

Level transmitters

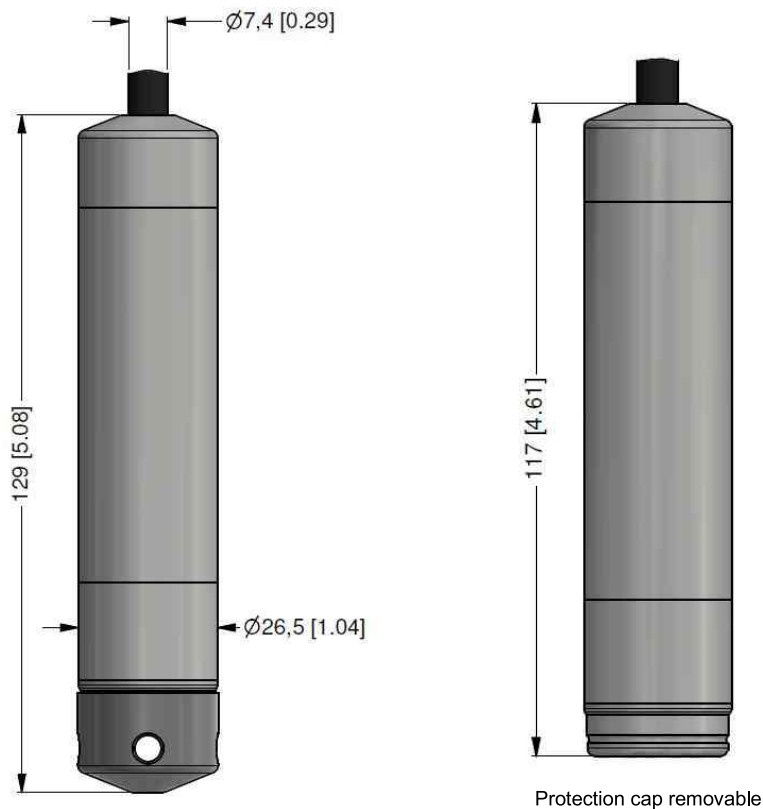
Permissible temperatures																	
Permissible temperatures	Medium/ electronics/ environment/ storage: -20 ... 80 °C *																
<i>*If the cable is intended for use in a smaller temperature range, the use of the probe is limited by this range.</i>																	
Electrical protection ⁵																	
Short-circuit protection	permanent																
Reverse polarity protection	no damage, but also no function																
Electromagnetic compatibility	emission and immunity according to EN 61326																
⁵ additional external overvoltage protection unit in terminal box KL 1 or KL 2 with atmospheric pressure reference available on request																	
Electrical connection																	
Cable with sheath material ⁶	<table border="0"> <tr> <td>PVC (-5 ... 70 °C)</td> <td>grey</td> <td>(-25 ... 70 °C in fixed condition)</td> <td>Ø 7,4 mm</td> </tr> <tr> <td>PUR (-25 ... 80 °C)</td> <td>black</td> <td>(with drinking water certificate)</td> <td>Ø 7,4 mm</td> </tr> <tr> <td>FEP ⁷ (-25 ... 75 °C)</td> <td>black</td> <td></td> <td>Ø 7,4 mm</td> </tr> <tr> <td>TPE-U (-25 ... 125 °C)</td> <td>blue</td> <td></td> <td>Ø 7,4 mm</td> </tr> </table>	PVC (-5 ... 70 °C)	grey	(-25 ... 70 °C in fixed condition)	Ø 7,4 mm	PUR (-25 ... 80 °C)	black	(with drinking water certificate)	Ø 7,4 mm	FEP ⁷ (-25 ... 75 °C)	black		Ø 7,4 mm	TPE-U (-25 ... 125 °C)	blue		Ø 7,4 mm
PVC (-5 ... 70 °C)	grey	(-25 ... 70 °C in fixed condition)	Ø 7,4 mm														
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Bending radius	static installation: 10-fold cable diameter, dynamic application: 20-fold cable diameter																
⁶ cable with integrated air tube for atmospheric pressure reference																	
⁷ do not use freely suspended probes with an FEP cable if effects due to highly charging processes are expected																	
Materials (media wetted)																	
Housing	stainless steel 1.4404 (316L)																
Seals	FKM; EPDM (with drinking water certificate) others on request																
Diaphragm	stainless steel 1.4435 (316L)																
Protection cap	POM-C																
Cable sheath	PVC, PUR, FEP, TPE-U, others on request																
Miscellaneous																	
drinking water certificate	According to DVGW W 270 and UBA KTW (With order please indicate if device must be certificated for drinking water.)																
Connecting cables (by factory)	cable capacitance: signal line/shield also signal line/signal line: 160 pF/m cable inductance: signal line/shield also signal line/signal line: 1µH/m																
Current consumption	signal output current: max. 25 mA / signal output voltage: max. 7 mA																
Weight	approx. 200 g (without cable)																
Ingress protection	IP 68																
CE-conformity	EMC Directive: 2014/30/EU																

ELECTRICAL CONNECTION

Wiring diagram	
2x2-wire-system (current)	
Pin configuration	
Electrical connection	cable colours (DIN 47100)
Supply P+	wh (white)
Supply P-	bn (brown)
Supply T+	gy (gray)
Supply T-	pk (pink)
Shield	ye/gn (yellow / green)



DIMENSION DRAWINGS



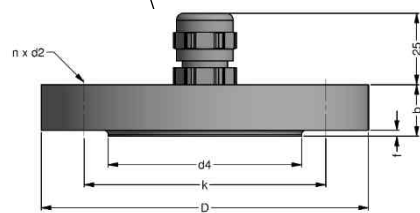
ACCESSORIES

Mounting flange with cable gland

Technical data

Suitable for	all probes	
Flange material	stainless steel 1.4404 (316L)	
Material of cable gland	standard: brass, nickel plated on request: stainless steel 1.4305 (303); plastic	
Seal insert	material: TPE (ingress protection IP 68)	
Hole pattern	according to DIN 2507	
Version	Size (in mm)	Weight
DN25 / PN40	D = 115, k = 85, b = 18, n = 4, d = 14	1.4 kg
DN50 / PN40	D = 165, k = 125, b = 20, n = 4, d = 18	3.2 kg
DN80 / PN16	D = 200, k = 160, b = 20, n = 8, d = 18	4.8 kg

cable gland M16x1.5 with seal insert (for cable-Ø 4 ... 11 mm)



Ordering type

DN25 / PN40 with cable gland brass, nickel plated	ZMF2540
DN50 / PN40 with cable gland brass, nickel plated	ZMF5040
DN80 / PN16 with cable gland brass, nickel plated	ZMF8016

Cable clamp

Technical Data

Suitable for	all probes with cable Ø 5.5 ... 10.5 mm
Material	standard: steel, zinc plated optionally: stainless steel 1.4301 (304)
Weight	approx. 160 g



Ordering type

Terminal clamp, of steel, zinc plated	1003440
Terminal clamp, of stainless steel 1.4301 (304)	1000278



