

# Model 264DC Differential/Gauge Model 264HC Gauge Model 264NC Absolute

Measurement made easy

Engineered solutions for all applications



**Base accuracy :  $\pm 0.075\%$**

**Span limits**

- 0.54 to 16000kPa; 2.14inH<sub>2</sub>O to 2320psi
- 1.1 to 16000kPa abs; 8mmHg to 2320psia

**Reliable sensing system coupled with very latest digital technologies**

**Comprehensive sensor choice**

- optimize in-use total performance and stability

**5-year stability**

**Flexible configuration facilities**

- provided locally via local keys combined with LCD indicator or via hand held terminal or PC configuration platform

**Multiple protocol availability**

- provides integration with HART®, PROFIBUS PA and FOUNDATION Fieldbus platforms offering interchangeability and transmitter upgrade capabilities

**Broad selection of variants, options, fill fluids and wetted materials**

- allows total flexibility maximizing cost-effective aspect, also providing applications with critical process media at extended temperature range

**PED compliance to sound engineering practice (SEP)**

## General Description

Model 264DC and 264HC/NC detailed in this data sheet apply for those transmitters which include on high pressure measuring side, a direct mount seal which is integral to the transducer by a short capillary connection inside a protective rigid tube.

This construction forms a standalone single assembly suitable to be mounted to the process by the seal mounting facilities.

By properly selecting the high and low pressure side variant in the ordering codes model 264DC can be in the following versions :

- a) one direct mount seal and one flange for process connection, direct  $\frac{1}{4}$  – 18 NPT or  $\frac{1}{2}$  – 14 NPT through adapter; this allows also to connect the other leg (wet or dry) for differential measurement.

A proper filter is supplied as standard when  $\frac{1}{4}$  – 18 NPT connection is selected, in order to plug the unused entry, leaving it vented for gauge measurement with reference to atmosphere.

- b) one direct mount seal and one remote seal with capillary; the two seals allow again a differential measurement and must be selected of same type/size.

Model 264HC and 264NC have the direct mount seal on the positive side, respectively with the reference at atmospheric or vacuum pressure, for gauge or absolute measurements. Allowed types of direct mount seal are those mainly used for chemical application:

- flush diaphragm flange mounted seal
- extended diaphragm flange mounted seal

These are suitable also for other process applications including food and sanitary, using FDA approved filling, which are defined as food fills and are Generally Recognized As Safe (GRAS) by the US Food and Drug Administration (FDA).

Refer to seal data sheet for all data and details relevant to seal element.

The following table list the types of standard seal which can be mounted with 264DC/HC/NC transmitters (the mnemonic is used as reference in the compatibility table).

Seal type	Size	Mnemonic
Flanged flush diaphragm	2in / DN50	P2
	3-4in / DN80-100	P3
Flanged extended diaphragm	2in / DN50	E2
	3in / DN80	E3
	4in / DN100	P3

All following specification data apply for identical characteristics of the two seals when the transmitter has the remote seal in addition to the direct mount one.

## Functional Specifications

### Range and span limits

Sensor Code	Upper Range Limit (URL)	Lower Range Limit (LRL)			Minimum span	Compatibility (allowed seal for 264DC)	
		264DC Direct mount differential	264DC Direct mount gauge	264HC/NC Direct mount gauge/absolute		Direct mount seal only	Direct mount and one remote seal (max length in m.)
<b>E</b>	16kPa 160mbar 64inH <sub>2</sub> O	-16kPa -160mbar -64inH <sub>2</sub> O	-16kPa -160mbar -64inH <sub>2</sub> O		0.54kPa 5.4mbar 2.14inH <sub>2</sub> O	P2 (●), P3 E3 (●)	P3 (3) E3 (2) (●)
<b>F</b>	40kPa 400mbar 160inH <sub>2</sub> O	-40kPa -400mbar -160inH <sub>2</sub> O	-40kPa -400mbar -160inH <sub>2</sub> O		0.67kPa 6.7mbar 2.67inH <sub>2</sub> O	P2, P3 E2 (●), E3	P2 (2) (●), P3 (5) E3 (3)
<b>G</b>	65kPa 650mbar 260inH <sub>2</sub> O	-65kPa -650mbar -260inH <sub>2</sub> O	-65kPa -650mbar -260inH <sub>2</sub> O	-65kPa/0.07kPa abs (\$) -650mbar/0.7mbar abs (\$) -260inH <sub>2</sub> O/0.5mmHg (\$)	1.1kPa 11mbar 4.35inH <sub>2</sub> O	P2, P3 E2 (●), E3	P2 (2) (●), P3 (5) E3 (3)
<b>H</b>	160kPa 1600mbar 642inH <sub>2</sub> O	-160kPa -1600mbar -642inH <sub>2</sub> O	0.07kPa abs (\$) 0.7mbar abs (\$) 0.5mmHg (\$)	0.07kPa abs (\$) 0.7mbar abs (\$) 0.5mmHg (\$)	2.67kPa 26.7mbar 10.7inH <sub>2</sub> O	P2, P3 E2, E3	P2 (5), P3 (8) E2 (4), E3 (6)
<b>M</b>	600kPa 6bar 87psi	-600kPa -6bar -87psi	0.07kPa abs (\$) 0.7mbar abs (\$) 0.5mmHg (\$)	0.07kPa abs (\$) 0.7mbar abs (\$) 0.5mmHg (\$)	10kPa 0.1bar 1.45psi	P2, P3 E2, E3	P2 (8), P3 (8) E2 (6), E3 (8)
<b>P</b>	2400kPa 24bar 348psi	-2400kPa -24bar -348psi	0.07kPa abs (\$) 0.7mbar abs (\$) 0.5mmHg (\$)	0.07kPa abs (\$) 0.7mbar abs (\$) 0.5mmHg (\$)	40kPa 0.4bar 5.8psi	P2, P3 E2, E3	P2 (8), P3 (8) E2 (6), E3 (8)
<b>Q</b>	8000kPa 80bar 1160psi	-8000kPa -80bar -1160psi	0.07kPa abs (\$) 0.7mbar abs (\$) 0.5mmHg (\$)	0.07kPa abs (\$) 0.7mbar abs (\$) 0.5mmHg (\$)	134kPa 1.34bar 19.4psi	P2, P3 E2, E3	P2 (8), P3 (8) E2 (6), E3 (8)
<b>S</b>	16000kPa 160bar 2320psi	-16000kPa -160bar -2320psi	0.07kPa abs (\$) 0.7mbar abs (\$) 0.5mmHg (\$)	0.07kPa abs (\$) 0.7mbar abs (\$) 0.5mmHg (\$)	267kPa 2.67bar 38.7psi	P2, P3 E2, E3	P2 (8), P3 (8) E2 (6), E3 (8)

The combinations sensor code/seal type marked (●) modify the base accuracy rating and static pressure effect; refer to performance specifications.

ALL AVAILABLE SEALS FOR DIRECT MOUNT ARE SUITABLE FOR LISTED RANGES OF MODELS 264HC/NC WITHOUT LIMITATION.

(\$) Lower Range Limit is 0.135kPa abs, 1.35mbar abs, 1mmHg for inert Galden or 0.4kPa abs, 4mbar abs, 3mmHg for inert Halocarbon.

**Span limits**

Maximum span = URL  
(can be further adjusted up to ± URL (TD = 0.5) for differential models, within the range limits)

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

**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**

Selectable time constant : 0, 0.25, 0.5, 1, 2, 4, 8 or 16s.  
This is in addition to sensor response time

**Turn on time**

Operation within specification in less than 1s with minimum damping.

**Insulation resistance**

> 100MΩ at 1000VDC (terminals to earth)

**Operative limits**

**Temperature limits °C (°F) :**

**Ambient (is the operating temperature)**

Filling	Model 264DC		Models 264HC/NC
	Sensors F to S	Sensor E	Sensors G to S
Silicone oil DC 200	-40 and +85 (-40 and +185)	-25 and +85 (-13 and +185)	-40 and +85 (-40 and +185)
Inert Galden	-20 and +85 (-4 and +185)	-10 and +85 (+14 and +185)	-20 and +85 (-4 and +185)
Inert Halocarbon	-20 and +85 (-4 and +185)	-10 and +85 (+14 and +185)	-20 and +85 (-4 and +185)

Lower ambient limit for LCD indicators: -20°C (-4°F)

Upper ambient limit for LCD indicators: +70°C (+158°F)

Note : For Hazardous Atmosphere applications see the temperature range specified on the certificate/approval relevant to the aimed type of protection

**Process**

Lower limit (side without seal for 264DC only)

- refer to lower ambient limits; -20°C (-4°F) for Viton gasket

Upper limit (side without seal for 264DC only)

- Silicone oil: 121°C (250°F) (1)

- Inert fluid: 100°C (212°F) (2)

- (1) 100°C (212°F) for application below atmospheric pressure

- (2) 65°C (150°F) for application below atmospheric pressure

The following table show characteristics of fill fluids when used in transmitters with direct mount seal on high pressure side.

FILL FLUIDS (APPLICATION)	OPERATING CONDITIONS			
	Tmax @ Pabs>of	Pmin mbar abs (psia)	Tmax @ P min	Tmin
Silicone oil-DC200 (General purpose)	200 (390) @ 35mbar	0.7 (0.01)	160 (320)	-40 (-40)
Silicone oil-DC704 (High temperature)	250 (480) @ 3.5mbar	0.7 (0.01)	220 (428)	-10 (+14)
Silicone Polymer-SylthermXLT (Low temperature)	100 (212) @ 110mbar	2 (0.03)	20 (68)	-100 (-148)
Vegetable oil-Neobee M-20 (Food-Sanitary) FDA	200 (390) @ 1bar	130 (1.9)	150 (300)	-18 (0)
Glycerin Water (70%) (Food-Sanitary) FDA	93 (200) @ 1bar	1000 (14.5)	93 (200)	-7 (+20)
Mineral oil-MARCOL 82 (Food-Sanitary) FDA	200 (390) @ 200mbar	33 (0.5)	40 (104)	-40 (-40)
Inert - Galden (Oxygen Service)	160 (320) @ 1bar	0.7 (0.01)	65 (150)	-18 (0)
Inert - Halocarbon 4.2 (Oxygen Service)	180 (356) @ 400mbar	4 (0.06)	70 (158)	-20 (-4)
ABB fill (Paints and specials)	250 (480) @ 35mbar	0.7 (0.01)	160 (320)	-10 (+14)

**Storage**

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

Upper limit: +85°C (+185°F)

## Pressure limits

### Overpressure limits (without damage to the transmitter)

0.07kPa abs, 0.7mbar abs, 0.01psia (0.135kPa abs, 1.35mbar abs, 1mmHg for inert Galden or 0.4kPa abs, 4mbar abs, 3mmHg for inert Halocarbon) to transmitter sensor limit or flange rating of seal, whichever is less:

- 16MPa, 160bar, 2320psi for all sensor codes of model 264DC
- 14MPa, 140bar, 2030psi for sensor codes G, H, M of models 264HC and 264NC
- 21MPa, 210bar, 3045psi for sensor codes P, Q, S of models 264HC and 264NC
- maximum flange pressure rating (see tables below)

Rating/Class to EN 1092-1	Carbon Steel @ 120° C	AISI 316 Stainless Steel @ 20° C
PN16	16bar	16bar
PN40	40bar	40bar
PN63	63bar	63bar
PN100	100bar	100bar

The pressure limit decreases with increasing temperature above 120°C for carbon steel or 20°C for AISI 316 stainless steel, according to EN 1092-1 standards.

Rating/Class to ASME B16.5	Carbon Steel @ 100° F (38° C)	AISI 316 Stainless Steel @ 100° F (38° C)
Class 150	285psi	275psi
Class 300	740psi	720psi
Class 600	1480psi	1440psi
Class 900	2220psi	2160psi

The pressure limit decreases with increasing temperature above 100°F (38°C), according to ASME B16.5 standards.

### Static pressure

Transmitters for differential pressure model 264DC operates within specifications between the following limits:

- 1.3kPa abs, 13mbar abs, 0.2psia and 16MPa, 160bar, 2320psi or flange rating of seal as above, whichever is less
- 0.07kPa abs, 0.7mbar abs, 0.01psia and 16MPa, 160bar, 2320psi or flange rating of seal as above, whichever is less, using a second seal remote on negative pressure side.

### Proof pressure

The transmitter can be exposed without leaking to line pressure of up to:

- 28MPa, 280bar, 4000psi for model 264DC
- 40MPa, 400bar, 5900psi for models 264HC and 264NC

or two times the flange rating of seal, whichever is less.

Meet ANSI/ISA-S 82.03 hydrostatic test requirements and SAMA PMC 27.1.

## Environmental limits

### Electromagnetic compatibility (EMC)

Comply with EN 61000-3 for emission and EN 61000-6-2 for immunity requirements and test;

Radiated electromagnetic immunity level: 30V/m  
(according to IEC 1000-4-3, EN61000-4-3)

Conducted electromagnetic immunity level: 30V  
(according to IEC 1000-4-6, EN 61000-4-6)

Surge immunity level (with surge protector): 4kV  
(according to IEC 1000-4-5 EN 61000-4-5)

Fast transient (Burst) immunity level: 4kV  
(according to IEC 1000-4-4 EN 61000-4-4)

### Pressure equipment directive (PED)

Comply with 97/23/EEC following sound engineering practice (SEP).

### Humidity

Relative humidity: up to 100% annual average

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 EN 60529 (1989) to IP 67 (IP 68 on request) or by NEMA to 4X or by JIS to C0920. IP65 with Harting Han connector.

### Hazardous atmospheres

With or without output meter/integral display

- COMBINED ATEX (Intrinsic safety and flameproof), FM and CSA ZELM approval. See below detailed classifications.
- COMBINED INTRINSIC SAFETY and FLAMEPROOF/EUROPE: ATEX/ZELM approval
  - II 1 GD T50°C, EEx ia IIC T6 (–40°C ≤ Ta ≤ +40°C) T95°C, EEx ia IIC T4 (–40°C ≤ Ta ≤ +85°C)
  - II 1/2 GD T85°C, EEx d IIC T6 (–40°C ≤ Ta ≤ +75°C)
- INTRINSIC SAFETY/EUROPE: ATEX/ZELM approval
  - II 1 GD T50°C, EEx ia IIC T6 (–40°C ≤ Ta ≤ +40°C) T95°C, EEx ia IIC T4 (–40°C ≤ Ta ≤ +85°C)
- TYPE "N"/EUROPE: ATEX/ZELM type examination (for HART)
  - II 3 GD T50°C, EEx nL IIC T6 (–40°C ≤ Ta ≤ +40°C) T95°C, EEx nL IIC T4 (–40°C ≤ Ta ≤ +85°C)
- FLAMEPROOF/EUROPE: ATEX/CESI approval
  - II 1/2 GD T85°C, EEx d IIC T6 (–40°C ≤ Ta ≤ +75°C)
- CANADIAN STANDARDS ASSOCIATION and FACTORY MUTUAL:
  - Explosionproof: Class I, Div. 1, Groups A, B, C, D
  - Dust ignitionproof: Class II, Div. 1, Groups E, F, G
  - Suitable for: Class II, Div. 2, Groups F, G; Class III, Div. 1, 2
  - Nonincendive: Class I, Div. 2, Groups A, B, C, D
  - Intrinsically safe: Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G AEx ia IIC T6/T4, Zone 0 (FM)
- STANDARDS AUSTRALIA (SAA): TS Approval
  - Intrinsically safe Ex ia IIC T4/T5 (–20°C ≤ Ta ≤ +80°C) only HART
  - No sparking Ex n IIC T4/T6 (–20°C ≤ Ta ≤ +80°C) only HART
  - Flameproof Ex d IIC T4/T6 (–20°C ≤ Ta ≤ +80°C)
  - Dust ignitionproof DIP A21 Ta T6 (–20°C ≤ Ta ≤ +80°C)
- INTRINSIC SAFETY/CHINA NEPSI approval Ex ia IIC T4-T6
- FLAMEPROOF/CHINA NEPSI approval Ex d IIC T6
- GOST (Russia), GOST (Kazakistan), Inmetro (Brazil) based on ATEX

## Electrical Characteristics and Options

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

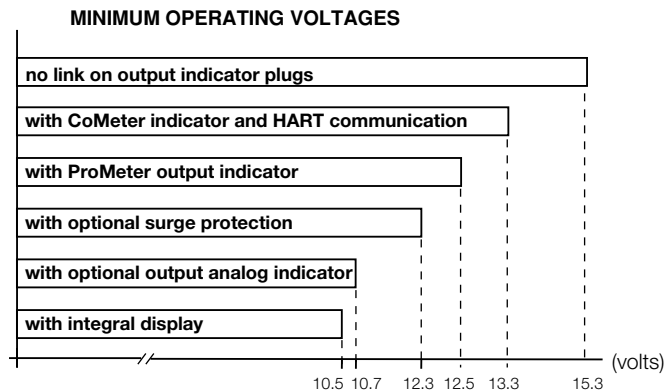
#### Power Supply

The transmitter operates from 10.5 to 42VDC with no load and is protected against reverse polarity connection (additional load allows operations over 42VDC).

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

#### Ripple

20mV max on a 250Ω load as per HART specifications



#### Load limitations

4 to 20mA and HART total loop resistance :

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

A minimum of 250Ω is required for HART communication.

### Optional indicators

#### Output meter

CoMeter and Prometer LCD :

5-digit (±99999 counts) programmable with 7.6mm. high (3in), 7-segment numeric characters plus sign and digital point for digital indication of output value in percentage, current or engineer unit;

10-segment bargraph display (10% per segment) for analog indication of output in percentage;

7-digit with 6mm. high (2.3in), 14-segment alphanumeric characters, for engineer units and configuration display

Analog : 36mm (1.4in) scale on 90°.

#### Integral display

LCD, 15 lines x 56 column dot matrix providing 2 lines indication as

- top: 5-digit (numeric) plus sign or 7-digit alphanumeric
- bottom: 7-digit alphanumeric

and additional 50-segment bargraph for indication of analog output in percentage.

User-definable matrix display mode with HART communication:

- process variable in pressure unit or
- output signal as percentage, current or engineering units

Display also indicates in/out transfer function, static pressure, sensor temperature and diagnostic messages and provides configuration facilities.

#### Optional surge protection

Up to 4kV

- voltage 1.2 μs rise time / 50 μs delay time to half value
- current 8 μs rise time / 20 μs delay time to half value

#### Output signal

Two-wire 4 to 20mA, user-selectable for linear or square root output, power of <sup>3</sup>/<sub>2</sub> or <sup>5</sup>/<sub>2</sub>, 5th order or two 2nd order switching point selectable programmable polynomial output.

HART® 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
- Upper limit: 20.5mA

#### Transmitter failure mode (to NAMUR standard)

The output signal can be user-selected to a value of 3.7 or 22mA on gross transmitter failure condition, detected by self-diagnostics.

In case of CPU failure the output is driven <3.7mA or >22mA.

## PROFIBUS PA output

### Device type

Pressure transmitter compliant to Profiles 3.0 Class A & B; ident. number 052B HEX.

### Power supply

The transmitter operates from 9 to 32VDC, polarity independent.

For EEx ia approval power supply must not exceed 17.5VDC. Intrinsic safety installation according to FISCO model.

### Current consumption

operating (quiescent): 10.5mA

fault current limiting: 20mA max.

### Output signal

Physical layer in compliance to IEC 1158-2/EN 61158-2 with transmission to Manchester II modulation, at 31.25kbit/sec.

### Output interface

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

### Output update time

25ms

### Function blocks

2 analog input, 1 transducer, 1 physical

### Integral display

LCD, 15 lines x 56 column dot matrix providing 2 lines indication as

– top: 5-digit (numeric) plus sign or 7-digit alphanumeric

– bottom: 7-digit alphanumeric

and additional 50-segment bargraph for indication of output in percentage of the analog input function block assigned to the primary variable.

User-definable matrix display mode:

– process variable in pressure units or

– primary variable in engineering units (output of transducer block) or

– output as percentage or engineering units of analog input function blocks

Display also indicates diagnostic messages and provides configuration facilities.

Secondary variable, static pressure and sensor temperature can be read.

### Transmitter failure mode

On gross transmitter failure condition, detected by self-diagnostics, the output signal can be driven to defined conditions, selectable by the user as safe, last valid or calculated value. If electronic failure or short circuit occur the transmitter consumption is electronically limited at a defined value (20mA approx), for safety of the network.

## FOUNDATION Fieldbus output

### Device type

LINK MASTER DEVICE

Link Active Scheduler (LAS) capability implemented.

### Power supply

The transmitter operates from 9 to 32VDC, polarity independent.

For EEx ia approval power supply must not exceed 24VDC (entity certification) or 17.5VDC (FISCO certification), according to FF-816.

### Current consumption

operating (quiescent): 10.5mA

fault current limiting: 20mA max.

### Output signal

Physical layer in compliance to IEC 1158-2/EN 61158-2 with transmission to Manchester II modulation, at 31.25kbit/sec.

### Function blocks/execution period

2 enhanced Analog Input blocks/25ms max (each)

1 enhanced PID block/40ms max.

1 standard ARithmetic block/25ms

1 standard Input Selector block/25ms

1 standard Control Selector block/25ms

1 standard Signal Characterization block/25ms

1 standard Integrator/Totalizer block/25ms

### Additional blocks

1 enhanced Resource block

1 custom Pressure with calibration transducer block

1 custom Advanced Diagnostics transducer block including Plugged Input Line Detection

1 custom Local Display transducer block

### Number of link objects

35

### Number of VCRs

35

### Output interface

FOUNDATION fieldbus digital communication protocol to standard H1, compliant to specification V. 1.6; FF registration in progress.

### Integral display

LCD, 15 lines x 56 column dot matrix providing 2 lines indication as

– top: 5-digit (numeric) plus sign or 7-digit alphanumeric

– bottom: 7-digit alphanumeric

and additional 50-segment bargraph for percentage indication of the analog input function block output, assigned to the primary variable.

User-definable matrix display mode:

– process variable in pressure units or

– primary variable in engineering units (output of transducer block) or

– output as percentage or engineering units of one or more selected function blocks

Display also indicates diagnostic messages. Secondary variable, static pressure and sensor temperature can be read.

### Transmitter failure mode

The output signal is "frozen" to the last valid value on gross transmitter failure condition, detected by self-diagnostics which also indicate a BAD conditions. If electronic failure or short circuit occur the transmitter consumption is electronically limited at a defined value (20mA approx), for safety of the network.



## 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), mounting position with vertical diaphragm and zero based range for transmitter with isolating diaphragms in AISI 316 L ss or Hastelloy and silicone oil fill and HART digital trim values equal to 4–20mA span end points, in linear mode.

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

Some performance data are affected 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.

## Accuracy rating

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

For fieldbus versions SPAN refer to analog input function block outscale range

Using direct mount seal sizes <DN 80/3in

- ±0.075% for TD from 1:1 to 10:1  
(±0.10% for sensor code F  
±0.10% for sensor code E for TD from 1:1 to 5:1)

- ±0.0075% ×  $\frac{\text{URL}}{\text{Span}}$  for TD from 10:1 to 20:1

(±0.01% ×  $\frac{\text{URL}}{\text{Span}}$  for sensor code F

±0.02% ×  $\frac{\text{URL}}{\text{Span}}$  for sensor code E for TD from 5:1 to 10:1)

Using direct mount seal sizes ≥DN 80/3in

- ±0.075% for TD from 1:1 to 10:1  
(±0.10% for sensor code E for TD from 1:1 to 5:1)

- ±0.0075% ×  $\frac{\text{URL}}{\text{Span}}$  for TD from 10:1 to 20:1

(±0.02% ×  $\frac{\text{URL}}{\text{Span}}$  for sensor code E for TD from 5:1 to 10:1)

Multiply the values by 1.5 for sensor/seal combination marked (●) and for transmitter with direct mount seal plus one remote seal.

## Operating influences

### Temperature effects

per 20K (36°F) ambient temperature change on transmitter sensor between the limits of –20°C to +65°C (–4 to +150°F) :

Transmitter effect:

- ±(0.04% URL + 0.065% span)

Direct mount seal additional effect:

Seal type size	Error		
	kPa	mbar	inH <sub>2</sub> O
Flush 2in/DN50	0.12	1.2	0.48
Flush 3–4in/DN80–100	0.02	0.2	0.08
Extended 2in/DN50	0.2	2	0.8
Extended 3in/DN80	0.06	0.6	0.24
Extended 4in/DN100	0.02	0.2	0.08

per 20K (36°F) process temperature change on seal diaphragm between the process operating temperature limits

Seal type size	Error		
	kPa	mbar	inH <sub>2</sub> O
Flush 2in/DN50	0.32	3.2	1.28
Flush 3–4in/DN80–100	0.1	1	0.4
Extended 2in/DN50	0.35	3.5	1.4
Extended 3in/DN80	0.17	1.7	0.68
Extended 4in/DN100	0.1	1	0.4

### Optional CoMeter and ProMeter ambient temperature

Total reading error per 20K (36°F) change between the ambient limits of –20 and +70°C (–4 and +158°F) :

±0.15% of max span (16mA).

### Static pressure (zero errors can be calibrated out at line pressure)

seal effect additional to transmitter sensor effect applicable for differential measurement per 2MPa, 20bar or 290psi.

#### Model 264DC direct mount seal only

- zero error: ±0.15% of URL
- span error: ±0.15% of reading

#### Model 264DC direct mount plus remote seal

- zero error: ±0.20% of URL
- span error: ±0.20% of reading

Multiply by 1.5 the errors for sensor seal combinations marked (●).

### Supply voltage

Within voltage/load specified limits the total effect is less than 0.005% of URL per volt.

### Load

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

### Electromagnetic field

Total effect : less than 0.10% of span from 20 to 1000MHz and for field strengths up to 30V/m when tested with shielded conduit and grounding, with or without meter.

### Common mode interference

No effect from 100Vrms @ 50Hz, or 50VDC

### Vibration effect

±0.10% of URL (according to IEC 61298–3)

## Physical Specification

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

### Materials

#### **Model 264DC only**

##### **Low pressure side process isolating diaphragms (\*)**

AISI 316 L ss; Hastelloy C276™; Monel 400™; Tantalum;

Hastelloy C276™ on AISI 316 L ss gasket seat.

A remote seal can be selected with required diaphragm (refer to high pressure side).

##### **Low pressure side process flanges, adapters, plugs and drain/vent valves (\*)**

AISI 316 L ss; Hastelloy C276™; Monel 400™.

##### **Bolts and nuts**

AISI 316 ss bolts and nuts Class A4–50 per UNI 7323 (ISO 3506), in compliance with NACE MR0175 Class II.

##### **Gaskets (\*)**

Viton™; PTFE.

#### **Model 264DC/HC/NC**

##### **High pressure side process diaphragm (direct mount seal) (\*)**

AISI 316 L ss; Hastelloy C276™, Tantalum;

AISI 316 L ss or Hastelloy C276™ with anti-stick coating;

AISI 316 L ss with anti-corrosion coating.

##### **Extension material**

AISI 316 L ss; Hastelloy C276™; AISI 316 L ss or Hastelloy C276™ with coating same as diaphragm.

##### **High pressure side fill fluid (direct mount seal)**

Silicone oil-DC200™, Silicone oil for high temperature, Inert-Galden™, Inert-Halocarbon™ 4.2, Silicone Polymer-Syltherm XLT™, Vegetable oil-Neobee M-20™, Glycerin Water, Mineral oil-MARCOL 82™, ABB fill.

##### **Sensor fill fluid**

Silicone oil (DC200™); inert fill (Halocarbon™ 4.2 or Galden™);

##### **Sensor housing**

AISI 316 L ss.

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

Barrel version

– Aluminium alloy with baked epoxy finish;

– Copper-free content aluminium alloy with baked epoxy finish;

– AISI 316 L ss.

DIN version

– Aluminium alloy with baked epoxy finish.

##### **Covers O-ring**

Buna N.

##### **Local zero and span adjustments:**

Glass filled polycarbonate plastic (removable).

##### **Tagging**

AISI 316ss data plate attached to the electronics housing.



## Calibration

Standard: at maximum span, zero based range, ambient temperature and pressure;

Optional: at specified range and ambient conditions.

## Optional extras

### Output indicator

plug-in rotatable type, LCD or analog.

### Supplemental customer tag

AISI 316 ss tag screwed/fastened to the transmitter for customer's tag data up to a maximum of 20 characters and spaces on one line for tag number and tag name, and up to a maximum of 3 spaced strings of 10 characters each for calibration details (lower and upper values plus unit). Special typing evaluated on request for charges.

### Surge protection (only as external unit for PROFIBUS PA and FF)

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

### Tag and manual language

### Communication connectors

## Process connections

on conventional flanges :  $\frac{1}{4}$  – 18 NPT on process axis

on adapters :  $\frac{1}{2}$  – 14 NPT on process axis

fixing threads:  $\frac{7}{16}$  – 20 UNF at 41.3mm centre distance

on mounting flange (seal side)

Flush diaphragm flanged seal (\*\*):

2in or 3in ASME 150 to 900 RF; 4in ASME 150-300RF.

DN50 or DN80 EN PN16–40, PN63–100;

DN100 PN 16 – 40.

Extended diaphragm flanged seal (\*\*):

2in, 3in, 4in ASME 150 - 300 RF.

DN50, DN80, DN100 PN16 – 40.

Gasket seat finish

smooth (ASME or EN): 0.8 $\mu$ m (Ra)

serrated (ASME): 3.2 to 6.3 $\mu$ m (Ra)

serrated (EN 1092-1 Type B1; up to PN40): 3.2 to 12.5 $\mu$ m (Ra)

serrated (EN 1092-1 Type B2; PN63-100): 0.8 to 3.2 $\mu$ m (Ra)

## Electrical connections

Two  $\frac{1}{2}$  – 14 NPT or M20x1.5 or PG 13.5 or  $\frac{1}{2}$  GK threaded conduit entries, direct on housing.

Special communication connector (on request)

– HART : straight or angle Harting Han connector and one plug.

– FOUNDATION Fieldbus, PROFIBUS PA: M12x1 and 7/8.

### Terminal block

HART version: three terminals for signal/external meter wiring up to 2.5mm<sup>2</sup> (14AWG) and three connection points for test and communication purposes.

Fieldbus versions: two terminals for signal wiring (bus connection) up to 2.5mm<sup>2</sup> (14AWG)

### Grounding

Internal and external 6mm<sup>2</sup> (10AWG) ground termination points are provided.

## Mounting position

Transmitter can be mounted in any position.

Electronics housing may be rotated to any position. A positive stop prevents over travel.

## Mass (without options)

7kg to 30kg approx (15 to 65lb) according to specified seal(s) options; add 1.5kg (3.4lb) for AISI housing.

Add 650g (1.5lb) for packing.

## Packing

Carton

(\*) Wetted parts of the transmitter.

(\*\*) Bolts and nuts, gasket and mating flange supplied by customer.

## Configuration

### Transmitter with HART communication and 4 to 20 mA

#### Standard configuration

Transmitters are factory calibrated to customer's specified range. Calibrated range and tag number are stamped on the tag plate. If a calibration range and tag data are not specified, the transmitter will be supplied with the plate left blank and configured as follows:

Engineering Unit	kPa
4 mA	Zero
20 mA	Upper Range Limit (URL)
Output	Linear
Damping	1 sec.
Transmitter failure mode	Upscale
Software tag (8 characters max)	Blank
Optional LCD indicator/display	0 to 100.0% linear

Any or all the above configurable parameters, including Lower range-value and Upper range-value which must be the same unit of measure, can be easily changed using the HART hand-held communicator or by a PC running the configuration software SMART VISION with DTM for 2600T. The transmitter database is customized with specified flange type and material, O-ring and drain/vent materials and meter code option.

#### Custom configuration (option)

The following data may be specified in addition to the standard configuration parameters:

Descriptor	16 alphanumeric characters
Message	32 alphanumeric characters
Date	Day, month, year

### Transmitter with PROFIBUS PA communication

Transmitters are factory calibrated to customer's specified range. Calibrated range and tag number are stamped on the tag plate. If a calibration range and tag data are not specified, the transmitter will be supplied with the plate left blank and configured as follows:

Measure Profile	Pressure
Engineering Unit	kPa
Output scale 0%	Lower Range Limit (LRL)
Output scale 100%	Upper Range Limit (URL)
Output	Linear
Hi-Hi Limit	Upper Range Limit (URL)
Hi Limit	Upper Range Limit (URL)
Low Limit	Lower Range Limit (LRL)
Low-Low Limit	Lower Range Limit (LRL)
Limits hysteresis	0.5% of output scale
PV filter	0 sec.
Address (settable by local key)	126
Tag	32 alphanumeric characters

Any or all the above configurable parameters, including Lower range-value and Upper range-value which must be the same unit of measure, can be easily changed by a PC running the configuration software SMART VISION with DTM for 2600T.

The transmitter database is customized with specified flange type and material, O-ring and drain/vent materials and meter code option.

#### Custom configuration (option)

The following data may be specified in addition to the standard configuration parameters:

Descriptor	32 alphanumeric characters
Message	32 alphanumeric characters
Date	Day, month, year

### Transmitter with FOUNDATION Fieldbus communication

Transmitters are factory calibrated to customer's specified range. Calibrated range and tag number are stamped on the tag plate. If a calibration range and tag data are not specified, the transmitter will be supplied with the plate left blank and the analog input function block FB1 is configured as follows:

Measure Profile	Pressure
Engineering Unit	kPa
Output scale 0%	Lower Range Limit (LRL)
Output scale 100%	Upper Range Limit (URL)
Output	Linear
Hi-Hi Limit	Upper Range Limit (URL)
Hi Limit :	Upper Range Limit (URL)
Low Limit	Lower Range Limit (LRL)
Low-Low Limit	Lower Range Limit (LRL)
Limits hysteresis	0.5% of output scale
PV filter time	0 sec.
Tag	32 alphanumeric characters

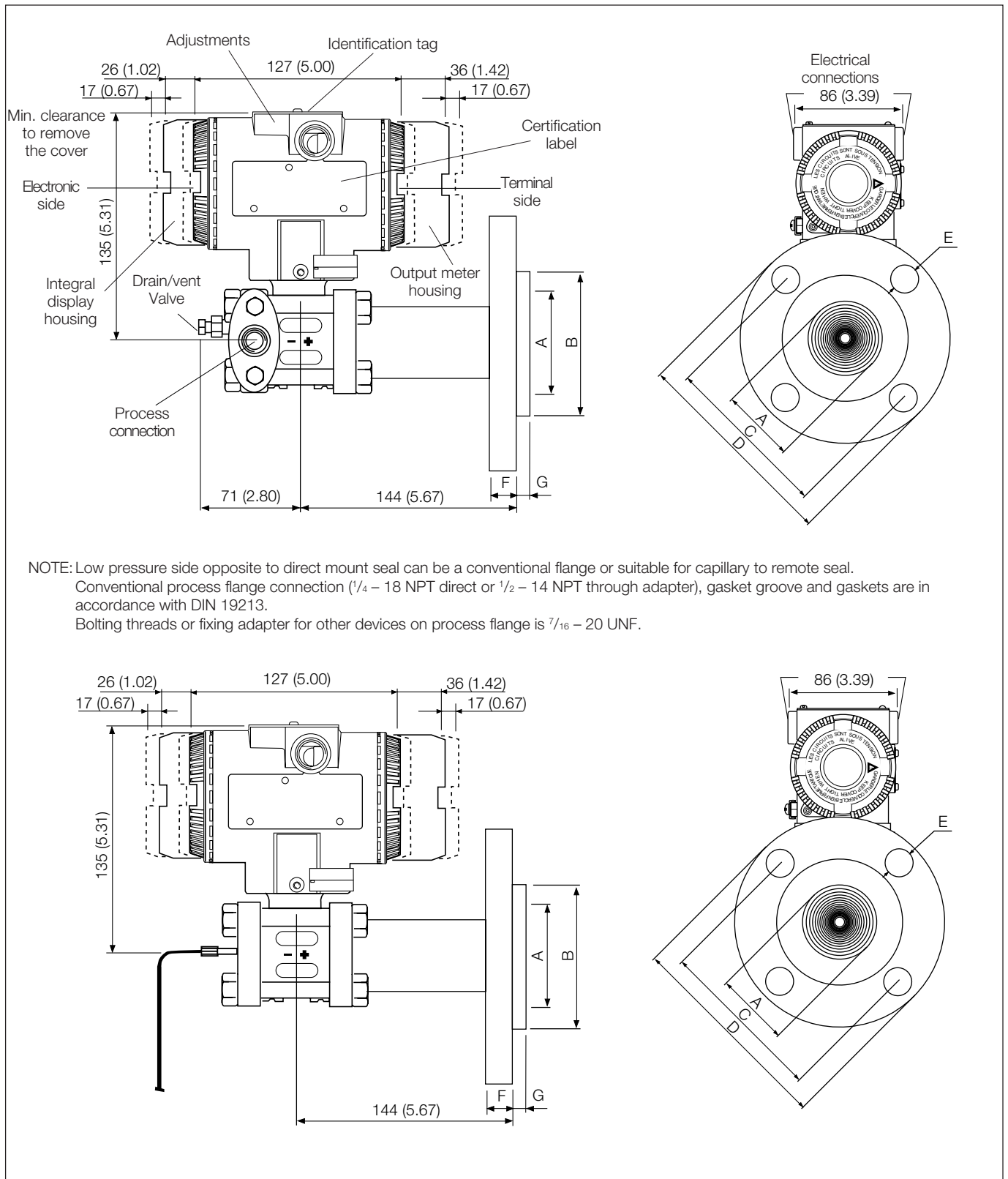
The analog input function block FB2 is configured for the sensor temperature measured in °C. Any or all the above configurable parameters, including the range values, can be changed using any host compliant to FOUNDATION fieldbus. The transmitter database is customized with specified flange type and material, O-ring and drain/vent materials and meter code option.

For any protocol available engineering units of pressure measure are :

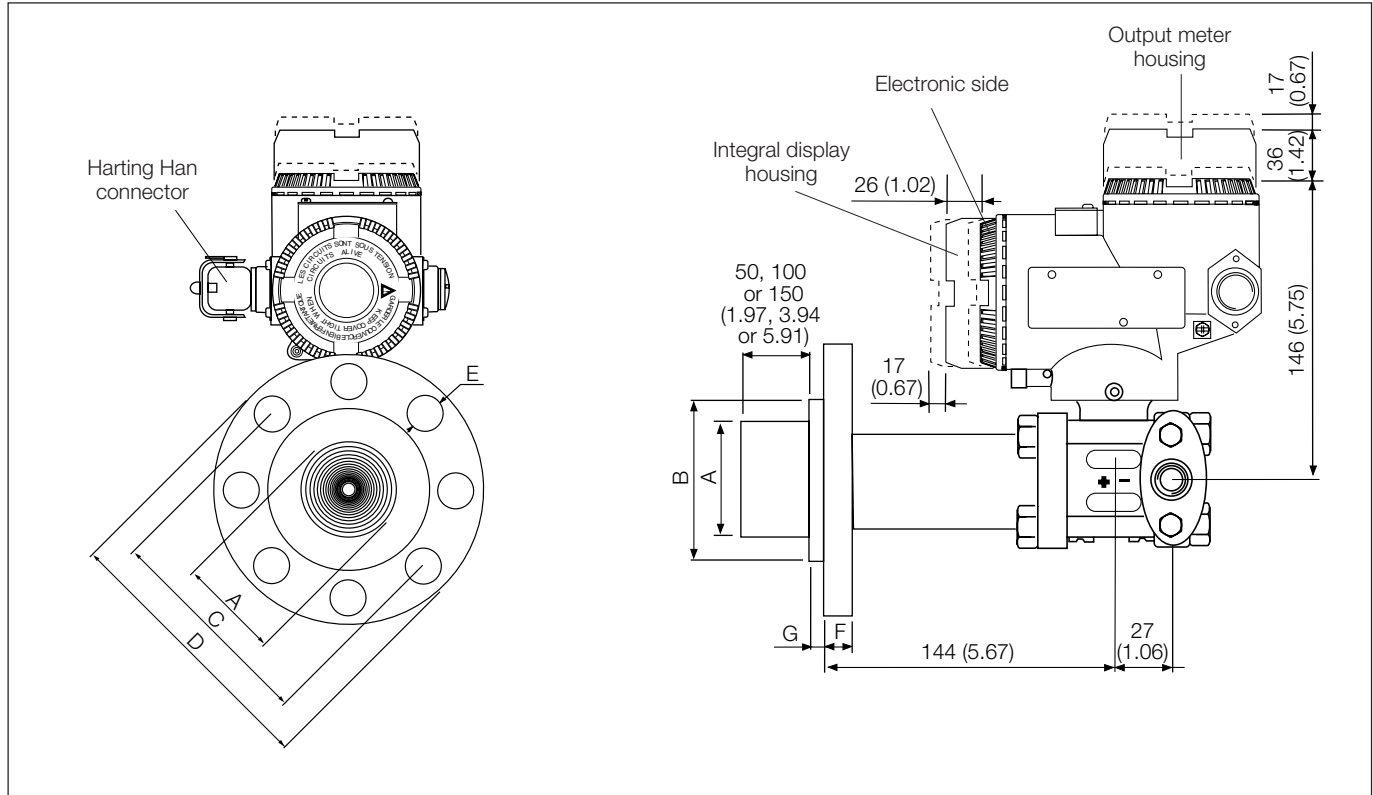
Pa, kPa, MPa  
 inH<sub>2</sub>O@4°C, mmH<sub>2</sub>O@4°C, psi  
 inH<sub>2</sub>O@20°C, ftH<sub>2</sub>O@20°C, mmH<sub>2</sub>O@20°C  
 inHg, mmHg, Torr  
 g/cm<sup>2</sup>, kg/cm<sup>2</sup>, atm  
 mbar, bar

**MOUNTING DIMENSIONS** (not for construction unless certified) - dimensions in mm (in)

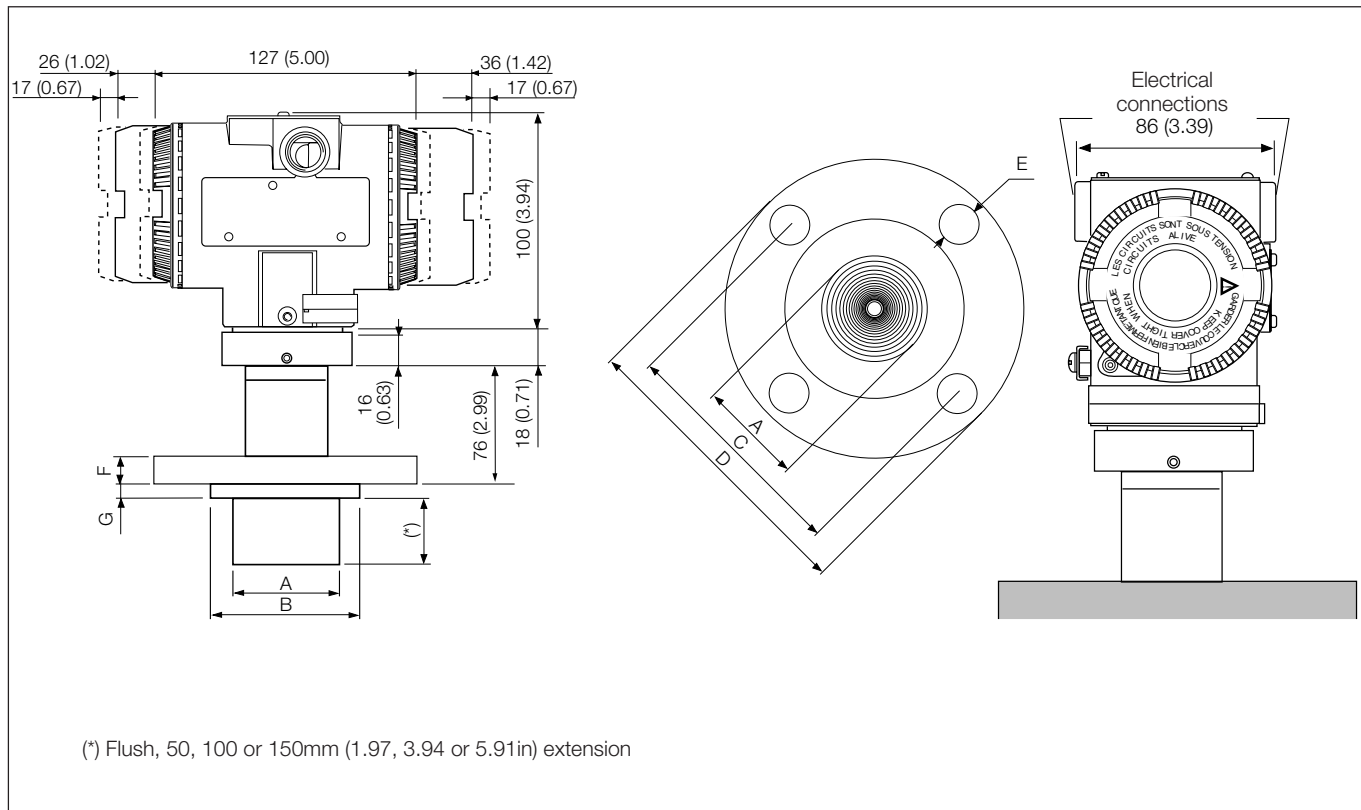
**264DC with direct mount flanged flush diaphragm seal (barrel housing)**



**264DC with direct mount flanged extended diaphragm seal (DIN housing)**



264HC/NC with direct mount flanged diaphragm seal (barrel housing)

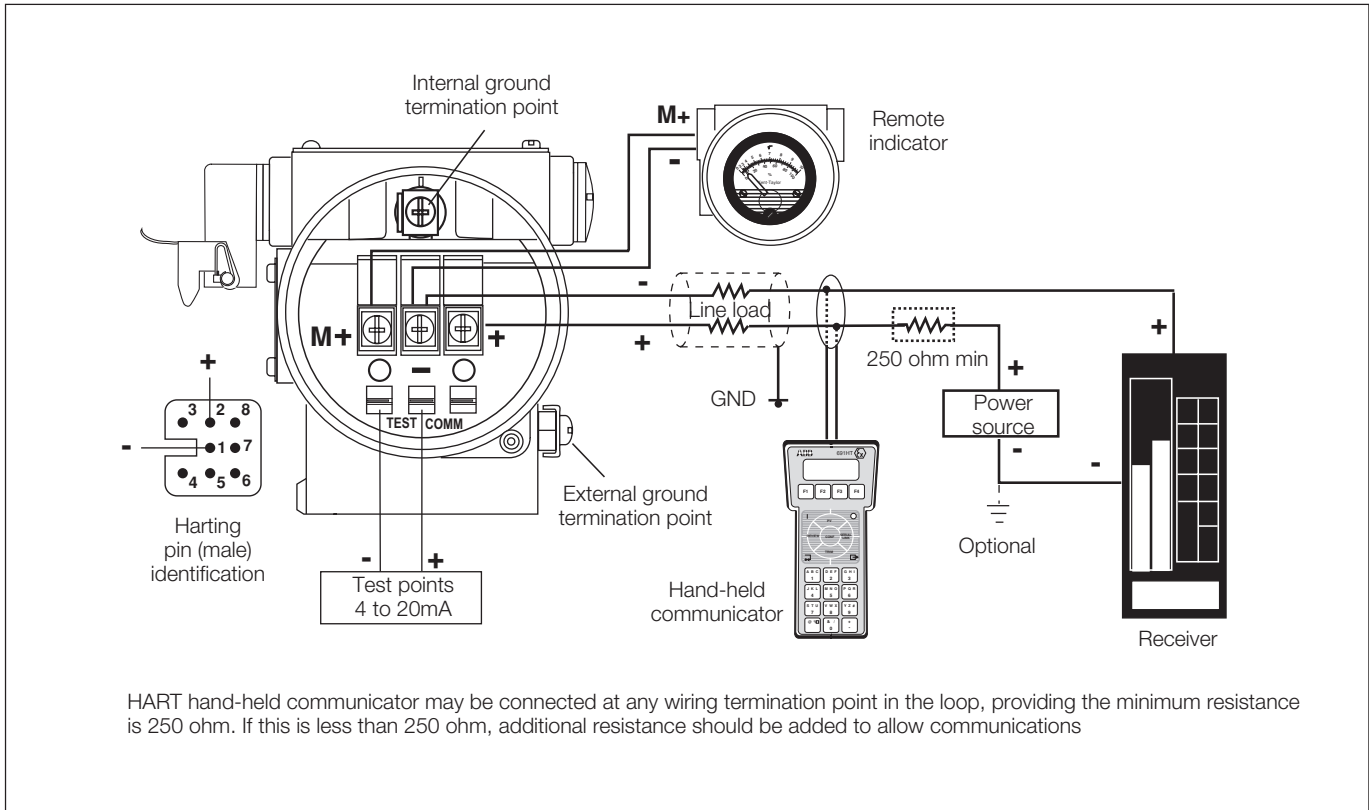


Size/Rating	Dimensions mm (in)								N° of holes
	A (dia)		B (dia)	C (dia)	D (dia)	E (dia)	F	G	
	flush	extended							
2in ASME CL 150	60 (2.36)	48 (1.9)	92.1 (3.62)	120.65 (4.75)	152.4 (6)	20 (0.79)	19.05 (0.75)	9.5 (0.37)	4
2in ASME CL 300	60 (2.36)	48 (1.9)	92.1 (3.62)	127 (5)	165.1 (6.5)	20 (0.79)	22.35 (0.88)	9.5 (0.37)	8
2in ASME CL 600	60 (2.36)	NA	92.1 (3.62)	127 (5)	165.1 (6.5)	20 (0.79)	25.4 (1)	9.5 (0.37)	8
2in ASME CL 900	60 (2.36)	NA	92.1 (3.62)	165 (6.5)	215.9 (8.5)	26 (1.02)	38.1 (1.5)	9.5 (0.37)	8
3in ASME CL 150	89 (3.5)	72 (2.83)	127 (5)	152.4 (6)	190.5 (7.5)	20 (0.79)	23.87 (0.94)	9.5 (0.37)	4
3in ASME CL 300	89 (3.5)	72 (2.83)	127 (5)	168.15 (6.62)	209.55 (8.25)	22 (0.86)	28.44 (1.12)	9.5 (0.37)	8
3in ASME CL 600	89 (3.5)	NA	127 (5)	168.15 (6.62)	209.55 (8.25)	22 (0.86)	31.75 (1.25)	9.5 (0.37)	8
3in ASME CL 900	89 (3.5)	NA	127 (5)	190.5 (7.5)	241 (9.48)	26 (1.02)	38.1 (1.50)	9.5 (0.37)	8
4in ASME CL 150	89 (3.5)	94 (3.7)	157.2 (6.2)	190.5 (7.5)	228.6 (9)	20 (0.79)	24 (0.94)	9.5 (0.37)	8
4in ASME CL 300	89 (3.5)	94 (3.7)	157.2 (6.2)	200.2 (7.88)	254 (10)	22 (0.86)	32 (1.26)	9.5 (0.37)	8

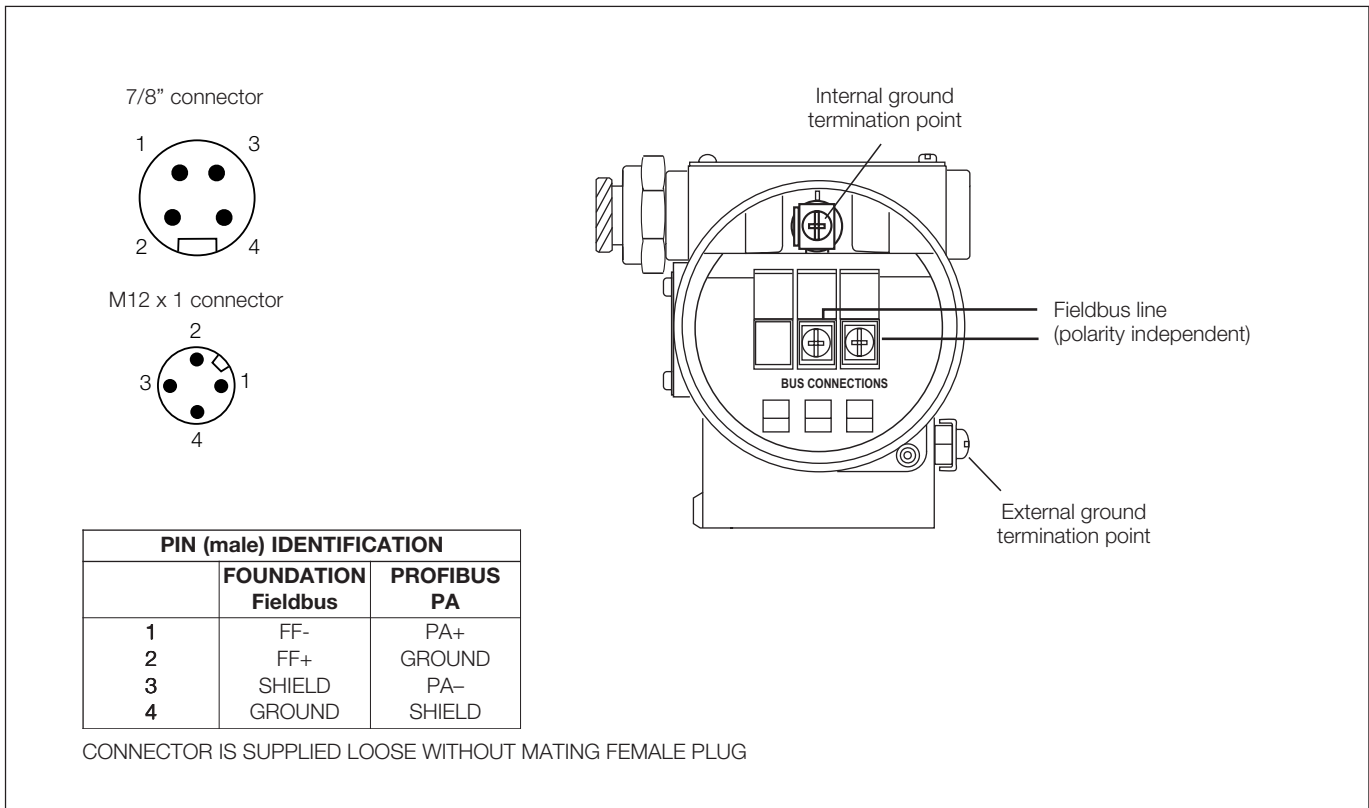
Size/Rating	Dimensions mm (in)								N° of holes
	A (dia)		B (dia)	C (dia)	D (dia)	E (dia)	F	G	
	flush	extended							
DN50 EN PN16	60 (2.36)	48 (1.9)	102 (4.02)	125 (4.92)	165 (6.5)	18 (0.71)	20 (0.79)	9.5 (0.37)	4
DN50 EN PN40	60 (2.36)	48 (1.9)	102 (4.02)	125 (4.92)	165 (6.5)	18 (0.71)	20 (0.79)	9.5 (0.37)	4
DN50 EN PN63	60 (2.36)	NA	102 (4.02)	135 (5.31)	180 (7.08)	22 (0.86)	26 (1.02)	9.5 (0.37)	4
DN50 EN PN100	60 (2.36)	NA	102 (4.02)	145 (5.71)	195 (7.67)	26 (1.02)	28 (1.1)	9.5 (0.37)	4
DN80 EN PN16	89 (3.5)	72 (2.83)	138 (5.43)	160 (6.3)	200 (7.87)	18 (0.71)	20 (0.79)	9.5 (0.37)	8
DN80 EN PN40	89 (3.5)	72 (2.83)	138 (5.43)	160 (6.3)	200 (7.87)	18 (0.71)	24 (0.94)	9.5 (0.37)	8
DN80 EN PN63	89 (3.5)	NA	138 (5.43)	170 (6.7)	215 (8.46)	22 (0.86)	28 (1.1)	9.5 (0.37)	8
DN80 EN PN100	89 (3.5)	NA	138 (5.43)	180 (7.08)	230 (9.05)	26 (1.02)	32 (1.26)	9.5 (0.37)	8
DN100 EN PN16	89 (3.5)	94 (3.7)	158 (6.22)	180 (7.08)	220 (8.66)	18 (0.71)	20 (0.79)	9.5 (0.37)	8
DN100 EN PN40	89 (3.5)	94 (3.7)	162 (6.38)	190 (7.48)	235 (9.25)	22 (0.86)	24 (0.94)	9.5 (0.37)	8

## Electrical connections

### HART Version



### FIELDBUS Versions



**BASIC ORDERING INFORMATION model 264DC Differential /Gauge Pressure Transmitter with direct mount seal**

Select one character or set of characters from each category and specify complete catalog number.  
 Refer to additional ordering information code and specify one or more codes for each transmitter if additional options are required.

BASE MODEL – 1 <sup>st</sup> to 5 <sup>th</sup> characters				2	6	4	D	C	X	X	X	X	X	X	Cont'd
Differential Gauge Pressure Transmitter with direct mount seal – BASE ACCURACY 0.075%															
<b>SENSOR - Span limits – 6<sup>th</sup> character</b>															
0.54 and 16kPa	5.4 and 160mbar	2.14 and 64inH <sub>2</sub> O							E						
0.67 and 40kPa	6.7 and 400mbar	2.67 and 160inH <sub>2</sub> O							F						
1.1 and 65kPa	11 and 650mbar	4.35 and 260inH <sub>2</sub> O							G						
2.67 and 160kPa	26.7 and 1600mbar	10.7 and 642inH <sub>2</sub> O							H						
10 and 600kPa	0.1 and 6bar	1.45 and 87psi							M						
40 and 2400kPa	0.4 and 24bar	5.8 and 348psi							P						
134 and 8000kPa	1.34 and 80bar	19.4 and 1160psi							Q						
267 and 16000kPa	2.67 and 160bar	38.7 and 2320psi							S						
<b>HIGH PRESSURE SIDE - Size/Mounting flange rating – 7<sup>th</sup> character</b>															
2in	ASME CL 150								A						
2in	ASME CL 300								D						
2in	ASME CL 600								G						
2in	ASME CL 900								J						
3in	ASME CL 150								B						
3in food design	ASME CL 150								1						
3in	ASME CL 300								E						
3in	ASME CL 600								H						
3in	ASME CL 900								K						
4in	ASME CL 150								C						
4in	ASME CL 300								F						
DN50	EN PN 16/40								M						
DN50	EN PN 63								P						
DN50	EN PN 100								R						
DN80	EN PN 16								N						
DN80	EN PN 40								L						
DN80	EN PN 63								Q						
DN80	EN PN 100								S						
DN100	EN PN 16								T						
DN100	EN PN 40								U						
<b>HIGH PRESSURE SIDE – Mounting flange material/Seat form (seal) – 8<sup>th</sup> character</b>															
Carbon steel	Form RF (raised face) – serrated finish	(Notes 1, 3)							A						
Carbon steel	Form RF (raised face) – smooth finish	(Notes 1, 3)							B						
Carbon steel	EN 1092-1 Type B1/B2 – serrated finish	(Notes 2, 3)							G						
Carbon steel	EN 1092-1 Type B1/B2 – smooth finish	(Notes 2, 3)							P						
AISI 316 ss	Form RF (raised face) – serrated finish	(Notes 1, 3)							D						
AISI 316 ss	Form RF (raised face) – smooth finish	(Note 1)							E						
AISI 316 ss	EN 1092-1 Type B1/B2 – serrated finish	(Notes 2, 3)							L						
AISI 316 ss	EN 1092-1 Type B1/B2 – smooth finish	(Notes 2, 3)							Q						
<b>HIGH PRESSURE SIDE – Extension length and material (wetted parts) – 9<sup>th</sup> character</b>															
Flush (see next for diaphragm material)									NACE				F		
50mm (2in)	AISI 316 L ss	(Notes 3, 4)							NACE				1		
50mm (2in)	Hastelloy C276™	(Notes 3, 4, 6)							NACE				2		
100mm (4in)	AISI 316 L ss	(Notes 3, 4)							NACE				3		
100mm (4in)	Hastelloy C276™	(Notes 3, 4, 6)							NACE				4		
150mm (6in)	AISI 316 L ss	(Notes 3, 4)							NACE				5		
150mm (6in)	Hastelloy C276™	(Notes 3, 4, 6)							NACE				6		
<b>HIGH PRESSURE SIDE – Diaphragm material (wetted parts) (seal) – 10<sup>th</sup> character</b>															
AISI 316 L ss		(Note 5)							NACE				S		
Hastelloy C276™		(Note 6)							NACE				H		
Tantalum		(Notes 6, 7)											T		
AISI 316 L ss with PFA anti-stick coating		(Notes 5, 6, 8)							NACE				K		
Hastelloy C276™ with PFA anti-stick coating		(Notes 6, 8)							NACE				Y		
AISI 316 L ss with PFA coating anti-corrosion and anti-stick		(Notes 5, 6)							NACE				W		
<b>HIGH PRESSURE SIDE – Fill fluid – 11<sup>th</sup> character</b>															
Silicone oil														S	
Inert fluid - Galden		(Notes 3, 9)												N	
Inert fluid - Halocarbon		(Notes 3, 9)												D	
Silicone oil for high temperature		(Note 3)												G	
Silicone polymer for low temperature		(Note 3)												C	
Mineral oil (FDA approved)														W	
Vegetable oil (FDA approved)														A	
Glycerin-Water (FDA approved)														B	



BASIC ORDERING INFORMATION model 264DC				X	X	X	X	X
<b>Low pressure side diaphragm material / Fill fluid (wetted parts) – 12<sup>th</sup> character</b>								
AISI 316 L ss	Silicone oil			S				
AISI 316 L ss (not wetted)	Silicone oil (one remote seal to be quoted separately)			R				
Hastelloy C276™ (on AISI seat)	Silicone oil		NACE	H				
Hastelloy C276™	Silicone oil		NACE	K				
Monel 400™	Silicone oil		NACE	M				
Tantalum	Silicone oil		NACE	T				
AISI 316 L ss	Inert fluid - Galden	(Note 9)		A				
AISI 316 L ss (not wetted)	Inert fluid - Galden (one remote seal to be quoted separately)	(Note 9)		2				
Hastelloy C276™ (on AISI seat)	Inert fluid - Galden	(Note 9)	NACE	B				
Hastelloy C276™	Inert fluid - Galden	(Note 9)	NACE	F				
Monel 400™	Inert fluid - Galden	(Note 9)	NACE	C				
Tantalum	Inert fluid - Galden	(Note 9)	NACE	D				
AISI 316 L ss	Inert fluid - Halocarbon	(Note 9)		L				
AISI 316 L ss (not wetted)	Inert fluid - Halocarbon (one remote seal to be quoted separately)	(Note 9)		W				
Hastelloy C276™ (on AISI seat)	Inert fluid - Halocarbon	(Note 9)	NACE	Q				
Hastelloy C276™	Inert fluid - Halocarbon	(Note 9)	NACE	P				
Monel 400™	Inert fluid - Halocarbon	(Note 9)	NACE	4				
Tantalum	Inert fluid - Halocarbon	(Note 9)	NACE	5				
<b>Low side process flanges/adapters material and connection (wetted parts) – 13<sup>th</sup> character</b>								
AISI 316 L ss (Horizontal connection)	1/4 – 18 NPT-f direct ( 7/16 – 20 UNF U.S. drilling)	(Note 10)	NACE	A				
AISI 316 L ss (Horizontal connection)	1/2 – 14 NPT-f through adapter ( 7/16 – 20 UNF U.S. drilling)	(Note 10)	NACE	B				
Hastelloy C276™ (Horizontal connection)	1/4 – 18 NPT-f direct ( 7/16 – 20 UNF U.S. drilling)	(Notes 10,12)	NACE	D				
Hastelloy C276™ (Horizontal connection)	1/2 – 14 NPT-f through adapter ( 7/16 – 20 UNF U.S. drilling)	(Notes 10,12)	NACE	E				
Monel 400™ (Horizontal connection)	1/4 – 18 NPT-f direct ( 7/16 – 20 UNF U.S. drilling)	(Notes 10,12)	NACE	G				
Monel 400™ (Horizontal connection)	1/2 – 14 NPT-f through adapter ( 7/16 – 20 UNF U.S. drilling)	(Notes 10,12)	NACE	H				
AISI 316 closing flange for two seals construction		(Note 11)	NACE	R				
<b>Bolts/Low side gasket (wetted parts) – 14<sup>th</sup> character</b>								
AISI 316 ss (NACE) – (MWP = 16MPa)	Viton™	(Note 10)	NACE	3				
AISI 316 ss (NACE) – (MWP = 16MPa)	PTFE	(Notes 9, 10)	NACE	4				
AISI 316 ss (NACE) – (MWP = 16MPa) without gasket for two seals construction		(Note 11)	NACE	R				
<b>Housing material and electrical connection – 15<sup>th</sup> character</b>								
Aluminium alloy (Barrel version)	1/2 – 14 NPT							A
Aluminium alloy (Barrel version)	M20 x 1.5 (CM 20)							B
Aluminium alloy (Barrel version)	Pg 13.5							D
Aluminium alloy (Barrel version)	1/2 GK							C
Aluminium alloy (Barrel version)	Harting Han connector	(general purpose only)	(Note 13)					E
Aluminium alloy (Barrel version)	Fieldbus connector	(general purpose only)	(Note 13)					G
Aluminium alloy copper-free (Barrel version)	1/2 – 14 NPT							H
Aluminium alloy copper-free (Barrel version)	M20 x 1.5 (CM 20)							L
Aluminium alloy copper-free (Barrel version)	Pg 13.5							N
Aluminium alloy copper-free (Barrel version)	1/2 GK							M
Aluminium alloy copper-free (Barrel version)	Harting Han connector	(general purpose only)	(Note 13)					P
Aluminium alloy copper-free (Barrel version)	Fieldbus connector	(general purpose only)	(Note 13)					R
AISI 316 L ss (Barrel version)	1/2 – 14 NPT							S
AISI 316 L ss (Barrel version)	M20 x 1.5 (CM20)							T
AISI 316 L ss (Barrel version)	Pg 13.5							V
AISI 316 L ss (Barrel version)	1/2 GK							U
AISI 316 L ss (Barrel version)	Fieldbus connector	(general purpose only)	(Note 13)					Z
Aluminium alloy (DIN version)	M20 x 1.5 (CM 20)	(general purpose only)						J
Aluminium alloy (DIN version)	Pg 13.5	(general purpose only)						Y
Aluminium alloy (DIN version)	Harting Han connector	(general purpose only)	(Note 13)					K
<b>Output/Additional options – 16<sup>th</sup> character</b>								
HART digital communication and 4 to 20mA	No additional options	(Notes 14, 15)						H
HART digital communication and 4 to 20mA	Options requested (to be ordered by "Additional ordering code")	(Note 14)						1
PROFIBUS PA	No additional options	(Notes 14, 15)						P
PROFIBUS PA	Options requested (to be ordered by "Additional ordering code")	(Note 15)						2
FOUNDATION Fieldbus	No additional options	(Notes 14, 15)						F
FOUNDATION Fieldbus	Options requested (to be ordered by "Additional ordering code")	(Note 15)						3

### ADDITIONAL ORDERING INFORMATION for model 264DC

Add one or more 2-digit code(s) after the basic ordering information to select all required options

	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
<b>Drain/vent valve (material and position) (wetted parts)</b>												
AISI 316 L ss on process axis (Note 16)	NACE	V1										
AISI 316 L ss on flange side top (Note 16)	NACE	V2										
AISI 316 L ss on flange side bottom (Note 16)	NACE	V3										
Hastelloy C276™ on process axis (Note 17)	NACE	V4										
Hastelloy C276™ on flange side top (Note 17)	NACE	V5										
Hastelloy C276™ on flange side bottom (Note 17)	NACE	V6										
Monel 400™ on process axis (Note 18)	NACE	V7										
Monel 400™ on flange side top (Note 18)	NACE	V8										
Monel 400™ on flange side bottom (Note 18)	NACE	V9										
<b>Electrical certification</b>												
ATEX Group II Category 1 GD – Intrinsic Safety EEx ia		E1										
ATEX Group II Category 1/2 GD – Flameproof EEx d		E2										
ATEX Group II Category 3 GD – Type of protection "N" EEx nL design compliance (Note 19)		E3										
Canadian Standard Association (CSA) (only 1/2–14NPT, M20 and Pg 13.5 electrical connection)		E4										
Standards Australia SAA (Not Ex ia and Ex n for PROFIBUS PA and FOUNDATION Fieldbus)		E5										
Factory Mutual (FM) approval (only with 1/2–14NPT, M20 and Pg 13.5 electrical connection)		E6										
Combined ATEX - Intrinsic Safety and Flameproof		E7										
Combined ATEX, FM and CSA (only with 1/2–14NPT, M20 and Pg 13.5 electrical connection) (Note 19)		EN										
NEPSI (China) - Intrinsic Safety Ex ia		EY										
NEPSI (China) - Flameproof Ex d		EZ										
GOST (Russia) EEx ia		W1										
GOST (Russia) EEx d		W2										
GOST (Kazakhstan) EEx ia		W3										
GOST (Kazakhstan) EEx d		W4										
Inmetro (Brazil) EEx ia (Note 19)		W5										
Inmetro (Brazil) EEx d (Note 19)		W6										
Inmetro (Brazil) EEx nL (Note 19)		W7										
<b>Output meter</b>												
ProMeter, Standard calibration (Note 19)		D1										
ProMeter, Special calibration (Note 19)		D2										
Analog output indicator linear 0–100% scale (Note 19)		D3										
Analog output indicator square root 0–10 scale (Note 19)		D4										
Analog output indicator, special graduation (to be specified for linear scale) (Note 19)		D5										
Analog output indicator, special graduation (to be specified for square root scale) (Note 19)		D6										
Programmable signal meter and HART configurator (CoMeter) (Note 19)		D7										
Programmable signal meter and HART configurator (CoMeter – customer configuration) (Note 19)		D8										
<b>Integral LCD</b>												
Digital LCD integral display									L1			
<b>Surge</b>												
Surge/Transient Protector (Internal for HART / 4-20mA)												
Surge/Transient Protector (External supplied loose for PROFIBUS PA and FOUNDATION Fieldbus only suitable with 1/2–14NPT and M20 electrical connection and with ATEX, FM and CSA certifications, no DUST)									S1			
<b>Operating manual</b>												
German										M1		
Italian										M2		
Spanish										M3		
French										M4		
<b>Labels &amp; tag language</b>												
German											T1	
Italian											T2	
Spanish											T3	
French											T4	
<b>Additional tag plate</b>												
Laser printing of tag on stainless steel plate											I2	
<b>Configuration</b>												
Standard – Pressure = inH <sub>2</sub> O/psi at 20° C; Temperature = deg. F											N2	
Standard – Pressure = inH <sub>2</sub> O/psi at 4° C; Temperature = deg. F											N3	
Standard – Pressure = inH <sub>2</sub> O/psi at 20° C; Temperature = deg. C											N4	
Standard – Pressure = inH <sub>2</sub> O/psi at 4° C; Temperature = deg. C											N5	
Custom											N6	
<b>Certificates</b>												
Inspection certificate EN 10204–3.1 of calibration (9-point)												C1
Certificate of compliance with the order EN 10204–2.1 of instrument design												C6
<b>Material traceability</b>												
Certificate of compliance with the order EN 10204–2.1 of process wetted parts												H1
Inspection certificate EN 10204–3.1 of process wetted parts												H3
<b>Connector</b>												
Fieldbus 7/8 (Recommended for FOUNDATION Fieldbus) - (supplied loose without mating female plug)											(Notes 15, 20)	U1
Fieldbus M12x1 (Recommended for PROFIBUS PA) - (supplied loose without mating female plug)											(Notes 15, 20)	U2
Harting Han – straight entry											(Notes 14, 20)	U3
Harting Han – angle entry											(Notes 14, 20)	U4

- Note 1: Not available with EN mounting flange code M, P, R, N, L, Q, S, T, U
- Note 2: Not available with ASME mounting flange code A, D, G, J, B, E, H, K, C, F
- Note 3: Not available with 3in ASME CL150 food design size code 1
- Note 4: Not available with ASME CL 600 and CL 900 mounting flange rating code G, J, H, K and with EN PN 63, PN 100 mounting flange rating code P, R, Q, S  
Also not available with sensor code E combined with 2in or DN50 high side size code A, D, G, J, M, P, R.
- Note 5: Not available with Hastelloy C276 extension code 2, 4, 6
- Note 6: Not available with serrated seat finish code A, G, D, L
- Note 7: Not available with extension code 1, 2, 3, 4, 5, 6
- Note 8: Not available with 2in, DN50, DN80, DN100, mounting flange code A, D, G, J, M, P, R, N, L, Q, S, T, U
- Note 9: Suitable for oxygen service
- Note 10: Not available with low side diaphragm code R, 2, W
- Note 11: Not available with low side diaphragm code S, H, K, M, T, A, B, F, C, D, L, Q, P, 4, 5
- Note 12: Not available with low side diaphragm code S, H, A, B, L, Q
- Note 13: Select type in additional ordering code
- Note 14: Not available with Electronic Housing code Z, R, G and W
- Note 15: Not available with Electronic Housing code P, E and K
- Note 16: Not available with Process flanges/adapters code D, E, G, H, R
- Note 17: Not available with Process flanges/adapters code A, B, G, H, R
- Note 18: Not available with Process flanges/adapters code A, B, D, E, R
- Note 19: Not available with PROFIBUS PA and FF output code 2 or 3
- Note 20: Not available with Electronic housing code U, S, T, V, H, M, L, N, D, C, A, B, J, Y

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

- Adapters supplied loose
- Plug on axis (no drain/vent valves)
- General purpose (no electrical certification)
- No meter/display, no mounting bracket, no surge protection
- 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.

## BASIC ORDERING INFORMATION model 264HC Gauge Pressure Transmitter with direct mount seal

Select one character or set of characters from each category and specify complete catalog number.  
 Refer to additional ordering information code and specify one or more codes for each transmitter if additional options are required.

BASE MODEL – 1 <sup>st</sup> to 5 <sup>th</sup> characters			2	6	4	H	C	X	X	X	X	X	X	X	Cont'd
Gauge Pressure Transmitter with direct mount seal – BASE ACCURACY 0.075%															
<b>SENSOR - Span limits – 6<sup>th</sup> character</b>															
1.1 and 65kPa	11 and 650mbar	4.35 and 260inH <sub>2</sub> O						G							
2.67 and 160kPa	26.7 and 1600mbar	10.7 and 642inH <sub>2</sub> O						H							
10 and 600kPa	0.1 and 6bar	1.45 and 87psi						M							
40 and 2400kPa	0.4 and 24bar	5.8 and 348psi						P							
134 and 8000kPa	1.34 and 80bar	19.4 and 1160psi						Q							
267 and 16000kPa	2.67 and 160bar	38.7 and 2320psi						S							
<b>Diaphragm material/Fill Fluid (not wetted) – 7<sup>th</sup> character</b>															
AISI 316 L ss	Silicone oil								R						
AISI 316 L ss	Inert fluid - Galden								2						
AISI 316 L ss	Inert fluid - Halocarbon								W						
<b>HIGH PRESSURE SIDE – Size/Mounting flange rating – 8<sup>th</sup> character</b>															
2in	ASME CL 150									A					
2in	ASME CL 300									D					
2in	ASME CL 600									G					
2in	ASME CL 900									J					
3in	ASME CL 150									B					
3in food design	ASME CL 150									1					
3in	ASME CL 300									E					
3in	ASME CL 600									H					
3in	ASME CL 900									K					
4in	ASME CL 150									C					
4in	ASME CL 300									F					
DN50	EN PN 16/40									M					
DN50	EN PN 63									P					
DN50	EN PN 100									R					
DN80	EN PN 16									N					
DN80	EN PN 40									L					
DN80	EN PN 63									Q					
DN80	EN PN 100									S					
DN100	EN PN 16									T					
DN100	EN PN 40									U					
<b>HIGH PRESSURE SIDE – Mounting flange material/Seat form (seal) – 9<sup>th</sup> character</b>															
Carbon steel	Form RF (raised face) - serrated finish	(Notes 1, 3)												A	
Carbon steel	Form RF (raised face) - smooth finish	(Notes 1, 3)												B	
Carbon steel	EN 1092-1 Type B1/B2 - serrated finish	(Notes 2, 3)												G	
Carbon steel	EN 1092-1 Type B1/B2 - smooth finish	(Notes 2, 3)												P	
AISI 316 ss	Form RF (raised face) - serrated finish	(Notes 1, 3)												D	
AISI 316 ss	Form RF (raised face) - smooth finish	(Note 1)												E	
AISI 316 ss	EN 1092-1 Type B1/B2 - serrated finish	(Notes 2, 3)												L	
AISI 316 ss	EN 1092-1 Type B1/B2 - smooth finish	(Notes 2, 3)												Q	
<b>HIGH PRESSURE SIDE – Extension length and material (wetted parts) – 10<sup>th</sup> character</b>															
Flush (see next for diaphragm material)								NACE						F	
50mm (2in)	AISI 316 L ss	(Notes 3, 4)						NACE						1	
50mm (2in)	Hastelloy C276™	(Notes 3, 4, 6)						NACE						2	
100mm (4in)	AISI 316 L ss	(Notes 3, 4)						NACE						3	
100mm (4in)	Hastelloy C276™	(Notes 3, 4, 6)						NACE						4	
150mm (6in)	AISI 316 L ss	(Notes 3, 4)						NACE						5	
150mm (6in)	Hastelloy C276™	(Notes 3, 4, 6)						NACE						6	
<b>HIGH PRESSURE SIDE – Diaphragm material (wetted parts) (seal) – 11<sup>th</sup> character</b>															
AISI 316 L ss		(Note 5)						NACE							S
Hastelloy C276™		(Note 6)						NACE							H
Tantalum		(Notes 6, 7)													T
AISI 316 L ss with PFA anti-stick coating		(Notes 5, 6, 8)						NACE							K
Hastelloy C276™ with PFA anti-stick coating		(Notes 6, 8)						NACE							Y
AISI 316 L ss with PFA coating anti-corrosion and anti-stick		(Notes 5, 6)						NACE							W
<b>HIGH PRESSURE SIDE – Fill fluid – 12<sup>th</sup> character</b>															
Silicone oil															S
Inert fluid - Galden		(Notes 3, 9)													N
Inert fluid - Halocarbon		(Notes 3, 9)													D
Silicone oil for high temperature		(Note 3)													G
Silicone polymer for low temperature		(Note 3)													C
Mineral oil (FDA approved)															W
Vegetable oil (FDA approved)															A
Glycerin-Water (FDA approved)															B

## 2600T Pressure Transmitters

Model 264DC, 264HC, 264NC

DS/264XC-EN Rev. G

<b>BASIC ORDERING INFORMATION model 264HC</b>				<b>X</b>	<b>X</b>
<b>Housing material and electrical connection</b> – 13 <sup>th</sup> character					
Aluminium alloy (Barrel version)	1/2 – 14 NPT				A
Aluminium alloy (Barrel version)	M20 x 1.5 (CM 20)				B
Aluminium alloy (Barrel version)	Pg 13.5				D
Aluminium alloy (Barrel version)	1/2 GK				C
Aluminium alloy (Barrel version)	Harting Han connector	(general purpose only)	(Nota 10)		E
Aluminium alloy (Barrel version)	Fieldbus connector	(general purpose only)	(Nota 10)		G
Aluminium alloy copper-free (Barrel version)	1/2 – 14 NPT				H
Aluminium alloy copper-free (Barrel version)	M20 x 1.5 (CM 20)				L
Aluminium alloy copper-free (Barrel version)	Pg 13.5				N
Aluminium alloy copper-free (Barrel version)	1/2 GK				M
Aluminium alloy copper-free (Barrel version)	Harting Han connector	(general purpose only)	(Nota 10)		P
Aluminium alloy copper-free (Barrel version)	Fieldbus connector	(general purpose only)	(Nota 10)		R
AISI 316 L ss (Barrel version)	1/2 – 14 NPT				S
AISI 316 L ss (Barrel version)	M20 x 1.5 (CM20)				T
AISI 316 L ss (Barrel version)	Pg 13.5				V
AISI 316 L ss (Barrel version)	1/2 GK				U
AISI 316 L ss (Barrel version)	Fieldbus connector	(general purpose only)	(Nota 10)		Z
<b>Output/Additional options</b> – 14 <sup>th</sup> character					
HART digital communication and 4 to 20mA	No additional options		(Notes 11, 12)		H
HART digital communication and 4 to 20mA	Options requested (to be ordered by "Additional ordering code")		(Note 11)		1
PROFIBUS PA	No additional options		(Notes 11, 12)		P
PROFIBUS PA	Options requested (to be ordered by "Additional ordering code")		(Note 12)		2
FOUNDATION Fieldbus	No additional options		(Notes 11, 12)		F
FOUNDATION Fieldbus	Options requested (to be ordered by "Additional ordering code")		(Note 12)		3

### ADDITIONAL ORDERING INFORMATION for model 264HC

Add one or more 2-digit code(s) after the basic ordering information to select all required options

	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
<b>Electrical certification</b>										
ATEX Group II Category 1 GD – Intrinsic Safety EEx ia	E1									
ATEX Group II Category 1/2 GD – Flameproof EEx d	E2									
ATEX Group II Category 3 GD – Type of protection "N" EEx nL design compliance (Note 13)	E3									
Canadian Standard Association (CSA) (only 1/2–14NPT, M20 and Pg 13.5 electrical connection)	E4									
Standards Australia SAA (Not Ex ia and Ex n for PROFIBUS PA and FOUNDATION Fieldbus)	E5									
Factory Mutual (FM) approval (only with 1/2–14NPT, M20 and Pg 13.5 electrical connection)	E6									
Combined ATEX - Intrinsic Safety and Flameproof	E7									
Combined ATEX, FM and CSA (only with 1/2–14NPT, M20 and Pg 13.5 electrical connection) (Note 13)	EN									
NEPSI (China) - Intrinsic Safety Ex ia	EY									
NEPSI (China) - Flameproof Ex d	EZ									
GOST (Russia) EEx ia	W1									
GOST (Russia) EEx d	W2									
GOST (Kazakistan) EEx ia	W3									
GOST (Kazakistan) EEx d	W4									
Inmetro (Brazil) EEx ia (Note 13)	W5									
Inmetro (Brazil) EEx d (Note 13)	W6									
Inmetro (Brazil) EEx nL (Note 13)	W7									
<b>Output meter</b>										
ProMeter, Standard calibration (Note 13)	D1									
ProMeter, Special calibration (Note 13)	D2									
Analog output indicator linear 0–100% scale (Note 13)	D3									
Analog output indicator, special graduation (to be specified for linear scale) (Note 13)	D5									
Programmable signal meter and HART configurator (CoMeter) (Note 13)	D7									
Programmable signal meter and HART configurator (CoMeter – customer configuration) (Note 13)	D8									
<b>Integral LCD</b>										
Digital LCD integral display									L1	
<b>Surge</b>										
Surge/Transient Protector (Internal for HART / 4-20mA)										
Surge/Transient Protector (External supplied loose for PROFIBUS PA and FOUNDATION Fieldbus only suitable with 1/2–14NPT and M20 electrical connection and with ATEX, FM and CSA certifications, no DUST)									S1	
<b>Operating manual</b>										
German										M1
Italian										M2
Spanish										M3
French										M4
<b>Labels &amp; tag language</b>										
German										T1
Italian										T2
Spanish										T3
French										T4
<b>Additional tag plate</b>										
Laser printing of tag on stainless steel plate										I2
<b>Configuration</b>										
Standard – Pressure = inH <sub>2</sub> O/psi at 20° C; Temperature = deg. F										N2
Standard – Pressure = inH <sub>2</sub> O/psi at 4° C; Temperature = deg. F										N3
Standard – Pressure = inH <sub>2</sub> O/psi at 20° C; Temperature = deg. C										N4
Standard – Pressure = inH <sub>2</sub> O/psi at 4° C; Temperature = deg. C										N5
Custom										N6
<b>Certificates</b>										
Inspection certificate EN 10204–3.1 of calibration (9-point)										C1
Certificate of compliance with the order EN 10204–2.1 of instrument design										C6
<b>Material traceability</b>										
Certificate of compliance with the order EN 10204–2.1 of process wetted parts										H1
Inspection certificate EN 10204–3.1 of process wetted parts										H3
<b>Connector</b>										
Fieldbus 7/8 (Recommended for FOUNDATION Fieldbus) - (supplied loose without mating female plug)										(Notes 12, 14) U1
Fieldbus M12x1 (Recommended for PROFIBUS PA) - (supplied loose without mating female plug)										(Notes 12, 14) U2
Harting Han – straight entry										(Notes 11, 14) U3
Harting Han – angle entry										(Notes 11, 14) U4

## 2600T Pressure Transmitters

Model 264DC, 264HC, 264NC

DS/264XC-EN Rev. G

- Note 1: Not available with EN mounting flange code M, P, R, N, L, Q, S, T, U
- Note 2: Not available with ASME mounting flange code A, D, G, J, B, E, H, K, C, F
- Note 3: Not available with 3in ASME CL150 food design size code 1
- Note 4: Not available with ASME CL 600 and CL 900 mounting flange rating code G, J, H, K and with EN PN 63, PN 100 mounting flange rating code P, R, Q, S
- Note 5: Not available with Hastelloy C276 extension code 2, 4, 6
- Note 6: Not available with serrated seat finish code A, G, D, L
- Note 7: Not available with extension code 1, 2, 3, 4, 5, 6
- Note 8: Not available with 2in, DN50, DN80, DN100, mounting flange code A, D, G, J, M, P, R, N, L, Q, S, T, U
- Note 9: Suitable for oxygen service
- Note 10: Select type in additional ordering code
- Note 11: Not available with Electronic Housing code Z, R, G
- Note 12: Not available with Electronic Housing code P, E
- Note 13: Not available with PROFIBUS PA and FF output code 2 or 3
- Note 14 : Not available with Electronic housing code U, S, T, V, H, M, L, N, D, C, A, B

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

- General purpose (no electrical certification)
- No meter/display, no mounting bracket, no surge protection
- 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.



## BASIC ORDERING INFORMATION model 264NC Absolute Pressure Transmitter with direct mount seal

Select one character or set of characters from each category and specify complete catalog number.  
 Refer to additional ordering information code and specify one or more codes for each transmitter if additional options are required.

BASE MODEL – 1 <sup>st</sup> to 5 <sup>th</sup> characters				2	6	4	N	C	X	X	X	X	X	X	X	Cont'd
Absolute Pressure Transmitter with direct mount seal – BASE ACCURACY 0.075%																
<b>SENSOR - Span limits – 6<sup>th</sup> character</b>																
1.1 and 65kPa	11 and 650mbar	8 and 480mmHg							G							
2.67 and 160kPa	26.7 and 1600mbar	20 and 1200mmHg							H							
10 and 600kPa	0.1 and 6bar	1.45 and 87psi							M							
40 and 2400kPa	0.4 and 24bar	5.8 and 348psi							P							
134 and 8000kPa	1.34 and 80bar	19.4 and 1160psi							Q							
267 and 16000kPa	2.67 and 160bar	38.7 and 2320psi							S							
<b>Diaphragm material/Fill Fluid (not wetted) – 7<sup>th</sup> character</b>																
AISI 316 L ss	Silicone oil									R						
AISI 316 L ss	Inert fluid - Galden									2						
AISI 316 L ss	Inert fluid - Halocarbon									W						
<b>HIGH PRESSURE SIDE – Size/Mounting flange rating – 8<sup>th</sup> character</b>																
2in	ASME CL 150										A					
2in	ASME CL 300										D					
2in	ASME CL 600										G					
2in	ASME CL 900										J					
3in	ASME CL 150										B					
3in food design	ASME CL 150										1					
3in	ASME CL 300										E					
3in	ASME CL 600										H					
3in	ASME CL 900										K					
4in	ASME CL 150										C					
4in	ASME CL 300										F					
DN50	DIN PN 16/40										M					
DN50	DIN PN 63										P					
DN50	DIN PN 100										R					
DN80	DIN PN 16										N					
DN80	DIN PN 40										L					
DN80	DIN PN 63										Q					
DN80	DIN PN 100										S					
DN100	DIN PN 16										T					
DN100	DIN PN 40										U					
<b>HIGH PRESSURE SIDE – Mounting flange material/Seat form (seal) – 9<sup>th</sup> character</b>																
Carbon steel	Form RF (raised face) – serrated finish	(Notes 1, 3)													A	
Carbon steel	Form RF (raised face) – smooth finish	(Notes 1, 3)													B	
Carbon steel	EN 1092-1 Type B1/B2 – serrated finish	(Notes 2, 3)													G	
Carbon steel	EN 1092-1 Type B1/B2 – smooth finish	(Notes 2, 3)													P	
AISI 316 ss	Form RF (raised face) – serrated finish	(Notes 1, 3)													D	
AISI 316 ss	Form RF (raised face) – smooth finish	(Note 1)													E	
AISI 316 ss	EN 1092-1 Type B1/B2 – serrated finish	(Notes 2, 3)													L	
AISI 316 ss	EN 1092-1 Type B1/B2 – smooth finish	(Notes 2, 3)													Q	
<b>HIGH PRESSURE SIDE – Extension length and material (wetted parts) – 10<sup>th</sup> character</b>																
Flush (see next for diaphragm material)										NACE					F	
50mm (2in)	AISI 316 L ss	(Notes 3, 4)								NACE					1	
50mm (2in)	Hastelloy C276™	(Notes 3, 4, 6)								NACE					2	
100mm (4in)	AISI 316 L ss	(Notes 3, 4)								NACE					3	
100mm (4in)	Hastelloy C276™	(Notes 3, 4, 6)								NACE					4	
150mm (6in)	AISI 316 L ss	(Notes 3, 4)								NACE					5	
150mm (6in)	Hastelloy C276™	(Notes 3, 4, 6)								NACE					6	
<b>HIGH PRESSURE SIDE – Diaphragm material (wetted parts) (seal) – 11<sup>th</sup> character</b>																
AISI 316 L ss		(Note 5)								NACE					S	
Hastelloy C276™		(Note 6)								NACE					H	
Tantalum		(Notes 6, 7)													T	
AISI 316 L ss with PFA anti-stick coating		(Notes 5, 6, 8)								NACE					K	
Hastelloy C276™ with PFA anti-stick coating		(Notes 6, 8)								NACE					Y	
AISI 316 L ss with PFA coating anti-corrosion and anti-stick		(Notes 5, 6)								NACE					W	
<b>HIGH PRESSURE SIDE – Fill fluid – 12<sup>th</sup> character</b>																
Silicone oil																S
Inert fluid - Galden		(Notes 3, 9)														N
Inert fluid - Halocarbon		(Notes 3, 9)														D
Silicone oil for high temperature		(Note 3)														G
Silicone polymer for low temperature		(Note 3)														C
Mineral oil (FDA approved)																W
Vegetable oil (FDA approved)																A
Glycerin-Water (FDA approved)																B

## 2600T Pressure Transmitters

Model 264DC, 264HC, 264NC

DS/264XC-EN Rev. G

<b>BASIC ORDERING INFORMATION model 264NC</b>			<b>X</b>	<b>X</b>
<b>Housing material and electrical connection</b> – 13 <sup>th</sup> character				
Aluminium alloy (Barrel version)	1/2 – 14 NPT			A
Aluminium alloy (Barrel version)	M20 x 1.5 (CM 20)			B
Aluminium alloy (Barrel version)	Pg 13.5			D
Aluminium alloy (Barrel version)	1/2 GK			C
Aluminium alloy (Barrel version)	Harting Han connector	(general purpose only)	(Note 10)	E
Aluminium alloy (Barrel version)	Fieldbus connector	(general purpose only)	(Note 10)	G
Aluminium alloy copper-free (Barrel version)	1/2 – 14 NPT			H
Aluminium alloy copper-free (Barrel version)	M20 x 1.5 (CM 20)			L
Aluminium alloy copper-free (Barrel version)	Pg 13.5			N
Aluminium alloy copper-free (Barrel version)	1/2 GK			M
Aluminium alloy copper-free (Barrel version)	Harting Han connector	(general purpose only)	(Note 10)	P
Aluminium alloy copper-free (Barrel version)	Fieldbus connector	(general purpose only)	(Note 10)	R
AISI 316 L ss (Barrel version)	1/2 – 14 NPT			S
AISI 316 L ss (Barrel version)	M20 x 1.5 (CM20)			T
AISI 316 L ss (Barrel version)	Pg 13.5			V
AISI 316 L ss (Barrel version)	1/2 GK			U
AISI 316 L ss (Barrel version)	Fieldbus connector	(general purpose only)	(Note 10)	Z
<b>Output/Additional options</b> – 14 <sup>th</sup> character				
HART digital communication and 4 to 20mA	No additional options		(Notes 11, 12)	H
HART digital communication and 4 to 20mA	Options requested (to be ordered by "Additional ordering code")		(Note 11)	1
PROFIBUS PA	No additional options		(Notes 11, 12)	P
PROFIBUS PA	Options requested (to be ordered by "Additional ordering code")		(Note 12)	2
FOUNDATION Fieldbus	No additional options		(Notes 11, 12)	F
FOUNDATION Fieldbus	Options requested (to be ordered by "Additional ordering code")		(Note 12)	3

### ADDITIONAL ORDERING INFORMATION for model 264NC

Add one or more 2-digit code(s) after the basic ordering information to select all required options

	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
<b>Electrical certification</b>											
ATEX Group II Category 1 GD – Intrinsic Safety EEx ia	E1										
ATEX Group II Category 1/2 GD – Flameproof EEx d	E2										
ATEX Group II Category 3 GD – Type of protection "N" EEx nL design compliance (Note 13)	E3										
Canadian Standard Association (CSA) (only 1/2–14NPT, M20 and Pg 13.5 electrical connection)	E4										
Standards Australia SAA (Not Ex ia and Ex n for PROFIBUS PA and FOUNDATION Fieldbus)	E5										
Factory Mutual (FM) approval (only with 1/2–14NPT, M20 and Pg 13.5 electrical connection)	E6										
Combined ATEX - Intrinsic Safety and Flameproof	E7										
Combined ATEX, FM and CSA (only with 1/2–14NPT, M20 and Pg 13.5 electrical connection) (Note 13)	EN										
NEPSI (China) - Intrinsic Safety Ex ia	EY										
NEPSI (China) - Flameproof Ex d	EZ										
GOST (Russia) EEx ia	W1										
GOST (Russia) EEx d	W2										
GOST (Kazakistan) EEx ia	W3										
GOST (Kazakistan) EEx d	W4										
Inmetro (Brazil) EEx ia (Note 13)	W5										
Inmetro (Brazil) EEx d (Note 13)	W6										
Inmetro (Brazil) EEx nL (Note 13)	W7										
<b>Output meter</b>											
ProMeter, Standard calibration (Note 13)	D1										
ProMeter, Special calibration (Note 13)	D2										
Analog output indicator linear 0–100% scale (Note 13)	D3										
Analog output indicator, special graduation (to be specified for linear scale) (Note 13)	D5										
Programmable signal meter and HART configurator (CoMeter) (Note 13)	D7										
Programmable signal meter and HART configurator (CoMeter – customer configuration) (Note 13)	D8										
<b>Integral LCD</b>											
Digital LCD integral display									L1		
<b>Surge</b>											
Surge/Transient Protector (Internal for HART / 4-20mA)											
Surge/Transient Protector (External supplied loose for PROFIBUS PA and FOUNDATION Fieldbus only suitable with 1/2–14NPT and M20 electrical connection and with ATEX, FM and CSA certifications, no DUST)									S1		
<b>Operating manual</b>											
German										M1	
Italian										M2	
Spanish										M3	
French										M4	
<b>Labels &amp; tag language</b>											
German											T1
Italian											T2
Spanish											T3
French											T4
<b>Additional tag plate</b>											
Laser printing of tag on stainless steel plate											I2
<b>Configuration</b>											
Standard – Pressure = inH <sub>2</sub> O/psi at 20° C; Temperature = deg. F											N2
Standard – Pressure = inH <sub>2</sub> O/psi at 4° C; Temperature = deg. F											N3
Standard – Pressure = inH <sub>2</sub> O/psi at 20° C; Temperature = deg. C											N4
Standard – Pressure = inH <sub>2</sub> O/psi at 4° C; Temperature = deg. C											N5
Custom											N6
<b>Certificates</b>											
Inspection certificate EN 10204–3.1 of calibration (9-point)											C1
Certificate of compliance with the order EN 10204–2.1 of instrument design											C6
<b>Material traceability</b>											
Certificate of compliance with the order EN 10204–2.1 of process wetted parts											H1
Inspection certificate EN 10204–3.1 of process wetted parts											H3
<b>Connector</b>											
Fieldbus 7/8 (Recommended for FOUNDATION Fieldbus) - (supplied loose without mating female plug)									(Notes 12, 14)		U1
Fieldbus M12x1 (Recommended for PROFIBUS PA) - (supplied loose without mating female plug)									(Notes 12, 14)		U2
Harting Han – straight entry									(Notes 11, 14)		U3
Harting Han – angle entry									(Notes 11, 14)		U4

## 2600T Pressure Transmitters

Model 264DC, 264HC, 264NC

DS/264XC-EN Rev. G

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- Note 1: Not available with EN mounting flange code M, P, R, N, L, Q, S, T, U
- Note 2: Not available with ASME mounting flange code A, D, G, J, B, E, H, K, C, F
- Note 3: Not available with 3in ASME CL150 food design size code 1
- Note 4: Not available with ASME CL 600 and CL 900 mounting flange rating code G, J, H, K and with EN PN 63, PN 100 mounting flange rating code P, R, Q, S
- Note 5: Not available with Hastelloy C276 extension code 2, 4, 6
- Note 6: Not available with serrated seat finish code A, G, D, L
- Note 7: Not available with extension code 1, 2, 3, 4, 5, 6
- Note 8: Not available with 2in, DN50, DN80, DN100, mounting flange code A, D, G, J, M, P, R, N, L, Q, S, T, U
- Note 9: Suitable for oxygen service
- Note 10: Select type in additional ordering code
- Note 11: Not available with Electronic Housing code Z, R, G
- Note 12: Not available with Electronic Housing code P, E
- Note 13: Not available with PROFIBUS PA and FF output code 2 or 3
- Note 14: Not available with Electronic housing code U, S, T, V, H, M, L, N, D, C, A, B

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

- General purpose (no electrical certification)
- No meter/display, no mounting bracket, no surge protection
- 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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