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Martens
Member of GHM GROUP
Hygienic Design

Product Information

Capacitive Level Switch MLC490/492



- Galvanic 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
Storage temperature : -20..+105 °C
Climatic class : EN 60068-2-38:2010-06
Vibration class : EN 60068-2-6, GL test2

Sensor

Radiated frequency : 40.68 MHz, <1 mW
Measuring range : DK-value 5..175 MLC490
DK-value 1..175 MLC492
Factory setting : DK-value = 20 (MLC490)
DK-value = 1 (MLC492)
Initialization time : 3 s
Process temperature : -20..+80 °C 100 °C < 60 min
CIP-capable *
Process pressure : -1..+10 bar
Process material : 1.4404, PEEK,
FDA approval number 21CFR177.2415
Surface quality : $R_a \leq 0,8 \mu m$
Process connection : G1" hygienic
Stud torque : 10..20 Nm
Mounting length : min. 130 mm; max. 1000 mm
Mounting direction : arbitrary,
see mounting notes

Output

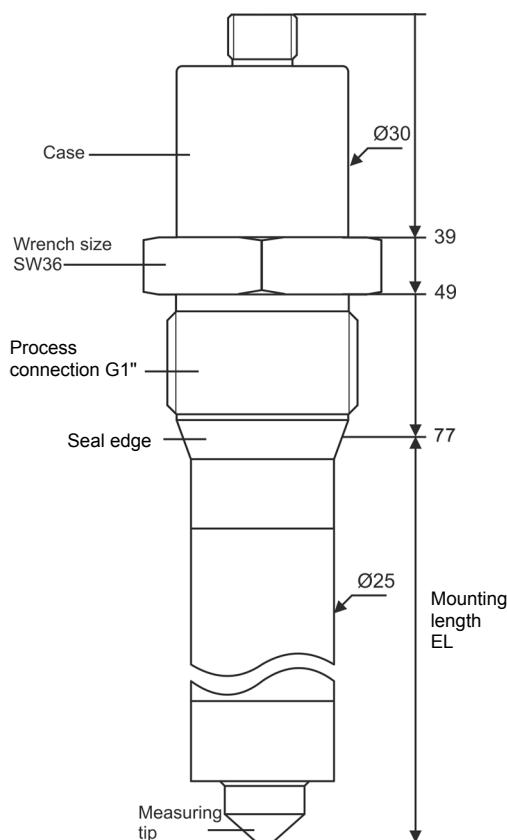
Switching output : transistor PNP or NPN
max. 30 V / 100 mA
Response time : programmable from 0.01..10 s
Isolation : sensor, case/supply, outputs

Case

Material : 1.4305
Protection class : IP67 / IP69K

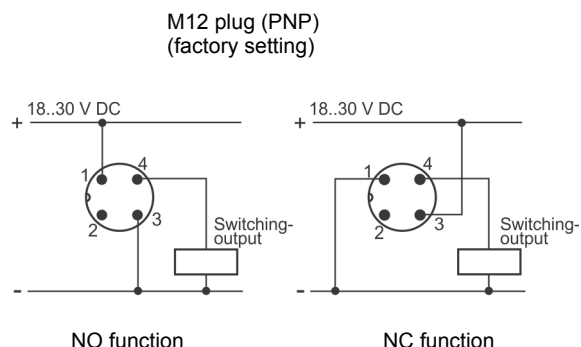
* For sterilisation processes with more than 100°C the device must be cut off from the power supply.

Dimensions



Product Information

Connection diagram



Cable colors:

1 = brown, 2 = white, 3 = blue, 4 = black

Ordering code

MLC49 1. 2. 3. 4. 5. 6. 7.

1. Measuring range	
0	DK-value 5..175
2	DK-value 1..175
2. Mounting length EL [mm]	
130	
200	
300	
400	
500	
600	
700	
800	
900	
1000	
XXX	custom length min. 130 mm, max. 1000 mm
3. Switching output	
0	PNP (standard)
1	NPN
4. Electrical connection	
0	M12-plug
5. Inspection window	
0	without window
6. Options	
00	without option
11	
7. 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 cables

APH process connection

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

EYY120 Programming adapter