



## **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 <sub>e</sub> <sup>1)</sup> [bar]	Output signal	Pressure connection	Code No.
0 - 6	4 - 20 mA	G 1/4 EN 837	<b>060G6100</b>
0 - 10			<b>060G6101</b>
0 - 16			<b>060G6102</b>
0 - 25			<b>060G6103</b>
0 - 6		G 1/2 EN 837	<b>060G6104</b>
0 - 10			<b>060G6105</b>
0 - 16			<b>060G6106</b>
0 - 25			<b>060G6107</b>

<sup>1)</sup> 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 <sup>6</sup> cycles

*Electrical specifications*

Nom. output signal (short-circuit protected)	4 – 20 mA
Supply voltage [U <sub>B</sub> ], 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 <sub>L</sub> ] (load connected to 0V)	R <sub>L</sub> ≤ (U <sub>B</sub> - 9V)/0.02 A

*Environmental conditions*

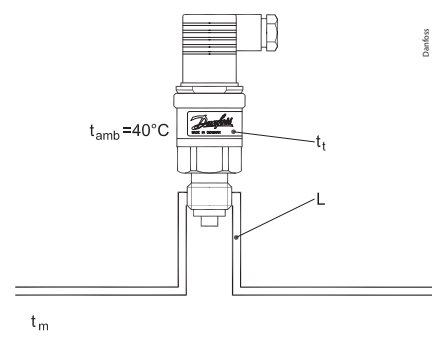
Media temperature range	–40 → +85°C		
Ambient temperature range	–40 → + 85 °C		
Compensated temperature range	0 → +80°C		
Transport temperature range	–50 → +85°C		
EMC - Emission	EN 61000-6-3		
EMC Immunity	EN 61000-6-2		
Insulation resistance	> 100 MΩ at 100 V		
Mains frequency test	SEN 361503		
Vibration stability	Sinusoidal	15.9 mm-pp, 5 Hz-25 Hz	IEC 60068-2-6
		20 g, 25 Hz - 2 kHz	
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 <sub>m</sub> ), [°C]	Heat isolator (L), [cm]	Transmitter temperature (t <sub>t</sub> ), [°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>