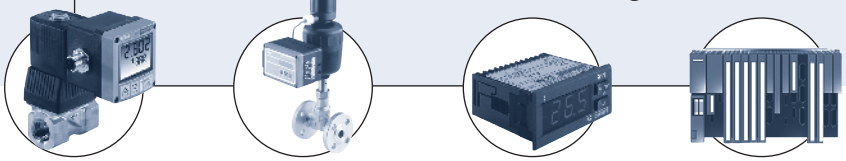
bürkert
FLUID CONTROL SYSTEMS

Pressure transmitter for hazardous environments, 0 - 25 bar

- Piezoresistive element
- Available with flush diaphragm
- ⟨Ex⟩-protection: EEx ia I/II C T6 in compliance with ATEX
- Applicable in the follow. hazardous environments:
  - connection to zone 0, 1 and 2 - Gases and vapour (G)
  - connection to zone 20, 21 and 22 - Dust (D)
  - mining: Category M1and M2
- Standard signal 4...20 mA for connection to automation-systems

Type 8327 can be combined with...



Type 8624-2
PI controller

Type 2712 (1067)
Control valve with SideControl

Type 0911
Process indicator

PLC

This intrinsically safe pressure transmitter is designed to cover the majority of industrial applications in the field of industrial pressure measurement technology.
High accuracy, reliability, compatibility with most media, adjustability, versatility, compact design and robust construction make this instrument universal and suitable for different measurement functions in hazardous environments.
For technical reasons piezoresistive sensor element is used for measuring ranges up to 16 bar (thin film sensor element for the measuring range of 25 bar, on request).
Wetted parts are made of stainless steel and completely welded. Internal seal elements, which could restrict the choice of measuring materials, are excluded.

General data	
Compatibility Standard version Flush Diaphragm version	Any pipe with sensor connection G 1/2" B according to DIN 16288, G 1" B with O-ring (range up to 1.6 bar) G 1/2" B with O-ring (range > 1.6 bar) (Weld-on socket with connection G1/2"B, G1"B)
Materials Housing Wetted parts Standard version Flush Diaphragm version Internal transmitting liquid	 Stainless steel 1.4571 Stainless steel 1.4571 (and 1.4542 with 25 bar) Stainless steel 1.4571, NBR seal Synthetic Oil (only for pressure range up to 16 bar or flush diaphragm units)
Electrical connections	4 pin cable plug acc. to EN 175301-803
Measuring range (Pressure reference = relative pressure [atmospheric])	0 up to 1.0, 2.5, 6.0, 10.0, 16.0 bar
Measuring element	piezo (≤ 16 bar) [thin film (25 bar) on request]
Fluid temperature**	-22°F up to 212°F (-30°C up to +100°C)
Compensated T° range	32°F up to 176°F (0°C up to +80°C)
Temperature coefficient Average Tc of zero Standard version Flush Diaphragm version Average Tc of Span	in compensated T° range ≤ 0.2% of F.S.* / 10K ≤ -0.2...+0.3% of F.S.* / 10K ≤ 0.2% of F.S.* / 10K
Accuracy	≤ 0.5% of F.S.* (2-point calibration)[1)] ≤ 0.25% of F.S.* (Best fit calibration, BFSL)[1)]
Hysteresis	≤ 0.1% of F.S.*
Repeatability	≤ 0.05% of F.S.*
1-year stability	≤ 0.2% of F.S.* (at reference conditions)

[1)] Calibrated in vertical mounting position with pressure connection bottom
* F.S.=Full scale
** see list of EC-type homologation certificate

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Electrical data	
Power supply [Vs]	10 -30 V DC
Reversed polarity of DC	Protected
Overvoltage protection	Yes
Short circuit protection	Yes
Output	Standard 4-20 mA signal, 2 wires
Load in Ω	≤ (Vs [V] - 10 [V]) / 0.02 [A]
Adjustability: Zero / span	± 10%
Response time	≤ 1 ms
Environment	
Ambient temperature**	-22°F up to 212°F (-30°C up to +100°C)
Standards and approvals	
Protection class	IP65 with cable plug mounted and tightened
Standard: EMC	EN 50081-1, 50081-2, 50082-2

Specifications EEx	
Ex-Protection	Categories** 2G {M1, M2, 1/2G, 1/2D, 2D}
Ex-Certification	EEx ia I/II C T6 (DMT 00 ATEX E 045X)
Conformity specifications	
power supply	30 VDC
short circuit rating	100 mA
power limitation	1 W
medium temperature	-4°F up to 140°F (-20°C up to +60°C)
ambient temperature	-4°F up to 140°F (-20°C up to +60°C)
storage temperature	-58°F up to 221°F (-50°C up to +105°C)
internal capacity Ci	≤ 22 nF
internal inductivity Li	≤ 100 mH

** see list of EC-type homologation certificate
(For further safety information please see the EC-type homologation certificate DMT 00 ATEX E 045 X)

Ordering chart for transmitter Type 8327

Pressure range [bar]	Pressure max. [bar]	Bursting pressure [bar]	Power supply	Output signal	Item no. Standard	Item no. Flush diaphragm standard G 1/2" B	Item no. Flush diaphragm standard G 1" B
0 - 1.00	5	5	10 - 30 V DC	4...20 mA	448 693	-	448 698
0 - 2.50	10	10	10 - 30 V DC	4...20 mA	448 694	448 699	-
0 - 6.00	35	35	10 - 30 V DC	4...20 mA	448 695	448 700	-
0 - 10.0	35	35	10 - 30 V DC	4...20 mA	448 696	448 701	-
0 - 16.0	80	80	10 - 30 V DC	4...20 mA	448 697	448 702	-

Further versions on request

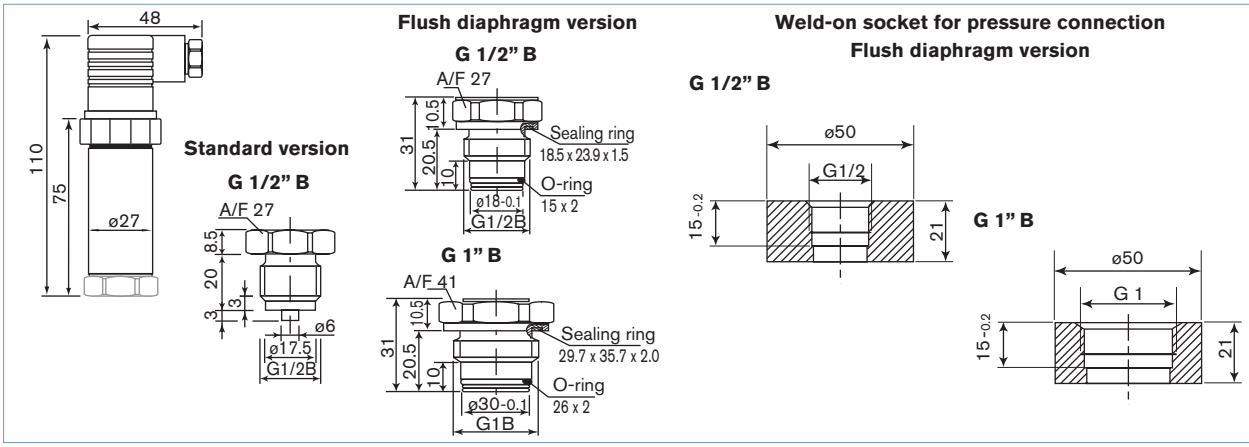
Pressure
0 up to 0.1, 0.16, 0.25, 0.4, 0.6, 1.6, 4.0, 25 bar

Materials
thin film sensor element for transmitter 0 up to 5 bar

Ordering chart accessories for Type 8327

Description	Item no.
Weld-on socket for flush diaphragm standard version G 1/2"	443 295
Weld-on socket for flush diaphragm standard version G 1"	444 137

Dimensions [mm]



In case of special application conditions, please consult for advice.

We reserve the right to make technical changes without notice.

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