Data Sheet DS/266XSH-EN

Model 266DSH Differential Model 266PSH Gauge Model 266VSH Absolute

2600T Series Pressure Transmitters Engineered solutions for all applications



Base accuracy : from 0.06 % of calibrated span

Reliable sensing system coupled with very latest digital technologies provides large turn down ratio up to 100:1

Comprehensive sensor choice optimize in-use total performance and stability

10-year stability 0.15 % of URL Flexible configuration facilities provided locally via local LCD keypad

New TTG (Through-The-Glass) keypad technology allows quick and easy local configuration without opening the cover, even in explosion proof environments

IEC 61508 certification for SIL2 (1001) and SIL3 (1002) applications

Full compliance with PED Category III



Functional Specifications

Range and span limits

Sensor	Upper Range		Lower Range Limit	(LRL)	Minimun	n span
Code	Limit (URL)	266DSH	266PSH	266VSH	266DSH differential	266VSH
		differential	gauge	absolute	266PSH gauge	absolute
	1 kPa	-1 kPa	-1 kPa		0.05 kPa	
А	10 mbar	-10 mbar	-10 mbar		0.5 mbar	
	4 inH2O	-4inH2O	-4inH2O		0.2 inH2O	
	4 kPa	-4 kPa	-4 kPa		0.2 kPa	
В	40 mbar	-40 mbar	-40 mbar		2 mbar	
	16 inH2O	-16 inH2O	-16 inH2O		0.8 inH2O	
	16 kPa	-16 kPa	-16 kPa	0.07 kPa abs (§)	0.54 kPa	0.54 kPa
Е	160 mbar	-160 mbar	-160 mbar	0.7 mbar abs (§)	5.4 mbar	5.4 mbar
	64 inH2O	-64 inH2O	-64 inH2O	0.5 mmHg (§)	2.16 inH2O	4 mmHg
	40 kPa	-40 kPa	-40 kPa	0.07 kPa abs (§)	0.4 kPa	0.67 kPa
F	400 mbar	-400 mbar	-400 mbar	0.7 mbar abs (§)	4 mbar	6.7 mbar
	160 inH2O	-160 inH2O	-160 inH2O	0.5 mmHg (§)	1.6 inH2O	5 mmHg
	65 kPa	-65 kPa	-65 kPa	0.07 kPa abs (§)	0.65 kPa	1.1 kPa
G	650 mbar	-650 mbar	-650 mbar	0.7 mbar abs (§)	6.5 mbar	11 mbar
	260 inH2O	-260 inH2O	-260 inH2O	0.5 mmHg (§)	2.6 inH2O	8 mmHg
	160 kPa	-160 kPa	1 kPa abs	0.07 kPa abs (§)	1.6 kPa	2.67 kPa
Н	1600 mbar	-1600 mbar	10 mbar abs	0.7 mbar abs (§)	16 mbar	26.7 mbar
	642 inH2O	-642 inH2O	0.15 psia	0.5 mmHg (§)	6.4 inH2O	20 mmHg
	600 kPa	-600 kPa	1 kPa abs	0.07 kPa abs (§)	6 kPa	10 kPa
Μ	6 bar	-6 bar	10 mbar abs	0.7 mbar abs (§)	0.06 bar	0.1 bar
	87 psi	-87 psi	0.15 psia	0.5 mmHg (§)	0.87 psi	1.45 psi
	2400 kPa	-2400 kPa	1 kPa abs	0.07 kPa abs (§)	24 kPa	40 kPa
Ρ	24 bar	-24 bar	10 mbar abs	0.7 mbar abs (§)	0.24 bar	0.4 bar
	348 psi	-348 psi	0.15 psia	0.5 mmHg (§)	3.5 psi	5.8 psi
	8000 kPa	-8000 kPa	1 kPa abs	0.07 kPa abs (§)	80 kPa	134 kPa
Q	80 bar	-80 bar	10 mbar abs	0.7 mbar abs (§)	0.8 bar	1.34 bar
	1160 psi	-1160 psi	0.15 psia	0.5 mmHg (§)	11.6 psi	19.4 psi
	16000 kPa	-16000 kPa	1 kPa abs	0.07 kPa abs (§)	160 kPa	267 kPa
S	160 bar	-160 bar	10 mbar abs	0.7 mbar abs (§)	1.6 bar	2.67 bar
	2320 psi	-2320 psi	0.15 psia	0.5 mmHg (§)	23.2 psi	38.7 psi

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

Span limits

Maximum span = URL (can be further adjusted up to ± URL (TD = 0.5) for differential models, within the range limits) IT IS RECOMMENDED TO SELECT THE TRANSMITTER SENSOR CODE PROVIDING THE TURNDOWN VALUE AS LOWEST AS POSSIBLE TO OPTIMIZE PERFORMANCE CHARACTERISTICS.

Zero suppression and elevation

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

– calibrated span \geq minimum span

Damping

Selectable time constant : between 0 and 60 s This is in addition to sensor response time.

Turn on time

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

Insulation resistance

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

Operative limits

Pressure limits:

Overpressure limits

Without damage to the transmitter

Sensors	Fill fluid	Overpressure limits
Sensor F to S	Silicone oil	0.07 kPa abs, 0.7 mbar abs, 0.5 mmHg
		and 21 MPa, 210 bar, 3045 psi ⁽¹⁾ (2)
Sensor E	Silicone oil	0.07 kPa abs, 0.7 mbar abs, 0.5 mmHg
		and 16 MPa, 160 bar, 2320 psi ⁽¹⁾
Sensor B	Silicone oil	0.07 kPa abs, 0.7 mbar abs, 0.5 mmHg
		and 7 MPa, 70 bar, 1015 psi ⁽¹⁾
Sensor A	Silicone oil	0.07 kPa abs, 0.7 mbar abs, 0.5 mmHg
		and 2 MPa, 20 bar, 290 psi ⁽¹⁾
Sensor F to S	Inert	0.135 kPa abs, 1.35 mbar abs, 1 mmHg
	(Galden)	and 21 MPa, 210 bar, 3045 psi ⁽¹⁾ (2)
Sensor E	Inert	0.135 kPa abs, 1.35 mbar abs, 1 mmHg
	(Galden)	and 16 MPa, 160 bar, 2320 psi ⁽¹⁾
Sensor F to S	Inert	0.4 kPa abs, 4 mbar abs, 3 mmHg
	(Halocarbon)	and 21 MPa, 210 bar, 3045 psi ⁽¹⁾ (2)
Sensor E	Inert	0.4 kPa abs, 4 mbar abs, 3 mmHg
	(Halocarbon)	and 16 MPa, 160 bar, 2320 psi ⁽¹⁾

Static pressure limits

Transmitters for differential pressure model 266DSH operates within specifications between the following limits:

Sensors	Static pressure limits
Sensor F to S	1.3 kPa abs, 13 mbar abs, 0.2 psia
	and 21 MPa, 210 bar, 3045 psi ⁽¹⁾ ⁽²⁾
Sensor E	1.3 kPa abs, 13 mbar abs, 0.2 psia
	and 16 MPa, 160 bar, 2320 psi ⁽¹⁾
Sensor B	1.3 kPa abs, 13 mbar abs, 0.2 psia
	and 7 MPa, 70 bar, 1015 psi ⁽¹⁾
Sensor A	1.3 kPa abs, 13 mbar abs, 0.2 psia
	and 2 MPa, 20 bar, 290 psi ⁽¹⁾

(1) 1 MPa, 10 bar, 145 psi for Kynar-PVDF

(2) 16 MPa, 160 bar, 2320 psi for AISI 316 ss NACE bolting

Proof pressure

The transmitter can be exposed without leaking to line pressure of up to 48 MPa, 480 bar, 6960 psi. Meet ANSI/ISA–S 82.03 hydrostatic test requirements.

(1) 1 MPa, 10 bar, 145 psi for Kynar-PVDF

(2) 16 MPa, 160 bar, 2320 psi for AISI 316 ss NACE bolting

Temperature limits °C (°F) : Ambient

is the operating temperature

-40 and 85 °C (-40 and 185 °F)
-25 and 85 °C (-13 and 185 °F)
-20 and 85 °C (-4 and 185 °F)
-10 and 85 °C (14 and 185 °F)
-20 and 85 °C (-4 and 185 °F)
-10 and 85 °C (14 and 185 °F)

Model 266VSH	Ambient temperature limits
Silicone oil for sensor F to S	-40 and 85 °C (-40 and 185 °F)
Silicone oil for sensor E	-15 and 70 °C (5 and 158 °F)
Inert (Galden) for sensor F to S	-10 and 65 °C (14 and 150 °F)
Inert (Halocarbon) for sensor F to S	-10 and 65 °C (14 and 150 °F)

Models 266DSH - 266PSH - 266VSH	Ambient temperature limits
LCD integral display	-40 and 85 °C (-40 and 185 °F)
I CD display may not be clearly readable below -20	$^{\circ}$ C (-1 °E) or above +70 °C (+158 °E)

LCD display may not be clearly readable below -20 °C (-4 °F) or above +70 °C (+158 °F)

IMPORTANT

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

Process

Models 266DSH - 266PSH	Process temperature limits
Silicone oil for sensor F to S	-40 and 121 °C (-40 and 250 °F) ⁽¹⁾
Silicone oil for sensor A to E	-25 and 121 °C (-13 and 250 °F) ⁽¹⁾
Inert (Galden) for sensor F to S	-20 and 100 °C (-4 and 212 °F) ⁽²⁾
Inert (Galden) for sensor E	-10 and 100 °C (14 and 212 °F) ⁽²⁾
Inert (Halocarbon) for sensor F to S	-20 and 100 °C (-4 and 212 °F) ⁽²⁾
Inert (Halocarbon) for sensor E	-10 and 100 °C (14 and 212 °F) ⁽²⁾

Model 266VSH	Process temperature limits
Silicone oil for sensor F to S	-40 and 121 °C (-40 and 250 °F) ⁽¹⁾
Silicone oil for sensor E	-15 and 121 °C (5 and 250 °F) ⁽¹⁾
Inert (Galden) for sensor F to S	-10 and 100 °C (14 and 212 °F) ⁽²⁾
Inert (Halocarbon) for sensor F to S	-10 and 100 °C (14 and 212 °F) ⁽²⁾

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

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

Models 266DSH - 266PSH - 266VSH	Process temperature limits
Viton gasket	-20 and 121 °C (-4 and 250 °F)

Storage

Models 266DSH - 266PSH - 266VSH	Storage temperature limits
Storage limits	-50 and 85 °C (-58 and 185 °F)
LCD integral display	-40 and 85 °C (-40 and 185 °F)

Environmental limits

Electromagnetic compatibility (EMC)

Comply with EN 61326 and NAMUR NE-21 Surge immunity level (with surge protector): 4 kV (according to IEC 1000-4–5 EN 61000–4–5)

Pressure equipment directive (PED)

Comply with 97/23/EEC Category III Module H. Humidity

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

Vibration resistance

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

Shock resistance

Acceleration: 50 g Duration: 11 ms (according to IEC 60068–2–27)

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 integral display
INTRINSIC SAFETY:
ATEX Europe (code E1) and IEC Ex (code E8) approval
II 1 G Ex ia IIC T6/T5/T4 and
II 1/2 G Ex ia IIC T6/T5/T4; IP67.
II 1 D Ex iaD 20 T85 °C and
II 1/2 D Ex iaD 21 T85 °C; IP67.
EXPLOSION PROOF:
ATEX Europe (code E2) and IEC Ex (code E9) approval
II 1/2 G Ex d IIC T6 and
II 1/2 D Ex tD A21 T85 °C (–50 °C ≤ Ta ≤+75 °C); IP67.
TYPE "N":
ATEX Europe (code E3) and IEC Ex (code ER)
type examination
II 3 G Ex nL IIC T6/T5/T4 and
II 3 D Ex tD A22 T85 °C; IP67.
FM Approvals US (code E6) and
FM Approvals Canada (code E4):
- Explosionproof (US): Class I, Div. 1, Groups A, B, C, D
- Explosionproof (Canada): Class I, Div. 1, Groups 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
Class I, Zone 0 AEx ia IIC T6/T4, Zone 0 (FM US)
Class I, Zone 0 Ex ia IIC T6/T4, Zone 0 (FM Canada)
COMBINED ATEX (code EW = E1 + E2 + E3)
COMBINED ATEX and FM Approvals (code EN = EW + E4 + E6)
COMBINED FM Approvals US and Canada
- Intrinsically safe (code EA)
– Explosionproof (code EB)
- Nonincendive (code EC)
 GOST (Russia), GOST (Kazakhstan), Inmetro (Brazil)

based on ATEX

REFER TO CERTIFICATES FOR AMBIENT TEMPERATURE RANGES (WITHIN THE LIMITS OF -50 TO 85°C) RELATED TO THE DIFFERENT TEMPERATURE CLASSES

Electrical Characteristics and Options

HART digital communication and 4 to 20 mA output Power Supply

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

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

Minimum operating voltage increase to 12.3 V DC with optional surge protector

Ripple

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

4 to 20 mA and HART total loop resistance :

R (kΩ) = $\frac{\text{Supply voltage} - \text{min. operating voltage (V DC)}}{22 \text{ mA}}$

A minimum of 250 Ω is required for HART communication. Optional indicators

Integral display (code L1)

Wide screen LCD, 128 x 64 pixel,

52.5 x 27.2 mm (2.06 x 1.07 in.) dot matrix. Multilanguage. Four keys for configuration and management of device.

Easy setup for quick commissioning.

User selectable application-specific visualizations.

Totalized and instantaneous flow indication.

Display may also indicate static pressure, sensor temperature and diagnostic messages and provides configuration facilities.

Through-the-glass (TTG) controlled display (code L5)

As above integral display but equipped with the innovative TTG keypad allowing the activation of the configuration and management menus of the device without the need of removing the transmitter housing cover.

TTG keypad is protected against accidental activations.



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 20 mA, user-selectable for linear or square root output, power of $3/_2$ or $5/_2$, square root for bidirectional flow, 22 points linearization table (i.e. for horizontal or spherical tank level measurement).

HART[®] communication provides digital process variable superimposed on 4 to 20 mA signal, with protocol based on Bell 202 FSK standard.

Output current limits (to NAMUR standard) Overload condition

Overload condition

- Lower limit: 3.8 mA (configurable from 3.8 to 4 mA)
- Upper limit: 20.5 mA (configurable from 20 to 21 mA) Alarm current
- Lower limit: 3.6 mA (configurable from 3.6 to 4 mA)
- Upper limit: 21 mA (configurable from 20 to 22 mA)

Factory setting: high alarm current

Process diagnostics (PILD)

Plugged impulse line detecion (PILD) generates a warning via HART communication. The device can also be configured to drive the analog output signal to the "Alarm current".

FOUNDATION Fieldbus output

Device type

LINK MASTER DEVICE Link Active Scheduler (LAS) capability implemented. Manufacturer code: 000320 (hex) Device type code: 0007 (hex)

Power supply

The transmitter operates from 9 to 32 V DC, polarity independent, with or without surge protector. For EEx ia approval power supply must not exceed 24 V DC (entity certification) or 17.5 V DC (FISCO certification), according to FF-816.

Current consumption

operating (guiescent): 15 mA fault current limiting: 20 mA max.

Output signal

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

Function blocks/execution period

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

- 1 enhanced PID block/40 ms max.
- 1 standard ARitmetic block/25 ms
- 1 standard Input Selector block/25 ms
- 1 standard Control Selector block/25 ms
- 1 standard Signal Characterization block/25 ms
- 1 standard Integrator/Totalizer block/25 ms

Additional blocks

1 enhanced Resource block,

- 1 custom Pressure with calibration transducer block
- 1 custom Advanced Diagnostics transducer block including

Plugged Input Line Detection

1 custom Local Display transducer block

Number of link objects

35

Number of VCRs

35

Output interface

FOUNDATION fieldbus digital communication protocol to standard H1, compliant to specification V. 1.7.

Integral display

Wide screen LCD, 128 x 64 pixel,

52.5 x 27.2 mm (2.06 x 1.07 in.) dot matrix. Multilanguage. Four keys for configuration and management of device. Easy setup for quick commissioning. User selectable application-specific visualizations.

Totalized and instantaneous flow indication.

Display may also indicate static pressure, sensor temperature and diagnostic messages and provides configuration facilities.

Transmitter failure mode

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

PROFIBUS PA output

Device type

Pressure transmitter compliant to Profiles 3.0.1 Identification number: 3450 (hex)

Power supply

The transmitter operates from 9 to 32 V DC , polarity independent, with or without surge protector.

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

Current consumption

operating (quiescent): 15 mA fault current limiting: 20 mA max.

Output signal

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

Output interface

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

Output update time

25 ms

Function blocks

3 analog input, 3 transducer, 1 physical.

Integral display

Wide screen LCD, 128 x 64 pixel,

 $52.5 \times 27.2 \text{ mm}$ (2.06 x 1.07 in.) dot matrix. Multilanguage. Four keys for configuration and management of device.

Easy setup for quick commissioning.

User selectable application-specific visualizations.

Instantaneous flow indication.

Display may also indicate static pressure, sensor temperature and diagnostic messages and provides configuration facilities.

Transmitter failure mode

On gross transmitter failure condition, detected by selfdiagnostics, the output signal can be driven to defined conditions, selectable by the user as safe, last valid or calculated value.

If electronic failure or short circuit occur the transmitter consumption is electronically limited at a defined value (20 mA approx), for safety of the network.

Performance specifications

Stated at reference condition to IEC 60770 ambient temperature of 20 °C (68 °F), relative humidity of 65 %, atmospheric pressure of 1013 hPa (1013 mbar), mounting position with vertical diaphragm and zero based range for transmitter with isolating diaphragms in AISI 316 L ss or Hastelloy and silicone oil fill and HART digital trim values equal to 4 mA and to 20 mA span end points, in linear mode. Unless otherwise specified, errors are quoted as % of span. Some performance referring to the Upper Range Limit 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.

Dynamic performance (according to IEC 61298-1 definition)

Sensors	Time constant (63.2 % of total step change)
Sensor M to S	≤ 70 ms
Sensor H	100 ms
Sensor G	130 ms
Sensor F	180 ms
Dead time for all sensors	30 ms

Response time (total) = dead time + time constant

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

Model	Sensor	for TD up to				
	F and G	from 1:1 to 10:1	± 0.06 %			
	F and G	from 10:1 to 100:1	± 0.025 + (0.0035 x TD) %			
	H to S	from 1:1 to 10:1	± 0.075 %			
	H to S	from 10:1 to 100:1	± (0.0075 x TD) %			
266DSH	E	from 1:1 to 10:1	± 0.075 %			
266PSH	E	from 10:1 to 30:1	± (0.0075 x TD) %			
	В	from 1:1 to 10:1	± 0.10 %			
	В	from 10:1 to 20:1	± (0.01 × TD) %			
	А	from 1:1 to 4:1	± 0.10 %			
	А	from 4:1 to 20:1	± (0.025 x TD) %			
	F to S	from 1:1 to 10:1	± 0.075 %			
266VSH	F to S	from 10:1 to 60:1	± (0.0075 x TD) %			
	E	from 1:1 to 10:1	± 0.075 %			
	E	from 10:1 to 30:1	± (0.0075 x TD) %			

Ambient temperature

per 20K change between the limits of -40 °C to +85 °C (per 36 °F change between the limits of -40 to +185 °F):

Model	Sensor	for TD up to	
	F to Q	10:1	± (0.03 % URL + 0.045 % span)
266DSH	E and S	10:1	± (0.04 % URL + 0.065 % span)
266PSH	В	10:1	± (0.06 % URL + 0.10 % span)
	A	4:1	± (0.10 % URL + 0.10 % span)
266VSH	F to Q	10:1	± (0.06 % URL + 0.09 % span)
	E and S	10:1	± (0.08 % URL + 0.13 % span)

for an ambient temperature change from –10 °C to +60 °C (+14 to +140 °F):

Model	Sensor	for TD up to	
	F to Q	10:1	± (0.055 % URL + 0.08 % span)
266DSH	E and S	10:1	± (0.075 % URL + 0.11 % span)
266PSH	В	10:1	± (0.11 % URL + 0.18 % span)
	А	4:1	± (0.18 % URL + 0.18 % span)
266VSH	F to Q	10:1	± (0.11 % URL + 0.16 % span)
	E and S	10:1	± (0.15 % URL + 0.22 % span)

per 10K change between the limits of -40 °C to -10 °C or $+60^{\circ}$ to +85 °C (per 18 °F change between the limits of -40 to +14 °F or $+140^{\circ}$ to +185 °F):

Model	Sensor	for TD up to	
	F to Q	10:1	± (0.03 % URL + 0.04 % span)
266DSH	E and S	10:1	± (0.04 % URL + 0.055 % span)
266PSH	В	10:1	± (0.055 % URL + 0.09 % span)
	А	4:1	± (0.09 % URL + 0.09 % span)
266VSH	F to Q	10:1	± (0.055 % URL + 0.08 % span)
	E and S	10:1	± (0.075 % URL + 0.11 % span)

Static pressure

(zero errors can be calibrated out at line pressure)

per 0.5 MPa, 5 bar or 72.5 psi (sensor A) per 2 MPa, 20 bar or 290 psi (sensor B) per 3.5 MPa, 35 bar or 500 psi (sensor E) per 7 MPa, 70 bar or 1015 psi (sensor F to S) Model 266DSH

zero error: ±0.05 % of URL for sensor F to S
 ±0.08 % of URL for sensor A, B and E

- span error: ±0.08 % of reading.

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**

Meets all the requirements of EN 61326 and NAMUR NE-21.

Common mode interference

No effect from 100Vrms @ 50Hz, or 50 V DC

Mounting position

No effect for rotation on diaphragm plane. A tilt up to 90° from vertical causes a zero shifts up to 0.5 kPa, 5 mbar or 2 inH2O, which can be corrected with zero adjustment. No span effect. **Stability**

±0.15 % of URL over a ten years period

 $(\pm 0.25 \%$ of URL over a ten years period for sensor A and B) Total performance

similar to DIN 16086

Temperature change in the range from -10 to 60 °C (14 to 140 °F), static pressure change (266DSH) 10 MPa, 100 bar, 1450 psi

Model	Sensor	for TD up to	
266DSH	F to Q	1:1	± 0.24 % of calibrated span
266PSH	F to Q	1:1	± 0.15 % of calibrated span
266VSH	F to Q	1:1	± 0.28 % of calibrated span

Total performance includes the measurement deviation of

- non-linearity including hysteresis and non-reproducibility,
- thermal change of ambient temperature on zero and span,
- static pressure change on zero and span.(266DSH only)

$$\mathsf{E}_{\mathsf{perf}} = \sqrt{(\mathsf{E}_{\Delta\mathsf{T}z} + \mathsf{E}_{\Delta\mathsf{T}s})^2 + \mathsf{E}_{\Delta\mathsf{P}z}^2 + \mathsf{E}_{\Delta\mathsf{P}s}^2 + \mathsf{E}_{\mathsf{lin}}^2}$$

- E_{perf} = Total Performance
- E_{ATz} = Effect of the ambient temperature on zero
- E_{ATs} = Effect of the ambient temperature on span
- E_{APz} = Effect of the static pressure on zero (266DSH only)
- E_{APs} = Effect of the static pressure on span (266DSH only)
- E_{lin} = Accuracy rating (for terminal-based linearity 0.06 % or 0.075% as per sensor accuracy)

Physical Specification

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

Materials

Process isolating diaphragms (*)

AISI 316 L ss; AISI 316 L ss gold plated; Monel 400[™]; Tantalum; Hastelloy C-276[™]; Hastelloy C-276[™] on AISI 316L ss gasket seat.

Process flanges, adapters, plugs and drain/vent valves (*)

AISI 316 L ss; Hastelloy C-276™; Monel 400™.

Kynar™ (PVDF insert in AISI 316 ss flange)

Blind flange (reference side of 266PSH, 266VSH) AISI 316 L ss.

AISI 316 L SS.

Sensor fill fluid

Silicone oil; Inert fill (Halocarbon™ 4.2 or Galden™).

Mounting bracket (**)

Zinc plated carbon steel with chrome passivation; AISI 316 ss; AISI 316 L ss.

Gaskets (*)

Viton™; PTFE.

Sensor housing

AISI 316 L ss.

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.

Plated alloy steel bolts per ASTM-A-193-77a grade B7M and nuts per ASTM A194/A 194 M-90 grade 2HM, in compliance with NACE MR0175 Class II.

Electronic housing and covers

Aluminium alloy (copper content \leq 0.3 %) with baked epoxy finish (colour RAL9002);

AISI 316 L ss. Covers O-ring

Buna N.

Local adjustments (zero, span and write protect)

Glass filled polyphenylene oxyde (removable).

Plates

AISI 316ss for transmitter nameplate, certification plate, optional tag/calibration plate attached to the electronics housing and optional wired-on customer data plate. All printing by laser.

Calibration

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

Optional: at specified range and ambient conditions.

(*) Wetted parts of the transmitter.

(**) U-bolt material: high-strength alloy steel or AISI 316 L ss; bolts/nuts material: high-strength alloy steel or AISI 316 ss.

Optional extras

Mounting brackets

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

4-position (at 90°) user orientable.

Optional plates

Code I2: for tag (up to 31 characters) and calibration details (up to 31 characters: lower and upper values plus unit) fixed onto transmitter housing.

Code I1: for customer data (32 character x 4 lines) wired-on transmitter housing

Surge protection

Cleaning procedure for oxygen service

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

Tag and manual language

Communication connectors

Process connections

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

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

centre distance (266DSH): 54 mm (2.13 in.) on flange;

51, 54 or 57 mm (2.01, 2.13 or 2.24 in.) as per adapters fittings fixing threads: $7/_{16}$ – 20 UNF at 41.3 mm centre distance

Electrical connections

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

Special communication connector (on request)

- HART : straight or angle Harting Han 8D connector and one plug.
- FOUNDATION Fieldbus, PROFIBUS PA: M12x1 or 7/8 in.

Terminal block

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

Fieldbus versions: two terminals for signal wiring (bus connection) up to 2.5 $\rm mm^2$ (14 AWG)

Grounding

Internal and external 6 mm² (10 AWG) 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)

4 kg approx (8.8 lb); add 1.5 kg (3.3 lb) for AISI housing. Add 650 g (1.5 lb) for packing.

Packing

Carton 27 x 24 x 20 cm approx (11 x 10 x 8 in.).

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:

eeningalea de lenener	
Engineering Unit	kPa
4 mA	Zero
20 mA	Upper Range Limit (URL)
Output	Linear
Damping	1 s
Transmitter failure mode	Upscale
Software tag (8 characters max)	Blank
Optional LCD display	PV in kPa; output in mA and
	in percentage on bargraph

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 with DTM for 266 models. 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 HART 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 These and others are available for PROFIBUS and FOUNDATION Fieldbus.

Transmitter with PROFIBUS PA communication 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:

oorinigaroa ao ronowo.	
Measure Profile	Pressure
Engineering Unit	kPa
Output scale 0 %	Lower Range Limit (LRL)
Output scale 100 %	Upper Range Limit (URL)
Output	Linear
Hi-Hi Limit	Upper Range Limit (URL)
Hi Limit	Upper Range Limit (URL)
Low Limit	Lower Range Limit (LRL)
Low-Low Limit	Lower Range Limit (LRL)
Limits hysteresis	0.5 % of output scale
PV filter	0 s
Address (set by local key)	126
Тад	32 alphanumeric characters
Optional LCD display	PV in kPa; output in percentage
	on bargraph

Any or all the above configurable parameters, including the range values which must be the same unit of measure, can be easily changed by a PC running the configuration software with DTM for 266 models.The transmitter database is customized with specified flange type and material, O-ring and drain/vent materials and meter code option.

Custom configuration (option)

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

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

Transmitter with FOUNDATION Fieldbus communication 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 the analog input function block FB1 is configured as follows:

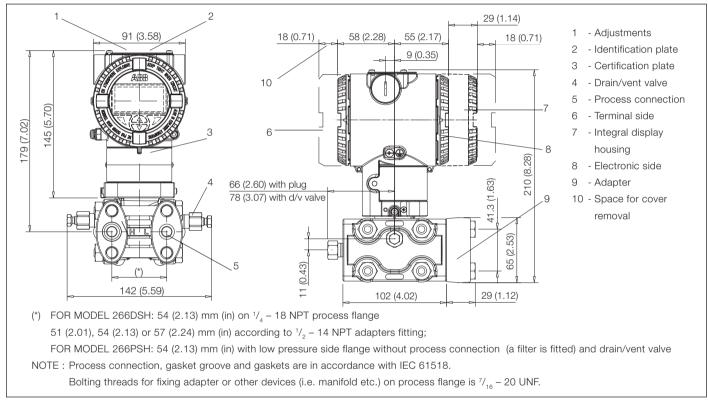
Pressure
kPa
Lower Range Limit (LRL)
Upper Range Limit (URL)
Linear
Upper Range Limit (URL)
Upper Range Limit (URL)
Lower Range Limit (LRL)
Lower Range Limit (LRL)
0.5 % of output scale
0 s
32 alphanumeric characters
PV in kPa; output in percentage
on bargraph

The analog input function block FB2 and FB3 are configured respectively for the sensor temperature measured in °C and for the static pressure measured in MPa.

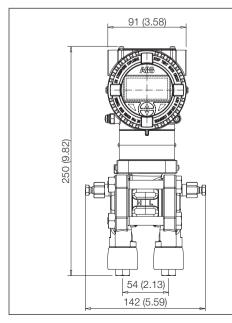
Any or all the above configurable parameters, including the range values, can be changed using any host compliant to FOUNDATION fieldbus. The transmitter database is customized with specified flange type and material, O-ring and drain/vent materials and meter code option.

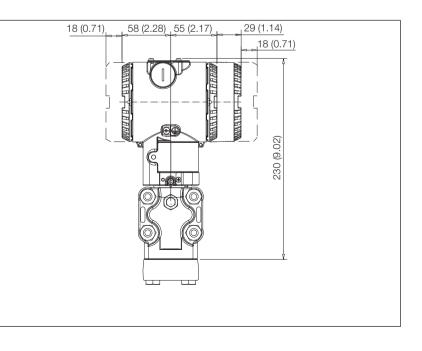
MOUNTING DIMENSIONS (not for construction unless certified) – dimensions in mm (in.)

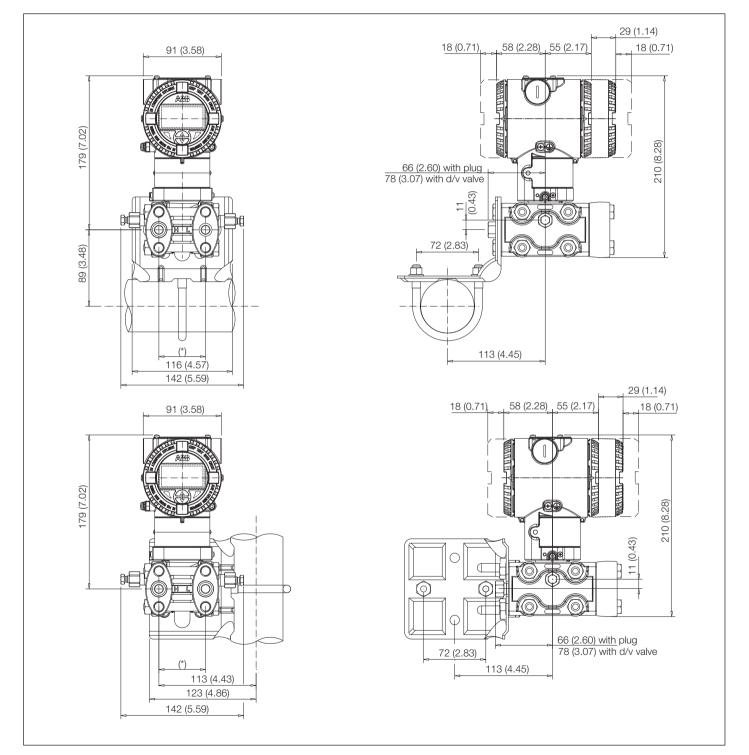
Transmitter with barrel housing - horizontal flanges



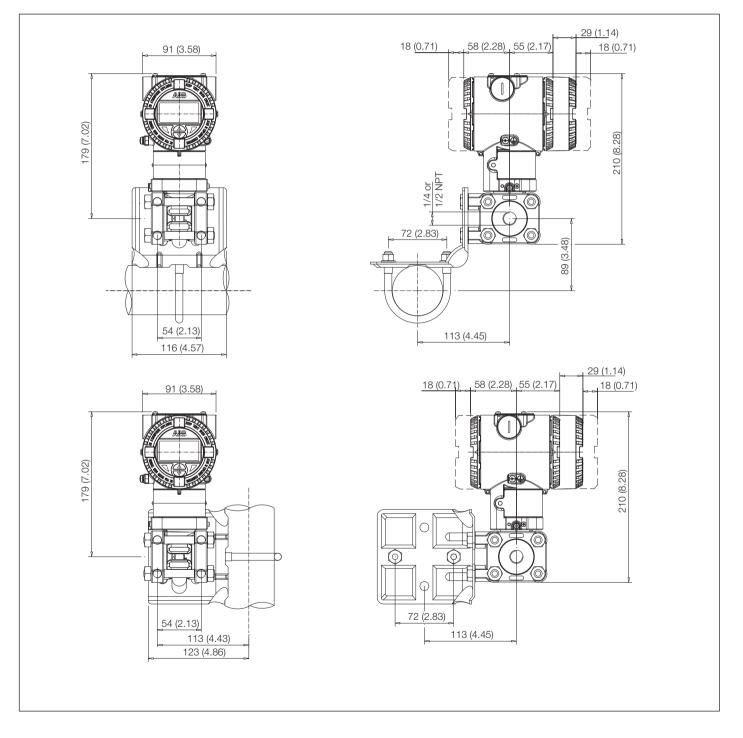
Transmitter with barrel housing - vertical flanges



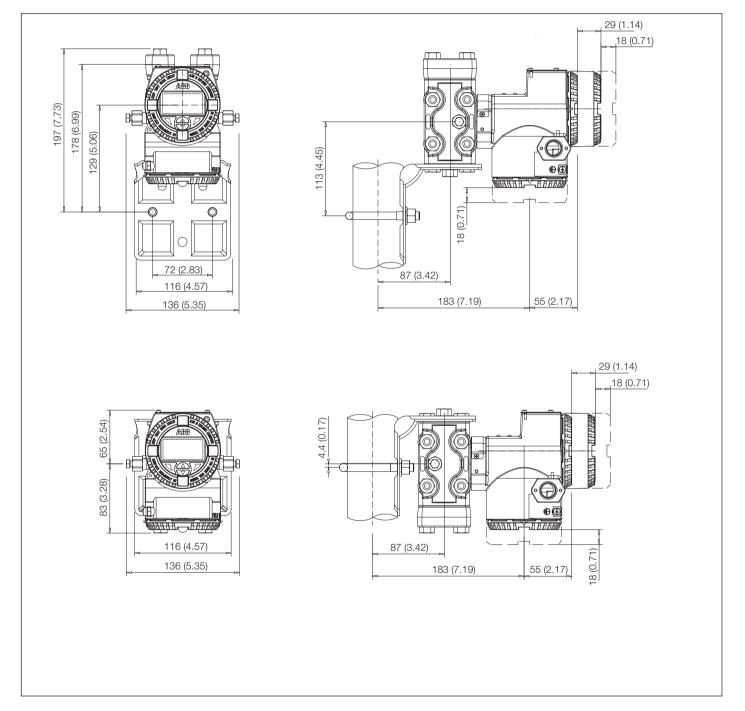




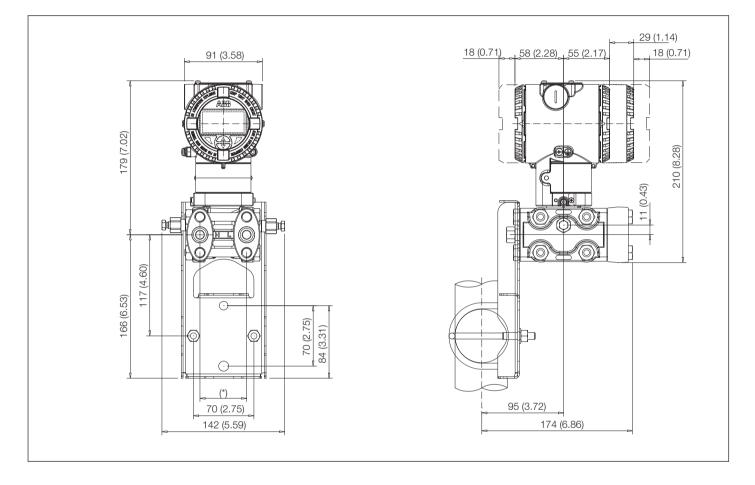
Transmitter on bracket for vertical or horizontal 60 mm (2in) pipe mounting



Transmitter with Kynar flanges on bracket for vertical or horizontal 60 mm (2in) pipe mounting



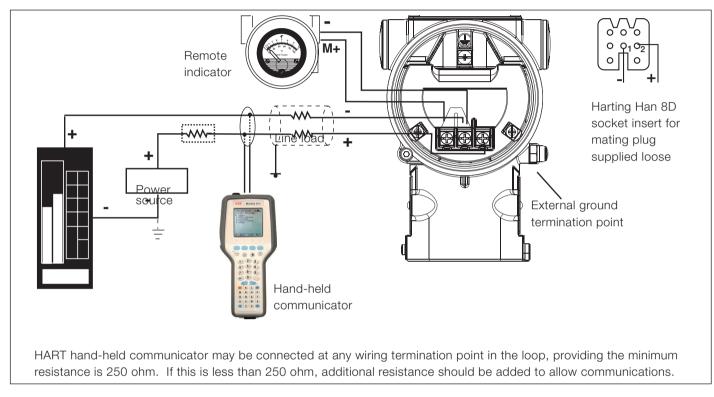
Transmitter with DIN aluminium housing - horizontal flanges on bracket for vertical or horizontal 60 mm (2in) pipe mounting



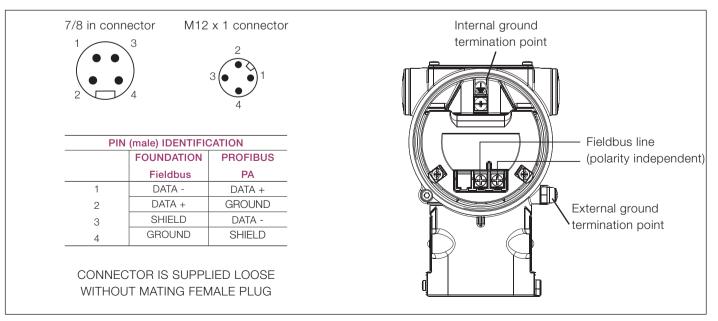
Transmitter on flat bracket for vertical or horizontal 60 mm (2in) pipe mounting

Electrical connections

HART Version



FIELDBUS Versions



Ordering information

BASIC ORDERING INFORMATION model 266DSH Differential Pressure Transmitter

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

	0									
BASE MODEL - 1st to 6	th characters		2 6 6 D S H	X	S	Х	Х	Х	Х	Х
Differential Pressure Tr	ansmitter – BASE ACCL	JRACY 0.06 %								
SENSOR - Span limits - 7th characters							contir	nued		
0.05 and 1 kPa	0.5 and 10 mbar	0.2 and 4 inH2O		А			S	ee nex	t pag	е
0.2 and 4 kPa	2 and 40 mbar	0.8 and 16 inH2O		В						
0.54 and 16 kPa	5.4 and 160 mbar	2.16 and 64 inH2O		Е						
0.4 and 40 kPa	4 and 400 mbar	1.6 and 160 inH2O		F						
0.65 and 65 kPa	6.5 and 650 mbar	2.6 and 260 inH2O		G						
1.6 and 160 kPa	16 and 1600 mbar	6.4 and 642 inH2O		Н						
6 and 600 kPa	0.06 and 6 bar	0.87 and 87 psi		М						
24 and 2400 kPa	0.24 and 24 bar	3.5 and 348 psi		Ρ						
80 and 8000 kPa	0.8 and 80 bar	11.6 and 1160 psi		Q						
160 and 16000 kPa	1.6 and 160 bar	23.2 and 2320 psi		S						
Use code - 8th characte	ers				S					
Diaphragm material / I	Fill fluid (wetted parts)	- 9 th characters								
AISI 316 L ss		Silicone oil	(Note 2)			S				
Hastelloy C-276™ (on	AISI seat)	Silicone oil		NA	CE	н				
Hastelloy C-276™		Silicone oil		NA	CE	К				
Monel 400™		Silicone oil	(Note 2)	NA	CE	М				
AISI 316 L ss gold plat	ed	Silicone oil	(Note 2)			8				
Tantalum		Silicone oil	(Note 2)	NA	CE	Т				
AISI 316 L ss		Inert fluid - Galden	(Notes 1, 2)			A				
Hastelloy C-276™ (on	AISI seat)	Inert fluid - Galden	(Notes 1, 2)	NA	CE	В				
Hastelloy C-276™		Inert fluid - Galden	(Notes 1, 2)	NA	CE	F				
Monel 400™		Inert fluid - Galden	(Notes 1, 2)	NA	CE	С				
AISI 316 L ss gold plat	ed	Inert fluid - Galden	(Notes 1, 2)			9				
Tantalum		Inert fluid - Galden	(Notes 1, 2)	NA	CE	D				
AISI 316 L ss		Inert fluid - Halocarbon	(Notes 1, 2)			L				
Hastelloy C-276™ (on	AISI seat)	Inert fluid - Halocarbon	(Notes 1, 2)	NA	CE	Q				
Hastelloy C-276™		Inert fluid - Halocarbon	(Notes 1, 2)	NA	CE	Р				
Monel 400™		Inert fluid - Halocarbon	(Notes 1, 2)	NA	CE	4				
AISI 316 L ss gold plat	ed	Inert fluid - Halocarbon	(Notes 1, 2)			I				
Tantalum		Inert fluid - Halocarbon	(Notes 1, 2)	NA	CE	5				

BASIC ORDERING INFORMATION model 2660	OSH Differential Pressur	e Transmitter	2	6 6 D S H X S X	X	Х	Х	Х
Process flanges/adapters material and conne	ction (wetted parts) - 10) th characters						
AISI 316 L ss (Horizontal connection)	1/4 – 18 NPT-f direct			NACE	А			
AISI 316 L ss (Horizontal connection)	1/2 – 14 NPT-f through a	adapter		NACE	В			
Hastelloy C-276™ (Horizontal connection)	1/4 – 18 NPT-f direct		(Note 3)	NACE	D			
Hastelloy C-276™ (Horizontal connection)	1/2 – 14 NPT-f through a	adapter	(Note 3)	NACE	Е			
Monel 400 [™] (Horizontal connection)	1/4 – 18 NPT-f direct		(Notes 3, 4)	NACE	G			
Monel 400 [™] (Horizontal connection)	1/2 – 14 NPT-f through a	adapter	(Notes 3, 4)	NACE	Н			
AISI 316 L ss (Vertical connection)	1/4 – 18 NPT-f direct			NACE	Q			
AISI 316 L ss (Vertical connection)	1/2 – 14 NPT-f through a	adapter		NACE	Т			
Hastelloy C-276™ (Vertical connection)	1/4 – 18 NPT-f direct		(Note 3)	NACE	М			
Hastelloy C-276™ (Vertical connection)	1/2 – 14 NPT-f through a	adapter	(Note 3)	NACE	S			
Monel 400 [™] (Vertical connection)	1/4 – 18 NPT-f direct		(Notes 3, 4)	NACE	U			
Monel 400 [™] (Vertical connection)	1/2 – 14 NPT-f through a	adapter	(Notes 3, 4)	NACE	V			
PVDF Kynar™ insert on AISI 316 ss flange side	1/4 – 18 NPT-f direct		(Notes 5, 6)		Р			
PVDF Kynar™ insert on AISI 316 ss flange side	1/2 – 14 NPT-f direct		(Notes 5, 6)		Ζ			
Bolts/Gasket (wetted parts) - 11 th characters								
AISI 316 ss	Viton™		(Notes 4, 7)			1		
AISI 316 ss	PTFE		(Notes 1, 4, 7)			2		
AISI 316 ss (NACE) – (MWP = 16 MPa)	Viton™		(Note 7)	NACE		3		
AISI 316 ss (NACE) - (MWP = 16 MPa)	PTFE		(Notes 1, 7)	NACE		4		
Alloy steel (NACE)	Viton™		(Notes 4, 7)	NACE		8		
Alloy steel (NACE)	PTFE		(Notes 1, 4, 7)	NACE		9		
AISI 316 ss spring loaded for PVDF Kynar proce	ess connection		(Note 8)			Ν		
Housing material and electrical connection - 1	12 th characters							
Aluminium alloy (barrel version)	1/2 – 14 NPT						А	
Aluminium alloy (barrel version)	M20 x 1.5 (CM 20)						В	
Aluminium alloy (barrel version)	Harting Han 8D connect	tor	(general purpo	se only)	(Note	9)	Е	
Aluminium alloy (barrel version)	Fieldbus connector		(general purpo	se only)	(Note	9)	G	
AISI 316 L ss (barrel version)	1/2 – 14 NPT						S	
AISI 316 L ss (barrel version)	M20 x 1.5 (CM20)						Т	
AISI 316 L ss (barrel version)	Fieldbus connector		(general purpo	se only)	(Note	9)	Ζ	
Aluminium alloy (DIN version)	M20 x 1.5 (CM20)						J	
Aluminium alloy (DIN version)	Harting Han 8D connect	tor	(general purpo	se only)	(Note	9)	К	
Aluminium alloy (DIN version)	Fieldbus connector		(general purpo	se only)	(Note	9)	W	
Output/Additional options - 13th characters				.				_
HART digital communication and 4 to 20 mA		No additional options			(Note	s 10,	11)	Н
-		Options requested by "Additional ordering code"			(Note 10)			1
PROFIBUS PA		No additional options			(Notes 10, 11)		11)	Р
		Options requested by "Additional ordering code"		lering code"	(Note 11)			2
FOUNDATION Fieldbus		No additional options			(Note	s 10,	11)	F
FOUNDATION Fieldbus		Options requested by "Additional ordering code"			(Note 11)			3
HART and 4 to 20 mA Safety - certified to IEC 6	61508	No additional options			(Note	s 10,	11)	Т
HART and 4 to 20 mA Safety - certified to IEC 6	61508	Options requested by	"Additional ord	lering code"	(Note	10)		8

ADDITIONAL ORDERING INFORMATION for model 266DSH

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

	3	5		X	x xx	XX	XX
Drain/vent valve (mate	rial and position) (wetted	parts)					
AISI 316 L ss	on process axis	(Notes 7, 12)	NACE	V	1		
AISI 316 L ss	on flange side top	(Notes 7, 13)	NACE	V	2		
AISI 316 L ss	on flange side bottom	(Notes 7, 13)	NACE	V	3		
Hastelloy C-276™	on process axis	(Notes 7, 14)	NACE	V	4		
Hastelloy C-276™	on flange side top	(Notes 7, 15)	NACE	V	5		
Hastelloy C-276™	on flange side bottom	(Notes 7, 15)	NACE	V	6		
Monel 400™	on process axix	(Notes 7, 16)	NACE	V	7		
Monel 400™	on flange side top	(Notes 7, 17)	NACE	V	8		
Monel 400™	on flange side bottom	(Notes 7, 17)	NACE	V	9		
Hazardous area certifi	cations						
ATEX Intrinsic Safety II	1 G and II 1/2 G Ex ia IIC T	6; II 1 D Ex iaD 20 T 95 °C	and II 1/2D Ex iaD 21 T95 °C		E1		
ATEX Explosion Proof	Group II Category 1/2 G Ex	d IIC T6 and Group II Categ	gory 1/2 D Ex tD A21 IP67 T85 °C	(Note 18)	E2		
ATEX Type "N" Group I	II Category 3 G Ex nL IIC T6	and Group II Category 3 D	Ex tD A22 IP67 T85 °C		E3		
Combined ATEX - Intri	nsic Safety, Explosion Proof	and Type "N"		(Note 18)	EW		
Combined ATEX, FM A	pprovals (USA) and FM App	orovals (Canada)		(Note 18)	EN		
FM Approvals (Canada	ı) approval			(Note 18)	E4		
FM Approvals (USA) ap	oproval			(Note 18)	E6		
FM Approvals (USA an	d Canada) Intrinsic Safety				EA		
FM Approvals (USA an	d Canada) Explosion Proof			(Note 18)	EB		
FM Approvals (USA an	d Canada) Nonincendive				EC		
IEC Intrinsic Safety II 1	G and II 1/2 G Ex ia IIC T6;	II 1 D Ex iaD 20 T 95 °C ar	nd II 1/2D Ex iaD 21 T95 °C;		E8		
IEC Explosion Proof G	roup II Category 1/2 G Ex d	IIC T6 and Group II Catego	ry 1/2 D Ex tD A21 IP67 T85 °C	(Note 18)	E9		
IEC Group II Category	3 G Ex nL IIC T6 and Group	II Category 3 D Ex tD A22	IP67 T85 °C		ER		
Other hazardous area	certifications						
GOST (Russia) EEx ia					W1		
GOST (Russia) EEx d				(Note 18)	W2		
GOST (Kazakhstan) EE	Ex ia				W3		
GOST (Kazakhstan) EE	Ex d			(Note 18)	W4		
Inmetro (Brazil) EEx ia					W5		
Inmetro (Brazil) EEx d				(Note 18)	W6		
Inmetro (Brazil) EEx nL					W7		
Integral LCD							
Digital LCD integral dis	splay					L1	
TTG (Through-The-Gla	ss) digital LCD controlled di	splay				L5	
Mounting bracket (sha	pe and material)						
For pipe mounting - Ca	arbon steel	(Not suitable for AIS	l housing)				B1
For pipe mounting - Al	SI 316 L ss	(Not suitable for AIS	I housing)				B2
For wall mounting - Ca	irbon steel	(Not suitable for AIS	I housing)				B3
For wall mounting - Als	SI 316 L ss	(Not suitable for AIS	I housing)				B4
Flat type for box - AISI							B5
Surge							
Ť	ctor						

ADDITIONAL ORDERING INFORMATION for model 266DSH	XX	ХХ	XX	XX	XX	XX
Operating manual (up to 2 different selections allowed)						
German	M1					
Italian	M2					
Spanish	M3					
French	M4					
English	M5					
Plates language						
German		T1				
Italian		T2				
Spanish		ТЗ				
French		T4				
Additional tag plate						
Supplemental wired-on stainless steel plate			11			
Laser printing of tag on stainless steel plate			12			
Configuration						
Standard – Pressure = inH2O/ psi at 68 °F; Temperature = deg. F				N2		
Standard – Pressure = inH2O/ psi at 39.2 °F; 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		
Preparation procedure						
Oxygen service cleaning (only available with inert fill and PTFE gasket)					P1	
Pmax =12 MPa for Galden, 9 MPa for Halocarbon; Tmax=60 °C/140 °F						
Certificates (up to 2 different selections allowed)						
Inspection certificate EN 10204-3.1 of calibration (9-point)						C1
Inspection certificate EN 10204-3.1 of the cleanliness stage						C3
Inspection certificate EN 10204-3.1 of helium leakage test of the sensor module						C4
Certificate of compliance with the order EN 10204-2.1 of instrument design						C6
Overfill protection						C9
Printed record of configured data of transmitter						CG
PMI test of wetted parts						СТ

ADDITIONAL ORDERING INFORMATION FOR MODEL 266DSH	XX	XX	ΧХ	X
Approvals				
GOST (Russia) without Ex	Y1			
GOST (Kazakhstan) without Ex	Y2			
GOST (Ukraine) without Ex	Y3			
GOST (Belarus) without Ex	Y4			
DNV approval		YA		
Lloyd approval		YΒ		
Approval for Custody transfer		YC		
Bureau Veritas approval		YD		
Material traceability				
Certificate of compliance with the order EN 10204-2.1 of process wetted parts			H1	
Inspection certificate EN 10204-3.1 of process wetted parts			H3	
Test report EN 10204-2.2 of pressure bearing and process wetted parts			H4	
Connector				
Fieldbus 7/8 in. (Recommended for FOUNDATION Fieldbus) - (supplied loose without mating female plug)	(Notes 11	, 19)		U
Fieldbus M12x1 (Recommended for PROFIBUS PA) - (supplied loose without mating female plug)	(Notes 11	, 19)		U
Harting Han 8D – straight entry - (supplied loose)	(Notes 10	, 19)		U
Harting Han 8D – angle entry - (supplied loose)	(Notes 10	, 19)		U

- Note 1: Suitable for oxygen service
- Note 2: Not available with sensor code A and B
- Note 3: Not available with AISI 316L ss or Hastelloy C-276 (on AISI seat) diaphragms code S, H, A, B, L, Q
- Note 4: Not available with sensor code A
- Note 5: Not available with Diaphragm material/Fill fluid code S, H, K, M, A, B, F, C, L, Q, P, 4
- Note 6: Not available with Span limits/Static pressure code A, Q, S
- Note 7: Not available with Process Flanges/Adapters material/connection code P, Z
- Note 8: Not available with Process Flanges/Adapters material/connection code A, B, D, E, G, H, Q, T, M, S, U, V
- Note 9: Select type in additional ordering code
- Note 10: Not available with Housing code G, Z, W
- Note 11: Not available with Housing code E, K
- Note 12:
 Not available with Process flanges/adapters material/connection code D, E, G, H, Q, T, M, S, U, V

 Note 13:
 Not available with Process flanges/adapters material/connection code D, E, G, H, M, S, U, V
- Note 14: Not available with Process flanges/adapters material/connection code A, B, G, H, Q, T, M, S, U, V
- Note 15: Not available with Process flanges/adapters material/connection code A, B, G, H, Q, T, W, O, S,
- Note 16: Not available with Process flanges/adapters material/connection code A, B, D, E, Q, T, M, S, U, V
- Note 17: Not available with Process flanges/adapters material/connection code A, B, D, E, Q, T, M, S
- Note 18: Not available with Housing code J, K, W
- Note 19: Not available with Housing code A, B, S, T, J

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

- Adapters supplied loose
- Plug on axis of horizontal connection flange; nothing for PVDF Kynar insert and for vertical connection flange (no drain/vent valves)
- General purpose (no electrical certification)
- No display, no mounting bracket, no surge protection
- Multilanguage short-form operating instruction manual and labels in english
- 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.

NACE CONFORMITY IS ACCORDING TO RECOMMENDATIONS PER MR0175 / ISO 15156.

AISI 316, AISI 316 L, HASTELLOY C-276 AND MONEL ALSO COMPLY WITH MR0103 IF ALREADY WITH MR0175.

BASIC ORDERING INFORMATION model 266PSH Gauge Pressure Transmitter

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

BASE MODEL - 1st to 6th characters		266PSH	X S	Х	X	X X	Х
Gauge Pressure Transmitter – BASE AC	CURACY 0.06 %						
SENSOR - Span limits - 7th characters						continued	k
0.05 and 1 kPa 0.5 and 10 m	bar 0.2 and 4 inH2O		A		s	ee next pa	ige
0.2 and 4 kPa 2 and 40 mba	ar 0.8 and 16 inH2O		В				
0.54 and 16 kPa 5.4 and 160 r	nbar 2.16 and 64 inH2O		E				
0.4 and 40 kPa 4 and 400 mk	bar 1.6 and 160 inH2O		F				
0.65 and 65 kPa 6.5 and 650 r	nbar 2.6 and 260 inH2O		G				
1.6 and 160 kPa 16 and 1600	mbar 6.4 and 642 inH2O		н				
6 and 600 kPa 0.06 and 6 ba	ar 0.87 and 87 psi		Μ				
24 and 2400 kPa 0.24 and 24 k	bar 3.5 and 348 psi		Р				
80 and 8000 kPa 0.8 and 80 ba	ar 11.6 and 1160 psi		Q				
160 and 16000 kPa 1.6 and 160 k	bar 23.2 and 2320 psi		S				
Use code - 8 th characters			S				
Diaphragm material / Fill fluid (wetted	parts) - 9 th characters						
AISI 316 L ss	Silicone oil	(Note 2)		S			
Hastelloy C-276™ (on AISI seat)	Silicone oil		NACE	Н			
Hastelloy C-276™	Silicone oil		NACE	K			
Monel 400™	Silicone oil	(Note 2)	NACE	Μ			
AISI 316 L ss gold plated	Silicone oil	(Note 2)		8			
Tantalum	Silicone oil	(Note 2)	NACE	Т			
AISI 316 L ss	Inert fluid - Galden	(Notes 1, 2)		А			
Hastelloy C-276™ (on AISI seat)	Inert fluid - Galden	(Notes 1, 2)	NACE	В			
Hastelloy C-276™	Inert fluid - Galden	(Notes 1, 2)	NACE	F			
Monel 400™	Inert fluid - Galden	(Notes 1, 2)	NACE	С			
AISI 316 L ss gold plated	Inert fluid - Galden	(Notes 1, 2)		9			
Tantalum	Inert fluid - Galden	(Notes 1, 2)	NACE	D			
AISI 316 L ss	Inert fluid - Halocarbon	(Notes 1, 2)		L			
Hastelloy C-276™ (on AISI seat)	Inert fluid - Halocarbon	(Notes 1, 2)	NACE	Q			
Hastelloy C-276™	Inert fluid - Halocarbon	(Notes 1, 2)	NACE	Ρ			
Monel 400™	Inert fluid - Halocarbon	(Notes 1, 2)	NACE	4			
AISI 316 L ss gold plated	Inert fluid - Halocarbon	(Notes 1, 2)		I			
Tantalum	Inert fluid - Halocarbon	(Notes 1, 2)	NACE	5]		

BASIC ORDERING INFORMATION model 26	66PSH Differential Pressure	Transmitter	2	6 6 P S H X S X	X	X	Х)
Process flanges/adapters material and con	nection (wetted parts) - 10th	characters						
AISI 316 L ss (Horizontal connection)	1/4 – 18 NPT-f direct			NACE	A			
AISI 316 L ss (Horizontal connection)	1/2 – 14 NPT-f through ad	apter		NACE	в			
Hastelloy C-276™ (Horizontal connection)	1/4 – 18 NPT-f direct		(Note 3)	NACE	D			
Hastelloy C-276™ (Horizontal connection)	1/2 – 14 NPT-f through ad	apter	(Note 3)	NACE	E			
Monel 400™ (Horizontal connection)	1/4 – 18 NPT-f direct		(Notes 3, 4)	NACE	G			
Monel 400™ (Horizontal connection)	1/2 – 14 NPT-f through ad	apter	(Notes 3, 4)	NACE	н			
AISI 316 L ss (Vertical connection)	1/4 – 18 NPT-f direct			NACE	Q			
AISI 316 L ss (Vertical connection)	1/2 – 14 NPT-f through ad	apter		NACE	т			
Hastelloy C-276™ (Vertical connection)	1/4 – 18 NPT-f direct		(Note 3)	NACE	м			
Hastelloy C-276™ (Vertical connection)	1/2 – 14 NPT-f through ad	apter	(Note 3)	NACE	s			
Monel 400™ (Vertical connection)	1/4 – 18 NPT-f direct		(Notes 3, 4)	NACE	υ			
Monel 400™ (Vertical connection)	1/2 – 14 NPT-f through ad	apter	(Notes 3, 4)	NACE	v			
PVDF Kynar™ insert on AISI 316 ss flange si	de 1/4 – 18 NPT-f direct		(Notes 5, 6)		Р			
PVDF Kynar™ insert on AISI 316 ss flange si	de 1/2 – 14 NPT-f direct		(Notes 5, 6)		z			
olts/Gasket (wetted parts) - 11th characters								
AISI 316 ss	Viton™		(Notes 4, 7)			1		
AISI 316 ss	PTFE		(Notes 1, 4, 7)			2		
AISI 316 ss (NACE) – (MWP = 16 MPa)	Viton™		(Note 7)	NACE		3		
AISI 316 ss (NACE) – (MWP = 16 MPa)	PTFE		(Notes 1, 7)	NACE		4		
Alloy steel (NACE)	Viton™		(Notes 4, 7)	NACE		8		
Alloy steel (NACE)	PTFE		(Notes 1, 4, 7)	NACE		9		
AISI 316 ss spring loaded for PVDF Kynar pr	ocess connection		(Note 8)			Ν		
ousing material and electrical connection	- 12 th characters		· · ·					
Aluminium alloy (barrel version)	1/2 – 14 NPT						А	
Aluminium alloy (barrel version)	M20 x 1.5 (CM 20)						В	
Aluminium alloy (barrel version)	Harting Han 8D connector		(general purpo	se only)	(Note 9	9)	Е	
Aluminium alloy (barrel version)	Fieldbus connector		(general purpo	se only)	(Note 9	9)	G	
AISI 316 L ss (barrel version)	1/2 – 14 NPT						S	
AISI 316 L ss (barrel version)	M20 x 1.5 (CM20)						Т	
AISI 316 L ss (barrel version)	Fieldbus connector		(general purpo	se only)	(Note s	9)	Ζ	
Aluminium alloy (DIN version)	M20 x 1.5 (CM20)						J	
Aluminium alloy (DIN version)	Harting Han 8D connector		(general purpo	se only)	(Note s	9)	К	
Aluminium alloy (DIN version)	Fieldbus connector		(general purpo		(Note s	,	W	
utput/Additional options - 13th characters						,		
HART digital communication and 4 to 20 mA	No	additional options			(Notes	10,	11)	
HART digital communication and 4 to 20 mA		otions requested by	"Additional orc	lerina code"	(Note		,	
PROFIBUS PA		additional options		0	(Notes	,	11)	
PROFIBUS PA		otions requested by	"Additional orc	lering code"	(Note		,	
FOUNDATION Fieldbus	'	additional options		0	(Notes		11)	
FOUNDATION Fieldbus		otions requested by	"Additional oro	lerina code"	(Note		/	
HART and 4 to 20 mA Safety - certified to IE		additional options			(Notes		11)	
HART and 4 to 20 mA Safety - certified to IE		otions requested by	"Additional orc	lering code"	(Note		/	

ADDITIONAL ORDERING INFORMATION for model 266PSH

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

					XX X	x x	x x	x
Drain/vent valve (mate	erial and position) (wetted	parts)						
AISI 316 L ss	on process axis	(Notes 7, 12)	NACE	١	/1			
AISI 316 L ss	on flange side top	(Notes 7, 13)	NACE	١	/2			
AISI 316 L ss	on flange side bottom	(Notes 7, 13)	NACE	١	/3			
Hastelloy C-276™	on process axis	(Notes 7, 14)	NACE	١	/4			
Hastelloy C-276™	on flange side top	(Notes 7, 15)	NACE	١	/5			
Hastelloy C-276™	on flange side bottom	(Notes 7, 15)	NACE	١	/6			
Monel 400™	on process axix	(Notes 7, 16)	NACE	١	/7			
Monel 400™	on flange side top	(Notes 7, 17)	NACE	١	/8			
Monel 400™	on flange side bottom	(Notes 7, 17)	NACE	\	/9			
lazardous area certif	ications							
ATEX Intrinsic Safety I	I 1 G and II 1/2 G Ex ia IIC Te	6; II 1 D Ex iaD 20 T 95 °C	and II 1/2D Ex iaD 21 T95 °C		E	1		
ATEX Explosion Proof	Group II Category 1/2 G Ex	d IIC T6 and Group II Categ	gory 1/2 D Ex tD A21 IP67 T85 °C	(Note 18)	E	2		
ATEX Type "N" Group	II Category 3 G Ex nL IIC T6	and Group II Category 3 D	Ex tD A22 IP67 T85 °C		E	3		
Combined ATEX - Intr	insic Safety, Explosion Proof	and Type "N"		(Note 18)	E١	V		
Combined ATEX, FM	Approvals (USA) and FM App	rovals (Canada)		(Note 18)	E	N		
FM Approvals (Canada	a) approval			(Note 18)	E	4		
FM Approvals (USA) a	pproval			(Note 18)	E	3		
FM Approvals (USA ar	nd Canada) Intrinsic Safety				E	4		
FM Approvals (USA ar	nd Canada) Explosion Proof			(Note 18)	El	3		
FM Approvals (USA ar	nd Canada) Nonincendive				E	2		
IEC Intrinsic Safety II	1 G and II 1/2 G Ex ia IIC T6;	II 1 D Ex iaD 20 T 95 °C ar	nd II 1/2D Ex iaD 21 T95 °C;		E	3		
IEC Explosion Proof G	Group II Category 1/2 G Ex d	IIC T6 and Group II Catego	ry 1/2 D Ex tD A21 IP67 T85 °C	(Note 18)	E	9		
IEC Group II Category	3 G Ex nL IIC T6 and Group	II Category 3 D Ex tD A22	IP67 T85 °C		E	٦		
Other hazardous area	certifications							
GOST (Russia) EEx ia					W	1		
GOST (Russia) EEx d				(Note 18)	W	2		
GOST (Kazakhstan) E	Ex ia				W	3		
GOST (Kazakhstan) E	Ex d			(Note 18)	W	4		
Inmetro (Brazil) EEx ia					W	5		
Inmetro (Brazil) EEx d				(Note 18)	W	6		
Inmetro (Brazil) EEx nl					W	7		
ntegral LCD								
Digital LCD integral di	splay					L	1	
TTG (Through-The-Gla	ass) digital LCD controlled dis	splay				L	5	
lounting bracket (sh	ape and material)							
For pipe mounting - C	Carbon steel	(Not suitable for AIS	I housing)				В	31
For pipe mounting - A	ISI 316 L ss	(Not suitable for AIS	I housing)				В	32
For wall mounting - C	arbon steel	(Not suitable for AIS	I housing)				В	33
For wall mounting - Al	ISI 316 L ss	(Not suitable for AIS	I housing)				В	34
Flat type for box - AIS	il 316 ss						В	35
Surge								
Surge/Transient Prote	ctor							

ADDITIONAL ORDERING INFORMATION for model 266PSH	XX	ХХ	XX	XX	XX	XX
Operating manual (up to 2 different selections allowed)						
German	M1					
Italian	M2					
Spanish	M3					
French	M4					
English	M5					
Plates language						
German		T1				
Italian		T2				
Spanish		Т3				
French		Τ4				
Additional tag plate						
Supplemental wired-on stainless steel plate			11			
Laser printing of tag on stainless steel plate			12			
Configuration						
Standard – Pressure = inH2O/ psi at 68 °F; Temperature = deg. F				N2		
Standard – Pressure = inH2O/ psi at 39.2 °F; 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		
Preparation procedure						
Oxygen service cleaning (only available with inert fill and PTFE gasket)					P1	
Pmax =12 MPa for Galden, 9 MPa for Halocarbon; Tmax=60 °C/140 °F						
Certificates (up to 2 different selections allowed)						
Inspection certificate EN 10204-3.1 of calibration (9-point)						C1
Inspection certificate EN 10204-3.1 of the cleanliness stage						C3
Inspection certificate EN 10204-3.1 of helium leakage test of the sensor module						C4
Certificate of compliance with the order EN 10204-2.1 of instrument design						C6
Overfill protection						C9
Printed record of configured data of transmitter						CG
PMI test of wetted parts						СТ

ADDITIONAL ORDERING INFORMATION FOR MODEL 266PSH	XX	XX	XX	X
Approvals				
GOST (Russia) without Ex	Y1			
GOST (Kazakhstan) without Ex	Y2			
GOST (Ukraine) without Ex	Y3			
GOST (Belarus) without Ex	Y4]		
DNV approval		YA		
Lloyd approval		YΒ		
Approval for Custody transfer		YC		
Bureau Veritas approval		YD		
Material traceability				
Certificate of compliance with the order EN 10204-2.1 of process wetted parts			H1	
Inspection certificate EN 10204-3.1 of process wetted parts			H3	
Test report EN 10204–2.2 of pressure bearing and process wetted parts			H4	
Connector				
Fieldbus 7/8 in. (Recommended for FOUNDATION Fieldbus) - (supplied loose without mating female plug)	(Notes 11	, 19)		U
Fieldbus M12x1 (Recommended for PROFIBUS PA) - (supplied loose without mating female plug)	(Notes 11	, 19)		Uź
Harting Han 8D – straight entry - (supplied loose)	(Notes 10	, 19)		U
Harting Han 8D – angle entry - (supplied loose)	(Notes 10	, 19)		U

- Note 1: Suitable for oxygen service
- Note 2: Not available with sensor code A and B
- Note 3: Not available with AISI 316L ss or Hastelloy C-276 (on AISI seat) diaphragms code S, H, A, B, L, Q
- Note 4: Not available with sensor code A
- Note 5: Not available with Diaphragm material/Fill fluid code S, H, K, M, A, B, F, C, L, Q, P, 4
- Note 6: Not available with Span limits/Static pressure code A, Q, S
- Note 7: Not available with Process Flanges/Adapters material/connection code P, Z
- Note 8: Not available with Process Flanges/Adapters material/connection code A, B, D, E, G, H, Q, T, M, S, U, V
- Note 9: Select type in additional ordering code
- Note 10: Not available with Housing code G, Z, W
- Note 11: Not available with Housing code E, K
- Note 12: Not available with Process flanges/adapters material/connection code D, E, G, H, Q, T, M, S, U, V Note 13: Not available with Process flanges/adapters material/connection code D, E, G, H, M, S, U, V
- Note 13:
 Not available with Process flanges/adapters material/connection code D, E, G, H, M, S, U, V

 Note 14:
 Not available with Process flanges/adapters material/connection code A, B, G, H, Q, T, M, S, U, V
- Note 15: Not available with Process flanges/adapters material/connection code A, B, G, H, Q, T, W, S, O,
- Note 16: Not available with Process flanges/adapters material/connection code A, B, D, E, Q, T, M, S, U, V
- Note 17: Not available with Process flanges/adapters material/connection code A, B, D, E, Q, T, M, S
- Note 18: Not available with Housing code J, K, W
- Note 19: Not available with Housing code A, B, S, T, J

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

- Adapters supplied loose
- Plug on axis of horizontal connection flange; nothing for PVDF Kynar insert and for vertical connection flange (no drain/vent valves)
- General purpose (no electrical certification)
- No display, no mounting bracket, no surge protection
- Multilanguage short-form operating instruction manual and labels in english
- 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.

NACE CONFORMITY IS ACCORDING TO RECOMMENDATIONS PER MR0175 / ISO 15156.

AISI 316, AISI 316 L, HASTELLOY C-276 AND MONEL ALSO COMPLY WITH MR0103 IF ALREADY WITH MR0175.

BASIC ORDERING INFORMATION model 266VSH Absolute Pressure Transmitter

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

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

BASE MODEL - 1st to 6t	h characters		266VSH	XS	X	X	Х	X	Х
Absolute Pressure Trans	smitter – BASE ACCURA	ACY 0.075 %							
SENSOR - Span limits	- 7 th characters						conti	nued	
0.54 and 16 kPa	5.4 and 160 mbar	4 and 120 mmHg		E		s	ee ne>	kt pag	е
0.67 and 40 kPa	6.7 and 400 mbar	5 and 300 mmHg		F					
1.1 and 65 kPa	11 and 650 mbar	8 and 480 mmHg		G					
2.67 and 160 kPa	26.7 and 1600 mbar	20 and 1200 mmHg		Н					
10 and 600 kPa	0.1 and 6 bar	1.45 and 87 psi		Μ					
40 and 2400 kPa	0.4 and 24 bar	5.8 and 348 psi		Р					
134 and 8000 kPa	1.34 and 80 bar	19.4 and 1160 psi		Q					
267 and 16000 kPa	2.67 and 160 bar	38.7 and 2320 psi		S					
Use code - 8th character	rs			S	;				
Diaphragm material / F	ill fluid (wetted parts) -	9 th characters							
AISI 316 L ss		Silicone oil			S				
Hastelloy C-276™ (on A	AISI seat)	Silicone oil		NACE	Н				
Hastelloy C-276™		Silicone oil		NACE	K				
AISI 316 L ss		Inert fluid - Galden	(Notes 1, 2)		А				
Hastelloy C-276™ (on A	AISI seat)	Inert fluid - Galden	(Notes 1, 2)	NACE	В				
Hastelloy C-276™		Inert fluid - Galden	(Notes 1, 2)	NACE	F				
AISI 316 L ss		Inert fluid - Halocarbon	(Notes 1, 2)		L				
Hastelloy C-276™ (on A	AISI seat)	Inert fluid - Halocarbon	(Notes 1, 2)	NACE	Q				
Hastelloy C-276™		Inert fluid - Halocarbon	(Notes 1, 2)	NACE	Р				

BASIC ORDERING INFORMATION model 26	6VSH Absolute Pressure Tr	ansmitter		2 6 6 V S H X S X	Х	Х	Х	Х
Process flanges/adapters material and con	nection (wetted parts) - 10th	characters						
AISI 316 L ss (Horizontal connection)	1/4 – 18 NPT-f direct			NACE	А			
AISI 316 L ss (Horizontal connection)	1/2 – 14 NPT-f through a	dapter		NACE	В			
Hastelloy C-276™ (Horizontal connection)	1/4 – 18 NPT-f direct		(Note 3)	NACE	D			
Hastelloy C-276™ (Horizontal connection)	1/2 – 14 NPT-f through a	dapter	(Note 3)	NACE	Е			
Monel 400™ (Horizontal connection)	1/4 – 18 NPT-f direct		(Note 3)	NACE	G			
Monel 400™ (Horizontal connection)	1/2 – 14 NPT-f through a	dapter	(Note 3)	NACE	Н			
AISI 316 L ss (Vertical connection)	1/4 – 18 NPT-f direct			NACE	Q			
AISI 316 L ss (Vertical connection)	1/2 – 14 NPT-f through a	dapter		NACE	Т			
Hastelloy C-276™ (Vertical connection)	1/4 – 18 NPT-f direct		(Note 3)	NACE	М			
Hastelloy C-276™ (Vertical connection)	1/2 – 14 NPT-f through a	dapter	(Note 3)	NACE	S			
Monel 400™ (Vertical connection)	1/4 – 18 NPT-f direct		(Note 3)	NACE	U			
Monel 400™ (Vertical connection)	1/2 – 14 NPT-f through a	dapter	(Note 3)	NACE	V			
Bolts/Gasket (wetted parts) - 11th characters	3					-		
AISI 316 ss	Viton™					1		
AISI 316 ss	PTFE		(Note 1)			2		
AISI 316 ss (NACE) - (MWP = 16 MPa)	Viton™			NACE		3		
AISI 316 ss (NACE) - (MWP = 16 MPa)	PTFE		(Note 1)	NACE		4		
Alloy steel (NACE)	Viton™			NACE		8		
Alloy steel (NACE)	PTFE		(Note 1)	NACE		9		
Housing material and electrical connection	- 12 th characters							
Aluminium alloy (barrel version)	1/2 – 14 NPT						А	
Aluminium alloy (barrel version)	M20 x 1.5 (CM 20)						В	
Aluminium alloy (barrel version)	Harting Han 8D connecto	r	(general p	urpose only)	(Note	e 4)	Е	
Aluminium alloy (barrel version)	Fieldbus connector		(general p	urpose only)	(Note	e 4)	G	
AISI 316 L ss (barrel version)	1/2 – 14 NPT						S	
AISI 316 L ss (barrel version)	M20 x 1.5 (CM20)						Т	
AISI 316 L ss (barrel version)	Fieldbus connector		(general p	urpose only)	(Note	e 4)	Ζ	
Aluminium alloy (DIN version)	M20 x 1.5 (CM20)						J	
Aluminium alloy (DIN version)	Harting Han 8D connecto	r	(general p	urpose only)	(Note	e 4)	К	
Aluminium alloy (DIN version)	Fieldbus connector		(general p	urpose only)	(Note	e 4)	W	
Output/Additional options - 13th characters								
HART digital communication and 4 to 20 mA	N	lo additional options			(Note	es 5, 6)	Н
HART digital communication and 4 to 20 mA	C	ptions requested by	"Additiona	l ordering code"	(Note	e 5)		1
PROFIBUS PA	N	lo additional options		-	(Note	es 5, 6)	Ρ
PROFIBUS PA		ptions requested by	"Additiona	l ordering code"	(Note			2
FOUNDATION Fieldbus		lo additional options		5		, s 5, 6)	F
FOUNDATION Fieldbus		ptions requested by	"Additiona	l ordering code"	(Note			3
HART and 4 to 20 mA Safety - certified to IE		lo additional options		0		es 5, 6)	Т
HART and 4 to 20 mA Safety - certified to IE		ptions requested by	"Additiona	l ordering code"	(Note			8

ADDITIONAL ORDERING INFORMATION for model 266VSH

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

		3		X	x xx	XX	xx)
)rain/vent valve (ma	terial and position) (wetted p	parts)						
AISI 316 L ss	on process axis	(Note 7)	NACE	V	1			
AISI 316 L ss	on flange side top	(Note 8)	NACE	V	2			
AISI 316 L ss	on flange side bottom	(Note 8)	NACE	V	3			
Hastelloy C-276™	on process axis	(Note 9)	NACE	V	4			
Hastelloy C-276™	on flange side top	(Note 10)	NACE	V	5			
Hastelloy C-276™	on flange side bottom	(Note 10)	NACE	V	6			
Monel 400™	on process axix	(Note 11)	NACE	V	7			
Monel 400™	on flange side top	(Note 12)	NACE	V	8			
Monel 400™	on flange side bottom	(Note 12)	NACE	V	9			
lazardous area cert	ifications							
ATEX Intrinsic Safety	II 1 G and II 1/2 G Ex ia IIC Te	6; II 1 D Ex iaD 20 T 95 °C	C and II 1/2D Ex iaD 21 T95 °C		E1			
ATEX Explosion Proc	f Group II Category 1/2 G Ex o	d IIC T6 and Group II Cat	egory 1/2 D Ex tD A21 IP67 T85 °C	(Note 13)	E2			
ATEX Type "N" Group	o II Category 3 G Ex nL IIC T6	and Group II Category 3	D Ex tD A22 IP67 T85 °C		E3			
Combined ATEX - Int	rinsic Safety, Explosion Proof	and Type "N"		(Note 13)	EW			
Combined ATEX, FM	Approvals (USA) and FM App	rovals (Canada)		(Note 13)	EN			
FM Approvals (Canad	da) approval			(Note 13)	E4			
FM Approvals (USA)	approval			(Note 13)	E6			
M Approvals (USA a	and Canada) Intrinsic Safety				EA			
M Approvals (USA a	and Canada) Explosion Proof			(Note 13)	EB			
FM Approvals (USA a	and Canada) Nonincendive				EC			
IEC Intrinsic Safety II	1 G and II 1/2 G Ex ia IIC T6;	II 1 D Ex iaD 20 T 95 °C	and II 1/2D Ex iaD 21 T95 °C;		E8			
IEC Explosion Proof	Group II Category 1/2 G Ex d	IIC T6 and Group II Categ	gory 1/2 D Ex tD A21 IP67 T85 °C	(Note 13)	E9			
IEC Group II Categor	ry 3 G Ex nL IIC T6 and Group	II Category 3 D Ex tD A2	22 IP67 T85 °C		ER			
ther hazardous are	a certifications							
GOST (Russia) EEx ia	a				W1			
GOST (Russia) EEx c	1			(Note 13)	W2			
GOST (Kazakhstan) I	EEx ia				W3			
GOST (Kazakhstan) I	EEx d			(Note 13)	W4			
Inmetro (Brazil) EEx i	a				W5			
Inmetro (Brazil) EEx o				(Note 13)	W6			
Inmetro (Brazil) EEx r					W7			
ntegral LCD						_		
Digital LCD integral of	display					L1		
	ilass) digital LCD controlled dis	splav				L5		
lounting bracket (sl							J	
For pipe mounting -		(Not suitable for A	ISI housing)				B1	
For pipe mounting -		(Not suitable for A	0.				B2	
For wall mounting - ((Not suitable for A	0,				B3	
For wall mounting - A		(Not suitable for A					B4	
Flat type for box - Al							B5	
							00	L
urge								

ADDITIONAL ORDERING INFORMATION for model 266VSH	ХХ	XX	XX	XX	XX	XX
Operating manual (up to 2 different selections allowed)						
German	M1					
Italian	M2					
Spanish	MB					
French	M					
English	M5					
Plates language						
German		T1				
Italian		T2				
Spanish		T3				
French		T4				
Additional tag plate						
Supplemental wired-on stainless steel plate			11			
Laser printing of tag on stainless steel plate			12			
Configuration						
Standard – Pressure = inH2O/ psi at 68 °F; Temperature = deg. F				N2		
Standard - Pressure = inH2O/ psi at 39.2 °F; 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		
Preparation procedure						
Oxygen service cleaning (only available with inert fill and PTFE gasket)					P1	
Pmax =12 MPa for Galden, 9 MPa for Halocarbon; Tmax=60 °C/140 °F						
Certificates (up to 2 different selections allowed)						
Inspection certificate EN 10204-3.1 of calibration (9-point)						C1
Inspection certificate EN 10204-3.1 of the cleanliness stage						C3
Inspection certificate EN 10204-3.1 of helium leakage test of the sensor module						C4
Certificate of compliance with the order EN 10204-2.1 of instrument design						C6
Overfill protection						C9
Printed record of configured data of transmitter						CG
PMI test of wetted parts						СТ

ADDITIONAL ORDERING INFORMATION FOR MODEL 266VSH	XX	XX	XX	X
Approvals				
GOST (Russia) without Ex	Y1			
GOST (Kazakhstan) without Ex	Y2			
GOST (Ukraine) without Ex	Y3			
GOST (Belarus) without Ex	Y4			
DNV approval		YA		
Lloyd approval		YB		
Approval for Custody transfer		YC		
Bureau Veritas approval		YD		
Material traceability				
Certificate of compliance with the order EN 10204-2.1 of process wetted parts			H1	
Inspection certificate EN 10204-3.1 of process wetted parts			НЗ	
Test report EN 10204-2.2 of pressure bearing and process wetted parts			H4	
Connector				
Fieldbus 7/8 in. (Recommended for FOUNDATION Fieldbus) - (supplied loose without mating female plug)	(Notes 6, 1	I 4)		U
Fieldbus M12x1 (Recommended for PROFIBUS PA) - (supplied loose without mating female plug)	(Notes 6, 1	I 4)		U
Harting Han 8D – straight entry - (supplied loose)	(Notes 5, 1	14)		U
Harting Han 8D – angle entry - (supplied loose)	(Notes 5, 1	14)		U

 Note 1:
 Suitable for oxygen service

 Note 2:
 Not available with sensor code E

Note 3: Not available with AISI 316L ss or Hastelloy C-276 (on AISI seat) diaphragms code S, H, A, B, L, Q

Note 4: Select type in additional ordering code

Note 5: Not available with Housing code G, Z, W

Note 6: Not available with Housing code E, K

Note 7: Not available with Process flanges/adapters material/connection code D, E, G, H, Q, T, M, S, U, V

 Note 8:
 Not available with Process flanges/adapters material/connection code D, E, G, H, M, S, U, V

 Note 9:
 Not available with Process flanges/adapters material/connection code A, B, G, H, Q, T, M, S, U, V

Note 10: Not available with Process flanges/adapters material/connection code A, B, G, H, Q, T, W, O,

- Note 11: Not available with Process flanges/adapters material/connection code A, B, D, E, Q, T, M, S, U, V
- Note 12: Not available with Process flanges/adapters material/connection code A, B, D, E, Q, T, M, S
- Note 13: Not available with Housing code J, K, W Note 14: Not available with Housing code A, B, S, T, J

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

- Adapters supplied loose
- Plug on axis of horizontal connection flange; nothing for vertical connection flange (no drain/vent valves)
- General purpose (no electrical certification)
- No display, no mounting bracket, no surge protection
- Multilanguage short-form operating instruction manual and labels in english
- 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.

NACE CONFORMITY IS ACCORDING TO RECOMMENDATIONS PER MR0175 / ISO 15156.

AISI 316, AISI 316 L, HASTELLOY C-276 AND MONEL ALSO COMPLY WITH MR0103 IF ALREADY WITH MR0175.

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Note

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