

FRTLOI_C121

31.01.2024

Illuminated contact block with 5-pole M12 connector, momentary



General Data	
Type reference	FRTLOI_C121
Description	Contact block with M12 connector, detent collar, illumination option
Approvals	CE, UKCA
Contact type	1 NC + 1 NO
Degree of protection	IP00
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	600,000 switching cycles
Electrical life (rated load)	600,000 switching cycles at rated load
Contact resistance NO	< 50 mOhm (new state)
Contact resistance NC	< 50 mOhm (new state)
Min. current	6 mA
Min. voltage	5 V
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	-	-
Continuous thermal current	2 A	2 A



Technical Data - Lamp

Lamp socket	none, with integrated 3 mm LED white
Max. lamp voltage	30 V AC/DC
Max. lamp output	14 mA (at 24 V DC)

Additional data

Mounting position	any
Standards	EN 60947-5-1
Tightening torque (M12-connector)	max. 0.4 Nm
B10d [cycles]	depending on the pushbutton/switch head
Material group	I
Overvoltage category	II
Pollution degree	2

Note

O = NC contact; I = NO contact

Pin assignment:

Pin 1 Pin 2 Pin 3 Pin 4 Pin 5 Type

NC 1 NO 1 LED - NC 1 COM (NO 1, LED +) 2 NC (AIDA)

Safety instructions / mounting instructions

- the M12 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
- there may not be any mechanical load on the M12 connector, ensure that there is sufficient strain relief!
- observe the operating instructions

Before using the illuminated contact block, above all in combination with emergency-stop heads, a safety review of the overall system needs to be done by the engineer.

Depending on the usage the LED connected to the common pin must be considered in the overall system.

The maximum permissible operating voltage of the LED is 30 V. If the contact element is operated with a higher operating voltage, measures may have to be taken to limit the LED current (e.g. series resistor).



