Data Sheet DS/268XR-EN Rev. I

Model 268DR Differential Models 268PR and 268HR Gauge Models 268VR and 268NR 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

- 0.2 to 16000kPa; 0.8inH2O to 2320psi
- 0.54 to 16000kPa abs; 4mmHg 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%.

Models detailed in this data sheet apply for those transmitters which include one or two remote seal(s) connected via a capillary to the transmitter sensor. Depending on the selected ordering code the following models are available:

- a) model 268DR which allows a differential measurement using either two remote seals of same type and size or one remote seal (on positive or negative side) and a standard threaded connection direct ¹/₄ – 18 NPT on flange or ¹/₂ – 14 NPT through adapter, for the wet or dry leg on the side opposite to seal.
- models 268PR or 268VR allowing gauge or absolute measurement respetively with the reference side at atmosphere or at vacuum. The other side which can be the positive or negative (high or low pressure side) features the required remote seal.

Model 268HR or 268NR have the remote seal on the positive side and the user can select the suitable code for having the reference at armospheric or vacuum pressure respectively for gauge or absolute measure.

The following table list the types of standard seal which can be combined with 268xR transmitters (the mnemonic is used as reference in the compatibility table of page 3).

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

All following specification data apply for identical characteristics of the two sides when the transmitter is differential with two seals.

Model	Seal type	Size	Mnemonic
S264W	Wafer Wafer Wafer Wafer (food) 1 1/2in / DN40 2in / DN50 3in / DN80 264C Chemical tee flanged 3in	2in / DN50	P1.5 P2 P3
S264C		3in	P3
S264A S264E	flush diaphragm	3-4in / DN80 - 100	P1.5 P2 P3
S264G	Wafer (food) 3in / DN80		E2 E3 P3
S264U	Flanged flush diaphragm (also Ring Joint) 264A 264E 264B 264G Flanged flush diaphragm (also Ring Joint) Flanged 2in / DN50 - 100 A80 - 100 264G Flanged 2in / DN50 and your possible process of the process of	1 ½in	Z1.5
S264T		2 ½in	T2.5
S264M		2 ½in	T2.5
S264S	Triclamp Cherry Burrel	3in / F80	S2 S3 S3
S264B	Button	1in	B1
S264P	Urea service flanged	1 ½in 2 ½in	U1.5 U2.5

Functional Specifications

Range and span limits

- models 268DR/268PR/268VR

			Lower Range Limit (L	RL)	
Sensor Code	Upper Range Limit (URL)	268DR differential measure	268PR gauge measure	268VR absolute measure	Minimum span
В	4kPa 40mbar 16inH2O	-4kPa -40mbar -16inH2O			0.2kPa 2mbar 0.8inH ₂ O
E	16kPa	–16kPa	-16kPa	0.07kPa abs (§)	0.54kPa
	160mbar	–160mbar	-160mbar	0.7mbar abs (§)	5.4mbar
	64inH ₂ O	–64inH ₂ O	-64inH2O	0.5mmHg (§)	2.16inH ₂ O
F	40kPa	-40kPa	-40kPa	0.07kPa abs (§)	0.67kPa
	400mbar	-400mbar	-400mbar	0.7mbar abs (§)	6.7mbar
	160inH ₂ O	-160inH2O	-160inH ₂ O	0.5mmHg (§)	2.67inH2O
G	65kPa	-65kPa	-65kPa	0.07kPa abs (§)	1.1kPa
	650mbar	-650mbar	-650mbar	0.7mbar abs (§)	11mbar
	260inH2O	-260inH ₂ O	-260inH₂O	0.5mmHg (§)	4.35inH2O
Н	160kPa	–160kPa	0.07kPa abs (§)	0.07kPa abs (§)	2.67kPa
	1600mbar	–1600mbar	0.7mbar abs (§)	0.7mbar abs (§)	26.7mbar
	642inH ₂ O	–642inH ₂ O	0.5mmHg (§)	0.5mmHg (§)	10.7inH2O
M	600kPa	-600kPa	0.07kPa abs (§)	0.07kPa abs (§)	10kPa
	6bar	-6bar	0.7mbar abs (§)	0.7mbar abs (§)	0.1bar
	87psi	-87psi	0.5mmHg (§)	0.5mmHg (§)	1.45psi
Р	2400kPa	-2400kPa	0.07kPa abs (§)	0.07kPa abs (§)	40kPa
	24bar	-24bar	0.7mbar abs (§)	0.7mbar abs (§)	0.4bar
	348psi	-348psi	0.5mmHg (§)	0.5mmHg (§)	5.8psi
Q	8000kPa	-8000kPa	0.07kPa abs (§)	0.07kPa abs (§)	134kPa
	80bar	-80bar	0.7mbar abs (§)	0.7mbar abs (§)	1.34bar
	1160psi	-1160psi	0.5mmHg (§)	0.5mmHg (§)	19.4psi
S	16000kPa	-16000kPa	0.07kPa abs (§)	0.07kPa abs (§)	267kPa
	160bar	-160bar	0.7mbar abs (§)	0.7mbar abs (§)	2.67bar
	2320psi	-2320psi	0.5mmHg (§)	0.5mmHg (§)	38.7psi

- models 268HR/NR

Sensor	Upper Range	Lower Range Limit	Minimum
Code	Limit (URL)	(LRL) for 268HR	Span
G	65kPa	-65kPa	1.1kPa
	650mbar	-650mbar	11mbar
	260inH ₂ O	-260inH₂O	4.35inH ₂ O
н	160kPa	0.07kPa abs (§)	2.67kPa
	1600mbar	0.7mbar abs (§)	26.7mbar
	642inH ₂ O	0.5mmHg (§)	10.7inH ₂ O
M	600kPa	0.07kPa abs (§)	10kPa
	6bar	0.7mbar abs (§)	0.1bar
	87psi	0.5mmHg (§)	1.45psi
P	2400kPa	0.07kPa abs (§)	40kPa
	24bar	0.7mbar abs (§)	0.4bar
	348psi	0.5mmHg (§)	5.8psi
Q	8000kPa	0.07kPa abs (§)	134kPa
	80bar	0.7mbar abs (§)	1.34bar
	1160psi	0.5mmHg (§)	19.4psi
S	16000kPa	0.07kPa abs (§)	267kPa
	160bar	0.7mbar abs (§)	2.67bar
	2320psi	0.5mmHg (§)	38.7psi

Lower Range Limit (LRL) for 268NR is 0.07kPa abs, 0.7mbar abs, 0.5mmHg for all ranges.

(§) 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 5s with minimum damping.

Insulation resistance

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

Sensor	Compatibility	(allowed seal types with maximum capillary length versus measurement configuration	n (m) in brakets)
Code	Differential (two seals)	gauge and differential (one seal)	absolute (one seal)
В	P3 (1.5) E3 (1•) T2.5 (1•) S3 (1.5•)	(one sear)	(one scar)
E	1 1	P3 (1) S3 (1)	
F-G		P2 (2), P3 (4), E3 (3), T2,5 (2) U2.5 (3), S3 (4)	P2 (2), P3 (3), E3 (3), T2,5 (2) U2.5 (3), S3 (3)
Н		P1.5 (3), P2 (6), P3 (10), E2 (4), E3 (8), Z1.5 (3), T2.5 (6),U2.5 (6), S2 (2), S3 (10)	P1.5 (3), P2 (5), P3 (8), E2 (3), E3 (6) T2.5 (5),U2.5 (5), S2 (2), S3 (8)
М		P1.5 (5), P2 (8), P3 (10), E2 (6), E3 (8), Z1.5 (5), T2.5 (6), U1.5 (5),U2.5 (6), S2 (6), S3 (10)	P1.5 (4), P2 (6), P3 (8), E2 (5), E3 (6), T2.5 (5), U1.5 (4),U2.5 (5), S2 (5), S3 (8)
Р			P1.5 (4), P2 (6), P3 (8), E2 (5), E3 (6), T2.5 (5), U1.5 (4),U2.5 (5), S2 (5), S3 (8)
Q		P1.5 (5), P2 (8), P3 (10), E2 (6), E3 (8), B1 (3•) Z1.5 (5), T2.5 (6), U1.5 (5), U2.5 (6), S2 (6), S3 (10)	P1.5 (4), P2 (6), P3 (8), E2 (5), E3 (6), T2.5 (5), U1.5 (4),U2.5 (5), S2 (5), S3 (8)
S		P1.5 (5), P2 (8), P3 (10), Z1.5 (5), T2.5 (6), U1.5 (5), U2.5 (6), B1 (3•)	P1.5 (4), P2 (6), P3 (8), T2.5 (5), U1.5 (4),U2.5 (5)

The combinations sensor code/seal type marked (•) modify the base accuracy rating and static pressure effect; refer to performance specifications. Although he above table defines capillary length, for some types of seal combined to the sensor, care should be taken of the maximum working pressure of the used seal which can limit the range.

Refer to ABB for data related to application of capillary lengths greater than those specified in above table.

Operative limits

Temperature limits °C (°F):

Ambient (is the operating temperature)

	Models 268	DR/PR/VR	Models 268HR/NR
Filling	Sensors	Sensors B, E	Sensors
	F to S	Selisors B, E	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	-20 and +85	-10 and +85	-20 and +85
Halocarbon	(-4 and +185)	(+14 and +185)	(-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 268DR only)

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

Upper limit (side without seal for 268DR 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 capillary/seal fill fluids when used in transmitters with remote seal.

	OPER	ATING CO	NDITION	IS
FILL FLUIDS (APPLICATION)	Tmax >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	375 (707)	0.7	220	-10
(High temperature)	@ 1bar	(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).

Lower limit for Viton gasket -20°C (-4°F)

Storage

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

Upper limit: +85°C (+185°F)

Pressure limits

Refer to seal data sheet for maximum working pressure related to the used remote seal

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:

- 21MPa, 210bar, 3045psi for models 268DR, 268PR and 268VR (except 7MPa, 70bar, 1015psi for sensor code B and 16MPa, 160bar, 2320psi for sensor code E)
- 21MPa, 210bar, 3045psi for sensor codes R, Q, S of models 268HR and 268NR
- 14MPa, 140bar, 2030psi for sensor codes G, H, M of models 268HR and 268NR

Static pressure

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

- 1.3kPa abs,13mbar abs, 0.2psia and 21MPa, 210bar, 3045psi (except 7MPa, 70bar, 1015psi for sensor code B and 16MPa, 160bar, 2320psi for sensor code E)
- 0.07kPa abs,0.7mbar abs, 0.1psia and 21MPa, 210bar, 3045psi (except 7MPa, 70bar, 1015psi for sensor code B and 16MPa, 160bar, 2320psi for sensor code E) or flange rating of seal whichever is less, using two remote seals on both transmitter side

Proof pressure

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

- 28MPa, 280bar, 4000psi for models 268DR, 268PR, 268VR and for sensor codes G, H, M of models 268HR and 268NR
- 40MPa, 400bar, 5900 psi for sensor codes P, Q, S of models 268HR and 268NR

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

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

- 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 OptionsHART digital communication and 4 to 20mA output

Power Supply

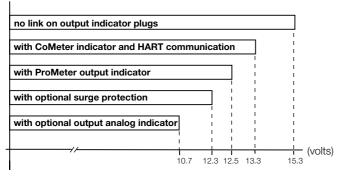
The transmitter operates from 10.5 to 42VDC with no load and is protected against reverse polarity connection (additional load allows operations over 42VDC).

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

MINIMUM OPERATING VOLTAGES



Load limitations

4 to 20mA and HART total loop resistance :

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

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°.

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 field bus versions SPAN refer to analog input function block outscale range $\,$

Using remote seal sizes <DN 80/3in

 $-\pm 0.10\%$ for TD from 1:1 to 10:1

(±0.10% for sensor codes B and E for TD from 1:1 to 5:1)

$$-\pm0.01\%$$
 x $\frac{URL}{Span}$ for TD from 10:1 to 20:1

$$\pm 0.02\%$$
 x $\frac{URL}{Span}$ for sensor codes B and E for TD from 5:1 to 10:1)

Using remote seal sizes ≥ DN 80/3in

- ±0.075% for TD from 1:1 to 10:1

(±0.10% for sensor codes B and E for TD from 1:1 to 5:1)

$$-\pm0.0075\%$$
 x URL for TD from 10:1 to 20:1

Multiply the values by 1.5 for sensor/seal combination marked (•) and for transmitter for absolute measurement.

Operating influences

Temperature effects

per 20K (36°F) ambient temperature change on transmitter sensor between the limits of -20° C to $+65^{\circ}$ C (-4 to $+150^{\circ}$ F):

Model	Sensor Code	for TD up to	
268DR	E to S	10:1	±(0.04% URL +0.065% span)
268PR	В	5:1	±(0.06% URL +0.10% span)
268VR	E to S	10:1	±(0.08% URL +0.13% span)
268HR/NR	G to S	10:1	±(0.04% URL +0.065% span)

The total temperature error is the combination of the above transmitter effect with seal errors, as applicable due to application temperatures.

Refer to seal data sheet for additional effects of the remote seal.

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)

for differential measurement per 2MPa, 20bar or 290psi.

Model 268DR with remote seal(s)

zero error: ±0.25% of URLspan error: ±0.25% of reading

Multiply by 1.5 the errors for sensor codes B and E and for sensor/seal combinations marked (\bullet)

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).

Model 268DR, 268PR, 268HR, 268VR, 268NR

Physical Specification

(Refer to ordering information sheets of transmitter and seal(s) for variant availability related to specific model or versions code)

Materials

Model 268DR only - Side without seal

Process isolating diaphragms (*)

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

Hastelloy C276™ on AlSI 316 L ss gasket seat.

A remote seal can be selected with required diaphragm (refer below)

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.

Models 268DR/PR/VR/HR/NR

Blind flange (reference and/or remote seal(s) side)

AISI 316 L ss

Seal side process diaphragm (remote 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

Seal side fill fluid (remote seal)

Silicone oil-DC200™; Silicone oil-AN140™; Inert-Galden™; Inert-Halocarbon™ 4.2; Silicone Polymer-Syltherm XTL™; Vegetable oil-Neobee M-20™; Glycerin Water; Mineral oil-MARCOL 82™.

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.

^(*) Wetted parts of the transmitter.

^(**) U-bolt material: AISI 400 ss; screws material: high-strength alloy steel or AISI 316 ss.

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

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

Refer to seal data sheet for process connection variants through remote seal.

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 6mm² (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 and seals)

- models 268DR/PR/VR: 3kg approx (7lb)

- models 268HR/NR: 1.7kg approx (4lb)

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 4 mA

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

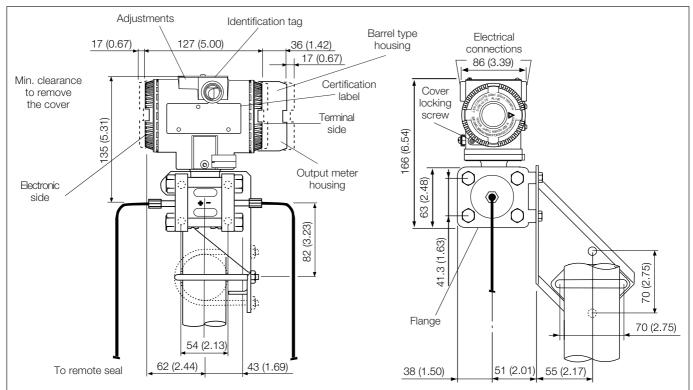
For any protocol available engineering units of pressure measure are :

Pa, kPa, MPa inH₂O@4°C, mmH₂O@4°C, psi inH₂O@20°C, ftH₂O@20°C, mmH₂O@20°C

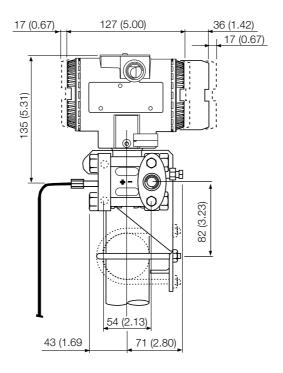
inHg, mmHg, Torr g/cm², kg/cm², atm mbar, bar

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

268DR/PR/VR transmitter on bracket for vertical or horizontal 60mm (2in) pipe mounting (barrel housing)



Consider one capillary only to remote seal for 268PR/VR

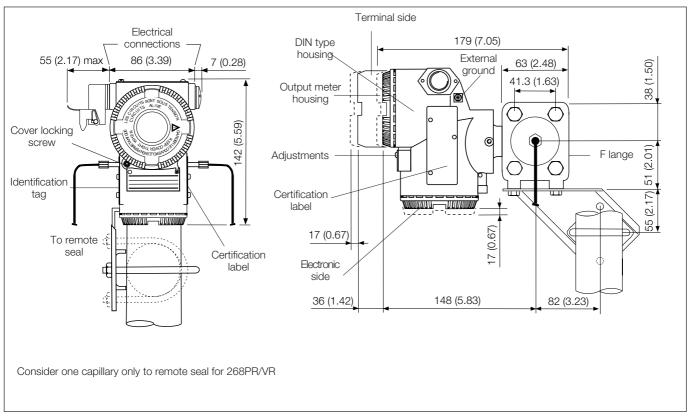


Note: For 268DR side with ¹/₄ – 18 NPT thread director with ¹/₂ – 14 NPT through adapter, threaded process connection, gasket groove and gaskets are in accordance with DIN 19213.

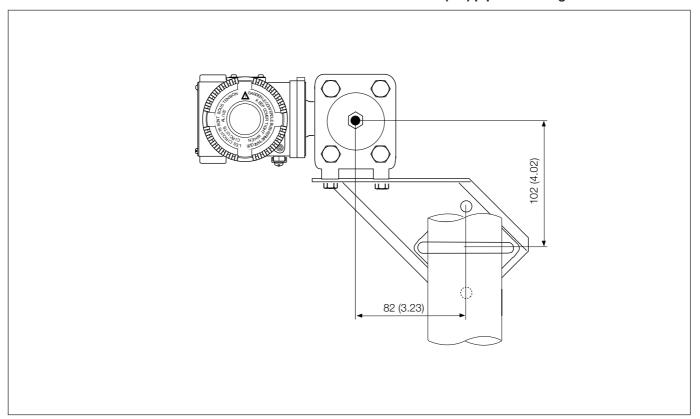
Bolting threads for fixing adapter or other devices (i.e. manifod etc.) on process flange is ⁷/₁₆ – 20 UNF.

11

268DR/PR/VR transmitter on bracket for vertical or horizontal 60mm (2in) pipe mounting (DIN housing)

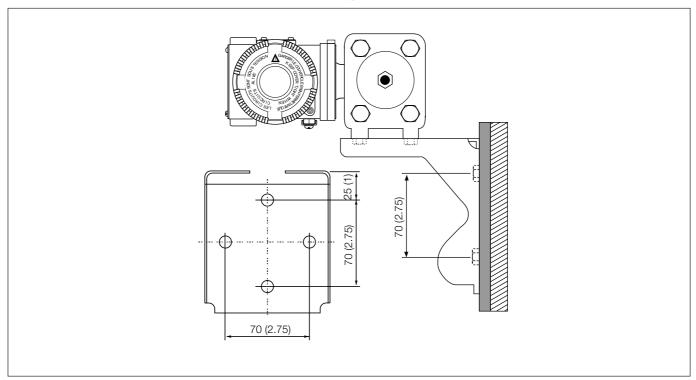


268DR/PR/VR transmitter on bracket for vertical or horizontal 60mm (2in) pipe mounting

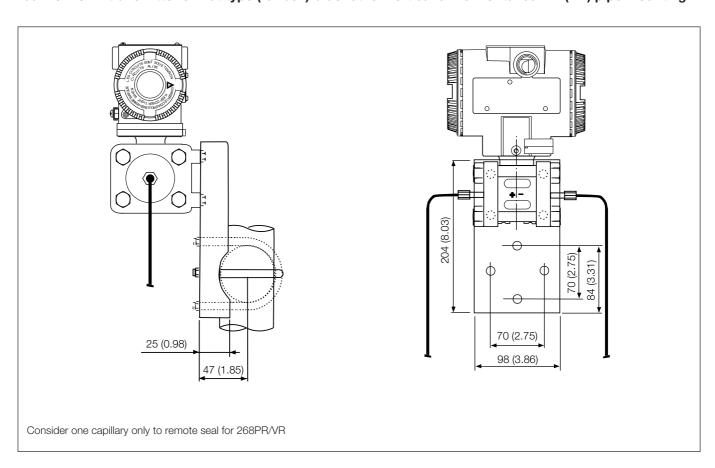


Model 268DR, 268PR, 268HR, 268VR, 268NR

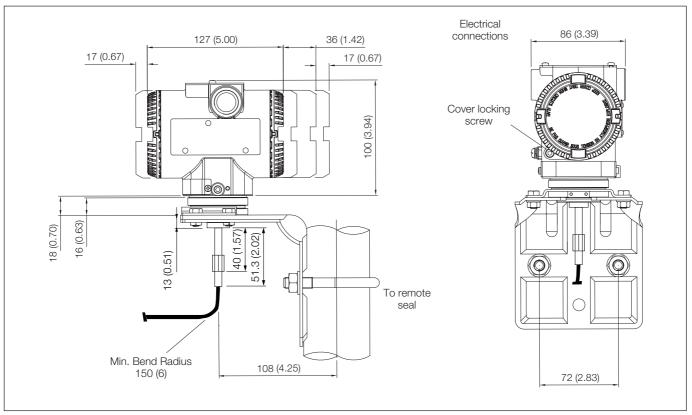
268DR/PR/VR transmitter on bracket for wall mounting (by up to four M8 screws; NOT SUPPLIED)



268DR/PR/VR transmitter on flat type (for box) bracket for vertical or horizontal 60mm (2in) pipe mounting



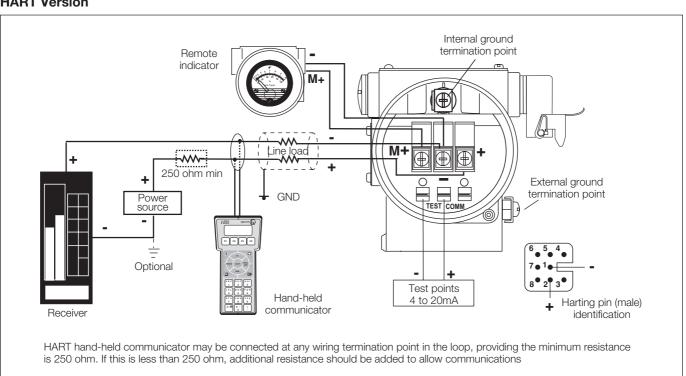
268HR/NR transmitter on bracket for 60mm (2in) pipe mounting (barrel housing)



Sensors H, M, P, Q, S

Electrical connections

HART Version



BASIC ORDERING INFORMATION model 268DR Safety Differential Pressure Transmitter with remote seal(s)

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. Quote separately one or two seals as required.

BASE MODEL – 1st to 5th ch				2	6	8	D R	X	S	X	X	X	Х	'
Safety Differential Pressure	Transmitter with remote	seal(s) - BASE ACCURAC	CY 0.075%											
SENSOR - Span limits - 6th	h character													l
0.2 and 4kPa	2 and 40mbar	0.8 and 16inH2O						В						L
0.54 and 16 kPa	5.4 and 160mbar	2.16 and 64inH2O						Ε						L
0.67 and 40kPa	6.7 and 400mbar	2.67 and 160inH2O						F						L
1.1 and 65kPa	11 and 650mbar	4.35 and 260inH ₂ O						G						L
2.67 and 160kPa	26.7 and 1600mbar	10.7 and 642inH ₂ O						Н						L
10 and 600kPa	0.1 and 6bar	1.45 and 87psi						M						L
40 and 2400kPa	0.4 and 24bar	5.8 and 348psi						Р						L
134 and 8000kPa	1.34 and 80bar	19.4 and 1160psi						Q						L
267 and 16000kPa	2.67 and 160bar	38.7 and 2320psi						S						l
Jse code - 7 th character									S					l
Diaphragm material / Fill fl	uid (wetted parts) – 8 th	character												l
AISI 316 L ss		Silicone oil	(one seal to be	quoted separately)		(Note	3)			S				ı
Hastelloy C276™ (on AISI s	seat)	Silicone oil	(one seal to be	quoted separately)		(Note	3)	NA	ACE	н				l
Hastelloy C276™	,	Silicone oil		quoted separately)		(Note	3)	N/	ACE	ĸ				l
Monel 400™		Silicone oil		quoted separately)		(Note			ACE	М				1
Tantalum		Silicone oil	,	quoted separately)		(Note	,		ACE	Т				
AISI 316 L ss		Inert fluid-Galden		quoted separately)			s 1, 3)			À				1
Hastellov C276™ (on AISI	seat)	Inert fluid-Galden		quoted separately)			s 1, 3)		ACE	В				1
Hastelloy C276™		Inert fluid-Galden		quoted separately)			s 1, 3)		ACE	F				1
Monel 400™		Inert fluid-Galden		quoted separately)			s 1, 3)		ACE	ċl				I
Tantalum		Inert fluid-Galden	,	quoted separately)			s 1, 3)		ACE	Ď				l
AISI 316 L ss		Inert fluid-Galden		quoted separately)			s 1, 3) s 1. 3)		٦٠.	Ľ				1
Hastelloy C276™ (on AISI	seat)	Inert fluid-Halocarbon		quoted separately)			s 1, 3) s 1, 3)		ACE	Q				1
Hastelloy C276™ (OIT AISI	oodij	Inert fluid-Halocarbon	1	quoted separately)		1	s 1, 3) s 1, 3)		ACE	P				1
Monel 400™		Inert fluid-Halocarbon		quoted separately)			s 1, 3)		ACE	4				l
Tantalum		Inert fluid-Halocarbon	*	quoted separately)			s 1, 3)		ACE	5				l
AISI 316 L ss		Silicone oil		quoted separately)		(Note		INF	40E	R				l
														l
AISI 316 L ss		Inert fluid-Galden	1	e quoted separately)		1	s 1, 3)			2 W				1
AISI 316 L ss Process flanges/adapters	material and connection	Inert fluid-Halocarbon		quoted separately)		(INOTE	s 1, 3)			VV				1
• •		iii (wetteu parts) – 9 G	laracter								_			l
AISI 316 L ss for two seals						(Note			4CE		R			L
AISI 316 L ss (Horizontal co		1/4 - 18 NPT-f direct (7				(Note	,		4CE		Α			ı
AISI 316 L ss (Horizontal co		¹ / ₂ – 14 NPT-f through				(Note	,		4CE		В			ı
Hastelloy C276™ (Horizont		1/4 - 18 NPT-f direct (7					s 5, 6)		4CE		D			L
Hastelloy C276™ (Horizont		1/2 - 14 NPT-f through				(Note	s 5, 6)	N/	4CE		Ε			L
Monel 400™ (Horizontal co		1/4 - 18 NPT-f direct (7				(Note	s 5, 6)	N/	ACE		G			ı
Monel 400™ (Horizontal co	,	¹ / ₂ – 14 NPT-f through	adapter (7/16 – 20) UNF U.S. drilling)		(Note	s 5, 6)	N/	ACE		Н			l
Bolts/Gasket (wetted parts	•													l
AISI 316 ss (NACE) without				(Note				N/	ACE			R		L
AISI 316 ss without gasket	s for two seals construct	on		(Note	,							S		L
AISI 316 ss			Viton™	(Note								1		ı
AISI 316 ss			PTFE	(Note		5)						2		
AISI 316 ss (NACE)			Viton™	(Note					ACE			3		
AISI 316 ss (NACE)	rical correction dath	oborootor	PTFE	(Note	es 1,	5)		N/	ACE			4		
Housing material and elect														
Aluminium alloy (Barrel vers		¹ / ₂ – 14 NPT											Α	1
Aluminium alloy (Barrel vers		M20 x 1.5 (CM 20)											В	1
Aluminium alloy (Barrel vers		Pg 13.5											D	1
Aluminium alloy (Barrel vers		1/2 GK											С	
Aluminium alloy (Barrel vers	sion)	Harting Han connector		(general purpose of	only)			(Note	7)				Ε	1
Aluminium alloy copper-free		1/2 - 14 NPT			- /								Н	
Aluminium alloy copper-free		M20 x 1.5 (CM 20)											L	1
Aluminium alloy copper-free		Pg 13.5											N	1
Aluminium alloy copper-free		1/2 GK											М	
Aluminium alloy copper-free		Harting Han connector		(general purpose	(vlnc			(Note	7)				P	
AISI 316 L ss (Barrel versio		1/2 – 14 NPT		(Source barbose (J. 11 y /			,	.,				S	1
AISI 316 L ss (Barrel versio	,	M20 x 1.5 (CM 20)											T	1
AISI 316 L ss (Barrel versio		, ,											V	1
*	,	Pg 13.5												1
AISI 316 L ss (Barrel versio		1/2 GK		(accepted	o in la A								U	1
Aluminium alloy (DIN versio		M20 x 1.5 (CM 20)		(general purpose of									J	1
Aluminium alloy (DIN versio		Pg 13.5		(general purpose of				/N.L. 1	7)				Υ	1
Aluminium alloy (DIN versio Output/Additional options		Harting Han connector		(general purpose of	only)			(Note	7)				K	1
output/Additional options														
	n and 1 to 00m 1 (CII 0)	No additional antiona						(Note	8)					
HART digital communication HART digital communication		No additional options Options requested (to be						(14010	0)					

ADDITIONAL ORDERING INFORMATION for model 268DR

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

	it code(s) after the basic ordering if			vv	vv v	v v	/ VV	XX X	v vv	VV	vv v	v vv
Drain/yent valve (meter	ial and position) (watted parts)			XX	XX X	X X)	XX		X XX	XX	XX X	X XX
AISI 316 L ss	ial and position) (wetted parts) on process axis	(Note 9)	NACE	V1								
AISI 316 L ss	on flange side top	(Note 9)	NACE	V1 V2								
AISI 316 L ss	on flange side bottom	(Note 9)	NACE	V3								
Hastellov C276™	on process axis	(Note 10)	NACE	V4								
Hastelloy C276™	on flange side top	(Note 10)	NACE	V5								
Hastelloy C276™	on flange side bottom	(Note 10)	NACE	V6								
Monel 400™	on process axis	(Note 11)	NACE	V7								
Monel 400™	on flange side top	(Note 11)	NACE	V8								
Monel 400™	on flange side bottom	(Note 11)	NACE	V9								
Electrical certification	ry 1G and 1/2G, Category 1D and 1/2E) - Intrincio Safety Ev ia			E1							
, ,	ry 1/2 GD – Explosion Proof Ex d) - IIIIIIIISIC Galety LX Ia			E2							
	ssociation (CSA) (only 1/2-14NPT, M20 a	and Pa 13.5 electrical con	nection)		E4							
	oproval (only with 1/2-14NPT, M20 and				E6							
	esp. Ex tb IIIC T85° C Da/Db (only with				E9							
GOST (Russia) EEx ia	sopi Ex to me ree e babb (em) mar	72	1001 001111/1/201101/		W1							
GOST (Russia) EEx d					W2							
GOST (Kazakistan) EE					W3							
GOST (Kazakistan) EE					W4							
Inmetro (Brazil) EEx ia	(pending)				W5							
Inmetro (Brazil) EEx d	(pending)				W6							
Inmetro (Brazil) EEx nl	_ (pending)				W7							
Metrologic (Russia)					WC							
Metrologic (Kazakhsta	n)				WD							
KOSHA Ex d (Korea)					WN							
Output meter												
ProMeter, Standard c					D							
ProMeter, Special cali					D							
• ,	or linear 0-100% scale				D							
	or square root 0-10 scale				D							
	or, special graduation (to be specified fo				D							
	or, special graduation (to be specified for				D							
	meter and HART configurator (CoMeter				D D							
	meter and HART configurator (CoMeter	- customer configuration)			D	0						
Mounting bracket (shap	•											
For pipe mounting	(Not suitable for AISI housing)	Carbon steel				B-						
For pipe mounting	(Not suitable for AISI housing)	AISI 316 L ss				B2						
For wall mounting	(Not suitable for AISI housing)	Carbon steel				B						
For wall mounting	(Not suitable for AISI housing)	AISI 316 L ss				B4						
Flat type for box		AISI 316 L ss				B	<u> </u>					
Surge /Transient Prote	otor											
Surge/Transient Prote	CIOI						S1]				
Operating manual												
German								M1				
Italian								M2				
French								M4				
Labels & tag language												
German								T	1			
German Italian								T:				
								T:	2			
Italian								T:	2			
Italian Spanish								T:	2			
Italian Spanish French	n stainless steel plate							T:	2			
Italian Spanish French Additional tag plate Laser printing of tag c	n stainless steel plate							T:	2 3 4			
Italian Spanish French Additional tag plate Laser printing of tag c Configuration	·							T:	2 3 4			
Italian Spanish French Additional tag plate Laser printing of tag c Configuration Standard – Pressure	= inH2O/psi at 20° C; Temperature = de							T:	2 3 4	N2		
Italian Spanish French Additional tag plate Laser printing of tag c Configuration Standard – Pressure : Standard – Pressure :	= inH2O/psi at 20° C; Temperature = deg = inH2O/psi at 4° C; Temperature = deg	j. F						T:	2 3 4	N3		
Italian Spanish French Additional tag plate Laser printing of tag c Configuration Standard – Pressure: Standard – Pressure: Standard – Pressure: Standard – Pressure:	= inH2O/psi at 20° C; Temperature = deg = inH2O/psi at 4° C; Temperature = deg = inH2O/psi at 20° C; Temperature = de	g. F eg.C						T:	2 3 4	N3 N4		
Italian Spanish French Additional tag plate Laser printing of tag of Configuration Standard – Pressure:	= inH2O/psi at 20° C; Temperature = deg = inH2O/psi at 4° C; Temperature = deg	g. F eg.C						T:	2 3 4	N3 N4 N5		
Italian Spanish French Additional tag plate Laser printing of tag of Configuration Standard – Pressure: Standard – Pressure: Standard – Pressure: Standard – Pressure: Custom	= inH2O/psi at 20° C; Temperature = deg = inH2O/psi at 4° C; Temperature = deg = inH2O/psi at 20° C; Temperature = de	g. F eg.C						T:	2 3 4	N3 N4		
Italian Spanish French Additional tag plate Laser printing of tag of Configuration Standard – Pressure: Standard – Pressure: Standard – Pressure: Standard – Pressure: Custom Certificates	= inH2O/psi at 20° C; Temperature = deg = inH2O/psi at 4° C; Temperature = deg = inH2O/psi at 20° C; Temperature = deg = inH2O/psi at 4° C; Temperature = deg	g. F eg.C						T:	2 3 4	N3 N4 N5		
Italian Spanish French Additional tag plate Laser printing of tag of Configuration Standard – Pressure: Standard – Pressure: Standard – Pressure: Standard – Pressure: Custom Certificates Inspection certificate I	= inH2O/psi at 20° C; Temperature = dec = inH2O/psi at 4° C; Temperature = dec = inH2O/psi at 20° C; Temperature = dec = inH2O/psi at 4° C; Temperature = dec EN 10204-3.1 of calibration (9-point)	j. F eg.C j. C						T:	2 3 4	N3 N4 N5	C1	
Italian Spanish French Additional tag plate Laser printing of tag of Configuration Standard – Pressure: Standard – Pressure: Standard – Pressure: Standard – Pressure: Custom Certificates Inspection certificate I	= inH2O/psi at 20° C; Temperature = deg = inH2O/psi at 4° C; Temperature = deg = inH2O/psi at 20° C; Temperature = deg = inH2O/psi at 4° C; Temperature = deg	j. F eg.C j. C						T:	2 3 4	N3 N4 N5	C1 C6	
Italian Spanish French Additional tag plate Laser printing of tag of Configuration Standard – Pressure : Standard – Pressure : Standard – Pressure : Custom Certificates Inspection certificate is Certificate of compliar	= inH2O/psi at 20° C; Temperature = dec = inH2O/psi at 4° C; Temperature = dec = inH2O/psi at 20° C; Temperature = dec = inH2O/psi at 4° C; Temperature = dec EN 10204-3.1 of calibration (9-point)	j. F eg.C j. C						T:	2 3 4	N3 N4 N5		
Italian Spanish French Additional tag plate Laser printing of tag of ta	= inH ₂ O/psi at 20° C; Temperature = deg = inH ₂ O/psi at 4° C; Temperature = deg = inH ₂ O/psi at 20° C; Temperature = deg = inH ₂ O/psi at 4° C; Temperature = deg EN 10204–3.1 of calibration (9-point) ace with the order EN 10204–2.1 of inst	j. F ig.C j. C :rument design						T:	2 3 4	N3 N4 N5	C6	11
Italian Spanish French Additional tag plate Laser printing of tag of Configuration Standard - Pressure: Standard - Pressure: Standard - Pressure: Standard - Pressure: Custom Certificates Inspection certificate of compliar Material traceability Certificate of compliar	= inH2O/psi at 20° C; Temperature = deg = inH2O/psi at 4° C; Temperature = deg = inH2O/psi at 20° C; Temperature = deg = inH2O/psi at 4° C; Temperature = deg EN 10204-3.1 of calibration (9-point) ince with the order EN 10204-2.1 of pro-	j. F ig.C j. C :rument design						T:	2 3 4	N3 N4 N5	<u>С6</u> Н	
Italian Spanish French Additional tag plate Laser printing of tag of ta	= inH ₂ O/psi at 20° C; Temperature = deg = inH ₂ O/psi at 4° C; Temperature = deg = inH ₂ O/psi at 20° C; Temperature = deg = inH ₂ O/psi at 4° C; Temperature = deg EN 10204–3.1 of calibration (9-point) ace with the order EN 10204–2.1 of inst	j. F ig.C j. C :rument design						T:	2 3 4	N3 N4 N5	C6	
Italian Spanish French Additional tag plate Laser printing of tag of ta	= inH2O/psi at 20° C; Temperature = deg = inH2O/psi at 4° C; Temperature = deg = inH2O/psi at 20° C; Temperature = deg = inH2O/psi at 4° C; Temperature = deg EN 10204–3.1 of calibration (9-point) ince with the order EN 10204–2.1 of instance with the order EN 10204–3.1 of process wetted parts	j. F ig.C j. C :rument design						T:	2 3 4	N3 N4 N5	<u>С6</u> Н	3
Italian Spanish French Additional tag plate Laser printing of tag of ta	e inH2O/psi at 20° C; Temperature = dec = inH2O/psi at 4° C; Temperature = dec = inH2O/psi at 20° C; Temperature = dec = inH2O/psi at 4° C; Temperature = dec EN 10204–3.1 of calibration (9-point) accepted with the order EN 10204–2.1 of instance with the order EN 10204–2.1 of process wetted parts	j. F ig.C j. C :rument design	(Note 12) (Note 12)					T:	2 3 4	N3 N4 N5	<u>С6</u> Н	

- Note 1: Suitable for oxygen service
- Note 2: Not wetted Hastelloy C276™ on AISI seat for sensor code B
- Note 3: Not wetted Not available with sensor code B
- Note 4: Not available with diaphragm/fill code S, H, K, M, T, A, B, F, C, D, L, Q, P, 4, 5
- Note 5: Not available with diaphragm/fill code R, 2, W
- Note 6: Not available with diaphragm/fill code S, H, A, B, L, Q
- Note 7: Select type in additional ordering code
- Note 8: Not available with Electronic Housing code P, E and K
- Note 9: Not available with Process flanges/adapters code D, E, G, H, R
- Note 10: Not available with Process flanges/adapters code A, B, G, H, R
- Note 11: Not available with Process flanges/adapters code A, B, D, E, R
- Note 12: 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 268PR Safety Gauge Pressure Transmitter with remote 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 - 1st to 5th characters		2	6 8 P	R	Х	S	Х	X	Х	X	Х
Safety Gauge Pressure Transmitter with	remote seal - BASE ACCURACY 0.07	5%									
SENSOR - Span limits - 6th character											
0.54 and 16 kPa 5.4 and 16	0mbar 2.16 and 64inH2O				Е						
0.67 and 40kPa 6.7 and 40	0mbar 2.67 and 160inH ₂ O				F						
1.1 and 65kPa	0mbar 4.35 and 260inH2O				G						
2.67 and 160kPa 26.7 and 1	600mbar 10.7 and 642inH2O				Н						
10 and 600kPa 0.1 and 6b	ar 1.45 and 87psi				М						
40 and 2400kPa 0.4 and 24	bar 5.8 and 348psi				Р						
134 and 8000kPa 1.34 and 8	Obar 19.4 and 1160psi				Q						
267 and 16000kPa 2.67 and 1	60bar 38.7 and 2320psi				S						
Use code - 7 th character						S					
Diaphragm material / Fill fluid - 8th ch	aracter										
AISI 316 L ss Silicone oil		(one seal to be quoted separately)					R				
AISI 316 L ss Inert fluid -	Galden	(one seal to be quoted separately)	(Note 1)				2				
AISI 316 L ss Inert fluid -	Halocarbon	(one seal to be quoted separately)	(Note 1)				w				
Process flanges/adapters material -		(to a control of the	()								
AISI 316 L ss for seal construction								R			
Bolts - 10 th character											
AISI 316 ss (NACE) without gaskets for	seal construction				NAC	Ε			R		
AISI 316 ss without gaskets for seal co	nstruction								s		
Housing material and electrical conne	ction - 11th character										
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 connecto	r (general purpose on	nlv) (Not	te 2)						E	
Aluminium alloy copper-free (Barrel vers			,	,						Н	
Aluminium alloy copper-free (Barrel vers										L	
Aluminium alloy copper-free (Barrel vers										Ν	
Aluminium alloy copper-free (Barrel vers										М	
Aluminium alloy copper-free (Barrel vers		r (general purpose on	nly) (Not	te 2)						Р	
AISI 316 L ss (Barrel version)	1/2 – 14 NPT	(0	,, (-	,						S	
AISI 316 L ss (Barrel version)	M20 x 1.5 (CM20)									Т	
AISI 316 L ss (Barrel version)	Pg 13.5									V	
AISI 316 L ss (Barrel version)	1/2 GK									U	
Aluminium alloy (DIN version)	M20 x 1.5 (CM 20)	(general purpose on	nly)							J	
Aluminium alloy (DIN version)	Pg 13.5	(general purpose on								Υ	
Aluminium alloy (DIN version)	Harting Han connecto			te 2)						K	
		/O 1	,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								
Output/Additional options - 12th charac	oter										
Output/Additional options – 12th character HART digital communication and 4 to 2			(Not	o 3)							Т

ADDITIONAL ORDERING INFORMATION for model 268PR

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

	XX	хх	хх	хх	хх	хх	хх	хх	XX	XX	XX
Electrical certification											
ATEX Group II Category 1G and 1/2G, Category 1D and 1/2D - Intrinsic Safety Ex ia ATEX Group II Category 1/2 GD - Explosion Proof Ex d Canadian Standard Association (CSA) (only ¹/₂-14NPT, M20 and Pg 13.5 electrical connection) Factory Mutual (FM) approval (only with ¹/₂-14NPT, M20 and Pg 13.5 electrical connection) IECEX IIC T6 Ga/Gb resp. Ex tb IIIC T85° C Da/Db (only with ¹/₂-14NPT and M20 electrical conn./Barrel) GOST (Russia) EEx ia GOST (Russia) EEx d GOST (Kazakistan) EEx ia GOST (Kazakistan) EEx d Inmetro (Brazil) EEx ia (pending) Inmetro (Brazil) EEx d (pending) Inmetro (Brazil) EEx nL (pending) Metrologic (Russia) Metrologic (Kazakhstan)	E1 E2 E4 E6 E9 W1 W2 W3 W4 W5 W6 W7	ı									
Output meter											
ProMeter, Standard calibration ProMeter, Special calibration Analog output indicator linear 0–100% scale Analog output indicator, special graduation (to be specified for linear scale) Programmable signal meter and HART configurator (CoMeter) Programmable signal meter and HART configurator (CoMeter – customer configuration)		D1 D2 D3 D5 D7 D8									
Mounting bracket (shape and material)											
For pipe mounting (Not suitable for AISI housing) Carbon steel For pipe mounting (Not suitable for AISI housing) AISI 316 L ss For wall mounting (Not suitable for AISI housing) Carbon steel For wall mounting (Not suitable for AISI housing) AISI 316 L ss Flat type for box AISI 316 L ss			B1 B2 B3 B4 B5								
Surge											
Surge/Transient Protector				S1							
Operating manual German					M1						
Italian French					M2 M4						
Labels & tag language						1					
German						T1					
Italian Spanish French						T2 T3 T4					
Additional tag plate						14]				
Laser printing of tag on stainless steel plate							12				
Configuration								I			
Standard - Pressure = inH2O/psi at 20° C; Temperature = deg. F Standard - Pressure = inH2O/psi at 4° C; Temperature = deg. F Standard - Pressure = inH2O/psi at 20° C; Temperature = deg. C Standard - Pressure = inH2O/psi at 4° C; Temperature = deg. C Custom								N2 N3 N4 N5 N6			
Certificates											
Inspection certificate EN 10204–3.1 of calibration (9-point) Certificate of compliance with the order EN 10204–2.1 of instrument design									C1 C6		
Material traceability											
Certificate of compliance with the order EN 10204–2.1 of process wetted parts Inspection certificate EN 10204–3.1 of process wetted parts										H1 H3	
Connector											
Harting Han – straight entry (Note 4) Harting Han – angle entry (Note 4)											U3 U4

Note 1: Suitable for oxygen service

Note 2: Select type in additional ordering code

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

Note 4: 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)

- 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 268HR Safety Gauge Pressure Transmitter with remote 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 – 1st to 5th characters					H R	Х	Х	Х	X)
Safety Pressure Transm	nitter with remote seal - BASE	ACCURACY 0.075%								
SENSOR - Span limits -	- 6 th character									
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				Ρ				
134 and 8000kPa	1.34 and 80bar	19.4 and 1160psi				Q				
267 and 16000kPa	2.67 and 160bar	38.7 and 2320psi				S				
Diaphragm material / Fi	ill fluid - 7 th character						•			ı
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	8 th character									
Remote seal (except bu	utton type)	(one seal to be quoted separately)						R		
Button type remote sea	al	(one button seal to be quoted separately)	(Note 2)					G		ı
Housing material and e	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	ı
Aluminium alloy (Barrel	version)	Pg 13.5							D	ı
Aluminium alloy (Barrel	version)	1/2 GK							С	ı
Aluminium alloy (Barrel	version)	Harting Han connector	(general purpose only)	(Note	3)				Ε	ı
Aluminium alloy copper	-free (Barrel version)	1/2 - 14 NPT		,	,				Н	ı
Aluminium alloy copper	-free (Barrel version)	M20 x 1.5 (CM 20)							L	ı
Aluminium alloy copper	-free (Barrel version)	Pg 13.5							Ν	ı
Aluminium alloy copper	-free (Barrel version)	1/2 GK							Μ	ı
Aluminium alloy copper	-free (Barrel version)	Harting Han connector	(general purpose only)	(Note	3)				Ρ	ı
AISI 316 L ss (Barrel ve		1/2 - 14 NPT		`	,				S	ı
AISI 316 L ss (Barrel ve	ersion)	M20 x 1.5 (CM20)							Τ	
AISI 316 L ss (Barrel ve		Pg 13.5							V	
AISI 316 L ss (Barrel ve		1/2 GK							U	
Output/Additional optio	ns - 10th character									,
HART digital communic	cation and 4 to 20mA (SIL 2)	No additional options		(Note	4)					
HART digital communic	eation and 4 to 20mA (SIL 2)	Options requested (to be ordered by "Add	litional ordering code")		•					

ADDITIONAL ORDERING INFORMATION for model 268HR

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

	XX	хх	хх	хх	хх	хх	ХX	XX	хх	хх	XX
Electrical certification											
ATEX Group II Category 1G and 1/2G, Category 1D and 1/2D - Intrinsic Safety Ex ia	E1										
ATEX Group II Category 1/2 GD – Explosion Proof Ex d	E2										
Canadian Standard Association (CSA) (only 1/2-14NPT, M20 and Pg 13.5 electrical connection) Factory Mutual (FM) approval (only with 1/2-14NPT, M20 and Pg 13.5 electrical connection)	E4 E6										
IECEX IIC T6 Ga/Gb resp. Ex tb IIIC T85° C Da/Db (only with ½–14NPT and M20 electrical conn./Ba											
GOST (Russia) EEx ia	W1										1
GOST (Russia) EEx d	W2										ı
GOST (Kazakistan) EEx ia	W3										1
GOST (Kazakistan) EEx d	W4										ı
Inmetro (Brazil) EEx ia (pending)	W5										ı
Inmetro (Brazil) EEx d (pending)	W6										1
Inmetro (Brazil) EEx nL (pending)	W7										ı
Metrologic (Russia)	WC										1
Metrologic (Kazakhstan) Output meter	WD										
ProMeter, Standard calibration		D1									ı
ProMeter, Special calibration		D2									1
Analog output indicator linear 0–100% scale		D3									1
Analog output indicator, special graduation (to be specified for linear scale)		D5									1
Programmable signal meter and HART configurator (CoMeter)		D7									1
Programmable signal meter and HART configurator (CoMeter – customer configuration)		D8									ı
Mounting bracket (shape and material)			-								ı
For pipe mounting (Not suitable for AISI housing) Carbon steel For pipe mounting AISI 316 L ss			B6 B7								
Surge											
Surge/Transient Protector				S1							
Operating manual											
German					M1						1
Italian					M2						1
French					M4						1
Labels & tag language											
German						T1					
Italian						T2					1
Spanish French						T3 T4					
Additional tag plate											ı
Laser printing of tag on stainless steel plate							12				
Configuration								'			ı
Standard - Pressure = inH2O/psi at 20° C; Temperature = deg. F								N2			1
Standard - Pressure = inH2O/psi at 4° C; Temperature = deg. F								ΝЗ			1
Standard - Pressure = inH2O/psi at 20° C; Temperature = deg.C								N4			1
Standard - Pressure = inH2O/psi at 4° C; Temperature = deg. C								N5			1
Custom								N6			
Certificates									01		
Inspection certificate EN 10204–3.1 of calibration (9-point)									C1 C6		
Certificate of compliance with the order EN 10204-2.1 of instrument design										•	
Material traceability Certificate of compliance with the order EN 10204–2.1 of process wetted parts										H1 H3	
Material traceability Certificate of compliance with the order EN 10204–2.1 of process wetted parts Inspection certificate EN 10204–3.1 of process wetted parts										H1 H3	
Material traceability Certificate of compliance with the order EN 10204–2.1 of process wetted parts Inspection certificate EN 10204–3.1 of process wetted parts Connector	ote 5)										U3

- Note 1: Suitable for oxygen service
- Note 2: Not available with sensor code G, H, M, P
- Note 3: Select type in additional ordering code
- Note 4: Not available with Electronic Housing code P, E
- Note 5: 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 268VR Safety Absolute Pressure Transmitter with remote 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.

DAGE MIODEL - 1 " 10 5"	characters		2 6	8 V R	Х	S	Х	X	Х	Х
Safety Absolute Pressur	re Transmitter with remote	seal - BASE ACCURACY 0.075%								
SENSOR - Span limits -	6 th character				'					
0.54 and 16 kPa	5.4 and 160mbar	4 and 120mmHg			Ε					
0.67 and 40kPa	6.7 and 400mbar	5 and 300 mmHg			F					
1.1 and 65kPa	11 and 650mbar	8 and 480 mmHg			G					
2.67 and 160kPa	26.7 and 1600mbar	20 and 1200 mmHg			Н					
10 and 600kPa	0.1 and 6bar	1.45 and 87psi			М					
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					
Use code - 7 th character						S				
Diaphragm material / Fil	II fluid - 8th character									
AISI 316 L ss	Silicone oil	(one seal except union type to be	e quoted separately)				R			
AISI 316 L ss	Inert fluid-Galden	(one seal except union type to be	e quoted separately)	(Note 1)			2			
AISI 316 L ss	Inert fluid-Halocarbon	(one seal except union type to be	e quoted separately)	(Note 1)			W			
Process flanges/adapte	rs material - 9th characte	er		, ,						
AISI 316 L ss for seal co	onstruction							R		
Bolts – 10 th character									'	
AISI 316 ss (NACE) with	out gaskets for seal constr	ruction			NACI	E			R	
	kets for seal construction								s	
Housing material and el		th character								
Aluminium alloy (Barrel v	version)	¹ / ₂ – 14 NPT								Α
Aluminium alloy (Barrel v		M20 x 1.5 (CM 20)								В
Aluminium alloy (Barrel v	version)	Pg 13.5								D
Aluminium alloy (Barrel)		1/2 GK								С
Aluminium alloy (Barrel)	version)	Harting Han connector	(general purpose only)	(Not	e 2)					E
Aluminium alloy copper-		1/2 - 14 NPT	(0)/		- ,					Н
										1 1 1
Aluminium alloy copper-										L
Aluminium alloy copper- Aluminium alloy copper-	-free (Barrel version)	M20 x 1.5 (CM 20) Pg 13.5								
Aluminium alloy copper-	free (Barrel version) free (Barrel version)	M20 x 1.5 (CM 20)								L
Aluminium alloy copper- Aluminium alloy copper-	-free (Barrel version) -free (Barrel version) -free (Barrel version)	M20 x 1.5 (CM 20) Pg 13.5 ¹ / ₂ GK	(general purpose only)	(Not	e 2)					L N M
Aluminium alloy copper-	-free (Barrel version) -free (Barrel version) -free (Barrel version) -free (Barrel version)	M20 x 1.5 (CM 20) Pg 13.5	(general purpose only)	(Not	e 2)					L N M P
Aluminium alloy copper- Aluminium alloy copper- Aluminium alloy copper-	r-free (Barrel version) rsion)	M20 x 1.5 (CM 20) Pg 13.5 ¹ / ₂ GK Harting Han connector	(general purpose only)	(Not	e 2)					L N M
Aluminium alloy copper- Aluminium alloy copper- Aluminium alloy copper- AISI 316 L ss (Barrel ver	free (Barrel version) rsion)	M20 x 1.5 (CM 20) Pg 13.5 ¹ / ₂ GK Harting Han connector ¹ / ₂ – 14 NPT	(general purpose only)	(Not	re 2)					L N M P S
Aluminium alloy copper- Aluminium alloy copper- Aluminium alloy copper- AISI 316 L ss (Barrel ver AISI 316 L ss (Barrel ver AISI 316 L ss (Barrel ver	rfree (Barrel version) -free (Barrel version) -free (Barrel version) -free (Barrel version) -free (Barrel version) -freion) -freion) -freion)	M20 x 1.5 (CM 20) Pg 13.5 ¹ / ₂ GK Harting Han connector ¹ / ₂ – 14 NPT M20 x 1.5 (CM20)	(general purpose only)	(Not	re 2)					LNMPST
Aluminium alloy copper- Aluminium alloy copper- Aluminium alloy copper- AISI 316 L ss (Barrel ver AISI 316 L ss (Barrel ver	rfree (Barrel version) -free (Barrel version) -free (Barrel version) -free (Barrel version) -fresion) -rsion) -rsion) -rsion)	M20 x 1.5 (CM 20) Pg 13.5 ¹ / ₂ GK Harting Han connector ¹ / ₂ = 14 NPT M20 x 1.5 (CM20) Pg 13.5 ¹ / ₂ GK	(general purpose only) (general purpose only)	(Not	e 2)					L N M P S T V
Aluminium alloy copper- Aluminium alloy copper- Aluminium alloy copper- AISI 316 L ss (Barrel ver AISI 316 L ss (Barrel ver Aluminium alloy (DIN ver	rfree (Barrel version) free (Barrel version) free (Barrel version) free (Barrel version) freion) rsion) rsion) rsion) rsion)	M20 x 1.5 (CM 20) Pg 13.5 ¹ / ₂ GK Harting Han connector ¹ / ₂ – 14 NPT M20 x 1.5 (CM20) Pg 13.5 ¹ / ₂ GK M20 x 1.5 (CM 20)	(general purpose only)	(Not	re 2)					LNMPSTVUJ
Aluminium alloy copper- Aluminium alloy copper- Aluminium alloy copper- AISI 316 L ss (Barrel vei AISI 316 L ss (Barrel vei AISI 316 L ss (Barrel vei AISI 316 L ss (Barrel vei	rfree (Barrel version) free (Barrel version) free (Barrel version) free (Barrel version) freion) rsion) rsion) rsion) rsion) rsion)	M20 x 1.5 (CM 20) Pg 13.5 ¹ / ₂ GK Harting Han connector ¹ / ₂ = 14 NPT M20 x 1.5 (CM20) Pg 13.5 ¹ / ₂ GK		(Not	,					L N M P S T V U
Aluminium alloy copper- Aluminium alloy copper- Aluminium alloy copper- AISI 316 L ss (Barrel ver AISI 316 L ss (Barrel ver AISI 316 L ss (Barrel ver AISI 316 L ss (Barrel ver Aluminium alloy (DIN ver Aluminium alloy (DIN ver Aluminium alloy (DIN ver	rfree (Barrel version) -free (Barrel version)	M20 x 1.5 (CM 20) Pg 13.5 1/2 GK Harting Han connector 1/2 - 14 NPT M20 x 1.5 (CM20) Pg 13.5 1/2 GK M20 x 1.5 (CM 20) Pg 13.5	(general purpose only) (general purpose only)	,	,					LNMPSTVUJY
Aluminium alloy copper- Aluminium alloy copper- Aluminium alloy copper- AISI 316 L ss (Barrel ver AISI 316 L ss (Barrel ver AISI 316 L ss (Barrel ver AISI 316 L ss (Barrel ver Aluminium alloy (DIN ver Aluminium alloy (DIN ver Aluminium alloy (DIN ver Output/Additional option HART digital communic	rfree (Barrel version) -free (Barrel version)	M20 x 1.5 (CM 20) Pg 13.5 1/2 GK Harting Han connector 1/2 - 14 NPT M20 x 1.5 (CM20) Pg 13.5 1/2 GK M20 x 1.5 (CM 20) Pg 13.5 Harting Han connector	(general purpose only) (general purpose only) (general purpose only)	,	re 2)					LNMPSTVUJY

ADDITIONAL ORDERING INFORMATION for model 268VR

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

	XX	хх	XX	хх	XX	хх	хх	хх	XX	хх	XX
Electrical certification											
ATEX Group II Category 1G and 1/2G, Category 1D and 1/2D - Intrinsic Safety Ex ia	E1										
ATEX Group II Category 1/2 GD – Explosion Proof Ex d	E2										
Canadian Standard Association (CSA) (only 1/2–14NPT, M20 and Pg 13.5 electrical connection)	E4										
Factory Mutual (FM) approval (only with ½–14NPT, M20 and Pg 13.5 electrical connection)	E6										
IECEX IIC T6 Ga/Gb resp. Ex tb IIIC T85° C Da/Db (only with 1/2–14NPT and M20 electrical conn./E	Barrel) E9 W1										
GOST (Russia) EEx ia GOST (Russia) EEx d	W2										
GOST (Nassia) EEx d	W3										
GOST (Kazakistan) EEx d	W4										
Inmetro (Brazil) EEx ia (pending)	W5										
Inmetro (Brazil) EEx d (pending)	W6										
Inmetro (Brazil) EEx nL (pending)	W7										
Metrologic (Russia)	WC										
Metrologic (Kazakhstan) Output meter	WD										
·		L 1									
ProMeter, Standard calibration ProMeter, Special calibration		D1 D2									
Analog output indicator linear 0–100% scale		D3									
Analog output indicator, special graduation (to be specified for linear scale)		D5									
Programmable signal meter and HART configurator (CoMeter)		D7									
Programmable signal meter and HART configurator (CoMeter – customer configuration)		D8									
Mounting bracket (shape and material)											
For pipe mounting (Not suitable for AISI housing) Carbon steel			B1								
For pipe mounting (Not suitable for AISI housing) AISI 316 L ss			B2								
For wall mounting (Not suitable for AISI housing) Carbon steel			B3								
For wall mounting (Not suitable for AISI housing) AISI 316 L ss			B4 B5								
Flat type for box AISI 316 L ss Surge			D0	ı							
Surge/Transient Protector				S1							
Operating manual											
German					M1						
Italian					M2						
French					M4						
Labels & tag language											
German						T1					
Italian						T2					
Spanish French						T3 T4					
Additional tag plate											
Laser printing of tag on stainless steel plate							12				
Configuration								'			
Standard - Pressure = inH2O/psi at 20° C; Temperature = deg. F								N2			
Standard - Pressure = inH2O/psi at 4° C; Temperature = deg. F								N3			
Standard - Pressure = inH2O/psi at 20° C; Temperature = deg.C								N4			
Standard - Pressure = inH2O/psi at 4° C; Temperature = deg. C								N5			
Custom								N6			
Certificates											
Inspection certificate EN 10204–3.1 of calibration (9-point) Certificate of compliance with the order EN 10204–2.1 of instrument design									C1 C6		
Material traceability											
Certificate of compliance with the order EN 10204–2.1 of process wetted parts Inspection certificate EN 10204–3.1 of process wetted parts										H1 H3	
Connector										0	
	Note 4)										U3
	Note 4)										U4
	,										

2600T Pressure Transmitters

Model 268DR, 268PR, 268HR, 268VR, 268NR

DS/268XR-EN Rev. I

Note 1: Suitable for oxygen service

Note 2: Select type in additional ordering code

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

Note 4: 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)

- 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 268NR Safety Absolute Pressure Transmitter with remote 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 – 1st to 5			2 6 8	N R	Х	Х	Х
Safety Absolute Pressu	ure Transmitter with remote seal	- BASE ACCURACY 0.075%					
SENSOR - Span limits	- 6 th character						
1.1 and 65kPa	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			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		
iaphragm material / F	ill fluid - 7 th 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 th character					_	
Remote seal		(one seal except button and union	n types to be quoted separately)			R	
lousing material and e	electrical connection – 9th cha	racter					1
Aluminium alloy (Barrel		¹ / ₂ – 14 NPT					Α
Aluminium alloy (Barrel	version)	M20 x 1.5 (CM 20)					В
Aluminium alloy (Barrel		Pg 13.5					D
Aluminium alloy (Barrel	version)	1/2 GK					С
Aluminium alloy (Barrel	version)	Harting Han connector	(general purpose only)		(Note 3)	Ε
Aluminium alloy coppe	er-free (Barrel version)	1/2 - 14 NPT					Н
Aluminium alloy coppe	er-free (Barrel version)	M20 x 1.5 (CM 20)					L
Aluminium alloy coppe		Pg 13.5					Ν
Aluminium alloy coppe		1/2 GK					М
Aluminium alloy coppe	r-free (Barrel version)	Harting Han connector	(general purpose only)		(Note 3)	Ρ
AISI 316 L ss (Barrel ve		1/2 - 14 NPT				,	S
AISI 316 L ss (Barrel ve		M20 x 1.5 (CM20)					T
AISI 316 L ss (Barrel ve		Pg 13.5					V
AISI 316 L ss (Barrel ve	,	1/2 GK					U
Output/Additional option	ons - 10 th character						
HART digital communi	cation and 4 to 20mA (SIL 2)	No additional options		(Note 4		
HART digital communi	cation and 4 to 20mA (SIL 2)	Options requested (to be ordered	by "Additional ordering code")				

ADDITIONAL ORDERING INFORMATION for model 268NR

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

	XX	хх	хх	ХХ	хх	хх	XX	хх	хх	хх	XX
Electrical certification											
ATEX Group II Category 1G and 1/2G, Category 1D and 1/2D - Intrinsic Safety Ex ia	E1										
ATEX Group II Category 1/2 GD – Explosion Proof Ex d	E2										
Canadian Standard Association (CSA) (only 1/2–14NPT, M20 and Pg 13.5 electrical connection)	E4										
Factory Mutual (FM) approval (only with 1/2-14NPT, M20 and Pg 13.5 electrical connection) IECEX IIC T6 Ga/Gb resp. Ex to IIIC T85° C Da/Db (only with 1/2-14NPT and M20 electrical conn./Barrel)	E6 E9										
GOST (Russia) EEx ia	W1										
GOST (Russia) EEx d	W2										
GOST (Kazakistan) EEx ia	W3										
GOST (Kazakistan) EEx d	W4										
Inmetro (Brazil) EEx ia (pending)	W5										
Inmetro (Brazil) EEx d (pending)	W6										
Inmetro (Brazil) EEx nL (pending)	W7										
Metrologic (Russia)	WC										
Metrologic (Kazakhstan) Output meter	WD										
		Б.									
ProMeter, Standard calibration		D1									
ProMeter, Special calibration Analog output indicator linear 0-100% scale		D2 D3									
Analog output indicator in lear 0-100% scale Analog output indicator, special graduation (to be specified for linear scale)		D5									
Programmable signal meter and HART configurator (CoMeter)		D7									
Programmable signal meter and HART configurator (CoMeter – customer configuration)		D8									
Mounting bracket (shape and material)			J								
For pipe mounting (Not suitable for AISI housing) Carbon steel			В6								
For pipe mounting (Not suitable to 7 Not Housing) AISI 316 L ss			B7								
Surge				'							
Surge/Transient Protector				S1							
Operating manual											
German					М1						
Italian					M2						
French					M4						
Labels & tag language											
German						T1					
Italian						T2					
Spanish						ТЗ					
French						T4					
Additional tag plate											
Laser printing of tag on stainless steel plate							12				
Configuration											
Standard – Pressure = inH2O/psi at 20° C; Temperature = deg. F								N2			
Standard - Pressure = inH2O/psi at 4° C; Temperature = deg. F								ΝЗ			
Standard - Pressure = inH2O/psi at 20° C; Temperature = deg.C								N4			
Standard - Pressure = inH2O/psi at 4° C; Temperature = deg. C								N5			
Custom								N6			
Certificates											
Inspection certificate EN 10204–3.1 of calibration (9-point) Certificate of compliance with the order EN 10204–2.1 of instrument design									C1 C6		
Material traceability											
inaterial didocubility										H1	
Certificate of compliance with the order EN 10204–2.1 of process wetted parts Inspection certificate EN 10204–3.1 of process wetted parts										НЗ	
Certificate of compliance with the order EN 10204–2.1 of process wetted parts										НЗ	ļ
Certificate of compliance with the order EN 10204–2.1 of process wetted parts Inspection certificate EN 10204–3.1 of process wetted parts)									НЗ	J U3

- Note 1: Suitable for oxygen service
- Note 2: Not used
- Note 3: Select type in additional ordering code
- Note 4: Not available with Electronic Housing code P, E
- Note 5: 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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