

DMP 339P

Industrial Pressure Transmitter

Stainless Steel Sensor

accuracy according to IEC 60770:
0.5 % FSO



Nominal pressure

from 0 ... 25 bar up to 0 ... 600 bar

Output signals

2-wire: 4 ... 20 mA

3-wire: 0 ... 10 V

Special characteristics

- ▶ mechanical connection:
G 1/4" flush welded
- ▶ suitable for viscous
and pasty media

Optional versions

- ▶ several electrical
connections
- ▶ customer
specific versions

The DMP 339P industrial pressure transmitter features a G 1/4" flush welded pressure port and was designed for the use in a range of machinery including metering systems. It is ideal for measuring the pressure of viscous and pasty media. No dead spaces arise from the flush welded stainless steel diaphragm.

Material accumulation, dripping and stringing in machinery is eliminated. This increases the efficiency and reliability of your machines.

The DMP 339P is available with various electrical connections, ensuring an excellent adaption to the application conditions.

Preferred areas of use are



Plant and Machine Engineering
- especially conveyor plants and
dosing systems



Hydraulics



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Technical Data

Input pressure range									
Nominal pressure gauge	[bar]	25	40	60	100	160	250	400	600
Overpressure (static)	[bar]	50	80	120	200	320	500	800	1200
Burst pressure \geq	[bar]	125	200	300	500	800	1250	2000	2000

Output signal / Supply	
2-wire	4 ... 20 mA / $V_S = 9 \dots 36 V_{DC}$
3-wire	0 ... 10 V / $V_S = 14 \dots 30 V_{DC}$

Performance	
Accuracy ¹	$\leq \pm 0.5 \% \text{ FSO}$
Permissible load	2 wire: $R_{\max} = [(V_S - V_{S \min}) / 0.02 \text{ A}] \Omega$ 3 wire: $R_{\min} = 10 \text{ k}\Omega$
Influence effects	supply: 0.05 % FSO / 10 V load: 0.05 % FSO / $\text{k}\Omega$
Response time	2-wire: $\leq 10 \text{ msec}$ 3-wire: $\leq 3 \text{ msec}$
Long term stability	$\leq \pm 0.15 \% \text{ FSO} / \text{year}$ at reference conditions

¹ accuracy according to IEC 60770 – limit point adjustment (non-linearity, hysteresis, repeatability)

Thermal effects (offset and span)	
Thermal error	$\leq \pm 0.15 \% \text{ FSO} / 10 \text{ K}$
in compensated range	-10 ... 80 °C

Permissible temperatures	
Medium	-10 ... 125 °C
Electronics / environment	-40 ... 85 °C
Storage	-40 ... 85 °C

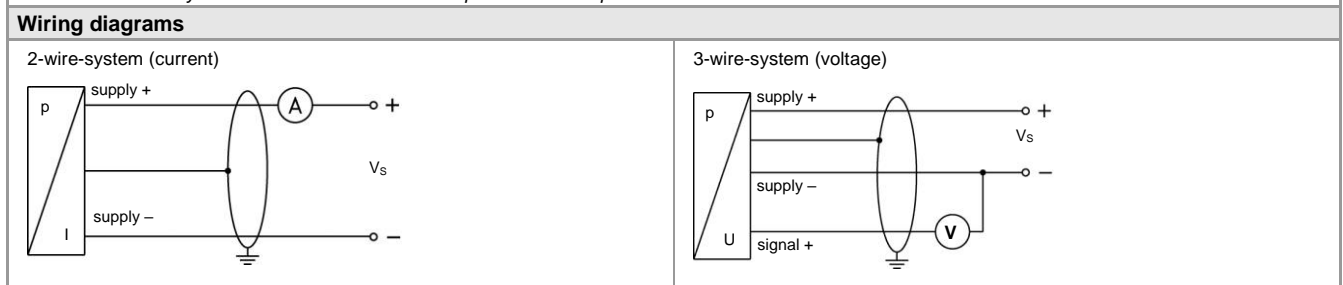
Electrical protection	
Short-circuit protection	permanent
Reverse polarity protection	no damage, but also no function
Electromagnetic protection	emission and immunity according to EN 61326

Mechanical stability	
Vibration	10 g, 25 Hz ... 2 kHz according to DIN EN 60068-2-6
Shock	100 g / 1 msec according to DIN EN 60068-2-27

Materials	
Pressure port / housing	stainless steel 1.4404 (316L)
O-ring pressure port	FKM others on request
Diaphragm	stainless steel 1.4435
Filling fluid	silicone oil
Media wetted parts	pressure port, seal, diaphragm

Miscellaneous	
Weight	approx. 170 g
Current consumption	signal output current: max. 25 mA signal output voltage: max. 7 mA
Operational life	100 million load cycles
CE-conformity	2014/30/EU (EMC) Pressure Equipment Directive: 2014/68/EU (module A) ²

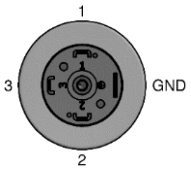
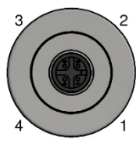

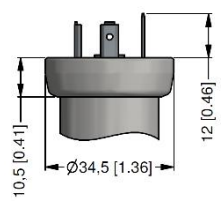
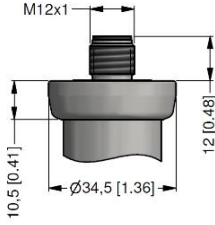
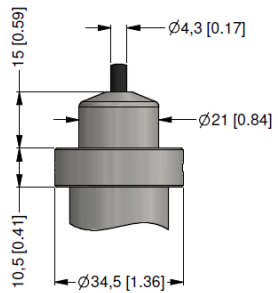
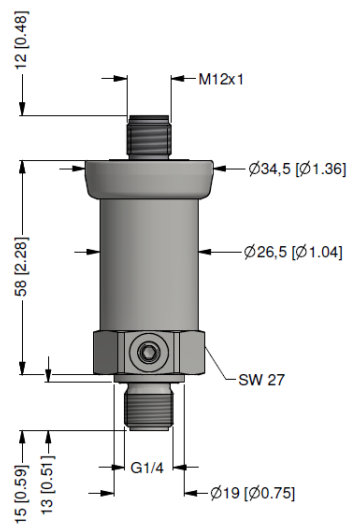
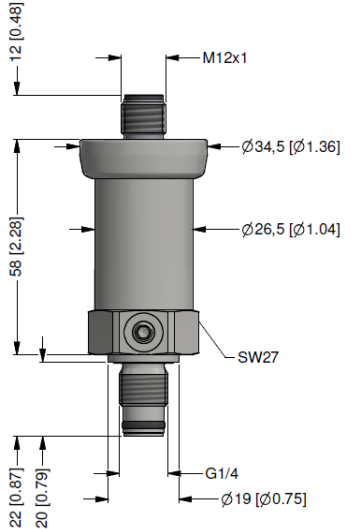
² This directive is only valid for devices with maximum permissible overpressure > 200 bar



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Technical Data

Pin configuration			
Electrical connection	ISO 4400	M12x1 / metal 4-pin	cable colours (IEC 60757)
			
Supply +	1	1	WH (white)
Supply -	2	2	BN (brown)
Signal (only 3-wire)	3	3	GN (green)
Shield	ground pin 	4	GNYE (green-yellow)
Electrical connections (dimensions mm / in)			
			
ISO 4400 (IP 65)	M12x1, 4 pin (IP 67)	cable outlet with PVC cable (IP 67) ³	
³ standard: 2 m PVC cable without ventilation tube (permissible temperature: -5 ... 70 °C); different cable types and lengths available, permissible temperature depends on kind of cable			
Dimensions (mm / in)			
			
G 1/4" DIN 3852 flush	G 1/4" DIN 3852 flush with 2 O-rings		

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