



Pressure transducer 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)

Measuring range

see ordering table

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 (Al_2O_3 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

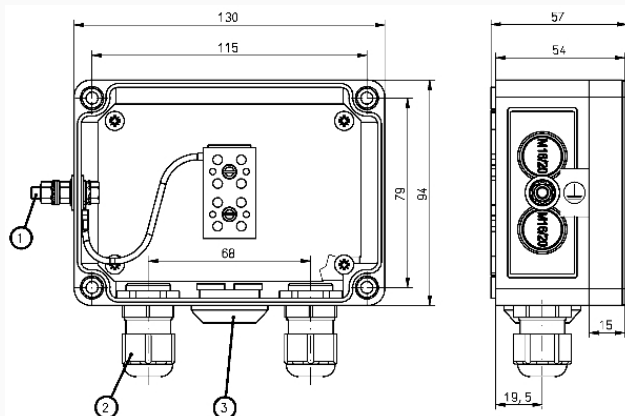
Pressure Equipment Directive 2014/68/EU

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 oder 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)

Technical Drawings

Junction box with pressure relief port



Dimensions (mm)

Earth

Cable gland PG 11

Pressure compensation element

Versions

Range	Measuring range	Type	Version	Part no.
	0/40 mbar	HydroFox® DMU 09	●	31767
	0/60 mbar	HydroFox® DMU 09	●	31768
	0/100 mbar	HydroFox® DMU 09	●	31571
	0/160 mbar	HydroFox® DMU 09	●	31572
	0/200 mbar	HydroFox® DMU 09	●	31573
	0/250 mbar	HydroFox® DMU 09	●	31574
	0/300 mbar	HydroFox® DMU 09	●	31812
	0/400 mbar	HydroFox® DMU 09	●	31575
	0/600 mbar	HydroFox® DMU 09	●	31576
	0/1 bar	HydroFox® DMU 09	●	31577
	0/1.6 bar	HydroFox® DMU 09	●	31578
	0/2 bar	HydroFox® DMU 09	●	31579
	0/2.5 bar	HydroFox® DMU 09	●	31580
	0/4 bar	HydroFox® DMU 09	●	31581
	0/6 bar	HydroFox® DMU 09	●	31582
	0/10 bar	HydroFox® DMU 09	●	31583

● in-stock items

● Non-stock items