



## Pressure transducers HydroFox® DMU 09

Part no. 31583

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)  
 $< \pm 0.35 \% \text{ FSO}$

#### Measuring range

0/10 bar

#### Overpressure safety

$> 400 \text{ mbar}$   
 at least 3 x FS

#### Operating temperature range

Medium:  $-25/+70 \text{ }^\circ\text{C}$   
 Ambient:  $-25/+70 \text{ }^\circ\text{C}$   
 Storage:  $-25/+70 \text{ }^\circ\text{C}$

#### dynamic characteristics

Response time:  $< 200 \text{ ms}$

#### Probe

L x  $\varnothing$ : 126 x 45 mm

#### material

Housing: PP  
 diaphragm: ultra-pure ceramic ( $\text{Al}_2\text{O}_3$  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

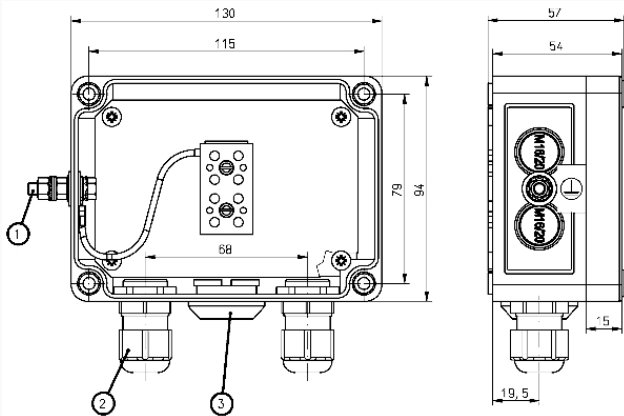
Pressure Equipment Directive 2014/68/EU

**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.
	0/10 bar	HydroFox® DMU 09		31583

-  in-stock items
-  Non-stock items