

Model 265GC/GM/GG/GJ/GN for gauge pressure Model 265AC/AM/AG/AJ/AN for absolute pressure

Series 2600T Pressure Transmitters

Engineered solutions for all applications



With direct mount seal

Base accuracy

– $\pm 0.04\%$

Span limits

– 6.0 ... 60,000 kPa; 25 in H₂O up to 8,700 psi
– 6.0 ... 3,000 kPa abs.; 25 in H₂O up to 435 psi

Proven sensor technology together with state-of-the-art digital technology

Comprehensive selection of sensors

– Optimized performance and stability

Flexible configuration options

– On device using control buttons in combination with LCD display, handheld terminal, or PC user interface

Various communication protocols available

– Enables integration into HART®, PROFIBUS PA and FOUNDATION fieldbus platforms
– Upgrade options thanks to interchangeable electronics with automatic configuration

Full compliance with Pressure Equipment Directive (PED) category III

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1 General description

Models 265G. and 265A., described in this data sheet, are transmitters that are equipped with a direct mount seal.

All data and detailed information relating to the remote seal element can be obtained from this data sheet. The table below specifies the types of standard remote seal that may be installed in combination with 265G./A. transmitters.

2 Functional specifications

Measuring range and span limits

Sensor code	Upper range limit (URL)	Lower range limit (LRL) ¹⁾	Overload limits Measuring equipment	Minimum span				
				Flush diaphragm			With extension	
				265GM/AM	265GC/AC			
				DN 25/1"	DN 50/2"	DN 80/3"	DN 50/2"	DN 80/3"
				Max. 250 bar 25 MPa 3,625 psi	Max. 100 bar 10 MPa 1,450 psi	Max. 100 bar 10 MPa 1,450 psi	Max. 100 bar 10 MPa 1,450 psi	Max. 100 bar 10 MPa 1,450 psi

Model 265G.

C	6 kPa 60 mbar 24 in H ₂ O	-6 kPa -60 mbar -24 in H ₂ O	1 MPa 10 bar 145 psi	-	-	6 kPa 60 mbar 24 in H ₂ O	-	6 kPa 60 mbar 24 in H ₂ O
F	40 kPa 400 mbar 160 in H ₂ O	-40 kPa -400 mbar -160 in H ₂ O	1 MPa 10 bar 145 psi	16 kPa 160 mbar 64 in H ₂ O	10 kPa 100 mbar 40 in H ₂ O	6 kPa 60 mbar 24 in H ₂ O	16 kPa 160 mbar 64 in H ₂ O	6 kPa 60 mbar 24 in H ₂ O
L	250 kPa 2,500 mbar 1,000 in H ₂ O	-100 kPa -1,000 mbar -400 in H ₂ O	500 kPa 5 bar 72.5 psi	16 kPa 160 mbar 64 in H ₂ O	10 kPa 100 mbar 40 in H ₂ O	8.3 kPa 83 mbar 34 in H ₂ O	16 kPa 160 mbar 64 in H ₂ O	8.3 kPa 83 mbar 34 in H ₂ O
D	1,000 kPa 10 bar 145 psi	-100 kPa -1 bar -14.5 psi	2 MPa 20 bar 290 psi	33 kPa 0.33 bar 4.9 psi	33 kPa 0.33 bar 4.9 psi	33 kPa 0.33 bar 4.9 psi	33 kPa 0.33 bar 4.9 psi	33 kPa 0.33 bar 4.9 psi
U	3,000 kPa 30 bar 435 psi	-100 kPa -1 bar -14.5 psi	6 MPa 60 bar 870 psi	100 kPa 1 bar 14.5 psi	100 kPa 1 bar 14.5 psi	100 kPa 1 bar 14.5 psi	100 kPa 1 bar 14.5 psi	100 kPa 1 bar 14.5 psi
R	10 MPa 100 bar 1,450 psi	-100 MPa -1 bar -14.5 psi	20 MPa 200 bar 2,900 psi	333 kPa 3.3 bar 49 psi	333 kPa 3.3 bar 49 psi	333 kPa 3.3 bar 49 psi	333 kPa 3.3 bar 49 psi	333 kPa 3.3 bar 49 psi
V	60 MPa 600 bar 8,700 psi	-100 kPa -1 bar -14.5 psi	90 MPa 900 bar 13,050 psi	2 MPa 20 bar 290 psi	2 MPa 20 bar 290 psi	2 MPa 20 bar 290 psi	2 MPa 20 bar 290 psi	2 MPa 20 bar 290 psi

1) For other usage restrictions caused by filling liquids, please refer to the table titled "Pressure limits".

Measuring range and span limits

Sensor code	Upper range limit (URL)	Lower range limit (LRL) ¹⁾	Overload limits Measuring equipment	Minimum span				
				Flush diaphragm			With extension	
				265GM/AM	265GC/AC			
				DN 25/1"	DN 50/2"	DN 80/3"	DN 50/2"	DN 80/3"
				Max. 250 bar 25 MPa 3,625 psi	Max. 100 bar 10 MPa 1,450 psi	Max. 100 bar 10 MPa 1,450 psi	Max. 100 bar 10 MPa 1,450 psi	Max. 100 bar 10 MPa 1,450 psi

Model 265A.

F	40 kPa abs. 400 mbar abs. 300 mmHg	0 kPa abs. 0 mbar abs. 0 mmHg	1 MPa 10 bar 145 psi	16 kPa 160 mbar 120 mmHg	10 kPa 100 mbar 75 mmHg	6 kPa 60 mbar 45 mmHg	16 kPa 160 mbar 120 mmHg	6 kPa 60 mbar 45 mmHg
L	250 kPa abs. 2,500 mbar abs. 1,875 mmHg	0 kPa abs. 0 mbar abs. 0 mmHg	500 kPa 5 bar 72.5 psi	16 kPa 160 mbar 120 mmHg	12.5 kPa 125 mbar 94 mmHg	12.5 kPa 125 mbar 94 mmHg	16 kPa 160 mbar 120 mmHg	12.5 kPa 125 mbar 94 mmHg
D	1,000 kPa abs. 10 bar abs. 145 psia	0 kPa abs. 0 mbar abs. 0 mmHg	2 MPa 20 bar 290 psi	50 kPa 0.5 bar 375 mmHg	50 kPa 0.5 bar 375 mmHg	50 kPa 0.5 bar 375 mmHg	50 kPa 0.5 bar 375 mmHg	50 kPa 0.5 bar 375 mmHg
U	3,000 kPa abs. 30 bar abs. 435 psia	0 kPa abs. 0 mbar abs. 0 mmHg	6 MPa 60 bar 870 psi	150 kPa 1.5 bar 21.7 psi	150 kPa 1.5 bar 21.7 psi	150 kPa 1.5 bar 21.7 psi	150 kPa 1.5 bar 21.7 psi	150 kPa 1.5 bar 21.7 psi
R	10 MPa abs. 100 bar abs. 1,450 psia	0 kPa abs. 0 mbar abs. 0 mmHg	20 MPa 200 bar 2,900 psi	500 kPa 5 bar 72.5 psi	500 kPa 5 bar 72.5 psi	500 kPa 5 bar 72.5 psi	500 kPa 5 bar 72.5 psi	500 kPa 5 bar 72.5 psi

1) For other usage restrictions caused by filling liquids, please refer to the table titled "Pressure limits".

Measuring range and span limits

Sensor code	Upper range limit (URL)	Lower range limit (LRL) ¹⁾	Overload limits	Minimum span					
				Inline remote seal		Remote seal with quick couplings		Miniature remote seal	
				265GJ/AJ		265GG/AG		265GN/AN	
						Dairy thread DIN 11851	Clamp connection		
			DN 25/1"	DN 40 DN 50/2" DN 80/3"	DN 50	DN 2 "	G 1 A	G 1 ½ A	
			Max. 250 bar 25 MPa 3,625 psi	Max. 250 bar 25 MPa 3,625 psi	Max. 25 bar 2.5 MPa 360 psi	Max. 40 bar 4 MPa 580 psi	Max. 600 bar 60 MPa 8,700 psi	Max. 600 bar 60 MPa 8,700 psi	

Model 265G.

C	6 kPa 60 mbar 24 in H ₂ O	-6 kPa -60 mbar -24 in H ₂ O	1 MPa 10 bar 145 psi	-	-	-	-	-	-
F	40 kPa 400 mbar 160 in H ₂ O	-40 kPa -400 mbar -160 in H ₂ O	1 MPa 10 bar 145 psi	-	-	-	-	-	-
L	250 kPa 2,500 mbar 1,000 in H ₂ O	-100 kPa -1,000 mbar -400 in H ₂ O	500 kPa 5 bar 72.5 psi	-	250 kPa 2.5 bar 36.3 psi	45 kPa 450 mbar 6.5 psi	200 kPa 2 bar 29 psi	-	120 kPa 1.2 bar 17.4 psi
D	1,000 kPa 10 bar 145 psi	-100 kPa -1 bar -14.5 psi	2 MPa 20 bar 290 psi	400 kPa 4 bar 58 psi	250 kPa 2.5 bar 36.3 psi	45 kPa 450 mbar 6.5 psi	200 kPa 2 bar 29 psi	600 kPa 6 bar 87 psi	120 kPa 1.2 bar 17.4 psi
U	3,000 kPa 30 bar 435 psi	-100 kPa -1 bar -14.5 psi	6 MPa 60 bar 870 psi	400 kPa 4 bar 58 psi	250 kPa 2.5 bar 36.3 psi	100 kPa 1 bar 14.5 psi	200 kPa 2 bar 29 psi	600 kPa 6 bar 87 psi	120 kPa 1.2 bar 17.4 psi
R	10 MPa 100 bar 1,450 psi	-100 MPa -1 bar -14.5 psi	20 MPa 200 bar 2,900 psi	400 kPa 4 bar 58 psi	333 kPa 3.3 bar 49 psi	333 kPa 3.3 bar 49 psi	333 kPa 3.3 bar 49 psi	600 kPa 6 bar 87 psi	333 kPa 3.3 bar 49 psi
V	60 MPa 600 bar 8,700 psi	-100 kPa -1 bar -14.5 psi	90 MPa 900 bar 13,050 psi	2 MPa 20 bar 290 psi	2 MPa 20 bar 290 psi	-	-	2 MPa 20 bar 290 psi	2 MPa 20 bar 290 psi

1) For other usage restrictions caused by filling liquids, please refer to the table titled "Pressure limits".

Measuring range and span limits

Sensor code	Upper range limit (URL)	Lower range limit (LRL) ¹⁾	Overload limits	Minimum span					
				Inline remote seal		Remote seal with quick couplings		Miniature remote seal	
				265GJ/AJ		265GG/AG		265GN/AN	
						Dairy thread DIN 11851	Clamp connection		
				DN 25/1"	DN 40 DN 50/2" DN 80/3"	DN 50	DN 2 "	G 1 A	G 1 ½ A
				Max. 250 bar 25 MPa 3,625 psi	Max. 250 bar 25 MPa 3,625 psi	Max. 25 bar 2.5 MPa 360 psi	Max. 40 bar 4 MPa 580 psi	Max. 600 bar 60 MPa 8,700 psi	Max. 600 bar 60 MPa 8,700 psi

Model 265A.

F	40 kPa abs. 400 mbar abs. 300 mmHg	0 kPa abs. 0 mbar abs. 0 mmHg	1 MPa 10 bar 145 psi	-	-	-	-	-	-
L	250 kPa abs. 2,500 mbar abs. 1,875 mmHg	0 kPa abs. 0 mbar abs. 0 mmHg	500 kPa 5 bar 72.5 psi	-	250 kPa 2.5 bar 36.3 psi	45 kPa 450 mbar 6.5 psi	200 kPa 2 bar 29 psi	-	120 kPa 1.2 bar 17.4 psi
D	1,000 kPa abs. 10 bar abs. 145 psia	0 kPa abs. 0 mbar abs. 0 mmHg	2 MPa 20 bar 290 psi	400 kPa 4 bar 58 psi	250 kPa 2.5 bar 36.3 psi	50 kPa 500 mbar 7.25 psi	200 kPa 2 bar 29 psi	600 kPa 6 bar 87 psi	120 kPa 1.2 bar 17.4 psi
U	3,000 kPa abs. 30 bar abs. 435 psia	0 kPa abs. 0 mbar abs. 0 mmHg	6 MPa 60 bar 870 psi	400 kPa 4 bar 58 psi	250 kPa 2.5 bar 36.3 psi	150 kPa 1.5 bar 21.7 psi	200 kPa 2 bar 29 psi	600 kPa 6 bar 87 psi	150 kPa 1.5 bar abs. 21.7 psia
R	10 MPa abs. 100 bar abs. 1,450 psia	0 kPa abs. 0 mbar abs. 0 mmHg	20 MPa 200 bar 2,900 psi	500 kPa 5 bar 72.5 psi	500 kPa 5 bar 72.5 psi	500 kPa 5 bar 72.5 psi	500 kPa 5 bar 72.5 psi	600 kPa 6 bar 87 psi	500 kPa 5 bar 72.5 psi

1) For other usage restrictions caused by filling liquids, please refer to the table titled "Pressure limits".

Span limits

Maximum span = URL = upper range limit

To optimize performance characteristics, it is recommended that you select the transmitter sensor with the lowest turndown (TD) ratio.

Zero suppression and elevation

Zero and span can be set to any value within the range limits listed in the table if:

- Set span \geq minimum span

Damping

Adjustable time constant: 0 ... 60 s

This is in addition to the sensor response time.

Warm-up period

Operation within specifications: \leq 2.5 sec. with minimum damping

Insulation resistance

$>$ 100 M Ω at 500 V DC (between terminals and ground)

3 Operating limits

3.1 Temperature limits in °C

Ambient (operating temperature)

	Ambient or operating temperature range
Operating temperature	-40 ... 85 °C (-40 ... 185 °F)
Silicone oil	-40 ... 85 °C (-40 ... 185 °F)
Chlorofluorocarbons	-40 ... 85 °C (-40 ... 185 °F)
White oil filling	-6 ... 85 °C (21 ... 185 °F)
LCD display	-20 ... 70 °C (-4 ... 158 °F)
Non-list design: O ₂ measurement with sensor code C and F	-20 ... 60 °C (-4 to 140 °F)

i Important

For applications in potentially explosive atmospheres, the temperature range specified on the relevant certificate/approval must be observed.

Process

ID letter(s), density, and process temperature usage restrictions for the various filling liquids in the remote seal:

Filling liquids	ID	Density at 20 °C (68 °F) in kg/m ³	Process temperature	
			At maximum ambient temperature	
			40 °C (104 °F)	60 °C (140 °F)
Silicone oil	IC	1,055	-30 ... 180 °C (-22 ... 356 °F)	-30 ... 140 °C (-22 ... 284 °F)
Carbon fluoride	L	1,860	-30 ... 150 °C (-22 ... 302 °F)	-30 ... 140 °C (-22 ... 284 °F)
White oil	WB	849	-6 ... 180 °C (21 ... 356 °F)	-6 ... 140 °C (21 ... 284 °F)
Vacuum-proof design	IC-V	1,055	-30 ... 180 °C (-22 ... 356 °F)	-30 ... 140 °C (-22 ... 284 °F)

Remote seal with dairy thread and Buna O ring: Max. 120 °C (248 °F)

Storage

	Storage temperature range
Storage temperature	-50 ... 85 °C (-58 ... 185 °F)
LCD display	-40 ... 85 °C (-40 ... 185 °F)
White oil filling	-6 ... 85 °C (21 ... 185 °F)

	Humidity during storage
Relative humidity	Up to 75 %

3.2 Pressure limits

The maximum permissible pressure depends on the permissible sensor overload (refer to table "Measuring range and span limits") and the permissible working pressure for the process connection (according to the order information).

Please refer to the table below for the minimum working pressure.

Filling liquids	ID	Pressure in kPa abs.			
		20 °C (68 °F)	100 °C (212 °F)	150 °C (302 °F)	180 °C (356 °F)
Silicone oil	IC	> 50	> 50	> 50	> 65
Carbon fluoride	L	> 100	> 100	> 100	-
White oil	WB	> 50	> 100	> 100	> 100
Silicone oil for vacuum applications	IC-V	> 0.5	> 2.5	> 3.8	> 4.5

4 Environmental limits

Electromagnetic compatibility (EMC)

Conforms to the requirements and tests for EMC Directive 89/336/EC, as well as to EN 61000-6-3 concerning emitted interference and EN 61000-6-2 concerning interference immunity.

Meets NAMUR recommendations.

Low Voltage Directive

Complies with 73/23/EC.

Pressure Equipment Directive (PED)

Complies with 97/23/EC Category III, module H.

Humidity

Relative humidity: Up to 100 %

Condensation, icing: Permissible

Vibration resistance

Acceleration up to 2 g at frequencies up to 1,000 Hz (according to IEC 60068-2-6).

Shock resistance (acc. to IEC 60068-2-27)

Acceleration: 50 g

Duration: 11 ms

Protection type (humid and dusty atmospheres)

The transmitter is dust and sand-tight, and is protected against immersion effects as defined by the following standards:

- IEC EN 60529 (1989) with IP 67 (with IP 68 on request)
- NEMA 4X
- JIS C0920

Protection type with plug connection: IP 65

5 Potentially explosive atmospheres

Transmitter with "Intrinsically safe EEx ia" type of explosion protection in accordance with Directive 94/9/EC (ATEX)

Transmitter with 4 ... 20 mA output signal and HART communication:

Designation: II 1/2 GD T 50 °C EEx ia IIC T6

II 1/2 GD T 95 °C EEx ia IIC T4

Power supply and signal circuit with "Intrinsically safe, EEx ib IIB/IIC" or "Intrinsically safe, EEx ia IIB/IIC" type of explosion protection, for connection to supply units with the following maximum values:

II 1/2 GD T 50 °C EEx ia or ib IIC T6

II 1/2 GD T 95 °C EEx ia or ib IIC T4

Temperature class T4:

$U_i = 30 \text{ V}$

$I_i = 200 \text{ mA}$

$P_i = 0.8 \text{ W}$ for T4 where $T_a = -40 \dots 85^\circ\text{C}$ (-40 ... 185°F)

$P_i = 1.0 \text{ W}$ for T4 where $T_a = -40 \dots 70^\circ\text{C}$ (-40 ... 158°F)

For temperature class T6:

$P_i = 0.7 \text{ W}$ for T6 where $T_a = -40 \dots 40^\circ\text{C}$ (-40 ... 104°F)

Effective internal capacitance: $C_i = 10 \text{ nF}$

Effective internal inductance: $L_i \approx 0$

Fieldbus transmitter (PROFIBUS PA / FOUNDATION Fieldbus):

Designation: II 1/2 GD T 50 °C EEx ia IIC T6

II 1/2 GD T 95 °C EEx ia IIC T4

Power supply and signal circuit with "Intrinsically safe" type of explosion protection, only for connection to supply units certified according to the FISCO concept and with the following maximum values:

II 1/2 GD T 50 °C EEx ia or ib IIC T6 $U_i = 17.5 \text{ V}$

II 1/2 GD T 95 °C EEx ia or ib IIC T4 $I_i = 360 \text{ mA}$

$P_i = 2.52 \text{ W}$

II 1/2 GD T 50 °C EEx ia or ib IIB T6 $U_i = 17.5 \text{ V}$

II 1/2 GD T 95 °C EEx ia or ib IIB T4 $I_i = 380 \text{ mA}$

$P_i = 5.32 \text{ W}$

or connection to supply units or barriers with linear characteristics.

Maximum values:

II 1/2 GD T 50 °C EEx ia or ib IIC T6

$U_i = 24 \text{ V}$

II 1/2 GD T 95 °C EEx ia or ib IIC T4

$I_i = 250 \text{ mA}$

$P_i = 1.2 \text{ W}$

Effective internal inductance: $L_i \leq 10 \mu\text{H}$,

Effective internal capacitance: $C_i \approx 0$

Permissible ambient temperature range depending on temperature class:

Temperature class	Lower limit of ambient temperature	Upper limit of ambient temperature
T4	-40 °C (-40 °F)	85 °C (185 °F)
T5, T6	-40 °C (-40 °F)	40 °C (104 °F)

Category 3 transmitter for use in "Zone 2" as defined by Directive 94/9/EC (ATEX)

Transmitter with 4 ... 20 mA output signal and HART communication:

Designation: II 3 GD T 50 °C EEx nL IIC T6
II 3 GD T 95 °C EEx nL IIC T4

Operating conditions:
Supply and signal circuit

(terminal signal ±): $U \leq 45 \text{ V}$
 $I \leq 22.5 \text{ mA}$

Ambient temperature range:

Temperature class T4: $T_a = -40 \dots 85^\circ\text{C}$ (-40 ... 185°F)
Temperature class T5 and T6: $T_a = -40 \dots 40^\circ\text{C}$ (-40 ... 104°F)

Transmitter with "Flameproof EEx d" type of explosion protection in accordance with Directive 94/9/EC (ATEX)

Transmitter with 4 ... 20 mA output signal, HART communication, and fieldbus transmitter (PROFIBUS PA / FOUNDATION Fieldbus)

Designation: II 1/2 G EEx d IIC T6

Operating conditions:

Ambient temperature range: $-40 \dots 75^\circ\text{C}$ (-40 ... 167°F)

Transmitter with "Intrinsically safe EEx ia" type of explosion protection in accordance with Directive 94/9/EC (ATEX), or

"Flameproof EEx d" type of explosion protection in accordance with Directive 94/9/EC (ATEX), or

"Limited energy EEx nL" type of explosion protection in accordance with Directive 94/9/EC (ATEX) (alternative certification)

Transmitter with 4 ... 20 mA output signal and HART communication:

Identification: II 1/2 GD T50 °C EEx ia IIC T6
II 1/2 GD T95 °C EEx ia IIC T4;
(refer to "EEx ia" for additional data)

or

Identification: II 1/2 GD T85 °C EEx d IIC T6
Ambient temperature range: $-40 \dots 75^\circ\text{C}$ (-40 ... 167°F)

or

Identification: II 3 GD T50 °C EEx nL IIC T6
II 3 GD T95 °C EEx nL IIC T4
(refer to "EEx nL" for additional data)

Factory Mutual (FM)

Transmitter with 4 ... 20 mA output signal and HART communication:

Intrinsically safe protection:

Class I; Division 1; Groups A, B, C, D;
Class I; Zone 0; Group IIC; AEx ia IIC

Degree of protection: NEMA type 4X (indoor or outdoor installation)

Permissible ambient temperature range depending on temperature class:

$U_{\text{max}} = 30 \text{ V}, C_i = 10.5 \text{ nF}, L_i = 10 \mu\text{H}$			
Ambient temperature	Temperature class	I_{max}	P_i
-40 ... 85 °C (-40 ... 185 °F)	T4	200 mA	0.8 W
			1 W
-40 ... 40 °C (-40 ... 104 °F)	T5	25 mA	0.75 W
	T6		0.5 W

Fieldbus transmitter (PROFIBUS PA / FOUNDATION Fieldbus):

Intrinsically safe protection:

Class I, II, and III; Division 1;
Groups A, B, C, D, E, F, G;
Class I; Zone 0; AEx ia Group IIC T6, T4;
Non-incendive Class I, II, and III; Division 2;
Groups A, B, C, D, F, G

Transmitter with 4 ... 20 mA output signal, HART communication, and fieldbus transmitter (PROFIBUS PA / FOUNDATION Fieldbus):

Explosion-proof protection:

Class I, Division 1, Groups A, B, C, D;
Class II/III, Division 1, Groups E, F, G

Degree of protection: NEMA type 4X (indoor or outdoor installation)

Canadian Standards Association (CSA)

Transmitter with 4 ... 20 mA output signal, HART communication, and fieldbus transmitter (PROFIBUS PA / FOUNDATION Fieldbus)

Explosion-proof protection:

Class I, Division 1, Groups B, C, D;
Class II, Division 1, Groups E, F, G

Degree of protection: NEMA type 4X (indoor or outdoor installation)

Standards Association of Australia (SAA)

Transmitter with "Intrinsically safe EEx ia" and "Non-sparking EEx n" types of protection

Transmitter with 4 ... 20 mA output signal and HART communication:

Identification:

Ex ia IIC T4 ($P_i \leq 0.8 \text{ W}$, $T_a = 85 \text{ }^\circ\text{C}$)/T6 ($P_i \leq 0.7 \text{ W}$, $T_a = 40 \text{ }^\circ\text{C}$)

Ex n IIC T4 ($T_a = 85 \text{ }^\circ\text{C}$)/T6 ($T_a = 40 \text{ }^\circ\text{C}$)

IP 66

Intrinsically safe installation input parameters:

$U_i = 30 \text{ V}$

$I_i = 200 \text{ mA}$

$P_i = 0.8 \text{ W}$ for T4 where $T_a = +85 \text{ }^\circ\text{C}$ or

$P_i = 0.7 \text{ W}$ for T6 where $T_a = +40 \text{ }^\circ\text{C}$

Effective internal capacitance: $C_i = 52 \text{ nF}$

Effective internal inductance: $L_i \approx 0 \text{ mH}$

EEx n installation input parameters:

$U_i = 30 \text{ V}$

Transmitter with "Flameproof Ex d" type of explosion protection

Transmitter with 4 ... 20 mA output signal, HART communication, and fieldbus transmitter (PROFIBUS PA / FOUNDATION Fieldbus, Modbus):

Identification:

Zone 1: Ex d IIC T6 ($T_{amb} +75 \text{ }^\circ\text{C}$) IP66 / IP67

Zone A21: Ex tD A21 T85 ($T_{amb} +75 \text{ }^\circ\text{C}$) IP66 / IP67

NEPSI (China)

Intrinsically safe protection

Transmitter with 4 ... 20 mA output signal and HART communication:

Identification: Ex ia IIC T4/T6

Permissible ambient temperature range depending on temperature class:

Temperature class	Ambient temperature	Pi
T4	-40 ... 85 °C (-40 ... 185 °F)	0.8
T4	-40 ... 70 °C (-40 ... 158 °F)	1.0
T6	-40 ... 40 °C (-40 ... 104 °F)	0.7

Supply and signal circuit for connection to supply units with the following maximum values:

$U_{i\max} = 30 \text{ V}$, $I_{i\max} = 200 \text{ mA}$			
Temperature class	$P_{i\max}$	Max. internal parameters	
		C_i (nF)	L_i (μH)
T6	0.7	47	10
T4	0.8	47	10
T4	1.0	47	10

Fieldbus transmitter (PROFIBUS PA / FOUNDATION Fieldbus)

Identification: Ex ia IIB/IIC T4 ... T6

Permissible ambient temperature range depending on temperature class:

Temperature class	Ambient temperature
T4	-40 ... 85 °C (-40 ... 185 °F)
T5	-40 ... 50 °C (-40 ... 122 °F)
T6	-40 ... 40 °C (-40 ... 104 °F)

Supply and signal circuit for connection to supply units with the following maximum values:

Ex mark	Supply unit Characteristic	$U_{i\max}$ (V)	$I_{i\max}$ (mA)	$P_{i\max}$ (W)
Ex ia IIC T4 ... T6	Rectangular or trapezoidal	17.5	360	2.52
Ex ia IIB T4 ... T6	Rectangular or trapezoidal	17.5	380	5.32
Ex ia IIC T4 ... T6	Linear	24	250	1.2
$C_{i\max}$ (nF)		$L_{i\max}$ (μH)		
0		10		

Explosion-proof protection

Transmitter with 4 ... 20 mA output signal, HART communication, and fieldbus transmitter (PROFIBUS PA / FOUNDATION Fieldbus)

Identification: Ex d IIC T6

Operating conditions

Ambient temperature range: -40 ... 75 °C (-40 ... 167 °F)

6 Electrical data and options

6.1 HART digital communication and 4 ... 20 mA output current

Power supply

The transmitter operates at voltages between 10.5 and 45 V DC with no load, and is protected against reverse polarity connection (additional load enables operation above 45 V DC).

With a backlit LCD display, the minimum voltage is 14 V DC.

In the case of the EEx ia version and other intrinsically safe, approved versions, the supply voltage must not exceed 30 V DC.

Ripple

Maximum permissible supply voltage ripple during communication: According to HART FSK "Physical Layer" specification rev. 8.1.

Load limitations

Total loop resistance with 4 ... 20 mA and HART:

$$R(k\Omega) = \frac{\text{Voltage supply} - \text{Minimum operating voltage (VDC)}}{22.5 \text{ mA}}$$



Important

A minimum of 250 Ω resistance is required for HART communication.

LCD display (optional)

19-segment alphanumeric display (two lines, six characters) with additional bar chart display; option of backlighting for customized display of:

- Output current in percent
- Output current in mA
- Freely selectable process variable

Diagnostic messages, alarms, measuring range upper limit violations, and changes to the configuration are also displayed.

Output signal

4 ... 20 mA two-wire output, linear output signal. In addition, a horizontal cylindrical container, a spherical vessel, or a freely programmable characteristic curve with 20 reference points can be selected.

HART® communication provides digital process variables (% , mA, or engineering units) superimposed on the 4 ... 20 mA signal (protocol in accordance with Bell 202 FSK standard).

Output current limits (according to NAMUR standard)

Overload condition:

- Lower limit: 3.8 mA (can be configured up to 3.5 mA)
- Upper limit: 20.5 mA (can be configured up to 22.5 mA)

Alarm current

Minimum alarm current:	Can be configured from 3.5 ... 4 mA; default setting: 3.6 mA
Max. alarm current:	Can be configured from 20 ... 22.5 mA; default setting: 21 mA
Default setting:	Maximum alarm current

SIL: Functional safety (optional)

According to IEC 61 508/61 511

Device with certificate of conformity for use in safety-related applications, up to and including SIL 2.

6.2 PROFIBUS PA output

Model

Pressure transmitter conforming to Profile 3.0, Class A and B;
ID number 04C2 HEX

Power supply

The transmitter is operated at 10.2 ... 32 V DC (no polarity).
The supply voltage must not exceed 17.5 V DC when used in EEx ia zones.

Intrinsically safe installation in accordance with FISCO model.

Current consumption

Operating (quiescent): 11.7 mA
Fault current limiting: Maximum 17.3 mA

Output signal

Physical layer in accordance with IEC 1158-2/EN 61158-2;
transmission using Manchester II modulation at 31.25 kbit/sec.

Output interface

PROFIBUS PA communication according to Profibus DP50170 Part 2/DIN 19245 Part 1-3

Output cycle time

40 ms

Function blocks

1 standard analog input function block
1 transducer block
1 physical block

LCD display (optional)

19-segment alphanumeric display (two lines, six characters) with additional bar chart display; option of backlighting.

Customized display:

Output value in percent or OUT (analog input)

Diagnostic messages, alarms, measuring range upper limit violations, and changes to the configuration are also displayed.

Transmitter interference mode

Permanent self-diagnosis; potential errors indicated in diagnostic parameters and in the status of process values.

6.3 FOUNDATION Fieldbus output

Power supply

The transmitter is operated at 10.2 ... 32 V DC (no polarity).
The supply voltage must not exceed 17.5 V DC when used in EEx ia zones.

Intrinsically safe installation in accordance with FISCO model.

Current consumption

Operating (quiescent): 11.7 mA
Fault current limiting: Maximum 17.3 mA

Output signal

Physical layer in accordance with IEC 1158-2/EN 61158-2;
transmission using Manchester II modulation at 31.25 kbit/sec.

Function blocks/execution time

1 standard analog input function block/maximum 25 ms,
1 standard PID function block

Additional blocks

1 manufacturer-specific pressure with calibration transducer block
1 enhanced resource block

Number of link objects

10

Number of VCRs

16

Output interface

FOUNDATION fieldbus digital communication protocol in accordance with standard H1; complies with specification V. 1.5.

FF registration no.: IT023600

LCD display (optional)

19-segment alphanumeric display (two lines, six characters) with additional bar chart display; option of backlighting.

Customized display:

Output value in percent or OUT (analog input)

Diagnostic messages, alarms, measuring range upper limit violations, and changes to the configuration are also displayed.

Transmitter interference mode

Permanent self-diagnosis; potential errors indicated in diagnostic parameters and in the status of process values.

7 Measuring accuracy

Reference conditions acc. to IEC 60770

- Ambient temperature T_U = Constant, in range: 18 ... 30 °C (64 ... 86 °F)
- Relative humidity = Constant, in range: 30 ... 80 %
- Atmospheric pressure P_U = Constant, in range: 950 ... 1,060 mbar
- Span based on zero position
- Remote seal isolating diaphragm material: Stainless steel
- Filling liquid: Silicone oil
- Supply voltage: 24 V DC
- Load with HART: 250 Ω
- Transmitter not grounded
- Characteristic setting: Linear, 4 ... 20 mA

i Important

Unless otherwise specified, errors are given as a percentage of the span value.

The accuracy of the measurement in relation to the upper range limit (URL) is affected by the turndown (TD); i.e., the ratio of the upper range limit (URL) to the set span (URL/span).

Select the transmitter sensor with the smallest possible turndown. This optimizes the accuracy of the measurement.

Dynamic behavior (according to IEC 61298-1)

Devices with standard configurations and a turndown of up to 30:1, plus linear output characteristics.

Reaction time:	30 ms
Time constant (63 %):	200 ms (for all sensors)

Measurement deviation (for setting cut-off point)

Percentage of set span, consisting of non-linearity, hysteresis, and non-reproducibility.

In the case of fieldbus devices, SPAN refers to the analog input function block output scale range.

Turndown	Measurement deviation
1:1 to 10:1	± 0.04 %
>10:1	$\pm(0.04$ % + $0.005 \times TD - 0.05)$ %

8 Operating influences

Thermal change in ambient temperature as regards the zero signal and span (turndown up to 15:1), in relation to the set span

Range	Maximum effect on zero signal and span
-10 ... 60 °C (14 ... 140 °F)	Sensor code C, F: $\pm(0.08 \% \times TD + 0.08 \%)$ Sensor code C, F (abs.): $\pm(0.20 \% \times TD + 0.10 \%)$ Sensor code L, D, U, R, V: $\pm(0.06 \% \times TD + 0.06 \%)$
-40 ... -10 °C (-40 ... 14 °F) and 60 ... 80 °C (140 ... 176 °F)	Sensor code C, F: $\pm(0.04 \% / 10 \text{ K} \times TD + 0.05 \% / 10 \text{ K})$ Sensor code C, F (abs.): $\pm(0.10 \% / 10 \text{ K} \times TD + 0.05 \% / 10 \text{ K})$ Sensor code L, D, U, R, V: $\pm(0.04 \% / 10 \text{ K} \times TD + 0.04 \% / 10 \text{ K})$

Additional effect for each 20 K (36 °F) change in the ambient temperature

Remote seal type	Size	Error		
		kPa	mbar	In H ₂ O
Flush diaphragm	1 in/DN 25	0.02	0.2	0.08
Flush diaphragm	2 in/DN 50	0.015	0.15	0.06
Flush diaphragm	3 in/DN 80	0.01	0.1	0.04
With tube	2 in/DN 50	0.025	0.25	0.1
With tube	3 in/DN 80	0.01	0.1	0.04
Inline remote seal	1 in/DN 25	0.6	6	2.4
Inline remote seal	1.5 in/DN 40	0.4	4	1.6
Inline remote seal	2 in/DN 50	0.1	1	0.4
Inline remote seal	3 in/DN 80	0.15	1.5	0.6
Dairy thread	DN 50	0.08	0.8	0.32
Clamp connection	2 in	0.28	2.8	1.12
Miniature remote seal	G1A	2.8	28	11.2
Miniature remote seal	G1.5A	0.4	4	1.6

Additional effect for each 20 K (36 °F) change in the process temperature at the remote seal diaphragm

Remote seal type	Size	Error		
		kPa	mbar	In H ₂ O
Flush diaphragm	1 in/DN 25	0.08	0.8	0.32
Flush diaphragm	2 in/DN 50	0.08	0.8	0.32
Flush diaphragm	3 in/DN 80	0.02	0.2	0.08
With tube	2 in/DN 50	0.18	1.8	0.72
With tube	3 in/DN 80	0.02	0.2	0.08
Inline remote seal	1 in/DN 25	1.8	18	7.2
Inline remote seal	1.5 in/DN 40	1.2	12	4.8
Inline remote seal	2 in/DN 50	0.8	8	3.2
Inline remote seal	3 in/DN 80	1.2	12	4.8
Dairy thread	DN 50	0.14	1.4	0.56
Clamp connection	2 in	0.4	4	1.6
Miniature remote seal	G1A	7	70	28
Miniature remote seal	G1.5A	0.8	8	3.2

Power supply

Within the specified limits for the voltage/load, the total effect is less than 0.001 % of the upper range limit per volt.

Load

Within the specified load/voltage limits, the total effect is negligible.

Electromagnetic fields

Total effect: Less than 0.05 % of span between 80 and 1,000 MHz and at field strengths of up to 10 V/m, when tested with unshielded cables, and either with or without a display.

9 Technical specification



Important

Refer to the order information sheets to check the availability of different versions of the relevant model.

9.1 Materials

Isolating diaphragms¹⁾

See order information for remote seals

Process connection¹⁾

See order information for remote seals

Remote seal filling liquid

See order information for remote seals

Sensor filling liquid

Silicone oil, inert filling (carbon fluoride), white oil (FDA)

Sensor housing

Stainless steel (316L/1.4404)

Electronics housing and cover

Barrel design

- Aluminum alloy with low copper content (<0.1 %), baked epoxy finish
- Stainless steel (316L/1.4404)

DIN design

- Aluminum alloy with low copper content (<0.1 %), baked epoxy finish

O-ring cover

Viton™

Local zero position and span adjustments

Fiber glass-reinforced polycarbonate plastic (removable), no adjustment options for stainless steel housings

Name plate

Stainless steel (304/1.4301) or plastic data plate attached to the electronics housing

™ Hastelloy is a Cabot Corporation trademark

™ Monel is an International Nickel Co. trademark

™ Viton is a DuPont de Nemours trademark

¹⁾ Transmitter parts that make contact with the medium

9.2 Calibration

Standard:

0 to upper range limit (URL) for ambient temperature and atmospheric pressure

Optional:

To specified span

9.3 Optional accessories

LCD display

Pluggable and rotatable design

Supplementary measuring point indication tag

Tag with wire (both stainless steel) attached to the transmitter, with a maximum of 30 characters including spaces

Lightning protection

Up to 4 kV

- Voltage pulses: 1.2 μs rise time/50 μs delay time at half value
- Current pulses: 8 μs rise time/20 μs delay time at half value

Cannot be supplied for devices with:

- ATEX EEx nL type of explosion protection,
- PROFIBUS PA/FOUNDATION fieldbus with intrinsically safe design (ATEX EEx i), or
- FM intrinsically safe type of explosion protection.

Certificates (test, design, characteristics, material traceability)

9.4 Process connections

See order information for remote seals

9.5 Electrical Connections

Two ½ -14 NPT or M20 x 1.5 threaded bores for cable glands, directly on housing or plug connector:

- HART: Straight or angled Harting Han 8D (8U) connector and one mating plug
- FOUNDATION fieldbus/PROFIBUS PA: 7/8" plug/M12 x 1

Terminals

HART version:

Four terminals for signals/external display, for wire cross sections of up to 2.5 mm² (14 AWG), and four connection points for testing and communication purposes.

Fieldbus versions:

Two signal terminals (bus connection) for wire cross sections of up to 2.5 mm² (14 AWG)

Grounding

Internal and external ground terminals for wire cross sections of up to 4 mm² (12 AWG) are provided.

9.6 Installation position

The transmitter can be installed in any position.

The electronics housing may be rotated 360°. A stop is provided to prevent overtravel.

9.7 Weight (without options)

Transmitter: Approx. 1.2 kg (2.65lb)

Wafer remote seal:

- DN 50, PN 16/40 with flush diaphragm: Approx. 3.3 kg (6.75lb)
- DN 2 in, Class 300 with flush diaphragm: Approx. 3.7 kg (7.57lb)
- DN 50, PN 16/40 with 100 mm tube: Approx. 4.0 kg (8.18lb)
- DN 2 in, Class 300 with 100 mm tube: Approx. 5.4 kg (11.05lb)
- DN 80, PN 16/40 with flush diaphragm: Approx. 5.8 kg (11.87lb)
- DN 3 in, Class 150 with flush diaphragm: Approx. 5.3 kg (10.84lb)
- DN 80, PN 16/40 with 100 mm tube: Approx. 7.5 kg (15.35lb)
- DN 3 in, Class 150 with 100 mm tube: Approx. 7.0 kg (14.32lb)

Remote seal with flush diaphragm DN 25/1 in, miniature remote seal, inline remote seal, and remote seal with quick couplings:

See dimension drawings

9.8 Packaging

Carton

10 Configuration

10.1 Transmitter with HART communication and 4 ... 20 mA output current

Standard configuration

Transmitters are calibrated at the factory to the customer's specified measuring range. The calibrated range and measuring point number are provided on the name plate. If this data has not been specified, the transmitter will be delivered with the following configuration:

4 mA	Zero position
20 mA	Upper range limit (URL)
Output	Linear
Damping	0.125 sec.

Transmitter failure mode	21 mA
Optional LCD display	0 ... 100 % linear

Any or all of the configurable parameters listed above - including the upper and lower range limit values - can easily be changed using a portable HART handheld communicator or a PC running the configuration software SMART VISION with DTM for 2600T. Data regarding flange type and material, O-ring materials, and type of filling liquid is stored in the device.

10.2 Transmitter with PROFIBUS PA communication

Transmitters are calibrated at the factory to the customer's specified measuring range. The calibrated range and measuring point number are provided on the name plate. If this data has not been specified, the transmitter will be delivered with the following configuration:

Measuring profile	Pressure
Engineering unit	mbar/bar
Output scale 0 %	Lower range limit (LRL)
Output scale 100 %	Upper range limit (URL)
Output	Linear
Upper alarm limit	Upper range limit (URL)
Upper warning limit	Upper range limit (URL)

Lower warning limit	Lower range limit (LRL)
Lower alarm limit	Lower range limit (LRL)
Hysteresis limit value	0.5 % of output scale
PV filter	0.125 sec.
Address	126

Any or all of the configurable parameters listed above - including the upper and lower range limit values - can easily be changed using a PC running the configuration software SMART VISION with DTM for 2600T. Data regarding flange type and material, O-ring materials, and type of filling liquid is stored in the device.

10.3 Transmitter with FOUNDATION Fieldbus communication

Transmitters are calibrated at the factory to the customer's specified measuring range. The calibrated range and measuring point number are stamped on the name plate. If this data has not been specified, the transmitter will be delivered with the following configuration:

Measuring profile	Pressure
Engineering unit	mbar/bar
Output scale 0 %	Lower range limit (LRL)
Output scale 100 %	Upper range limit (URL)
Output	Linear
Upper alarm limit	Upper range limit (URL)
Upper warning limit	Upper range limit (URL)

Lower warning limit	Lower range limit (LRL)
Lower alarm limit	Lower range limit (LRL)
Hysteresis limit value	0.5 % of output scale
PV filter	0.125 sec.
Address	Not required

Any or all of the configurable parameters listed above - including the upper and lower range limit values - can easily be changed using FOUNDATION fieldbus-compatible configuration software. Data regarding flange type and material, O-ring materials, and type of filling liquid is stored in the device.

11 Mounting dimensions (not design data)

11.1 Transmitter with barrel housing

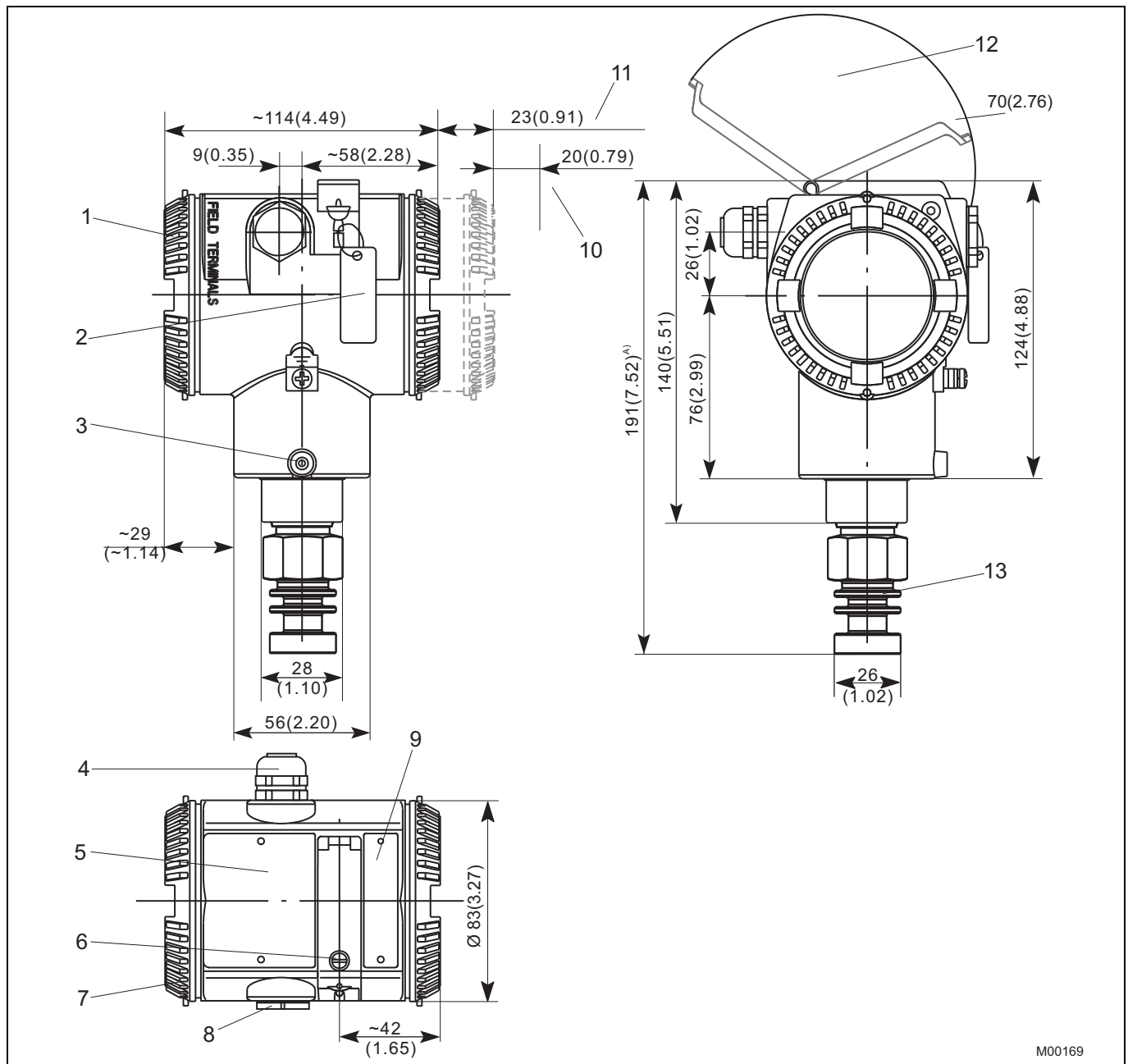


Fig. 1: Dimensions in mm (inches)

- | | |
|---|---|
| 1 Terminal side | 8 Electrical connection (with blind plug) |
| 2 Tag for indicating measuring points, for example (optional) | 9 Plate with key legend, etc. |
| 3 Housing stop-screw | 10 Space for removing the cover required |
| 4 Electrical connection | 11 With LCD display |
| 5 Name plate | 12 Space for rotating the keyboard cover required |
| 6 Captive screw for keyboard cover | 13 Remote seal connection |
| 7 Housing cover | |

A) In the case of direct mount seals, the length (height) of the remote seal must be added to the dimensions specified (see corresponding dimension drawing).

11.2 Transmitter with DIN housing

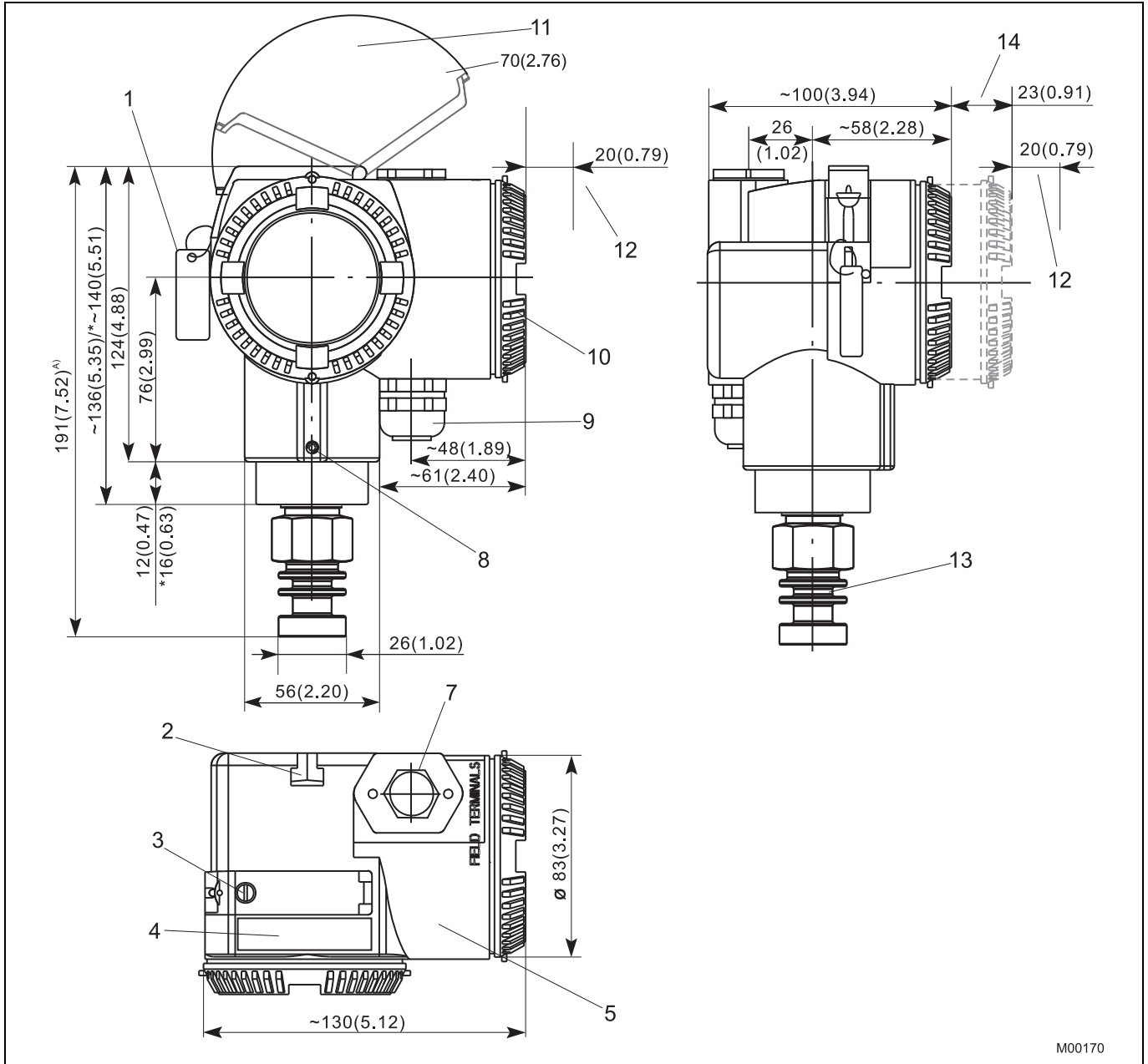


Fig. 2: Dimensions in mm (inches)

- | | |
|---|---|
| 1 Tag for indicating measuring points, for example (optional) | 8 Housing stop-screw |
| 2 Groove for screws (wall or pipe installation) | 9 Electrical connection |
| 3 Captive screw for keyboard cover | 10 Housing cover |
| 4 Plate with key legend, etc. | 11 Space for rotating the keyboard cover required |
| 5 Name plate | 12 Space for removing the cover required (with LCD display) |
| 6 Terminal side | 13 Remote seal connection |
| 7 Electrical connection (with blind plug) | 14 With LCD display |

* Silicon pressure sensor

A) In the case of direct mount seals, the length (height) of the remote seal must be added to the dimensions specified (see corresponding dimension drawing).

11.3 Directly connected remote seals

Gaskets and fixing accessories not supplied.

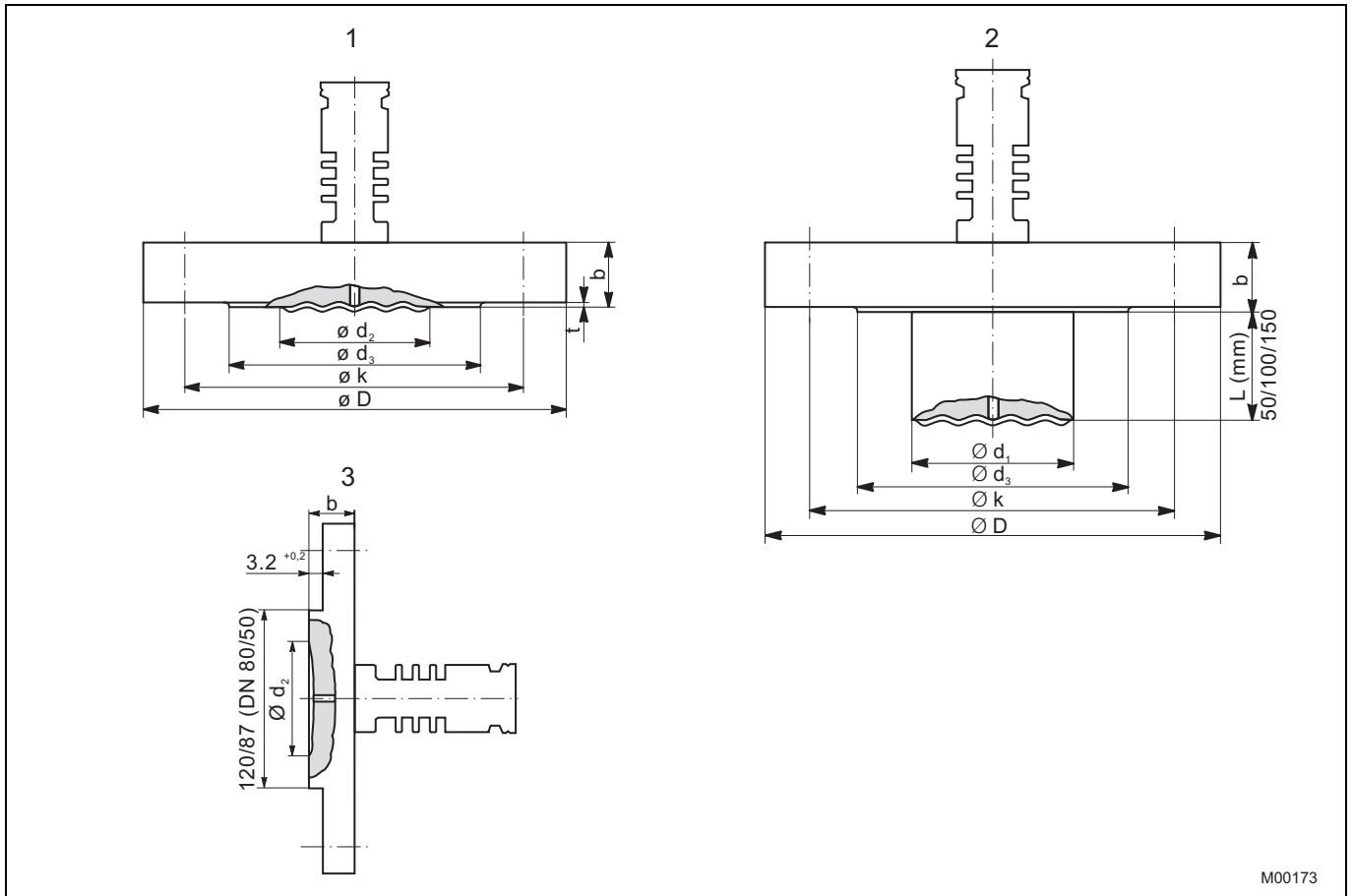


Fig. 3

- 1 Wafer remote seal with flush diaphragm (model 265GC/265AC)
- 2 Wafer remote seal with extended diaphragm (extension) (model 265GC/265AC)
- 3 Wafer remote seal with form V13 sealing surface (model 265GC/265AC)

Sealing surface B2 - EN 1092-1 (form E - DIN 2526), D - EN 1092-1 (DIN 2512-N), form RF (ASME B 16.5)											
Size/max. working pressure	Dimensions in mm (inches)									Screws required	
	D Ø	K Ø	Extension d1 Ø	Without extension	With extension	d3 Ø	t	b	Number	Thread	
				d2 Ø							
DN 50, PN 16/40	165 (6.5)	125 (4.92)	48.3 (1.9)	57 (2.24)	47 (1.85)	102 (4.02)	2 (0.08)	20 (0.79)	4	M16	
DN 50, PN 63	180 (7.09)	135 (5.31)	48.3 (1.9)	57 (2.24)	47 (1.85)	102 (4.02)	2 (0.08)	26 (1.02)	4	M20	
DN 50, PN 100	195 (7.68)	145 (5.71)	48.3 (1.9)	57 (2.24)	47 (1.85)	102 (4.02)	2 (0.08)	28 (1.10)	4	M20	
DN 80, PN 16/40	200 (7.88)	160 (6.3)	73 (2.87)	75 (2.95)	71 (2.80)	138 (5.43)	2 (0.08)	24 (0.94)	8	M16	
DN 80, PN 63	215 (8.47)	170 (6.7)	73 (2.87)	75 (2.95)	71 (2.80)	138 (5.43)	2 (0.08)	28 (1.10)	8	M20	
DN 80, PN 100	230 (9.06)	180 (7.09)	73 (2.87)	75 (2.95)	71 (2.80)	138 (5.43)	2 (0.08)	32 (1.26)	8	M24	
2 " ASME CL 150	152.4 (6)	120.6 (4.75)	48.3 (1.9)	57 (2.24)	47 (1.85)	92 (3.62)	2 (0.08)	17.4 (0.69)	4	M18	
2 " ASME CL 300	165.1 (6.5)	127.0 (5)	48.3 (1.9)	57 (2.24)	47 (1.85)	92 (3.62)	2 (0.08)	20.6 (0.81)	8	M18	
2 " ASME CL 600	165.1 (6.5)	127.0 (5)	48.3 (1.9)	57 (2.24)	47 (1.85)	92 (3.62)	6.4 (0.25)	31.75 (1.25)	8	M18	
3 " ASME CL 150	190.5 (7.5)	152.4 (6)	73 (2.87)	75 (2.95)	71 (2.80)	127 (5)	2 (0.08)	22.2 (0.87)	4	M18	
3 " ASME CL 300	209.5 (8.25)	168.3 (6.63)	73 (2.87)	75 (2.95)	71 (2.80)	127 (5)	2 (0.08)	27.0 (1.06)	8	M20	
3 " ASME CL 600	209.5 (8.25)	168.3 (6.63)	73 (2.87)	75 (2.95)	71 (2.80)	127 (5)	6.4 (0.25)	38.05 (1.5)	8	M20	

11.4 Wafer remote seal DN 25/DN 1 in, with internal diaphragm (model 265GM/265AM)

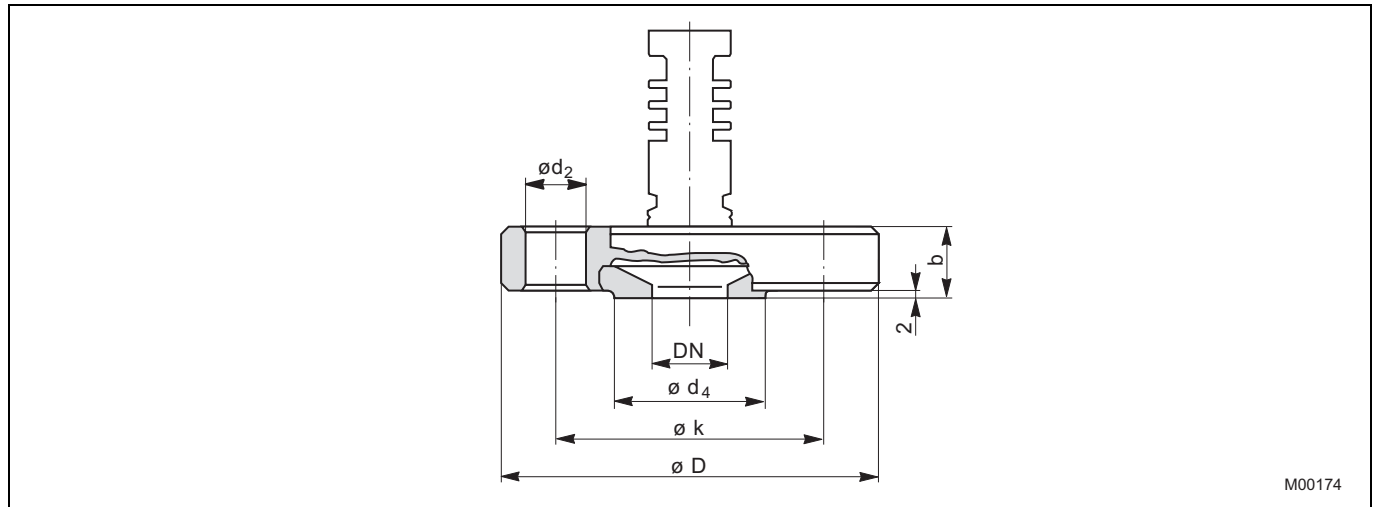
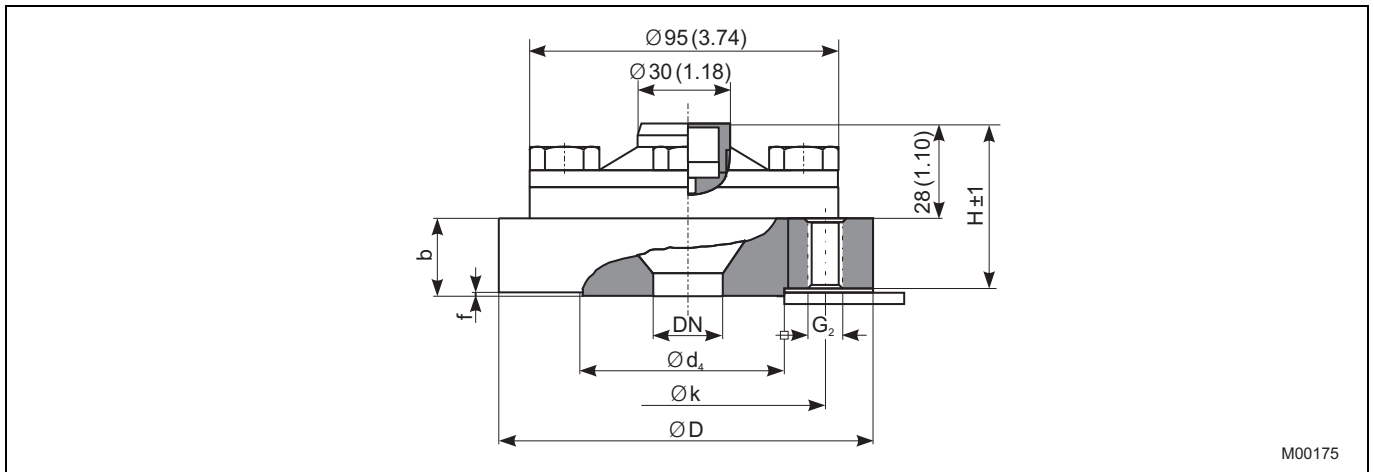


Fig. 4: PN 10/40 or ASME CL 150/300

Connection as per DIN 2501										
DN	PN	Dimensions in mm (inches)								Weight in kg (lb)
		D	k	d ₄	b	f	H	d ₂	G ₂	
25	10/40	115 (4.53)	85 (3.35)	68 (2.68)	22 (0.87)	2 (0.08)	-	14 (0.55)	-	1.5 (3.07)
25	63/100	140 (5.51)	100 (3.94)	68 (2.68)	24 (0.95)	2 (0.08)	52 (2.05)	-	4 x M16	3.2 (6.55)
	160	140 (5.51)	100 (3.94)	68 (2.68)	24 (0.95)	2 (0.08)	52 (2.05)	-	4 x M16	3.6 (7.37)
	250	150 (5.91)	105 (4.13)	68 (2.68)	28 (1.10)	2 (0.08)	56 (2.20)	-	4 x M16	4.0 (8.18)



M00175

Fig. 5: PN 63/100 or ASME CL 600/1500

Connection as per ASME B 16.5										
DN	Class	Dimensions in mm (inches)								Weight in kg (lb)
		D	k	d ₂	d ₄	b	f	H	G ₂ UNC	
1 in	150	110 (4.33)	79.5 (3.13)	16 (0.63)	51 (2.01)	22 (0.87)	2 (0.08)	-	-	1.4 (2.86)
1 in	300	125 (4.92)	89 (3.50)	20 (0.79)	51 (2.01)	22 (0.87)	2 (0.08)	-	-	1.7 (3.48)
	600	125 (4.92)	89 (3.50)	-	51 (2.01)	25 (0.98)	7 (0.28)	53 (2.09)	4 x 5/8"	3.6 (7.37)
	1,500	150 (5.91)	101.5 (4.00)	-	51 (2.01)	36 (1.42)	7 (0.28)	64 (2.52)	4 x 7/8"	4.0 (8.18)

11.5 Small-size seal (model 265GN/265AN)

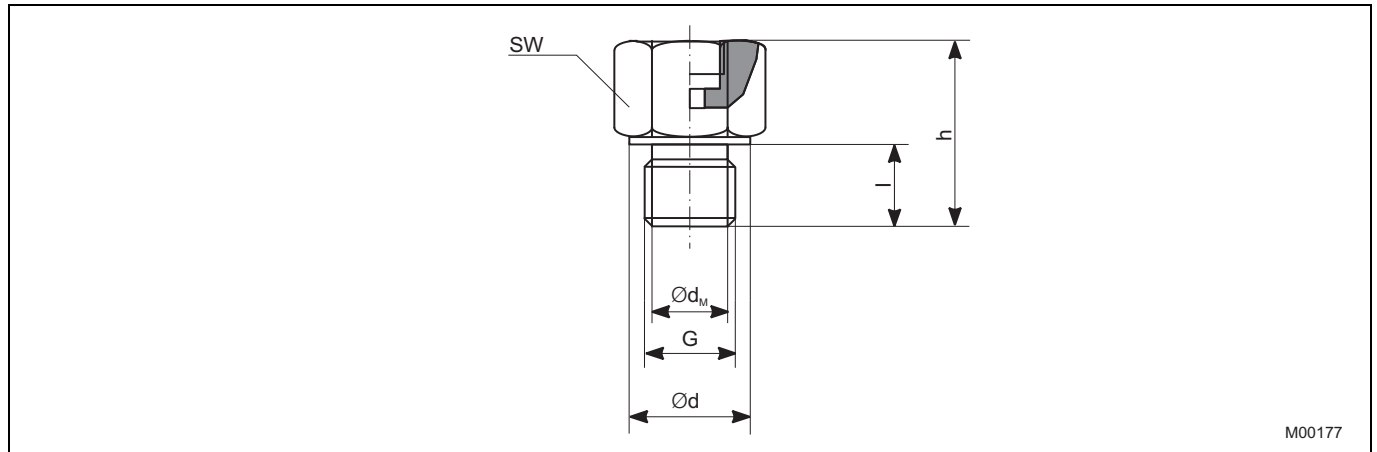


Fig. 6

DN (G)	PN	Dimensions in mm (inches)					Weight in kg (lb)
		d _M	WS	d	l	h	
G 1A	600	25 (0.98)	41 (1.61)	39 (1.54)	28 (1.10)	64 (2.52)	0.3 (0.61)
G 1 ½A	600	40 (1.58)	55 (2.17)	60 (2.36)	30 (1.18)	50 (1.97)	0.5 (1.02)

11.6 Inline remote seal (without flange) (model 265GJ/265AJ)

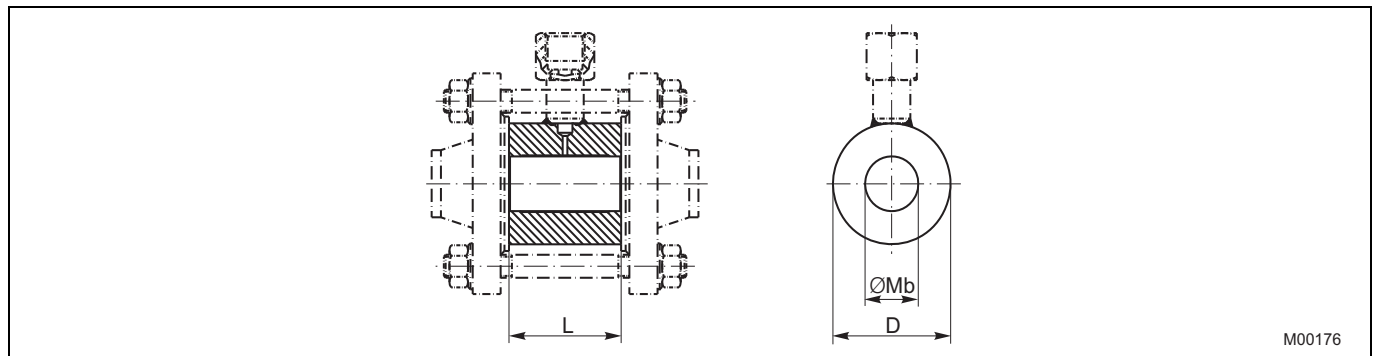
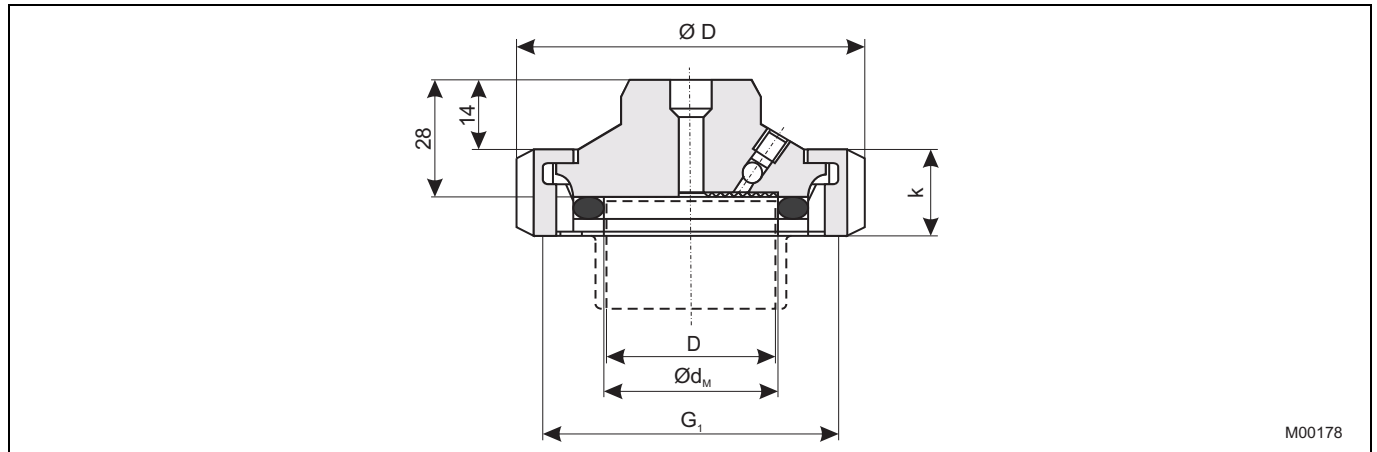


Fig. 7

Connection as per DIN 2501/ASME B 16.5					
DN mm/inches	PN bar/psi	Dimensions in mm (inches)			Weight in kg (lb)
		D	L	Mb	
25/1 in	6 ... 400/150 ... 2,500	63 (2.48)	60 (2.36)	28.5 (1.12)	1.4 (2.86)
40/1 ½ in	6 ... 400/150 ... 2,500	85 (3.35)/78 (3.07)	60 (2.36)	43 (1.69)	2.2 (4.50)
50/2 in	6 ... 400/150 ... 2,500	95 (3.74)	60 (2.36)	54.5 (2.15)	2.5 (5.12)
80/3 in	6 ... 400/150 ... 2,500	130 (5.12)	60 (2.36)	82.5 (3.25)	4.0 (8.18)

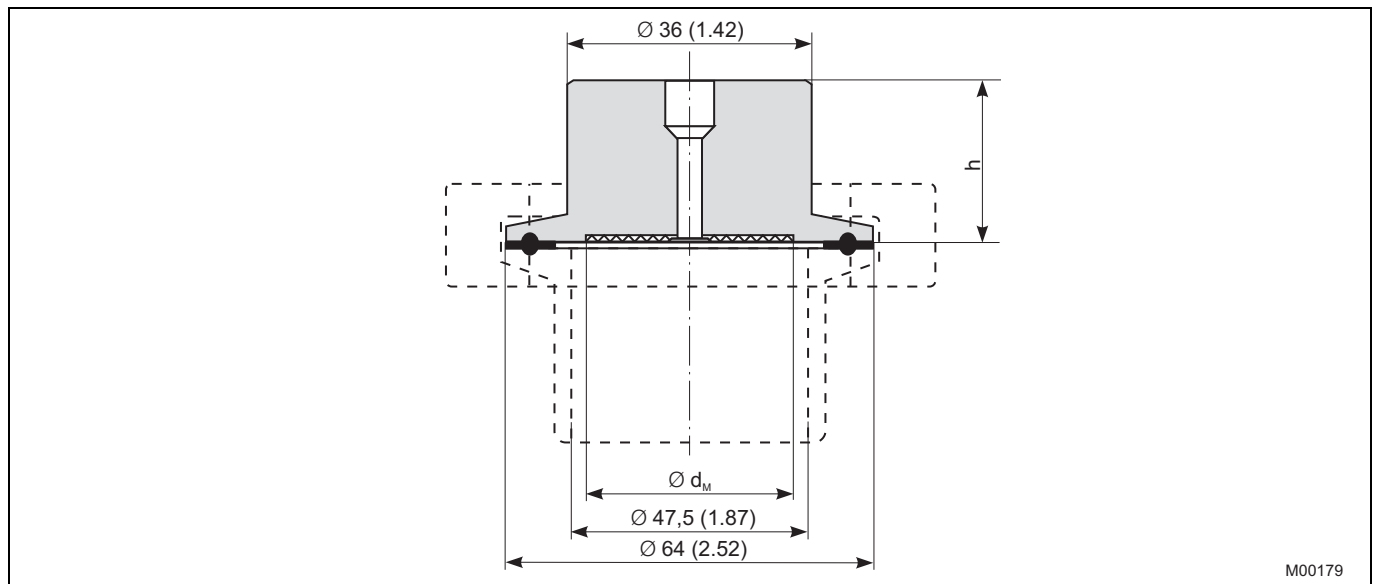
11.7 Remote seal with quick couplings (model 265GG/265AG)



M00178

Fig. 8: With dairy thread DIN 11851, DN 50, PN_{max} 25

Connection as per DIN 11851							
Dimensions in mm (inches)						Design	Weight in kg (lb)
For external pipe \varnothing x wall thickness	d_M	D	d	k	G_1		
53 x 1.5 (2.09 x 0.059)	52 (2.05)	92 (3.62)	50 (1.97)	22 (0.87)	Rd 78 x 1/6	Form D-F	0.8 (1.64)



M00179

Fig. 9: With clamp connection DN 2, PN_{max} 40

Dimensions in mm (inches)			Weight in kg (lb)
For external pipe \varnothing x wall thickness	d_M	h	
50.8 x 1.65 (2 x 0.065)	40 (1.58)	20 (0.79)	0.8 (1.64)

12 Electrical connections

12.1 Standard terminal strip

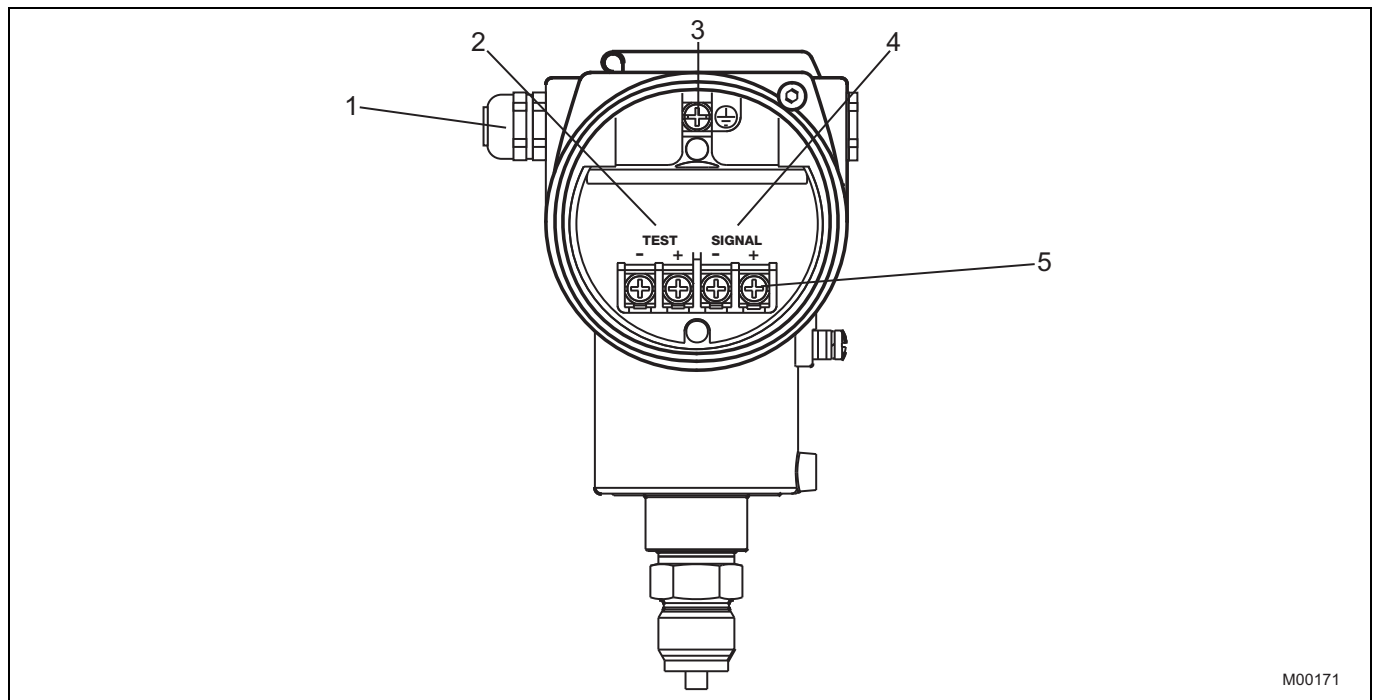


Fig. 10

- | | |
|---|--|
| 1 Cable entry | 4 Output signal/power supply |
| 2 Test sockets for 4 ... 20 mA (not with fieldbus transmitters) | 5 Screw terminals for leads with 0.5 ... 2.5 mm ² cross section |
| 3 Ground/equipotential bonding terminal | |

12.2 Fieldbus plug connector

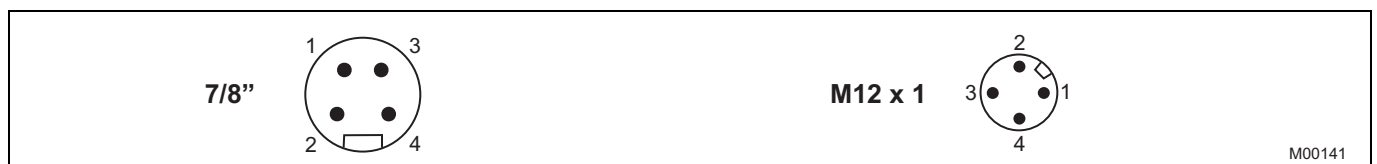


Fig. 11

Pin (male) assignment		
Pin number	FOUNDATION fieldbus	PROFIBUS PA
1	FF-	PA+
2	FF+	Ground
3	Shield	PA-
4	Ground	Shield

Mating plug (socket) not supplied

12.3 Harting Han 8D (8U) plug connector

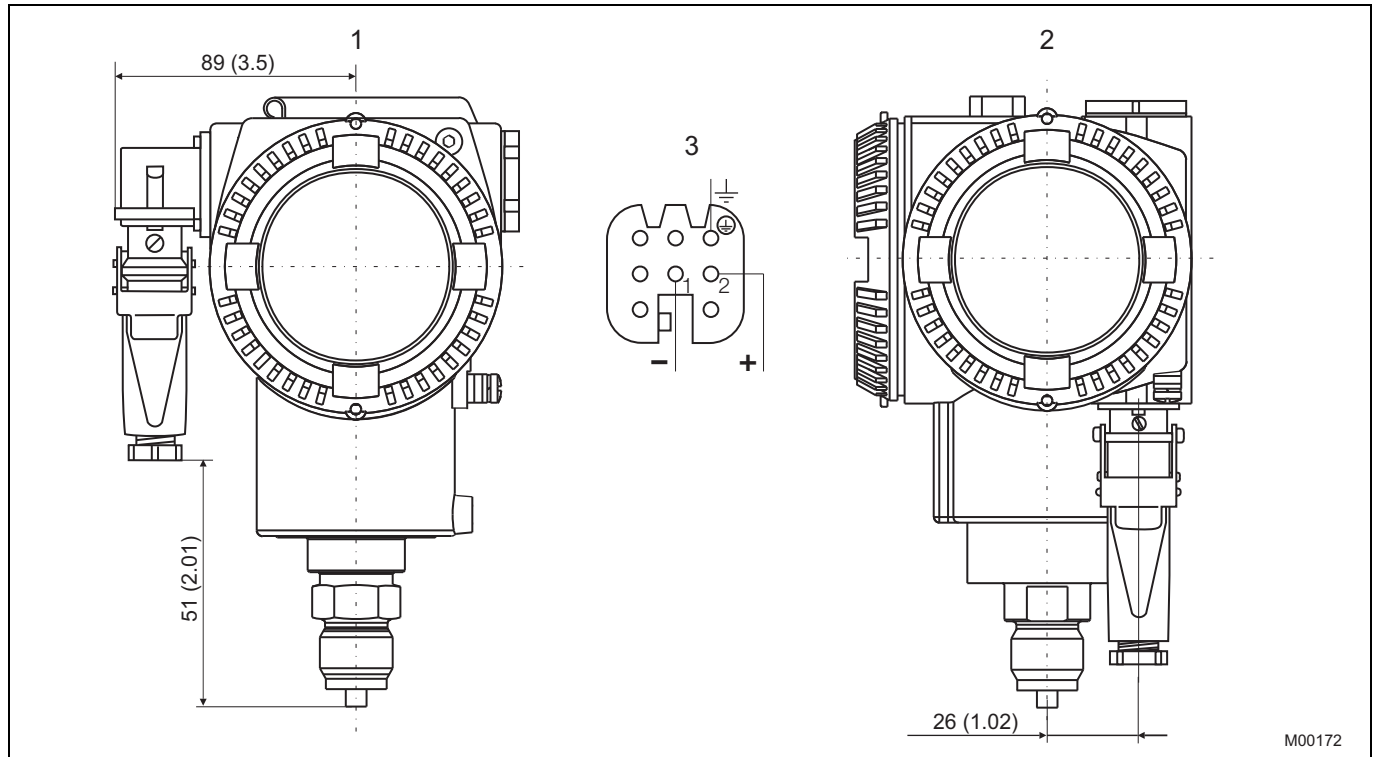


Fig. 12: Dimensions in mm (inches)

- 1 Barrel housing
- 2 DIN housing

- 3 Harting Han 8D (8U) pin assignment (socket view)

13 Ordering information

13.1 Ordering information for model 265GC/265AC

Model 265GC/265AC with direct mount wafer seal DN 50/DN 80/2 in/3 in

Gauge Pressure Transmitter			Variant digit No.	1	6	7	8	9	10	11	12	13	14	15	Code
265GC Base accuracy: 0,04%			Catalog No.	265GC-											
Sensor - Range/ Max.Span															
6 kPa	60 mbar	24 in H ₂ O				C									
40 kPa	400 mbar	160 in H ₂ O				F									
250 kPa	2500 mbar	1000 in H ₂ O				L									
1000 kPa	10 bar	145 psi				D									
3000 kPa	30 bar	435 psi				U									
10000 kPa	100 bar	1450 psi				R									
Absolute Pressure Transmitter			Variant digit No.	1	6	7	8	9	10	11	12	13	14	15	Code
265AC Base accuracy: 0,04%			Catalog No.	265AC-											
Sensor - Range/ Max.Span															
40 kPa	400 mbar	300 mmHg				F									
250 kPa	2500 mbar	1875 mmHg				L									
1000 kPa	10 bar	145 psi				D									
3000 kPa	30 bar	435 psi				U									
10000 kPa	100 bar	1450 psi				R									
Diaphragm material / Fill Fluid (sensor, not wetted)															
Front bonded diaphragm	Silicone oil	1)				R									
Front bonded diaphragm	Carbon fluoride	1)				2									
Front bonded diaphragm	White oil	1)				6									
Front bonded diaphragm	No filling	2)				3									
Size/Mounting flange rating															
2in	ASME CL 150					A									
2in	ASME CL 300					D									
2in	ASME CL 600					G									
3in	ASME CL 150					B									
3in	ASME CL 300					E									
3in	ASME CL 600					H									
DN 50	DIN PN 16/40					M									
DN 50	DIN PN 63					P									
DN 50	DIN PN 100					R									
DN 80	DIN PN 40					L									
DN 80	DIN PN 63					Q									
DN 80	DIN PN 100					S									
Mounting flange material / Seat form (seal)															
AISI 316 ss / 1.4401	Form RF (raised face)	NACE 3)				E									
AISI 316 ss / 1.4401	EN 1092 - B2 (DIN 2526 - Form E)	NACE 4)				S									
AISI 316 ss / 1.4401	EN 1092 - E (DIN 2513 - V13)	NACE 4)				M									
AISI 316 ss / 1.4401	EN 1092 - D (DIN 2512 - N)	NACE 4)				N									
Extensions length and material (wetted parts) - 2in / DN50															
Flush						F									
50 mm (2in)	AISI 316L ss / 1.4404					1									
50 mm (2in)	Hastelloy C276™					2									
100 mm (4in)	AISI 316L ss / 1.4404					3									
100 mm (4in)	Hastelloy C276™					4									
150 mm (6 in)	AISI 316L ss / 1.4404					5									
150 mm (6 in)	Hastelloy C276™					6									
Extensions length and material (wetted parts) - 3in / DN80															
Flush						F									
50 mm (2in)	AISI 316L ss / 1.4404					1									
50 mm (2in)	Hastelloy C276™					2									
100 mm (4in)	AISI 316L ss / 1.4404					3									
100 mm (4in)	Hastelloy C276™					4									
150 mm (6 in)	AISI 316L ss / 1.4404					5									
150 mm (6 in)	Hastelloy C276™					6									

- 1) not available with sensor range Code C, F
- 2) not available with sensor range Code L, D, U, R
- 3) not available with size / mounting flange rating Code M, P, R, L, Q, S
- 4) not available with size / mounting flange rating Code A, D, G, B, E, H

Continued on next page

13.2 Ordering information for model 265GC/265AC (continued)

Model 265GC/265AC with direct mount wafer seal DN 50/DN 80/2 in/3 in

Gauge Pressure Transmitter		Variant digit No.	1 - 6	7	8	9	10	11	12	13	14	15	Code			
265GC	Base accuracy: 0.04%	Catalog No.	265GC-													
Absolute Pressure Transmitter		Variant digit No.	1 - 6	7	8	9	10	11	12	13	14	15	Code			
265AC	Base accuracy: 0.04%	Catalog No.	265AC-													
Diaphragm material (wetted parts) - Form RF / EN 1092-B2 (DIN 2526-Form E)																
AISI 316L ss / 1.4435		NACE				5)			S							
Hastelloy C276™		NACE				6)			H							
Tantalum		NACE				7)			T							
AISI 316L ss / 1.4435 with Teflon anti-stick coating		NACE				7)			1							
Hastelloy C276™ with Teflon anti-stick coating		NACE				7)			2							
Diaphragm material (wetted parts) - EN 1092 - E (DIN 2513-V13)																
AISI 316L ss / 1.4435		NACE				5)			S							
Hastelloy C276™		NACE				6)			H							
Tantalum		NACE				7)			T							
AISI 316L ss / 1.4435 with Teflon anti-stick coating		NACE				7)			1							
Hastelloy C276™ with Teflon anti-stick coating		NACE				7)			2							
Diaphragm material (wetted parts) - D (DIN 2512-N)																
AISI 316L ss / 1.4435		NACE				5)			S							
Hastelloy C276™		NACE				6)			H							
Fill fluid (seal)																
Silicone oil									S							
Carbon fluoride						9)			N							
White oil (FDA approved)						10)			W							
Silicone oil for vacuum applications									L							
Electronic Housing																
Housing - Material		Electrical Connection														
Aluminium alloy (Barrel version)		1/2-14 NPT										A				
Aluminium alloy (Barrel version)		M20x1.5 (n.a.: FM, CSA)										B				
Aluminium alloy (Barrel version)		Harting Han conn. (n.a.: ATEX EExd, FM, CSA)										E				
Aluminium alloy (Barrel version)		Fieldbus connector										G				
AISI 316 L ss (Barrel version)		1/2-14 NPT										S				
AISI 316 L ss (Barrel version)		M20 x 1.5 (n.a.: FM, CSA)										T				
Aluminium alloy (DIN version)		M20 x 1.5 (n.a.: FM, CSA)										J				
Aluminium alloy (DIN version)		Harting Han conn. (n.a.: ATEX EExd, FM, CSA)										K				
Aluminium alloy (DIN version)		Fieldbus connector										W				
Output / Additional Options																
HART digital communication and 4 ... 20 mA		No additional options										12) 13)	H			
HART digital communication and 4 ... 20 mA		Options requested (to be ordered by "Additional ordering code")										12)	1			
PROFIBUS PA		No additional options										12) 13)	P			
PROFIBUS PA		Options requested (to be ordered by "Additional ordering code")										13)	2			
FOUNDATION Fieldbus		No additional options										12) 13)	F			
FOUNDATION Fieldbus		Options requested (to be ordered by "Additional ordering code")										13)	3			

- n.a. - not applicable with
- 5) not available with extension length and material - Code 2, 4, 6
- 6) not available with extension length and material - Code 1, 3, 5
- 7) not available with extension length and material - Code 1, 2, 3, 4, 5, 6
- 9) suitable for oxygen applications
- 10) suitable for food applications
- 11) select connector type with additional ordering code
- 12) not available with electronic housing - Code G, W
- 13) not available with electronic housing - Code E, K
- 17) not available with EEx nL, EEx d, FM- / CSA- / NEPSI-Explosion Proof

13.3 Additional ordering information for model 265GC/265AC

Model 265GC/265AC with direct mount wafer seal DN 50/DN 80/2 in/3 in

265GC , 265AC	Code			
Electrical Certification				
ATEX Group II Category 1/2 GD - Intrinsic Safety EEx ia	E1			
ATEX Group II Category 1/2 G - Flameproof EEx d	E2			
ATEX Group II Category 3 GD - Type of protection N, EEx nL, energy limited	E3			
ATEX II 1/2 GD EEx ia + ATEX II 1/2 GD EEx d + ATEX EEx nL	EW			
Factory Mutual (FM) - Intrinsically Safe	EA			
Factory Mutual (FM) - Explosion Proof (only with 1/2-14 NPT electrical connection and stainless steel type label)	EB			
Canadian Standard Association - Intrinsically Safe (pending)	ED			
Canadian Standard Association - Explosion Proof	EE			
Canadian Standard Association - Explosion Proof (Kanada & USA)	EM			
NEPSI Ex ia II C T4/T6	EY			
NEPSI Ex d II C T6	EZ			
SAA Ex d IIC T6 and Ex td A21 IP66 T85°C	X1			
SAA Ex ia IIC T4/T6 and Ex n IIC T4/T6 (only for devices with HART / 4...20 mA, without SIL2)	X2			
Integral LCD				
Digital LCD integral display	L1			
Backlit digital LCD integral display	L2			
Surge				
Surge/Transient Protector	S1			
Operating Manuals				
German	M1			
Italian	M2			
Spanish	M3			
French	M4			
Swedish	M7			
Portuguese	MA			
Russian	MB			
Labels & Tag Language				
German in stainless steel (not available with DIN Electronic Housing code J, K, W)	T1			
German and English plastic (not suitable for Factory Mutual - Explosion Proof)	TA			
Additional Tag Plate				
in stainless steel, laser printed	I1			
Certificates				
Inspection certificate EN 10204-3.1 of calibration	C1			
Inspection certificate EN 10204-3.1 of the cleanliness stage	C3			
Inspection certificate EN 10204-3.1 of helium leakage test of the sensor module	C4			
Inspection certificate EN 10204-3.1 of the pressure test	C5			
Certificate EN 10204-2.1 of compliance with the order of instrument design	C6			
SIL2 - classification	CL			
Material Traceability				
Certificate EN 10204-2.1 of compliance with the order of process wetted parts	H1			
Inspection certificate EN 10204-3.1 for pressure-bearing process wetted parts with analysis-certificates as material verification (minor parts with certificate of compliance EN 10204)	H3			
Test report EN 10204-2.2 of the pressure bearing and process wetted parts	H4			
Connector				
Fieldbus 7/8in (without mating female plug, recommended for FOUNDATION Fieldbus)	U1	13) 15)		
Fieldbus M12x1 (without mating female plug, recommended for PROFIBUS PA)	U2	13) 15)		
Harting Han 8D (8U) - straight entry	U3	12) 15)		
Harting Han 8D (8U) - angle entry	U4	12) 16)		

14) not available with ATEX-EEx nL (Code E3),
not available with PROFIBUS PA / FOUNDATION Fieldbus (Code 2, 3) with Intrinsic Safety EEx ia (Code E1, EY),
not available with Intrinsically Safe FM (Code EA) and SAA (Code X2)

15) not available with electronic housing - Code T, S, A, B, J, E

16) not available with electronic housing - Code T, S, A, B, J, K

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13.4 Ordering information for model 265GM/265AM

Model 265GM/265AM with direct mount wafer seal DN 25/1 in, with internal diaphragm

Gauge Pressure Transmitter		Variant digit No.	1	2	3	4	5	6	7	8	9	Code								
265GM	Base accuracy: 0,04%	Catalog No.	265GM-																	
Sensor - Range/ Max.Span																				
40 kPa	400 mbar	160 in H ₂ O	F																	
250 kPa	2500 mbar	1000 in H ₂ O	L																	
1000 kPa	10 bar	145 psi	D																	
3000 kPa	30 bar	435 psi	U																	
10000 kPa	100 bar	1450 psi	R																	
60000 kPa	600 bar	8700 psi	V																	
Absolute Pressure Transmitter																				
265AM	Base accuracy: 0,04%	Catalog No.																		
Sensor - Range/ Max.Span																				
40 kPa	400 mbar	300 mmHg	F																	
250 kPa	2500 mbar	1875 mmHg	L																	
1000 kPa	10 bar	145 psi	D																	
3000 kPa	30 bar	435 psi	U																	
10000 kPa	100 bar	1450 psi	R																	
Diaphragm material / Fill Fluid (sensor, not wetted)																				
direct mount seal	Silicone oil		1)	R																
direct mount seal	Carbon fluoride		1)	2																
direct mount seal	No filling		2)	3																
Size/Mounting flange rating																				
1in	ASME CL150					A														
1in	ASME CL 300					C														
1in	ASME CL 600					E														
1in	ASME CL 1500					K														
DN 25	DIN - 10/40 bar					H														
DN 25	DIN - 63/100 bar					L														
DN 25	DIN - 160 bar					T														
DN 25	DIN - 250 bar					V														
Mounting flange material / Seat form (seal)																				
AISI 316 ss / 1.4401	Form RF (raised face)	NACE	3)	E																
AISI 316 ss / 1.4401	EN 1092 - B1 (DIN 2526 - Form D)	NACE	4)	4																
AISI 316 ss / 1.4401	EN 1092 - D (DIN 2512 - N)	NACE	5)	N																
Diaphragm material (seal, wetted parts)																				
AISI 316L ss / 1.4435	NACE			S																
Fill fluid (seal)																				
Silicone oil								S												
Silicone oil for vacuum applications								L												
Electronic Housing																				
Housing - Material		Electrical Connection																		
Aluminium alloy (Barrel version)	1/2-14 NPT																			
Aluminium alloy (Barrel version)	M20x1.5	(n.a.: FM, CSA)																		
Aluminium alloy (Barrel version)	Harting Han conn.	(n.a.: ATEX EExd, FM, CSA)	6)																	
Aluminium alloy (Barrel version)	Fieldbus connector		6) 12)																	
AISI 316 L ss (Barrel version)	1/2-14 NPT																			
AISI 316 L ss (Barrel version)	M20 x 1.5	(n.a.: FM, CSA)																		
Aluminium alloy (DIN version)	M20 x 1.5	(n.a.: FM, CSA)																		
Aluminium alloy (DIN version)	Harting Han conn.	(n.a.: ATEX EExd, FM, CSA)	6)																	
Aluminium alloy (DIN version)	Fieldbus connector		6) 12)																	
Output / Additional Option																				
HART digital communication and 4 ... 20 mA	No additional options		7) 8)																	
HART digital communication and 4 ... 20 mA	Options requested		7)																	
	(to be ordered by "Additional ordering code")																			
PROFIBUS PA	No additional options		7) 8)																	
PROFIBUS PA	Options requested		8)																	
	(to be ordered by "Additional ordering code")																			
FOUNDATION Fieldbus	No additional options		7) 8)																	
FOUNDATION Fieldbus	Options requested (to be ordered by "Additional ordering code")																			

n.a. - not applicable with

13.5 Additional ordering information for model 265GM/265AM

Model 265GM/265AM with direct mount wafer seal DN 25/1 in, with internal diaphragm

265GM , 265AM	Code			
Electrical Certification				
ATEX Group II Category 1/2 GD - Intrinsic Safety EEx ia				
ATEX Group II Category 1/2 G - Flameproof EEx d	1)	E1		
ATEX Group II Category 3 GD - Type of protection N, EEx nL, energy limited		E2		
ATEX II 1/2 GD EEx ia + ATEX II 1/2 GD EEx d + ATEX EEx nL	1)	E3		
Factory Mutual (FM) - Intrinsically Safe		EW		
Factory Mutual (FM) - Explosion Proof	1)	EA		
(only with 1/2-14 NPT electrical connection and stainless steel type label)		EB		
Canadian Standard Association - Intrinsically Safe (pending)		ED		
Canadian Standard Association - Explosion Proof	1)	EE		
Canadian Standard Association - Explosion Proof (Kanada & USA)		EM		
NEPSI Ex ia II C T4/T6		EY		
NEPSI Ex d II C T6	1)	EZ		
SAA Ex d IIC T6 and Ex td A21 IP66 T85°C	1)	X1		
SAA Ex ia IIC T4/T6 and Ex n IIC T4/T6 (only for devices with HART / 4...20mA, without SIL2)		X2		
Integral LCD				
Digital LCD integral display		L1		
Backlit digital LCD integral display		L2		
Surge				
Surge/Transient Protector	9)	S1		
Operating Manuals				
German		M1		
Italian		M2		
Spanish		M3		
French		M4		
Swedish		M7		
Portuguese		MA		
Russian		MB		
Labels & Tag Language				
German in stainless steel (not available with DIN Electronic Housing code J, K, W)		T1		
German and English plastic (not suitable for Factory Mutual - Explosion Proof)		TA		
Additional Tag Plate				
in stainless steel, laser printed		I1		
Certificates				
Inspection certificate EN 10204-3.1 of calibration		C1		
Inspection certificate EN 10204-3.1 of the cleanliness stage		C3		
Inspection certificate EN 10204-3.1 of helium leakage test of the sensor module		C4		
Inspection certificate EN 10204-3.1 of the pressure test		C5		
Certificate EN 10204-2.1 of compliance with the order of instrument design		C6		
SIL2 - classification		CL		

13.6 Additional ordering information for model 265GM/265AM

Model 265GM/265AM with direct mount wafer seal DN 25/1 in, with containing internal diaphragm

265GM , 265AM		Code			
Material Traceability					
Certificate EN 10204-2.1 of compliance with the order of process wetted parts		H1			
Inspection certificate EN 10204-3.1 for pressure-bearing process wetted parts with analysis-certificates as material verification (minor parts with certificate of compliance EN 10204)		H3			
Test report EN 10204-2.2 of the pressure bearing and process wetted parts		H4			
Connector					
Fieldbus 7/8in	(without mating female plug, recommended for FOUNDATION Fieldbus)	8) 10)	U1		
Fieldbus M12x1	(without mating female plug, recommended for PROFIBUS PA)	8) 10)	U2		
Harting Han 8D (8U) - straight entry		7) 10)	U3		
Harting Han 8D (8U) - angle entry		7) 11)	U4		

- 1) not available with sensor range Code F
- 2) not available with sensor range Code L, U, R, V
- 3) not available with size / mounting flange rating Code H, L, T, V
- 4) not available with size / mounting flange rating Code A, C, E, K
- 5) not available with size / mounting flange rating Code A, C, E, K, L, T, V
- 6) select connector type with additional ordering code
- 7) not available with electronic housing - Code G, W
- 8) not available with electronic housing - Code E, K
- 9) not available with ATEX-Ex nL (Code E3),
not available with PROFIBUS PA / FOUNDATION Fieldbus (Code 2, 3) with Intrinsic Safety EEx ia (Code E1, EY),
not available with Intrinsically Safe FM (Code EA) and SAA (Code X2)
- 10) not available with electronic housing - Code T, S, A, B, J, E
- 11) not available with electronic housing - Code T, S, A, B, J, K
- 12) not available with EEx nL, EEx d, FM- / CSA- / NEPSI-Explosion Proof

13.7 Ordering information for model 265GG/265AG

Model 265GG/265AG featuring direct mount seal with quick couplings

Gauge Pressure Transmitter		Variant digit No.	1 - 6	7	8	9	10	11	12	13	14	Code				
265GG	Base accuracy: 0,04%	Catalog No.	265GG-													
Sensor - Range/ Max.Span																
250 kPa	2500 mbar	1000 in H ₂ O		L												
1000 kPa	10 bar	145 psi		D												
3000 kPa	30 bar	435 psi		U												
10000 kPa	100 bar	1450 psi		R												
Absolute Pressure Transmitter		Variant digit No.	1 - 6	7	8	9	10	11	12	13	14					
265AG	Base accuracy: 0,04%	Catalog No.	265AG-													
Sensor - Range/ Max.Span																
250 kPa	2500 mbar	1875 mmHg		L												
1000 kPa	10 bar	145 psi		D												
3000 kPa	30 bar	435 psi		U												
10000 kPa	100 bar	1450 psi		R												
Diaphragm material / Fill Fluid (sensor, not wetted)																
direct mount seal	Silicone oil				R											
direct mount seal	Carbon fluoride				2											
direct mount seal	White oil				6											
Mounting connection																
Dairy thread DIN 11851, DN 50, PN 25						A										
2in Clamp PN 40						F										
Diaphragm material (seal) - Dairy thread																
AISI 316L ss / 1.4435	NACE							S								
Hastelloy C276™	NACE							H								
Diaphragm material (seal) - Clamp																
AISI 316L ss / 1.4435	NACE							S								
Hastelloy C276™	NACE							H								
Fill fluid (seal)																
Silicone oil								S								
Carbon fluoride						1)		N								
White oil (FDA approved)						2)		W								
Silicone oil for vacuum applications								L								
Gasket (O-ring)																
none						3)		1								
Buna (max. 120°C / 248°F)						4)		4								
PTFE						4)		2								
Electronic Housing																
Housing - Material		Electrical Connection														
Aluminium alloy (Barrel version)	1/2-14 NPT									A						
Aluminium alloy (Barrel version)	M20x1.5	(n.a.: FM, CSA)								B						
Aluminium alloy (Barrel version)	Harting Han conn.	(n.a.: ATEX EExd, FM, CSA)					5)			E						
Aluminium alloy (Barrel version)	Fieldbus connector						5) 11)			G						
AISI 316 L ss (Barrel version)	1/2-14 NPT									S						
AISI 316 L ss (Barrel version)	M20 x 1.5	(n.a.: FM, CSA)								T						
Aluminium alloy (DIN version)	M20 x 1.5	(n.a.: FM, CSA)								J						
Aluminium alloy (DIN version)	Harting Han conn.	(n.a.: ATEX EExd, FM, CSA)					5)			K						
Aluminium alloy (DIN version)	Fieldbus connector						5) 11)			W						
Output / Additional Option																
HART digital communication and 4 ... 20 mA	No additional options						6) 7)			H						
HART digital communication and 4 ... 20 mA	Options requested (to be ordered by "Additional ordering code")						6)			1						
PROFIBUS PA	No additional options						6) 7)			P						
PROFIBUS PA	Options requested (to be ordered by "Additional ordering code")						7)			2						
FOUNDATION Fieldbus	No additional options						6) 7)			F						
FOUNDATION Fieldbus	Options requested (to be ordered by "Additional ordering code")						7)			3						

n.a. - not applicable with

13.8 Additional ordering information for model 265GG/265AG

Model 265GG/265AG featuring direct mount seal with quick couplings

265GG , 265AG	Code			
Electrical Certification				
ATEX Group II Category 1/2 GD - Intrinsic Safety EEx ia	E1			
ATEX Group II Category 1/2 G - Flameproof EEx d	E2			
ATEX Group II Category 3 GD - Type of protection N, EEx nL, energy limited	E3			
ATEX II 1/2 GD EEx ia + ATEX II 1/2 GD EEx d + ATEX EEx nL	EW			
Factory Mutual (FM) - Intrinsically Safe	EA			
Factory Mutual (FM) - Explosion Proof (only with 1/2-14 NPT electrical connection and stainless steel type label)	EB			
Canadian Standard Association - Intrinsically Safe (pending)	ED			
Canadian Standard Association - Explosion Proof	EE			
Canadian Standard Association - Explosion Proof (Kanada & USA)	EM			
NEPSI Ex ia II C T4/T6	EY			
NEPSI Ex d II C T6	EZ			
SAA Ex d IIC T6 and Ex td A21 IP66 T85°C	X1			
SAA Ex ia IIC T4/T6 and Ex n IIC T4/T6 (only for devices with HART / 4...20mA, without SIL2)	X2			
Integral LCD				
Digital LCD integral display	L1			
Backlit digital LCD integral display	L2			
Surge				
Surge/Transient Protector 8)	S1			
Operating Manuals				
German	M1			
Italian	M2			
Spanish	M3			
French	M4			
Swedish	M7			
Portuguese	MA			
Russian	MB			
Labels & Tag Language				
German in stainless steel (not available with DIN Electronic Housing code J, K, W)	T1			
German and English plastic (not suitable for Factory Mutual - Explosion Proof)	TA			
Additional Tag Plate				
in stainless steel, laser printed	I1			
Certificates				
Inspection certificate EN 10204-3.1 of calibration	C1			
Inspection certificate EN 10204-3.1 of the cleanliness stage	C3			
Inspection certificate EN 10204-3.1 of helium leakage test of the sensor module	C4			
Inspection certificate EN 10204-3.1 of the pressure test	C5			
Certificate EN 10204-2.1 of compliance with the order of instrument design	C6			
SIL2 - classification	CL			

13.9 Additional ordering information for model 265GG/265AG

Model 265GG/265AG featuring direct mount remote seal with quick couplings

265GG , 265AG		Code			
Material Traceability					
Certificate EN 10204-2.1 of compliance with the order of process wetted parts		H1			
Inspection certificate EN 10204-3.1 for pressure-bearing process wetted parts with analysis-certificates as material verification (minor parts with certificate of compliance EN 10204)		H3			
Test report EN 10204-2.2 of the pressure bearing and process wetted parts		H4			
Connector					
Fieldbus 7/8in	(without mating female plug, recommended for FOUNDATION Fieldbus) 7) 9)	U1			
Fieldbus M12x1	(without mating female plug, recommended for PROFIBUS PA) 7) 9)	U2			
Harting Han 8D (8U) - straight entry	6) 9)	U3			
Harting Han 8D (8U) - angle entry	6) 10)	U4			

- 1) suitable for oxygen applications
 - 2) suitable for food applications
 - 3) not available with mounting connection Code A
 - 4) not available with mounting connection Code F
 - 5) select connector type with additional ordering code
 - 6) not available with electronic housing - Code G, W
 - 7) not available with electronic housing - Code E, K
 - 8) not available with ATEX-Ex nL (Code E3),
not available with PROFIBUS PA / FOUNDATION Fieldbus (Code 2, 3) with Intrinsic Safety EEx ia (Code E1, EY),
not available with Intrinsically Safe FM (Code EA) and SAA (Code X2)
 - 9) not available with electronic housing - Code T, S, A, B, J, E
 - 10) not available with electronic housing - Code T, S, A, B, J, K
 - 11) not available with EEx nL, EEx d, FM- / CSA- / NEPSI-Explosion Proof
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13.10 Ordering information for model 265GJ/265AJ

Model 265GJ/265AJ with direct mount inline seal

Gauge Pressure Transmitter		Variant digit No.	1 - 6	7	8	9	10	11	12	13	Code			
265GJ Base accuracy: 0,04%		Catalog No.	265GJ-											
Sensor - Range/ Max.Span														
250 kPa	2500 mbar	1000 in H2O		L										
1000 kPa	10 bar	145 psi		D										
3000 kPa	30 bar	435 psi		U										
10000 kPa	100 bar	1450 psi		R										
60000 kPa	600 bar	8700 psi		V										
Absolute Pressure Transmitter		Variant digit No.	1 - 6	7	8	9	10	11	12	13				
265AJ Base accuracy: 0,04%		Catalog No.	265AJ-											
Sensor - Range/ Max.Span														
250 kPa	2500 mbar	1875 mmHg		L										
1000 kPa	10 bar	145 psi		D										
3000 kPa	30 bar	435 psi		U										
10000 kPa	100 bar	1450 psi		R										
Diaphragm material / Fill Fluid (sensor, not wetted)														
direct mount seal	Silicone oil				R									
direct mount seal	Carbon fluoride				2									
direct mount seal	White oil				6									
Connection - Diaphragm material stainless steel														
DN 25 / ASME 1in						A								
DN 40 / ASME 1 1/2 in						B								
DN 50 / ASME 2in						C								
DN 80 / ASME 3in						D								
Connection - Diaphragm material Hastelloy C														
DN 25 / ASME 1in						A								
DN 40 / ASME 1 1/2 in						B								
DN 50 / ASME 2in						C								
DN 80 / ASME 3in						D								
Diaphragm material (seal, wetted parts)														
AISI 316L ss / 1.4435		NACE					R							
Hastelloy C276™		NACE					D							
Fill fluid (seal)														
Silicone oil								S						
Carbon fluoride								N						
White oil (FDA approved)								1)						
Silicone oil for vacuum applications								2)						
Electronic Housing														
Housing - Material		Electrical Connection												
Aluminium alloy (Barrel version)		1/2-14 NPT									A			
Aluminium alloy (Barrel version)		M20x1.5	(n.a.: FM, CSA)								B			
Aluminium alloy (Barrel version)		Harting Han conn.	(n.a.: ATEX EExd, FM, CSA)								E			
Aluminium alloy (Barrel version)		Fieldbus connector									G			
AISI 316 L ss (Barrel version)		1/2-14 NPT									S			
AISI 316 L ss (Barrel version)		M20 x 1.5	(n.a.: FM, CSA)								T			
Aluminium alloy (DIN version)		M20 x 1.5	(n.a.: FM, CSA)								J			
Aluminium alloy (DIN version)		Harting Han conn.	(n.a.: ATEX EExd, FM, CSA)								K			
Aluminium alloy (DIN version)		Fieldbus connector									W			
Output / Additional Option														
HART digital communication and 4 ...20 mA	No additional options											H		
HART digital communication and 4 ...20 mA	Options requested (to be ordered by "Additional ordering code")											1		
PROFIBUS PA	No additional options											P		
PROFIBUS PA	Options requested (to be ordered by "Additional ordering code")											2		
FOUNDATION Fieldbus	No additional options											F		
FOUNDATION Fieldbus	Options requested (to be ordered by "Additional ordering code")											3		

n.a. - not applicable with

13.11 Additional ordering information for model 265GJ/265AJ

Model 265GJ/265AJ with direct mount inline seal

265GJ , 265AJ	Code			
Electrical Certification				
ATEX Group II Category 1/2 GD - Intrinsic Safety EEx ia	E1			
ATEX Group II Category 1/2 G - Flameproof EEx d	E2			
ATEX Group II Category 3 GD - Type of protection N, EEx nL, energy limited	E3			
ATEX II 1/2 GD EEx ia + ATEX II 1/2 GD EEx d + ATEX EEx nL	EW			
Factory Mutual (FM) - Intrinsically Safe	EA			
Factory Mutual (FM) - Explosion Proof (only with 1/2-14 NPT electr. connection a. stainless steel type label)	EB			
Canadian Standard Association - Intrinsically Safe (pending)	ED			
Canadian Standard Association - Explosion Proof	EE			
Canadian Standard Association - Explosion Proof (Kanada & USA)	EM			
NEPSI Ex ia II C T4/T6	EY			
NEPSI Ex d II C T6	EZ			
SAA Ex d IIC T6 and Ex td A21 IP66 T85°C	X1			
SAA Ex ia IIC T4/T6 and Ex n IIC T4/T6 (only for devices with HART / 4...20mA, without SIL2)	X2			
Integral LCD				
Digital LCD integral display	L1			
Backlit digital LCD integral display	L2			
Surge				
Surge/Transient Protector 6)	S1			
Operating Manuals				
German	M1			
Italian	M2			
Spanish	M3			
French	M4			
Swedish	M7			
Portuguese	MA			
Russian	MB			
Labels & Tag Language				
German in stainless steel (not available with DIN Electronic Housing code J, K, W)	T1			
German and English plastic (not suitable for Factory Mutual - Explosion Proof)	TA			
Additional Tag Plate				
in stainless steel, laser printed	I1			
Certificates				
Inspection certificate EN 10204-3.1 of calibration	C1			
Inspection certificate EN 10204-3.1 of the cleanliness stage	C3			
Inspection certificate EN 10204-3.1 of helium leakage test of the sensor module	C4			
Inspection certificate EN 10204-3.1 of the pressure test	C5			
Certificate EN 10204-2.1 of compliance with the order of instrument design	C6			
SIL2 - classification	CL			

13.12 Additional ordering information for model 265GJ/265AJ

Model 265GJ/265AJ with direct mount inline seal

265GJ , 265AJ		Code			
Material Traceability					
Certificate EN 10204-2.1 of compliance with the order of process wetted parts		H1			
Inspection certificate EN 10204-3.1 for pressure-bearing process wetted parts with analysis-certificates as material verification (minor parts with certificate of compliance EN 10204)		H3			
Test report EN 10204-2.2 of the pressure bearing and process wetted parts		H4			
Connector					
Fieldbus 7/8in (without mating female plug, recommended for FOUNDATION Fieldbus)	5) 7)	U1			
Fieldbus M12x1 (without mating female plug, recommended for PROFIBUS PA)	5) 7)	U2			
Harting Han 8D (8U) - straight entry	4) 7)	U3			
Harting Han 8D (8U) - angle entry	4) 8)	U4			

1) suitable for oxygen applications

2) suitable for food applications

3) select connector type with additional ordering code

4) not available with electronic housing - Code G, W

5) not available with electronic housing - Code E, K

6) not available with ATEX-EEEx nL (Code E3),

not available with PROFIBUS PA / FOUNDATION Fieldbus (Code 2, 3) with Intrinsic Safety EEx ia (Code E1, EY),

not available with Intrinsically Safe FM (Code EA) and SAA (Code X2)

7) not available with electronic housing - Code T, S, A, B, J, E

8) not available with electronic housing - Code T, S, A, B, J, K

9) not available with EEx nL, EEx d, FM- / CSA- / NEPSI-Explosion Proof

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13.13 Ordering information for model 265GN/265AN

Model 265GN/265AN with direct mount small-size seal

Gauge Pressure Transmitter		Variant digit No.	1 - 6	7	8	9	10	11	12	13	Code			
265GN Base accuracy: 0,04%		Catalog No.	265GN-											
Sensor - Range/ Max.Span														
250 kPa	2500 mbar	1000 in H2O		L										
1000 kPa	10 bar	145 psi		D										
3000 kPa	30 bar	435 psi		U										
10000 kPa	100 bar	1450 psi		R										
60000 kPa	600 bar	8700 psi		V										
Absolute Pressure Transmitter		Variant digit No.	1 - 0	1	2	3	4	5	6	7				
265AN Base accuracy: 0,04%		Catalog No.												
Sensor - Range/ Max.Span														
1000 kPa	10 bar	145 psi		D										
3000 kPa	30 bar	435 psi		U										
10000 kPa	100 bar	1450 psi		R										
Diaphragm material / Fill Fluid (sensor, not wetted)														
direct mount seal	Silicone oil			R										
direct mount seal	Carbon fluoride			2										
direct mount seal	White oil			6										
Connection / rating - Diaphragm material stainless steel														
G 1 A - PN 600						1								
G 1 1/2 A - PN 600						2								
Connection / rating - Diaphragm material Hastelloy C														
G 1 A - PN 600						1								
G 1 1/2 A - PN 600						2								
Diaphragm material (seal, wetted parts)														
AISI 316L ss / 1.4435	NACE					S								
Hastelloy C276™	NACE					H								
Fill fluid (seal)														
Silicone oil								S						
Carbon fluoride						1)		N						
White oil (FDA approved)						2)		W						
Silicone oil for vacuum applications								L						
Electronic Housing														
Housing - Material		Electrical Connection												
Aluminium alloy (Barrel version)	1/2-14 NPT							A						
Aluminium alloy (Barrel version)	M20x1.5	(n.a.: FM, CSA)						B						
Aluminium alloy (Barrel version)	Harting Han conn.	(n.a.: ATEX EExd, FM, CSA)				3)		E						
Aluminium alloy (Barrel version)	Fieldbus connector					3) 9)		G						
AISI 316 L ss (Barrel version)	1/2-14 NPT							S						
AISI 316 L ss (Barrel version)	M20 x 1.5	(n.a.: FM, CSA)						T						
Aluminium alloy (DIN version)	M20 x 1.5	(n.a.: FM, CSA)						J						
Aluminium alloy (DIN version)	Harting Han conn.	(n.a.: ATEX EExd, FM, CSA)				3)		K						
Aluminium alloy (DIN version)	Fieldbus connector					3) 9)		W						
Output / Additional Option														
HART digital communication and 4 to 20 mA	No additional options					4) 5)		H						
HART digital communication and 4 to 20 mA	Options requested (to be ordered by "Additional ordering code")					4)		1						
PROFIBUS PA	No additional options					4) 5)		P						
PROFIBUS PA	Options requested (to be ordered by "Additional ordering code")					5)		2						
FOUNDATION Fieldbus	No additional options					4) 5)		F						
FOUNDATION Fieldbus	Options requested (to be ordered by "Additional ordering code")					5)		3						

n.a. - not applicable with

13.14 Additional ordering information for model 265GN/265AN

Model 265GN/265AN with direct mount small-size seal

265GN , 265AN	Code			
Electrical Certification				
ATEX Group II Category 1/2 GD - Intrinsic Safety EEx ia	E1			
ATEX Group II Category 1/2 G - Flameproof EEx d	E2			
ATEX Group II Category 3 GD - Type of protection N, EEx nL, energy limited	E3			
ATEX II 1/2 GD EEx ia + ATEX II 1/2 GD EEx d + ATEX EEx nL	EW			
Factory Mutual (FM) - Intrinsically Safe	EA			
Factory Mutual (FM) - Explosion Proof (only with 1/2-14 NPT electr. connection a. stainless steel type label)	EB			
Canadian Standard Association - Intrinsically Safe (pending)	ED			
Canadian Standard Association - Explosion Proof	EE			
Canadian Standard Association - Explosion Proof (Kanada & USA)	EM			
NEPSI Ex ia II C T4/T6	EY			
NEPSI Ex d II C T6	EZ			
SAA Ex d IIC T6 and Ex td A21 IP66 T85°C	X1			
SAA Ex ia IIC T4/T6 and Ex n IIC T4/T6 (only for devices with HART / 4...20mA, without SIL2)	X2			
Integral LCD				
Digital LCD integral display	L1			
Backlit digital LCD integral display	L2			
Surge				
Surge/Transient Protector 6)	S1			
Operating Manuals				
German	M1			
Italian	M2			
Spanish	M3			
French	M4			
Swedish	M7			
Portuguese	MA			
Russian	MB			
Labels & Tag Language				
German in stainless steel (not available with DIN Electronic Housing code J, K, W)	T1			
German and English plastic (not suitable for Factory Mutual - Explosion Proof)	TA			
Additional Tag Plate				
in stainless steel, laser printed	I1			
Certificates				
Inspection certificate EN 10204-3.1 of calibration	C1			
Inspection certificate EN 10204-3.1 of the cleanliness stage	C3			
Inspection certificate EN 10204-3.1 of helium leakage test of the sensor module	C4			
Inspection certificate EN 10204-3.1 of the pressure test	C5			
Certificate EN 10204-2.1 of compliance with the order of instrument design	C6			
SIL2 - classification	CL			
Material Traceability				
Certificate EN 10204-2.1 of compliance with the order of process wetted parts	H1			
Inspection certificate EN 10204-3.1 for pressure-bearing process wetted parts with analysis-certificates as material verification (minor parts with certificate of compliance EN 10204)	H3			
Test report EN 10204-2.2 of the pressure bearing and process wetted parts	H4			
Connector				
Fieldbus 7/8in (without mating female plug, recommended for FOUNDATION Fieldbus) 5) 7)	U1			
Fieldbus M12x1 (without mating female plug, recommended for PROFIBUS PA) 5) 7)	U2			
Harting Han 8D (8U) - straight entry 4) 7)	U3			
Harting Han 8D (8U) - angle entry 4) 8)	U4			

1) suitable for oxygen applications

2) suitable for food applications

3) select connector type with additional ordering code

4) not available with electronic housing - Code G, W

5) not available with electronic housing - Code E, K

6) not available with ATEX-EEx nL (Code E3),

not available with PROFIBUS PA / FOUNDATION Fieldbus (Code 2, 3) with Intrinsic Safety EEx ia (Code E1, EY),

not available with Intrinsically Safe FM (Code EA) and SAA (Code X2)

7) not available with electronic housing - Code T, S, A, B, J, E

8) not available with electronic housing - Code T, S, A, B, J, K

9) not available with EEx nL, EEx d, FM- / CSA- / NEPSI-Explosion Proof

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14 Standard scope of delivery (changes may be made by using additional ordering code)

- For general-purpose applications (no Ex applications)
- No display, no lightning protection
- English-language operating instructions and labels
- Name plate material: Barrel electronics housing code A, B, E, G, S, T – stainless steel
 DIN electronics housing code J, K, W – plastic
- Configuration with kPa and °C units
- No test, inspection, or material certificates

Unless otherwise specified prior to manufacture, the customer shall be responsible for the selection of suitable parts that make contact with the medium and appropriate filling liquids in order to ensure compatibility with the relevant process medium.

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