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 The specified product features and technical data do not constitute any  
 guarantee -  
 - as of 14 Sept. 2009 / V2.0 -



## 1 About Safety

1.1 **(!) Safety Regulations:** These operating instructions are provided for your safety and the safety of the machine operator. Please read them carefully before installation and commissioning.

1.2 **Application:** Schlegel emergency stops are electromechanical switch components serving to protect persons working with machinery or close to it. They are used to switch off / shut down machinery and equipments in order to avert impending or minimise existing dangers to persons or damages on machines / material.

The following (inter-)national statutory provisions apply to installation, commissioning and regular technical inspections:

- Directive 2006/42/EG on machinery
- Low-Voltage Directive 2006/95/EG
- safety regulations as well as
- regulations of the accident prevention / safety rules.

Manufacturers and operators of machines using emergency stops should retain the responsibility for the adherence of these instructions as well as for compliance with the relevant safety regulations and rules.

For the application of emergency stops as directed the respective requirements for installation and operation must be observed:

- EN 60947-5-1:2004
- EN 60947-5-5:1997 + A1:2005
- EN ISO 13850:2008

**(!) Emergency stops fulfil the function of personal protection. Improper installation or unauthorised modifications can lead to severe personal injuries!**

**(!) Emergency stops should not be bypassed, removed or otherwise disabled!**

**(!) The switching operation should only be triggered by means of appropriate actuators which are securely connected to the contact block!**

**(!) Disconnect equipment and device from the mains before installation!**

1.3 **Approvals and Technical Data:** Refer to the catalogue information of the respective actuators and contact blocks or to the product configurator under [www.schlegel.biz](http://www.schlegel.biz).

## 2 Product Description

2.1 **Construction:** Emergency stop switches consist of variants of actuators and one or several contact elements. Emergency stops are available for front-panel mounting or as base-plate mounted version in an enclosure. They are operated by pushing.

**Features:** The actuators differ in

- their mode of release: rotation in both directions or to the right; key release by rotation to the right
- the shape of the protective shroud/antilock collar (some with illuminating option)
- illumination: illuminated / non-illuminated
- the protection system: Actuators for standard applications

and for hygienic areas according to DIN EN 1672-2 und GS-FW

The contact blocks are of modular or monoblock design and can be supplied with different connection types (screw, spring cage, Faston and PCB-mounted terminals).

### 2.1 Actuators and Contact Blocks

Actuators	Ø	Contact Blocks
OKJUV	23,1 x 23,1	AZOSOI(_AU) AZSOSO(_AU) BZ(L)O(5)(K)(_AU) BZ(L)OO(5)(K)(_AU) BZ(L)OI(5)(K)(_AU) BZ(L)OS(5)(K)(_AU)
RKUV28	16	
OKUVGB		
RKUVGB		
RKUV40_496		
RKUV40 RKUV32		
RRJUV	22	AT(_AU) AZ011(_AU) AZOO(_AU) AZ(L)2(_AU) AZOSOI(_AU) AZSOSO(_AU)
RXBUV	16	
RXBLUV		
RXBLUVSE		
RXBUVSE		
RXUV	24x24	
RXUVP		
QXJUV		
QXJBUV	22	
RXJUV		
RXJBUV	22	MTO MTO+MTO MTO+MTOSF MTO+MTO+MTI MTO+MTI+MTOSF  accessories: MAL, MHR_3, MHR_5
QRUV		
QRUVP		
QRBUV		
QRSKUUV		
QRBUVSE		
QRSKUUVSE		
QRBLUV		
QRSKLUV		
QRBLUVSE	ETR	
QRSKUUVSE		
QRJUV	26x26	PTOO(_AU)
FRUV	22	
FRUVL	23,1 x 23,1	PTPOO(_AU) PTPOI(_AU) PTFOO(_AU) PTFOI(_AU)
OKJUV		
RKUV28		
OKUVGB		
RKUVGB		
RKUV40_496		
RKUV40 RKUV32		
RRJUV	22	

Actuators	Ø	ASI-Safety at Work	
OKJUV	23,1 x 23,1	ASI_SAW16A ASI_SAW16E ASI_SAW16	
QXJBUV QXJUV	24x24		
RKUV28 RXBUV RXBUVSE RXBLUVSE RXBLUV RKUV40_496 RKUV32	16		
RXJBUV RXJUV RRJUV	22		
RXUV RXUVP	16		
QRBLUV QRBLUVSE QRBUV QRBUVSE QRSKUV QRSKUVSE QRSKLUV QRSKLUVSE	22		ASI_SAW22A ASI_SAW22E ASI_SAW22
QRJUV	26x26		
QRUV QRUVP	22		
ASI_SAW16A, ASI_SAW22A, with failure switch-off and digital output for actuator lighting			

- 3) Insert wiring cable in the enclosure or rather connect it to the enclosure.  
(!) Make sure that the contact blocks used in the enclosure are connected correctly in order to comply with the clearance and creepage distance requirements for insulated enclosures on proper use.
- 4) Close the enclosure.  
(!) Make sure to have the enclosure closed tightly (tighten all screws...)

(!) Make sure that the emergency-stop switch is always easily accessible. This particularly applies to emergency stops with high protective shroud!

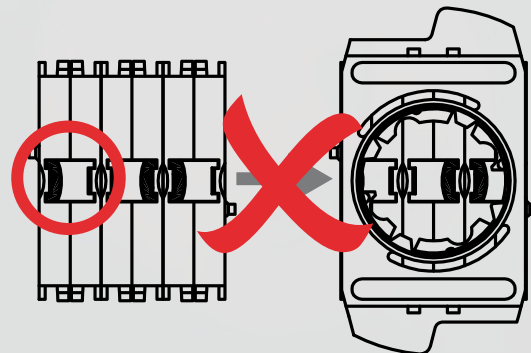
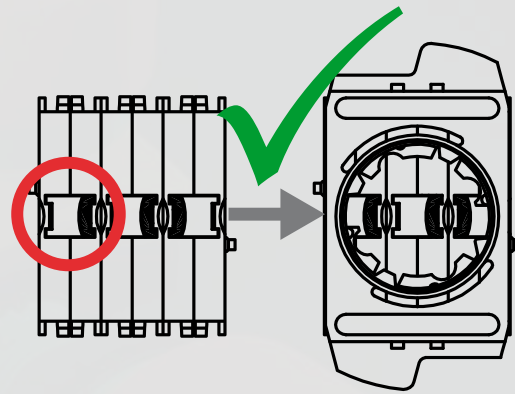


Fig. 1: correct assembly of modular contact blocks

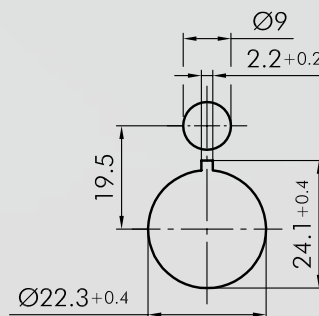


Fig. 2: mounting hole for illuminated E-stop

### 3 Assembly and Commissioning

#### 3.1 Assembly Instructions Front-panel mounted

- 1) Provide the required mounting hole in an appropriate mounting plate (refer to the relative catalogue drawings). In order to ensure full tightness of the unit, make sure to have a smooth surface, particularly in case of hygienic areas and actuators with protective shroud.
- 2) For actuators with illuminated protective shroud provide a second hole following the relative assembly drawings in the catalogue (Fig. 2).
- 3) Insert actuator in the cutout.
- 4) Fasten actuator with plastic nut. (Observe the max. tightening torque: actuators with 16mm thread = 1.5Nm, actuators with 22mm thread = 2.5Nm)
- 5) Snap-fit contact block to actuator neck by rotary motion (MT..., DT..., ET...) or by pressing (AT..., BT..., PTF...). Exception: The contact blocks of the type series PTP... are set onto the actuator and fixed by a small locking bolt through a hole in the PCB. The contact unit PTOO is put onto the neck of the actuator type FRUV(L); spacer sleeves ensure correct distance between PCB and mounting plate (Fig. 4).
- 6) (!) Check whether contact block and actuator are snap-fitted correctly.
- 7) Modular contact blocks (MT...) must first be correctly aligned and snapped into a module holder before snap-fitting them to the actuator. (Fig. 1)
- 8) Connect contact block.
- 9) For actuators with illuminated collar put the plug for lighting through the relative hole in the mounting plate and connect it to the actuator. (Fig. 2 and 3)

#### Base-plate mounted in an enclosure

- 1) Mount lower enclosure section on the appropriate surface.
- 2) Compare 3.1, steps 2 to 9.

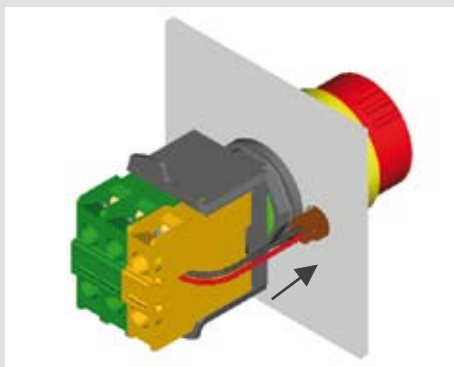
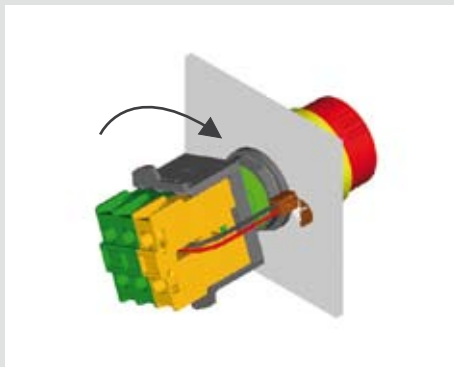
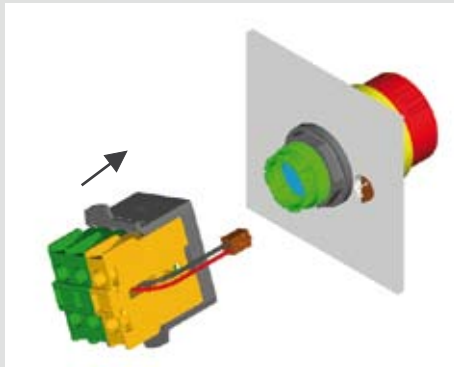


Fig. 3: assembly sequence

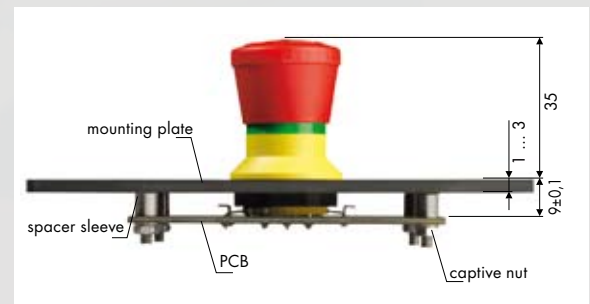
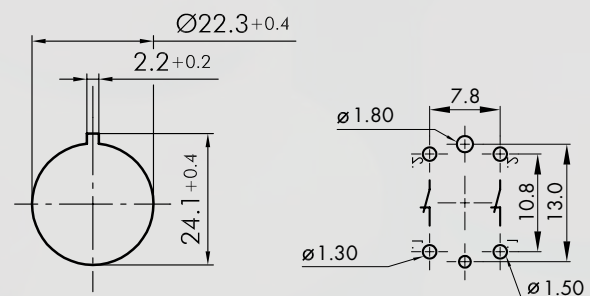


Fig. 4: FRUV(L) with PTOO

#### 4 Testing Before Initial Operation:

Mechanical Test: Emergency stop latches when operated  
 Electrical Test: Machine stops / switches off on actuation of the E-stop.

#### 5 Maintenance and Repair:

It is recommended to have the E-stop triggered for testing purposes at least once a year by the responsible safety officer in order to ensure its proper function.

#### 6 More Useful Particulars :

For cleaning the emergency stops in hygienic areas (QRUVP, RXUVP) use proper detergents!

Note:

- good resistance to acids, lyes and alcohols
- no/limited resistance to hydrocarbons (benzine, oil, etc.)!
- high resistance to ozone and UV

## 7 EC Declaration of Conformity:

Name/address of issuer:	Georg Schlegel GmbH & Co. KG, Kapellenweg 4, 88525 Dürmentingen
Responsible for documentation:	T.Gairing, Georg Schlegel GmbH & Co. KG, Kapellenweg 4, 88525 Dürmentingen
Product description	Emergency-stop switches
Type references:	see table 2.1 above

The referenced products comply with the provisions of the following directives:

Directive:	dd.:	applicable norms:	referred to:
2006/95/EG	12.12.2006	EN 60947-5-1:2004, EN 60947-5-5:1997+A1:2005	contact blocks, actuators
2006/42/EG *)	17.05.2006	EN 60947-5-5:1997+A1:2005, EN ISO 13850:2008	contact blocks, actuators, ASI-Safety
2004/108/EG	12.12.2006	EN 50295:1998	ASI-Safety

\*) applicable as of 29 Dec.2009

Dürmentingen, 14 Sept. 2009

