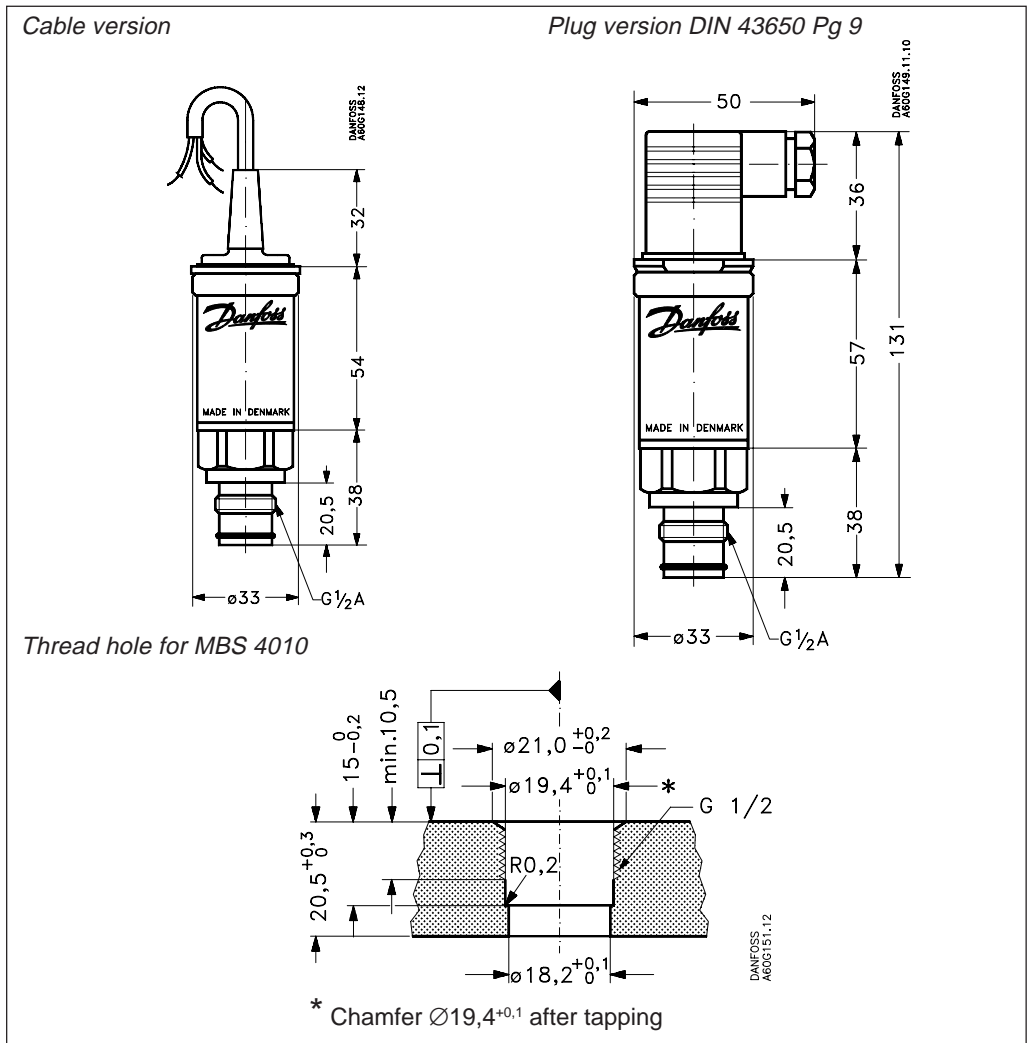


Pressure transmitter with flush diaphragm Type MBS 4010



- For aggressive, viscous, non-uniform and crystallizing media
- Flush diaphragm made of acid-resistant stainless steel - minimum dead volume
- EMC protected in accordance with EU EMC directive
- Temperature compensated, linearized and laser-calibrated - no potentiometer
- O-ring sealing ahead of thread
- Typical application:
 - waste water systems
 - water treatment
 - paper industry

Dimensions



Technical data

Performance (IEC 770)

Accuracy	$\leq \pm 0.8\% \text{ FS} / \leq \pm 0.3\% \text{ FS (typ.)}$
Non-linearity (Best fit straight line)	$\leq \pm 0.2\% \text{ FS}$
Hysteresis and repeatability	$\leq \pm 0.1\% \text{ FS}$
Thermal zero point shift	$\leq \pm 0.1\% \text{ FS/10K (typ.)}$ $\leq \pm 0.2\% \text{ FS/10K (max.)}$
Thermal sensitivity (span) shift	$\leq \pm 0.1\% \text{ FS/10K (typ.)}$ $\leq \pm 0.2\% \text{ FS/10K (max.)}$
Response time	< 4 ms
Max. operating pressure (see table on page 3)	min. 2 × FS
Burst pressure (see table on page 3)	min. 4 × FS

Electrical specifications

Rated output signal	4 to 20 mA
Supply voltage, U_B (polarity protected)	10 to 30 V d.c.
Voltage dependency	< 0,05% FS/10 V
Current limitation (linear output signal up to 1.5 × rated range)	28 mA
Load, R_L	$R_L \leq \frac{U_B - 10 \text{ V}}{0.02 \text{ A}} \quad [\Omega]$

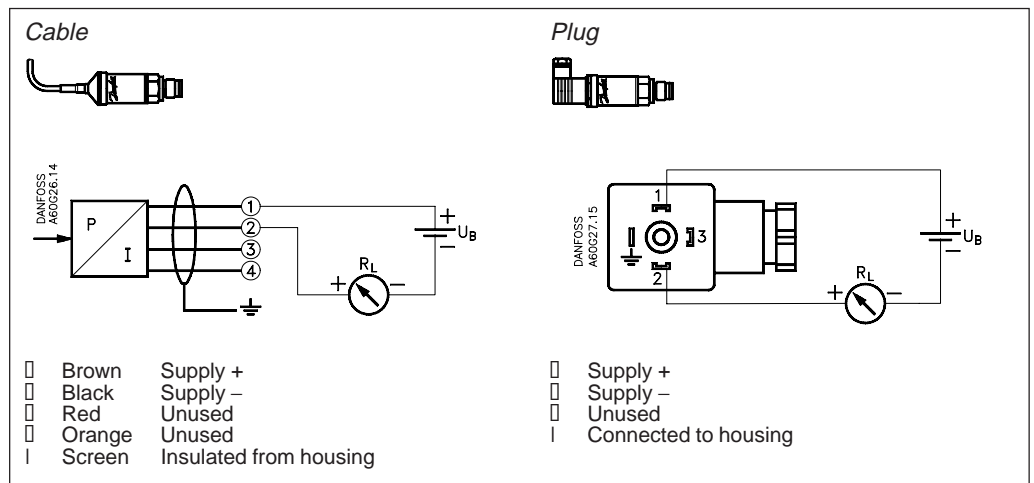
Environmental conditions

Operating temperature range	-10 to 85°C			
Compensated temperature range	0 to 80°C			
Transport temperature range	-50 to 85°C			
EMC - Emission	EN 50081-1			
EMC - Immunity	Electrostatic discharge	Air 8 kV Contact 4 kV	EN 50082-2 (IEC 801-2)	
	RF field	conducted	10 V/m, 26 MHz - 1 GHz	EN 50082-2 (IEC 801-3)
		radiated	10 V _{rms} , 150 kHz - 30 MHz	EN 50082-2 (IEC 801-6)
	Transient	burst	4 kV (CM) clamp	EN 50082-2 (IEC 801-4)
		surge	1 kV (CM,DM)RG=42Ω	EN 50082-2 (IEC 801-5)
Insulation resistance		> 100 MΩ at 500 V d.c.		
Mains frequency	500 V, 50 Hz	SEN 361503		
Vibration stability	Sinusoidal	20 g, 25 Hz - 2 kHz	IEC 68-2-6	
	Random	7,5 g _{rms} , 5 Hz - 1 kHz	IEC 68-2-34, IEC 68-2-36	
Shock resistance	Shock	500 g / 1 ms	IEC 68-2-27	
	Free fall		IEC 68-2-32	
Enclosure	Plug version		IP 65 - IEC 529	
	Cable version		IP 67 - IEC 529	

Mechanical characteristics

Pressure connection	Thread	G 1/2 A, ISO 228/1
	Seal behind thread	DIN 3852 form E, NBR
	Seal ahead of thread	O-ring 15 × 2, NBR
Electrical connection	Plug	DIN 43650 Pg 9
	Cable	2 m screened PE-cable
Wetted parts, material		DIN 17440-1.4401 (AISI 316)
Housing material		DIN 17440-1.4301 (AISI 304)
Weight		0.3 kg

Electrical connection,
Two-wire, 4 - 20 mA



Ordering

MBS 4010 for absolute pressure measuring

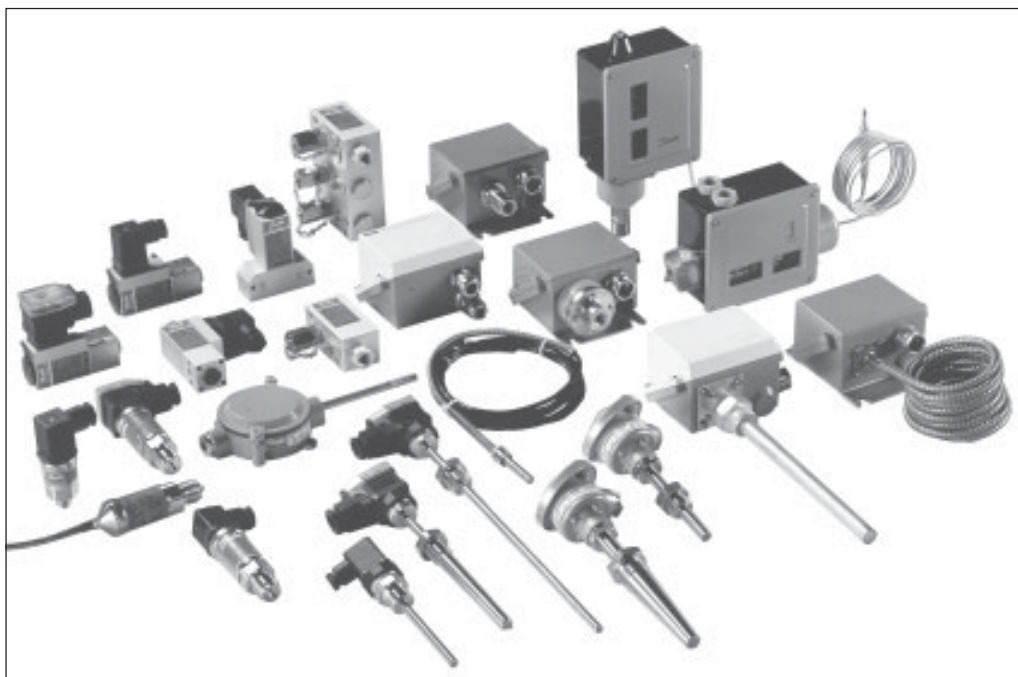
Pressure connection	Pressure range P_{abs}	Max. operation pressure	Min. burst pressure	Code. no	
				Plug version	Cable version
G 1/2 A ISO 228/1	0 - 4 bar	8 bar	200 bar	060G3203	060G3224
	0 - 6 bar	20 bar	200 bar	060G3204	060G3225
	0 - 10 bar	20 bar	200 bar	060G3205	060G3226
	0 - 16 bar	50 bar	200 bar	060G3206	060G3227
	0 - 25 bar	50 bar	200 bar	060G3207	060G3228

MBS 4010 for gauge pressure measuring

Pressure connection	Pressure range P_e	Max. operation pressure	Min. burst pressure	Code. no	
				Plug version	Cable version
G 1/2 A ISO 228/1	0 - 4 bar	8 bar	16 bar	060G3211	060G3232
	0 - 6 bar	20 bar	40 bar	060G3212	060G3233
	0 - 10 bar	20 bar	40 bar	060G3213	060G3234
	0 - 16 bar	50 bar	100 bar	060G3214	060G3235
	0 - 25 bar	50 bar	100 bar	060G3215	060G3236
	0 - 40 bar	80 bar	160 bar	060G3216	060G3237
	0 - 60 bar	200 bar	400 bar	060G3217	060G3238

Accessories

	Code no
Adapter for armoured hose	060G0211
Plug DIN 43650 IP67 5 m cable	060G1034
Weld nipple G 1/2 A	060G0289



Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.