

MOT-C2 MAGNETOSTRICTIVE LEVEL SENSOR DATASHEET



Level measuring range in cm 10..200

Characteristics

- Magnetostrictive measuring principle
- Continuous measurement of the filling level in liquids
- Absolute and accurate method of measurement
- Stable and reliable measurements even in difficult environments
- Installation opening for $\frac{3}{4}$ inch and 2 inch
- Available in small sensor length increments
- Tank screw connection infinitely adjustable in height

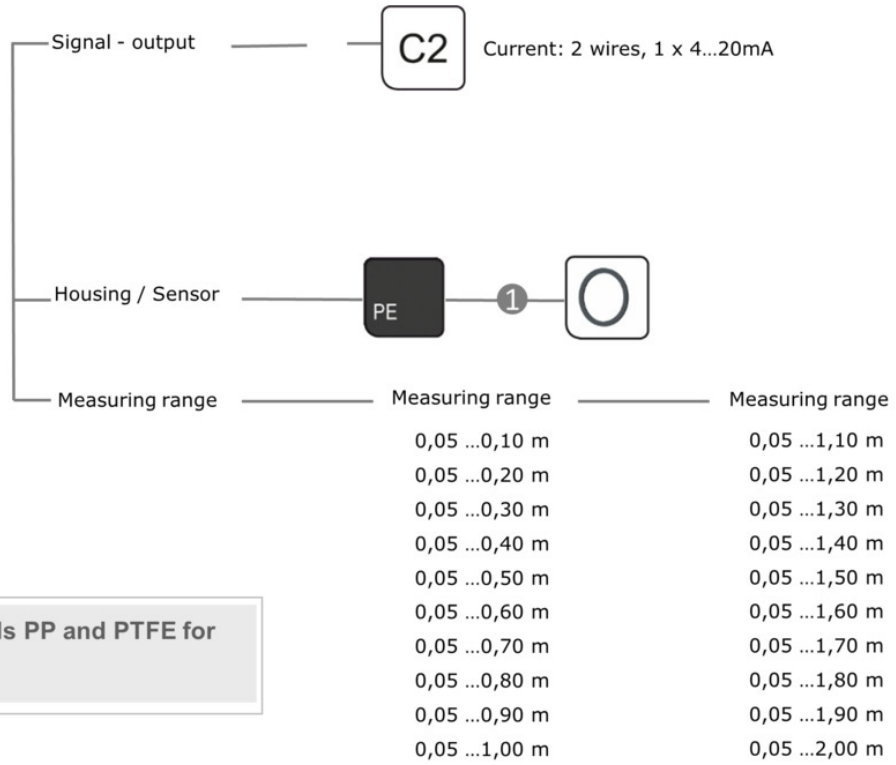


MOT-10..200 C2



Magnetostrictive

MOT C2



① Materials PP and PTFE for sealing

* Not included in delivery

● Available
○ not available

MOT-C2 Magnetostrictive level sensor**Function**

- The MOT uses the magnetostrictive effect to measure the filling level in containers. A pulse is generated at the position of the magnetic float in the sensor wire. The time this pulse takes to reach the receiver is a direct measurement of the float position, i.e. the filling level.
- C2: Low-cost version, with a standardized 2-conductor 4-20mA output.

Application

- Filling level measurement of liquids in tight head drums, IBC containers, collection containers, dosing containers and similar containers or tanks with a 3/4" or 2" IG fitting.
- Precision measurement of filling levels in flat containers
- Measurements in containers with overpressure or underpressure
- Measurements in liquids with a foaming tendency
- Measurements in gas-emitting liquids
- Measurements in liquids with moving surfaces
- Measurements independent of liquid properties such as conductivity, dielectricity, density
- Measurements in containers with additional installed components
- Based on DIN EN 61326-1, the resistance to interference for use in industrial electromagnetic environments was tested according to table 2

Application limits

- Sticky or highly viscous liquids that prevent the float from positioning
- Check resistance according to resistance list
- Environment with strong magnetic fields

Accessories

- Sealing ring Tank leadthrough EPDM 3/4" Art. NR: 539281010
- Sealing ring Tank leadthrough EPDM 2" Art. NR: 539321010
- Sealing ring Tank leadthrough FPM 3/4" Art. NR: 539371010
- Sealing ring Tank leadthrough FPM 2" Art. NR: 539411010

STÜBBE resistance guide

- www.stuebbe.com/pdf_resistance/300051.pdf

MOT-C2 Magnetostrictive level sensor

Technical Data

Measuring		MOT-10..MOT-200
Measuring range filling level	cm	5..200
Measuring resolution filling level	mm	1
Step response (10–90 %)	ms	800
Measuring deviation		±(1.6mm)
Power up	s	2
Voltage supply	V DC	18 - 30

Signal output		
Current loop C2	mA	4 – 20
Connection		pluggable screw connectors

Material coming into contact with the media	
Sensor	LDPE
float	PE
Sensor seal	PP und PTFE

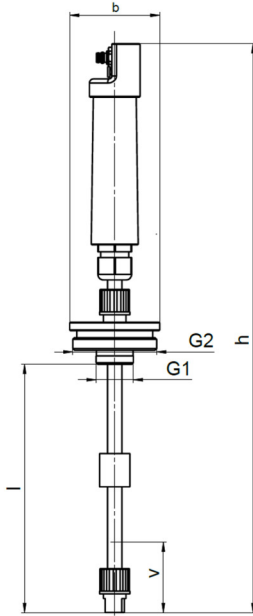
Material not coming into contact with the media	
Housing	PP - GF

Process conditions		
Ambient temperature	°C	-15–40
Atmospheric ambient pressure	bar	0,8–1
Relative humidity	%	20–85
Process temperature	°C	0–70

Mechanical data	
Mounting position	vertical
Type of protection	IP67
Accessories	Sealing ring for the tank screw connection

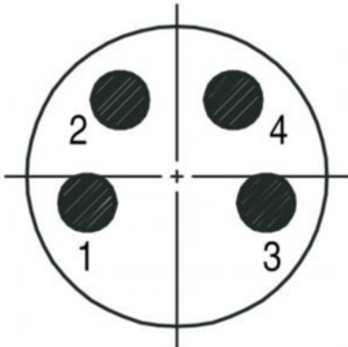
MOT-C2 Magnetostrictive level sensor

Dimensioned drawing



	l [mm]	v [mm]	h [mm]	h2 [mm]	b [mm]	b2 [mm]	G1	G2	[g]
MOT-10	100	50	340	330	90	64	3/4"	2"	360
MOT-20	200	50	440	430	90	64	3/4"	2"	370
MOT-30	300	50	540	530	90	64	3/4"	2"	380
MOT-40	400	50	640	630	90	64	3/4"	2"	390
MOT-50	500	50	740	730	90	64	3/4"	2"	400
MOT-60	600	50	840	830	90	64	3/4"	2"	410
MOT-70	700	50	940	930	90	64	3/4"	2"	420
MOT-80	800	50	1040	1030	90	64	3/4"	2"	430
MOT-90	900	50	1140	1130	90	64	3/4"	2"	440
MOT-100	1000	50	1240	1230	90	64	3/4"	2"	450
MOT-110	1100	50	1340	1330	90	64	3/4"	2"	460
MOT-120	1200	50	1440	1430	90	64	3/4"	2"	470
MOT-130	1300	50	1540	1530	90	64	3/4"	2"	480
MOT-140	1400	50	1640	1630	90	64	3/4"	2"	490
MOT-150	1500	50	1740	1730	90	64	3/4"	2"	500
MOT-160	1600	50	1840	1830	90	64	3/4"	2"	510
MOT-170	1700	50	1940	1930	90	64	3/4"	2"	520
MOT-180	1800	50	2040	2030	90	64	3/4"	2"	530
MOT-190	1900	50	2140	2130	90	64	3/4"	2"	540
MOT-200	2000	50	2240	2230	90	64	3/4"	2"	550

MOT-C2 Magnetostrictive level sensor



M8 Stecker (Steckseite)	Connection / function
1	4-20 mA signal
2	-
3	-
4	4-20 mA signal