SS/261GC/AC\_1

# **2600T Series Pressure Transmitter**

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

#### ■ Base accuracy: ±0.15 %

#### ■ Span limits

- 0.3 to 60000kPa; 1.2inH<sub>2</sub>O to 8700psi
- 0.3 to 3000kPa abs; 2.25mmHg to 435psia

# ■ Reliable sensing system coupled with the latest digital technologies

- provides large turn down 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 based software

# ■ 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



### **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).

#### **Functional Specifications**

#### Range and span limits

Sensor	Upper Range	Lower Range	Minimum Span	Overrange
Code	Limit (URL)	Limit (LRL)	(sensor limit)	limit
С	6kPa 60mbar 24inH <sub>2</sub> O	-6kPa -60mbar -24inH <sub>2</sub> O	0.3kPa 3mbar 1.2inH <sub>2</sub> O	1MPa 10bar 145psi
F	40kPa 400mbar 160inH <sub>2</sub> O	-40kPa -400mbar -160inH <sub>2</sub> O	2kPa 20mbar 8inH <sub>2</sub> O	1MPa 10bar 145psi
L	250kPa 2500mbar 1000inH <sub>2</sub> O	0 absolute	12.5kPa 125mbar 50inH <sub>2</sub> O	0.5MPa 5bar 72.5psi
D	1000kPa 10bar 145psi	0 absolute	50kPa 500mbar 7.25psi	2MPa 20bar 290psi
U	3000kPa 30bar 435psi	0 absolute	150kPa 1.5bar 21.7psi	6MPa 60bar 870psi
R	10000kPa 100bar 1450psi	0 absolute	500kPa 5bar 72.5psi	20MPa 200bar 2900psi
V	60000kPa 600bar 8700psi	0 absolute	3000kPa 30bar 435psi	90MPa 900bar 13050psi

#### Note:

Lower Range Limit (LRL) for 261A. is 0 absolute for all ranges.

#### **Span limits**

Maximum span = Upper range limit (URL)

Minimum span: see table above and refer to recommended minimum span at 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 adjusted to any value within the range limits detailed in the table as long as:

- calibrated span ≥ minimum span

#### Damping

Adjustable time constant: 0 to 60s. This is in addition to sensor response time. Can be adjusted via local indicator, hand terminal or PC based software.

#### Turn on time

Operation within specification in less than 10s with minimum damping.

#### Insulation resistance

 $> 100M\Omega$  at 500VDC (terminals to earth)

# **Operative limits**

## Temperature limits °C (°F):

#### **Ambient temperature limits**

Silicone oil and inert filling: -40°C and +85°C (-40°F and +185°F) white oil filling: -10°C and +85°C (-14°F and +185°F) with LCD indicator: -20°C and +70°C (-4°F and +158°F)

#### Note:

For Hazardous Atmosphere applications see the temperature range specified on the certificate/approval relevant to the desired type of protection.

			Process temperature in °C (°F)			
Filling Liquid	ld	Density at 20 °C in kg/m <sup>3</sup>	at max. ambient temperature			
		iii kg/iii	+40 °C (+104 °F)	+60 °C (+140 °F)		
Silicone oil	IC	1055	-30 and +180 (-22 and +356)	-30 and +140 (-22 and +284)		
Carbon Fluoride	L	1880	-30 and +150 (-22 and +302)	-30 and +140 (-22 and +284)		
White Oil (FDA)	WB	849		-10 and +140 (+14 and +284)		
Silicone oil for vacuum applications	IC-V	1055		-30 and +140 (-22 and +284)		
White Oil (FDA) for vacuum applications	WB-V	849		-10 and +140 (+14 and +284)		

#### Storage temperature limits

Lower limit: -50°C (-58°F), -40°C (-40°F) for LCD indicators

-10°C (+14°F) for white oil filling

Upper limit: +85°C (+185°F)

# **Pressure limits**

For maximum pressure refer to sensor overrange limit in table "Range and Span limits" and seal working pressure at ordering information. For minimum pressure refer to the following table.

		Pres	ssure ratin	g in mbar	abs
Filling liqiud	ld	20°C (68°F)	100°C (212°F)	150°C (302°F)	180°C (356°F)
Silicone oil	IC	>500	>500	>500	>650
Carbon Fluoride	L	>1000	>1000	>1000	_
White Oil	WB	>500	>1000	>1000	>1000
Silicone oil for vacuum applications	IC-V	>5	>25	>38	>45
White Oil for vacuum applications	WB-V	>5	>25	>50	>600

#### **Environmental limits**

#### Electromagnetic compatibility (EMC)

Complies with EMC directive 89 / 336 / EEC as well as with EN 61000-6-3 for emission and EN 61000-6-2 for immunity requirements and test Fulfills NAMUR recommendation

#### Low voltage directive

Complies with 73 / 23 / EEC

#### Pressure equipment directive (PED)

Complies with 97 / 23 / EEC Category III module H.

#### Humidity

Relative humidity: up to 100% Condensing, icing: admissible

#### Vibration resistance

Accelerations up to 2g at frequency up to 1000Hz (according to IEC 60068-2-6)

#### Shock resistance (according to IEC 60068-2-27)

Acceleration: 50g Duration: 11ms

#### Wet and dust-laden atmospheres

The transmitter is dust and sand tight and protected against immersion effects as defined by IEC EN60529 (1989) to IP 67(IP 68, IP 69K on request) or by NEMA to 4X or by JIS to C0920.

#### **Hazardous atmospheres**

Transmitters with hazardous area electrical certification "Intrinsically safe EEx ia/ib" comply with the directive 94 / 9 / EC (ATEX)

Transmitter with 4 to 20mA output signal and HART communication

Marking (DIN EN 50 014): II 1/2 G EEx ia IIC T4...T6

Permissible ambient temperature depending on temperature class:

Ambient Temperature Temperature class -40 to +85°C (-40 to +185°F) T1 ... T4 ... T4 ... T5

-40 to +71°C (-40 to +159 °F) T5 -40 to +56°C (-40 to +132 °F) T6

or

Marking (DIN EN 50 014): II 1/2 D IP65 T95°

supplied intrinsically safe Ex ia

II 2 D IP65 T95°

supplied intrinsically safe Ex ib

Permissible ambient temperature: -40 to +85°C (-40 to +185°F)

Supply and signal circuit type of protection Intrinsic Safety EEx ia/ib IIB/IIC with maximum values:

Ui = 30V Ii = 130mAPi = 0.8W

effective internal capacitance: Ci = 10nF effective internal inductance:  $Li = 10\mu H$ 

#### Factory Mutual (FM) (pending)

Transmitter with 4 to 20mA 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 -incentive Class I, II, and III, Division 2, Groups A, B, C, D, F, G

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

#### Canadian Standard (CSA) (pending)

Transmitter with 4 to 20mA 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 -incentive Class I, II, and III, Division 2, Groups A, B, C, D, F, G

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

## **Electrical Characteristics and Options**

#### HART digital communication and 4 to 20mA output

#### **Power Supply**

The transmitter operates from 10 to 42VDC with no load and is protected against reverse polarity connection (additional load allows operations over 42VDC).

Minimum power supply is 11VDC with LCD indicator.

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

#### Ripple

According to HART FSK physical layer specification Rev. 8.1

#### **Load limitations**

4 to 20mA and HART total loop resistance:

$$R(k\Omega) = \frac{Supply \text{ voltage - min. operating voltage (VDC)}}{22.5\text{mA}}$$

A minimum of  $250\Omega$  is required for HART communication.

#### Integral display (optional)

Digital Graphic LCD display for user-specific indication of: Gauge pressure / absolute pressure or percentage of the output current or

output current in mA or

HART output (free choice of initial-, final value and unit) Diagnostic messages, alarms, errors and measuring range infringements are also displayed.

Furthermore the LCD indicator can be used for configuration and parametrization of the transmitter via four keys.

#### **Output signal**

Two-wire, 4 to 20mA output  ${\rm HART}^{\rm @}$  communication provides digital process variable (%, mA or engineering units) superimposed on 4 to 20mA signal, with protocol based on Bell 202 FSK standard.

#### Output current limits (to NAMUR standard)

Overload condition

- Lower limit: 3.8mA (configurable down to 3.5mA) - Upper limit: 20.5mA (configurable up to 22.5mA)

# Alarm current

configurable from 3.5mA to 4mA, Min. alarm current:

standard setting: 3.6mA

Max. alarm current: configurable from 20mA to 22.5mA,

> standard setting: 21mA max. alarm current

Standard setting:

### SIL - Functional Safety (optional)

according to IEC 61508 / 61511

Device with Declaration of SIL Conformity for use in safety related applications up to SIL 2

### **Performance specifications**

Stated at reference condition to IEC 60770 ambient temperature of 20°C (68°F), relative humidity of 65%, atmospheric pressure of 1013hPa (1013mbar), zero based range for transmitter and silicone oil fill.

Mode: linear, 4-20mA

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

The performances based to the Upper Range Limit (URL) are effected by the actual turndown (TD) as ratio between Upper Range Limit (URL) and calibrated span.

IT IS RECOMMENDED TO SELECT THE TRANSMITTER SENSOR CODE PROVIDING THE TURNDOWN VALUE AS LOWEST AS POSSIBLE TO OPTIMIZE PERFORMANCE CHARACTERISTICS.

#### Dynamic performance (according to IEC 61298-1 definition)

Time constant (63.2% of total step change):

- 200 ms for all sensors

#### **Accuracy rating**

% of calibrated span, including combined effects of terminal based linearity, hysteresis and repeatability.

- ±0.15% for TD from 1:1 to 10:1

$$\pm \left(0.15\% + 0.005 \times \frac{\text{URL}}{\text{Span}} - 0.05\%\right)$$
 for TD greater than > 10:1

#### Operating influences

#### **Ambient temperature**

per 10 K (18 °F) change between the limits of -10°C to +60°C (+14°F to +140°F): ±(0.15% URL + 0.15% span)

For additional temperature effects depending one type and size of process connection see dimensional drawing.

## Supply voltage

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

#### Load

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

#### Radio frequency interference

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

#### Common mode interference

No effect from 250Vrms @ 50Hz, or 50VDC

# **Physical Specification**

(Refer to ordering information sheets for variant availability related to specific model)

#### **Materials**

#### Process isolating diaphragms (\*)

refer to ordering information

#### Process connection (\*)

refer to ordering information

#### Seal fill fluid

refer to ordering information

#### Sensor fill fluid

Silicone oil; inert fill (Carbon fluoride); white oil (FDA)

#### **Mounting bracket**

AISI 316 L ss

#### Sensor housing

AISI 316 L ss

#### **Electronic housing and covers**

AISI 316 C ss

#### Filter for atmosphere ventilation

plastic (standard), stainless steel

#### **Cover O-ring**

Neoprene™ (CR)

#### **Tagging**

Plastic data plate attached to the electronic housing

#### Calibration

Standard: 0 to Upper Range Limit (URL) Optional: at specified range

#### **Optional extras**

#### Mounting brackets

For vertical and horizontal 60mm (2in) pipes or wall mounting

#### Integral display

graphic display, plug-in rotatable LCD indicator

#### Supplemental customer tag

AISI 316 ss tag fastened to the transmitter with stainless steel wire for customer's tag data up to a maximum of 30 characters and spaces

#### Cleaning procedure for oxygen service

#### Test Certificates (test, design, calibration, material traceability)

#### Manual language

#### **Process connections**

refer to ordering information

#### **Electrical connections**

one M16x1.5 threaded conduit entry, direct on housing

or 1/2-14 NPT (without cable gland)

or M20x1.5 (without cable gland)

or Harting Han connector

or Miniature-connector (without plug socket)

#### **Terminal block**

HART version: two terminals for signal/supply voltage wiring up to  $1.5 \text{mm}^2$  (16 AWG)

#### **Grounding (Option)**

External 4mm<sup>2</sup> (12AWG) ground termination point

#### Mounting position

Transmitter can be mounted in any position

#### Mass (without options)

transmitter without process connection: 0.7kg approx (1.54lb)
Process connection see dimensional drawings Add 650g (1.43lb) for packing

#### **Packing**

Carton 24 x 14 x 19cm approx (10 x 6 x 8in)

## Configuration

# Transmitter with HART communication and 4 to 20 mA

#### Standard configuration

Transmitters are factory adjusted to customer's specific range. Adjusted range and tag number are marked on the type plate. If calibration range and tag data are not specified, the transmitter will be supplied configured as follows:

4 mA Zero

20 mA Upper Range Limit (URL)

Output Linear

Damping 0,1s

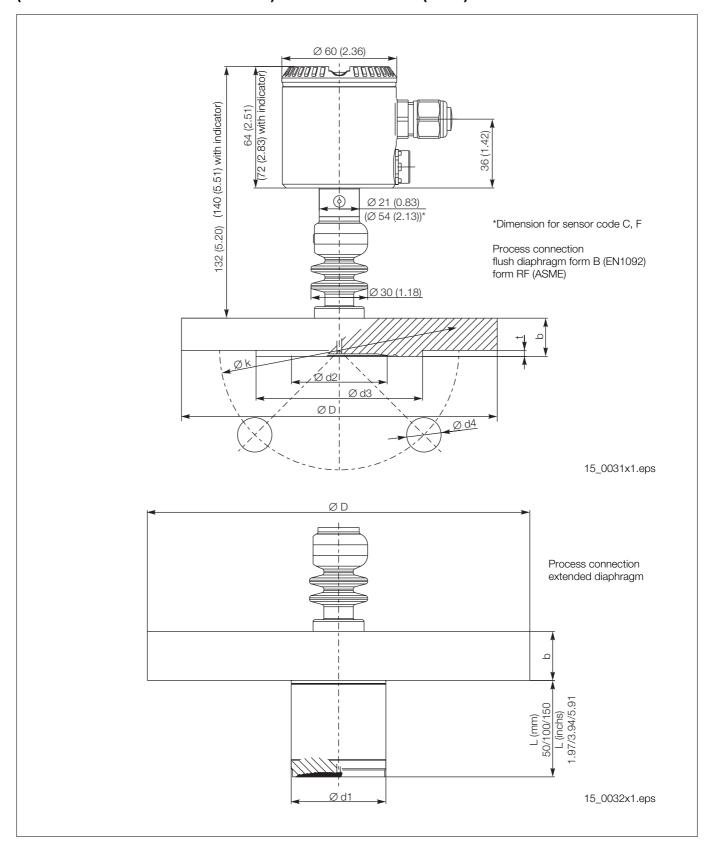
Transmitter failure mode 21mA

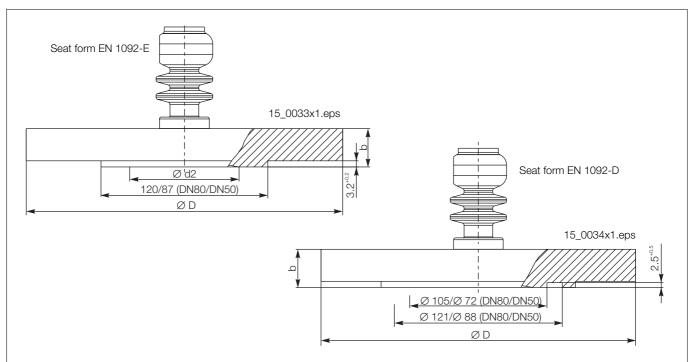
LCD indicator (optional) 0...100%

Any or all the above configurable parameters, including Lower range-value and Upper range-value, can be easily changed with the optional LCD indicator, using a HART hand–held communicator or by a PC, running the configuration software SMART VISION with DTM for 2600T.

<sup>(\*)</sup> Wetted parts of the transmitter

# Mounting dimensions Model 261GC/261AC (not for construction unless certified) – dimensions in mm (inchs)





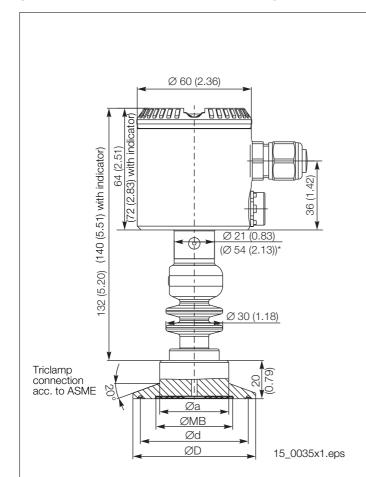
Seat form B, D, E (EN 1092), RF (ASME)

Seat 1011	II D, D, E (EIN IC	192), NF (ASI	VI⊏)			ń.					
										Weight	(approx.)
DN	PN	ØD	Øk	Ød1	Ød2	Ød3	t	b	Ød4	flush diapragm	extended diaphragm
25	PN 10/40	115 (4.53)	85 (3.35)	-	32 (1.26)	68 (2.68)	2	18 (0.71)	4xØ14	1.38kg	-
50	PN 16/40 PN 64 PN 100	165 (6.50) 180 (7.09) 195 (7.68)	125 (4.92) 135 (5.31) 145 (5.71)	48 (1.89) 48 (1.89) 48 (1.89)	57 (2.24) 57 (2.24) 57 (2.24)	102 (4.02) 102 (4.02)	3 +0.5 3 +0.5 3 +0.5	26 (1.02) 28 (1.10)	4x∅18 4x∅22 4x∅26	3.3kg 4.5kg 5.8kg	4kg 5.2kg 6.5kg
80	PN 16/40 PN 64 PN 100	200 (7.87) 215 (8.46) 230 (9.06)	160 (6.30) 170 (6.70) 180 (7.09)	73 (2.87) 73 (2.87) 73 (2.87)	75 (2.95) 75 (2.95) 75 (2.95)	138 (5.43)	3 +0.5 3 +0.5 3 +0.5	28 (1.10)	8xØ18 8xØ22 8xØ26	5.8kg 6.9kg 9.4kg	7.5kg 8.6kg 11.1kg
1in	ASME CL 150 ASME CL 300	107.9 (4.25) 123.8 (4.87)	` '	-	32 (1.26) 32 (1.26)	50.8 (2) 50.8 (2)	2 2	14.3 (0.56) 17.5 (0.69)	4x∅15.9 4x∅19	0.9kg 1.4kg	_ _
2in	ASME CL 150 ASME CL 300 ASME CL 600	152.4 (6) 165.1 (6.5) 165.1 (6.5)	120.9 (4.76) 127 (5) 127 (5)	48 (1.89) 48 (1.89) 48 (1.89)	57 (2.24) 57 (2.24) 57 (2.24)	92.1 (3.63) 92.1 (3.63)		22.2 (0.87) 31.75 (1.25)	4x∅19 4x∅19 4x∅19	2.3kg 3.7kg 4.5kg	4kg 5.4kg 6.2kg
3in	ASME CL 150 ASME CL 300 ASME CL 600	, ,	, ,	73 (2.87) 73 (2.87) 73 (2.87)	75 (2.95) 75 (2.95) 75 (2.95)	127 (5) 127 (5) 127 (5)	3 +0.5 3 +0.5 6.35	22.2 (0.87) 28.6 (1.13) 38.05 (1.50)	4x∅19 8x∅22.2 8x∅22.2	5.3kg 7.3kg 9.1kg	7kg 9kg 10.8kg

#### Performance data

Process connection		Tempe influence	recommended min. Span			
Frocess connection	Ambient		Prod	cess	Эрап	
	mbar	$inH_2O$	mbar	inH <sub>2</sub> O	mbar	inH <sub>2</sub> O
DN25 flush diaphragm	0.77	0.310	1.20	0.48	1000	401.50
DN50 flush diaphragm	0.075	0.030	0.4	0.16	100	40.15
DN50 extended diaphragm	0.125	0.050	0.9	0.36	160	64.24
DN80 flush diaphragm	0.05	0.020	0.1	0.04	60	24.09
DN80 extended diaphragm	0.05	0.020	0.1	0.04	60	24.09
1in ASME flush diaphragm	0.77	0.310	1.20	0.48	1000	401.50
2in ASME flush diaphragm	0.075	0.030	0.4	0.16	100	40.15
2in ASME extended diaphragm	0.125	0.050	0.9	0.36	160	64.24
3in ASME flush diaphragm	0.05	0.020	0.1	0.04	60	24.09
3in ASME extended diaphragm	0.05	0.020	0.1	0.04	60	24.09

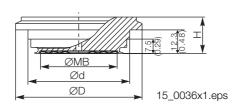
# Mounting dimensions Model 261GG/261AG (not for construction unless certified) – dimensions in mm (inchs)



\*Dimension for sensor code C, F

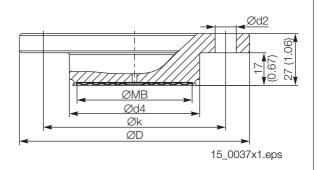
DN	PN	ØMB	ØD	Ød	Ød2
1 1/2"	40	32 (1.26)	50 (1.97)	43.5 (1.71)	36 (1.42)
2"	40	40 (1.57)	64 (2.52)	56.5 (2.22)	36 (1.42)
3"	25	72 (2.83)	91 (3.58)	83.5 (3.29)	77 (3.03)

# Proces connection Varivent

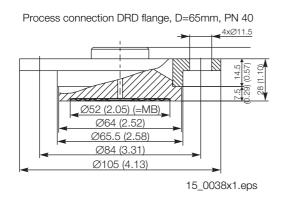


Form	ØMB	ØD	Øc	Н
For pipes DN40 to 125	60 (2.36)	84 (3.31)	70.9 (2.79)	17 (0.67)
For pipes DN 25	40 (1.57)	66 (2.60)	53 (2.08)	17 (0.67)

#### Process connection Neumo-Biocontrol



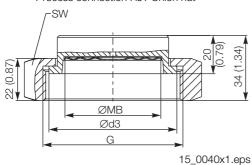
Size	PN	ØMB	ØD	Ød2	Øk	Ød4
GR50	16	40 (1.57)	90 (3.54)	4xØ9	70 (2.76)	50 (1.97)
GR65	16	59 (2.32)	120 (4.72)	4xØ11	95 (3.74)	67.9 (2.67)



# Process connection Dairy thread DIN 11851

DN	PN	ØMB	ØD	Ød	b	G
32	40	32 (1.26)	70 (2.76)	41 (1.61)	21 (0.83)	Rd 58x1/6"
40	40	40 (1.57)	78 (3.07)	48 (1.89)	21 (0.83)	Rd 65x1/6"
50	25	52 (2.05)	92 (3.62)	61 (2.40)	22 (0.87)	Rd 78x1/6"

#### Process connection RJT Union nut



DN	PN	ØMB	Ød3	G	SW
1 1/2"	40	32 (1.26)	54 (2.16)	2 5/16x8"	65 (2.65)
2"	40	40 (1.57)	66.7 (2.63)	2 7/8x6"	80 (3.15)

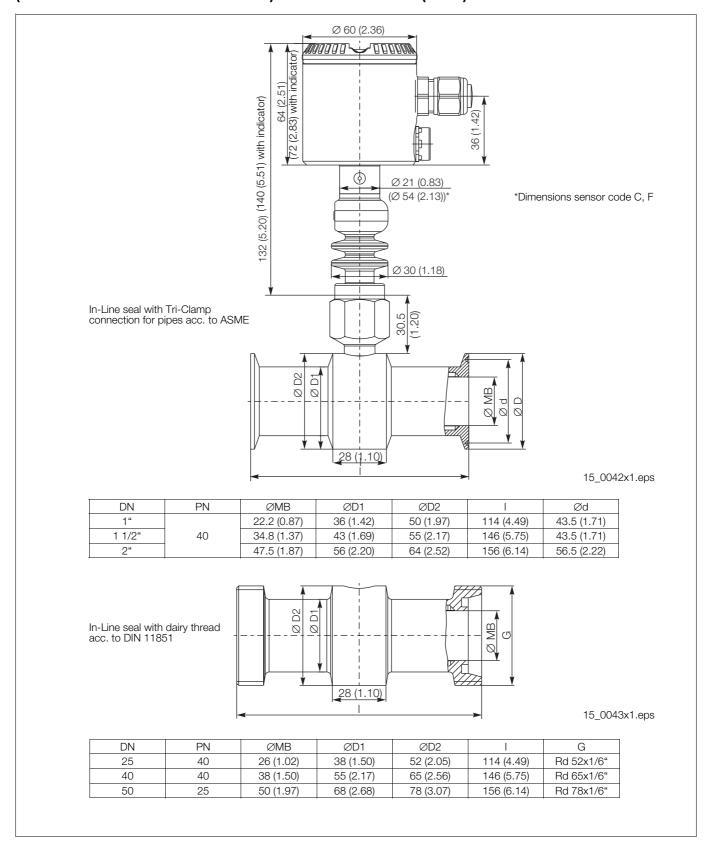
# 

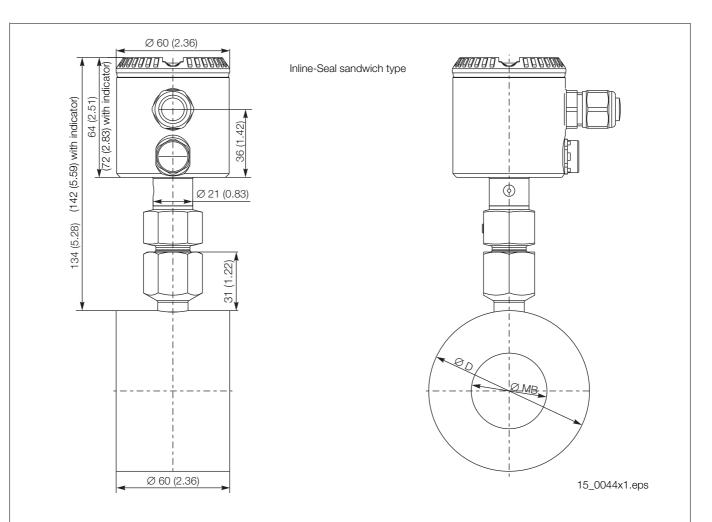
DN	PN	ØMB	ØD	Øc	G	b
1 1/2"	40	35 (1.38)	74 (2.91)	55 (2.17)	Rd 60x1/6"	25 (0.98)
2"	40	45 (1.77)	84 (3.30)	65 (2.56)	Rd 70x1/6"	26 (1.02)

#### Performance data

D			erature per 10 K		recommended min. Span		Weight
Process connection	Ambient		Process		Spari		(approx.)
	mbar	inH <sub>2</sub> O	mbar	inH <sub>2</sub> O	mbar	inH <sub>2</sub> O	
Dairy thread DIN 11851, DN32, PN40	0.77	0.31	1.20	0.48	1000	401.50	0.5kg
Dairy thread DIN 11851, DN40, PN40	0.24	0.09	0.78	0.31	500	200.75	0.75kg
Dairy thread DIN 11851, DN50, PN25	0.24	0.09	0.78	0.31	160	64.24	0.8kg
SMS 1 1/2" Union nut, PN 40	1.32	0.53	2.06	0.83	1600	642.40	0.8kg
SMS 2" Union nut, PN 40	0.25	0.10	0.71	0.28	500	200.75	1kg
RJT Union nut, DN1 1/2", PN40	0.77	0.31	1.20	0.48	1000	401.50	0.9kg
RJT Union nut, DN2", PN40	0.24	0.09	0.78	0.31	500	200.75	1.1kg
Tri-Clamp for pipes acc. to ASME, DN 1 1/2", PN 40	0.77	0.31	1.20	0.48	1000	401.50	0.6kg
Tri-Clamp for pipes acc. to ASME, DN 2", PN 40	0.24	0.09	0.78	0.31	500	200.75	0.75kg
Tri-Clamp for pipes acc. to ASME, DN 3", PN 40	0.05	0.02	0.36	0.15	200	80.30	1.3kg
Varivent for pipes DN25	0.28	0.11	0.79	0.32	500	200.75	0.33kg
Varivent for pipes DN40 – DN125	0.19	0.07	0.90	0.36	500	200.75	0.58kg
Neumo-Biocontrol G50	0.16	0.07	0.52	0.21	300	120.45	0.65kg
Neumo-Biocontrol G65	0.18	0.07	0.88	0.35	500	200.75	1.3kg
DRD flange, D=65mm	0.77	0.31	1.20	0.48	1000	401.50	2kg

# Mounting dimensions Model 261GJ/261AJ (not for construction unless certified) – dimensions in mm (inchs)



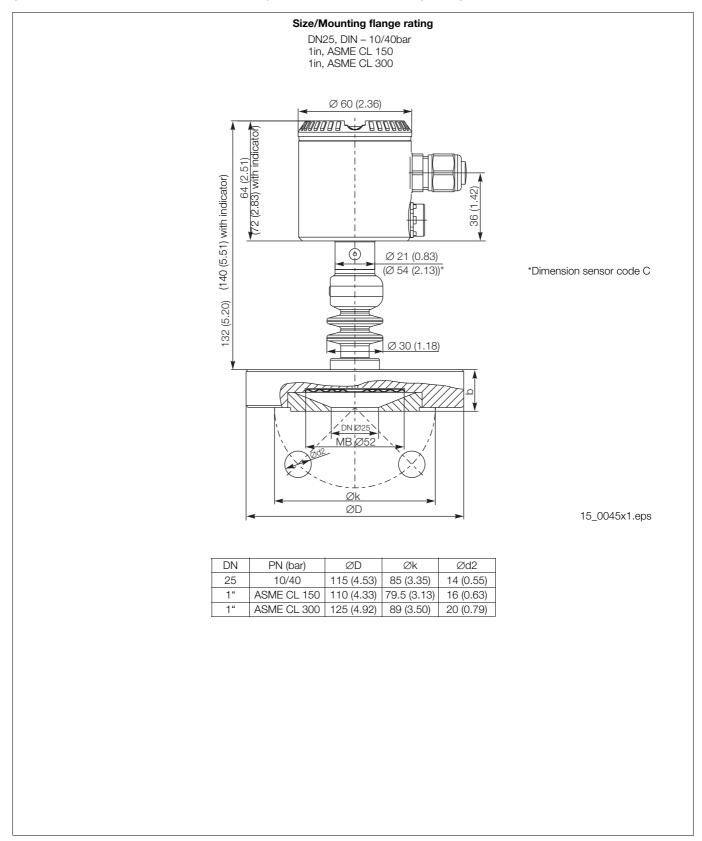


DN	PN (bar)	PN (psi)	ØMB	ØD
25/1"	6400		28.5 (1.12)	63 (2.48)
40	6400		43 (1.69)	85 (3.35)
1 1/2"	_	1502500	43 (1.69)	78 (3.07)
50/2"	6320		54.5 (2.15)	95 (3.74)
80/3"	6250		82.5 (3.25)	130 (5.12)

# Performance data

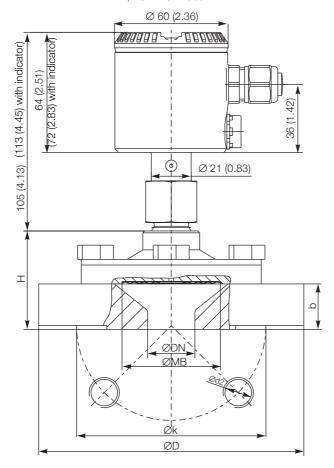
D			erature per 10 K		recomme Sp	Weight	
Process connection	Amk	pient	Prod	cess	) Sp	all	(approx.)
	mbar	inH <sub>2</sub> O	mbar	inH <sub>2</sub> O	mbar	inH <sub>2</sub> O	
Dairy thread DIN 11851, DN25, PN40	0.63	0.25	8.19	3.29	2200	883	1kg
Dairy thread DIN 11851, DN40, PN40	0.07	0.03	1.92	0.77	500	201	1.9kg
Dairy thread DIN 11851, DN50, PN25	0.04	0.01	1.86	0.75	500	201	2.8kg
Tri-Clamp for pipes acc. to ASME, DN 1", PN 40	1.92	0.77	18.54	7.44	5000	2008	1kg
Tri-Clamp for pipes acc. to ASME, DN 1 1/2", PN 40	0.08	0.03	0.99	0.40	250	100	1.9kg
Tri-Clamp for pipes acc. to ASME, DN 2", PN 40	0.06	0.02	2.25	0.90	600	241	2.8kg
DN25 / ASME 1"	1.76	0.71	9.21	3.70	2800	1124	1.4kg
DN40 / ASME 1 1/2"	0.57	0.23	5.03	2.02	1400	562	2.2kg
DN50 / ASME 2"	1.57	0.63	16.62 6.67		4500	1807	2.5kg
DN80 / ASME 3"	0.74 0.30 7.11 2.85		2000	803	4kg		

# Mounting dimensions Model 261GM/261AM (not for construction unless certified) – dimensions in mm (inchs)



# Size/Mounting flange rating

DN25, DIN – 63/100bar DN25, DIN – 160bar DN25, DIN – 250bar 1in, ASME CL 600 1in, ASME CL 1500



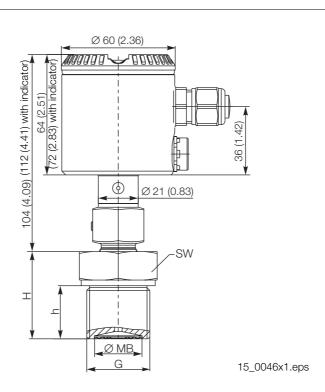
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DN	PN (bar)	ØMB	ØD	Øk	b	Н	Ød2
	63/100		140 (5.51)	( ,	24 (0.94)	52 (2.05)	4xM16
25	160	52 (2.04)	140 (5.51)	100 (3.94)	24 (0.94)	52 (2.05)	4xM16
	250		150 (5.91)	105 (4.13)	28 (1.10)	56 (2.20)	4xM20
1"	ASME CL 600		125 (4.92)	' '	24.5 (1.42)	٠,	
'	ASME CL 1500	02 (2.04)	150 (5.91)	101.5 (4.00)	36 (1.42)	64 (1.42)	4x7/8"

# Performance data

Process connection	Rating	Amb		erature per 10 K Process			nded min. oan	Weight (approx.)
		mbar	inH <sub>2</sub> O	mbar	inH <sub>2</sub> O	mbar	inH <sub>2</sub> O	
1in 1in 1in 1in	ASME CL 150 ASME CL 300 ASME CL 600 ASME CL 1500	0.24	0.096	0.78	0.313	160	64.24	1.4kg 1.7kg 3.6kg 4kg
DN25 DN25 DN25 DN25	DIN - 10/40bar DIN - 63/100bar DIN - 160bar DIN - 250bar	0.24	0.096	0.78	0.313	160	64.24	1.5kg 3.2kg 3.6kg 4kg

# Mounting dimensions Model 261GN/261AN (not for construction unless certified) – dimensions in mm (inchs)

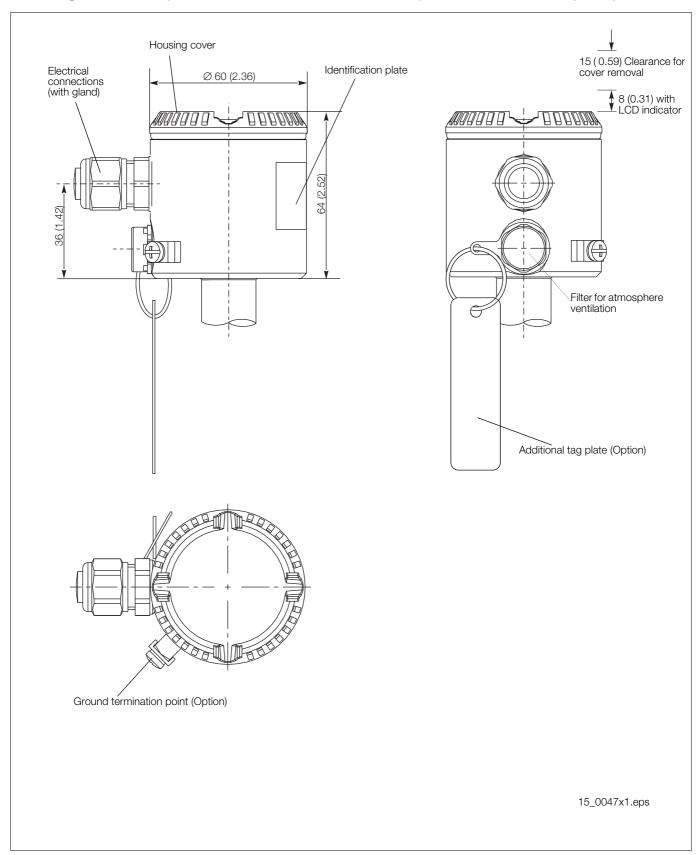


DN	PN	ØMB	G	SW	h	Н	Weight
							(approx.)
1in	600	25 (0.98)	G 1 A	41 (1.61)	28 (1.10)	46 (1.81)	0.3kg
1 1/2in	600	40 (1.57)	G1 1/2 A	55 (2.17)	30 (1.18)	50 (1.97)	0.5kg

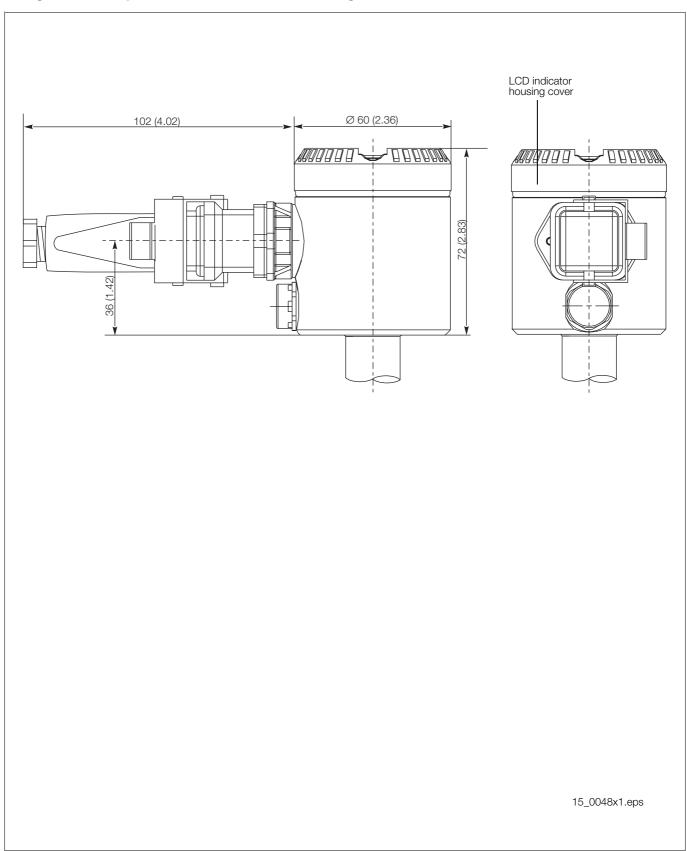
### Performance data

D			erature per 10 K		recomme Sp	
Process connection	Amb	pient	Prod	cess	S).	all
	mbar	inH <sub>2</sub> O	mbar	inH <sub>2</sub> O	mbar	inH <sub>2</sub> O
G 1 A - PN600	14	5.62	35	14.05	6000	2409
G1 1/2 A - PN600	- PN600 2 0.80 4 1.61					482

# Mounting dimensions (not for construction unless certified) - dimensions in mm (inchs)

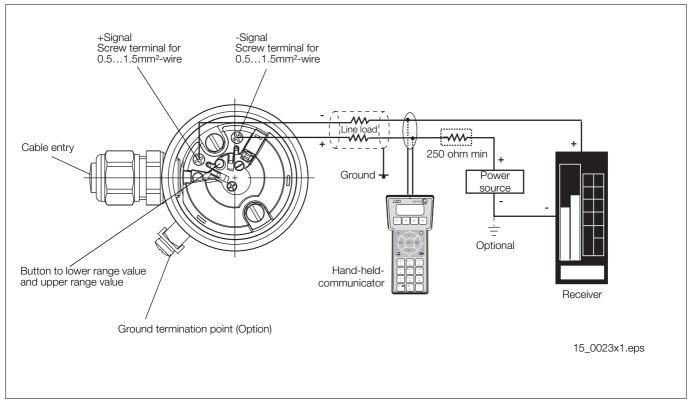


# Design with the options LCD indicator and Harting Han connector

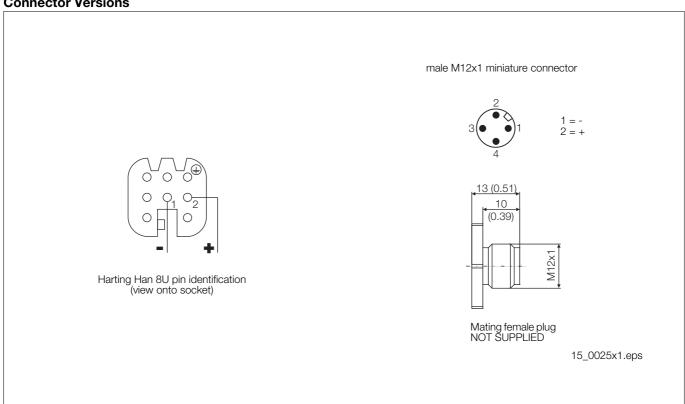


# **Electrical connections**

## **Standard Terminal block**



#### **Connector Versions**



# **Ordering information Model 261GC/261AC**

Gauge pressure transmi	tter		Catalog No	<b>)</b> .					Code		
Base accuracy 0.15%			261GC								
Sensor-Span limits											
6 kPa 60	mbar	24 in H <sub>2</sub> O		С							
40 kPa 400	) mbar	160 in H <sub>2</sub> O		F							
250 kPa 250	00 mbar	1000 in H <sub>2</sub> O		L							
1000 kPa 10	bar	145 psi		D							
3000 kPa 30 l	bar	435 psi		U							
10000 kPa 100	) bar	1450 psi		R							
Absolute pressure trans	mitter		Catalog No	Ο.							
Base accuracy 0.15%			261AC								
Sensor-Span limits											
40 kPa 400	) mbar	300 mmHg		F							
250 kPa 250	00 mbar	1875 mmHg		L							
1000 kPa 10	bar	7500 mmHg		D							
3000 kPa 30	bar	435 psi		U							
Diaphragm material / Fill	fluid (sensor	)									
Front bonded diaphragm	Silicone oil		2)	F	}						
Front bonded diaphragm	Carbon fluo	ride	1, 2)	2	2						
Front bonded diaphragm	White oil		2)	6	3						
Front bonded diaphragm	No filling		3)	3	3						
Size / Mounting flange ra	ating										
1 in	ASME CL 1	50			3	3					
1 in	ASME CL 3	00			4	↓					
2 in	ASME CL 1	50			Α	\					
2 in	ASME CL 3	00			D	)					
2 in	ASME CL 6	00			G	à					
3 in	ASME CL 1	50			В	3					
3 in	ASME CL 3	00			E	[					
3 in	ASME CL 6	00			Н	1					
DN25	DIN PN 10/	40		11)	2	2					
DN 50	DIN PN 16/	40			M	1					
DN 50	DIN PN 64				Р	•					
DN 50	DIN PN 100	)			R	₹					
DN 80	DIN PN 16/	40			L	-					
DN 80	DIN PN 64				Q	<b>∑</b>					
DN 80	DIN PN 100	)			s						
Mounting flange/Seat fo	rm (flange)				•						
Stainless steel (316)		raised face	NACE	4	)	E					
Stainless steel (316)	EN 1092 - E	32 (DIN 2526 - Form E)	NACE	5	,	s					
Stainless steel (316)		31 (DIN 2526 - Form D)	NACE		,	4					
Stainless steel (316)		E (DIN 2513 - V13)	NACE	5	,	М					
Stainless steel (316)		) (DIN 2512 - N)	NACE	5	,	N					

- 1) suitable for oxygen measurement
- 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 ANSI
- 5) only for size / mounting flange rating according to DIN
- 11) only with seat form EN 1092 B2
- 12) only with size DN 25

Continue next page

# Ordering information Model 261GC/261AC (continued)

Gauge pressure transmitter		Catalog No.							Code	
Base accuracy 0.15%		261GC								
Absolute pressure transmitt	ter	Catalog No.								
Base accuracy 0.15%		261AC								
Extension length and mater	ial – DN 50 / 2"		_					T		
Without extension	211 00 / 2				F					
	Stainless steel (316 L)		13	۱ (	1					
	Hastellov C276™		13	<i>'</i>	2					
	Stainless steel (316 L)		13	′ I	3					
	Hastelloy C276™		13	′ I	4					
	Stainless steel (316 L)		13	′ I	5					
	Hastelloy C276™		13	′	6					
Extension length and mater	,				Ŭ	1				
Without extension	ia. 514 00 / 0				F					
	Stainless steel (316 L)		13	۱ ۱	1					
	Hastellov C276™		13	′ I	2					
	Stainless steel (316 L)		13	<i>'</i>	3					
	Hastelloy C276™		13	<i>'</i>	4					
	Stainless steel (316 L)		13	<i>'</i>	5					
	Hastellov C276™		13		6					
	s connection) - Form RF / EN 109	2-B1/B2		/	Ŭ		1			
Stainless steel (316 L)	5 com 5 cm , 1 cm , 1 cm	NACE		6)		s				
Hastelloy C276™		NACE	7.	13)		Н				
Tantalum		NACE		13)		Т				
Stainless steel (316 L) with FE	P non-adhesive coating	NACE		13)		1				
Hastelloy C276™ with FEP nor	•	NACE		13)		2				
Diaphragm material (proces	<u> </u>		-,	,		=		+	1	
Stainless steel (316 L)		NACE		6)		s				
Hastelloy C276™		NACE	7.	13)		H				
Tantalum		NACE	,	13)		Т				
Stainless steel (316 L) with FE	P non-adhesive coating	NACE		13)		1				
Hastelloy C276™ with FEP no		NACE	,	13)		2				
Diaphragm material (process			-							
Stainless steel (316 L)	,	NACE		6)		s				
Hastelloy C276 <sup>™</sup>		NACE	7,	13)		Н				
Fill fluid										
Silicone oil							s			
Carbon fluoride					9)		N			
White oil (FDA certified)				1	0)	١,	w			
Silicone oil for vacuum applicat	tions				•		L			
White oil (FDA certified) for vac	cuum applications			1	0)		Υ			
Electronic housing										
Housing material	Electrical connection									
Stainless steel	M16x1.5 (with cable gland made	e of plastic)						2		
Stainless steel	1/2-14 NPT (without cable gland	d)					-   9	3		
Stainless steel	M20x1.5 (without cable gland)						-	Г		
Stainless steel	Harting HAN connector				1	4)		3		
Stainless steel	Miniature connector				1	4)	7	7		

- 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 measurement
- 10) suitable for food applications
- 13) not with size 1" / DN 25
- 14) select connector type with additional ordering code

continue next page

 $<sup>^{\</sup>mathsf{TM}}$  Hastelloy is a trademark of Cabot Corporation

# Ordering information Model 261GC/261AC (continued)

Gauge pressure transmitter		Catalog N	0.								Code		
Base accuracy 0.15%		261GC											
Absolute pressure transmitter		Catalog N	0.										
Base accuracy 0.15%		261AC											
Output/Additional options													
HART digital communication and 4 to 20 mA	No additional option	าร						1	5)	Н			
HART digital communication and 4 to 20 mA	Options requested									1			
	(to be ordered by "	Additional (	Ord	erinç	g Co	ode'	")						

<sup>15)</sup> not for electr. connection with connector

# Additional ordering information Model 261GC/261AC

	Code	
Explosion protection		
ATEX Group II Category 1/2 G – Intrinsic Safety EEx ia	EH	
ATEX Group II Category 1/2 D – Intrinsic Safety EEx ia (without cable gland)	EL	
Factory Mutual (FM) – Intrinsically Safe	EA	
Canadian Standard Association – Intrinsically Safe	ED	
Integrated digital display (LCD)		
With integrated LCD display	L1	
Electronic housing-Accessories		
Housing with external ground terminal	AA	
Cable gland M16x1,5 and atmosphere ventilation of metal	AB	
Applications		
Oil and grease-free for oxygen measurement (O <sub>2</sub> )	P1	
(only with carbon fluoride fill)		
P <sub>max</sub> = 21 Mpa/210 bar/3045 psi, T <sub>max</sub> = 60°C		
Operating manual		
German	M1	
Additional tag plate		
Stainless steel	l1	
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	
SIL 2 classification	CL	
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	НЗ	
analysis certificates as material verification (minor parts with Factory Certificate acc. to "EN 10 204")		
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 8U – straight entry 16)	U3	

16) only for electr. connection with Harting HAN connector

# Standard delivery items (can be differently specified by additional ordering code)

- General purpose (no electrical certification)
- No meter/display, no mounting bracket
  English manual and labels
- Configuration with kPa and deg. C units
- No test, inspection or material traceability certificates

THE SELECTION OF SUITABLE WETTED PARTS AND FILLING FLUID FOR COMPATIBILITY WITH THE PROCESS MEDIA IS A CUSTOMER'S RESPONSIBILITY, IF NOT OTHERWISE NOTIFIED BEFORE MANUFACTURING.

# Ordering information Model 261GG/261AG

	Catalog No	n.								Code			
Gauge Pressure Transmitter Base accuracy 0.15%	261GG	ĺΠ							П	2000		$\dashv$	
Sensor–Span limits	120.00	H	H					H	H			-	
40 kPa 400 mbar 160 in H <sub>2</sub> O		F											
250 kPa 2500 mbar 1000 in H <sub>2</sub> O		Ľ											
1000 kPa 10 bar 145 psi		D											
3000 kPa 30 bar 435 psi		Ū											
10000 kPa 100 bar 1450 psi		R											
Absolute Pressure Transmitter	Catalog No	_	ш	ш	!				Н				
Base accuracy 0.15%	261AG	<u>.</u> П							П				
Sensor-Span limits	IZUIAG	H							H				
40 kPa 400 mbar 300 mmHg		F											
250 kPa 2500 mbar 1875 mmHg		Ľ											
1000 kPa 10 bar 7500 mmHg		D											
3000 kPa 30 bar 435 psi		U											
Diaphragm material / Fill fluid (sensor)		٦										_	
Front bonded diaphragm Silicone oil			R										
Front bonded diaphragm Silicone oil  Front bonded diaphragm Carbon fluoride			2										
Front bonded diaphragm Carbon nuonde  Front bonded diaphragm White oil			6										
Connection White oil			Ü					$\vdash$	$\vdash \vdash$			-	
Dairy thread DIN 11851, DN32, PN40				В									
				С									
Dairy thread DIN 11851, DN40, PN40				D									
Dairy thread DIN 11851, DN50, PN25													
SMS 1½" Union nut PN 40				F									
SMS 2" Union nut PN 40				G									
RJT Union nut DN 1½", PN 40				J									
RJT Union nut DN 2", PN 40				K									
Tri-Clamp connection acc. to ASME 1 1/2", PN40				М									
Tri-Clamp connection acc. to ASME 2", PN40				N									
Tri-Clamp connection acc. to ASME 3", PN25				Р									
Varivent for pipes DN 25				R									
Varivent for pipes DN40 - DN125				S									
Neumo-Biocontrol G50				Т									
Neumo-Biocontrol G65				U									
DRD flange, D=65 mm				Υ					Ш				
Diaphragm material (process connection)													
Stainless steel (316 L)	NACE				S								
Fill fluid													
Silicone oil						S							
Carbon fluoride				1)		Ν							
White oil (FDA certified)				2)		W							
Silicone oil for vacuum applications						L							
White oil (FDA certified) for vacuum applications				2)		Υ		L					
Sealing (O-ring)											-		
Without					3)		1						
Buna (max. 120°C)					4)		4						
PTFE					4)		2	L	$\bigsqcup$				
Electronic housing													
Housing material Electrical connection													
Stainless steel M16x1.5 (with cable gland made of	plastic)							2					
Stainless steel 1/2-14 NPT (without cable gland)	•							s					
Stainless steel M20x1.5 (without cable gland)								Т					
Stainless steel Harting HAN connector					1	4)		3					
Stainless steel Miniature connector						4)		z					

- 1) suitable for oxygen application
- 2) suitable for food application
- 3) for all connections except for dairy thread
- 4) only for dairy thread
- 14) select connector type with additional ordering code

continue next page

# Ordering information Model 261GG/261AG (continued)

Gauge Pressure Transmitter		Catalog No	).					Code		
Base accuracy 0.15%		261GG								
Absolute Pressure Transmitter		Catalog No	).							
Base accuracy 0.15%		261AG								
Output/Additional options										
HART digital communication and 4 to 20 mA	No additional options					15)	Н			
HART digital communication and 4 to 20 mA	Options requested						1			
	(to be ordered by "Add	ditional Orde	ering	Cod	le")					

<sup>15)</sup> not for electr. connection with connector

# Additional ordering information Model 261GG/261AG

	Code
Explosion protection	
ATEX Group II Category 1/2 G – Intrinsic Safety EEx ia	EH
ATEX Group II Category 1/2 D – Intrinsic Safety EEx ia (without cable gland)	EL
Factory Mutual (FM) – Intrinsically Safe	EA
Canadian Standard Association – Intrinsically Safe	ED
Integrated digital display (LCD)	
With integrated LCD display	L1
Electronic housing-Accessories	
Housing with external ground terminal	AA
Cable gland M16x1,5 and atmosphere ventilation of metal	AB
Applications	
Oil and grease-free for oxygen measurement ( $O_2$ )	P1
(only with carbon fluoride fill)	
P <sub>max</sub> = 21 Mpa/210 bar/3045 psi, T <sub>max</sub> = 60°C	
Operating manual	
German	M1
Additional tag plate	
Stainless steel	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
SIL 2 classification	CL
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	H3
analysis certificates as material verification (minor parts with Factory Certificate acc. to "EN 10 204")	
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 8U – straight entry 16)	U3

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

# Standard delivery items (can be differently specified by additional ordering code)

- General purpose (no electrical certification)
- No meter/display, no mounting bracket
  English manual and labels
  Configuration with kPa and deg. C units

- No test, inspection or material traceability certificates

THE SELECTION OF SUITABLE WETTED PARTS AND FILLING FLUID FOR COMPATIBILITY WITH THE PROCESS MEDIA IS A CUSTOMER'S RESPONSIBILITY, IF NOT OTHERWISE NOTIFIED BEFORE MANUFACTURING.

# Ordering information Model 261GJ/261AJ

Base accuracy 0, 15%   261GJ	Gauge Pressure Tran	smitter			Catalog N	0.						Code	
Sensor-Span limits						Ħ		T	T	Π			
40 kPa					1-0.00	H		1	T				
250 kPa		400 mbar	160 ir	n H <sub>a</sub> O		lfl							
1000 kPa				-		I . I							
300 kPa				=									
10000 kPa													
Absolute Pressure Transmitter													
Absolute Pressure Transmitter   Catalog No.   Base accuracy 0.15%   Sensor-Span limits   40 kPa		600 bar				V							
Base accuracy 0.15%   Sensor-Span limits				F -	Catalog N	0.		1	-	-			
Sensor-Span limits													
40 kPa													
250 kPa	40 kPa	400 mbar	300 n	nmHg		F							
3000 kPa	250 kPa	2500 mbar		•		L							
3000 kPa	1000 kPa	10 bar		· ·		D							
Diaphragm material / Fill fluid (sensor)   R   Mounted seal   Silicone oil   R   Mounted seal   Silicone oil   R   Mounted seal   Silicone oil   R   Mounted seal   White oil   G   Carbon fluoride   2   Mounted seal   White oil   G   Mounted seal   Mounted seal   White oil   G   Mounted seal   Mounted seal   Mounted seal   Mounted seal   G   Mounted seal   Mounted seal   Mounted seal   G   Mounted seal   Mounted seal   Mounted seal   G	3000 kPa	30 bar		· ·									
Mounted seal   Silicone oil   R   Q   Mounted seal   Carbon fluoride   Q   Mounted seal   Carbon fluoride   Q   Mounted seal   White oil   G   Mounted seal   Mounted seal   White oil   G   Mounted seal   Mounted									T				
Mounted seal   White oil   Connection   Co		•	•				R						
Connection   DN 25, PN 40, dairy thread acc. to DIN 11851   E   DN 40, PN 40, dairy thread acc. to DIN 11851   F   DN 40, PN 40, dairy thread acc. to DIN 11851   G   DN 11, PN 40, Tir-Clamp for pipes acc. to ASME   H   DN 11, PN 40, Tir-Clamp for pipes acc. to ASME   H   DN 2", PN 40, Tir-Clamp for pipes acc. to ASME   K   DN 2", PN 40, Tir-Clamp for pipes acc. to ASME   K   DN 25 / ASME 1"   DN 40   DN 50 / ASME 2"   D   DI 50 / ASME 2"   D   DI 50 / ASME 2"   D   DI 50 / ASME 3"   D   DI 50 / ASME 3"   D   DI 50 / ASME 3"   D   DI 50 / ASME 50 /	Mounted seal	Carbo	on fluoride				2						
DN 25, PN 40, dairy thread acc. to DIN 11851 DN 40, PN 40, dairy thread acc. to DIN 11851 DN 40, PN 40, dairy thread acc. to DIN 11851 DN 50, PN 25, dairy thread acc. to DIN 11851 DN 11, PN 40, Tri-Clamp for pipes acc. to ASME DN 11, PN 40, Tri-Clamp for pipes acc. to ASME DN 11, PN 40, Tri-Clamp for pipes acc. to ASME DN 11, PN 40, Tri-Clamp for pipes acc. to ASME DN 21, PN 40, Tri-Clamp for pipes acc. to ASME DN 22, PN 40, Tri-Clamp for pipes acc. to ASME DN 25, ASME 1" DN 26, ASME 1" DN 27, PN 40, Tri-Clamp for pipes acc. to ASME DN 25, ASME 1" DN 40 DN 50 / ASME 2" DN 50 / ASME 3" DD DIaphragm material (seal) Stainless steel (316 L) Stainless steel (316 L) NACE FR  FIII fluid Silicone oil Carbon fluoride 1) White oil (FDA certified) Silicone oil for vacuum applications L White oil (FDA certified) for vacuum applications Uhite oil (FDA certified) for vacuum applications 2) W Silicone steel White oil (FDA certified) Stainless steel M16x1.5 (with cable gland) Stainless steel M20x1.5 (without cable gland) S Stainless steel Harting HAN connector 14) 3 Stainless steel M20x1.5 (without cable gland) T Stainless steel M20x1.5 (without cable gland) T Stainless steel M20x1.5 (without cable gland) T ASTAINLESS Steel M20x1.5 (without cable gland) T Stainless steel M20x1.5 (without cable gland) T ASTAINLESS Steel M20x1.5 (without cable gland) T AST	Mounted seal	White	oil				6						
DN 40, PN 40, dairy thread acc. to DIN 11851 DN 50, PN 25, dairy thread acc. to DIN 11851 DN 50, PN 25, dairy thread acc. to DIN 11851 DN 11, PN 40, Tri-Clamp for pipes acc. to ASME DN 11, PN 40, Tri-Clamp for pipes acc. to ASME DN 21, PN 40, Tri-Clamp for pipes acc. to ASME DN 22, PN 40, Tri-Clamp for pipes acc. to ASME DN 25, ASME 1" DN 25, ASME 1" DN 25, ASME 2" DN 80 / ASME 2" DN 80 / ASME 3" Diaphragm material (seal) Stainless steel (316 L) NACE R  Fill fluid Silicone oil Carbon fluoride White oil (FDA certified) Silicone oil for vacuum applications Uhite oil (FDA certified) for vacuum applications Uhite oil (FDA certified) for vacuum applications Electronic housing Housing material Electrical connection Stainless steel M16x1.5 (with cable gland made of plastic) Stainless steel M20x1.5 (without cable gland) Stainless steel Harting HAN connector 14) 3 Stainless steel Miniature connector 14) A DH HART digital communication and 4 to 20 mA Options requested 1 1	Connection					•							
DN 50, PN 25, dairy thread acc. to DIN 11851  DN 11, PN 40, Tri-Clamp for pipes acc. to ASME  DN 11, PN 40, Tri-Clamp for pipes acc. to ASME  DN 21, PN 40, Tri-Clamp for pipes acc. to ASME  DN 22, PN 40, Tri-Clamp for pipes acc. to ASME  DN 25 / ASME 1"  DN 40  B	DN 25, PN 40, dairy th	read acc. to	DIN 11851				E	:					
DN 1", PN 40, Tri-Clamp for pipes acc. to ASME	DN 40, PN 40, dairy th	read acc. to	DIN 11851				F						
DN 1 1/2", PN 40, Tri-Clamp for pipes acc. to ASME DN 2", PN 40, Tri-Clamp for pipes acc. to ASME DN 25 / ASME 1" DN 50 / ASME 2" DN 80 / ASME 2" DN 80 / ASME 3" Diaphragm material (seal) Stainless steel (316 L) NACE R Fill fluid Silicone oil Carbon fluoride 1) N N White oil (FDA certified) Silicone oil for vacuum applications White oil (FDA certified) for vacuum applications Unythie oil (FDA certified) for vacuum applications Electronic housing Housing material Stainless steel M16x1.5 (with cable gland made of plastic) Stainless steel M20x1.5 (without cable gland) Stainless steel M20x1.5 (without cable gland) Stainless steel Miniature connector 14) 3 Stainless steel Miniature connector 14) 3 Stainless steel MIART digital communication and 4 to 20 mA No additional options NACE R S S C C D V S S S S S S S S S S S S S S S S S S S	DN 50, PN 25, dairy th	read acc. to	DIN 11851				G	i					
DN 1 1/2", PN 40, Tri-Clamp for pipes acc. to ASME DN 2", PN 40, Tri-Clamp for pipes acc. to ASME DN 25 / ASME 1" DN 50 / ASME 2" DN 80 / ASME 2" DN 80 / ASME 3" Diaphragm material (seal) Stainless steel (316 L) NACE R Fill fluid Silicone oil Carbon fluoride 1) N N White oil (FDA certified) Silicone oil for vacuum applications White oil (FDA certified) for vacuum applications Unythie oil (FDA certified) for vacuum applications Electronic housing Housing material Stainless steel M16x1.5 (with cable gland made of plastic) Stainless steel M20x1.5 (without cable gland) Stainless steel M20x1.5 (without cable gland) Stainless steel Miniature connector 14) 3 Stainless steel Miniature connector 14) 3 Stainless steel MIART digital communication and 4 to 20 mA No additional options NACE R S S C C D V S S S S S S S S S S S S S S S S S S S							H	ı					
DN 2", PN 40, Tri-Clamp for pipes acc. to ASME DN 25 / ASME 1" DN 40 DN 50 / ASME 2" DN 80 / ASME 3" Diaphragm material (seal) Stainless steel (316 L) NACE R  Silicone oil Carbon fluoride White oil (FDA certified) Silicone oil f(FDA certified) Silicone sil f(FDA certified) Stainless steel M16x1.5 (with cable gland made of plastic) Stainless steel M2x1.5 (without cable gland) Stainless steel M3x1.5 (without cable gland) Stainless steel M2x1.5 (without cable gland) Stainless steel M3x1.5 (without cable gland) Stainless steel M3x1.5 (without cable gland) Stainless steel M4x1.5 (without cable gland) Stainless steel M5x1.5 (without cable gland) Stainless steel M6x1.5 (without cable gland) Stainless steel M6x1.5 (without cable gland) Stainless steel M6x1.5 (without cable gland) Stainless steel M7x1.5 (without cable gland) Stainless steel M6x1.5 (without cable gland) Stainless steel M7x1.5 (without cable gland) Sta							J						
DN 40							Ιĸ						
DN 50 / ASME 2"	DN 25 / ASME 1"						Α						
DN 80 / ASME 3"  Diaphragm material (seal) Stainless steel (316 L) NACE R  Silicone oil Carbon fluoride Silicone oil for vacuum applications White oil (FDA certified) for vacuum applications White oil (FDA certified) for vacuum applications Uhite oil (FDA certified) for vacuum applications  Electronic housing Housing material Stainless steel M16x1.5 (with cable gland made of plastic) Stainless steel M16x1.5 (without cable gland) Stainless steel M20x1.5 (without cable gland) Sta	DN 40						В						
Diaphragm material (seal) Stainless steel (316 L) NACE R Fill fluid Silicone oil Carbon fluoride White oil (FDA certified) Silicone oil for vacuum applications White oil (FDA certified) for vacuum applications White oil (FDA certified) for vacuum applications Unite oil (FDA certified) for vacuum applications  Electronic housing Housing material Stainless steel M16x1.5 (with cable gland made of plastic) Stainless steel M1/2-14 NPT (without cable gland) Stainless steel M20x1.5 (without cable gland) T Stainless steel Harting HAN connector 14) 3 Stainless steel Miniature connector 14) T Output/Additional options HART digital communication and 4 to 20 mA No additional options HART digital communication and 4 to 20 mA Options requested  NACE R R  R  B B B B B B B B B B B B B B B	DN 50 / ASME 2"						c	;					
Stainless steel (316 L)  Fill fluid  Silicone oil  Carbon fluoride  White oil (FDA certified)  Silicone oil for vacuum applications  White oil (FDA certified) for vacuum applications  White oil (FDA certified) for vacuum applications  U  White oil (FDA certified) for vacuum applications  Electronic housing  Housing material  Stainless steel  M16x1.5 (with cable gland made of plastic)  Stainless steel  M20x1.5 (without cable gland)  Stainless steel  Harting HAN connector  14)  Stainless steel  Miniature connector  14)  Output/Additional options  HART digital communication and 4 to 20 mA  Options requested  NACE  R  R  I  I  I  I  I  I  I  I  I  I  I	DN 80 / ASME 3"												
Fill fluid  Silicone oil  Carbon fluoride  White oil (FDA certified)  Silicone oil for vacuum applications  White oil (FDA certified) for vacuum applications  U White oil (FDA certified) for vacuum applications  Electronic housing  Housing material  Stainless steel  M16x1.5 (with cable gland made of plastic)  Stainless steel  M20x1.5 (without cable gland)  Stainless steel  M20x1.5 (without cable gland)  Stainless steel  Harting HAN connector  Miniature connector  14)  Output/Additional options  HART digital communication and 4 to 20 mA  Options requested  N N N N N N N N N N N N N N N N N N N	Diaphragm material (	seal)											
Silicone oil Carbon fluoride 1) N White oil (FDA certified) Silicone oil for vacuum applications White oil (FDA certified) for vacuum applications White oil (FDA certified) for vacuum applications White oil (FDA certified) for vacuum applications  Electronic housing Housing material Stainless steel M16x1.5 (with cable gland made of plastic) Stainless steel M1/2-14 NPT (without cable gland) Stainless steel M20x1.5 (without cable gland) T Stainless steel Harting HAN connector 14) Stainless steel Miniature connector 14) T Output/Additional options HART digital communication and 4 to 20 mA Options requested  N Options requested	Stainless steel (316 L)				NACE			R					
Carbon fluoride 1) N White oil (FDA certified) 2) W Silicone oil for vacuum applications L L White oil (FDA certified) for vacuum applications 2) Y Silicone oil for vacuum applications 2) Y Silicone oil (FDA certified) for vacuum applications 2) Y Silicone oil (FDA certified) for vacuum applications 2) Y Silicone oil (FDA certified) for vacuum applications 2) Y Silicone oil (FDA certified) for vacuum applications 2) Y Silicone oil (FDA certified) for vacuum applications 2) Y Silicone oil (FDA certified) for vacuum applications Silicone oil (FDA certified) for vacuum applications 2) Y Silicone oil (FDA certified) for vacuum applications Silicone oil (FDA certified) for vacuum applications 2) Y Silicone o	Fill fluid												
White oil (FDA certified) Silicone oil for vacuum applications White oil (FDA certified) for vacuum applications White oil (FDA certified) for vacuum applications  Electronic housing Housing material Stainless steel M16x1.5 (with cable gland made of plastic) Stainless steel M1/2-14 NPT (without cable gland) Stainless steel M20x1.5 (without cable gland) T Stainless steel M30x1.5 (without cable gland) T Stainless steel M40x1.5 (without cable gland) T Stainless steel M20x1.5 (without cable gland) T Stainless steel M30x1.5 (without cable gland) T Stainless steel M40x1.5 (without cable gland) T S S S S S S S S S S S S S S S S S S	Silicone oil								S				
Silicone oil for vacuum applications White oil (FDA certified) for vacuum applications  Electronic housing Housing material Stainless steel M16x1.5 (with cable gland made of plastic) Stainless steel 1/2-14 NPT (without cable gland) Stainless steel M20x1.5 (without cable gland) T Stainless steel Harting HAN connector 14) 3 Stainless steel Miniature connector 14) T Output/Additional options HART digital communication and 4 to 20 mA No additional options requested  L Y Y	Carbon fluoride						1)	)	N				
White oil (FDA certified) for vacuum applications  Electronic housing Housing material Stainless steel M16x1.5 (with cable gland made of plastic) Stainless steel 1/2-14 NPT (without cable gland) Stainless steel M20x1.5 (without cable gland) Stainless steel M20x1.5 (without cable gland) Totalnless steel Harting HAN connector 14) 3 Stainless steel Miniature connector 14) 7  Output/Additional options HART digital communication and 4 to 20 mA No additional options 15) H HART digital communication and 4 to 20 mA Options requested	White oil (FDA certified	l)					2	)	W				
Electronic housing Housing material Stainless steel M16x1.5 (with cable gland made of plastic) Stainless steel M20x1.5 (without cable gland) Stainless steel M20x1.5 (without cable gland) T Stainless steel M20x1.5 (without cable gland) T Stainless steel Harting HAN connector Miniature connector Miniature connector Miniature connector MART digital communication and 4 to 20 mA No additional options HART digital communication and 4 to 20 mA Options requested  No additional options No additional options MART digital communication and 4 to 20 mA Options requested	Silicone oil for vacuum	applications							L				
Housing materialElectrical connectionImage: Connection of the connec	White oil (FDA certified	l) for vacuun	n applications	}			2	)	Υ				
Stainless steel M16x1.5 (with cable gland made of plastic) 2 Stainless steel 1/2-14 NPT (without cable gland) 5 Stainless steel M20x1.5 (without cable gland) 7 Stainless steel M20x1.5 (without cable gland) 7 Stainless steel Harting HAN connector 14) 3 Stainless steel Miniature connector 14) 7  Output/Additional options HART digital communication and 4 to 20 mA No additional options 15) H HART digital communication and 4 to 20 mA Options requested 1	Electronic housing												
Stainless steel 1/2-14 NPT (without cable gland) Stainless steel M20x1.5 (without cable gland) Stainless steel Harting HAN connector 14) 3 Stainless steel Miniature connector 14) Z  Output/Additional options HART digital communication and 4 to 20 mA No additional options 15) H HART digital communication and 4 to 20 mA Options requested 1	Housing material		Electrical co	nnection									
Stainless steel M20x1.5 (without cable gland)  Stainless steel Harting HAN connector 14) 3  Stainless steel Miniature connector 14) Z  Output/Additional options  HART digital communication and 4 to 20 mA No additional options 15) H  HART digital communication and 4 to 20 mA Options requested 1	Stainless steel		M16x1.5 (wit	th cable gland made of plas	stic)								
Stainless steel Harting HAN connector 14) 3 Stainless steel Miniature connector 14) Z	Stainless steel		1/2-14 NPT (	(without cable gland)									
Stainless steel Miniature connector 14) Z  Output/Additional options  HART digital communication and 4 to 20 mA No additional options 15) H  HART digital communication and 4 to 20 mA Options requested 1	Stainless steel M20x1.5 (without cable gland)									Т			
Output/Additional options         HART digital communication and 4 to 20 mA       No additional options       15)       H         HART digital communication and 4 to 20 mA       Options requested       1								14)					
HART digital communication and 4 to 20 mA  No additional options  15)  H  HART digital communication and 4 to 20 mA  Options requested  1	Stainless steel Miniature connector							14)		Ζ			
HART digital communication and 4 to 20 mA Options requested 1			_										
·							15)		Н				
(to be ordered by "Additional Ordering Code")	HART digital communic								1				
(to be ordered by "Additional Ordering Code")				(to be ordered by "Addition	nal Orderin	g C	ode")						

<sup>1)</sup> suitable for oxygen application

<sup>2)</sup> suitable for food application

<sup>14)</sup> select connector type with additional ordering code15) not for electr. connection with connector

# Additional ordering information Model 261GJ/261AJ

	Code
Explosion protection	
ATEX Group II Category 1/2 G – Intrinsic Safety EEx ia	EH
ATEX Group II Category 1/2 D - Intrinsic Safety EEx ia (without cable gland)	EL
Factory Mutual (FM) – Intrinsically Safe	EA
Canadian Standard Association – Intrinsically Safe	ED
Integrated digital display (LCD)	
With integrated LCD display	L1
Electronic housing-Accessories	
Housing with external ground terminal	AA
Cable gland M16x1,5 and atmosphere ventilation of metal	AB
Applications	
Oil and grease-free for oxygen measurement (O <sub>2</sub> )	P1
(only with carbon fluoride fill)	
P <sub>max</sub> = 21 Mpa/210 bar/3045 psi, T <sub>max</sub> = 60°C	
Operating manual	
German	M1
Additional tag plate	
Stainless steel	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
SIL 2 classification	CL
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	H3
analysis certificates as material verification (minor parts with Factory Certificate acc. to "EN 10 204"	)
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 8U – straight entry 16)	U3

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

# Standard delivery items (can be differently specified by additional ordering code)

- General purpose (no electrical certification)
- No meter/display, no mounting bracket
  English manual and labels
  Configuration with kPa and deg. C units

- No test, inspection or material traceability certificates

THE SELECTION OF SUITABLE WETTED PARTS AND FILLING FLUID FOR COMPATIBILITY WITH THE PROCESS MEDIA IS A CUSTOMER'S RESPONSIBILITY, IF NOT OTHERWISE NOTIFIED BEFORE MANUFACTURING.

# Ordering information Model 261GM/261AM

Gauge Pressure Transmitter			Catalog No	).							Code			
Base accuracy 0.15%			261GM											
Sensor-Span limits			•											
•	400 mbar	160 in H₂O		F										
250 kPa 2	2500 mbar	1000 in Ĥ₃O		L										
1000 kPa	10 bar	145 psi <sup>2</sup>		D										
	30 bar	435 psi		Ū										
	100 bar	1450 psi		R										
	600 bar	8700 psi		v										
Absolute Pressure Tra		0700 poi	Catalog No	•			<del></del>			l				
Base accuracy 0.15%			261AM	Ï										
Sensor-Span limits			120111111		$\dashv$	+	t							
· ·	400 mbar	300 mmHg		F										
	2500 mbar	1875 mmHg		Ľ										
	10 bar	7500 mmHg		D										
	30 bar	435 psi		U										
Diaphragm material /				۲	+	+								
Front bonded diaphragr		)	1)		R									
			1) 2)		3									
Front bonded diaphragr			2)		3	+	-							
Size/Mounting flange	-	-0			Ι,									
1in	ASME CL15				I A									
1in	ASME CL 3													
1in	ASME CL 6				E									
1in	ASME CL 1				ļ.									
DN25	DIN - 10/40				H									
DN25	DIN - 63/100 bar				L									
DN25	DIN - 160 b				⊺									
DN25	DIN - 250 b				١	′								
Mounting flange mate														
AISI 316 ss		smooth finish	NACE		3)	E								
AISI 316 ss	EN 1092 - E	31 (DIN 2526 - Form D)	NACE		4)	4								
AISI 316 ss	EN 1092 - E	) (DIN 2512 - N)	NACE		5)	Ν								
Diaphragm material (v	wetted parts)													
AISI 316 L ss			NACE				S							
Fill fluid														
Silicone oil								S						
Silicone oil for vacuum p	oroofed design							L						
Electronic housing														
Housing material	Electrical c	onnection												
Stainless steel		ith cable gland made of plasti	c)						2					
Stainless steel	,	(without cable gland)	,						s					
Stainless steel		rithout cable gland)							Т					
Stainless steel Harting HAN connector							14)		3					
Stainless steel					14)		z							
Output/Additional op					• +/		-				1			
HART digital communic						15)		Н						
HART digital communic						.0)		1						
I arr aignaí comindinc	a and 7 to 20 f	mA Options requested (to be ordered by "Ad	Iditional Orde	rinc	ı Coo	اھا <sup>،</sup>								
		(to be ordered by Ad	anional Oluc	), II 16	, 000	,								

- 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

# Additional ordering information Model 261GM/261AM

	Code
Explosion protection	
ATEX Group II Category 1/2 G – Intrinsic Safety EEx ia	EH
ATEX Group II Category 1/2 D - Intrinsic Safety EEx ia (without cable gland)	EL
Factory Mutual (FM) – Intrinsically Safe	EA
Canadian Standard Association – Intrinsically Safe	ED
Integrated digital display (LCD)	
With integrated LCD display	L1
Electronic housing-Accessories	
Housing with external ground terminal	AA
Cable gland M16x1,5 and atmosphere ventilation of metal	AB
Applications	
Oil and grease-free for oxygen measurement (O <sub>2</sub> )	P1
(only with carbon fluoride fill)	
P <sub>max</sub> = 21 Mpa/210 bar/3045 psi, T <sub>max</sub> = 60°C	
Operating manual	
German	M1
Additional tag plate	
Stainless steel	l1
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
SIL 2 classification	CL
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	H3
analysis certificates as material verification (minor parts with Factory Certificate acc. to "EN 10 204")	
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 8U – straight entry 16)	U3

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

## Standard delivery items (can be differently specified by additional ordering code)

- General purpose (no electrical certification)
- No meter/display, no mounting bracket
  English manual and labels
- Configuration with kPa and deg. C units
- No test, inspection or material traceability certificates

THE SELECTION OF SUITABLE WETTED PARTS AND FILLING FLUID FOR COMPATIBILITY WITH THE PROCESS MEDIA IS A CUSTOMER'S RESPONSIBILITY, IF NOT OTHERWISE NOTIFIED BEFORE MANUFACTURING.

# Ordering information Model 261GN/261AN

Gauge Pressure Transmitter				٥.						Code	
Base accuracy 0.15%	Base accuracy 0.15%										
Sensor-Span limits			l.		T						
250 kPa 2500	mbar 100	00 in H₂O		ᅵᅵ							
1000 kPa 10 ba		5 psi		D							
3000 kPa 30 ba		5 psi		U							
10000 kPa 100 b	ar 145	50 psi		R							
60000 kPa 600 b	ar 870	00 psi		V							
Absolute Pressure Transm	itter	·	Catalog No	٥.		-		•			
Base accuracy 0.15%			261AN								
Sensor-Span limits											
250 kPa 2500	mbar 187	75 mmHg		L							
1000 kPa 10 ba	r 750	00 mmHg		D							
3000 kPa 30 ba	r 435	5 psi		U							
Diaphragm material / Fill fl	uid (sensor)										
Front bonded diaphragm	Silicone oil				R						
Front bonded diaphragm	Carbon fluoride				2						
Front bonded diaphragm	White oil				6						
Connection / Rating											
G 1 A - PN600						1					
G 1 1/2 A - PN600						2					
Diaphragm material (proce	ess connection)										
Stainless steel (316 L)			NACE				S				
Fill fluid											
Silicone oil							S				
Carbon fluoride						1)	N				
White oil (FDA certified)					2	2)	٧	/			
Silicone oil for vacuum applic	ations						L				
White oil (FDA certified) for v	acuum application	ons			:	2)	Υ				
Electronic housing											
Housing material	Electrical	connection									
Stainless steel	M16x1.5 (v	with cable gland made of plas	tic)					2			
Stainless steel		T (without cable gland)						S			
Stainless steel	M20x1.5 (v	without cable gland)						Т			
Stainless steel		AN connector				14	4)	3			
Stainless steel Miniature connector						14	4)	Z			
Output/Additional options	<b>i</b>										
HART digital communication and 4 to 20 mA No additional options							15	)	Н		
HART digital communication							1				
		(to be ordered by "Addition	nal Orderin	g Co	ode'	")			L		

<sup>1)</sup> suitable for oxygen application

<sup>2)</sup> suitable for food application

<sup>14)</sup> select connector type with additional ordering code

<sup>15)</sup> not for electr. connection with connector

 $<sup>^{\</sup>mathsf{TM}}$  Hastelloy is a trademark of Cabot Corporation

# Additional ordering information Model 261GN/261AN

	Code	
Explosion protection		
ATEX Group II Category 1/2 G – Intrinsic Safety EEx ia	EH	
ATEX Group II Category 1/2 D – Intrinsic Safety EEx ia (without cable gland)	EL	
Factory Mutual (FM) – Intrinsically Safe	EA	
Canadian Standard Association – Intrinsically Safe	ED	
Integrated digital display (LCD)		
With integrated LCD display	L1	
Electronic housing-Accessories		
Housing with external ground terminal	AA	
Cable gland M16x1,5 and atmosphere ventilation of metal	AB	
Applications		
Oil and grease-free for oxygen measurement (O <sub>2</sub> )	P1	
(only with carbon fluoride fill)		
P <sub>max</sub> = 21 Mpa/210 bar/3045 psi, T <sub>max</sub> = 60°C		
Operating manual		
German	M1	
Additional tag plate		
Stainless steel	l1	
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	
SIL 2 classification	CL	
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	H3	
analysis certificates as material verification (minor parts with Factory Certificate acc. to "EN 10 204")		
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 8U – straight entry 16)	U3	

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

# Standard delivery items (can be differently specified by additional ordering code)

- General purpose (no electrical certification)
- No meter/display, no mounting bracket
  English manual and labels
  Configuration with kPa and deg. C units

- No test, inspection or material traceability certificates

THE SELECTION OF SUITABLE WETTED PARTS AND FILLING FLUID FOR COMPATIBILITY WITH THE PROCESS MEDIA IS A CUSTOMER'S RESPONSIBILITY, IF NOT OTHERWISE NOTIFIED BEFORE MANUFACTURING.

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