made in germany

SCHLEGEL®
ELEKTROKONTAKT

Fascinating Electrotechnics

Product Overview

Index

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

Tradition and Progress

The company Schlegel Elektrokontakt 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.

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Schlegel Leipzig

The company was founded in Leipzig on 10th March1937 under the name Monopol. In1951 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.
Since that day the two companies complement each other in the market, thus, rounding off their product portfolios.

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.
In November 2005 Schlegel Leipzig was certified according to DIN EN ISO 9001:2008.
In July 2013 DUX was renamed as Schlegel.

Subsidiary in Austria

The Schlegel Vertriebs Ges.mbH, 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 Schlegel Vertriebs Ges. mbH, 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.

In Czechia and Croatia we are represented by local companies with own stockkeeping.

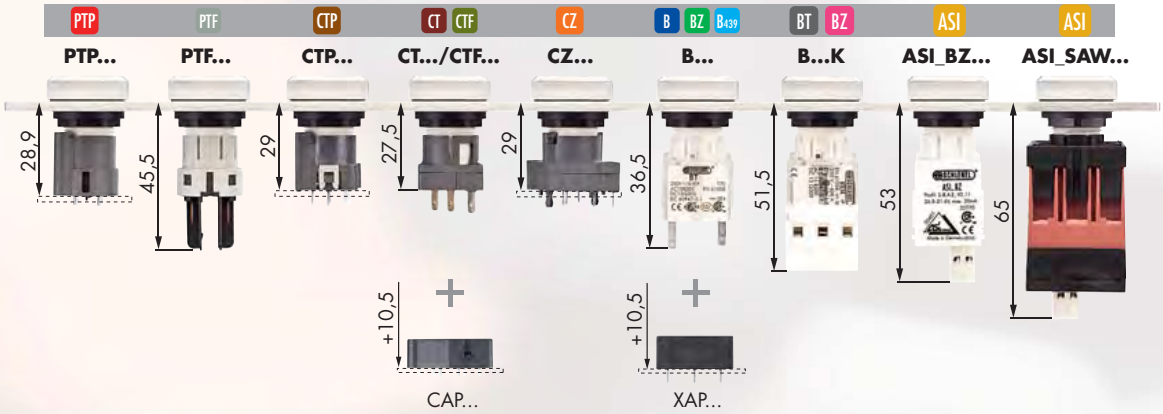
The high quality, the outstanding design, but not least the proverbial Swabian reliability and price-worthiness of Schlegel products is being appreciated by a more and more increasing customer family.

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

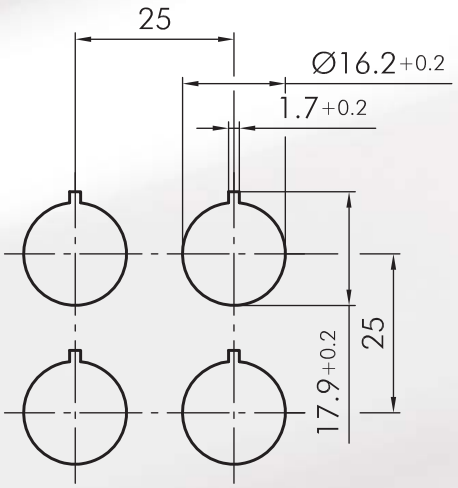
Product configurator

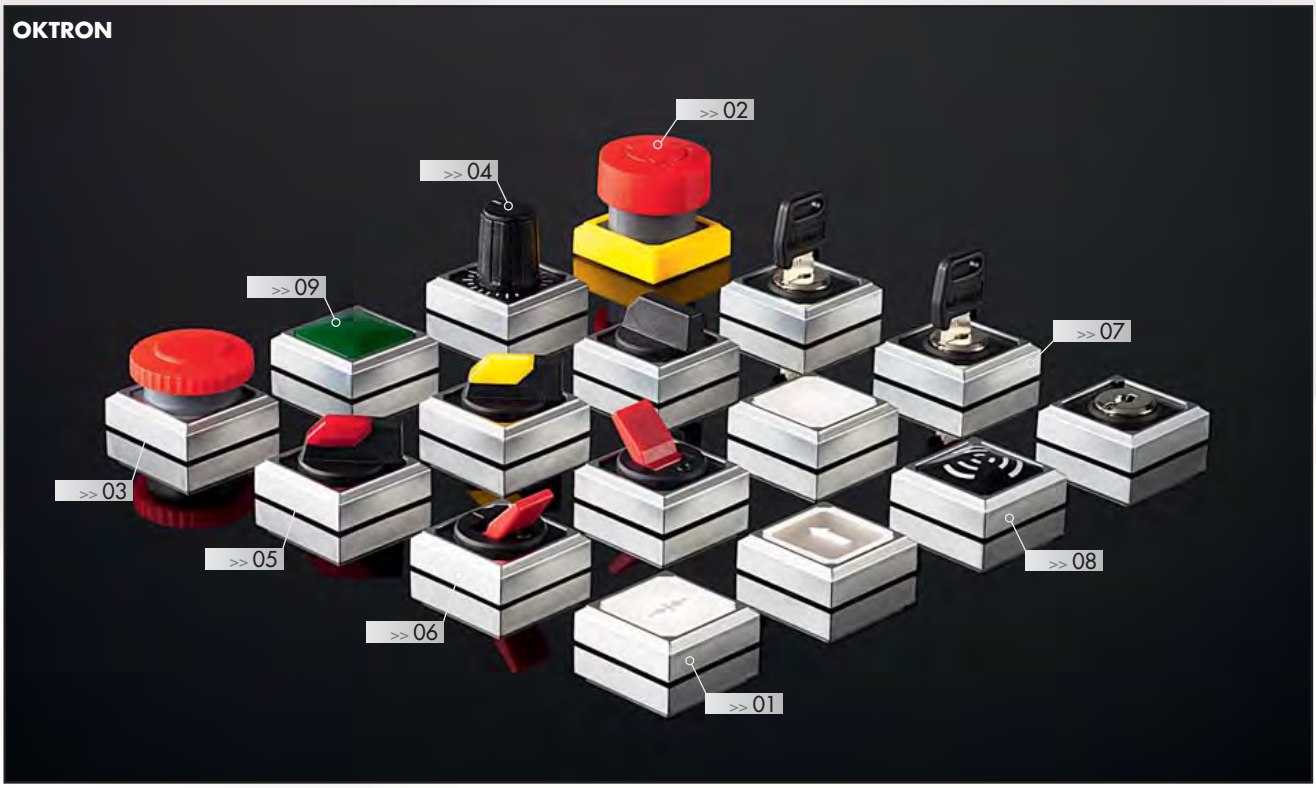
Mounting Depth Dimensions



Cutout Dimensions

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





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

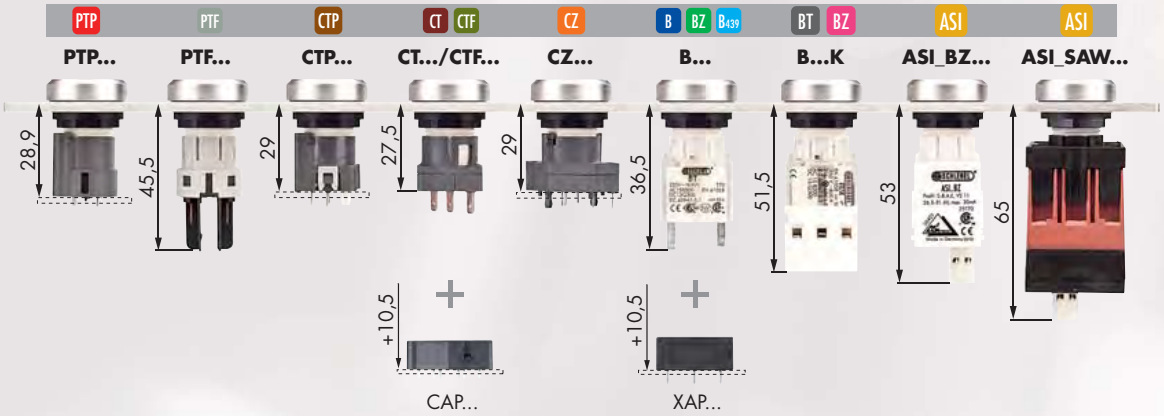
OKTRON

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

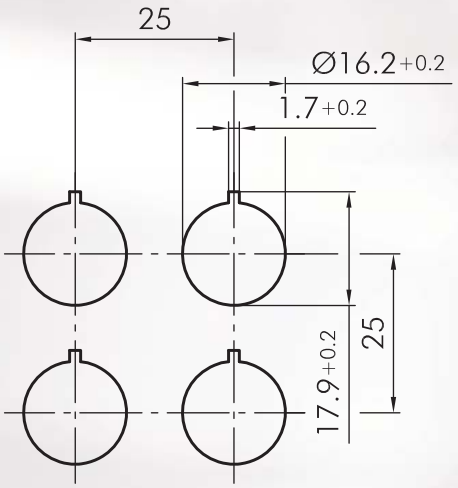
Product configurator

Mounting Depth Dimensions



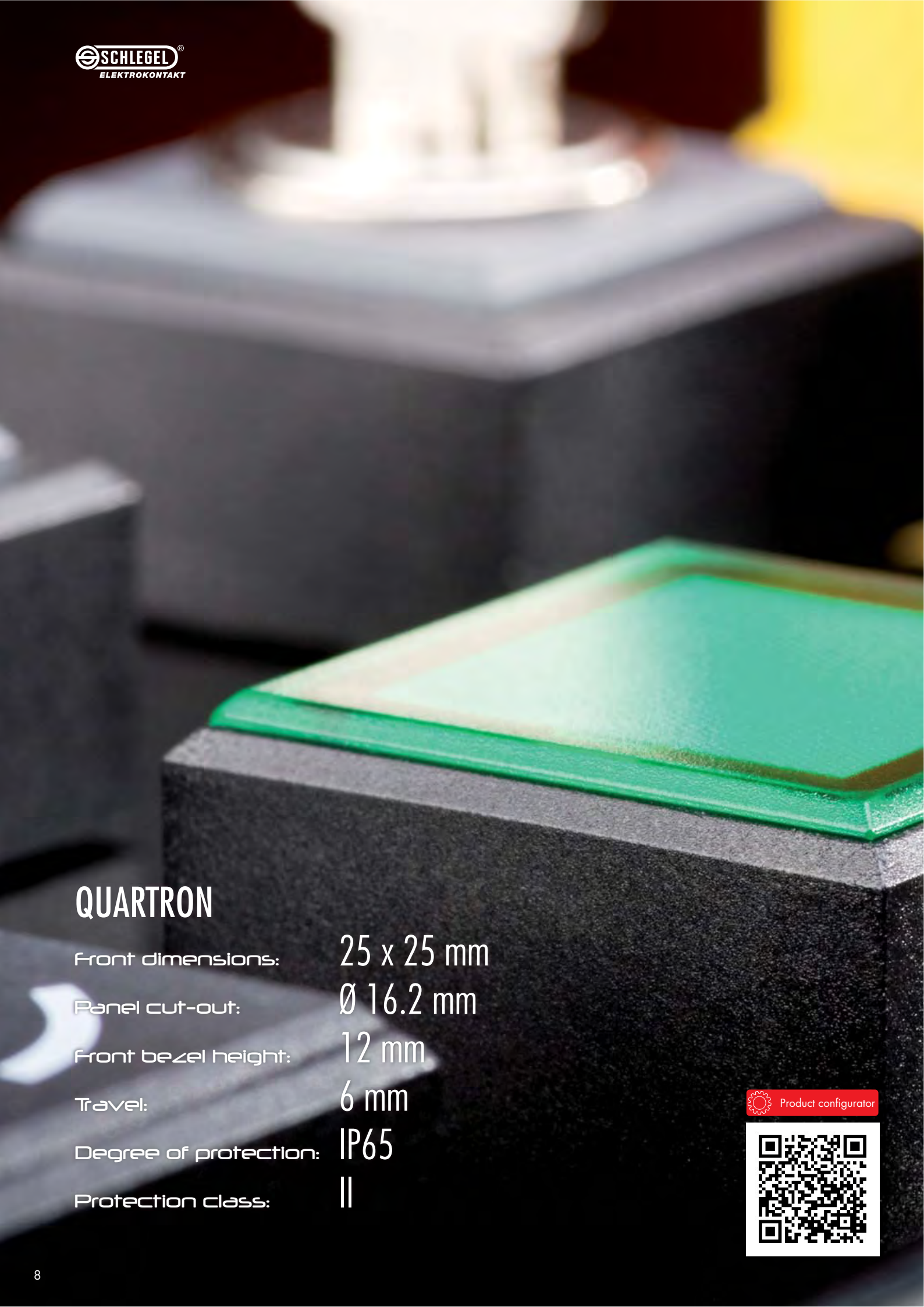
Cutout Dimensions

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



OKTRON-R

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

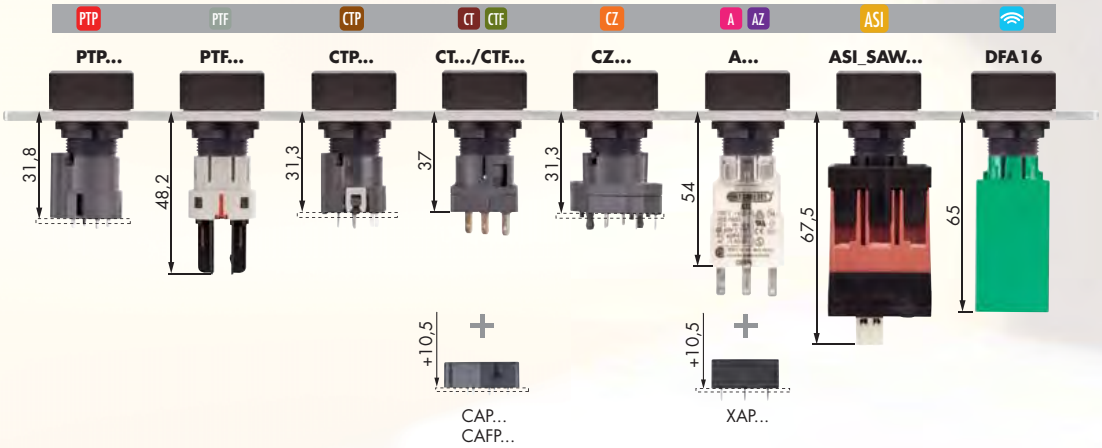


QUARTRON

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

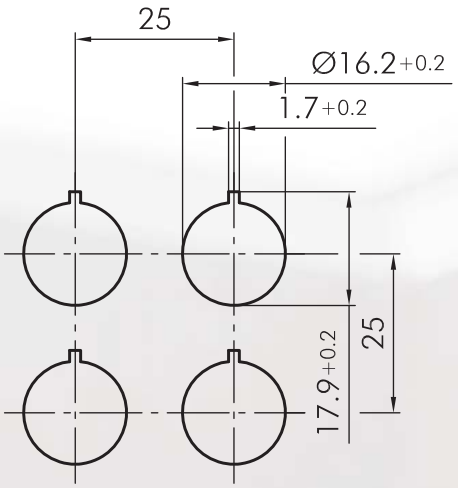
Product configurator

Mounting Depth Dimensions



Cutout Dimensions

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



QUARTRON

01 Pushbutton Heads
02 Emergency Stop Buttons
03 Mushroom Heads
04 Knob Set for Rotary Switch/Potentiometer
05 Selector Heads
06 Toggle Heads
07 Key Actuators
08 Acoustic Buzzers
09 Pilot Lights

RONTRON-R-JUWEL

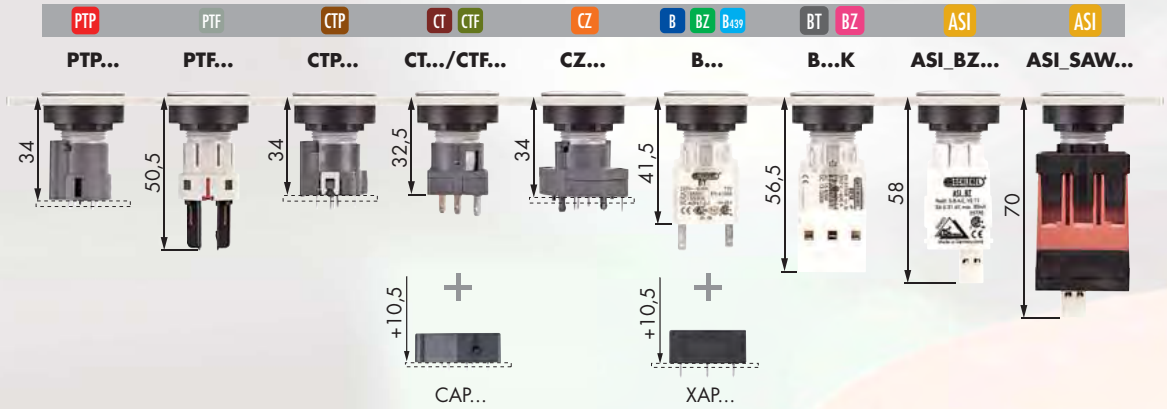
Front dimensions:	Ø 28 mm
Panel cut-out:	Ø 22.3 mm
Front bezel height:	2 mm
Travel:	3 mm
Degree of protection:	IP65
Protection class:	II

product design award 2006

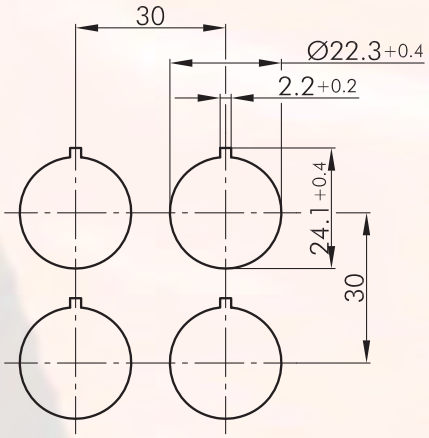
DESIGNPREIS 2007 NOMINIERT

Product configurator

Mounting Depth Dimensions



Cutout Dimensions



RONTRON-R-JUWEL

01 Pushbutton Heads
02 Emergency Stop Buttons
03 Knob Sets for Potentiometers/Incremental Encoders
04 Selector Heads
05 Key Actuators
06 Acoustic Buzzers
07 Flush-mounted Jacks
08 Pilot Lights

RONTRON-R-JUWEL

RONTRON-RJ-Edelstahl

Front dimensions:	Ø 28 mm
Panel cut-out:	Ø 22.3 mm
Front bezel height:	2 mm
Travel:	3 mm/1,2mm
Degree of protection:	IP65/IP66
Protection class:	II

Designpreis Deutschland 2011 NOMINIERT

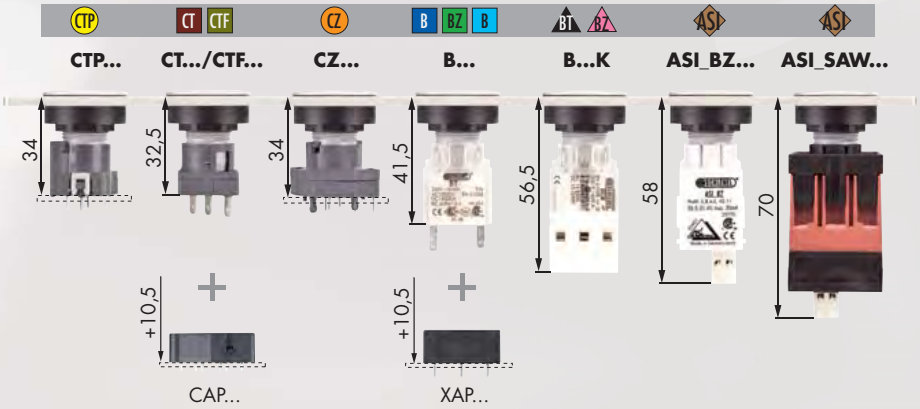
product design award 2010

Focus Open Silber 2010

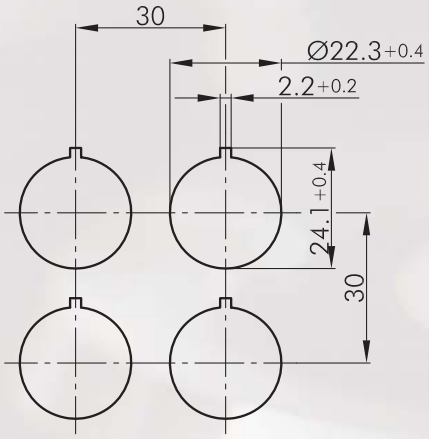
reddot design award winner 2010

Product configurator

Mounting Depth Dimensions

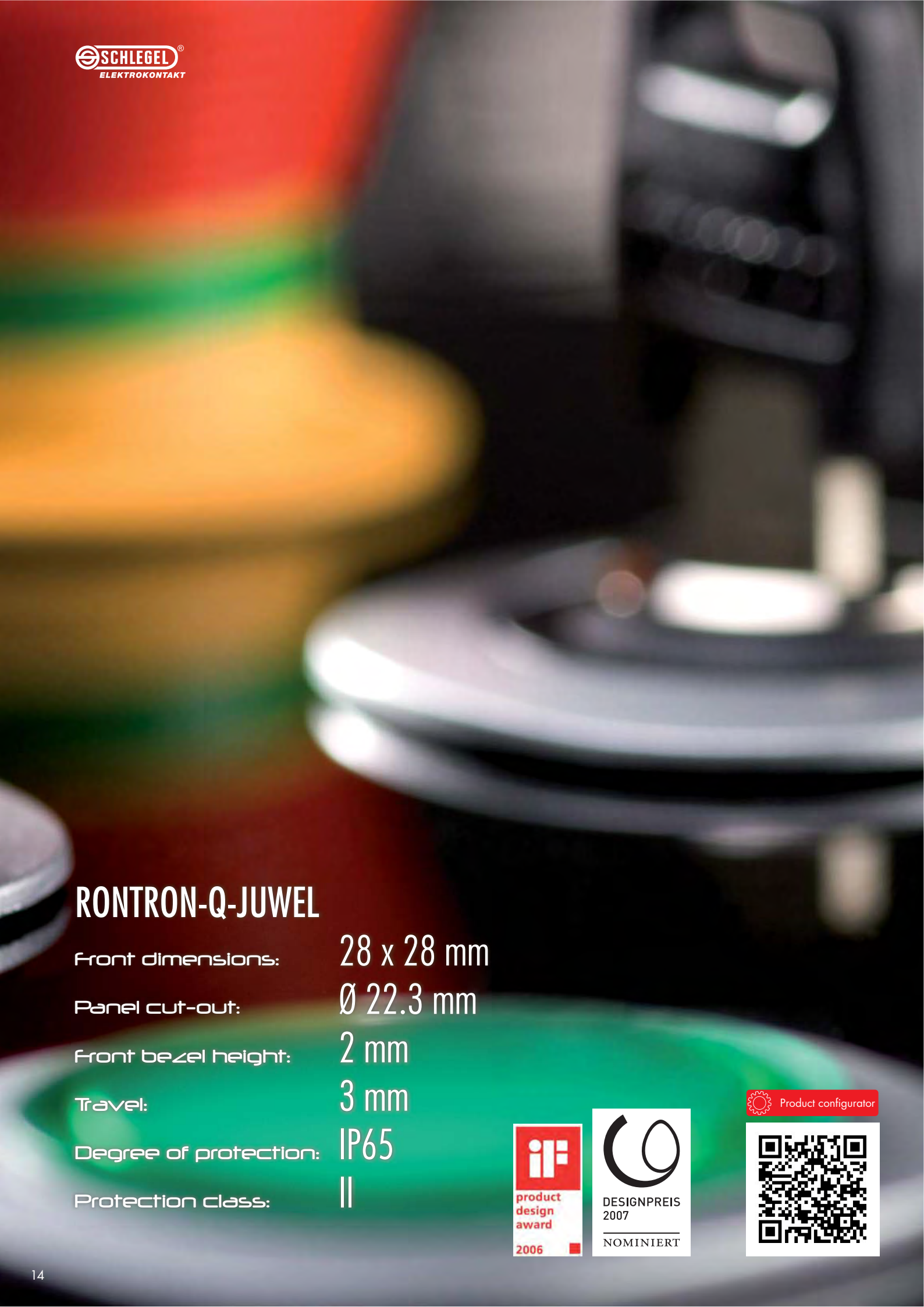


Cutout Dimensions



RONTRON-RJ-Edelstahl

01 Pushbutton Heads
02 Individual Membrane Pushbuttons
03 Knob Sets for Potentiometer/Incremental Encoders
04 Selector Heads
05 Key Actuators
06 Acoustic Buzzers
07 Flush-mounted Jacks
08 Pilot Light Heads / Pilot Lights



RONTRON-Q-JUWEL

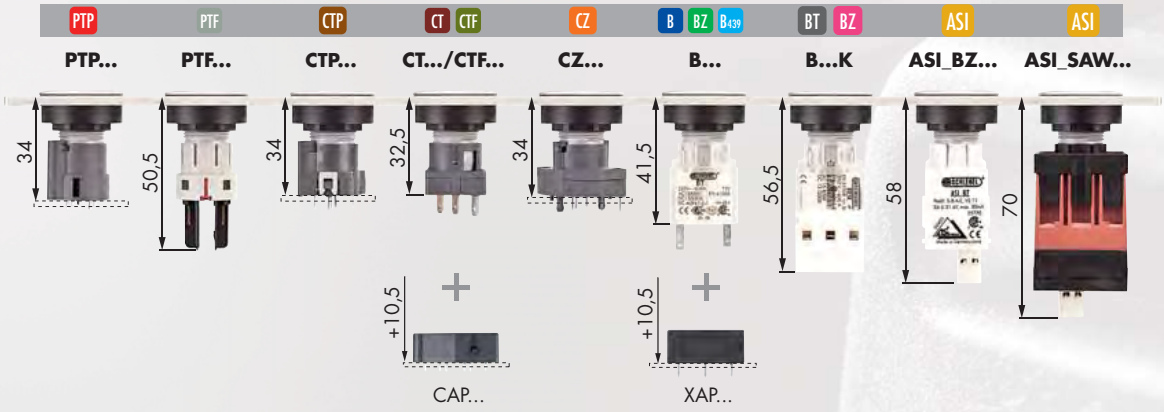
Front dimensions:	28 x 28 mm
Panel cut-out:	Ø 22.3 mm
Front bezel height:	2 mm
Travel:	3 mm
Degree of protection:	IP65
Protection class:	II

product design award 2006

DESIGNPREIS 2007 NOMINIERT

Product configurator

Mounting Depth Dimensions



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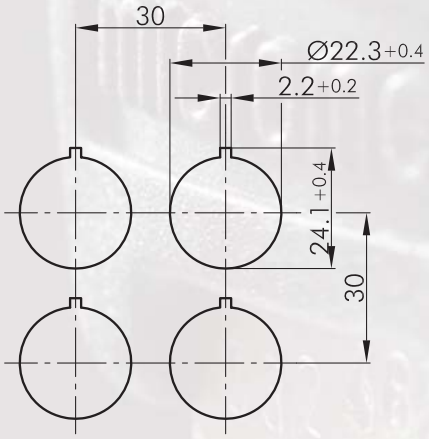


RONTRON-Q-JUWEL

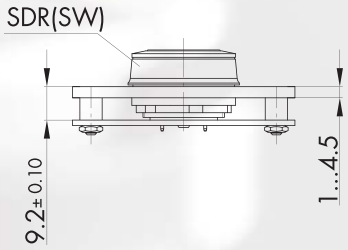
01 Pushbutton Heads
02 Emergency Stop Buttons
03 Knob Set for Potentiometers
04 Selector Heads
05 Key Actuators
06 Acoustic Buzzers
07 Flush-mounted Jacks
08 Pilot Lights

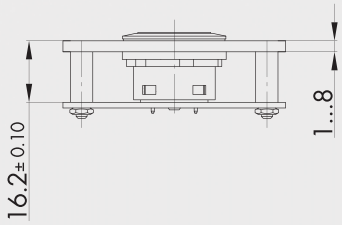
SHORTRON

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

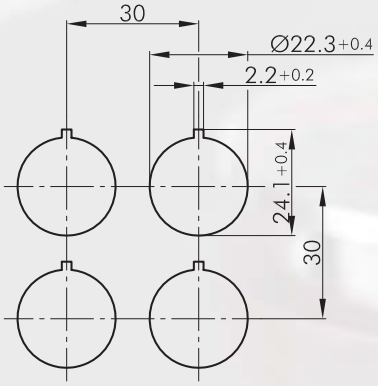
Product configurator

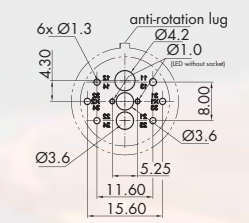
Mounting Depth Dimensions





Cutout Dimensions

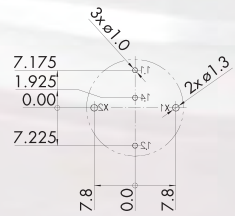




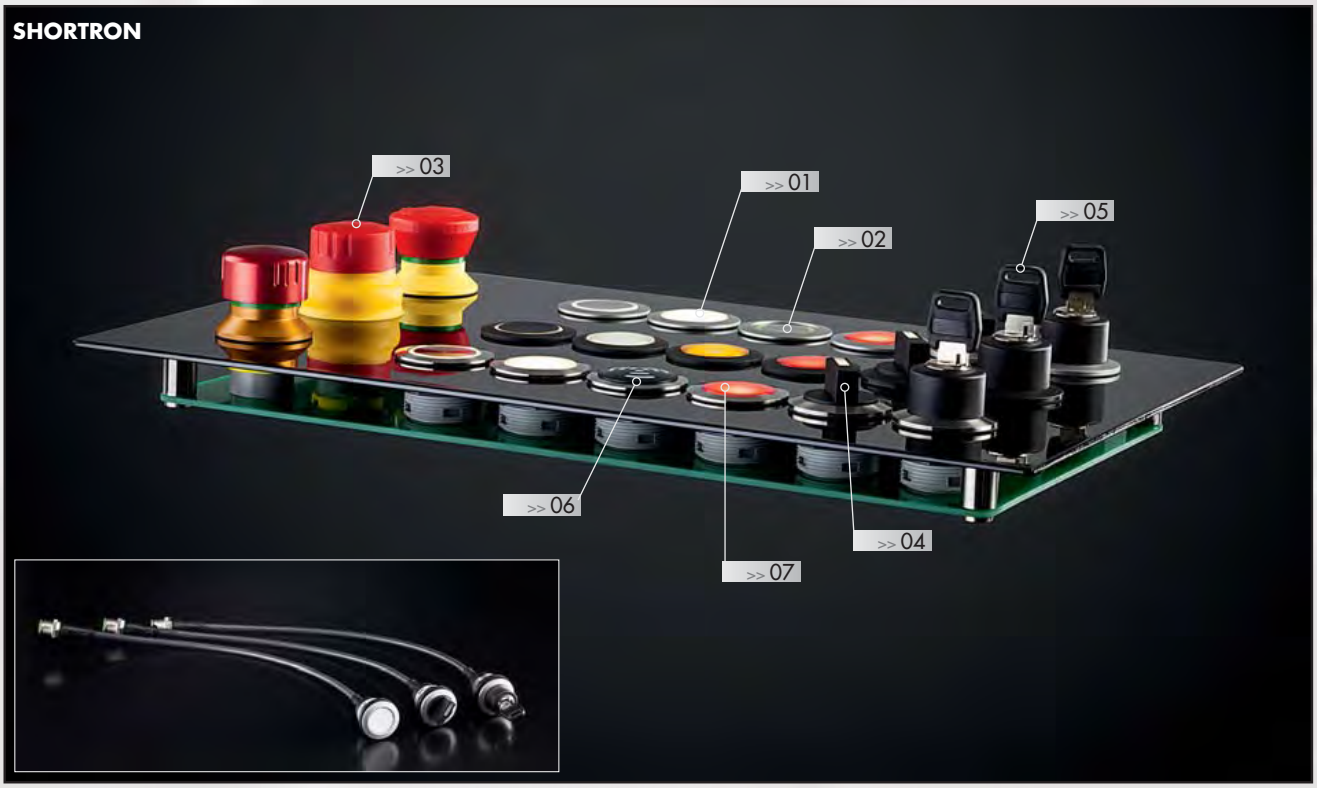
Component side view

Contact assignment:see wiring scheme of the relevant types

PCT...



SHORTRON



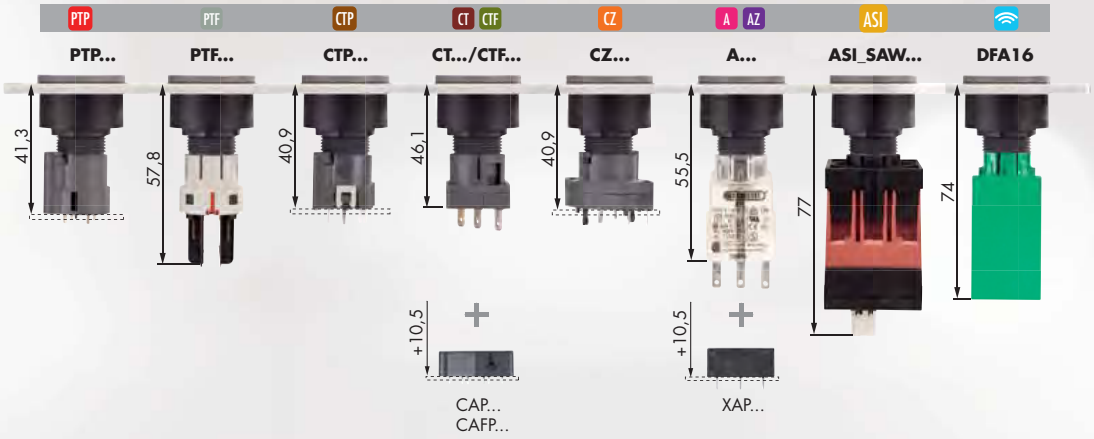
01 Pushbuttons
Tactile Pushbuttons
02 Capacitive Pushbuttons
03 Emergency Stop Buttons
04 Selector Switches
05 Key Switches
06 Acoustic Buzzers
07 Pilot Lights

RX-JUWEL

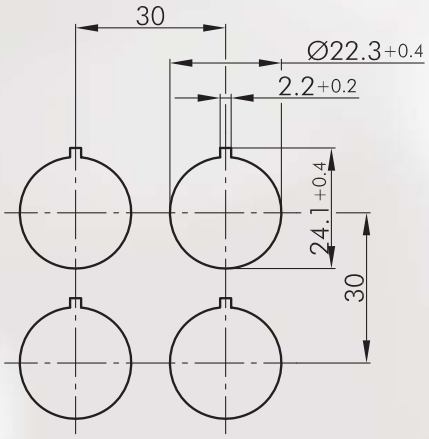
Front dimensions:	Ø 28 mm
Panel cut-out:	Ø 22.3 mm
Front bezel height:	2,6 mm
Travel:	6 mm
Degree of protection:	IP65
Protection class:	II

Product configurator

Mounting Depth Dimensions



Cutout Dimensions



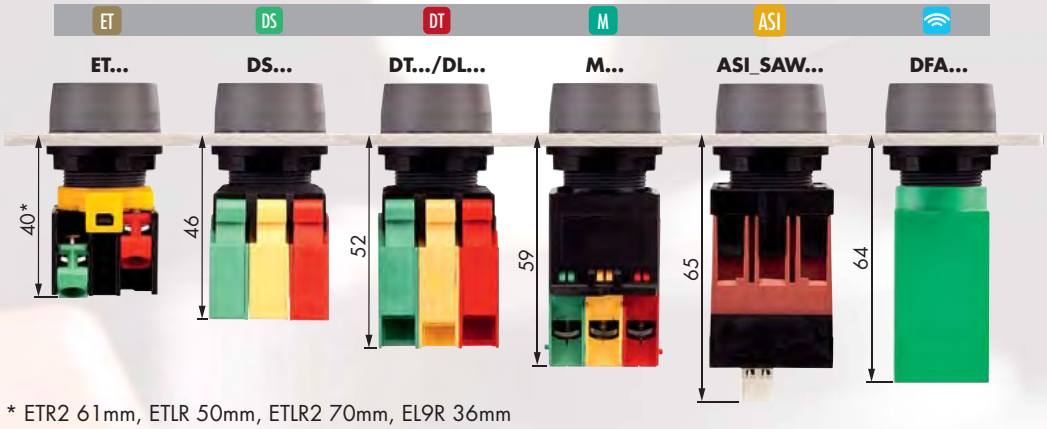
01 Pushbutton Heads
02 Emergency Stop Buttons
03 Knob Set for Potentiometers
04 Selector Heads
05 Key Actuators
06 Acoustic Buzzers
07 Pilot Lights

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

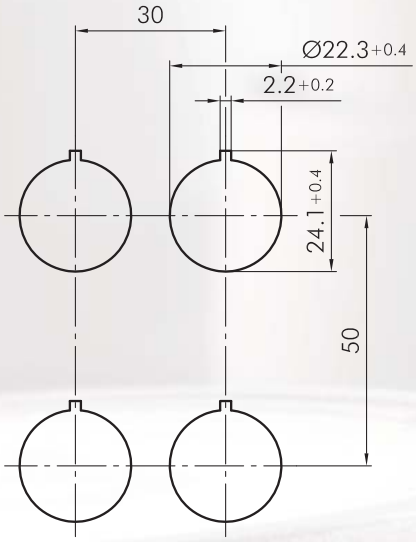
Product configurator

Mounting Depth Dimensions



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

Cutout Dimensions



01 Pushbutton Heads
02 Emergency Stop Buttons
03 Mushroom Heads
04 Knob Set for Rotary Switch/Potentiometer
05 Selector Heads
06 Toggle Heads
07 Key Actuators
08 Acoustic Buzzers
09 Pilot Lights

RONDEX-M

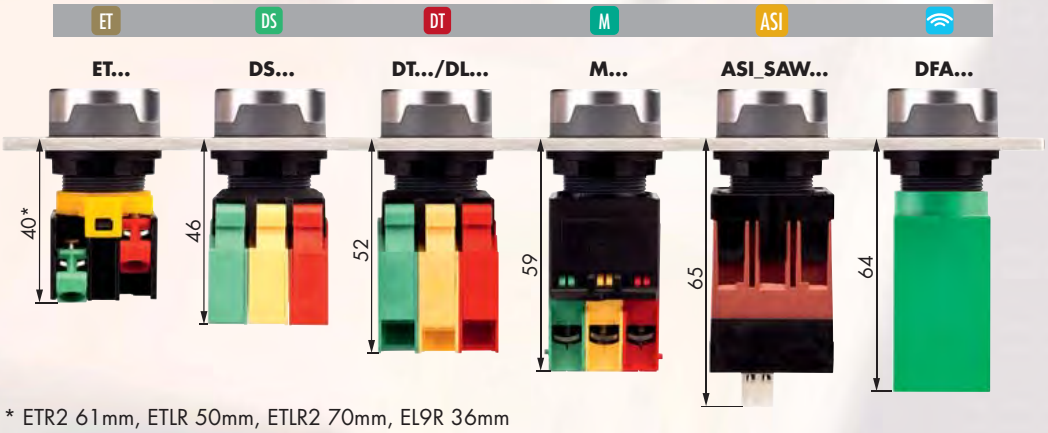
Front dimensions:	Ø 28 mm
Panel cut-out:	Ø 22.3 mm
Front bezel height:	12 mm
Travel:	6 mm
Degree of protection:	IP65
Protection class:	II

product design award 2008

DESIGNPREIS 2009 NOMINIERT

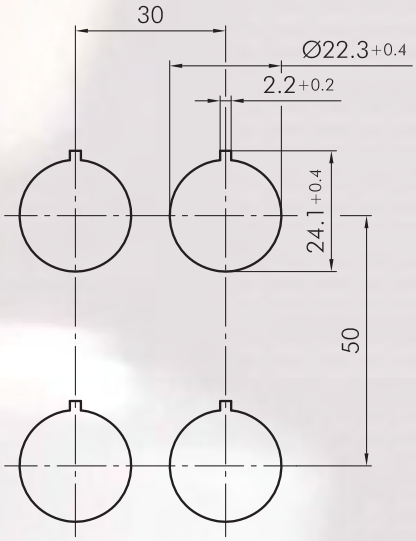
Product configurator

Mounting Depth Dimensions



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

Cutout Dimensions



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

DUX-Basic

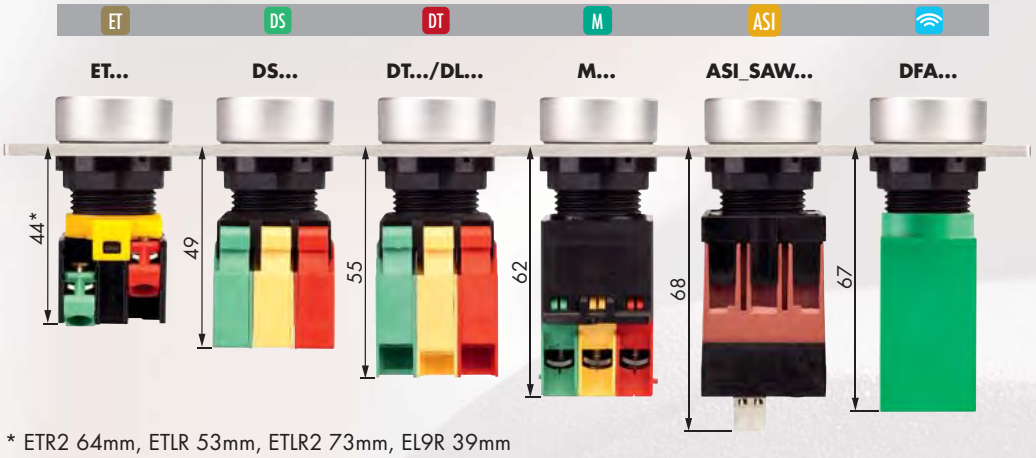
Front dimensions:	Ø 30 mm
Panel cut-out:	Ø 22.3 mm
Front bezel height:	12 mm
Travel:	6 mm
Degree of protection:	IP65
Protection class:	II

DESIGNPREIS 2006 NOMINIERT

design award 2005

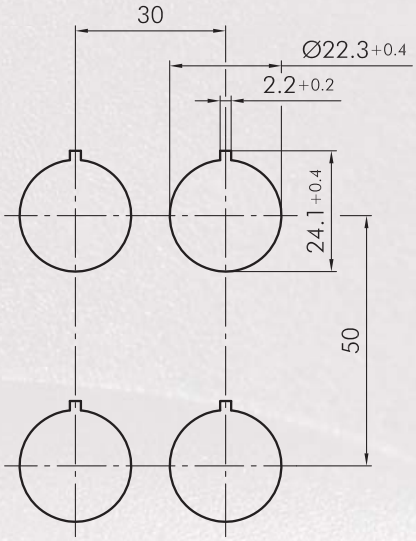
Product configurator

Mounting Depth Dimensions



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

Cutout Dimension



DUX-Basic

01 Pushbutton Heads
02 Emergency Stop Buttons
03 Mushroom Heads
04 Selector Heads
05 Toggle Heads
06 Key Actuators
07 Pilot Lights

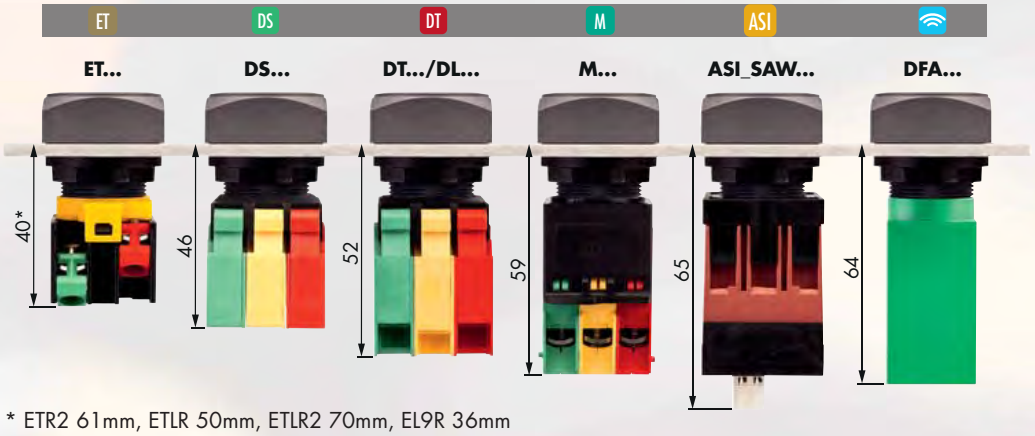
QUARTEX-R

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

design award winner 2004

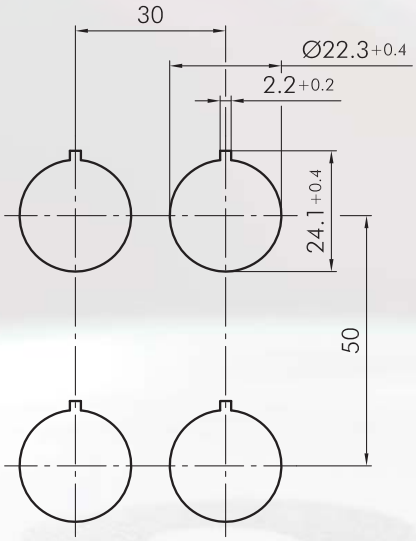
Product configurator

Mounting Depth Dimensions



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

Cutout Dimensions



QUARTEX-R

01 Pushbutton Heads
02 Emergency Stop Buttons
03 Mushroom Heads
04 Knob Set for Rotary Switch/Potentiometer
05 Selector Heads
06 Toggle Heads
07 Key Actuators
08 Pilot Lights

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

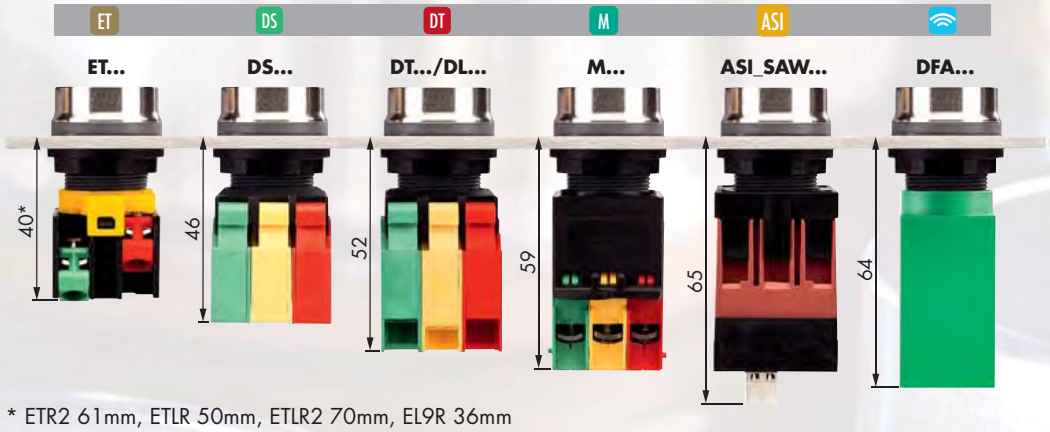
reddot

Design Award Winner 2000

excellent! Design Center Stuttgart

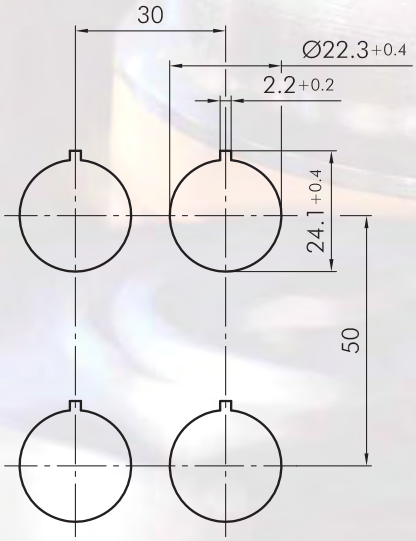
Product configurator

Mounting Depth Dimensions



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

Cutout Dimensions



RVA

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

KOMBITAST-R-JUWEL

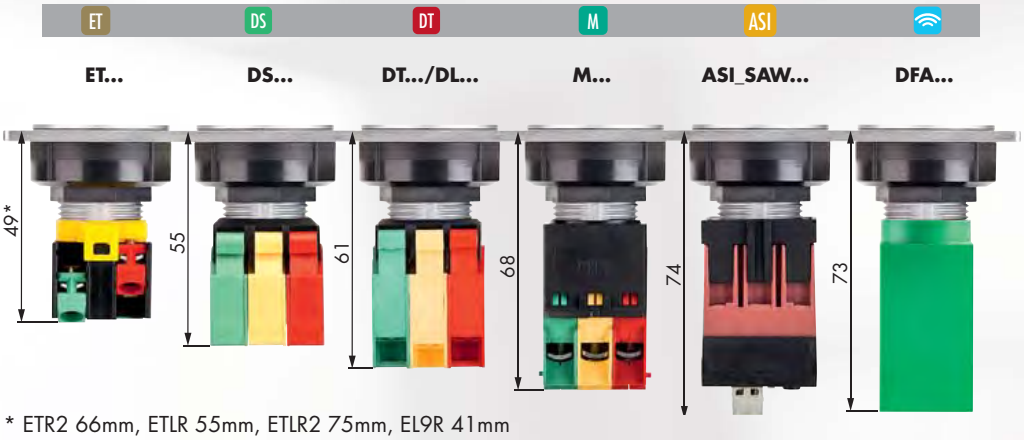
Front dimensions:	Ø 36 mm
Panel cut-out:	Ø 30.5 mm
Front bezel height:	2.7 mm
Travel:	6 mm
Degree of protection:	IP66/IP67
Protection class:	II

German Design Award WINNER 2014

product design award 2013

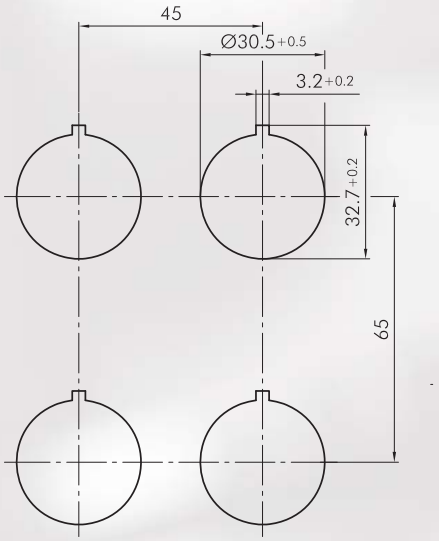
Product configurator

Mounting Depth Dimensions



* ETR2 66mm, ETLR 55mm, ETLR2 75mm, EL9R 41mm

Cutout Dimensions



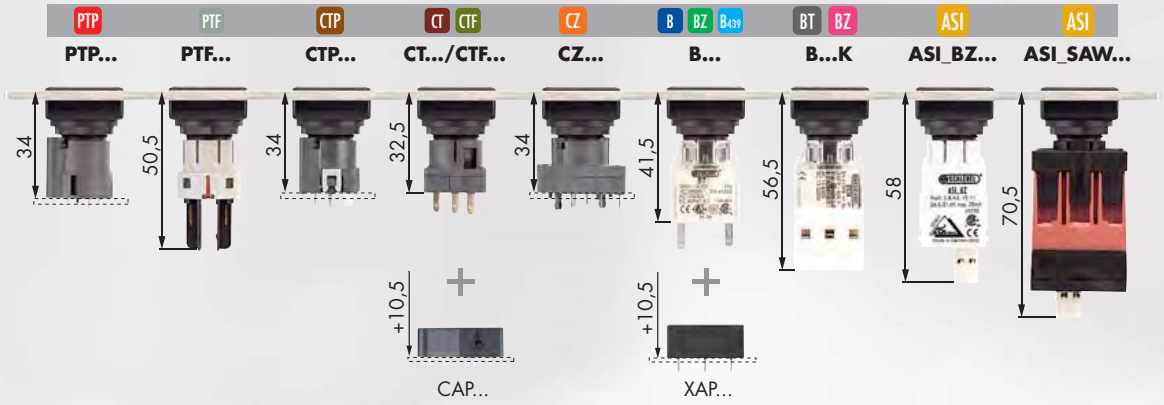
01 Pushbutton Heads
02 Emergency Stop Buttons
03 Knob Set for Rotary Switches/Potentiometers
04 Selector Heads
05 Toggle Heads
06 Key Actuators
07 Flush-mounted jacks
08 Pilot Lights

OKTRON-JUWEL

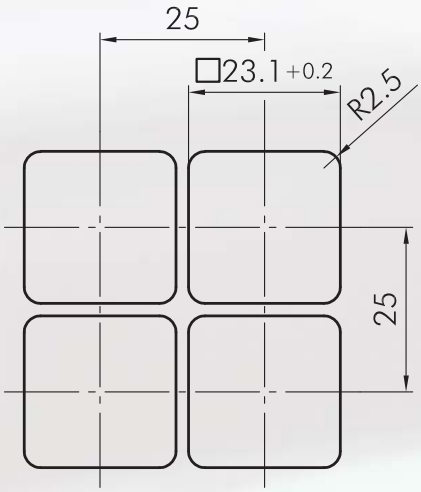
Front dimensions:	25 x 25 mm
Panel cut-out:	23.1 x 23.1 mm
Front bezel height:	2 mm
Travel:	3 mm
Degree of protection:	IP65 / IP69K
Protection class:	II

Product configurator

Mounting Depth Dimensions



Cutout Dimensions



OKTRON-JUWEL

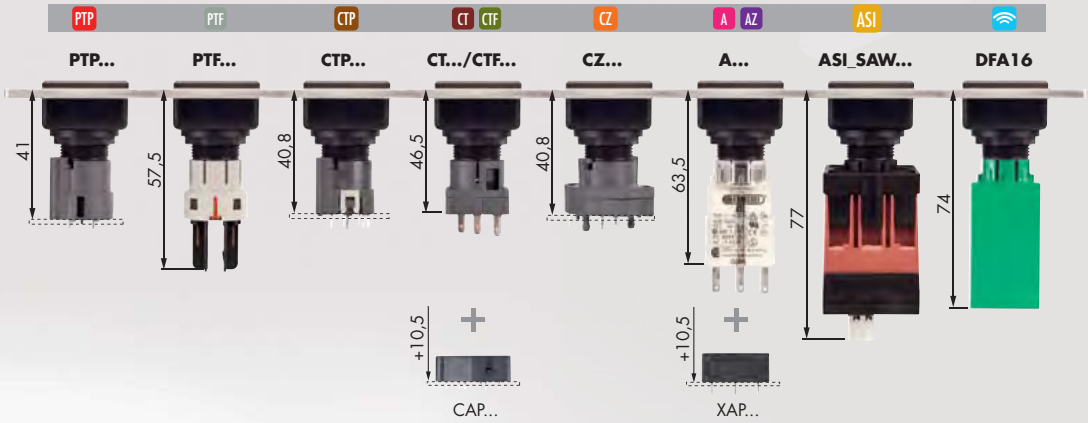
01 Pushbutton Heads
02 Emergency Stop Buttons
03 Knob Set for Potentiometers
04 Selector Heads
05 Key Actuators
06 Acoustic Buzzers
07 Flush-mounted jacks
08 Pilot Lights

QUARTRON-JUWEL

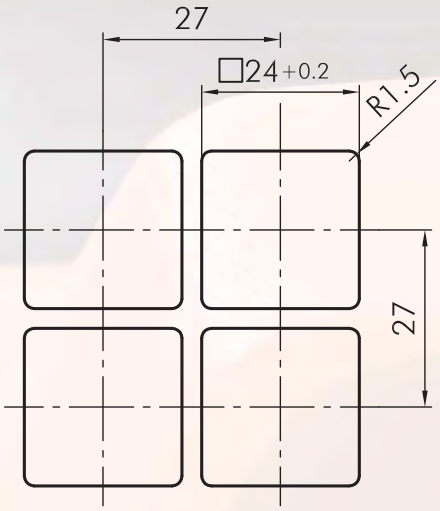
Front dimensions:	27 x 27 mm
Panel cut-out:	24 x 24 mm
Front bezel height:	2.5 mm
Travel:	6 mm
Degree of protection:	IP65
Protection class:	II

Product configurator

Mounting Depth Dimensions



Cutout Dimensions



QUARTRON-JUWEL

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

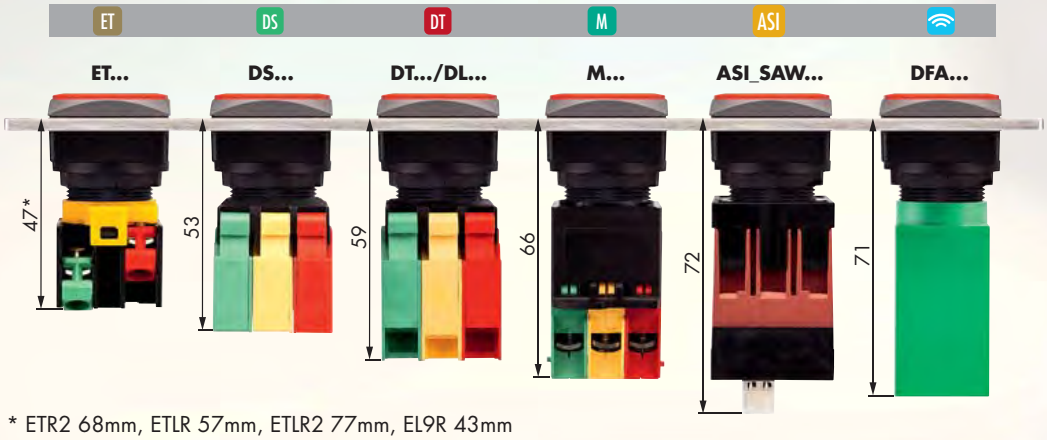
QUARTRON-JUWEL

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

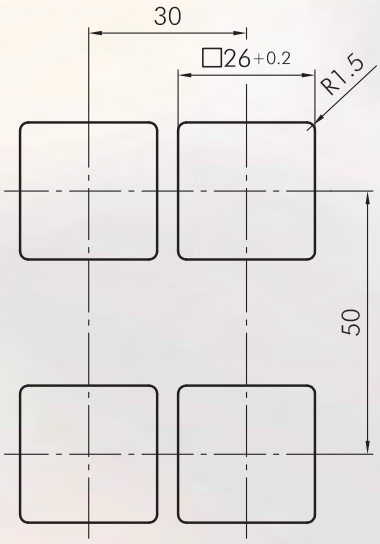
Product configurator

Mounting Depth Dimensions



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

Cutout Dimensions



QUARTEX-R-JUWEL

01 Pushbutton Heads
02 Emergency Stop Buttons
03 Knob Set for Rotary Switch/Potentiometer
04 Selector Heads
05 Toggle Heads
06 Key Actuators
07 Pilot Lights

Emergency Stops

Safe and Optically Appealing Emergency Stop Buttons

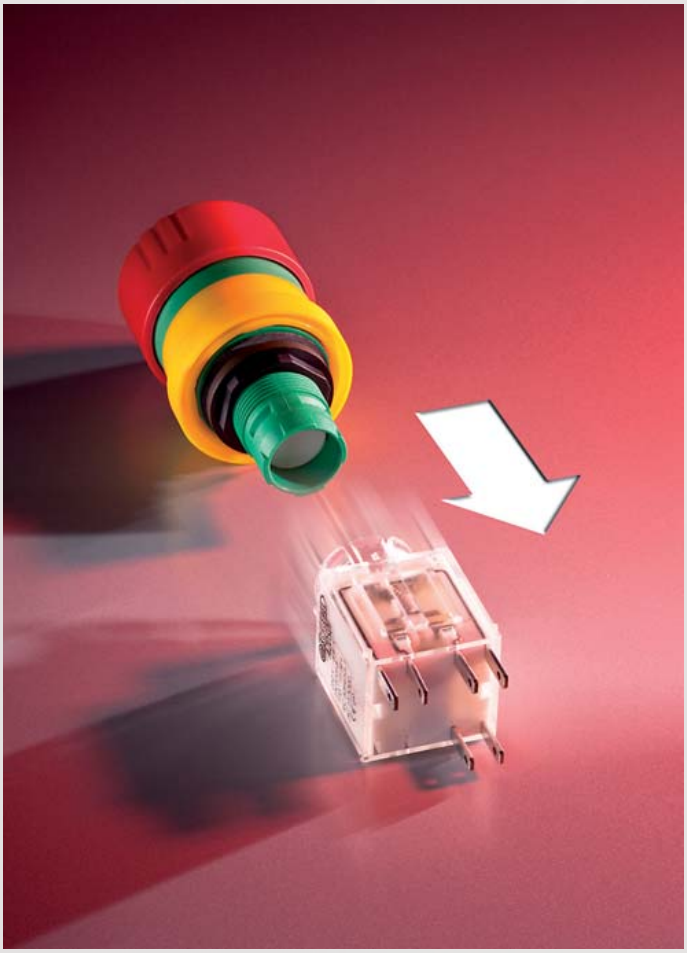
The user can choose from a wide range of TÜV certified Schlegel emergency stop buttons for panel cut-outs of different shapes and dimensions (16mm, 22mm, 30mm...) which can be combined with both, the standard and ASi contact units.
The actuators are well known for their modern and attractive design combining 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 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** by Schlegel Elektrokontakt are the response to this danger that may occur e.g. as a result of a negligent assembly or a mechanical damage. In such a situation the safety contact blocsk acc. to EN60947-5-5 and EN 13850 ensure that the emergency function is activated and the installation is switched off immediately. It can only be restarted after successful trouble-shooting. The contact blocks are available with screw connections, Faston terminals, Cage-Clamp and push-in connection and do have positive opening contacts acc.to IEC60947-5-1. They can be supplied with one or two channels. The high-quality contact elements allow reliable switching even of low currents (5mA at 24V or less). They are available as conventional contact blocks as well as for AS-Interface application (Safety@Work).

Safety@Work

Safety@Work is an extension of the existing ASi system by safety-related components, such as e.g. emergency stop switches.
The great advantage is that standard and safety-related ASi slaves can be used in one and the same system. That means an existing ASi network consisting of ASi master, power supply and slaves, is simply extended by a safety monitor and safe ASi slaves.
Safety@Work is based on the standard ASi protocol reaching the safety integrity level 3. The transmission of dynamic code sequences which are stored in each safe ASi slave serves as base for the safety-related communication.



Automatic switch off on separation of the
contact block from the emergency-stop button

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		Panel cut-out	Foolproof	DIN EN ISO 13850, EN 60947-5-1, EN 60947-5-5	TÜV-certified	UL/CSA	Switching position indicator	Degree of protection	Twist release	Pull release	Key release	Illuminating option	Faston terminals	Screw connections	PCB-mount terminals	Spring-clamp / push-in connection	AS-Interface
RXJUV		Ø 22.3 mm	X	X	X	X	X	IP65	X				X		X		X
RXUV		Ø 16.2 mm	X	X	X		X	IP65	X				X		X		X
QXJUV		24 x 24 mm	X	X	X		X	IP65	X				X		X		X
QRUV		Ø 22.3 mm	X	X	X	X	X	IP65 IP69K	X					X		X	X
QRJUV		26 x 26 mm	X	X	X		X	IP65	X					X		X	X
RXUVP		Ø 16 .2 mm	X	X	X			IP66 IP69K	X				X		X		X
QRUVP		Ø 22.3 mm	X	X	X	X		IP66 IP69K	X					X		X	X
RXJBUV		Ø 22.3 mm	X	X	X		X	IP65	X				X		X		X
RXBUV		Ø 16.2 mm	X	X	X		X	IP65	X				X		X		X

		Panel cut-out	Foolproof	DIN EN ISO 13850, EN 60947-5-1, EN 60947-5-5	TÜV-certified	UL/CSA	Switching position indicator	Degree of protection	Twist release	Pull release	Key release	Illuminating option	Faston terminals	Screw connections	PCB-mount terminals	Spring-cage/push-in connection	AS-Interface
RXBLUV		Ø 16.2 mm	X	X	X		X	IP65	X			X	X		X		X
QXJBUV		24 x 24 mm	X	X	X		X	IP65	X				X		X		X
QRBUV		Ø 22.3 mm	X	X	X	X	X	IP65 IP69K	X					X		X	X
QRBLUV		Ø 22.3 mm	X	X	X	X	X	IP65	X			X		X		X	X
QRBUVSE		Ø 22.3 mm	X	X	X	X	X	IP66			X			X		X	X
QRBLUVSE		Ø 22.3 mm	X	X	X	X	X	IP65			X	X		X		X	X
QRBUVSE43		Ø 22.3 mm	X	X			X	IP66	X		X			X		X	X
QRSKUV		Ø 22.3 mm	X	X	X	X	X	IP69K	X					X		X	X
QRSKLUV		Ø 22.3 mm	X	X	X	X	X	IP65	X			X		X		X	X

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Emergency Stops

	Panel cut-out	Foolproof	DIN EN ISO 13850, EN 60947-5-1, EN 60947-5-5	TÜV-certified	UL/CSA	Switch. position indicator	Degree of protection	Twist release	Pull release	Key release	Illuminating option	Faston terminals	Screw connections	PCB-mount terminals	Spring-cage/push-in connections	AS-Interface
QRSKUVSE 	Ø 22.3 mm	X	X	X	X	X	IP66			X			X		X	X
QRSKLUVSE 	Ø 22.3 mm	X	X	X	X	X	IP65			X	X		X		X	X
RKUV40 	Ø 16.2 mm	X	X	X	X		IP65	X				X	X	X		X
RKUV32 	Ø 16.2 mm	X	X	X		X	IP65	X				X	X	X		X
DXRVS40S 	Ø 22.3 mm	X	X	X		X	IP65		X				X		X	X
DXRV39PF 	Ø 22.3 mm	X	X	X	X	X	IP65	X					X		X	X
FRVKALOOI 	Ø 22.3 mm						IP65 IP67									
FRZVKOO 	Ø 22.3 mm						IP65 IP67									
RRJUV 	Ø 22.3 mm	X	X	X	X	X	IP65 IP67 IP69K	X				X	X	X		X

		Panel cut-out	Foolproof	DIN EN ISO 13850, EN 60947-5-1, EN 60947-5-5	TÜV-certified	UL/CSA	Switching position indicator	Degree of protection	Twist release	Pull release	Key release	Illuminating option	Faston connections	Screw connections	PCB-mount connections	Spring-cage/push-in connections	AS-Interface
RKUV28		Ø 16.2 mm	X	X	X	X	X	IP65	X				X	X	X		X
RKVGB		Ø 16.2 mm	X	X	X			IP65	X			X	X	X	X		X
RKUVGB		Ø 16.2 mm	X	X	X	X		IP65	X				X	X	X		X
OKJUV		23 x 23 mm	X	X	X	X	X	IP65	X				X	X	X		X
OKVGB		☒Ø 16.2 mm						IP65	X			X	X	X	X		X
OKUVGB		☒Ø 16.2 mm	X	X	X	X		IP65	X				X	X	X		X
OKJBUV		23 x 23 mm	X	X	X	X	X	IP65	X				X	X	X		X
YVOO		Ø 16.2 mm	X	X	X	X	X	IP65 IP67	X				X				
YVOOI		Ø 16.2 mm	X	X	X	X	X	IP65 IP67	X				X				

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		Panel cut-out	Foolproof	DIN EN ISO 13850, EN 60947-5-1, EN 60947-5-5	TÜV-certified	UL/CSA	Switch. position indicator	Degree of protection	Twist release	Pull release	Key release	Illuminating option	Faston terminals	Screw connections	PCB-mount terminals	Spring-cage/push-in connections	AS-Interface
FRVK00		Ø 22.3 mm	X	X	X		X	IP65 IP67	X				X				
FRVK00I		Ø 22.3 mm	X	X	X		X	IP65 IP67	X				X				
FRVKL00		Ø 22.3 mm	X	X	X		X	IP65 IP67	X			X	X				
FRVK00P		Ø 22.3 mm	X	X	X		X	IP65 IP67	X						X		
FRVK00IP		Ø 22.3 mm	X	X	X		X	IP65 IP67	X						X		
FRVKL00P		Ø 22.3 mm	X	X	X		X	IP65 IP67	X			X			X		
FRVKP00		Ø 22.3 mm	X	X				IP65 IP67	X				X				
FRVKP00I		Ø 22.3 mm	X	X				IP65 IP67	X				X				
FRVKD00		Ø 22.3 mm	X	X	X	X	X	IP65 IP67	X			X	X				

Enclosures

Schlegel enclosures offer much space inside safeguarding your control units to an optimum. The enclosures are made of plastic or stainless steel.
The varied types allow 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…)

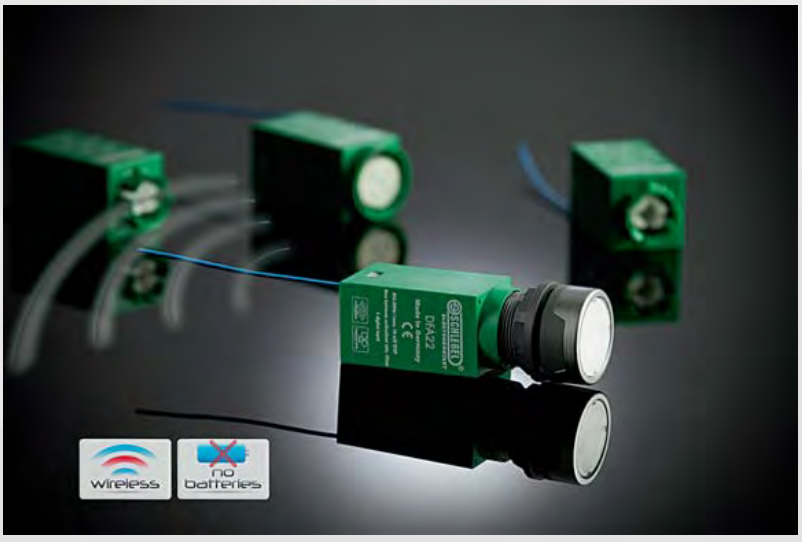
Stainless steel enclosures for profile rail mounting (S4…)

E-stop miniboxes

Equipped insulated plastic enclosures (IRF…)

Battery-free Wireless Pushbuttons and Limit Switches

The energy required for signal transmission in wireless pushbuttons and limit switches is generated by the switching operation itself and, thus, the modules are self-powered and low-maintenance.



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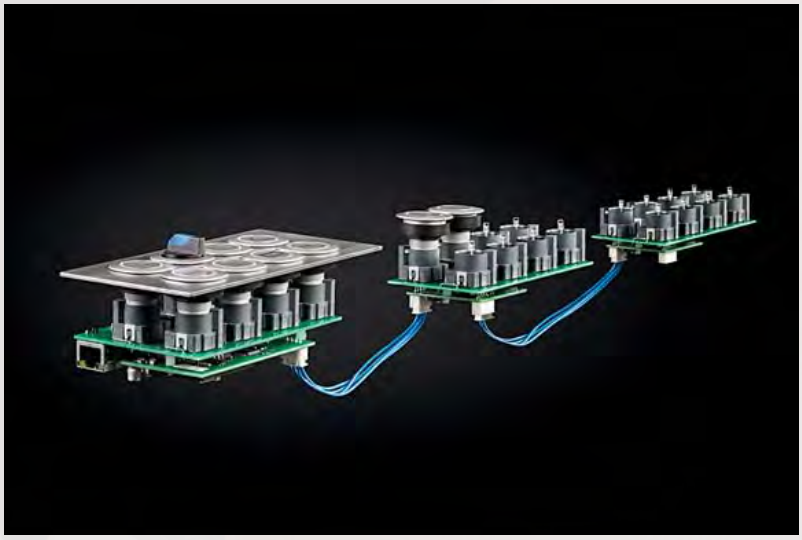
Modular Bus Operating Concept

The basic idea was to develop an operating concept that makes us flexible enough to provide low-cost up to high-end solutions. The result is a future-proof and dynamic system to integrate contemporary design and state-of-the-art technology in modern machine concepts and panel layouts. The modular operating concept provides for project planning either standardised modules in a fixed grid spacing or the possibility to respond individually to customer-specific designs.
The modular operating concept consists of two basic modules, the bus-specific basic module and the bus-independent expansion module. The basic module includes the typical bus connection as well as the bus node for communication with the corresponding bus system. The expansion module serves as a bus-independent I/O expansion in conjunction with the basic module, which enables us to integrate up to 128 command positions with 128 indicator lamps.
The system power supply of the expansion modules is effected via the basic module, thus, reducing handling to a minimum. Each module is construed with 8 inputs for contact blocks and 8 outputs for LED indicator lamps.
We distinguish in this concept two basic applications, control panel construction in which all command points are summarised on one area, and plant engineering & construction with several command points, which are distributed in the system.

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 card with the command points (PCB with individual contact blocks) according to your design proposal, consequently, the cost-optimised concept also taking effect here.



Flush-mounted Jacks

available in numerous versions

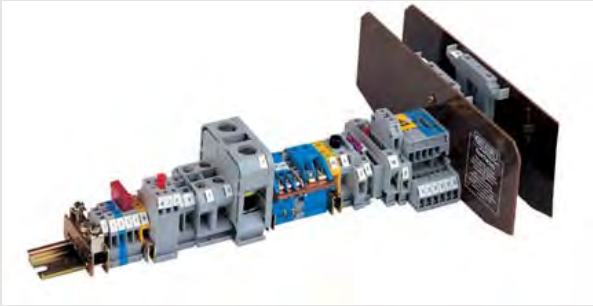
For detailed information, please visit our website www.schlegel.biz or refer to our product catalogue.

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:

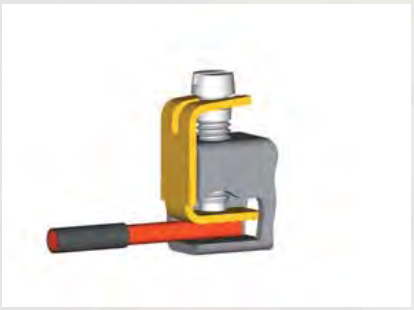
- Screw connections (with the „OSK – Original Schlegel Clamping System")
- Spring-cage connections
- IDC fast connection technology
- Flat plug connections



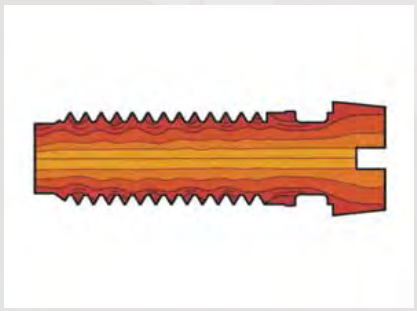
"OSK - Original Schlegel Clamping System"
On the screw-type terminals with wire protection bracket the conductors are pressed onto the basis of the conductive clamping body by the lower foot of the wire protection bracket which is fastened by a screw. This system is called the "OSK" system (Original 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

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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"
- Tension spring connections
- Insulation displacement fast connections
- Flat plug connections (6.3mm)

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"
- Tension spring connections
- Insulation displacement fast 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 2-storey arrangement reduces the length of terminal blocks 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-storey 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"

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 4x90°.
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.

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Pedal Switches

In a robust light metal casing. Operation through a red anti-slip pedal (corrugated) covering the whole pushbutton. A protected oil-tight and chemical-resistant rubber membrane seals reliably against dust and humidity, according to IP65. The integrated stroke limitation makes the unit insensitive to mechanical overloading.

Pedal switch made of light metal, the modular contact block system allows various contact combinations inside.

Range of Contact Blocks

Electric Contact Blocks with PCB-mounted 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
PT...	NC / NO			240V / 120V	1.5A / 3A	120V~ / 3A 240V~ / 1.5A

Electric Contact Blocks with Screw Connections

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 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 and industrial automation, automotive industry and others. The required energy is provided by an electrodynamic power generator using the energy of the key travel (energy harvesting).

Contact Blocks (Slaves) for AS-Interface

Instead of up to 10 cable lines per control unit, ASi requires only two wires which are connected by insulation piercing (IDC technology) and looped through to all the assigned slaves. Up to 62 control units can be connected to one 2-conductor cable. This saves work, cuts installation times, reduces the number of potential errors and the system can be easily changed or expanded as required.
Due to the flexible AS-Interface network structure, the Schlegel slaves can be connected to any position. Each control and signalling unit means a separate node in the AS-Interface system with individual address.

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

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