

FRVKPOOI_C112

16.12.2024

Emergency-stop with 5-pole M12 connector, AIDA, hygiene approved



General Data

Type reference:	FRVKPOOI_C112
Description:	Emergency-stop for hygienic areas, positive opening with integrated M12 connector
Approvals:	CE, cURus, TÜV_Süd, UKCA
Contact type:	2 NC + 1 NO
Degree of protection:	IP66 / IP67 / IP69K (in the front) * 1), IP65/67 (in the rear with plugged-in M12 cable)
Connection type:	5-pole M12 connector (integrated), A coded, AIDA
Contact material:	AgNi
Max. storage temperature:	-40°C ... 80°C
Max. operating temperature:	-25°C ... 70°C
Mechanical life:	20,000 (20°C) >6,050 (-25°C) >6,050 (+70°C) switching cycles
Electrical life (rated load):	50,000 switching cycles at rated load
Contact resistance NO:	< 50 mOhm (new state)
Contact resistance NC:	< 50 mOhm (new state)
Bouncing time NO:	< 10ms
Bouncing time NC:	< 10ms
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	50 V	50 V
Rated operating voltage Ue	35 V	35 V
Rated operating current Ie	2 A	2 A
Breaking capacity	10Ie	1,1Ie
Continuous thermal current	2 A	2 A

Additional data

Mounting aperture:	22.3 mm
Tightening torque (mounting nut):	1.0 ... 1.7 Nm
Tightening torque (M12-connector):	max. 0.4 Nm
Mounting position:	any
Standards:	EN 60947-5-1, EN 60947-5-5, EN ISO 13850
Release:	twist release, left or right
Ld:	20% (NC)
B10d [cycles]:	150,000 (20°C)
Rated impulse voltage:	2,5 kV (contact block)
Material group:	I
Overvoltage category:	II

Pollution degree : 2

Note

O = NC contact
- for hygienic areas

Conditional short circuit I_q: 1000 A
Short circuit means (recommendation): safety fuse 2A gG

Pin assignment:

Pin 1	Pin 2	Pin 3	Pin 4	Pin 5
NC(11)	NC(21)	NO(31)	NC(12)	COM(NC22, NO32)

Safety instructions / mounting instructions

- the connector must not be connected or disconnected under load
- the single connector pin may be loaded with max. 2 A
- not suitable for use under water
- when used outdoors, the M12 connections must be protected against corrosion separately
- there may not be any mechanical load on the M12 connector, ensure that there is sufficient strain relief!

Use in hygienic areas:

- Permanently suitable from -25°C to +50°C and with food contact temporarily up to +70°C
- Migration testing (OML) according to EU regulation no.10/2011 using ethanol (50%) and acetic acid (3%) at 40°C/1h, ethanol (95%) at 40°C/0.5h.
- The emergency stop should be installed in a way to exclude a deposit of residues in its active and non-active state

* 1) Limitation: Nozzle distance > 250 mm. Standard requirement acc. to ISO 20653:2013-02 (IPX9K) 100 - 150 mm

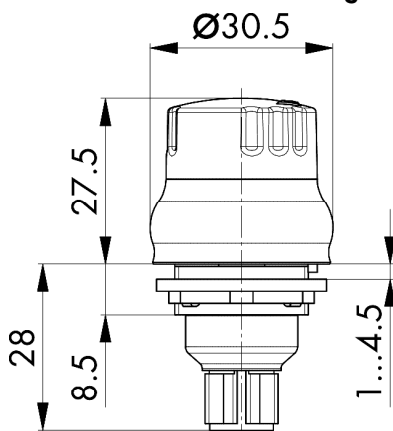
Data acc. to UL/IEC 60947-5-5

Ratings: 35 V AC/DC 2 A
I_{th} 2 A, U_i 50 V

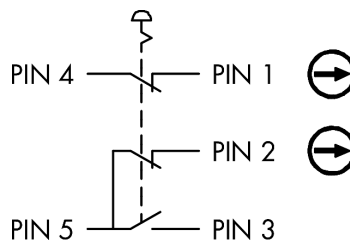
Torque: 1.0 ... 1.7 Nm (head nut)

Enclosure Type: Type 4X (indoor) front face

Dimensional drawing



Circuit diagram



Drilling pattern

