



Pressure transducers HydroFox® DMU 09 level probe - for chemical applications



Benefits

- Chemical-resistant plastic version
- Robust ceramic diaphragm without transmission liquid
- Highly resistant FEP cable
- Special calibration for all standard pressure units possible

Application

For electronic, continuous level measurement in extremely corrosive liquids, e.g. chemicals or waste water from landfill sites.

Description

Pressure transducers HydroFox® convert physical pressure into an electrical signal proportional to the pressure. HydroFox® DMU 09 uses a capacitance ceramic measuring cell.



Technical specifications

Measuring accuracy

Deviation from the characteristic curve according to IEC 60770 – limit point calibration (non-linearity, hysteresis, repeatability)
< ± 0.35 % FSO

Measuring range

See ordering table

Overpressure safety

≤ 400 mbar: At least 15 x FS
> 400 mbar: At least 3 x FS

Operating temperature range

Medium: -25/+70 °C
Ambient: -25/+70 °C
Storage: -25/+70 °C

Dynamic characteristics

Response time: < 200 ms

Probe

L x ø: 126 x 45 mm

Material

Housing: PP
Diaphragm: Ultra-pure ceramic (Al₂O₃ 99.9 %)
Seals: FKM (Viton)
Cable: FEP

Supply voltage

DC 9 – 32 V

Output signal

4–20 mA, 2-wire

Load

$R_{Max} = [(UB - UB_{Min})/0.02 A] \Omega$

Current input

< 21 mA

Electrical protection

Short circuit proof and protected against reverse polarity

Electrical connection

FEP cable with integrated breather tube for reference to the ambient atmospheric pressure
Cable length: 5 m
Degree of protection: IP 68 (EN 60529)

CE conformity

EMC Directive 2014/30/EU
RoHS Directive 2011/65/EU
Pressure Equipment Directive 2014/68/EU

Options

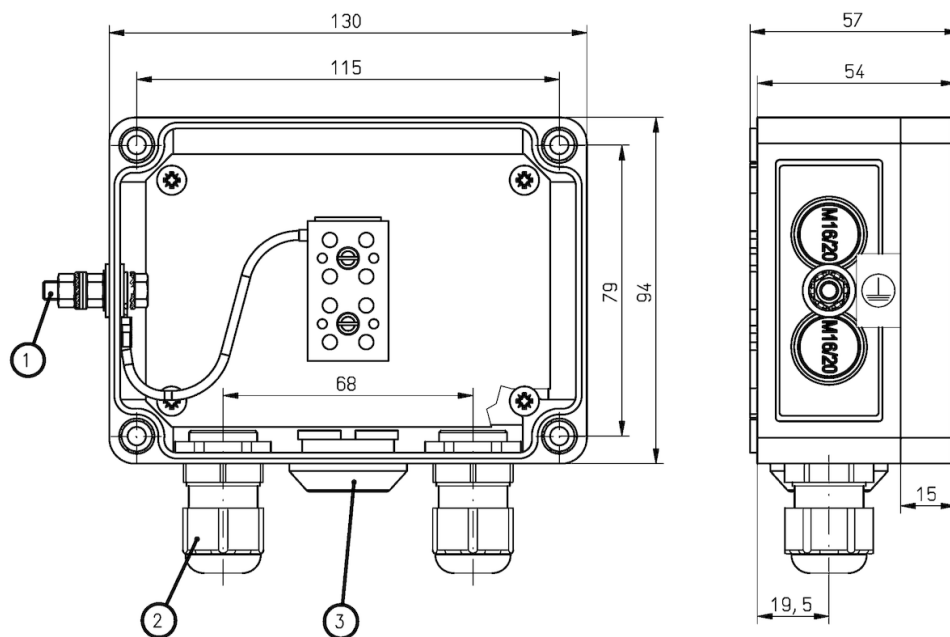
- Housing PVDF
- Cable protection conduits
- Seals made of FFKM
- Ex version
 - Ex II 1/2G Ex ia IIC T4 Ga/Gb
 - Ex II 1G Ex ia IIC or IIB T6 or T4 Ga (metal housing)
 - Ex II 1/2D Ex ia IIIC T 110 °C Da/Db
 - Ex II 10 Ex ia IIIC T 110 °C (metal housing)

Detail views



1. Junction box with pressure relief port
2. Digital display unit DA 12
3. Signalling device
4. HydroFox® DMU09

Junction box with pressure relief port

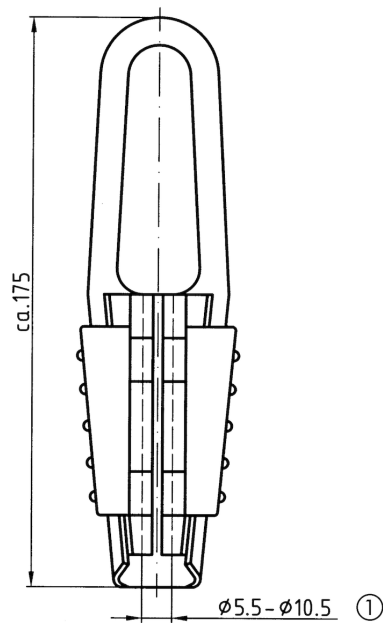


Dimensions (in mm)

1. Earth
2. Cable gland PG 11
3. Pressure compensation element



Anchor clamp

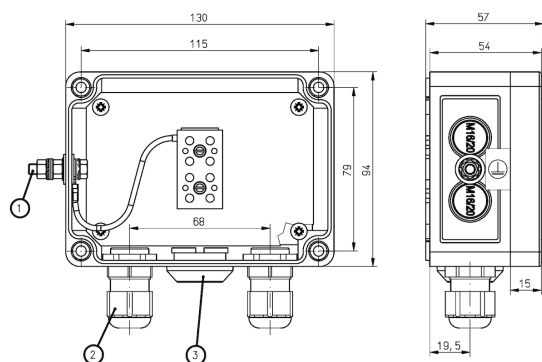


Dimensions (in mm)

1. Cable diameter

Technical drawings

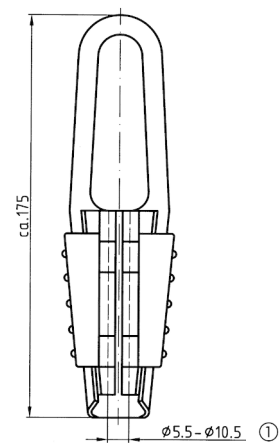
Junction box with pressure relief port



Dimensions (in mm)

1. Earth
2. Cable gland PG 11
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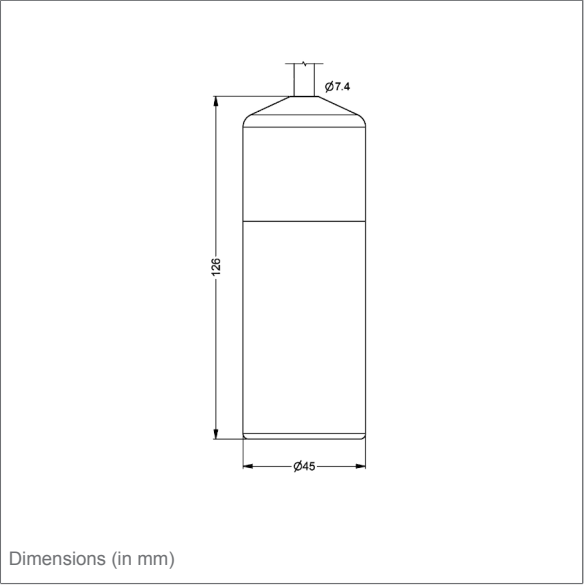
Anchor clamp



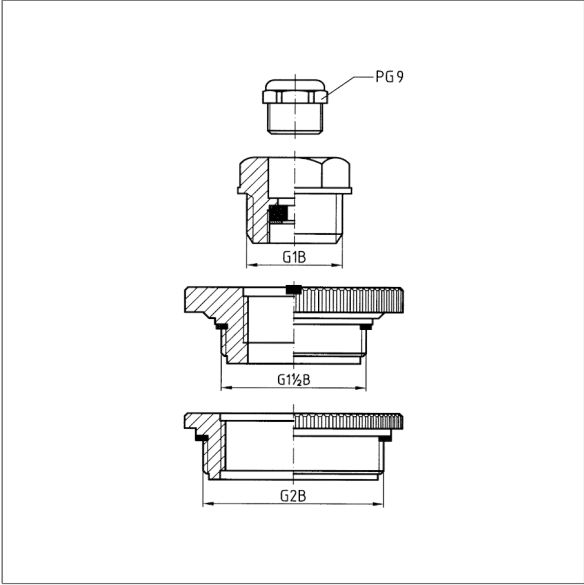
Dimensions (in mm)

1. Cable diameter

DMU 09 - standard version



Screw connector kit



Versions

Type	Measuring range	Part no.
HydroFox® DMU 09	0/40 mbar	31767
HydroFox® DMU 09	0/60 mbar	31768
HydroFox® DMU 09	0/100 mbar	31571
HydroFox® DMU 09	0/160 mbar	31572
HydroFox® DMU 09	0/200 mbar	31573
HydroFox® DMU 09	0/250 mbar	31574
HydroFox® DMU 09	0/300 mbar	31812
HydroFox® DMU 09	0/400 mbar	31575
HydroFox® DMU 09	0/600 mbar	31576
HydroFox® DMU 09	0/1 bar	31577
HydroFox® DMU 09	0/1.6 bar	31578
HydroFox® DMU 09	0/2 bar	31579
HydroFox® DMU 09	0/2.5 bar	31580



Blue part no. = in-stock items



Type	Measuring range	Part no.
HydroFox® DMU 09	0/4 bar	31581
HydroFox® DMU 09	0/6 bar	31582
HydroFox® DMU 09	0/10 bar	31583

Blue part no. = in-stock items