



Pressure transmitter for general purpose

Type MBS 1700

Features



- Enclosure and wetted parts of acid-resistant stainless steel (AISI 316L)
- Pressure ranges in relative (gauge) from 0 to 25 bar
- Output signal: 4 - 20 mA
- Pressure connections: G1/4 A, G1/2 A (EN837)
- Temperature compensated and laser calibrated

Description

The compact pressure transmitter MBS 1700 is designed for use as a general purpose transmitter, and offers a reliable pressure measurement, even under harsh environmental conditions.

Excellent vibration stability, robust construction, and a high degree of EMC/EMI protection equip the pressure transmitter to meet the most stringent industrial requirements.

Ordering

Measuring range P _e ¹⁾ [bar]	Output signal	Pressure connection	Code No.
0 - 6	4 - 20 mA	G 1/4 EN 837	060G6100
0 - 10			060G6101
0 - 16			060G6102
0 - 25			060G6103
0 - 6		G 1/2 EN 837	060G6104
0 - 10			060G6105
0 - 16			060G6106
0 - 25			060G6107

¹⁾ Relative / gauge
 Plug: Pg 9 (EN 175301-803-A)

Technical data
Performance (EN 60770)

Accuracy (incl. non-linearity, hysteresis and repeatability)	±0.5% FS (typ.) ±1% FS (max.)
Non-linearity BFSL (conformity)	≤ ±0.2% FS
Hysteresis and repeatability	≤ ±0.1% FS
Thermal zero point shift	≤ ±0.1% FS/10K (typ.) ≤ ±0.2% FS/10K (max.)
Thermal sensitivity (span) shift	≤ ±0.1% FS/10K (typ.) ≤ ±0.2% FS/10K (max.)
Response time	< 4 ms
Overload pressure (static)	6 × FS (max. 1500 bar)
Burst pressure	> 6 × FS (max. 2000 bar)
Durability, P: 10-90% FS	>10×10 ⁶ cycles

Electrical specifications

Nom. output signal (short-circuit protected)	4 – 20 mA
Supply voltage [U _B], polarity protected	9 → 32 V
Supply - current consumption	–
Supply voltage dependency	≤ ±0.05% FS/10 V
Current limitation	28 mA (typ.)
Output impedance	–
Load [R _L] (load connected to 0V)	R _L ≤ (U _B - 9V)/0.02 A

Environmental conditions

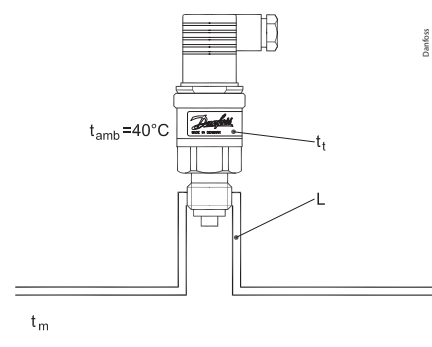
Media temperature range	–40 → +85°C		
Ambient temperature range	–40 → + 85 °C		
Compensated temperature range	0 → +80°C		
Transport temperature range	–50 → +85°C		
EMC - Emission	EN 61000-6-3		
EMC Immunity	EN 61000-6-2		
Insulation resistance	> 100 MΩ at 100 V		
Mains frequency test	SEN 361503		
Vibration stability	Sinusoidal	15.9 mm-pp, 5 Hz-25 Hz 20 g, 25 Hz - 2 kHz	IEC 60068-2-6
	Random	7.5 g _{rms} , 5 Hz - 1 kHz	IEC 60068-2-64
Shock resistance	Shock	500 g / 1 ms	IEC 60068 - 2 - 27
	Free fall		IEC 60068 - 2 - 32
Enclosure			IP 65

Mechanical characteristics

Materials	Wetted parts	EN 10088-1; 1.4404 (AISI 316 L)
	Enclosure	EN 10088-1; 1.4404 (AISI 316 L)
	Electrical connections	Glass filled polyamid, PA 6.6
Weight		0.25 kg

Guideline for temperature influence

Medium temperature (t _m), [°C]	Heat isolator (L), [cm]	Transmitter temperature (t _t), [°C]
120	2	85
	5	75
	10	70
100	2	75
	5	65
	10	60



Dimensions

<p>G 1/4 A (EN 837)</p>	<p>G 1/2 A (EN 837)</p>

Recommended torque = 30-35 Nm (Depends of different parameters as packing material, mating material, thread lubrication and pressure level.)

Electrical connection

<p>EN 175301-803-A, Pg 9</p>	<p>4 - 20 mA output (2 wire) Pin 1: + supply Pin 2: - supply Pin 3: Not used Earth: Connected to MBS enclosure</p>