SCHLEGEL ®
ELEKTROKONTAKT
Faszination Elektrotechnik

Product Overview

Control units

Panel mount jacks

RFID

Fielbus interfaces

Enclosures

Terminal blocks

Pedal switches

Limit switches

9-0-1 | Customised solutions

Contents

For detailed information, please refer to www.schlegel.biz and our product catalogue

Index

Tradition and Progress

The company Schlegel stands for innovation, good design and quality "Made in Germany". From tradition the best has been taken over, however, development has never stopped though.

To actively shape the future, Schlegel has continuously developed new products for new applications. Thus in-house production includes not only control units, pilot lights and terminal blocks but also emergency-stops, pedal switches, membrane and short-stroke pushbuttons, enclosures, limit switches, operator control panels and functional modules. Moreover, electronic solutions with integrated fieldbus technology are part of the product portfolio, just as customer-specific solutions for individual fields of application.

The products are all-over made in Germany, from development and toolmaking to final production. The company purchases the necessary raw materials on the world market. Schlegel goes global. Whether in the car wash, the fire engine, in laboratory techniques, on ships, in trains or international airports - Schlegel control units are in demand all over the world.

In addition to sales branches in Austria and Singapore, Schlegel maintains industrial representatives in 88 countries. The export share is 45 percent but is likely to be closer to 70 percent, if it is considered that German customers also sell their equipment and machines on international markets.

Good Design

The Schlegel products have received more than 90 national and international design awards. Fact is that decades ago Schlegel has realised that technical functionality and operator convenience make the switch or pushbutton the "calling card" of a device. They are the link between human and machine and are used wherever a command is triggered at the touch of a button. The shape thereby shall support the function.

Schlegel Leipzig

The company was founded in Leipzig on 10th March 1937 under the name Monopol. In 1951 it was renamed as DUX Elektrotechnische Fabrik.
Different combines were successively responsible for DUX. In 1980 the company merged into the VEB combine Robotron.
With effect from 30th June 1990 DUX Schaltgeräte GmbH was registered again as independent enterprise.
On 1st April 1993 the company was sold to Georg Schlegel GmbH & Co. KG, with the assistance of the Treuhand.

In the initial years the company developed, produced and sold installation technology, starting with insulated indicator devices with drop indicator technology over doorbell buttons and panels to signal bells, door contacts and limit switches. Later on the company specialised in components for industrial circuit control systems. During the last years particular attention was paid to the production and development of control units, enclosures and limit switches as well as to the production of control panels for the building automation sector. Another focus is the creation of customer-specific solutions. Here the company responds more and more to individual requirements, creating the desired solution in close collaboration with the customer. Our advantage is being able to resort to many components out of the Schlegel modular construction systems in order to provide a cost-efficient solution to the customer.
Another important aspect is the design, on which we have been focussing more and more during the last years. A typical example

are our control units of the DUX-Basic series.
Since November 2005 Schlegel Leipzig is certified according to DIN EN ISO 9001.
In July 2013 DUX was renamed as Schlegel.

Subsidiary in Austria

The Georg Schlegel Vertriebsges.m.b.H, as it is called today, was founded on 1st February 1980 as Schlegel-Sarel Vertriebsges.m.b.H.

Just as the two company names imply, this combination of firms was a very good basis for selling products like switch cabinets and the necessary components, such as terminal blocks and control units.

A quick growth of both companies affirmed this assumption, so that Schlegel-Sarel was converted into today's Georg Schlegel Vertriebsges.m.b.H, being a 100% Schlegel subsidiary.
From the original location in Vienna-Mauer with a storage space of 10 m² and two employees Schlegel Austria quickly grew up to a sales office with 15 employees storing a large assortment of products in an area of 150 m². We supply our products from there to many reputable commercial and industrial enterprises. We also manufacture complete pushbutton panels, as well as customised terminal block assemblies and control stations.

Schlegel Österreich is responsible for sales and marketing in the following countries:
Bosnia-Herzegovina, Macedonia, Czechia, Hungary, Serbia, Slovenia, Croatia, Slovakia, Romania and Bulgaria.

The high demand as to quality, the outstanding design, the proverbial Swabian reliability and the fair pricing for the products from Schlegel are being appreciated by a constantly increasing customer base.
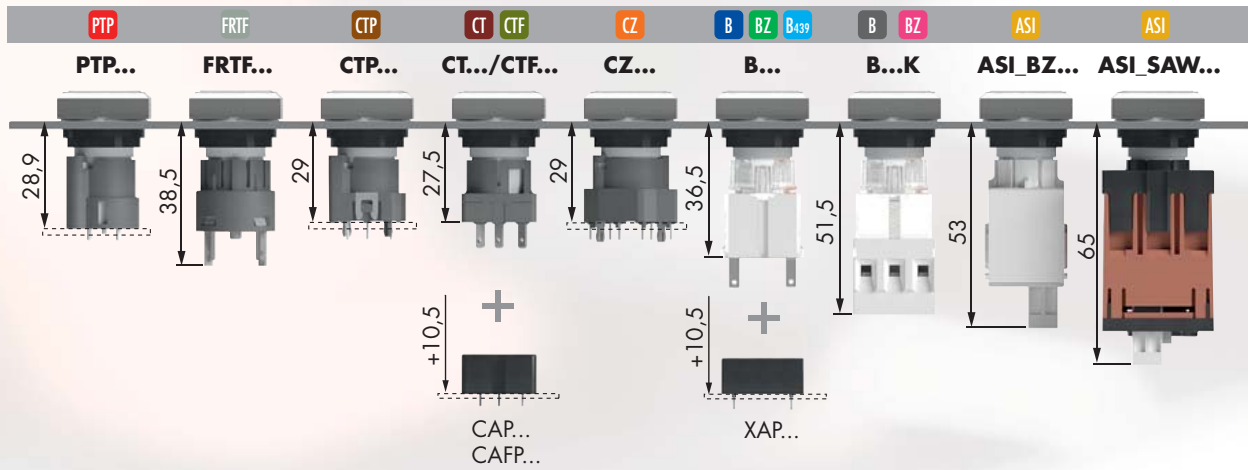
OKTRON®

Front dimensions:	25 x 25 mm
Panel cut-out:	Ø 16.2 mm
Front bezel height:	7.5 mm
Travel:	3 mm
Degree of protection:	IP65
Protection class:	II

Product configurator

Mounting Depth Dimensions

PTP	FRTF	CTP	CT CTF	CZ	B BZ B439	B BZ	ASI	ASI

PTP... 28,9

FRTF... 38,5

CTP... 29

CT.../CTF... 27,5 / 29

CZ... 36,5

B... 51,5

B...K 53

ASI_BZ...

ASI_SAW... 65

+10,5
CAP...
CAFP...

+10,5
XAP...

Cutout Dimensions

Min. mounting grid 25 x 38 mm when using external nameplate holders.

25

Ø16.2 +0.2

1.7 +0.2

17.9 +0.2

25

OKTRON®

>> 02
>> 04
>> 09
>> 07
>> 03
>> 05
>> 08
>> 06
>> 01
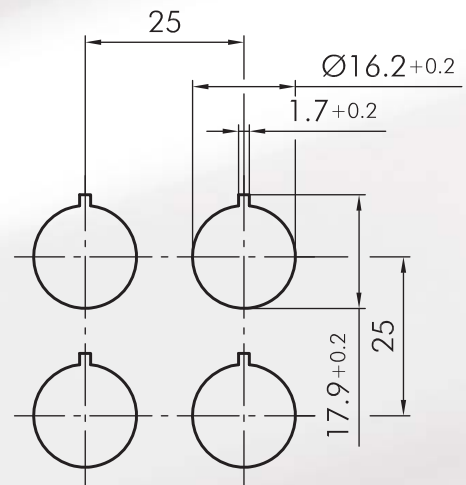
01	Pushbutton Heads	07	Key Actuators
02	Emergency-Stop Heads	08	Buzzers
03	Mushroom Heads	09	Pilot Light Heads / Pilot Lights
04	Knob Set for Potentiometers		
05	Selector Heads		
06	Toggle Heads		

OKTRON

OKTRON®-R

Front dimensions:	Ø 25 mm
Panel cut-out:	Ø 16.2 mm
Front bezel height:	7 mm
Travel:	3 mm
Degree of protection:	IP65
Protection class:	II

Product configurator

Mounting Depth Dimensions

PTP	FRTF	CTP	CT CTF	CZ	B BZ B439	B BZ	ASI	ASI
PTP...	FRTF...	CTP...	CT.../CTF...	CZ...	B...	B...K	ASI_BZ...	ASI_SAW...

28,9   45,5   29   27,5   29   36,5   51,5   53   65

+10,5

CAP...
CAFP...

+10,5

XAP...

Cutout Dimensions

Min. mounting grid 25 x 38 mm when using external nameplate holders

25

Ø16.2 +0.2

1.7 +0.2

25

17.9 +0.2

OKTRON®-R

>> 02
>> 04
>> 07
>> 09
>> 03
>> 05
>> 06
>> 08
>> 01

01	Pushbutton Heads	07	Key Actuators
02	Emergency-Stop Heads	08	Buzzers
03	Mushroom Heads	09	Pilot Light Heads / Pilot Lights
04	Knob Set for Potentiometers		
05	Selector Heads		
06	Toggle Heads		

OKTRON-R

QUARTRON®

Front dimensions:	25 x 25 mm
Panel cut-out:	Ø 16.2 mm
Front bezel height:	12 mm
Travel:	6 mm
Degree of protection:	IP65
Protection class:	II

Product configurator

Mounting Depth Dimensions

PTP	FRTF	CTP	CT	CTF	CZ	A	AZ	ASI	

PTP...	FRTF...	CTP...	CT.../CTF...	CZ...	A...	ASI_SAW...	DFA16

31,8   41,2   31,3   37   31,3   54   67,5   65

+10,5   +   +10,5   +

Cutout Dimensions

Min. mounting grid 25 x 38 mm when using external nameplate holders

25

$\varnothing 16.2_{+0.2}$

$1.7_{+0.2}$

25

$17.9_{+0.2}$

QUARTRON®

>> 02
>> 04
>> 07
>> 09
>> 03
>> 05
>> 06
>> 01
>> 08

01	Pushbutton Heads	07	Key Actuators
02	Emergency-Stop Heads	08	Buzzers
03	Mushroom Heads	09	Pilot Light Heads / Pilot Lights
04	Knob Set for Rotary Switches/Potentiometers		
05	Selector Heads		
06	Toggle Heads		

QUARTRON

![SCHLEGEL ELEKTROKONTAKT logo]

RONTRON-R-JUWEL

Front dimensions:	Ø 28 mm
Panel cut-out:	Ø 22.3 mm
Front bezel height:	2 mm
Travel:	3 mm
Degree of protection:	IP65
Protection class:	II

iF product design award 2010

DESIGNPREIS 2007 NOMINIERT

Designpreis Deutschland 2011 NOMINIERT

Designpreis Deutschland 2012 NOMINIERT

reddot design award winner 2010

Focus Open Silber 2010

Product configurator

Mounting Depth Dimensions

PTP	FRTF	CTP	CT CTF	CZ	B BZ B439	B BZ	ASI	ASI
PTP...	FRTF...	CTP...	CT.../CTF...	CZ...	B...	B...K	ASI_BZ...	ASI_SAW...

34 43,5 34 32,5 34 41,5 56,5 58 70

+10,5

CAP...
CAFP...

+10,5

XAP...
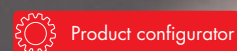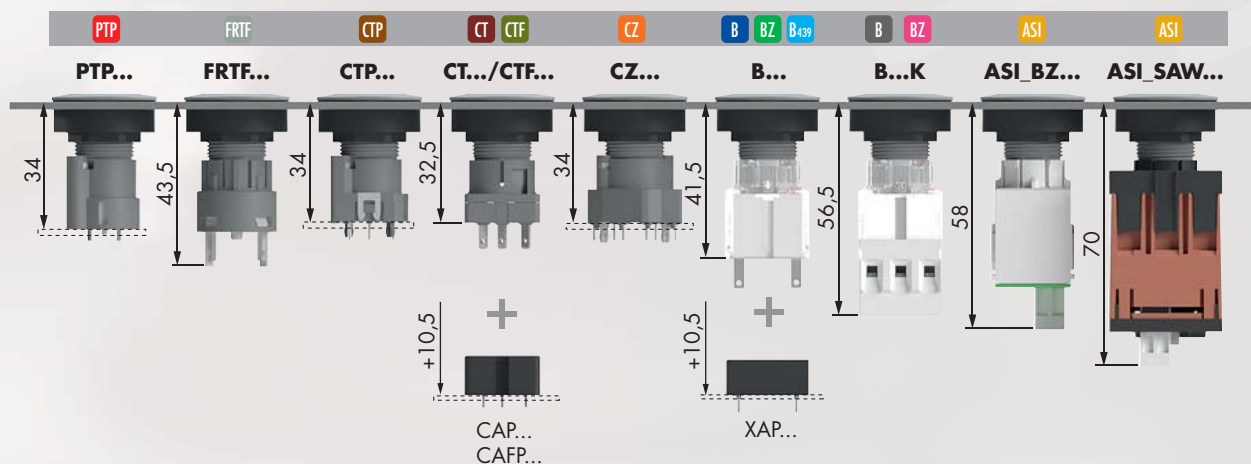
Cutout Dimensions

RRJDTLR
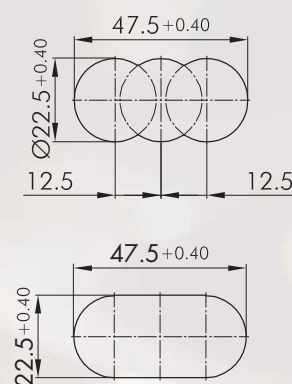
30

Ø22.3+0.4

2.2+0.2

24.1+0.4

30

47.5+0.40

Ø22.5+0.40

12.5   12.5

47.5+0.40

22.5+0.40

RONTRON-R-JUWEL

>> 02

>> 03

>> 05

>> 08

>> 04

>> 06

>> 07

>> 01

01 Pushbutton Heads	07 Panel Mount Jacks
02 Emergency-stop Heads	08 Pilot Light Heads / Pilot Lights
03 Knob Set for Potentiometers	
04 Selector Heads	
05 Key Actuators	
06 Buzzers	

RONTRON-R-JUWEL

RONTRON-Q-JUWEL

Front dimensions:	28 x 28 mm
Panel cut-out:	Ø 22.3 mm
Front bezel height:	2 mm
Travel:	3 mm
Degree of protection:	IP65
Protection class:	II

DESIGNPREIS 2007 NOMINIERT

iF product design award 2006

Product configurator

Mounting Depth Dimensions

PTP	FRTF	CTP	CT CTF	CZ	B BZ B439	B BZ	ASI	ASI

| PTP... | FRTF... | CTP... | CT.../CTF... | CZ... | B... | B...K | ASI_BZ... | ASI_SAW... |

34

43,5

34

32,5

34

41,5

56,5

58

70

+10,5

CAP...
CAFP...

+10,5

XAP...

Cutout Dimensions

30

∅22.3 +0.4

2.2 +0.2

24.1 +0.4

30

RONTRON-Q-JUWEL

>> 02
>> 03
>> 05
>> 08
>> 04
>> 06
>> 07
>> 01

01 Pushbutton Heads	07 Panel Mount Jacks
02 Emergency-Stop Heads	08 Pilot Light Heads / Pilot Lights
03 Knob Set for Potentiometers	
04 Selector Heads	
05 Key Actuators	
06 Buzzers	

RONTRON-Q-JUWEL

SHORTRON®

Front dimensions:	Ø 28 mm
Panel cut-out:	Ø 22.3 mm
Front bezel height:	2 mm
Travel:	2.3 mm / 1.8 mm
Degree of protection:	IP65/IP66/IP67/IP69K
Protection class:	II

Product configurator
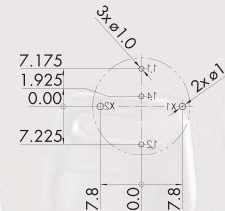
Mounting Depth Dimensions

18 9,2

16,2 25

SDR(SW)

9,2 ± 0.10

1...4.5

16,2 ± 0.10

1...8

Cutout Dimensions

30

Ø22.3 +0.4

2.2 +0.2

24.1 +0.4

30

anti-rotation lug
Ø4.2
6x Ø1.3
Ø1.0
(LED without socket)
4.30
8.00
Ø3.6
Ø3.6
5.25
11.60
15.60
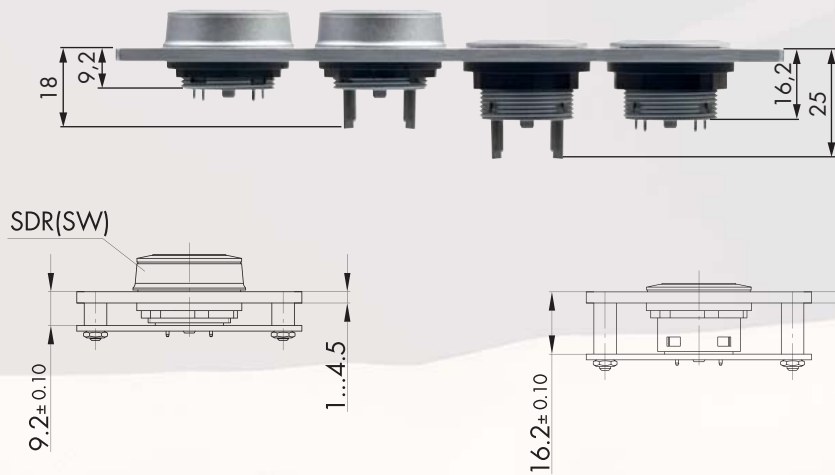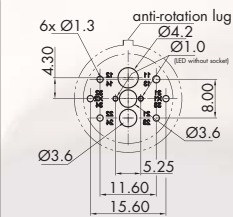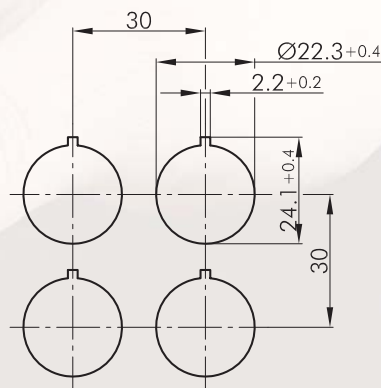
Component side view

Contact assignment: see wiring scheme of the relevant types

PCT...

3x ø1.0
7.175
1.925
0.00
2x ø1.3
7.225
7.8
0.0
7.8

SHORTRON®

>> 03
>> 01
>> 02
>> 05
>> 06
>> 04
>> 07
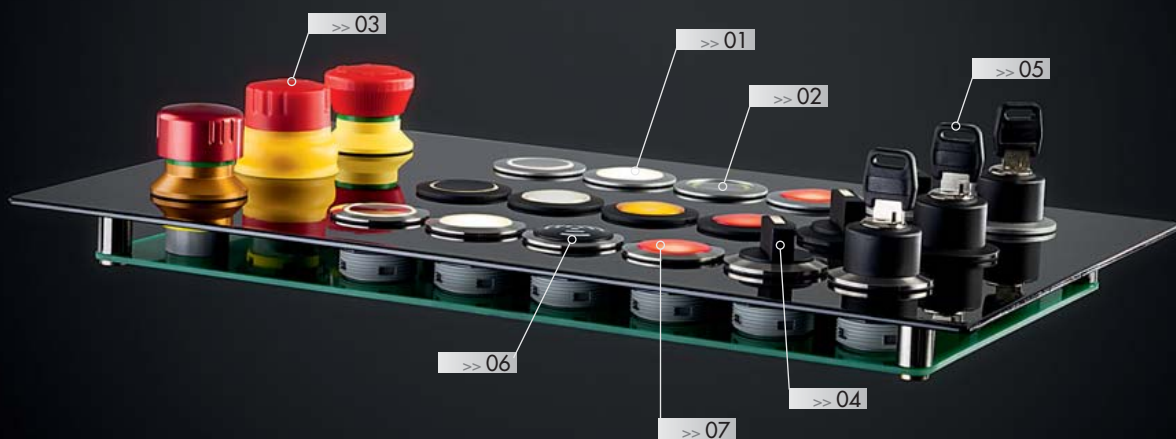
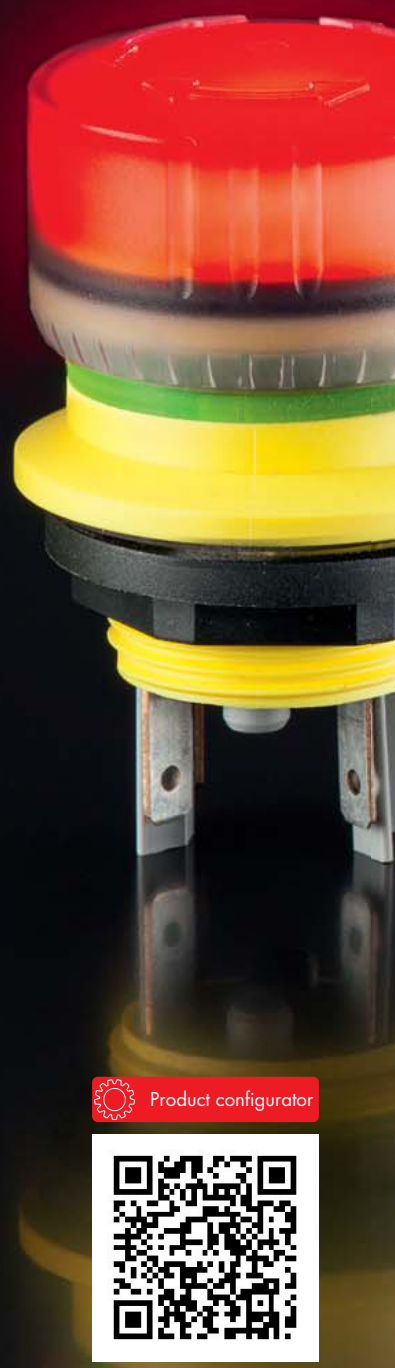|	
01 Pushbuttons	06 Buzzers
Tactile Pushbuttons	07 Pilot Lights
02 Capacitive Pushbuttons	
03 Emergency-Stop Buttons	
04 Selector Switches	
05 Key Switches	

mYnitron®

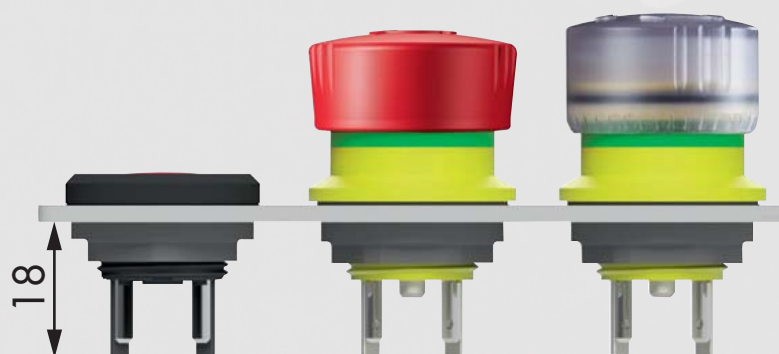| Front dimensions: | Ø 23.5 mm |
Panel cut-out:	Ø 16.2 mm
Front bezel height:	4 mm
Degree of protection:	IP66/IP67/IP69K
Protection class:	II

Product configurator

Mounting Depth Dimensions

18

Cutout Dimensions

25

Ø16.2 +0.2

1.7 +0.2

25

17.9 +0.2

mYnitron®

>> 03

>> 02

>> 01
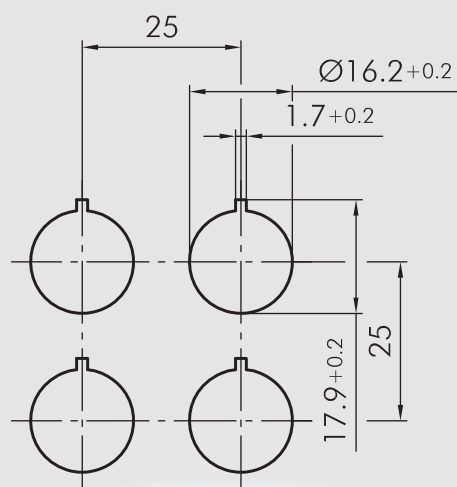
01   Pushbutton Heads
02   Emergency-Stop Buttons
03   Emergency-Stop Buttons active/inactive

mYnitron

RX-JUWEL

Front dimensions:	Ø 28 mm
Panel cut-out:	Ø 22.3 mm
Front bezel height:	2,6 mm
Travel:	6 mm
Degree of protection:	IP65
Protection class:	II

Product configurator

Mounting Depth Dimensions

| PTP | FRTF | CTP | CT | CTF | CZ | A | AZ | ASI | 📶 |

| PTP... | FRTF... | CTP... | CT.../CTF... | CZ... | A... | ASI_SAW... | DFA16 |

- 41,3
- 50,8
- 40,9
- 46,1
- 40,9
- 55,5
- 77
- 74

+10,5 +

+10,5 +

Cutout Dimensions

30

Ø22.3 +0.4

2.2 +0.2

24.1 +0.4

30

RX-JUWEL

>> 02
>> 03
>> 05
>> 04
>> 06
>> 07
>> 01
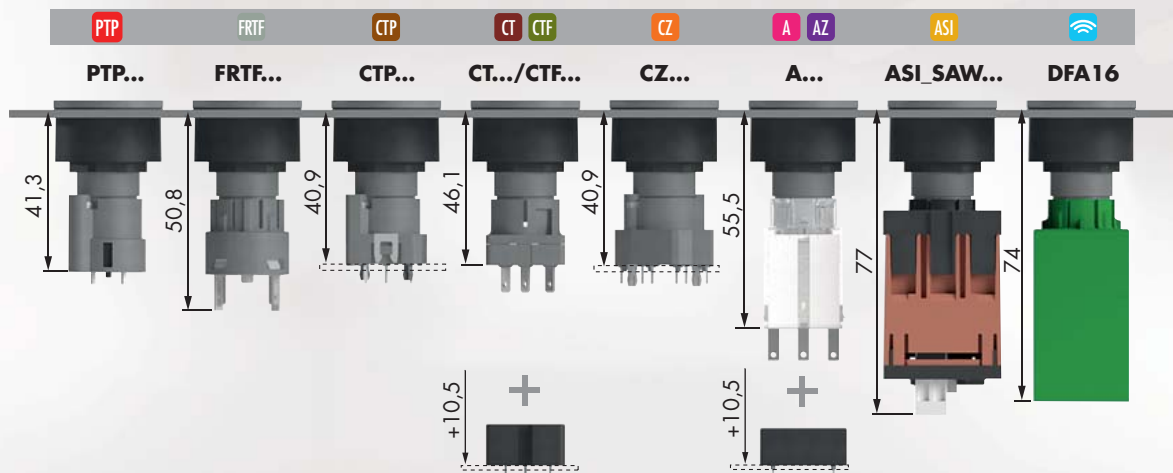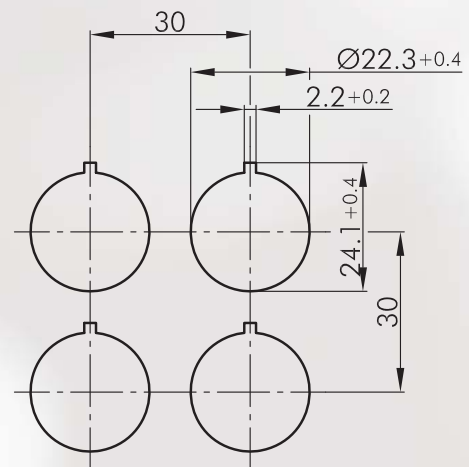
01	Pushbutton Heads		07	Pilot Light Heads / Pilot Lights
02	Emergency-Stop Heads
03	Knob Set for Potentiometers
04	Selector Heads
05	Key Actuators
06	Buzzers

Georg Schlegel GmbH & Co. KG - 88525 Dürmentingen - ☏ +49 (0) 73 71 / 502-0 - Fax: +49 (0) 73 71 / 502 49 - info@schlegel.biz - www.schlegel.biz

19

RX-JUWEL

RONDEX

Front dimensions:	Ø 28 mm
Panel cut-out:	Ø 22.3 mm
Front bezel height:	12 mm
Travel:	6 mm
Degree of protection:	IP65
Protection class:	II

Product configurator

Mounting Depth Dimensions

| ET | DS | DT | M | ASI | 📶 |

ET... **DS...** **DT.../DL...** **M...** **ASI_SAW...** **DFA...**

40* 46 52 59 65 64

* ETR2 61mm, ETLR 50mm, ETLR2 70mm, EL9R 36mm

Cutout Dimensions

30
∅22.3+0.4
2.2+0.2
24.1+0.4
50

RONDEX

>> 02
>> 04
>> 09
>> 07
>> 03
>> 05
>> 06
>> 01
>> 08
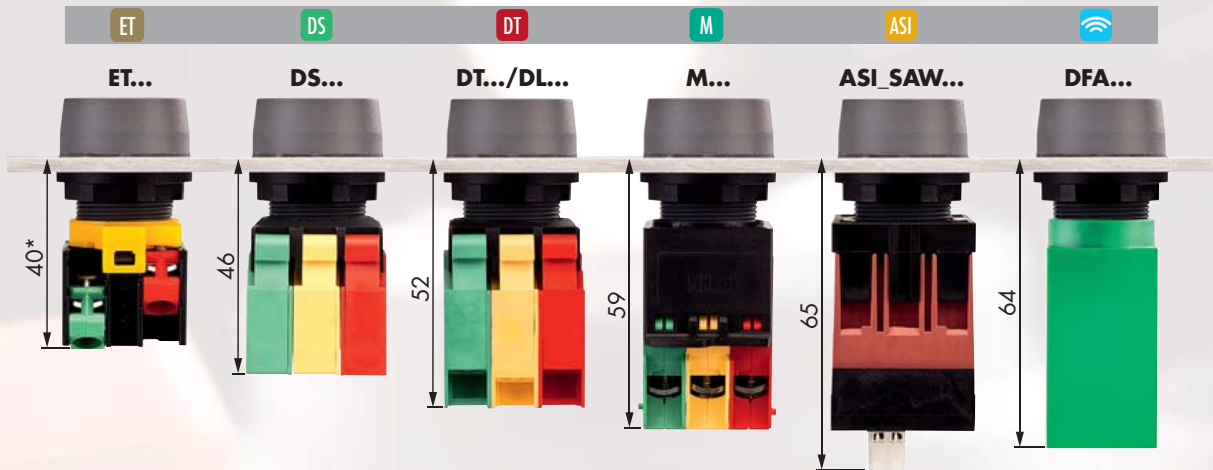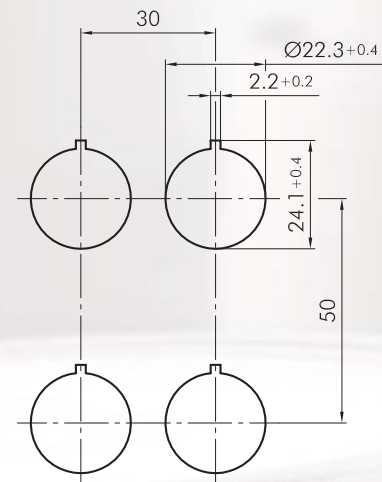
01   Pushbutton Heads
02   Emergency-stop Buttons
03   Mushroom Heads
04   Knob Set for Potentiometers
05   Selector Heads/Knob Set for
       Rotary Switches

06   Toggle Heads
07   Key Actuators
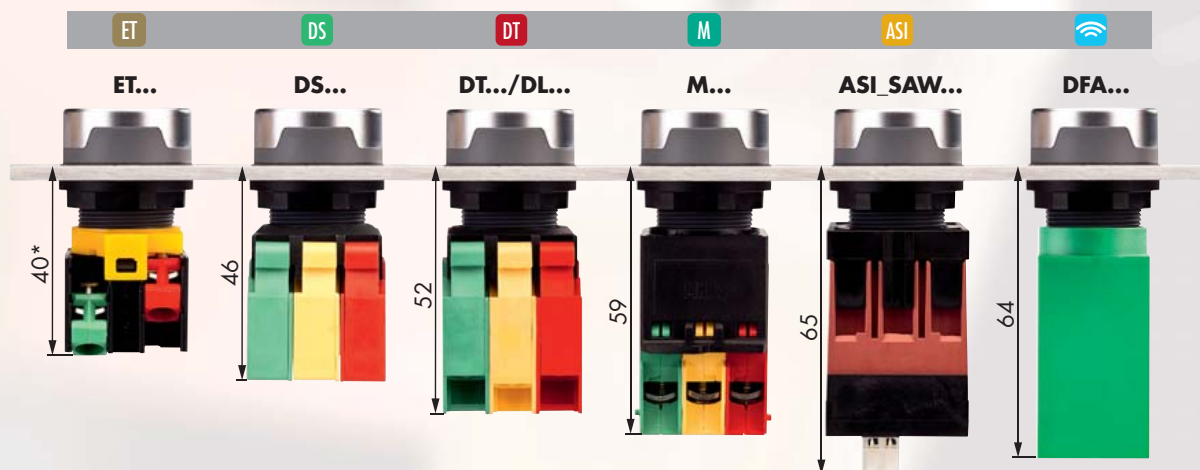08   Buzzers
09   Pilot Light Heads / Pilot Lights

RONDEX

RONDEX-M

Front dimensions:	Ø 28 mm
Panel cut-out:	Ø 22.3 mm
Front bezel height:	12 mm
Travel:	6 mm
Degree of protection:	IP65
Protection class:	II

DESIGNPREIS 2009 NOMINIERT

iF product design award 2008

Product configurator

Mounting Depth Dimensions

| ET | DS | DT | M | ASI | 📶 |

ET...   DS...   DT.../DL...   M...   ASI_SAW...   DFA...

40* | 46 | 52 | 59 | 65 | 64

* ETR2 61mm, ETLR 50mm, ETLR2 70mm, EL9R 36mm

Cutout Dimensions

30
$\varnothing 22.3 +0.4$
$2.2 +0.2$
$24.1 +0.4$
50

RONDEX-M

>> 02
>> 04
>> 07
>> 09
>> 03
>> 05
>> 06
>> 08
>> 01

01 Pushbutton Heads	07 Key Actuators
02 Emergency-stop Heads	08 Buzzers
03 Mushroom Heads	09 Pilot Light Heads / Pilot Lights
04 Knob Set for Potentiometers	
05 Selector Heads	
06 Toggle Heads	

RONDEX-M

RONDEX-JUWEL®

Front dimensions:	Ø 28 mm
Panel cut-out:	Ø 22.3 mm
Front bezel height:	2 mm
Travel:	6 mm
Degree of protection:	IP65/IP67
Protection class:	II

Product configurator

reddot award 2018
winner

Mounting Depth Dimensions

| ET | DS | DT | M | ASI | 📶 |

ET...   DS...   DT.../DL...   M...   ASI_SAW...   DFA...

49.5*   55.5   61.5   68.5   74.5   73.5
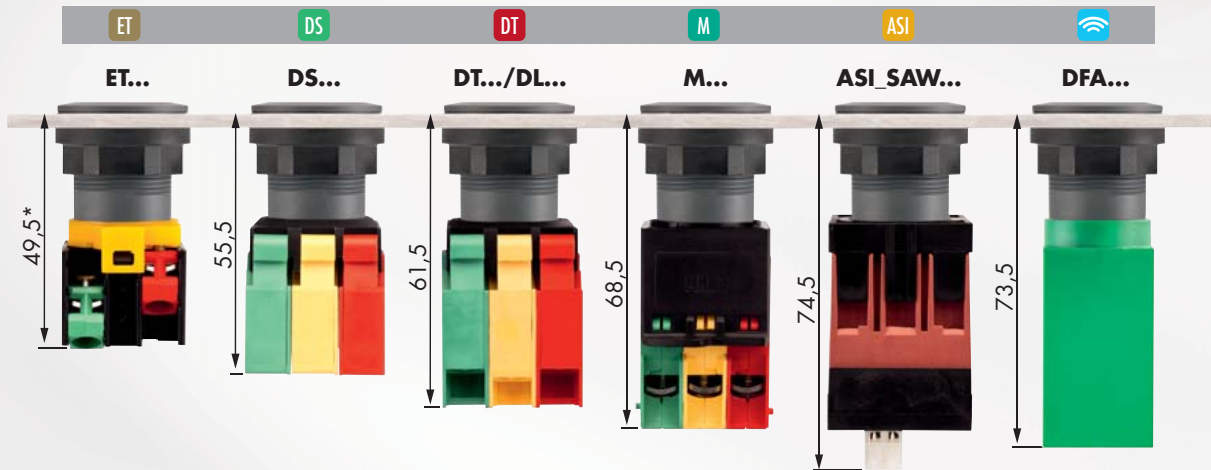
* ETR2 70.5mm, ETLR 59.5mm, ETLR2 79.5mm, EL9R 45.5mm

Cutout Dimensions

30

$\varnothing 22.3_{+0.4}$

$2.2_{+0.2}$

$24.1_{+0.4}$

50

RONDEX-JUWEL®

>> 02

>> 04

>> 06

>> 03

>> 05

>> 01
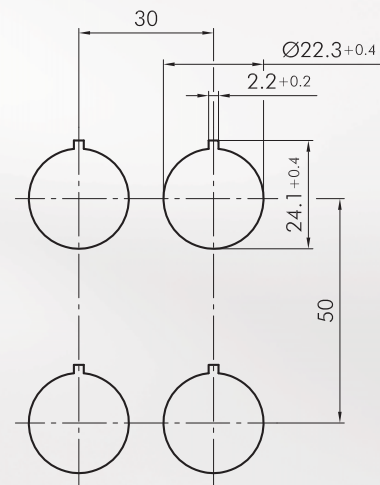
01   Pushbutton Heads
02   Emergency-Stop Heads
03   Selector Heads
04   Key Actuators
05   Panel Mount Jacks
06   Pilot Light Heads

RONDEX-JUWEL®
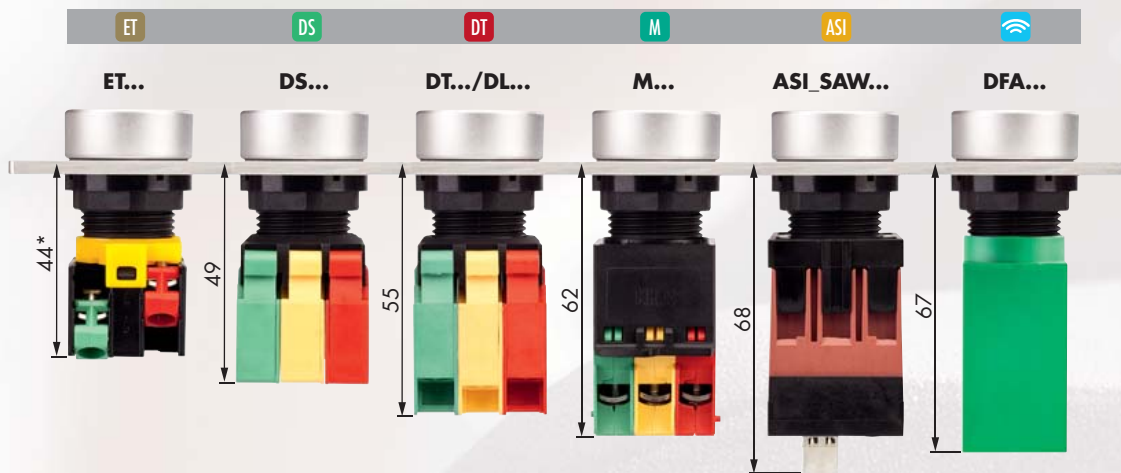
DUX-Basic

Front dimensions:	Ø 30 mm
Panel cut-out:	Ø 22.3 mm
Front bezel height:	12 mm
Travel:	6 mm
Degree of protection:	IP65
Protection class:	II

Product configurator

DESIGNPREIS 2006 NOMINIERT

iF design award 2005

Mounting Depth Dimensions

| ET | DS | DT | M | ASI | 📶 |

ET...   **DS...**   **DT.../DL...**   **M...**   **ASI_SAW...**   **DFA...**

44*   49   55   62   68   67

* ETR2 64mm, ETLR 53mm, ETLR2 73mm, EL9R 39mm

Cutout Dimension

30.0

R1.6

Ø22.3+0.2

23.7+0.2

50.0

DUX-Basic

>> 02

>> 07

>> 06

>> 03

>> 04

>> 05

>> 01
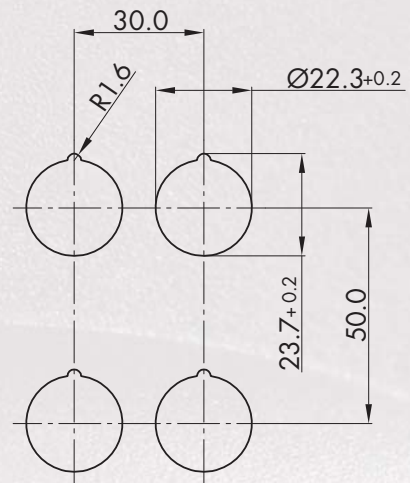
01   Pushbutton Heads
02   Emergency-Stop Heads
03   Mushroom Heads
04   Selector Heads
05   Toggle Heads
06   Key Actuators

07   Pilot Light Heads / Pilot Lights
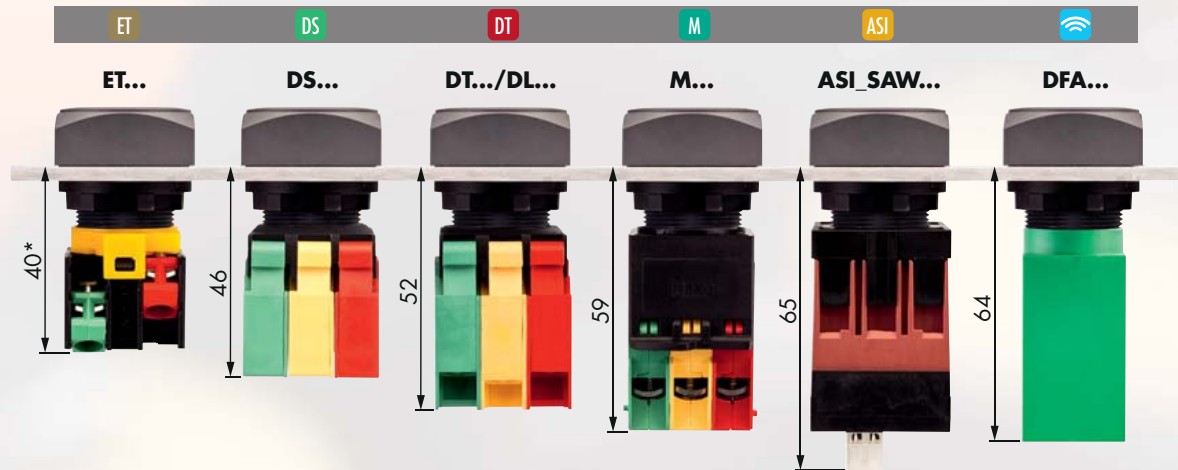
DUX-Basic

QUARTEX®-R

Front dimensions:	30 x 30 mm
Panel cut-out:	Ø 22.3 mm
Front bezel height:	12 mm
Travel:	6 mm
Degree of protection:	IP65
Protection class:	II

Product configurator

iF design award winner 2004

Mounting Depth Dimensions

| ET | DS | DT | M | ASI | 📶 |

ET...   DS...   DT.../DL...   M...   ASI_SAW...   DFA...

40*   46   52   59   65   64

* ETR2 61mm, ETLR 50mm, ETLR2 70mm, EL9R 36mm

Cutout Dimensions

30

$\varnothing 22.3_{+0.4}$

$2.2_{+0.2}$

$24.1_{+0.4}$

50

QUARTEX®-R

>> 02
>> 04
>> 07
>> 08
>> 03
>> 05
>> 06
>> 01
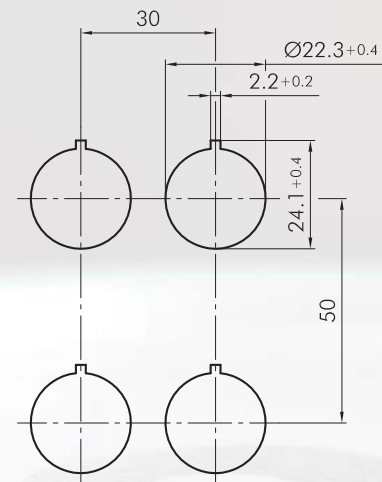
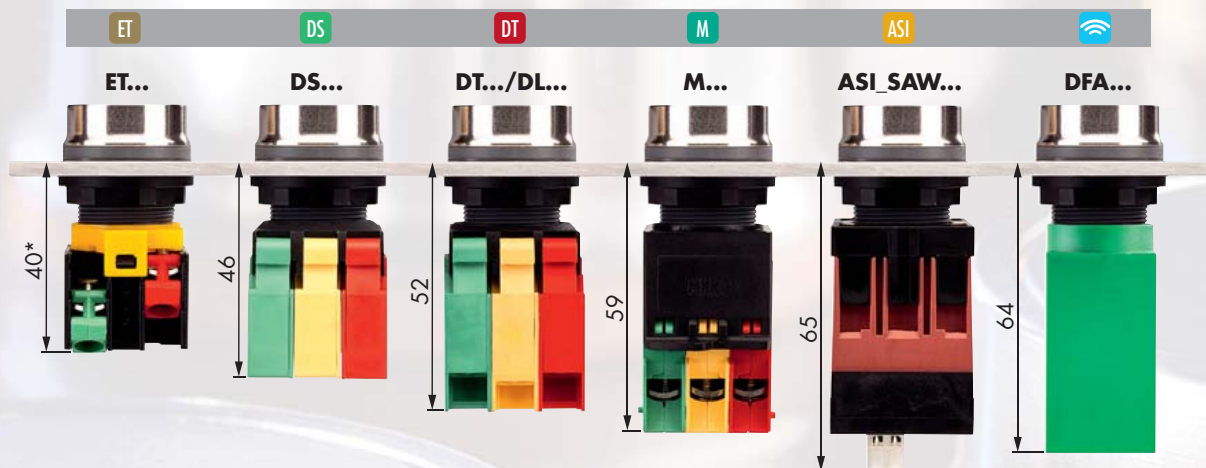|	
01 Pushbutton Heads	06 Toggle Heads
02 Emergency-stop Buttons	07 Key Actuators
03 Mushroom Heads	08 Pilot Light Heads / Pilot Lights
04 Knob Set for Potentiometers	
05 Selector Heads/Knob Set for Rotary Switches	

QUARTEX-R

RVA

Front dimensions:	Ø 28 mm
Panel cut-out:	Ø 22.3 mm
Front bezel height:	12 mm
Travel:	6 mm
Degree of protection:	IP65/IP69
Protection class:	II

Product configurator

reddot

excellent !
Design Center Stuttgart

iF Design Award Winner 2000

Mounting Depth Dimensions

ET	DS	DT	M	ASI	📶

ET... 40*

DS... 46

DT.../DL... 52

M... 59

ASI_SAW... 65

DFA... 64

* ETR2 61 mm, ETLR 50 mm, ETLR2 70 mm, EL9R 36 mm

Cutout Dimensions

30

Ø22.3 +0.4

2.2 +0.2

24.1 +0.4

50

RVA

>> 04

>> 03

>> 02

>> 01
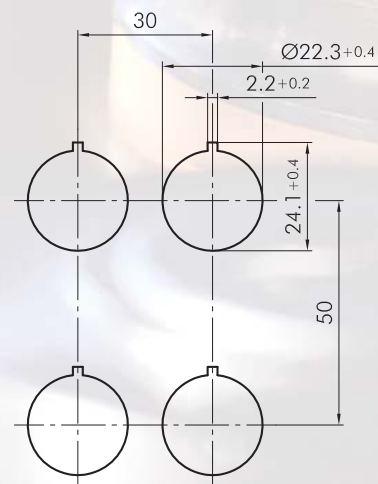
01   Pushbutton Heads
02   Selector Heads
03   Key Actuators
04   Pilot Light Heads

RVA

tested down to
-40°C | -40°F

KOMBITAST®-R-JUWEL

Front dimensions:	Ø 36 mm
Panel cut-out:	Ø 30.5 mm
Front bezel height:	2.7 mm
Travel:	6 mm
Degree of protection:	IP66/IP67/IP69K
Protection class:	II

Product configurator

German Design Award
WINNER 2014

iF product design award 2013

Mounting Depth Dimensions

ET	DS	DT	M	ASI	📶
ET...	DS...	DT.../DL...	M...	ASI_SAW...	DFA...

49* | 55 | 61 | 68 | 74 | 73
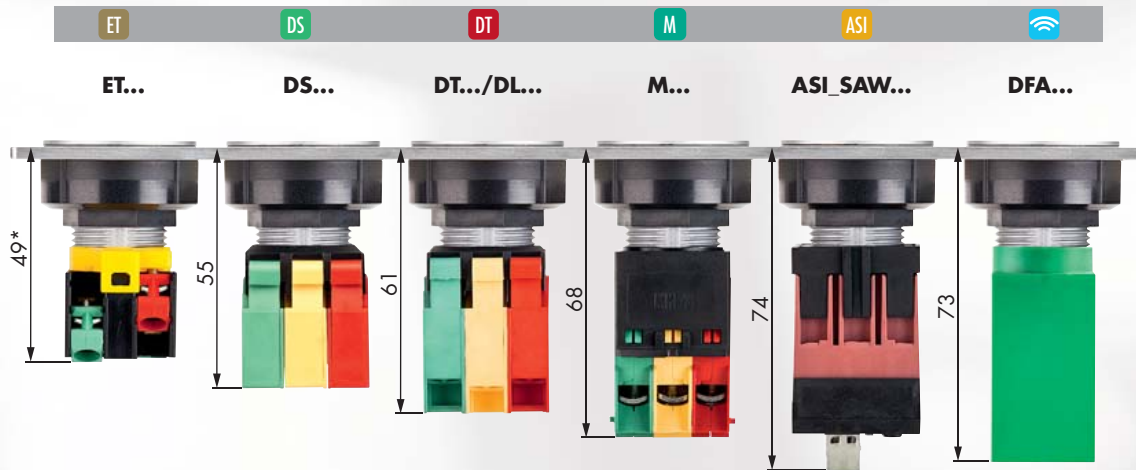
* ETR2 69 mm, ETLR 58 mm, ETLR2 78 mm, EL9R 44 mm

Cutout Dimensions

45

Ø30.5 +0.5

3.2 +0.2

32.7 +0.2

65
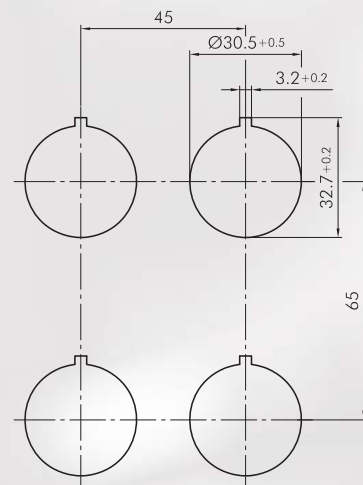
KOMBITAST®-R-JUWEL

>> 03
>> 06
>> 08
>> 07
>> 04
>> 01
>> 05

01 Pushbutton Heads	07 Panel Mount Jacks
02 Emergency-Stop Heads	08 Pilot Light Heads / Pilot Lights
03 Knob Set for Rotary Switches/Potentiometers	
04 Selector Heads	
05 Toggle Heads	
06 Key Actuators	

OKTRON®-JUWEL

Front dimensions:	25 x 25 mm
Panel cut-out:	23.1 x 23.1 mm
Front bezel height:	2 mm
Travel:	3 mm
Degree of protection:	IP65 / IP69K
Protection class:	II

Product configurator

Mounting Depth Dimensions

PTP	FRTF	CTP	CT CTF	CZ	B BZ B439	B BZ	ASI	ASI
PTP...	**FRTF...**	**CTP...**	**CT.../CTF...**	**CZ...**	**B...**	**B...K**	**ASI_BZ...**	**ASI_SAW...**

34 — 43,5 — 34 — 32,5 — 34 — 41,5 — 56,5 — 58 — 70,5

+10,5

CAP...

+10,5

XAP...

Cutout Dimensions

25

□23.1 +0.2

R2.5

25

OKTRON®-JUWEL

>> 02
>> 03
>> 05
>> 08
>> 04
>> 06
>> 07
>> 01

01 Pushbutton Heads	07 Panel Mount Jacks
02 Emergency-Stop Heads	08 Pilot Lights
03 Knob Set for Potentiometers	
04 Selector Heads	
05 Key Actuators	
06 Buzzers	

OKTRON-JUWEL

QUARTRON-JUWEL®

Front dimensions: 27 x 27 mm

Panel cut-out: 24 x 24 mm

Front bezel height: 2.5 mm

Travel: 6 mm
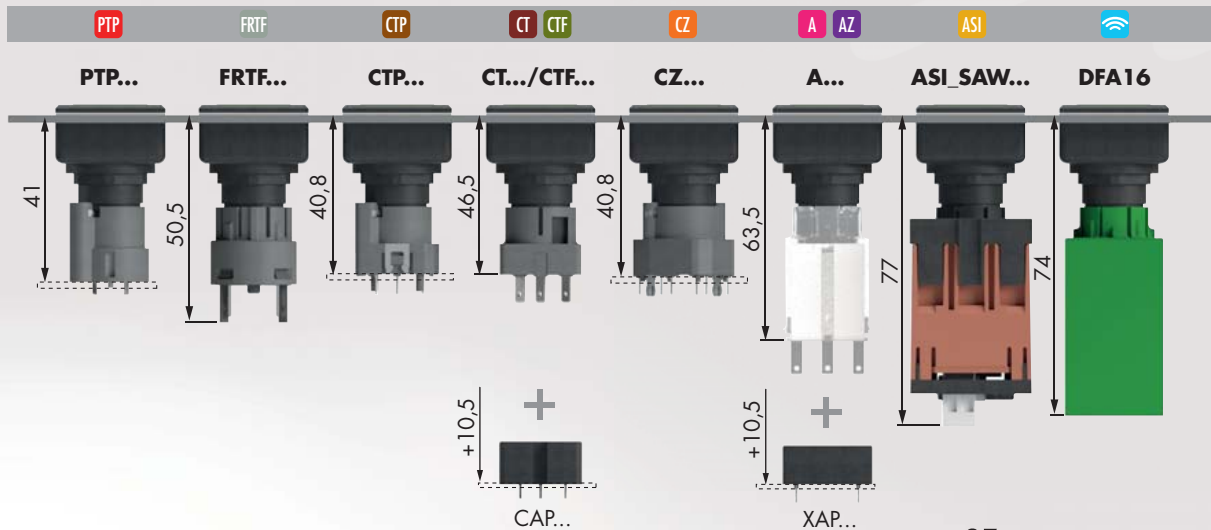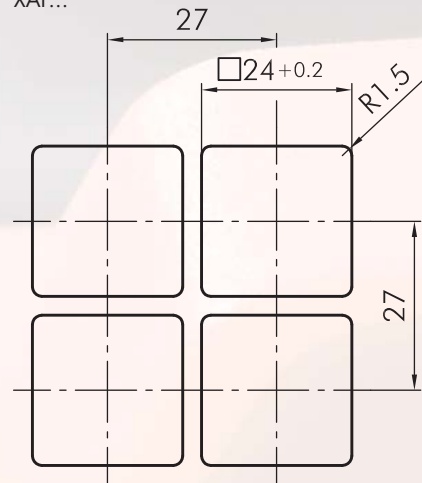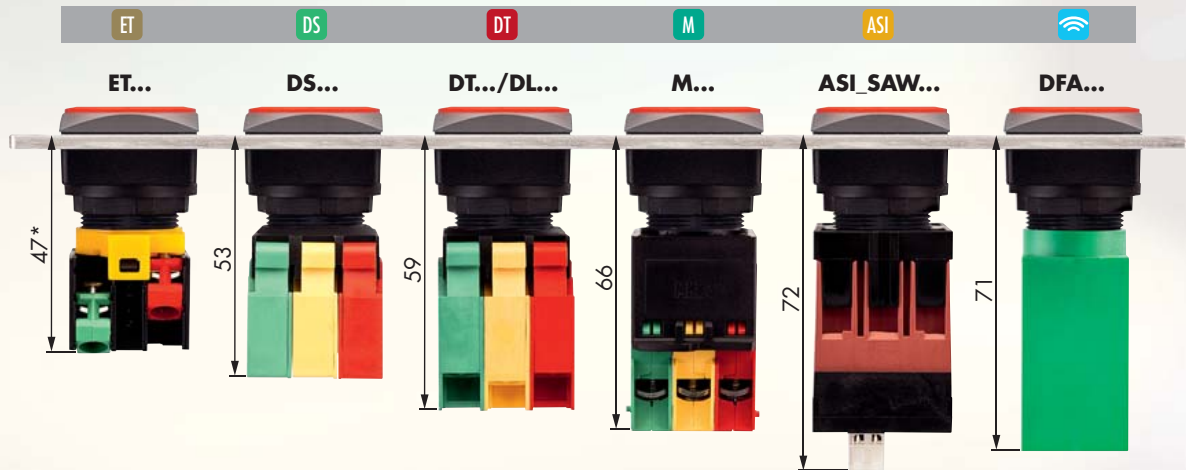
Degree of protection: IP65

Protection class: II

Product configurator

Mounting Depth Dimensions

PTP	FRTF	CTP	CT	CTF	CZ	A	AZ	ASI	

PTP...	FRTF...	CTP...	CT.../CTF...	CZ...	A...	ASI_SAW...	DFA16
41	50,5	40,8	46,5	40,8	63,5 / 77	74	

+10,5 CAP...

+10,5 XAP...

Cutout Dimensions

27

□24 +0.2

R1.5

27

QUARTRON-JUWEL®

>> 02
>> 04
>> 09
>> 07
>> 03
>> 05
>> 06
>> 01
>> 08

01 Pushbutton Heads
02 Emergency-Stop Heads
03 Mushroom Heads
04 Knob Set for Potentiometers
05 Selector Heads
06 Toggle Heads

07 Key Actuators
08 Buzzers
09 Pilot Light Heads / Pilot Lights

QUARTRON-JUWEL

QUARTEX®-R-JUWEL

Front dimensions:	30 x 30 mm
Panel cut-out:	26 x 26 mm
Front bezel height:	6 mm
Travel:	6 mm
Degree of protection:	IP65
Protection class:	II

Product configurator

Designpreis der
Bundesrepublik
Deutschland
Nominiert 2004

iF
design award
winner
2004

Mounting Depth Dimensions

| ET | DS | DT | M | ASI | 📶 |

ET...   DS...   DT.../DL...   M...   ASI_SAW...   DFA...

47*   53   59   66   72   71

* ETR2 68 mm, ETLR 57 mm, ETLR2 77 mm, EL9R 43 mm

Cutout Dimensions

30

□26 +0.2

R1.5

50

QUARTEX®-R-JUWEL

>> 02

>> 06

>> 03

>> 07

>> 04

>> 05

>> 01
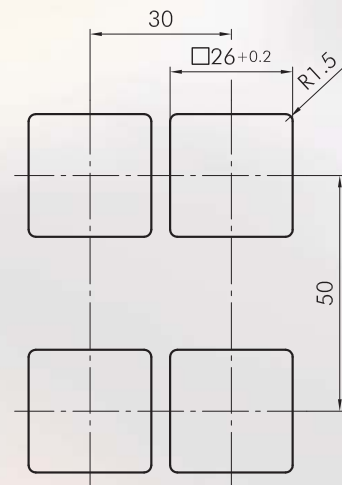
01   Pushbutton Heads
02   Emergency-stop Buttons
03   Knob Set for Potentiometers
04   Selector Heads/Knob Set for
       Rotary Switches
05   Toggle Heads

06   Key Actuators
07   Pilot Light Heads / Pilot Lights

QUARTEX-R-JUWEL

Safe and Optically Appealing Emergency-Stop Buttons

The user can choose from a wide range of TÜV certified emergency-stop buttons of Schlegel for panel cut-outs of different shapes and dimensions (16.2 mm, 22.3 mm, 30.5 mm) which can be combined with both, the standard and ASi contact units.
The actuators are well-known for their modern and attractive design combining mechanical robustness and outstanding functionality, featuring e.g. a clearly visible switching position indicator, a twist release (in either direction) or pull release and tightness from IP65 up to IP69K, depending on the model.

Safety Contact Blocks for Emergency-Stop Buttons

Even redundant, secure emergency-stop chains are ineffective unless the contact block is accurately connected with the emergency-stop button. The **safety contact blocks** for emergency-stops of Schlegel Elektrokontakt are the response to this danger that may occur e.g. as a result of a negligent assembly or a mechanical damage.
The safety contact blocks for emergency-stops acc. to EN60947-5-5 and EN13850 ensure that in such a situation the emergency function is automatically activated and the installation is switched off immediately. It can only be restarted after successful trouble-shouting.
The contact blocks are available as a one or two channel solution with screw connections, Faston terminals, Cage-Clamp or push-in connection and do have positive opening contacts acc. to IEC60947-5-1. The high-quality contact elements allow reliable switching even in case of low currents (5mA at 24V or less). They are available as conventional contact blocks as well as for AS-Interface (Safety@Work).
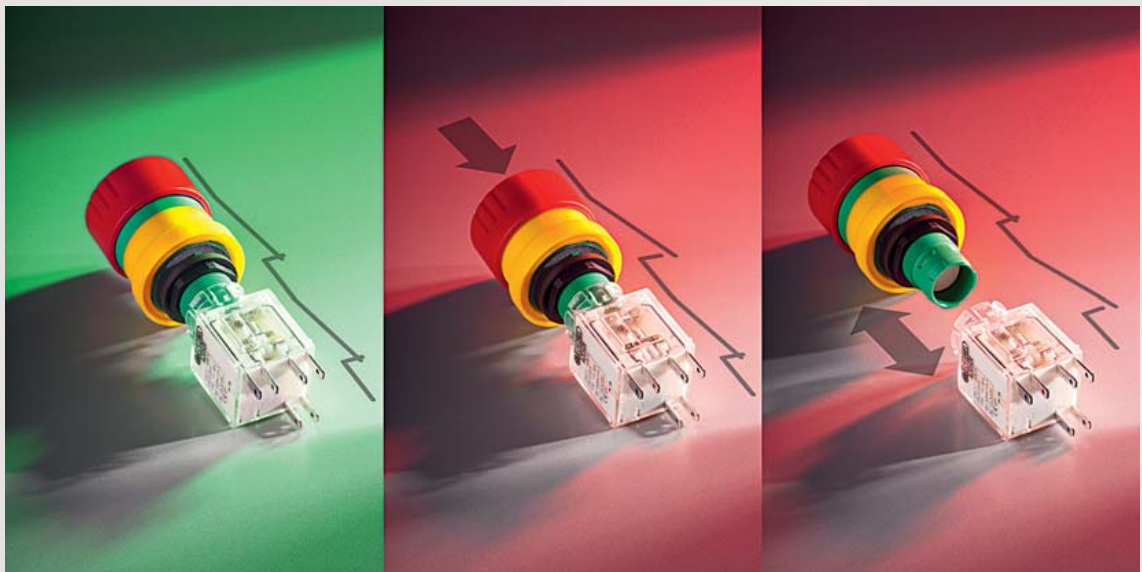
Automatic switch off on separation of the
contact block from the emergency-stop button

Enclosure-Mounted Emergency-Stop and Reset Button

Pre-assembled emergency-stop and reset buttons of Schlegel are available in many different versions, there is a solution for every application.

Emergency-Stops With Illuminated Status Indication Active/Inactive

The functional principle: If the plant part equipped with the fix mounted emergency-stop – for example as a module of a production line – is in operation, the actuator is active and signals its readiness for operation by a red illumination. If the module is disconnected from the production line, the emergency-stop is inactive, is no longer illuminated and remains grey. Thus, in case of emergency an inadvertent operation of the inactive emergency-stop is being significantly reduced, as it is no longer identified as emergency-stop. The Schlegel active/inactive emergency-stops fulfil the requirements of the standard DIN EN ISO 13850:2015.

Active illuminated emergency-stops, like e.g. SIL_QRBDUVOOM125 are additionally equipped with an integrated diagnostic unit. It steadily monitors the illumination status and thus ensures the perceptibility of an active emergency-stop. If there is a total or only partial failure of the illumination the emergency-stop signal is activated automatically and the installation is put into the safe status.

The active illuminated emergency-stop buttons are available for the following panel cut-outs:
→ Ø 16.2 mm
→ Ø 22.3 mm
→ plug & play solution in an enclosure with mounting plate and M12 connector for a quick and easy installation
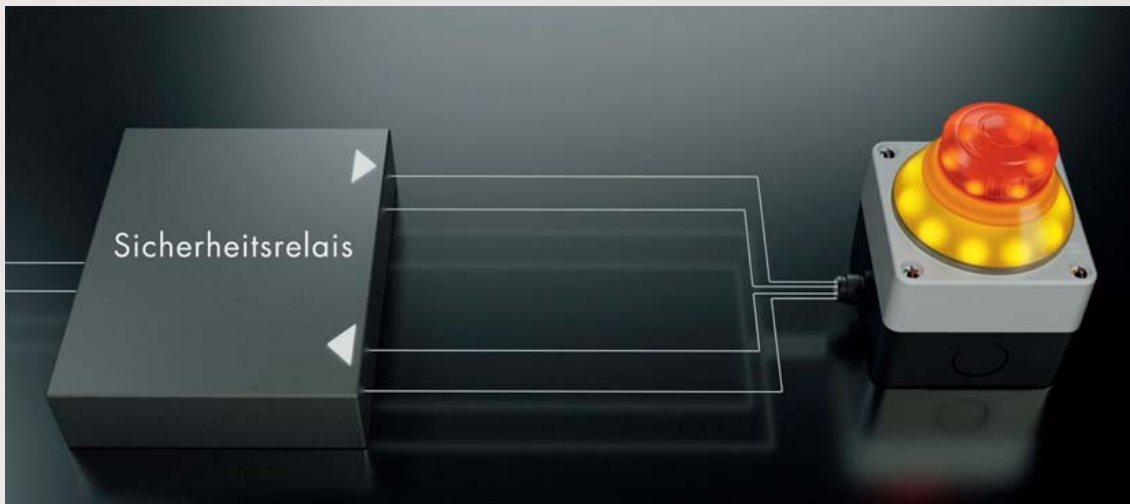
Functional principle of SIL_QRBDUVOOM125 with diagnostic unit

Quick perceptibility in active condition

Enclosures

Schlegel enclosures offer much space inside safeguarding your control units to an optimum. The enclosures are made of plastic or stainless steel.
The wide range of types allows to find the right enclosure for every application.

Insulated plastic enclosures (SIL…)	Insulated plastic enclosures (DIR…)	Stainless steel enclosures
E-stop control stations (SIL…)	Equipped insulated plastic enclosures (DIR…)	ASI E-stop control stations (SIL…)
Stainless steel enclosures for profile rail mounting (S4…)	E-stop miniboxes	Equipped insulated plastic enclosures (IRF…/IRL...)

Battery-free Wireless Pushbuttons and Limit Switches

For the wireless pushbuttons and limit switches the energy being needed for the transmission of the signal is generated by the switching operation itself. Thus the modules are self-sustaining and of low-maintenance.
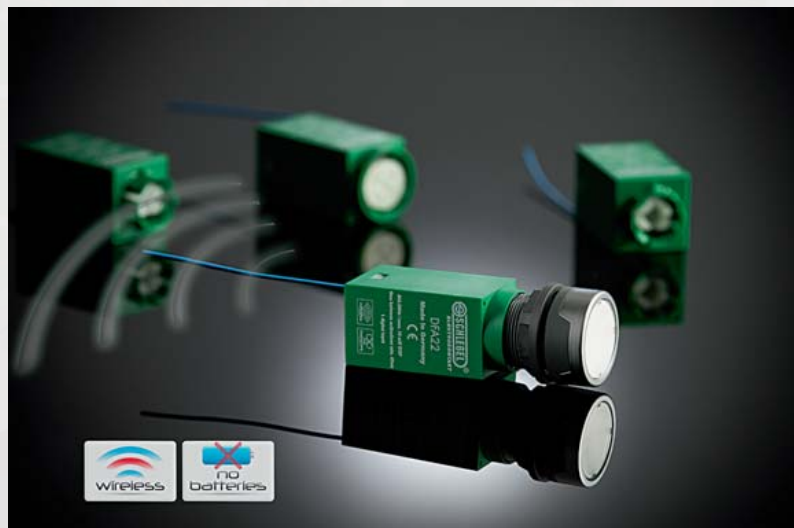
Modular Bus Operating Concept

The modular operating concept allows to integrate an existing operating concept modularly into an available bus system. The modular operating concept consists of two basic modules: The bus-specific basic module and the bus-independent expansion module. Thus, up to 128 inputs for control units as well 128 outputs for status indication of the control units are possible.

For the modular operating concept the following bus systems are being supported:
➔ AS-Interface
➔ Canopen
➔ Profibus
➔ Profinet
➔ EtherCAT
➔ Ethernet IP
➔ Powerlink

For the modular bus concept the following bus systems are under development:
➔ CC-Link IE
➔ Sercos
➔ VARAN

### Customised, Fast, Cost-Effective
If your design plans cannot be implemented with the standardised modules, we can respond to your special design requirements anyway. For customised designs we resort to sub-modules of the modular operating concept by adapting the carrier board with the command points (PCB with individual contact blocks) according to your design proposal, consequently, the cost-optimised concept also taking effect here.
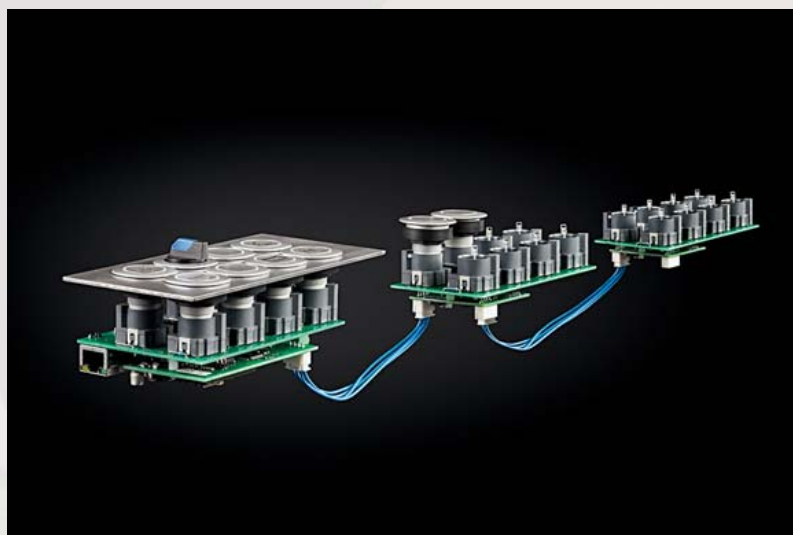
Panel Mount Jacks

available in numerous versions

**For detailed information, please visit our website www.schlegel.biz or refer to our product catalogue.**
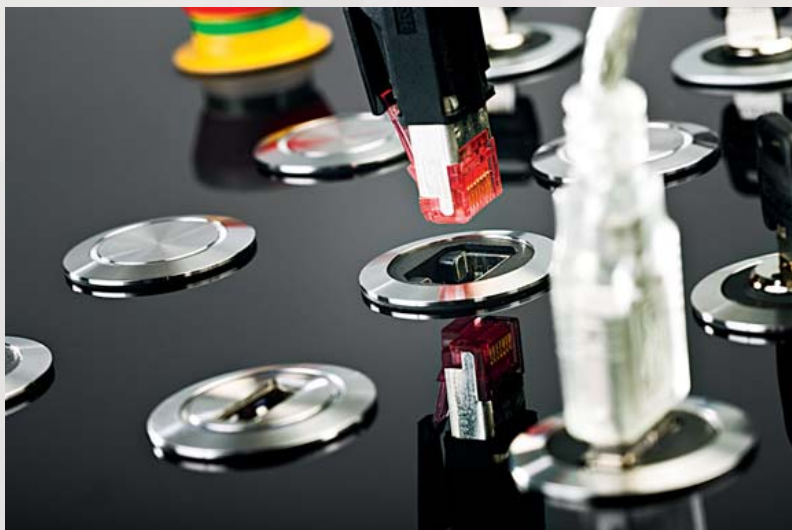
Terminal Blocks

Schlegel offers standard terminals for industrial application, particularly for electric machine control systems, for switchgear and controlgear, distribution and measuring systems, as well as for the lift and equipment construction. The terminals are suitable for high and low voltage applications for DC and AC. They are featuring short assembly times and small dimensions.
With a complete documentation of the production processes acc. to ISO 9001-2008 we ensure the highest quality standards. A precise mould construction is the prerequisite for the production of high-quality terminals. The necessary production tools have, therefore, being manufactured in-house for many years already in order to retain control on one of the most important quality criterias.

Schlegel terminal blocks are available with the following connection types:
→ Screw connections (with the „OSK – Original Schlegel Clamping System")
→ Spring-cage connections
→ IDC fast connection technology
→ Flat plug connections
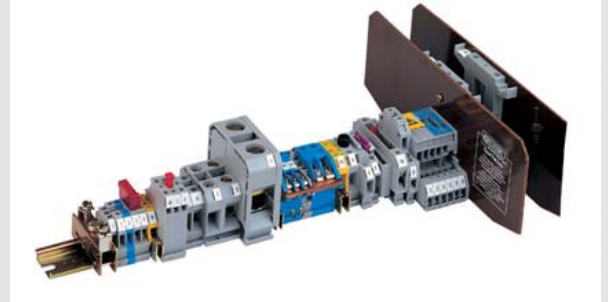
"OSK - Original Schlegel Clamping System"
On the screw-type terminals with wire protection bracket the conductors are pressed onto the basis of the conductive clamping body by the lower foot of the wire protection bracket which is fastened by a screw. This system is called the "OSK" system (Original Schlegel Clamping System), because it is unique in the terminal market. This construction ensures the so-called "Six Securities" :

Secure Wire Insertion due to:
1. insulating walls next to wire insertion opening of the metal body,
2. reliable opening of the clamp when loosening the screws (because wire protection bracket snap-fits below screw head) and
3. limitation of clamping space by the lower arm of the wire protection bracket, thus no slipping of single wires or strands.

Security against screw loosening under vibration by the resilient wire protection bracket that presses against the screw head (this makes the screws captive).
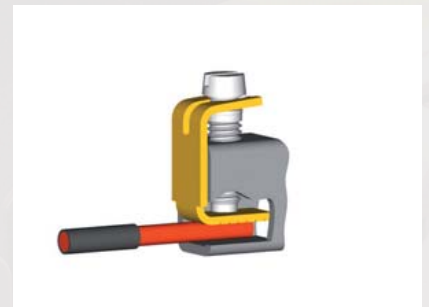
Direct clamping pressure transmission onto the wire at full bearing of the screw and protection of the wire (no damaging or piercing by the screw)
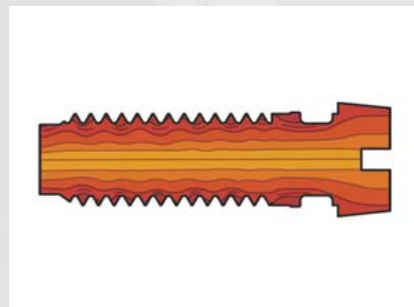
High tightening torque
The Schlegel terminals have rolled screws which, contrary to turned screws, feature a high-compressed structure with unbroken fibres in the thread area. The very high mechanical strength properties are achieved by thread rolling and assure high tightening torques

Security against tilting of the clamp (the solid metal clamping body prevents the connection „cages" from tilting when using thin wires)

Security against wire loosening thanks to resilient wire protection brackets and elastic deformation properties of the clamping body

The Universal Terminal Block Range at a Glance

Feed-through Terminals
For cross sections from 0.5 to 240 mm² (all kinds of conductors). Also available for railless assembly.

Connection Types:
➜ Screw connections featuring the "OSK system"
➜ Spring-cage connections
➜ IDC connections
➜ Flat plug connections (6.3 mm)

Fuse Terminals
Terminals with integrated fuseholder facilitate the protection of cables such as on photovoltaic systems (Junction Boxes). Fuseholders are available with bayonet connector, with pluggable insulator handle and another variant accepts automotive fuses.

Connection Types:
➜ Screw connections featuring the "OSK system"

Neutral Wire Separator Terminals
for current circuits acc. to VDE 0108, allow testing of the insulation without disconnecting the neutral from the neutral busbar.

Connection Types:
➜ Screw connections featuring the "OSK system"

Separator Terminals
Serve to disconnect current circuits by means of a captive disconnecting plug – no need to disconnect the conductor. Other functions are possible by using special accessories such as optocoupler, free-wheeling diode, diode plug, adjustable resistance plug or bridge rectifier plug.

Connection Types:
➜ Screw connections featuring the "OSK system"

Initiator Terminals
The interconnection of initiators requires special terminals. Featuring a width of 6 mm, the initiator terminals have connections to supply the initiator with the necessary power (+ and -). These connections are interconnected by comb-type jumpers. The output signal passes via a third connection.

Connection Types:
➜ Screw connections featuring the "OSK system"

Earth Connection Terminals
Earth connection terminals are feed-through terminals providing contact to the support rail which serves as earthing bar. The special design (only referred to the version with screw connections) creates a 3-way clamping on the rail once the conductor is connected.

Connection Types:
➜ Screw connections featuring the "OSK system"
➜ Spring-cage connections
➜ IDC connections

Pickaback Terminals
A feed-through terminal with the replica of a support rail on its topside. Here on this upper level, any other terminals can be placed, even with a different width or foot for 15 mm support rail. This double-level arrangement reduces the length of terminal block rail to the half.

Connection Types:
➜ Screw connections featuring the "OSK system"

Combi Terminals
3-wire terminal with particularly low-profile design for the phase, neutral and PE conductor with fixture and disconnecting slider for the neutral busbar. The support rail also serves as earthing bar. The clamping point for the neutral is marked blue, for the PE conductor it is green/yellow.

Connection Types:
➜ Screw connections featuring the "OSK system"

Distribution Terminals
Three-level wiring terminal particularly suitable for installation purposes, with connections for the phase, neutral and PE conductor – terminal width only 6 mm. A slider is available to disconnect the neutral from the neutral busbar. The support rail serves also as earthing bar.

Connection Types:
➜ Screw connections featuring the "OSK system"

Terminal Blocks

Limit Switches

Application:
➜ for automated process control (e.g. door monitoring)
➜ for movement limitation in processing and manufacturing machines, lifts, ships, conveying systems
➜ as trigger switch in safety and alarm systems

A multitude of actuators provide high flexibility to suit each particular case of application. The various combination possibilities help to optimally solve your control problems.

Distinctive Features of the EK Series:
➜ impact-resistant, hardly inflammable plastic housing
➜ reliable contacting
➜ easy and time-saving exchange of the actuators

Construction
The limit switches of the EK… series consist of a basic element with plunger axle, plunger seal, locking bolt, cover with gasket; the cover being fixed by a screw. Depending on the application, the user can select from a variety of actuators which are rotable in accordance with their respective operating direction by 4 x 90°.
Exceptions are actuators forming a firm connection with the drive shaft, such as the push button, pull axle, roller plunger and adjustable roller plunger.

There are two different contact types available
➜ slow-action contact EKU1
➜ snap-action contact EKU1SPR

Optionally, the switch can be supplied with switching bridge with double contact interruption for contacts of the same potential.

For more limit switches and detailed information, please refer to www.schlegel.biz and to our product catalogue.

RFID system

The increasing demand for electronic access authorisation for industrial applications requires an access concept which is not possible to handle with standard key switches. The Schlegel RFID system is a wireless communication technology for an easy, fast and unambiguous identification of persons. The RFID transponder, also named tag, replaces the key and includes special data which can be read by a reader via electromagnetic waves and which will then be evaluated in the control device. Thus, persons or groups can be unambiguously assigned and the relating access authorisations and levels will be enabled on the machine or installation.

Advantages
→ convenient - fast and easy operation, passwords no longer necessary
→ reliable - robust and durable, as there are no mechanical wear parts in the system
→ flexible - access authorisation can be defined and changed individually
→ safe - improves the operational safety of machines and installations
→ easy - easy assembly for panel cut-out Ø 22.3 mm (Ø 30.5 mm with accessory)
→ design - appealing design

Application fields
→ controlled personalised machine access with details access documentation
→ individual machine operation according to the access authorisation for groups and individual persons
→ easy and safe realisation of an operation mode switch


Pedal Switches

Robust light metal enclosure. Actuation is done by a red pedal with anti-slip crosswise ribbing which covers the whole switch. For the reliable protection against dust and humidity acc. to IP65 the pedal is equipped with an oil and chemical resistant rubber membrane which is protectively placed. A stroke limitation prevents a mechanical overload.
The modular contact blocks inside allow many different contact configurations.
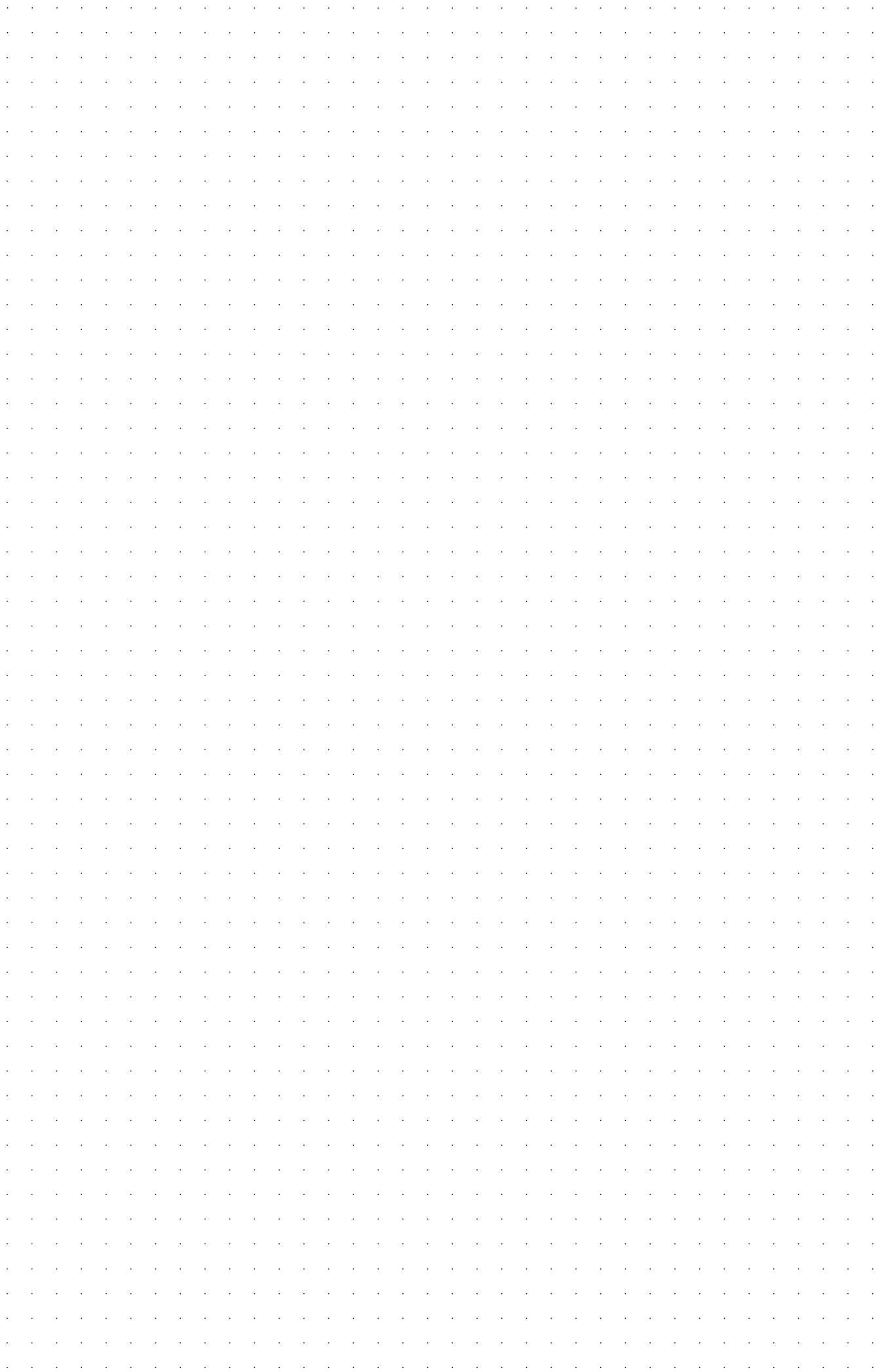
Range of Contact Blocks

➜ Electric contact blocks with PCB-mount terminals

Type	Contact configuration	Data acc. to VDE 0630		Data acc. to IEC 60947-5-1		Max. switching capacity
		Ue	Ie	Ue ~	Ie	
CTP...	1 inverter					48V AC/DC 100mA
CZ...	1...2 inverters					48V AC/DC 100mA
PT...	NC / NO			240V / 120V	1.5A / 3A	120V~ / 3A 240V~ / 1.5A
P...	NC / NO			240V / 120V	1.5A / 3A	120V~ / 3A 240V~ / 1.5A

➜ Electric contact blocks with Faston terminals

Type	Contact configuration	Data acc. to VDE 0630		Data acc. to IEC 60947-5-1		Max. switching capacity
		Ue	Ie	Ue ~	Ie	
AT..., AF...	NC/NO	250V~	6(3)A	250V	3A	250V~ / 6(3)A
AZ...	NC/NClb/NO/NOem/CC	250V~	6(4)A	250V	3A	250V~ / 6(4)A
BF...	NC/NO	250V~	6(4)A	250V	1.5A	250V~ / 6(4)A
B..._439	2NC/2NO			60V	3A (inductive)	60V~/3A and 60V DC/1A
BZ...	NC/NO	250V~	6(4)A	250V	1.5A	250V~/6(4)A
CTF...	1 inverter					48V AC/DC 100mA
CT...	1...2 inverters					48V AC/DC 100mA
FRTF...	NC / NO			240V / 120V	1.5A / 3A	120V~ / 3A 240V~ / 1.5A

➜ Electric contact blocks with screw connection

Type	Contact configuration	Data acc. to VDE 0630		Data acc. to IEC 60947-5-1		Max. switching capacity
		Ue	Ie	Ue ~	Ie	
BF...K	NC/NO	250V~	6(4)A	250V	1.5A	250V~ / 6(4)A
BZ...K	NC/NO	250V~	6(4)A	250V	1.5A	250V~/6(4)A
ET...	NC/NO	250V~ / 440V~	10(6)A / 6(3)A	250V /400V	5A / 3A	250V~ / 10(6)A 440V~ / 6(3)A
MT...	NC/NClb/NO/NOem/NO-NOem/NOem-NClb/NC-NOem	250V~ / 440V~	16(10)A / 10(6)A	250V / 440V	3A / 1.6A	250V~ / 16(10)A 440V~ / 10(6)A

➜ Electric contact blocks with spring-cage connection resp. push-in connection

Type	Contact configuration	Data acc. to VDE 0630		Data acc. to IEC 60947-5-1		Max. switching capacity
		Ue	Ie	Ue ~	Ie	
DS...	1NC/1NO	250V~ / 400V~	16(10)A / 10(5)A	240V / 380V	3A / 1.9A	250V~ / 16(10)A 400V~ / 10(5)A
DT...	NC/NClb/NO/NOem	250V~ / 400V~	16(10)A / 10(5)A	240V / 380V	3A / 1.9A	250V~ / 16(10)A 400V~ / 10(5)A

➜ Battery-free transmitter modules for wireless pushbuttons

The transmitter modules enable the implementation of battery-free radio transmission of a pushbutton signal, particularly in the building technology, the industrial automation, the automotive industry and others. The required energy is provided by a electrodynamic power generator using the energy of the key travel.

➜ Contact blocks (slaves) for AS-Interface

➜ Modular bus operating conecept

CANopen, Profibus, EtherCAT, Profinet I/O, Ethernet IP, AS-Interface

The current ratings in brackets refer to the inductive load acc. to EN61058-1.

SCHLEGEL

ELEKTROKONTAKT