

Product Information

Capacitive Level Switch MLC433



- 2-port isolation
- Microprocessor controlled measurement
- Parametrization via GHMware and internal Mini USB interface
- No moving parts in the medium
- 2 switching outputs
- Analog output for DK value
- Switching functions programmable
- Condensate-stability type
- Ultra-wide LED indicator

Technical data

Power supply

Supply voltage : 18..30 V DC, max. 100 mA
 Electrical connection : M12x1 plug or cable gland M16x1.5
 Polyamide (PA) or SS-type 1.4305
 CE-conformity : EN 61326:2007-05

Ambient conditions

Ambient temperature : -20..+60 °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 1.5..175
 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 according to EHEDG
 conform regulation EC 1935/2004 & 10/2001

Process connection : G1/2" hygienic
 Stud torque : 5..10 Nm
 Mounting direction : arbitrary,
 see mounting notes

Outputs

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

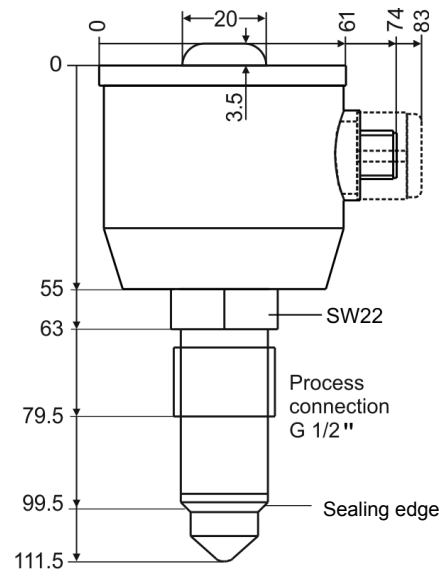
LED indicator S1, S2 : S1 active = green, S2 active = red
 S1+S2 active = mixed color

Response time : 20 ms
 Analog output : active 0/4..20 mA, burden <600 Ω
 Response time : programmable from 0.1..10 s
 Isolation : sensor, case / supply, outputs

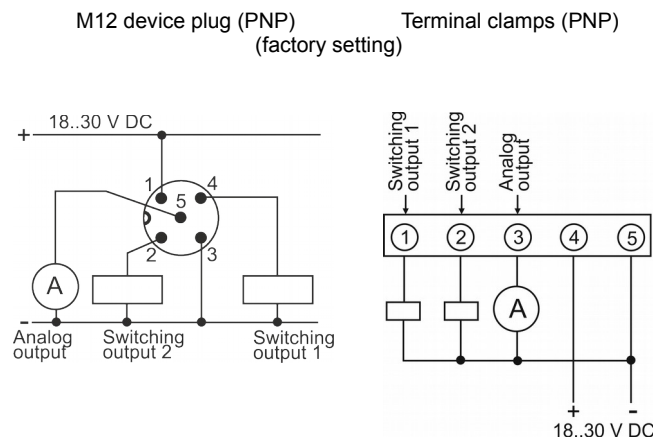
Case

Material : 1.4305
 LED-cap : Acrylic glass (PMMA)
 Protection class : IP67 / IP69K

Dimension



Connection diagram



Cable colors (plug):
 1 = brown, 2 = white, 3 = blue, 4 = black, 5 = grey

Product Information

Ordering code

MLC433 - ^{1.} - ^{2.} - ^{3.} - ^{4.} - ^{5.}

1. Output	
0	2 x PNP / NPN programmable and 1 x analog 0/4...20mA
2. Electrical connection	
0	M12 plug
1	cable gland M16x1,5
2	cable gland VA (1.4305) M16x1,5
3. Inspection window	
0	without window (standard)
1	lid with LED indicator
4. Options	
00	without option
01	measuring range optimized for media (Dk 1...4)
02	internal fixing element stainless steel
5. Certificate DIN EN 10204 (indicate only when required, multiple responses possible)	
RA08	R _a < 0,8µm (with acceptance test certificate 3.1 incl. measurement report)
RA06	R _a < 0,6µm (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)
Accessory	
ACI211	USB connection cable for programming MLC43x

Additional accessories:

ACH connection cables

APH process connection

see separate product information **GHMadapt/Accessories**.