



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)
< ± 0.35 % FSO

Measuring range

See ordering table

Overpressure safety

≤ 400 mbar: At least 25 x FS
> 400 mbar: At least 3 x FS

Operating temperature range

Medium: -40/+125 °C
Ambient: -40/+85 °C
Storage: -40/+100 °C

Temperature error band

≤ 0.1 % FSO/10 K In compensated range -20/+80 °C

Dynamic characteristics

Response time: ≤ 200 ms

Process connection

G1½B with flush diaphragm

Material

Housing: Stainless steel 316 L
Pressure connection: Stainless steel 316 L
Diaphragm: Ceramic (Al₂O₃ 96 %)
Seal: FKM (Viton)

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 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)

Supply voltage

DC 9 – 32 V

Output signal

2-wire, 4–20 mA

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

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

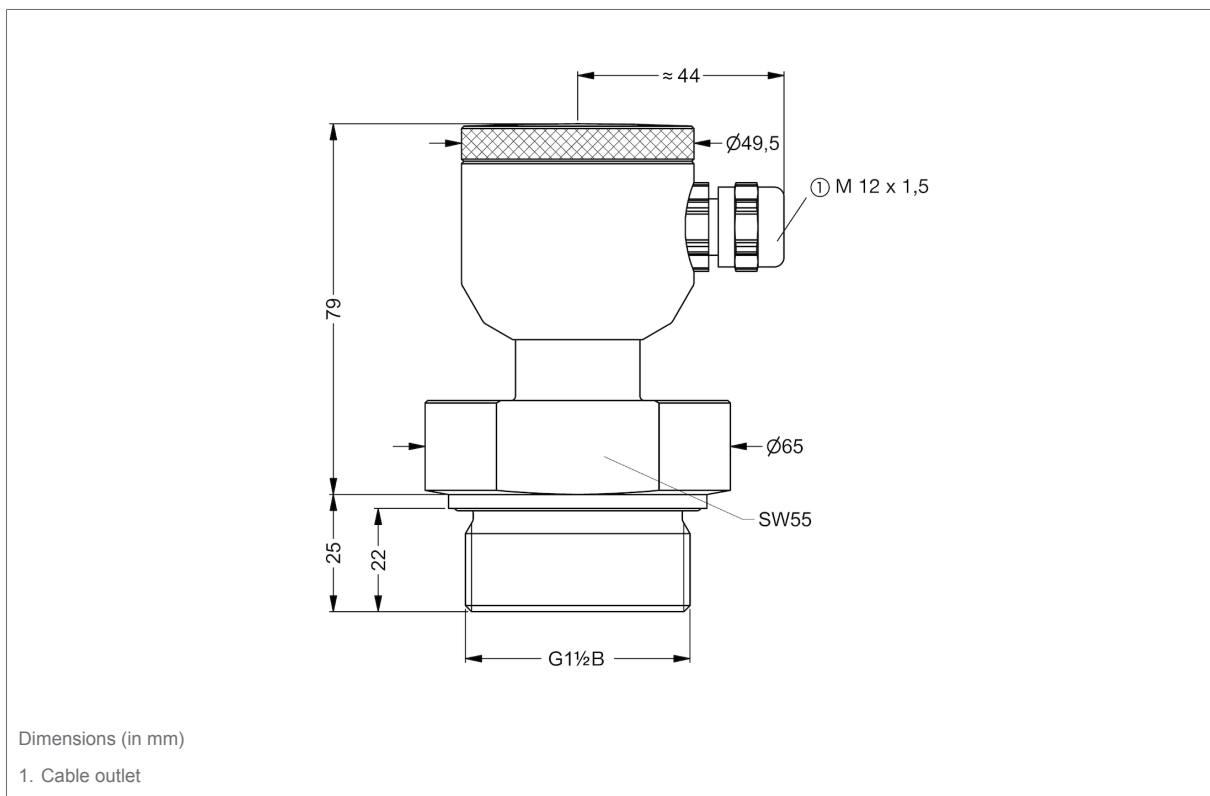


Detail views



1. Digital display unit DA 12
2. Signalling device
3. Pressure transducers HydroFox® DMU07

DMU 07 FG - connection G1½B field housing



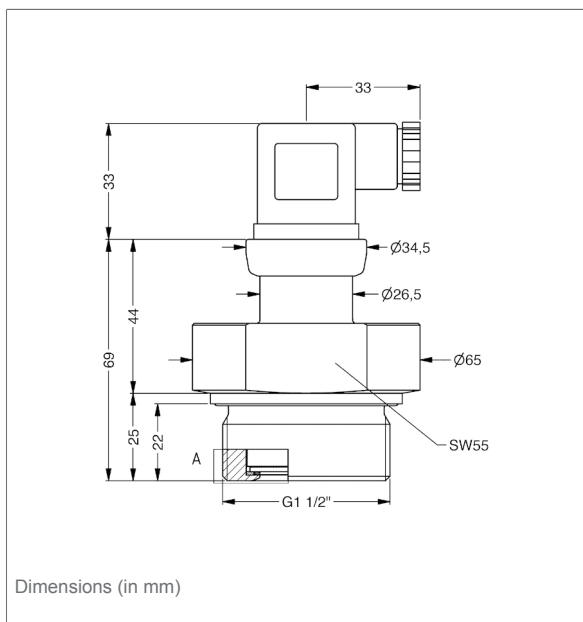
Dimensions (in mm)

1. Cable outlet

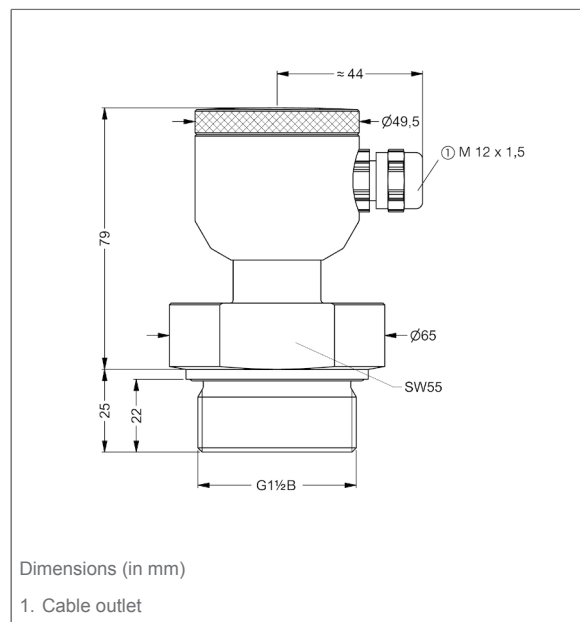


Technical drawings

DMU 07 - connection G1½B DIN 3852 type E – Connector and junction box ISO 4400, pressure connection made of stainless steel



DMU 07 FG - connection G1½B field housing



Versions

Type	Connection	Measuring range	Part no.
HydroFox® DMU 07	G1½B	0/40 mbar	31789
HydroFox® DMU 07	G1½B	0/60 mbar	31790
HydroFox® DMU 07	G1½B	0/100 mbar	31791
HydroFox® DMU 07	G1½B	0/160 mbar	31792
HydroFox® DMU 07	G1½B	0/200 mbar	31793
HydroFox® DMU 07	G1½B	0/250 mbar	31794
HydroFox® DMU 07	G1½B	0/400 mbar	31795
HydroFox® DMU 07	G1½B	0/600 mbar	31796
HydroFox® DMU 07	G1½B	0/1 bar	31797
HydroFox® DMU 07	G1½B	0/1.6 bar	31798
HydroFox® DMU 07	G1½B	0/2 bar	31799
HydroFox® DMU 07	G1½B	0/4 bar	31800



Blue part no. = in-stock items



Type	Connection	Measuring range	Part no.
HydroFox® DMU 07	G1½B	0/6 bar	31801
HydroFox® DMU 07	G1½B	0/10 bar	31802
HydroFox® DMU 07 FG	G1½B	0/40 mbar	31821
HydroFox® DMU 07 FG	G1½B	0/60 mbar	31805
HydroFox® DMU 07 FG	G1½B	0/100 mbar	31547
HydroFox® DMU 07 FG	G1½B	0/160 mbar	31806
HydroFox® DMU 07 FG	G1½B	0/200 mbar	31548
HydroFox® DMU 07 FG	G1½B	0/250 mbar	31807
HydroFox® DMU 07 FG	G1½B	0/400 mbar	31549
HydroFox® DMU 07 FG	G1½B	0/600 mbar	31808
HydroFox® DMU 07 FG	G1½B	0/1 bar	31550
HydroFox® DMU 07 FG	G1½B	0/1.6 bar	31809
HydroFox® DMU 07 FG	G1½B	0/2 bar	31551
HydroFox® DMU 07 FG	G1½B	0/4 bar	31552
HydroFox® DMU 07 FG	G1½B	0/6 bar	31810
HydroFox® DMU 07 FG	G1½B	0/10 bar	31553



Blue part no. = in-stock items