

**FRTLOI\_C121**

16.01.2023

**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

\*1) values and data that may need to be determined specifically:  
 Electrical/mechanical lifetime:  
 Pushbutton, illuminated pushbutton: 1 million switching cycles  
 Selector/key switches: 30.000 switching cycles  
 Emergency-stop: 50.000 switching cycles

Minimum current: 10 mA  
 Minimum voltage: 10 V

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

- 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 signal lamp connected to the common pin must be considered in the overall system.



