

Product Information

Capacitive Level Switch MLC420/422



- 2-port isolation
- Microprocessor controlled measurement
- Parametrization via GHMware and adapter EYY120
- No moving parts in the medium
- Switching function depends to the polarity of the supply voltage
- Condensate-stability type

Technical data

Power supply
 Supply voltage : 18..30 V DC, max. 50 mA
 Electrical connection : M12x1 plug
 CE-conformity : EN 61326:2007-05

Ambient conditions
 Ambient temperature : -20..+80 °C
 Climatic class : EN 60068-2-38:2010-06
 Vibration class : EN 60068-2-6, GL test2

Certifications
 EHEDG certificate no. : 28/2011

Sensor
 Radiated frequency : 40.68 MHz, <1 mW
 Measuring range : DK-value 5..175 (MLC420)
 : DK-value 1..175 (MLC422)

Factory setting
 : DK-value = 20 (MLC420)
 : DK-value = 1 (MLC422)

Initialization time
 : 3 s

Process temperature
 : -20..+100 °C, 140 °C < 30 min
 CIP-/SIP-capable

Process pressure
 : -1..10 bar

Process material
 : PEEK, FDA approval number
 21CFR177.2415
 food-safe acc. to EHEDG
 Conform regulation EC 1935/2004 &
 10/2011

Surface quality
 : $R_a \leq 0,8\mu\text{m}$

Process connection
 : G1/2" hygienic

Stud torque
 : 5..10 Nm

Mounting direction
 : arbitrary,
 see mounting notes

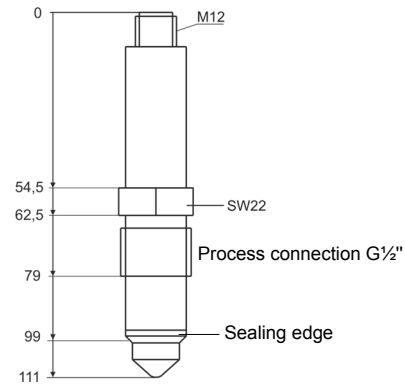
Output
Switching output : transistor PNP / NPN
 max. 30 V / 100 mA

Response time
 : programmable from 0.01..10 s

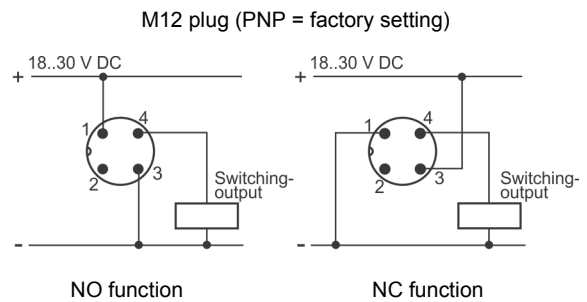
Isolation
 : sensor, case/supply, outputs

Case
Material : 1.4305
Protection class : IP67 / IP69K

Dimension



Connection diagram



Cable colors: 1 = brown, 2 = white, 3 = blue, 4 = black

Ordering code

1. 2. 3. 4. 5. 6.
MLC42 - - - - -

1. Measuring range	
0	DK-value 5..175
2	DK-value 1..175
2. Switching output	
0	PNP (standard)
1	NPN
3. Electrical connection	
0	M12-plug
4. Inspection window	
0	without window
5. Options	
00	without option
6. Certificate DIN EN 10204 (indicate only when required, multiple responses possible)	
RA08	$R_a < 0,8\mu\text{m}$ (with acceptance test certificate 3.1 incl. measurement report)
RA06	$R_a < 0,6\mu\text{m}$ (with acceptance test certificate 3.1 incl. measurement report)
WZ2.2	factory certification 2.2
APZMAT	acceptance test certificate 3.1 for material (in contact with products)

Accessories:
 ACH connection cable
 APH process connection
 see separate product information **GHMadapt/Accessories**.
 EYY120 Programming adapter