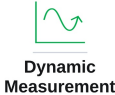


DIFFERENTIAL PRESSURE TRANSDUCER



- DIFFERENTIAL 0.1 TO 2 bar
- LINEARITY 0.10 %
- AISI 316 · IP65



NOMINAL PRESSURE (FS)

Pressure type	Nominal pressure (FS)	Zero at	Code
Differential (R)	0.1 bar · service 0.5 bar · limit 1 bar	atmospheric pressure	R
Differential (R)	0.5 bar · service 2.5 bar · limit 4 bar	atmospheric pressure	R
Differential (R)	1 bar · service 5 bar · limit 8 bar	atmospheric pressure	R
Differential (R)	2 bar · service 10 bar · limit 15 bar	atmospheric pressure	R

Two ports, A+ and B-, and a reading of the difference between them. Each range has its own static limits: the service pressure is five times the nominal differential pressure, the maximum permissible pressure is given per range in the table above — so the four mechanical limits further down do not apply to this model in the usual way. Wetted parts of AISI 316. Bidirectional voltage outputs ± 5 V and ± 10 V make the sign of the difference readable.



TECHNICAL DATA

PRECISION

Linearity and hysteresis	$\leq \pm 0.10 \%$
Calibration tolerance	$\leq \pm 0.05 \%$
Temperature effect on zero (1 °C)	not stated by the manufacturer
Temperature effect on sensitivity (1 °C)	not stated by the manufacturer
Zero balance	$\pm 5 \%$, adjustable
Response frequency	not stated by the manufacturer
Reference temperature	+23 °C

MECHANICAL PROPERTIES

Sensor material	Stainless steel 17-4 PH, monolithic
Sealing	Entirely laser welded, resin encapsulated
Protection class	IP65 · EN 60529
Process coupling	Two G 1/4" male ports, A+ and B-
Wetted material	Stainless steel AISI 316
Tightening	Wrench 27 mm · 10 N·m
Body · length	Ø 25 mm · 76 mm across the ports · approx. 95 mm high
Working temperature range	Electronics -10...+70 °C · fluid -10...+90 °C
Storage temperature range	-20...+90 °C

FIELD OF USE — Filter monitoring, flow measurement across an orifice, level in closed vessels and clean-room differential pressure.

MECHANICAL LIMITS

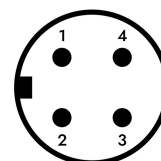
Service pressure	100 %	May be applied continuously without leaving the specification.
Max. permissible pressure	150 %	May be applied without permanent change of the characteristics.
Breaking pressure	> 300 %	Pressure at which mechanical failure may occur.
Highly dynamic pressure	75 %	Amplitude permitted for rapidly alternating pressure.

All four values refer to the nominal pressure of the version ordered.

ELECTRICAL PROPERTIES

Output signal	4–20 mA (3 wires)
Output signal, voltage	$\pm 5 \text{ V} \cdot \pm 10 \text{ V}$
Nominal power supply, 4–20 mA and $\pm 5 \text{ V}$	12–24 Vdc
Nominal power supply, $\pm 10 \text{ V}$	15–24 Vdc
Max. power supply	28 Vdc
Max. absorption	30 mA (3 wires)
Loading resistance, voltage	min. 3 kΩ
Loading resistance, current	0 to 470 Ω
Insulation resistance	> 2 GΩ
Electrical connection	M12x1 connector and a 4-pole shielded cable, 3 m
Sign of the difference	B- above A+ gives a negative voltage output

ELECTRICAL CONNECTION



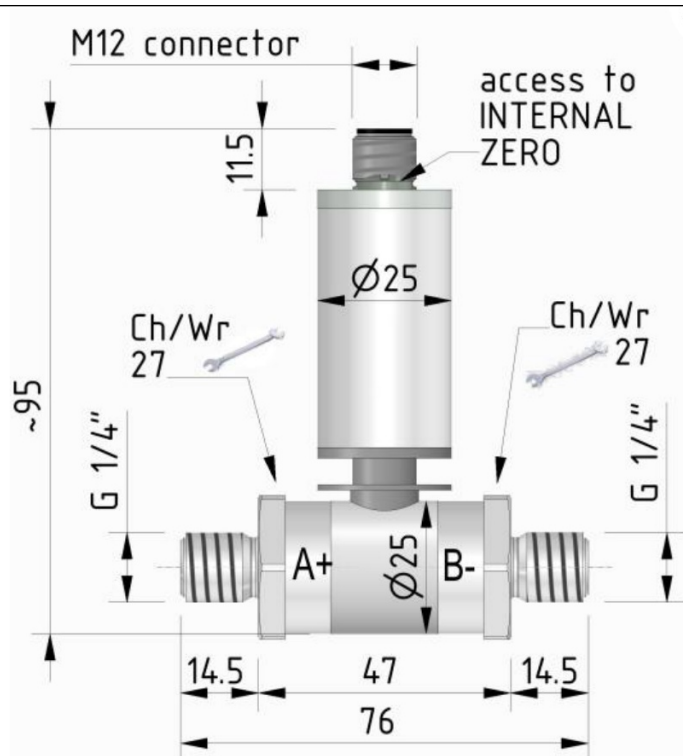
M12x1, 4 poles

3 WIRES	M12x1	Cable
Supply +	1	RED
Supply – · reference	3	BLACK
Output	4	WHITE
Earth · shield	2	On the body

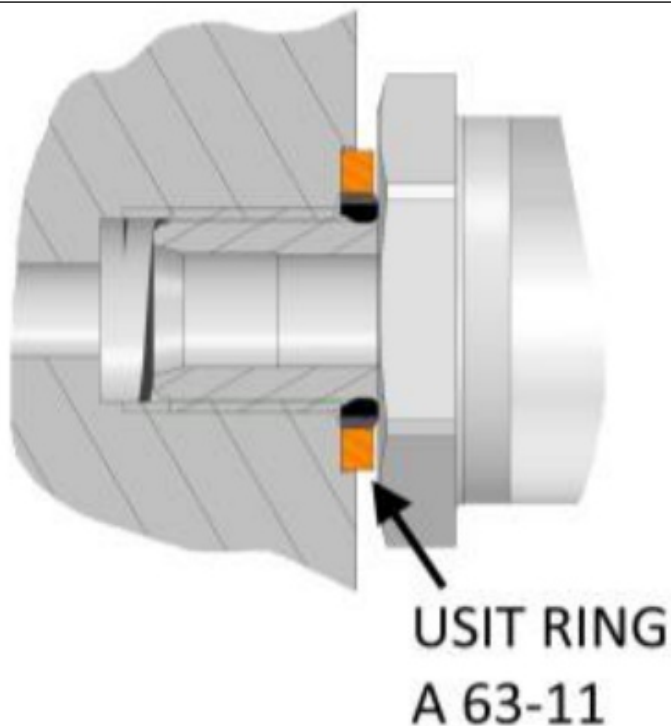
Three-wire connection only — the differential transducer needs its own supply. Pin numbering refers to the connector seen from the front.



DIMENSIONS (mm)



Dimensions in mm. Ports A+ and B- at 14.5 mm from each end, 47 mm apart; the electronics sit above the axis, height approx. 95 mm with the M12 connector.



Typical installation with a USIT ring A 63-11 against the face of each port.



COMPLIANCE AND CERTIFICATION

Protection rating	IP65 according to EN 60529 · entirely laser welded and resin encapsulated
Compliance	CE, RoHS, REACH
Applied standards	EN 61326-1 (2013) · EN 61010-1 (2013)
Directives and regulations	2014/30/EU · 2014/35/EU · 2011/65/EU (RoHS) · 2012/19/EU (WEEE) · 1907/2006 (REACH)
Quality system	Certified according to EN ISO 9001 · Dasa-Rägiſter IQ-1100-01
Declaration of conformity	Issued by the manufacturer on 01/04/2016, covering all options listed in the sales catalogue
On request	Calibration report

OPTIONS AND ACCESSORIES

Item	Availability	Data
Voltage output	Option	± 5 V or ± 10 V instead of 4–20 mA
Calibration report	On request	Factory calibration

