Data Sheet DS/268XD-EN Rev. G

## Model 268DD Differential/Gauge Model 268HD Gauge Model 268ND Absolute

ABB 2600T Series Engineered solutions for all applications



## TÜV SIL2 certified to IEC 61508

- the smart solution in Safety loop application

## Best in Class Safety protection for your plants

- Safe Failure Fraction (SFF): 98.6%
- Diagnostic Coverage (DC): 97.7%
- Undetected Dangerous Failures λDU: 11 FIT

## In-situ hardware redundancy (HFT=1)

- a guarantee of true protection

## SIL3 capability in redundant architecture (1002)

 Software and hardware development process certified by TÜV

Reduced maintenance costs thanks to the longest proof test interval of 10 years for SIL2 in 1001 architecture

Base accuracy: ±0.075%

### **Span limits**

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

# Hardware and software redundancy with MTBF of over 100 years

## 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 268 is the IEC 61508 TÜV certified Safety 2600T transmitter for SIS and critical applications where safety and performances are the main requirement.

The transmitters detailed in this datasheets have been designed and manufactured according to a certified process which lead to a product specifically suitable for critical applications.

Thanks to the internal software and hardware redundancy, the 268 models have got the IEC 61508 certifications which not only allows installation in conformance with SIL2 (1001) but also to SIL3 in a 1002 architecture.

The 2600T Safety transmitter exceeds the IEC 61508 requirements for SIL2 with a Hardware Fault Tolerance of 1 (HFT = 1) and a Safe Failure Fraction of 98%.

In addition the following requirements of IEC 61508 have been assessed as part of the certification process:

- functional safety (hardware and software) testing;
- electrical safety testing;
- EMC testing;
- environmental testing;
- Quality Assurance in production and product maintenance;
- verification of the product development process.

Furthermore, with a very low Probability of Dangerous Undetected Failures ( $\lambda DU = 11$  FIT), the 2600T safety transmitters allow to extend the Proof Test Interval reducing maintenance costs by 50%.

Model 268DD, 268HD and 268ND 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 268DD can be in the following versions:

- a) one direct mount seal and one flange for process connection, direct  $^{1}/_{4} 18 \, \text{NPT} \, \text{or} \, ^{1}/_{2} 14 \, \text{NPT} \, \text{through adapter}$ ; this allows also to connect the other leg (wet or dry) for differential measurement.
  - A proper filter is supplied as standard when  $^{1}/_{4}$  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 268HD and 268ND 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 mainly used for chemical application:

- flush diaphragm flange mounted seal
- extended diaphragm flange mounted seal
- off-line threaded connection seal
- off-line flanged connection 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 268DD, 268HD and 268ND transmitters (the mnemonic is used as reference in the compatibility table).

Model	Seal type	Size	Mnemonic
S264A S264E S264G S264R	Flanged flush diaphragm (also Ring Joint and JIS standard)	1-1/2in (ASME RJ only) 2in / DN50 / A50 3-4in / DN80-100 / A80-100	P1.5 P2 P3
	Flanged extended diaphragm	2in / DN50 3in / DN80 4in / DN100	E2 E3 P3
S264T	Threaded off-line	2 <sup>1</sup> / <sub>2</sub> in	T2.5
S264M	Flanged off-line	2 ½in	T2.5
S264W (remote only)	Wafer Wafer food	1-1/2in / DN40 2in /DN50 3in / DN80	P1.5 P2 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

0			Lower Range L	imit (LRL)		Compatibility (allowed seal for 268DD)		
Sensor Code	Upper Range Limit (URL)	268DD Direct mount differential	268DD Direct mount gauge	268HD/268ND Direct mount gauge/absolute	Minimum span	Direct mount seal only	Direct mount and one remote seal (max length in m.)	
E	16kPa 160mbar 64inH <sub>2</sub> O	–16kPa –160mbar –64inH2O	–16kPa –160mbar –64inH <sub>2</sub> O		0.54kPa 5.4mbar 2.14inH <sub>2</sub> O	P2 (•), P3 E3 (•) T2.5	P3 (3) E3 (2) (•)	
F	40kPa 400mbar 160inH <sub>2</sub> O	-40kPa -400mbar -160inH₂O	-40kPa -400mbar -160inH2O		0.67kPa 6.7mbar 2.67inH <sub>2</sub> O	P2, P3 E2 (•), E3 T2.5	P2 (2) (•), P3 (5) E3 (3) T2.5 (2)	
G	65kPa 650mbar 260inH2O	-65kPa -650mbar -260inH2O	-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 T2.5	P2 (2) (•), P3 (5) E3 (3) T2.5 (2)	
н	160kPa 1600mbar 642inH <sub>2</sub> O	-160kPa -1600mbar -642inH <sub>2</sub> O	(0)	0.07kPa abs (§) 0.7mbar abs (§) 0.5mmHg (§)	2.67kPa 26.7mbar 10.7inH <sub>2</sub> O	P1.5 P2, P3 E2, E3 T2.5	P1.5 (2) P2 (5), P3 (8) E2 (4), E3 (6) T2.5 (6)	
M	600kPa 6bar 87psi	-600kPa -6bar -87psi	(0)	0.07kPa abs (§) 0.7mbar abs (§) 0.5mmHg (§)	10kPa 0.1bar 1.45psi	P1.5 P2, P3 E2, E3 T2.5	P1.5 (3) P2 (8), P3 (8) E2 (6), E3 (8) T2.5 (6)	
Р	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	P1.5 P2, P3 E2, E3 T2.5	P1.5 (5) P2 (8), P3 (8) E2 (6), E3 (8) T2.5 (6)	
Q	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	P1.5 P2, P3 E2, E3 T2.5	P1.5 (5) P2 (8), P3 (8) E2 (6), E3 (8) T2.5 (6)	
S	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	P1.5 P2, P3 E2, E3 T2.5	P1.5 (5) P2 (8), P3 (8) E2 (6), E3 (8) T2.5 (6)	

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 268HD/ND 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  $\pm$  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

 $> 100 M\Omega$  at 1000VDC (terminals to earth).

## **Operative limits**

REFER ALSO TO S264 DATA SHEET FOR POSSIBLE FURTHER LIMITATION DUE TO SEAL VARIANTS AND FOR DATA RELEVANT TO THE POSSIBLE REMOTE SEAL (IF SELECTED ON NEGATIVE SIDE)

## Temperature limits °C (°F):

#### Ambient (is the operating temperature)

	Model	Models 268HD/ND		
Filling	Sensors F to S	Sensor E	Sensors G to S	
Silicone oil	-40 and +85	-25 and +85	-40 and +85	
DC 200	(-40 and +185)	(-13 and +185)	(-40 and +185)	
Inert	-20 and +85	-10 and +85	-20 and +85	
Galden	(-4 and +185)	(+14 and +185)	(-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 268DD only)

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

Upper limit (side without seal for 268DD 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.

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

Fill fluids with FDA are defined as food fills and are Generally Recognized As Safe (GRAS) by the US Food and Drug Administration (FDA).

#### Limits for gaskets (flange to seal) of S264M and S264T

- Viton: -20°C (-4°F) to 200°C (392°F)

#### Limits for gaskets of flushing rings

Material	Pressure (max.)	Temperature (max.) (min.)		PxT limit
Garlock	6.9MPa, 69bar,	204° C	-73° C	250000
	1000psi	(400° F)	(-100° F)	(° F x psi)
Graphite	2.5MPa, 25bar,	380° C	-100° C	
Chaprille	362psi	(716° F)	(-148° F)	
PTFE	6MPa, 60bar,	250° C	-100° C	
III	870psi	(482° F)	(-148° F)	

#### 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 sensor code E of model 268DD
- -14MPa, 140bar, 2030psi for sensor codes G,H,M of model 268HD/ND
- 21MPa, 210bar, 3045psi for sensor codes F to S of model 268DD and for sensor codes P,Q,S of models 268HD and 268ND.
- maximum flange pressure rating (see tables below)

For model S264E flanged seal:

	O	
Rating/Class to EN 1092-1	Carbon Steel @ 120° C	AISI 316 Stainless Steel @ 20° C
10 EN 1032-1	@ 120 0	@ 20 0
PN16	16bar	16bar
PN40	40bar	40bar
PN63	63bar	63bar
PN100	100bar	100bar

For model S264A (RF) and S264R (RJ) flanged seal:

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
Class 1500	3705psi	3600psi

For model S264G flanged seal:

Rating/Class to JIS B 2220	Carbon Steel @ 120° C	AISI 316 Stainless Steel @ 120° C
10K	14bar	14bar
20K	36bar	36bar
40K	68bar	68bar

For model S264M off-line flanged seal:

- Class 150 to ASME B16.5: 230psi @100°F (38°C)

- Class 300 to ASME B16.5: 600psi @100°F (38°C)

- PN16-40 to EN 1092-1: 34bar @20°C

For model S264W wafer or S264T off-line threaded connection seal:

- 16MPa, 160bar, 2320psi @20°C (68°F) (but not greater than the wafer backup flange rating, not supplied)

The pressure limit decreases with increasing temperature above to the specified values as defined for the material, respectively for ASME B16.5, EN 1092-1 or JIS standards.

#### Static pressure

Transmitters for differential pressure model 268DD operates within specifications between the following limits:

- 1.3kPa abs, 13mbar abs, 0.2psia and 21MPa, 210bar, 3045psi (16MPa, 160bar, 2320psi for sensor code E) or flange rating of seal as above, whichever is less
- 0.07kPa abs, 0.7mbar abs, 0.01psia and 21MPa, 210bar, 3045psi (16MPa, 160bar, 2320psi for sensor code E) 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 268DD and for sensor codes G.H.M of models 268HD and 268ND
- 40MPa, 400bar, 5900psi for sensor codes P.Q.S of models 268HD and 268ND

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

Meet ANSI/ISA-S 82.03 hydrostatic test requirements.

#### **Environmental limits**

#### Electromagnetic compatibility (EMC)

Comply with EN 61000-6-3 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:

10V (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

admissible Condensing, icing:

#### 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

- INTRINSIC SAFETY and EXPLOSION PROOF/ATEX: ZELM approval

II 1G Ex ia IIC T6 and II 1/2G Ex ia IIC T6 and II 1D Ex iaD 20 T95°C and II 1/2D Ex iaD 21 T95°C

resp. II 1/2G Ex d IIC T6 and II 1/2D Ex tD A21 IP67 T85°C

- EXPLOSION PROOF/IECEx:

ZELM approval

Ex d IIC T6 Ga/Gb resp.

Ex tb IIIC T85°C Da/Db (-40°C < Ta < +75°C)

- CANADIAN STANDARD 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)
- GOST (Russia), GOST (Kazakhstan), Inmetro (Brazil pending) based on ATEX

## **Electrical Characteristics and Options**

## HART digital communication and 4 to 20mA output

#### **Power Supply**

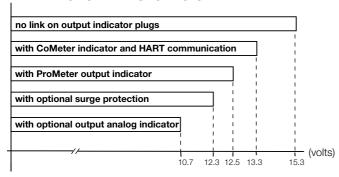
The transmitter operates from 10.5 to 42VDC with no load and is protected against reverse polarity connection (additional load allows operations over 42VDC).

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

#### Ripple

20mV max on a 250 $\Omega$  load as per HART specifications

#### MINIMUM OPERATING VOLTAGES



#### **Load limitations**

4 to 20mA and HART total loop resistance:

 $R(k\Omega) = \frac{\text{Supply voltage - min. operating voltage (VDC)}}{\frac{1}{2}}$ 

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

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### **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°.

#### 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  $^3/_2$  or  $^5/_2$ , 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)

Low saturation: 3.8mA (field configurable from 3.5 to 4mA)

High saturation: 20.5mA (field configurable from 20 to 22.5mA)

#### Alarm current

Low alarm current: 3.7mA (field configurable from 3.5 to 4mA)

High alarm current: 22mA (field configurable from 20 to 22.5mA)

Factory setting: high alarm current

## **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 digital trim values equal to 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% x  $\frac{\mbox{URL}}{\mbox{Span}}$  for TD from 10:1 to 20:1

$$(\pm 0.01\% \text{ x} \quad \frac{\text{URL}}{\text{Span}} \quad \text{for sensor code F}$$

$$\pm 0.02\%$$
 x  $\frac{URL}{Span}$  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)

$$-\pm0.0075\%$$
 x  $\frac{URL}{Span}$  for TD from 10:1 to 20:1   
( $\pm0.02\%$  x  $\frac{URL}{Span}$  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:

Coal time size	Error				
Seal type size	kPa	mbar	inH <sub>2</sub> 0		
Flush 1-1/2in (RJ only)	0.52	5.2	2.09		
Flush 2in/DN50/A50	0.12	1.2	0.48		
Flush 3-4in/DN80-100/A80-100	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		
Off-line 2-1/2in	0.10	1	0.4		

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

Sool time sine	Error					
Seal type size	kPa	mbar	inH <sub>2</sub> 0			
Flush 1-1/2in (RJ only)	0.85	8.5	3.4			
Flush 2in/DN50/A50	0.32	3.2	1.28			
Flush 3-4in/DN80-100/A80-100	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			
Off-line 2-1/2in	0.25	2.5	1			

#### **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 268DD direct mount seal only

zero error: ±0.15% of URLspan error: ±0.15% of reading

#### Model 268DD direct mount plus remote seal

zero error: ±0.20% of URLspan 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 of transmitter and seal(s) for variant availability related to specific model or versions code)

#### **Materials**

#### Model 268DD only

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

AISI 316 L ss; Hastelloy C276 $^{\text{TM}}$ ; Monel 400 $^{\text{TM}}$ ; Tantalum; Hastelloy C276 $^{\text{TM}}$  on AISI 316 L ss gasket seat.

A remote seal can be selected with required diaphragm material (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 Class A4–80 and nuts Class A4-70 per UNI 7323 (ISO 3506):

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 268DD/HD/ND

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

AISI 316 L ss; Hastelloy C276™; Hastelloy C2000™; Inconel 625; Tantalum; AISI 316 L ss or Hastelloy C276™ with anti-stick coating; AISI 316 L ss with anti-corrosion coating; AISI 316 L ss gold plated; Superduplex ss (UNS S32750 to ASTM SA479); Diaflex (AISI with anti-abrasion treatment).

## **Extension material**

AISI 316 L ss (also for Diaflex and gold plated diaphragms); Hastelloy C276 $^{\text{TM}}$ ;

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-AN 140™; Inert-Galden™; Inert-Halocarbon™ 4.2; Silicone Polymer-Syltherm XLT™; Vegetable oil-Neobee M-20™; Glycerin Water; Mineral oil-MARCOL 82™.

#### Sensor fill fluid

Silicone oil (DC200 $^{\text{TM}}$ ); inert fill (Halocarbon  $^{\text{TM}}$  4.2 or Galden $^{\text{TM}}$ );

#### 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

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

## Tag and manual language

Communication connectors

Seal flushing ring (with relevant plugs and gasket)

#### **Process connections**

on conventional flanges: 1/4 - 18 NPT on process axis

on adapters: 1/2 - 14 NPT on process axis

fixing threads: 7/16 - 20 UNF at 41.3mm centre distance

on seal side (refer to drawings for details)

Flush diaphragm flanged seal (\*\*):

2in or 3in ASME 150 to 1500 RF; 4in ASME 150-300 RF;

1-1/2in, 2in or 3in ASME 150 to 1500 RJ; DN50 or DN80 DIN PN16-40, PN63-100;

DN100 PN16-40;

A50 or A80 Class 10K, 20K, 40K

A100 Class 10K, 20K.

Extended diaphragm flanged seal (\*\*): 2in, 3in or 4in ASME 150 - 300 RF; DN50, DN80 or DN100 PN16 - 40.

Off-line flanged connection seal (\*\*\*)

<sup>1</sup>/<sub>2</sub>in, 1in or 1-<sup>1</sup>/<sub>2</sub>in hole connection, ASME CL150-300;

DN25 or DN40, EN PN16-40.

Off-line threaded connection seal

1/4in, 1/2in, 3/4in, 1in or 1-1/2in NPT thread.

Gasket seat finish

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

serrated (ASME or JIS): 3.2 to 6.3 µm (Ra)

serrated (EN 1092-1 Type B1; up to PN40): 3.2 to 12.5µm (Ra) serrated (EN 1092-1 Type B2; PN63-100): 0.8 to 3.2µm (Ra).

Wafer seal (remote only)

1-1/2in, 2in or 3in to ASME;

DN40, DN50 or DN80 to EN.

(\*) Wetted parts of the transmitter.

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

(\*\*\*) Gasket to process supplied by customer.

#### **Electrical connections**

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

Special communication connector (on request)

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

#### **Terminal block**

HART version: three terminals for signal/external meter wiring up to 2.5mm² (14AWG) and three connection points for test and communication purposes.

#### 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 50kg approx (15 to 110lb) according to specified seal(s) options; add 1.5kg (3.4lb) for AISI housing. Add 650g (1.5lb) for packing.

### **Packing**

Carton

### 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

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

inH2O@20°C, ftH2O@20°C, mmH2O@20°C

inHg, mmHg, Torr g/cm², kg/cm², atm

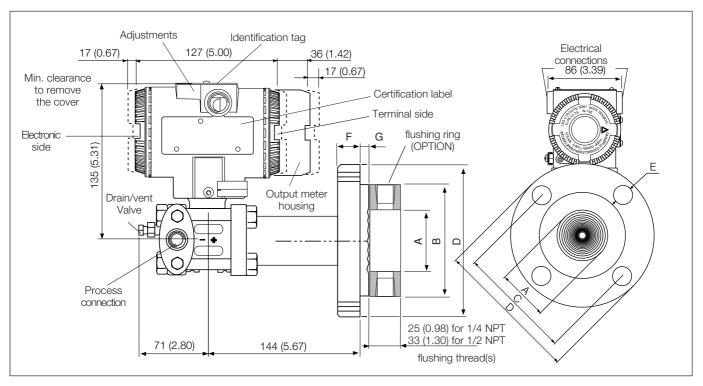
mbar, bar

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

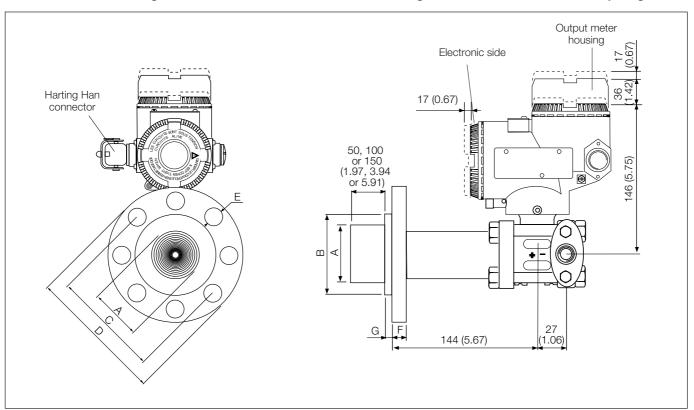
NOTE: For 268DD, low pressure side opposite to direct mount seal can be a conventional flange or suitable for capillary to remote seal.

Conventional process flange connection (1/4 – 18 NPT direct or 1/2 – 14 NPT through adapter), gasket groove and gaskets are in accordance with DIN 19213. Bolting threads or fixing adapter for other devices on process flange is 7/16 – 20 UNF.

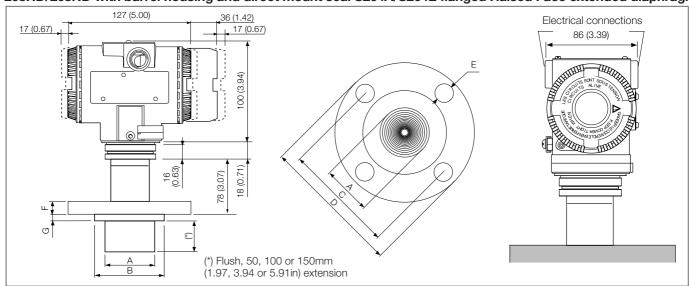
## 268DD with barrel housing and direct mount seal S264A/S264E/S264G flanged Raised Face flush diaphragm



## 268DD with DIN housing and direct mount seal S264A/S264E flanged Raised Face extended diaphragm



## 268HD/268ND with barrel housing and direct mount seal S264A/S264E flanged Raised Face extended diaphragm

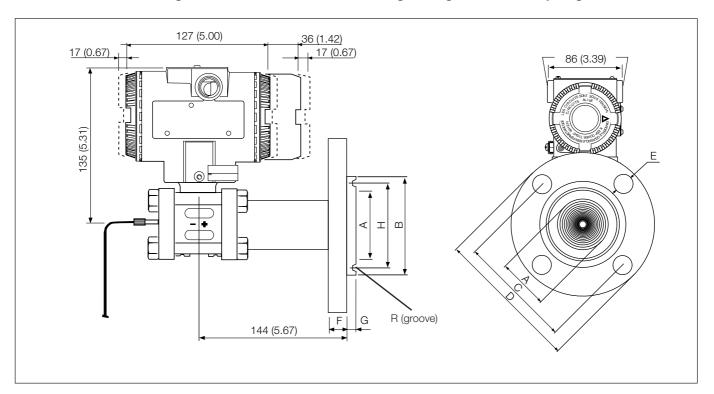


	Dimensions mm (in)									
Size/Rating	A (dia)								N° of holes	
	extended	flush	flushing ring	B (dia)	C (dia)	D (dia)	E (dia)	F	G	lioles
	diaphragm	diaphragm	internal dia							
2in ASME CL 150	48 (1.9)	60 (2.36)	62 (2.44)	92 (3.62)	120.65 (4.75)	152.4 (6)	20 (0.79)	19.05 (0.75)	9.5 (0.37)	4
2in ASME CL 300	48 (1.9)	60 (2.36)	62 (2.44)	92 (3.62)	127 (5)	165.1 (6.5)	20 (0.79)	22.35 (0.88)	9.5 (0.37)	8
2in ASME CL 600	NA	60 (2.36)	62 (2.44)	92 (3.62)	127 (5)	165.1 (6.5)	20 (0.79)	25.4 (1)	9.5 (0.37)	8
2in ASME CL 900	NA	60 (2.36)	62 (2.44)	92 (3.62)	165 (6.5)	215.9 (8.5)	26 (1.02)	38.1 (1.5)	9.5 (0.37)	8
2in ASME CL 1500	NA	60 (2.36)	62 (2.44)	92 (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	72 (2.83)	89 (3.5)	92 (3.62)	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	72 (2.83)	89 (3.5)	92 (3.62)	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	NA	89 (3.5)	92 (3.62)	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	NA	89 (3.5)	92 (3.62)	127 (5)	190.5 (7.5)	241 (9.48)	26 (1.02)	38.1 (1.50)	9.5 (0.37)	8
3in ASME CL1500	NA	89 (3.5)	92 (3.62)	127 (5)	203.2 (8)	266.7 (10.5)	31.75 (1.25)	47.8 (1.88)	9.5 (0.37)	8
4in ASME CL 150	94 (3.7)	89 (3.5)	92 (3.62)	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	94 (3.7)	89 (3.5)	92 (3.62)	157.2 (6.2)	200.2 (7.88)	254 (10)	22 (0.86)	32 (1.26)	9.5 (0.37)	8

	Dimensions mm (in)									
Size/Rating	extended diaphragm		flushing ring internal dia	B (dia)	C (dia)	D (dia)	E (dia)	F	G	N° of holes
DN50 EN PN16	48 (1.9)	60 (2.36)	62 (2.44)	102 (4.02)	125 (4.92)	165 (6.5)	18 (0.71)	20 (0.79)	9.5 (0.37)	4
DN50 EN PN40	48 (1.9)	60 (2.36)	62 (2.44)	102 (4.02)	125 (4.92)	165 (6.5)	18 (0.71)	20 (0.79)	9.5 (0.37)	4
DN50 EN PN63	NA	60 (2.36)	62 (2.44)	102 (4.02)	135 (5.31)	180 (7.08)	22 (0.86)	26 (1.02)	9.5 (0.37)	4
DN50 EN PN100	NA	60 (2.36)	62 (2.44)	102 (4.02)	145 (5.71)	195 (7.67)	26 (1.02)	28 (1.1)	9.5 (0.37)	4
DN80 EN PN16	72 (2.83)	89 (3.5)	92 (3.62)	138 (5.43)	160 (6.3)	200 (7.87)	18 (0.71)	20 (0.79)	9.5 (0.37)	8
DN80 EN PN40	72 (2.83)	89 (3.5)	92 (3.62)	138 (5.43)	160 (6.3)	200 (7.87)	18 (0.71)	24 (0.94)	9.5 (0.37)	8
DN80 EN PN63	NA	89 (3.5)	92 (3.62)	138 (5.43)	170 (6.7)	215 (8.46)	22 (0.86)	28 (1.1)	9.5 (0.37)	8
DN80 EN PN100	NA	89 (3.5)	92 (3.62)	138 (5.43)	180 (7.08)	230 (9.05)	26 (1.02)	32 (1.26)	9.5 (0.37)	8
DN100 EN PN16	94 (3.7)	89 (3.5)	92 (3.62)	158 (6.22)	180 (7.08)	220 (8.66)	18 (0.71)	20 (0.79)	9.5 (0.37)	8
DN100 EN PN40	94 (3.7)	89 (3.5)	92 (3.62)	162 (6.38)	190 (7.48)	235 (9.25)	22 (0.86)	24 (0.94)	9.5 (0.37)	8

	Dimensions mm (in)									
Size/Rating	A (dia) flush diaphragm	B (dia)	C (dia)	D (dia)	E (dia)	F	G	N° of holes		
A50 Class 10K	60 (2.36)	96 (3.78)	120 (4.72)	155 (6.1)	15 (0.59)	16 (0.63)	9.5 (0.37)	4		
A50 Class 20K	60 (2.36)	96 (3.78)	120 (4.72)	155 (6.1)	19 (0.75)	18 (0.71)	9.5 (0.37)	4		
A50 Class 40K	60 (2.36)	104.3 (4.11)	130 (5.12)	165 (6.5)	19 (0.75)	26 (1.02)	9.5 (0.37)	8		
A80 Class 10K	89 (3.5)	126 (4.96)	150 (5.91)	185 (7.28)	15 (0.59)	18 (0.71)	9.5 (0.37)	8		
A80 Class 20K	89 (3.5)	132 (5.2)	160 (6.3)	200 (7.87)	23 (0.91)	22 (0.87)	9.5 (0.37)	8		
A80 Class 40K	89 (3.5)	139.4 (5.49)	170 (6.69)	210 (8.27)	23 (0.91)	32 (1.26)	9.5 (0.37)	8		
A100 Class 10K	89 (3.5)	151 (5.94)	175 (6.89)	210 (8.27)	19 (0.75)	18 (0.71)	9.5 (0.37)	8		
A100 Class 20K	89 (3.5)	160 (6.3)	185 (7.28)	225 (8.86)	23 (0.91)	24 (0.94)	9.5 (0.37)	8		

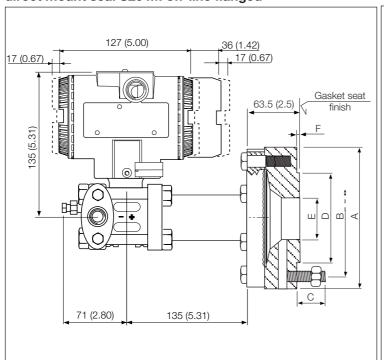
## 268DD with barrel housing and direct mount seal S264R flanged Ring Joint flush diaphragm

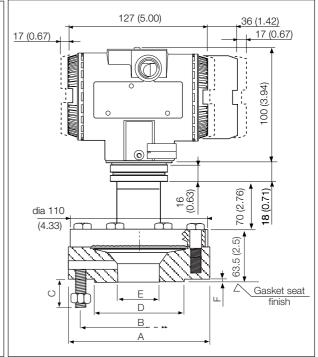


	Dimensions mm (in)									N° of
Size/Rating	A (dia)	B (dia)	C (dia)	D (dia)	E (dia)	F	G	H (dia)	R	holes
1-1/2in ASME CL 150	48 (1.89)	83 (3.27)	98.6 (3.88)	127 (5)	15.75 (0.62)	17.5 (0.69)	17.3 (0.68)	65.1 (2.56)	R19	4
1-1/2in ASME CL 300	48 (1.89)	90 (3.54)	114.3 (4.5)	155.5 (6.12)	22.35 (0.88)	20.6 (0.81)	17.3 (0.68)	68.3 (2.69)	R20	4
1-1/2in ASME CL 600	48 (1.89)	90 (3.54)	114.3 (4.5)	155.5 (6.12)	22.35 (0.88)	22.4 (0.88)	17.3 (0.68)	68.3 (2.69)	R20	4
1-1/2in ASME CL 900/1500	48 (1.89)	92 (3.62)	124 (4.88)	177.8 (7)	28.45 (1.12)	31.8 (1.25)	20.8 (0.82)	68.3 (2.69)	R20	4
2in ASME CL 150	60 (2.36)	102 (4.02)	120.65 (4.75)	152.4 (6)	19.05 (0.75)	19.05 (0.75)	17.3 (0.68)	82.6 (3.25)	R22	4
2in ASME CL 300	60 (2.36)	108 (4.25)	127 (5)	165.1 (6.5)	19.05 (0.75)	22.35 (0.88)	17.3 (0.68)	82.6 (3.25)	R23	8
2in ASME CL 600	60 (2.36)	108 (4.25)	127 (5)	165.1 (6.5)	19.05 (0.75)	25.4 (1)	17.3 (0.68)	82.6 (3.25)	R23	8
2in ASME CL 900/1500	60 (2.36)	124 (4.88)	165 (6.5)	215.9 (8.5)	25.4 (1)	38.1 (1.5)	20.8 (0.82)	95.3 (3.75)	R24	8
3in ASME CL 150	89 (3.5)	133 (5.24)	152.4 (6)	190.5 (7.5)	19.05 (0.75)	23.87 (0.94)	17.3 (0.68)	114.3 (4.5)	R29	4
3in ASME CL 300	89 (3.5)	146 (5.75)	168.15 (6.62)	209.55 (8.25)	22.35 (0.88)	28.44 (1.12)	17.3 (0.68)	123.8 (4.87)	R31	8
3in ASME CL 600	89 (3.5)	146 (5.75)	168.15 (6.62)	209.55 (8.25)	22.35 (0.88)	31.75 (1.25)	17.3 (0.68)	123.8 (4.87)	R31	8
3in ASME CL 900	89 (3.5)	155 (6.10)	190.5 (7.5)	241.3 (9.5)	25.4 (1)	38.1 (1.50)	20.8 (0.82)	123.8 (4.87)	R31	8
3in ASME CL 1500	89 (3.5)	168 (6.61)	203.2 (8)	266.7 (10.5)	31.75 (1.25)	47.8 (1.88)	20.8 (0.82)	136.5 (5.37)	R35	8

## 268DD with barrel housing and direct mount seal S264M off-line flanged

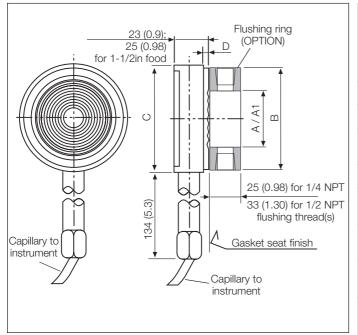
# 268HD/268ND with barrel housing and direct mount seal S264M off-line flanged





(	Connection								
C:	Standard	A (dia)	D (dia)	C (	4 studs)	D (dia)	E (dio)		
Size	Standard	A (dia)	B (dia) Length		Thread	D (dia)	E (dia)	F	
¹/₂in	ASME CL 150	110 (4.33)	60.5 (2.38)	39 (1.53)	1/2in - 13 UNC	35.1 (1.38)	15.8 (0.62)	1.6 (0.06)	
72111	ASME CL 300	110 (4.33)	66.5 (2.62)	39 (1.53)	1/2in - 13 UNC	33.1 (1.36)	13.6 (0.02)	1.6 (0.06)	
1in	ASME CL 150	110 (4.33)	79.4 (3.12)	39 (1.53)	1/2in - 13 UNC	EO 0 (0)	06.7 (1.05)	1.6 (0.06)	
	ASME CL 300	124 (4.88)	88.9 (3.5)	51 (2)	5/8in - 11 UNC	50.8 (2)	26.7 (1.05)	1.6 (0.06)	
4 1/ :	ASME CL 150	127 (5)	98.4 (3.87)	39 (1.53)	1/2in - 13 UNC	70 (0.07)	44 (4 04)	1.0 (0.00)	
1 <sup>1</sup> / <sub>2</sub> in	ASME CL 300	155 (6.1)	114.3 (4.5)	57 (2.24)	3/4in - 10 UNC	73 (2.87)	41 (1.61)	1.6 (0.06)	
DN 25	EN PN 16-40	115 (4.52)	85 (3.34)	42 (1.65)	M12	68 (2.67)	28.5 (1.12)	2 (0.07)	
DN 40	EN PN 16-40	150 (5.9)	110 (4.33)	48 (1.89)	M16	88 (3.46)	43.1 (1.69)	3 (0.12)	

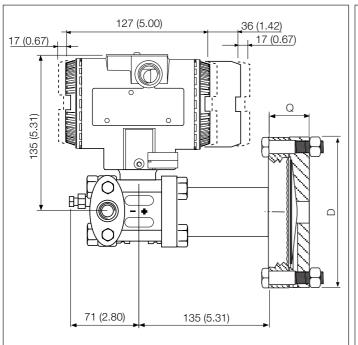
### Wafer remote seal mod. S264W

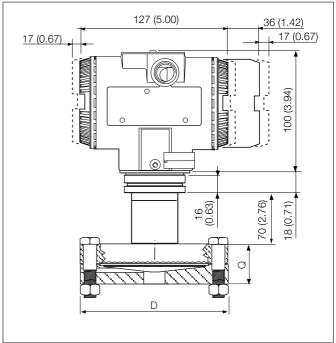


		DIMENS	SIONS mm	(in)	
Size	A (dia) diaph.	A1 Flushing ring int. dia.	B (dia)	С	D
1 <sup>1</sup> / <sub>2</sub> in	50 (1.97)	52 (2.05)	73 (2.87)	76.8 (3.02)	
2in	60 (2.36)	62 (2.44)	92 (3.62)	95.8 (3.77)	1.6
3in	89 (3.5)	92 (3.62)	127 (5)	130.8 (5.15)	(0.06)
DN 40	50 (1.97)	52 (2.05)	88 (3.46)	92 (3.62)	
DN 50	60 (2.36)	62 (2.44)	102 (4.02)	106 (4.17)	3 (0.12)
DN 80	89 (3.5)	92 (3.62)	138 (5.43)	142 (5.59)	
1 <sup>1</sup> / <sub>2</sub> in (food)	50 (1.97)	52 (2.05)	73 (2.87)	76.8 (3.02)	N.A.
3in (food)	89 (3.5)	92 (3.62)	127 (5)	130.8 (5.15)	3.7 (0.15)

## 268DD with barrel housing and direct mount seal S264T off-line threaded

## 268HD/268ND with barrel housing and direct mount seal S264T off-line threaded

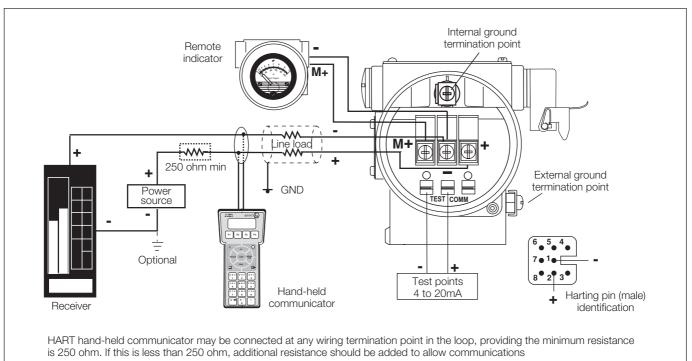




Size	Dimension	ns mm (in)
Size	D (dia)	Q
<sup>1</sup> / <sub>4</sub> in NPT, <sup>1</sup> / <sub>2</sub> in NPT	109.2 (4.3)	53.3 (2.1)
<sup>3</sup> / <sub>4</sub> in NPT, 1in NPT, 1 <sup>1</sup> / <sub>2</sub> in NPT	109.2 (4.3)	63.5 (2.5)

## **Electrical connections**

### **HART Version**



## **BASIC ORDERING INFORMATION model 268DD Safety Differential 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.

Aluminium alloy (Barrel version) Aluminium alloy copper-free (Barrel version) Alsi 316 L ss (Barrel version) Aluminium alloy (DIN version) Aluminium alloy (D	BASE MODEL - 1st to 5th chara	acters				2 6	8 D	D	X S	Х	Х	Х	Х	Х
0.54 and 18PAP	Safety Differential Pressure Tra	ansmitter with direct m	nount seal(s) - BASE AC	CURACY 0.075%										
0.637 and 400Pt	-													
1.1 and 66/Pa 26. and 11 and 650mbs														
2.67 and 1600Pa														
1 As and BOOKPe 0.1 and Char 4 As and Strpai 4 As and Strpai 134 and BOOKPe 0.1 and 24 par 134 and BOOKPe 0.1 and 24 par 134 and BOOKPe 1.34 and 1160ps 1.34 a														
40 and 2400KPa														
134 and 1500pkPa														
267 and 16000RPa   2.67 and 1600ber   38.7 and 2320psi   5   5   8   9   9   9   9   9   9   9   9   9														
		.67 and 160bar	38.7 and 2320psi											
Hastelloy CZ76™ (no AISI seat)   Silicone oil (one seat to be quoted separately)   NACE   K   Hastelloy CZ76™   Silicone oil (one seat to be quoted separately)   NACE   K   Monel 400™   Silicone oil (one seat to be quoted separately)   NACE   K   Monel 400™   Silicone oil (one seat to be quoted separately)   NACE   K   AISI 316   Silicone oil (one seat to be quoted separately)   NACE   K   AISI 316   Silicone oil (one seat to be quoted separately)   Note 1   NACE   K   AISI 316   Silicone oil (one seat to be quoted separately)   Note 1   NACE   K   AISI 316   Silicone oil   National 400™   Inert fluid-Galden (one seat to be quoted separately)   Note 1   NACE   K   NACE   NACE   K   NACE   K   NACE   NAC		l (wetted parts) - 8 <sup>th</sup>	character											
Hastelloy CZ76™ (not AIS) each   Silicone oil (one seal to be quoted separately)   NACE   K   Monel 400™   Silicone oil (one seal to be quoted separately)   NACE   K   Monel 400™   Silicone oil (one seal to be quoted separately)   NACE   K   Monel 400™   Silicone oil (one seal to be quoted separately)   NACE   K   AIS 316 Ls   Silicone oil (one seal to be quoted separately)   NACE   K   AIS 316 Ls   Silicone oil (one seal to be quoted separately)   Note 1   NACE   K   AIS 316 Ls   Silicone oil (one seal to be quoted separately)   Note 1   NACE   K   NACE   K   NACE   Monel 400™   Inert fluid-Galden (one seal to be quoted separately)   Note 1   NACE   K   NACE   Monel 400™   Inert fluid-Galden (one seal to be quoted separately)   Note 1   NACE   K   NACE	AISI 316 L ss		Silicone oil	(one seal to be a	uoted separ	ately)				S				
Hastelloy CZ76™   Silicone oil   (one seal to be quoted separately)   NACE   K   NACI   Monel 400™   Silicone oil   (one seal to be quoted separately)   NACE   K   NACI   MACI	Hastellov C276™ (on AISI sea	it)	Silicone oil						NACE					1
Monel 400   Mone   Silicone oil   (one seal to be quoted separately)   NACE   Monel   A   Silicone oil   (one seal to be quoted separately)   NACE   T   A   A   A   A   A   A   A   A   A		/												
Tantalum														
ASIS 316 L ss														ı
Hastelloy C276™ (A) (A) (S) each   nert fluid-Galden   cone seal to be quoted separately    (Note 1)   NACE   B   Nestalloy C276™ (Note 1)   NACE   C							(Note 1)		14710L					ı
Hastelloy C276™   Inert fluid-Galdem   Cone seal to be quoted separately    (Note 1)   NACE   C   NACE   C   Tantalum   Inert fluid-Galdem   Cone seal to be quoted separately    (Note 1)   NACE   C   Tantalum   Inert fluid-Galdem   Cone seal to be quoted separately    (Note 1)   NACE   C   Tantalum   Inert fluid-Halocarbon (one seal to be quoted separately    (Note 1)   NACE   C   NACE   NACE   C   NACE   NACE   C   NACE   NACE   C		at)							NACE					ı
Monet 400		αι					,							ı
Tantalum				`		,,	,							ı
ASI 316 L ss   Inert fluid-Halocarbon (one seal to be quoted separately)   (Note 1)   NACE														ı
Hastelloy C276™ (no ASI seat)   Inert fluid-Halocarbon (one seal to be quoted separately)   (Note 1)   NACE   O   NACE   P   Monel 400™   Inert fluid-Halocarbon (one seal to be quoted separately)   (Note 1)   NACE   4   NACE   1   NACE   4   NACE   4   NACE   4   NACE   4   NACE   4   NACE   1   NACE   4									1 W/ (OL					ı
Hastelloy C276™   Inert fluid-Halocarbon (one seal to be quoted separately)   (Note 1)   NACE   P   NACE   A   Tantalum   Inert fluid-Halocarbon (one seal to be quoted separately)   (Note 1)   NACE   5   A   NASI 316   Ls   S   Silcone oil (wo seals to be quoted separately)   (Note 1)   NACE   5   NASI 316   Ls   Silcone oil (wo seals to be quoted separately)   (Note 1)   NACE   5   NASI 316   Ls   S   NASI 316   Ls   NASI 316		at)					,		NACE					ı
Monel 400™   Inert fluid-Halocarbon (one seal to be quoted separately)   (Note 1)   NACE 4   NACE 5   NACE 4   NACE 4   NACE 5   NACE 4   NACE 5   NACE 4   NACE 5   NACE 4   NACE 5   NACE 5   NACE 4   NACE 5   NACE 4   NACE 5   NACE 4   NACE 5   NACE 4   NACE 5   NACE 5   NACE 4   NACE 5		ш					,							ı
Inart fluid-Hallocarbon   Inart fluid-Hallocarbon   Inart fluid-Hallocarbon   Inart fluid-Hallocarbon   Inart fluid-Hallocarbon   Invo seals to be quoted separately)   (Note 1)							,							ı
ASI 316 L ss							,							ı
ASIS 316 L ss							(Note I)		NACE					ı
ASIS 316 L ss   Inert fluid-Halocarbon (two seals to be quoted separately)   (Note 1)   W   Frocess flanges/adapters material and connection (wetted parts) – 9" character   (Note 2)   NACE   R   ASIS 316 L ss (Horizontal connection)   1/4 – 18 NPT-f direct (1/16 – 20 UNF U.S. drilling)   (Note 3)   NACE   B   ASIS 316 L ss (Horizontal connection)   1/4 – 18 NPT-f through adapter (1/16 – 20 UNF U.S. drilling)   (Note 3)   NACE   B   ASIS 316 L ss (Horizontal connection)   1/4 – 18 NPT-f direct (1/16 – 20 UNF U.S. drilling)   (Note 3)   NACE   B   ASIS 316 L ss (Horizontal connection)   1/4 – 18 NPT-f direct (1/16 – 20 UNF U.S. drilling)   (Note 3, 4)   NACE   B   ASIS 316 L ss (Horizontal connection)   1/4 – 18 NPT-f direct (1/16 – 20 UNF U.S. drilling)   (Note 3, 4)   NACE   E   (Note 4 000 mth (Horizontal connection)   1/4 – 18 NPT-f direct (1/16 – 20 UNF U.S. drilling)   (Note 3, 4)   NACE   E   (Note 4 000 mth (Horizontal connection)   1/4 – 18 NPT-f direct (1/16 – 20 UNF U.S. drilling)   (Note 3, 4)   NACE   E   (Note 4 000 mth (Horizontal connection)   1/4 – 18 NPT-f direct (1/16 – 20 UNF U.S. drilling)   (Note 3, 4)   NACE   E   (Note 4 000 mth (Horizontal connection)   1/4 – 18 NPT-f direct (1/16 – 20 UNF U.S. drilling)   (Note 3, 4)   NACE   E   (Note 2)   (Note 3, 4)   NACE   E   (Note 4 000 mth (Horizontal connection)   1/4 – 14 NPT-f through adapter (1/16 – 20 UNF U.S. drilling)   (Note 3, 4)   NACE   E   (Note 2)   S   S   (Note 2)   S   (Note 2)   S   S   (Note 3)							/NI=+= +\							ı
ASI 316 L ss for two seals construction   (Note 2) NACE   R							,							ı
AISI 316 L ss for two seals construction  AISI 316 L ss (Horizontal connection)  1/4 – 18 NPT-f direct (1/16 – 20 UNF U.S. drilling)  (Note 2)  NACE A AISI 316 L ss (Horizontal connection)  1/2 – 14 NPT-f through adapter (1/16 – 20 UNF U.S. drilling)  (Note 3)  NACE B Hastelloy C276™ (Horizontal connection)  1/3 – 18 NPT-f direct (1/16 – 20 UNF U.S. drilling)  (Note 3, 4)  NACE B Hastelloy C276™ (Horizontal connection)  1/4 – 18 NPT-f direct (1/16 – 20 UNF U.S. drilling)  (Note 3, 4)  NACE B Hastelloy C276™ (Horizontal connection)  1/4 – 18 NPT-f direct (1/16 – 20 UNF U.S. drilling)  (Note 3, 4)  NACE B Hastelloy C276™ (Horizontal connection)  1/4 – 18 NPT-f direct (1/16 – 20 UNF U.S. drilling)  (Note 3, 4)  NACE B Honel 400™ (Horizontal connection)  1/4 – 18 NPT-f direct (1/16 – 20 UNF U.S. drilling)  (Note 3, 4)  NACE B Honel 400™ (Horizontal connection)  1/2 – 14 NPT-f through adapter (1/16 – 20 UNF U.S. drilling)  (Note 3, 4)  NACE B Honel 400™ (Horizontal connection)  1/2 – 14 NPT-f through adapter (1/16 – 20 UNF U.S. drilling)  (Note 3, 4)  NACE B Honel 400™ (Horizontal connection)  1/2 – 14 NPT-f through adapter (1/16 – 20 UNF U.S. drilling)  (Note 3, 4)  NACE B Honel 400™ (Horizontal connection)  1/2 – 14 NPT-f through adapter (1/16 – 20 UNF U.S. drilling)  (Note 3, 4)  NACE B Honel 400™ (Horizontal connection)  Note 3, 4)  NACE B Horizontal connection  Note 3, 4  NACE B Horizontal connection  Note 3, 4  NACE B Horizontal conn		torial and souncetic			quoted sepa	arately)	(Note 1)			VV	]			
ASI 316 L ss (Horizontal connection)			ii (wetteu parts) – 9	Character										
ASI 316 Les (Horizontal connection)							,							
Hastelloy C276 <sup>TM</sup> (Horizontal connection)							(Note 3)							
Hastelloy C276™ (Horizontal connection)  1/2 - 14 NPT-f through adapter (7/16 - 20 UNF U.S. drilling)  Notes 3, 4) NACE E Monel 400™ (Horizontal connection)  1/4 - 18 NPT-f through adapter (7/16 - 20 UNF U.S. drilling)  Notes 3, 4) NACE B Monel 400™ (Horizontal connection)  1/2 - 14 NPT-f through adapter (7/16 - 20 UNF U.S. drilling)  Notes 3, 4) NACE B Note 4 NACE B Note 4 NACE B Note 5 NACE Without gaskets for two seals construction - (MWP = 16MPa)  Notes 3 (NACE) without gaskets for two seals construction - (MWP = 16MPa)  ASI 316 ss (NACE) without gaskets for two seals construction - (MWP = 16MPa)  Note 2 NACE S NASI 316 ss without gaskets for two seals construction - (MWP = 16MPa)  Note 3 NACE S NASI 316 ss (NACE) - (MWP = 16MPa)  Note 3 NACE S NASI 316 ss (NACE) - (MWP = 16MPa)  NACE S NASI 316 ss (NACE) - (MWP = 16MPa)  NACE S NASI 316 ss (NACE) - (MWP = 16MPa)  NACE S NASI 316 ss (NACE) - (MWP = 16MPa)  NACE S NASI 316 ss (NACE) - (MWP = 16MPa)  NACE S NASI 316 ss (NACE) - (MWP = 16MPa)  NACE S NACE S NASI 316 ss (NACE) - (MWP = 16MPa)  NACE S NACE S NACE S NASI 316 ss (NACE) - (MWP = 16MPa)  NACE S NACE						drilling)	,							
Monel 400™ (Horizontal connection)														
Monel 400™ (Horizontal connection)         1/₂ - 14 NPT-f through adapter (7/16 - 20 UNF U.S. drilling)         (Notes 3, 4)         NACE         H           Jolist/Gasket (wetted parts) - 10™ character           AISI 316 ss (NACE) without gaskets for two seals construction - (MWP = 16MPa)         (Note 2)         NACE         R           AISI 316 ss without gaskets for two seals construction         (NUT ™ (Note 3)         NACE         S           AISI 316 ss (NACE) - (MWP = 16MPa)         Viton™ (Note 3)         NACE         3           AISI 316 ss (NACE) - (MWP = 16MPa)         Viton™ (Note 3)         NACE         3           AISI 316 ss (NACE) - (MWP = 16MPa)         Viton™ (Note 3)         NACE         3           AISI 316 ss (NACE) - (MWP = 16MPa)         Viton™ (Note 3)         NACE         3           AISI 316 ss (NACE) - (MWP = 16MPa)         Viton™ (Note 3)         NACE         3           AISI 316 ss (NACE) - (MWP = 16MPa)         Viton™ (Note 3)         NACE         4           AISI 316 ss (NACE) - (MWP = 16MPa)         Viton™ (Note 3)         NACE         3           AISI 316 ss (Barrel version)         M20 x 1.5 (CM 20)           AISI 316 series version)         M20 x 1.5 (CM 20)         (General purpose only) <td< td=""><td></td><td></td><td></td><td></td><td></td><td>drilling)</td><td>(Notes 3</td><td>3, 4)</td><td></td><td></td><td></td><td></td><td></td><td></td></td<>						drilling)	(Notes 3	3, 4)						
AlSI 316 ss (NACE) without gaskets for two seals construction - (MWP = 16MPa)	Monel 400™ (Horizontal conne	ection)	1/4 - 18 NPT-f direct (	7/16 - 20 UNF U.S	i. drilling)		(Notes 3	3, 4)	NACE		G			
AISI 316 ss (NACE) without gaskets for two seals construction - (MWP = 16MPa) (Note 2) NACE R AISI 316 ss without gaskets for two seals construction  AISI 316 ss without gaskets for two seals construction  Viton <sup>TM</sup> (Note 3) 1  AISI 316 ss  PTFE (Notes 1, 3) 2  AISI 316 ss (NACE) - (MWP = 16MPa) Viton <sup>TM</sup> (Note 3) NACE 3  AISI 316 ss (NACE) - (MWP = 16MPa) PTFE (Notes 1, 3) NACE 3  AISI 316 ss (NACE) - (MWP = 16MPa) PTFE (Notes 1, 3) NACE 4  AISI 316 ss (NACE) - (MWP = 16MPa) PTFE (Notes 1, 3) NACE 4  AISI 316 ss (NACE) - (MWP = 16MPa) PTFE (Notes 1, 3) NACE 4  AISI 316 ss (NACE) - (MWP = 16MPa) PTFE (Notes 1, 3) NACE 4  AISI 316 ss (NACE) - (MWP = 16MPa) PTFE (Notes 1, 3) NACE 4  AISI 316 ss (NACE) - (MWP = 16MPa) PTFE (Notes 1, 3) NACE 4  AISI 316 ss (NACE) - (MWP = 16MPa) PTFE (Notes 1, 3) NACE 4  AISI 316 ss (NACE) - (MWP = 16MPa) NACE 4  AISI 316 ss (NACE) - (MWP = 16MPa) NACE 3  AISI 316 ss (NACE) - (MWP = 16	•	,	1/2 - 14 NPT-f through	n adapter ( <sup>7</sup> / <sub>16</sub> – 2	0 UNF U.S.	drilling)	(Notes 3	3, 4)	NACE		Н			
AISI 316 ss without gaskets for two seals construction  AISI 316 ss AISI 316			1 1 (1401)	21.4D. )		(1) (1)			NIAOE			_		
AISI 316 ss  AISI 316 ss  AISI 316 ss  AISI 316 ss (NACE) - (MWP = 16MPa)  AISI 316 L ss (Barrel version)  AI				oMPa)					NACE					
AISI 316 ss (NACE) - (MWP = 16MPa)		JI IWO Seals CONSTRUCTI	OH		VitonTM	, ,								
AISI 316 ss (NACE) - (MWP = 16MPa) AISI 316 ss (Na						'								
Alsi 316 ss (NACE) - (MWP = 16MPa) PTFE (Notes 1, 3) NACE 4  Housing material and electrical connection - 11th character  Aluminium alloy (Barrel version) 1/2 - 14 NPT Aluminium alloy (Barrel version) M20 x 1.5 (CM 20) Aluminium alloy (Barrel version) Pg 13.5 Aluminium alloy (Barrel version) Pg 13.5 Aluminium alloy (Barrel version) Pg 13.5 Aluminium alloy copper-free (Barrel version) M20 x 1.5 (CM 20) Aluminium alloy copper-free (Barrel version) M20 x 1.5 (CM 20) Aluminium alloy copper-free (Barrel version) Pg 13.5 Aluminium alloy copper-free (Barrel version) Pg 13.5 Aluminium alloy copper-free (Barrel version) Pg 13.5 Aluminium alloy copper-free (Barrel version) 1/2 - 14 NPT Aluminium alloy copper-free (Barrel version) Pg 13.5 Alsi 316 L ss (Barrel version) M20 x 1.5 (CM 20) Alsi 316 L ss (Barrel version) Pg 13.5 Aluminium alloy (DIN version) Harting Han connector (general purpose only) (Note 5)		10MD-\				. ,			NIAOE					
Aluminium alloy (Barrel version)   1/2 - 14 NPT														
Aluminium alloy (Barrel version) Aluminium alloy copper-free (Barrel version) Alsi 316 L ss (Barrel version) Aluminium alloy (DIN version) Aluminiu	, , ,		character		r II L	(Notes 1, 5)			NACL			4		
Aluminium alloy (Barrel version) Aluminium alloy (Barrel version) Aluminium alloy (Barrel version) Aluminium alloy (Barrel version) Aluminium alloy copper-free (Barrel version) Alsi 316 L ss (Barrel version) Aluminium alloy (DIN version) Aluminium alloy (DIN version) Aluminium alloy (DIN version) Aluminium alloy (DIN version) Harting Han connector (general purpose only) (Note 5)	Aluminium alloy (Barrel version	٦)	1/2 - 14 NPT										Α	
Aluminium alloy (Barrel version) Aluminium alloy copper-free (Barrel version) Alsi 316 L ss (Barrel version) Aluminium alloy (DIN version) Aluminium alloy (D			M20 x 1.5 (CM 20)										В	
Aluminium alloy (Barrel version)  Aluminium alloy (Barrel version)  Aluminium alloy (Barrel version)  Aluminium alloy (Barrel version)  Aluminium alloy copper-free (Barrel version)  Aluminium alloy (Barrel version)  Aluminium	- 1	'	, ,										D	ı
Aluminium alloy (Barrel version)  Aluminium alloy copper-free (Barrel version)  Alsi 316 L ss (B													C	ı
Aluminium alloy copper-free (Barrel version)  Alsi 316 L ss (Barrel version)				or	(general pu	rnose only)	(No	ote 5)					E	ı
Aluminium alloy copper-free (Barrel version) Aluminium alloy (Barrel version) Aluminium al	Aluminium alloy copper-free (F	Rarrel version)		"	(goriorai pu	i pose or iiy)	(140	, (0 0)					Н	ı
Aluminium alloy copper-free (Barrel version) Also 316 L ss (Barrel version) Also 3													L	ı
Aluminium alloy copper-free (Barrel version)  Aluminium alloy copper-free (Barrel version)  Alsi 316 L ss (Barrel version)  Pg 13.5  Aluminium alloy (DIN version)  Aluminium alloy (DIN version)  Aluminium alloy (DIN version)  Harting Han connector  (general purpose only)  (Note 5)			, , , , , , , , , , , , , , , , , , , ,										N	ı
Aluminium alloy copper-free (Barrel version)  AlSI 316 L ss (Barrel version)  AlUminium alloy (DIN version)  Aluminium alloy (DIN version)  Aluminium alloy (DIN version)  Harting Han connector  (general purpose only)  (Note 5)	, , , , ,	,												ı
AISI 316 L ss (Barrel version)       1/2 - 14 NPT         AISI 316 L ss (Barrel version)       M20 x 1.5 (CM 20)         AISI 316 L ss (Barrel version)       Pg 13.5         AISI 316 L ss (Barrel version)       1/2 GK         Aluminium alloy (DIN version)       M20 x 1.5 (CM 20)       (general purpose only)         Aluminium alloy (DIN version)       Pg 13.5       (general purpose only)         Aluminium alloy (DIN version)       Harting Han connector       (general purpose only)       (Note 5)					(		/h :	+- =>					М	ı
AISI 316 L ss (Barrel version)       M20 x 1.5 (CM 20)         AISI 316 L ss (Barrel version)       Pg 13.5         AISI 316 L ss (Barrel version)       ½ GK         Aluminium alloy (DIN version)       M20 x 1.5 (CM 20)       (general purpose only)         Aluminium alloy (DIN version)       Pg 13.5       (general purpose only)         Aluminium alloy (DIN version)       Harting Han connector       (general purpose only)       (Note 5)		Sarrei version)		or	(general pu	rpose only)	(No	te 5)					Р	ı
AISI 316 L ss (Barrel version)  AISI 316 L ss (Barrel version)  I/2 GK  Aluminium alloy (DIN version)  Aluminium alloy (DIN version)  Aluminium alloy (DIN version)  Pg 13.5  (general purpose only)  Aluminium alloy (DIN version)  Harting Han connector  (general purpose only)  (Note 5)													S	ı
AISI 316 L ss (Barrel version)  Aluminium alloy (DIN version)  Aluminium alloy (DIN version)  Pg 13.5  Aluminium alloy (DIN version)  Harting Han connector  (general purpose only)  (general purpose only)  (general purpose only)  (Note 5)	•												T	ı
Aluminium alloy (DIN version)       M20 x 1.5 (CM 20)       (general purpose only)         Aluminium alloy (DIN version)       Pg 13.5       (general purpose only)         Aluminium alloy (DIN version)       Harting Han connector       (general purpose only)       (Note 5)													V	ı
Aluminium alloy (DIN version)  Pg 13.5 (general purpose only)  Aluminium alloy (DIN version)  Harting Han connector (general purpose only) (Note 5)	'												U	ı
Aluminium alloy (DIN version) Harting Han connector (general purpose only) (Note 5)													J	ı
													Υ	ı
who the delitional antique of the share star	Aluminium alloy (DIN version)		Harting Han connecto	or	(general pu	rpose only)	(No	te 5)					Κ	l
rutput/Additional options – 12" character	Output/Additional options - 1	2 <sup>th</sup> character												
HART digital communication and 4 to 20mA (SIL2) No additional options (Note 6)	•		No additional options				(No	te 6)						
HART digital communication and 4 to 20mA (SIL2) Options requested (to be ordered by "Additional ordering code)	9	, ,	· ·	be ordered by "A	dditional ord	derina code)	,	,						

## **ADDITIONAL ORDERING INFORMATION for model 268DD**

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

				хх	хх	хх	XX	хх	XX	XX	XX	ХХ	XX	хх
Drain/vent valve (mate	rial and position) (wetted parts	s)												
AISI 316 L ss	on process axis	(Note 7)	NACE	V1										
AISI 316 L ss	on flange side top	(Note 7)	NACE	V2										
AISI 316 L ss	on flange side bottom	(Note 7)	NACE	V3										
Hastelloy C276™	on process axis	(Note 8)	NACE	V4										
	on flange side top	,	NACE	V5										
Hastelloy C276™	0 1	(Note 8)												
Hastelloy C276™	on flange side bottom	(Note 8)	NACE	V6										
Monel 400™	on process axis	(Note 9)	NACE	V7										
Monel 400™	on flange side top	(Note 9)	NACE	V8										
Monel 400™	on flange side bottom	(Note 9)	NACE	V9										
Electrical certification		ad 1/2D Intringia Safaty Ey ia			E-1									
	ory 1G and 1/2G, Category 1D ar				E1									
	ory 1/2 GD – Explosion Proof Ex				E2									
		M20 and Pg 13.5 electrical conne			E4									
Factory Mutual (FM) a	approval (only with ½-14NPT, M2	0 and Pg 13.5 electrical connection	1)		E6									
IECEx IIC T6 Ga/Gb i	resp. Ex tb IIIC T85° C Da/Db (on	y with 1/2-14NPT and M20 electrica	al conn./Barrel)		E9									
GOST (Russia) EEx ia		,	,		W1									
GOST (Russia) EEx o					W2									
GOST (Kazakistan) El					W3									
GOST (Kazakistan) El					W4									
Inmetro (Brazil) EEx ia					W5									l
Inmetro (Brazil) EEx d	(pending)				W6									
Inmetro (Brazil) EEx n					W7									
Metrologic (Russia)	((				WC									
Metrologic (Kazakhsta	an)				WD									
Output meter	a. , <sub>/</sub>				***	I								
ProMeter, Standard of	palibration					D1								
ProMeter, Special cal						D2								
	tor linear 0-100% scale					D3								
Analog output indicat	tor square root 0-10 scale					D4								
Analog output indicat	tor, special graduation (to be spec	ified for linear scale)				D5								
Analog output indicat	tor, special graduation (to be spec	ified for square root scale)				D6								
0 1	meter and HART configurator (C	. ,				D7								
	meter and HART configurator (C					D8								
Surge	Thotor and the first oor migarator (or	Sivilities Galletines Germagaration,					1							
Surge/Transient Prote	ector						0.4							
	50101						S1							
Operating manual														
German								M1						
Italian								M2						
French								M4						
Labels & tag language														
German									T1					
Italian									T2					
Spanish									T3					
French									T4					
Additional tag plate									• •					
• • •	on stainless steel plate									12				
Configuration														
	= inH2O/psi at 20° C; Temperatu										N2			
Standard - Pressure	= inH2O/psi at 4° C; Temperature	e = deg. F									N3			
	= inH <sub>2</sub> O/psi at 20° C; Temperatu	o o									N4			
	= inH <sub>2</sub> O/psi at 4° C; Temperature										N5			
Custom	20, por at 1 0, romporature										N6			
Certificates											0	'		
	EN 10204-3.1 of calibration (9-po	oint\										C1		
	nce with the order EN 10204–2.1	,										C6		
Material traceability		5stramont acorgin												
_														
	nce with the order EN 10204-2.1												H1	
	EN 10204-3.1 of process wetted	parts											НЗ	I
Connector	at onto		(NIc+c 10)											LIO
Harting Han – straigh	-		(Note 10)											U3
Harting Han – angle	entry		(Note 10)											U4

- Note 1: Suitable for oxygen service
- Note 2: Not available with low side diaphragm code S, H, K, M, T, A, B, F, C, D, L, Q, P, 4, 5
- Note 3: Not available with low side diaphragm code R, 2, W
- Note 4: Not available with diaphragm material/fill fluid code S, H, A, B, L, Q
- Nota 5: Select type in additional ordering code
- Note 6: Not available with Electronic Housing code P, E, K
- Note 7: Not available with Process flanges/adapters code D, E, G, H, R Note 8: Not available with Process flanges/adapters code A, B, G, H, R
- Note 9: Not available with Process flanges/adapters code A, B, D, E, R
- Note 10: 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 268HD Safety Gauge Pressure Transmitter with direct mount seal**

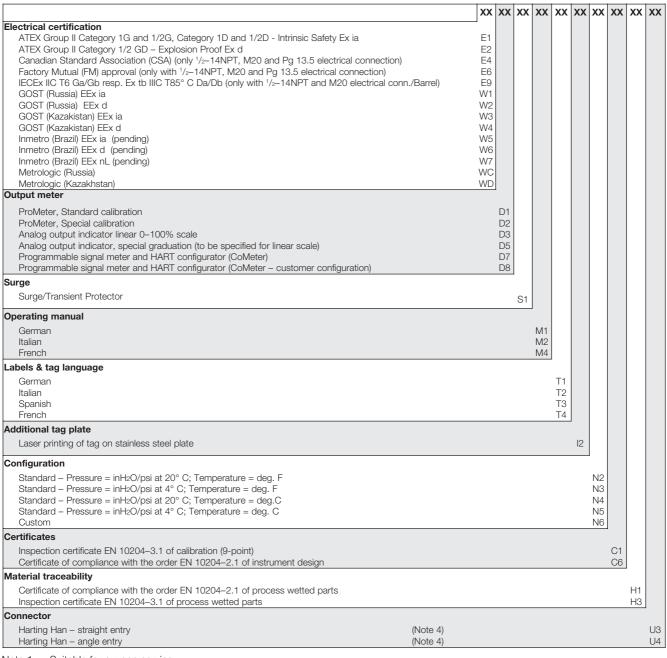
Select one character or set of characters from each category and specify complete catalog number.

Refer to additional ordering information code and specify one or more codes for each transmitter if additional options are required.

Safety Gauge Pressure		seal - BASE ACCURACY 0.075%	2 (	8 H	D X	Х	Х	X
SENSOR - Span limits -								
1.1 and 65 kPa	11 and 650mbar	4.35 and 260inH2O			G			
2.67 and 160kPa	26.7 and 1600mbar	10.7 and 642inH2O			Н			
10 and 600kPa	0.1 and 6bar	1.45 and 87psi			M			
40 and 2400kPa	0.4 and 24bar	5.8 and 348psi			Р			
134 and 8000kPa	1.34 and 80bar	19.4 and 1160psi			Q			
267 and 16000kPa	2.67 and 160bar	38.7 and 2320psi			S			
iaphragm material / Fi	II fluid - 7 <sup>th</sup> character					_		
AISI 316 L ss		Silicone oil				R		
AISI 316 L ss		Inert fluid - Galden	(Note 1)			2		
AISI 316 L ss		Inert fluid - Halocarbon	(Note 1)			W		
rocess connection - 8	3 <sup>th</sup> character							
Direct mount seal		(to be quoted separately)					М	
ousing material and el	lectrical connection – 9th ch	aracter						
Aluminium alloy (Barrel	version)	1/2 - 14 NPT						Α
Aluminium alloy (Barrel	version)	M20 x 1.5 (CM 20)						В
Aluminium alloy (Barrel	version)	Pg 13.5						D
Aluminium alloy (Barrel	version)	1/2 GK						С
Aluminium alloy (Barrel	version)	Harting Han connector	(general purpose only)	(Note 2)				Ε
Aluminium alloy copper-	-free (Barrel version)	1/2 - 14 NPT						Н
Aluminium alloy copper-	-free (Barrel version)	M20 x 1.5 (CM 20)						L
Aluminium alloy copper-	-free (Barrel version)	Pg 13.5						Ν
Aluminium alloy copper-	-free (Barrel version)	1/2 GK						Μ
Aluminium alloy copper-	-free (Barrel version)	Harting Han connector	(general purpose only)	(Note 2)				Ρ
AISI 316 L ss (Barrel ve	rsion)	1/2 - 14 NPT						S
AISI 316 L ss (Barrel ve	rsion)	M20 x 1.5 (CM20)						Τ
AISI 316 L ss (Barrel ve	rsion)	Pg 13.5						V
AISI 316 L ss (Barrel ve	rsion)	1/2 GK						U
utput/Additional optio	ns - 10 <sup>th</sup> character							
HART digital communic	ation and 4 to 20mA (SIL 2)	No additional options		(Note 3)				
	ation and 4 to 20mA (SIL 2)	Options requested (to be ordered by	ov "Additional ordering code")	. ,				

## **ADDITIONAL ORDERING INFORMATION for model 268HD**

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



Note 1: Suitable for oxygen service

Note 2: Select type in additional ordering code

Note 3: Not available with Electronic Housing code P, E

Note 4: 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 268ND Safety Absolute Pressure Transmitter** with direct mount seal

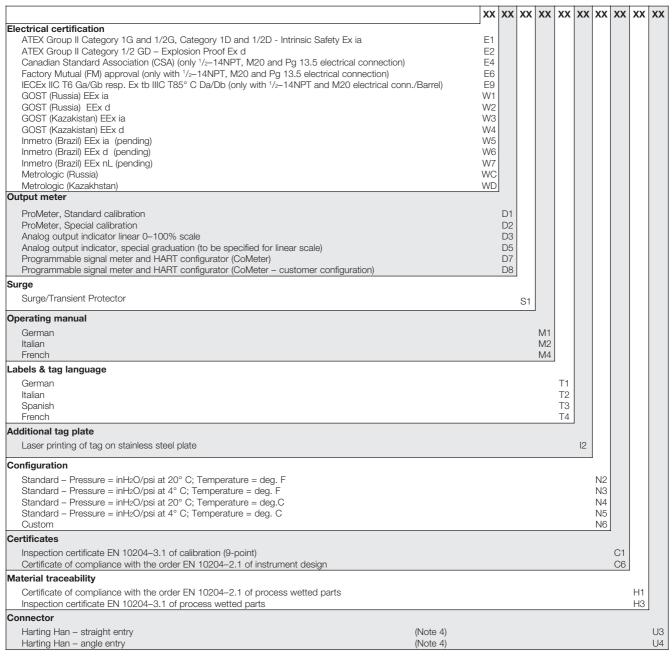
Select one character or set of characters from each category and specify complete catalog number.

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>t</sup> Safety Absolute Pressu		nt seal – BASE ACCURACY 0.075%	2 (	8 N	D X	X	Х	Х	)
SENSOR - Span limits -	- 6 <sup>th</sup> character								
1.1 and 65 kPa	11 and 650mbar	8 and 480mmHg			G				
2.67 and 160kPa	26.7 and 1600mbar	20 and 1200mmHg			Н				
10 and 600kPa	0.1 and 6bar	1.45 and 87psi			M				
40 and 2400kPa	0.4 and 24bar	5.8 and 348psi			Р				
134 and 8000kPa		19.4 and 1160psi			Q				
267 and 16000kPa	2.67 and 160bar	38.7 and 2320psi			S				
Diaphragm material / F	ill fluid - 7 <sup>th</sup> character								
AISI 316 L ss		Silicone oil				R			
AISI 316 L ss		Inert fluid - Galden	(Note 1)			2			
AISI 316 L ss		Inert fluid - Halocarbon	(Note 1)			W			
Process connection -	8 <sup>th</sup> character								
Direct mount seal		(to be quoted separately)					М		
lousing material and e	electrical connection – 9th cha	aracter						1	
Aluminium alloy (Barrel	version)	1/2 - 14 NPT						Α	
Aluminium alloy (Barrel	version)	M20 x 1.5 (CM 20)						В	
Aluminium alloy (Barrel	version)	Pg 13.5						D	
Aluminium alloy (Barrel	version)	1/2 GK						С	
Aluminium alloy (Barrel	version)	Harting Han connector	(general purpose only)	(Note 2)				Ε	
Aluminium alloy copper	r-free (Barrel version)	1/2 - 14 NPT						Н	
Aluminium alloy copper	r-free (Barrel version)	M20 x 1.5 (CM 20)						L	
Aluminium alloy copper	r-free (Barrel version)	Pg 13.5						Ν	
Aluminium alloy copper	r-free (Barrel version)	1/2 GK						Μ	
Aluminium alloy copper	r-free (Barrel version)	Harting Han connector	(general purpose only)	(Note 2)				Ρ	
AISI 316 L ss (Barrel ve	ersion)	1/2 - 14 NPT						S	
AISI 316 L ss (Barrel ve	ersion)	M20 x 1.5 (CM20)						Τ	
AISI 316 L ss (Barrel ve	ersion)	Pg 13.5						V	
AISI 316 L ss (Barrel ve	ersion)	1/2 GK						U	
utput/Additional option	ons - 10th character								-
HART digital communic	cation and 4 to 20mA (SIL 2)	No additional options		(Note 3)					
	cation and 4 to 20mA (SIL 2)	Options requested (to be ordered	by "Additional ordering code")	,,					

## **ADDITIONAL ORDERING INFORMATION for model 268ND**

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



Note 1: Suitable for oxygen service

Note 2: Select type in additional ordering code

Note 3: Not available with Electronic Housing code P, E

Note 4: 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.

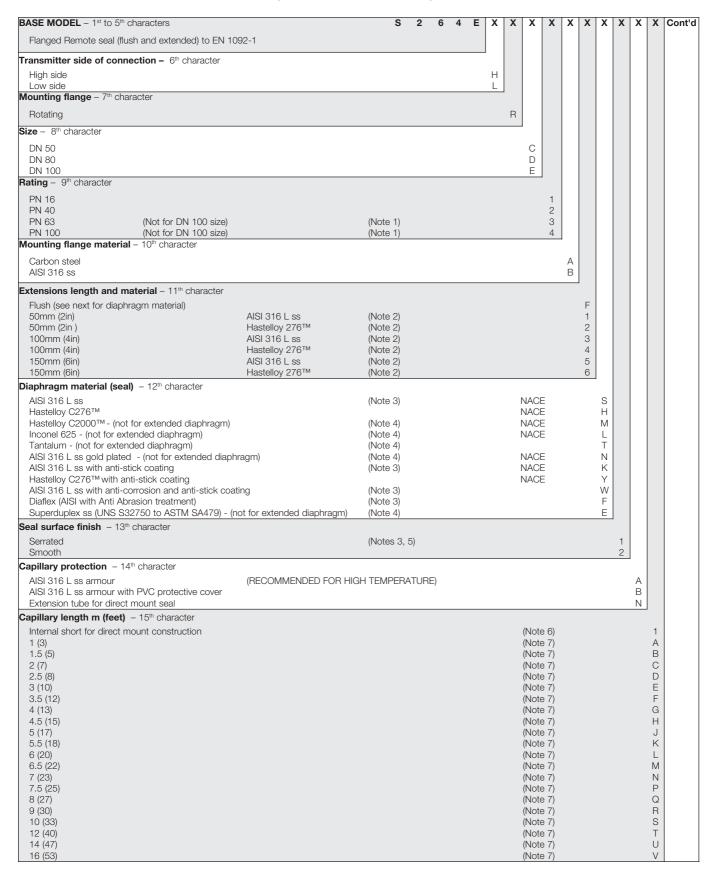
## BASIC ORDERING INFORMATION model S264A Flanged seal (flush and extended) - Raised Face

BASE MODEL – 1st to 5th characters S 2 6  Flanged seal (flush and extended) to ASME B16.5  Transmitter side of connection – 6th character												
, , , , , , , , , , , , , , , , , , ,	4 A	X	Х	Х	Х	X	X	X	Х	X	Х	Cont'd
Transmitter side of connection - 6th character												
		'										
High side		Н										
Low side		Ľ										
Mounting flange – 7th character												
Rotating			R									
Size - 8th character												
				_								
2in 3in				C D								
4in				E								
Rating - 9th character					1							
ASME CL 150					1							
ASME CL 300					2							
ASME CL 600 (Not available with 4in size) (Note 1)					3							
ASME CL 900 (Not available with 4in size) (Note 1) ASME CL 1500 (Not available with 4in size) (Note 1)					4 5							
ASME CL 1500 (Not available with 4in size) (Note 1)  Mounting flange material – 10 <sup>th</sup> character					5							
						٨						
Carbon steel AISI 316 ss						A B						
						ں						
Extensions length and material – 11 <sup>th</sup> character												
Flush (see next for diaphragm material) 50mm (2in) AISI 316 L ss (Note 2)							F 1					
50mm (2in) AISI 316 L ss (Note 2) 50mm (2in ) Hastelloy 276™ (Note 2)							2					
100mm (4in) AISI 316 L ss (Note 2)							3					
100mm (4in) Hastelloy 276™ (Note 2)							4					
150mm (6in) AISI 316 L ss (Note 2)							5					
150mm (6in) Hastelloy 276™ (Note 2)							6	l				
Diaphragm material (seal) – 12th character					_			0				
AISI 316 L ss (Note 3) Hastelloy C276™				NACI NACI				S				
Hastelloy C2000™ - (not for extended diaphragm) (Note 4)				NACI				М				
Inconel 625 - (not for extended diaphragm) (Note 4)				NACI				L				
Tantalum - (not for extended diaphragm) (Note 4)								Т				
AISI 316 L ss gold plated - (not for extended diaphragm) (Note 4) AISI 316 L ss with anti-stick coating (Note 3)				NACI NACI				N K				
Hastelloy C276 <sup>TM</sup> with anti–stick coating				NACI				Y				
AISI 316 L ss with anti-corrosion and anti-stick coating (Note 3)								W				
Diaflex (AISI with Anti Abrasion treatment) (Note 3)								F				
Superduplex ss (UNS S32750 to ASTM SA479) - (not for extended diaphragm) (Note 4)								Е				
Seal surface finish – 13th character												
Serrated (Notes 3, 5)									1			
Smooth									2	]		
Capillary protection – 14th character	)\									٨		
AISI 316 L ss armour (RECOMMENDED FOR HIGH TEMPERATURI AISI 316 L ss armour with PVC protective cover	(∟)									A B		
Extension tube for direct mount seal										N		
Capillary length m (feet) – 15 <sup>th</sup> character											•	
				(Note	e 6)						1	
Internal short for direct mount construction				(Not	e 7)						Α	
				(Note							В	
Internal short for direct mount construction 1 (3) 1.5 (5)				(Note							C D	
Internal short for direct mount construction 1 (3) 1.5 (5) 2 (7)											E	
Internal short for direct mount construction 1 (3) 1.5 (5) 2 (7) 2.5 (8)				(Note								
Internal short for direct mount construction 1 (3) 1.5 (5) 2 (7)				(Note (Note (Note	e 7)						F	
Internal short for direct mount construction 1 (3) 1.5 (5) 2 (7) 2.5 (8) 3 (10) 3.5 (12) 4 (13)				(Note (Note (Note	e 7) e 7) e 7)						F G	
Internal short for direct mount construction 1 (3) 1.5 (5) 2 (7) 2.5 (8) 3 (10) 3.5 (12) 4 (13) 4.5 (15)				(Note (Note (Note (Note	e 7) e 7) e 7) e 7)						F G H	
Internal short for direct mount construction 1 (3) 1.5 (5) 2 (7) 2.5 (8) 3 (10) 3.5 (12) 4 (13) 4.5 (15) 5 (17)				(Note (Note (Note (Note (Note	e 7) e 7) e 7) e 7) e 7)						F G H J	
Internal short for direct mount construction 1 (3) 1.5 (5) 2 (7) 2.5 (8) 3 (10) 3.5 (12) 4 (13) 4.5 (15)				(Note (Note (Note (Note	e 7) e 7) e 7) e 7) e 7) e 7)						F G H	
Internal short for direct mount construction 1 (3) 1.5 (5) 2 (7) 2.5 (8) 3 (10) 3.5 (12) 4 (13) 4.5 (15) 5 (17) 5.5 (18) 6 (20) 6.5 (22)				(Note (Note (Note (Note (Note (Note (Note (Note (Note	e 7)						F G H J K L M	
Internal short for direct mount construction 1 (3) 1.5 (5) 2 (7) 2.5 (8) 3 (10) 3.5 (12) 4 (13) 4.5 (15) 5 (17) 5.5 (18) 6 (20) 6.5 (22) 7 (23)				(Note (Note (Note (Note (Note (Note (Note (Note (Note (Note	e 7)						F G H J K L M N	
Internal short for direct mount construction 1 (3) 1.5 (5) 2 (7) 2.5 (8) 3 (10) 3.5 (12) 4 (13) 4.5 (15) 5 (17) 5.5 (18) 6 (20) 6.5 (22) 7 (23) 7.5 (25)				(Note (Note	e 7)						F G H J K L M N P	
Internal short for direct mount construction  1 (3)  1.5 (5)  2 (7)  2.5 (8)  3 (10)  3.5 (12)  4 (13)  4.5 (15)  5 (17)  5.5 (18)  6 (20)  6.5 (22)  7 (23)  7.5 (25)  8 (27)				(Note (Note	e 7)						F G H J K L M N P Q	
Internal short for direct mount construction 1 (3) 1.5 (5) 2 (7) 2.5 (8) 3 (10) 3.5 (12) 4 (13) 4.5 (15) 5 (17) 5.5 (18) 6 (20) 6.5 (22) 7 (23) 7.5 (25)				(Note (Note	e 7)						F G H J K L M N P	
Internal short for direct mount construction 1 (3) 1.5 (5) 2 (7) 2.5 (8) 3 (10) 3.5 (12) 4 (13) 4.5 (15) 5 (17) 5.5 (18) 6 (20) 6.5 (22) 7 (23) 7.5 (25) 8 (27) 9 (30) 10 (33) 12 (40)				(Note	e 7)						F G H J K L M N P Q R S T	
Internal short for direct mount construction 1 (3) 1.5 (5) 2 (7) 2.5 (8) 3 (10) 3.5 (12) 4 (13) 4.5 (15) 5 (17) 5.5 (18) 6 (20) 6.5 (22) 7 (23) 7.5 (25) 8 (27) 9 (30) 10 (33)				(Note	e 7)						FGHJKLMNPQRS	

BASIC ORDERING INFORMATION S264A			Х	Х	Х	Х	Х
Fill fluid - 16th character							
Silicone oil Inert fluid - Galden Inert fluid - Halocarbon Silicone oil for high temperature Silicone polymer for low temperature	(Note 8) (Note 8)		S N D G C				
Mineral oil (FDA approved)  Vegetable oil (FDA approved)  Glycerin-water (FDA approved)	(Note 9) (Note 9) (Note 9)		W A B				
Certification – 17 <sup>th</sup> character	(			'			H
None				1			
Flushing ring: hole and thread – 18th character							
None 1 hole - 1/2in NPT 2 holes - 1/2in NPT 1 hole - 1/4in NPT 2 holes - 1/4in NPT		(Note 4) (Note 4) (Note 4) (Note 4)			N 2 3 4 5		
Flushing ring material – 19th character							
None AISI 316 L ss Hastelloy C276	(Note 10) (Note 11) (Notes 11, 12)	NACE NACE				N A H	
Flushing ring: plug and gasket - 20th character							
No plug - no gasket No plug - garlock No plug - graphite AlSI 316 L ss - no gasket AlSI 316 L ss - garlock AlSI 316 L ss - PTFE AlSI 316 L ss - graphite Hastelloy C276 - no gasket Hastelloy C276 - parlock Hastelloy C276 - PTFE	(Note 11) (Note 11) (Notes 11) (Notes 11, 13) (Notes 11, 13) (Notes 11, 13) (Notes 11, 13) (Notes 11, 14) (Notes 11, 14)						N A B C D E F G H L M
Hastelloy C276 - graphite	(Notes 11, 14)						Р

- Note 1: Not available with size code E
- Note 2: Not available with mounting flange rating code 3, 4, 5
- Note 3: Not available with extensions length and material code 2, 4, 6
- Note 4: Not available with extensions length and material code 1, 2, 3, 4, 5, 6
- Note 5: Not available with diaphragm material code M, L, T, N, K, Y, W and H when selected with extension length and material code F, 2, 4, 6
- Note 6: Not available with capillary protection code A, B
- Note 7: Not available with capillary protection code N
- Note 8: Suitable for oxygen service
- Note 9: Suitable for food application
- Note 10: Not available with Flushing ring: hole and thread code 2, 3, 4, 5
- Note 11: Not available with Flushing ring: hole and thread code N
- Note 12: Not available with Seal surface finish code 1
- Note 13: Not available with Hastelloy C276 flushing ring material code H
- Note 14: Not available with AISI 316L flushing ring material code A

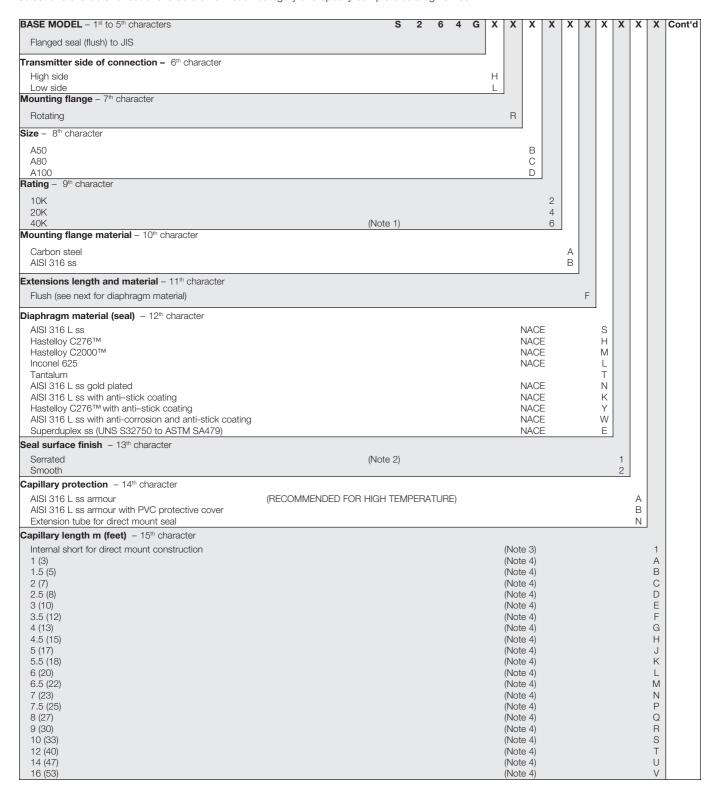
## **BASIC ORDERING INFORMATION model S264E Flanged seal (flush and extended)**

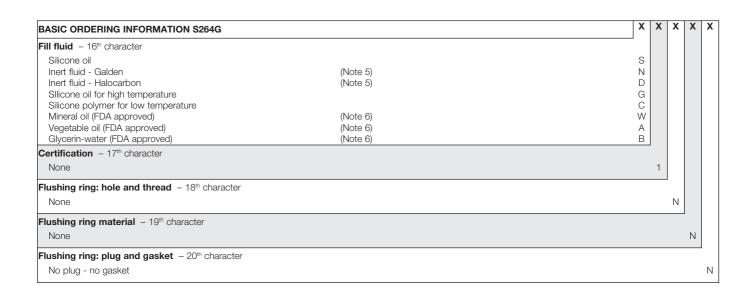


BASIC ORDERING INFORMATION S264E			Х	X	Х	Х	Х
Fill fluid - 16th character			-				
Silicone oil Inert fluid - Galden Inert fluid - Halocarbon Silicone oil for high temperature Silicone polymer for low temperature	(Note 8) (Note 8)		S N D G C				
Mineral oil (FDA approved) Vegetable oil (FDA approved) Glycerin-water (FDA approved)	(Note 9) (Note 9) (Note 9)		W A B				
Certification – 17 <sup>th</sup> character				_			
None				1			
Flushing ring: hole and thread – 18th character					1		
None 1 hole - 1/2in NPT 2 holes - 1/2in NPT 1 hole - 1/4in NPT 2 holes - 1/4in NPT		(Note 4) (Note 4) (Note 4) (Note 4)			N 2 3 4 5		
Flushing ring material – 19 <sup>th</sup> character		,					
None AISI 316 L ss Hastelloy C276	(Note 10) (Note 11) (Notes 11, 12)	NACE NACE				N A H	
Flushing ring: plug and gasket - 20th character							
No plug - no gasket No plug - garlock No plug - PTFE No plug - graphite AISI 316 L ss - no gasket	(Note 11) (Note 11) (Note 11) (Notes 11, 13)						N A B C D
AISI 316 L ss - garlock AISI 316 L ss - PTFE AISI 316 L ss - graphite Hastelloy C276 - no gasket	(Notes 11, 13) (Notes 11, 13) (Notes 11, 13) (Notes 11, 14)						E F G H
Hastelloy C276 - garlock Hastelloy C276 - PTFE Hastelloy C276 - graphite	(Notes 11, 14) (Notes 11, 14) (Notes 11, 14)						M P

- Note 1: Not available with size code E
- Note 2: Not available with mounting flange rating code 3, 4
- Note 3: Not available with extensions length and material code 2, 4, 6
- Note 4: Not available with extensions length and material code 1, 2, 3, 4, 5, 6
- Note 5: Not available with diaphragm material code M, L, T, N, K, Y, W and H when selected with extension length and material code F, 2, 4, 6
- Note 6: Not available with capillary protection code A, B
- Note 7: Not available with capillary protection code N
- Note 8: Suitable for oxygen service
- Note 9: Suitable for food application
- Note 10: Not available with Flushing ring: hole and thread code 2, 3, 4, 5
- Note 11: Not available with Flushing ring: hole and thread code N
- Note 12: Not available with Seal surface finish code 1
- Note 13: Not available with Hastelloy C276 flushing ring material code H
- Note 14: Not available with AISI 316L flushing ring material code A

## BASIC ORDERING INFORMATION model S264G Flanged seal (flush) to JIS





Note 1: Not available with A100 size code D

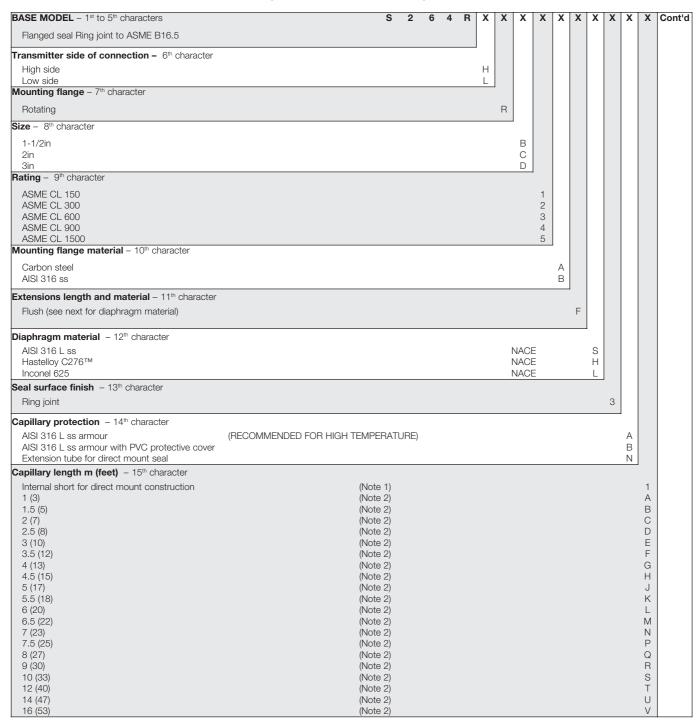
Note 2: Not available with diaphragm material code H, M, L, T, N, K, Y, W

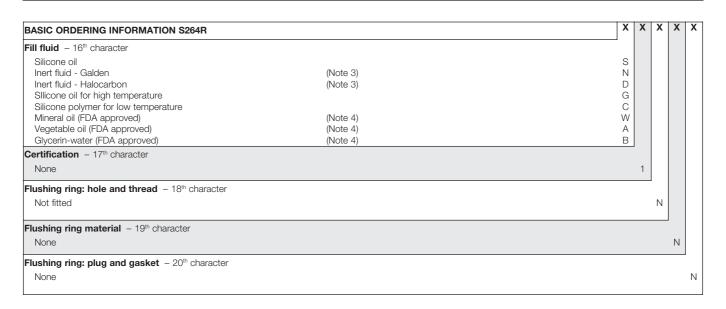
Note 3: Not available with capillary protection code A, B Note 4: Not available with capillary protection code N

Note 5: Suitable for oxygen service

Note 6: Suitable for food application

## **BASIC ORDERING INFORMATION model S264R Flanged seal - Ring Joint**





Note 1: Not available with capillary protection code A, B Note 2: Not available with capillary protection code N

Note 3: Suitable for oxygen service Note 4: Suitable for food application

## **BASIC ORDERING INFORMATION model S264M Off-line mini-flanged seal**

Select one character or set of characters from each category and specify complete catalog number.

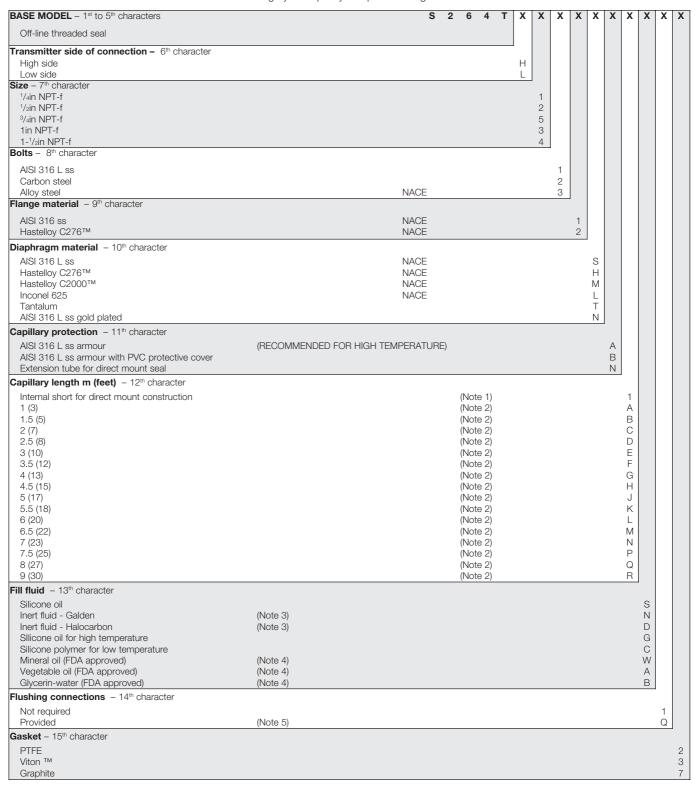
SASE MODEL – 1st to 5th o	characters	S 2 6	4 M X X	X	X	Х	Х	Х	Х	Х	
Off-line mini-flanged seal											
ransmitter side of conn	ection - 6th character										
High side Low side			H L								
Tounting flange- 7th char	acter		L								
Integral with seal			Р								
ize/Mounting flange rat	ing - 8th character										
1/2in	ASME CL 150			6							
¹/₂in 1in	ASME CL 300 ASME CL 150			7 A							
1in	ASME CL 1300			C							
1 ¹/₂in	ASME CL 150			В							
1 <sup>1</sup> / <sub>2</sub> in	ASME CL 300			D							
DN25	EN PN 16/40			Μ							
DN40	EN PN 16/40			N							
ounting flange/Seat for											
AISI 316 ss	Form RF (raised face) – serrated finish	(Note 1)	NACE		D						
AISI 316 ss	EN 1092-1 Type B1 – serrated finish	(Note 2)	NACE		L						
Hastelloy C276™ Hastelloy C276™	Form RF (raised face) – serrated finish EN 1092-1 Type B1 – serrated finish	(Note 1) (Note 2)	NACE NACE		V						
aphragm material (sea		(1 VOLO Z)	IVIOL		v	1					
AISI 316 L ss	, .o ondiactor		NACE			S					
Hastelloy C276™			NACE			Н					
Hastelloy C2000™			NACE			М					
Inconel 625			NACE			L					
Tantalum						Т					
AISI 316 L ss gold plated						Ν	1				
apillary protection - 11		ND 1 1101 1 TEN 4DET 1 TO 1					,				
AISI 316 L ss armour	· · · · · · · · · · · · · · · · · · ·	OR HIGH TEMPERATURE)					A				
AISI 316 L ss armour wit Extension tube for direct							B N				
apillary length m (feet)							14				
Internal short for direct m			(Note 3)					1			
1 (3)	Odrit Construction		(Note 4)					Å			
1.5 (5)			(Note 4)					В			
2 (7)			(Note 4)					С			
2.5 (8)			(Note 4)					D			
3 (10)			(Note 4)					E			
3.5 (12)			(Note 4) (Note 4)					F G			
4 (13) 4.5 (15)			(Note 4)					Н			
5 (17)			(Note 4)					J			
5.5 (18)			(Note 4)					Κ			
6 (20)			(Note 4)					L			
6.5 (22)			(Note 4)					M			
7 (23) 7 5 (25)			(Note 4) (Note 4)					N P			
7.5 (25) 8 (27)			(Note 4)					Q			
9 (30)			(Note 4)					R			
Il fluid - 13 <sup>th</sup> character											
Silicone oil									S		
Inert fluid - Galden	(Note 5)								Ν		
Inert fluid - Halocarbon	(Note 5)								D		
Silicone oil for high temp									G		
Silicone polymer for low to Mineral oil (FDA approved									C W		
Vegetable oil (FDA approved									A		
Glycerin-water (FDA appr	roved) (Note 6)								В		
ushing connections -	14 <sup>th</sup> character										
Not required										1	
Provided						_				Q	
asket - 15th character											
PTFE											

Note 1: Not available with size/mounting flange rating code M, N Note 4: Not available with capillary protection code N

Note 2: Not available with size/mounting flange rating code A, B, C, D, 6, 7 Note 5: Suitable for oxygen service

Note 3: Not available with capillary protection code A, B Note 6: Suitable for food application

#### BASIC ORDERING INFORMATION model S264T Off-line threaded seal



- Note 1: Not available with capillary protection code A, B
- Note 2: Not available with capillary protection code N
- Note 3: Suitable for oxygen service
- Note 4: Suitable for food application
- Note 5: Not available with size code 4

## **BASIC ORDERING INFORMATION model S264W Wafer Remote Seal**

BASE MODEL – 1st to 5th characters	S	2 6 4 W	X	ΚX	Х	F	Х	Х	Х	Х	Х	Cont'c
Wafer Remote Seal												
Transmitter side of connection – 6th character												
High side Low side			H									
Centering system – 7 <sup>th</sup> character												
Seat on back diameter (suitable for ASME backup flange)			E	3								
Size – 8 <sup>th</sup> character												
1 1/2in ASME 2in ASME				A B								
3in ASME				С								
1 1/2in ASME food design 3in ASME food design				1 2								
EN DN40				D								
EN DN50				E								
EN DN80 Seat finish – 9 <sup>th</sup> character				F	_							
Serrated finish (suitable for ASME)	(Notes 1, 2)				D							
Smooth finish (suitable for ASME)	(Note 1)				E							
Serrated finish to EN 1092-1 Type B1; up to PN40	(Notes 2, 3)				R							
Serrated finish to EN 1092-1 Type B2; PN63 to PN100 Smooth finish (suitable for EN)	(Notes 2, 3) (Notes 2, 3)				S T							
Use code – 10 <sup>th</sup> character	(					F						
Diaphragm material – 11th character												
AISI 316 L ss				NACE			S					
Hastelloy C276™	(Notes 2, 4)		- 1	VACE			Н					
Hastelloy C2000 <sup>™</sup> Inconel 625	(Notes 2, 4) (Notes 2, 4)			VACE VACE			M L					
Tantalum	(Notes 2, 4)		'	NAOL			T					
AISI 316 L ss gold plated	(Notes 2, 4)			VACE			N					
AISI 316 L ss with anti–stick coating Hastelloy C276™ with anti–stick coating	(Notes 2, 4) (Notes 2, 4)			VACE VACE			K Y					
AISI 316 L ss with anti-corrosion and anti-stick coating	(Notes 2, 4)		- 1	VACE			W					
Diaflex (AISI with Anti Abrasion treatment) Superduplex ss (UNS S32750 to ASTM SA479)	(Note 2) (Note 2)			NACE NACE			F E					
Capillary protection – 12th character	(NOTE 2)		'	VAOL								
AISI 316 L ss armour	(RECOMMENDED FOR HIGH TEMPER	RATURE)						Α				
AISI 316 L ss armour with PVC protective cover								В				
Capillary length m (feet) – 13th character												
1 (3) 1.5 (5)									A B			
2 (7)									С			
2.5 (8) 3 (10)									D E			
3.5 (12)									F			
4 (13)									G			
4.5 (15) 5 (17)									H			
5.5 (18)									K			
6 (20) 6.5 (22)									L M			
7 (23)									N			
7.5 (25)									Р			
8 (27) 9 (30)									Q R			
10 (33)									S			
12 (40)									T U			
14 (47) 16 (53)									V			
Fill fluid - 14th character												
Silicone oil										S		
Inert fluid - Galden Inert fluid - Halocarbon	(Notes 2, 5)									N D		
Sllicone oil for high temperature	(Notes 2, 5) (Note 2)									G		
Silicone polymer for low temperature	(Note 2)									С		
Mineral oil (FDA approved)  Vegetable oil (FDA approved)	(Note 6) (Note 6)									W		
Glycerin-water (FDA approved)	(Note 6)									В		
Certification – 15 <sup>th</sup> character												
<b>Certification</b> – 15 <sup>th</sup> character None											1	

BASIC ORDERING INFORMATION S264W			Х	Х	Х
Flushing ring: hole and thread - 16th character					
None			N		
1 hole - 1/2in NPT			2		
2 holes - 1/2in NPT			3		
1 hole - 1/4in NPT			4		
2 holes - 1/4in NPT			5		
Flushing ring material - 17th character					
None	(Note 7)			Ν	
AISI 316 L ss	(Note 8)	NACE		Α	
Hastelloy C276	(Notes 4, 8)	NACE		Н	
Flushing ring: plug and gasket - 18th character					
No plug - no gasket					Ν
No plug - garlock	(Note 8)				Α
No plug - PTFE	(Note 8)				В
No plug - graphite	(Note 8)				С
AISI 316 L ss - no gasket	(Notes 8, 9)				D
AISI 316 L ss - garlock	(Notes 8, 9)				Ε
AISI 316 L ss - PTFE	(Notes 8, 9)				F
AISI 316 L ss - graphite	(Notes 8, 9)				G
Hastelloy C276 - no gasket	(Notes 8, 10)				Н
Hastelloy C276 - garlock	(Notes 8, 10)				L
Hastelloy C276 - PTFE	(Notes 8, 10)				M
Hastelloy C276 - graphite	(Notes 8, 10)				Ρ

Note 1: Not available with EN size code D, E, F
Note 2: Not available with food design size code 1, 2
Note 3: Not available with ASME size code A, B, C
Note 4: Not available with serrated seat finish code D, R, S
Note 5: Suitable for oxygen service
Note 6: Suitable for food application
Note 7: Not available with flushing ring - hole and thread code 2, 3, 4, 5
Note 8: Not available with flushing ring - hole and thread code N
Note 9: Not available with flushing ring material code H
Note 10: Not available with AISI 316L flushing ring material code A

<sup>™</sup> Hastelloy C276 is a Cabot Corporation trademark

<sup>™</sup> Hastelloy C2000 is an Haynes International trademark

 $<sup>^{\</sup>mathrm{TM}}$  Monel is an International Nickel Co. trademark

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## Contact us

### ABB Ltd.

#### **Process Automation**

Howard Road St. Neots Cambridgeshire PE19 8EU UK

Tel: +44 (0)1480 475321 Fax: +44 (0)1480 217948

#### ABB Inc.

### **Process Automation**

125 E. County Line Road Warminster PA 18974 USA

Tel: +1 215 674 6000 Fax: +1 215 674 7183

## ABB Automation Products GmbH

## **Process Automation**

Schillerstr. 72 32425 Minden Germany

Tel: +49 551 905 534 Fax: +49 551 905 555

## ABB S.p.A. Process Automation

Via Statale 113 22016 Lenno (CO)

Italy

Tel: +39 0344 58111 Fax: +39 0344 56278

www.abb.com

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