

Series 2600T Pressure Transmitters 261Gx, 261Ax

Model 261GC/GG/GJ/GM/GN Gauge
Model 261AC/AG/AJ/AM/AN Absolute
with direct mount seal

- **Base accuracy: $\pm 0.15\%$**
- **Span limits**
 - 0.3 ... 60000 kPa; 1.2 in H₂O up to 8700 psi
 - 0.3 ... 3000 kPa abs; 2.25 mmHg up to 435 psia
- **Reliable sensing system coupled with the latest digital technologies**
 - provides large turndown ratio up to 20:1
- **Stainless steel housing**
 - optimized for harsh environment
 - extremely robust
- **Flexible configuration facilities**
 - local zero and span button
 - local configuration with keys on LCD indicator
 - remote configuration with hand terminal or PC user interface
- **Broad selection of variants, options and fill fluids**
 - allows total flexibility for hygienic applications or applications at extended temperature range
- **Full compliance with PED Category III**



ABB 2600T Series
Engineered solutions
for all applications



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1 General description

Model 261G and 261A detailed in this data sheet provide process connections with frontbonded diaphragms in several shapes and sizes to meet the requirements of different industries, e.g. oil & gas, pulp & paper, chemical, food & beverage and pharmaceutical.

Special filling liquids are available for applications with high temperature. For food and sanitary applications FDA approved filling liquids can be selected, which are defined as food fills and are Generally Recognized As Safe (GRAS) by the US Food and Drug Administration (FDA).

2 Functional Specifications

Measuring range and span limits

Sensor code	Upper range limit (URL)	Lower range limit (LRL)	Minimum span (sensor limits)	Overload limits
C	6 kPa 60 mbar 24 in H ₂ O	-6 kPa -60 mbar -24 in H ₂ O	0,3 kPa 3 mbar 1,2 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	2 kPa 20 mbar 8 in H ₂ O	1 MPa 10 bar 145 psi
L	250 kPa 2500 mbar 1000 in H ₂ O	0 abs	12,5 kPa 125 mbar 50 in H ₂ O	0,5 MPa 5 bar 72,5 psi
D	1000 kPa 10 bar 145 psi	0 abs	50 kPa 500 mbar 7,25 psi	2 MPa 20 bar 290 psi
U	3000 kPa 30 bar 435 psi	0 abs	150 kPa 1,5 bar 21,7 psi	6 MPa 60 bar 870 psi
R	10000 kPa 100 bar 1450 psi	0 abs	500 kPa 5 bar 72,5 psi	20 MPa 200 bar 2900 psi
V	60000 kPa 600 bar 8700 psi	0 abs	3000 kPa 30 bar 435 psi	90 MPa 900 bar 13050 psi



Important

The lower range limit (LRL) for 261A is 0 absolute for all measuring ranges.

Span limits

Maximum span = URL = upper range limit

Minimum span: refer to table above and the recommended minimum span, which is based on the process connection and is provided in the dimensional drawings.

In order to optimise the transmitter performance it is advisable to select the transmitter sensor to provide the minimum possible turndown.

Turndown = Upper range limit / Calibrated span

Zero suppression and elevation

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

- Calibrated span ≥ minimum span

Damping

Adjustable time constant: 0 ... 60 s

This is in addition to sensor response time, and can be set via optional LCD display, handheld terminal or PC user interface.

Warm-up period

Operation within specifications: ≤ 10 sec with minimal damping.

Insulation resistance

>100 MΩ at 500 V DC (between terminals and ground)

3 Operating limits

3.1 Temperature limits in °C (°F)

Ambient (operating temperature)

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



Important

For Hazardous Atmosphere applications, comply with the temperature range specified on the relevant certificate/approval.

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.

Fill fluids	Id	Density at 20 °C (68 °F) in kg / m ³	Process temperature in °C (°F) at maximum ambient temperature	
			40 °C (104 °F)	60 °C (140 °F)
Silicone oil	IC	1055	-30 ... 180 (-22 ... 356)	-30 ... 140 (-22 ... 284)
Carbon fluoride	L	1860	-30 ... 150 (-22 ... 302)	-30 ... 140 (-22 ... 284)
White oil (FDA)	WB	849	-6 ... 180 (21 ... 356)	-6 ... 140 (21 ... 284)
Silicone oil for vacuum applications	IC-V	1055	-30 ... 180 (-22 ... 356)	-30 ... 140 (-22 ... 284)
White oil (FDA) for vacuum applications	WB-V	849	-6 ... 180 (21 ... 356)	-6 ... 140 (21 ... 284)

Fill fluids	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
White oil for vacuum applications	WB-V	> 0,5	> 2,5	> 5,0	> 60

4 Environmental limits

Electromagnetic compatibility (EMC)

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

Meets NAMUR recommendations.

Low voltage directive:

Meets 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 1000 Hz (according to IEC 60068-2-6).

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

Acceleration: 50 g

Time: 11 ms

Protection class (wet and dust-laden atmospheres)

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

- IEC EN60529 (1989) with IP 67 (upon request with IP 68, IP 69K)
- NEMA 4X
- JIS C0920

Protection type with plugged connection: IP 65

5 Hazardous atmospheres

Transmitters with type of protection class "Intrinsically safe EEx ia/ib" acc. to Directive 94/9/EC (ATEX)

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

Marking (DIN EN 50014):

II 1/2 G EEx ia IIC T4 ... T6

II 2 G EEx ib IIC T4 ... T6

Max. permissible ambient temperatures depending on temperature class:

Ambient temperature	Temperature class
-40 °C ... 85 °C (-40 °F ... 185 °F)	T1 ... T4
-40 °C ... 71 °C (-40 °F ... 159 °F)	T5
-40 °C ... 56 °C (-40 °F ... 132 °F)	T6

or Marking (DIN EN 50014):

II 1/2 D IP65 T95 °C Ex ia D

II 2 D IP65 T95 °C Ex ib D

Permissible ambient temperature range:

-40 °C ... 85 °C (-40 °F ... 185 °F)

Supply and signal circuit in "Explosion protection class intrinsic safety EEx ia/ib IIB/IIC" with the following maximum values:

$U_i = 30 \text{ V}$

$I_i = 130 \text{ mA}$

$P_i = 0.8 \text{ W}$

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

Effective internal inductance: $L_i = 0.5 \text{ mH}$

Factory Mutual (FM)

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

Intrinsically Safe: 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

Protection class:

NEMA type 4X (indoor or outdoor mount)

Canadian standard (CSA)

Transmitters with 4 ... 20 mA output signal and HART communication

Intrinsically Safe: Class I, II and III; Division 1;

Groups A, B, C, D, E, F, G

Class I; Zone 0; Group IIC T6;

T4

Non-incendive

Class I, II, III; Division 2;

Groups A, B, C, D, F, G

Protection class:

NEMA type 4X (indoor or outdoor mount)

NEPSI (China)

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

Intrinsically Safe: (Gas, order code X3)

Marking: Ex ia II CT1~CT6

Max. permissible ambient temperatures depending on temperature class:

	$U_i \text{ max.} = 30 \text{ V}; I_i \text{ max.} = 130 \text{ mA};$ $P_i = 0.8 \text{ W}; C_i = 10 \text{ nF}; L_i = 0.5 \mu\text{H}$		
Ex ia II CT1 ... T6	T6	T5	T1 ... T4
	-40 ... 56 °C	-40 ... 71 °C	-40 ... 85 °C

Intrinsically Safe: (Gas and dust, order code X4)

Marking: Ex ia II CT1~T6;

DIP A20 T_A 95 °C

Max. permissible ambient temperatures depending on temperature class:

	$U_i \text{ max.} = 30 \text{ V}; I_i \text{ max.} = 130 \text{ mA}; P_i = 0.8 \text{ W};$ $C_i = 10 \text{ nF}; L_i = 0.5 \mu\text{H}$		
Ex ia II CT1 ... T6	T6	T5	T1 ... T4
	-40 ... 56 °C	-40 ... 71 °C	-40 ... 85 °C
DIP A20 TA95°C	-40 ... 85 °C		

6 Electrical characteristics and options

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

Power supply

The transmitter operates from 11 ... 42 V DC with no load and is protected against reverse polarity connection (additional load allows operations over 42 V DC).

For EEx ia and other intrinsically safe approval power supply must not exceed 30 V DC.

Ripple

Maximum permissible voltage ripple of power supply during communication:

Complies with HART FSK "Physical Layer" specification rev. 8.1.

Load limitations

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

$$R(k\Omega) = \frac{\text{Voltage supply} - \text{Minimum operating voltage (VDC)}}{23.6 \text{ mA}}$$



Important

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

LCD display (optional)

Digital, graphic LCD indicator for user specific indication of:

- Gauge pressure / absolute pressure or
- Output current in mA or % or
- HART output (freely assigned start/end values and unit)

Diagnostic messages, alarms, errors and measuring range overshoots are also displayed.

In addition, the LCD display can be used with 4 buttons for configuring and parametrizing the transmitter.

Output signal

Two wire 4 ... 20 mA output

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

Output current limits (according to NAMUR standard)

Overload condition:

- Lower limit: 3.8 mA (configurable down to 3.5 mA)
- Upper limit: 20.5 mA (configurable up to 23.6 mA)

Alarm current

Minimum alarm current:	Configurable from 3.5 ... 4 mA, Default: 3.6 mA
Max. alarm current:	Configurable from 20 ... 23.6 mA, Default: 21 mA
Default:	Max. alarm current

7 Measuring accuracy

Reference conditions acc. to IEC 60770

- Ambient temperature T_U = constant, in the range: 18 ... 30 °C (64 ... 86 °F)
- Humidity r.H. = constant, in the range: 30 ... 80 %
- Atmospheric pressure P_u = constant, in range: 950 ... 1060 mbar
- Zero based span on zero position
- Transmitter with seal diaphragm made sensor of stainless steel
- Fill fluid: Silicone oil
- Supply voltage: 24 V DC
- Load with HART: 250 Ω
- Transmitter not grounded
- Characteristic setting: linear, 4 ... 20 mA



Important

Unless otherwise specified, errors are quoted as % of span.

The accuracies related to the Upper Range Limits (URL) are affected by the actual turndown (TD) as a ratio between Upper Range Limit (URL) and calibrated span (URL / span).

8 Operating influences

Thermal change of ambient temperature to zero and span (turndown to 6:1), based on the set span.

Range	Maximum effect on zero and span
-10 ... 60 °C (14 ... 140 °F)	All measuring ranges $\pm (0.2 \% \times TD + 0.2 \%)$
-40 ... -10 °C (-40 ... 14 °F)	All measuring ranges $\pm \left(\frac{0.1\%}{10\text{ K}} \times TD + \frac{0.1\%}{10\text{ K}} \right)$
60 ... 85 °C (140 ... 185 °F)	

Temperature coefficient (T_K)

Effect of the ambient temperature for each 10 K (but limited to the maximum temperature effect on zero and span, refer to previous information). The information refers to the set span.

Range	Effect on zero and span
-10 ... 60 °C (14 ... 140 °F)	Sensor code C / F: $\pm (0.15 \% \times TD + 0.15 \%)$
	Sensor code L / D / U / R / V: $\pm (0.05 \% \times TD + 0.05 \%)$

Temperature limit for white oil, refer to "Operating limits"



Important

Additional temperature effects dependent on type and size of the process connection, provided in the dimensional drawings.



Important

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

Dynamic behavior (according to IEC 61298-1)

Dead time:	100 ms
Time constant (63 %)	200 ms (for all sensors)

Non-linearity (terminal based)

Percentage of calibrated span, consisting of non-linearity, hysteresis and non-repeatability.

Turndown	Non-linearity
1:1 to 10:1	$\pm 0,15 \%$
>10:1	$\pm (0.15 + 0.005 \times TD - 0.05) \%$

Power supply

Within the specified limits for the voltage / load the total effect is less than 0.001 % per volt.

Load

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

Electromagnetic fields

Total effect: less than 0.3 % of span from 80 ... 1000 MHz and for field strengths up to 10 V/m when tested with unshielded conduit, with or without meter.

Common-mode interference

No effect from 250 V_{eff} (50 Hz) or 50 V DC.

9 Technical Specification



Important

Refer to the order information sheets for the availability of different versions of the respective model.

9.1 Materials

Process isolating diaphragms¹⁾

See order information

Process connection¹⁾

See order information

Fill fluid for process connection

See order information

Sensor fill fluid

Silicon oil, inert fill (carbon fluoride), white oil (FDA)

Mounting bracket

Stainless steel AISI 316 L ss

Sensor housing

Stainless steel (1.4404 / 316L)

Electronics housing and cover

Stainless steel (1.4404 / 316L)

Inspection glass for LCD display cover

Polycarbonate (Makrolon 6557)

Filter for atmospheric ventilation

Filter housing: Plastic (standard), stainless steel (code EA, AB)

Filter material: polyamide (PA)

Cover O-ring

EPDM

Type plate

Plastic data plate attached to the electronics housing

¹⁾ Wetted transmitter parts

9.2 Calibration

- Standard: 0 to upper range limit (URL)
- Optional: for specified measuring span

9.3 Optional accessories

LCD display

Graphical display, plug-in and rotatable design.

Supplemental measuring point marker tag

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

Cleanliness procedure for oxygen application

Certificates (test, model, calibration, material traceability)

Language of operating instructions

9.4 Process connections

See order information

9.5 Electrical connections

- One M16 x 1.5 threaded conduit entry with cable gland (cable diameter approx. 5 ... 10 mm) directly on housing or
- M20 x 1.5 (via adapter) with cable gland (cable diameter approx. 6 ... 11 mm) or
- ½ -14 NPT (via adapter, without cable gland) or
- Harting Han plug connector (with mating plug (socket outlet, for wire diameters of 0.75 ... 1 mm² and cable diameters of 5 ... 11 mm)) or
- Miniature plug connector (without mating plug (socket outlet))

Terminal block

HART version: Two terminals for signal / auxiliary power, for wire cross-sections from 0.5 ... 1.5 mm² (16 AWG)

Ground connection (optional)

External ground terminals for wire cross-sections up to 4 mm² (12 AWG)

9.6 Mounting position

The transmitter can be mounted in any position.

9.7 Weight (without options)

- Transmitter without process connections: approx. 0.7 kg (1.54 lb)
- Process connections: see dimensional drawings
- Packaging: addit. 650 g (1.43 lb)

9.8 Packaging

Carton approx. 240 x 140 x 190 mm (10 x 6 x 8 in).

10 Configuration

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

Standard configuration

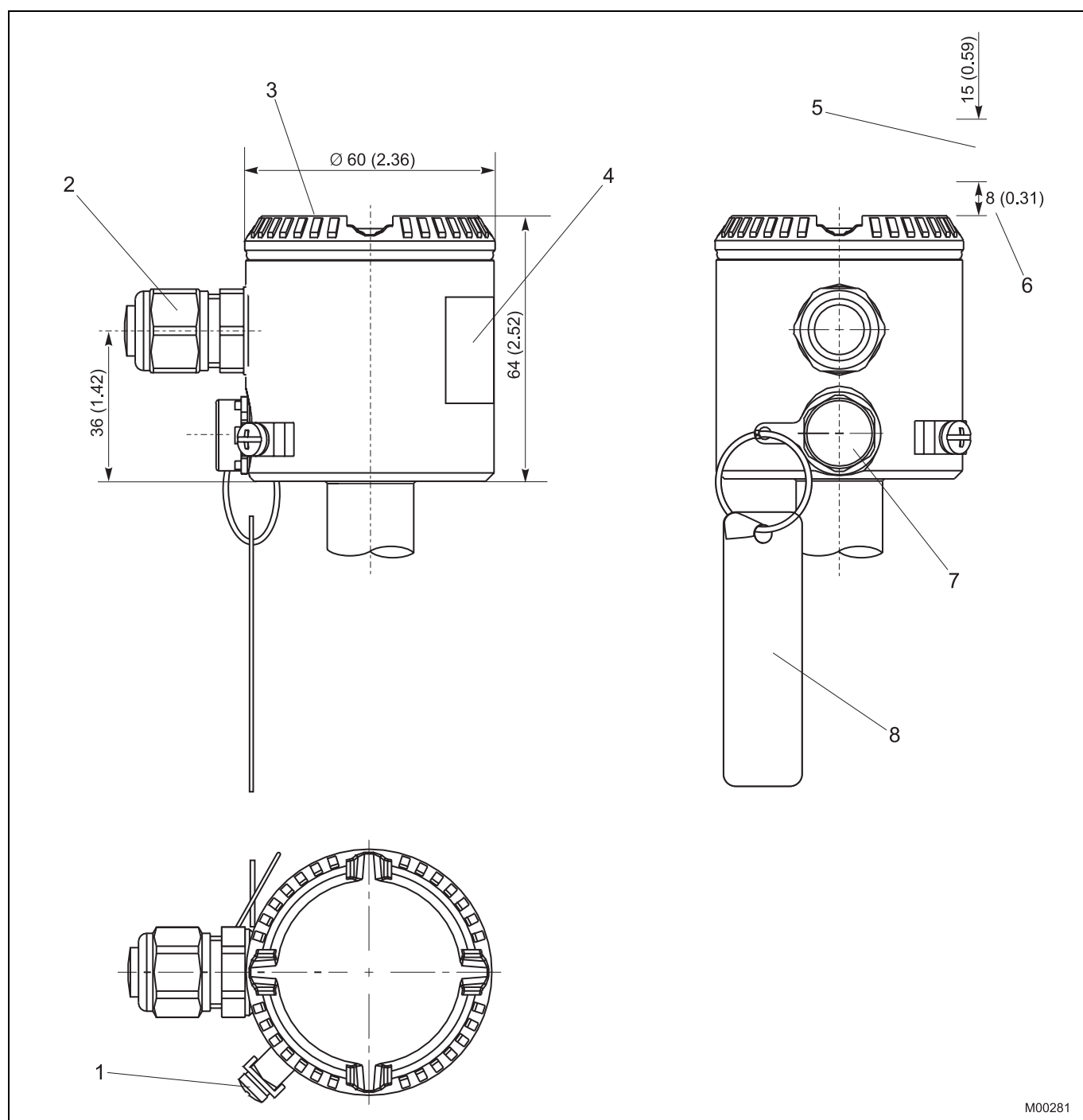
The transmitters are factory calibrated to the customer's specified range. Calibrated range and tag No. are provided on the type plate. If this data has not been specified, the transmitter will be delivered configured as follows:

4 mA	Zero
20 mA	Upper range limit (URL)
Output	linear
Damping	0.1 sec
Transmitter failure mode	21 mA
Optional LCD display	0 ... 100 %

Any or all the above configurable parameters, including lower range value and upper range value, can be easily changed using the optional LCD display, a HART handheld communicator or a PC, running the configuration software SMART VISION with DTM for 2600T.

11 Mounting Dimensions (not design data)

11.1 Pressure transmitter



M00281

- | | |
|--|--|
| 1 Grounding/potential equalizing terminal (optional) | 5 Clearance for cover removal required |
| 2 Electrical connection (with cable gland) | 6 With LCD display |
| 3 Housing cover | 7 Filter for atmospheric ventilation |
| 4 Type plate | 8 Tag plate (optional) |

11.2 Version with LCD display and Harting Han plug

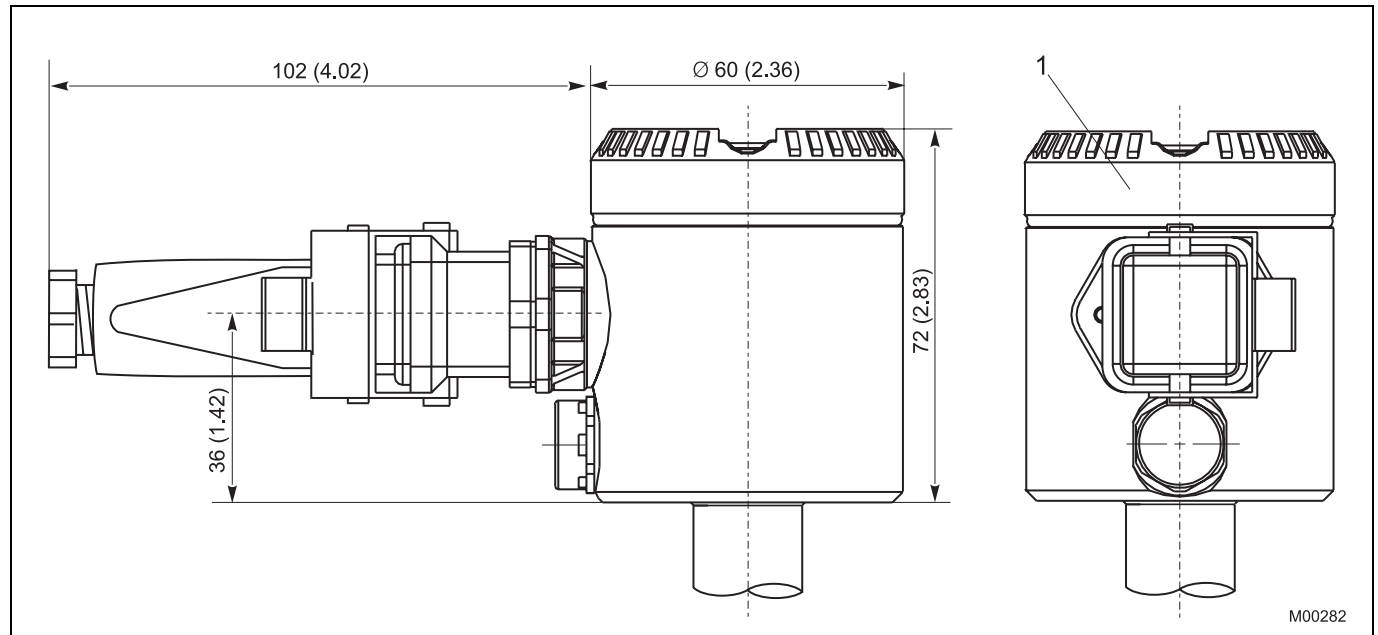


Fig. 2: Dimensions in mm (inches)

- 1 Housing cover for LCD display

11.3 Model 261GC / 261AC

11.3.1 Flush diaphragm remote seal

Form B (EN 1092)

Form RF (ANSI B16.5)

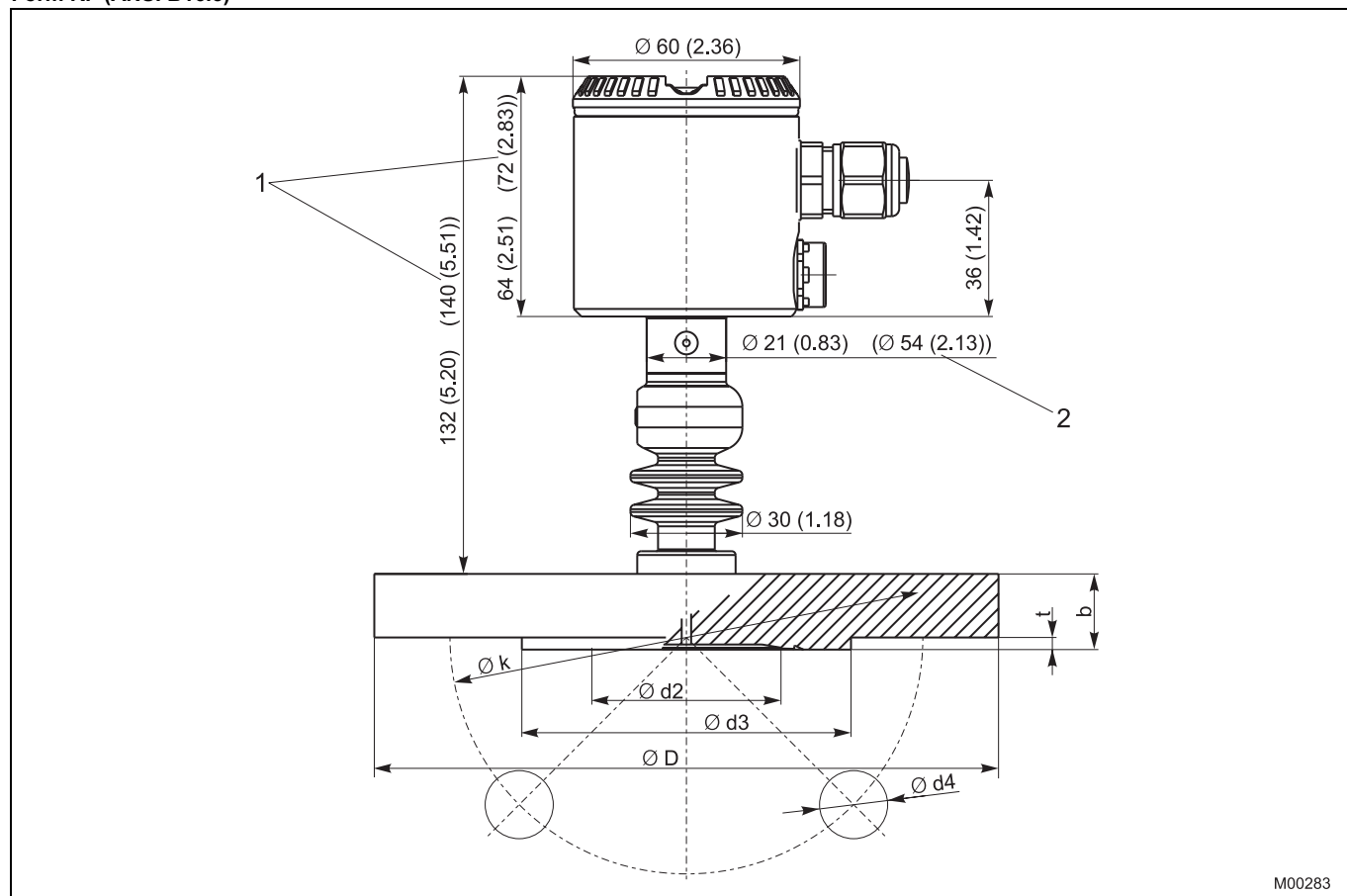


Fig. 3: Dimensions in mm (inches)

1 With LCD display

2 Dimensions of sensor code C, F

11.3.2 Extended diaphragm remote seal

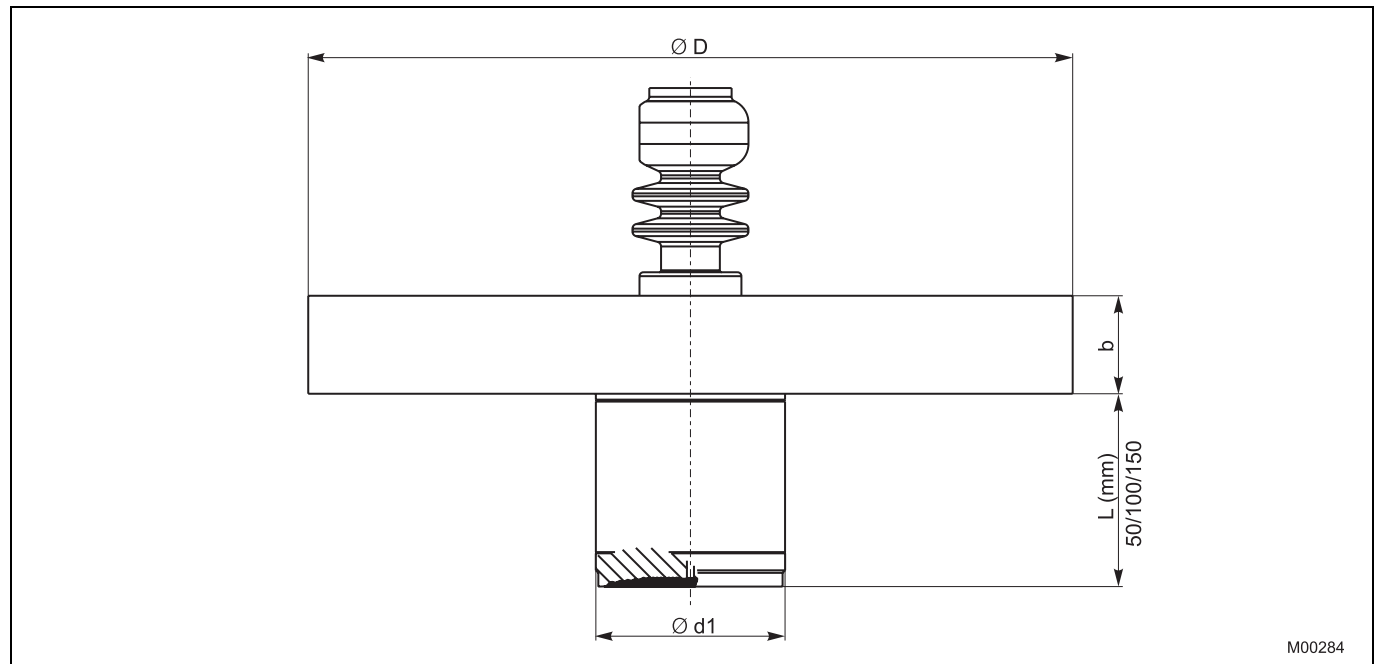


Fig. 4: Dimensions in mm (inches)

11.4 Sealing surfaces

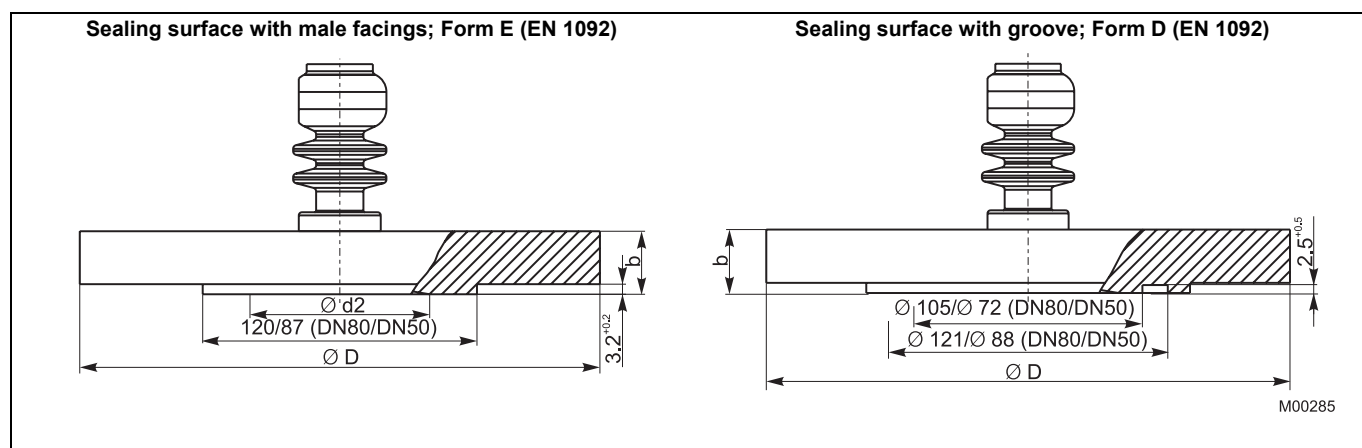


Fig. 5: Dimensions in mm (inches)

Sealing surface Form B, Form D, Form E (EN 1092), Form RF (Ansi B16.5)

DN	PN	Ø D	Ø k	Ø d1	Ø d2	Ø d3	t	b	Ø d4	Weight (kg)	
										Flush diaphragm	Extended diaphragm (tube)
25	PN 10 / 40	115 (4.53)	85 (3.35)	-	32 (1.26)	68 (2.68)	2	18 (0.71)	4xØ14	1.38	-
50	PN 16 / 40	165 (6.50)	125 (4.92)	48.3 (1.9)	57 (2.24)	102 (4.02)	2 (0.08)	20 (0.79)	4xØ18	3.3	4.0
	PN 63	180 (7.09)	135 (5.31)	48.3 (1.9)	57 (2.24)	102 (4.02)	2 (0.08)	26 (1.02)	4xØ22	4.5	5.2
	PN 100	195 (7.68)	145 (5.71)	48.3 (1.9)	57 (2.24)	102 (4.02)	2 (0.08)	28 (1.10)	4xØ26	5.8	6.5
80	PN 16 / 40	200 (7.87)	160 (6.30)	73 (2.87)	75 (2.95)	138 (5.43)	2 (0.08)	24 (0.94)	8xØ18	5.8	7.5
	PN 63	215 (8.46)	170 (6.69)	73 (2.87)	75 (2.95)	138 (5.43)	2 (0.08)	28 (1.10)	8xØ22	6.9	8.6
	PN 100	230 (9.06)	180 (7.09)	73 (2.87)	75 (2.95)	138 (5.43)	2 (0.08)	32 (1.26)	8xØ26	9.4	11.1
1 in	class 150	107.9 (4.25)	79.4 (3.13)	-	32 (1.26)	50.8 (2)	1.6 (0.06)	14.2 (0.56)	4xØ15.7	0.9	-
	class 300	123.8 (4.87)	88.9 (3.5)	-	32 (1.26)	50.8 (2)	1.6 (0.06)	17.5 (0.69)	4xØ19.1	1.4	-
2 in	class 150	152.4 (6)	120.6 (4.75)	48.3 (1.9)	57 (2.24)	92.1 (3.63)	1.6 (0.06)	19.1 (0.75)	4xØ19.1	2.3	4.0
	class 300	165.1 (6.5)	127 (5)	48.3 (1.9)	57 (2.24)	92.1 (3.63)	1.6 (0.06)	22.4 (0.88)	8xØ19.1	3.7	5.4
	class 600	165.1 (6.5)	127 (5)	48.3 (1.9)	57 (2.24)	92.1 (3.63)	6.35 (0.25)	25.4 (1.0)	8xØ19.1	4.5	6.2
3 in	class 150	190.5 (7.5)	152.4 (6)	73 (2.87)	75 (2.95)	127 (5)	1.6 (0.06)	22.2 (0.87)	4xØ19.1	5.3	7.0
	class 300	209.5 (8.25)	168.3 (6.63)	73 (2.87)	75 (2.95)	127 (5)	1.6 (0.06)	28.4 (1.12)	8xØ22.4	7.3	9.0
	class 600	209.5 (8.25)	168.3 (6.63)	73 (2.87)	75 (2.95)	127 (5)	6.35 (0.25)	31.8 (1.25)	8xØ22.4	9.1	10.8

Accuracy information

Process connection	Temperature effect for each 10 K				Recommended min. measuring span	
	Ambient		Process			
	mbar	in H ₂ O	mbar	in H ₂ O	mbar	in H ₂ O
DN 25 flush diaphragm	0.77	0.31	1.20	0.48	1000	401.5
DN 50 flush diaphragm	0.075	0.03	0.4	0.16	100	40.15
DN 50 extended diaphragm	0.125	0.05	0.9	0.36	160	64.24
DN 80 flush diaphragm	0.05	0.02	0.1	0.04	60	24.09
DN 80 extended diaphragm	0.05	0.02	0.1	0.04	60	24.09
1 in ASME flush diaphragm	0.77	0.31	1.20	0.48	1000	401.5
2 in ASME flush diaphragm	0.075	0.03	0.4	0.16	100	40.15
2 in ASME extended diaphragm	0.125	0.05	0.9	0.36	160	64.24
3 in ASME flush diaphragm	0.05	0.02	0.1	0.04	60	24.09
3 in ASME extended diaphragm	0.05	0.02	0.1	0.04	60	24.09

11.5 Model 261GG / 261AG

11.5.1 Pressure transmitter with tri-clamp connection acc. to ASME

Roughness for wetted surfaces: $R_a \leq 0.8 \mu\text{m}$

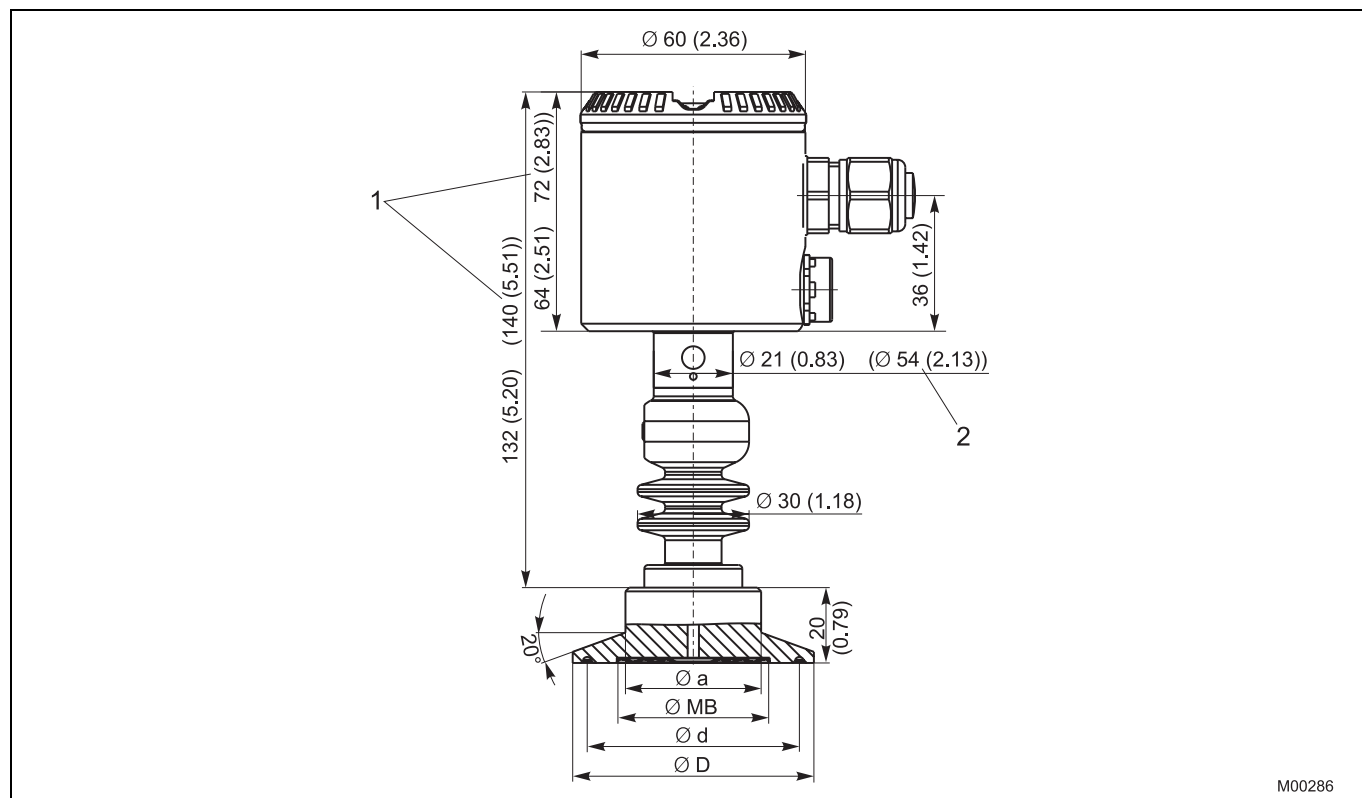


Fig. 6: Dimensions in mm (inches)

1 With LCD display

2 Dimensions of sensor code C, F

DN	PN	Ø MB	Ø D	Ø d	Ø d2
1 1/2 in	40	32 (1.26)	50 (1.97)	43.5 (1.71)	36 (1.42)
2 in	40	40 (1.57)	64 (2.52)	56.5 (2.22)	36 (1.42)
3 in	25	72 (2.83)	91 (3.58)	83.5 (3.29)	77 (3.03)

11.5.2 Varivent connection

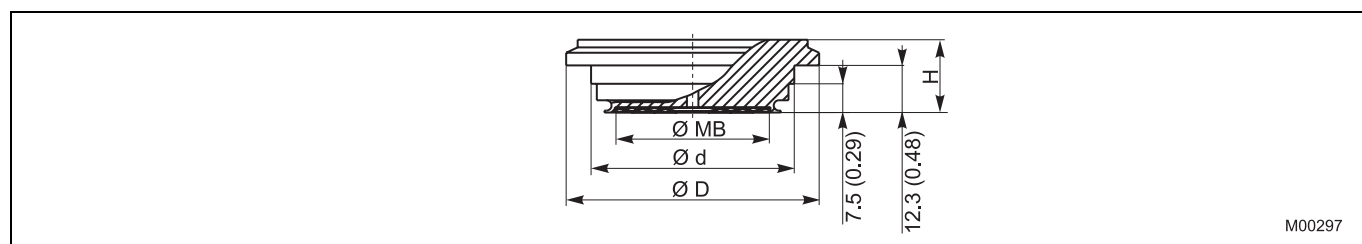


Fig. 7: Dimensions in mm (inches)

Form	Ø MB	Ø D	Ø d	H
N for pipes DN 40 to 125 and 1 1/2 in to 4 in	60 (2.36)	84 (3.31)	70.9 (2.79)	17 (0.67)
F for pipes DN 25 and 1 in	40 (1.57)	66 (2.60)	53 (2.08)	17 (0.67)

11.5.3 NEUMO BioControl (flange connection)

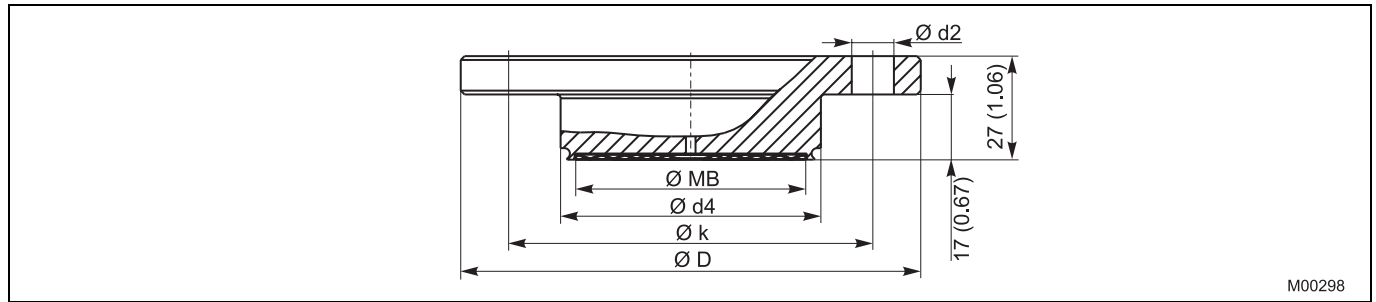


Fig. 8: Dimensions in mm (inches)

Model	PN	$\varnothing MB$	$\varnothing D$	$\varnothing d2$	$\varnothing k$	$\varnothing d4$
GR50	16	40 (1.57)	90 (3.54)	4x $\varnothing 9$	70 (2.76)	50 (1.97)
GR65	16	59 (2.32)	120 (4.72)	4x $\varnothing 11$	95 (3.74)	67.9 (2.67)

11.5.4 Pressure sensor with DRD flange

D = 65 mm; PN 40

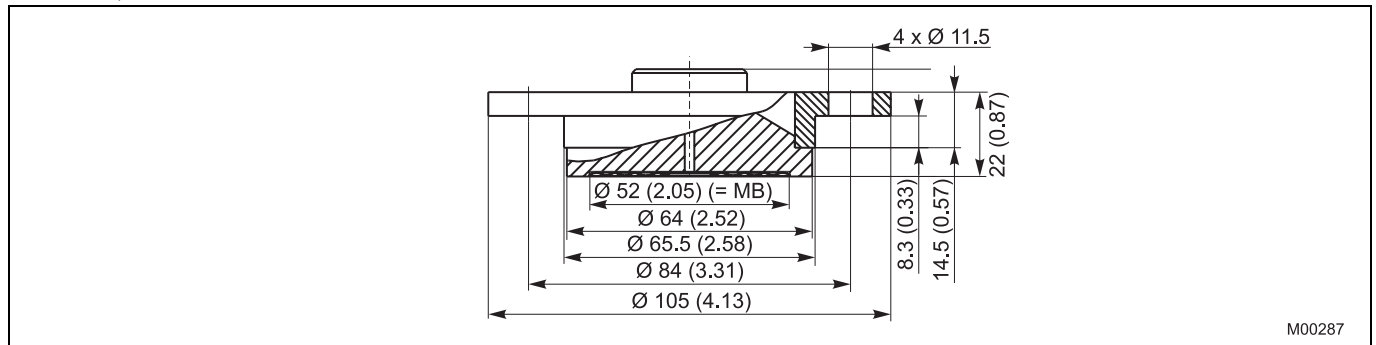


Fig. 9: Dimensions in mm (inches)

11.5.5 Dairy thread

DIN 11851

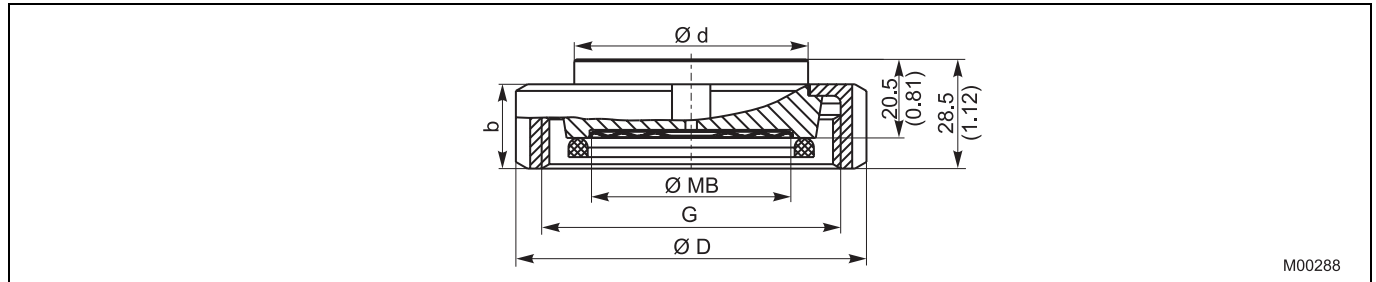


Fig. 10: Dimensions in mm (inches)

DN	PN	$\varnothing MB$	$\varnothing D$	$\varnothing d$	b	G
32	40	32 (1.26)	70 (2.76)	41 (1.61)	21 (0.83)	Rd 58 x 1/6 in
40	40	40 (1.57)	78 (3.07)	48 (1.89)	21 (0.83)	Rd 65 x 1/6 in
50	25	52 (2.05)	92 (3.62)	61 (2.40)	22 (0.87)	Rd 78 x 1/6 in

11.5.6 APV-RJT Union nut

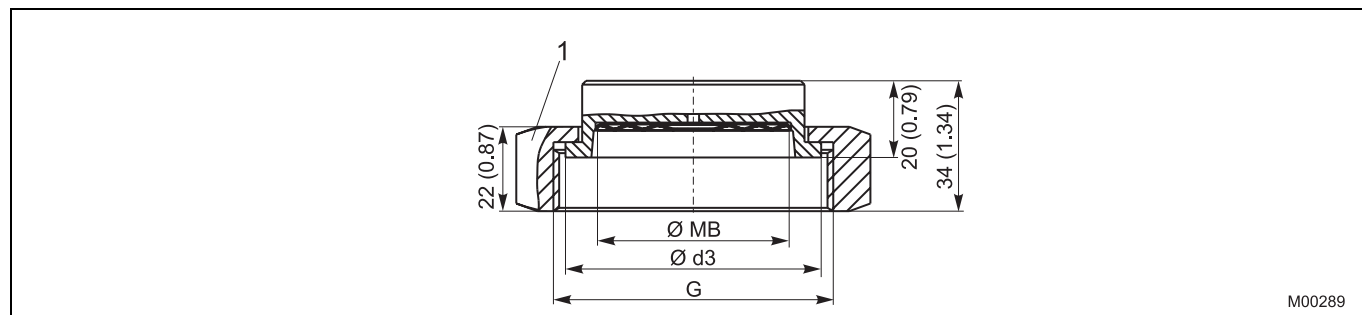


Fig. 11: Dimensions in mm (inches)

1 Wrench size

DN	PN	Ø MB	Ø d3	G	WS
1 1/2 in	40	32 (1.26)	54 (2.16)	2 5/16 x 8 in	65 (2.65)
2 in	40	40 (1.57)	66.7 (2.63)	2 7/8 x 6 in	80 (3.15)

11.5.7 SMS Union nut

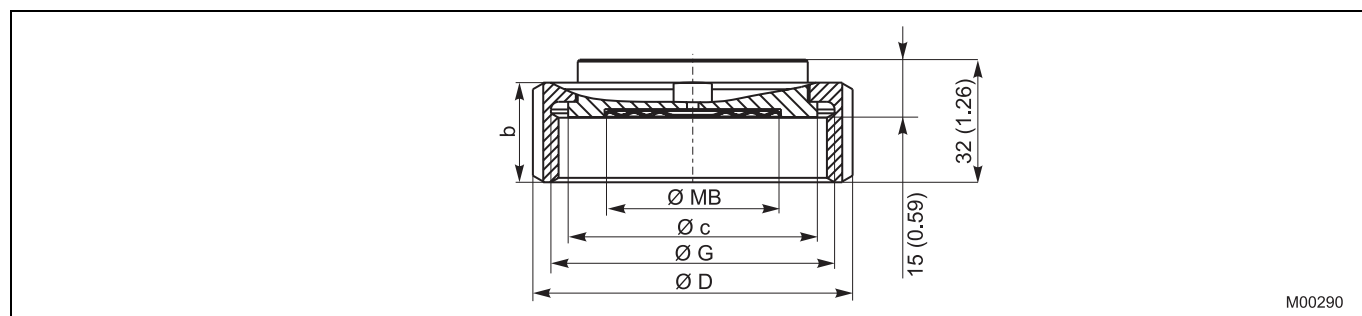


Fig. 12: Dimensions in mm (inches)

DN	PN	Ø MB	Ø D	Ø c	G	b
1 1/2 in	40	35 (1.38)	74 (2.91)	55 (2.17)	Rd 60 x 1/6 in	25 (0.98)
2 in	40	45 (1.77)	84 (3.30)	65 (2.56)	Rd 70 x 1/6 in	26 (1.02)

Additional effect of process connection, only when temperature of transmitter (ambient temperature) deviates from process connection

Process connection	Temperature effect for each 10 K		Recommended min. measuring span		Weight (kg)
	Process		mbar	in H ₂ O	
	mbar	in H ₂ O			
Dairy thread DIN 11851, DN 32, PN 40	0.22	0.09	45	18.07	0.5
Dairy thread DIN 11851, DN 40, PN 40	0.20	0.08	40	16.06	0.75
Dairy thread DIN 11851, DN 50, PN 25	0.12	0.05	40	16.06	0.8
SMS Union nut DN 1 1/2 in, PN 40	0.35	0.14	70	28.10	0.8
SMS Union nut DN 2 in, PN 40	0.12	0.05	40	16.06	1.0
Tri-clamp connection ASME, DN 1 1/2 in, PN 40	0.35	0.14	70	28.10	0.6
Tri-clamp connection per ASME, DN 2 in, PN 40	0.12	0.05	40	16.06	0.75
Tri-clamp connection per ASME, DN 3 in, PN 25	0.08	0.03	40	16.06	1.3
DRD flange, D = 65 mm	0.12	0.05	40	16.06	2.0

Additional effect of process connection based on calibration temperature

Process connection	Temperature effect for each 10 K				Recommended min. measuring span		Weight (kg)
	Ambient		Process				
	mbar	in H ₂ O	mbar	in H ₂ O	mbar	in H ₂ O	
APV-RJT Union nut DN 1 1/2 in, PN 40	0.77	0.31	1.20	0.48	400	160.59	0.9
APV-RJT Union nut DN 2 in, PN 40	0.24	0.09	0.78	0.31	200	80.29	1.1
Varivent for DN 25 pipes	0.28	0.11	0.79	0.32	215	86.31	0.33
Varivent for DN 40-DN 125 pipes	0.19	0.07	0.90	0.36	220	88.32	0.58
NEUMO BioControl G50	0.16	0.07	0.52	0.21	135	54.20	0.65
NEUMO BioControl G65	0.18	0.07	0.88	0.35	220	88.32	1.3

11.6 Model 261GJ / 261AJ

11.6.1 Pressure transmitter with inline remote seal and tri-clamp connection acc. to ASME

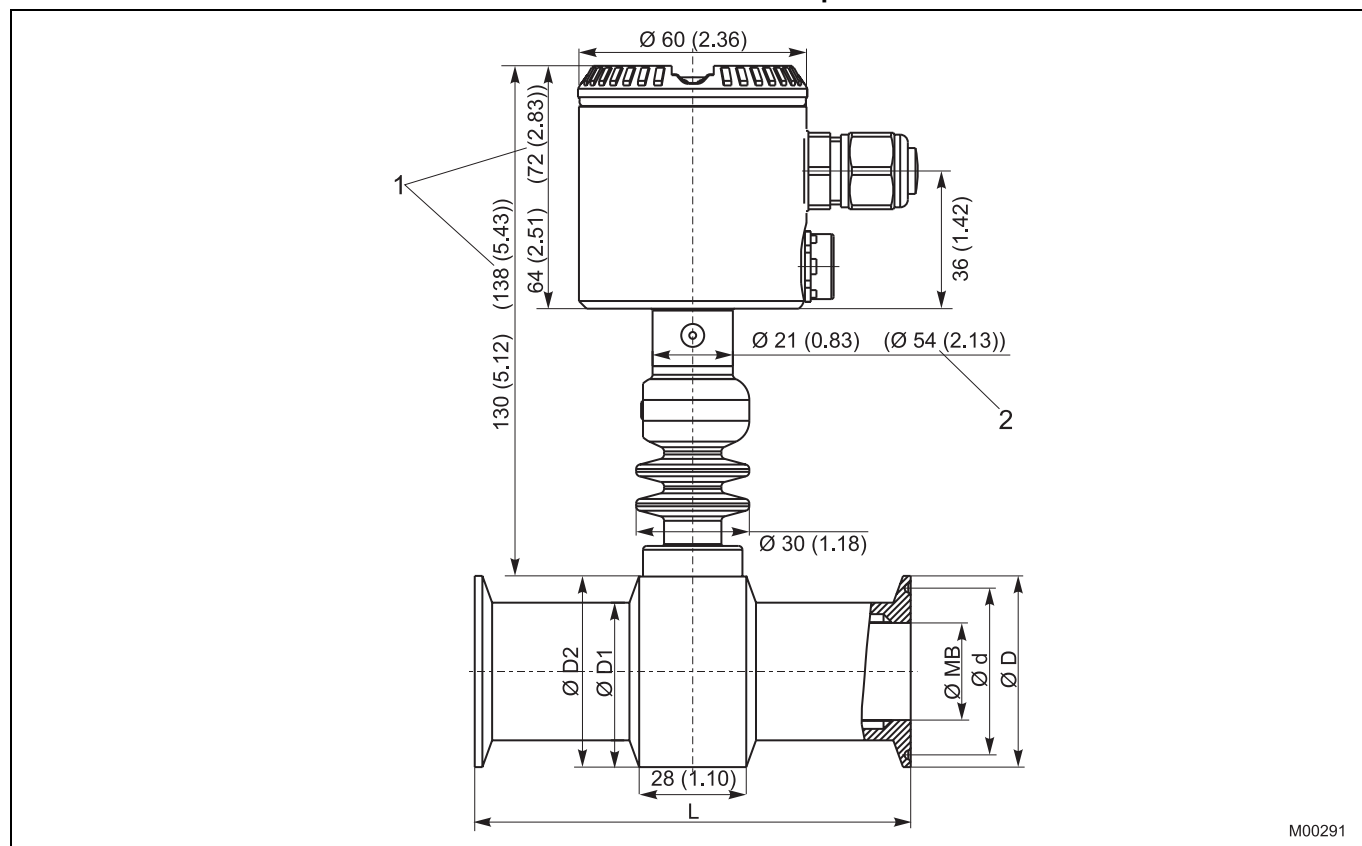


Fig. 13: Dimensions in mm (inches)

1 With LCD display

2 Dimensions of sensor code C, F

DN	PN	Ø MB	Ø D1	Ø D2	L	Ø d
1 in	40	22.2 (0.87)	36 (1.42)	50 (1.97)	114 (4.49)	43.5 (1.71)
1 1/2 in		34.8 (1.37)	43 (1.69)	55 (2.17)	146 (5.75)	43.5 (1.71)
2 in		47.5 (1.87)	56 (2.20)	64 (2.52)	156 (6.14)	56.5 (2.22)

11.6.2 Inline remote seal with dairy thread

DIN 11851

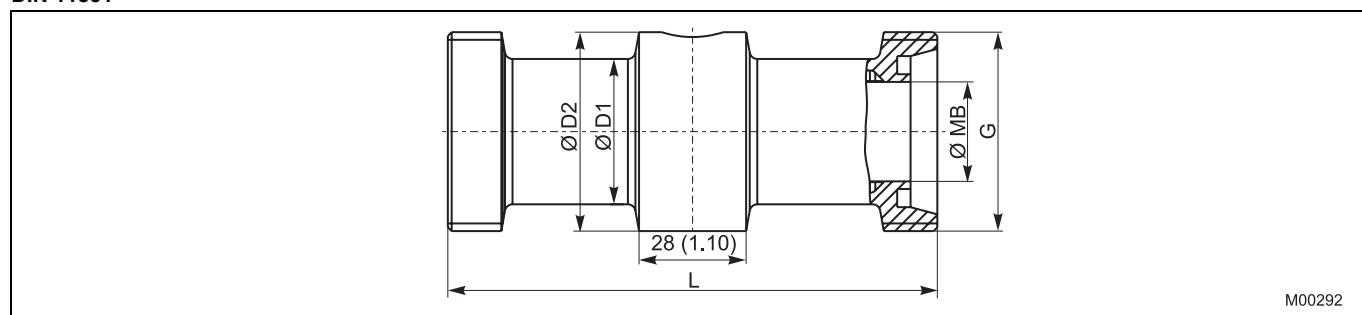


Fig. 14: Dimensions in mm (inches)

DN	PN	Ø MB	Ø D1	Ø D2	L	G
25	40	26 (1.02)	38 (1.50)	52 (2.05)	114 (4.49)	Rd 52 x 1/6 in
40	40	38 (1.50)	55 (2.17)	65 (2.56)	146 (5.75)	Rd 65 x 1/6 in
50	25	50 (1.97)	68 (2.68)	78 (3.07)	156 (6.14)	Rd 78 x 1/6 in

11.6.3 Inline remote seal with sandwich design

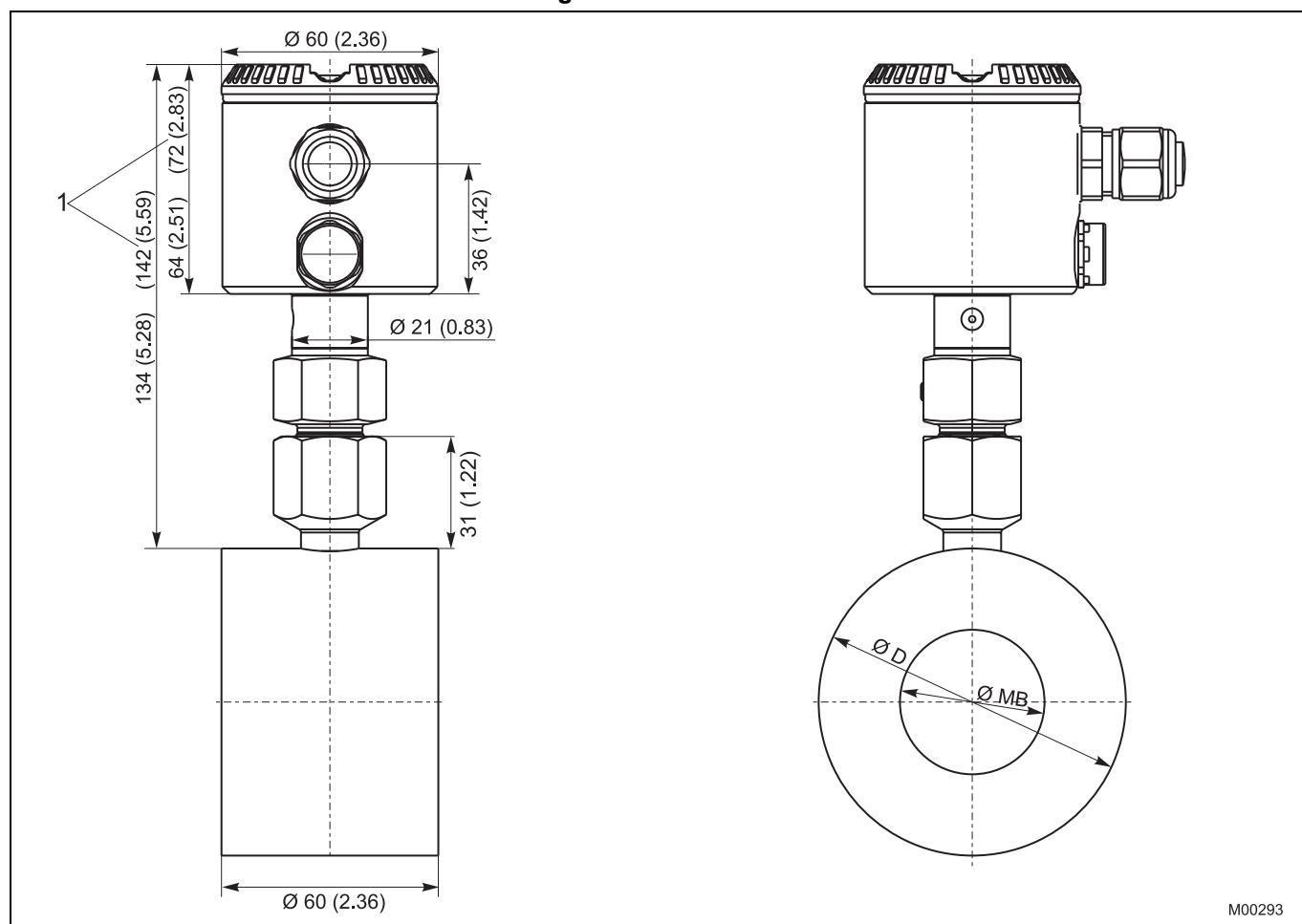


Fig. 15: Dimensions in mm (inches)

1 With LCD display

DN	PN (bar)	PN (psi)	Ø MB	Ø D
25 / 1 in	6 ... 400	150 ... 2500	28.5 (1.12)	63 (2.48)
40 in	6 ... 400		43 (1.69)	85 (3.35)
1 1/2 in	-		43 (1.69)	78 (3.07)
50 / 2 in	6 ... 320		54.5 (2.15)	95 (3.74)
80 / 3 in	6 ... 250		82.5 (3.25)	130 (5.12)

Accuracy information

Process connection	Temperature effect for each 10 K				Recommended min. measuring span		Weight (kg)
	Ambient		Process				
	mbar	in H ₂ O	mbar	in H ₂ O	mbar	in H ₂ O	
Dairy thread DIN 11851, DN 25, PN 40	0.63	0.25	8.19	3.29	2200	883	1.0
Dairy thread DIN 11851, DN 40, PN 40	0.07	0.03	1.92	0.77	500	201	1.9
Dairy thread DIN 11851, DN 50, PN 25	0.04	0.01	1.86	0.75	500	201	2.8
Tri-clamp for pipes acc. to ASME, DN 1 in, PN 40	1.92	0.77	18.54	7.44	5000	2008	1.0
Tri-clamp for pipes acc. to ASME, DN 1 1/2 in, PN 40	0.08	0.03	0.99	0.40	250	100	1.9
Tri-clamp for pipes acc. to ASME, DN 2 in, PN 40	0.06	0.02	2.25	0.90	600	241	2.8
DN 25 / ASME 1 in	1.76	0.71	9.21	3.70	2800	1124	1.4
DN 40 / ASME 1 1/2 in	0.57	0.23	5.03	2.02	1400	562	2.2
DN 50 / ASME 2 in	1.57	0.63	16.62	6.67	4500	1807	2.5
DN 80 / ASME 3 in	0.74	0.30	7.11	2.85	2000	803	4.0

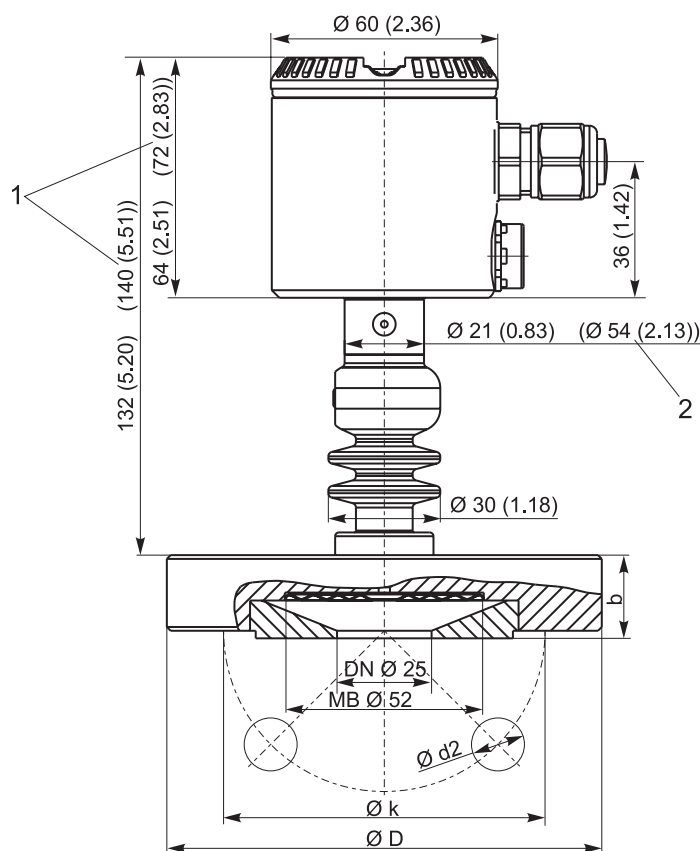
11.7 Model 261GM / 261AM

11.7.1 Transmitter with flange type seal and internal diaphragm

DN 25, PN 10 / 40

DN 1 in CL 150

DN 1 in CL 300



M00294

Fig. 16: Dimensions in mm (inches)

1 With LCD display

2 Dimensions of sensor code C

DN	PN	Ø D	Ø k	Ø d2
25	10 / 40	115 (4.53)	85 (3.35)	14 (0.55)
1 in	ASME CL 150	110 (4.33)	79.5 (3.13)	16 (0.63)
1 in	ASME CL 300	125 (4.92)	89 (3.50)	20 (0.79)

11.7.2 Transmitter with flange type seal and internal diaphragm

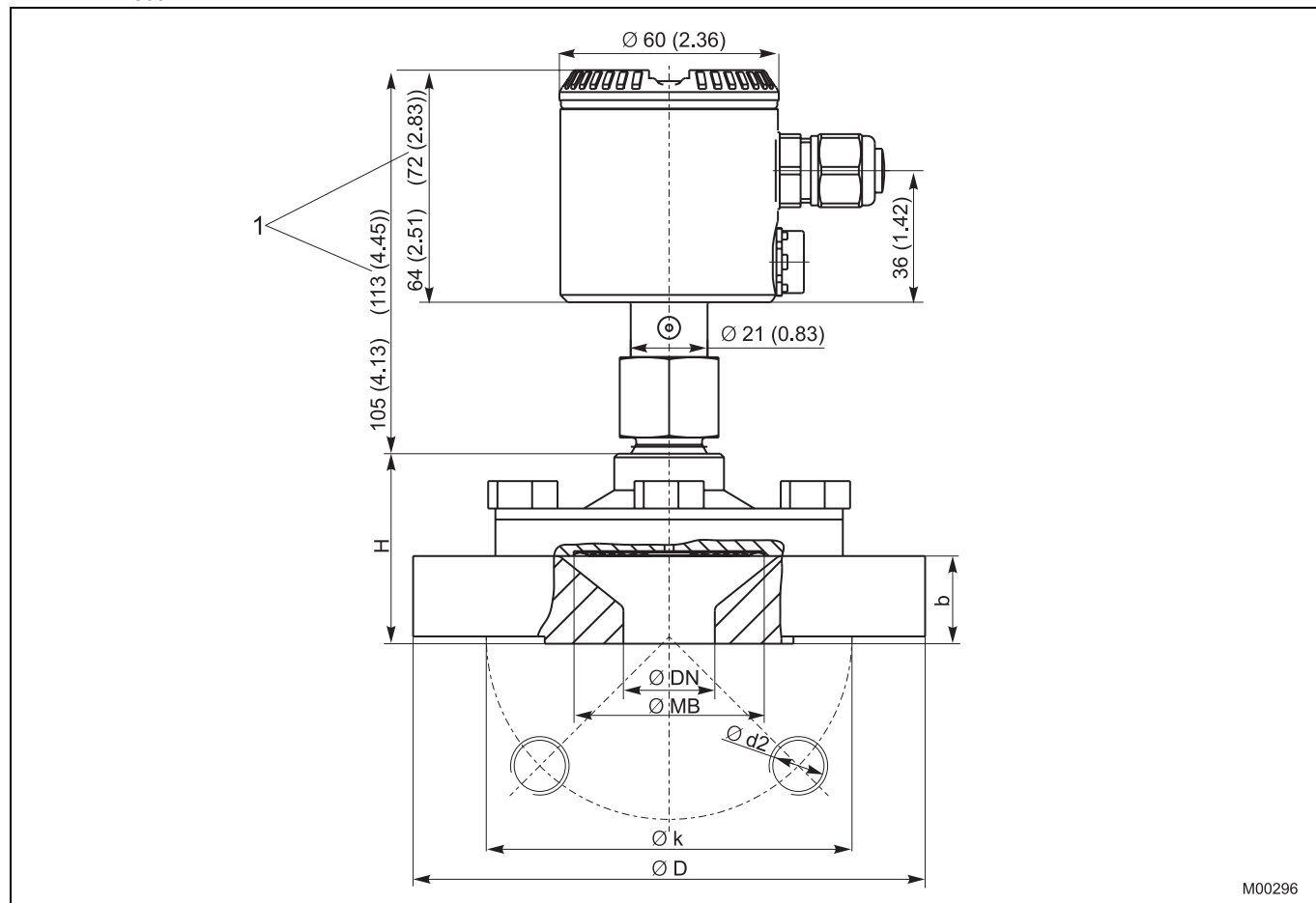
DN 25, PN 63 / 100

DN 25, PN 160

DN 25, PN 250

DN 1 in CL 600

DN 1 in CL 1500



M00296

Fig. 17: Dimensions in mm (inches)

1 With LCD display

DN	PN	Ø MB	Ø D	Ø k	b	H	Ø d2
25	63 / 100	52 (2.04)	140 (5.51)	100 (3.94)	24 (0.94)	52 (2.05)	4 x M16
	160		140 (5.51)	100 (3.94)	24 (0.94)	52 (2.05)	4 x M16
	250		150 (5.91)	105 (4.13)	28 (1.10)	56 (2.20)	4 x M20
1 in	ASME CL 600	52 (2.04)	125 (4.92)	89 (3.50)	24.5 (1.42)	52.5 (0.96)	4 x 5/8 in
	ASME CL 1500		150 (5.91)	101.5 (4.00)	36 (1.42)	64 (1.42)	4 x 7/8 in

Accuracy information

Process connection	Nominal pressure	Temperature effect for each 10 K				Recommended min. measuring span		Weight (kg)
		Ambient		Process				
		mbar	in H ₂ O	mbar	in H ₂ O	mbar	in H ₂ O	
1 in	ASME CL 150	0.24	0.096	0.78	0.313	160	64.24	1.4
1 in	ASME CL 300							1.7
1 in	ASME CL 600							3.6
1 in	ASME CL 1500							4.0
DN 25	DIN - 10 / 40 bar	0.24	0.096	0.78	0.313	160	64.24	1.5
DN 25	DIN - 63 / 100 bar							3.2
DN 25	DIN - 160 bar							3.6
DN 25	DIN - 250 bar							4.0

12 Electrical connections

12.1 Standard terminal block

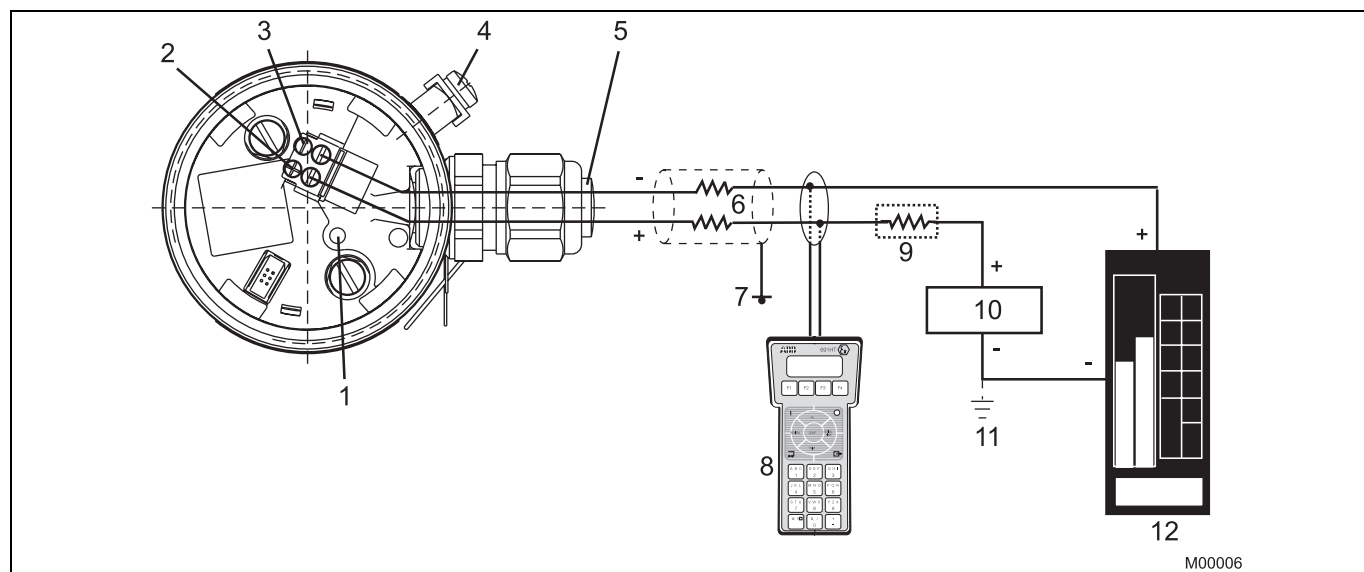


Fig. 19

- | | |
|--|----------------------------|
| 1 Pushbutton for lower/upper range values | 6 Line load |
| 2 + Signal screw terminal for wires with 0.5 ... 1.5 mm ² cross-section | 7 Ground |
| 3 - Signal screw terminal for wires with 0.5 ... 1.5 mm ² cross-section | 8 Handheld terminal |
| 4 Grounding/potential equalizing terminal (optional) | 9 Resistor with min. 250 Ω |
| 5 Cable entry | 10 Power source |
| | 11 Optional ground |
| | 12 Receiver |

12.2 Optional plug connectors

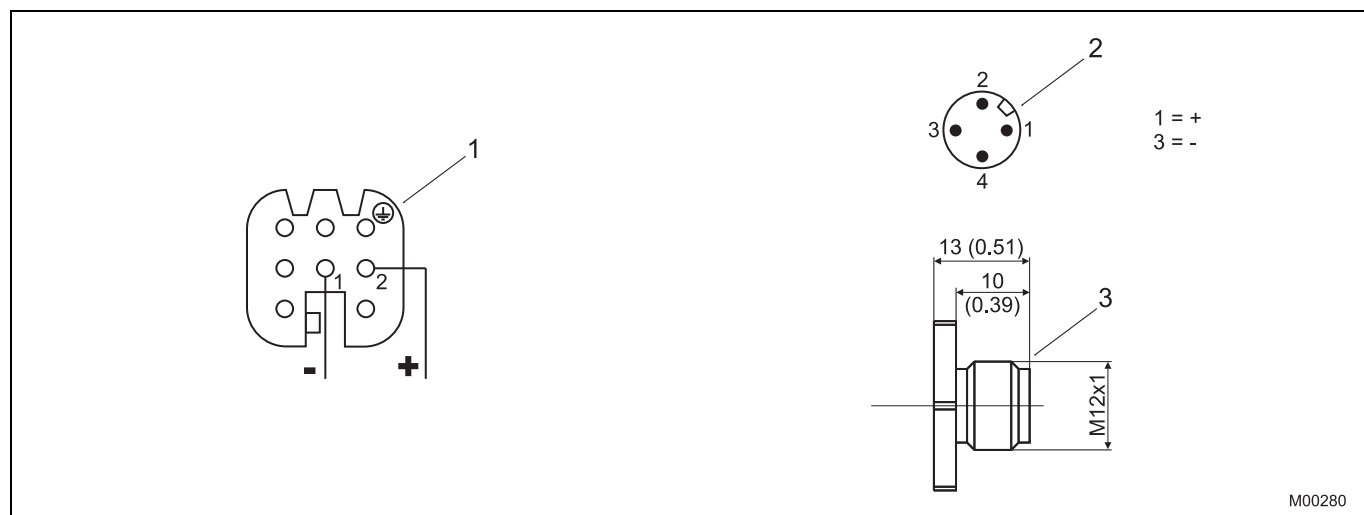


Fig. 20: Dimensions in mm (inches)

- | | |
|--|------------------------------|
| 1 Harting Han 8D (8U) pin identification (socket view) | 3 Plug (socket) not supplied |
| 2 M12x1 miniature plug (pins) | |

13 Ordering information

13.1 Ordering information for model 261GC/261AC

Gauge Pressure Transmitter			Variant digit No.	1 - 6	7	8	9	10	Code			
261GC			Base accuracy 0.15 %	Catalog No.	261GC-							
Sensor-Span limits												
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												
261AC			Base accuracy 0.15 %	Catalog No.	261AC-							
Sensor-Span limits												
40 kPa	400 mbar	300 mmHg				F						
250 kPa	2500 mbar	1875 mmHg				L						
1000 kPa	10 bar	7500 mmHg				D						
3000 kPa	30 bar	435 psi				U						
10000 kPa	100 bar	1450 psi				R						
Diaphragm material / Fill fluid (sensor)												
Front bonded diaphragm	Silicone oil	2)				R						
Front bonded diaphragm	Carbon fluoride	1, 2)				2						
Front bonded diaphragm	White oil	2)				6						
Front bonded diaphragm	No filling	3)				3						
Size / Mounting flange rating												
1 in	ASME CL 150					3						
1 in	ASME CL 300					4						
2 in	ASME CL 150					A						
2 in	ASME CL 300					D						
2 in	ASME CL 600					G						
3 in	ASME CL 150					B						
3 in	ASME CL 300					E						
3 in	ASME CL 600					H						
DN 25	DIN PN 10/40	11)				2						
DN 50	DIN PN 16/40					M						
DN 50	DIN PN 63					P						
DN 50	DIN PN 100					R						
DN 80	DIN PN 16/40					L						
DN 80	DIN PN 63					Q						
DN 80	DIN PN 100					S						
Mounting flange / Seat form (flange)												
Stainless steel (316)	Form RF – raised face	NACE				4)			E			
Stainless steel (316)	EN 1092 - B2 (DIN 2526 - Form E)	NACE				5)			S			
Stainless steel (316)	EN 1092 - B1 (DIN 2526 - Form D)	NACE				12)			4			
Stainless steel (316)	EN 1092 - E (DIN 2513 - V13)	NACE				5)			M			
Stainless steel (316)	EN 1092 - D (DIN 2512 - N)	NACE				5)			N			

1) suitable for oxygen applications

2) not available with sensor range 60 and 400 mbar

3) only available with sensor range 60 and 400 mbar

4) only for size / mounting flange rating according to ASME

5) only for size / mounting flange rating according to DIN

11) only with seat form EN 1092 - B1

12) only with size DN 25

Continued on next page

13.2 Ordering information for model 261GC/261AC (cont.)

Gauge Pressure Transmitter		Variant digit No.	1 - 6	11	12	13	14	Code			
261GC	Base accuracy 0.15 %	Catalog No.	261GC-								
Absolute Pressure Transmitter											
261AC	Base accuracy 0.15 %	Catalog No.	261AC-								
Extension length and material DN 25 / 1 in											
Without extension				F							
Extension length and material DN 50 / 2 in											
Without extension				F							
50 mm	Stainless steel (316 L)			1							
50 mm	Hastelloy C276™			2							
100 mm	Stainless steel (316 L)			3							
100 mm	Hastelloy C276™			4							
150 mm	Stainless steel (316 L)			5							
150 mm	Hastelloy C276™			6							
Extension length and material DN 80 / 3 in											
Without extension				F							
50 mm	Stainless steel (316 L)			1							
50 mm	Hastelloy C276™			2							
100 mm	Stainless steel (316 L)			3							
100 mm	Hastelloy C276™			4							
150 mm	Stainless steel (316 L)			5							
150 mm	Hastelloy C276™			6							
Diaphragm material (process connection)		Form RF / EN 1092 - B2/B1									
Stainless steel (316 L)	NACE	6)		S							
Hastelloy C276™	NACE	7, 13)		H							
Tantalum	NACE	8, 13)		T							
Stainless steel (316 L) with FEP non-adhesive coating	NACE	8, 13)		1							
Hastelloy C276™ with FEP non-adhesive coating	NACE	8, 13)		2							
Diaphragm material (process connection)		EN 1092 - E									
Stainless steel (316 L)	NACE	6)		S							
Hastelloy C276™	NACE	7, 13)		H							
Tantalum	NACE	8, 13)		T							
Stainless steel (316 L) with FEP non-adhesive coating	NACE	8, 13)		1							
Hastelloy C276™ with FEP non-adhesive coating	NACE	8, 13)		2							
Diaphragm material (process connection)		EN 1092 - D									
Stainless steel (316 L)	NACE	6)		S							
Hastelloy C276™	NACE	7, 13)		H							
Fill fluid											
Silicone oil				S							
Carbon fluoride		9)		N							
White oil (FDA certified)		10)		W							
Silicone oil for vacuum applications				L							
White oil (FDA certified) for vacuum applications		10)		Y							
Electronic housing											
Housing material		Electrical connection									
Stainless steel	M16 x 1.5 (with cable gland made of plastic)			2							
Stainless steel	1/2-14 NPT (without cable gland)			S							
Stainless steel	M20 x 1.5 (with cable gland made of plastic)			T							
Stainless steel	Harting Han connector	14)		3							
Stainless steel	Miniature connector	14)		Z							

6) not with tube of Hastelloy C

7) not with tube of stainless steel

8) not with tube and not with seat form EN 1092 - D (groove)

9) suitable for oxygen applications

10) suitable for food applications

13) not with size 1" / DN 25

14) select connector type with additional ordering code

Continued on next page

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13.3 Ordering information for model 261GC/261AC (cont.)

Gauge Pressure Transmitter		Variant digit No.	1 - 6	12	13	14	15	Code			
261GC Base accuracy 0.15 %		Catalog No.	261GC-								
Absolute Pressure Transmitter											
261AC Base accuracy 0.15 %		Catalog No.	261AC-								
Output / Additional options											
HART digital communication and 4...20 mA		No additional options						15)	H		
HART digital communication and 4...20 mA		Options requested							1		
		(to be ordered by "Additional Ordering Code")									

15) not for electr. connection with connector

13.4 Additional ordering information for model 261GC/261AC

261GC , 261AC	Code			
Explosion protection				
ATEX Group II Category 1/2 G – Intrinsic Safety EEx ia	EH			
ATEX Group II Category 1/2 G and 1/2 D – Intrinsic Safety EEx ia	EL			
Factory Mutual (FM) – Intrinsically Safe	EA			
Canadian Standard Association – Intrinsically Safe	ED			
NEPSI Ex ia IIC T-T6 gas	X3			
NEPSI Ex ia IIC T-T6 gas & dust	X4			
Integrated digital display (LCD)				
With integrated LCD display	L1			
Electronic housing accessories				
Housing with external ground terminal	AA			
Cable gland M16 x 1.5 / M20 x 1.5 and atmosphere ventilation of metal	AB			
Applications				
Oil and grease-free for oxygen measurement (O ₂) (only available with carbon fluoride fill) P _{max} = 21 MPa/210 bar/3045 psi, T _{max} = 60 °C/140 °F	P1			
Operating Instruction				
German	M1			
Italian	M2			
French	M4			
English	M5			
Swedish	M7			
Additional tag plate				
Stainless steel (Laser labeled, max. 30 characters)	I1			
Certificates / Approvals				
Inspection certificate EN 10204-3.1.B of calibration	C1			
Inspection certificate EN 10204-3.1.B of the cleanliness stage according to DIN 25410	C3			
Inspection certificate EN 10204-3.1.B of helium leakage test of the sensor module	C4			
Inspection certificate EN 10204-3.1.B of the pressure test	C5			
Certificate of compliance with the order EN 10204-2.1 of instrument design	C6			
MVO-approval (only with fill fluid white oil)	CR			
Material certificates				
Certificate of compliance with the order EN 10204-2.1 of process wetted parts	H1			
Inspection certificate EN 10204-3.1.B for pressure-bearing process wetted parts with analysis certificates as material verification (minor parts with Factory Certificate acc. to EN 10204)	H3			
Test report EN 10204-2.2 for pressure bearing process wetted parts	H4			
Connectors				
Miniature connector M12 x 1 (without mating female plug)	U2			
Harting Han 8D (8U) – straight entry	U3			

15) not available for electrical connection with connector

16) only for electr. connection with Harting Han connector

13.5 Ordering information for model 261GG/261AG

Gauge Pressure Transmitter			Variant digit No.	1 - 6	7	8	9	10	11	12	13	Code			
261GG			Base accuracy 0.15 %	Catalog No.	261GG-		0								
Sensor-Span limits															
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										
4000 kPa	40 bar	580 psi			1										
Absolute Pressure Transmitter															
261AG			Base accuracy 0.15 %	Catalog No.	261AG-										
Sensor-Span limits															
40 kPa	400 mbar	300 mmHg			F										
250 kPa	2500 mbar	1875 mmHg			L										
1000 kPa	10 bar	7500 mmHg			D										
4000 kPa	40 bar	580 psi			1										
Process connection															
Dairy thread DIN 11851, DN 32, PN 40			available with 3A Approval			B									
Dairy thread DIN 11851, DN 40, PN 40			available with 3A Approval			C									
Dairy thread DIN 11851, DN 50, PN 25			available with 3A Approval			D									
SMS 1½ in Union nut PN 40			available with 3A Approval			F									
SMS 2 in Union nut PN 40			available with 3A Approval			G									
RJT Union nut DN 1½ in, PN 40			available with 3A Approval			J									
RJT Union nut DN 2 in, PN 40			available with 3A Approval			K									
Tri-Clamp connection acc. to ASME 1 1/2 in, PN 40			available with 3A Approval			M									
Tri-Clamp connection acc. to ASME 2 in, PN 40			available with 3A Approval			N									
Tri-Clamp connection acc. to ASME 3 in, PN 25			available with 3A Approval			P									
Varivent for pipes DN 25			available with 3A Approval			R									
Varivent for pipes DN 40...DN 125			available with 3A Approval			S									
Neumo-Biocontrol G50			available with 3A Approval			T									
Neumo-Biocontrol G65			available with 3A Approval			U									
DRD flange, D = 65 mm			available with 3A Approval			Y									
Diaphragm material (process connection)															
Stainless steel (316 L)			NACE				S								
Fill fluid															
Silicone oil									S						
Carbon fluoride						1)			N						
White oil (FDA certified)						2)			W						
Silicone oil for vacuum applications									L						
White oil (FDA certified) for vacuum applications						2)			Y						
Sealing (O-ring)															
Without							3)			1					
Buna (max. 120 °C)							4)			4					
Viton							17)			3					
PTFE							4)			2					
Electronic housing															
Housing material			Electrical connection												
Stainless steel			M16 x 1.5 (with cable gland made of plastic)							2					
Stainless steel			1/2-14 NPT (without cable gland)							S					
Stainless steel			M20 x 1.5 (with cable gland made of plastic)							T					
Stainless steel			Harting Han connector					14)		3					
Stainless steel			Miniature connector					14)		Z					

Continued on next page

- 1) suitable for oxygen applications
2) suitable for food applications
3) for all connections except dairy thread
4) only for dairy thread
Exception: with 3A approval no seal is provided
14) select connector type with additional ordering code
17) only for DRD flange

13.6 Ordering information for model 261GG/261AG (cont.)

Gauge Pressure Transmitter		Variant digit No.	1 - 6	8	9	10	11	12	13	14	Code			
261GG Base accuracy 0.15 %		Catalog No.	261GG-											
Absolute Pressure Transmitter		Variant digit No.	1 - 6	8	9	10	11	12	13	14	Code			
261AG Base accuracy 0.15 %		Catalog No.	261AG-											
Output / Additional options														
HART digital communication and 4...20 mA		No additional options												
HART digital communication and 4...20 mA		Options requested										H		
		(to be ordered by "Additional Ordering Code")										1		

15) not for electr. connection with connector

13.7 Additional ordering information for model 261GG/261AG

261GG, 261AG	Code			
Explosion protection				
ATEX Group II Category 1/2 G – Intrinsic Safety EEx ia	EH			
ATEX Group II Category 1/2 G and 1/2 D – Intrinsic Safety EEx ia	EL			
Factory Mutual (FM) – Intrinsically Safe	EA			
Canadian Standard Association – Intrinsically Safe	ED			
NEPSI Ex ia IIC T-T6 gas	X3			
NEPSI Ex ia IIC T-T6 gas & dust	X4			
Integrated digital display (LCD)				
With integrated LCD display	L1			
Electronic housing accessories				
Housing with external ground terminal	AA			
Cable gland M16 x 1.5 / M20 x 1.5 and atmosphere ventilation of metal	AB			
Applications				
Oil and grease-free for oxygen measurement (O ₂) (only available with carbon fluoride fill) P _{max} = 21 MPa/210 bar/3045 psi, T _{max} = 60 °C/140 °F	P1			
Process connection electropolished	P5			
Operating Instruction				
German	M1			
Italian	M2			
French	M4			
English	M5			
Swedish	M7			
Additional tag plate				
Stainless steel (Laser labeled, max. 30 characters)	I1			
Certificates / Approvals				
Inspection certificate EN 10204-3.1.B of calibration	C1			
Inspection certificate EN 10204-3.1.B of the cleanliness stage according to DIN 25410	C3			
Inspection certificate EN 10204-3.1.B of helium leakage test of the sensor module	C4			
Inspection certificate EN 10204-3.1.B of the pressure test	C5			
Certificate of compliance with the order EN 10204-2.1 of instrument design	C6			
3A approval	CN			
MVO-approval (only with fill fluid white oil)	CR			
Material certificates				
Certificate of compliance with the order EN 10204-2.1 of process wetted parts	H1			
Inspection certificate EN 10204-3.1.B for pressure-bearing process wetted parts with analysis certificates as material verification (minor parts with Factory Certificate acc. to EN 10204)	H3			
Test report EN 10204-2.2 for pressure bearing process wetted parts	H4			
Connectors				
Miniature connector M12 x 1 (without mating female plug)	U2			
Harting Han 8D (8U) – straight entry	U3			

15) not available for electrical connection with connector

16) only for electr. connection with Harting Han connector and HART output

13.8 Ordering information for model 261GJ/261AJ

Gauge Pressure Transmitter			Variant digit No.	1 - 6	7	8	9	10	11	12	13	Code			
261GJ			Base accuracy 0.15 %	Catalog No.	261GJ-										
Sensor-Span limits															
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															
261AJ			Base accuracy 0.15 %	Catalog No.	261AJ-										
Sensor-Span limits															
40 kPa	400 mbar	300 mmHg			F										
250 kPa	2500 mbar	1875 mmHg			L										
1000 kPa	10 bar	7500 mmHg			D										
3000 kPa	30 bar	435 psi			U										
10000 kPa	100 bar	1450 psi			R										
Diaphragm material / Fill fluid (sensor)															
Mounted seal	Silicone oil					R									
Mounted seal	Carbon fluoride					2									
Mounted seal	White oil	necessary for 3A Approval				6									
Mounted seal	No filling	17)				3									
Connection															
DN 25, PN 40, dairy thread acc. to DIN 11851		18)				E									
DN 40, PN 40, dairy thread acc. to DIN 11851		18)				F									
DN 50, PN 25, dairy thread acc. to DIN 11851		18)				G									
DN 1 in, PN 40, Tri-Clamp for pipes acc. to ASME		18)				H									
DN 1 1/2 in, PN 40, Tri-Clamp for pipes acc. to ASME		18)				J									
DN 2 in, PN 40, Tri-Clamp for pipes acc. to ASME		18)				K									
DN 25 / ASME 1 in						A									
DN 40						B									
DN 50 / ASME 2 in						C									
DN 80 / ASME 3 in						D									
Diaphragm material (seal)															
Stainless steel (316 L)		NACE				R									
Fill fluid															
Silicone oil									S						
Carbon fluoride						1)			N						
White oil (FDA certified)						2)			W						
Silicone oil for vacuum applications									L						
White oil (FDA certified) for vacuum applications						2)			Y						
Electronic housing															
Housing material															
Stainless steel	Electrical connection	M16 x 1.5 (with cable gland made of plastic)								2					
Stainless steel		1/2-14 NPT (without cable gland)								S					
Stainless steel		M20 x 1.5 (with cable gland made of plastic)								T					
Stainless steel		Harting Han connector				14)				3					
Stainless steel		Miniature connector				14)				Z					
Output / Additional options															
HART digital communication and 4...20 mA	No additional options	15)								H					
HART digital communication and 4...20 mA	Options requested									1					
(to be ordered by "Additional Ordering Code")															

1) suitable for oxygen applications

2) suitable for food applications

14) select connector type with additional ordering code

15) not for electr. connection with connector

17) only available with sensor range 400 mbar

18) available with 3A approval

13.9 Additional ordering information for model 261GJ/261AJ

261GJ , 261AJ	Code			
Explosion protection				
ATEX Group II Category 1/2 G – Intrinsic Safety EEx ia	EH			
ATEX Group II Category 1/2 G and 1/2 D – Intrinsic Safety EEx ia	EL			
Factory Mutual (FM) – Intrinsically Safe	EA			
Canadian Standard Association – Intrinsically Safe	ED			
NEPSI Ex ia IIC T-T6 gas	X3			
NEPSI Ex ia IIC T-T6 gas & dust	X4			
Integrated digital display (LCD)				
With integrated LCD display	L1			
Electronic housing accessories				
Housing with external ground terminal	AA			
Cable gland M16 x 1.5 / M20 x 1.5 and atmosphere ventilation of metal	AB			
Applications				
Oil and grease-free for oxygen measurement (O ₂) (only available with carbon fluoride fill) P _{max} = 21 MPa/210 bar/3045 psi, T _{max} = 60 °C/140 °F	P1			
Operating Instruction				
German	M1			
Italian	M2			
French	M4			
English	M5			
Swedish	M7			
Additional tag plate				
Stainless steel (Laser labeled, max. 30 characters)	I1			
Certificates / Approvals				
Inspection certificate EN 10204-3.1.B of calibration	C1			
Inspection certificate EN 10204-3.1.B of the cleanliness stage according to DIN 25410	C3			
Inspection certificate EN 10204-3.1.B of helium leakage test of the sensor module	C4			
Inspection certificate EN 10204-3.1.B of the pressure test	C5			
Certificate of compliance with the order EN 10204-2.1 of instrument design	C6			
3A approval	CN			
MVO-approval (only with fill fluid white oil)	CR			
Material certificates				
Certificate of compliance with the order EN 10204-2.1 of process wetted parts	H1			
Inspection certificate EN 10204-3.1.B for pressure-bearing process wetted parts with analysis certificates as material verification (minor parts with Factory Certificate acc. to EN 10204)	H3			
Test report EN 10204-2.2 for pressure bearing process wetted parts	H4			
Connectors				
Miniature connector M12 x 1 (without mating female plug)	U2			
Harting Han 8D (8U) – straight entry	U3			

15) not available for electrical connection with connector

16) only for electr. connection with Harting Han connector and HART output

13.10 Ordering information for model 261GM/261AM

Gauge Pressure Transmitter			Variant digit No.	1 - 6	7	8	9	10	11	12	13	14	Code			
261GM			Base accuracy 0.15 %	Catalog No.	261GM-											
Sensor-Span limits																
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																
261AM			Base accuracy 0.15 %	Catalog No.	261AM-											
Sensor-Span limits																
40 kPa	400 mbar	300 mmHg			F											
250 kPa	2500 mbar	1875 mmHg			L											
1000 kPa	10 bar	7500 mmHg			D											
3000 kPa	30 bar	435 psi			U											
10000 kPa	100 bar	1450 psi			R											
Diaphragm material / Fill fluid (sensor)																
Front bonded diaphragm	Silicone oil		1)			R										
Front bonded diaphragm	No filling		2)			3										
Size / Mounting flange rating																
1 in	ASME CL 150					A										
1 in	ASME CL 300					C										
1 in	ASME CL 600					E										
1 in	ASME CL 1500					K										
DN 25	DIN PN 10/40					H										
DN 25	DIN PN 63/100					L										
DN 25	DIN PN 160					T										
DN 25	DIN PN 250					V										
Mounting flange material / Seat form (seal)																
AISI 316 ss	Form RF – smooth finish	NACE	3)				E									
AISI 316 ss	EN 1092 - B1 (DIN 2526 - Form D)	NACE	4)				4									
AISI 316 ss	EN 1092 - D (DIN 2512 - N)	NACE	5)				N									
Diaphragm material (wetted parts)																
AISI 316 L ss	NACE						S									
Fill fluid																
Silicone oil							S									
Silicone oil for vacuum applications							L									
Electronic housing																
Housing material		Electrical connection														
Stainless steel	M16 x 1.5 (with cable gland made of plastic)										2					
Stainless steel	1/2-14 NPT (without cable gland)										S					
Stainless steel	M20 x 1.5 (with cable gland made of plastic)										T					
Stainless steel	Harting Han connector								14)		3					
Stainless steel	Miniature connector								14)		Z					
Output / Additional options																
HART digital communication and 4...20 mA	No additional options		15)								H					
HART digital communication and 4...20 mA	Options requested										1					
(to be ordered by "Additional Ordering Code")																

1) not available with sensor range 400 mbar

2) only available with sensor range 400 mbar

3) only for size / mounting flange rating according to ASME

4) only for size / mounting flange rating according to DIN

5) only for size / mounting flange rating according to DIN and only for 10/40 bar

14) select connector type with additional ordering code

15) not for electr. connection with connector

13.11 Additional ordering information for model 265GM/265AM

261GM , 261AM	Code			
Explosion protection				
ATEX Group II Category 1/2 G – Intrinsic Safety EEx ia	EH			
ATEX Group II Category 1/2 G and 1/2 D – Intrinsic Safety EEx ia	EL			
Factory Mutual (FM) – Intrinsically Safe	EA			
Canadian Standard Association – Intrinsically Safe	ED			
NEPSI Ex ia IIC T-T6 gas	X3			
NEPSI Ex ia IIC T-T6 gas & dust	X4			
Integrated digital display (LCD)				
With integrated LCD display	L1			
Electronic housing accessories				
Housing with external ground terminal	AA			
Cable gland M16 x 1.5 / M20 x 1.5 and atmosphere ventilation of metal	AB			
Operating Instruction				
German	M1			
Italian	M2			
French	M4			
English	M5			
Swedish	M7			
Additional tag plate				
Stainless steel (Laser labeled, max. 30 characters)	I1			
Certificates / Approvals				
Inspection certificate EN 10204-3.1.B of calibration	C1			
Inspection certificate EN 10204-3.1.B of the cleanliness stage according to DIN 25410	C3			
Inspection certificate EN 10204-3.1.B of helium leakage test of the sensor module	C4			
Inspection certificate EN 10204-3.1.B of the pressure test	C5			
Certificate of compliance with the order EN 10204-2.1 of instrument design	C6			
MVO-approval (only with fill fluid white oil)	CR			
Material certificates				
Certificate of compliance with the order EN 10204-2.1 of process wetted parts	H1			
Inspection certificate EN 10204-3.1.B for pressure-bearing process wetted parts with analysis certificates as material verification	H3			
(minor parts with Factory Certificate acc. to EN 10204)				
Test report EN 10204-2.2 for pressure bearing process wetted parts	H4			
Connectors				
Miniature connector M12 x 1 (without mating female plug)	U2			
Harting Han 8D (8U) – straight entry	U3			

15) not available for electrical connection with connector

16) only for electr. connection with Harting Han connector and HART output

13.12 Ordering information for model 261GN/261AN

Gauge Pressure Transmitter			Variant digit No.	1 - 6	7	8	9	10	11	12	13	Code			
261GN			Base accuracy 0.15 %	Catalog No.	261GN-										
Sensor–Span limits															
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															
261AN			Base accuracy 0.15 %	Catalog No.	261AN-										
Sensor–Span limits															
250 kPa	2500 mbar	1875 mmHg			L										
1000 kPa	10 bar	7500 mmHg			D										
3000 kPa	30 bar	435 psi			U										
10000 kPa	100 bar	1450 psi			R										
Diaphragm material / Fill fluid (sensor)															
Front bonded diaphragm	Silicone oil					R									
Front bonded diaphragm	Carbon fluoride					2									
Front bonded diaphragm	White oil					6									
Connection / Rating															
G 1 A - PN 600							1								
G 1 1/2 A - PN 600							2								
Diaphragm material (process connection)															
Stainless steel (316 L)	NACE						S								
Fill fluid															
Silicone oil									S						
Carbon fluoride							1)		N						
White oil (FDA certified)							2)		W						
Silicone oil for vacuum applications									L						
White oil (FDA certified) for vacuum applications							2)		Y						
Electronic housing															
Housing material															
Stainless steel	Electrical connection	M16 x 1.5 (with cable gland made of plastic)								2					
Stainless steel		1/2-14 NPT (without cable gland)								S					
Stainless steel		M20 x 1.5 (with cable gland made of plastic)								T					
Stainless steel		Harting Han connector					14)			3					
Stainless steel		Miniature connector					14)			Z					
Output / Additional options															
HART digital communication and 4...20 mA	No additional options							15)		H					
HART digital communication and 4...20 mA	Options requested									1					
(to be ordered by "Additional Ordering Code")															

1) suitable for oxygen applications

2) suitable for food applications

14) select connector type with additional ordering code

15) not for electr. connection with connector

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13.13 Additional ordering information for model 261GN/261AN

261GN , 261AN	Code			
Explosion protection				
ATEX Group II Category 1/2 G – Intrinsic Safety EEx ia	EH			
ATEX Group II Category 1/2 G and 1/2 D – Intrinsic Safety EEx ia	EL			
Factory Mutual (FM) – Intrinsically Safe	EA			
Canadian Standard Association – Intrinsically Safe	ED			
NEPSI Ex ia IIC T-T6 gas	X3			
NEPSI Ex ia IIC T-T6 gas & dust	X4			
Integrated digital display (LCD)				
With integrated LCD display	L1			
Electronic housing accessories				
Housing with external ground terminal	AA			
Cable gland M16 x 1.5 / M20 x 1.5 and atmosphere ventilation of metal	AB			
Applications				
Oil and grease-free for oxygen measurement (O ₂) (only available with carbon fluoride fill) P _{max} = 21 MPa/210 bar/3045 psi, T _{max} = 60 °C/140 °F	P1			
Operating Instruction				
German	M1			
Italian	M2			
French	M4			
English	M5			
Swedish	M7			
Additional tag plate				
Stainless steel (Laser labeled, max. 30 characters)	I1			
Certificates / Approvals				
Inspection certificate EN 10204-3.1.B of calibration	C1			
Inspection certificate EN 10204-3.1.B of the cleanliness stage according to DIN 25410	C3			
Inspection certificate EN 10204-3.1.B of helium leakage test of the sensor module	C4			
Inspection certificate EN 10204-3.1.B of the pressure test	C5			
Certificate of compliance with the order EN 10204-2.1 of instrument design	C6			
MVO-approval (only with fill fluid white oil)	CR			
Material certificates				
Certificate of compliance with the order EN 10204-2.1 of process wetted parts	H1			
Inspection certificate EN 10204-3.1.B for pressure-bearing process wetted parts with analysis certificates as material verification (minor parts with Factory Certificate acc. to EN 10204)	H3			
Test report EN 10204-2.2 for pressure bearing process wetted parts	H4			
Connectors				
Miniature connector M12 x 1 (without mating female plug)	U2			
Harting Han 8D (8U) – straight entry	U3			

15) not available for electrical connection with connector

16) only for electr. connection with Harting Han connector and HART output

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