

# NEW ZEALAND ELECTRICAL PRODUCT SELECTION GUIDE

CABLES / ACCESSORIES / SWITCHGEAR / SOLAR / AUTOMATION



ecs



**ecs**

**FOR INDUSTRY**

**Established in 1983, we are proud to be a family-owned New Zealand company, spanning two generations. From humble beginnings designing and manufacturing automated machinery, we've grown to support key industries such as dairy production and construction, with innovative, purpose-built solutions.**

Our relationships with our suppliers such as LAPP in Germany was initiated through our own demand for high quality products for our production.

Over the last 40 years ECS has evolved from a manufacturing company to a market leading supplier of electrical and automation products. We are now the exclusive distributors in New Zealand for world leading manufacturers such as LAPP, Wieland Electric, Wago, MOXA Networking and ABB LV Switchgear.

At ECS we strive to offer the best customer service in the industry. When you phone us you will go straight through to our sales team who are made up of trained electricians and

automation engineers. We are not just order takers; we are able to guide you through our products so you can select the right product to suit your requirements.

In 2012 we moved into a purpose built 2500m<sup>2</sup> warehouse, specifically designed to suit our requirements. Located in Hamilton where we stock 5000 different parts and over 1 million metres of cable, in our 5000m<sup>2</sup> warehouse, we are committed to holding the right products for you.

Over the course of 2015 we more than doubled the size of our warehouse giving us the ability to hold greater stock quantities and much larger cable sizes.

With our well established logistics network, we are able to deliver products to customers from Kaitia to Invercargill in just one working day. Linking with our supplier's warehouses around the world, if customers are working overseas we are able to drop-ship directly to site anywhere in the world while handling all the paperwork back here in New Zealand.

ECS is an expanding and adapting company; we are consistently adding new products to our line-up based on customers' requirements. We strive to offer you a complete package for all your electrical and automation requirements.





# OUR WORLD LEADING BRAND PARTNERS

 **LAPP**

**ABB**

**MOXA®**

**ECS is an ever expanding company; we are consistently adapting and adding new products to our line-up based on customer requirements.**

 **wieland**

**WAGO**

**icotek®**

**PCE**

**RITTAL**

**LSis**

We strive to offer all of our customers a complete package for all their electrical and automation requirements. We are distributors of world leading manufacturers such as LAPP, Wieland Electric, MOXA Networking, ABB and much more.

  
**Allied Telesis**

  
**Cambium  
Networks**

**DELTA  
MOTION**

**TOSIBOX®**

 **Temposonics**

**LEINE & LINDE**

 **SATEC**

 **SCHLEGEL®**

**Vecow**

 **PEPPERL+FUCHS**

 **MARLEY®**

**EKD SYSTEMS**

**cimco®**  
WERKZEUGFABRIK

**STÄUBLI**

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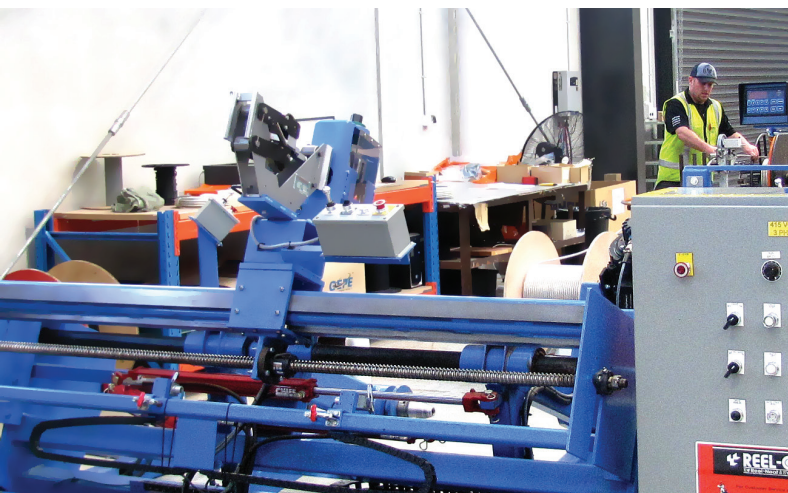


## 20,000+ Products Online

Buy online freight-free for orders over \$100, real time stock & price check, order Tracking and Account Management plus more.

## 6,000,000+ mtrs of Cable

From Power & Control to Ethernet & Fibre, we've got the variety, quantity and the quality your industry demands.



## 1,000+ Customers

We supply to a diverse range of engineers, technicians, installers and OEM's in the Electrical & Automation industry.

## 5,000m<sup>2</sup> Warehousing

To keep up with demand we doubled the size of our warehouse providing stockholding for now and the future.







# THE COMPLETE LAPP PRODUCT RANGE THAT GUARANTEES PERFORMANCE WITHOUT COMPRISING ON QUALITY



## ÖLFLEX

Power and control cables

ÖLFLEX® has become synonymous with power and control cables. Our flexible and oil-resistant cables satisfy the highest demands and can withstand even the very toughest conditions.



## UNITRONIC

Data communication systems

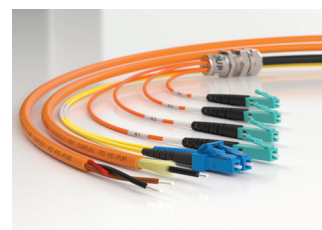
Our high-quality UNITRONIC® data network cables and field bus components provide a forward-looking solution for all applications in industrial machinery and plant engineering. From transmission of simple control signals to field bus signals in complex network structures – we offer a dependable cabling and connection solution for almost every situation.



## ETHERLINE

Data communication systems for ETHERNET technology

Our ETHERLINE® branded products open up a secure, fast and reliable path to the future of Ethernet applications. The systems are made up of durable and robust cables and connection components for passive network technology, and deliver an effective solution for almost any application, particularly in an industrial environment.



## HITRONIC®

Optical transmission systems

HITRONIC® fibre optic cables make transmitting large data volumes easy: fault free, bug proof and at almost light speed. Even electromagnetic radiation does not interfere with the transmission. The HITRONIC® range includes the ideal solution for indoor or outdoor use, for demanding conditions, and even for use in power chains.



## EPIC®

Industrial connectors

EPIC® industrial connectors can be found everywhere in industrial machinery and plant engineering, for measuring, control and drives. EPIC® is a flexible system of housings, inserts and contacts: all extremely robust, absolutely safe and simplicity itself to assemble.



## SKINTOP®

Cable glands

Simply feed in the cable and twist. That's it. Our SKINTOP® cable glands provide secure connections in no time. The universal systems are simple but effective. They secure and centre the cable, hermetically seal it and guarantee optimum strain relief.



## SILVYN®

Protective cable conduit systems and cable carrier systems

The universal range of SILVYN® protection and guidance systems protect cables effectively against dust, moisture, mechanical, thermal and chemical influences. The versatile SILVYN® CHAIN range of energy supply chains also protects and guides cables in dynamic applications.



## FLEXIMARK®

Marking systems

The requirement: permanent marking. The solution: FLEXIMARK®. These sophisticated systems mean that a clear overview inside a control cabinet is no longer just a pipe dream. From simple labels for manual marking through to electronic markings, the FLEXIMARK® range is guaranteed to be permanent.





# CENTRE FOR COMPETENCE & QUALITY TESTING

THE LAPP CENTER FOR COMPETENCE AND INNOVATION IS A KEY ASSET IN THE DEVELOPMENT OF INDUSTRY LEADING AND INNOVATIVE SOLUTIONS FOR OUR CUSTOMERS.

Underwriters Laboratories Inc. completed an assessment of our Florham Park, New Jersey facility for the UL Data Acceptance Program as a UL Client Data Program laboratory. This means the equipment and test methods have been certified to precisely meet the same requirements as at UL test facilities. We validate designs of high performance Industrial Cables, Industrial Connectors, Strain Relief Cable Glands and Accessories through continuous testing. Some of the testing taking place at our state-of-the-art laboratory include:

## Flame Testing (USA)

### SCOPE

To evaluate flame resistance characteristics of Lapp wire and cable and insure that the products do not propagate flame or spread burning particles within the specified application.

These tests are performed to verify compliance with Lapp Flame Resistance Cable Attributes, Industry Tests and Safety Agency Standards.

### TECHNICAL DETAIL

Multiple samples are cut to a specified length and then a Kraft paper flag is applied to each specimen. The samples are hung vertically in the support apparatus within the flame chamber. The test is performed in chamber which is completely sealed and free from any air drafts. An application of flame is directly applied to the sample in such a manner that flame traverses upward towards the Kraft paper flag. After the specified flame application cycle, the flame is removed for a specific time duration.

This cycle may be repeated several times. Failure occurs if the sample does not self-extinguish, or if falling burning particles ignite the chamber-floor bedding, or if the Kraft paper flag has been burnt.

## Endurance Testing (GERMANY & FRANCE)

### SCOPE

To evaluate how flexible cables will perform in permanent flexing installations. This test is used to quality check existing cables, and to develop and test new products before they enter mass production.

Regular flexible (OLFLEX CLASSIC 110) and super flexible (OLFLEX FD, UNITRONIC FD) cables are testing with this process.

### TECHNICAL DETAIL

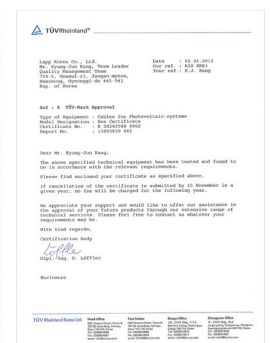
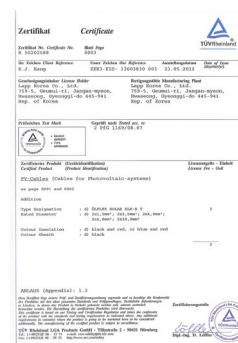
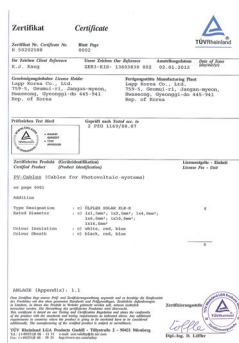
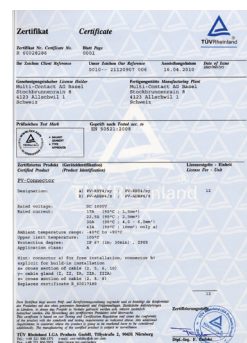
Cables are tested on a variety of linear test rigs which test specific endurance flexing scenarios.

The 5m linear test rig runs cables at a speed of 6m/s and repeats 20,000 times per day. The 20m linear test rig runs cables at a speed of 6m/s and repeats 5,000 times per day. The 55m linear test rig runs cables at a speed of 5m/s and repeats 1,500 times per day.

Failure occurs if any conductor in the cable loses electrical continuity during the test. Cables are disassembled/dissected after the test to check how specific materials performed to check any wear and tear to the internal of the cable.

## Independently Tested OUR INTERNATIONAL QUALITY CERTIFICATE

Almost all of our products are certified, as is our company. Certification is always awarded by an independent authority. In doing so, all the quality-relevant factors are thoroughly examined, in particular, reliability, safety and possible danger, health-hazard or environment aspects. Certificates are both quality certificates as well as certificates of non-objection and technical "passports" for international use.



COMPETENCE & QUALITY TESTING

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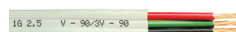
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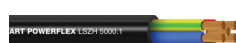
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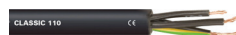
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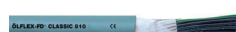
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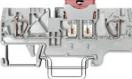
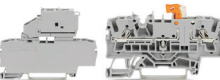
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# V90HT Appliance Wire

TINNED CONDUCTORS WITH 1000V RATING

#292



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## Construction

» Flexible Class 5 fine wire stranding, PVC insulation, tinned copper conductor.

## Temperature Rating

» -20°C to +105°C

## Nominal Voltage

» 600/1000V

## Test Voltage

» 3000V

| Conductor | 0.5mm <sup>2</sup> | 0.75mm <sup>2</sup> | 1mm <sup>2</sup> | 1.5mm <sup>2</sup> | 2.5mm <sup>2</sup> | 4mm <sup>2</sup> | 6mm <sup>2</sup> | 10mm <sup>2</sup> | 16mm <sup>2</sup> |
|-----------|--------------------|---------------------|------------------|--------------------|--------------------|------------------|------------------|-------------------|-------------------|
| Cable OD  | 2.55mm             | 2.75mm              | 2.95mm           | 3.25mm             | 3.7mm              | 4.3mm            | 4.9mm            | 6.5mm             | 8.4mm             |
| Earth     | 3801000            | 3801010             | 3801020          | 3801030            | 3801040            | 3801050          | 3801060          | 3801070           |                   |
| Black     | 3801001            | 3801011             | 3801021          | 3801031            | 3801041            | 3801051          | 3801061          | 3801071           | 3801081           |
| Red       | 3801004            | 3801014             | 3801024          | 3801034            | 3801044            | 3801054          | 3801064          | 3801074           | 3801084           |
| White     | 3801005            | 3801015             | 3801025          | 3801035            | 3801045            | 3801055          | 3801065          | 3801075           | 3801085           |
| Blue      | 38010014           | 38010114            | 38010214         | 38010314           | 38010414           | 38010514         | 38010614         | 3801072           | 3801082           |
| Brown     | 3801003            | 3801013             | 3801023          | 3801033            | 3801043            | 3801053          | 3801063          |                   | 3801083           |
| Grey      | 3801006            | 3801016             | 3801026          | 3801036            | 3801046            | 3801056          |                  |                   |                   |
| Orange    | 3801009            | 3801019             | 3801029          | 3801039            | 3801049            |                  |                  |                   |                   |
| Violet    | 3801007            | 3801017             | 3801027          | 3801037            | 3801047            |                  |                  |                   |                   |
| Pink      | 3801008            | 3801018             | 3801028          | 3801038            | 3801048            |                  |                  |                   |                   |
| Yellow    | 38010011           | 38010111            | 38010211         | 38010311           | 38010411           |                  |                  |                   |                   |

## CURRENT RATINGS FOR V90HT APPLIANCE WIRE

| Conductor cross-sectional area | Unenclosed |        | Unenclosed          |          | Unenclosed |          | Enclosed       |                | Single Phase Voltage Drop |
|--------------------------------|------------|--------|---------------------|----------|------------|----------|----------------|----------------|---------------------------|
|                                | Spaced     | Spaced | Spaced from surface | Touching | Touching   | Touching | Conduit in air | Conduit in air |                           |
| mm <sup>2</sup>                | A          | A      | A                   | A        | A          | A        | A              | A              | mV/A/m                    |
| 1                              | 18         | 18     | 18                  | 15       | 14         | 14       | 14             | 12             | 54                        |
| 1.5                            | 23         | 22     | 23                  | 19       | 18         | 18       | 14             | 15             | 34.6                      |
| 2.5                            | 33         | 32     | 32                  | 28       | 25         | 25       | 18             | 22             | 18.9                      |
| 4                              | 44         | 42     | 43                  | 36       | 34         | 34       | 24             | 29             | 11.7                      |
| 6                              | 56         | 54     | 54                  | 46       | 44         | 44       | 33             | 37             | 7.9                       |
| 10                             | 76         | 74     | 74                  | 64       | 59         | 59       | 42             | 52             | 4.7                       |
| 16                             | 101        | 98     | 98                  | 85       | 79         | 79       | 58             | 68             | 2.9                       |

These ratings are based on an ambient air temperature of 30° C, and an ambient soil temperature of 15° C at 0.5m depth.

# LSZH Tinned Appliance Wire 110 Degree

LOW SMOKE, HALOGEN-FREE, HIGH TEMPERATURE, FLAME RETARDANT FLEXIBLE CABLES

#6



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## Construction

Flexible tinned copper wire stranding class 5 (0.5-10mm<sup>2</sup>), or class 6 (16 and more) according to IEC 60228 and AS/NZS 1125.

## Insulation

Cross-linked, halogen-free, flame retardant compound type X-HF-110 acc. to AS/NZS 3808, chemical ,oil and UV resistant.

## Applications

Wiring of switchboards, control, general wiring, instrumentation and communication systems. Used where LSZH is needed and where higher current ratings are required.

## Nominal Voltage

» 600/1000V

## Test Voltage

» 3000V

## Temperature Rating

» 110°C

## Standards

» **Cable Construction:** AS/NZS 5000.1  
 » **Flame retardant:** AS/NZS 1660.5.1; IEC 60332-3-22 Cat. A; IEC 60332-1  
 » **Smoke density:** AS/NZS 1660.5.2; IEC 61034-2  
 » **Halogen acid gas content:** AS/NZS 1660.5.3, IEC 60754-1  
 » **Gases evolved during combustion:** AS/NZS 1660.5.4, IEC 60754-2

| Conductor | 0.5mm <sup>2</sup> | 0.75mm <sup>2</sup> | 1mm <sup>2</sup> | 1.5mm <sup>2</sup> | 2.5mm <sup>2</sup> | 4mm <sup>2</sup> | 6mm <sup>2</sup> | 10mm <sup>2</sup> | 16mm <sup>2</sup> |
|-----------|--------------------|---------------------|------------------|--------------------|--------------------|------------------|------------------|-------------------|-------------------|
| Cable OD  | 2.3mm              | 2.5mm               | 2.6mm            | 2.9mm              | 3.4mm              | 3.9mm            | 4.4mm            | 5.4mm             | 6.4mm             |
| Earth     | 3801000-LSZH       | 3801010-LSZH        | 3801020-LSZH     | 3801030-LSZH       | 3801040-LSZH       | 3801050-LSZH     | 3801060-LSZH     | 136326            | 136327            |
| Black     | 3801001-LSZH       | 3801011-LSZH        | 3801021-LSZH     | 3801031-LSZH       | 3801041-LSZH       | 3801051-LSZH     | 3801061-LSZH     | 3801071-LSZH      | 3801081-LSZH      |
| Red       | 3801004-LSZH       | 3801014-LSZH        | 3801024-LSZH     | 3801034-LSZH       | 3801044-LSZH       | 3801054-LSZH     | 3801064-LSZH     | 3801074-LSZH      | 3801084-LSZH      |
| White     | 3801005-LSZH       | 3801015-LSZH        | 3801025-LSZH     | 3801035-LSZH       | 3801045-LSZH       | 3801055-LSZH     | 3801065-LSZH     | 3801075-LSZH      | 3801085-LSZH      |
| Blue      | 3801002-LSZH       | 3801012-LSZH        | 3801022-LSZH     | 3801032-LSZH       | 3801042-LSZH       | 3801052-LSZH     | 3801062-LSZH     | 3801072-LSZH      | 3801082-LSZH      |
| Brown     | 3801003-LSZH       | 3801013-LSZH        | 3801023-LSZH     | 3801033-LSZH       | 3801043-LSZH       |                  |                  |                   |                   |
| Grey      | 3801006-LSZH       | 3801016-LSZH        | 3801026-LSZH     | 3801036-LSZH       | 3801046-LSZH       |                  |                  |                   |                   |
| Orange    | 3801009-LSZH       | 3801019-LSZH        | 3801029-LSZH     | 3801039-LSZH       |                    |                  |                  |                   |                   |
| Violet    | 3801007-LSZH       | 3801017-LSZH        | 3801027-LSZH     | 3801037-LSZH       |                    |                  |                  |                   |                   |
| Pink      | 3801008-LSZH       | 3801018-LSZH        | 3801028-LSZH     | 3801038-LSZH       |                    |                  |                  |                   |                   |
| Yellow    | 38010011-LSZH      | 38010111-LSZH       | 38010211-LSZH    | 38010311-LSZH      |                    |                  |                  |                   |                   |

## CURRENT RATINGS FOR 110 APPLIANCE WIRE

| Conductor cross-sectional area | Unenclosed |        | Unenclosed          |          | Unenclosed |          | Enclosed       |                |
|--------------------------------|------------|--------|---------------------|----------|------------|----------|----------------|----------------|
|                                | Spaced     | Spaced | Spaced from surface | Touching | Touching   | Touching | Conduit in air | Conduit in air |
| mm <sup>2</sup>                | Cu         | Cu     | Cu                  | Cu       | Cu         | Cu       | Cu             | Cu             |
| 1                              | 27         | 26     | 26                  | 22       | 21         | 21       | 21             | 18             |
| 1.5                            | 34         | 33     | 33                  | 29       | 27         | 27       | 27             | 24             |
| 2.5                            | 48         | 46     | 47                  | 41       | 39         | 39       | 37             | 34             |
| 4                              | 63         | 61     | 62                  | 54       | 50         | 50       | 49             | 44             |
| 6                              | 80         | 78     | 78                  | 67       | 63         | 63       | 62             | 55             |
| 10                             | 112        | 106    | 106                 | 92       | 87         | 87       | 83             | 76             |
| 16                             | 144        | 139    | 139                 | 123      | 112        | 112      | 112            | 100            |

These ratings are based on an ambient air temperature of 30° C, and an ambient soil temperature of 15° C.



## Cable Ferrules

INSULATED FERRULES (SINGLE AND DOUBLE ENTRY)

#179



SEARCH ON EXPRESS.ECSNZ.COM

|                       | Colour     | Wires                                                              | Conductor Size | Pin Length | Pack Size |
|-----------------------|------------|--------------------------------------------------------------------|----------------|------------|-----------|
| <b>Standard Loose</b> |            |                                                                    |                |            |           |
| 61721866              | Light Blue | Single                                                             | 0.25           | 6mm        | 500       |
| 61721868              | Turquoise  | Single                                                             | 0.34           | 6mm        | 500       |
| 61801590              | White      | Single                                                             | 0.5            | 8mm        | 500       |
| 61801630              | Grey       | Single                                                             | 0.75           | 8mm        | 500       |
| 61801670              | Red        | Single                                                             | 1              | 8mm        | 500       |
| 61801710              | Black      | Single                                                             | 1.5            | 8mm        | 500       |
| 61801750              | Blue       | Single                                                             | 2.5            | 8mm        | 500       |
| 61801780              | Grey       | Single                                                             | 4              | 10mm       | 500       |
| 61801810              | Yellow     | Single                                                             | 6              | 12mm       | 100       |
| 61801830              | Red        | Single                                                             | 10             | 12mm       | 100       |
| 61801850              | Blue       | Single                                                             | 16             | 12mm       | 100       |
| 61801870              | Yellow     | Single                                                             | 25             | 16mm       | 50        |
| 61801900              | Red        | Single                                                             | 35             | 16mm       | 50        |
| 61801930              | Blue       | Single                                                             | 50             | 20mm       | 50        |
| 61801950              | Yellow     | Single                                                             | 70             | 20mm       | 25        |
| 61801970              | Red        | Single                                                             | 95             | 25mm       | 25        |
| 61801980              | Blue       | Single                                                             | 120            | 27mm       | 25        |
| 61801990              | Yellow     | Single                                                             | 150            | 32mm       | 25        |
| <b>XL Loose</b>       |            |                                                                    |                |            |           |
| 61802061              | White      | Single                                                             | 0.5            | 8mm        | 500       |
| 61802063              | Grey       | Single                                                             | 0.75           | 8mm        | 500       |
| 61802065              | Red        | Single                                                             | 1              | 8mm        | 500       |
| 61802067              | Black      | Single                                                             | 1.5            | 8mm        | 500       |
| <b>Strips</b>         |            |                                                                    |                |            |           |
| 61805170              | White      | Single                                                             | 0.5            | 8mm        | 5x 100    |
| 61805180              | Grey       | Single                                                             | 0.75           | 8mm        | 5x 100    |
| 61805190              | Red        | Single                                                             | 1              | 8mm        | 5x 100    |
| 61805200              | Black      | Single                                                             | 1.5            | 8mm        | 5x 100    |
| 61802052              | White      | Single                                                             | 0.5            | 8mm        | 1x 3000   |
| 61802054              | Grey       | Single                                                             | 0.75           | 8mm        | 1x 3000   |
| 61802056              | Red        | Single                                                             | 1              | 8mm        | 1x 3000   |
| 61802058              | Black      | Single                                                             | 1.5            | 8mm        | 1x 2500   |
| 61802060              | Blue       | Single                                                             | 2.5            | 8mm        | 1x 1500   |
| <b>Double Wire</b>    |            |                                                                    |                |            |           |
| 61801999              | White      | Double                                                             | 0.5            | 8mm        | 500       |
| 61802000              | Grey       | Double                                                             | 0.75           | 8mm        | 500       |
| 61802010              | Red        | Double                                                             | 1              | 8mm        | 500       |
| 61802020              | Black      | Double                                                             | 1.5            | 8mm        | 500       |
| 61802030              | Blue       | Double                                                             | 2.5            | 10mm       | 500       |
| 61802032              | Grey       | Double                                                             | 4              | 12mm       | 100       |
| 61802033              | Yellow     | Double                                                             | 6              | 14mm       | 100       |
| 61802034              | Red        | Double                                                             | 10             | 14mm       | 100       |
| <b>Assorted Packs</b> |            |                                                                    |                |            |           |
| 61802040              | Single     | 30 x 0.25mm + 30 x 0.34mm + 30 x 0.5mm + 30 x 0.75mm + 30 x 1mm    |                |            |           |
| 61802041              | Single     | 50 x 0.5mm + 100 x 0.75mm + 100 x 1mm + 100 x 1.5mm + 50 x 2.5mm   |                |            |           |
| 61802042              | Single     | 40 x 4mm + 20 x 6mm + 20 x 10mm + 10 x 16mm                        |                |            |           |
| 61802046              | Double     | Double Ferrules : 50 x 0.75mm + 50 x 1mm + 50 x 1.5mm + 50 x 2.5mm |                |            |           |



Standard Loose



XL Loose



STRIPS



Double Wire



Assorted Packs

## Ferrule & Strip Tools

QUALITY TOOLS FOR CRIMPING

#17



SEARCH ON EXPRESS.ECSNZ.COM



61813742



61813737



61735800

| Item No  | Type                          | Features                                  | Conductor Size              | Weight | Crimp Type |
|----------|-------------------------------|-------------------------------------------|-----------------------------|--------|------------|
| 61813742 | PEW 8.87                      | Heavy and Robust (Front Entry)            | 0.08mm to 10mm <sup>2</sup> | 475g   | Square     |
| 61813737 | PEW 8.186                     | Heavy and Robust (Side Entry)             | 0.08mm to 10mm <sup>2</sup> | 380g   | Hex        |
| 61735800 | Easy Strip 2 including blades | Self-adjusting cutting and stripping tool | 0.02 to 10mm <sup>2</sup>   | 180g   |            |



ECS

FERRULES & STRIPPERS

# 90 DEGREE - UV Resistant Switchboard Flex

FLEXIBLE UV RESISTANT BLACK PVC BARE COPPER MAINS POWER CABLE

#7



SEARCH ON EXPRESS.ECSNZ.COM

## 90 XLPE/PVC - SWITCHBOARD FLEX

### Construction

- » Flexible Class 5 bare copper
- » Double insulated
- » XLPE Inner Insulation
- » 5V-90 PVC outer sheath

### Application

- » Suitable for fixed installation mains power distribution
- » Excellent UV resistance

### Minimum Bending Radius

- » Fixed: 4 x cable OD

### Voltage Rating

- » 600/1000V

### Temperature Rating

- » -30 to 90 degrees

### Standards

- » AS/NZS 5000.1
- » AS/NZS 1125
- » AS/NZS 3808

| TF Item No  | LAPP Item No | Conductor (mm) | OD (mm) | Drum Size |
|-------------|--------------|----------------|---------|-----------|
| TF-G-136481 | LAPP-8100961 | 10mm           | 8.2mm   | 500m      |
| TF-G-136482 | LAPP-8100962 | 16mm           | 9.3mm   | 500m      |
| TF-G-036468 | LAPP-8100963 | 25mm           | 10.9mm  | 500m      |
| TF-G-036469 | LAPP-8100964 | 35mm           | 11.9mm  | 500m      |
| TF-G-036470 | LAPP-8100965 | 50mm           | 13.8mm  | 500m      |
| TF-G-036471 | LAPP-8100966 | 70mm           | 15.8mm  | 500m      |
| TF-G-036472 | LAPP-8100967 | 95mm           | 18.1mm  | 500m      |
| TF-G-036473 | LAPP-8100968 | 120mm          | 19.4mm  | 500m      |
| TF-G-036474 | LAPP-8100969 | 150mm          | 23.5mm  | 500m      |
| TF-G-036475 | LAPP-8100970 | 185mm          | 25.3mm  | 500m      |
| TF-G-036476 | LAPP-8100971 | 240mm          | 27.6mm  | 500m      |
| TF-G-036477 | LAPP-8100972 | 300mm          | 31.3mm  | 500m      |
| TF-G-036478 | LAPP-8100973 | 400mm          | 33.8mm  | 500m      |

### CURRENT RATINGS FOR 90 DEGREE SWITCHBOARD FLEX

| Conductor cross-sectional area<br>mm <sup>2</sup> | Unenclosed |     |                     |     |          | Enclosed       |     |     |
|---------------------------------------------------|------------|-----|---------------------|-----|----------|----------------|-----|-----|
|                                                   | Spaced     |     | Spaced from surface |     | Touching | Conduit in air |     |     |
|                                                   |            |     |                     |     |          |                |     |     |
|                                                   | A          | A   | A                   | A   | A        | A              | A   | A   |
| 10                                                | 92         | 89  | 90                  | 76  | 72       | 72             | 72  | 64  |
| 16                                                | 121        | 121 | 121                 | 101 | 95       | 95             | 95  | 86  |
| 25                                                | 165        | 160 | 160                 | 138 | 127      | 127            | 127 | 121 |
| 35                                                | 204        | 198 | 193                 | 171 | 160      | 160            | 160 | 138 |
| 50                                                | 253        | 242 | 237                 | 209 | 193      | 193            | 193 | 171 |
| 70                                                | 319        | 308 | 303                 | 264 | 248      | 248            | 242 | 209 |
| 95                                                | 396        | 385 | 374                 | 330 | 308      | 308            | 286 | 253 |
| 120                                               | 462        | 451 | 435                 | 385 | 358      | 358            | 341 | 297 |
| 150                                               | 534        | 517 | 495                 | 446 | 413      | 413            | 385 | 341 |
| 185                                               | 627        | 605 | 572                 | 517 | 479      | 479            | 440 | 391 |
| 240                                               | 748        | 726 | 682                 | 616 | 572      | 572            | 523 | 462 |
| 300                                               | 869        | 847 | 792                 | 715 | 671      | 660            |     | 534 |
| 400                                               | 1012       | 990 | 924                 | 836 | 781      | 770            |     | 616 |

These ratings are based on an ambient air temperature of 30° C, and an ambient soil temperature of 15° C at 0.5m depth.

# ÖLFLEX WIRE V-90 DEGREE - PVC Insulated Earth Wire

CLASS 2, BARE COPPER GREEN/YELLOW FOR FIXED INSTALLATION

#2718



SEARCH ON EXPRESS.ECSNZ.COM

## LAPP KABEL V-90 – EARTH CONDUIT WIRE

### Construction

- » Conductor : Stranded bare copper Class 2 acc. AS/NZS 1125
- » Core Insulation : PVC V-90 acc to AS/NZS 3808

### Application

- » For fixed installation in power circuits in residential and commercial buildings
- » Plant engineering and construction, industrial machinery, earthing systems.

### Minimum Bending Radius

- » Fixed: 4 x cable OD

### Voltage Rating

- » 600/1000v

### Temperature Rating

- » -20° to 90° degrees

### Standards

- » AS/NZS 5000.1
- » AS/NZS 1125
- » AS/NZS 3808
- » IEC 60332-1-2
- » 2011/65/EU (RoHS)

| Item No     | Conductor Size (mm) | OD (mm) | Drum Size  |
|-------------|---------------------|---------|------------|
| 8100901-100 | 4                   | 4.7     | 100m       |
| 8100902-100 | 6                   | 5.2     | 100m       |
| 8100901     | 4                   | 4.7     | 500m/1000m |
| 8100902     | 6                   | 5.2     | 500m/1000m |
| 8100903     | 10                  | 6.2     | 500m/1000m |
| 8100904     | 16                  | 7.2     | 500m/1000m |
| 8100905     | 25                  | 9.0     | 500m/1000m |
| 8100906     | 35                  | 10.1    | 500m/1000m |
| 8100907     | 50                  | 11.9    | 500m/1000m |
| 8100908     | 70                  | 13.7    | 500m/1000m |
| 8100909     | 95                  | 16.0    | 500m/1000m |
| 8100910     | 120                 | 17.6    | 500m/1000m |





## Flexible 110° - Low Smoke - Halogen Free

## X-HF-110 LSZH - Tinned Switchboard Flex

**Conductors**

- » Tinned Copper Conductors
- » Super Flexible Class 6 Stranding

**Insulation**

- » Black: R-E-110
- » Earth: X-HF-110

**Outer Sheath**

- » Black: E-110-R (Flexible Rubber)

**Colour Of Outer Sheath**

- » Black or Green/Yellow
- » UV Resistant

**Application**

- » Switchboards and transformers
- » Mains power distribution
- » Portable power feeds
- » Flexible copper tails
- » Other industrial applications
- » LSZH installations

**Temperature Range**

- » Black: -25°C to 110°C
- » Earth: -40°C to 110°C

**Voltage Rating**

- » 600/1000V

**Features**

- » Halogen free
- » Low Smoke
- » Heat resistance
- » Oil and chemical resistant
- » Flame retardant
- » UV and weather resistant

**Standards**

- » AS/NZS 5000.1
- » AS/NZS 3808
- » AS/NZS 3008
- » AS/NZS 1660.5.2, 1660.5.3
- » IEC 60228
- » IEC 61034-2
- » IEC 60754-2
- » IEC 60332-1

**Minimum Bending Radius**

- » 5 x cable OD

| Item No                        | Conductor | Cable OD |
|--------------------------------|-----------|----------|
| <b>110 LSZH - Single Cores</b> |           |          |
| TF-G-012568-BK-SN              | 10mm      | 9.0mm    |
| TF-G-012569-BK-SN              | 16mm      | 10.3mm   |
| TF-G-012570-BK-SN              | 25mm      | 11.9mm   |
| TF-G-012571-BK-SN              | 35mm      | 13.3mm   |
| TF-G-022907-BK-SN              | 50mm      | 15.0mm   |
| TF-G-012573-BK-SN              | 70mm      | 17.1mm   |
| TF-G-012574-BK-SN              | 95mm      | 19.5mm   |
| TF-G-012575-BK-SN              | 120mm     | 21.5mm   |
| TF-G-012576-BK-SN              | 150mm     | 23.9mm   |
| TF-G-012577-BK-SN              | 185mm     | 26.5mm   |
| TF-G-012579-BK-SN              | 240mm     | 29.3mm   |
| TF-G-012581-BK-SN              | 300mm     | 32.4mm   |
| <b>EARTH - Green Yellow</b>    |           |          |
| TF-G-136326                    | 10mm      | 6.0mm    |
| TF-G-136327                    | 16mm      | 7.0mm    |
| TF-G-136318                    | 25mm      | 8.0mm    |
| TF-G-136329                    | 35mm      | 9.0mm    |
| TF-G-136331                    | 50mm      | 11.0mm   |
| TF-G-136335                    | 70mm      | 13.0mm   |
| TF-G-136336                    | 95mm      | 15.0mm   |
| TF-G-136355                    | 120mm     | 16.0mm   |

## CURRENT RATINGS FOR 110 LSZH - SWITCHBOARD FLEX

| Conductor | Unenclosed                                                                          |                                                                                     |                                                                                     |                                                                                     | Enclosed                                                                            |                                                                                     |                                                                                       |                                                                                       | Underground                                                                           |                                                                                       |
|-----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|           | Spaced                                                                              | Spaced                                                                              | Touching                                                                            | Touching                                                                            | Exposed to sunlight                                                                 | Exposed to sunlight                                                                 | In Conduit in air                                                                     | In Conduit in air                                                                     | Buried in Conduit                                                                     | Buried in Conduit                                                                     |
|           |  |  |  |  |  |  |  |  |  |  |
| mm2       | 2                                                                                   | 3                                                                                   | 2                                                                                   | 3                                                                                   | 2                                                                                   | 3                                                                                   | 2                                                                                     | 3                                                                                     | 2                                                                                     | 3                                                                                     |
| 10        | 109                                                                                 | 106                                                                                 | 86                                                                                  | 86                                                                                  | 72                                                                                  | 72                                                                                  | 82                                                                                    | 75                                                                                    | 91                                                                                    | 81                                                                                    |
| 16        | 144                                                                                 | 139                                                                                 | 112                                                                                 | 112                                                                                 | 94                                                                                  | 94                                                                                  | 109                                                                                   | 97                                                                                    | 119                                                                                   | 103                                                                                   |
| 25        | 190                                                                                 | 185                                                                                 | 149                                                                                 | 149                                                                                 | 124                                                                                 | 124                                                                                 | 142                                                                                   | 129                                                                                   | 152                                                                                   | 133                                                                                   |
| 35        | 236                                                                                 | 229                                                                                 | 184                                                                                 | 184                                                                                 | 153                                                                                 | 153                                                                                 | 179                                                                                   | 158                                                                                   | 187                                                                                   | 160                                                                                   |
| 50        | 299                                                                                 | 289                                                                                 | 233                                                                                 | 232                                                                                 | 192                                                                                 | 192                                                                                 | 221                                                                                   | 203                                                                                   | 228                                                                                   | 199                                                                                   |
| 70        | 376                                                                                 | 364                                                                                 | 292                                                                                 | 292                                                                                 | 240                                                                                 | 240                                                                                 | 281                                                                                   | 250                                                                                   | 282                                                                                   | 243                                                                                   |
| 95        | 452                                                                                 | 439                                                                                 | 352                                                                                 | 352                                                                                 | 288                                                                                 | 288                                                                                 | 334                                                                                   | 296                                                                                   | 331                                                                                   | 284                                                                                   |
| 120       | 535                                                                                 | 521                                                                                 | 417                                                                                 | 417                                                                                 | 340                                                                                 | 339                                                                                 | 389                                                                                   | 354                                                                                   | 381                                                                                   | 335                                                                                   |
| 150       | 617                                                                                 | 601                                                                                 | 482                                                                                 | 482                                                                                 | 392                                                                                 | 391                                                                                 | 456                                                                                   | 404                                                                                   | 439                                                                                   | 378                                                                                   |
| 185       | 706                                                                                 | 689                                                                                 | 552                                                                                 | 552                                                                                 | 447                                                                                 | 446                                                                                 | 515                                                                                   | 469                                                                                   | 492                                                                                   | 428                                                                                   |
| 240       | 850                                                                                 | 829                                                                                 | 664                                                                                 | 663                                                                                 | 535                                                                                 | 534                                                                                 | 624                                                                                   | 576                                                                                   | 581                                                                                   | 510                                                                                   |
| 300       | 980                                                                                 | 958                                                                                 | 766                                                                                 | 764                                                                                 | 615                                                                                 | 612                                                                                 |                                                                                       | 655                                                                                   | 669                                                                                   | 575                                                                                   |
| 400       | 1182                                                                                | 1155                                                                                | 920                                                                                 | 915                                                                                 | 735                                                                                 | 730                                                                                 |                                                                                       | 810                                                                                   | 778                                                                                   | 687                                                                                   |
| 500       | 1380                                                                                | 1348                                                                                | 1069                                                                                | 1059                                                                                | 850                                                                                 | 841                                                                                 |                                                                                       | 924                                                                                   | 906                                                                                   | 773                                                                                   |
| 630       | 1636                                                                                | 1598                                                                                | 1250                                                                                | 1235                                                                                | 990                                                                                 | 977                                                                                 |                                                                                       | 1064                                                                                  | 1036                                                                                  | 878                                                                                   |



ECS

SWITCHBOARD FLEX

## Copper Cable Lugs

FOR SINGLE CORE TERMINATION

#2449

SEARCH ON EXPRESS.ECSNZ.COM



### Application

» Mainly for connection to busbars and to copper connectors

### Features

» Electro Tinned

### Benefits

» Manufactured from 99.9% oxygen-free high conductivity Copper  
» With inspection Hole



| Conductor | Bolt Hole Size (mm) |             |             |             |              |              |              |             |
|-----------|---------------------|-------------|-------------|-------------|--------------|--------------|--------------|-------------|
|           | 4                   | 5           | 6           | 8           | 10           | 12           | 16           | Blank       |
| 2.5mm²    | LUG-S-2.5-4         | LUG-S-2.5-5 | LUG-S-2.5-6 |             |              |              |              |             |
| 4mm²      | LUG-S-4-4           | LUG-S-4-5   | LUG-S-4-6   | LUG-S-4-8   |              |              |              |             |
| 6mm²      | LUG-S-6-4           | LUG-S-6-5   | LUG-S-6-6   | LUG-S-6-8   |              |              |              |             |
| 10mm²     |                     | LUG-S-10-5  | LUG-S-10-6  | LUG-S-10-8  | LUG-S-10-10  |              |              |             |
| 16mm²     |                     | LUG-S-16-5  | LUG-S-16-6  | LUG-S-16-8  | LUG-S-16-10  | LUG-S-16-12  |              |             |
| 25mm²     |                     |             | LUG-S-25-6  | LUG-S-25-8  | LUG-S-25-10  | LUG-S-25-12  |              |             |
| 35mm²     |                     |             | LUG-S-35-6  | LUG-S-35-8  | LUG-S-35-10  | LUG-S-35-12  |              |             |
| 50mm²     |                     |             | LUG-S-50-6  | LUG-S-50-8  | LUG-S-50-10  | LUG-S-50-12  |              |             |
| 70mm²     |                     |             |             | LUG-S-70-8  | LUG-S-70-10  | LUG-S-70-12  |              |             |
| 95mm²     |                     |             |             | LUG-S-95-8  | LUG-S-95-10  | LUG-S-95-12  |              |             |
| 120mm²    |                     |             |             | LUG-S-120-8 | LUG-S-120-10 | LUG-S-120-12 |              |             |
| 150mm²    |                     |             |             | LUG-S-150-8 | LUG-S-150-10 | LUG-S-150-12 |              | LUG-S-150-B |
| 185mm²    |                     |             |             |             | LUG-S-185-10 | LUG-S-185-12 |              | LUG-S-185-B |
| 240mm²    |                     |             |             |             | LUG-S-240-10 | LUG-S-240-12 |              | LUG-S-240-B |
| 300mm²    |                     |             |             |             | LUG-S-300-10 | LUG-S-300-12 | LUG-S-300-16 | LUG-S-300-B |

## Bellmouth Cable Lugs

FOR SINGLE CORE TERMINATION

#2450

SEARCH ON EXPRESS.ECSNZ.COM



### Application

» Mainly for connection to busbars and to copper connectors

### Features

» Designed with a larger cable entry to accommodate strand splaying of a conductor  
» Electro Tinned

### Benefits

» Manufactured from 99.9% oxygen-free high conductivity Copper  
» With inspection Hole



| Conductor          | Bolt Hole Size (mm) |              |               |               |               |              |
|--------------------|---------------------|--------------|---------------|---------------|---------------|--------------|
|                    | 6                   | 8            | 10            | 12            | 16            | Blank        |
| 25mm <sup>2</sup>  | LUG-BM-25-6         | LUG-BM-25-8  | LUG-BM-35-6   |               |               |              |
| 35mm <sup>2</sup>  | LUG-BM-35-6         | LUG-BM-35-8  | LUG-BM-35-10  | LUG-BM-35-12  |               |              |
| 50mm <sup>2</sup>  |                     | LUG-BM-50-8  | LUG-BM-50-10  | LUG-BM-50-12  |               |              |
| 70mm <sup>2</sup>  |                     | LUG-BM-70-8  | LUG-BM-70-10  | LUG-BM-70-12  |               |              |
| 95mm <sup>2</sup>  |                     | LUG-BM-95-8  | LUG-BM-95-10  | LUG-BM-95-12  |               |              |
| 120mm <sup>2</sup> |                     | LUG-BM-120-8 | LUG-BM-120-10 | LUG-BM-120-12 |               |              |
| 150mm <sup>2</sup> |                     | LUG-BM-150-8 | LUG-BM-150-10 | LUG-BM-150-12 |               |              |
| 185mm <sup>2</sup> |                     |              | LUG-BM-185-10 | LUG-BM-185-12 |               | LUG-BM-185-B |
| 240mm <sup>2</sup> |                     |              | LUG-BM-240-10 | LUG-BM-240-12 |               | LUG-BM-240-B |
| 300mm <sup>2</sup> |                     |              | LUG-BM-300-10 | LUG-BM-300-12 | LUG-BM-300-16 | LUG-BM-300-B |

## Cable Crimp Links

FOR JOINTING OF IDENTICAL SIZED COPPER CONDUCTORS

#2451

SEARCH ON EXPRESS.ECSNZ.COM



### Application

» Joining of identical sized copper conductors

### Features

» Electro Tinned

### Benefits

» Manufactured from 99.9% oxygen-free high conductivity Copper



| Conductor          | Item No    | Conductor          | Item No    |
|--------------------|------------|--------------------|------------|
| 1.5mm <sup>2</sup> | LINK-S-1.5 | 50mm <sup>2</sup>  | LINK-S-50  |
| 2.5mm <sup>2</sup> | LINK-S-2.5 | 70mm <sup>2</sup>  | LINK-S-70  |
| 4mm <sup>2</sup>   | LINK-S-4   | 95mm <sup>2</sup>  | LINK-S-95  |
| 6mm <sup>2</sup>   | LINK-S-6   | 120mm <sup>2</sup> | LINK-S-120 |
| 10mm <sup>2</sup>  | LINK-S-10  | 150mm <sup>2</sup> | LINK-S-150 |
| 16mm <sup>2</sup>  | LINK-S-16  | 185mm <sup>2</sup> | LINK-S-185 |
| 25mm <sup>2</sup>  | LINK-S-25  | 240mm <sup>2</sup> | LINK-S-240 |
| 35mm <sup>2</sup>  | LINK-S-35  | 300mm <sup>2</sup> | LINK-S-300 |



# RENT ME

STANLEY DUBUIS Industrial Hydraulic Crimp Tool

# \$30

per/day

projects.ecsnz.com/rentals





## LAPP KABEL STUTTGART AS BLACK CIRCULAR TPS

## Construction

- » Class 2 stranded conductors
- » 6mm and below – UV Resistant Sheath 5V-90, inner insulation V-90 (PVC)
- » 10mm and above – UV Resistant Sheath 5V-90, inner insulation X-90 (XLPE)
- » Cables are metre marked

## Minimum Bending Radius

- » Fixed: 4 x cable OD

## Temperature Rating

- » -20 to 90

## Standards

- » AS/NZS 5000.1
- » AS/NZS 5000.2
- » AS/NZS 1660.5.6

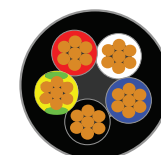
| Item No                        | Cores          | Conductors | Earth Size | Rating    | OD     | Insulation |
|--------------------------------|----------------|------------|------------|-----------|--------|------------|
| <b>3 core (2 core + earth)</b> |                |            |            |           |        |            |
| 3803840                        | 2 Core + Earth | 1.5mm      | 1.5mm      | 450/750V  | 9.4mm  | PVC        |
| 3803841                        | 2 Core + Earth | 2.5mm      | 2.5mm      | 450/750V  | 11mm   | PVC        |
| 3803842                        | 2 Core + Earth | 4mm        | 2.5mm      | 450/750V  | 12.6mm | PVC        |
| 3803843                        | 2 Core + Earth | 6mm        | 2.5mm      | 450/750V  | 13.8mm | PVC        |
| 3803844A                       | 2 Core + Earth | 10mm       | 4mm        | 600/1000V | 16.7mm | XLPE       |
| 3803845A                       | 2 Core + Earth | 16mm       | 6mm        | 600/1000V | 18.9mm | XLPE       |
| 3803846A                       | 2 Core + Earth | 25mm       | 6mm        | 600/1000V | 20.3mm | XLPE       |
| 3803847A                       | 2 Core + Earth | 35mm       | 10mm       | 600/1000V | 22.6mm | XLPE       |
| <b>4 core (3 core + earth)</b> |                |            |            |           |        |            |
| 3803852                        | 3 Core + Earth | 1.5mm      | 1.5mm      | 450/750V  | 10.1mm | PVC        |
| 3803853                        | 3 Core + Earth | 2.5mm      | 2.5mm      | 450/750V  | 11.9mm | PVC        |
| 3803854                        | 3 Core + Earth | 4mm        | 2.5mm      | 450/750V  | 13.6mm | PVC        |
| 3803855                        | 3 Core + Earth | 6mm        | 2.5mm      | 450/750V  | 15mm   | PVC        |
| 3803856A                       | 3 Core + Earth | 10mm       | 4mm        | 600/1000V | 17.3mm | XLPE       |
| 3803857A                       | 3 Core + Earth | 16mm       | 6mm        | 600/1000V | 19.8mm | XLPE       |
| <b>5 core (4 core + earth)</b> |                |            |            |           |        |            |
| 3803864                        | 4 Core + Earth | 1.5mm      | 1.5mm      | 450/750V  | 10.9mm | PVC        |
| 3803865                        | 4 Core + Earth | 2.5mm      | 2.5mm      | 450/750V  | 12.8mm | PVC        |
| 3803866                        | 4 Core + Earth | 4mm        | 2.5mm      | 450/750V  | 14.8mm | PVC        |
| 3803867                        | 4 Core + Earth | 6mm        | 2.5mm      | 450/750V  | 16.3mm | PVC        |
| 3803868A                       | 4 Core + Earth | 10mm       | 4mm        | 600/1000V | 19.9mm | XLPE       |
| 3803869A                       | 4 Core + Earth | 16mm       | 6mm        | 600/1000V | 22.8mm | XLPE       |
| 3803870A                       | 4 Core + Earth | 25mm       | 6mm        | 600/1000V | 27.4mm | XLPE       |
| 3803871A                       | 4 Core + Earth | 35mm       | 10mm       | 600/1000V | 30.5mm | XLPE       |
| 3803872A                       | 4 Core + Earth | 50mm       | 16mm       | 600/1000V | 35.4mm | XLPE       |
| 3803873A                       | 4 Core + Earth | 70mm       | 25mm       | 600/1000V | 40.7mm | XLPE       |
| 3803874A                       | 4 Core + Earth | 95mm       | 25mm       | 600/1000V | 44.5mm | XLPE       |



3 core (2 core + earth)



4 core (3 core + earth)



5 core (4 core + earth)

## CURRENT RATINGS FOR CIRCULAR TPS

| Conductor<br>cross-<br>sectional<br>area | Unenclosed                                                                          |                                                                                     |                                                                                     |                                                                                     | Enclosed                                                                            |                                                                                      | Underground Ducts                                                                     |                                                                                       | Three<br>Phase<br>Voltage<br>Drop |
|------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------------------------|
|                                          | Spaced                                                                              |                                                                                     | Touching                                                                            |                                                                                     | Conduit in air                                                                      |                                                                                      |                                                                                       |                                                                                       |                                   |
|                                          |  |  |  |  |  |  |  |  |                                   |
| mm²                                      | A                                                                                   | A                                                                                   | A                                                                                   | A                                                                                   | A                                                                                   | A                                                                                    | A                                                                                     | A                                                                                     | mV/A/m                            |
| 1.5                                      | 22                                                                                  | 18                                                                                  | 21                                                                                  | 17                                                                                  | 16                                                                                  | 15                                                                                   | 24                                                                                    | 21                                                                                    | 30                                |
| 2.5                                      | 31                                                                                  | 26                                                                                  | 30                                                                                  | 25                                                                                  | 23                                                                                  | 21                                                                                   | 34                                                                                    | 29                                                                                    | 16.4                              |
| 4                                        | 42                                                                                  | 35                                                                                  | 39                                                                                  | 33                                                                                  | 30                                                                                  | 27                                                                                   | 44                                                                                    | 37                                                                                    | 10.2                              |
| 6                                        | 52                                                                                  | 46                                                                                  | 50                                                                                  | 42                                                                                  | 39                                                                                  | 35                                                                                   | 56                                                                                    | 47                                                                                    | 6.8                               |
|                                          |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                   |
| 10                                       | 86                                                                                  | 73                                                                                  | 80                                                                                  | 68                                                                                  | 65                                                                                  | 58                                                                                   | 82                                                                                    | 68                                                                                    | 4.05                              |
| 16                                       | 116                                                                                 | 97                                                                                  | 107                                                                                 | 91                                                                                  | 87                                                                                  | 77                                                                                   | 107                                                                                   | 89                                                                                    | 2.55                              |
| 25                                       | 154                                                                                 | 132                                                                                 | 143                                                                                 | 121                                                                                 | 121                                                                                 | 108                                                                                  | 139                                                                                   | 118                                                                                   | 1.61                              |
| 35                                       | 193                                                                                 | 160                                                                                 | 176                                                                                 | 149                                                                                 | 143                                                                                 | 127                                                                                  | 171                                                                                   | 144                                                                                   | 1.17                              |
| 50                                       | 231                                                                                 | 198                                                                                 | 215                                                                                 | 187                                                                                 | 176                                                                                 | 154                                                                                  | 203                                                                                   | 171                                                                                   | 0.87                              |
| 70                                       | 297                                                                                 | 253                                                                                 | 275                                                                                 | 237                                                                                 | 220                                                                                 | 193                                                                                  | 251                                                                                   | 214                                                                                   | 0.61                              |
| 95                                       | 363                                                                                 | 314                                                                                 | 341                                                                                 | 292                                                                                 | 264                                                                                 | 231                                                                                  | 305                                                                                   | 257                                                                                   | 0.45                              |

These ratings are based on an ambient air temperature of 30° C



ECS

CIRCULAR TPS



## ÖLFLEX POWER NS Neutral Screen

NEUTRAL WIRE SCREENED CABLE

#2504

Freephone ECS Sales



LAPP KABEL STUTTGART ÖLFLEX® POWER NS

### Construction

- » Stranded plain annealed copper wires
- » PVC core insulation
- » Neutral screen made of plain annealed copper wire
- » PVC outer sheath
- » Colour : black

### Minimum Bending Radius

- » 12 x cable diameter

### Features

- » Flame retardant according to IEC 60332-1-2

### Temperature Rating

- » Up to 75°C

### Rated voltage

- » 0.6/1 kV

### Standards

- » AS/NZS 4961

| Item No       | Type                                                      | Conductors | Sheath | OD            |
|---------------|-----------------------------------------------------------|------------|--------|---------------|
| <b>1 Core</b> |                                                           |            |        |               |
| 8100669       | LAPP KABEL CU/PVC/NSC/PVC - For Direct Burial             | 10mm       | 3.2mm  | 14.8mm        |
| 8100670       | LAPP KABEL CU/PVC/NSC/PVC - For Direct Burial             | 16mm       | 3.2mm  | 16.2mm        |
| <b>2 Core</b> |                                                           |            |        |               |
| 8100671       | LAPP KABEL CU/PVC/NSC/PVC - Flat Cable                    | 2.5mm      | 1.8mm  | 12.5 x 8.6mm  |
| 8100672       | LAPP KABEL CU/PVC/NSC/PVC - Flat Cable                    | 4mm        | 1.8mm  | 14.5 x 9.5mm  |
| 8100673       | LAPP KABEL CU/PVC/NSC/PVC - Flat Cable                    | 6mm        | 1.8mm  | 15.8 x 10.2mm |
| 8100679       | LAPP KABEL CU/PVC/NSC/PVC - Flat Cable, For Direct Burial | 10mm       | 3.2mm  | 21.0 x 14.4mm |
| 8100680       | LAPP KABEL CU/PVC/NSC/PVC - Flat Cable, For Direct Burial | 16mm       | 3.2mm  | 23.5 x 15.8mm |
| <b>3 Core</b> |                                                           |            |        |               |
| 8100681       | LAPP KABEL CU/PVC/NSC/PVC                                 | 2.5mm      | 1.8mm  | 12.8mm        |
| 8100682       | LAPP KABEL CU/PVC/NSC/PVC                                 | 4mm        | 1.8mm  | 14.9mm        |
| 8100683       | LAPP KABEL CU/PVC/NSC/PVC                                 | 6mm        | 1.8mm  | 16.3mm        |
| 8100689       | LAPP KABEL CU/PVC/NSC/PVC - For Direct Burial             | 10mm       | 3.2mm  | 21.5mm        |
| 8100690       | LAPP KABEL CU/PVC/NSC/PVC - For Direct Burial             | 16mm       | 3.2mm  | 23.8mm        |
| <b>4 Core</b> |                                                           |            |        |               |
| 8100691       | LAPP KABEL CU/PVC/NSC/PVC                                 | 2.5mm      | 1.8mm  | 13.8mm        |
| 8100692       | LAPP KABEL CU/PVC/NSC/PVC                                 | 4mm        | 1.8mm  | 16.2mm        |
| 8100693       | LAPP KABEL CU/PVC/NSC/PVC                                 | 6mm        | 1.8mm  | 18.6mm        |
| 8100699       | LAPP KABEL CU/PVC/NSC/PVC - For Direct Burial             | 10mm       | 3.2mm  | 23.1mm        |
| 8100700       | LAPP KABEL CU/PVC/NSC/PVC - For Direct Burial             | 16mm       | 3.2mm  | 25.7mm        |



# RENT ME

LAPP CHAMPION Drum Roller Dispensers

**\$6**  
per/day

projects.ecsnz.com/rentals

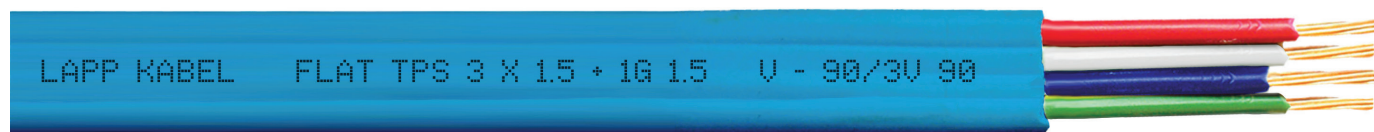
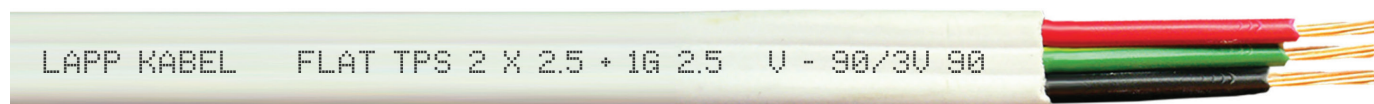


# Flat TPS

POWER DISTRIBUTION CABLE FOR FIXED INSTALLATIONS

#2096

SEARCH ON EXPRESS.ECSNZ.COM



## Standard

» AS/NZS 5000.2

## Flame Retardant to

» AS/NZS IEC 60332-1-2

## Temperature Rating

» -15 °C to 90 °C

## Voltage Rating

» 450/750 V

| 100m Drum                            | 200m Drum   | 500m Drum   | Conductors   | Conductor Size | Earth Size | Core Colours                 | Sheath Colour |
|--------------------------------------|-------------|-------------|--------------|----------------|------------|------------------------------|---------------|
| <b>2 Core</b>                        |             |             |              |                |            |                              |               |
| 8100721                              |             |             | 2 (no earth) | 1.5mm          | 1.5mm      | Red, Black                   | White         |
| <b>2 Core + Earth</b>                |             |             |              |                |            |                              |               |
| 8100701                              | 8100701-200 |             | 2 + Earth    | 1mm            | 1mm        | Red, Black, G/Y              | White         |
| 8100702                              | 8100702-200 | 8100702-500 | 2 + Earth    | 1.5mm          | 1.5mm      | Red, Black, G/Y              | White         |
| 8100703                              | 8100703-200 | 8100703-500 | 2 + Earth    | 2.5mm          | 2.5mm      | Red, Black, G/Y              | White         |
| 8100704                              |             | 8100704-500 | 2 + Earth    | 4mm            | 2.5mm      | Red, Black, G/Y              | White         |
| 8100705                              |             | 8100705-500 | 2 + Earth    | 6mm            | 2.5mm      | Red, Black, G/Y              | White         |
| 8100706                              |             |             | 2 + Earth    | 10mm           | 4mm        | Red, Black, G/Y              | White         |
| <b>3 Core + Earth</b>                |             |             |              |                |            |                              |               |
| 8100709                              |             |             | 3 + Earth    | 1.5mm          | 1.5mm      | Red, White, Blue, G/Y        | White         |
| 8100719                              |             |             | 3 + Earth    | 1.5mm          | 1.5mm      | Red, White, Blue, G/Y        | Blue          |
| 8100720                              |             |             | 3 + Earth    | 2.5mm          | 2.5mm      | Red, White, Blue, G/Y        | Blue          |
| <b>3 Core (No Earth) - Switching</b> |             |             |              |                |            |                              |               |
| 8100715                              |             |             | 3 (no earth) | 1mm            |            | Red, White, Blue             | Yellow/Lemon  |
| 8100716                              |             |             | 3 (no earth) | 1.5mm          |            | Red, White, Blue             | Yellow/Lemon  |
| <b>4 Core + Earth</b>                |             |             |              |                |            |                              |               |
| 8100730                              |             |             | 4 + Earth    | 1.5mm          | 1.5mm      | Red, White, Blue, Black, G/Y | Yellow/Lemon  |
| 8100731                              |             |             | 4 + Earth    | 2.5mm          | 2.5mm      | Red, White, Blue, Black, G/Y | Yellow/Lemon  |



FLAT TPS







## Fire Rated Series FR3013

FIRE RESISTANT POWER & CONTROL CABLE, 0.6/1KV, AS/NZS 5000.1

#1550



SEARCH ON EXPRESS.ECSNZ.COM

### AS/NZS 3013 Fire Resistant Cable

#### Conductors

Flexible bare copper wire stranding; class 5 according to IEC 60228 and AS/NZS 1125 with Glass Mica Tape Flame Barrier.

#### Insulation

Cross-linked, halogen-free, flame retardant compound type X-HF-110 acc. to AS/NZS 3808

#### Sheath

Flexible, thermoplastic, low smoke, halogen-free compound having reduced flame propagation when exposed to a fire, type HFS-110-TP acc. to AS/NZS 3808

#### Colour Of Outer Sheath

» Red

#### Temperature Rating

» -25 to 110°C

#### Voltage Rating

» 0.6/1kV

#### Minimum bending radius

» 8 x cable OD

#### Features

» Low Smoke & Halogen Free

#### Standards

- » AS/NZS 5000.1
- » AS/NZS 1660.5.1 / IEC 60332-3-22
- » AS/NZS 1660.5.2 / IEC 61034-2
- » AS/NZS 1660.5.3 / IEC 60754-1
- » AS/NZS 1660.5.4 / IEC 60754-2
- » AS/NZS 1660.5.5 / IEC 60331
- » AS/NZS 3013 / Cat WS52W

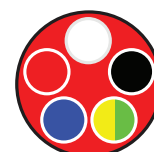
| Item No                                      | Conductor | Earth | Cable OD |
|----------------------------------------------|-----------|-------|----------|
| <b>2 Core and Earth</b>                      |           |       |          |
| TF-G-025236                                  | 1.5mm     | 1.5mm | 11.2mm   |
| TF-G-025237                                  | 2.5mm     | 2.5mm | 12.3mm   |
| TF-G-025238                                  | 4mm       | 2.5mm | 12.9mm   |
| TF-G-022522                                  | 6mm       | 2.5mm | 13.8mm   |
| <b>3 Core and Earth</b>                      |           |       |          |
| TF-G-018996                                  | 1.5mm     | 1.5mm | 12.3mm   |
| TF-G-025239                                  | 2.5mm     | 2.5mm | 13.5mm   |
| <b>4 Core and Earth</b>                      |           |       |          |
| TF-G-025242                                  | 2.5mm     | 2.5mm | 14.8mm   |
| TF-G-025243                                  | 4mm       | 2.5mm | 16.1mm   |
| TF-G-022524                                  | 6mm       | 2.5mm | 17.6mm   |
| TF-G-022527                                  | 10mm      | 4.0mm | 20.0mm   |
| TF-G-022528                                  | 16mm      | 6mm   | 23.2mm   |
| TF-G-122512                                  | 25mm      | 6mm   | 25.7mm   |
| <b>Multi-Core - 12 Core</b>                  |           |       |          |
| TF-G-036446                                  | 12G 1.5mm | 1.5mm | 19.4mm   |
| <b>3 Core and Earth + Screen (for VSD's)</b> |           |       |          |
| ECS-FR-4G2.5VSD                              | 4G 2.5mm  | 2.5mm | 19.3mm   |



3 Core



4 Core



5 Core

### CURRENT RATINGS FOR FR3013 FIRE RATED SERIES

| Conductor | Unenclosed |        |          |          |            |            |                     |                     |
|-----------|------------|--------|----------|----------|------------|------------|---------------------|---------------------|
|           | Spaced     | Spaced | Touching | Touching | In Conduit | In Conduit | Fully in insulation | Fully in insulation |
|           |            |        |          |          |            |            |                     |                     |
| mm2       | 2          | 3&4    | 2        | 3&4      | 2          | 3&4        | 2                   | 3&4                 |
| 1.5       | 32         | 28     | 30       | 26       | 26         | 22         | 15                  | 13                  |
| 2.5       | 43         | 36     | 41       | 34       | 34         | 29         | 20                  | 18                  |
| 4         | 57         | 48     | 54       | 45       | 46         | 39         | 28                  | 24                  |
| 6         | 72         | 61     | 67       | 58       | 58         | 49         | 35                  | 30                  |
| 16        |            | 113    |          | 106      |            | 90         |                     | 54                  |
| 25        |            | 150    |          | 140      |            | 120        |                     | 72                  |

# LAPP POWERFLEX LSZH FLEXIBLE POWER DISTRIBUTION CABLE



## What's so special about the new LAPP POWERFLEX LSZH Cable?

It was once true that the electrical and mechanical performance of LSZH cables were inferior to that of their traditional counterparts, but this is far less true today.

Built to perform in rough environments - LAPP have developed an enhanced LSZH cable that

provides the fire retardant properties of PVC and FEP materials, without reducing flexibility, bend radius, cold temperature capability, or performance.

This cable is also a great fit for Green Star Builds as the cable has no PVC compounds,

superseding PVC Best Practice cables and offers contractors another option to meet these project requirements.

This is the modern cable alternative for contractors, consultants, and engineers who want next-level safety and reliability.

## ÖLFLEX POWERFLEX LSZH Power Cable

LOW SMOKE, HALOGEN FREE, FLEXIBLE POWER DISTRIBUTION CABLE FOR FIXED INSTALLATIONS

#2766



SEARCH ON EXPRESS.ECSNZ.COM



### Construction

- » Conductors: Flexible Class 5 Stranded to AS/NZS 1125
- » Core Insulation: Halogen free compound X-HF-90
- » Sheath: Halogen free compound HFS-90-TP

### Nominal Voltage

- » 600/1000V

### Temperature Rating

- » -25 to 90

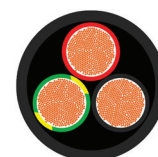
### Minimum Bending Radius

- » 6 x D for conductor sizes 6mm<sup>2</sup> and below
- » 8 x D for conductor sizes 10mm<sup>2</sup> and above

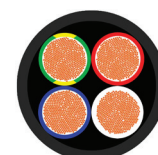
### Standards

- » Cable Construction: AS/NZS 5000.1
- » Flammability : AS/NZS 1660.5.6
- » Smoke Density : AS/NZS 1660.5.2
- » Halogen Free : AS/NZS 1660.5.4
- » UV-resistance : ISO 4892-2 method A

| Item No                        | Conductors | Earth Size | Rating    | OD     |
|--------------------------------|------------|------------|-----------|--------|
| <b>3 Core (2 Core + earth)</b> |            |            |           |        |
| 3805392                        | 1.5mm      | 1.5mm      | 600/1000V | 10.5mm |
| 3805394                        | 2.5mm      | 2.5mm      | 600/1000V | 11.3mm |
| 3805397                        | 4mm        | 4mm        | 600/1000V | 12.7mm |
| 3805400                        | 6mm        | 6mm        | 600/1000V | 13.9mm |
| 3805403                        | 10mm       | 10mm       | 600/1000V | 16.1mm |
| 3805406                        | 16mm       | 16mm       | 600/1000V | 18.2mm |
| <b>4 Core (3 Core + Earth)</b> |            |            |           |        |
| 3805393                        | 1.5mm      | 1.5mm      | 600/1000V | 11.2mm |
| 3805395                        | 2.5mm      | 2.5mm      | 600/1000V | 12.2mm |
| 3805398                        | 4mm        | 4mm        | 600/1000V | 13.8mm |
| 3805401                        | 6mm        | 6mm        | 600/1000V | 15.1mm |
| 3805404                        | 10mm       | 10mm       | 600/1000V | 17.5mm |
| 3805407                        | 16mm       | 16mm       | 600/1000V | 20.0mm |
| <b>5 Core (4 Core + Earth)</b> |            |            |           |        |
| 3805423                        | 1.5mm      | 1.5mm      | 600/1000V | 12.1mm |
| 3805396                        | 2.5mm      | 2.5mm      | 600/1000V | 13.1mm |
| 3805399                        | 4mm        | 4mm        | 600/1000V | 14.9mm |
| 3805402                        | 6mm        | 6mm        | 600/1000V | 16.4mm |
| 3805405                        | 10mm       | 10mm       | 600/1000V | 19.1mm |
| 3805408                        | 16mm       | 16mm       | 600/1000V | 21.8mm |
| 3805410                        | 25mm       | 25mm       | 600/1000V | 27.2mm |
| 3805412                        | 35mm       | 35mm       | 600/1000V | 31.1mm |
| 3805414                        | 50mm       | 50mm       | 600/1000V | 37.5mm |
| 3805416                        | 70mm       | 70mm       | 600/1000V | 43.9mm |
| 3805418                        | 95mm       | 95mm       | 600/1000V | 49.4mm |



3 Core  
(2 Core + Earth)



4 Core  
(3 Core + Earth)



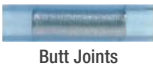
5 Core  
(4 Core + Earth)



ECS

LSZH POWER CABLE

| Item No              | Conductor Size | Bolt Size | Colour      | Pack Size |
|----------------------|----------------|-----------|-------------|-----------|
| Ring Lugs            |                |           |             |           |
| 63104010             | 0.25 to 0.75   | M3        | Green       | 100       |
| 63104020             | 0.25 to 0.75   | M4        | Green       | 100       |
| 63104030             | 0.25 to 0.75   | M5        | Green       | 100       |
| 63104040             | 0.5 to 1.5     | M3        | Red         | 100       |
| 63104050             | 0.5 to 1.5     | M3.5      | Red         | 100       |
| 63104060             | 0.5 to 1.5     | M4        | Red         | 100       |
| 63104070             | 0.5 to 1.5     | M5        | Red         | 100       |
| 63104080             | 0.5 to 1.5     | M6        | Red         | 100       |
| 63104160             | 1.5 to 2.5     | M3        | Blue        | 100       |
| 63104170             | 1.5 to 2.5     | M4        | Blue        | 100       |
| 63104180             | 1.5 to 2.5     | M5        | Blue        | 100       |
| 63104190             | 1.5 to 2.5     | M6        | Blue        | 100       |
| 63104200             | 1.5 to 2.5     | M8        | Blue        | 100       |
| 63104340             | 4 to 6         | M4        | Yellow      | 50        |
| 63104350             | 4 to 6         | M5        | Yellow      | 50        |
| 63104360             | 4 to 6         | M6        | Yellow      | 50        |
| 63104370             | 4 to 6         | M8        | Yellow      | 50        |
| 63104380             | 4 to 6         | M10       | Yellow      | 50        |
| Fork Lugs (Standard) |                |           |             |           |
| 63105010             | 0.25 to 0.75   | M3        | Green       | 100       |
| 63105020             | 0.25 to 0.75   | M4        | Green       | 100       |
| 63105050             | 0.5 to 1.5     | M4        | Red         | 100       |
| 63105060             | 0.5 to 1.5     | M5        | Red         | 100       |
| 63105070             | 0.5 to 1.5     | M6        | Red         | 100       |
| 63105130             | 1.5 to 2.5     | M4        | Blue        | 100       |
| 63105140             | 1.5 to 2.5     | M5        | Blue        | 100       |
| 63105150             | 1.5 to 2.5     | M6        | Blue        | 100       |
| 63105210             | 4 to 6         | M4        | Yellow      | 50        |
| 63105220             | 4 to 6         | M5        | Yellow      | 50        |
| 63105230             | 4 to 6         | M6        | Yellow      | 50        |
| Fork Lugs (Narrow)   |                |           |             |           |
| 63105040             | 0.5 to 1.5     | M3.5      | Red         | 100       |
| 63105110             | 1.5 to 2.5     | M3        | Blue        | 100       |
| 63105120             | 1.5 to 2.5     | M3.5      | Blue        | 100       |
| Fork Lugs (Talon)    |                |           |             |           |
| 63108050             | 1.5 to 2.5     | M5        | Blue        | 100       |
| Pin Lugs             |                |           |             |           |
| 63107010             | 0.25 to 0.75   |           | Green       | 100       |
| 63107020             | 0.5 to 1.5     |           | Red         | 100       |
| 63107040             | 1.5 to 2.5     |           | Blue        | 100       |
| 63107070             | 4 to 6         |           | Yellow      | 50        |
| Circular Connectors  |                |           |             |           |
| 63110010             | 0.5 to 1.5     |           | Red         | 100       |
| 63110020             | 1.5 to 2.5     |           | Blue        | 100       |
| Connector Sleeve     |                |           |             |           |
| 63111010             | 0.5 to 1.5     |           | Red         | 100       |
| 63111020             | 1.5 to 2.5     |           | Blue        | 50        |
| Butt Joints          |                |           |             |           |
| 63106020             | 0.5 to 1.5     |           | Red         | 100       |
| 63106040             | 1.5 to 2.5     |           | Blue        | 100       |
| 63106080             | 4 to 6         |           | Yellow      | 50        |
| End Joints           |                |           |             |           |
| 63112010             | 1.5 to 2.5     |           | Transparent | 100       |
| 63112020             | 4 to 6         |           | Transparent | 50        |



61722050



61722070

| Item No  | Type     | Conductor Sizes           | Weight | Crimp Type |
|----------|----------|---------------------------|--------|------------|
| 61722050 | DSA 0110 | 0.1 to 1.5mm <sup>2</sup> | 350g   | Oval       |
| 61722070 | CSA 0760 | 0.5 to 6mm <sup>2</sup>   | 220g   | Oval       |



## Basic Cable Ties

BASIC CABLE TIES

#108



SEARCH ON EXPRESS.ECSNZ.COM

### Benefits

High resistance to bases, oils, greases, oil derivatives, solvents containing chlorine

### Application Range

Basic Tie is a multipurpose cable tie for many applications

### Product Features

- » Flame retardancy: UL 94 class V2.
- » UV Resistant (Black Only)



| Item No      | Dimensions (mm) | Pack Size |
|--------------|-----------------|-----------|
| <b>Black</b> |                 |           |
| 61831041     | 98 x 2.5        | 100       |
| 61831045     | 140 x 3.6       | 100       |
| 61831043     | 160 x 2.5       | 100       |
| 61831049     | 160 x 4.5       | 100       |
| 61831044     | 200 x 2.6       | 100       |
| 61831046     | 200 x 3.6       | 100       |
| 61831047     | 290 x 3.6       | 100       |
| 61831051     | 200 x 4.8       | 100       |
| 61831053     | 370 x 3.6       | 100       |
| 61831054     | 290 x 4.8       | 100       |
| 61831056     | 360 x 4.8       | 100       |
| 61831062     | 365 x 7.8       | 100       |
| 61831063     | 450 x 7.8       | 100       |
| 61831064     | 540 x 7.8       | 100       |
| 61831065     | 750 x 7.8       | 100       |

| Item No      | Dimensions | Pack Size |
|--------------|------------|-----------|
| <b>White</b> |            |           |
| 61831001     | 98 x 2.5   | 100       |
| 61831003     | 160 x 2.5  | 100       |
| 61831004     | 200 x 2.6  | 100       |
| 61831006     | 200 x 3.6  | 100       |
| 61831007     | 290 x 3.6  | 100       |
| 61831011     | 200 x 4.8  | 100       |
| 61831014     | 290 x 4.8  | 100       |
| 61831016     | 360 x 4.8  | 100       |
| 61831023     | 450 x 7.8  | 100       |

## TY-RAP® Cable Ties

WEATHER-PROOF, UV-STABILISED

#106



SEARCH ON EXPRESS.ECSNZ.COM

### Description

Cable ties were first invented by Thomas & Betts, an electrical company, in 1958 under the brand name Ty-Rap. Initially they were designed for airplane wire harnesses.

### Application Range

The TY-RAP® weather-resistant product is used outdoors for installation and maintenance of power plants.

### Benefits

- » Weather-resistant

### TY- RAP®

- » Is a trademark of Thomas&Betts

### Product features

- » Metal blade in head

### Approvals

- » File Number E49405

| Description                  | Dimensions | 1000 Pack | 500 Pack | 100 Pack     | 50 Pack     |
|------------------------------|------------|-----------|----------|--------------|-------------|
| <b>TY Black</b>              |            |           |          |              |             |
| TYB 23 MX                    | 92 x 2.4   | 61723010  |          | 61723010-100 |             |
| TYB 24 MX                    | 140 x 3.6  | 61723020  |          | 61723020-100 |             |
| TYB 25 MX                    | 186 x 4.8  | 61723030  |          | 61723030-100 |             |
| TY 26 MX                     | 281 x 3.6  | 61723040  |          | 61723040-100 |             |
| TY 27 MX                     | 340 x 7.0  |           | 61723050 |              | 61723050-50 |
| TY 28 MX                     | 360 x 4.8  | 61723060  |          | 61723060-100 |             |
| TY 234 MX                    | 356 x 2.4  | 61723120  |          | 61723120-100 |             |
| <b>NDT (Detectable Blue)</b> |            |           |          |              |             |
| TY523M                       | 92 x 2.0   |           |          | 61723351     |             |
| TY525M                       | 186 x 4.0  |           |          | 61723352     |             |
| TY528M                       | 360 x 4.0  |           |          | 61723353     |             |
| TY527M                       | 340 x 7.0  |           |          |              | 61723354    |



## Stainless Steel Solar Cable Management

FOR SOLAR POWER INSTALLATIONS

#1568



SEARCH ON EXPRESS.ECSNZ.COM

### Ties

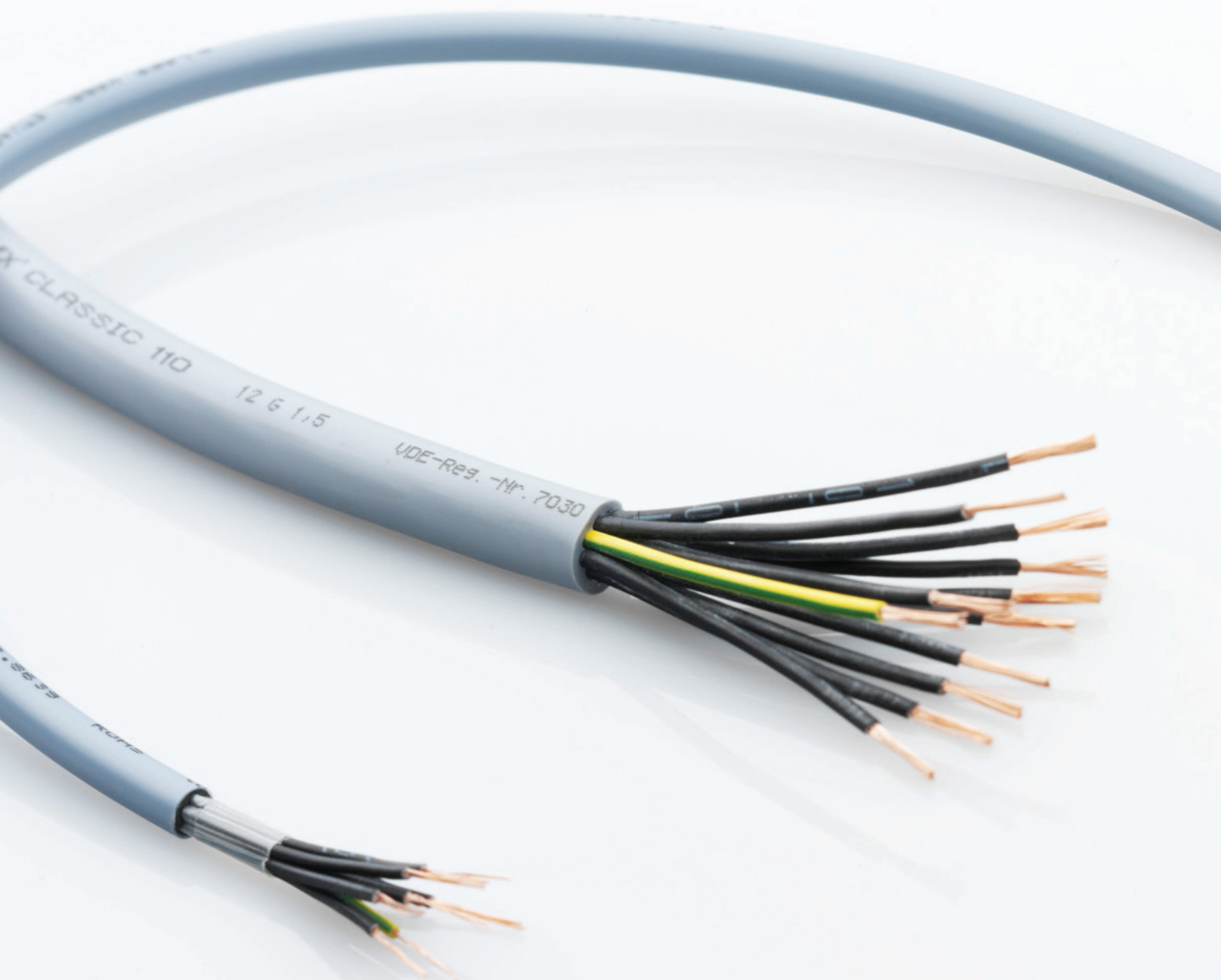
Some basic cable ties are bare metal and are quite sharp, however Wiley cable ties have a black Epoxy coating and are less likely to cut into cables.

### Clips

- » Can hold 2 cables: 5.0mm-5.7mm (i.e. a loop)
- » Can hold 1 cable: 5.0mm-7.0mm
- » Quick tidy cable handling
- » 304 Stainless Steel
- » Wiley is the market leader for this type of product



| Item No             | Description                                                   | Stainless Steel Rating | Dimensions  | Pack Size |
|---------------------|---------------------------------------------------------------|------------------------|-------------|-----------|
| <b>Ties</b>         |                                                               |                        |             |           |
| PV-TS1-4-46200-316C | Epoxy Coated Stainless Steel Cable Ties                       | 316                    | 4.6 x 200mm | 100       |
| PV-TS1-4-46360-316C | Epoxy Coated Stainless Steel Cable Ties                       | 316                    | 4.6 x 360mm | 100       |
| PV-HT338            | Cable Tie Gun for Stainless Steel Ties (max tie width: 7.9mm) |                        |             | 1         |
| <b>Clips</b>        |                                                               |                        |             |           |
| PV-ACC-EACH         | Stainless Steel Cable Clips Each                              | 304                    |             | 1         |
| PV-ACC              | Stainless Steel Cable Clips Packet                            | 304                    |             | 100       |



## THE WORLD'S ORIGINAL CONTROL CABLE

ÖLFLEX® – invented by LAPP – is the world's first flexible multiconductor control cable and is widely trusted for industrial machinery and equipment.

LAPP's ÖLFLEX® range is ideally suited to heating and cooling systems, wind power, buildings, medical technology, food and beverage, construction, vehicles and mobile equipment. LAPP offers an extensive range of ÖLFLEX® cables which includes flexible control, continuous flex, torsional, servo, high temperature, and field bus cables, all designed to withstand the rigours of the most demanding applications.



Contact our technical team today to assist with your application.  
[sales@ecsnz.com](mailto:sales@ecsnz.com) | [ecsnz.com](http://ecsnz.com) | 0800 849 2211





## Construction

» Flexible Class 5 fine wire stranding,  
PVC insulation and outer sheath.

## Minimum Bending Radius

» Flexing: 15 x cable OD  
» Fixed: 4 x cable OD

## Temperature Rating

» Flexing: -5 to 70  
» Fixed: -40 to 80

## Nominal Voltage

» 300/500V

## With Earth

| Grey          | Black   | Cores           | OD     |
|---------------|---------|-----------------|--------|
| <b>0.5mm</b>  |         |                 |        |
| 1119003       |         | 2 core + earth  | 4.8mm  |
| 1119004       |         | 3 core + earth  | 5.7mm  |
| 1119005       |         | 4 core + earth  | 6.2mm  |
| 1119007       |         | 6 core + earth  | 6.7mm  |
| 1119010       |         | 9 core + earth  | 8.6mm  |
| 1119012       |         | 11 core + earth | 8.9mm  |
| 1119018       |         | 17 core + earth | 10.5mm |
| 1119021       |         | 20 core + earth | 11.7mm |
| 1119025       |         | 24 core + earth | 12.4mm |
| 1119030       |         | 29 core + earth | 13.3mm |
| 1119040       |         | 39 core + earth | 15.4mm |
| <b>0.75mm</b> |         |                 |        |
| 1119103       | 1119871 | 2 core + earth  | 5.7mm  |
| 1119104       | 1119872 | 3 core + earth  | 6.2mm  |
| 1119105       | 1119873 | 4 core + earth  | 6.7mm  |
| 1119107       | 1119874 | 6 core + earth  | 7.3mm  |
| 1119109       |         | 8 Core + earth  | 9.4mm  |
| 1119110       |         | 9 core + earth  | 9.6mm  |
| 1119112       | 1119875 | 11 core + earth | 9.9mm  |
| 1119115       |         | 14 core + earth | 10.9mm |
| 1119118       | 1119876 | 17 core + earth | 11.7mm |
| 1119121       |         | 20 core + earth | 13mm   |
| 1119125       | 1119877 | 24 core + earth | 13.8mm |
| 1119134       |         | 33 core + earth | 15.9mm |
| 1119141       |         | 40 core + earth | 17.4mm |
| 1119150       |         | 49 core + earth | 19.2mm |
| <b>1mm</b>    |         |                 |        |
| 1119203       | 1119244 | 2 core + earth  | 6mm    |
| 1119204       | 1119245 | 3 core + earth  | 6.5mm  |
| 1119205       | 1119246 | 4 core + earth  | 7.1mm  |
| 1119207       | 1119247 | 6 core + earth  | 8mm    |
| 1119209       |         | 8 core + earth  | 10mm   |
| 1119210       |         | 9 core + earth  | 10.2mm |
| 1119212       | 1119248 | 11 core + earth | 10.5mm |
| 1119214       |         | 13 core + earth | 11.2mm |
| 1119218       | 1119249 | 17 core + earth | 12.7mm |
| 1119220       |         | 19 core + earth | 13.4mm |
| 1119225       |         | 24 core + earth | 14.7mm |
| 1119236       |         | 35 core + earth | 17.4mm |
| 1119241       |         | 40 core + earth | 18.8mm |
| 1119250       |         | 49 core + earth | 20.6mm |

| Grey         | Black   | Cores           | OD     |
|--------------|---------|-----------------|--------|
| <b>1.5mm</b> |         |                 |        |
| 1119303      | 1119020 | 2 core + earth  | 6.7mm  |
| 1119304      | 1119879 | 3 core + earth  | 7.2mm  |
| 1119305      | 1119880 | 4 core + earth  | 8.1mm  |
| 1119307      | 1119881 | 6 core + earth  | 8.9mm  |
| 1119309      |         | 8 core + earth  | 11.4mm |
| 1119312      | 1119882 | 11 core + earth | 12mm   |
| 1119318      | 1119883 | 17 core + earth | 14.4mm |
| 1119321      |         | 20 core + earth | 15.7mm |
| 1119325      | 1119884 | 24 core + earth | 16.9mm |
| 1119334      |         | 33 core + earth | 19.4mm |
| 1119341      |         | 40 core + earth | 21.3mm |
| 1119350      |         | 49 core + earth | 23.5mm |
| <b>2.5mm</b> |         |                 |        |
| 1119403      | 1119885 | 2 core + earth  | 8.1mm  |
| 1119404      | 1119886 | 3 core + earth  | 8.9mm  |
| 1119405      | 1119887 | 4 core + earth  | 10mm   |
| 1119407      | 1119888 | 6 core + earth  | 11.1mm |
| 1119412      | 1119889 | 11 core + earth | 14.8mm |
| 1119418      | 1119890 | 17 core + earth | 17.8mm |
| 1119425      | 1119891 | 24 core + earth | 20.8mm |
| <b>4mm</b>   |         |                 |        |
| 1119503      |         | 2 core + earth  | 9.9mm  |
| 1119504      |         | 3 core + earth  | 10.8mm |
| 1119505      |         | 4 core + earth  | 12.1mm |
| 1119507      |         | 6 core + earth  | 13.4mm |
| <b>6mm</b>   |         |                 |        |
| 1119603      |         | 2 core + earth  | 11.7mm |
| 1119604      |         | 3 core + earth  | 13mm   |
| 1119605      |         | 4 core + earth  | 14.5mm |
| <b>10mm</b>  |         |                 |        |
| 1119613      |         | 2 core + earth  | 14.6mm |
| 1119615      |         | 4 core + earth  | 18.1mm |
| <b>16mm</b>  |         |                 |        |
| 1119264      |         | 3 core + earth  | 18.8mm |
| <b>25mm</b>  |         |                 |        |
| 1119634      |         | 3 core + earth  | 23.5mm |

## No Earth

| Grey          | Black   | Cores              | OD    |
|---------------|---------|--------------------|-------|
| <b>0.5mm</b>  |         |                    |       |
| 1119752       |         | 2 core - no earth  | 4.8mm |
| 1119753       |         | 3 core - no earth  | 5.1mm |
| 1119754       |         | 4 core - no earth  | 5.7mm |
| 1119757       |         | 7 core - no earth  | 6.7mm |
| <b>0.75mm</b> |         |                    |       |
| 1119802       | 1119809 | 2 core - no earth  | 5.4mm |
| 1119803       | 1119892 | 3 core - no earth  | 5.7mm |
| 1119804       | 1119893 | 4 core - no earth  | 6.2mm |
| 1119805       |         | 5 core - no earth  | 6.7mm |
| 1119807       |         | 7 core - no earth  | 7.3mm |
| 1119812       |         | 12 core - no earth | 9.9mm |

| Grey         | Black   | Cores              | OD     |
|--------------|---------|--------------------|--------|
| <b>1mm</b>   |         |                    |        |
| 1119852      | 1119894 | 2 core - no earth  | 5.7mm  |
| 1119853      | 1119895 | 3 core - no earth  | 6mm    |
| 1119854      | 1119896 | 4 core - no earth  | 6.5mm  |
| 1119855      |         | 5 core - no earth  | 7.1mm  |
| 1119857      |         | 7 core - no earth  | 8mm    |
| 1119862      |         | 12 core - no earth | 10.5mm |
| <b>1.5mm</b> |         |                    |        |
| 1119902      | 1119898 | 2 core - no earth  | 6.3mm  |
| 1119903      | 1119899 | 3 core - no earth  | 6.7mm  |
| 1119904      | 1119900 | 4 core - no earth  | 7.2mm  |
| <b>2.5mm</b> |         |                    |        |
| 1119952      | 1119914 | 2 core - no earth  | 7.5mm  |





## Construction

Flexible Class 5 fine wire stranding, PVC inner insulation material and transparent PVC outer sheath. Tinned copper braid screen with high coverage.

## Minimum Bending Radius

» 20 x cable OD  
» 6 x cable OD

## Temperature Rating

» Flexing: -5 to 70  
» Fixed: -40 to 80

## Nominal Voltage

» 300/500V

## Test Voltage

» 4000V

| Item No | Description     | Cores / Conductor (mm <sup>2</sup> ) | OD (mm) | Gland Size |
|---------|-----------------|--------------------------------------|---------|------------|
| 1135752 | 2 core no earth | 2 x 0.5                              | 7.0     | M16        |
| 1135753 | 3 core no earth | 3 x 0.5                              | 7.3     | M16        |
| 1135003 | 2 core + earth  | 3G + 0.5                             | 7.3     | M16        |
| 1135004 | 3 core + earth  | 4G + 0.5                             | 7.9     | M16        |
| 1135005 | 4 core + earth  | 5G + 0.5                             | 8.4     | M16        |
| 1135007 | 6 core + earth  | 7G + 0.5                             | 8.9     | M16        |
| 1135012 | 11 core + earth | 12G + 0.5                            | 11.3    | M20        |
| 1135018 | 17 core + earth | 18G + 0.5                            | 13.3    | M25        |
| 1135025 | 24 core + earth | 25G + 0.5                            | 15.2    | M25        |
| 1135802 | 2 core no earth | 2 x 0.75                             | 7.4     | M16        |
| 1135803 | 3 core no earth | 3 x 0.75                             | 7.9     | M16        |
| 1135103 | 2 core + earth  | 3G + 0.75                            | 7.9     | M16        |
| 1135104 | 3 core + earth  | 4G + 0.75                            | 8.4     | M16        |
| 1135105 | 4 core + earth  | 5G + 0.75                            | 8.9     | M16        |
| 1135107 | 6 core + earth  | 7G + 0.75                            | 9.7     | M20        |
| 1135112 | 11 core + earth | 12G + 0.75                           | 12.3    | M20        |
| 1135118 | 17 core + earth | 18G + 0.75                           | 14.5    | M25        |
| 1135125 | 24 core + earth | 25G + 0.75                           | 16.6    | M25        |
| 1135852 | 2 core no earth | 2 x 1.0                              | 7.9     | M16        |
| 1135853 | 3 core no earth | 3 x 1.0                              | 8.2     | M16        |
| 1135203 | 2 core + earth  | 3G + 1.0                             | 8.2     | M16        |
| 1135204 | 3 core + earth  | 4G + 1.0                             | 8.7     | M16        |
| 1135205 | 4 core + earth  | 5G + 1.0                             | 9.5     | M20        |
| 1135207 | 6 core + earth  | 7G + 1.0                             | 10.2    | M20        |
| 1135212 | 11 core + earth | 12G + 1.0                            | 13.3    | M25        |
| 1135218 | 17 core + earth | 18G + 1.0                            | 15.5    | M25        |
| 1135225 | 24 core + earth | 25G + 1.0                            | 17.5    | M32        |
| 1135902 | 2 core no earth | 2 x 1.5                              | 8.5     | M16        |
| 1135303 | 2 core + earth  | 3G + 1.5                             | 8.9     | M16        |
| 1135903 | 3 core + earth  | 3 x 1.5                              | 8.9     | M16        |
| 1135304 | 3 core + earth  | 4G + 1.5                             | 9.6     | M20        |
| 1135305 | 4 core + earth  | 5G + 1.5                             | 10.3    | M20        |
| 1135307 | 6 core + earth  | 7G + 1.5                             | 11.3    | M20        |
| 1135312 | 11 core + earth | 12G + 1.5                            | 14.8    | M25        |
| 1135318 | 17 core + earth | 18G + 1.5                            | 17.2    | M32        |
| 1135325 | 24 core + earth | 25G + 1.5                            | 20.1    | M32        |
| 1135402 | 2 core no earth | 2 x 2.5                              | 9.9     | M20        |
| 1135403 | 2 core + earth  | 3G + 2.5                             | 10.3    | M20        |
| 1135404 | 3 core + earth  | 4G + 2.5                             | 11.3    | M20        |
| 1135405 | 4 core + earth  | 5G + 2.5                             | 12.6    | M25        |
| 1135407 | 6 core + earth  | 7G + 2.5                             | 13.9    | M25        |
| 1135412 | 11 core + earth | 12G + 2.5                            | 17.6    | M32        |
| 1135502 | 2 core no earth | 2 x 4.0                              | 11.4    | M20        |
| 1135504 | 3 core + earth  | 4G + 4.0                             | 13.4    | M25        |
| 1135505 | 4 core + earth  | 5G + 4.0                             | 14.7    | M25        |



## ÖLFLEX CLASSIC 115 CY BLACK

EMC SCREENED FLEXIBLE SMALLER OUTER DIAMETER CONTROL CABLE W/ BLACK OUTER SHEATH

#1874



SEARCH ON EXPRESS.ECSNZ.COM



### Construction

Fine wire strand made of bare copper wires, tinned-copper braiding. Core insulation: PVC, Cores twisted in layers.

**Note:** Only Black PVC outer sheath suitable for outdoors, UV-weather resistant according to ISO 4892-2.

### Minimum Bending Radius

- » Occasional flexing: 20 x outer diameter
- » Fixed installation: 6 x outer diameter

### Temperature Rating

- » Occasional Flexing: -5°C to +70°C
- » Fixed installation: -40°C to +80°C

### Nominal Voltage

- » U0/U: 300/500 V

| Item No | Description     | Cores / Conductor (mm²) | OD (mm) |
|---------|-----------------|-------------------------|---------|
| 1136510 | 2 core no earth | 2 x 0.5                 | 5.8     |
| 1136512 | 3 core no earth | 3 x 0.5                 | 6.1     |
| 1136511 | 2 core + earth  | 3G 0.5                  | 6.1     |
| 1136513 | 3 core + earth  | 4G 0.5                  | 6.5     |
| 1136515 | 4 core + earth  | 5G 0.5                  | 7.0     |
| 1136517 | 6 core + earth  | 7G 0.5                  | 7.5     |
| 1136523 | 2 core no earth | 2 x 0.75                | 6.2     |
| 1136525 | 3 core no earth | 3 x 0.75                | 6.5     |
| 1136110 | 2 core + earth  | 3G 0.75                 | 6.5     |
| 1136111 | 3 core + earth  | 4G 0.75                 | 7.0     |
| 1136113 | 4 core + earth  | 5G 0.75                 | 7.7     |
| 1136114 | 6 core + earth  | 7G 0.75                 | 8.3     |
| 1136535 | 2 core no earth | 2 x 1.0                 | 6.5     |
| 1136537 | 3 core no earth | 3 x 1.0                 | 6.8     |
| 1136536 | 2 core + earth  | 3G 1.0                  | 6.8     |
| 1136538 | 3 core + earth  | 4G 1.0                  | 7.3     |
| 1136540 | 4 core + earth  | 5G 1.0                  | 8.1     |
| 1136542 | 6 core + earth  | 7G 1.0                  | 8.8     |
| 1136547 | 2 core no earth | 2 x 1.5                 | 7.1     |
| 1136549 | 3 core no earth | 3 x 1.5                 | 7.5     |
| 1136548 | 2 core + earth  | 3G 1.5                  | 7.5     |
| 1136550 | 3 core + earth  | 4G 1.5                  | 8.2     |
| 1136552 | 4 core + earth  | 5G 1.5                  | 8.9     |
| 1136554 | 6 core + earth  | 7G 1.5                  | 9.9     |

## ÖLFLEX CLASSIC 115 CY GREY

EMC SCREENED FLEXIBLE SMALLER OUTER DIAMETER CONTROL CABLE W/ GREY OUTER SHEATH

#1931



SEARCH ON EXPRESS.ECSNZ.COM



| Item No | Description     | Cores / Conductor (mm²) | OD (mm) |
|---------|-----------------|-------------------------|---------|
| 1136752 | 2 core no earth | 2 x 0.5                 | 5.8     |
| 1136753 | 3 core no earth | 3 x 0.5                 | 6.1     |
| 1136003 | 2 core + earth  | 3G 0.5                  | 6.1     |
| 1136004 | 3 core + earth  | 4G 0.5                  | 6.5     |
| 1136005 | 4 core + earth  | 5G 0.5                  | 7.0     |
| 1136007 | 6 core + earth  | 7G 0.5                  | 7.5     |
| 1136012 | 11 core + earth | 12G 0.5                 | 9.9     |
| 1136018 | 17 core + earth | 18G 0.5                 | 11.5    |
| 1136802 | 2 core no earth | 2 x 0.75                | 6.2     |
| 1136803 | 3 core no earth | 3 x 0.75                | 6.5     |
| 1136103 | 2 core + earth  | 3G 0.75                 | 6.5     |
| 1136104 | 3 core + earth  | 4G 0.75                 | 7.0     |
| 1136105 | 4 core + earth  | 5G 0.75                 | 7.7     |
| 1136107 | 6 core + earth  | 7G 0.75                 | 8.3     |
| 1136112 | 11 core + earth | 12G 0.75                | 10.9    |
| 1136118 | 17 core + earth | 18G 0.75                | 12.7    |
| 1136852 | 2 core no earth | 2 x 1.0                 | 6.5     |
| 1136853 | 3 core no earth | 3 x 1.0                 | 6.8     |
| 1136203 | 2 core + earth  | 3G 1.0                  | 6.8     |
| 1136204 | 3 core + earth  | 4G 1.0                  | 7.3     |
| 1136205 | 4 core + earth  | 5G 1.0                  | 8.1     |
| 1136207 | 6 core + earth  | 7G 1.0                  | 8.8     |
| 1136212 | 11 core + earth | 12G 1.0                 | 11.5    |
| 1136218 | 17 core + earth | 18G 1.0                 | 13.9    |
| 1136902 | 2 core no earth | 2 x 1.5                 | 7.1     |
| 1136903 | 3 core no earth | 3 x 1.5                 | 7.5     |
| 1136303 | 2 core + earth  | 3G 1.5                  | 7.5     |
| 1136304 | 3 core + earth  | 4G 1.5                  | 8.2     |
| 1136305 | 4 core + earth  | 5G 1.5                  | 8.9     |
| 1136307 | 6 core + earth  | 7G 1.5                  | 9.9     |
| 1136312 | 11 core + earth | 12G 1.5                 | 13.0    |
| 1136318 | 17 core + earth | 18G 1.5                 | 15.6    |



SCREEN CONTROL CABLE





## ÖLFLEX 100 Series

MULTI-CORE FLEX WITH COLOURED CORES

#20



SEARCH ON EXPRESS.ECSNZ.COM



### Construction

- » Flexible Class 5 fine wire stranding
- » PVC inner insulation material
- » Grey PVC outer sheath

### Minimum Bending Radius

- » Flexing: 15 x cable OD
- » Fixed: 4 x cable

### Temperature Rating

- » Flexing: -5 to 70
- » Fixed: -40 to 80

### Nominal Voltage

- » 300/500V (<1.5mm)
- » 600/1000V (>=2.5mm)

| Item No                        | Conductor Size | Description    | Conductor Colours                | OD     |
|--------------------------------|----------------|----------------|----------------------------------|--------|
| <b>2 Core</b>                  |                |                |                                  |        |
| 100004                         | 0.5mm          | 2 core         | Blue, Brown                      | 4.8mm  |
| 100214                         | 0.75mm         | 2 core         | Blue, Brown                      | 5.4mm  |
| 100414                         | 1.0mm          | 2 core         | Blue, Brown                      | 5.7mm  |
| 100634                         | 1.5mm          | 2 core         | Blue, Brown                      | 6.3mm  |
| 10086                          | 2.5mm          | 2 core         | Blue, Brown                      | 8.9mm  |
| <b>3 core (2 core + earth)</b> |                |                |                                  |        |
| 100014                         | 0.5mm          | 2 core + earth | Blue, Brown, Green/Yellow        | 5.1mm  |
| 100224                         | 0.75mm         | 2 core + earth | Blue, Brown, Green/Yellow        | 5.7mm  |
| 100424                         | 1.0mm          | 2 core + earth | Blue, Brown, Green/Yellow        | 6.0mm  |
| 100644                         | 1.5mm          | 2 core + earth | Blue, Brown, Green/Yellow        | 6.7mm  |
| 10087                          | 2.5mm          | 2 core + earth | Blue, Brown, Green/Yellow        | 9.6mm  |
| <b>4 core (3 core + earth)</b> |                |                |                                  |        |
| 100434                         | 1.0mm          | 3 core + earth | Brown, Black, Grey, Green/Yellow | 6.5mm  |
| 100654                         | 1.5mm          | 3 core + earth | Brown, Black, Grey, Green/Yellow | 7.2mm  |
| 100883                         | 2.5mm          | 3 core + earth | Brown, Black, Grey, Green/Yellow | 10.7mm |



2 Core

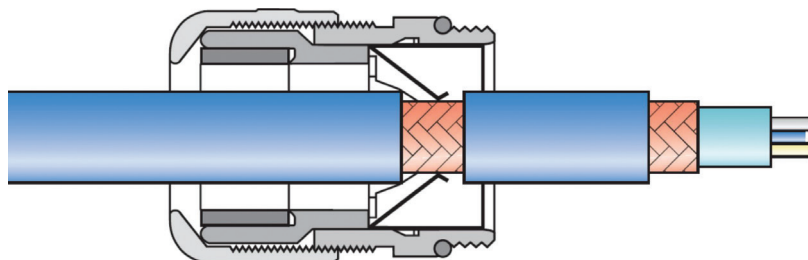


3 core (2 core + earth)



4 core (3 core + earth)

For the perfect Screened Gland,  
try SKINTOP EMC...





## ÖLFLEX 100CY Series

EMC SCREENED FLEXIBLE POWER CABLE WITH COLOURED CORES

#24



SEARCH ON EXPRESS.ECSNZ.COM



### Construction

Flexible Class 5 fine wire stranding, PVC inner insulation material and transparent PVC outer sheath. Tinned copper braid screen with high coverage.

### Minimum Bending Radius

» Flexing: 20 x cable OD  
» Fixed: 6 x cable OD

### Temperature Rating

» Flexing: -5 to 70  
» Fixed: -40 to 80

### Nominal Voltage

» Flexing <= 1.0mm 300/500V  
» >= 1.5mm 450/750V  
» Fixed >= 1.5mm 600/1000V

| Item No                        | Cores | Conductor | Description    | Conductor Colours                | OD     | Suitable Gland |
|--------------------------------|-------|-----------|----------------|----------------------------------|--------|----------------|
| <b>4 core (3 core + earth)</b> |       |           |                |                                  |        |                |
| 352223                         | 4     | 1.0mm     | 3 core + earth | Brown, Black, Grey, Green/Yellow | 8.7mm  | M20 EMC        |
| 354593                         | 4     | 1.5mm     | 3 core + earth | Brown, Black, Grey, Green/Yellow | 11.3mm | M20 EMC        |
| 350173                         | 4     | 2.5mm     | 3 core + earth | Brown, Black, Grey, Green/Yellow | 13.5mm | M25 EMC        |
| 350183                         | 4     | 4mm       | 3 core + earth | Brown, Black, Grey, Green/Yellow | 15.1mm | M25/M32 EMC    |
| 350193                         | 4     | 6mm       | 3 core + earth | Brown, Black, Grey, Green/Yellow | 16.6mm | M32 EMC        |
| 350213                         | 4     | 10mm      | 3 core + earth | Brown, Black, Grey, Green/Yellow | 21.1mm | M40 EMC        |
| 350223                         | 4     | 16mm      | 3 core + earth | Brown, Black, Grey, Green/Yellow | 23.9mm | M40 EMC        |
| 350233                         | 4     | 25mm      | 3 core + earth | Brown, Black, Grey, Green/Yellow | 29.4mm | M50 EMC        |
| 350253                         | 4     | 35mm      | 3 core + earth | Brown, Black, Grey, Green/Yellow | 32.4mm | M50 EMC        |
| 350273                         | 4     | 50mm      | 3 core + earth | Brown, Black, Grey, Green/Yellow | 38.8mm | M63 EMC        |
| 350283                         | 4     | 70mm      | 3 core + earth | Brown, Black, Grey, Green/Yellow | 43.7mm | M63 EMC        |
| 350293                         | 4     | 95mm      | 3 core + earth | Brown, Black, Grey, Green/Yellow | 50.4mm | M63 Plus EMC   |



4 core  
(3 core + earth)

## ULTRA SCREEN VSD Black

DOUBLE EMC SCREENED CABLE WITH 100% SCREEN COVERAGE

#24



SEARCH ON EXPRESS.ECSNZ.COM



### Conductors

Fine strands of bare copper wire acc. to IEC 60228 resp. VDE 0295, Class 5

### Core Insulation

» PVC

### Core Colour

» Red, White, Blue, Green/Yellow

### Screening

» 1st: Pure copper foil  
» 2nd Tinned copper wire braiding

### Outer Sheath

» UV Resistant PVC

### Sheath Colour

» Black

### Rated Voltage

» 0.6/1 kV

### Test Voltage

» 4 kV

### Minimum Bending Radius

» 4 x cable diameter (fixed installation)

### Temperature Range

» -20 to +90

### Flame Retardant

» In acc. to IEC 60332-1-2

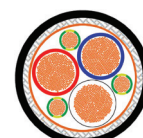
### Standards

» In acc. to AS/NZS 5000.1

| Item No             | Conductor      | Cable OD | Suitable Gland | Item No  |
|---------------------|----------------|----------|----------------|----------|
| <b>Single Earth</b> |                |          |                |          |
| 3804245A            | 4G 1.5mm       | 13.3     | M25 EMC        | 53112671 |
| 3804246A            | 4G 2.5mm       | 14       | M25 EMC        | 53112676 |
| 3804247A            | 4G 4mm         | 16.5     | M32 EMC        | 53112677 |
| <b>Split Earth</b>  |                |          |                |          |
| 3804269A            | 3x6 + 3x1.5mm  | 17       | M32 EMC        | 53112677 |
| 3804261A            | 3x10 + 3x1.5mm | 19       | M32 EMC        | 53112677 |
| 3804270A            | 3x16 + 3x2.5mm | 22       | M40 EMC        | 53112678 |
| 3804263A            | 3x25 + 3x4mm   | 25.5     | M40 EMC        | 53112678 |
| 3804264A            | 3x35 + 3x6mm   | 29       | M50 EMC        | 53112679 |
| 3804265A            | 3x50 + 3x10mm  | 36       | M63 EMC        | 53112680 |
| 3804266A            | 3x70 + 3x10mm  | 41.1     | M63 EMC        | 53112680 |



Single Earth



Split Earth

ecs

## SIZES UP TO 240MM AVAILABLE ON REQUEST

The new LAPP VSD ULTRA gets its name from the special ULTRA performance screen. This innovation in design has a 100% copper wrap screen, reducing the resistance of the screen compared to traditional flexible VSD cables.

SCREENED POWER

ÖLFLEX SERVO 719 CY 

SCREENED SERVO CABLE WITH PVC OUTER SHEATH FOR STATIC USE

#1889

SEARCH ON EXPRESS.ECSNZ.COM



## LAPP KABEL STUÏTGART ÖLFLEX® SERVO 719 CY DESINA, CE

**Construction**

Fine wire stranding, polypropylene (PP) inner insulation material and PVC outer sheath, orange. Individual design depending on the item: Power cores without or with one or two individually shielded control core pairs twisted together in short lay lengths; Power cores with control core triplet twisted together in short lay lengths.

**Minimum Bending Radius**

- » Flexing: 15 x cable OD
- » Fixed: 6 x cable OD

**Temperature Rating**

- » Flexing: -5°C to 60°C (UL: +80°C)
- » Fixed: -40°C to 80°C

**Nominal Voltage**

- » IEC: 600/1000V
- » UL & CSA: 1000V

| Item No       | Cores | Conductor | Description    | Control Cores | OD (mm) |
|---------------|-------|-----------|----------------|---------------|---------|
| <b>0.75mm</b> |       |           |                |               |         |
| 1020024       | 4     | 0.75mm    | 3 Core + Earth | 2x(2x0,34)    | 9.7     |
| <b>1.5mm</b>  |       |           |                |               |         |
| 1020025       | 4     | 1.5mm     | 3 Core + Earth | 2x(2x0,75)    | 12.3    |
| 1020045       | 4     | 1.5mm     | 3 Core + Earth | 2x1,0         | 10.8    |
| 1020019       | 4     | 1.5mm     | 3 Core + Earth | 2x1,5         | 11.5    |
| <b>2.5mm</b>  |       |           |                |               |         |
| 1020026       | 4     | 2.5mm     | 3 Core + Earth | 2x(2x1)       | 14.7    |
| 1020046       | 4     | 2.5mm     | 3 Core + Earth | 2x1,0         | 12.1    |
| 1020054       | 4     | 2.5mm     | 3 Core + Earth | 3x1,0         | 12.9    |

| Item No     | Cores | Conductor | Description    | Control Cores | OD (mm) |
|-------------|-------|-----------|----------------|---------------|---------|
| <b>4mm</b>  |       |           |                |               |         |
| 1020021     | 4     | 1.5mm     | 3 Core + Earth | 2x1,5         | 15      |
| 1020027     | 4     | 1.5mm     | 3 Core + Earth | 2x1,0         | 16.4    |
| <b>10mm</b> |       |           |                |               |         |
| 1020023     | 4     | 1.5mm     | 3 Core + Earth | 2x1,5         | 19.5    |
| <b>16mm</b> |       |           |                |               |         |
| 1020031     | 4     | 1.5mm     | 3 Core + Earth | 2x1,5         | 25      |

ÖLFLEX SERVO FD 796 CP  

HIGHLY FLEXIBLE SCREENED SERVO CABLE FOR HARSH CONDITION DRAG CHAIN APPLICATIONS

#1889

EXPRESS.ECSNZ.COM



## LAPP KABEL STUÏTGART ÖLFLEX® SERVO FD 796 CP CE

**Construction**

Extra-fine wire strand made of bare copper wires (class 6) Core insulation: polypropylene (PP), Individual design depending on the item: Power cores without or with one or two individually shielded control core pairs twisted together in short lay lengths; Power cores with control core triplet twisted together in short lay lengths, Non-woven wrapping, Tinned-copper braiding, PUR outer sheath, orange (RAL 2003).

**Minimum Bending Radius**

- » Flexing: up from 7.5 x OD (up to 16mm<sup>2</sup>)
- » Flexing: up from 10 x OD (from 25mm<sup>2</sup>)
- » Fixed installation: 4 x OD

**Temperature Rating**

- » Flexing: -40°C to 90°C (UL/CSA: +80°C)
- » Fixed installation: -50°C to 90°C (UL/CSA: +80°C)

**Nominal Voltage**

- » Power cores and control cores:
- » IEC U0/U: 600/1000 V
- » UL & CSA: 1000 V

| Item No      | Cores | Conductor | Description     | Control Cores | OD (mm) |
|--------------|-------|-----------|-----------------|---------------|---------|
| <b>1.5mm</b> |       |           |                 |               |         |
| 0027950      | 4     | 1.5mm     | 4 cores + earth | -             | 9.1     |
| 0027959      | 4     | 1.5mm     | 4 cores + earth | 2 x 1.5mm     | 11.6    |
| 0027969      | 4     | 1.5mm     | 4 cores + earth | 2 x(2x0.75mm) | 12.2    |
| <b>2.5mm</b> |       |           |                 |               |         |
| 0027951      | 4     | 2.5mm     | 4 cores + earth | -             | 10.6    |
| 0027960      | 4     | 2.5mm     | 4 cores + earth | 2 x 1.5mm     | 13.4    |
| 0027970      | 4     | 2.5mm     | 4 cores + earth | 2 x(2x1mm)    | 14.6    |
| <b>4mm</b>   |       |           |                 |               |         |
| 0027952      | 4     | 4mm       | 4 cores + earth | -             | 11.9    |
| 0027961      | 4     | 4mm       | 4 cores + earth | 2 x 1.5mm     | 14.8    |
| 0027980      | 4     | 4mm       | 4 cores + earth | 2x(2x1,0)     | 16.1    |

| Item No     | Cores | Conductor | Description     | Control Cores | OD (mm) |
|-------------|-------|-----------|-----------------|---------------|---------|
| <b>6mm</b>  |       |           |                 |               |         |
| 0027962     | 4     | 6mm       | 4 cores + earth | 2 x 1.5mm     | 16.8    |
| 0027972     | 4     | 6mm       | 4 cores + earth | (2x1)+(2x1,5) | 18.1    |
| <b>10mm</b> |       |           |                 |               |         |
| 0027963     | 4     | 10mm      | 4 cores + earth | 2 x 1.5mm     | 19.4    |
| 0027973     | 4     | 10mm      | 4 cores + earth | (2x1)+(2x1,5) | 21.8    |
| <b>16mm</b> |       |           |                 |               |         |
| 0027955     | 4     | 16mm      | 4 cores + earth | -             | 21.6    |
| 0027964     | 4     | 16mm      | 4 cores + earth | 2 x 1.5mm     | 23.1    |
| 0027974     | 4     | 16mm      | 4 cores + earth | 2 x(2x1.5mm)  | 25.5    |

ÖLFLEX SERVO FD 798 CP  

HIGHLY FLEXIBLE SCREENED ENCODER CABLE FOR HARSH CONDITION DRAG CHAIN APPLICATIONS

#1889

EXPRESS.ECSNZ.COM



## LAPP KABEL STUÏTGART ÖLFLEX® SERVO FD 798 CP

**Construction**

Super flexible Class 6 fine wire stranding, green PUR outer sheath for extra chemical resistance. Tinned copper braid screen with high coverage.

**Minimum Bending Radius**

- Flexing: 7.5 x cable OD
- Fixed: 4 x cable OD

**Temperature Rating**

- Flexing: -40°C to 90°C

| Item No | Description          | OD (mm) |
|---------|----------------------|---------|
| 0036915 | 4x2x0.25mm + 2x1mm   | 8.8     |
| 0036916 | 6x2x0.25mm + 2x0.5mm | 10.3    |
| 0036921 | 4x2x0.25mm           | 7.6     |

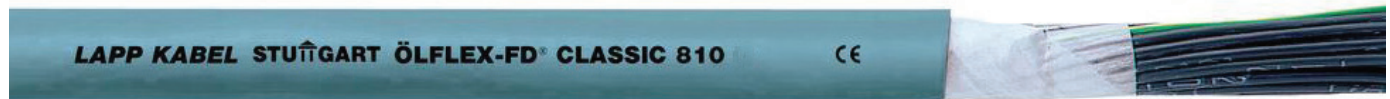
## ÖLFLEX FD CLASSIC 810 Series

ULTRA-FLEXIBLE DRAGCHAIN CABLE

#28



SEARCH ON EXPRESS.ECSNZ.COM



### Construction

- » Super flexible Class 6 fine wire stranding,
- » PVC inner insulation material
- » PVC outer sheath.

### Minimum Bending Radius

- » 7.5 x cable OD
- » 4 x cable OD

### Temperature Rating

- » 0 to 70
- » -40 to 70

### Standards

- » 300/500V

| Item No                  | Cores | Conductor | Description       | OD     |
|--------------------------|-------|-----------|-------------------|--------|
| <b>0.5mm Conductors</b>  |       |           |                   |        |
| 26100                    | 2     | 0.5mm     | 2 core - No Earth | 5.8mm  |
| 26101                    | 3     | 0.5mm     | 2 core + earth    | 6.2mm  |
| 26103                    | 5     | 0.5mm     | 4 core + earth    | 7.3mm  |
| 26104                    | 7     | 0.5mm     | 6 core + earth    | 8.5mm  |
| 26105                    | 12    | 0.5mm     | 11 core + earth   | 10mm   |
| 26106                    | 18    | 0.5mm     | 17 core + earth   | 12mm   |
| 26107                    | 25    | 0.5mm     | 24 core + earth   | 14.9mm |
| <b>0.75mm Conductors</b> |       |           |                   |        |
| 26119                    | 2     | 0.75mm    | 2 core - No Earth | 6.2mm  |
| 26120                    | 3     | 0.75mm    | 2 core + earth    | 6.7mm  |
| 26121                    | 4     | 0.75mm    | 3 core + earth    | 7.3mm  |
| 26122                    | 5     | 0.75mm    | 4 core + earth    | 7.9mm  |
| 26123                    | 7     | 0.75mm    | 6 core + earth    | 9.4mm  |
| 26124                    | 12    | 0.75mm    | 11 core + earth   | 11.2mm |
| 26126                    | 18    | 0.75mm    | 17 core + earth   | 13.3mm |
| 26127                    | 25    | 0.75mm    | 24 core + earth   | 15.9mm |

| Item No                 | Cores | Conductor | Description       | OD     |
|-------------------------|-------|-----------|-------------------|--------|
| <b>1mm Conductors</b>   |       |           |                   |        |
| 26130                   | 2     | 1mm       | 2 core - No Earth | 6.6mm  |
| 26131                   | 3     | 1mm       | 2 core + earth    | 7.1mm  |
| 26132                   | 4     | 1mm       | 3 core + earth    | 7.8mm  |
| 26133                   | 5     | 1mm       | 4 core + earth    | 8.5mm  |
| 26134                   | 7     | 1mm       | 6 core + earth    | 10.1mm |
| 26135                   | 12    | 1mm       | 11 core + earth   | 12mm   |
| 26138                   | 18    | 1mm       | 17 core + earth   | 14.5mm |
| 26139                   | 25    | 1mm       | 24 core + earth   | 17.8mm |
| <b>1.5mm Conductors</b> |       |           |                   |        |
| 26149                   | 2     | 1.5mm     | 2 core - No Earth | 7.3mm  |
| 26150                   | 3     | 1.5mm     | 2 core + earth    | 7.9mm  |
| 26151                   | 4     | 1.5mm     | 3 core + earth    | 8.6mm  |
| 26153                   | 7     | 1.5mm     | 6 core + earth    | 11.5mm |
| 26154                   | 12    | 1.5mm     | 11 core + earth   | 13.5mm |
| 26156                   | 18    | 1.5mm     | 17 core + earth   | 16.3mm |
| 26157                   | 25    | 1.5mm     | 24 core + earth   | 20mm   |
| <b>2.5mm Conductors</b> |       |           |                   |        |
| 26170                   | 3     | 2.5mm     | 2 core + earth    | 9.5mm  |
| 26171                   | 4     | 2.5mm     | 3 core + earth    | 10.5mm |
| 26172                   | 5     | 2.5mm     | 4 core + earth    | 13.8mm |

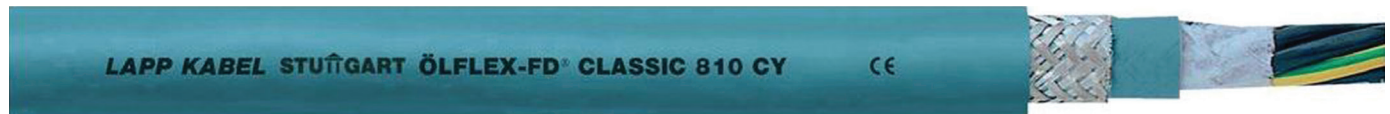
## ÖLFLEX FD CLASSIC 810 CY Series

ULTRA-FLEXIBLE DRAGCHAIN CABLE - SCREENED

#27



SEARCH ON EXPRESS.ECSNZ.COM



### Construction

- » Super flexible Class 6 fine wire stranding
- » PVC inner insulation material
- » Grey PVC outer sheath.
- » Tinned copper braid screen with high coverage.

### Minimum Bending Radius

- » 7.5 x cable OD
- » 4 x cable OD

### Temperature Rating

- » 0 to 70
- » -40 to 70

### Nominal Voltage

- » 300/500V

| Item No                  | Cores | Conductor | Description              | OD     |
|--------------------------|-------|-----------|--------------------------|--------|
| <b>0.75mm Conductors</b> |       |           |                          |        |
| 26221                    | 4     | 0.75mm    | 3 core + earth + screen  | 8.3mm  |
| <b>1mm Conductors</b>    |       |           |                          |        |
| 26232                    | 4     | 1mm       | 3 core + earth + screen  | 9.4mm  |
| 26234                    | 7     | 1mm       | 6 core + earth + screen  | 12mm   |
| 26235                    | 12    | 1mm       | 11 core + earth + screen | 14mm   |
| 26239                    | 25    | 1mm       | 24 core + earth + screen | 20.2mm |
| <b>1.5mm Conductors</b>  |       |           |                          |        |
| 26251                    | 4     | 1.5mm     | 3 core + earth + screen  | 10.4mm |
| 26254                    | 12    | 1.5mm     | 11 core + earth + screen | 15.8mm |
| <b>2.5mm Conductors</b>  |       |           |                          |        |
| 26271                    | 4     | 2.5mm     | 3 core + earth + screen  | 12.4mm |
| 26273                    | 7     | 2.5mm     | 6 core + earth + screen  | 16.5mm |
| <b>4mm Conductors</b>    |       |           |                          |        |
| 26281                    | 4     | 4mm       | 3 core + earth + screen  | 14.3mm |

ecs

DRAGCHAIN CABLE





## H07RN-F Rubber Series

HEAVY DUTY FLEX WITH COLOURED CORES

#21



SEARCH ON EXPRESS.ECSNZ.COM

LAPP KABEL H07RN-F HEAVY DUTY RUBBER

### Construction

- » Flexible Class 5 fine wire stranding
- » Rubber inner insulation material
- » Black neoprene rubber outer sheath

### Minimum Bending Radius

- » Flexing: 6 x cable OD
- » Fixed: 6 x cable OD

### Temperature Rating

- » Flexing: -25 to 60
- » Fixed: -25 to 60

### Nominal Voltage

- » 450/750V (flexible use)
- » 600/1000V (fixed and protected)

| Item No                        | Conductor Size | Description    | Conductor Colours                      | OD     |
|--------------------------------|----------------|----------------|----------------------------------------|--------|
| <b>2 core (no earth)</b>       |                |                |                                        |        |
| 393808220                      | 0.75mm         | 2 core         | Blue, Brown                            | 6mm    |
| 393808221                      | 1mm            | 2 core         | Blue, Brown                            | 7mm    |
| 393807121                      | 1.5mm          | 2 core         | Blue, Brown                            | 9.5mm  |
| 393807122                      | 2.5mm          | 2 core         | Blue, Brown                            | 11.5mm |
| 393807123                      | 4mm            | 2 core         | Blue, Brown                            | 13mm   |
| <b>3 core (2 core + earth)</b> |                |                |                                        |        |
| 393808230                      | 0.75mm         | 2 core + earth | Blue, Brown, Green/Yellow              | 7mm    |
| 393807140                      | 1mm            | 2 core + earth | Blue, Brown, Green/Yellow              | 7.5mm  |
| 393807141                      | 1.5mm          | 2 core + earth | Blue, Brown, Green/Yellow              | 10.5mm |
| 393807142                      | 2.5mm          | 2 core + earth | Blue, Brown, Green/Yellow              | 11.9mm |
| 393807143                      | 4mm            | 2 core + earth | Blue, Brown, Green/Yellow              | 13.9mm |
| 393807144                      | 6mm            | 2 core + earth | Blue, Brown, Green/Yellow              | 14.4mm |
| <b>4 core (3 core + earth)</b> |                |                |                                        |        |
| 393807161                      | 1.5mm          | 3 core + earth | Brown, Black, Grey, Green/Yellow       | 11.3mm |
| 393807162                      | 2.5mm          | 3 core + earth | Brown, Black, Grey, Green/Yellow       | 13.4mm |
| 393807163                      | 4mm            | 3 core + earth | Brown, Black, Grey, Green/Yellow       | 15.4mm |
| 393807164                      | 6mm            | 3 core + earth | Brown, Black, Grey, Green/Yellow       | 17.3mm |
| <b>5 core (4 core + earth)</b> |                |                |                                        |        |
| 393807181                      | 1.5mm          | 4 core + earth | Brown, Black, Grey, Blue, Green/Yellow | 12.7mm |
| 393807182                      | 2.5mm          | 4 core + earth | Brown, Black, Grey, Blue, Green/Yellow | 15.2mm |
| 393807183                      | 4mm            | 4 core + earth | Brown, Black, Grey, Blue, Green/Yellow | 17.6mm |
| 393807184                      | 6mm            | 4 core + earth | Brown, Black, Grey, Blue, Green/Yellow | 18.8mm |
| 16001093 / 393807185           | 10mm           | 4 core + earth | Brown, Black, Grey, Blue, Green/Yellow | 28mm   |
| 16001113 / 393807186           | 16mm           | 4 core + earth | Brown, Black, Grey, Blue, Green/Yellow | 31.9mm |
| 16001133 / 393807187           | 25mm           | 4 core + earth | Brown, Black, Grey, Blue, Green/Yellow | 37.5mm |



2 core (no earth)



3 core (2 core + earth)



4 core (3 core + earth)



5 core (4 core + earth)



# RENT ME

**\$20-90**  
per/day

Jackson LIFEGUARD® Portable Power Range

projects.ecsnz.com/rentals

## ÖLFLEX ROBUST 200

ALL-WEATHER CONTROL CABLE CHEMICAL RESISTANT WITH COLOURED CORES

#237

EXPRESS.ECSNZ.COM



### LAPP KABEL STUTTGART ÖLFLEX® ROBUST 200 CE

#### Construction

Fine wire, bare copper conductors, Core insulation made of modified PP, Cores twisted in layers, Outer sheath made of special black TPE.  
Up to 5 cores: colour-coded. From 6 cores: black with white numbers

#### Minimum Bending Radius

» Flexing: 10 x OD  
» Fixed installation: 4 x OD

#### Temperature Rating

» Flexing: -40°C to +80°C  
» Fixed installation: -50°C to +80°C

#### Nominal Voltage

» U0/U: 450/750 V

| Item No      | Cores | Description    | OD (mm) |
|--------------|-------|----------------|---------|
| <b>1.0mm</b> |       |                |         |
| 0021801      | 3     | 2 Core + Earth | 8.4     |
| 0021802      | 4     | 3 Core + Earth | 9.2     |
| 0021803      | 5     | 4 Core + Earth | 10      |
| <b>1.5mm</b> |       |                |         |
| 0021806      | 3     | 2 Core + Earth | 9.1     |
| 0021807      | 4     | 3 Core + Earth | 9.9     |
| 0021809      | 7     | 6 Core + Earth | 13.5    |

| Item No      | Cores | Description    | OD (mm) |
|--------------|-------|----------------|---------|
| <b>2.5mm</b> |       |                |         |
| 0021812      | 4     | 3 Core + Earth | 11.5    |
| <b>4mm</b>   |       |                |         |
| 0021817      | 4     | 3 Core + Earth | 14      |

## ÖLFLEX ROBUST 210

ALL-WEATHER CONTROL CABLE RESISTANT TO A WIDE RANGE OF CHEMICAL MEDIA

#237

EXPRESS.ECSNZ.COM



### LAPP KABEL STUTTGART ÖLFLEX® ROBUST 210 CE

#### Construction

Fine-wire, bare copper conductor, Core insulation made of modified PP, Cores twisted in layers, Outer sheath made of special TPE.

#### Minimum Bending Radius

» Occasional flexing: 15 x OD  
» Fixed installation: 4 x OD

#### Temperature Rating

» Occasional flexing: -40°C to +80°C  
» Fixed installation: -50°C to +80°C

#### Nominal Voltage

» U0/U: 300/500 V

| Item No      | Cores | Description       | OD (mm) |
|--------------|-------|-------------------|---------|
| <b>0.5mm</b> |       |                   |         |
| 0021880      | 2     | 2 core - no earth | 4.9     |
| 0021881      | 3     | 2 Core + Earth    | 5.2     |
| 0021883      | 4     | 3 Core + Earth    | 5.8     |
| 0021885      | 5     | 4 Core + Earth    | 6.3     |
| 0021888      | 7     | 6 Core + Earth    | 6.9     |
| 0021891      | 12    | 11 Core + Earth   | 9.1     |
| 0021892      | 18    | 17 Core + Earth   | 10.8    |
| 0021893      | 25    | 24 Core + Earth   | 12.7    |

| Item No      | Cores | Description     | OD (mm) |
|--------------|-------|-----------------|---------|
| <b>1.0mm</b> |       |                 |         |
| 0021914      | 3     | 2 Core + Earth  | 6.1     |
| 0021916      | 4     | 3 Core + Earth  | 6.6     |
| 0021918      | 5     | 4 Core + Earth  | 7.3     |
| 0021920      | 7     | 6 Core + Earth  | 8.1     |
| 0021922      | 12    | 11 Core + Earth | 10.7    |
| 0021923      | 18    | 17 Core + Earth | 12.9    |
| 0021924      | 25    | 24 Core + Earth | 15      |

| Item No      | Cores | Description       | OD (mm) |
|--------------|-------|-------------------|---------|
| <b>1.5mm</b> |       |                   |         |
| 0021928      | 2     | 2 core - no earth | 6.4     |
| 0021929      | 3     | 2 Core + Earth    | 6.8     |
| 0021931      | 4     | 3 Core + Earth    | 7.4     |
| 0021933      | 5     | 4 Core + Earth    | 8.3     |
| 0021936      | 7     | 6 Core + Earth    | 9       |
| 0021940      | 12    | 11 Core + Earth   | 12.2    |
| 0021941      | 18    | 17 Core + Earth   | 14.6    |
| 0021942      | 25    | 24 Core + Earth   | 17.2    |
| 0021943      | 34    | 33 Core + Earth   | 19.8    |
| <b>2.5mm</b> |       |                   |         |
| 0021946      | 2     | 2 core + no earth | 7.6     |
| 0021947      | 3     | 2 Core + Earth    | 8.3     |
| 0021949      | 4     | 3 Core + Earth    | 9       |
| 0021953      | 7     | 6 Core + Earth    | 11.2    |
| 0021954      | 12    | 11 Core + Earth   | 15.1    |

## ÖLFLEX ROBUST 215 C

ALL-WEATHER CONTROL CABLE SCREENED & RESISTANT TO A WIDE RANGE OF CHEMICAL MEDIA

#237

EXPRESS.ECSNZ.COM



### LAPP KABEL STUTTGART ÖLFLEX® ROBUST 215 C CE

#### Construction

Fine-wire, bare copper conductor, Core insulation made of modified PP, Cores twisted in layers, Halogen-free plastic foil wrapping, Tinned copper screen braiding, Outer sheath made of special TPE.

#### Minimum Bending Radius

» Occasional flexing: 20 x OD  
» Fixed installation: 6 x OD

#### Temperature Rating

» Occasional flexing: -40°C to +80°C  
» Fixed installation: -50°C to +80°C

#### Nominal Voltage

» U0/U: 300/500 V

| Item No      | Cores | Description              | OD (mm) |
|--------------|-------|--------------------------|---------|
| <b>0.5mm</b> |       |                          |         |
| 0022701      | 3     | 2 Core + Earth + screen  | 6.2     |
| 0022703      | 4     | 3 Core + Earth + screen  | 6.6     |
| 0022705      | 5     | 4 Core + Earth + screen  | 7.1     |
| 0022708      | 7     | 6 Core + Earth + screen  | 7.7     |
| 0022711      | 12    | 11 Core + Earth + screen | 10.1    |
| 0022712      | 18    | 17 Core + Earth + screen | 11.8    |
| 0022713      | 25    | 24 Core + Earth + screen | 13.7    |
| <b>1.0mm</b> |       |                          |         |
| 0022734      | 3     | 2 Core + Earth + screen  | 6.9     |
| 0022736      | 4     | 3 Core + Earth + screen  | 7.4     |
| 0022738      | 5     | 4 Core + Earth + screen  | 8.3     |
| 0022740      | 7     | 6 Core + Earth + screen  | 8.9     |
| 0022742      | 12    | 11 Core + Earth + screen | 11.7    |
| 0022743      | 18    | 17 Core + Earth + screen | 14.1    |
| 0022744      | 25    | 24 Core + Earth + screen | 16.2    |

| Item No      | Cores | Description              | OD (mm) |
|--------------|-------|--------------------------|---------|
| <b>1.5mm</b> |       |                          |         |
| 0022749      | 3     | 2 Core + Earth + screen  | 7.6     |
| 0022751      | 4     | 3 Core + Earth + screen  | 8.4     |
| 0022753      | 5     | 4 Core + Earth + screen  | 9.1     |
| 0022756      | 7     | 6 Core + Earth + screen  | 10      |
| 0022760      | 12    | 11 Core + Earth + screen | 13.4    |
| 0022761      | 18    | 17 Core + Earth + screen | 15.8    |
| 0022762      | 25    | 24 Core + Earth + screen | 18.2    |
| <b>2.5mm</b> |       |                          |         |
| 0022767      | 3     | 3 Core + Earth + screen  | 9.1     |
| 0022768      | 4     | 3 Core + Earth + screen  | 10      |
| 0022770      | 7     | 6 Core + Earth + screen  | 12      |



ECS

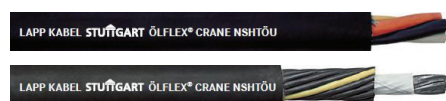
HARSH ENVIRONMENTS





# ÖLFLEX REELING & LIFTING CABLE

For use in hoists, transport and conveyor systems. Cables are reeled, unreeled, and guided by roller trains. In dry or damp interiors, outdoors, or not more than 2 weeks without interruption in industrial water.



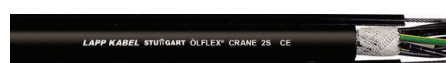
## CRANE NSHTÖU

Reelable cables for low and medium mechanical stress. Robust and efficient, suitable for outdoor use, integrated sheath supporting braid.



## CRANE

Highly flexible and weather-proof rubber cables with support element. Suitable for outdoor use, integrated supporting element, also suitable for power chains and cable trolley systems.



## CRANE 2ST

Flexible at cold temperatures, PVC cables with external steel supporting elements. For connecting movable control panels & consoles, self-supporting shaft cable; in high racking.



## CRANE VS (N) SHTÖU

Reelable cables for medium to high mechanical stress. Reinforced outer sheath design, central and tear-resistant supporting element. Suitable for extreme tensile stress.



## CRANE F

Weather-resistant flat rubber cables. For outdoor cable trolley application Space-saving installation. Also suitable for power chains and lift applications.



## LIFT F

Flexible at cold temperatures, PVC flat cables. For cable trolley application space-saving installation, also suitable for power chains and lift applications.



## CRANE PUR

Reelable polyurethane cables for low, medium and high mechanical stress. Multifunctional application possibilities, flexible use down to -40°C, lightweight, halogen-free.



## CRANE CF

Weather-resistant flat rubber cables with copper screening. For use in crane systems on building sites and shipyards for fixed installation, or for flexible use in cable trolley systems. EMC-compliant.



## LIFT N

Flexible at cold temperatures, PVC lift cables with supporting element. Lift cable that ensures the electrical integrity in various areas of lift construction, suitable for use in outdoor lifts.



# Expanded Ambient Temperature Cable

LAPP's heat resistant wire features silicon and finely stranded tinned copper for high quality functionality and high levels of heat protection. High temperature cable options include resistance to UV-radiation, abrasion, and tears. Further options include outstanding resistance to oil and weather, and high flame resistance.



## HEAT 125 SC

**Versatile single core cable suitable for use in ambient temperature.** Ranging from -55°C to 125°C Available in 12 different colours and 18 sizes (0.5mm to 240mm) Robust and efficient, suitable for outdoor use, integrated sheath supporting braid.



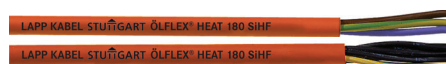
## HEAT 125 MC / C MC

**Screened (C MC) and unscreened (MC) electron beam cross-linked cables.** For use in ambient temperature ranging from -55°C to 125°C Available in number and colour coded versions.



## HEAT 180 SiF

**Versatile single core cable with extended ambient temperature.** Ranging from -50°C to 180°C Available in 12 different colours and 18 sizes (0.25mm to 185mm).



## HEAT 180 SiHF

**Silicone cables with extended ambient temperature.** Ranging from -50°C to 180°C Available in number and colour coded versions.



## HEAT 260 SC

**PTFE single core cables for the most extreme loads.** Ranging from -190°C to +260°C with outstanding resistance against acids, alkalis, solvents, lacquers, petrol, oils and many other chemical media.



## HEAT 260 MC

**PTFE cables for the most extreme loads.** Ranging from -190°C to +260°C with Outstanding resistance against acids, alkalis, solvents, lacquers, petrol, oils and many other chemical media.



## SCAN TO VIEW MORE ONLINE

Explore our wide range of Expanded Ambient Temperature Cables Online

<https://express.ecsnz.com/heat-resistant-cable> | For all the latest technologies, pricing, stock and ordering.



EXPANDED AMBIENT TEMPERATURE



## ÖLFLEX 128 H BK

LOW SMOKE HALOGEN-FREE POWER CABLE, WITH IMPROVED FIRE CHARACTERISTICS

#27



SEARCH ON EXPRESS.ECSNZ.COM

**LAPP KABEL STUTTGART ÖLFLEX® CLASSIC 128 H BK 0,6/1kV HFFR IEC 60332-3 CE**

**LAPP KABEL STUTTGART ÖLFLEX® CLASSIC 128 H BK 0,6/1kV HFFR IEC 60332-3 CE**

### Construction

- » Fine-wire strand made of bare copper wires.
- » Core insulation: Halogen-free.
- » Outer sheath: Special halogen-free compound, black.

### Minimum Bending Radius

- » Occasional flexing: 15 x OD
- » Fixed installation: 4 x OD

### Core Identification Code:

- » Up to 5 cores: colour-coded according to VDE 0293-308
- » From 6 cores: black with white numbers

### Temperature Rating

- » Occasional flexing: -5°C to +70°C
- » Fixed installation: -40°C to +80°C

### Nominal Voltage

- » U0/U: 600/1000 V
- » Test Voltage: 4000 V

| Item No      | Cores | Description       | OD (mm) |
|--------------|-------|-------------------|---------|
| <b>1mm</b>   |       |                   |         |
| 1123520      | 2     | 2 core (no earth) | 7.4     |
| 1123521      | 3     | 2 Core + Earth    | 7.8     |
| 1123522      | 4     | 3 Core + Earth    | 8.4     |
| 1123523      | 5     | 4 Core + Earth    | 9.2     |
| 1123524      | 7     | 6 Core + Earth    | 9.9     |
| 1123525      | 12    | 11 Core + Earth   | 12.8    |
| <b>1.5mm</b> |       |                   |         |
| 1123528      | 2     | 2 core (no earth) | 8.4     |
| 1123529      | 3     | 2 Core + Earth    | 8.9     |
| 1123530      | 4     | 3 Core + Earth    | 9.6     |
| 1123531      | 5     | 4 Core + Earth    | 10.5    |
| 1123532      | 7     | 6 Core + Earth    | 11.4    |
| 1123533      | 12    | 11 Core + Earth   | 15.1    |

| Item No      | Cores | Description     | OD (mm) |
|--------------|-------|-----------------|---------|
| <b>2.5mm</b> |       |                 |         |
| 1123537      | 3     | 2 Core + Earth  | 10.1    |
| 1123538      | 4     | 3 Core + Earth  | 11      |
| 1123539      | 5     | 4 Core + Earth  | 12.1    |
| 1123541      | 12    | 11 Core + Earth | 17.9    |
| <b>4mm</b>   |       |                 |         |
| 1123545      | 4     | 3 Core + Earth  | 12.5    |
| 1123546      | 5     | 4 Core + Earth  | 13.7    |
| <b>6mm</b>   |       |                 |         |
| 1123548      | 4     | 3 Core + Earth  | 13.9    |

## ÖLFLEX 128 CH BK

SCREENED LSZH POWER CABLE, W/ IMPROVED FIRE CHARACTERISTICS

#27



SEARCH ON EXPRESS.ECSNZ.COM

**LAPP KABEL STUTTGART ÖLFLEX® CLASSIC 128 CH BK 0,6/1kV HFFR IEC 60332-3 CE**

**LAPP KABEL STUTTGART ÖLFLEX® CLASSIC 128 CH BK 0,6/1kV HFFR IEC 60332-3 CE**

### Construction

Fine-wire strand made of bare copper wires. Core insulation: Halogen-free. Halogen-free plastic foil wrapping. Tinned-copper braiding. Outer sheath made of special halogen-free compound, black.

### Minimum Bending Radius

- » Occasional flexing: 20 x OD
- » Fixed installation: 6 x OD
- » Core Identification Code:
- » Up to 5 cores: colour-coded according to VDE 0293-308
- » From 6 cores: black with white numbers

### Temperature Rating

- » Occasional flexing: -5°C to +70°C
- » Fixed installation: -40°C to +80°C

### Nominal Voltage

- » U0/U: 600/1000 V
- Test Voltage:**
- » Core/core: 4000 V
- » Core/screen: 2000 V

| Item No      | Description       | Cores | OD (mm) |
|--------------|-------------------|-------|---------|
| <b>1mm</b>   |                   |       |         |
| 1123557      | 2 Core (no earth) | 2     | 8.2     |
| 1123558      | 2 Core + Earth    | 3     | 8.6     |
| 1123559      | 3 Core + Earth    | 4     | 9.2     |
| 1123560      | 4 Core + Earth    | 5     | 10      |
| 1123561      | 6 Core + Earth    | 7     | 10.7    |
| 1123562      | 11 Core + Earth   | 12    | 14      |
| <b>1.5mm</b> |                   |       |         |
| 1123565      | 2 Core (no earth) | 2     | 9.2     |
| 1123566      | 2 Core + Earth    | 3     | 9.7     |
| 1123567      | 3 Core + Earth    | 4     | 10.4    |
| 1123568      | 4 Core + Earth    | 5     | 11.3    |
| 1123569      | 6 Core + Earth    | 7     | 12.2    |
| 1123570      | 11 Core + Earth   | 12    | 16.3    |

| Item No      | Description       | Cores | OD (mm) |
|--------------|-------------------|-------|---------|
| <b>2.5mm</b> |                   |       |         |
| 1123573      | 2 Core (no earth) | 2     | 10.4    |
| 1123574      | 2 Core + Earth    | 3     | 10.9    |
| 1123575      | 3 Core + Earth    | 4     | 11.8    |
| 1123576      | 4 Core + Earth    | 5     | 12.9    |
| 1123577      | 6 Core + Earth    | 7     | 14.4    |
| 1123578      | 11 Core + Earth   | 12    | 19.3    |
| <b>4mm</b>   |                   |       |         |
| 1123582      | 3 Core + Earth    | 4     | 13.5    |
| 1123583      | 4 Core + Earth    | 5     | 14.9    |
| <b>6mm</b>   |                   |       |         |
| 1123584      | 3 Core + Earth    | 3     | 13.7    |
| 1123585      | 4 Core + Earth    | 4     | 15.1    |
| 1123586      | 5 Core + Earth    | 5     | 16.8    |

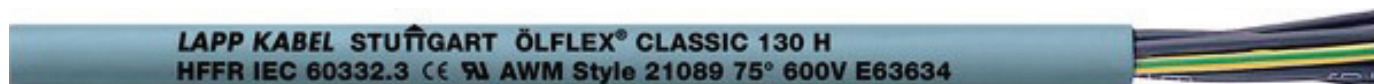
## ÖLFLEX CLASSIC 130H

HALOGEN-FREE CONTROL CABLE WITH IMPROVED FIRE CHARACTERISTICS

#27



SEARCH ON EXPRESS.ECSNZ.COM



### Construction

- » Fine-wire strand made of bare copper wires.
- » Core insulation: Halogen-free.
- » Outer sheath: Special halogen-free
- » Compound, grey

### Minimum Bending Radius

- » Occasional flexing: 15 x OD
- » Fixed installation: 4 x OD

### Temperature Rating

- » Occasional flexing: -25°C to +70°C
- » Fixed installation: -40°C to +80°C

### Nominal Voltage

- » U0/U: 600/1000 V

### Test Voltage

- » 4000 V

| Item No       | Description       | Cores | OD (mm) |
|---------------|-------------------|-------|---------|
| <b>0.5mm</b>  |                   |       |         |
| 1123000       | 2 core (no earth) | 2     | 5.1     |
| 1123001       | 2 Core + Earth    | 3     | 5.4     |
| 1123003       | 3 Core + Earth    | 4     | 5.8     |
| 1123008       | 6 Core + Earth    | 7     | 6.9     |
| 1123013       | 11 Core + Earth   | 12    | 9.1     |
| <b>0.75mm</b> |                   |       |         |
| 1123033       | 2 Core + Earth    | 3     | 5.8     |
| 1123035       | 3 Core + Earth    | 4     | 6.3     |
| 1123037       | 4 Core + Earth    | 5     | 6.9     |
| 1123041       | 6 Core + Earth    | 7     | 7.5     |
| 1123047       | 11 Core + Earth   | 12    | 10.1    |
| <b>1mm</b>    |                   |       |         |
| 1123066       | 2 core (no earth) | 2     | 5.8     |
| 1123067       | 2 Core + Earth    | 3     | 6.1     |
| 1123069       | 3 Core + Earth    | 4     | 6.6     |
| 1123071       | 4 Core + Earth    | 5     | 7.3     |
| 1123074       | 6 Core + Earth    | 7     | 8.1     |
| 1123080       | 11 Core + Earth   | 12    | 10.7    |

| Item No      | Cores | Description       | OD (mm) |
|--------------|-------|-------------------|---------|
| <b>1.5mm</b> |       |                   |         |
| 1123106      | 2     | 2 core (no earth) | 6.4     |
| 1123107      | 3     | 2 Core + Earth    | 6.8     |
| 1123109      | 4     | 3 Core + Earth    | 7.4     |
| 1123111      | 5     | 4 Core + Earth    | 8.3     |
| 1123114      | 7     | 6 Core + Earth    | 9       |
| 1123118      | 10    | 9 Core + Earth    | 11.8    |
| 1123120      | 12    | 11 Core + Earth   | 12.2    |
| <b>2.5mm</b> |       |                   |         |
| 1123140      | 3     | 2 Core + Earth    | 8.3     |
| 1123142      | 4     | 3 Core + Earth    | 9       |
| 1123144      | 5     | 4 Core + Earth    | 10.1    |
| 1123146      | 7     | 6 Core + Earth    | 11.2    |
| 1123149      | 12    | 11 Core + Earth   | 15.1    |
| <b>4mm</b>   |       |                   |         |
| 1123160      | 4     | 3 Core + Earth    | 10.8    |
| 1123161      | 5     | 4 Core + Earth    | 12.1    |
| <b>6mm</b>   |       |                   |         |
| 1123167      | 4     | 3 Core + Earth    | 13      |
| 1123168      | 5     | 4 Core + Earth    | 14.5    |

## ÖLFLEX 135 CH

SCREENED HALOGEN-FREE CONTROL CABLE WITH IMPROVED FIRE CHARACTERISTICS

#27



SEARCH ON EXPRESS.ECSNZ.COM



### Construction

- » Fine-wire strand made of bare copper wires.
- » Core insulation: Halogen-free.
- » Outer sheath: Special halogen-free
- » Compound, grey
- » Tinned-copper braiding

### Minimum Bending Radius

- » Occasional flexing: 20 x OD
- » Fixed installation: 6 x OD

### Temperature Rating

- » Occasional flexing: -25°C to +70°C
- » Fixed installation: -40°C to +80°C

### Nominal Voltage

- » U0/U: 300/500 V

### Test Voltage

- » 4000 V

| Item No      | Description       | Cores | OD (mm) |
|--------------|-------------------|-------|---------|
| <b>1mm</b>   |                   |       |         |
| 1123266      | 2 core (no earth) | 2     | 6.6     |
| 1123267      | 2 Core + Earth    | 3     | 6.9     |
| 1123269      | 3 Core + Earth    | 4     | 7.4     |
| 1123271      | 4 Core + Earth    | 5     | 8.3     |
| 1123274      | 6 Core + Earth    | 7     | 8.9     |
| 1123280      | 11 Core + Earth   | 12    | 11.7    |
| 1123284      | 17 Core + Earth   | 18    | 14.1    |
| <b>1.5mm</b> |                   |       |         |
| 1123307      | 2 Core + Earth    | 3     | 7.6     |
| 1123309      | 3 Core + Earth    | 4     | 8.4     |
| 1123311      | 4 Core + Earth    | 5     | 9.1     |
| 1123314      | 6 Core + Earth    | 7     | 10      |
| 1123320      | 11 Core + Earth   | 12    | 13.4    |

| Item No      | Description       | Cores | OD (mm) |
|--------------|-------------------|-------|---------|
| <b>2.5mm</b> |                   |       |         |
| 1123339      | 2 core (no earth) | 2     | 8.6     |
| 1123340      | 2 Core + Earth    | 3     | 9.1     |
| 1123342      | 3 Core + Earth    | 4     | 10      |
| 1123346      | 6 Core + Earth    | 7     | 12      |
| <b>4mm</b>   |                   |       |         |
| 1123359      | 2 Core + Earth    | 3     | 10.6    |
| 1123360      | 3 Core + Earth    | 4     | 11.8    |
| <b>6mm</b>   |                   |       |         |
| 1123367      | 3 Core + Earth    | 4     | 14.2    |
| <b>10mm</b>  |                   |       |         |
| 1123372      | 3 Core + Earth    | 4     | 17.2    |



ECS

LSZH CONTROL CABLE





# UL Approved Cables for Export to the USA & Canada

UL approved products are required on all industrial machines being exported to the USA. This is required by the NFPA 79 regulations. The purpose of UL approvals is to ensure all electrical machinery being imported into the USA is safe to use.

Cables that are UL approved are marked with UL symbols so that electrical inspectors will know when a non-UL cable is being used.

Failure to comply with UL regulations can result with two outcomes: Either the machine will need to be re-wired in the United States, or the

machine will be sent back to New Zealand to be rewired with cables that comply. Both scenarios are very expensive.

LAPP work with the largest machine builders in the world. Our USA design team are always up to date with regulations to make sure products meet the latest regulations.

If you have any questions regarding UL requirements, please contact the ECS sales team on 0800 849 2211, or sales@ecsnz.com.

## ÖLFLEX UL - Appliance Wire

APPLIANCE WIRE WITH UL APPROVALS - 1000V



#154



SEARCH ON EXPRESS.ECSNZ.COM



| Conductor Size MM   | 0.5mm <sup>2</sup> | 0.75mm <sup>2</sup> | 1mm <sup>2</sup> | 1.5mm <sup>2</sup> | 2.5mm <sup>2</sup> | 4mm <sup>2</sup> | 6mm <sup>2</sup> | 10mm <sup>2</sup> | 16mm <sup>2</sup> |
|---------------------|--------------------|---------------------|------------------|--------------------|--------------------|------------------|------------------|-------------------|-------------------|
| Conductor Size AWG  | 22AWG              | 20AWG               | 18AWG            | 16AWG              | 14AWG              | 12AWG            | 10AWG            | 8AWG              | 6AWG              |
| Earth               | 4160100            | 4160200             | 4160300          | 4160400            | 4160500            | 4160600          | 4160700          | 4160800           | 4160900           |
| Black               | 4160101            | 4160201             | 4160301          | 4160401            | 4160501            | 4160601          | 4160701          | 4160801           | 4160901           |
| Blue                | 4160102            | 4160202             | 4160302          | 4160402            | 4160502            | 4160602          | 4160702          | 4160802           | 4160902           |
| Brown               | 4160103            | 4160203             | 4160303          | 4160403            | 4160503            | 4160603          | 4160703          | 4160803           | 4160903           |
| Red                 | 4160104            | 4160204             | 4160304          | 4160404            | 4160504            | 4160604          | 4160704          | 4160804           | 4160904           |
| White               | 4160105            | 4160205             | 4160305          | 4160405            | 4160505            | 4160605          | 4160705          | 4160805           | 4160905           |
| Grey                | 4160106            | 4160206             | 4160306          | 4160406            | 4160506            | 4160606          | 4160706          | 4160806           | 4160906           |
| Purple              | 4160107            | 4160207             | 4160307          | 4160407            | 4160507            | 4160607          | 4160707          |                   |                   |
| Pink                | 4160108            | 4160208             | 4160308          | 4160408            |                    |                  |                  |                   |                   |
| Orange              | 4160109            | 4160209             | 4160309          | 4160409            | 4160509            | 4160609          | 4160709          | 4160809           | 4160909           |
| Yellow              | 4160110            | 4160210             | 4160310          | 4160410            | 4160510            | 4160610          | 4160710          | 4160810           | 4160910           |
| Green               | 4160111            | 4160211             | 4160311          | 4160411            | 4160511            | 4160611          | 4160711          | 4160811           | 4160911           |
| Dark Blue           | 4160114            | 4160214             | 4160314          | 4160414            | 4160514            | 4160614          | 4160714          | 4160814           | 4160914           |
| Blue + White Stripe | 4160126            | 4160226             | 4160326          | 4160426            | 4160526            | 4160626          | 4160726          | 4160826           |                   |
| White + Blue Stripe | 4160144            | 4160244             | 4160344          | 4160444            | 4160544            | 4160644          | 4160744          | 4160844           |                   |
| Cable OD            | 2.5mm              | 2.7mm               | 2.9mm            | 3.1mm              | 3.7mm              | 4.4mm            | 4.9mm            | 6.8mm             | 8.9mm             |

## ÖLFLEX UL - Control TM CY

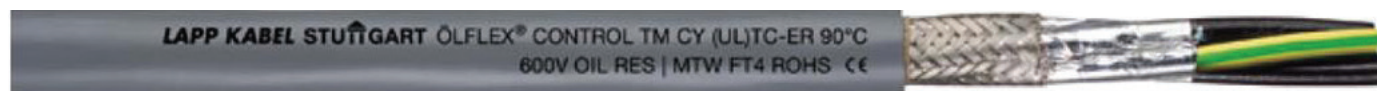
EMC SCREENED FLEX FOR DRIVES



#1333



SEARCH ON EXPRESS.ECSNZ.COM



| Item No                        | Cores | Conductor | Description    | OD   |
|--------------------------------|-------|-----------|----------------|------|
| <b>3 core (2 core + earth)</b> |       |           |                |      |
| 281803CY                       | 3     | 1mm       | 2 core + earth | 8.1  |
| 281603CY                       | 3     | 1.5mm     | 2 core + earth | 8.8  |
| <b>4 core (3 core + earth)</b> |       |           |                |      |
| 281804CY                       | 4     | 1mm       | 3 core + earth | 8.6  |
| 281604CY                       | 4     | 1.5mm     | 3 core + earth | 9.4  |
| 281404CY                       | 4     | 2.5mm     | 3 core + earth | 10.4 |
| 281204CY                       | 4     | 4mm       | 3 core + earth | 12.3 |
| 281004CY                       | 4     | 6mm       | 3 core + earth | 15.3 |
| 280804CY                       | 4     | 10mm      | 3 core + earth | 18.5 |
| 280604CY                       | 4     | 16mm      | 3 core + earth | 22.9 |

## ÖLFLEX UL - 150 Series

MULTICORE FLEX WITH SMALL CONDUCTORS



#1331



SEARCH ON EXPRESS.ECSNZ.COM

ÖLFLEX® 150 H05VV5-F ◁ USE ▷ ◁ HAR ▷ CE  
AWM STYLE 2587 or 21098 CSA AWM IA/BII 600V FT1 90 °C



| Item No                          | Cores | Conductor | Description       | OD   |
|----------------------------------|-------|-----------|-------------------|------|
| <b>0.5mm / 21AWG Conductors</b>  |       |           |                   |      |
| 15002                            | 2     | 0.5mm     | 2 core (no earth) | 5.9  |
| 15003                            | 3     | 0.5mm     | 2 core + earth    | 6.2  |
| 15004                            | 4     | 0.5mm     | 3 core + earth    | 6.8  |
| 15005                            | 5     | 0.5mm     | 4 core + earth    | 7.4  |
| 15007                            | 7     | 0.5mm     | 6 core + earth    | 9.1  |
| 15012                            | 12    | 0.5mm     | 11 core + earth   | 11.1 |
| 15025                            | 25    | 0.5mm     | 24 core + earth   | 16   |
| <b>0.75mm / 19AWG Conductors</b> |       |           |                   |      |
| 15102                            | 2     | 0.75mm    | 2 core            | 6.3  |
| 15103                            | 3     | 0.75mm    | 2 core + earth    | 6.7  |
| 15104                            | 4     | 0.75mm    | 3 core + earth    | 7.2  |
| 15105                            | 5     | 0.75mm    | 4 core + earth    | 8.1  |
| 15107                            | 7     | 0.75mm    | 6 core + earth    | 9.9  |
| 15112                            | 12    | 0.75mm    | 11 core + earth   | 12   |
| 15118                            | 18    | 0.75mm    | 17 core + earth   | 14.4 |
| 15125                            | 25    | 0.75mm    | 24 core + earth   | 17.5 |

## ÖLFLEX UL - Control TM

MULTICORE FLEX WITH UL APPROVALS - 600V



#1331



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| Item No                         | Cores | Conductor | Description     | OD   |
|---------------------------------|-------|-----------|-----------------|------|
| <b>1mm / 18AWG Conductors</b>   |       |           |                 |      |
| 281803                          | 3     | 1mm       | 2 core + earth  | 7.4  |
| 281804                          | 4     | 1mm       | 3 core + earth  | 8    |
| 281805                          | 5     | 1mm       | 4 core + earth  | 8.6  |
| 281807                          | 7     | 1mm       | 6 core + earth  | 9.3  |
| 281812                          | 12    | 1mm       | 11 core + earth | 12   |
| 281818                          | 18    | 1mm       | 17 core + earth | 14.9 |
| 281825                          | 25    | 1mm       | 24 core + earth | 16.7 |
| <b>1.5mm / 16AWG Conductors</b> |       |           |                 |      |
| 281602                          | 2     | 1.5mm     | 2 core          | 7.3  |
| 281603                          | 3     | 1.5mm     | 2 core + earth  | 8.1  |
| 281604                          | 4     | 1.5mm     | 3 core + earth  | 8.8  |
| 281605                          | 5     | 1.5mm     | 4 core + earth  | 9.5  |
| 281607                          | 7     | 1.5mm     | 6 core + earth  | 10.3 |
| 281612                          | 12    | 1.5mm     | 11 core + earth | 14.2 |
| 281618                          | 18    | 1.5mm     | 17 core + earth | 16.2 |
| 281625                          | 25    | 1.5mm     | 24 core + earth | 18.6 |
| <b>2.5mm / 14AWG Conductors</b> |       |           |                 |      |
| 281403                          | 3     | 2.5mm     | 2 core + earth  | 9.1  |
| 281404                          | 4     | 2.5mm     | 3 core + earth  | 9.8  |
| 281405                          | 5     | 2.5mm     | 4 core + earth  | 10.7 |
| <b>4mm / 12 AWG Conductors</b>  |       |           |                 |      |
| 281203                          | 3     | 4mm       | 2 core + earth  | 10.6 |
| 281204                          | 4     | 4mm       | 3 core + earth  | 11.5 |
| 281205                          | 5     | 4mm       | 4 core + earth  | 12.6 |

ecs

UL CABLE

## ÖLFLEX SOLAR XLR-E / (I+E)

E-BEAM CROSSLINKED EN 50618 SOLAR CABLE / NEW 62930 IEC 131 TYPE

#1750

SEARCH ON EXPRESS.ECSNZ.COM



LAPP KABEL STUTTGART ÖLFLEX® SOLAR XLR-E



LAPP KABEL STUTTGART ÖLFLEX® SOLAR XLR-E T



CAUTION: DC CABLE - DO NOT DISCONNECT UNDERLOAD



### Application Range

- » PV systems rated 1500VDC
- » Cabling between solar modules and as extension cable between module strings and DC/AC inverters
- » Gable and flat roof PV systems
- » PV parks and power plants
- » Not suitable for direct burial, Installation according to IEC 60364-5-52, respectively HD 60364-5-52

### Construction

- » Fine-wire, tinned-copper conductor
- » Core insulation made of electron beam cross-linked copolymer
- » Colour of core insulation: white
- » Outer sheath made of electron beam cross-linked copolymer
- » Outer sheath colour: black respectively black with red stripe

### Special Features

- » Halogen-free and flame-retardant
- » Weather /UV-resistant acc. to EN 50618
- » Ozone-resistant according to EN 50396
- » XLR-E = X-Linked Radiated-EN Standard Proven electron beam cross-linked quality

### Test Voltage

- » AC 6500 V

### Temperature Rating

- » -40°C to 120°C

### Nominal Voltage

- » AC U0/U: 1.0/1.0 kV DC U0/U: 1.5/1.5 kV

### Norm references / Approvals

- » **XLR-E/I+E:** H1Z2Z2-K approved by TÜV acc. to EN 50618 / 62930 IEC conformity
- » **I+E:** EN 50618 / 62930 IEC 131 approved by TÜV acc. to IEC 62930

| XLR-E              | XLR-E I+E | Conductor Size (mm) | Outer Sheath Colour | Conductor Colours | OD (mm)  | UoM     | Drum Size (m) |
|--------------------|-----------|---------------------|---------------------|-------------------|----------|---------|---------------|
| <b>Single Core</b> |           |                     |                     |                   |          |         |               |
| 1023652s           | 1023716s  | 1 x 4               | Black               | White             | 5.4      | per/mtr | 100           |
| 1023652            | 1023716   | 1 x 4               | Black               | White             | 5.4      | Drum    | 500           |
| 1023653            | 1023717   | 1 x 6               | Black               | White             | 6.0      | per/mtr | 500           |
| 1023654            | 1023718   | 1 x 10              | Black               | White             | 7.2      | per/mtr | 500           |
| <b>Twin Core</b>   |           |                     |                     |                   |          |         |               |
| 1023712S           |           | 2 x 4               | Black               | Red / Blue        | 12 x 5.2 | per/mtr | 100           |
| 1023712            |           | 2 x 4               | Black               | Red / Blue        | 12 x 5.2 | Drum    | 500           |
| 1023713            |           | 2 x 6               | Black               | Red / Blue        | 12 x 5.8 | per/mtr | 500           |

## ÖLFLEX SOLAR XLWP

FOR UNDERGROUND INSTALLATION, FLOATING PV, PLANTS, SOLAR PARKS & DIRECT BURIAL

#1942

SEARCH ON EXPRESS.ECSNZ.COM



LAPP KABEL STUTTGART ÖLFLEX® SOLAR XLWP



### Application Range

- » For floating PV/ canal top installations where cables are in contact with water or exposed to high humidity (see data sheet for more details)
- » For underground installation, for example in conduits which water, heat, and moisture may accumulate in
- » Suitable for direct burial: see data sheet
- » In September 2018 and based on AD8 water-tightness, this product was recommended by Solartechnik Bayern for installation in ground typically realized via underground circuits for PV applications, whereas underground sand beds are not required to channel off water anymore, thanks to this cable's AD8 grade

### Benefits

- » The alternative for long-term storage in water, e.g. as it can occur in case after flooding or in buried conduits
- » Reduction of flame propagation and of toxic combustion gases in the event of fire
- » Robust against mechanical impacts
- » Extruded colour stripe serves as reverse polarity protection during installation.
- » Exact quantity control during installation by meter marking on the cable sheath

### Special Features

- » Weather/UV-resistant acc. to EN 50618, appendix E
- » Ozone-resistant according to EN 50396
- » Halogen-free and flame-retardant
- » Good notch and abrasion resistance
- » XLWP = X-Linked + Water-Proof (Permanent water contact AD8 acc. to IEC 60364-5-51),
- » Proven electron beam cross-linked quality

### Temperature Rating

- » -40°C to 120°C

### Test Voltage

- » AC 6500 V

### Norm references / Approvals

- » H1Z2Z2-K (type according to EN 50618)
- » Items with other cross-sections on request

| Item No | Cores | Conductor (mm) | Conductor Colours | OD (mm) | Drum Size (m) |
|---------|-------|----------------|-------------------|---------|---------------|
| 1023601 | 1     | 4              | White/Black       | 5.8     | 500           |
| 1023602 | 1     | 6              | White/Black       | 6.8     | 500           |
| 1023603 | 1     | 10             | White/Black       | 7.6     | 500           |

## ÖLFLEX SOLAR XLS Earth

EARTH CABLE WITH UV RESISTANT SHEATH FOR EXPOSED APPLICATIONS

#1750

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LAPP KABEL STUTTGART ÖLFLEX® SOLAR GN/YE



### Construction

Flexible Class 5 fine wire stranding, copolymer insulation, tinned copper conductor. This Solar Cable is a variation on our standard Solar range, a traditional fine stranded earth cable wrapped in a special black solar sheath. This is the only truly UV resistant earth cable on the market.

### Temperature Rating

- » -40°C to 120°C

### Minimum Bending Radius

- » Fixed installation:  
4 x outer diameter

### Test Voltage

- » AC 6,500V

### Special Features

- » Designed for long outdoor lifespan
- » Small Cable OD
- » Excellent weather and UV resistance
- » Metre marked on sheath

| Item No  | Cores | Conductor | Conductor Colours | OD (mm) | Drum Size (m) |
|----------|-------|-----------|-------------------|---------|---------------|
| 0025814S | 1     | 4mm       | Earth             | 6       | 100           |
| 0025823S | 1     | 6mm       | Earth             | 7.1     | 100           |



# PV BALANCE OF SYSTEMS

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## Multi Contact (MC4) Solar Connector

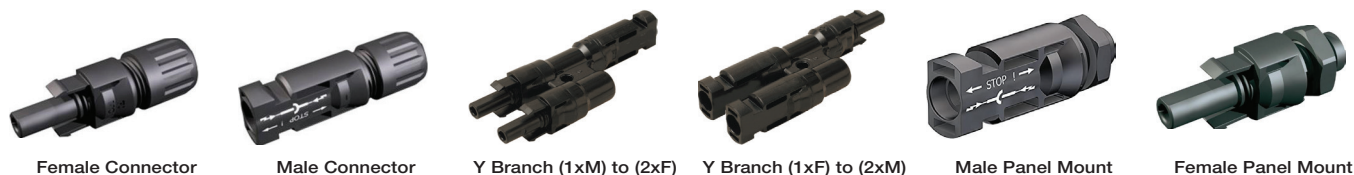
THE LARGEST SELLING SOLAR CONNECTOR IN THE WORLD MC4

Multi-Contact



#1558

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| Item No                        | Type                   | Conductor Size (mm) | Cable OD (mm) |
|--------------------------------|------------------------|---------------------|---------------|
| <b>Female Sockets</b>          |                        |                     |               |
| MC-320014                      | Female                 | 4 & 6               | 3-6           |
| MC-320016                      | Female                 | 4 & 6               | 5.5-9         |
| <b>Male Plugs</b>              |                        |                     |               |
| MC-320015                      | Male                   | 4 & 6               | 3-6           |
| MC-320017                      | Male                   | 4 & 6               | 5.5-9         |
| <b>Y Branch Connectors</b>     |                        |                     |               |
| MC-320018                      | 1 x Male to 2 x Female |                     |               |
| MC-320019                      | 2 x Male to 1 x Female |                     |               |
| <b>Panel Mount Receptacles</b> |                        |                     |               |
| 32.0078P0001                   | Female Panel-mount     | 4 & 6               |               |
| 32.0079P0001                   | Male Panel-mount       | 4 & 6               |               |

## Noark DC MCBs

NON-POLARISED DC, K TYPE FOR PV SYSTEMS

#1559

SEARCH ON EXPRESS.ECSNZ.COM



### Application

DC miniature circuit breakers Ex9BP are designed for direct current applications. Thanks to their polarity independency they are suitable for PV applications.

### Features

- » Non-polarized, suitable for PV
- » K type tripping
- » 1 to 4 modules

### Standards

- » Tested according to IEC / EN 60947-2

### Working Temperature

- » -35~+70

| Item No     | Poles | Current Rating (A) |
|-------------|-------|--------------------|
| <b>360V</b> |       |                    |
| PV-N84449   | N2P   | 10A                |
| PV-N84450   | N2P   | 16A                |
| PV-N84451   | N2P   | 20A                |
| PV-N84452   | N2P   | 25A                |
| PV-N84453   | N2P   | 32A                |
| PV-N84454   | N2P   | 40A                |
| PV-N84455   | N2P   | 50A                |
| PV-N84456   | N2P   | 63A                |
| <b>720v</b> |       |                    |
| PV-N84475   | N4P   | 10A                |
| PV-N84476   | N4P   | 16A                |
| PV-N84477   | N4P   | 20A                |
| PV-N84478   | N4P   | 25A                |
| PV-N84479   | N4P   | 32A                |
| PV-N84480   | N4P   | 40A                |
| PV-N84481   | N4P   | 50A                |
| PV-N84482   | N4P   | 63A                |



2 Pole | 360Vdc



4 Pole | 720Vdc

## Marley Heavy Duty uPVC Solar Conduit

FOR SOLAR POWER INSTALLATIONS



#1561

SEARCH ON EXPRESS.ECSNZ.COM



### Application

Our flexible solar conduit is designed specifically for long term outdoor applications. Flexible conduit is very popular leading into the DC isolators, or when bending rigid conduit is not really an option.

### Features

- » Conforms with AS/NZS 2053:5
- » Meets the requirements of AS/NZS 5033:2012
- » Best Environmental Practice Certified
- » Compatible with a full range of Marley uPVC fittings
- » Proudly New Zealand Made and 100% Recyclable



| Product Number  | Description                                                               | Diameter (mm) | Length (m) |
|-----------------|---------------------------------------------------------------------------|---------------|------------|
| <b>Rigid</b>    |                                                                           |               |            |
| PV-Rigid-25-4m  | Grey Heavy Duty uPVC SOLAR Rigid Conduit - Comes with Solar Markings      | 25            | 4          |
| PV-Rigid-32-4m  | Grey Heavy Duty uPVC SOLAR Rigid Conduit - Comes with Solar Markings      | 32            | 4          |
| PV-CON-SC250C   | Marley PVC Cement for Conduit (250ml)                                     |               |            |
| <b>Flexible</b> |                                                                           |               |            |
| PV-Flex-25-50m  | Grey Heavy Duty uPVC SOLAR Corrugated Conduit - Comes with Solar Markings | 25            | 50         |
| PV-Flex-32-25m  | Grey Heavy Duty uPVC SOLAR Corrugated Conduit - Comes with Solar Markings | 32            | 25         |



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## UNITRONIC LiYY

FLEXIBLE FLAME RETARDANT DATA CABLE

#222



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LAPP KABEL STUIGART UNITRONIC® LiYY

### Construction

- » Fine wire stranded conductors
- » PVC inner insulation material
- » PVC outer sheath

### Minimum Bending Radius

- » Flexing: 10 x cable OD
- » Fixed: 4 x cable OD

### Temperature Rating

- » Flexing: -5°C to 70°C
- » Fixed: -40°C to 80°C

| Item No       | Cores | Conductor | OD (mm) |
|---------------|-------|-----------|---------|
| <b>0.25mm</b> |       |           |         |
| 0028302       | 2     | 0.25mm    | 3.8     |
| 0028304       | 4     | 0.25mm    | 4.3     |
| 0028308       | 8     | 0.25mm    | 6.2     |
| <b>0.5mm</b>  |       |           |         |
| 0028502       | 2     | 0.5mm     | 4.7     |
| 0028504       | 4     | 0.5mm     | 5.6     |
| 0028508       | 8     | 0.5mm     | 8       |

## UNITRONIC LiYCY

SCREENED DATA CABLE

#222



SEARCH ON EXPRESS.ECSNZ.COM

LAPP KABEL UNITRONIC® - LiYCY

### Construction

Fine wire stranded conductors, PVC inner insulation material and grey PVC outer sheath. Tinned copper braid screen with high coverage.

### Minimum Bending Radius

- » 15 x cable OD
- » 6 x cable OD

### Temperature Rating

- » -40 to 80
- » -5 to 70

### Nominal Voltage

- » 250V (not for single or three phase power)

| Item No                  | Core | Conductor | OD   | Item No                  | Core | Conductor | OD  |
|--------------------------|------|-----------|------|--------------------------|------|-----------|-----|
| <b>0.25mm Conductors</b> |      |           |      | <b>0.5mm Conductors</b>  |      |           |     |
| 34402                    | 2    | 0.25mm    | 4.5  | 34602                    | 2    | 0.5mm     | 5.6 |
| 34403                    | 3    | 0.25mm    | 4.7  | 34603                    | 3    | 0.5mm     | 5.9 |
| 34404                    | 4    | 0.25mm    | 5    | 34604                    | 4    | 0.5mm     | 6.3 |
| 34405                    | 5    | 0.25mm    | 5.6  | 34605                    | 5    | 0.5mm     | 7   |
| 34407                    | 7    | 0.25mm    | 6    | 34607                    | 7    | 0.5mm     | 7.6 |
| 34410                    | 10   | 0.25mm    | 7.5  | 34610                    | 10   | 0.5mm     | 9.3 |
| 34412                    | 12   | 0.25mm    | 7.7  | <b>0.75mm Conductors</b> |      |           |     |
| 34418                    | 18   | 0.25mm    | 8.8  | 34702                    | 2    | 0.75mm    | 6   |
| 34420                    | 20   | 0.25mm    | 9.3  | 34703                    | 3    | 0.75mm    | 6.3 |
| 34425                    | 25   | 0.25mm    | 10.7 |                          |      |           |     |
| 34430                    | 30   | 0.25mm    | 11   |                          |      |           |     |
| 34436                    | 36   | 0.25mm    | 11.8 |                          |      |           |     |
| 34440                    | 40   | 0.25mm    | 12.7 |                          |      |           |     |

## UNITRONIC LiYCY TP

SCREENED DATA CABLE WITH TWISTED PAIRS

#223



SEARCH ON EXPRESS.ECSNZ.COM

LAPP KABEL STUIGART UNITRONIC® LiYCY (TP)

### Construction

Fine wire stranded conductors, PVC inner insulation material and grey PVC outer sheath. Tinned copper braid screen with high coverage.

### Minimum Bending Radius

- » 15 x cable OD
- » 6 x cable OD

### Temperature Rating

- » -40 to 80
- » -5 to 70

### Nominal Voltage

- » 250V (not for single or three phase power)

| Item No                  | Core | Pairs | Conductor | OD   |
|--------------------------|------|-------|-----------|------|
| <b>0.25mm Conductors</b> |      |       |           |      |
| 35800                    | 4    | 2     | 0.25mm    | 7    |
| 35801                    | 6    | 3     | 0.25mm    | 7.1  |
| 35802                    | 8    | 4     | 0.25mm    | 7.6  |
| 35803                    | 12   | 6     | 0.25mm    | 8.5  |
| 35804                    | 16   | 8     | 0.25mm    | 10.3 |
| <b>0.5mm Conductors</b>  |      |       |           |      |
| 35810                    | 4    | 2     | 0.5mm     | 8.6  |
| 35811                    | 6    | 3     | 0.5mm     | 8.7  |
| 35812                    | 8    | 4     | 0.5mm     | 9.4  |
| 35813                    | 12   | 6     | 0.5mm     | 11.1 |
| 35814                    | 16   | 8     | 0.5mm     | 13.1 |



## UNITRONIC ST - Single Pair

FOIL SCREEN FOR BMS HVAC (2 CORE)



#224

SEARCH ON EXPRESS.ECSNZ.COM



LAPP KABEL UNITRONIC® ST 1x2x22AWG/7 <3800764>

### Construction

Fine wire stranded tinned conductors, PE polyethylene inner insulation material and grey PVC outer sheath. Aluminum foil screen with tinned copper drain wire

### Minimum Bending Radius

» Fixed: 10 x cable OD

### Temperature Rating

» -30 to 60

### Nominal Voltage

» 300V (not for single or three phase power)

| Item No | Type | Pairs  | Conductor                     | Conductor Colours | Cable OD | Drum Size    |
|---------|------|--------|-------------------------------|-------------------|----------|--------------|
| 3804580 |      | 1 Pair | 24 awg / ~0.25mm <sup>2</sup> | Black / White     | 4.8      | 500m         |
| 3800764 | 8761 | 1 Pair | 22 awg / ~0.34mm <sup>2</sup> | Black / White     | 4.5      | 305m         |
| 3802854 | 8762 | 1 Pair | 20 awg / ~0.5mm <sup>2</sup>  | Black / White     | 5.2      | 500m         |
| 33002   | 8760 | 1 Pair | 18 awg / ~1.0mm <sup>2</sup>  | Black / White     | 5.6      | 305m         |
| 3804581 |      | 1 Pair | 16 awg / ~1.5mm <sup>2</sup>  | Black / White     | 6.7      | 500m / 1000m |

## UNITRONIC ST - Triple

FOIL SCREEN FOR RTD'S (3 CORE)



#225

SEARCH ON EXPRESS.ECSNZ.COM



LAPP KABEL STUTTGART UNITRONIC® ST 3x18AWG

### Construction

Fine wire stranded tinned conductors, FPE inner insulation material and gun metal grey PVC outer sheath. Aluminum foil screen with tinned copper drain wire.

### Minimum Bending Radius

» Fixed: 10 x cable OD

### Temperature Rating

» -30 to 80

### Nominal Voltage

» 300V (not for single or three phase power)

### Black Sheath Option

» UV Resistant suitable for outdoor use

| Item No | Type    | Pairs    | Conductor                    | Conductor Colours     | Cable OD | Sheath |
|---------|---------|----------|------------------------------|-----------------------|----------|--------|
| 3804951 | B5401FE | 1 Triple | 20 awg / ~0.5mm <sup>2</sup> | Black / Natural / Red | 5.5      | Cream  |
| 3804931 | B5301FE | 1 Triple | 18 awg / ~1.0mm <sup>2</sup> | Black / Natural / Red | 6.2      | Cream  |
| 3802398 | B5301FE | 1 Triple | 18 awg / ~1.0mm <sup>2</sup> | Black / Natural / Red | 6.2      | Black  |

## UNITRONIC ST - 2 Pair

FOIL SCREEN FOR RTD'S (4 CORE)



#225

SEARCH ON EXPRESS.ECSNZ.COM



LAPP KABEL STUTTGART UNITRONIC® ST 20276

### Construction

» Multi-wire tinned stranded copper conductor  
» Core insulation made of polyethylene (PE)  
» Plastic-laminated aluminium foil with tinned copper drain wire  
» Outer sheath made of PVC, Colour of the outer sheath: Similar to Silver-grey/ RAL 7001

### Benefits

» Pair screening, offers optimum protection against external interference at medium and high frequencies  
» Twisted cores and individual pair shielding ensures high Near End Cross Talk attenuation  
» Flame retardant in acc. to IEC 60332-1-2

### Temperature Rating

» -20 to +60

### Minimum Bending Radius

» Fixed: 10 x cable OD

| Item No | Type  | Pairs  | Conductor                     | Conductor Colours       | Cable OD | Sheath      |
|---------|-------|--------|-------------------------------|-------------------------|----------|-------------|
| 3800952 | 20276 | 2 Pair | 22 awg / ~0.34mm <sup>2</sup> | Black/Red & White/Green | 4.3      | Chrome Grey |

## UNITRONIC ST - Serial RS485

FOR SERIAL RS485 COMMUNICATIONS - MODBUS



#226

SEARCH ON EXPRESS.ECSNZ.COM



LAPP KABEL STUTTGART UNITRONIC® ST 1x2x24AWG

### Construction

Fine wire stranded tinned conductors, FPE inner insulation material and gun metal grey PVC outer sheath. Aluminum foil screen with tinned copper drain wire.

### Impedance

» 120 Ohm

### Applications

» RS485

### Nominal Voltage

» 30V

| Item No | Type | Pairs  | Conductor                     | Conductor Colours             | Cable OD | Drum Size |
|---------|------|--------|-------------------------------|-------------------------------|----------|-----------|
| 3800765 | 9841 | 1 Pair | 24 awg / ~0.25mm <sup>2</sup> | Bu/Wh & Wh/Bu                 | 5.9      | 305m      |
| 3800953 | 9842 | 2 Pair | 24 awg / ~0.25mm <sup>2</sup> | Bu/Wh & Wh/Bu + Og/Wh & Wh/Og | 8.8      | 305m      |



ECS

DATA CABLE



## Instrumentation Cable RE-Y(ST)Y

OVERALL SCREENED INSTRUMENTATION CABLE 500V

#228

SEARCH ON EXPRESS.ECSNZ.COM



### Construction

Stranded conductors, PVC inner insulation material and black UV resistant PVC outer sheath. Aluminium foil screen with tinned copper drain wire.

### Minimum Bending Radius

» Fixed: 6 x cable OD

### Temperature Rating

» Fixed: -30°C to 105°C

### Nominal Voltage

» 500V

| Item No      | Type     | Pairs    | Colours         | OD (mm) |
|--------------|----------|----------|-----------------|---------|
| <b>0.5mm</b> |          |          |                 |         |
| 1270800      | B5001 CS | 1 Pair   | Black/White     | 6.8     |
| 1271250      | B5301 CS | 1 Triple | Black/White/Red | 7.2     |
| 1270802      | B5002 CS | 2 Pair   | Black/White     | 7.7     |
| 1270804      | B5004 CS | 4 Pair   | Black/White     | 12      |
| 1270806      | B5006 CS | 6 Pair   | Black/White     | 13.7    |
| 1270808      | B5008 CS | 8 Pair   | Black/White     | 15.2    |
| 1270812      | B5012CS  | 12 Pair  | Black/White     | 17.9    |
| <b>1.5mm</b> |          |          |                 |         |
| 1270950      | B5102 ES | 1 Pair   | Black/White     | 8.2     |
| 1271300      | B5103 ES | 1 Triple | Black/White/Red | 9.0     |
| 1270952      | B5502 CS | 2 Pair   | Black/White     | 12.6    |
| 12709578     | B5012 CS | 3 Pair   | Black/White     | 13.2    |
| 1270954      | B5504 CS | 4 Pair   | Black/White     | 15.2    |
| 1270956      | B5506 CS | 6 Pair   | Black/White     | 17.4    |
| 1270962      | B5512 CS | 12 Pair  | Black/White     | 23.1    |

## INSTRUMENTATION CABLE RE-Y(ST)Y PIMF

INDIVIDUAL AND OVERALL SCREENED INSTRUMENTATION CABLE 500V

#228

SEARCH ON EXPRESS.ECSNZ.COM



### Construction

Stranded conductors, PVC inner insulation material and black UV resistant PVC outer sheath. Tinned copper drain wire, individually and collectively screened pairs with aluminium polyester tape.

### Impedance

» Flexing: 6 x cable OD

### Applications

» Fixed: -30°C to 105°C

### Nominal Voltage

» 500V

| Item No      | Pairs | Colours     | OD (mm) |
|--------------|-------|-------------|---------|
| <b>0.5mm</b> |       |             |         |
| 1271050      | 2     | Black/White | 10.8    |
| 1271052      | 4     | Black/White | 12.4    |
| 1271054      | 6     | Black/White | 14.7    |
| 1271056      | 8     | Black/White | 16.7    |
| 1271060      | 12    | Black/White | 19.5    |
| <b>1.5mm</b> |       |             |         |
| 1271160      | 2     | Black/White | 13.5    |
| 1271162      | 4     | Black/White | 15.8    |
| 1271164      | 6     | Black/White | 18.9    |
| 1271166      | 8     | Black/White | 21.4    |
| 1271170      | 12    | Black/White | 52.1    |

## INSTRUMENTATION CABLE RE-Y(ST)YRY SWA

ARMoured AND OVERALL SCREENED INSTRUMENTATION CABLE 500V

#228

SEARCH ON EXPRESS.ECSNZ.COM



### Construction

Stranded conductors, galvanised steel wire armoured, PVC inner insulation material and black UV resistant PVC outer sheath. Tinned copper drain wire, collectively screened pairs with aluminium polyester tape.

### Impedance

» Flexing: 10 x cable OD

### Applications

» Fixed: -30°C to 105°C

### Nominal Voltage

» 500V

| Item No      | Pairs | Colours     | OD (mm) |
|--------------|-------|-------------|---------|
| <b>1.5mm</b> |       |             |         |
| 1271500      | 1     | Black/White | 12.9    |
| 1271502      | 2     | Black/White | 17.6    |
| 1271504      | 4     | Black/White | 20      |
| 1271506      | 6     | Black/White | 23.7    |
| 1271508      | 8     | Black/White | 26.2    |
| 1271510      | 10    | Black/White | 29      |



# UNITRONIC ST - Serial RS232

FOR SERIAL RS232 & RS422 COMMUNICATIONS



#227

SEARCH ON EXPRESS.ECSNZ.COM



### Construction

Fine wire stranded tinned conductors, FPE inner insulation material and gun metal grey PVC outer sheath. Aluminum foil screen with tinned copper drain wire.

### Impedance

» 100 Ohm

### Applications

» RS232  
» RS422

### Nominal

» 30V

| Item No | Type   | Pairs            | Conductor                     | Cable OD | Drum Size |
|---------|--------|------------------|-------------------------------|----------|-----------|
| 3800950 | B1419A | 2 Pair           | 24 awg / ~0.25mm <sup>2</sup> | 6.3      | 305m      |
| 3800951 | B1421A | 4 Pair           | 24 awg / ~0.25mm <sup>2</sup> | 7.1      | 305m      |
| 3804947 | B1424A | 12 Pair + 1 Core | 24 awg / ~0.25mm <sup>2</sup> | 10.6     | 305m      |

# UNITRONIC BUS EIB / KNX

FOR COMMUNICATION IN BUILDING MANAGEMENT

#46

SEARCH ON EXPRESS.ECSNZ.COM



### Minimum bending radius

» Fixed installation: 5 x outer diameter

### Benefits

Can be laid on or under plaster; in pipes, cable ducts; in dry, damp or wet environments.

### Application Range

Decentralised control of lighting, heating, air-conditioning, ventilation, energy management, blinds, time management, locking systems etc.

### Temperature Range

» -30 to +70

| Item No | Type          | Strands/Conductor | Cores & Size | OD  |
|---------|---------------|-------------------|--------------|-----|
| 2170240 | BUS EIB / KNX | 1                 | 2 x 2 x 0.8  | 6.6 |

# Valve Cable

VALVE CABLE USED IN DAIRY FACTORY INSTALLATIONS

#29

SEARCH ON EXPRESS.ECSNZ.COM



### Construction

Tinned Fine wire stranded conductors, PVC inner insulation material and black UV resistant PVC outer sheath.

### Minimum Bending Radius

» Fixed: 6 x cable OD

### Temperature Rating

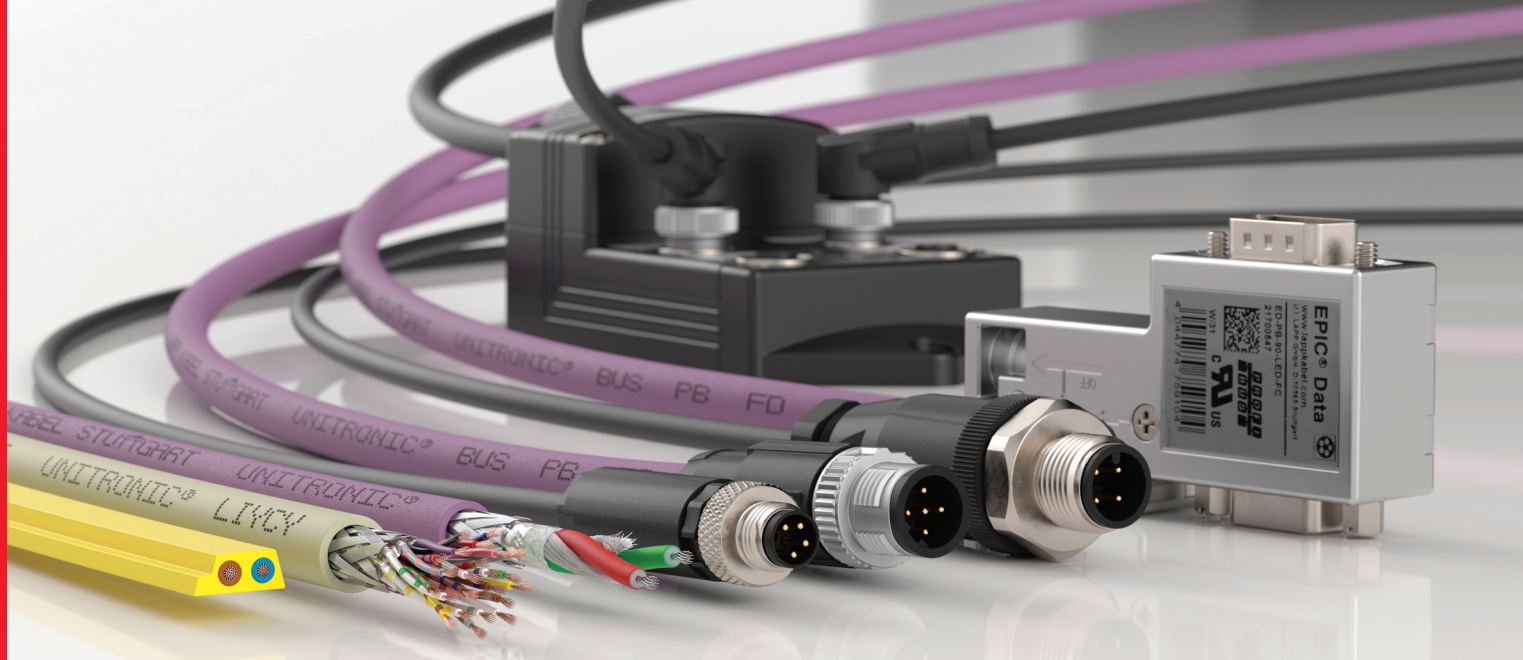
» -20 to 70

### Features

» Tinned Conductors  
» Black UV Resistant Sheath  
» Meets new colour coding standard for valves

| Item No                  | Cores | Conductor | Sheath Rating | Conductor Colours                                  | OD    |
|--------------------------|-------|-----------|---------------|----------------------------------------------------|-------|
| <b>0.25mm Conductors</b> |       |           |               |                                                    |       |
| 3805717                  | 6     | 0.25      | 24V           | Brown, Blue, Grey, White, Red, Black               | 5.1mm |
| <b>0.5mm Conductors</b>  |       |           |               |                                                    |       |
| 3805718                  | 6     | 0.5       | 500V          | Brown, Blue, Grey, White, Red, Black               | 6.9mm |
| 3805719                  | 9     | 0.5       | 500V          | Brown, Blue, Grey, White, Red, Black, Pink, Orange | 9.1mm |





## UNITRONIC Profibus

FOR SIEMENS PLC COMMUNICATION NETWORKS

#236



SEARCH ON EXPRESS.ECSNZ.COM

### LAPP KABEL STUÏGART UNITRONIC® BUS L2/FIP ROBUST

| Item No                           | Type                | No. of cores and Ø of conductor | OD | Sheath Type  |
|-----------------------------------|---------------------|---------------------------------|----|--------------|
| <b>Static</b>                     |                     |                                 |    |              |
| 2170220                           | Solid Conductor     | 1 x 2 x 0.64 mm Ø (~0.34mm²)    | 8  | PVC - Purple |
| <b>Dragchain - Ultra Flexible</b> |                     |                                 |    |              |
| 2170222                           | Stranded Conductors | 1 x 2 x 0.64 mm Ø (~0.34mm²)    | 8  | PUR - Purple |

## EPIC Profibus Connectors

FOR SIEMENS PLC COMMUNICATION NETWORKS

#273



SEARCH ON EXPRESS.ECSNZ.COM

| Item No                                 | Style           | Connector    | Terminator Switch |
|-----------------------------------------|-----------------|--------------|-------------------|
| <b>Standard</b>                         |                 |              |                   |
| 21700502                                | 90°             | Fast Connect | Yes               |
| 21700544                                | 180° / Straight | Fast Connect | Yes               |
| 21700504                                | 90°             | Screw        | Yes               |
| 21700505                                | 180° / Straight | Screw        | Yes               |
| 21700507                                | 35°             | Screw        | Yes               |
| <b>With additional programming port</b> |                 |              |                   |
| 21700501                                | 90°             | Fast Connect | Yes               |
| 21700503                                | 90°             | Screw        | Yes               |
| 21700506                                | 35°             | Screw        | Yes               |



21700504  
HIGHLY REQUESTED



21700505  
HIGHLY REQUESTED

## UNITRONIC DeviceNet

FOR ALLEN BRADLEY PLC COMMUNICATION NETWORKS

#237



SEARCH ON EXPRESS.ECSNZ.COM

### UNITRONIC® BUS DeviceNet TRUNK Cable

### UNITRONIC® BUS DeviceNet DROP Cable

| Item No                           | Type                  | No. of cores and AWG per conductor | OD   | Sheath Type  |
|-----------------------------------|-----------------------|------------------------------------|------|--------------|
| <b>Static</b>                     |                       |                                    |      |              |
| 3801234                           | THICK (TRUNK) / 3082A | 1x2xAWG18 + 1x2xAWG15              | 12   | PVC - Grey   |
| 3801235                           | THIN (DROP) / 3084A   | 1x2xAWG24 + 1x2xAWG22              | 7.1  | PVC - Grey   |
| <b>Dragchain - Ultra Flexible</b> |                       |                                    |      |              |
| 2170344                           | THICK (TRUNK) / 3082A | 1x2xAWG18 + 1x2xAWG15              | 12.2 | PUR - Purple |
| 2170345                           | THIN (DROP) / 3084A   | 1x2xAWG24 + 1x2xAWG22              | 6.9  | PUR - Purple |



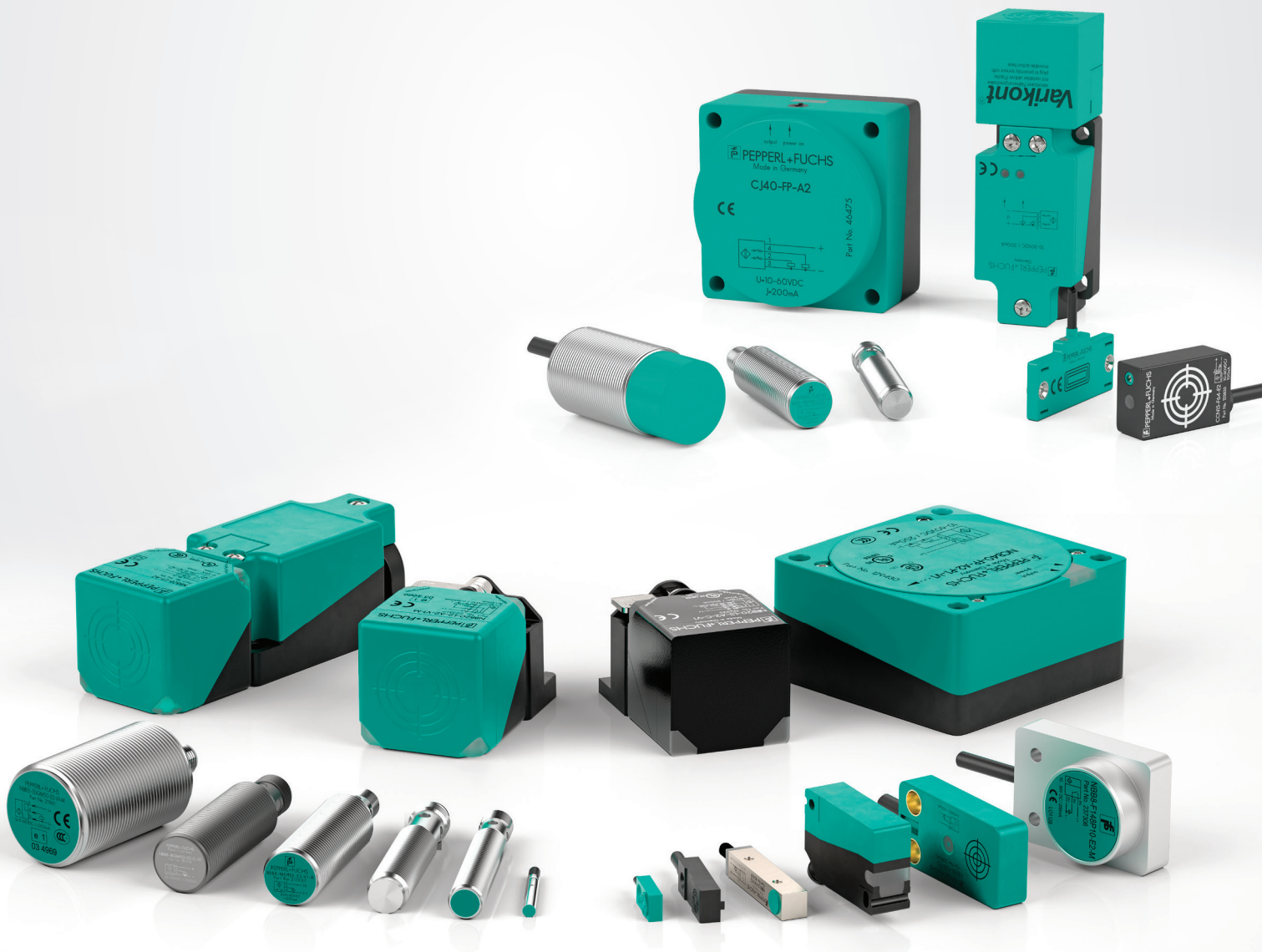
# Pepperl+Fuchs, Sensor Technology For Tomorrow, Available Now From ECS

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## UNITRONIC M8 Field Wireable Connectors

SCREW TERMINAL SERIES

#141



SEARCH ON EXPRESS.ECSNZ.COM

| Terminal      | Male     | Female   |
|---------------|----------|----------|
| <b>3 Pole</b> |          |          |
| Screw         | 22260120 | 22260125 |
| <b>4 Pole</b> |          |          |
| Screw         | 22260121 | 22260126 |



3 Pole



4 Pole

## UNITRONIC M8 Connectors With Leads

PUR BLACK CABLE - DRAGCHAIN RATED - INCLUDES MARKER SLEEVES

#142



SEARCH ON EXPRESS.ECSNZ.COM

|               | Male / Plug | Female / Socket | Female / Socket |
|---------------|-------------|-----------------|-----------------|
| Lead Length   | Straight    | Straight        | Right Angle     |
| <b>3 Pole</b> |             |                 |                 |
| 2m            | 22260204    | 22260202        | 22260203        |
| 5m            | 22260205    | 22260200        | 22260201        |
| 10m           | 22260218    | 22260219        | 22260220        |
| <b>4 Pole</b> |             |                 |                 |
| 2m            | 22260300    | 22260309        | 22260311        |
| 5m            | 22260308    | 22260310        | 22260312        |
| 10m           | 22260318    | 22260317        | 22260319        |



## UNITRONIC M8 Panel Mount

PANEL MOUNTS FOR CABINETS

#143



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|               | Male     | Female   | Thread | Suitable Locknut |
|---------------|----------|----------|--------|------------------|
| <b>3 Pole</b> | 22260100 | 22260102 | M8     | LUM-RSKF-8       |
| <b>4 Pole</b> | 22260101 | 22260103 | M8     | LUM-RSKF-8       |



## UNITRONIC M12 Field Wireable Connectors

QUICK CONNECT SERIES

#138



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| Description | Max Cable | Male     | Female   | Cable Joiner |
|-------------|-----------|----------|----------|--------------|
| 4 Pole      | 8mm       | 22260134 | 22260133 | 22260983     |

## UNITRONIC M12 Field Wireable Connectors

SCREW TERMINAL SERIES

#138



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| A Coded Male | B Coded Male | D Coded Male |          |          | Male / Plug |             | Female / Socket |             |
|--------------|--------------|--------------|----------|----------|-------------|-------------|-----------------|-------------|
|              | Poles        | Key Coding   | Shielded | Cable OD | Straight    | Right Angle | Straight        | Right Angle |
| Standard     | 4 Pole       | A            |          | 8mm      | RSC-4/9     | RSCW-4/9    | RKC-4/9         | RKCW-4/9    |
|              | 4 Pole       | A            |          | 6mm      | 22260649    | 22260647    | 22260640        | 22260636    |
|              | 5 Pole       | A            |          | 6mm      | 22260129    | 22260130    | 22260127        | 22260128    |
|              | 8 Pole       | A            |          | 6mm      | 22260652    |             | 22260645        |             |
| Shielded     | 5 Pole       | A            | Shielded | 8mm      | 22260135    |             | 22260136        |             |
|              | 8 Pole       | A            | Shielded | 8mm      | 22260825    |             | 22260826        |             |
| Fieldbus     | 4 Pole       | D / Ethernet | Shielded | 8mm      | 22260820    |             | 22261016        |             |
|              | 5 Pole       | B / Profibus | Shielded | 8.5mm    | 22260653    |             | 22260646        |             |

## UNITRONIC M12 Connectors With Leads

PUR OR PVC BLACK CABLE - DRAGCHAIN RATED - INCLUDES MARKER SLEEVES

#139



SEARCH ON EXPRESS.ECSNZ.COM



|               | Male / Plug  | Male / Plug     | Female / Socket | Female / Socket | Female / Socket | Female / Socket |
|---------------|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Lead Length   | Straight PUR | Right Angle PUR | Straight PUR    | Straight PVC    | Right Angle PUR | Right Angle PVC |
| <b>4 Pole</b> |              |                 |                 |                 |                 |                 |
| 2m            | 22260320     | 22260301        | 22260322        | 22260688        | 22260324        | 22260841        |
| 5m            | 22260321     | 22260302        | 22260323        | 22260689        | 22260325        | 22260678        |
| 10m           | 22260342     | 22260303        | 22260343        | 22260685        | 22260341        | 22260683        |
| <b>5 Pole</b> |              |                 |                 |                 |                 |                 |
| 2m            | 22260400     | 22260402        | 22260404        |                 | 22260406        |                 |
| 5m            | 22260401     | 22260403        | 22260405        |                 | 22260407        |                 |
| 10m           | 22260414     | 22260417        | 22260415        |                 | 22260418        |                 |
| <b>8 Pole</b> |              |                 |                 |                 |                 |                 |
| 2m            | 22260091     | 22260094        | 22260726        |                 | 22260141        |                 |
| 5m            | 22260092     | 22260095        | 22260728        |                 | 22260615        |                 |
| 10m           | 22260093     | 22260096        | 22260729        |                 | 22260616        |                 |

## UNITRONIC M12 Panel Mount

PANEL MOUNTS FOR CABINETS

#140



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| Thread        | Male     | Female   | Suitable Locknut |
|---------------|----------|----------|------------------|
| <b>4 Pole</b> |          |          |                  |
| M16           | 22260108 | 22260107 | 52103010         |
| PG9           | 22260113 | 22260114 | 52003500         |
| <b>5 Pole</b> |          |          |                  |
| M16           | 22260106 | 22260105 | 52103010         |
| PG9           | 22260112 | 22260111 | 52003500         |
| <b>8 Pole</b> |          |          |                  |
| M16           | 22260631 | 22260628 | 52103010         |



## UNITRONIC Sensor Distribution Boxes

DISTRIBUTION BOXES AVAILABLE WITH M8 OR M12 CONNECTORS

#1364 / #1365



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### Passive (Conventional Wiring)

- » 4 or 8 Slot x M12
- » 4 or 8 Slot x M8

### Active Fieldbus

- » Profibus
- » DeviceNet
- » AS-I



| Item No                      | Description                                      | Type           | Thread |
|------------------------------|--------------------------------------------------|----------------|--------|
| <b>Sensor Blocks (#1364)</b> |                                                  |                |        |
| 22260031                     | Sensor Block M8 with 8 slots and LED indication  | 10m            | M8     |
| 22260036                     | Sensor Block M8 with 8 slots and LED indication  | Terminal Block | M8     |
| 22260002                     | Sensor Block M12 with 4 slots and LED indication |                | M12    |
| <b>Covers (#1365)</b>        |                                                  |                |        |
| ZVKM                         | Sealing Cap for M8 Female Connectors             | Female         | M8     |
| ZVK                          | Sealing Cap for M12 Female Connectors            | Female         | M12    |
| 0909-UAC-101B                | Sealing Cap for M12 Male Connectors              | Male           | M12    |

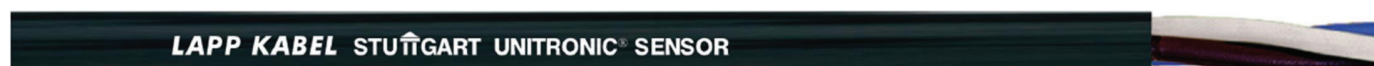
## UNITRONIC Sensor Cable

CABLE FOR EXTENDING LEADS OR WIRING M8 AND M12 CONNECTORS

#1370



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| Item No           | Conductors | 1     | 2     | 3     | 4      | 5    | 6    | 7    | 8   |
|-------------------|------------|-------|-------|-------|--------|------|------|------|-----|
| <b>UNSCREENED</b> |            |       |       |       |        |      |      |      |     |
| 7038864           | 3 x 0.34   | brown | blue  | black |        |      |      |      |     |
| 7038865           | 4 x 0.34   | brown | white | blue  | black  |      |      |      |     |
| 7038893           | 5 x 0.34   | brown | white | blue  | black  | grey |      |      |     |
| 7038868           | 8 x 0.25   | white | brown | green | yellow | grey | pink | blue | red |
| <b>SCREENED</b>   |            |       |       |       |        |      |      |      |     |
| 7038886           | 4 x 0.34   | brown | white | blue  | black  |      |      |      |     |



# ETHERLINE RJ45 Connectors

FOR ETHERNET NETWORKS IN FACTORY INSTALLATIONS

#48

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## FIELD MOUNTABLE

### 21700600

- » No Tools Required
- » 4 Pair: Standard T568A
- » Solid Wire: 24 to 22AWG
- » 7 Stranded: 27 to 22AWG
- » Cable OD: 5-9mm



## FOR FD CABLES

### 21700615

- » No Tools Required
- » 4 pair: standard t568a
- » For FD dragchain cables
- » Solid Wire: 26 to 24awg
- » 7 Stranded: 27 to 24awg
- » 19 Stranded: 26awg
- » Cable OD: 5-9mm



## PROFINET COLOUR CODING

### 21700605

- » No Tools Required
- » 2 Pair: ProfiNet YE/OG/BU/WH
- » Solid Wire: 24 to 22AWG
- » 7 Stranded: 27 to 22AWG
- » Cable OD: 5-9mm



## PROFINET COLOUR CODING

### 21700651

- » 2 Pair: ProfiNet YE, OG, BU, WH
- » Solid Wire: 24 to 22AWG
- » 7 Stranded: 27 to 22AWG
- » Cable OD: 5.5-10mm
- » Gland included



## FIELD MOUNTABLE

### 21700652e

- » 4 Pair: Standard T568A
- » Solid Wire: 24 to 22AWG
- » 7 Stranded: 27 to 22AWG
- » Cable OD: 5.5-10mm
- » Gland included



## FOR FD CABLES

### 21700654

- » 4 Pair: Standard T568A
- » For FD Dragchain Cables
- » Solid Wire: 26 to 24AWG
- » 7 Stranded: 27 to 24AWG
- » 19 Stranded: 26AWG
- » Cable OD: 5.5-10mm
- » Gland included



## UNSHIELDED

### ECS-P129

- » Un Shielded
- » Standard RJ45 crimp tool required
- » 4 Pair / Cat5e
- » 7 Stranded: 26 to 24AWG



## SHIELDED

### ECS-P129s

- » Shielded
- » Standard RJ45 crimp tool required
- » 4 Pair / Cat5e
- » 7 Stranded: 26 to 24AWG



## RJ45 CAT.6A COUPLER - 21700611

### Features

- Available with colour code T568A (21700611) or T568B (21700612). Qualified for 10 Gigabit/s Ethernet, metal housing suitable for industrial applications.
- » Installation without tools
- » RJ45 suitable for Cat.6A



## FOR FD CABLES

### 21700639

- » Quick Termination / No Tools Required
- » 4 Pair: Standard T568A
- » 90 Degree cable exit
- » 4 Way Mountable
- » For FD Dragchain Cables
- » Solid Wire: 26 to 24AWG
- » 7 Stranded: 27 to 24AWG
- » 19 Stranded: 26AWG
- » Cable OD: 5-10mm



## FOR STANDARD CABLES

### 21700636

- » Quick Termination / No Tools Required
- » 4 Pair: Standard T568A
- » 90 Degree cable exit
- » 4 Way Mountable
- » Solid Wire: 24 to 22AWG
- » 7 Stranded: 27 to 22AWG
- » Cable OD: 5-10mm



## DIN RAIL ETHERNET SOCKET

### 21700613

- » Fully Enclosed
- » Cover flap when socket not in use
- » Ideal for Ethernet Patch cables in Switchboards
- » Bring main cable in, then run a short patch cable
- » Suitable for speeds up to CAT6A
- » Solid Wire: 26 to 22AWG
- » 7 Stranded: 27 to 22AWG



## SNAG COVERS

### Features

- » For use with ECS-P129 and ECS-P129s
- » Cable OD: 5-6mm
- » Available in Green, Blue, White, Black and Red



## RJ45 JACK W/ COVER

### SCH-RRJ\_RJ45\_WC

- » Standard 22mm hole size
- » Dust cap
- » Locknut included
- » 2 x RJ45 sockets



## FIELD MOUNTABLE

### 21700540

- » Quick Termination / No Tools Required
- » 4 Pair: Standard T568A
- » Suitable for speeds up to CAT5e
- » Solid Wire: 26 to 23AWG
- » 7 Stranded: 26 to 24AWG



## MALE D CODED

### 22260820

- » Quick Termination / No Tools Required
- » 2 Pair: D Coded
- » IP67
- » Solid Wire: 26 to 22AWG
- » 7 Stranded: 26 to 22AWG
- » Cable OD: 4-8mm



## FEMALE D CODED

### 22261016

- » Quick Termination / No Tools Required
- » 2 Pair: D Coded
- » IP67
- » Solid Wire: 26 to 22AWG
- » 7 Stranded: 26 to 22AWG
- » Cable OD: 4-8mm



## EPIC SENSOR M12-M12 5-POLE

### 22262020

- » M12 control cabinet feed-through
- » CANopen/Devicenet applications
- » For sensor/actuator cabling
- » 5-pin
- » A-coded
- » Screened



## ETHERNET CABLE JOINER

### 21700623

- » For Joining Ethernet Cables
- » Quick Termination / No Tools Required
- » Suitable for speeds up to CAT7A
- » 4 Pair
- » IP67
- » Solid Wire: 24 to 22AWG
- » 7 Stranded: 24 to 22AWG
- » Cable OD: 5-10mm



## CAT6A SHIELDED JOINER

### ECS-P129s-Joiner

- » For Joining Ethernet Patch Cables
- » Suitable for speeds up to CAT6A



## Ethernet CAT 5E

ETHERNET CABLE CATEGORY 5E, CLASS D FOR FIXED INSTALLATION

# 2010

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| Item No                                                     | Type                        | Number of pairs  | OD (mm) | Sheath Type | EXPRESS Category ID |
|-------------------------------------------------------------|-----------------------------|------------------|---------|-------------|---------------------|
| LAPP KABEL UNITRONIC LAN CAT5e - UTP                        |                             |                  |         |             |                     |
| 3803513                                                     | UNITRONIC LAN UTP CAT.5e    | 4 x 2 x AWG 24/1 | 5.1     | PVC         | #46                 |
| LAPP KABEL STUÏGART ETHERLINE® H-H CAT.5e                   |                             |                  |         |             |                     |
| 2170280                                                     | ETHERLINE H CAT.5e          | 2 x 2 x AWG 24/1 | 5.6     | LSZH        | #2010               |
| LAPP KABEL STUÏGART ETHERLINE® H-H CAT.5e                   |                             |                  |         |             |                     |
| 2170296                                                     | ETHERLINE H CAT.5e          | 4 x 2 x AWG 24/1 | 6.1     | LSZH        | #2010               |
| LAPP KABEL STUÏGART ETHERLINE® PN Cat.5e Y 2x2xAWG22/1      |                             |                  |         |             |                     |
| 2170891                                                     | ETHERLINE PN Cat.5e Y       | 2 x 2 x AWG 22   | 6.3     | PVC         | #2010               |
| LAPP KABEL STUÏGART ETHERLINE® FIRE Cat.6 PH120 4x2xAWG22/1 |                             |                  |         |             |                     |
| 2170905                                                     | ETHERLINE FIRE Cat.5e PH120 | 4 x 2 x AWG 23/1 | 8.6     | FRNC        | #2014               |

## UNITRONIC® LAN 250 UTP Cat.6

DATA COMMUNICATION SYSTEMS FOR ETHERNET TECHNOLOGY

#46

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| Item No                                          | Type                        | Number of pairs | OD (mm) | Sheath Type | EXPRESS Category ID |
|--------------------------------------------------|-----------------------------|-----------------|---------|-------------|---------------------|
| LAPP KABEL STUÏGART UNITRONIC® LAN 250 UTP CAT.6 |                             |                 |         |             |                     |
| 3801501K                                         | UNITRONIC LAN 250 UTP CAT.6 | 4 x 2 x AWG 23  | 6.4     | PVC         | #46                 |

## ETHERLINE® FIRE CAT.6

INDUSTRIAL ETHERNET CABLE WITH INSULATION INTEGRITY

#2014

SEARCH ON EXPRESS.ECSNZ.COM



| Item No                                                     | Type                       | Number of pairs  | OD (mm) | Sheath Type | EXPRESS Category ID |
|-------------------------------------------------------------|----------------------------|------------------|---------|-------------|---------------------|
| LAPP KABEL STUÏGART ETHERLINE® FIRE Cat.6 PH120 4x2xAWG22/1 |                            |                  |         |             |                     |
| 2170913                                                     | ETHERLINE FIRE Cat.6 PH120 | 4 x 2 x AWG 22/1 | 10.2    | FRNC        | #2014               |

## ETHERLINE® LAN 500 Cat.6A

ETHERNET CABLE FOR CATEGORY 6 A / CLASS E A -VERIFIED UP TO 500 MHZ

#2023

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| Item No                                             | Type                       | Number of pairs  | OD (mm) | Sheath Type | EXPRESS Category ID |
|-----------------------------------------------------|----------------------------|------------------|---------|-------------|---------------------|
| LAPP KABEL STUÏGART ETHERLINE® LAN 500 S/FTP Cat.6A |                            |                  |         |             |                     |
| 2170960                                             | ETHERLINE LAN Cat.6A S/FTP | 4 x 2 x AWG 23/1 | 7.3     | PVC         | #2023               |
| LAPP KABEL STUÏGART ETHERLINE® LAN 500 F/FTP Cat.6A |                            |                  |         |             |                     |
| 2170962                                             | ETHERLINE LAN Cat.6A F/FTP | 4 x 2 x AWG 23/1 | 7.3     | LSZH        | #2023               |

## ETHERLINE® PN Cat.7

ETHERNET CABLE CATEGORY 7, CLASS F FOR FIXED INSTALLATION, VERIFIED UP TO 600 MHZ

#2010

SEARCH ON EXPRESS.ECSNZ.COM



| Item No                                             | Type                      | Number of pairs  | OD (mm) | Sheath Type | EXPRESS Category ID |
|-----------------------------------------------------|---------------------------|------------------|---------|-------------|---------------------|
| LAPP KABEL STUÏGART ETHERLINE® PN Cat.7 4x2xAWG23/1 |                           |                  |         |             |                     |
| 2170605                                             | ETHERLINE PN CAT.7 Y A    | 2 x 4 x AWG 23/1 | 8.1     | PVC         | #2010               |
| 2170606                                             | ETHERLINE PN CAT.7 FRNC A | 2 x 4 x AWG 23/1 | 8.1     | LSZH        | #2010               |
| 2170607                                             | ETHERLINE PN CAT.7 P A    | 2 x 4 x AWG 23/1 | 8.1     | PUR         | #2010               |

## UNITRONIC® LAN Cat.7 OUTDOOR

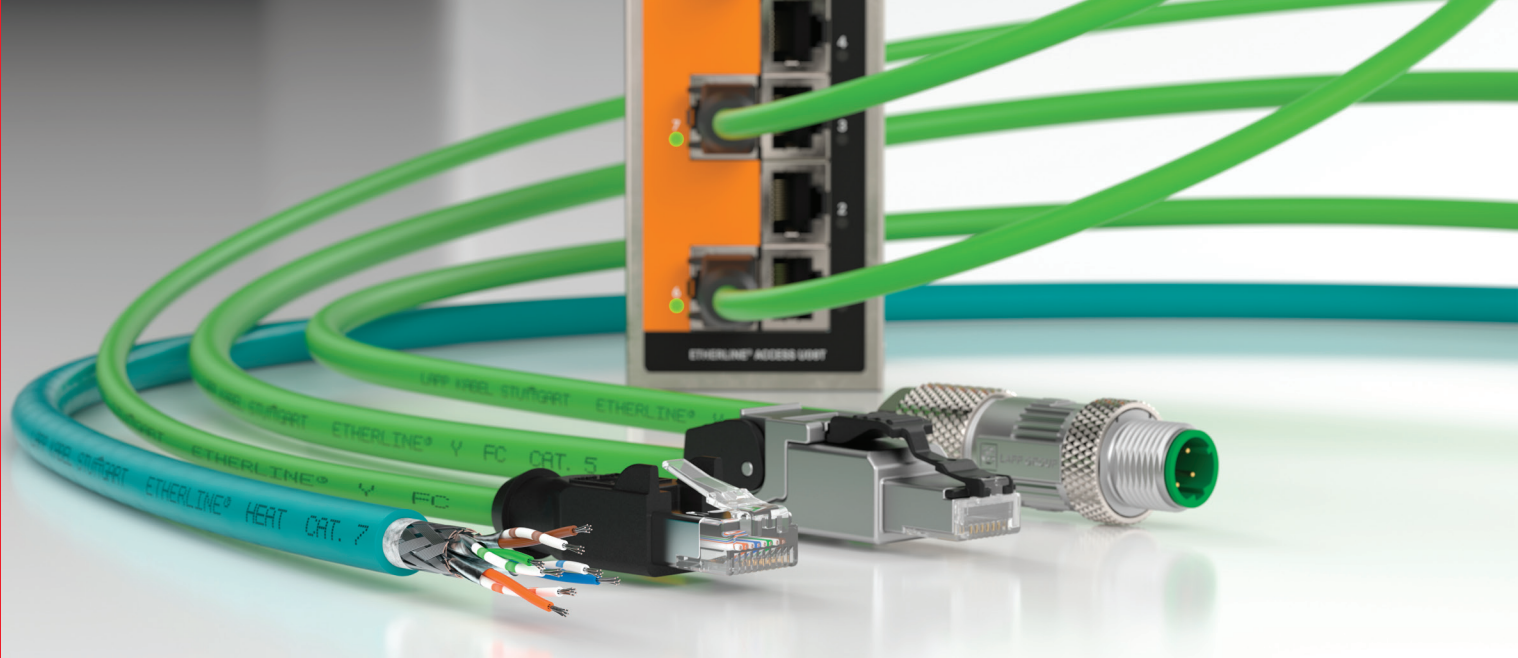
ETHERNET CABLE FOR CATEGORY 7/CLASS F, VERIFIED UP TO 1000 MHZ, FOR OUTDOOR APPLICATIONS

#2023

SEARCH ON EXPRESS.ECSNZ.COM



| Item No                                                | Type                      | Number of pairs        | OD (mm) | Sheath Type | EXPRESS Category ID |
|--------------------------------------------------------|---------------------------|------------------------|---------|-------------|---------------------|
| LAPP KABEL STUÏGART ETHERLINE® LAN 1000 S/FTP Cat.7 PE |                           |                        |         |             |                     |
| 2170977                                                | ETHERLINE LAN Cat.7 S/FTP | 4 x 2 x AWG 23/1 (L)PE | 9.6     | (L)PE       | #2023               |



## STRANDED CONDUCTORS FOR FLEXIBLE APPLICATIONS

### Ethernet® CAT 5/E/Y/PN Flex

ETHERNET CABLE CATEGORY 5... FOR FLEXIBLE USE

#



SEARCH ON EXPRESS.ECSNZ.COM

| Item No                                                                | Type                                | Number of pairs  | OD (mm) | Sheath Type | EXPRESS Category ID |
|------------------------------------------------------------------------|-------------------------------------|------------------|---------|-------------|---------------------|
| LAPP KABEL STUTTGART UNITRONIC® LAN 200 MHz F/UTP CAT.5e Y 4x2x26AWG/7 |                                     |                  |         |             |                     |
| 2170127                                                                | ETHERLINE LAN 200 F/UTP Cat.5e FLEX | 4 x 2 x AWG 26/7 | 5.6     | PVC         | #2024               |
| LAPP KABEL STUTTGART ETHERLINE® Y Flex CAT.5e 4x2xAWG26/7              |                                     |                  |         |             |                     |
| 2170486                                                                | ETHERLINE Y Flex CAT.5e             | 4 x 2 x AWG 26/7 | 6.2     | PVC         | #2011               |
| LAPP KABEL STUTTGART UNITRONIC® EtherLine Flex                         |                                     |                  |         |             |                     |
| 2170299                                                                | ETHERLINE H FLEX CAT.5e             | 4 x 2 x AWG 26/7 | 6.1     | LSZH        | #2011               |
| LAPP KABEL STUTTGART ETHERLINE® P Flex CAT.5e                          |                                     |                  |         |             |                     |
| 2170300                                                                | ETHERLINE P Flex CAT.5e             | 4 x 2 x AWG 26/7 | 6.1     | PUR         | #2011               |
| LAPP KABEL STUTTGART ETHERLINE® PN Cat.5 Y FLEX FC 2x2xAWG22/7         |                                     |                  |         |             |                     |
| 2170886                                                                | ETHERLINE PN Cat.5 Y FLEX FC        | 2 x 2 x AWG 22/7 | 6.5     | PVC         | #2015               |
| LAPP KABEL STUTTGART ETHERLINE® ROBUST PN Cat.5                        |                                     |                  |         |             |                     |
| 2170451                                                                | ETHERLINE ROBUST PN Cat.5           | 2 x 2 x AWG 22/7 | 6.5     | TPE         | #1918               |

### Ethernet® CAT 7 Flex

DATA CABLE FOR PATCHCABLE APPLICATIONS

#46



SEARCH ON EXPRESS.ECSNZ.COM

| Item No                                                  | Type                                | Number of pairs  | OD (mm) | Sheath Type | EXPRESS Category ID |
|----------------------------------------------------------|-------------------------------------|------------------|---------|-------------|---------------------|
| LAPP KABEL STUTTGART ETHERLINE® LAN 600 S/FTP Cat.7 Flex |                                     |                  |         |             |                     |
| 2170144                                                  | UNITRONIC LAN 600 S/FTP CAT7 Y FLEX | 4 x 2 x AWG 26/7 | 6.5     | PVC         | #46                 |
| LAPP KABEL STUTTGART ETHERLINE® Cat.7 FLEX 4x2xAWG26/7   |                                     |                  |         |             |                     |
| 2170934                                                  | ETHERLINE Cat.7 FLEX                | 4 x 2 x AWG 26/7 | 6.4     | PUR         | #46                 |

### ETHERLINE® ROBUST CAT 7

PROFINET & INDUSTRIAL ETHERNET CAT.7 FOR PROFINET APPLICATIONS

#1918



SEARCH ON EXPRESS.ECSNZ.COM

| Item No                                         | Type                        | Number of pairs  | OD (mm) | Sheath Type | EXPRESS Category ID |
|-------------------------------------------------|-----------------------------|------------------|---------|-------------|---------------------|
| LAPP KABEL STUTTGART ETHERLINE® ROBUST PN Cat.7 |                             |                  |         |             |                     |
| 2170452                                         | ETHERLINE ROBUST PN Cat.7   | 4 x 2 x AWG 23/7 | 8.7     | TPE         | #1918               |
| 2170453                                         | ETHERLINE ROBUST Cat.7 FLEX | 4 x 2 x AWG 26/7 | 6.2     | TPE         | #1918               |



# SUPER FINE STRANDED CONDUCTORS FOR CONSTANT MOVING APPLICATIONS

## ETHERLINE® Cat.5e FD

ETHERNET CABLE CATEGORY 5E, CLASS D FOR USE IN DRAG CHAIN APPLICATIONS - VERIFIED UP TO 100 MHZ

#2012



SEARCH ON EXPRESS.ECSNZ.COM

| Item No | Type                               | Number of pairs   | OD (mm) | Sheath Type | EXPRESS Category ID |
|---------|------------------------------------|-------------------|---------|-------------|---------------------|
|         |                                    |                   |         |             |                     |
| 2170289 | ETHERLINE FD P Cat.5e 2x2x26/19AWG | 2 x 2 x AWG 26/19 | 5.9     | PUR         | #2012               |
| 2170489 | ETHERLINE FD P CAT5e 4X2XAWG26     | 4 x 2 x AWG 26/19 | 6.3     | PUR         | #2012               |

## ETHERLINE® CAT.6 FD

ETHERNET CABLE CATEGORY 6, CLASS E FOR USE IN DRAG CHAIN APPLICATIONS - VERIFIED UP TO 250 MHZ

#46



SEARCH ON EXPRESS.ECSNZ.COM

| Item No | Type                           | Number of pairs   | OD (mm) | Sheath Type | EXPRESS Category ID |
|---------|--------------------------------|-------------------|---------|-------------|---------------------|
|         |                                |                   |         |             |                     |
| 2170488 | ETHERLINE FD P CAT.6 4X2XAWG26 | 4 x 2 x AWG 26/19 | 7.8     | PUR         | #46                 |

# SUPER FINE STRANDED CONDUCTORS FOR ROBOTIC TORSION APPLICATIONS

## CAT 5/6/7 Robotics

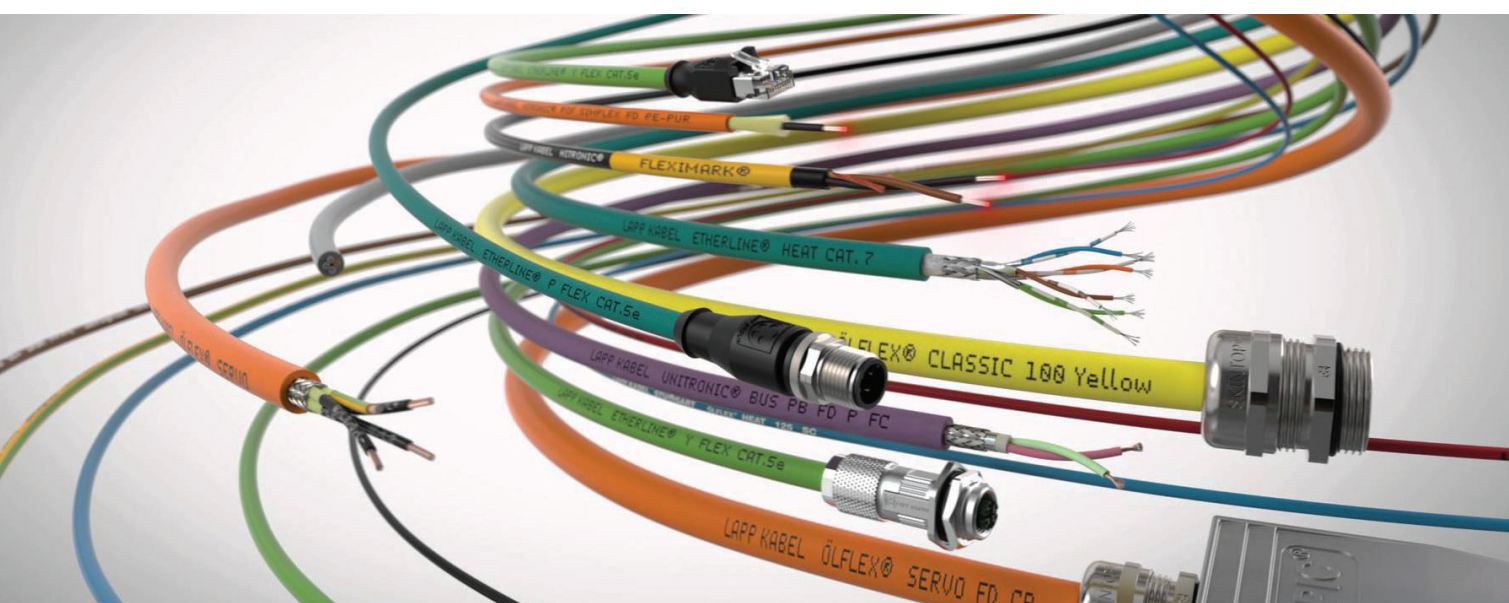
ETHERNET CABLE CATEGORY 6, CLASS E FOR USE IN DRAG CHAIN APPLICATIONS - VERIFIED UP TO 250 MHZ

#2013



SEARCH ON EXPRESS.ECSNZ.COM

| Item No | Type                       | Number of pairs    | OD (mm) | Sheath Type | EXPRESS Category ID |
|---------|----------------------------|--------------------|---------|-------------|---------------------|
|         |                            |                    |         |             |                     |
| 2170888 | ETHERLINE TORSION P CAT.5a | "2 x 2 x AWG 22/19 | 6.5     | PUR         | #2013               |
|         |                            |                    |         |             |                     |
| 2170482 | ETHERLINE TORSION Y CAT6A  | 4 x 2 x AWG 24/7   | 8.9     | PVC         | #2013               |
|         |                            |                    |         |             |                     |
| 2170481 | ETHERLINE TORSION Cat.7    | 4 x 2 x AWG 24/7   | 9.4     | PUR         | #2013               |



ECS

ETHERNET CABLE





ecs

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POWER COMMUNICATIONS / MARKING



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By leveraging this valuable input, we continuously enhance our systems to provide better support. We take into consideration the unique pain points experienced by individuals within your organisation and strive to tailor our solutions accordingly. This customer-centric approach is what sets our technology and systems apart, positioning us as the preferred choice for numerous companies in the market.

## HITRONIC Fibre Optic - Distribution

LOOSE-TUBE, GEL FILLED SINGLE & MULTIMODE FIBRE

#49



SEARCH ON EXPRESS.ECSNZ.COM



### Application

Generally used for long transmission runs. Typically installed in conduit ducts or cable trays.

### Special Features

- » Suitable for direct burial
- » Suitable for direct installation outdoors

### Notes

- » More versions available on request

### Construction

UV resistant (outdoor suitable). Special water blocking tape for water protection. Tough PE outer sheath.

| Item No                  | Fibre Size | Cores | Core Jacket | Cable OD |
|--------------------------|------------|-------|-------------|----------|
| <b>Multi Mode (OM3)</b>  |            |       |             |          |
| 27600304                 | 50/125     | 4     | 250 micron  | 7.3 mm   |
| 27600308                 | 50/125     | 8     | 250 micron  | 7.3 mm   |
| 27600312                 | 50/125     | 12    | 250 micron  | 7.3 mm   |
| 27600324                 | 50/125     | 24    | 250 micron  | 8.3 mm   |
| <b>Single Mode (OS2)</b> |            |       |             |          |
| 27600908                 | 9/125      | 8     | 250 micron  | 7.3 mm   |
| 27600912                 | 9/125      | 12    | 250 micron  | 7.3 mm   |
| 27600924                 | 9/125      | 24    | 250 micron  | 8.3 mm   |

## Terminations

CONNECTORS, BREAKOUT BOXES AND OTHER ACCESSORIES

#50



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### Application

Each end of the fibre distribution cable should be terminated into a breakout box. A short fibre patch cable is then run to the end device.

### Special Request

Cables can be pre-terminated and supplied on drums ready for site installation. This is available on request. Free training and a getting started guide for the No-Polish system are available on request.

### Features

"No Polish" connectors can take as little as 2 minutes per connection. The fibre requires no polishing.



| Item No                | Description                                                     |
|------------------------|-----------------------------------------------------------------|
| <b>Termination Kit</b> |                                                                 |
| ECS-FO-KIT             | No Polish Connector Termination Kit with cleaver (SC & LC Only) |
| <b>Connectors</b>      |                                                                 |
| ECS-FO-SC-50           | No Polish SC Connector MM 50 / 125 µm                           |
| ECS-FO-SC-62,5         | No Polish SC Connector MM 62,5 / 125 µm                         |
| ECS-FO-SC-9            | No Polish SC Connector SM 9 / 125 µm                            |
| ECS-FO-LC-50           | No Polish LC Connector MM 50 / 125 µm                           |

## Fibre Patch Cables

FIBRE PATCH LEADS LC, ST, SC

#51



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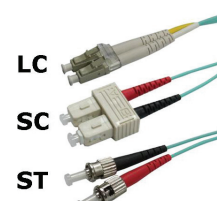
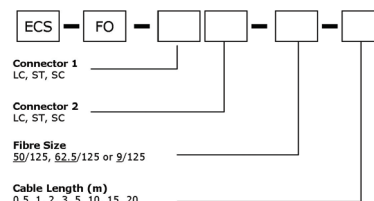
### Application

Generally used for short flexible installations between breakout boxes and the end devices.

### Fibre options

- » ST, SC & LC connections
- » A range of lengths available

| Connector 1 | Connector 2 | Fibre Size                | Cable Length (m)            |
|-------------|-------------|---------------------------|-----------------------------|
| LC, ST, SC  | LC, ST, SC  | 50/125, 62.5/125 or 9/125 | 0.5, 1, 2, 3, 5, 10, 15, 20 |
| LC, ST, SC  | LC, ST, SC  | 50/125, 62.5/125 or 9/125 | 0.5, 1, 2, 3, 5, 10, 15, 20 |
| LC, ST, SC  | LC, ST, SC  | 50/125, 62.5/125 or 9/125 | 0.5, 1, 2, 3, 5, 10, 15, 20 |
| LC, ST, SC  | LC, ST, SC  | 50/125, 62.5/125 or 9/125 | 0.5, 1, 2, 3, 5, 10, 15, 20 |



# RENT ME

3M No Polish Fibre Termination Kit with Cleaver

# \$50

per/day

projects.ecsnz.com/rentals





## Industrial Splice Boxes

HITRONIC SBX INDUSTRIAL SPLICE BOXES FOR SPLICING FIBRE OPTIC CABLES

#2332



SEARCH ON EXPRESS.ECSNZ.COM

### Features

- » Din Mounting
- » Three different cable inlets and positions on contract rail possible
- » Available in 6x and 12x duplex adapter
- » Plastic or metal versions
- » SC-RJ variants are suitable for PROFINET® applications



| Item No                      | Description                             | Application | Housing | Colour    |
|------------------------------|-----------------------------------------|-------------|---------|-----------|
| <b>Multimode G50 OM3</b>     |                                         |             |         |           |
| LAPP-29500791                | HITRONIC SBX 12xST-D MT PG150 G50 OM3   |             | metal   |           |
| LAPP-29500795                | HITRONIC SBX 12xSC-D TQ PG150 G50 OM3   |             | plastic | turquoise |
| LAPP-29500804                | HITRONIC SBX 12xLC-D TQ PG150 G50 OM3   |             | plastic | turquoise |
| LAPP-29500776                | HITRONIC SBX 6xST-D MT PG150 G50 OM3    |             | metal   |           |
| LAPP-29500781                | HITRONIC SBX 6xSC-D TQ PG150 G50 OM3    |             | plastic | turquoise |
| LAPP-29500787                | HITRONIC SBX 6XSC-RJ BG PG150 G50 OM3   | PROFINET    | plastic | beige     |
| LAPP-29500800                | HITRONIC SBX 6xLC-D TQ PG150 G50 OM3    |             | plastic | turquoise |
| <b>Multimode G50 OM2</b>     |                                         |             |         |           |
| LAPP-29500790                | HITRONIC SBX 12xST-D MT PG150 G50 OM2   |             | metal   |           |
| LAPP-29500794                | HITRONIC SBX 12xSC-D BG PG150 G50 OM2   |             | plastic | beige     |
| LAPP-29500803                | HITRONIC SBX 12xLC-D BG PG150 G50 OM2   |             | plastic |           |
| LAPP-29500775                | HITRONIC SBX 6xST-D MT PG150 G50 OM2    |             | metal   |           |
| LAPP-29500780                | HITRONIC SBX 6xSC-D BG PG150 G50 OM2    |             | plastic | beige     |
| LAPP-29500786                | HITRONIC SBX 6XSC-RJ BG PG150 G50 OM2   | PROFINET    | plastic | beige     |
| LAPP-29500799                | HITRONIC SBX 6xLC-D BG PG150 G50 OM2    |             | plastic | beige     |
| <b>Multimode G62,5 OM1</b>   |                                         |             |         |           |
| LAPP-29500774                | HITRONIC SBX 6xST-D MT PG150 G62.5 OM1  |             | metal   |           |
| LAPP-29500779                | HITRONIC SBX 6xSC-D BG PG150 G62.5 OM1  |             | plastic | beige     |
| LAPP-29500785                | HITRONIC SBX 6XSC-RJ BG PG150 G62.5 OM1 | PROFINET    | plastic | beige     |
| LAPP-29500798                | HITRONIC SBX 6xLC-D BG PG150 G62.5 OM1  |             | plastic | beige     |
| <b>Singlemode E9/125 OS2</b> |                                         |             |         |           |
| LAPP-29500793                | HITRONIC SBX 12xST-D MT PG150 E9 OS2    |             | metal   |           |
| LAPP-29500797                | HITRONIC SBX 12xSC-D BL PG150 E9 OS2    |             | plastic | blue      |
| LAPP-29500806                | HITRONIC SBX 12xLC-D BL PG150 E9 OS2    |             | plastic | blue      |
| LAPP-29500778                | HITRONIC SBX 6xST-D MT PG150 E9 OS2     |             | metal   |           |
| LAPP-29500783                | HITRONIC SBX 6xSC-D BL PG150 E9 OS2     |             | plastic | blue      |
| LAPP-29500784                | HITRONIC SBX 6xSC-D MT PG150 E9 OS2     |             | metal   |           |
| LAPP-29500789                | HITRONIC SBX 6XSC-RJ BL PG150 E9 OS2    | PROFINET    | plastic | blue      |
| LAPP-29500802                | HITRONIC SBX 6xLC-D BL PG150 E9 OS2 p   |             | plastic | blue      |

## HITRONIC 19" Fibre Racks

FIBRE DISTRIBUTION IN SERVER / CONTROL ROOMS

#53



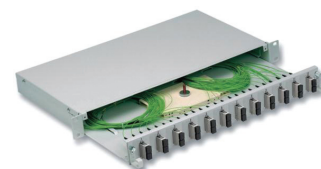
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### Application

Fibre terminations tray for installation in 19" server racks.

### Details

- » Distribution for up to 24 single fibres
- » Slide out tray
- » Holds up to 4 splicing cartridges
- » Unpopulated (couplers supplied separately)
- » Material: Steel



| Item No | Number of Connection Points           | Suitable Couple Style | Dimensions (WxHxD) | Size |
|---------|---------------------------------------|-----------------------|--------------------|------|
| CE9135  | 12 Duplex holes for SC/LC/ST couplers | Rectangle             | 483 x 44.5 x 170mm | 1 RU |

## Splice Box Compact Fibre Distribution Box

FIBRE DISTRIBUTION AROUND THE FACTORY

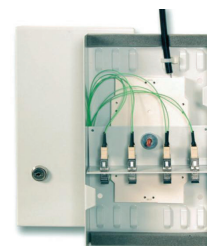
#53



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### Details

- » Lockable (2 keys supplied with box)
- » Includes distribution plates for both 4 x SC Duplex and 8 x ST Simplex



| Item No | Description                                 | Material | Dimensions                |
|---------|---------------------------------------------|----------|---------------------------|
| CE9147  | Splice Box Compact - Fibre Distribution Box | Steel    | (WxHxD): 265 x 150 x 55mm |

## Mini Wall Mounted Rack Fibre Distribution Box

FIBRE DISTRIBUTION AROUND THE FACTORY

#53



SEARCH ON EXPRESS.ECSNZ.COM

### Details

- » Lockable (2 keys supplied with box)
- » Distribution plate not included with box
- » Holds up to 4 splicing cartridges



| Item No | Description                                      | Material | Dimensions                |
|---------|--------------------------------------------------|----------|---------------------------|
| CE9150  | Mini Wall Mounted Rack - Fibre Distribution Box  | Steel    | (WxHxD): 320 x 280 x 54mm |
| CE9153  | Distribution Plate for 12 x SC duplex connectors | Steel    |                           |

## Plastic Fibre Distribution Box

FIBRE DISTRIBUTION AROUND THE FACTORY

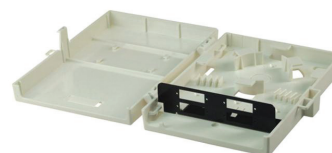
#53



SEARCH ON EXPRESS.ECSNZ.COM

### Details

- » Distribution for up to 8 single fibres
- » Includes distribution plates for both 4 x SC Duplex and Splicing Cartridge



| Item No           | Description                      | Material | Dimensions                |
|-------------------|----------------------------------|----------|---------------------------|
| ECS-FO-Plastic-01 | Plastic - Fibre Distribution Box | Plastic  | (WxHxD): 183 x 129 x 39mm |

## Fibre Accessories

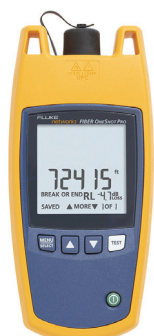
ACCESSORIES FOR DISTRIBUTION UNITS

#53



SEARCH ON EXPRESS.ECSNZ.COM

| Item No                  | Description                             | Item No               | Description                               |
|--------------------------|-----------------------------------------|-----------------------|-------------------------------------------|
| <b>Splice Cartridges</b> |                                         | <b>Fibre Couplers</b> |                                           |
| CE9914                   | Fibre cable holder. For spooling tails. | FO-SCSC-Joiner        | Duplex SC Coupler for 50/125 and 62,5/125 |
| CE9914D                  | Cover for fibre cable holder.           | FO-SCSC-Joiner-9      | Duplex SC Coupler for 9/125               |
| CE9916                   | Splice Holder (up to 2 per cartridge)   | FO-STST-Joiner        | Duplex ST Coupler for 50/125 and 62,5/125 |
|                          |                                         | FO-STST-Joiner-9      | Duplex ST Coupler for 9/125               |
|                          |                                         | FO-LCLC-Joiner        | Quad LC Coupler for 50/125 and 62,5/125   |
|                          |                                         | FO-LCLC-Joiner-9      | Quad LC Coupler for 9/125                 |



# RENT ME

Fluke Networks Multimode Fibre Optic Cable Tester

# \$70

per day

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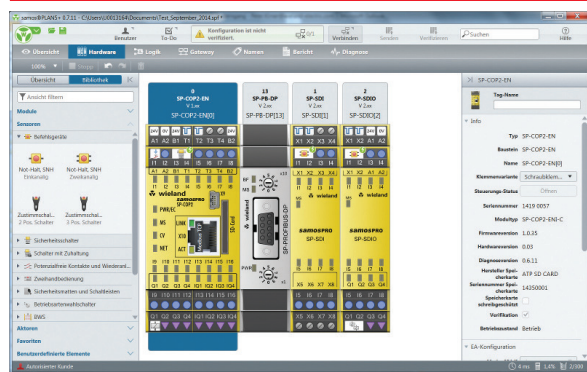
## Wieland SAMOS Pro

### PROGRAMMABLE SAFETY CONTROLLER

#249



SEARCH ON EXPRESS.ECSNZ.COM



#### Details

- » Cost effective and extremely flexible programmable safety controller.

#### Application

- » SIL3 (IEC 61508), SILCL3 (IEC 62061)
- » Category 4 (EN ISO 13849-1)

#### Features

- » Free configuration software
- » Flexible modular slice based IO system
- » Each controller can process up to 96 Safe Inputs and 48 Safe outputs



Safety Controllers



Input Modules



Fieldbus Modules

| Item No                       | Description                              | Connection                 |
|-------------------------------|------------------------------------------|----------------------------|
| <b>Safety Controllers</b>     |                                          |                            |
| R1.190.1210.0                 | SP-COP2-EN-A DC 24V (Controller Module)  | Ethernet Programming       |
| R1.190.1310.0                 | SP-COP2-ENI-A DC 24V (Controller Module) | Modbus TCP and Ethernet IP |
| R1.190.1000.0                 | SP-COP-CARD1 (Memory Insert)             |                            |
| R1.190.1010.0                 | SP-CABLE-USB1 (Programming Cable)        |                            |
| <b>Input / Output Modules</b> |                                          |                            |
| R1.190.0030.0                 | 8 Safe Inputs / 4 Safe Outputs           | Screw                      |
| R1.190.0040.0                 | 8 Safe Inputs / 4 Safe Outputs           | Spring                     |
| <b>Input Modules</b>          |                                          |                            |
| R1.190.0050.0                 | 8 Safe Inputs                            | Screw                      |
| R1.190.0060.0                 | 8 Safe Inputs                            | Spring                     |
| <b>Fieldbus Modules</b>       |                                          |                            |
| R1.190.0210.0                 | Can Open                                 | Can Connector              |
| R1.190.0190.0                 | Profibus DP                              | D9                         |

## Wieland SAMOS S4000 Series

### UNIVERSAL SAFETY RELAYS

#42



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#### SNO 4062K

The device is a two-channel switching device for emergency stop applications with self-monitoring on each ON-OFF cycle. It complies with EN 60204-1 and is equipped with forcibly guided relays.

#### Basic function

With supply voltage applied to terminals A1/A2 and the safety inputs closed, pressing the reset button closes the enabling current paths (manual start). When the safety inputs are opened/de-energized the enabling current paths will open.

#### Protection

- » PL e / Category 4 (EN ISO 13849-1)
- » SILCL 3 (EN 62061)

#### Application

- » EStops
- » Magnet Safety Gates
- » Light Barriers



Emergency Stop Monitoring



Protective Gate Monitoring

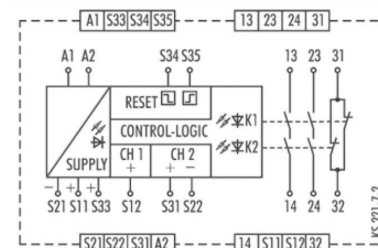


Monitoring Light Barriers



| Item No | Description | Connection |
|---------|-------------|------------|
|---------|-------------|------------|

|               |          |                 |
|---------------|----------|-----------------|
| R1.188.0700.2 | SNO4062K | Screw Terminals |
|---------------|----------|-----------------|





## Wieland Emergency Stops

CAT 2,3,4 (EN ISO 13849-1) ESTOP BUTTONS

#43

SEARCH ON EXPRESS.ECSNZ.COM



Estop Buttons



Contacts



Base

| Item No              | Type     | Description                                                   |
|----------------------|----------|---------------------------------------------------------------|
| <b>Estop Buttons</b> |          |                                                               |
| R1.200.0100.0        | SNH 0100 | IP65 Estop Button                                             |
| R1.200.0400.0        | SNH 0400 | IP65 Estop Button with Illumination                           |
| R1.200.0500.0        | SNH 0500 | IP65 Estop Button with Key Lock Release                       |
| <b>Contacts</b>      |          |                                                               |
| R1.200.0022.0        | SNH 0022 | 2 x N/C with Failure Protection                               |
| R1.200.0023.0        | SNH 0023 | 2 x N/C with Failure Protection (with Illumination)           |
| R1.200.0032.0        | SNH 0032 | 2 x N/C + 1 x N/O with Failure Protection                     |
| R1.200.0033.0        | SNH 0033 | 2 x N/C + 1 x N/O with Failure Protection (with Illumination) |
| <b>Base</b>          |          |                                                               |
| R1.200.6001.0        | SNH 6001 | Estop base Housing (M20 gland knockout)                       |

## Wieland Magnet Safety Switches

CAT 4 (EN ISO 13849-1) MAGNETIC SENSORS IP67

#44

SEARCH ON EXPRESS.ECSNZ.COM



| Item No                                                            | Type                             | Contacts              | Dimensions      |
|--------------------------------------------------------------------|----------------------------------|-----------------------|-----------------|
| Block Magnet                                                       |                                  |                       |                 |
| R1.100.0119.0                                                      | SMA 0119                         | N/O + N/C             | w36 x h26 x d13 |
| R1.100.0129.0                                                      | SMA 0129                         | 2 x N/O               |                 |
| R1.100.4100.0                                                      | Spacer / Washer                  |                       |                 |
| Rectangle Magnet                                                   |                                  |                       |                 |
| R1.100.0219.0                                                      | SMA 0219                         | N/O + N/C             | w88 x h25 x d14 |
| R1.100.0229.0                                                      | SMA 0229                         | 2 x N/O               |                 |
| R1.100.4200.0                                                      | Spacer / Washer                  |                       |                 |
| Round Magnet                                                       |                                  |                       |                 |
| R1.100.0319.0                                                      | SMA 0319                         | N/O + N/C             | M30 x 32mm      |
| R1.100.0329.0                                                      | SMA 0329                         | 2 x N/O               |                 |
| Interface Block                                                    |                                  |                       |                 |
| R1.100.4001.0                                                      | SMI 1001                         | Up to 4 NC/NC Magnets |                 |
| Connection block for sensors for up to Category 3 (EN ISO 13849-1) |                                  |                       |                 |
| Signal output and LED Indication for each sensor                   |                                  |                       |                 |
| Sensor Connectors                                                  |                                  |                       |                 |
| 22260309                                                           | M8 Straight with 2m cable        |                       |                 |
| 22260310                                                           | M8 Straight with 5m cable        |                       |                 |
| 22260317                                                           | M8 Straight with 10m cable       |                       |                 |
| 22260311                                                           | M8 Angled with 2m cable          |                       |                 |
| 22260312                                                           | M8 Angled with 5m cable          |                       |                 |
| 22260319                                                           | M8 Angled with 10m cable         |                       |                 |
| 22260126                                                           | M8 Connector (screw termination) |                       |                 |
| 22260983                                                           | Cable Joiner                     |                       |                 |
| 7038865                                                            | Sensor Cable 4 x 0.34            |                       |                 |



Block Magnet



Rectangle Magnet



Round Magnet



Interface Block



Sensor Connectors

## Wieland Mechanical Safety Switches

SAFETY SWITCH WITH GUARDLOCKING AND SEPARATE ACTUATOR

#45

SEARCH ON EXPRESS.ECSNZ.COM



SIN 1330 AC/DC 24V



SIN 9001



SIN 9002

| Item No       | Type               | Description                         |
|---------------|--------------------|-------------------------------------|
| R1.310.1330.0 | SIN 1330 AC/DC 24V | Safety switch with LED indication   |
| R1.310.9001.0 | SIN 9001           | Standard Actuator                   |
| R1.310.9002.0 | SIN 9002           | Adjustable Actuator with ball point |



ECS

SAFETY

# MOXA Industrial Ethernet Switches

SWITCHES FOR FACTORY AUTOMATION (UNMANAGED)

#55

EXPRESS

SEARCH ON EXPRESS.ECSNZ.COM

Notes

- m = multimode
- mm = multimode x 2
- s = singlemode
- ss = singlemode x 2



| Item No                                       | Notes           | Housing | Copper Ports | Fibre Ports | Fibre Types  | Fibre connectors |
|-----------------------------------------------|-----------------|---------|--------------|-------------|--------------|------------------|
| EDS-2xx Series (Entry-level Ethernet Switch)  |                 |         |              |             |              |                  |
| EDS-205A                                      |                 | Metal   | 5            |             |              |                  |
| EDS-208A                                      |                 | Metal   | 8            |             |              |                  |
| EDS-205A-xx-x                                 |                 | Metal   | 5            | 1 x Fibre   | m, s         | SC or ST         |
| EDS-208A-xx-x                                 |                 | Metal   | 6            | 2 x Fibre   | m, mm, s, ss | SC or ST         |
| EDS-3xx Series (Medium-level Ethernet Switch) |                 |         |              |             |              |                  |
| EDS-305                                       |                 | Metal   | 5            |             |              |                  |
| EDS-308                                       |                 | Metal   | 8            |             |              |                  |
| EDS-316                                       |                 | Metal   | 16           |             |              |                  |
| EDS-305-xx-x                                  |                 | Metal   | 4            | 1 x Fibre   | m, mm, s, ss | SC or ST         |
| EDS-308-xx-x                                  |                 | Metal   | 6            | 2 x Fibre   | m, mm, s, ss | SC or ST         |
| EDS-G2xx Series (Full Gigabit)                |                 |         |              |             |              |                  |
| EDS-G205                                      | 5 Gigabit Ports | Metal   | 5            |             |              |                  |

# MOXA Managed Ethernet Switches

SWITCHES FOR CRITICAL FACTORY NETWORKING

#56

EXPRESS

SEARCH ON EXPRESS.ECSNZ.COM

Features

- » IGMP Snooping (Filters Allen Bradley broadcasts)
- » VLAN'S (Security feature for local area networks)
- » Turbo Ring (Ring option for redundant paths)
- » Port Trunking (Use multiple ports for more bandwidth)
- » Web Interface for setup



| Item No                                    | Notes           | Housing | Copper Ports | Fibre Ports | Fibre Types  | Fibre connectors |
|--------------------------------------------|-----------------|---------|--------------|-------------|--------------|------------------|
| EDS-5xx Series (Managed Ethernet Switches) |                 |         |              |             |              |                  |
| EDS-508A                                   |                 | Metal   | 8            |             |              |                  |
| EDS-516A                                   |                 | Metal   | 16           |             |              |                  |
| EDS-518A                                   |                 | Metal   | 18           |             |              |                  |
| EDS-508A-xx-x                              |                 | Metal   | 6            | 2 x Fibre   | mm, ss       | SC or ST         |
| EDS-516A-xx-x                              |                 | Metal   | 14           | 2 x Fibre   | mm, ss       | SC or ST         |
| EDS-510 Series (Gigabit Switches)          |                 |         |              |             |              |                  |
| EDS-510A-3GT                               | 3 Gigabit Ports | Metal   | 10           |             |              |                  |
| EDS-510A-3SFP                              | 5 Gigabit Ports | Metal   | 7            | 3 x Fibre   | Requires SFP | LC               |

# MOXA Fibre to Copper Converters

MEDIA CONVERTERS FOR FIBRE OPTICS

#57

EXPRESS

SEARCH ON EXPRESS.ECSNZ.COM



Entry Level Converters



Medium-level Converters

| Item No                 | Notes                 | Housing | Copper Ports | Fibre Ports | Fibre Types  | Fibre connectors |
|-------------------------|-----------------------|---------|--------------|-------------|--------------|------------------|
| Entry Level Converters  |                       |         |              |             |              |                  |
| MOXA-IMC-21-x-x         |                       | Plastic | 1            |             | s or m       |                  |
| Medium-level Converters |                       |         |              |             |              |                  |
| MOXA-IMC-101-x-x        |                       | Metal   | 1            | 1 x Fibre   | s or m       |                  |
| Gigabit Converters      |                       |         |              |             |              |                  |
| MOXA-IMC-101G-x-x       | Gigabit of both ports | Metal   | 1            | 2 x Fibre   | Requires SFP | LC               |

## MOXA Industrial Serial Converters

INTEGRATE SERIAL DEVICES TO THE ETHERNET NETWORK

#288

SEARCH ON EXPRESS.ECSNZ.COM



RS232



RS232, RS422 or RS485

| Item No                      | Protocols      | Serial Ports | Connections    | Rack Mount | Power Required |
|------------------------------|----------------|--------------|----------------|------------|----------------|
| <b>RS232</b>                 |                |              |                |            |                |
| MOXA-NPORT-5110A             | RS232          | 1            | D9 Male        |            | 12 to 48Vdc    |
| MOXA-NPort-5210              | RS232          | 2            | RJ45           |            | 12 to 48Vdc    |
| MOXA-NPORT-5210A             | RS232          | 2            | D9 Male        |            | 12 to 48Vdc    |
| MOXA-NPORT-5410              | RS232          | 4            | D9 Male        |            | 12 to 48Vdc    |
| MOXA-NPORT-5610-8            | RS232          | 8            | RJ45           |            | 240Vac         |
| MOXA-NPORT-5610-16           | RS232          | 16           | RJ45           | Yes        | 240Vac         |
| <b>RS232, RS422 or RS485</b> |                |              |                |            |                |
| MOXA-NPORT-5150A             | RS232, 422/485 | 1            | D9 Male        |            | 12 to 48Vdc    |
| MOXA-NPORT-5232              | RS232, 422/485 | 2            | Terminal Block |            | 12 to 48Vdc    |
| MOXA-NPORT-5450              | RS232, 422/485 | 4            | Terminal Block |            | 12 to 48Vdc    |
| MOXA-NPORT-5650-8            | RS232, 422/485 | 8            | RJ45           |            | 240Vac         |
| MOXA-NPORT-5650-16           | RS232, 422/485 | 16           | RJ45           | Yes        | 240Vac         |

## MOXA Accessories

COMMON MOXA ACCESSORIES

#302

SEARCH ON EXPRESS.ECSNZ.COM



MOXA-RK-4U



MOXA-DB9F-TB



MOXA-UPOUT-1150

| Item No              | Description                                             |
|----------------------|---------------------------------------------------------|
| MOXA-CBL-RJ45M9-150  | RJ45 to D9 Male Cable (1.5m) - for NPORT 5210 / 5610    |
| MOXA-CBL-RJ45F9-150  | RJ45 to D9 Female Cable (1.5m) - for NPORT 5210 / 5610  |
| MOXA-CBL-RJ45M25-150 | RJ45 to D25 Male Cable (1.5m) - for NPORT 5210 / 5610   |
| MOXA-CBL-RJ45F25-150 | RJ45 to D25 Female Cable (1.5m) - for NPORT 5210 / 5610 |
| MOXA-PWR-12120-AU-L1 | 240VAC NZ Wall Power Adapter 12VDC 1.2A SAA             |
| MOXA-DB9F-TB         | DB9 Female to Terminal Block (Easy to wire)             |
| MOXA-RK-4U           | 19" Rack Kit for Din Rail Devices                       |
| MOXA-UPOUT-1150      | Serial RS232, 422/485 to USB Converter                  |

## Vecow Fanless Industrial PC

ADVANCED BOX PC, 2 GBE LAN, 1 DVI-I, 4 RS-232/422/485, 4 USB3.0

SPC-2145

SEARCH ON EXPRESS.ECSNZ.COM



Vecow SPC-2000 Series Ultra-compact Embedded System features with ultra small form factor, multiple I/O onboard, WiFi/3G/4G/UMTS/GPS supported, reliable performance in harsh environments and wide range of power input to make easy implementation possible.

Vecow SPC-2000 Series Ultra-compact Embedded System is your powerful, fanless, compact and cost effective choice to meet various requirements of Automation, Machine Vision, Surveillance and any Internet of Things (IoT) applications.

### Features

- » Intel® Atom™ Quad Core E3845 1.91GHz Processor
- » Rugged, -25°C to 70°C Operating Temperature
- » Fanless and Ultra-compact
- » 6V to 36V DC Power Input
- » 4 COM (RS-232/422/485) with Auto Flow Control
- » DVI-I for VGA/DVI/HDMI Video Output
- » 4 USB 3.0
- » 2 GbE LAN

### Application

- » Harsh Environments
- » Automation
- » Machine Vision
- » Surveillance
- » Industrial Internet of Things (IoT)

### Item No

- » SPC-2145



ecs

NETWORKING

# Automation & Networking Online

WAGO TOSIBOX MOXA wieland Vecow

<https://express.ecsnz.com/automation-products> | For all the latest technologies, pricing, stock, and ordering.







## Industrial Ethernet Switch

NETWORK SWITCHES FOR ETHERNET BASED SOLUTIONS IN SMART FACTORIES

#55

SEARCH ON EXPRESS.ECSNZ.COM

### Info

- » Redundant power inputs
- » Robust metal housing and DIN rail mounting
- » Fanless - maintenance free

### Product Features Unmanaged

- » RJ45 Ports: 10/100BaseT(X)
- » Packet Buffer Size: 512kbit
- » Redundant Power Input: 24 VDC
- » Broadcast storm protection

### Product Features Managed

(in addition to Unmanaged)

- » Simple setup of redundant network topologies
- » Packet Buffer Size: 1Mbit
- » Supported protocols: HTTP, Telnet, EtherNet/IP, Modbus/TCP, IPv6, and many more

### Benefits

- » Improve your total cost of ownership with faster installation and lower downtime
- » Most flexible and globally present solutions from one hand

### Temperature Range

- » Unmanaged: -10°C to +60°C
- » Managed: 0°C to +60°C



UNMANAGED

MANAGED

| Item No          | Ports |
|------------------|-------|
| <b>Unmanaged</b> |       |
| 21700118         | 5     |
| 21700119         | 8     |
| <b>Managed</b>   |       |
| 21700121         | 5     |
| 21700122         | 8     |

## Industrial Ethernet Switch Gen2

FASTER NETWORK SWITCHES FOR ETHERNET BASED SOLUTIONS IN SMART FACTORIES

#56

SEARCH ON EXPRESS.ECSNZ.COM

### Info

- » Redundant power inputs
- » Robust metal housing and DIN rail mounting
- » Fanless - maintenance free

### Product Features Unmanaged

- » RJ45 Ports: 10/100/1000 BaseT(X)
- » Packet Buffer Size: 1Mbit

### Product Features Managed

(in addition to Unmanaged)

- » Simple setup of redundant network topologies
- » Supported protocols: HTTPS/SSL, SSH, TACACS+, RADIUS, SNMP Client, Ethernet IP, Modbus TCP

### Benefits

- » Improve your total cost of ownership with faster installation and lower downtime
- » Most flexible and globally present solutions from one hand

### Temperature Range

- » Unmanaged: -10°C to +60°C
- » Managed: -40°C to +75°C



UNMANAGED

MANAGED

| Item No          | Ports |
|------------------|-------|
| <b>Unmanaged</b> |       |
| 21700123         | 5     |
| 21700124         | 8     |
| <b>Managed</b>   |       |
| 21700125         | 6     |
| 21700126         | 8     |

## Firewall / NAT Router

INDUSTRIAL NAT ROUTER WITH FIREWALL FUNCTION

#1697

SEARCH ON EXPRESS.ECSNZ.COM

### Info

- » Compact design
- » Tailor-made solution

### Product Features

- » NAT (Basic NAT, NAT) and port forwarding
- » Integrated Firewall feature
- » RJ45 Ports: 10/100/1000BaseT(X)

### Benefits

- » Compact design with high port density
- » Reduced installation effort in existing networks
- » Easy Configuration via web-interface
- » Space saving and industrial grade DIN rail mounting

### Temperature Range

- » Managed: -40°C to +75°C

| Item No  | Type    | Ports |
|----------|---------|-------|
| 21700141 | Managed | 4     |





# TOSIBOX

## CONNECTIVITY MEETS SECURITY

### TOSIBOX® Lock

is a router with firewall sharing access to devices. One TOSIBOX® Lock protects all devices behind it. As the company grows, more Locks can be added to various locations.

#### LOCK 500/500i - TBL5B/TBL5iB

##### Features

High-end connectivity device bringing unprecedented possibilities for customers to manage their operations and to build new IoT solutions.

- » Up to 50 concurrent VPN connections
- » VPN throughput up to 70 Mbit/s
- » TOSIBOX® Lock 500i with built-in LTE modem
- » TOSIBOX® Lock 500



#### LOCK 175 - TBL175

##### Features

Ideal for demanding industry sectors that require an all-in-one solution that is compact, able to handle all environments and suited to global market usage.

- » High VPN throughput, end-to-end encryption between TOSIBOX® devices, users and servers
- » Integrated WiFi as connectivity method or access point for wireless devices on site
- » Built-in global LTE modem – no external modem needed
- » TosiOnline™ automatic reconnection of dropped connections



### TOSIBOX® Key

is a dongle used to access the network. In addition to a Master Key, the ecosystem can have several users with more physical keys, mobile app or software licenses.

#### KEY - TBK2 SOFT KEY - TBSKL1

##### Features

Intelligent cryptoprocessing device that enables a secure connection between your computer and one or more TOSIBOX® Locks, giving you full visibility and control over the network devices connected to the Lock. The Key is fully compatible with all existing TOSIBOX® products.

- » TOSIBOX®Key USB - must have at least one for the Master Key
- » TOSIBOX® Softkey is a computer software that works as a Sub Key controlled via a physical Master Key



# RENT ME

## TOSIBOX VPN SECURITY SOLUTIONS

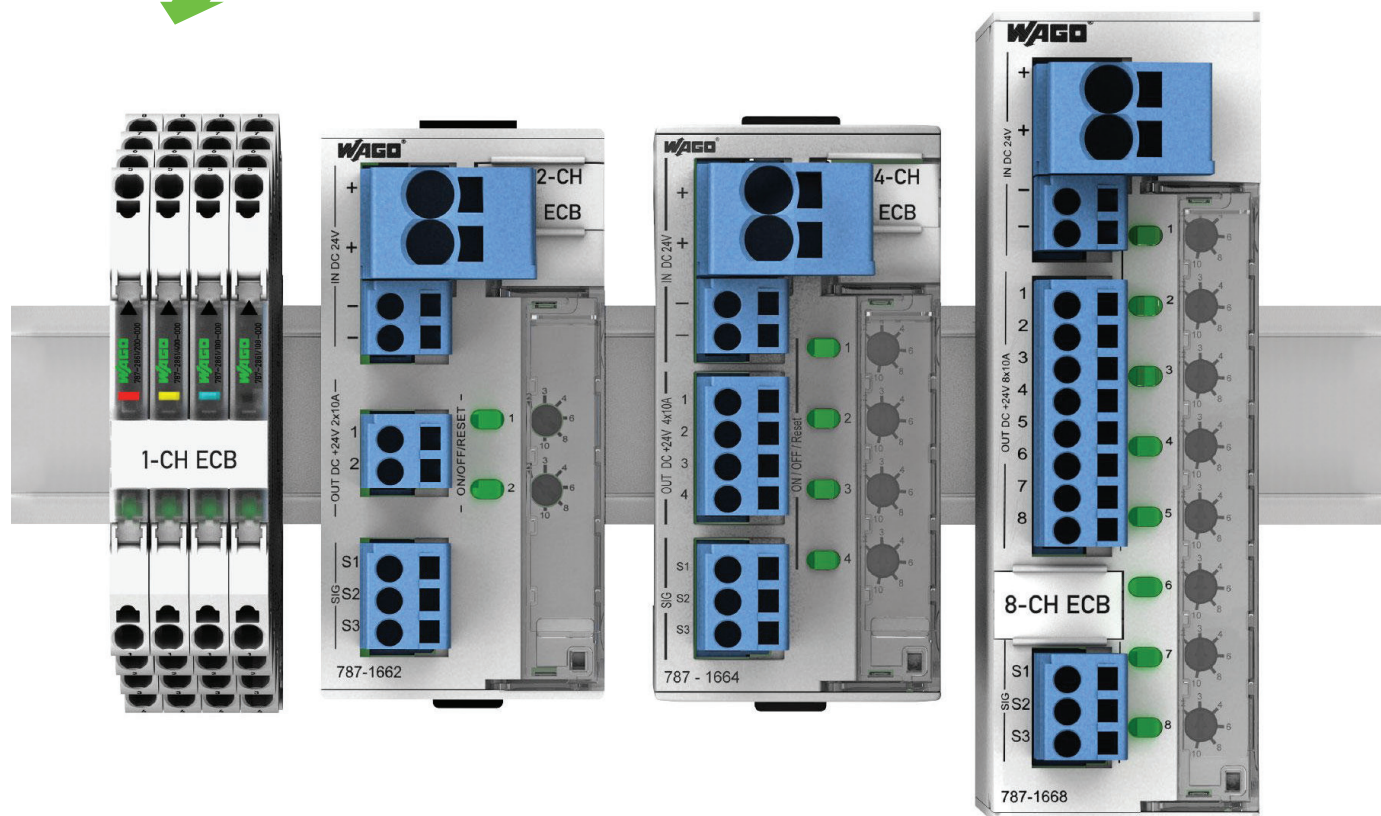
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## LEARN MORE ABOUT TOSIBOX

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## WAGO ECBs

### ELECTRONIC CIRCUIT BREAKER

#2140



SEARCH ON EXPRESS.ECSNZ.COM

#### Description

The ECB checks whether the output current is greater than the nominal current. As soon as the output current exceeds the nominal current, the output is electronically switched off by a semiconductor switch. Trip time depends on the magnitude of the overcurrent.

#### Benefits

- » Ensures precision settings
- » Reaction within a short time even at low overcurrents
- » Protection of long cable runs and small cross sections possible



787-1664



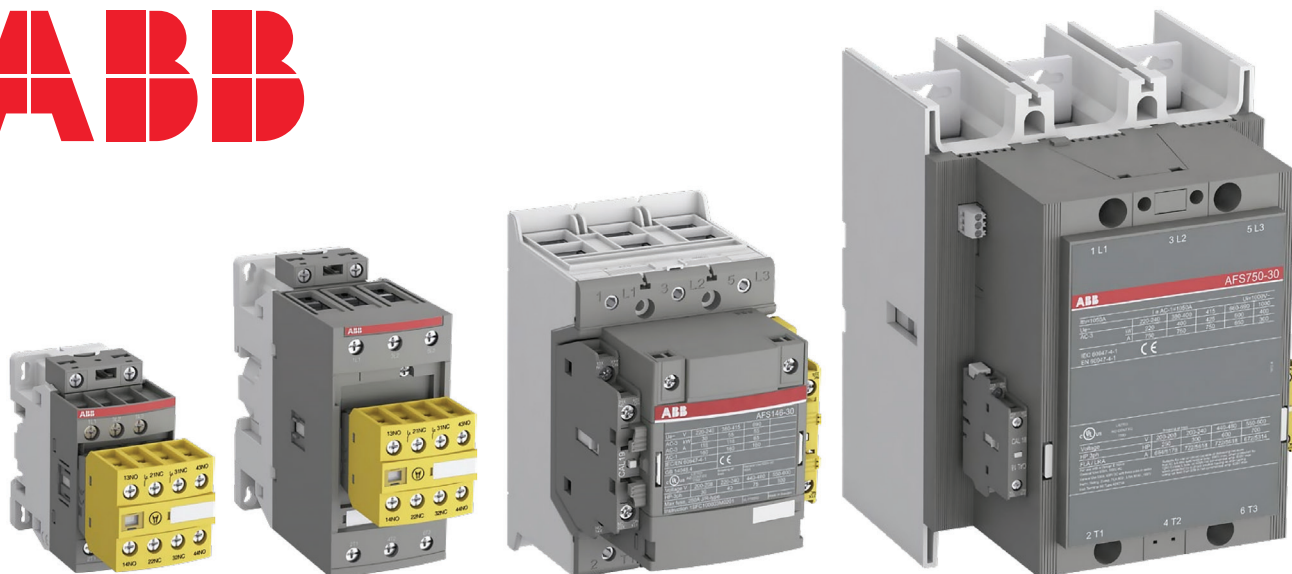
787-1668



787-2861/400-000

| Part Number                                                                                  | Type                                                                                                                                                  |
|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Multi-Channel - Channel Adjustable via Selector Switch</b>                                |                                                                                                                                                       |
| 787-1664                                                                                     | 4-channel ; 2/3/4/6/8/10A                                                                                                                             |
| 787-1668                                                                                     | 8-channel ; 2/3/4/6/8/10A                                                                                                                             |
| <b>Multi-Channel - Channel Adjustable via Selector Switch &amp; I/O Link Interface</b>       |                                                                                                                                                       |
| 787-1664/000-080                                                                             | 4-channel ; 1/2/3/4/6/8/10A adjustable for each channel separately via IOlink interface - 1/2/4/6/10A adjustable for each channel via selector switch |
| 787-1668/000-080                                                                             | 8-channel ; 1/2/3/4/6/8/10A adjustable for each channel separately via IOlink interface - 1/2/4/6/10A adjustable for each channel via selector switch |
| <b>Multi-Channel - Channel Adjustable via Selector Switch with Active Current Limitation</b> |                                                                                                                                                       |
| 787-1664/006-1000                                                                            | 4-channel ; 0.5/1/2/3/4/6A                                                                                                                            |
| <b>Single Channel Adjustable</b>                                                             |                                                                                                                                                       |
| 787-2861/108-020                                                                             | 1-channel; 24 VDC input voltage; adjustable 1 to 8 A; Signal contact                                                                                  |
| <b>Single Channel Fixed</b>                                                                  |                                                                                                                                                       |
| 787-2861/200-000                                                                             | 1-channel; 24 VDC input voltage; 1 A; communication capability                                                                                        |
| 787-2861/200-000                                                                             | 1-channel; 24 VDC input voltage; 2 A; communication capability                                                                                        |
| 787-2861/400-000                                                                             | 1-channel; 24 VDC input voltage; 4 A; communication capability                                                                                        |
| 787-2861/600-000                                                                             | 1-channel; 24 VDC input voltage; 6 A; communication capability                                                                                        |
| 787-2861/800-000                                                                             | 1-channel; 24 VDC input voltage; 8 A; communication capability                                                                                        |





## ABB RCCB's

### RESIDUAL CURRENT CIRCUIT BREAKERS

#1768

SEARCH ON EXPRESS.ECSNZ.COM



#### Standard & Voltage

» AS/NZS 61008  
» 230/400V

#### Rated Residual Current

» 30mA

#### Operational Temperature

» -5 to 40deg C

| Item No       | Type         | Current Rating |
|---------------|--------------|----------------|
| <b>2 Pole</b> |              |                |
| FH202A40      | FH202 Type A | 40A            |
| FH202A63      | FH202 Type A | 63A            |
| <b>4 Pole</b> |              |                |
| FH204A40      | FH204 Type A | 40A            |
| FH204A63      | FH204 Type A | 63A            |



## ABB RCBO's

### RESIDUAL-CURRENT CIRCUIT BREAKER WITH OVERLOAD PROTECTION

#1768

SEARCH ON EXPRESS.ECSNZ.COM



#### Standard & Voltage

» AS/NZS 61009.1  
» 230V

#### Rated Residual Current

» 6kA

#### Operational Temperature

» 25 to 55deg C

| Item No       | Type           | Current Rating |
|---------------|----------------|----------------|
| <b>30mA</b>   |                |                |
| DSN201EC6A30  | DSN201E Type A | 6A             |
| DSN201EC10A30 | DSN201E Type A | 10A            |
| DSN201EC16A30 | DSN201E Type A | 16A            |
| DSN201EC20A30 | DSN201E Type A | 20A            |
| DSN201EC25A30 | DSN201E Type A | 25A            |
| DSN201EC32A30 | DSN201E Type A | 32A            |
| <b>10mA</b>   |                |                |
| DSN201EC10A10 | DSN201E Type A | 10A            |
| DSN201EC16A10 | DSN201E Type A | 16A            |
| DSN201EC20A10 | DSN201E Type A | 20A            |



## ABB Isolators

### MAIN ISOLATION SWITCHES

#1755

SEARCH ON EXPRESS.ECSNZ.COM



#### Standard & Voltage

» AS/NZS 60947.3  
» 230/400V

#### Operational Temperature

» 25 to 55deg C

| Item No       | Type   | Current Rating |
|---------------|--------|----------------|
| <b>1 Pole</b> |        |                |
| SHD20163      | SHD201 | 63A            |
| E201100RD     | E201   | 100A           |
| <b>2 Pole</b> |        |                |
| SHD20263      | SHD202 | 63A            |
| E202100RD     | E202   | 100A           |
| <b>3 Pole</b> |        |                |
| SHD20363      | SHD203 | 63A            |
| E20380RD      | E203   | 80A            |
| E203100RD     | E203   | 100A           |



RCCB'S / RCBO'S / ISOLATORS

## ABB MCB's - 6kA

MINIATURE CIRCUIT BREAKERS - S200 6KA SERIES

#1768



SEARCH ON EXPRESS.ECSNZ.COM

### Standards & Approvals

- » AS/NZS 60898
- » AS/NZS 60947
- » UL 1077

### Operational Temperature

- » -25 to 55deg C

### Operating Voltage

- » 1P: 230-240V AC, 72V DC
- » 2-4P: 400-440V AC, 125V DC

| Current Rating | C Curve | D Curve |
|----------------|---------|---------|
| <b>1 Pole</b>  |         |         |
| 1A             | S201C1  | S201D1  |
| 2A             | S201C2  | S201D2  |
| 3A             | S201C3  | S201D3  |
| 4A             | S201C4  | S201D4  |
| 6A             | S201C6  | S201D6  |
| 10A            | S201C10 | S201D10 |
| 16A            | S201C16 | S201D16 |
| 20A            | S201C20 | S201D20 |
| 25A            | S201C25 | S201D25 |
| 32A            | S201C32 | S201D32 |
| 40A            | S201C40 | S201D40 |
| 50A            | S201C50 | S201D50 |
| 63A            | S201C63 | S201D63 |
| <b>2 Pole</b>  |         |         |
| 1A             | S202C1  | S202D1  |
| 2A             | S202C2  | S202D2  |
| 3A             | S202C3  | S202D3  |
| 4A             | S202C4  | S202D4  |
| 6A             | S202C6  | S202D6  |
| 10A            | S202C10 | S202D10 |
| 16A            | S202C16 | S202D16 |
| 20A            | S202C20 | S202D20 |
| 25A            | S202C25 | S202D25 |
| 32A            | S202C32 | S202D32 |
| 40A            | S202C40 | S202D40 |
| 50A            | S202C50 | S202D50 |
| 63A            | S202C63 | S202D63 |
| <b>3 Pole</b>  |         |         |
| 2A             | S203C2  | S203D2  |
| 3A             | S203C3  | S203D3  |
| 4A             | S203C4  | S203D4  |
| 6A             | S203C6  | S203D6  |
| 10A            | S203C10 | S203D10 |
| 16A            | S203C16 | S203D16 |
| 20A            | S203C20 | S203D20 |
| 25A            | S203C25 | S203D25 |
| 32A            | S203C32 | S203D32 |
| 40A            | S203C40 | S203D40 |
| 50A            | S203C50 | S203D50 |
| 63A            | S203C63 | S203D63 |



CO Auxiliary Contact 10A  
Item No S2CH6R

## Busbars & End Caps

AUXILIARY BUSBAR SYSTEMS FOR 6/10KA BREAKERS

#1764



SEARCH ON EXPRESS.ECSNZ.COM

| Item No       | Type               | Current Rating |
|---------------|--------------------|----------------|
| <b>1 Pole</b> |                    |                |
| PS1/60        | Busbar 60 x 1P     | 63A            |
| PS-END0       | End Cap for 1P     |                |
| <b>2 Pole</b> |                    |                |
| PS2/58        | Busbar 29 x 2P     | 63A            |
| PS-END        | End Cap for 2 & 3P |                |
| <b>3 Pole</b> |                    |                |
| PS3/60        | Busbar 20 x 3P     | 63A            |
| PS-END        | End Cap for 2 & 3P |                |



# RENT ME

Fluke Networks Portable Appliance Tester

# \$60

per/day

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## ABB MCB's - 10kA

MINIATURE CIRCUIT BREAKERS - S200M 10KA SERIES

#1762



SEARCH ON EXPRESS.ECSNZ.COM

### Standards & Approvals

- » AS/NZS 60898
- » AS/NZS 60947
- » UL 1077

### Operational Temperature

- » -25 to 55deg C

### Operating Voltage

- » 1P: 230-240V AC, 72V DC
- » 2-4P: 400-440V AC, 125V DC

| Current Rating | C Curve  | D Curve  |
|----------------|----------|----------|
| <b>1 Pole</b>  |          |          |
| 1A             | S201MC1  | S201MD1  |
| 2A             | S201MC2  | S201MD2  |
| 3A             | S201MC3  | S201MD3  |
| 4A             | S201MC4  | S201MD4  |
| 6A             | S201MC6  | S201MD6  |
| 10A            | S201MC10 | S201MD10 |
| 16A            | S201MC16 | S201MD16 |
| 20A            | S201MC20 | S201MD20 |
| 25A            | S201MC25 | S201MD25 |
| 32A            | S201MC32 | S201MD32 |
| 40A            | S201MC40 | S201MD40 |
| 50A            | S201MC50 | S201MD50 |
| 63A            | S201MC63 | S201MD63 |
| <b>2 Pole</b>  |          |          |
| 1A             | S202MC1  | S202MD1  |
| 2A             | S202MC2  | S202MD2  |
| 3A             | S202MC3  | S202MD3  |
| 4A             | S202MC4  | S202MD4  |
| 6A             | S202MC6  | S202MD6  |
| 10A            | S202MC10 | S202MD10 |
| 16A            | S202MC16 | S202MD16 |
| 20A            | S202MC20 | S202MD20 |
| 25A            | S202MC25 | S202MD25 |
| 32A            | S202MC32 | S202MD32 |
| 40A            | S202MC40 | S202MD40 |
| 50A            | S202MC50 | S202MD50 |
| 63A            | S202MC63 | S202MD63 |
| <b>3 Pole</b>  |          |          |
| 2A             | S203MC2  | S203MD2  |
| 3A             | S203MC3  | S203MD3  |
| 4A             | S203MC4  | S203MD4  |
| 6A             | S203MC6  | S203MD6  |
| 10A            | S203MC10 | S203MD10 |
| 16A            | S203MC16 | S203MD16 |
| 20A            | S203MC20 | S203MD20 |
| 25A            | S203MC25 | S203MD25 |
| 32A            | S203MC32 | S203MD32 |
| 40A            | S203MC40 | S203MD40 |
| 50A            | S203MC50 | S203MD50 |
| 63A            | S203MC63 | S203MD63 |



CO Auxiliary Contact 10A  
Item No S2CH6R

## ABB S200 & S200M CHASSIS

PAN ASSEMBLY FOR ABB MCB'S

#1767



SEARCH ON EXPRESS.ECSNZ.COM

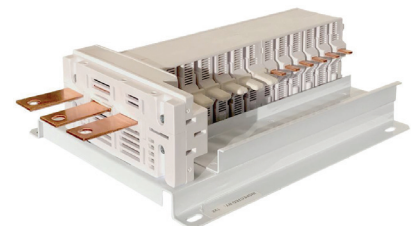
### Standards & Approvals

- » Type Tested to AS3439.1

### Fault Rating

- » 25kA for 0.1sec

| Part Number | Number of Poles | Current Rating |
|-------------|-----------------|----------------|
| ECM25024    | 24              | 250A           |
| ECM25036    | 36              | 250A           |
| ECM25048    | 48              | 250A           |
| ECM25060    | 60              | 250A           |
| ECM25072    | 72              | 250A           |



# RENT ME

Fluke Networks Power Quality & Energy Analyser

# \$200

per/day

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ECS

MCB'S





## LS MCCB

MOULDED CASE CIRCUIT BREAKERS SUITABLE FOR AC AND DC APPLICATIONS

#74



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Frame Size 100A / 50kA@415V



Frame Size 160A / 50kA@415V

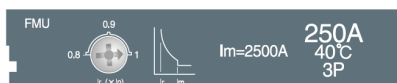


Frame Size 250A / 50kA@415V

| Item No                            | Current Rating | Lug Hole Size | Trip Unit |
|------------------------------------|----------------|---------------|-----------|
| <b>Frame Size 100A / 50kA@415V</b> |                |               |           |
| 0105011500                         | 40A            | M8            | FMU       |
| 0105011600                         | 50A            | M8            | FMU       |
| 0105011700                         | 63A            | M8            | FMU       |
| 0105011800                         | 80A            | M8            | FMU       |
| 0105011900                         | 100A           | M8            | FMU       |
| <b>Frame Size 160A / 50kA@415V</b> |                |               |           |
| 0105025900                         | 125A           | M8            | ATU       |
| 0105025800                         | 160A           | M8            | ATU       |
| <b>Frame Size 250A / 50kA@415V</b> |                |               |           |
| 0105022900                         | 200A           | M8            | ATU       |
| 0105023000                         | 250A           | M8            | ATU       |
| <b>Frame Size 400A / 65kA@415V</b> |                |               |           |
| 0108005100                         | 400A           | M10           | ETS33     |
| 0108006300                         | 630A           | M10           | ETS33     |
| <b>Frame Size 800A / 65kA@415V</b> |                |               |           |
| 0111002300                         | 800A           | M12           | ETS43     |

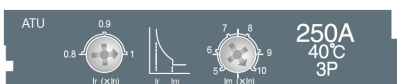
## Trip Unit Types

FOR MOULDED CASE CIRCUIT BREAKERS



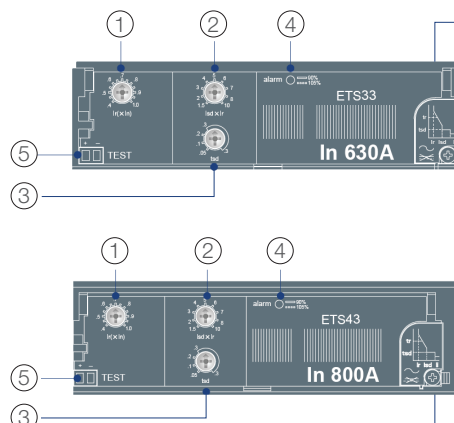
### FMU

Adjustable Thermal: (0.8 to 1) X In  
Fixed Magnetic



### ATU

Adjustable Thermal: (0.8 to 1) X In  
Adjustable Magnetic: (5 to 10) X In



### ETS

- 1) Adjustable rated current setting (Ir)
- 2) Adjustable short time delay current setting (I<sub>sd</sub>)
- 3) Adjustable time delay setting (tsd)
- 4) Alarm LED  
 < 90% Ir: ON  
 > 105% Ir: ON-OFF
- 5) Test Connector

## LS Auxiliaries

FOR MOULDED CASE CIRCUIT BREAKERS

#76



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| Item No     | Switch Type | Suitable Models | Type                                       |
|-------------|-------------|-----------------|--------------------------------------------|
| 83011171701 | AX          | ALL             | Indication for remote monitoring of ON/OFF |
| 83011171702 | AL          | ALL             | Trip Alarm Indication                      |



## LS Terminal Covers

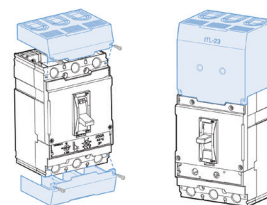
FOR MOULDED CASE CIRCUIT BREAKERS

#77



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| Short Cover          | Longer Cover         | Suitable Models |
|----------------------|----------------------|-----------------|
| 64621172011 (ITS 23) | 64621172016 (ITL 23) | TS100, 160, 250 |
| 64621173011 (ITS 33) | 64621173013 (ITL 33) | TS400, 630      |
| 64621174011 (ITS 43) | 64621174013 (ITL 43) | TS800           |



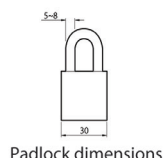
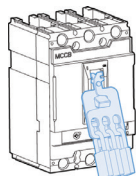
## LS Locking Devices

FOR MOULDED CASE CIRCUIT BREAKERS

#78



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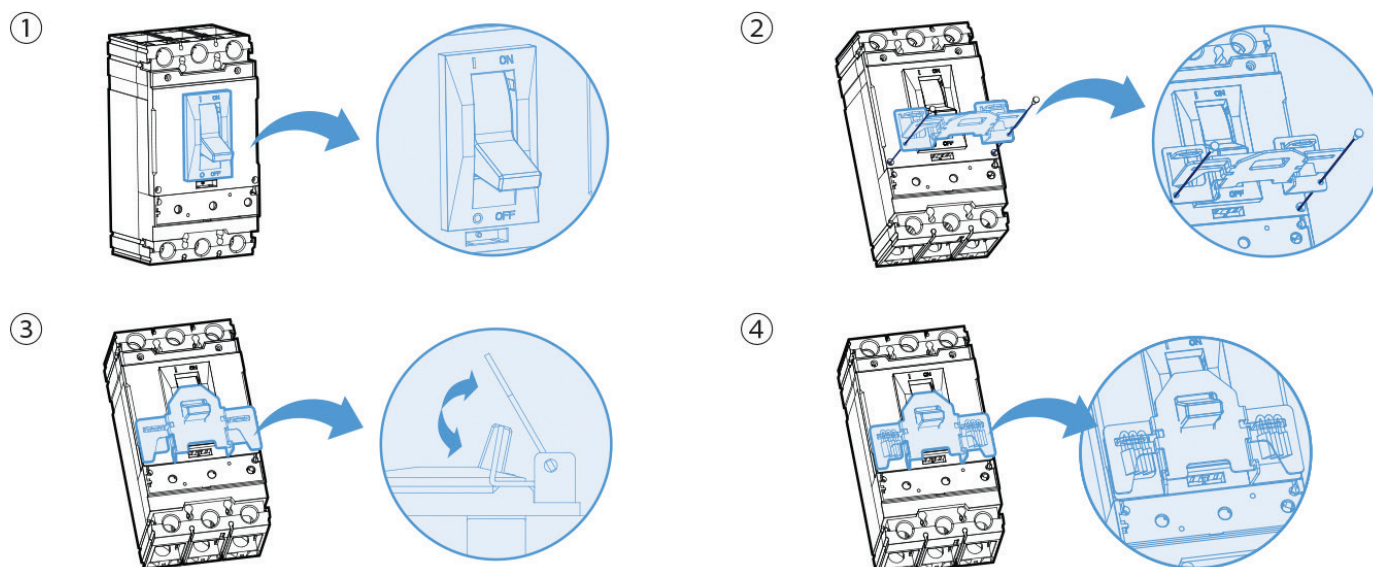


Locking Devices (OFF position)



Locking Devices (On/OFF position)

| Item No                                  | Type | Suitable Models | Notes                                 |
|------------------------------------------|------|-----------------|---------------------------------------|
| <b>Locking Devices (OFF position)</b>    |      |                 |                                       |
| 56771172801                              | PL2  | TS100, 160, 250 | Locks in OFF position only            |
| 56771173801                              | PL3  | TS400, 630      | Locks in OFF position only            |
| 56771174801                              | PL4  | TS800           | Locks in OFF position only            |
| <b>Locking Devices (On/OFF position)</b> |      |                 |                                       |
| 56771172802                              | PHL2 | TS100, 160, 250 | Can lock in either ON or OFF position |
| 56771173802                              | PHL3 | TS400, 630      | Can lock in either ON or OFF position |
| 56771174802                              | PHL4 | TS800           | Can lock in either ON or OFF position |



ECS

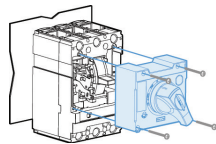
MCCB'S

## LS External Handles

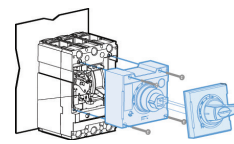
FOR MOULDED CASE CIRCUIT BREAKERS

#79

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Direct Rotary Handle



Extended Rotary Handle

| Item No                       | Type  | Suitable Models |
|-------------------------------|-------|-----------------|
| <b>Direct Rotary Handle</b>   |       |                 |
| 83111172801                   | DH2-S | TS100, 160, 250 |
| 83111173801                   | DH3-S | TS400, 630      |
| 83111174801                   | DH4-S | TS800           |
| <b>Extended Rotary Handle</b> |       |                 |
| 83111172806                   | EH2-S | TS100, 160, 250 |
| 83111173806                   | EH3-S | TS400, 630      |
| 83111174806                   | EH4-S | TS800           |

## LS Manual Motor Starters

MOTOR CIRCUIT BREAKERS

#80

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### Features

- » Adjustable thermal release
- » Lockout with Handle
- » Large Scale for current setting
- » Touch safe terminals



| Item No    | Type          | Dimensions        | Min Rating (A) | Max Rating (A) |
|------------|---------------|-------------------|----------------|----------------|
| <b>32H</b> |               |                   |                |                |
| 0705000400 | MMS-32H-0.63A | W45 x H94 x D100  | 0.4            | 0.63           |
| 0705000500 | MMS-32H-1A    | W45 x H94 x D100  | 0.63           | 1              |
| 0705000600 | MMS-32H-1.6A  | W45 x H94 x D100  | 1              | 1.6            |
| 0705000700 | MMS-32H-2.5A  | W45 x H94 x D100  | 1.6            | 2.5            |
| 0705000800 | MMS-32H-4A    | W45 x H94 x D100  | 2.5            | 4              |
| 0705000900 | MMS-32H-6A    | W45 x H94 x D100  | 4              | 6              |
| 0705001100 | MMS-32H-10A   | W45 x H94 x D100  | 6              | 10             |
| 0705001300 | MMS-32H-17A   | W45 x H94 x D100  | 11             | 17             |
| 0705001200 | MMS-32H-13A   | W45 x H94 x D100  | 9              | 13             |
| 0705001400 | MMS-32H-22A   | W45 x H94 x D100  | 14             | 22             |
| 0705001500 | MMS-32H-32H   | W45 x H94 x D100  | 18             | 26             |
| 0705001600 | MMS-32H-32A   | W45 x H94 x D100  | 22             | 32             |
| <b>63H</b> |               |                   |                |                |
| 0706001300 | MMS-63H-22A   | W55 x H140 x D145 | 14             | 22             |
| 0706001600 | MMS-63H-40A   | W55 x H140 x D145 | 28             | 40             |
| 0706001700 | MMS-63H-50A   | W55 x H140 x D145 | 34             | 50             |
| 0706001800 | MMS-63H-63A   | W55 x H140 x D145 | 45             | 63             |

## LS Auxiliary Feedback

FOR MANUAL MOTOR STARTERS

#81

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Auxiliary Switch Units (Front Mount)



Auxiliary Switch Units (Left Hand Side)

| Item No                                        | Type                             | Contacts   | Mounting Type  | Notes                                      |
|------------------------------------------------|----------------------------------|------------|----------------|--------------------------------------------|
| <b>Auxiliary Switch Units (Front Mount)</b>    |                                  |            |                |                                            |
| 83361941001                                    | FX                               | 2 NO       | Front Mount    | One per unit                               |
| 83361941002                                    | FX                               | 1 NO / 1NC | Front Mount    | One per unit                               |
| <b>Auxiliary Switch Units (Left Hand Side)</b> |                                  |            |                |                                            |
| 83361941004                                    | LX                               | 2 NO       | Left Hand Side |                                            |
| 83361941005                                    | LX                               | 1 NO / 1NC | Left Hand Side |                                            |
| 83361941006                                    | LX                               | 2 NC       | Left Hand Side |                                            |
| <b>Alarm Contact Units</b>                     |                                  |            |                |                                            |
| 83011941005                                    | LAM - Magnetic Trip Alarm Switch | 1 NO / 1NC | Left Hand Side | Set LAM first in case of using LX together |
| 83011941002                                    | LA - Any Trip Alarm Switch       | 1 NO / 1NC | Left Hand Side | MMS-63 can not accept LX and LA together   |





MMS to Contactor Linking Bars



Jumper Bars for MMS



Handles



Enclosures

| Item No                              | Type            | Description                              |
|--------------------------------------|-----------------|------------------------------------------|
| <b>MMS to Contactor Linking Bars</b> |                 |                                          |
| 73311941003                          | MINI AC DA-16HA | 32H MMS and Mini Contactor (for AC coil) |
| 73311941004                          | MINI AC DA-16HD | 32H MMS and Mini Contactor (for DC coil) |
| 73311634052                          | AC DA-18HA      | 32H MMS and 18AF Contactor (for AC coil) |
| 73311634054                          | DC DA-18HD      | 32H MMS and 18AF Contactor (for DC coil) |
| 73311634056                          | AC DA-22HA      | 32H MMS and 22AF Contactor (for AC coil) |
| 73311634058                          | DC DA-22HD      | 32H MMS and 22AF Contactor (for DC coil) |
| 73311634002                          | AC DA-32HA      | 32H MMS and 40AF Contactor (for AC coil) |
| 73311634004                          | DC DA-32HD      | 32H MMS and 40AF Contactor (for DC coil) |
| 73311634005                          | AC DA-63A       | 63H MMS and 65AF Contactor (for AC coil) |
| <b>Jumper Bars for MMS</b>           |                 |                                          |
| 70211941201                          | PB-322          | Link Busbar 2 x 32H MMS unit             |
| 70211941301                          | PB-323          | Link Busbar 3 x 32H MMS unit             |
| 70211941340                          | PB-324          | Link Busbar 4 x 32H MMS unit             |
| 70211941350                          | PB-325          | Link Busbar 5 x 32H MMS unit             |
| 62671941001                          | LTB-32          | Main Feed Terminal 65A                   |
| <b>Handles</b>                       |                 |                                          |
| 83111912004                          |                 | Handle for 32H, 315mm Shaft              |
| 83111912005                          |                 | Handle for 63H, 315mm Shaft              |
| <b>Enclosures</b>                    |                 |                                          |
| 53911941001                          |                 | IP65 Enclosure for 32H                   |

**LS Contactors**  
MAGNETIC CONTACTORS



18AF



22AF



40AF



65AF



100AF



150AF



225AF



400AF

|                                         |               | 415V |     | Coil Voltages |            |            |            |            |
|-----------------------------------------|---------------|------|-----|---------------|------------|------------|------------|------------|
| Type                                    | Auxiliary     | kW   | HP  | AC-3          | 24Vdc      | 24Vac      | 240Vac     | 400Vac     |
| <b>Frame Size 18AF (73.5mm x 45mm)</b>  |               |      |     |               |            |            |            |            |
| MC-6a                                   | 1 N/O         | 3    | 5   | 6A            | 1327100300 | 1327001600 | 1327002400 | 1327001100 |
| MC-9a                                   | 1 N/O         | 4    | 5   | 9A            | 1316005300 | 1316001600 | 1316002400 | 1316001100 |
| MC-12a                                  | 1 N/O         | 5.5  | 7.5 | 12A           | 1317005300 | 1317001600 | 1317002400 | 1317001100 |
| MC-18a                                  | 1 N/O         | 7.5  | 10  | 18A           | 1328100300 | 1328001600 | 1328002400 | 1328001100 |
| <b>Frame Size 22AF (73.5mm x 45mm)</b>  |               |      |     |               |            |            |            |            |
| MC-22b                                  | 1 N/O + 1 N/C | 11   | 15  | 22A           | 1347100300 | 1347000100 | 1347000800 | 1347001100 |
| <b>Frame Size 40AF (83mm x 45mm)</b>    |               |      |     |               |            |            |            |            |
| MC-32a                                  |               | 15   | 20  | 32A           | 1336005300 | 1336000100 | 1336000800 |            |
| MC-40a                                  |               | 18.5 | 30  | 40A           | 1337005300 | 1337000100 | 1337000800 |            |
| <b>Frame Size 65AF (106mm x 55mm)</b>   |               |      |     |               |            |            |            |            |
| MC-50a                                  |               | 22   | 40  | 50A           |            |            | 1380000500 |            |
| MC-65a                                  |               | 30   | 50  | 65A           | 1381004800 |            | 1381000600 |            |
| <b>Frame Size 100AF (140mm x 70mm)</b>  |               |      |     |               |            |            |            |            |
| MC-75a                                  |               | 37   | 50  | 75A           |            |            | 1382001000 |            |
| MC-100a                                 |               | 55   | 75  | 105A          | 1384011900 |            |            |            |
| <b>Frame Size 150AF (158mm x 95mm)</b>  |               |      |     |               |            |            |            |            |
| MC-130a                                 |               | 60   | 75  | 130A          |            |            | 1385000100 |            |
| MC-150a                                 |               | 75   | 100 | 150A          |            |            | 1386000100 |            |
| <b>Frame Size 225AF (203mm x 138mm)</b> |               |      |     |               |            |            |            |            |
| MC-225a                                 | 2 N/O + 2 N/C | 132  | 150 | 225A          |            |            | 1368000200 |            |
| <b>Frame Size 400AF (243mm x 163mm)</b> |               |      |     |               |            |            |            |            |
| MC-400a                                 | 2 N/O + 2 N/C | 200  | 300 | 400A          |            |            | 1371000200 |            |

## LS Contactor Overloads

OVERLOADS 18AF SIZE CONTACTORS

#89



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| Item No    | Conductor Size | Min   | Max  | Suitable Contactor Frames |
|------------|----------------|-------|------|---------------------------|
| 1323000500 | 1mm2           | 0.63A | 1A   | MC-6a, 9a, 12a & 18a      |
| 1323000600 | 1mm2           | 1A    | 1.6A | MC-6a, 9a, 12a & 18a      |
| 1323000700 | 1mm2           | 1.6A  | 2.5A | MC-6a, 9a, 12a & 18a      |
| 1323000800 | 1mm2           | 2.5A  | 4A   | MC-6a, 9a, 12a & 18a      |
| 1323000900 | 1mm2           | 4A    | 6A   | MC-6a, 9a, 12a & 18a      |
| 1323001000 | 1mm2           | 5A    | 8A   | MC-6a, 9a, 12a & 18a      |
| 1323001100 | 1.5mm2         | 6A    | 9A   | MC-6a, 9a, 12a & 18a      |
| 1323001200 | 1.5mm2         | 7A    | 10A  | MC-6a, 9a, 12a & 18a      |
| 1323001300 | 2.5mm2         | 9A    | 13A  | MC-6a, 9a, 12a & 18a      |
| 1323002700 | 2.5mm2         | 12A   | 18A  | MC-6a, 9a, 12a & 18a      |



## LS Mounting Kit for Contactor Overloads

MOUNTING KIT FOR CONTACTOR OVERLOADS

#89



SEARCH ON EXPRESS.ECSNZ.COM

### Features

- » Allows overload to be mounted next to contactor
- » Easy to assemble

| Item No     | Type  | Description                      |
|-------------|-------|----------------------------------|
| 83661834001 | UZ-12 | Mounting Kit for above overloads |



## LS Capacitor Units

FOR POWER FACTOR CORRECTION APPLICATIONS

#91

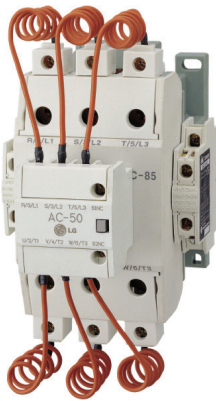


SEARCH ON EXPRESS.ECSNZ.COM

### Features

- » Eliminate switching surge
- » Improves performance of capacitor system
- » Damping resistor limits inrush current

| Item No     | Type  | Suitable Contactors | Configuration      | 400-440V       |
|-------------|-------|---------------------|--------------------|----------------|
| 83631611001 | AC-9  | MC-9a to MC-40a     | MC-9b with AC-9    | 9.7kVar - 14A  |
| 83631613004 | AC-50 | MC-50a to MC-100a   | MC-12b with AC-9   | 12.5kVar - 18A |
|             |       |                     | MC-18b with AC-9   | 16.7kVar - 24A |
|             |       |                     | MC-22b with AC-9   | 18kVar - 26A   |
|             |       |                     | MC-32a with AC-9   | 25kVar - 36A   |
|             |       |                     | MC-40a with AC-9   | 33.3kVar - 48A |
|             |       |                     | MC-50a with AC-50  | 40kVar - 58A   |
|             |       |                     | MC-65a with AC-50  | 45.7kVar - 66A |
|             |       |                     | MC-75a with AC-50  | 54kVar - 92A   |
|             |       |                     | MC-85a with AC-50  | 60kVar - 87A   |
|             |       |                     | MC-100a with AC-50 | 62kVar - 106A  |



## LS Contactor Reversing Interlocks

USED FOR MECHANICAL INTERLOCKING

#91



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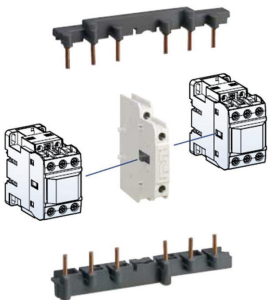
### Interlock Terminal

UR-02 interlock is a mechanical interlock unit and provides 2NC contacts for use in electrical interlocking.

### Jumper Bars

UW jumper bars are used for making reversing circuit between two contactors.

| Item No     | Type  | Description                             |
|-------------|-------|-----------------------------------------|
| 76671635003 | UW-18 | Jumper Bar Kit for MC-6a, 9a, 12a & 18a |
| 83411634001 | UR-02 | Interlock Terminal                      |



## LS Contactor Auxiliaries

FRONT & SIDE MOUNT

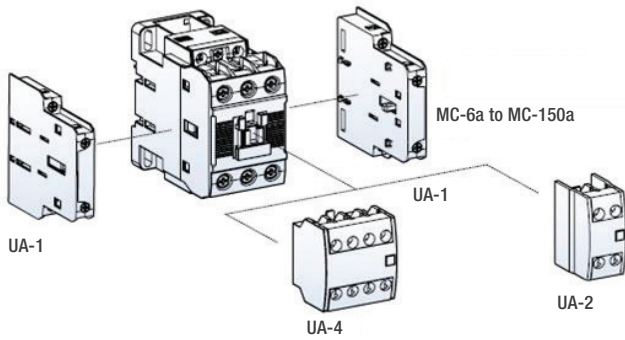
#90



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### Features

» Allows overload to be mounted next to contactor



| Item No     | Type | Mounting    | Contacts    |
|-------------|------|-------------|-------------|
| 83361634001 | UA-1 | Side Mount  | 1 NO / 1 NC |
| 83361634066 | UA-2 | Front Mount | 1 NO / 1 NC |
| 83361634048 | UA-4 | Front Mount | 2 NO / 2 NC |

## LS Mini Contactors

SMALL MAGNETIC CONTACTORS

#87



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| 415V    |           | Coil Voltages |      |            |            |            |            |
|---------|-----------|---------------|------|------------|------------|------------|------------|
| Type    | Auxiliary | kW            | AC-3 | 24Vdc      | 24Vac      | 240Vac     | 400Vac     |
| GMD-6M  | 1 N/O     | 2.2           | 6A   | 1270005200 |            |            |            |
| GMD-6M  | 1 N/C     | 2.2           | 6A   | 1270008000 |            |            |            |
| GMD-9M  | 1 N/O     | 4             | 9A   | 1270016400 |            |            |            |
| GMD-16M | 1 N/O     | 7.5           | 16A  | 1270039200 |            |            |            |
| GMC-6M  | 1 N/C     | 2.2           | 6A   |            | 1269002100 | 1269055500 | 1269003600 |
| GMC-16M | 1 N/O     | 7.5           | 16A  |            | 1269026800 | 1269039600 |            |
| GMC-16M | 1 N/C     | 7.5           | 16A  |            |            | 1269039800 |            |

## LS Mini Contactor GT12 Overloads

GT12 OVERLOADS FOR MINI CONTACTORS

#93



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| Item No    | Type          | Min  | Max  |
|------------|---------------|------|------|
| 1271003100 | GTK-12M 0.33A | 0.25 | 0.4  |
| 1271003200 | GTK-12M 0.52A | 0.4  | 0.63 |
| 1271003300 | GTK-12M 0.82A | 0.63 | 1    |
| 1271003400 | GTK-12M 1.3A  | 1    | 1.6  |
| 1271003500 | GTK-12M 2.1A  | 1.6  | 2.5  |
| 1271003600 | GTK-12M 3.3A  | 2.5  | 4    |
| 1271003700 | GTK-12M 5A    | 4    | 6    |
| 1271003900 | GTK-12M 7.5A  | 6    | 9    |
| 1271004100 | GTK-12M 11A   | 9    | 13   |
| 1271004200 | GTK-12M 14A   | 12   | 16   |

## LS Overload Mounting Unit

MOUNTING KIT FOR MINI CONTACTOR OVERLOADS

#93



| Item No     | Type    |
|-------------|---------|
| 83661821002 | AZ-12MH |

## LS Mini Contactor Auxiliaries

FRONT & SIDE MOUNT

#92



| Item No     | Type  | Mounting | Contacts    |
|-------------|-------|----------|-------------|
| 83361621001 | AU-1M | Side     | 1 NO        |
| 83361621009 | AU-2M | Front    | 1 NO / 1 NC |
| 83361621005 | AU-4M | Front    | 2 NO / 2 NC |

## AR-12M Interlock

INTERLOCK KIT FOR MINI CONTACTORS

#94

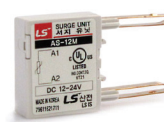


| Item No     | Type                  |
|-------------|-----------------------|
| 83411621001 | AR-12M                |
| 83411621007 | AR-12MW (with wiring) |

## Surge Absorber Unit

SURGE UNIT TO REDUCE STARTUP LOAD ON COIL

#94



| Item No     | Type   |
|-------------|--------|
| 83611621004 | AS-12M |





## SCHLEGEL Push-Button Heads

STANDARD & ILLUMINATED SWITCHBOARD PUSH BUTTON HEADS

#1579



SEARCH ON EXPRESS.ECSNZ.COM

### Features

- » Standard 22mm Hole Size
- » Includes Locknut
- » Labelling option available

### Specifications

- » Panel cut-out: Ø 22.3 mm
- » Travel: 6 mm
- » Front bezel: metallic/charcoal

### Protection

- » IP65
- » IP67\* (SCH-RMCTM Only)
- » Class: II (protective insulation)

### Applications

- » Control circuits
- » Machine Control

| STANDARD (#1580) |                                                                 | ILLUMINATED (#1581) |           |
|------------------|-----------------------------------------------------------------|---------------------|-----------|
|                  | Momentary                                                       | Maintained          | Momentary |
| Blue             | RMCT-GBL                                                        | RMCF-GBL            | RMCT-BL   |
| Yellow           | RMCT-GGB                                                        | RMCF-GGB            | RMCT-GB   |
| Green            | RMCT-GGN                                                        | RMCF-GGN            | RMCT-GN   |
| Red              | RMCT-GRT                                                        | RMCF-GRT            | RMCT-RT   |
| Black            | RMCT-GSW                                                        | RMCF-GSW            |           |
| White            | RMCT-GWS                                                        |                     | RMCT-WS   |
| Clear            |                                                                 |                     | RMCF-KL   |
| <b>Extras</b>    |                                                                 |                     |           |
| Clear            | Waterproof Pushbutton including transparent silicone cap (IP67) |                     | RMCTM     |



Standard



Illuminated



Waterproof

## SCHLEGEL LED Indicators

230V & 24V LED INDICATORS

#1587



SEARCH ON EXPRESS.ECSNZ.COM

### Features

- » Standard 22mm Hole Size
- » Suitable for up to 2.5mm conductors

### Specifications (230V Lamp Module)

- » Operating temperature: -25...70 °C
- » Protection degree acc. to IEC/EN 60529: IP65
- » Approvals: cCSAus, CE, GOST-R

### Protection

- » IP65

| MODULAR |             | MONO         |            |
|---------|-------------|--------------|------------|
|         | 24V         | 230V         | 230V       |
| Blue    | RMCM-24-BL  | RMCM-230-BL  |            |
| Yellow  | RMCM-24-GB  | RMCM-230-GB  | RGLED24V_Y |
| Green   | RMCM-24-GN  | RMCM-230-GN  | RGLED24V_G |
| Red     | RMCM-24-RT  | RMCM-230-RT  | RGLED24V_R |
| White   | RMCM-24-GWS | RMCM-230-GWS |            |
| Clear   | RMCM-24-KL  | RMCM-230-KL  |            |



Mono



Modular

## SCHLEGEL Selector Switches

MOMENTARY & MAINTAINED MONO SELECTOR SWITCHES

#1582



SEARCH ON EXPRESS.ECSNZ.COM

### Function

- » Left position, contact 1 is closed, contact 2 is open
- » Middle position, both contact 1 and contact 2 are open
- » Right position, contact 1 is open, contact 2 is closed

### Specifications

- » Standard 22mm Hole Size
- » Includes Locknut

### Protection

- » IP65

| Item No                | Positions |                                                          | Mechanism        |
|------------------------|-----------|----------------------------------------------------------|------------------|
| Selector Only          |           |                                                          |                  |
| RMCWA                  | 2         | Left / Right                                             | Standard Dial    |
| RMCWB                  | 3         | Left / Middle / Right                                    | Standard Dial    |
| RMCWC                  | 3         | Left / Middle / Right (Spring Return)                    | Standard Dial    |
| RMCSTB                 | 3         | Left (Spring Return) / Middle / Right (Spring Return)    | Standard Dial    |
| RMCWAL                 | 2         | Left / Right                                             | Illuminated Dial |
| RMCWBL                 | 3         | Left / Middle / Right                                    | Illuminated Dial |
| RMCWCL                 | 3         | Left / Middle / Right (Spring Return)                    | Illuminated Dial |
| RMCK                   | 2         | Up / Down                                                | Toggle Head      |
| Selector with Contacts |           |                                                          |                  |
| RMCWA-MTI              | 2         | Selector Switch 2 Position Complete                      | Standard Dial    |
| RMCWB-MTI-MTO          | 3         | Selector Switch 3 Position Complete                      | Standard Dial    |
| RMCSSA18E-MTI          | 2         | Key Switch 2 Position Complete                           | Keyed            |
| RMCSSA12E-MTI-MTO      | 3         | Key Switch 3 Position Complete                           | Keyed            |
| Accessories            |           |                                                          |                  |
| ESE845                 |           | Standard spare key, specify key number for special locks |                  |



Selector



Toggle Selector



With Contacts



Keyed with Contacts

## SCHLEGEL Buzzers

WARNING BUZZER 24V

#1584



SEARCH ON EXPRESS.ECSNZ.COM

### Features

- » Loud annoying siren sound
- » Screw Terminals for each connection
- » Designed for more than > 5000h of active usage

### Specifications

- » Operating Voltage: 18-30V AC or DC
- » Volume: 80dB
- » IP65

| Item No | Volts | Description        |
|---------|-------|--------------------|
| RSG-24V | 24    | Warning Buzzer 24V |



# RENT ME

CIMCO Stainless Steel Hydraulic Chassis Punch

# \$50

per/day

projects.ecsnz.com/rentals

## SCHLEGEL Stop Buttons

LATCHING & MOMENTARY STOP BUTTONS

#1589

SEARCH ON EXPRESS.ECSNZ.COM



### Features

- » When mushroom head is out, contact 1 is closed
- » When mushroom is pressed, contact 1 is open
- » Includes 1 N/C Contact (MTO)

### Specifications

- » IP65
- » Standard 22mm Hole Size
- » Includes Locknut

| Item No        | Description             | Mechanism     |
|----------------|-------------------------|---------------|
| <b>Modular</b> |                         |               |
| RMCV-MTO       | Stop Button - Latching  | Standard Dial |
| RMCS-MTO       | Stop Button - Momentary | Standard Dial |



## SCHLEGEL RJ45 and USB

RJ45 & USB PANEL MOUNT BUTTONS WITH COVER

#1583

SEARCH ON EXPRESS.ECSNZ.COM



### Features

- » Standard 22mm Hole Size
- » Includes Locknut
- » Dust Cover

### Specifications

- » Series: RONTRON-R-JUWEL
- » Panel cut-out: Ø 22.3 mm
- » Front bezel: silver-coloured

| Item No       | Outside    | Inside                       | IP Closed |
|---------------|------------|------------------------------|-----------|
| <b>RJ45</b>   |            |                              |           |
| RRJ_RJ45_WC   | RJ45       | RJ45                         | IP67      |
| <b>USB</b>    |            |                              |           |
| RRJ_USB_AB_WC | USB Type A | USB Type B                   | IP67      |
| RRJ_USB_WC    | USB Type A | USB Type A Male + 60cm Cable | IP67      |



RJ45



USB

## SCHLEGEL Labels

LABEL FOR 22MM PUSHBUTTONS

#1585

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| Item No        | Label       |
|----------------|-------------|
| <b>Printed</b> |             |
| BZ23L_0206     | Down        |
| BZ23L_0129     | Fault       |
| BZ23L_0211     | Forward     |
| BZ23B6003      | Hand O Auto |
| BZ23B6004      | O I         |
| BZ23L_0204     | Off         |
| BZ23L_0203     | On          |
| BZ23L_0226     | Reset       |
| BZ23L_0212     | Reverse     |
| BZ23L_0095     | Run         |
| BZ23L_0201     | Start       |
| BZ23L_0202     | Stop        |
| BZ23L_0205     | Up          |

| Item No            | Label                             |
|--------------------|-----------------------------------|
| <b>Accessories</b> |                                   |
| RABT               | Label Holder for 22mm Pushbuttons |
| BZ23U              | Blank Label for 22mm Pushbuttons  |



BLANK



PRINTED



HOLDER

## SCHLEGEL Contact Blocks

MODULAR CONTACT BLOCKS, LED'S & HOLDERS FOR 22MM PUSHBUTTONS

#1588

SEARCH ON EXPRESS.ECSNZ.COM



MHR\_3



MHR\_5



MTO



MTON



MTIV



MTI



MF



MLED

| Item No            | Description                   | Type       |
|--------------------|-------------------------------|------------|
| <b>Holder</b>      |                               |            |
| MHR_3              | Module holder for 3 elements  | 3 Slot     |
| MHR_5              | Module holder for 5 elements  | 5 Slot     |
| <b>Contact NC</b>  |                               |            |
| MTO                | Normally Closed Contact Block | Standard   |
| MTON               | Normally Closed Contact Block | Late Break |
| <b>Contact NO</b>  |                               |            |
| MTI                | Normally Open Contact Block   | Standard   |
| MTIV               | Normally Open Contact Block   | Early Make |
| <b>Latching</b>    |                               |            |
| MF                 | Module                        | Latching   |
| <b>LED Modules</b> |                               |            |
| MLED230B           | LED Module - Blue             | 230V       |
| MLED230Y           | LED Module - Yellow           | 230V       |
| MLED230G           | LED Module - Green            | 230V       |
| MLED230R           | LED Module - Red              | 230V       |
| MLED230W           | LED Module - White            | 230V       |
| MLED24B            | LED Module - Blue             | 24V        |
| MLED24Y            | LED Module - Yellow           | 24V        |
| MLED24G            | LED Module - Green            | 24V        |
| MLED24R            | LED Module - Red              | 24V        |
| MLED24W            | LED Module - White            | 24V        |



CONTROL & SIGNAL UNITS

Wieland Timers

FLARE CHANGE-OVER TIMERS

#99



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Multi-Function Timer

- » Universal timer with multiple functions for different applications.
- » 8 Timer Functions
- » Time ranges from 0.05 seconds to 1200 hours
- » Supply Voltage: 24v to 240v AC/DC
- » Switching Output: Up to 240V / 5A each
- » Dimensions: 22.5 x 89.4 x 100 mm

Twin Timer

- » On/Off timer with two inputs to set different high and low times.
- » Time ranges from 0.1 seconds to 100 hours
- » Supply Voltage: 24v to 240v AC/DC
- » Switching Output: Up to 240V / 5A each



Multi-Function



Twin Timer

| Item No        | Trigger Voltage | Number of Outputs | Switching Current | Switching Voltage | Connection Type |
|----------------|-----------------|-------------------|-------------------|-------------------|-----------------|
| Multi-Function |                 |                   |                   |                   |                 |
| 81.020.0002.0  | 24 - 240 ac/dc  | 1                 | 5A                | 250V              | Screw           |
| 81.020.0003.0  | 24 - 240 ac/dc  | 2                 | 5A                | 250V              | Screw           |
| Twin Timer     |                 |                   |                   |                   |                 |
| 81.020.0011.0  | 24 - 240 ac/dc  | 1                 | 5A                | 250V              | Screw           |

Wieland Relays

FLARE CHANGE-OVER RELAYS

#97



SEARCH ON EXPRESS.ECSNZ.COM

Compact Series

- » An extremely compact relay allowing you to fit twice as many relays in the same space.
- » Space Saving (only 6.2mm wide)
- » Suitable for AC or DC
- » LED Indication

Heavy Duty Series

- » Suitable for more demanding switching applications with higher switching loads. The 24Vdc version has a manual trigger button which allows you to switch the output manually. A great tool for fault finding.
- » Manual force hold-on button (on 24V version)
- » DC Polarity Protected
- » LED Indication

Solid State Series

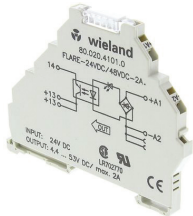
Designed for high speed switching applications. Because there are no moving parts this means they can switch faster and for a longer period of time.



Compact



Heavy Duty



Solid State

| Item No       | Trigger Voltage       | Switching Current | Switching Voltage | Width (mm) | Connection Type |
|---------------|-----------------------|-------------------|-------------------|------------|-----------------|
| Compact       |                       |                   |                   |            |                 |
| 80.010.4521.0 | 12V ac/dc             | 6A                | 250V              | 6.2        | Screw           |
| 80.010.4522.0 | 24V ac/dc             | 6A                | 250V              | 6.2        | Screw           |
| 80.010.4526.0 | 240Vac                | 6A                | 250V              | 6.2        | Screw           |
| 80.063.4029.1 | 20 Pole Common Jumper |                   |                   |            |                 |
| Heavy Duty    |                       |                   |                   |            |                 |
| 80.010.5501.2 | 12Vdc                 | 2 x 8A            | 250V              | 15.8       | Screw           |
| 80.010.4912.3 | 24Vac                 | 16A               | 250V              | 15.8       | Screw           |
| 80.010.6102.2 | 24Vdc                 | 16A               | 250V              | 15.8       | Spring Clamp    |
| 80.010.6002.2 | 24Vdc                 | 16A               | 250V              | 15.8       | Screw           |
| 80.010.6032.2 | 24Vdc                 | 2 x 8A            | 250V              | 15.8       | Screw           |
| 80.010.5702.2 | 24Vdc                 | 4 x 7A            | 250V              | 27         | Screw           |
| 80.010.4916.3 | 240Vac                | 16A               | 250V              | 15.8       | Screw           |
| 80.010.5316.2 | 240Vac                | 2 x 8A            | 250V              | 15.8       | Screw           |
| 80.063.5029.2 | 8 Pole Common Jumper  |                   |                   |            |                 |
| Solid State   |                       |                   |                   |            |                 |
| 80.020.4100.0 | 10..53 Vdc            | 0.5A (500 Hz)     | 4.4...53 Vdc      | 6.2        | Spring Clamp    |
| 80.020.4101.0 | 10..53 Vdc            | 2A (5 Hz)         | 4.4...53 Vdc      | 6.2        | Spring Clamp    |



## Wieland Mini Single Phase Power Supplies

DIN-RAIL MOUNTED MINIATURE POWER SUPPLIES

#96



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### Features

- » DIN Rail Mounting
- » Plastic Housing
- » Adjustable DC output
- » Short circuit proof

| Item No       | Vdc | Current (A) | Dimensions (WxHxD) | Input (V) | Watt |
|---------------|-----|-------------|--------------------|-----------|------|
| 81.000.6331.0 | 5   | 3           | 35 x 91 x 57       | 110 / 240 | 15   |
| 81.000.6310.0 | 24  | 1           | 35 x 91 x 57       | 110 / 240 | 15   |



## Wieland Power Supplies

DIN-RAIL MOUNTED POWER SUPPLIES

#96



SEARCH ON EXPRESS.ECSNZ.COM

### Features

- » DIN Rail Mounting
- » Robust Metal Construction
- » Adjustable DC output
- » Alarm Relay Output

### Parallel Operation

Many of the Wieland Power supplies allow for parallel mode. This increases the Current by sharing the load between multiple power supplies.



Single Phase

Three Phase

| Item No             | Vdc | Current (A) | Parallel Mode | Dimensions (WxHxD) | Input (V) | Watt  |
|---------------------|-----|-------------|---------------|--------------------|-----------|-------|
| <b>Single Phase</b> |     |             |               |                    |           |       |
| 81.000.6331.0       | 5   | 3           |               | 35 x 91 x 57       | 110 / 240 | 15    |
| 81.000.6132.0       | 12  | 5           |               | 41 x 91 x 115      | 110 / 240 | 60    |
| 81.000.6142.0       | 12  | 10          | Up to 3       | 63.2 x 123.6 x 123 | 110 / 240 | 120   |
| 81.000.6110.0       | 24  | 1.25        |               | 44 x 89 x 114      | 110 / 240 | 35    |
| 81.000.6120.0       | 24  | 2.5         |               | 44 x 89 x 114      | 110 / 240 | 70    |
| 81.000.6130.0       | 24  | 5           | Up to 3       | 63 x 124 x 124     | 110 / 240 | 142.5 |
| 81.000.6140.0       | 24  | 10          | Up to 3       | 83 x 124 x 124     | 110 / 240 | 285   |
| 81.000.6150.0       | 24  | 20          | Up to 3       | 175 x 124 x 124    | 110 / 240 | 570   |
| 81.000.6134.0       | 48  | 5           | Up to 3       | 175 x 124 x 124    | 110 / 240 | 480   |
| <b>Three Phase</b>  |     |             |               |                    |           |       |
| 81.000.6160.0       | 24  | 5           | Up to 2       | 75 x 124 x 118     | 340 - 575 | 240   |
| 81.000.6170.0       | 24  | 10          | Up to 2       | 89 x 124 x 118     | 340 - 575 | 240   |
| 81.000.6180.0       | 24  | 20          | Up to 2       | 150 x 124 x 118    | 340 - 575 | 480   |
| 81.000.6190.0       | 24  | 40          | Up to 2       | 276 x 126 x 112    | 340 - 575 | 960   |

## Wieland UPS

UNINTERRUPTIBLE POWER SUPPLY FOR CRITICAL APPLICATIONS

#96



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### Features

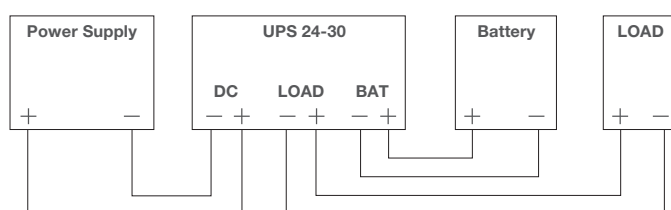
- » Suitable for Lead-Acid and Lead-Gel Batteries
- » Suitable for up to 30A
- » Charges and monitors the battery condition
- » Alarm output for battery failure
- » Alarm output for battery discharging (primary power lost)
- » LED indication for module status

### Description

Wieland UPS provides instantaneous protection from input power interruption. The UPS module charges and maintains the battery charge. The module also monitors the status of the battery and has a relay output if the battery fails. This module is suitable for all common Lead-Acid and Lead-Gel batteries.



| Item No       | Vdc | Current (A) | Dimensions (WxHxD) | Input (V) |
|---------------|-----|-------------|--------------------|-----------|
| 81.000.6220.0 | 24  | 30          | 54 x 90 x 115      | 2 x 24    |



| State                                                        | LED (• = on)      |                      |                     |
|--------------------------------------------------------------|-------------------|----------------------|---------------------|
|                                                              | BAT FAIL<br>(red) | BAT DIS.<br>(yellow) | DC IN OK<br>(green) |
| Battery disconnected or fuse blown                           | •                 |                      | •                   |
| Inverse polarity of battery, or overcharge protection active | •                 |                      | •                   |
| Battery charging                                             |                   |                      | •                   |
| VIN < 22.5 V, battery discharging                            |                   | •                    |                     |
| VIN < 22.5 V, battery discharge voltage < 20.5 V             | •                 | •                    |                     |
| VIN < 22.5 V, VBAT ≤ 19.2 V                                  |                   |                      | •                   |
| DC IN OK, 19.2 V ≤ VBAT ≤ 20.5 V                             | •                 |                      | •                   |

# Wieland R20 Redundancy Module

DIN-RAIL MOUNTED REDUNDANCY MODULE WIPOS R20

#96

SEARCH ON EXPRESS.ECSNZ.COM

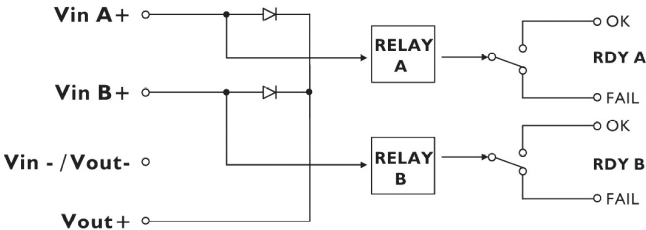


Features

- » Redundancy module for two inputs
- » Inputs: 21 – 28 V DC
- » Rated current 20 A
- » Relay control output for every input
- » Vertical mount

Application

This redundancy unit is used in critical applications. Two power supplies are wired into this unit, and if one fails and alarm is triggered.



| Item No       | Vdc | Current (A) | Dimensions (WxHxD) | Input Range(V) |
|---------------|-----|-------------|--------------------|----------------|
| Single Phase  |     |             |                    |                |
| 81.000.6200.0 | 24  | 20          | 54 x 90 x 114      | 21 to 28       |

# Wieland Power Supplies - Slimline

DIN-RAIL MOUNTED SWITCHED-MODE SLIMLINE POWER SUPPLY

#96

SEARCH ON EXPRESS.ECSNZ.COM



Features

- » Primary switching power supply, single phase
- » Output: 24 V DC (adjustable 21.6 - 27.6 V DC)
- » Input: 85 - 264 V AC; 90 - 350 V DC
- » Parallel operation possible (2 devices)
- » Full load up to 60 °C
- » Temperature Rating -40 to 70 °C
- » Vertical mount
- » UL1310 class 2 power supply

Application

New Slimline series power supplies offer a significant space saving over the standard Wieland power supply range. These are idea for applications where space is at a premium.



Standard vs Slimline

| Item No       | Vdc   | Current (A) | Dimensions (WxHxD) | Input (V) |
|---------------|-------|-------------|--------------------|-----------|
| Single Phase  |       |             |                    |           |
| 81.000.6510.0 | 24Vdc | 1.25A       | 32 x 90 x 90       | 230V      |
| 81.000.6520.0 | 24Vdc | 2.5A        | 32 x 90 x 110      | 230V      |
| 81.000.6530.0 | 24Vdc | 5A          | 40 x 125 x 122     | 230V      |
| 81.000.6540.0 | 24Vdc | 10A         | 60 x 125 x 140     | 230V      |
| 81.000.6550.0 | 24Vdc | 20A         | 95 x 125 x 150     | 230V      |
| Three Phase   |       |             |                    |           |
| 81.000.6560.0 | 24Vdc | 5A          | 40 x 125 x 122.2   | 400V      |
| 81.000.6570.0 | 24Vdc | 10A         | 60 x 125 x 150     | 400V      |

## Wieland Fuse Holder Inserts, Bases & Plates

FOR ISOLATION AND PROTECTION OF CIRCUITS

#1376 & #1381

SEARCH ON EXPRESS.ECSNZ.COM



### Description

Fuse terminals with rocking head for disconnection. Takes standard 5x20mm glass fuses. 6.3mm x 32mm also on request.

### Conductor Sizes

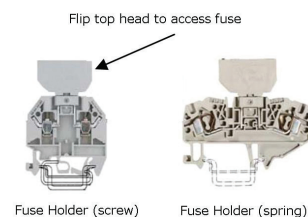
» Stranded: 0.13mm<sup>2</sup> to 4mm<sup>2</sup>  
» Solid: 0.13mm<sup>2</sup> to 6mm<sup>2</sup>  
Available in both Spring Clamp and Screw terminal options.

### Features

Fuse insert can be pulled out and removed making it easy to check fuses.

### Current Rating

» Dependant on fuse



| Item No                   | Type                    | Series          | Clamp  |
|---------------------------|-------------------------|-----------------|--------|
| <b>Bases</b>              |                         |                 |        |
| 56.704.4055.0             | Fuse Terminal Base      | WKFN 4 TKG/35   | Spring |
| 57.504.4055.0             | Fuse Terminal Base      | WK 4 TKG/U /V0  | Screw  |
| <b>End Plates</b>         |                         |                 |        |
| 07.312.9055.0             | Grey End Plate          | APFN 4 D2/2     | Spring |
| 07.311.6155.0             | Grey End Plate          | AP 4 TK /V0     | Screw  |
| <b>Inserts (5 x 20mm)</b> |                         |                 |        |
| Z1.298.1053.0             | No LED Indication       | THSI 5X20       |        |
| Z1.298.1153.0             | 12-24V LED Indication   | THSI 5X20LED 24 |        |
| Z1.298.1253.0             | 24-60V LED Indication   | THSI 5X20LED 60 |        |
| Z1.298.1353.0             | 110-250V LED Indication | THSI 5X20GL 250 |        |

## Wieland Fuse Holder Terminals

FOR ISOLATION AND PROTECTION OF CIRCUITS

#281

SEARCH ON EXPRESS.ECSNZ.COM



### Description

Fuse terminal block for standard glass fuses. Takes standard 5x20mm or 6.3x32mm glass fuses. Available in Screw Terminal only.

### Conductor Sizes

» Stranded: 0.13mm<sup>2</sup> to 4mm<sup>2</sup>  
» Solid: 0.13mm<sup>2</sup> to 6mm<sup>2</sup>

### Features

Fully enclosed so it does not require an extra end plate. As it is all one piece, this makes it the strongest and most robust fuse holder in the range.

### Current Rating

» Dependant on fuse



| Item No                                      | Type               | Series                 | Clamp |
|----------------------------------------------|--------------------|------------------------|-------|
| <b>for (5 x 20mm, 5 x 25mm and 5 x 30mm)</b> |                    |                        |       |
| 57.904.5355.0                                | No LED Indication  | WK 4 / THSI5 U/V0      | Screw |
| 57.904.5555.0                                | 24V LED Indication | WK 4/THSI5 LED 24U /V0 | Screw |
| Z7.255.8627.0                                | Cross connector    | WKN 6 TK-6             |       |
| <b>for (6.3 x 32mm)</b>                      |                    |                        |       |
| 57.904.6355.0                                | No LED Indication  | WK 4/THSI6,3 U /V0     | Screw |

## Wieland Automotive Fuse Terminals

FOR ISOLATION AND PROTECTION OF CIRCUITS

#1377

SEARCH ON EXPRESS.ECSNZ.COM



### Description

Fuse terminal block for automotive fuses. This block takes the larger style ATO type automotive fuse.

### Conductor Sizes

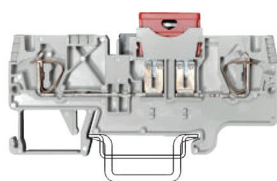
» Stranded: 0.13mm<sup>2</sup> to 4mm<sup>2</sup>  
» Solid: 0.13mm<sup>2</sup> to 6mm<sup>2</sup>  
Available in Spring Clamp only

### Features

» LED indication which is very useful when fault finding.

### Current Rating

» Dependant on fuse



| Item No          | Type                 | Series            | Clamp  |
|------------------|----------------------|-------------------|--------|
| <b>Terminal</b>  |                      |                   |        |
| 56.704.4155.0    | No LED Indication    | WKFN 4 FSI        | Spring |
| 56.704.4255.0    | 12Vdc LED Indication | WKFN 4 FSI LED 12 | Spring |
| 56.704.5355.0    | 24Vdc LED Indication | WKFN 4 FSI LED 24 | Spring |
| <b>End Plate</b> |                      |                   |        |
| 07.312.9055.0    | Grey End Plate       | APFN 4 D2/2       | Spring |

## Wieland Resettable Blade Fuse

MINIATURE CIRCUIT BREAKER

#1377

SEARCH ON EXPRESS.ECSNZ.COM



### Description

Miniature circuit breaker that fits into a standard automotive blade fuse holder. These units can be manually turned off and on via the button located at the top and have built in over current protection.



| Item No      | Current Rating | Voltage    | Height |
|--------------|----------------|------------|--------|
| 1180-01-2.5A | 2.5A           | Up to 250V | 55mm   |
| 1180-01-4A   | 4A             | Up to 250V | 55mm   |

## Wieland Knife Disconnects

FOR ISOLATION AND PROTECTION OF CIRCUITS

#277 & #282

SEARCH ON EXPRESS.ECSNZ.COM



### Description

These disconnect terminals are used to isolate circuits for testing purposes.

### Conductor Sizes

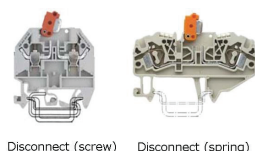
» Stranded: 0.13mm<sup>2</sup> to 4mm<sup>2</sup>  
» Solid: 0.13mm<sup>2</sup> to 6mm<sup>2</sup>

### Features

» Available in both Spring Clamp and Screw terminal options.

### Current Rating

» 20A



| Item No          | Type                | Series         | Clamp  |
|------------------|---------------------|----------------|--------|
| <b>Terminal</b>  |                     |                |        |
| 56.704.2053.0    | Disconnect Terminal | WKF 4 TKM / 35 | Spring |
| 57.504.2055.0    | Disconnect Terminal | WK 4 TKM/U /V0 | Screw  |
| <b>End Plate</b> |                     |                |        |
| 07.312.4353.0    | Grey End Plate      | APF 4 TK       | Spring |
| 07.311.6155.0    | Grey End Plate      | AP 4 TK /V0    | Screw  |



ECS

FUSE PROTECTION





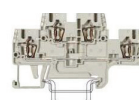
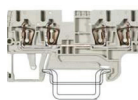
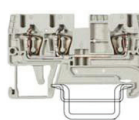
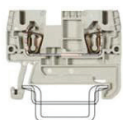
## Wieland Spring Terminals

SPRING CLAMP TERMINALS

#274



SEARCH ON EXPRESS.ECSNZ.COM



| Type            | 2 Pole        | 3 Pole           | 4 Pole           | 4 Pole - Double/Deck | 6 Pole - Triple/Deck |
|-----------------|---------------|------------------|------------------|----------------------|----------------------|
|                 | WKFN 2.5/35   | WKFN 2.5 D1/2/35 | WKFN 2.5 D2/2/35 | WKFN 2.5 E/35        | WKFN 2.5 E3/35       |
| Grey Terminal   | 56.703.0055.0 | 56.703.5055.0    | 56.703.5155.0    | 56.703.7055.0        | 56.703.3055.0        |
| Grey End Plate  | 07.312.6755.0 | 07.312.6955.0    | 07.312.7155.0    | 07.312.7355.0        | 07.312.7555.0        |
| Blue Terminal   | 56.703.0055.6 | 56.703.5055.6    | 56.703.5155.6    |                      |                      |
| Earth Terminal  | 56.703.9055.0 | 56.703.9355.0    | 56.703.9155.0    | 56.703.8955.0        | 56.703.8855.0        |
| Earth End Plate | 07.312.6755.7 | 07.312.6955.7    | 07.312.7155.7    | 07.312.7355.7        | 07.312.7555.7        |
| Vertical Jumper |               |                  |                  | Z7.261.1127.0        | Z7.261.1127.0        |
|                 | WKFN 4/35     | WKFN 4 D1/2/35   | WKFN 4 D2/2/35   | WKFN 4 E/35          |                      |
| Grey Terminal   | 56.704.0055.0 | 56.704.5055.0    | 56.704.5155.0    | 56.704.7055.0        |                      |
| Grey End Plate  | 07.312.9255.0 | 07.312.9455.0    | 07.312.9055.0    | 07.312.9655.0        |                      |
| Blue Terminal   | 56.704.0055.6 | 56.704.5055.6    | 56.704.5155.6    |                      |                      |
| Earth Terminal  | 56.704.9055.0 | 56.704.9355.0    | 56.704.9155.0    |                      |                      |
| Earth End Plate | 07.312.9255.7 | 07.312.9455.7    | 07.312.9055.7    |                      |                      |
| Vertical Jumper |               |                  |                  | Z7.261.1127.0        |                      |
|                 | WKFN 6/35     | WKFN 6 D1/2/35   |                  |                      |                      |
| Grey Terminal   | 56.706.0055.0 | 56.706.5055.0    |                  |                      |                      |
| Grey End Plate  | 07.313.0455.0 | 07.313.0655.0    |                  |                      |                      |
| Earth Terminal  | 56.706.9055.0 |                  |                  |                      |                      |
| Earth End Plate |               |                  |                  |                      |                      |
|                 | WKFN 10/35    | WKFN 10 D1/2/35  |                  |                      |                      |
| Grey Terminal   | 56.710.0055.0 | 56.710.5055.0    |                  |                      |                      |
| Grey End Plate  | 07.313.0855.0 | 07.313.0855.0    |                  |                      |                      |
| Earth Terminal  | 56.710.9055.0 |                  |                  |                      |                      |
| Earth End Plate |               |                  |                  |                      |                      |

## Wieland DIN Rail Terminal - Jumper Options

FOR SCREW AND SPRING CLAMP TERMINALS

#111



SEARCH ON EXPRESS.ECSNZ.COM

| Type   | 2.5mm         | 4mm           | 6mm           | 10mm          | 16mm          |
|--------|---------------|---------------|---------------|---------------|---------------|
| 2 Way  | Z7.280.6227.0 | Z7.261.1227.0 | Z7.282.5227.0 | Z7.283.8227.0 | Z7.284.4227.0 |
| 3 Way  | Z7.280.6327.0 | Z7.261.1327.0 | Z7.282.5327.0 |               |               |
| 4 Way  | Z7.280.6427.0 | Z7.261.1427.0 | Z7.282.5427.0 |               |               |
| 5 Way  | Z7.280.6527.0 | Z7.261.1527.0 | Z7.282.5527.0 |               |               |
| 10 Way | Z7.280.7027.0 | Z7.261.2027.0 |               |               |               |



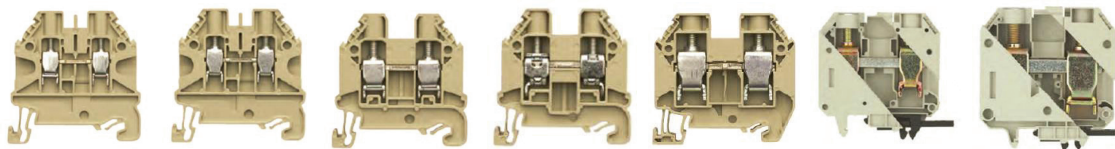
## Wieland Screw Terminals

2 POLE SCREW TERMINALS

#279



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| Type            | 2.5mm         | 4mm           | 6mm           | 10mm          | 16mm          | 35mm           | 70mm           |
|-----------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|
|                 | WT 2,5        | WT 4          | WT 6          | WT 10         | WT 16         | WKN 35/U       | WKN 70/U       |
| Grey Terminal   | 58.503.0055.0 | 58.504.0055.0 | 58.506.0055.0 | 58.510.0055.0 | 58.516.0055.0 | 57.535.0155.0  | 57.570.0155.0  |
| Grey End Plate  | 07.313.2555.0 | 07.313.2555.0 | 07.313.2555.0 | 07.313.2555.0 | 07.313.2755.0 | Fully Enclosed | Fully Enclosed |
| Partition Plate | 07.313.2655.0 | 07.313.2655.0 | 07.313.2655.0 | 07.313.2655.0 |               |                |                |
| Blue Terminal   | 58.503.0055.6 | 58.504.0055.6 | 58.506.0055.6 | 58.510.0055.6 | 58.516.0055.6 |                |                |
| Earth Terminal  | 58.503.9055.0 | 58.504.9055.0 | 58.506.9055.0 | 58.510.9055.0 | 58.516.9055.0 | 57.535.9055.0  |                |
| Earth End Plate | 07.313.2555.0 | 07.313.2555.0 | 07.313.2555.0 | 07.313.2555.0 | 07.313.2755.0 |                |                |

## Wieland Multi-tier Screw Terminals

DOUBLE & SINGLE DECK SCREW TERMINALS

#279



SEARCH ON EXPRESS.ECSNZ.COM



| Type                  | Double Deck                |                     | Single Deck            |                        |
|-----------------------|----------------------------|---------------------|------------------------|------------------------|
|                       | 2.5mm 4 Pole (WKN 2,5 E/U) | 4mm 4 Pole (WT 4 E) | 4mm 3 Pole (WT 4 D1/2) | 4mm 4 Pole (WT 4 D2/2) |
| Grey Terminal         | 57.403.7055.0              | 58.504.7055.0       | 58.504.5055.0          | 58.504.5155.0          |
| Grey End Plate        | 07.312.1755.0              | 07.313.3355.0       | 07.313.2955.0          | 07.313.3155.0          |
| Grey Partition Plate  | 07.312.1855.0              | 07.313.2855.0       | 07.313.2855.0          | 07.313.2855.0          |
| Grey Top Deck Jumpers | Z7.280.2227.0              | Z7.261.1227.0       | Z7.261.1227.0          | Z7.261.1227.0          |
| Earth Terminal        |                            | 58.504.9255.0       | 58.504.9355.0          | 58.504.9155.0          |
| Earth End Plate       |                            | 07.313.3355.0       | 07.313.2955.0          | 07.313.3155.0          |

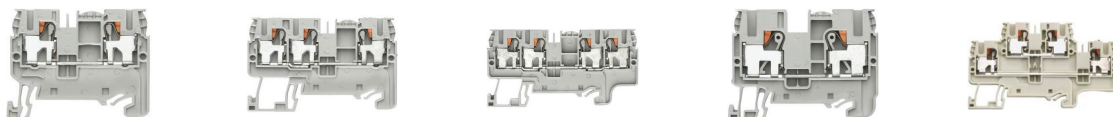
## Wieland Push Terminals

DIN RAIL TERMINAL BLOCKS WITH PUSH-IN CONNECTION

#116



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| Type            | 2.5mm Single Deck  |                         | 6mm Single Deck         |                | 2.5mm Double Deck    |
|-----------------|--------------------|-------------------------|-------------------------|----------------|----------------------|
|                 | 2 Pole (WTP 2,5/4) | 3 Pole (WTP 2,5/4 D1/2) | 4 Pole (WTP 2,5/4 D2/2) | 2 Pole (WTP 6) | 4 Pole (WTP 2,5/4 E) |
| Grey Terminal   | 56.203.0055.0      | 56.203.5055.0           | 56.203.5155.0           | 56.206.0055.0  | 56.203.7055.0        |
| Grey End Plate  | 07.312.6755.0      | 07.312.6955.0           | 07.312.7155.0           | 07.313.4155.0  | 07.312.7355.0        |
| Blue Terminal   | 56.203.0055.6      | 56.203.5055.6           | 56.203.5155.6           | 56.206.0055.6  |                      |
| Earth Terminal  | 56.203.9055.0      |                         |                         |                |                      |
| Earth End Plate | 07.312.6755.0      |                         |                         |                |                      |

## Wieland Motor Connection Terminal

UP TO 4MM CONDUCTORS

#116

This is a small three phase distribution terminal. The three phases are passed through, the earth is linked to the DIN rail via the bottom row.



| Type           | WKF 4 3D/SL    |
|----------------|----------------|
| Grey Terminal  | 56.704.8453.0  |
| Grey End Plate | Fully Enclosed |

## Wieland Reduction Terminal

16MM DOWN TO 2.5MM/4MM

#274

This terminal can take up to 16mm conductors. Using standard 2.5mm/4mm jumpers, you can link smaller terminals.



| Type           | WKF 16/35PV/WKFN |
|----------------|------------------|
| Grey Terminal  | 56.716.0353.0    |
| Grey End Plate | Fully Enclosed   |



# RENT ME

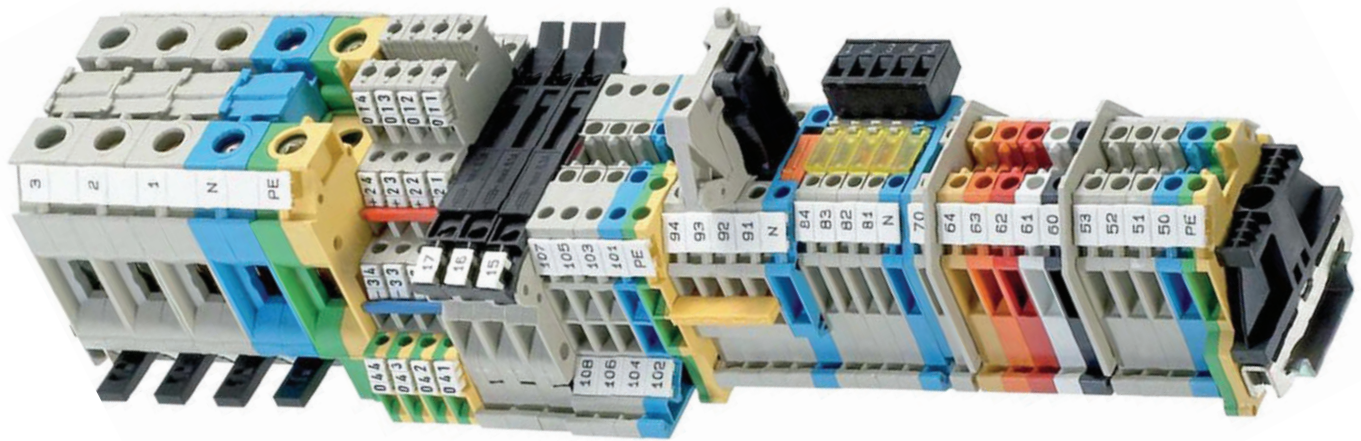
Fluke Networks Thermal Imaging Camera

# \$200

per/day

projects.ecsnz.com/rentals





## Wieland Sensor Terminals

### SPRING CLAMP TERMINALS

#1380



SEARCH ON EXPRESS.ECSNZ.COM

#### Details

Compact slice based connection system specially designed for 3-wire I/O. +, - and the shield are all common through the base block.

#### Advantages

No need for jumpers to common sensor power. Space saving compared to conventional multi-tier terminals

#### Conductor Sizes

» 0.13mm<sup>2</sup> to 1.5mm<sup>2</sup>

#### Current Rating

» 10A

#### Terminal Width

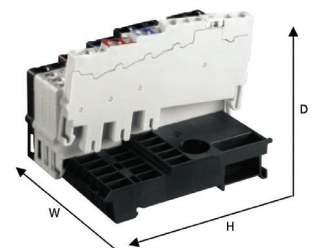
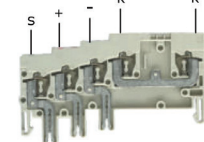
» 5mm

#### Voltage Rating

» 65V (sensor wiring)

#### Module Dimensions

» (W)idth = 9 Module (9 x 5mm + 1.5mm)  
= 18 Module (18 x 5mm + 1.5mm)  
» (H)eight = 71mm  
» (D)epth = 41mm (from top of DIN rail)



| Item No                         | Description                                     |
|---------------------------------|-------------------------------------------------|
| <b>Grey sensor modules</b>      |                                                 |
| 37.702.7453.0                   | Grey 3 level terminal (no 'S' terminal)         |
| 37.702.7553.0                   | Grey 4 level terminal                           |
| 37.702.8553.0                   | Grey 4 level terminal with 24Vdc LED indication |
| <b>Black Power Feed Modules</b> |                                                 |
| 37.702.7753.0                   | Black Power Feed Terminal                       |
| <b>Backplane</b>                |                                                 |
| 69.700.0953.0                   | Base Block (8 IO Slots + 1 Power)               |
| 69.700.1853.0                   | Base Block (17 IO Slots + 1 Power)              |

## Wieland Pluggable Terminals

### SPRING CLAMP TERMINALS - PLUG AND PLAY

#278



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#### Details

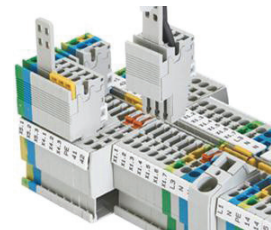
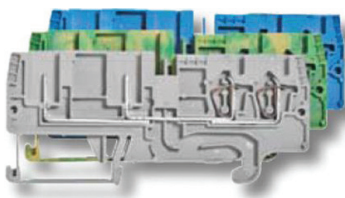
Pluggable terminal range. A special range of terminals with connectors on one side, and spring terminals on the other.

#### Advantages

» Fast error free terminations  
» Saves installation time on site

#### Terminal Size

» 2.5mm Spring Type



| 2 Terminals / 2 Connectors |                |                     | Connector Parts |               |               |               |
|----------------------------|----------------|---------------------|-----------------|---------------|---------------|---------------|
| Type                       | WKFN 2,5 2P/2F | WKFN 2,5 E/./././.. | Left            | Mid           | Right         | Cable Fixing  |
| <b>Single Level</b>        |                |                     |                 |               |               |               |
| Grey Terminal              | 56.703.2155.0  | 56.703.3455.0       | Z1.110.8955.0   | Z1.110.8855.0 | Z1.110.9055.0 | 05.567.9155.0 |
| Grey End Plate             | 07.313.0055.0  | 07.312.7155.0       |                 |               |               |               |
| <b>Double Deck</b>         |                |                     |                 |               |               |               |
| Earth Terminal             | 56.703.2255.0  | 56.703.3655.0       | Z1.110.8955.7   | Z1.110.8855.7 | Z1.110.9055.7 | 05.567.9155.0 |
| Earth End Plate            | 07.313.0055.0  | 07.312.7155.0       |                 |               |               |               |



## Features

- » Compatible with both screw and spring clamp terminals
- » Low MOQ's - Comes as strips of 10 characters
- » 2.5mm size will also fit on 4mm terminals



| Item No                                   | Type                   |
|-------------------------------------------|------------------------|
| <b>Number Sequences (2.5mm Terminals)</b> |                        |
| 04.242.5053.0                             | Blank                  |
| 04.845.0153.0                             | 1 to 10                |
| 04.845.0253.0                             | 11 to 20               |
| 04.845.0353.0                             | 21 to 30               |
| 04.845.0453.0                             | 31 to 40               |
| 04.845.0553.0                             | 41 to 50               |
| 04.845.0653.0                             | 51 to 60               |
| 04.845.0753.0                             | 61 to 70               |
| 04.845.0853.0                             | 71 to 80               |
| 04.845.0953.0                             | 81 to 90               |
| 04.845.1053.0                             | 91 to 100              |
| 04.855.0853.0                             | L1, L2, L3, N, PE (x2) |
| <b>Numbers Sequences (4mm Terminals)</b>  |                        |
| 04.242.6053.0                             | Blank                  |
| 04.846.0153.0                             | 1 to 10                |
| 04.846.0253.0                             | 11 to 20               |
| 04.846.0353.0                             | 21 to 30               |
| 04.846.0453.0                             | 31 to 40               |
| 04.846.0553.0                             | 41 to 50               |
| 04.846.0653.0                             | 51 to 60               |
| 04.846.0753.0                             | 61 to 70               |
| 04.846.0853.0                             | 71 to 80               |
| 04.846.0953.0                             | 81 to 90               |
| 04.846.1053.0                             | 91 to 100              |
| 04.856.0853.0                             | L1, L2, L3, N, PE (x2) |

| Item No        | Type    |
|----------------|---------|
| <b>Numbers</b> |         |
| 04.841.1150.0  | 1 (x10) |
| 04.841.1250.0  | 2 (x10) |
| 04.841.1350.0  | 3 (x10) |
| 04.841.1450.0  | 4 (x10) |
| 04.841.1550.0  | 5 (x10) |
| 04.841.1650.0  | 6 (x10) |
| 04.841.1750.0  | 7 (x10) |
| 04.841.1850.0  | 8 (x10) |
| 04.841.1950.0  | 9 (x10) |
| 04.841.2050.0  | 0 (x10) |
| 04.841.7450.0  | + (X10) |
| 04.841.7550.0  | - (X10) |
| <b>Letters</b> |         |
| 04.841.2250.0  | A (x10) |
| 04.841.2350.0  | B (x10) |
| 04.841.2450.0  | C (x10) |
| 04.841.2550.0  | D (x10) |
| 04.841.2650.0  | E (x10) |
| 04.841.2750.0  | F (x10) |
| 04.841.2850.0  | G (x10) |
| 04.841.2950.0  | H (x10) |
| 04.841.3050.0  | I (x10) |
| 04.841.3150.0  | J (x10) |
| 04.841.3250.0  | K (x10) |

| Item No       | Type    |
|---------------|---------|
| 04.841.3350.0 | L (x10) |
| 04.841.3450.0 | M (x10) |
| 04.841.3550.0 | N (x10) |
| 04.841.3650.0 | O (x10) |
| 04.841.3750.0 | P (x10) |
| 04.841.3850.0 | Q (x10) |
| 04.841.3950.0 | R (x10) |
| 04.841.4050.0 | S (x10) |
| 04.841.4150.0 | T (x10) |
| 04.841.4250.0 | U (x10) |
| 04.841.4350.0 | V (x10) |
| 04.841.4450.0 | W (x10) |
| 04.841.4550.0 | X (x10) |
| 04.841.4650.0 | Y (x10) |
| 04.841.4750.0 | Z (x10) |

## Wieland Terminal Accessories

DIN RAIL, END STOPS AND OPERATING TOOLS



End Clamps



Screwdriver

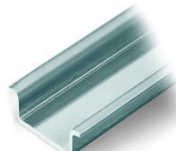
| Item No            | Type                                  |
|--------------------|---------------------------------------|
| <b>End Clamps</b>  |                                       |
| Z5.523.9353.0      | End Clamp (snap-on )                  |
| Z5.522.8553.0      | End Clamp (screw-on with metal foot)  |
| 69.920.1053.0      | End Clamp (snap-on with label marker) |
| <b>Screwdriver</b> |                                       |
| 06.502.4000.0      | Screwdriver for 2.5mm, 4mm and 6mm    |

## Din Rail

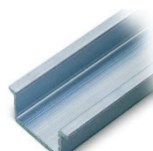
RAILS & SUPPORT BRACKET



98.300.1000.0



210-113



210-196



210-148

| Item No                | Type                                                                  |
|------------------------|-----------------------------------------------------------------------|
| <b>Din Rail</b>        |                                                                       |
| 98.300.1001.0          | Steel Din Rail 35x7.5mm, 1m length, slotted                           |
| 98.300.1000.0          | Steel Din Rail 35x7.5mm, 2m length, slotted                           |
| 210-113                | Steel Din Rail 35x7.5mm, 2m length, solid                             |
| 210-196                | Aluminum Din Rail 35x8.2mm, 2m length, silver coated for conductivity |
| <b>Support Bracket</b> |                                                                       |
| 210-148                | Angled support bracket M5, without screw                              |
| 210-149                | Screw M5x8, for angled support bracket                                |

# WAGO Fuse Holder Terminals

FOR ISOLATION AND PROTECTION OF CIRCUITS

#2147

EXPRESS

SEARCH ON EXPRESS.ECSNZ.COM

### Description

Fuse terminal block for standard glass fuses. Takes standard 5x20mm glass fuses.



### Conductor Sizes

- » Conductor Range: 0.25mm² to 4mm²
- » Push-in termination: 0.75mm² to 4mm²

### Features

- » Fully enclosed. 12 to 30V & 230V Blown indication options available.
- » Dual level incorporates an additional through terminal providing 50% space saving.

### Current Rating

- » Dependant on fuse

| Item No                               | Type                      | Clamp      |
|---------------------------------------|---------------------------|------------|
| <b>Single Level Fuse Terminal</b>     |                           |            |
| 2002-1611                             | No LED Indication         | Cage Clamp |
| 2002-1611/1000-541                    | 12 to 30 V LED Indication | Cage Clamp |
| 2002-1611/1000-836                    | 230V LED Indication       | Cage Clamp |
| <b>Dual Level Fuse Terminal</b>       |                           |            |
| 2002-2611                             | No LED Indication         | Cage Clamp |
| 2002-2611/1000-541                    | 12 to 30 V LED Indication | Cage Clamp |
| 2002-2611/1000-836                    | 230V LED Indication       | Cage Clamp |
| <b>End Plates</b>                     |                           |            |
| 2002-1091                             | Grey End Plate            |            |
| 2002-1092                             | Orange End Plate          |            |
| <b>Jumper Bars For Fuse Terminals</b> |                           |            |
| 2004-402                              | 2-Way                     |            |
| 2004-403                              | 3-Way                     |            |
| 2004-404                              | 4-Way                     |            |
| 2004-405                              | 5-Way                     |            |
| 2004-406                              | 6-Way                     |            |
| 2004-407                              | 7-Way                     |            |
| 2004-408                              | 8-Way                     |            |
| 2004-409                              | 9-Way                     |            |
| 2004-410                              | 10-Way                    |            |

# WAGO Knife Disconnects

FOR ISOLATION AND PROTECTION OF CIRCUITS

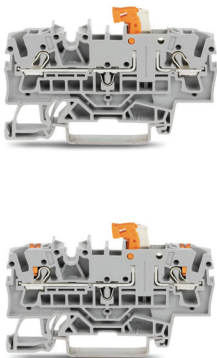
#2148

EXPRESS

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### Description

These disconnect terminals are used to isolate circuits for testing purposes.



### Conductor Sizes

- » Conductor Range: 0.25mm² to 4mm²
- » Push-in termination: 0.75mm² to 4mm²

### Features

Available in both Cage Clamp and Push button terminal options

### Current Rating

16A

| Item No                                           | Type                | Clamp              |
|---------------------------------------------------|---------------------|--------------------|
| <b>Terminal</b>                                   |                     |                    |
| 2002-1671                                         | Disconnect Terminal | Push-In Cage Clamp |
| 2202-1671                                         | Disconnect Terminal | Push-Button        |
| <b>End Plates</b>                                 |                     |                    |
| 2002-1691                                         | Grey End Plate      |                    |
| 2002-1692                                         | Orange End Plate    |                    |
| <b>Jumper Bars For Knife Disconnect Terminals</b> |                     |                    |
| 2002-402                                          | 2-Way               |                    |
| 2002-403                                          | 3-Way               |                    |
| 2002-404                                          | 4-Way               |                    |
| 2002-405                                          | 5-Way               |                    |
| 2002-406                                          | 6-Way               |                    |
| 2002-407                                          | 7-Way               |                    |
| 2002-408                                          | 8-Way               |                    |
| 2002-409                                          | 9-Way               |                    |
| 2002-410                                          | 10-Way              |                    |

# WAGO Terminals

CAGE CLAMP, PUSH BUTTON & LEVER TO PUSH BUTTON

#2114



SEARCH ON EXPRESS.ECSNZ.COM



|                               | 2 pole<br>Cage Clamp | 2 pole<br>Push Button | 2 pole<br>Lever to<br>Push Button | 3 pole<br>Cage Clamp | 3 pole<br>Push Button | 3 pole<br>Lever to<br>Push Button | 4 pole<br>Cage Clamp | 4 pole<br>Push Button | 2 pole<br>Double/Deck<br>Cage Clamp | 2 pole<br>Double/Deck<br>Push Button | 4 pole<br>Double/Deck<br>Cage Clamp | 2 pole<br>Triple/Deck<br>Cage Clamp |
|-------------------------------|----------------------|-----------------------|-----------------------------------|----------------------|-----------------------|-----------------------------------|----------------------|-----------------------|-------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|
| <b>2.5mm Terminals</b>        |                      |                       |                                   |                      |                       |                                   |                      |                       |                                     |                                      |                                     |                                     |
| Grey                          | 2002-1201            | 2202-1201             | 2102-5201                         | 2002-1301            | 2202-1301             | 2102-5301                         | 2002-1401            | 2202-1401             | 2002-2201                           | 2202-2701                            | 2002-2401                           | 2002-3201                           |
| Orange                        | 2002-1202            |                       |                                   | 2002-1302            |                       |                                   | 2002-1402            |                       |                                     |                                      |                                     |                                     |
| Blue                          | 2002-1204            | 2202-1204             | 2102-5204                         | 2002-1304            | 2202-1304             | 2102-5304                         | 2002-1404            | 2202-1404             | 2002-2204                           | 2202-2704                            | 2002-2404                           | 2002-3204                           |
| Earth                         | 2002-1207            | 2202-1207             | 2102-5207                         | 2002-1307            | 2202-1307             | 2102-5307                         | 2002-1407            | 2202-1407             | 2002-2207                           | 2202-2707                            | 2002-2407                           | 2002-3207                           |
| <b>2.5mm End Plates</b>       |                      |                       |                                   |                      |                       |                                   |                      |                       |                                     |                                      |                                     |                                     |
| Grey                          | 2002-1291            | 2002-1291             | 2102-1291                         | 2002-1391            | 2002-1391             | 2102-1391                         | 2002-1491            | 2002-1491             | 2002-2291                           | 2002-2791                            | 2002-2491                           | 2002-3291                           |
| Orange                        | 2002-1292            | 2002-1292             | 2102-1292                         | 2002-1392            | 2002-1392             | 2102-1392                         | 2002-1492            | 2002-1492             | 2002-2292                           | 2002-2792                            | 2002-2492                           | 2002-3292                           |
| <b>2.5mm Separator Plates</b> |                      |                       |                                   |                      |                       |                                   |                      |                       |                                     |                                      |                                     |                                     |
| Grey                          | 2002-1293            | 2002-1293             | 2002-1293                         | 2002-1393            | 2002-1393             | 2002-1393                         | 2002-1493            | 2002-1493             |                                     |                                      |                                     |                                     |
| Orange                        | 2002-1294            | 2002-1294             | 2002-1294                         | 2002-1394            | 2002-1394             | 2002-1394                         | 2002-1494            | 2002-1494             |                                     |                                      |                                     |                                     |
| <b>Vertical Jumper</b>        |                      |                       |                                   |                      |                       |                                   |                      |                       |                                     |                                      |                                     |                                     |
|                               |                      |                       |                                   |                      |                       |                                   |                      |                       | 2002-492                            | 2002-492                             | 2002-492                            | 2002-493                            |
| <b>4mm Terminals</b>          |                      |                       |                                   |                      |                       |                                   |                      |                       |                                     |                                      |                                     |                                     |
| Grey                          | 2004-1201            | 2204-1201             |                                   | 2004-1301            | 2204-1301             |                                   | 2004-1401            | 2204-1401             |                                     |                                      |                                     |                                     |
| Orange                        | 2004-1202            |                       |                                   | 2004-1302            |                       |                                   | 2004-1402            |                       |                                     |                                      |                                     |                                     |
| Blue                          | 2004-1204            | 2204-1204             |                                   | 2004-1304            | 2204-1304             |                                   | 2004-1404            | 2204-1404             |                                     |                                      |                                     |                                     |
| Earth                         | 2004-1207            | 2204-1207             |                                   | 2004-1307            | 2204-1307             |                                   | 2004-1407            | 2204-1407             |                                     |                                      |                                     |                                     |
| <b>4mm End Plates</b>         |                      |                       |                                   |                      |                       |                                   |                      |                       |                                     |                                      |                                     |                                     |
| Grey                          | 2004-1291            | 2004-1291             |                                   | 2004-1391            | 2004-1391             |                                   | 2004-1491            | 2004-1491             |                                     |                                      |                                     |                                     |
| Orange                        | 2004-1292            | 2004-1292             |                                   | 2004-1392            | 2004-1392             |                                   | 2004-1492            | 2004-1492             |                                     |                                      |                                     |                                     |
| <b>4mm Separator Plates</b>   |                      |                       |                                   |                      |                       |                                   |                      |                       |                                     |                                      |                                     |                                     |
| Grey                          | 2004-1293            | 2004-1293             |                                   | 2004-1393            | 2004-1393             |                                   | 2004-1493            | 2004-1493             |                                     |                                      |                                     |                                     |
| Orange                        | 2004-1294            | 2004-1294             |                                   | 2004-1394            | 2004-1394             |                                   | 2004-1494            | 2004-1494             |                                     |                                      |                                     |                                     |
| <b>6mm Terminals</b>          |                      |                       |                                   |                      |                       |                                   |                      |                       |                                     |                                      |                                     |                                     |
| Grey                          | 2006-1201            | 2206-1201             | 2106-5201                         | 2006-1301            | 2206-1301             | 2106-5301                         |                      |                       |                                     |                                      |                                     |                                     |
| Orange                        | 2006-1202            |                       |                                   | 2006-1302            |                       |                                   |                      |                       |                                     |                                      |                                     |                                     |
| Blue                          | 2006-1204            | 2206-1204             | 2106-5204                         | 2006-1304            | 2206-1304             | 2106-5304                         |                      |                       |                                     |                                      |                                     |                                     |
| Earth                         | 2006-1207            | 2206-1207             | 2106-5207                         | 2006-1307            | 2206-1307             | 2106-5307                         |                      |                       |                                     |                                      |                                     |                                     |
| <b>6mm End Plates</b>         |                      |                       |                                   |                      |                       |                                   |                      |                       |                                     |                                      |                                     |                                     |
| Grey                          | 2006-1291            | 2006-1291             | 2106-1291                         | 2006-1391            | 2006-1391             | 2106-1391                         |                      |                       |                                     |                                      |                                     |                                     |
| Orange                        | 2006-1292            | 2006-1292             | 2106-1292                         | 2006-1392            | 2006-1392             | 2106-1392                         |                      |                       |                                     |                                      |                                     |                                     |
| <b>6mm Separator Plates</b>   |                      |                       |                                   |                      |                       |                                   |                      |                       |                                     |                                      |                                     |                                     |
| Grey                          | 2006-1293            | 2006-1293             | 2006-1293                         | 2006-1393            | 2006-1393             | 2006-1393                         |                      |                       |                                     |                                      |                                     |                                     |
| Orange                        | 2006-1294            | 2006-1294             | 2006-1294                         | 2006-1394            | 2006-1394             | 2006-1394                         |                      |                       |                                     |                                      |                                     |                                     |
| <b>10mm Terminals</b>         |                      |                       |                                   |                      |                       |                                   |                      |                       |                                     |                                      |                                     |                                     |
| Grey                          | 2010-1201            | 2210-1201             |                                   | 2010-1301            | 2210-1301             |                                   |                      |                       |                                     |                                      |                                     |                                     |
| Orange                        | 2010-1202            |                       |                                   | 2010-1302            |                       |                                   |                      |                       |                                     |                                      |                                     |                                     |
| Blue                          | 2010-1204            | 2210-1204             |                                   | 2010-1304            | 2210-1304             |                                   |                      |                       |                                     |                                      |                                     |                                     |
| Earth                         | 2010-1207            | 2210-1207             |                                   | 2010-1307            | 2210-1307             |                                   |                      |                       |                                     |                                      |                                     |                                     |
| <b>10mm End Plates</b>        |                      |                       |                                   |                      |                       |                                   |                      |                       |                                     |                                      |                                     |                                     |
| Grey                          | 2010-1291            | 2010-1291             |                                   | 2010-1391            | 2010-1391             |                                   |                      |                       |                                     |                                      |                                     |                                     |
| Orange                        | 2010-1292            | 2010-1292             |                                   | 2010-1392            | 2010-1392             |                                   |                      |                       |                                     |                                      |                                     |                                     |
| <b>16mm Terminals</b>         |                      |                       |                                   |                      |                       |                                   |                      |                       |                                     |                                      |                                     |                                     |
| Grey                          | 2016-1201            | 2216-1201             | 2116-5201                         | 2016-1301            | 2116-5301             | 2116-5301                         |                      |                       |                                     |                                      |                                     |                                     |
| Orange                        | 2016-1202            |                       |                                   | 2016-1302            |                       |                                   |                      |                       |                                     |                                      |                                     |                                     |
| Blue                          | 2016-1204            | 2216-1204             | 2116-5204                         | 2016-1304            | 2216-1304             | 2116-5304                         |                      |                       |                                     |                                      |                                     |                                     |
| Earth                         | 2016-1207            | 2216-1207             | 2116-5207                         | 2016-1307            | 2216-1307             | 2116-5307                         |                      |                       |                                     |                                      |                                     |                                     |
| <b>16mm End Plates</b>        |                      |                       |                                   |                      |                       |                                   |                      |                       |                                     |                                      |                                     |                                     |
| Grey                          | 2016-1291            | 2016-1291             | 2116-1291                         | 2016-1391            | 2016-1391             | 2116-1391                         |                      |                       |                                     |                                      |                                     |                                     |
| Orange                        | 2016-1292            | 2016-1292             | 2116-1292                         | 2016-1392            | 2016-1392             | 2116-1392                         |                      |                       |                                     |                                      |                                     |                                     |

## WAGO Standard Jumpers

FOR TOPJOB-S SERIES

#2122



|                              | 2.5mm    | 4mm      | 6mm      | 10mm     | 16mm     |
|------------------------------|----------|----------|----------|----------|----------|
| <b>2 Way Adjacent Jumper</b> |          |          |          |          |          |
|                              | 2002-400 |          |          |          |          |
| <b>2 Way</b>                 | 2002-402 | 2004-402 | 2006-402 | 2010-402 | 2016-402 |
| <b>3 Way</b>                 | 2002-403 | 2004-403 | 2006-403 | 2010-403 | 2016-403 |
| <b>4 Way</b>                 | 2002-404 | 2004-404 | 2006-404 | 2010-404 | 2016-404 |
| <b>5 Way</b>                 | 2002-405 | 2004-405 | 2006-405 | 2010-405 | 2016-405 |
| <b>6 Way</b>                 | 2002-406 | 2004-406 |          |          |          |
| <b>7 Way</b>                 | 2002-407 | 2004-407 |          |          |          |
| <b>8 Way</b>                 | 2002-408 | 2004-408 |          |          |          |
| <b>9 Way</b>                 | 2002-409 | 2004-409 |          |          |          |
| <b>10 Way</b>                | 2002-410 | 2004-410 |          |          |          |

## WAGO Step Down Jumpers

FOR TOPJOB-S SERIES

#2123



### Description

Step-down jumpers may common terminal blocks of different sizes, without loss

### Features

A large conductor can be easily connected to smaller conductors at the distribution point. Additional through terminal blocks having a smaller cross-section may be commoned using push-in type jumper bars.

| Item No  | Type                                                           | Current Rating |
|----------|----------------------------------------------------------------|----------------|
| 2006-499 | Commons 6/4mm <sup>2</sup> Down to 4/2.5/1.5mm <sup>2</sup>    | 32A            |
| 2016-499 | Commons 16/10mm <sup>2</sup> Down to 10/6/4/2.5mm <sup>2</sup> | 57A            |
| 285-430  | Step down from 35mm terminal to 16mm/10mm                      | 90A            |



## WAGO Terminals

### POWER CAGE CLAMP

0800 849 2211

Freephone ECS Sales



#### Features

- » Quick and easy cable termination that offers a secure cable connection.
- » Vibration Proof, maintenance-free spring pressure connection technology

#### Termination

- » Open clamp by turning an Allen wrench counter-clockwise
- » Press the integrated latch open clamping unit for hands-free wiring
- » Insert the conductor
- » A small counter-clockwise rotation closes the clamp, securing conductor

#### Current Ratings 1000V/ 8kV/3

- » 35mm - 125A
- » 50mm - 150A
- » 95mm - 232A
- » 185mm - 353A



|                 | 35mm    | 50mm    | 50mm With Mounting Feet | 95mm    | 95mm With Mounting Feet | 185mm    | 185mm With Mounting Feet |
|-----------------|---------|---------|-------------------------|---------|-------------------------|----------|--------------------------|
| Grey terminal   | 285-135 | 285-150 | 285-141                 | 285-195 | 285-181                 | 285-1185 | 285-1161                 |
| Blue terminal   | 285-134 | 285-154 | 285-144                 | 285-194 | 285-184                 | 285-1184 | 285-1164                 |
| Earth terminal  | 285-137 | 285-157 |                         | 285-197 |                         | 285-1187 |                          |
| Warning Cover   | 285-420 | 285-440 | 285-440                 | 285-170 | 285-170                 | 285-1177 | 285-1177                 |
| Finger Guard    | 285-421 | 285-441 | 285-441                 | 285-169 | 285-169                 | 285-1178 | 285-1178                 |
| Adjacent Jumper | 285-435 | 285-450 | 285-450                 | 285-495 | 285-495                 | 285-1171 | 285-1171                 |

## WAGO Power Tap

### FOR POWER CAGE CLAMP TERMINALS

0800 849 2211

Freephone ECS Sales



#### Description

Can be fitted to Power Cage Clamp Terminals for additional potential connections.



| Item No           | 285-427 | 285-447 | 285-407  | 285-1175 |
|-------------------|---------|---------|----------|----------|
| Connection Points | 35mm    | 50mm    | 95mm     | 185mm    |
| Conductor Sizes   | 1 x 6mm | 2 x 6mm | 2 x 10mm | 2 x 10mm |



## WAGO Distribution Terminal Block

### CAGE AND SCREW CLAMP CONNECTIONS

0800 849 2211

Freephone ECS Sales



#### Conductor Sizes

- » 1 x 6mm<sup>2</sup> to 35mm<sup>2</sup> - Screw Type
- » 3 x 0.2mm<sup>2</sup> to 10mm<sup>2</sup> - Cage-Clamp

#### Current Rating

- » 125A

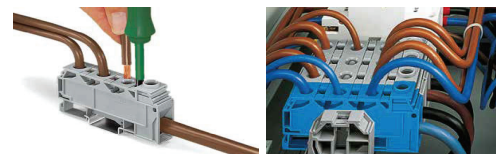
#### Terminal Width

- » 17.5mm

#### Voltage Rating

- » 800V

| Item No | Type            |
|---------|-----------------|
| 284-621 | Grey            |
| 284-624 | Blue            |
| 284-412 | Adjacent Jumper |



## WAGO Disconnect Terminals

### SUITABLE FOR CURRENT TRANSFORMER APPLICATIONS

0800 849 2211

Freephone ECS Sales



#### Description

Disconnect/Test Terminal Blocks are designed for current transformer circuits. These blocks are ideal for safe and automatic short-circuiting, as well as easy measurement applications.

#### Features

- » Top-of-unit circuit jumper slot for shorting path activation
- » Open, shock-protected design indicates exact switching status



2007-8876



2007-8873



2007-8821



2007-8811

| Item No     | Type                                   | Item No           | Type                                                                                                                                 |
|-------------|----------------------------------------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| <b>Sets</b> |                                        | <b>Individual</b> |                                                                                                                                      |
| 2007-8876   | Current Transformer Assembly           | 282-882           | Locking cover; mechanically locks multiple links, 2-pole                                                                             |
| 2007-8873   | Current & Voltage Transformer Assembly | 282-884           | Locking cover; mechanically locks multiple links, 4-pole                                                                             |
|             |                                        | 2007-8442         | Circuit jumper; insulated; 2-way                                                                                                     |
|             |                                        | 2007-8807         | 2-conductor ground terminal block; with touch-proof test socket; for 4 mm Ø test plugs                                               |
|             |                                        | 2007-8811         | 2-conductor disconnect/test terminal block; with touch-proof test sockets; for 4 mm Ø test plugs                                     |
|             |                                        | 2007-8821         | 2-conductor disconnect/test terminal block; with receptacle for adjacent jumper with touch-proof test sockets; for 4 mm Ø test plugs |
|             |                                        | 2007-8892         | End and separator plate; 1.5 mm thick; without lock-out seal option                                                                  |
|             |                                        |                   | Jumper; insulated; 1-3-5                                                                                                             |

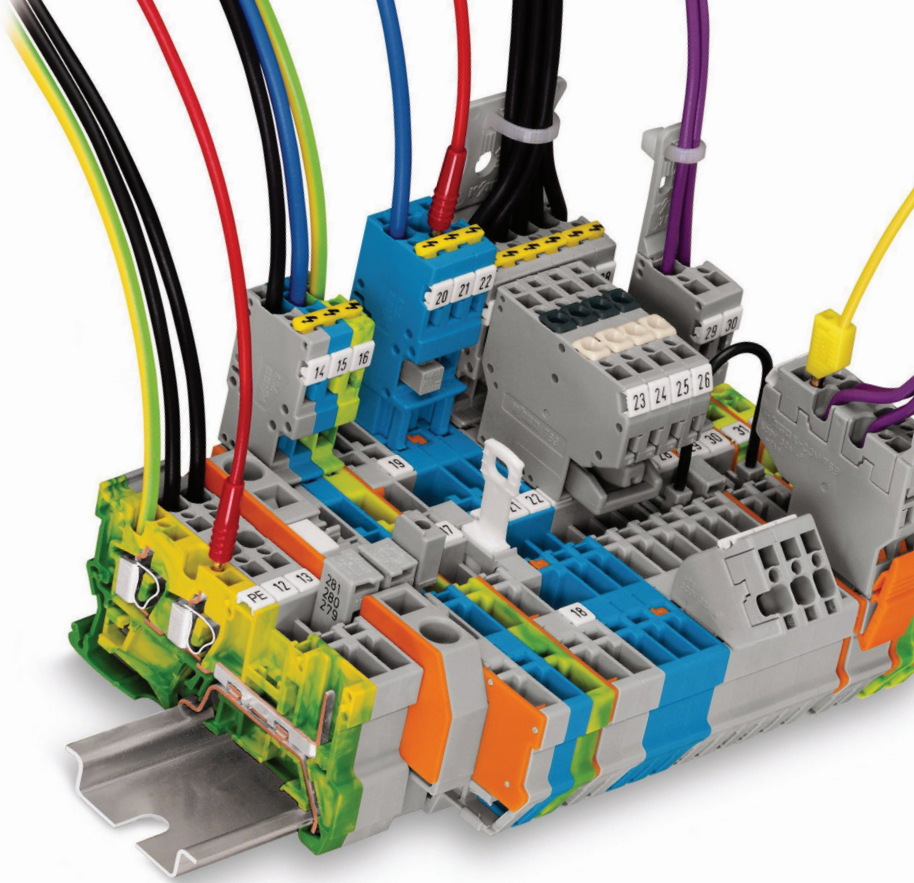




# Populated Rails

SAVE TIME AND LABOUR –  
REDUCE SHELVES STOCK,  
AND SAVE ON YOUR LABEL  
CONSUMABLES

ECS can provide your WAGO terminals  
populated on a din rail, labelled and ready  
to install in your cabinet or control box.



## WAGO Terminal Accessories

END STOPS & GROUP MARKERS

#2143



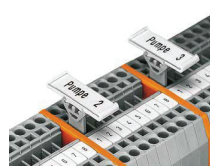
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249-116



2009-110



209-112 & 209-141



249-119

| Item No              | Type                                                                       | Label Product        |
|----------------------|----------------------------------------------------------------------------|----------------------|
| <b>End Stop</b>      |                                                                            |                      |
| 249-116              | Screwless End Stop - 6mm Wide                                              |                      |
| 249-117              | Screwless End Stop - 10mm Wide                                             |                      |
| 249-197              | Screwless End Stop - 14mm Wide                                             |                      |
| <b>Group Markers</b> |                                                                            |                      |
| 2009-110             | Height-adjustable group marker carrier suits end stops 249-116 & 249-117   | 2009-110 or 2009-115 |
| 209-112              | Group marker carrier; white                                                | 209-113              |
| 209-141              | Group Carrier Marker - fits into jumper slot of rail-mount terminal blocks |                      |
| 249-119              | Height-adjustable group marker carrier suits end stops 249-116 & 249-117   | 209-113              |

## WAGO Operating Tools

HAND TOOLS FOR TERMINALS

#2143



SEARCH ON EXPRESS.ECSNZ.COM



285-172



210-720



210-658



210-722

| Item No                  | Type                                                    |
|--------------------------|---------------------------------------------------------|
| <b>Universal Tools</b>   |                                                         |
| 210-720                  | Straight - 3.5 x 0.5mm with a partially insulated shaft |
| 210-658                  | Angled - 3.5 x 0.5mm with a partially insulated shaft   |
| 210-722                  | Screwdriver set with 2.5mm, 3.5mm and 5.5mm heads       |
| <b>High Current Tool</b> |                                                         |
| 285-172                  | Hex wrench for high current terminals                   |



## WAGO SmartPrinter

### THERMAL TRANSFER PRINTER & ACCESSORIES

#2239

Freephone ECS Sales



#### Description

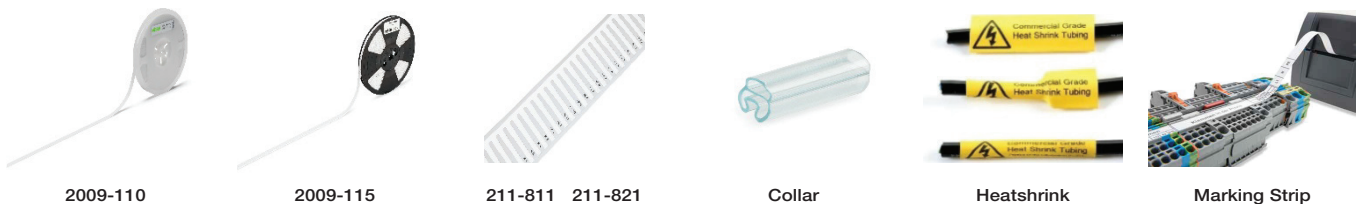
A universal and Fast Thermal Transfer Printer

#### Benefits

- » Easy to use - Generate all marking data directly via smartSCRIPT FREE marking software
- » Long-Lasting, Wipe and Scratch Proof Marking
- » One printer for both Terminal Group and Wire Markers



| Item No                    | Type                                                                                                                  |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------|
| <b>Printer</b>             |                                                                                                                       |
| 258-5000                   | Thermal transfer printer; Smart Printer; for complete control cabinet marking; 300 dpi                                |
| <b>Printer Accessories</b> |                                                                                                                       |
| 258-5030                   | Cutter; for Smart Printer; for marking strips, equipment markers, conductor and cable markers; Durable; High accuracy |
| 258-5005                   | Thermal transfer ink ribbon; for Smart Printer; black                                                                 |



| Part Number                                          | Diameter | Type                            | Conductor Cross Section Range              | Colour | Reel Size   |
|------------------------------------------------------|----------|---------------------------------|--------------------------------------------|--------|-------------|
| <b>Printable Products - Snap-on Terminal Markers</b> |          |                                 |                                            |        |             |
| 2009-110                                             |          | Non-stretchable Marking Strips  |                                            | White  | 50m         |
| 2009-115                                             |          | WMB-Inline Stretchable 5-5.2 mm |                                            | White  | 1500 labels |
| <b>Printable Product - Collar Wire Markers</b>       |          |                                 |                                            |        |             |
| 211-811                                              |          | 12x4mm                          |                                            | White  | 2500 labels |
| 211-821                                              |          | 23x4mm                          |                                            | White  | 2500 labels |
| <b>Printable Product - Heatshrink</b>                |          |                                 |                                            |        |             |
| 211-500                                              | 2.4 mm   |                                 | 0.25mm <sup>2</sup> to 0.75mm <sup>2</sup> | White  | 20m         |
| 211-500/000-002                                      | 2.4 mm   |                                 | 0.25mm <sup>2</sup> to 0.75mm <sup>2</sup> | Yellow | 20m         |
| 211-501                                              | 3.2 mm   |                                 | 0.75mm <sup>2</sup> to 1mm <sup>2</sup>    | White  | 20m         |
| 211-501/000-002                                      | 3.2 mm   |                                 | 0.75mm <sup>2</sup> to 1mm <sup>2</sup>    | Yellow | 20m         |
| 211-502                                              | 4.8 mm   |                                 | 1.00mm <sup>2</sup> to 2.5mm <sup>2</sup>  | White  | 20m         |
| 211-502/000-002                                      | 4.8 mm   |                                 | 1.00mm <sup>2</sup> to 2.5mm <sup>2</sup>  | Yellow | 20m         |
| 211-503                                              | 6.4 mm   |                                 | 4mm <sup>2</sup> to 6mm <sup>2</sup>       | White  | 20m         |
| 211-503/000-002                                      | 6.4 mm   |                                 | 4mm <sup>2</sup> to 6mm <sup>2</sup>       | Yellow | 20m         |
| 211-504                                              | 9.5 mm   |                                 | 10mm <sup>2</sup> to 16mm <sup>2</sup>     | White  | 15m         |
| 211-504/000-002                                      | 9.5 mm   |                                 | 10mm <sup>2</sup> to 16mm <sup>2</sup>     | Yellow | 15m         |
| 211-505                                              | 9.5 mm   |                                 | 25mm <sup>2</sup> to 35mm <sup>2</sup>     | White  | 15m         |
| 211-505/000-002                                      | 9.5 mm   |                                 | 25mm <sup>2</sup> to 35mm <sup>2</sup>     | Yellow | 15m         |
| 211-506                                              | 19 mm    |                                 | 35mm <sup>2</sup> to 50mm <sup>2</sup>     | White  | 15m         |
| 211-506/000-002                                      | 19 mm    |                                 | 35mm <sup>2</sup> to 50mm <sup>2</sup>     | Yellow | 15m         |

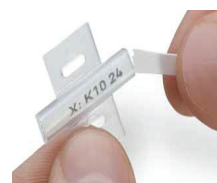


## WAGO Cable Collar Marking

MARKING SYSTEMS FOR CABLE COLLARS

#2247

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| Part Number                   | Suitable Conductor Diameters         | Pack Size |
|-------------------------------|--------------------------------------|-----------|
| <b>12mm Clear Collar</b>      |                                      |           |
| 211-812                       | 1.4mm to 5 mm                        | 500       |
| 211-813                       | 5mm to 11 mm                         | 500       |
| <b>23mm Clear Collar</b>      |                                      |           |
| 211-823                       | 1.4mm to 5 mm                        | 500       |
| 211-824                       | 5mm to 11 mm                         | 200       |
| 211-926                       | 10mm to 14 mm                        | 200       |
| 211-927                       | 14mm to 22 mm                        | 100       |
| <b>23mm - Cable Tie Mount</b> |                                      |           |
| 211-829                       | 23 mm long; mounting with cable ties | 200       |

## WAGO Pre-Printed Marking Systems

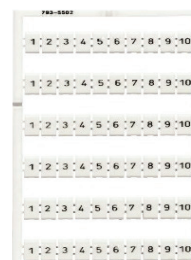
PRINTED TERMINAL MARKERS - WMB 5MM TO 5.2MM (STRETCHABLE)

#2143

SEARCH ON [EXPRESS.ECSNZ.COM](https://express.ecsnz.com)



| HORIZONTAL  |           |             | VERTICAL    |           |             |
|-------------|-----------|-------------|-------------|-----------|-------------|
| Part Number | Type      | Qty         | Part Number | Type      | Qty         |
| 793-5502    | 1 to 10   | 10 Sets     | 793-5602    | 1 to 10   | 10 Sets     |
| 793-5503    | 11 to 20  | 10 Sets     | 793-5603    | 11 to 20  | 10 Sets     |
| 793-5504    | 21 to 30  | 10 Sets     | 793-5604    | 21 to 30  | 10 Sets     |
| 793-5505    | 31 to 40  | 10 Sets     | 793-5605    | 31 to 40  | 10 Sets     |
| 793-5506    | 41 to 50  | 10 Sets     | 793-5606    | 41 to 50  | 10 Sets     |
| 793-5566    | 1 to 50   | 2 Sets      | 793-5666    | 1 to 50   | 2 Sets      |
| 793-5507    | 51 to 100 | 2 Sets      | 793-5607    | 51 to 100 | 2 Sets      |
| 793-5501    | Blank     | 100 Markers | 793-5501    | Blank     | 100 Markers |



CUSTOM MARKERS AVAILABLE ON REQUEST



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MARKING



# RENT ME

WAGO Smart Printer Thermal Transfer Printer



# \$15

per/day

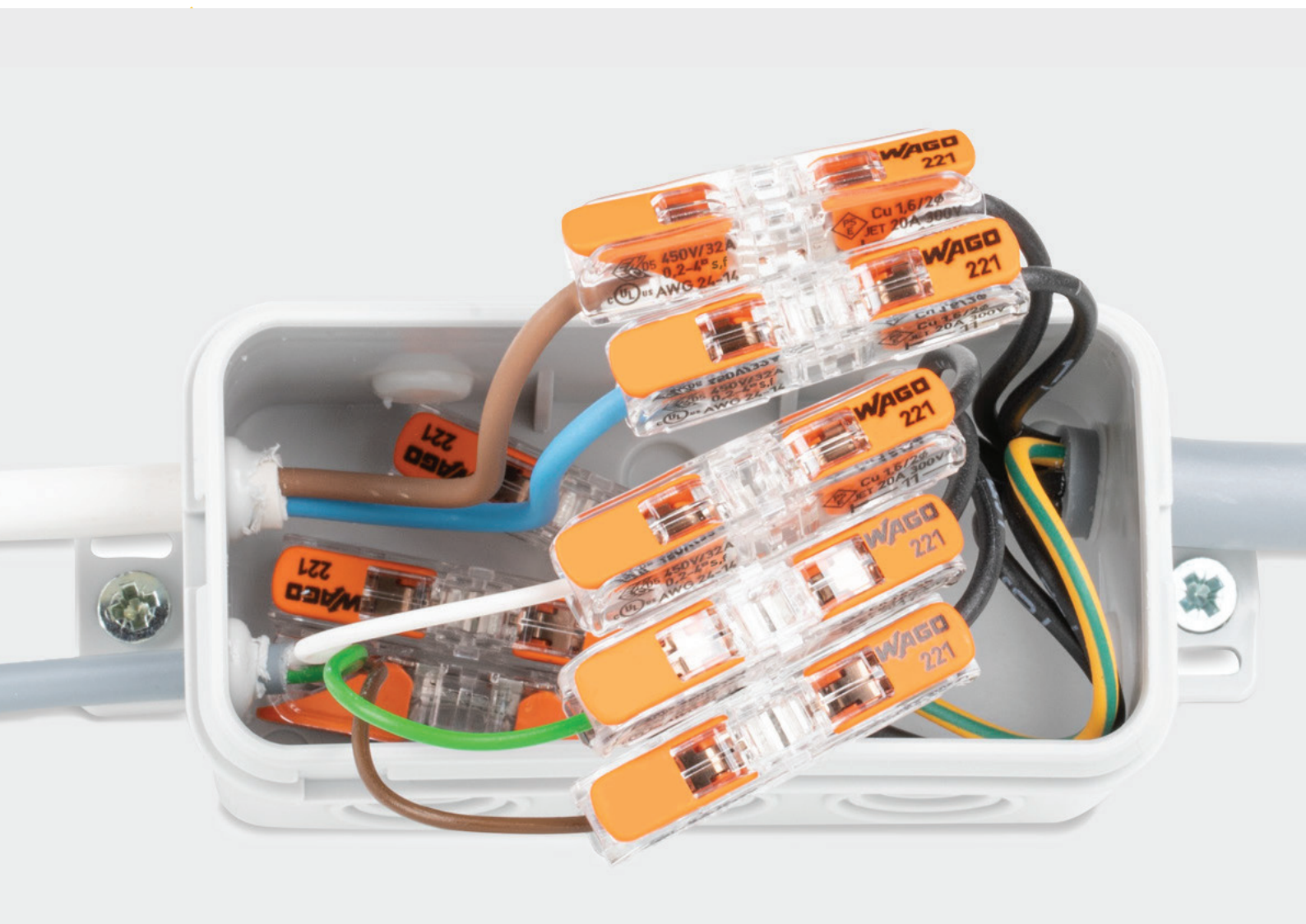
[projects.ecsnz.com/rental-categories/marketing-solutions](https://projects.ecsnz.com/rental-categories/marketing-solutions)



# 221 Series Inline Splicing Connector

## CONNECT ALL CONDUCTOR TYPES WITHOUT TOOLS

The new 221 Series Inline Splicing Connector with levers combines all the trusted advantages of the 221 Series Splicing Connectors into a slim design.



## WAGO 221 - Standard Quick Connectors

COMPACT WIRE SPLICING CONNECTORS

#2485

SEARCH ON EXPRESS.ECSNZ.COM



### Features

- » 4mm connectors are suitable for all conductor types - 0.14 - 4mm<sup>2</sup>
- » 6mm connectors are suitable for all conductor types - 0.5 - 6mm<sup>2</sup>
- » Quick and easy to open
- » Require less opening force
- » The recessed grips on the side also prevent slipping and make it easier to hold the connector while inserting the conductor
- » Fast, Easy, Safe, Reliable, Compact, Vibration-proof, Maintenance-free

### Benefits

- » Ease of use
- » Connection of all conductor types
- » Time savings for installers and device manufacturers
- » Quickly install devices with higher levels of power consumption
- » Safely install long cable runs with larger conductor cross sections
- » Mounting carrier for installation conforms to standards



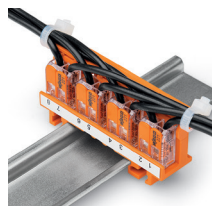
221-413



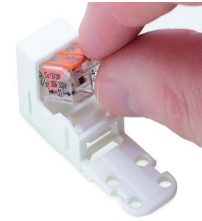
887-952



221-500



221-500 + 222-505



221-503



221-413/4401-050

| Part Number           | Type                                                      |                                                                                                               |
|-----------------------|-----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| <b>4mm Individual</b> |                                                           |                                                                                                               |
| 221-412               | 2 Pole Snap Connector for 4mm                             |                                                                                                               |
| 221-413               | 3 Pole Snap Connector for 4mm                             |                                                                                                               |
| 221-415               | 5 Pole Snap Connector for 4mm                             |                                                                                                               |
| <b>6mm Individual</b> |                                                           |                                                                                                               |
| 221-612               | 2 Pole Snap Connector for 6mm                             |                                                                                                               |
| 221-613               | 3 Pole Snap Connector for 6mm                             |                                                                                                               |
| 221-615               | 5 Pole Snap Connector for 6mm                             |                                                                                                               |
| <b>Jars</b>           |                                                           |                                                                                                               |
| 221-412/K000-0001     | Jar (100) 2-Way 4mm                                       |                                                                                                               |
| 221-413/K000-0001     | Jar (50) 3-Way 4mm                                        |                                                                                                               |
| 221-415/K000-0001     | Jar (25) 5-Way 4mm                                        |                                                                                                               |
| 221-612/K000-0002     | Jar (50) 2-Way 6mm                                        |                                                                                                               |
| 221-613/K000-0002     | Jar (30) 3-Way 6mm                                        |                                                                                                               |
| 221-615/K000-0002     | Jar (15) 5-Way 6mm                                        |                                                                                                               |
| <b>Accessories</b>    |                                                           |                                                                                                               |
| 221-500               | DIN Rail Mounted Connector Carrier for 4mm                |                                                                                                               |
| 221-510               | DIN Rail Mounted Connector Carrier for 6mm                |                                                                                                               |
| 222-505               | Strain Relief Plate for Mounting Carriers                 |                                                                                                               |
| 222-510               | Angled DIN-rail adapter for horizontal mounting           |                                                                                                               |
| 221-502               | Mounting carrier for 2-wire connectors for screw mounting |                                                                                                               |
| 221-503               | Mounting carrier for 3-wire connectors for screw mounting |                                                                                                               |
| 221-505               | Mounting carrier for 5-wire connectors for screw mounting |                                                                                                               |
| <b>Assorted Kits</b>  |                                                           | <b>Includes</b>                                                                                               |
| 887-952               | Assorted Box of 2, 3 and 5 way connectors 4mm             | 100 x (221-412): 100 x (221-413): 25 x (221-415): 4 x (221-500)                                               |
| 887-957               | Assorted Box of 2, 3 and 5 way connectors 4mm & 6mm       | 40 x (221-612): 30 x (221-613): 15 x (221-615): 75 x (221-415): 50 x (221-413): 25 x (221-415): 1 x (221-500) |

## WAGO 221 - Inline Quick Connectors

COMPACT WIRE SPLICING CONNECTORS

#2486

SEARCH ON EXPRESS.ECSNZ.COM



### Description

All the same great features and benefits of the standard range plus the added feature of a slim design minimising dimensions for installations in tight spaces.

### Notes

Other Carrier sizes available on request.



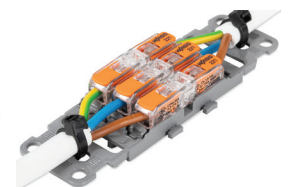
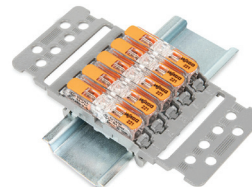
221-2411



221-2411/K000-0007



209-120



| Part Number        | Type                                                 |  |
|--------------------|------------------------------------------------------|--|
| <b>4mm</b>         |                                                      |  |
| 221-2411           | WAGO 221 Inline Connector - 4mm <sup>2</sup> - Clear |  |
| <b>Jars</b>        |                                                      |  |
| 221-2411/K000-0007 | Jar (60) WAGO 221 Inline Connector 4mm <sup>2</sup>  |  |
| <b>Accessories</b> |                                                      |  |
| 209-120            | Din Mounting Foot for Snap-in Devices                |  |
| WAGO-221-2533      | Din Snap-In Carrier Without Strain Relief 3-Way      |  |
| WAGO-221-2535      | Din Snap-In Carrier Without Strain Relief 5-Way      |  |
| WAGO-221-2513      | Din Snap-In Carrier With Strain Relief 3-Way         |  |
| WAGO-221-2515      | Din Snap-In Carrier With Strain Relief 5-Way         |  |
| WAGO-221-2523      | Screw Mount Carrier Without Strain Relief 3-Way      |  |
| WAGO-221-2525      | Screw Mount Carrier Without Strain Relief 5-Way      |  |
| WAGO-221-2503      | Screw Mount Carrier With Strain Relief 3-Way         |  |
| WAGO-221-2505      | Screw Mount Carrier With Strain Relief 5-Way         |  |



ECS

SPlicing CONNECTORS



# Wieland NRG Flat Cable System

LIGHTING POWER DISTRIBUTION CABLE

#1405

SEARCH ON EXPRESS.ECSNZ.COM

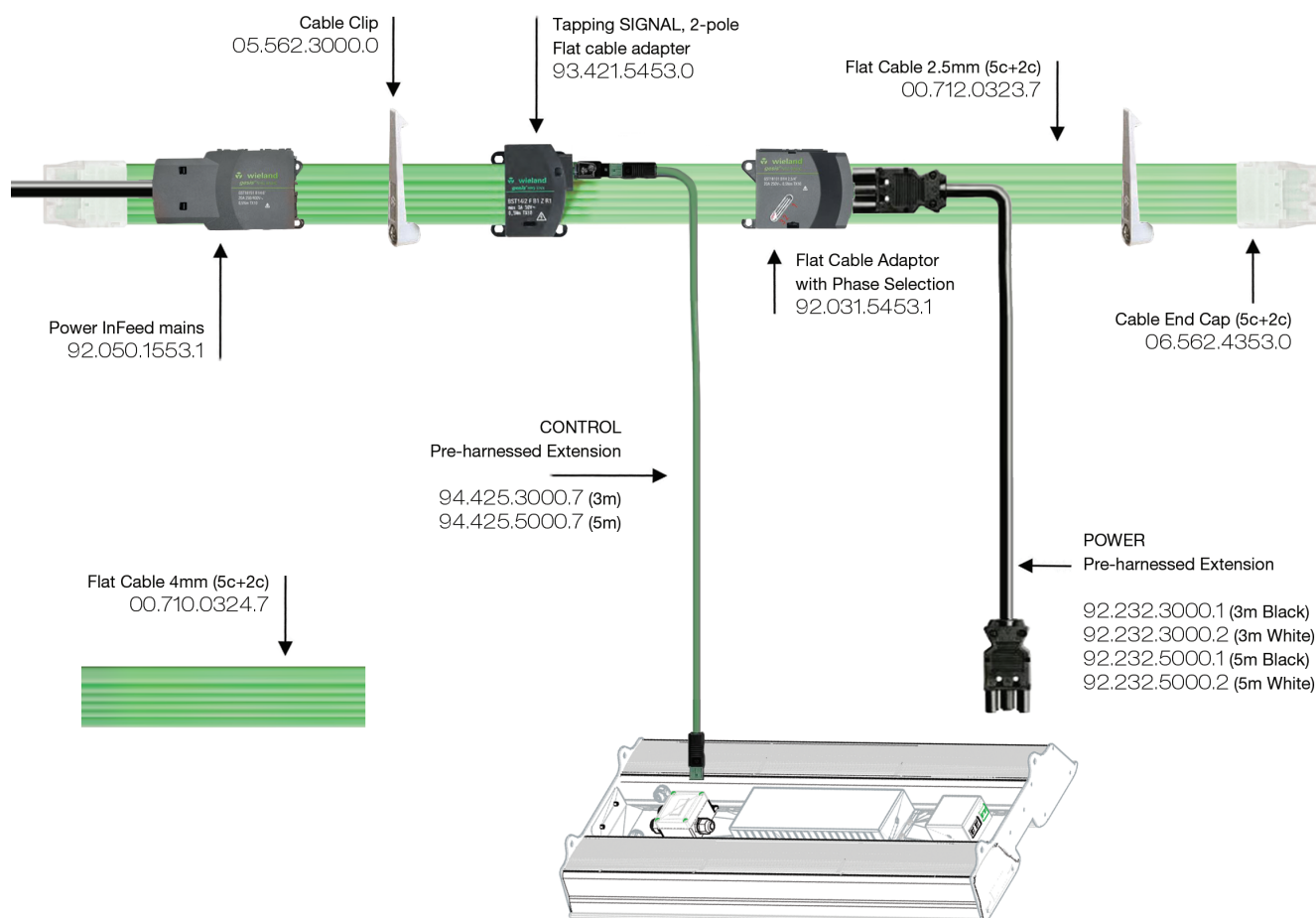


## Details

Complete plug and play power distribution system ideal for high bay warehouse lighting. A single 3+N+E flat cable is run as a backbone and connection taps slide over the cable to make terminations.

## Advantages

- » Only need to run one cable rather than multiple TPS cables
- » Time saving - Taps slide straight over the cable
- » Substantial reduction in time working at height
- » Error free terminations
- » Future Proof - Additional Taps can be added at any time
- » Cost Savings - Materials are a similar price to traditional wiring methods



| Item No                     | Description                               | Type     |
|-----------------------------|-------------------------------------------|----------|
| <b>Back Bone Flat Cable</b> |                                           |          |
| 00.712.0323.7               | Flat Cable 2.5mm                          | (5c+2c)  |
| 00.710.0324.7               | Flat Cable 4mm                            | (5c+2c)  |
| <b>Control Cable</b>        |                                           |          |
| 94.425.3000.7               | Pre-harnessed Control Cable Extension     | 3meter   |
| 94.425.5000.7               | Pre-harnessed Control Cable Extension     | 5meter   |
| <b>Power Cable</b>          |                                           |          |
| 92.232.3000.1               | Pre-harnessed Power Cable Extension       | 3m Black |
| 92.232.3000.2               | Pre-harnessed Power Cable Extension       | 3m White |
| 92.232.5000.1               | Pre-harnessed Power Cable Extension       | 5m Black |
| 92.232.5000.2               | Pre-harnessed Power Cable Extension       | 5m White |
| <b>Taps</b>                 |                                           |          |
| 92.050.1553.1               | 5 pole Power Feed In                      | GST18I5A |
| 93.421.5453.0               | Tapping SIGNAL, 2-pole Flat cable adapter |          |
| 92.031.5453.1               | Flat Cable Adaptor with Phase Selection   | GST18I3I |
| <b>Accessories</b>          |                                           |          |
| 05.562.3000.0               | Cable Clip                                |          |
| 06.562.4353.0               | Cable End Cap                             | (5c+2c)  |
| <b>Tools</b>                |                                           |          |
| 95.300.0300.0               | Special Cable Cutting Shears              |          |
| 95.350.0200.0               | Special Cable Stripping tool for ends     |          |



## Wieland GST - 3 Pole 18i3

SINGLE PHASE CONNECTORS FOR LIGHTING

#124



SEARCH ON EXPRESS.ECSNZ.COM

### Details

Plug and Play connectors for commercial lighting installations. Designed specifically to reduce installation time by allowing pre-terminated before running the cables. Maintenance is also made easier as individual fittings can be disconnected without turning off the mains.



Female 92.931.3053.1



Male 92.932.3053.1



### Conductor Sizes

» From 0.75mm<sup>2</sup> to 2.5mm<sup>2</sup> Conductors

### Voltage Rating

» 3 Pole - 250  
» 5 Pole - 400

### Current Rating

» 20A

### Applications

» Commercial Lighting  
» General Power Distribution

| Item No                    | Rating     | Type                                         | Cable OD | Termination |
|----------------------------|------------|----------------------------------------------|----------|-------------|
| <b>Connectors</b>          |            |                                              |          |             |
| 92.931.3053.1              | 250V / 20A | Female Connector                             | 11mm Max | Screw       |
| 92.932.3053.1              | 250V / 20A | Male Connector                               | 11mm Max | Screw       |
| 05.561.3653.1              |            | Sealing cap for female 3 pole connectors     |          | Screw       |
| <b>Panel Mount</b>         |            |                                              |          |             |
| 92.031.8758.1              | 250V / 20A | Female Panel Mount                           |          | Screw       |
| 92.032.8758.1              | 250V / 20A | Male Panel Mount                             |          | Screw       |
| <b>Distribution Blocks</b> |            |                                              |          |             |
| 92.030.1053.1              |            | Distribution Block - 1 IN / 2 OUT            |          |             |
| 92.030.4853.1              |            | Distribution Block - 1 IN / 3 OUT            |          |             |
| 92.030.5353.1              |            | Distribution Block - 1 IN / 5 OUT            |          |             |
| <b>Harnessed Leads</b>     |            |                                              |          |             |
| 92.232.xx00.1              | 3G1.5mm    | Male to Female Lead (xx denotes length in m) |          |             |
| 92.232.xx03.1              | 3G1.5mm    | Female to free end (xx denotes length in m)  |          |             |
| 92.232.xx04.1              | 3G1.5mm    | Male to free end (xx denotes length in m)    |          |             |
| 92.238.xx00.1              | 3G2.5mm    | Male to Female Lead (xx denotes length in m) |          |             |
| 92.238.xx03.1              | 3G2.5mm    | Female to free end (xx denotes length in m)  |          |             |
| 92.238.xx04.1              | 3G2.5mm    | Male to free end (xx denotes length in m)    |          |             |

## Wieland GST - 5 Pole 18i5

SINGLE PHASE CONNECTORS FOR LIGHTING

#124



SEARCH ON EXPRESS.ECSNZ.COM

### Details

Plug and Play connectors for commercial lighting installations. Designed specifically to reduce installation time by allowing pre-terminated before running the cables. Maintenance is also made easier as individual fittings can be disconnected without turning off the mains.



Female 92.953.4053.1



Male 92.954.4053.1



### Conductor Sizes

» From 0.75mm<sup>2</sup> to 2.5mm<sup>2</sup> Conductors

### Voltage Rating

» 3 Pole - 250  
» 5 Pole - 400

### Current Rating

» 20A

### Applications

» Commercial Lighting  
» General Power Distribution

| Item No                    | Rating     | Type                                                        | Cable OD | Termination |
|----------------------------|------------|-------------------------------------------------------------|----------|-------------|
| <b>Connectors</b>          |            |                                                             |          |             |
| 92.953.4053.1              | 250V / 20A | Female Connector                                            | 13mm Max | Screw       |
| 92.954.4053.1              | 250V / 20A | Male Connector                                              | 13mm Max | Screw       |
| 05.566.9253.0              |            | Sealing cap for female 5 pole connectors                    |          | Screw       |
| <b>Panel Mount</b>         |            |                                                             |          |             |
| 92.051.9658.1              | 250V / 20A | Female Panel Mount                                          |          | Screw       |
| 92.052.9658.1              | 250V / 20A | Male Panel Mount                                            |          | Screw       |
| <b>Distribution Blocks</b> |            |                                                             |          |             |
| 92.050.1053.1              |            | Distribution Block - 1 IN (5 pole) / 2 OUT (5 pole)         |          |             |
| 92.050.4153.1              |            | Distribution Block - 1 IN (5) / 1 OUT (5) + 1 OUT (Phase 1) |          |             |
| 92.050.4253.1              |            | Distribution Block - 1 IN (5) / 1 OUT (5) + 1 OUT (Phase 2) |          |             |
| 92.050.4353.1              |            | Distribution Block - 1 IN (5) / 1 OUT (5) + 1 OUT (Phase 3) |          |             |
| <b>Harnessed Leads</b>     |            |                                                             |          |             |
| 92.257.xx00.1              | 5G1.5mm    | Male to Female Lead (xx denotes length in m)                |          |             |
| 92.257.xx03.1              | 5G1.5mm    | Female to free end (xx denotes length in m)                 |          |             |
| 92.257.xx04.1              | 5G1.5mm    | Male to free end (xx denotes length in m)                   |          |             |
| 92.258.xx00.1              | 5G2.5mm    | Male to Female Lead (xx denotes length in m)                |          |             |
| 92.258.xx03.1              | 5G2.5mm    | Female to free end (xx denotes length in m)                 |          |             |
| 92.258.xx04.1              | 5G2.5mm    | Male to free end (xx denotes length in m)                   |          |             |



LIGHTING CONNECTORS



## Wieland RST - 3 Pole 20A Range

### IP68 SINGLE PHASE CONNECTORS

#125



SEARCH ON EXPRESS.ECSNZ.COM

#### Details

Plastic waterproof connection solutions. Made from extremely tough UV resistant plastic. Connection is made via pushing connectors together and is held in place via locking pin. A screwdriver is required to release the connection.

#### Conductor Sizes

» 0.75mm<sup>2</sup> to 4mm<sup>2</sup>

#### Voltage Rating

» 250V

#### Current Rating

» 20A

#### Applications

» Outdoor Lighting  
» Stage Lighting  
» Garden Lighting  
» Extension leads  
» Repairing damaged cables  
» Pumps in wet areas

#### IP Rating

» IP68

| Item No             | Rating     | Type                                         | Cable OD | Hole Size |
|---------------------|------------|----------------------------------------------|----------|-----------|
| <b>Connectors</b>   |            |                                              |          |           |
| 96.032.4053.1       | 250V / 20A | Male                                         | 6-10mm   |           |
| 96.031.4053.1       | 250V / 20A | Female                                       | 6-10mm   |           |
| 96.032.4153.1       | 250V / 20A | Male                                         | 10-14mm  |           |
| 96.031.4153.1       | 250V / 20A | Female                                       | 10-14mm  |           |
| <b>Panel Mounts</b> |            |                                              |          |           |
| 96.032.5053.1       | 250V / 20A | Male                                         |          | M25       |
| 96.031.5053.1       | 250V / 20A | Female                                       |          | M25       |
| <b>Splitters</b>    |            |                                              |          |           |
| 96.030.0153.1       | 250V / 20A | 1 Male / 3 Females                           |          |           |
| <b>Sealing Caps</b> |            |                                              |          |           |
| 99.416.6205.2       |            | For Male Connectors (includes cable noose)   |          |           |
| 99.414.6205.2       |            | For Female Connectors (includes cable noose) |          |           |



## Wieland RST - 5 Pole 20A Range

### IP68 SINGLE PHASE CONNECTORS

#125



SEARCH ON EXPRESS.ECSNZ.COM

#### Details

Plastic waterproof connection solutions. Made from extremely tough UV resistant plastic. Connection is made via pushing connectors together and is held in place via locking pin. A screwdriver is required to release the connection.

#### Conductor Sizes

» 0.75mm<sup>2</sup> to 4mm<sup>2</sup>

#### Voltage Rating

» 250/400V (Suitable for 3 phase)

#### Current Rating

» 20A

#### Applications

» Pumps in wet areas  
» Motor connections for machines

#### IP Rating

» IP68

| Item No             | Rating     | Type                                               | Cable OD | Hole Size |
|---------------------|------------|----------------------------------------------------|----------|-----------|
| <b>Connectors</b>   |            |                                                    |          |           |
| 96.052.4053.1       | 400V / 20A | Male                                               | 6-10mm   |           |
| 96.051.4053.1       | 400V / 20A | Female                                             | 6-10mm   |           |
| 96.052.4153.1       | 400V / 20A | Male                                               | 10-14mm  |           |
| 96.051.4153.1       | 400V / 20A | Female                                             | 10-14mm  |           |
| <b>Panel Mounts</b> |            |                                                    |          |           |
| 96.052.5053.1       | 400V / 20A | Male                                               |          | M25       |
| 96.051.5053.1       | 400V / 20A | Female                                             |          | M25       |
| <b>Splitters</b>    |            |                                                    |          |           |
| 96.051.4253.1       |            | 1 x Female (5 pole) - 2 cable glands for 6 to 10mm |          |           |
| 96.050.0153.1       |            | 1 x Male (5 pole) - 3 Females (5 pole)             |          |           |
| 96.050.6153.1       |            | 1 x Male (5 pole) - 3 Females (3 pole L1+L2+L3)    |          |           |
| <b>Sealing Caps</b> |            |                                                    |          |           |
| 99.532.0000.7       |            | For Male Connectors (includes cable noose)         |          |           |
| 99.530.0000.7       |            | For Female Connectors (includes cable noose)       |          |           |



## Wieland RST - 7 pole 20A Range

### IP68 SINGLE PHASE CONNECTORS

#125



SEARCH ON EXPRESS.ECSNZ.COM

#### Details

Plastic waterproof connection solutions. Made from extremely tough UV resistant plastic. Connection is made via pushing connectors together and is held in place via locking pin. A screwdriver is required to release the connection.

#### Conductor Sizes

» 0.75mm<sup>2</sup> to 4mm<sup>2</sup>

#### Voltage Rating

» 250/400V (Suitable for 3 phase)

#### Current Rating

» 20A

#### Applications

» Pumps in wet areas  
» Motor connections for machines

#### IP Rating

» IP68

| Item No             | Rating     | Type                                     | Cable OD     | Hole Size |
|---------------------|------------|------------------------------------------|--------------|-----------|
| <b>Connectors</b>   |            |                                          |              |           |
| 96.072.4053.1       | 400V / 20A | Male Connector                           | 6-10mm       |           |
| 96.071.4053.1       | 400V / 20A | Female Connector                         | 6-10mm       |           |
| 96.072.4153.1       | 400V / 20A | Male Connector                           | 10-14mm      |           |
| 96.071.4153.1       | 400V / 20A | Female Connector                         | 10-14mm      |           |
| 96.072.4553.1       | 400V / 20A | Male Connector                           | (13 to 18mm) |           |
| 96.071.4553.1       | 400V / 20A | Female Connector                         | (13 to 18mm) |           |
| <b>Panel Mounts</b> |            |                                          |              |           |
| 96.072.6353.1       | 400V / 20A | Male Panel Mount                         |              | M25       |
| 96.071.6353.1       | 400V / 20A | Female Panel Mount                       |              | M25       |
| <b>Splitters</b>    |            |                                          |              |           |
| 96.072.4253.1       |            | 1 x Male (7) / 2 x Gland (6mm to 10mm)   |              |           |
| 96.071.4253.1       |            | 1 x Female (7) / 2 x Gland (6mm to 10mm) |              |           |
| <b>Sealing Caps</b> |            |                                          |              |           |
| 99.532.0000.7       |            | For Male RST, 7pole (with cable noose)   |              |           |
| 99.530.0000.7       |            | For Female RST, 7pole (with cable noose) |              |           |





# PowerLock Connectors

IP67 SINGLE PHASE HIGH POWER LOW VOLTAGE CONNECTORS

#1660



SEARCH ON EXPRESS.ECSNZ.COM

## Benefits

- » Resistant to mechanical influences in harsh environmental conditions
- » Connectors in harmonised colours according to NZ standards
- » Every colour has a different coding to prevent incorrect plugging

## Application range

- » For renewable energy plants, e.g. wind power
- » For mobile and stationary power distribution
- » For the connection of motors, transformers and generators
- » Light & sound technology

## Voltage Rating

- » 1000V

## IP Rating

- » IP67

## Current Rating

- » 400A

### Panel Drains (A1)



| Item No    | LAPP-PL_PD_RD                                          | LAPP-PL_PD_WH | LAPP-PL_PD_BU | LAPP-PL_PD_BK   | LAPP-PL_PD_GN |
|------------|--------------------------------------------------------|---------------|---------------|-----------------|---------------|
| NZ Colours | Red                                                    | White         | Blue          | Black (Neutral) | Green (Earth) |
| Included   | Part number includes housing and contact with M12 stud |               |               |                 |               |

### Panel Source (A6)



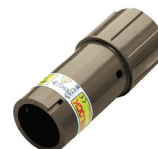
| Item No    | LAPP-PL_PS_RD                                          | LAPP-PL_PS_WH | LAPP-PL_PS_BU | LAPP-PL_PS_BK   | LAPP-PL_PS_GN |
|------------|--------------------------------------------------------|---------------|---------------|-----------------|---------------|
| NZ Colours | Red                                                    | White         | Blue          | Black (Neutral) | Green (Earth) |
| Included   | Part number includes housing and contact with M12 stud |               |               |                 |               |

### Line Drain (F6)



| Item No    | LAPP-PL_LD_RD                                                     | LAPP-PL_LD_WH | LAPP-PL_LD_BU | LAPP-PL_LD_BK   | LAPP-PL_LD_GN |
|------------|-------------------------------------------------------------------|---------------|---------------|-----------------|---------------|
| NZ Colours | Red                                                               | White         | Blue          | Black (Neutral) | Green (Earth) |
| Included   | Part number includes housing, contact, 120mm sleeve and M40 gland |               |               |                 |               |

### Line Source (D6)



| Item No    | LAPP-PL_LS_RD                                                     | LAPP-PL_LS_WH | LAPP-PL_LS_BU | LAPP-PL_LS_BK   | LAPP-PL_LS_GN |
|------------|-------------------------------------------------------------------|---------------|---------------|-----------------|---------------|
| NZ Colours | Red                                                               | White         | Blue          | Black (Neutral) | Green (Earth) |
| Include    | Part number includes housing, contact, 120mm sleeve and M40 gland |               |               |                 |               |

# PowerLock Accessories

ACCESSORIES FOR POWERLOCK CONNECTORS

#1665



SEARCH ON EXPRESS.ECSNZ.COM



Disconnection Tool



Reduction Kit



Protection Caps Line



Protection Caps Panel

| Item No         | Description                  | Purpose                                     | Details       |    |        |
|-----------------|------------------------------|---------------------------------------------|---------------|----|--------|
| Tools           |                              |                                             |               |    |        |
| LAPP-44420243   | PowerLock Disconnection Tool | Removal tool for mated PowerLock Connectors |               |    |        |
| Reduction Kits  |                              |                                             |               |    |        |
| LAPP-44420245   | PowerLock Reduction Kit 95   | Reduction set for PowerLock screw contact   | 120mm to 95mm |    |        |
| LAPP-44420246   | PowerLock Reduction Kit 70   | Reduction set for PowerLock screw contact   | 120mm to 70mm |    |        |
| LAPP-44420247   | PowerLock Reduction Kit 50   | Reduction set for PowerLock screw contact   | 120mm to 50mm |    |        |
| Protection Caps |                              |                                             |               |    |        |
| LAPP-44420250   | PowerLock Protection Cap F6  | For Line Drain Connectors                   | IP54          | F6 | Drain  |
| LAPP-44420251   | PowerLock Protection Cap D6  | For Line Source Connectors                  | IP54          | A6 | Source |
| LAPP-44420252   | PowerLock Protection Cap A1  | For Panel Drain Connectors                  | IP54          | A1 | Drain  |
| LAPP-44420253   | PowerLock Protection Cap A6  | For Panel Source Connectors                 | IP54          | A6 | Source |



ECS

POWERLOCK CONNECTORS

CEE Connectors & Plugs

PCE 16A TO 125A CONNECTORS & PLUGS IP44 & IP67

#2195

SEARCH ON EXPRESS.ECSNZ.COM



Features

» PCE has a dyamic range of CEE Connectors ranging from 16A to 125A, 3 to 5 Pole and available in IP44 or IP67 versions. A robust design that can challenge harsh enviroments. Quick and easy assembly that saves time and energy.

Construction

- » Polyamide 6
- » PC/ABS
- » Halogen Free

Benefits

- » Excellent impact resistance
- » High Thermal Stability (self-extinguishing)
- » High abrasion resistance
- » High weather & UV-resistance
- » Very good chemical resistance

Conformities

- » ISO 4892-2
- » RoHS-directive 2011/65/EU



|                |       | Connector |        | Plug   |        | Midnight Connector | Midnight Plug |
|----------------|-------|-----------|--------|--------|--------|--------------------|---------------|
| Type           | Poles | IP44      | IP67   | IP44   | IP67   | IP44               | IP44          |
| 16A            |       |           |        |        |        |                    |               |
| 230Vac 50/60Hz | 3     | 213-6     | 2132-6 | 013-6  | 0132-6 | 213-6X             | 013-6X        |
| 400Vac 50/60Hz | 4     | 214-6     | 2142-6 | 014-6  | 0142-6 | 214-6X             | 014-6X        |
| 400Vac 50/60Hz | 5     | 215-6     | 2152-6 | 015-6  | 0152-6 | 215-6X             | 015-6X        |
| 32A            |       |           |        |        |        |                    |               |
| 230Vac 50/60Hz | 3     | 223-6     | 2232-6 | 023-6  | 0232-6 | 223-6X             | 023-6X        |
| 400Vac 50/60Hz | 4     | 224-6     | 2242-6 | 024-6  | 0242-6 | 224-6X             | 024-6X        |
| 400Vac 50/60Hz | 5     | 225-6     | 2252-6 | 025-6  | 0252-6 | 225-6X             | 025-6X        |
| 63A            |       |           |        |        |        |                    |               |
| 230Vac 50/60Hz | 3     | 2331-6    | 233-6  | 0331-6 | 033-6  | 233-6XS            | 033-6XS       |
| 400Vac 50/60Hz | 4     | 2341-6    | 234-6  | 0341-6 | 034-6  | 234-6XS            | 034-6XS       |
| 400Vac 50/60Hz | 5     | 2351-6    | 235-6  | 0351-6 | 035-6  | 235-6XS            | 035-6XS       |
| 125A           |       |           |        |        |        |                    |               |
| 230Vac 50/60Hz | 3     |           | 243-6  |        | 043-6  | 243-6XS            | 043-6XS       |
| 400Vac 50/60Hz | 4     |           | 244-6  |        | 044-6  | 244-6XS            | 044-6XS       |
| 400Vac 50/60Hz | 5     |           | 245-6  |        | 045-6  | 245-6XS            | 045-6XS       |

CEE Wall Mount Sockets & Appliance Inlets

PCE 16A TO 125A WALL MOUNT SOCKETS & APPLIANCE INLETS IP44 & IP67

#2201

SEARCH ON EXPRESS.ECSNZ.COM



|                |       | Wall Socket |        | Wall Plug / Inlet |         |
|----------------|-------|-------------|--------|-------------------|---------|
| Type           | Poles | IP44        | IP67   | IP44              | IP67    |
| 16A            |       |             |        |                   |         |
| 230Vac 50/60Hz | 3     | 113-6       | 1132-6 | 513-6             | 5132-6K |
| 400Vac 50/60Hz | 4     | 114-6       | 1142-6 | 514-6             | 5142-6K |
| 400Vac 50/60Hz | 5     | 115-6       | 1152-6 | 515-6             | 5152-6K |
| 32A            |       |             |        |                   |         |
| 230Vac 50/60Hz | 3     | 123-6       | 1232-6 | 523-6             | 5232-6K |
| 400Vac 50/60Hz | 4     | 124-6       | 1242-6 | 524-6             | 5242-6K |
| 400Vac 50/60Hz | 5     | 125-6       | 1252-6 | 525-6             | 5252-6K |
| 63A            |       |             |        |                   |         |
| 230Vac 50/60Hz | 3     |             | 133-6  |                   | 533-6   |
| 400Vac 50/60Hz | 4     |             | 134-6  |                   | 534-6   |
| 400Vac 50/60Hz | 5     |             | 135-6  |                   | 535-6   |
| 125A           |       |             |        |                   |         |
| 230Vac 50/60Hz | 3     |             | 143-6  |                   | 543-6   |
| 400Vac 50/60Hz | 4     |             | 144-6  |                   | 544-6   |
| 400Vac 50/60Hz | 5     |             | 145-6  |                   | 545-6   |

## CEE Flanged Socket & Plug - Straight

PCE 16A TO 125A SOCKET & PLUG IP44 & IP67

# 2206

SEARCH ON EXPRESS.ECSNZ.COM



| Straight Flanged Socket |       |         |        |         |        | Midnight Straight Flanged Socket | Midnight Straight Flanged Plug |
|-------------------------|-------|---------|--------|---------|--------|----------------------------------|--------------------------------|
| Voltage                 | Poles | IP44    | IP67   | IP44    | IP67   | IP44                             | IP44                           |
| 16A                     |       |         |        |         |        |                                  |                                |
| 230Vac 50/60Hz          | 3     | 313-6F7 | 3132-6 | 613-6   | 6132-6 | 313-6X                           | 613-6X                         |
| 400Vac 50/60Hz          | 4     | 314-6F7 | 3142-6 | 614-6   | 6142-6 | 314-6X                           | 614-6X                         |
| 400Vac 50/60Hz          | 5     | 315-6F7 | 3152-6 | 615-6F7 | 6152-6 | 315-6X                           | 615-6X                         |
| 32A                     |       |         |        |         |        |                                  |                                |
| 230Vac 50/60Hz          | 3     | 323-6F7 | 3232-6 | 623-6   | 6232-6 | 323-6X                           | 623-6X                         |
| 400Vac 50/60Hz          | 4     | 324-6F7 | 3242-6 | 624-6   | 6242-6 | 324-6X                           | 624-6X                         |
| 400Vac 50/60Hz          | 5     | 325-6F7 | 3252-6 | 625-6F7 | 6252-6 | 325-6X                           | 625-6X                         |
| 63A                     |       |         |        |         |        |                                  |                                |
| 230Vac 50/60Hz          | 3     |         | 333-6  |         | 633-6  | 333-6XS                          |                                |
| 400Vac 50/60Hz          | 4     |         | 334-6  |         | 634-6  | 334-6XS                          |                                |
| 400Vac 50/60Hz          | 5     |         | 335-6  |         | 635-6  | 335-6XS                          |                                |
| 125A                    |       |         |        |         |        |                                  |                                |
| 230Vac 50/60Hz          | 3     |         | 343-6  |         | 643-6  | 343-6XS                          |                                |
| 400Vac 50/60Hz          | 4     |         | 344-6  |         | 644-6  | 344-6XS                          |                                |
| 400Vac 50/60Hz          | 5     |         | 345-6  |         | 645-6  | 345-6XS                          |                                |

## CEE Flanged Socket & Appliance Inlet - Sloping/Angled

PCE 16A TO 125A SOCKET & APPLIANCE INLET - IP44 & IP67

#2207

SEARCH ON EXPRESS.ECSNZ.COM



| Sloping Flanged Socket |       |         |           | Angled Flanged Inlet |          | Midnight Sloping Flanged Socket |         |
|------------------------|-------|---------|-----------|----------------------|----------|---------------------------------|---------|
| Voltage                | Poles | IP44    | IP67      | IP44                 | IP67     | IP44                            | IP67    |
| 16A                    |       |         |           |                      |          |                                 |         |
| 230Vac 50/60Hz         | 3     | 413-6F8 | 4132-6F8  | 77713-6              | 777132-6 | 413-6F8X                        |         |
| 400Vac 50/60Hz         | 4     | 414-6F8 | 4142-6F8  | 77714-6              | 777142-6 | 414-6F8X                        |         |
| 400Vac 50/60Hz         | 5     | 415-6   | 4152-6F78 | 77715-6              | 777152-6 | 415-6X                          |         |
| 32A                    |       |         |           |                      |          |                                 |         |
| 230Vac 50/60Hz         | 3     | 423-6   | 4232-6F7  | 77723-6              | 777232-6 | 423-6X                          |         |
| 400Vac 50/60Hz         | 4     | 424-6   | 4242-6F78 | 77724-6              | 777242-6 | 424-6X                          |         |
| 400Vac 50/60Hz         | 5     | 425-6   | 4252-6F78 | 77725-6              | 777252-6 | 425-6X                          |         |
| 63A                    |       |         |           |                      |          |                                 |         |
| 230Vac 50/60Hz         | 3     |         | 433-6     |                      | 77733-6  |                                 | 433-6XS |
| 400Vac 50/60Hz         | 4     |         | 434-6     |                      | 77734-6  |                                 | 434-6XS |
| 400Vac 50/60Hz         | 5     |         | 435-6     |                      | 77735-6  |                                 | 435-6XS |
| 125A                   |       |         |           |                      |          |                                 |         |
| 230Vac 50/60Hz         | 3     |         | 443-6     |                      | 743-6    |                                 | 443-6VS |
| 400Vac 50/60Hz         | 4     |         | 444-6     |                      | 744-6    |                                 | 444-6XS |
| 400Vac 50/60Hz         | 5     |         | 445-6     |                      | 745-6    |                                 | 445-6XS |



CEE CONNECTORS



# CEE Phase Inverter Plugs

PCE PHASE INVERTER PLUGS 16A TO 32A 400VAC 50/60HZ IP44 & IP67

#2212

SEARCH ON EXPRESS.ECSNZ.COM

EXPRESS

## Description

» Changes the direction of rotation of three-phase motors without the need to reconnect the lead wire. Two phase pins arranged on one rotor. This can be turned by 180° from the outside using a screw driver.

## Benefits

» No re-wiring required if changing the rotation of the motor is required  
 » Great for Hireage equipment, mobile socket applications



| Current Rating | Poles | IP44   | IP67    |
|----------------|-------|--------|---------|
| 16A            | 5     | 7015-6 | 70152-6 |
| 32A            | 5     | 7025-6 | 70252-6 |

# CEE Caravan Plugs and Sockets

PCE CARAVAN PLUGS AND SOCKETS 16A 230VAC 50/60HZ IP44 & IP67

#2198

SEARCH ON EXPRESS.ECSNZ.COM

EXPRESS

## Description

PCE Caravan devices are perfectly designed for the use on camp sites, caravan and marinas

## Benefits

» Robust Design  
 » Brass or Nickel-Plated Contacts

## Features

» Ingress Protection options - IP44 & IP67  
 » Current Rating/Number or Poles - 16A 3P  
 » Position of Earth Contact - 6H

## Voltage

» 230Vac 50/60Hz



|           | Wall Mount Plug |         | Flanged Plug Angled |          | Socket |        | Plugs  |        | Connectors |        | Angled |
|-----------|-----------------|---------|---------------------|----------|--------|--------|--------|--------|------------|--------|--------|
|           | IP44            | IP67    | IP44                | IP67     | IP44   | IP67   | IP44   | IP67   | IP44       | IP67   | IP44   |
| Item No   | 513-6D          | 5132-6K | 77713-6             | 777132-6 | 113-6  | 1132-6 | 013-6  | 0132-6 | 213-6      | 2132-6 | 8213-6 |
| Dust Caps |                 | 20163   | TS613G              | 20163    |        |        | TS613G | 20163  |            |        |        |

# CEE Container Plugs and Sockets

PCE CONTAINER PLUGS & SOCKETS 32A 400VAC 50/60HZ IP67

#2197

SEARCH ON EXPRESS.ECSNZ.COM

EXPRESS

## Description

» PCE Container Plugs and sockets are specially designed for the rough condition on reefer-containers, at harbors and terminals.  
 » Ingress Protection - IP67  
 » Current Rating/Number of Poles - 32A/4 Pole  
 » Position of Earth Contact - 3H

## Benefits

» Nickel-Plated Contacts  
 » Robust Design  
 » External, Central Cable Gland  
 » with Lloyd's Register Type Approval (1)



|                |       | Plug        | Connector | Wall socket | Flanged Socket Straight | Flanged Socket Sloping | Switched Socket |
|----------------|-------|-------------|-----------|-------------|-------------------------|------------------------|-----------------|
| Current Rating | Poles | IP67        | IP67      | IP67        | IP67                    | IP67                   | IP67            |
| 32A            | 4     | 0242-3V (1) | 2242-3V   | 1242-3V     | 3242-3V                 | 4242-3F78V             | 75242-3 (1)     |

# CEE Dust & Water Protection Caps

FOR PLUGS & APPLIANCE INLETS

#2213

SEARCH ON EXPRESS.ECSNZ.COM

EXPRESS

## Description

» For PCE Plugs and Appliance Inlets added protection against dust and water  
 » Available for both IP44 and IP67 Protection

## Material

» IP44 Dust Caps - TPE/PP  
 » IP67 Watertight Caps 16/32/63A - Polypropylen  
 » IP67 Watertight Caps 125A - Polyamide PA6



|       | Dust Caps IP44 |        |        |        | Watertight Caps IP67 |        |         |         |
|-------|----------------|--------|--------|--------|----------------------|--------|---------|---------|
| Poles | 16A            | 32A    | 63A    | 125A   | 16A                  | 32A    | 63A     | 125A    |
| 3     | TS613G         | TS623G | TS635G | TS645G | 20163                | 203234 | TS7632G | TS1252G |
| 4     | TS614G         | TS623G | TS635G | TS645G | 20164                | 203234 | T67632G | TS1252G |
| 5     | TS615G         | TS625G | TS635G | TS645G | 20165                | 20325  | TS7632G | TS1252G |

## EPIC HA 3+E & 4+E Pole Series

IP65 CONNECTORS FOR STANDARD INDUSTRIAL SENSORS

#1416



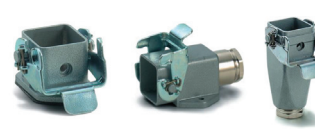
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Multi-Pole Inserts



Metal Hoods



Metal Bases & Couplers

| Item No                           | Type            | Poles          | Rating     | Thread | Gland (Plastic) | Gland (Spiral) | Gland (Metal) |
|-----------------------------------|-----------------|----------------|------------|--------|-----------------|----------------|---------------|
| <b>Multi-Pole Inserts</b>         |                 |                |            |        |                 |                |               |
| 10420000                          | Male Insert     | 3 pole + earth | 400V / 23A |        |                 |                |               |
| 10421000                          | Female Insert   | 3 pole + earth | 400V / 23A |        |                 |                |               |
| 10431000                          | Male Insert     | 4 pole + earth | 400V / 23A |        |                 |                |               |
| 10432000                          | Female Insert   | 4 pole + earth | 400V / 23A |        |                 |                |               |
| <b>Metal Hoods</b>                |                 |                |            |        |                 |                |               |
| 10512100                          | Straight Metal  |                |            | PG11   | 53015020        | 53015620       | 52015720      |
| 10512300                          | 90 Metal        |                |            | PG11   | 53015020        | 53015620       | 52015720      |
| 19512100                          | Straight Metal  |                |            | M20    | 53111020        | 53111620       | 53112020      |
| 19512300                          | 90 Metal        |                |            | M20    | 53111020        | 53111620       | 53112020      |
| <b>Metal Bases &amp; Couplers</b> |                 |                |            |        |                 |                |               |
| 10422500                          | Panel Mount     |                |            |        |                 |                |               |
| 10424500                          | Base with gland |                |            | PG11   | 53015020        | 53015620       | 52015720      |
| 19512700                          | Base with gland |                |            | M20    | 53111020        | 53111620       | 53112020      |
| 10512900                          | Coupler Hood    |                |            | PG11   | 53015020        | 53015620       | 52015720      |
| 19512900                          | Coupler Hood    |                |            | M20    | 53111020        | 53111620       | 53112020      |

## EPIC HB 6+E Pole Series

IP65 CONNECTORS FOR STANDARD INDUSTRIAL SENSORS

#1419



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Multi-Pole Inserts



Metal Hoods



Metal Bases & Couplers

| Item No                           | Type                                | Poles     | Rating     | Thread | Gland (Plastic) | Gland (Spiral) | Gland (Metal) |
|-----------------------------------|-------------------------------------|-----------|------------|--------|-----------------|----------------|---------------|
| <b>Multi-Pole Inserts</b>         |                                     |           |            |        |                 |                |               |
| 10190000                          | Male insert                         | 6 + earth | 500V / 16A |        |                 |                |               |
| 10191000                          | Female insert                       | 6 + earth | 500V / 16A |        |                 |                |               |
| <b>Metal Hoods</b>                |                                     |           |            |        |                 |                |               |
| 10021000                          | Straight - Double stud              |           |            | PG16   | 53015040        | 53015640       | 52015740      |
| 19011000                          | Straight - Double stud              |           |            | M20    | 53111020        | 53111630       | 53112020      |
| 19021000                          | Straight - Double stud              |           |            | M25    | 53111030        | 53111630       | 53112030      |
| 19022000                          | 90 degree - Double stud             |           |            | M25    | 53111030        | 53111630       | 53112030      |
| <b>Metal Bases &amp; Couplers</b> |                                     |           |            |        |                 |                |               |
| 10024000                          | Couple hood straight - Single lever | PG16      |            |        | 53015040        | 53015640       | 52015740      |
| 10003000                          | Panel mount - Single lever          |           |            |        |                 |                |               |

ecs

BOX CONNECTORS





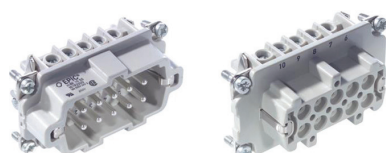
## EPIC HB 10+E Pole Series

IP65 CONNECTORS FOR STANDARD INDUSTRIAL SENSORS

#131



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Multi-Pole Inserts



Metal Hoods



Metal Bases & Couplers

| Item No                           | Type                         | Poles      | Rating     | Thread | Gland (Plastic) | Gland (Spiral) | Gland (Metal) |
|-----------------------------------|------------------------------|------------|------------|--------|-----------------|----------------|---------------|
| <b>Multi-Pole Inserts</b>         |                              |            |            |        |                 |                |               |
| 10192000                          | Male insert                  | 10 + earth | 500V / 16A |        |                 |                |               |
| 10193000                          | Female insert                | 10 + earth | 500V / 16A |        |                 |                |               |
| <b>Metal Hoods</b>                |                              |            |            |        |                 |                |               |
| 10040000                          | Straight - 4 stud            |            |            | PG16   | 53015040        | 53015640       | 52015740      |
| 10040100                          | Straight - 4 stud            |            |            | PG21   | 53015050        | 53015650       | 52015750      |
| 19040100                          | Straight - 4 stud            |            |            | M25    | 53111030        | 53111630       | 53112030      |
| 70050600                          | Straight High - 4 stud       |            |            | PG29   | 53015060        |                | 52015760      |
| 79050400                          | Straight High - 4 stud       |            |            | M25    | 53111030        | 53111630       | 53112030      |
| 10042000                          | 90 Degree - 4 stud           |            |            | PG16   | 53015040        | 53015640       | 52015740      |
| <b>Metal Bases &amp; Couplers</b> |                              |            |            |        |                 |                |               |
| 10032000                          | Panel mount - double lever   |            |            |        |                 |                |               |
| 10046000                          | Straight - Double lever      | PG16       |            |        | 53015040        | 53015640       | 52015740      |
| 70040400                          | Straight High - Double lever | PG21       |            |        | 53015050        | 53015650       | 52015750      |
| 10049000                          | Replacement levers - double  |            |            |        |                 |                |               |

## EPIC HB 16+E Pole Series

IP65 CONNECTORS FOR STANDARD INDUSTRIAL SENSORS

#132



SEARCH ON EXPRESS.ECSNZ.COM



Multi-Pole Inserts



Metal Hoods



Metal Bases & Couplers

| Item No                           | Type                                | Poles      | Rating     | Gland (Plastic) | Gland (Spiral) | Gland (Metal) |
|-----------------------------------|-------------------------------------|------------|------------|-----------------|----------------|---------------|
| <b>Multi-Pole Inserts</b>         |                                     |            |            |                 |                |               |
| 10194000                          | Male insert                         | 16 + earth | 500V / 16A |                 |                |               |
| 10195000                          | Female insert                       | 16 + earth | 500V / 16A |                 |                |               |
| <b>Metal Hoods</b>                |                                     |            |            |                 |                |               |
| 10080900                          | Straight - Double stud              | PG21       |            | 53015050        | 53015650       | 52015750      |
| 19080900                          | Straight - Double stud              | M25        |            | 53111030        | 53111630       | 53112030      |
| 19082900                          | 90 degree - Double stud             | M25        |            | 53111030        | 53111630       | 53112030      |
| <b>Metal Bases &amp; Couplers</b> |                                     |            |            |                 |                |               |
| 10072900                          | Panel mount - Single lever          |            |            |                 |                |               |
| 10073900                          | Panel mount - Single lever + cover  |            |            |                 |                |               |
| 10074900                          | box mount - Single lever            | PG21       |            | 53015050        | 53015650       | 52015750      |
| 10086900                          | Couple hood straight - Single lever | PG21       |            | 53015050        | 53015650       | 52015750      |

## EPIC HB 24+E Pole Series

IP65 CONNECTORS FOR STANDARD INDUSTRIAL SENSORS

#133



SEARCH ON EXPRESS.ECSNZ.COM



Multi-Pole Inserts



Metal Hoods



Metal Bases & Couplers

| Item No                           | Type                                | Poles      | Rating     | Gland (Plastic) | Gland (Spiral) | Gland (Metal) |
|-----------------------------------|-------------------------------------|------------|------------|-----------------|----------------|---------------|
| <b>Multi-Pole Inserts</b>         |                                     |            |            |                 |                |               |
| 10196000                          | Male insert                         | 24 + earth | 500V / 16A |                 |                |               |
| 10197000                          | Female insert                       | 24 + earth | 500V / 16A |                 |                |               |
| <b>Metal Hoods</b>                |                                     |            |            |                 |                |               |
| 10121900                          | Straight - Double stud              | PG21       |            | 53015050        | 53015650       | 52015750      |
| 19121900                          | Straight - Double stud              | M25        |            | 53111030        | 53111630       | 53112030      |
| 19113900                          | 90 degree - Double stud             | M25        |            | 53111030        | 53111630       | 53112030      |
| 10123900                          | 90 degree - Double stud             | PG29       |            | 53015060        |                | 52015760      |
| <b>Metal Bases &amp; Couplers</b> |                                     |            |            |                 |                |               |
| 10102900                          | Panel mount - Single lever          |            |            |                 |                |               |
| 10103900                          | Panel mount - Single lever + cover  |            |            |                 |                |               |
| 10127900                          | Couple hood straight - Single lever | PG21       |            | 53015050        | 53015650       | 52015750      |



## EPIC M23 Encoder

IP68 CONNECTORS FOR ENCODERS

#1512

SEARCH ON EXPRESS.ECSNZ.COM



### Details

Metal connectors commonly used for rotary encoders. EPIC connectors are compatible with most common encoders. Terminations are done via solder buckets.

### Conductor Sizes

» From 0.14mm<sup>2</sup> to 1mm<sup>2</sup> Conductors

### Voltage Rating

» 100V

### Current Rating

» 7A

### IP Rating

» IP68



D6



F6



A1



| Item No   | Type | Description        | Clamping Range |
|-----------|------|--------------------|----------------|
| <b>D6</b> |      |                    |                |
| 72044030  | D6   | Standard Connector | 7 to 10mm      |
| 72044000  | D6   | Standard Connector | 9.5 to 13.5mm  |
| <b>F6</b> |      |                    |                |
| 72064030  | F6   | Coupler Connector  | 7 to 10mm      |
| 72064000  | F6   | Coupler Connector  | 9.5 to 13.5mm  |
| <b>A1</b> |      |                    |                |
| 72004000  | A1   | Panel Mount        |                |

## EPIC M23 Inserts

INSERTS FOR ENCODERS

#1511

SEARCH ON EXPRESS.ECSNZ.COM



### Details

When selecting inserts, you should select the opposite direction for the opposing connector. I.e. Clockwise male to anticlockwise female



9 Pin



12 Pin



16 Pin



9 Pin



12 Pin



16 Pin



17 Pin

| Type          | Clockwise | Anti-clockwise |
|---------------|-----------|----------------|
| <b>9 Pin</b>  |           |                |
| Male          | 73002732  | 73002726       |
| Female        | 73002734  | 73002728       |
| <b>12 Pin</b> |           |                |
| Male          | 73002720  | 73002714       |
| Female        | 73002722  | 73002716       |
| <b>16 Pin</b> |           |                |
| Male          | 73002708  | 73002702       |
| Female        | 73002710  | 73002704       |
| <b>17 Pin</b> |           |                |
| Male          | 73028500  | 73028000       |
| Female        | 73018500  | 73018000       |



## LS1 Power

IP68 CONNECTORS FOR SERVO DRIVES

#1509

SEARCH ON EXPRESS.ECSNZ.COM



### Details

Metal connectors commonly used for servo drives. Many drives such as SEW use LS1 connectors. Terminations can be made via solder or crimp tool. (LS1.5 and LS3 on available on request.)

### Conductor Sizes

» Power Pins: From 0.5mm<sup>2</sup> to 4mm<sup>2</sup> Conductors  
» Small Pins: From 0.14mm<sup>2</sup> to 1mm<sup>2</sup> Conductors

### Voltage Rating

» 630V

### Current Rating

» 25A (Power Pins)  
» 7A (Small Pins)

### IP Rating

» IP68



D6



F6



A1

| Item No   | Type | Contacts  | Description        | Clamping Range |
|-----------|------|-----------|--------------------|----------------|
| <b>D6</b> |      |           |                    |                |
| 73000005  | D6   | 5 + E     | Standard Connector | 10.5 to 15.5mm |
| 73000001  | D6   | 3 + E + 4 | Standard Connector | 10.5 to 15.5mm |
| <b>F6</b> |      |           |                    |                |
| 73000013  | F6   | 5 + E     | Coupler Connector  | 10.5 to 15.5mm |
| 73000009  | F6   | 3 + E + 4 | Coupler Connector  | 10.5 to 15.5mm |
| <b>A1</b> |      |           |                    |                |
| 76003000  | A1   | 5 + E     | Panel Mount        |                |
| 76004000  | A1   | 3 + E + 4 | Panel Mount        |                |



# RENT ME

EPIC® SIGNAL M23 Servo Connector Crimp Tool

# \$45

per/day

projects.ecsnz.com/rentals



## UNITRONIC Valve Connectors with Leads

PUR BLACK CABLE - INCLUDES MARKER SLEEVES

#146

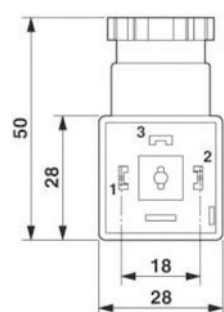


SEARCH ON EXPRESS.ECSNZ.COM

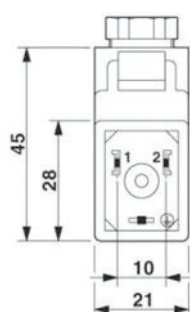
| Lead Length           | Type A (18mm) | Type B (10mm) | Type BI (11mm) | Type C (8mm) | Type CI (9.4mm) |
|-----------------------|---------------|---------------|----------------|--------------|-----------------|
| <b>3 Pole (1 LED)</b> |               |               |                |              |                 |
| 2m                    | 22260584      | 22260585      | 22260586       | 22260587     | 22260588        |
| 5m                    | 22260576      | 22260578      | 22260580       | 22260582     | 22260574        |
| 10m                   | 22260577      | 22260579      | 22260581       | 22260583     | 22260575        |
| <b>5 Pole (2 LED)</b> |               |               |                |              |                 |
| 2m                    | 22260589      |               |                |              |                 |
| 5m                    | 22260590      |               |                |              |                 |
| 10m                   | 22260591      |               |                |              |                 |



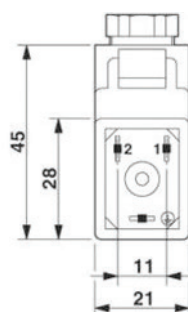
### VALVE CONNECTOR SELECTION OPTIONS



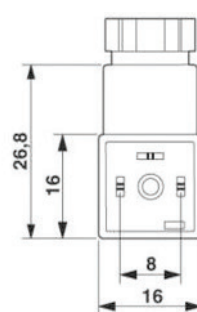
**Type A**  
(18mm)



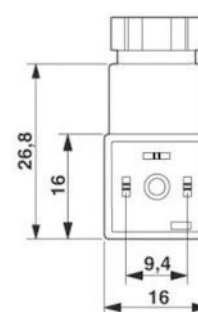
**Type B**  
(10mm)



**Type BI**  
(11mm)



**Type C**  
(8mm)



**Type CI**  
(9.4mm)

## SILVYN RILL Conduit

STRONG FLEXIBLE NYLON CONDUIT

#148



SEARCH ON EXPRESS.ECSNZ.COM

### Construction

» PA6 Nylon - Halogen free

### Protection

» IP68 - with straight glands  
» IP67 - with right angle glands

### Temperature Rating

» Conduit: -40 to 115  
» Glands: -30 to 100



Conduit



Straight gland



90 degree gland



Conduit clip

|                    | 12mm     | 16mm     | 20mm     | 25mm     | 32mm     | 40mm     | 50mm     |
|--------------------|----------|----------|----------|----------|----------|----------|----------|
| <b>Grey Nylon</b>  |          |          |          |          |          |          |          |
| Type               | 9        | 11       | 16       | 21       | 29       | 36       | 48       |
| Conduit            | 61746940 | 61746950 | 61746960 | 61746970 | 61746980 | 61746990 | 61747000 |
| ID                 | 10mm     | 12mm     | 16.5mm   | 23mm     | 29mm     | 36mm     | 48mm     |
| OD                 | 13mm     | 15.8mm   | 21.2mm   | 28.5mm   | 34.5mm   | 42.5mm   | 54.5mm   |
| Coil Size          | 50m      | 50m      | 50m      | 50m      | 25m      | 25m      | 25m      |
| Straight Gland     | 55501010 | 55501030 | 55501050 | 55501060 | 55501070 | 55501080 | 55501090 |
| 90 Degree Gland    | 55501120 | 55501140 | 55501160 | 55501180 | 55501200 | 55501220 | 55501240 |
| Locknut (Grey)     | 53119000 | 53119010 | 53119020 | 53119030 | 53119040 | 53119050 | 53119060 |
| Conduit Clip       | 65500631 | 65500632 | 65500634 | 65500635 | 65500636 | 65500637 | 65500638 |
| <b>Black Nylon</b> |          |          |          |          |          |          |          |
| Type               | 9        | 11       | 16       | 21       | 29       | 36       | 48       |
| Conduit            | 61746945 | 61746955 | 61746965 | 61746975 | 61746985 | 61746995 | 61747005 |
| ID                 | 10mm     | 12mm     | 16.5mm   | 23mm     | 29mm     | 36mm     | 48mm     |
| OD                 | 13mm     | 15.8mm   | 21.2mm   | 28.5mm   | 34.5mm   | 42.5mm   | 54.5mm   |
| Coil Size          | 50m      | 50m      | 50m      | 50m      | 25m      | 25m      | 25m      |
| Straight Gland     | 55501015 | 55501035 | 55501055 | 55501065 | 55501075 | 55501085 | 55501095 |
| 90 Degree Gland    | 55501125 | 55501145 | 55501165 | 55501185 | 55501205 | 55501225 | 55501245 |
| Locknut (Black)    | 53119100 | 53119110 | 53119120 | 53119130 | 53119140 | 53119150 | 53119160 |
| Conduit Clip       | 65500640 | 65500641 | 65500643 | 65500644 | 65500645 | 65500646 | 65500647 |

## SILVYN Liquid Tight Conduit

FLEXIBLE CONDUIT WITH STEEL INNER WALL

#149



SEARCH ON EXPRESS.ECSNZ.COM

### Construction

» PVC - Outer Sheath  
» Galvanized Steel - Inner Wall

### Protection

» IP67

### Temperature Rating

» Conduit: -20 to 100 (120 short term)  
» Glands: -45 to 105



Conduit



Straight gland



45 degree gland



90 degree gland

|                 | 16mm        | 20mm        | 25mm        | 32mm     | 40mm     | 50mm     |
|-----------------|-------------|-------------|-------------|----------|----------|----------|
| Type            | 3/8"        | 1/2"        | 3/4"        | 1"       | 1 1/4"   | 1 1/2"   |
| Conduit         | 61712470    | 61712480    | 61712490    | 61712500 | 61712510 | 61712520 |
| ID              | 12.6mm      | 16mm        | 21.0mm      | 26.5mm   | 35.1mm   | 40.3mm   |
| OD              | 17.8mm      | 21.1mm      | 26.4mm      | 33.1mm   | 41.8mm   | 47.8mm   |
| Coil Size       | 75m or 250m | 60m or 150m | 50m or 120m | 30m      | 30m      | 15m      |
| Straight Gland  | 61803800    | 61803802    | 61803803    | 61803804 | 61803805 | 61803806 |
| 45 Degree Gland | 61803850    | 61803852    | 61803853    | 61803854 | 55503254 | 55503255 |
| 90 Degree Gland | 61803808    | 61803810    | 61803811    | 61803812 | 61803813 | 61803814 |
| Locknut (Metal) | 52103010    | 52103020    | 52103030    | 52103040 | 52103050 | 52103060 |

ecs

CONDUIT



# SKINTOP Nylon Cable Glands

THREADED NYLON GLANDS FOR USE IN CONTROL CABINETS



#158

SEARCH ON EXPRESS.ECSNZ.COM



## Construction

Special Polyamide (nylon plastic) for harsh applications

## Protection

- » IP68 - 5 bar
- » IP69K

## Temperature Rating

- » Static: -40 to 100
- » Cable Moving: -20 to 100



| Size                            | Clamping Range | Thread Length | Gland    | Locknut  | Gland    | Locknut  |
|---------------------------------|----------------|---------------|----------|----------|----------|----------|
| Nylon metric thread cable gland |                |               |          |          |          |          |
| M12                             | 3.5 to 7mm     | 8             | 53111200 | 53119100 | 53111000 | 53119000 |
| M16                             | 4.5 to 10mm    | 8             | 53111210 | 53119110 | 53111010 | 53119010 |
| M20                             | 7 to 13mm      | 9             | 53111220 | 53119120 | 53111020 | 53119020 |
| M25                             | 9 to 17mm      | 10            | 53111230 | 53119130 | 53111030 | 53119030 |
| M32                             | 11 to 21mm     | 10            | 53111240 | 53119140 | 53111040 | 53119040 |
| M40                             | 19 to 28mm     | 10            | 53111250 | 53119150 | 53111050 | 53119050 |
| M50                             | 27 to 35mm     | 12            | 53111260 | 53119160 | 53111060 | 53119060 |
| M63                             | 34 to 45mm     | 12            | 53111270 | 53119170 | 53111070 | 53119070 |
| Nylon PG thread cable gland     |                |               |          |          |          |          |
| PG7                             | 2.5 to 6.5mm   | 8             | 53015200 | 53019200 | 53015000 | 53019000 |
| PG9                             | 3.5 to 8mm     | 8             | 53015210 | 53019210 | 53015010 | 53019010 |
| PG11                            | 4 to 10mm      | 8             | 53015220 | 53019220 | 53015020 | 53019020 |
| PG13.5                          | 6 to 12mm      | 9             | 53015230 | 53019230 | 53015030 | 53019030 |
| PG16                            | 9 to 14mm      | 10            | 53015240 | 53019240 | 53015040 | 53019040 |
| PG21                            | 13 to 18mm     | 11            | 53015250 | 53019250 | 53015050 | 53019050 |
| PG29                            | 14 to 25mm     | 11            | 53015260 | 53019260 | 53015060 | 53019060 |

# SKINTOP Spiral Cable Glands

CABLE GLANDS WITH SPIRAL STRAIN RELIEF



#160

SEARCH ON EXPRESS.ECSNZ.COM



## Construction

» Special Polyamide (nylon plastic) for harsh applications

## Temperature Rating

- » Static: -40 to 100
- » Cable Moving: -20 to 100

## Protection

- » IP68 - 5 bar
- » IP69K



| Size          | Clamping Range | Thread Length | Gland    | Locknut  | Gland    | Locknut  |
|---------------|----------------|---------------|----------|----------|----------|----------|
| Metric Thread |                |               |          |          |          |          |
| M12           | 3.5 to 7mm     | 8             | 53111700 | 53119100 | 53111600 | 53119000 |
| M16           | 4.5 to 10mm    | 8             | 53111710 | 53119110 | 53111610 | 53119010 |
| M20           | 7 to 13mm      | 8             | 53111720 | 53119120 | 53111620 | 53119020 |
| M25           | 9 to 17mm      | 9             | 53111730 | 53119130 | 53111630 | 53119030 |
| M32           | 11 to 21mm     | 10            | 53111740 | 53119140 | 53111640 | 53119040 |
| PG Thread     |                |               |          |          |          |          |
| PG7           | 2.5 to 6.5mm   | 8             | 53015800 | 53019200 | 53015600 | 53019000 |
| PG9           | 3.5 to 8mm     | 8             | 53015810 | 53019210 | 53015610 | 53019010 |
| PG11          | 4 to 10mm      | 8             | 53015820 | 53019220 | 53015620 | 53019020 |
| PG13.5        | 6 to 12mm      | 9             | 53015830 | 53019230 | 53015630 | 53019030 |
| PG16          | 9 to 14mm      | 10            | 53015840 | 53019240 | 53015640 | 53019040 |
| PG21          | 13 to 18mm     | 11            | 53015850 | 53019250 | 53015650 | 53019050 |

## SKINTOP Brass Cable Glands

METAL CABLE GLANDS FOR TOUGH ENVIRONMENTS



#159



SEARCH ON EXPRESS.ECSNZ.COM

### Construction

» Nickel plated brass with a special Polyamide (nylon plastic) insert.

### Protection

» IP68 - 10 bar

### Temperature Rating

» -30 to 100



| Size                 | Clamping Range | Thread Length | Gland    | Locknut  |
|----------------------|----------------|---------------|----------|----------|
| <b>Metric Thread</b> |                |               |          |          |
| M12                  | 3 to 7mm       | 6.5           | 53112000 | 52103000 |
| M16                  | 4.5 to 10mm    | 7             | 53112010 | 52103010 |
| M20                  | 7 to 13mm      | 8             | 53112020 | 52103020 |
| M25                  | 9 to 17mm      | 8             | 53112030 | 52103030 |
| M32                  | 11 to 21mm     | 9             | 53112040 | 52103040 |
| M40                  | 19 to 28mm     | 9             | 53112050 | 52103050 |
| M50                  | 27 to 35mm     | 10            | 53112060 | 52103060 |
| M63                  | 34 to 45mm     | 15            | 53112070 | 52103070 |
| M63 Plus             | 44 to 55mm     | 15            | 53112080 | 52103070 |
| <b>PG Thread</b>     |                |               |          |          |
| PG7                  | 2 to 6.5mm     | 6.5           | 52015700 | 52003490 |
| PG9                  | 4 to 8mm       | 7             | 52015710 | 52003500 |
| PG11                 | 4 to 10mm      | 8             | 52015720 | 52003510 |
| PG13.5               | 5 to 12mm      | 8             | 52015730 | 52003520 |
| PG16                 | 8 to 14mm      | 9             | 52015740 | 52003530 |
| PG21                 | 11 to 18mm     | 9             | 52015750 | 52003540 |
| PG29                 | 16 to 25mm     | 10            | 52015760 | 52003550 |

## SKINTOP Blanking Glands

FOR SEALING OFF UNUSED HOLES

#165



SEARCH ON EXPRESS.ECSNZ.COM

### Construction (Metal)

Nickel plated brass

### Construction (Nylon)

Glass-fibre reinforced nylon

### Temperature Rating (Metal)

» With O-ring: -30 to 100  
» Without O-ring: -60 to 200

### Temperature Rating (Nylon)

-40 to 100

### Protection (Metal)

» With O-ring: IP68  
» Without O-ring: IP54

### Protection (Nylon)

» With O-ring: IP68  
» Without O-ring: IP54



| Size                       | Thread Length | Blank    | Screwdrivers    | Optional O-Ring |
|----------------------------|---------------|----------|-----------------|-----------------|
| <b>Metal</b>               |               |          |                 |                 |
| M12                        | 6             | 52103100 | Flat Head       | 53102001        |
| M16                        | 6             | 52103110 | Flat Head       | 53102010        |
| M20                        | 6             | 52103120 | Flat Head       | 53102020        |
| M25                        | 8             | 52103130 | Flat Head       | 53102030        |
| M32                        | 8             | 52103140 | Flat Head       | 53102040        |
| M40                        | 8             | 52103150 | Flat Head       | 53102050        |
| M50                        | 10            | 52103160 | Flat Head       | 53102060        |
| M63                        | 12            | 52103170 | Flat Head       | 53102070        |
| <b>Black Nylon Plastic</b> |               |          |                 |                 |
| M12                        | 6             | 52006103 | Flat & Phillips | 53102001        |
| M16                        | 6             | 52006113 | Flat & Phillips | 53102010        |
| M20                        | 6             | 52006123 | Flat & Phillips | 53102020        |
| M25                        | 8             | 52006133 | Flat & Phillips | 53102030        |
| M32                        | 8             | 52006143 | Flat & Phillips | 53102040        |
| M40                        | 8             | 52006153 | Flat & Phillips | 53102050        |
| M50                        | 10            | 52006163 | Flat & Phillips | 53102060        |
| M63                        | 12            | 52006173 | Flat & Phillips | 53102070        |



# RENT ME

CIMCO Metric Thread Tap Set M12-M63

# \$50

per/day

projects.ecsnz.com/rentals



## SKINTOP Thread Adapters and Reducers

FOR SWAPPING BETWEEN THREAD TYPES

#164

SEARCH ON EXPRESS.ECSNZ.COM



| Outer Thread                    | Inner Thread | Nickel Brass | Grey Nylon | Black Nylon |
|---------------------------------|--------------|--------------|------------|-------------|
| <b>Reducers M to M Threads</b>  |              |              |            |             |
| M16                             | M12          | 52104310     | 52104505   | 52104541    |
| M20                             | M12          | 52104311     | 52104470   | 52104520    |
| M20                             | M16          | 52104312     | 52104504   | 52104521    |
| M25                             | M16          | 52104313     | 52104473   | 52104523    |
| M25                             | M20          | 52104314     | 52104474   | 52104524    |
| M32                             | M12          |              | 52104475   |             |
| M32                             | M16          |              | 52104476   | 52104526    |
| M32                             | M20          | 52104315     | 52104477   | 52104527    |
| M32                             | M25          | 52104316     | 52104478   | 52104528    |
| M40                             | M16          |              | 52104479   | 52104529    |
| M40                             | M20          |              | 52104480   | 52104530    |
| M40                             | M25          | 52104317     | 52104481   | 52104531    |
| M40                             | M32          | 52104318     | 52104482   | 52104532    |
| M50                             | M25          |              | 52104483   | 52104534    |
| M50                             | M32          | 52104319     | 52104484   | 52104535    |
| M50                             | M40          | 52104320     | 52104485   | 52104536    |
| M63                             | M40          | 52104321     | 52104486   | 52104539    |
| M63                             | M50          | 52104322     | 52104469   | 52104540    |
| <b>Enlargers M to M Threads</b> |              |              |            |             |
| M12                             | M16          | 52104450     | 52100300   | 52100308    |
| M16                             | M20          | 52104452     | 52100301   | 52100309    |
| M20                             | M25          | 52104454     | 52100302   | 52100310    |
| M25                             | M32          | 52104456     | 52100303   | 52100311    |
| M32                             | M40          | 52104458     | 52100304   | 52100312    |
| M40                             | M50          | 52104460     | 52100305   | 52100313    |
| M50                             | M63          | 52104462     | 52100306   | 52100314    |
| <b>Adapters PG to M Threads</b> |              |              |            |             |
| PG9                             | M16          | 52104491     |            |             |
| PG11                            | M16          | 52104492     |            |             |
| PG11                            | M20          | 52104493     |            |             |
| PG13.5                          | M20          | 52104494     |            |             |
| PG16                            | M20          | 52104495     |            |             |
| PG16                            | M25          | 52104496     |            |             |
| PG21                            | M20          | 52104497     |            |             |
| PG21                            | M25          | 52104498     |            |             |
| PG21                            | M32          | 52104499     |            |             |
| PG29                            | M25          | 52104500     |            |             |
| PG29                            | M32          | 52104501     |            |             |
| PG29                            | M40          | 52104502     |            |             |
| PG36                            | M40          | 52104503     |            |             |

## SKINTOP® LOCATOR

EASY POSITIONING AND SCRIBING OF THE THROUGH-HOLE ON SWITCHGEAR CABINETS

#237

SEARCH ON EXPRESS.ECSNZ.COM



### Application Range

- » Cable Gland Through-hole drilling
- » Small to medium control cabinets
- » Electrical installation
- » Quick allocation of cable and conduit glands
- » Suitable for metric cable glands
- » Use the kit for steel enclosure walls

### Benefits

- » Fast and easy placement of the SKINTOP® LOCATOR directly on the wall of the cabinet
- » No mistakes during hole drilling
- » For the easy mounting of SKINTOP® cable glands on switchgear cabinets (Independent from wall thickness)

### Product Make-up

- » High quality PETG
- » Suitable for cable glands/ fittings with metric threads

### Note

- » Single template not for sale, only complete kit solution
- » Stencil with a notch to flag the size



| Item No  | Size    | Included                       |
|----------|---------|--------------------------------|
| 61791330 | M12-M25 | 5x M12, 5x M16, 5x M20, 5x M25 |
| 61791331 | M32-M63 | 4x M32, 3x M40, 2x M50, 1x M63 |



## SKINTOP EMC - Metric Thread

EMC CABLE GLAND FOR VSD DRIVES



#1547

SEARCH ON EXPRESS.ECSNZ.COM



### Construction

» Nickel plated brass with a special Polyamide (nylon plastic) insert.

### Protection

» IP68 - 5 bar

### Temperature Rating

» -30 to 100



| Size                     | Clamping Range | Thread Length | Gland    | Standard Locknut | Spike Locknut |
|--------------------------|----------------|---------------|----------|------------------|---------------|
| <b>Standard Thread</b>   |                |               |          |                  |               |
| M12                      | 3.5 to 7mm     | 6.5           | 53112610 | 52103000         | 52103300      |
| M16                      | 4.5 to 9mm     | 7             | 53112620 | 52103010         | 52103310      |
| M20                      | 7 to 12.5mm    | 8             | 53112630 | 52103020         | 52103320      |
| M25                      | 9 to 16.5mm    | 8             | 53112640 | 52103030         | 52103330      |
| M32                      | 11 to 21mm     | 9             | 53112650 | 52103040         | 52103340      |
| M40                      | 19 to 28mm     | 9             | 53112660 | 52103050         | 52103350      |
| M50                      | 27 to 35mm     | 10            | 53112670 | 52103060         | 52103360      |
| M63                      | 34 to 45mm     | 15            | 53112680 | 52103070         | 52103370      |
| M63 Plus                 | 44 to 55mm     | 15            | 53112681 | 52103070         | 52103370      |
| <b>Extra Long Thread</b> |                |               |          |                  |               |
| M20                      | 7 to 12.5mm    | 12            | 53112635 | 52103020         | 52103320      |
| M25                      | 9 to 16.5mm    | 12            | 53112645 | 52103030         | 52103330      |
| M32                      | 11 to 21mm     | 15            | 53112655 | 52103040         | 52103340      |
| M40                      | 19 to 28mm     | 15            | 53112665 | 52103050         | 52103350      |
| M50                      | 27 to 35mm     | 15            | 53112675 | 52103060         | 52103360      |

## SKINTOP MS-M BRUSH

EMC CABLE GLAND FOR VSD DRIVES

#1548

SEARCH ON EXPRESS.ECSNZ.COM



### Features

- » Best EMC performance
- » Full 360 degree contact area with cable screen
- » Cables can be easily removed from the gland
- » Patented EMC design

### Protection

- » IP 68 - 10 bar (M12 - M50)
- » IP 68 - 5 bar (M63)
- » IP 68 - 1 bar (M63 plus - M75)
- » IP 69 K (M12 - M63)

### Application Range

For screen termination of both braid and tape screened cables.

### Temperature Rating

- » Moving: -30 to 100
- » Fixed: -40 to 100



| Size                     | Clamping Range | Thread Length | Gland    | Standard Locknut | Spike Locknut |
|--------------------------|----------------|---------------|----------|------------------|---------------|
| <b>Standard Thread</b>   |                |               |          |                  |               |
| M20                      | 7 to 13mm      | 8mm           | 53112507 | 52103020         | 52103320      |
| M25                      | 9 to 17mm      | 8             | 53112676 | 52103030         | 52103330      |
| M32                      | 11 to 21mm     | 9             | 53112677 | 52103040         | 52103340      |
| M40                      | 19 to 28mm     | 9             | 53112678 | 52103050         | 52103350      |
| M50                      | 27 to 35mm     | 10            | 53112679 | 52103060         | 52103360      |
| M63                      | 34 to 45mm     | 15            | 53112680 | 52103070         | 52103370      |
| M63 Plus                 | 44 to 55mm     | 15            | 53112681 | 52103070         | 52103370      |
| M25 (Reduced Clamping)   | 6 to 13mm      | 8             | 53112671 | 52103030         | 52103330      |
| <b>Extra Long Thread</b> |                |               |          |                  |               |
| M25                      | 9 to 17mm      | 12            | 53113727 | 52103030         | 52103330      |
| M32                      | 11 to 21mm     | 15            | 53113728 | 52103040         | 52103340      |
| M40                      | 19 to 28mm     | 15            | 53113729 | 52103050         | 52103350      |
| M50                      | 27 to 35mm     | 15            | 53112673 | 52103060         | 52103360      |

ecs

EMC GLANDS



# RENT ME

CIMCO Stainless Steel Hydraulic Chassis Punch

# \$50

per/day

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## SKINTOP BRUSH - ADD ON

CONVERT ANY SKINTOP GLAND INTO A VSD GLAND

#166



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### Construction

» Nickel plated brass housing & brass brush.

### Protection

» IP rating based on gland used

### Temperature Rating

» -70 to 200

### Installation Instructions

1. Pass the cable through the gland
2. Pull through as much cable as required in the cabinet
3. Pull an extra 100mm of cable through the gland
4. Strip 10mm of insulation off the cable (don't strip the screen)
5. Pull cable out of the gland so stripped area is under the EMC flaps
6. Tighten the compression gland



| Size | Thread Length | Minimum Diameter (Shield) | Brush Locknut |
|------|---------------|---------------------------|---------------|
| M16  | 10            | 5 mm                      | 54110840      |
| M20  | 10            | 5 mm                      | 54110841      |
| M25  | 10            | 5 mm                      | 54110842      |
| M32  | 12            | 8 mm                      | 54110843      |
| M40  | 12            | 10 mm                     | 54110844      |
| M50  | 12            | 14 mm                     | 54110845      |

## ICOTEK EMC Clamps

CLAMPS FOR CABLE SCREENS FOR WITHIN CABINETS

#167



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| Item No                                  | Clamping Range | Mounting        | Suitable VSD Cable  |
|------------------------------------------|----------------|-----------------|---------------------|
| <b>SFZ / SKL (For DIN Rail mounting)</b> |                |                 |                     |
| 36850                                    | 1.5mm to 3mm   | DIN Rail 35mm   |                     |
| 36855                                    | 3mm to 6mm     | DIN Rail 35mm   |                     |
| 36860                                    | 6mm to 8mm     | DIN Rail 35mm   |                     |
| 36865                                    | 9mm to 11mm    | DIN Rail 35mm   | 4G1.5mm             |
| 36870                                    | 12mm to 16mm   | DIN Rail 35mm   | 4G2.5mm / 4mm / 6mm |
| 36875                                    | 17mm to 22mm   | DIN Rail 35mm   | 4G10mm / 16mm       |
| 36880                                    | 23mm to 29mm   | DIN Rail 35mm   | 4G25mm              |
| <b>LFZ / SKL (For bolt mounting)</b>     |                |                 |                     |
| 36910                                    | 1.5mm to 3mm   | 4.1mm Bolt Hole |                     |
| 36915                                    | 3mm to 6mm     | 4.1mm Bolt Hole |                     |
| 36920                                    | 6mm to 8mm     | 4.1mm Bolt Hole |                     |
| 36925                                    | 9mm to 11mm    | 4.1mm Bolt Hole | 4G1.5mm             |
| 36930                                    | 12mm to 16mm   | 4.1mm Bolt Hole | 4G2.5mm / 4mm / 6mm |
| 36935                                    | 17mm to 22mm   | 4.1mm Bolt Hole | 4G10mm / 16mm       |
| 36940                                    | 23mm to 29mm   | 4.1mm Bolt Hole | 4G25mm              |



SFZ / SKL (For DIN Rail mounting)



LFZ / SKL (For bolt mounting)

## SKINTOP / INOX S/Steel Cable Glands

COMPACT STAINLESS STEEL CABLE GLANDS

#1341



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### Application Range

- » Onshore marine applications
- » Bottling plants and breweries
- » Food industry (product-free zone, splash zone)

### Material

- » Body: Stainless steel - V4A (1.4404 / 316L)
- » Insert: Polyamide
- » Sealing ring: Silicone
- » O-Ring: Silicone

### Protection Rating

- » IP 68 - 10 bar (M12 - M20)
- » IP 68 - 5 bar (M25 - M32)
- » IP 69 K

### Temperature Range

- » -40°C to +100°C



| Size                | Clamping Range | Thread Length | Gland    | Locknut  |
|---------------------|----------------|---------------|----------|----------|
| <b>Standard</b>     |                |               |          |          |
| M12                 | 4 to 7mm       | 6.5mm         | 53806739 | 52032585 |
| M16                 | 6 to 10mm      | 7mm           | 53806740 | 52032615 |
| M20                 | 7 to 13mm      | 8mm           | 53806741 | 52032625 |
| M25                 | 9 to 17mm      | 8mm           | 53806742 | 52032635 |
| M32                 | 11 to 21mm     | 9mm           | 53806743 | 52032645 |
| M40                 | 19 to 28mm     | 9mm           | 53806744 | 52032655 |
| <b>Screened EMC</b> |                |               |          |          |
| M12                 | 4 to 7mm       | 6.5mm         | 53806720 | 52032585 |
| M16                 | 6 to 10mm      | 7mm           | 53806722 | 52032615 |
| M20                 | 7 to 13mm      | 8mm           | 53806724 | 52032625 |
| M25                 | 9 to 17mm      | 8mm           | 53806726 | 52032635 |
| M32                 | 11 to 21mm     | 9mm           | 53806728 | 52032645 |
| M40                 | 19 to 28mm     | 9mm           | 53806731 | 52032655 |



## SKINTOP DIX multi-inserts

GLAND INSERTS WITH MULTIPLE CABLE HOLES

#168



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| Item No                           | For Gland | Number of Holes | Hole Size      |
|-----------------------------------|-----------|-----------------|----------------|
| <b>Multiple Hole Inserts</b>      |           |                 |                |
| 53316220                          | M16       | 2               | 2 mm           |
| 53316230                          | M16       | 2               | 3 mm           |
| 53316240                          | M16       | 2               | 4 mm           |
| 53320250                          | M20       | 2               | 5 mm           |
| 53320260                          | M20       | 2               | 6 mm           |
| 53320340                          | M20       | 3               | 4 mm           |
| 53320353                          | M20       | 3               | 5.3 mm         |
| 53320440                          | M20       | 4               | 4 mm           |
| 53325260                          | M25       | 2               | 6 mm           |
| 53325350                          | M25       | 3               | 5 mm           |
| 53325360                          | M25       | 3               | 6 mm           |
| 53325370                          | M25       | 3               | 7 mm           |
| 53325450                          | M25       | 4               | 5 mm           |
| 53325540                          | M25       | 5               | 4 mm           |
| 53325640                          | M25       | 6               | 4 mm           |
| 53332270                          | M32       | 2               | 7 mm           |
| 53332280                          | M32       | 2               | 8 mm           |
| 53332290                          | M32       | 2               | 9 mm           |
| 53332380                          | M32       | 3               | 8 mm           |
| 53332470                          | M32       | 4               | 7 mm           |
| 53332560                          | M32       | 5               | 6 mm           |
| 53332650                          | M32       | 6               | 5 mm           |
| 53332840                          | M32       | 8               | 4 mm           |
| 53332850                          | M32       | 8               | 5 mm           |
| 53332940                          | M32       | 9               | 4 mm           |
| 53340480                          | M40       | 4               | 8 mm           |
| 53340580                          | M40       | 5               | 8 mm           |
| 53340590                          | M40       | 5               | 9 mm           |
| 53340670                          | M40       | 6               | 7 mm           |
| 53340860                          | M40       | 8               | 6 mm           |
| 53340969                          | M40       | 9               | 6.9 mm         |
| 53350166                          | M50       | 16              | 6 mm           |
| 53350680                          | M50       | 6               | 8 mm           |
| <b>Special Automation Inserts</b> |           |                 |                |
| 53611001                          | M20       | 1               | ASI Flat Cable |
| 53440980                          | M25       | 1               | RJ45's         |
| <b>Solid Inserts for Sealing</b>  |           |                 |                |
| 54113000                          | M12       | Solid           | Solid          |
| 54113010                          | M16       | Solid           | Solid          |
| 54113020                          | M20       | Solid           | Solid          |
| 54113030                          | M25       | Solid           | Solid          |
| 54113040                          | M32       | Solid           | Solid          |
| 54113050                          | M40       | Solid           | Solid          |
| 54113060                          | M50       | Solid           | Solid          |



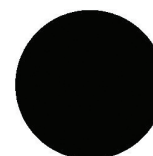
Standard Dix Inserts for multiple Cables



Standard AS-I Insert for Flat Cable (M20)



Standard Insert for RJ45 Ethernet Cable (M25)



Solid rubber for sealing off Glands

## Sealing Pins

FOR SEALING OFF UNUSED HOLES

#168



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| Item No  | Pin Diameter | Length |
|----------|--------------|--------|
| 53100004 | 4mm          | 9mm    |
| 53100005 | 5mm          | 11mm   |
| 53100006 | 6mm          | 14mm   |
| 53100007 | 7mm          | 14mm   |
| 53100008 | 8mm          | 14mm   |
| 53100009 | 9mm          | 14mm   |



## AX / AE SYSTEM PERFECTION

### Compact and small enclosures.

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ENCLOSURES   AX PLASTIC   AE MILD STEEL   AE STAINLESS STEEL 304   AE STAINLESS STEEL 316L

**RITTAL**



## Shrink Tube

FOR APPLICATIONS IN CONTINUOUS USE

#109



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### Benefits

- » Fulfills high mechanical requirements for underwater and underground insulations and repairs.
- » Resistant and flexible protection

### Application Range

- » 600V, 90°C low voltage applications in continuous use
- » For sealing and insulating cable splices, connections, end caps and sheaths.

### Approvals

- » Approval for ESI 09-11

### Design

- » Piece = 1.22 m



| Item No  | Description | Internal Shrinkage Range | Wall Thickness | Pieces / PU | Length |
|----------|-------------|--------------------------|----------------|-------------|--------|
| 61810140 | TBM0750     | 19.1 - 13.0              | 2              | 5           | 1.22m  |
| 61810150 | TBM1100     | 27.9 - 17.7              | 2              | 3           | 1.22m  |
| 61810160 | TBM1500     | 38.1 - 26.2              | 2              | 2           | 1.22m  |
| 61810170 | TBM2050     | 52.1 - 33.0              | 2              | 1           | 1.22m  |
| 61810180 | TBM3500     | 88.9 - 58.9              | 2.4            | 1           | 1.22m  |
| 61810190 | TBM6700     | 170.2 - 111.8            | 2.8            | 1           | 1.22m  |
| 61810200 | TBM9000     | 228.6 - 151.6            | 3              | 1           | 1.22m  |

## Shrink Tube Protect Box

BLACK FLEXIBLE UL FLAME RETARDANT THIN WALLED HEAT SHRINK

#109



SEARCH ON EXPRESS.ECSNZ.COM

### Application Range

- » General purpose, flexible heat shrink tubing for protection, insulation and bundling

### Product features

- » Flame-retardant (except colour: clear)
- » Silicone-free
- » UV-resistant (only colour: black)

### Benefits

- » Very flexible, UL 224 flame retardant thin-walled heat shrink tubing with excellent physical and mechanical properties
- » Convenient quantity for small consumers
- » Stackable boxes for easy storage

### Norm references / Approvals

- » UL file no.: E476215

### Product features

- » UV-resistant

### Note

- » Not resistant against engine oils



| Item No  | Shrinking Range | Panel Thickness, Shrunk +/- 0.1 mm | LENGTH |
|----------|-----------------|------------------------------------|--------|
| 61742424 | 1.6 - 0.8       | 0.43                               | 12     |
| 61742425 | 2.4 - 1.2       | 0.51                               | 12     |
| 61742426 | 3.2 - 1.6       | 0.51                               | 12     |
| 61742427 | 4.8 - 2.4       | 0.51                               | 10     |
| 61742428 | 6.4 - 3.2       | 0.64                               | 8      |
| 61742429 | 9.5 - 4.7       | 0.64                               | 7      |
| 61742430 | 12.7 - 6.4      | 0.64                               | 6      |
| 61742431 | 19.1 - 9.5      | 0.70                               | 5      |

## Economic Box Enclosures

ECONOMIC ENCLOSURE WITH HINGES AND QUICK RELEASE FASTENERS

#1594



SEARCH ON EXPRESS.ECSNZ.COM

### Benefits

- » Tidy storage
- » Dust and moisture protection
- » Few work steps, free assembly in any position
- » Fast-snap-lock for easy handling
- » Good combination of quality and price

### Product Features

- » Enclosure with hinges and quick release fasteners
- » Unique dovetail guide for frame or front panel (no standoff)
- » Integrated mounting panel (included in the enclosure price)
- » 3,5mm screw diameter for mounting plate

### Certifications

- » -40°C to +85°C

### Temperature Range

- » UV-resistant

### Protection rating

- » IP67



| Item No  | Width (mm) | Height (mm) | Depth (mm) |
|----------|------------|-------------|------------|
| 53110130 | 150        | 150         | 90         |
| 53110131 | 150        | 200         | 100        |
| 53110132 | 180        | 180         | 150        |
| 53110133 | 200        | 300         | 160        |
| 53110134 | 300        | 400         | 160        |
| 53110135 | 400        | 500         | 160        |

## PV Power Enclosures

IP65 ENCLOSURES FOR PV STRING COMBINING AND ISOLATING

# 1563



SEARCH ON EXPRESS.ECSNZ.COM

### Description

PV Power IP65 Enclosures are manufactured in Europe from ASA (Acrylonitrile Styrene Acrylate). ASA material is extremely tough with good chemical resistance and thermal stability, UV stabilised, and outstanding resistance to weather and aging.

### Benefits

- » Tamper evident security seal
- » Optional key lock available
- » Blanking Plates included
- » Made in Europe
- » UV stabilised

### Norm references / Approvals

- » Material: Acrylonitrile Styrene Acrylate (ASA)
- » Complies with: IEC 60670-1 :2002 IEC 60670-24:2005
- » Rated voltage: 1000VDC
- » Resistance of insulating material to fire (glow wire test): 650°C
- » Protection degree IP65 / Insulation class II

| SKU         | Poles                                                       | Dimensions (WxHxD) | Rows   |
|-------------|-------------------------------------------------------------|--------------------|--------|
| Enclosures  |                                                             |                    |        |
| PV-N4D      | 4                                                           | 127 x 200 x 120    | 1 Row  |
| PV-N8D      | 8                                                           | 200 x 200 x 120    | 1 Row  |
| PV-N12D     | 12                                                          | 318 x 258 x 142    | 1 Row  |
| PV-N24D     | 24                                                          | 318 x 383 x 142    | 2 Rows |
| PV-N36D     | 36                                                          | 318 x 507 x 142    | 3 Rows |
| Accessories |                                                             |                    |        |
| PV-LOCKDP   | Enclosure Lock                                              |                    |        |
| PV-2000200  | Earth & Neutral Bar - 4 + 4 way - for N4D                   |                    |        |
| PV-2000205  | Earth & Neutral Bar - 8 + 8 way - for N8D                   |                    |        |
| PV-103547   | Earth & Neutral Bar - 14 + 9 + 8 way - for N12D, N24D, N36D |                    |        |



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## ICOTEK Split Gland System

FOR HIGH NUMBERS OF CABLE ENTRIES TO CABINETS

#1320

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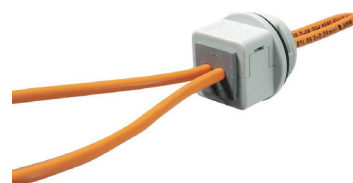
| Item No | Type     | Number of inserts | Dimensions (h x w) |
|---------|----------|-------------------|--------------------|
| 42204   | KEL B4   | 4                 | 58 x 73            |
| 42248   | KEL24/5  | 5                 | 58 x 147           |
| 42241   | KEL24/10 | 10                | 58 x 147           |
| 42164   | KEL16/4  | 4                 | 58 x 120           |
| 42168   | KEL16/8  | 8                 | 58 x 120           |

## ICOTEK Circular Split Gland

FOR LARGE CONNECTORS THROUGH CABINETS

#1318

SEARCH ON EXPRESS.ECSNZ.COM



| Item No | Type    | Locknut  | Thread | Numbers of Inserts |
|---------|---------|----------|--------|--------------------|
| 45035   | KVT25   | Included | M25    | 1                  |
| 45036   | KVT32   | Included | M32    | 1                  |
| 45215   | KVT63-4 | Included | M63    | 4                  |

## ICOTEK Split Gland System Inserts

INSERTS FOR SPLIT GLAND SYSTEM

#1319

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| Grey  | Black | Clamping Range  | Type    |
|-------|-------|-----------------|---------|
| 41251 | 41351 | Blanking Insert | BTk     |
| 41203 | 41303 | 3 - 4 mm        | KT3     |
| 41204 | 41304 | 4 - 5 mm        | KT4     |
| 41205 | 41305 | 5 - 6 mm        | KT5     |
| 41206 | 41306 | 6 - 7 mm        | KT6     |
| 41207 | 41307 | 7 - 8 mm        | KT7     |
| 41208 | 41308 | 8 - 9 mm        | KT8     |
| 41209 | 41309 | 9 - 10 mm       | KT9     |
| 41210 | 41310 | 10 - 11 mm      | KT10    |
| 41211 | 41311 | 11 - 12 mm      | KT11    |
| 41212 | 41312 | 12 - 13 mm      | KT12    |
| 41213 | 41313 | 13 - 14 mm      | KT13    |
| 41214 | 41314 | 14 - 15 mm      | KT14    |
| 41215 | 41315 | 15 - 16 mm      | KT15    |
| 39901 | 39912 | 16 mm           | KT16    |
| 39906 | 39907 | 2 x Ø 4 mm      | KT2/4   |
| 41200 | 39904 | 2 x Ø 5 mm      | KT2/5   |
| 41201 | 39905 | 2 x Ø 6 mm      | KT2/6   |
| 41202 | 39916 | 2 x Ø 7 mm      | KT2/7   |
| 39914 | 39915 | 4 x Ø 3 mm      | KT4/3   |
| 39909 | 39911 | 4 x Ø 4 mm      | KT4/4   |
| 39908 | 39910 | 4 x Ø 5 mm      | KT4/5   |
| 39902 | 39903 | for 1 ASI-cable | KT-ASI  |
| 39922 | 39924 | for 2 ASI-cable | KT-ASI2 |



### SPLIT GLAND - HOW THEY WORK

With these systems both the rubber insert and the plastic housing split in half. This allows very large pre-terminated cables to be passed into cabinets without having to cut off the connectors.

Ideal for circular motor connectors, RJ45's, PC mouse's etc. They are also more compact than conventional glands saving on both space and installation time.



## EKD Kolibri Series

DRAGCHAIN FOR COMMON APPLICATIONS



#170

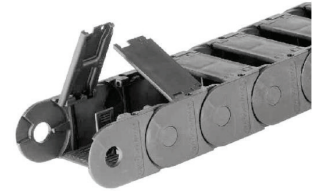


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| Type                   | Bending Radius            | Pitch | Inner Dimensions | Outer Dimensions |
|------------------------|---------------------------|-------|------------------|------------------|
| <b>Without latches</b> |                           |       |                  |                  |
| Kolibri 0              | 30                        | 20    | 10 x 10          | 15 x 15          |
| Kolibri 01             | 30                        | 20    | 10 x 10          | 15 x 22          |
| Kolibri 1              | 40 / 100                  | 40    | 24 x 18          | 30 x 30          |
| Kolibri 2              | 40 / 100 / 150 / 200      | 40    | 24 x 48          | 30 x 60          |
| Kolibri 3              | 40 / 100                  | 40    | 24 x 78          | 30 x 90          |
| <b>With latches</b>    |                           |       |                  |                  |
| Kolibri 02             | 30                        | 20    | 10 x 24          | 15 x 37          |
| Kolibri 03             | 20 / 30                   | 20    | 10 x 39          | 15 x 51          |
| Kolibri 05             | 35 / 70                   | 30    | 18 x 25          | 22 x 38          |
| Kolibri 06             | 35 / 70                   | 30    | 18 x 36          | 22 x 48          |
| Kolibri 10.0           | 40 / 75 / 100 / 150 / 200 | 35    | 23 x 34          | 30 x 50          |
| Kolibri 11.0           | 40 / 75 / 100 / 150 / 200 | 35    | 23 x 44          | 30 x 60          |
| Kolibri 12.0           | 40 / 75 / 100 / 150 / 200 | 35    | 23 x 64          | 30 x 80          |
| Kolibri 13.0           | 40 / 75 / 100 / 150 / 200 | 35    | 23 x 79          | 30 x 95          |
| Kolibri 14.0           | 40 / 150 / 200            | 35    | 23 x 109         | 30 x 125         |
| Dividers               | K10.0 to 14.0 Series      |       |                  |                  |



Without Latches



With Latches

## EKD PKK Series

DRAGCHAIN FOR HEAVY LOADS AND LONG TRAVEL LENGTHS



0800 849 2211

For Orders Freephone ECS Sales



| Type    | Bending Radius          | pitch | Inner w options | Inner h | Outer w        | Outer h |
|---------|-------------------------|-------|-----------------|---------|----------------|---------|
| PKK 220 | 75/100/150/200/300      | 65    | 50/100/150/200  | 34      | inner w + 30mm | 50      |
| PKK 320 | 100/150/200/250/300/400 | 90    | 100/150/200/300 | 51      | inner w + 36mm | 75      |

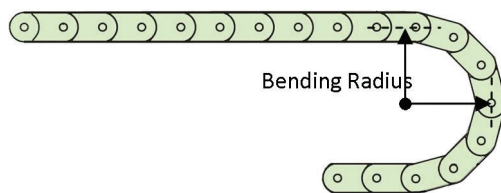
\*More dragchain styles available on request



## Dragchain Installation Tips

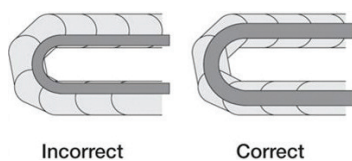
### SELECTING THE CORRECT BENDING RADIUS

When selecting a dragchain it is important to select a bending radius that does not overstress the cables. Most of our cables include a "Minimum bending radius" rating. The dragchain radius should always be larger than the "Minimum bending radius" of cables.



### PLACEMENT OF CABLE WITHIN THE DRAGCHAIN

When installing cables in dragchain allow slack on the cables so they sit in the centre of the dragchain. Otherwise when the dragchain bends it will pull the cables tight and overstress them.

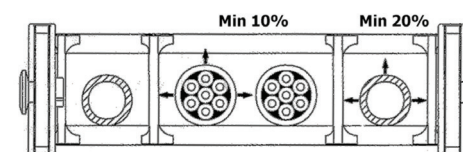


\*We recommend calling our technical team when selecting dragchains

### EXTRA SPACE ALLOWANCE

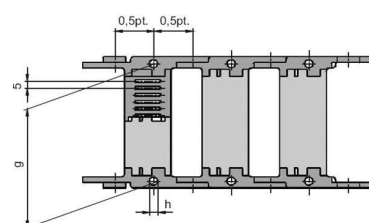
When installing cables and other items into a dragchain allow the following extra space within the dragchain.

|                 |                   |
|-----------------|-------------------|
| Cables          | Add 10% to the OD |
| Pneumatic Hoses | Add 15% to the OD |
| Hydraulic Hoses | Add 20% to the OD |



### MOUNTING OPTIONS

Our dragchains do not require expensive end connectors. Every chain link includes mounting holes which allows for simple mounting and easy maintenance.



Most Common  
(through vertical / top holes)



Alternative Mounting  
(through horizontal holes)



## FLEXIMARK Single Core Marking - LF

### FLEXI-PRINT LABELS

#174



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#### Flexi-Print Label Construction

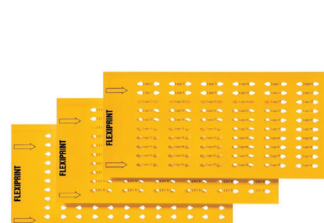
» Halogen Free polyester. Resistant against oils, water, common chemicals and UV Resistant

#### Feature

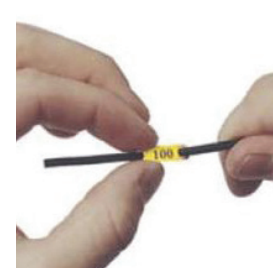
» Can be printed on using most common Laser printers



| Item No           | Suitable App Wire (V90) | Suitable Control Cable (110) | Made from P/N | Labels / sheet | Pack Size |
|-------------------|-------------------------|------------------------------|---------------|----------------|-----------|
| LAPP-FLEXIPRINT-1 |                         | 0.25mm to 0.75mm             | 83254400      | 60             | 1 sheet   |
| LAPP-FLEXIPRINT-2 | 0.5mm to 0.75mm         | 0.75mm to 1.5mm              | 83254420      | 60             | 1 sheet   |
| LAPP-FLEXIPRINT-3 | 0.5mm to 1.5mm          | 1.5mm to 2.5mm               | 83254460      | 60             | 1 sheet   |



4.5 Seconds to mark a cable



## FLEXIMARK PT Collar Marking - LMB

### FLEXI-PRINT LABELS

#1492



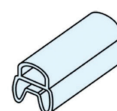
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#### Flexi-Print Label Construction

» Halogen Free polyester. Resistant against oils, water, common chemicals and UV Resistant

#### Feature

- » The label inserts are compatible with other common collar brands available
- » The inserts come on A5 sheets and can be printed with standard Laser printers
- » There is no need to purchase a special printer
- » Two colours per sheet: Yellow on one side, White on the other



| Item No                   | Description | Suitable App Wire (V90)   | Suitable Control Cable (110) | Cable Ø      | Pack Size |
|---------------------------|-------------|---------------------------|------------------------------|--------------|-----------|
| <b>15mm Clear Holders</b> |             |                           |                              |              |           |
| 61823000                  | PT 02/15    |                           | 0.25 to 1.5mm <sup>2</sup>   | 1.3 to 3mm   | 200       |
| 61823010                  | PT 10/15    | 0.5 to 1.5mm <sup>2</sup> | 1.5 to 4mm <sup>2</sup>      | 2.5mm to 5mm | 200       |
| 61823020                  | PT 20/15    | 2.5 to 6mm <sup>2</sup>   | 2.5 to 16mm <sup>2</sup>     | 4mm to 10mm  | 100       |
| 61823030                  | PT 30/15    | 10 & 16mm <sup>2</sup>    | 16mm <sup>2</sup> +          | 8mm to 16mm  | 50        |
| <b>21mm Clear Holders</b> |             |                           |                              |              |           |
| 61823040                  | PT 02/21    |                           | 0.25 to 1.5mm <sup>2</sup>   | 1.3 to 3mm   | 200       |
| 61823050                  | PT 10/21    | 0.5 to 1.5mm <sup>2</sup> | 1.5 to 4mm <sup>2</sup>      | 2.5mm to 5mm | 200       |
| 61823060                  | PT 20/21    | 2.5 to 6mm <sup>2</sup>   | 2.5 to 16mm <sup>2</sup>     | 4mm to 10mm  | 100       |
| 61823070                  | PT 30/21    | 10 & 16mm <sup>2</sup>    | 16mm <sup>2</sup> +          | 8mm to 16mm  | 50        |

| Item No  | Description                              | Side 1 | Side 2 | Suitable Holders | Labels / A5 Sheet | Pack Size    |
|----------|------------------------------------------|--------|--------|------------------|-------------------|--------------|
| 83254680 | Yellow Laser Printable Flexilabel Insert | Yellow | White  | Both 15 & 21mm   | 48                | 1 sheet (A5) |

## FLEXIMARK Label Holders - LFL

FOR OVERALL CABLE MARKING

0800 849 2211

Freephone ECS Sales



### Flexi-Print Label Construction

Halogen Free polyethylene

#### Feature

- » UV-filter protects the label from fading
- » Can be used outdoors
- » We recommend using black cables ties for outdoors
- » Labels can be printed with Laser printers.



| Item No       | Description                    | Size         | Labels / Sheet | Internal Size | External Size | Pack Size    |
|---------------|--------------------------------|--------------|----------------|---------------|---------------|--------------|
| <b>Clear</b>  |                                |              |                |               |               |              |
| 83254963      | Clear Label Holder             |              |                | 35mm x 10.4mm | 47mm x 12.2mm | 50           |
| 83254965      | Clear Label Holder             |              |                | 70mm x 10.4mm | 82mm x 12.2mm | 50           |
| <b>Black</b>  |                                |              |                |               |               |              |
| 61831041      | Black Cable Tie (98mm x 2.5mm) |              |                |               |               | 1000         |
| <b>Yellow</b> |                                |              |                |               |               |              |
| 83254670      | Yellow Marker Insert           | 35mm x 9.5mm | 150            |               |               | 1 sheet (A4) |
| 83254701      | Yellow Marker Insert           | 70mm x 9.5mm | 84             |               |               | 1 sheet (A4) |

## FLEXIMARK Wrap-Around Labels - LCK

FOR OVERALL CABLE MARKING

0800 849 2211

Freephone ECS Sales



### Flexi-Print Label Construction

Halogen Free polyethylene.

#### Features

- » Quick and cost effective cable marking system
- » Very low profile system which is useful for running pre-marked cables through conduit
- » Labels can be printed with Laser printers



| Item No  | Description               | Printable Size  | Suitable Cable OD | Labels / Sheet | Pack Size    |
|----------|---------------------------|-----------------|-------------------|----------------|--------------|
| 83256144 | Wrap around label (LCK35) | 25mm x 19mm     | 6 to 12mm         | 40             | 1 sheet (A4) |
| 83256146 | Wrap around label (LCK40) | 25mm x 25.4mm   | 8 to 22mm         | 24             | 1 sheet (A4) |
| 83256148 | Wrap around label (LCK45) | 25.5mm x 25.4mm | 8 to 37mm         | 16             | 1 sheet (A4) |

## FLEXIMARK Software

PRINTING SOFTWARE FOR FLEXIMARK

0800 849 2211

Freephone ECS Sales



#### Features

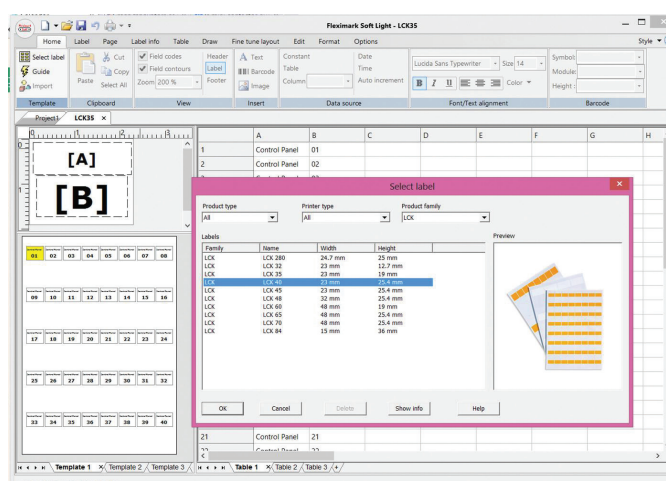
- » Free to download and no expiry date
- » Lines up the printing area for each label type
- » Import label data direct from Microsoft Excel
- » Many smart features including automatic number sequences.

#### Requirements

Windows Operating System

#### Getting Started

Contact ECS for a free getting started tutorial and a link to the download site



CABLE MARKING



# COLOUR CODING FOR POWER CABLES

## Accepted Standards AS/NZS 3000:2007

For industrial factory and machine applications many of the cables are being designed and manufactured in Europe. Some cables use AS/NZS colour coding but many of the high end cables (including flex's and robotic cables) will use the European VDE colour coding standard.

AS/NZS Standard, European and number coded standards are accepted in Australia (AS/NZS 3000:2007 ref 3.8.3.3)



### AS/NZS STANDARD

#### Cores

#### Application

#### Earth

#### Neutral

#### Phases



| 3            | 4            | 5            |
|--------------|--------------|--------------|
| Single Phase | Three Phase  | 3 Phase + N  |
| Green/Yellow | Green/Yellow | Green/Yellow |
| Black        |              | Black        |
| Red          | Red          | Red          |
|              | White        | White        |
|              | Blue         | Blue         |



### VDE EUROPEAN STANDARD

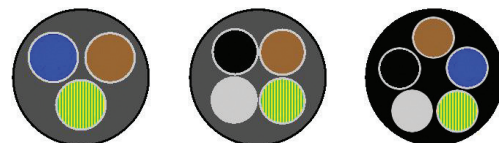
#### Cores

#### Application

#### Earth

#### Neutral

#### Phases



| 3            | 4            | 5            |
|--------------|--------------|--------------|
| Single Phase | Three Phase  | 3 Phase + N  |
| Green/Yellow | Green/Yellow | Green/Yellow |
| Blue         |              | Blue         |
| Brown        | Brown        | Brown        |
|              | Black        | Black        |
|              | Grey         | Grey         |



### NUMBER CODED

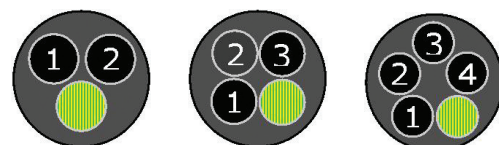
#### Cores

#### Application

#### Earth

#### Neutral

#### Phases



| 3            | 4            | 5            |
|--------------|--------------|--------------|
| Single Phase | Three Phase  | 3 Phase + N  |
| Green/Yellow | Green/Yellow | Green/Yellow |
| 2            |              | 4            |
| 1            | 1            | 1            |
|              | 2            | 2            |
|              | 3            | 3            |

### CROSS-REFERENCE BETWEEN STANDARDS

#### Phase 1

#### Phase 2

#### Phase 3

#### Neutral

#### Earth

| AS/NZS       | European     | Number Coded |
|--------------|--------------|--------------|
| Red          | Brown        | 1            |
| White        | Black        | 2            |
| Blue         | Grey         | 3            |
| Black        | Blue         | 4            |
| Green/Yellow | Green/Yellow | Green/Yellow |

## Colour Coding for Unitronic Data Cables

DIN 47100 INTERNATIONAL COLOUR CODING STANDARD

| Colour       | Core | Pair |
|--------------|------|------|
| White        | 1    | 1    |
| brown        | 2    | 1    |
| green        | 3    | 2    |
| yellow       | 4    | 2    |
| grey         | 5    | 3    |
| pink         | 6    | 3    |
| blue         | 7    | 4    |
| red          | 8    | 4    |
| black        | 9    | 5    |
| violet       | 10   | 5    |
| grey/pink    | 11   | 6    |
| red/blue     | 12   | 6    |
| white/green  | 13   | 7    |
| brown/green  | 14   | 7    |
| white/yellow | 15   | 8    |
| yellow/brown | 16   | 8    |
| white/grey   | 17   | 9    |
| grey/brown   | 18   | 9    |
| white/pink   | 19   | 10   |
| pink/brown   | 20   | 10   |
| white/blue   | 21   | 11   |
| brown/blue   | 22   | 11   |
| white/red    | 23   | 12   |
| brown/red    | 24   | 12   |
| white/black  | 25   | 13   |
| brown/black  | 26   | 13   |
| grey/green   | 27   | 14   |
| yellow/grey  | 28   | 14   |
| pink/green   | 29   | 15   |
| yellow/pink  | 30   | 15   |
| green/blue   | 31   | 16   |
| yellow/blue  | 32   | 16   |
| green/red    | 33   | 17   |
| yellow/red   | 34   | 17   |
| green/black  | 35   | 18   |
| yellow/black | 36   | 18   |
| grey/blue    | 37   | 19   |
| pink/blue    | 38   | 19   |
| grey/red     | 39   | 20   |
| pink/red     | 40   | 20   |

## AWG to mm² Conversion

CONTROL CABLE WITH UL APPROVALS

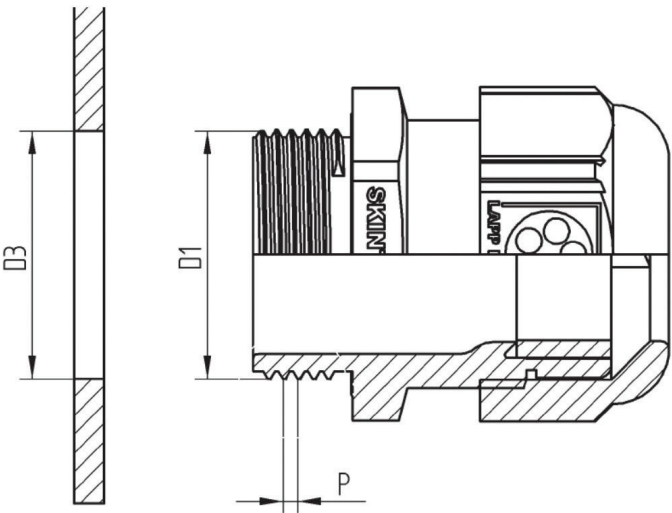


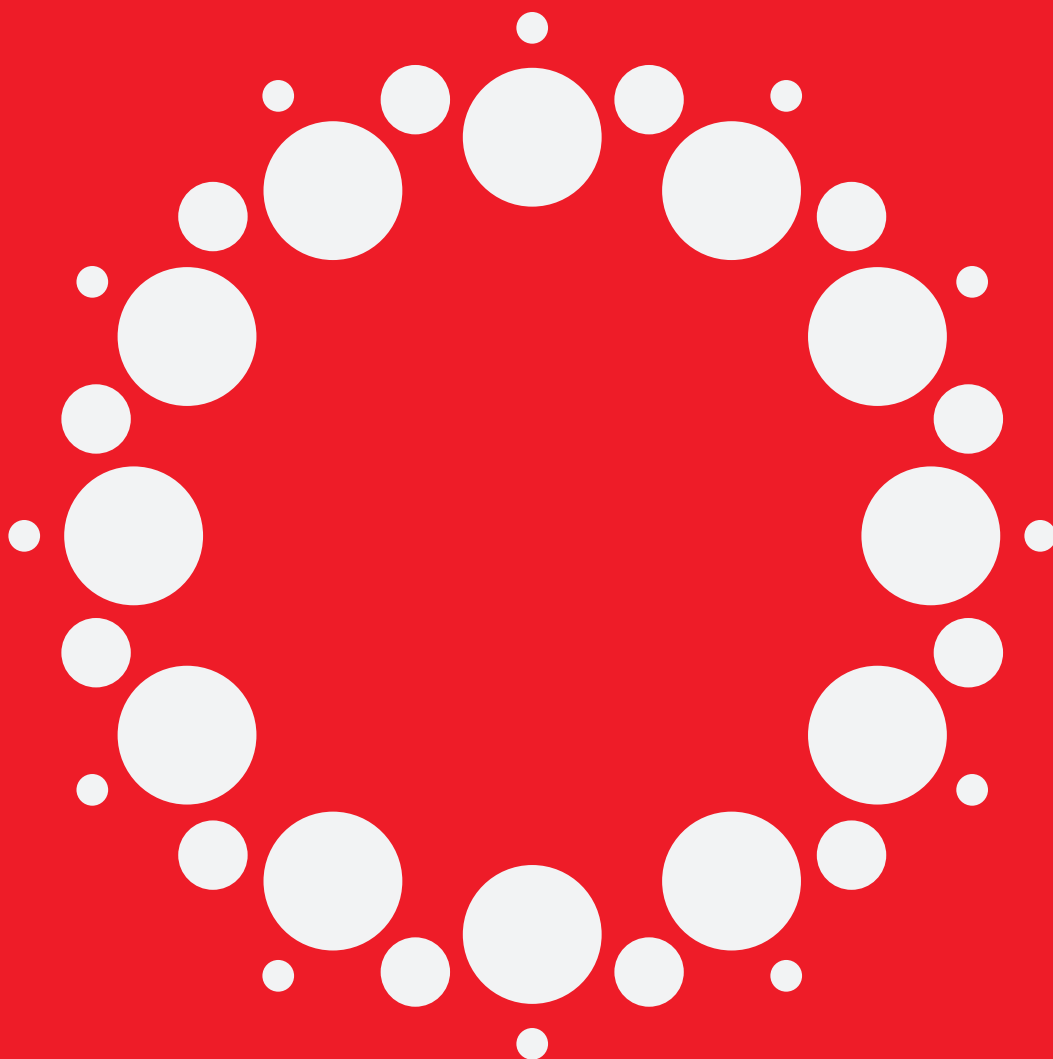
| AWG | Actual mm² | Closest Size |
|-----|------------|--------------|
| 1   | 42.4       |              |
| 2   | 33.6       |              |
| 4   | 21.2       |              |
| 6   | 13.3       |              |
| 8   | 8.37       |              |
| 10  | 5.26       | 6mm²         |
| 12  | 3.31       | 4mm²         |
| 14  | 2.08       | 2.5mm²       |
| 16  | 1.31       | 1.5mm²       |
| 18  | 0.823      | 1mm²         |
| 20  | 0.519      | 0.75mm²      |
| 22  | 0.324      | 0.5mm²       |
| 24  | 0.205      | 0.25mm²      |
| 26  | 0.128      | 0.14mm²      |
| 28  | 0.0804     |              |

## Thread Sizes

HOLE SIZES FOR SKINTOP GLANDS

| Size          | Pitch | ø D1 | Hole size ø D3 |
|---------------|-------|------|----------------|
| Metric Thread |       |      |                |
| M12 x 1,5     | 1,5   | 12   | 12,3 ± 0,2     |
| M16 x 1,5     | 1,5   | 16   | 16,3 ± 0,2     |
| M20 x 1,5     | 1,5   | 20   | 20,3 ± 0,2     |
| M25 x 1,5     | 1,5   | 25   | 25,3 ± 0,2     |
| M32 x 1,5     | 1,5   | 32   | 32,3 ± 0,2     |
| M40 x 1,5     | 1,5   | 40   | 40,4 ± 0,3     |
| M50 x 1,5     | 1,5   | 50   | 50,4 ± 0,3     |
| M63 x 1,5     | 1,5   | 63   | 63,4 ± 0,3     |
| PG Thread     |       |      |                |
| PG 7          | 1,27  | 12,5 | 13,0 ± 0,2     |
| PG 9          | 1,41  | 15,2 | 15,7 ± 0,2     |
| PG 11         | 1,41  | 18,6 | 19,0 ± 0,2     |
| PG 13,5       | 1,41  | 20,4 | 21,0 ± 0,2     |
| PG 16         | 1,41  | 22,5 | 23,0 ± 0,2     |
| PG 21         | 1,558 | 28,3 | 28,8 ± 0,2     |
| PG 29         | 1,558 | 37,0 | 37,5 ± 0,3     |
| PG 36         | 1,558 | 47,0 | 47,5 ± 0,3     |
| PG 42         | 1,558 | 54,0 | 54,5 ± 0,3     |
| PG 48         | 1,558 | 59,3 | 59,8 ± 0,3     |





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