



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

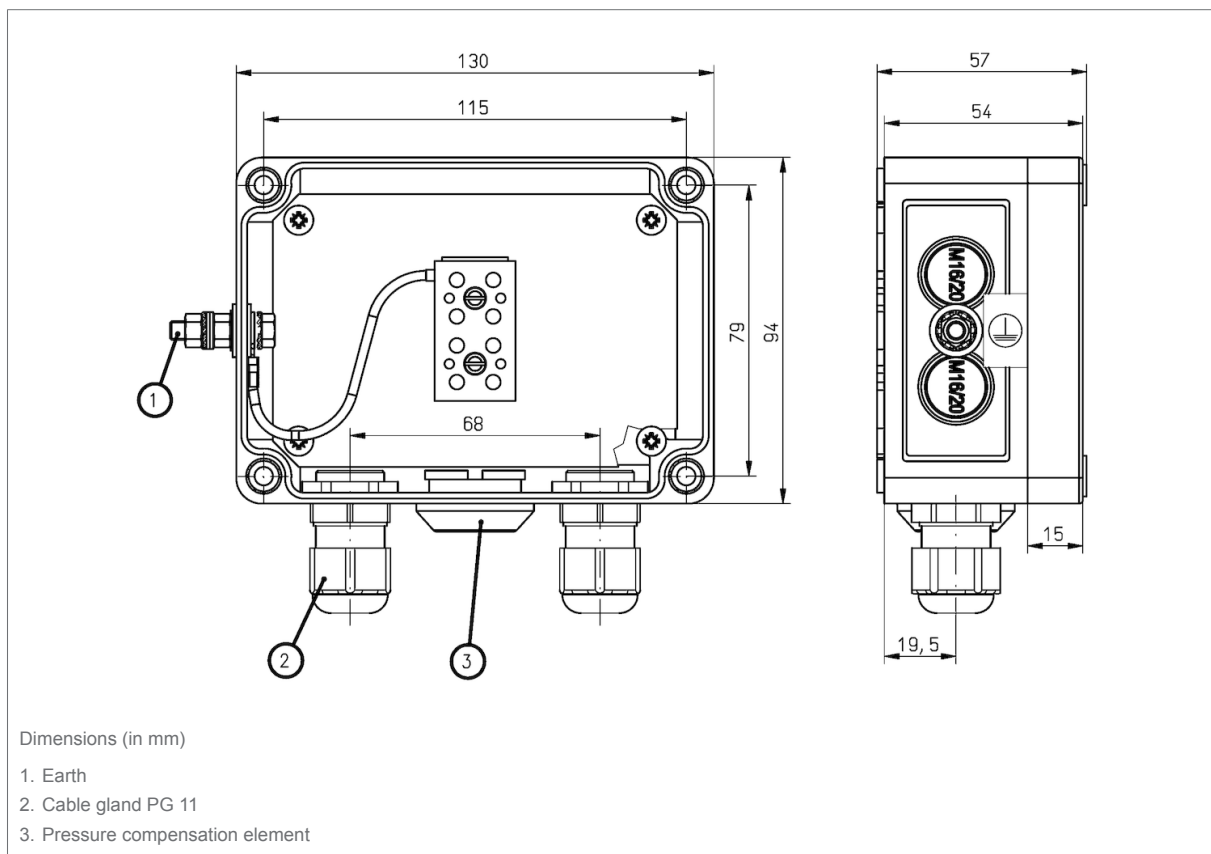
- Housing PVDF
- Cable protection conduits
- Seals made of FFKM
- Ex version
 - Ex II 1/2G Ex ia IIC T4 Ga/Gb
 - Ex II 1G Ex ia IIC or IIB T6 or T4 Ga (metal housing)
 - Ex II 1/2D Ex ia IIIC T 110 °C Da/Db
 - Ex II 10 Ex ia IIIC T 110 °C (metal housing)



Detail views

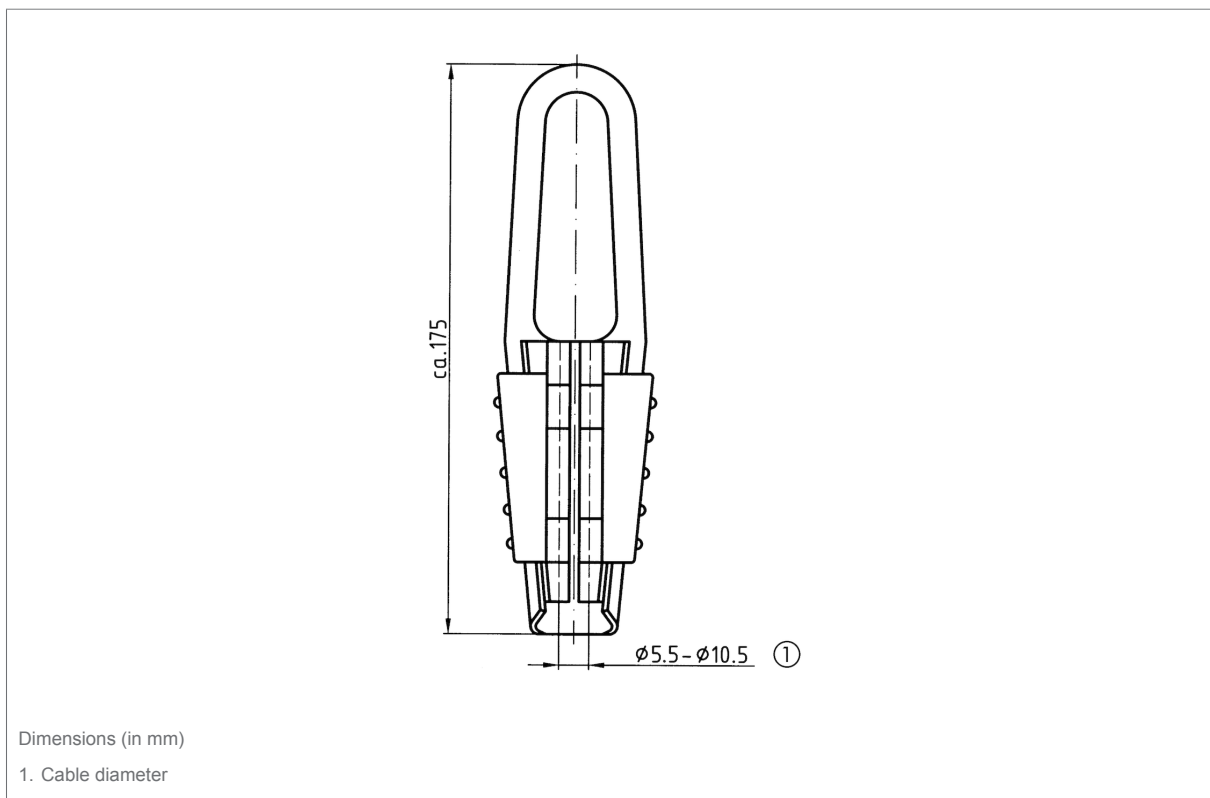


Junction box with pressure relief port



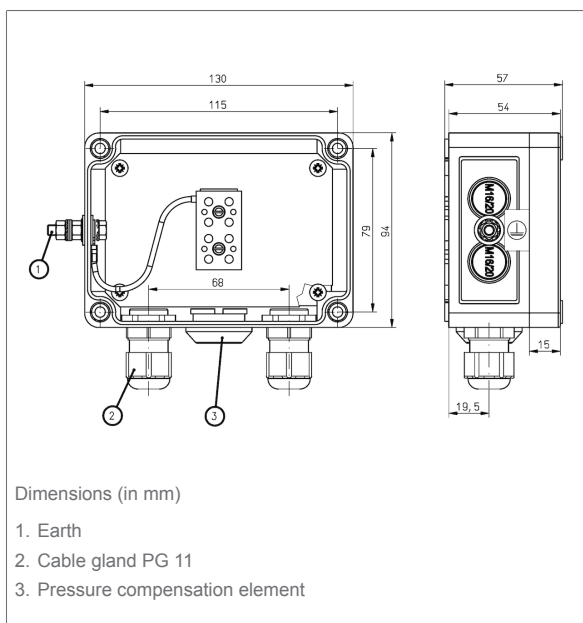


Anchor clamp

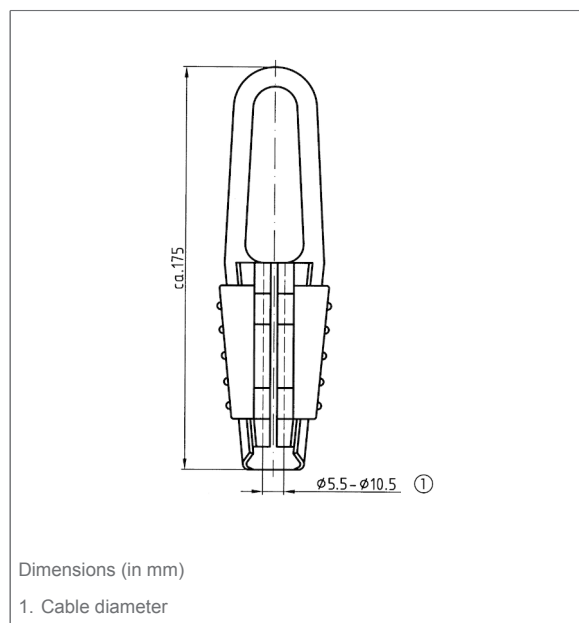


Technical drawings

Junction box with pressure relief port

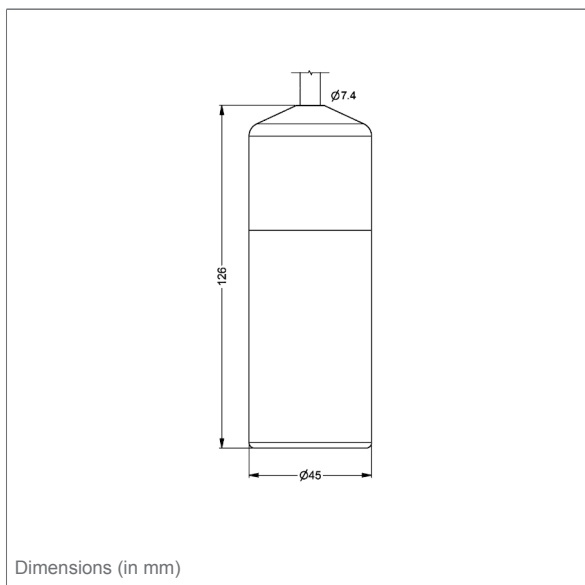


Anchor clamp

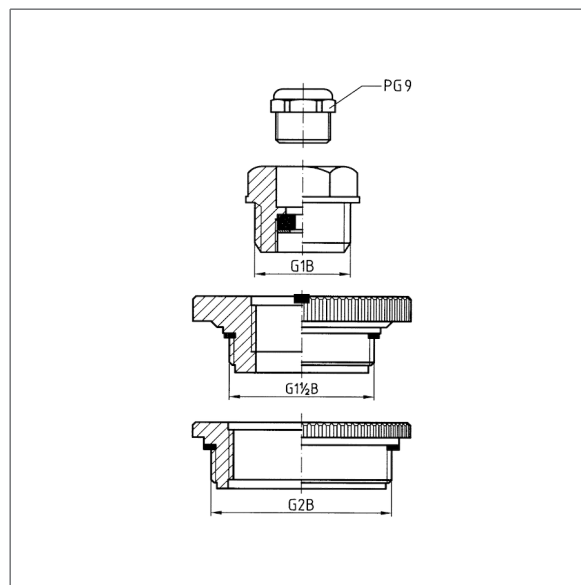




DMU 09 - standard version

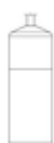


Screw connector kit



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