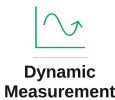


FLUSH DIAPHRAGM TRANSDUCER, DN 20



- FLUSH DIAPHRAGM · DN 20
- 1 TO 50 bar · VACUUM
- IP65 · DIN 43650



NOMINAL PRESSURE (FS)

Pressure type	Nominal pressure (FS)	Zero at	Code
Gauge (R)	1 · 2.5 · 5 · 10 · 20 · 50 bar	atmospheric pressure	R
Vacuum (V)	-1/0 · -1/+1 · -1/+2.5 · -1/+5 bar	atmospheric pressure	V

A DN 20 flush diaphragm: the sensing face sits in the plane of the clamp connection, so nothing collects in front of it. That is what makes this model suitable for viscous, pasty and fibrous media and for cleaning in place. The vacuum versions measure across zero, from -1 bar upwards.



TECHNICAL DATA

PRECISION

Linearity and hysteresis	$\leq \pm 0.25 \%$
Calibration tolerance	$\leq \pm 0.1 \%$
Temperature effect on zero (1 °C)	$\leq \pm 0.015 \%$
Temperature effect on sensitivity (1 °C)	$\leq \pm 0.015 \%$
Zero balance	$\pm 10 \%$, adjustable
Zero adjustment	Internal, under the nut
Response frequency	0.5 kHz
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	DN 20 clamp, flush diaphragm
Tightening	not applicable — clamp connection
Body · length	Ø 30 mm · 95 mm · flange Ø 35 mm, diaphragm Ø 17.6 mm
Working temperature range	-10...+70 °C
Storage temperature range	-20...+80 °C

FIELD OF USE — Viscous, pasty and fibrous media in food and pharmaceutical plant, filling lines and level measurement — wherever a bore in front of the diaphragm would block or spoil.

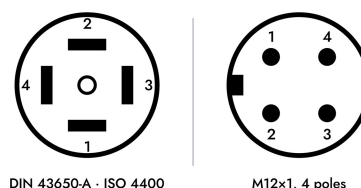
MECHANICAL LIMITS

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.

ELECTRICAL PROPERTIES

Output signal	4–20 mA (2 or 3 wires)
Output signal, voltage	0–5 V · 0–10 V
Nominal power supply, 4–20 mA and 0–5 V	12–24 Vdc
Nominal power supply, 0–10 V	15–24 Vdc
Max. power supply	28 Vdc
Max. absorption	30 mA (3 wires) · 20 mA (2 wires)
Loading resistance, voltage	min. 3 kΩ
Loading resistance, current	0 to 470 Ω
Insulation resistance	> 2 GΩ
Electrical connection	Connector DIN 43650-A · ISO 4400

ELECTRICAL CONNECTION

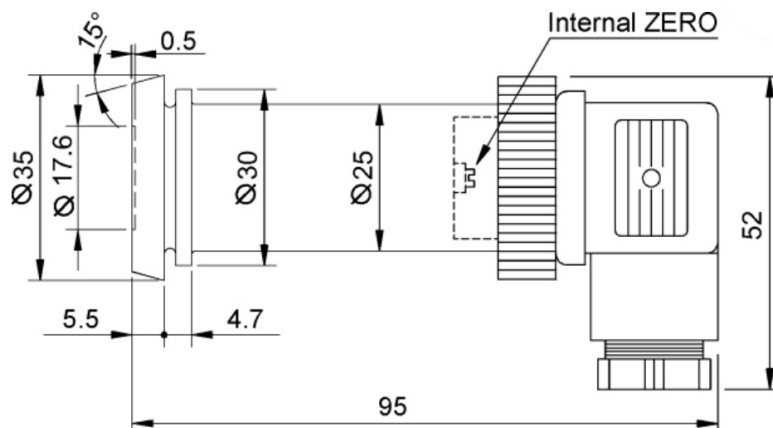


3 WIRES	DIN · M12	Moulded cable
Supply +	1 · 1	RED
Supply – · reference	2 · 3	BLACK
Output	3 · 4	WHITE
Earth · shield	4 · 2	On the lock nut
2 WIRES	DIN · M12	Moulded cable
Supply +	1 · 1	RED
To instrument	2 · 3	BLACK
Earth · shield	4 · 2	On the lock nut
Not connected	3 · 4	—

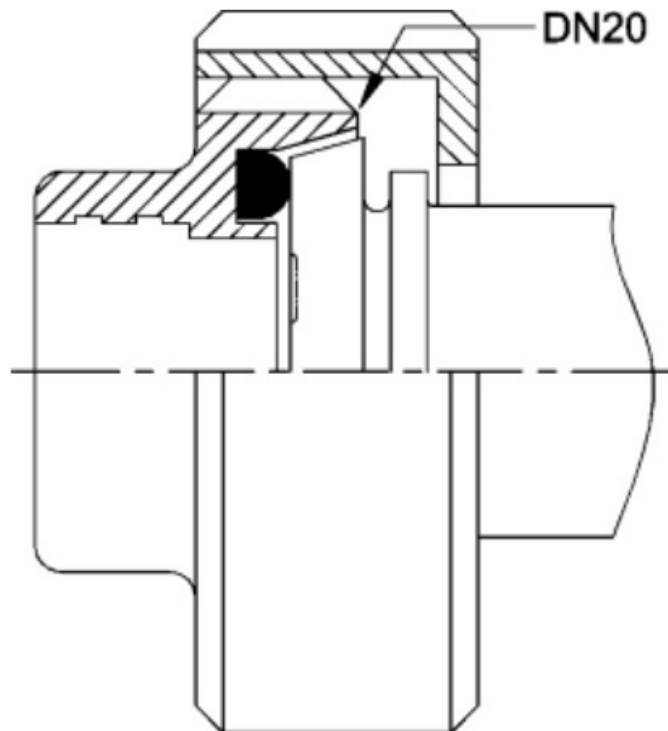
All four values refer to the nominal pressure of the version ordered.



DIMENSIONS (mm)



Dimensions in mm. Flange Ø 35 mm with a 15° seat, diaphragm Ø 17.6 mm, overall 95 mm; height over the axis 52 mm with the DIN connector.



Typical installation in a DN 20 clamp connection; the diaphragm lies in the plane of the process surface.



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
Food contact	Declaration of conformity for materials in contact with food to (CE) 1935/2004 and (CE) 2023/2006 (GMP) — for versions from 20 bar upwards, material 17-4 PH (WN 1.4542)
On request	Calibration report

OPTIONS AND ACCESSORIES

Item	Availability	Data
M12x1 connector	Option	Instead of the DIN connector
Cable outlet	Option	5 m cable instead of the connector
Food contact (MOCA)	Option	For versions from 20 bar upwards
Calibration report	On request	Factory calibration

