



## Pressure transducers HydroFox® DMU 07 FG

Part no. 31550

Pressure transducers HydroFox® DMU 07 for level measurement

### benefits

- flush diaphragm
- without transmission liquid
- mechanically insensitive ceramic sensor
- small temperature error
- high overpressure safety

### Application

For electronic, continuous level measurement of liquids and for pressure measurement of liquids and gases in plant construction.

### Description

Pressure transducers convert physical pressure into an electrical signal proportional to the pressure. HydroFox® DMU 07 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

0/1 bar

#### Overpressure safety

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

#### Operating temperature range

Medium:  $-40/+125\text{ }^{\circ}\text{C}$   
 Ambient:  $-40/+85\text{ }^{\circ}\text{C}$   
 Storage:  $-40/+100\text{ }^{\circ}\text{C}$

#### Temperature error band

$\leq 0.1 \% \text{ FSO}/10 \text{ K}$  In compensated range  $-20/+80\text{ }^{\circ}\text{C}$

#### dynamic characteristics

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

#### Process connection

G1½B with flush diaphragm

#### material

Housing: Stainless steel 316 L  
 pressure connection: Stainless steel 316 L  
 diaphragm: ceramic ( $\text{Al}_2\text{O}_3$  96 %)  
 Seal: FKM (Viton)

#### Supply voltage

DC 9 – 32 V

#### Output signal

2-wire, 4–20 mA

#### Load

$R_{\text{max}} = [(UB - UB_{\text{min}})/0.02 \text{ A}] \Omega$

**Current input**

< 21 mA

**electrical protection**

short circuit proof and protected against reverse polarity

**Electrical connection**

Connector and junction box as per ISO 4400 (DIN 43650-A)

**Degree of protection**

IP 65 (EN 60529)

**CE conformity**

EMC Directive 2014/30/EU

RoHS Directive 2011/65/EU

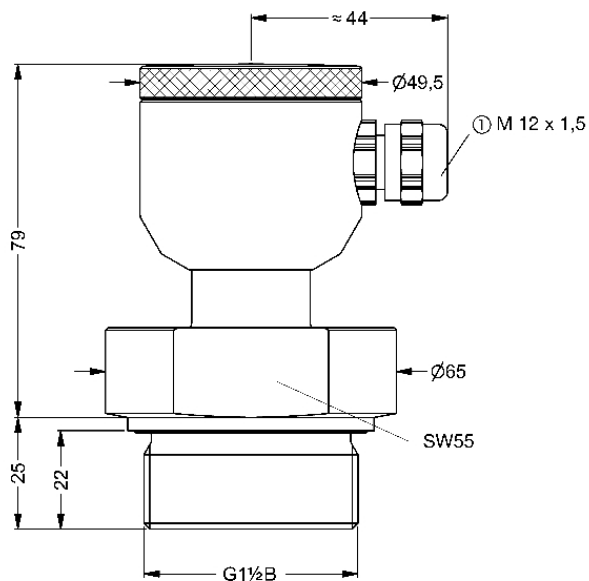
Pressure Equipment Directive 2014/68/EU

**Options**

- Pressure connection made of PVDF
- other seal materials
- Field housing (stainless steel 303)
- higher accuracy
- other output signals
- 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**

**DMU 07 FG - connection G1½B field housing**



**Dimensions (mm)**

Cable outlet

Versions

| Range | Measuring range | Type                   | Version                                                                             | Part no. |
|-------|-----------------|------------------------|-------------------------------------------------------------------------------------|----------|
|       | 0/1 bar         | HydroFox® DMU<br>07 FG |  | 31550    |

-  in-stock items
-  Non-stock items