BD SENSORS®
pressure measurement

DMP 335

Industrial Pressure Transmitter

Welded, Dry
Stainless Steel Sensor

accuracy according to IEC 61298-2:
0.5 % span

Nominal pressure

from 0 ... 6 bar up to 0 ... 600 bar

Output signals

2-wire: 4 ... 20 mA
3-wire: 0 … 10 V
others on request

Special characteristics

- suitable for oxygen applications
- necitlivé na tlakové nárazy
- high overpressure capability

Optional versions

- IS-version
  Ex ia = intrinsically safe for gases and dusts
- customer specific versions

The industrial pressure transmitter **DMP 335** is based on a **stainless-steel welded pressure sensor without any filling fluid**. This dry measuring cell design eliminates the risk of medium contamination and is especially suitable for applications where **silicone oil or elastomeric seals must not be used**.

Thanks to its robust construction, the DMP 335 is **ideally suited for gas applications**, including **oxygen and hydrogen**. The absence of internal filling fluid prevents diffusion-related effects and long-term drift, ensuring stable and reliable measurement.

Furthermore, the transmitter provides **excellent resistance to pressure spikes and pressure shocks** as well as **high overload capability**, making it a reliable solution for harsh industrial environments.

Preferred areas of use are

- Medical Technology
- Plant and Machine Engineering
- Mobile Hydraulics
- Oxygen application

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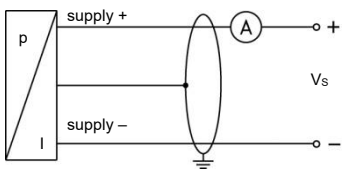
Input pressure range												
Nominal pressure gauge	[bar]	6	10	16	25	40	60	100	160	250	400	600
Overpressure	[bar]	14	35	35	70	140	140	350	350	700	1200	1200
Burst pressure ≥	[bar]	35	85	85	175	350	350	850	850	1750	2100	2100
Vacuum resistance		unlimited										

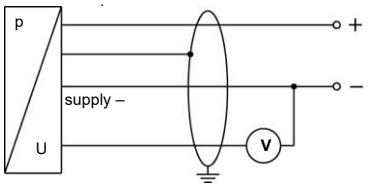
Output signal / Supply	
Standard	2-wire: 4 ... 20 mA / V_S = 8 ... 32 V_{DC}
Option 3-wire	3-wire: 0 ... 10 V / V_S = 14 ... 30 V_{DC}
Performance	
Accuracy[1]	≤ ± 0,5 % of span
Permissible load	current 2-wire: $R_{max} = [(V_S – V_{S\,min}) / 0.02\ A]\ \Omega$ voltage 3-wire: R_{min} = 10 kΩ
Influence effects	supply: 0.05 % span / 10 V load: 0.05 % span / kΩ
Long term stability	≤ ± 0.3 % span / year at reference conditions (typical)
Response time	2-wire: ≤ 10 msec 3-wire: ≤ 3 msec
[1]accuracy according to ČSN_EN_IEC_62828-1 – limit point adjustment (non-linearity, hysteresis, repeatability)	
Thermal effects (Offset and Span)	
Thermal error	<±2,8 % / 10 K
in compensated range	0 … 70 °C
Permissible temperatures	
Permissible temperatures	medium: -40 ... 125 °C electronics / environment: -40 ... 85 °C storage: -40 ... 100 °C
Electrical protection	
Short-circuit protection	permanent
Reverse polarity protection	no damage, but also no function
Electromagnetic compatibility	emission and immunity according to EN 61326
Mechanical stability	
Vibration	20 g RMS (25 ... 2000 Hz) according to DIN EN 60068-2-6
Shock	500 g / 1 msec according to DIN EN 60068-2-27
Materials	
Pressure port	stainless steel 1.4571 (316 Ti)
Housing	stainless steel 1.4404 (316 L)
Option compact field housing	stainless steel 1.4305 (304), cable gland M16x 1.5 brass, nickel plated (clamping range 2…8mm)
Seals (media wetted)	none (welded)
Diaphragm	stainless steel 1.4542 (17-4PH)
Media wetted parts	pressure port, diaphragm
Explosion protection (only for 4 … 20 mA / 2-wire)	
Approvals DX9-DMP 335	**IBExU10ATEX1122 X** zóna 0: II 1G Ex ia IIC T4 Ga zóna 20: II 1D Ex ia IIIC T 85°C Da
Safety technical maximum values	U_i = 28 V_{DC}, I_i = 93 mA, P_i = 660 mW, C_i ≈ 0 nF, L_i ≈ 0 µH, the supply connections have an inner capacity of max. 27 nF to the housing
Ambient temperature range	in zone 0: -20 ... 60 °C p_{atm} 0.8 bar up to 1.1 bar in zone 1 or higher: -20 ... 70 °C
Connecting cables (by factory)	cable capacitance: signal line/shield also signal line/signal line: 160 pF/m cable inductance: signal line/shield also signal line/signal line: 1 µH/m
Miscellaneous	
Current consumption	signal output current: max. 25 mA signal output voltage: max. 7 mA
Weight	approx. 140 g
Installation position	any
Operational life	> 100 x 10^6 pressure cycles
CE-conformity	EMC Directive: 2014/30/EU Pressure Equipment Directive: 2014/68/EU (module A) [2]
ATEX Directive	2014/34/EU
[2] This directive is only valid for devices with maximum permissible overpressure > 200 bar	

Wiring diagrams

2-wire-system (current)



3-wire-system (voltage)

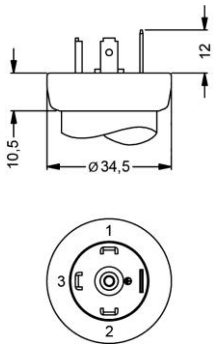


Pin configuration

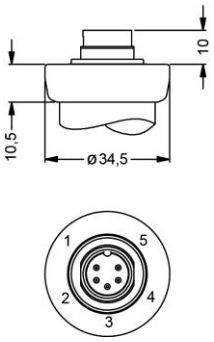
Electrical connections	ISO 4400	Binder 723 (5-pin)	M12x1 (4-pin)	field housing	cable colours (IEC 60757)
Supply +	1	3	1	IN +	wh (white)
Supply –	2	4	2	IN –	bn (brown)
Signal + (only for 3-wire)	3	1	3	OUT +	gn (green)
Shield	ground pin ⏚	5	4	⏚	gn/ye (green / yellow)

Electrical connections (dimensions in mm)

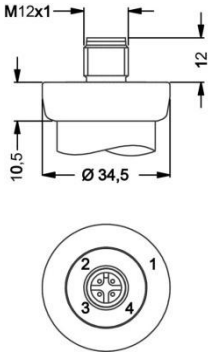
standard **option**



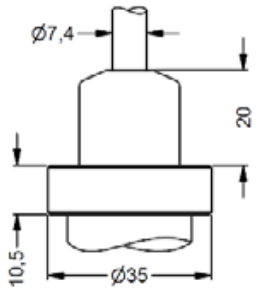
ISO 4400
(IP 65)



Binder series 723 5-pin
(IP 67)



M12x1 4-pin
(IP 67)



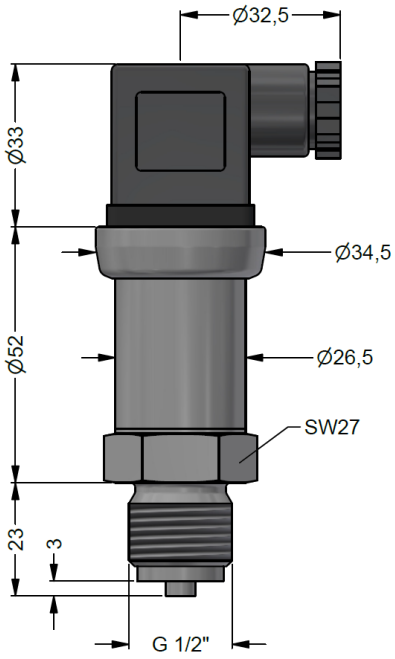
cable outlet, cable with ventilation tube
(IP 68) [3]

⇨ **universal field housing stainless steel 1.4404 (316 L) with cable gland M20x1.5 (ordering code 880) and other versions on request**

[3] *different cable types and lengths available, permissible temperature depends on kind of cable*

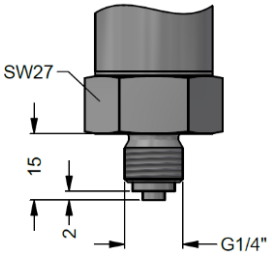
Mechanical connections (dimensions in mm)

Standard

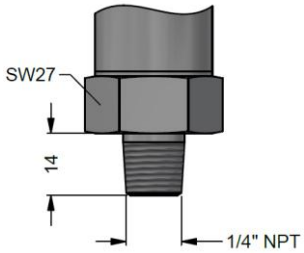


G1/2" EN 837

Option



G1/4" EN 837



1/4" NPT

⇨ **metric threads ant other versions on request**

Accessories

Plug-on Display PA 430

Functional range

- ► free scalable display
- ► switch mode, hysteresis, parameterizable deceleration of the contacts
- ► display 330 ° rotatable
- ► connector 300 ° rotatable
- ► no external power supply necessary

Product characteristics

- ► plug-on display for pressure transmitter with output signal: 4 … 20 mA / 2-wire or 0 … 10 V / 3-wire
- ► 4-digit LED display

Optional versions

- ► IS-version
- ► 1 or 2 programmable contacts

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Ordering code

27.04.2026

DMP 335 ☐☐☐☐ - ☐ - ☐ - ☐☐☐ - ☐☐☐ - ☐ - ☐ - ☐☐☐

Pressure																							
Gauge	210																						
Input [bar]																							
0 … 6		6	0	0	1																		
0 … 10		1	0	0	2																		
0 … 16		1	6	0	2																		
0 … 25		2	5	0	2																		
0 … 40		4	0	0	2																		
0 … 60		6	0	0	2																		
0 … 100		1	0	0	3																		
0 … 160		1	6	0	3																		
0 … 250		2	5	0	3																		
0 … 400		4	0	0	3																		
0 … 600		6	0	0	3																		
Customer		9	9	9	9																		
Output																							
4 … 20 mA / 2-wire						1																	
0 … 10 V / 3-wire						3																	
Intrinsic safety 4 … 20 mA / 2-wire						E																	
Customer						9																	
Accuracy																							
0,5 % span							5																
Customer							9																
Electrical connection																							
Connector ISO 4400 (IP 65) - plug incuded								1	0	0													
Male plug Binder series 723 (5-pin)								2	0	0													
Cable outlet, cable with ventilation tube (IP68)[2]								T	R	0													
+ PVC cable / 1 m																							
Connector M12 x 1, 4-pin (IP 67) - metal - plug included								M	1	0													
Customer								9	9	9													
Mechanical connection																							
G 1/2" EN 837											2	0	0										
G 1/4" EN 837											4	0	0										
1/4" NPT											N	4	0										
Customer											9	9	9										
Seals																							
Without - welded														2									
Customer														9									
Special version																							
Standard															0	0	0						
Version for oxygen															0	0	7						
Customer															9	9	9						

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0,-…without additional charge
On request… in accordance with the producer

Surcharges for calibration are not subject to any discounts. Subject to change.
This document contains the specification for ordering the product; detailed technical parameters of the product and its possible variants are given in the data sheet. BD SENSORS reserves the right to change sensor specifications without further notice.

1 - standard: 2 m PVC cable without ventilation tube (permissible temperature: -5 … 70 °C)

2 - code TR0 = PVC cable, cable with ventilation tube available in different types and lengths, cable not included in the price