

Active Illuminated Safety Emergency-Stop with position indication active/inactive FRVKDOO

General Data

Type reference	FRVKD(O)(OO)(OI)(P)(_AU)
Description	Emergency-stop Head, active/inactive (without diagnostic device)
Approvals	CE, cURus, TÜV_Süd
Nature of contact	1NC/2NC/1NC+1NO
Degree of protection	IP65 / IP67
Connection type	Faston terminals 2.8x0.8 mm / PCB-mount terminals
Contact material	AgNi / AgNi, gold-plated 5µm
Max. storage temperature	-40°C ... 80°C
Max. operating temperature	-25°C ... 70°C
Mechanical life	50,000
Electrical life (rated load)	50,000 at rated load
Contact resistance NO	< 50 mOhm (new state)
Contact resistance NC	< 50 mOhm (new state)
Bouncing time NO	< 10 ms
Bouncing time NC	< 10 ms
Positive opening contact	acc. to EN60947-5-1, appendix K

Electrical data acc. to IEC/EN 60947-5-1 (VDE 0660 Sect. 200)

	alternate current	direct current
Utilisation category	AC15	DC13
Rated insulation voltage Ui	250 V	250 V
Rated operating voltage Ue	35 V	35 V
Rated operating current Ie	5A	2 A
Breaking capacity	10Ie	1,1Ie
Continuous thermal current	5A	2.5A

Technical Data - Lamp

Lamp socket	none, with integrated 3 mm LED
Definition	X1...anode, X2...cathode

Additional Data

Mounting aperture	22.3mm
Tightening torque (mounting nut)	1.3 ... 1.9 Nm
Release	twist release, left or right
Mounting position	any
Standards	ISO 13850:2015(E), EN ISO 13850:2015(D), DIN EN ISO 13850:2016-05
Ld	20% (NC)
B10d	250,000
Overvoltage category	II
Pollution degree	2
Material group	I

Note

- with switching position indicator
- a diagnostic unit is not included

Electrical Features - 5µm gold-plating (type addition ...AU)

Switching voltage 20mV ... 35V AC/DC

Switching current 1mA ... 250mA

For the version with Faston terminals, use partially or fully insulated Faston clamps.

Illuminated version, status indication active/inactive: acc. to ISO 13850:2015(E), EN ISO 13850:2015(D), DIN EN ISO 13850:2016-05

Mushroom "grey": "inactive", no emergency-stop

Mushroom "red": "active" emergency-stop

Technical Data of LED:

Type: Opto Devices

Typical data at IF=20mA:

Luminous intensity: min. 10000 mcd, typical 13000 mcd

Beam angle: typical 15°

Dominant wavelength: 618...624 nm, typical 621 nm

Rated voltage: 24 V DC ± 10%

Rated current: 17.8 mA (15,6...19.95mA)

Typical luminous intensity at IF=1.8mA: min. 9000 mcd, typical 11700 mcd

LED cut-off voltage: max. 70V

Average life: approx. 80,000...100,000h

Safety Instructions:

- The emergency stop must only be used when lighting conditions ensure clear and distinct visibility of the red illuminated (active) mushroom,
e.g. in interiors or roofed places without direct sunlight (normal industrial environment);
- Before using the emergency stop, a systematic safety review of the overall system is required.
- Depending on the designer's risk assessment, the emergency stop lighting must be monitored by means of a

