

ABB MEASUREMENT & ANALYTICS | DATA SHEET

266GST and 266AST

Gauge and absolute pressure transmitters



Measurement made easy

Engineered solutions for all applications

Base accuracy

• 0.04 % of calibrated span (optional 0.025 %)

Proven sensor technology together with state-of-the-art digital technology

• Large turn down ratio of up to 100:1

Comprehensive selection of sensors

Optimized performance and stability

10-year stability

• 0.15 % of URL

Flexible configuration options

Local configuration via keys on LCD indicator

TTG (Through-The-Glass) key technology

• Enables quick and easy local configuration without the need to open the cover - even in environments with explosion protection

IEC 61508 certification

• For SIL2 (1001) and SIL3 (1002) applications

Full compliance with Pressure Equipment Directive (PED) category III

Product in compliance with Directive 2011/65/UE (RoHS II)

In-built advanced diagnostics

Specification – functional

Range and span limits

	Upper	Lower	Minimum me	asuring span
Sensor Code	Range Limit (URL)	Range Limit (LRL) 266GST *	266GST	266AST
	6 kPa	-6 kPa	0.2 kPa	0.3 kPa
с	60 mbar	–60 mbar	2 mbar	3 mbar
	24 inH2O	–24 inH2O	0.8 inH2O	2.25 mmHg
	40 kPa	-40 kPa	0.4 kPa	2 kPa
F	400 mbar	–400 mbar	4 mbar	20 mbar
	160 inH2O	–160 inH2O	1.6 inH2O	15 mmHg
	250 kPa	-100 kPa	2.5 kPa	12.5 kPa
L	2500 mbar	– 1 bar	25 mbar	125 mbar
	1000 inH2O	–14.5 psi	10 inH2O	93.8 mmHg
	1000 kPa	-100 kPa	10 kPa	50 kPa
D	10 bar	– 1 bar	100 mbar	500 mbar
	145 psi	–14.5 psi	1.45 psi	7.25 psi
	3000 kPa	-100 kPa	30 kPa	150 kPa
U	30 bar	– 1 bar	0.3 bar	1.5 bar
	435 psi	–14.5 psi	4.35 psi	21.7 psi
	10000 kPa	-100 kPa	100 kPa	500 kPa
R	100 bar	– 1 bar	1 bar	5 bar
	1450 psi	–14.5 psi	14.5 psi	72.6 psi
	60000 kPa	-100 kPa	600 kPa	
V	600 bar	– 1 bar	6 bar	-
	8700 psi	–14.5 psi	87 psi	

* Measuring range lower limit (LRL) for 266AST is 0 abs for all measuring ranges

Span limits

Maximum span = URL

For optimum measuring accuracy, it is recommended that you select the sensor code which will provide the lowest TD value.

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Zero position suppression and elevation

The zero position and span can be set to any value within the measuring range limits listed in the table if: - adjusted span \geq smallest span

Damping

Configurable time constant between 0 and 60 s. This is in addition to the sensor response time.

Turn On time

Ready for operation as per specifications in less than 10 s with minimum damping.

Insulation resistance

>100 M Ω at 500 V DC (between terminals and ground).

Specification – operative limits

Pressure limits

Overpressure limits

Without damage to the transmitter

Sensors	Overpressure limits	
Concer C. F.	0 absolute	
Sensor C, F	and 1 MPa, 10 bar, 145 psi	
Comoon I	0 absolute	
Sensor L	and 3 MPa, 30 bar, 435 psi	
Company D	0 absolute	
Sensor D	and 6 MPa, 60 bar, 870 psi	
Compose II	0 absolute	
Sensor U	and 6 MPa, 60 bar, 870 psi	
Company D	0 absolute	
Sensor R	and 30 MPa, 300 bar, 4300 psi	
Concer V	0 absolute	
Sensor V	and 90 MPa, 900 bar, 13050 psi	

Proof pressure

The transmitter can be be subjected to a line pressure up to the following values without leakage:

Sensors	Overpressure limits	
Concer C. F.	0 absolute	
Sensor C, F	and 1 MPa, 10 bar, 145 psi	
Sensor L	0 absolute	
	and 3 MPa, 30 bar, 435 psi	
Sensor D	0 absolute	
	and 6 MPa, 60 bar, 870 psi	
Sensor U	0 absolute	
	and 6 MPa, 60 bar, 870 psi	
6 D	0 absolute	
Sensor R	and 30 MPa, 300 bar, 4300 psi	
	0 absolute	
Sensor V	and 90 MPa, 900 bar, 13050 psi	

Meets hydrostatic test requirements of ANSI/ISA-S 82.03.

Temperature limits °C (°F)

Environment

This is the operating temperature

Models 266GST, 266AST	Ambient temperature limits
Silicone oil	–40 to 85 °C (–40 to 185 °F)
Fluorocarbon (Galden)	–40 to 85 °C (–40 to 185 °F)
White oil	–6 to 85 °C (21 to 185 °F)
Integral LCD display	–40 to 85 °C (–40 to 185 °F)

Below –20 °C (–4 °F) and above 70 °C (158 °F), it may no longer be possible to read the LCD display clearly.

IMPORTANT

For applications in explosive environments, the temperature range specified on the certificate / approval applies dependent upon the degree of protection sought.

Process

Models 266GST, 266AST	Process temperature limits	
Silicone oil	–50 to 121 °C (–58 to 250 °F)	
Fluorocarbon (Galden)	–40 to 121 °C (–40 and 250 °F)	
White oil	–6 to 121 °C (21 to 250 °F)	

 \leq 85 °C (185 °F) for operating pressures below the atmospheric pressure

Storage

Models 266GST, 266AST	Storage temperature range
Storage temperature	–50 to 85 °C (–58 to 185 °F)
Integral LCD display	–40 to 85 °C (–40 to 185 °F)
White oil	–6 to 85 °C (21 to 185 °F)

Limits for environmental effects

Electromagnetic compatibility (EMC)

Meets requirements of EN 61326 and Namur NE-21 (option) Overvoltage strength (with surge protection): 4 kV (in acc. with IEC 1000-4-5 EN 61000-4-5)

Pressure Equipment Directive (PED)

Meets requirements of Directive 2014/68/EU category III module H.

Humidity

Relative humidity: Up to 100 %. Condensation, icing: Permissible

Vibration resistance

Acceleration up to 2 g at frequencies of up to 1000 Hz (according to IEC 60068-2-6). Acceleration limited to 1 g for housing out of stainless steel.

Shock resistance

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

IP rating

In accordance with EN 60529, JIS C0920 The transmitter is dust and sand proof and protected against immersion effects.

- IP 67, IP 68 on request, NEMA 4X
- IP 65 (devices with Harting Han plug connector)
- IP 66 (devices with barrel housing made from aluminum or stainless steel housing)

Hazardous atmospheres

With or without integral display

INTRINSIC SAFETY Ex ia:

- ATEX Europe (code E1) approval
 II 1 G Ex ia IIC T6...T4 Ga, II 1/2 G Ex ia IIC T6...T4 Ga/Gb,
 II 1 D Ex ia IIIC T85 °C Da, II 1/2 D Ex ia IIIC T85 °C Da;
 IP66, IP67.
- IECEx (code E8) approval Ex ia IIC T6...T4 Ga/Gb, Ex ia IIIC T85 °C Da; IP66, IP67.
- NEPSI China (code EY)
 Ex ia IIC T4/T5/T6 Ga, Ex ia IIC T4/T5/T6 Ga/Gb,
 Ex iaD 20 T85/T100/T135, Ex iaD 20/21 T85/T100/T135.

EXPLOSION PROOF:

- ATEX Europe (code E2) approval II 1/2 G Ex db IIC T6 Ga/Gb Ta=-50 °C to +75 °C, II 1/2 D Ex tb IIIC T85 °C Db Ta = -50 °C to +75 °C; IP66, IP67.
- IECEx (code E9) approval
 Ex db IIC T6 Ga/Gb Ta=-50 °C to +75 °C,
 Ex tb IIIC T85 °C Db Ta = -50 °C to +75 °C; IP66, IP67.
- NEPSI China (code EZ)
 Ex d IIC T6 Gb, Ex tD A21 IP67 T85 °C.

INTRINSIC SAFETY Ex ic:

- ATEX Europe (code E3) type examination
 II 3 G Ex ic IIC T6...T4 Gc, II 3 D Ex tc IIIC T85 °C Dc;
 IP66, IP67.
- IECEx (code ER) type examination
 Ex ic IIC T6...T4 Gc, Ex tc IIIC T85 °C Dc; IP66, IP67.
- NEPSI China (code ES) type examination Ex ic IIC T4~T6 Gc, Ex tD A22 IP67 T85 °C.

FM Approvals US (code E6) and

FM Approvals Canada (code E4):

- Explosionproof (US): Class I, Division 1,
 - Groups A, B, C, D; T5
- Explosionproof (Canada): Class I, Division 1, Groups B, C, D; T5
- Dust-ignitionproof: Class II, Division 1, Groups E, F, G, Class III, Division 1; T5
- Flameproof (US): Class I, Zone 1 AEx d IIC T4 Gb
- Flameproof (Canada): Class I, Zone 1 Ex d IIC T4 Gb
- Nonincendive: Class I, Division 2, Groups A, B, C, D T6...T4
- Energy limited (US): Class I, Zone 2 AEx nC IIC T6...T4
- Energy limited (Canada): Class I, Zone 2 Ex nC IIC T6...T4
- Intrinsically safe: Class I, II, III, Division 1,
 - Groups A, B, C, D, E, F, G T6...T4 Class I, Zone 0 AEx ia IIC T6...T4 (US)
 - Class I, Zone 0 Ex ia IIC T6...T4 (Canada)

Type 4X, IP66, IP67 for all above markings.

COMBINED FM Approvals US and Canada

Intrinsically safe (code EA)

COMBINED ATEX, FM and IECEx Approvals (code EN) Technical Regulations Customs Union EAC (Russia, Kazakhstan, Belarus), Inmetro (Brazil)

The permissible ambient temperature ranges (within the limits of -50 to 85 °C) are specified in the type examination certificates dependent upon the temperature class.

Specification - electrical data 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 reversed polarity (additional loads enable operation above 42 V DC).

During use in Ex ia zones and in other intrinsically safe applications, the power supply must not exceed 30 V DC.

Minimum operating voltage		
12.3 V DC	Device with the option "S2 – overvoltage protection"	
10.8 V DC	Devices with the option "YE – NE21 conformity"	

Ripple

Max. 20 mV over a 250 Ω load as per HART specifications.

Load limitations

Total loop resistance at 4 to 20 mA and HART:

R (k Ω)=<u>Voltage supply</u>-<u>Minimum operating voltage (V DC)</u> 22 mA

A minimum resistance of 250 Ω is required for HART communication.

Surge protection (optional)

Up to $4 \, kV$

- Voltage: 1.2 µs rise time / 50 µs delay time at half value
- Current: 8 µs rise time / 20 µs delay time at half value

Output signal

Two-wire output 4 – 20 mA, selectable by the operator: linear or square root output signal, characteristic curve with the exponents 3/2 or 5/2, square root for bidirectional flow, linearization table with 22 points (i.e. for level measurements in lateral, cylindric containers and spherical containers).

The HART communication provides the digital process variables which are superimposed on the 4 to 20 mA signal (protocol in accordance with Bell 202 FSK standard).

HART protocol

· · ·
HART revision 7 (standard, as default)
HART revision 5 (optional, on request)

Output current limits (in accordance with NAMUR standard) Overload condition

- Lower limit: 3.8 mA (configurable from 3.8 4 mA)
- Upper limit: 20.5 mA (configurable from 20 21 mA)

Alarm current

Adjustment range	
Minimum alarm current (low alarm	3.6 mA
current)	(configurable from 3.6 – 4 mA)
Maximum alarm current (high alarm	21 mA
current)	(configurable from 20 – 23 mA)
Maximum alarm current (high alarm current) for devices with "HART SIL – functional safety"	Limited to maximum 22 mA! (From electronic version 7.1.15)

Standard setting: high alarm current

FOUNDATION Fieldbus[™] output

Model

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, regardless of polarity, with or without surge protection. During use in EEx ia zones, the power supply must not exceed 24 V DC (entity certification) or 17.5 V DC (FISCO certification) according to FF-816.

Current consumption

Operating (quiescent): 15 mA Fault current limit value: 20 mA max.

Output signal

Physical layer in accordance with IEC 11582 / EN 611582; transmission using Manchester II modulation at 31.25 kbit/s.

Function blocks/execution period

- 3 enhanced analog input blocks / 25 ms max. (each)
- 1 extended PID block / 40 ms max.
- 1 standard arithmetic 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 manufacturer-specific pressure with calibration
- transducer block
- 1 manufacturer-specific advanced diagnostics transducer block
- 1 manufacturer-specific local display transducer block

Number of link objects

35

Number of VCRs

35

Output interface

FOUNDATION fieldbus digital communication protocol in accordance with standard H1, fulfills the specification V 1.7

Operating mode during transmitter mulfunction

The output signal will be "frozen" to the last value in case of significant transmitter interference, once this interference is detected by the self-diagnostics function (which also displays error states).

In the event of electronics failures or short circuits, the transmitter consumption is electronically limited to a defined value (approx. 20 mA) in order to ensure network safety.

...Specification - electrical data and options

PROFIBUS PA output

DeviceType

Pressure transmitter conform with profile 3.0.1 Indent number: 3450 (hex)

Power supply

The transmitter operates from 9 to 32 V DC, independent of the polarity with or without overvoltage protection. During use in EEx ia zones, the operating voltage must not exceed 17.5 V DC.

Intrinsically safe installation in accordance with the FISCO model.

Input Current

Operation (quiescent current): 15 mA Residual current limit value 20 mA maximum

Output signal

Physical layer in accordance with IEC 1158–2 / EN 61158–2, transmission with Manchester II modulation with 31.25 kBit/s.

Output interface

PROFIBUS PA communication in accordance with PROFIBUS DP 50170 part 2 / DIN 19245 part 1–3

Output cycle time

25 ms

Data blocks

- 1 "Physical Block"
- 3 "Analog Input" blocks
- 1 "Pressure Transducer Block" with calibration
- 1 "Transducer Block" local display

Operating mode during transmitter malfunction

In case of heavy transmitter errors, which are recognized by self-diagnosis, the output signal can be put into defined states, which can be chosen by the operator: safe, most recent or calculated value.

In case of electronic errors or short-circuits, the current consumption is electronically limited to a set value (approx. 20 mA) for the safety of the network.

LCD display



M10142

Figure 1 LCD display (example)

Integral LCD display (code L1)

Wide screen LCD display, 128 x 64 pixel, 52.5 x 27.2 mm
(2.06 x 1.07 in), dot matrix, multilingual.
Four buttons for device configuration and management.
Easy setup for quick commissioning.
Customized visualizations which the user can select.
Total value and actual value flow indication.
The display can also be used to show static pressure, sensor temperature, and diagnosis notice, as well as make configuration settings.

Integral LCD display with TTG-(Through-The-Glass) operation (code L5)

As with the integral LCD display above, but featuring an innovative TTG (Through–The–Glass) button technology which can be used to activate the device's configuration and management menus without having to remove the transmitter housing cover.

The TTG (Through–The–Glass) buttons are protected against accidental activation.

Specification - measuring accuracy

Reference conditions according to IEC 60770.

Ambient temperature 20 °C (68 °F), rel. humidity 65 %, atmospheric pressure 1013 hPa (1013 mbar), measuring span based on zero, separating diaphragms made from stainless steel AISI 316 L, or Hastelloy, silicone oil filling fluid, HART digital trim values equal to 4 and 20 mA span end points, linear characteristic.

Unless otherwise stated, errors are specified as a % of the span value.

Some measuring accuracy levels relating to the upper measuring range limit (URL) are affected by the current turn down (TD); i.e., the ratio of the upper measuring range limit to the set span.

FOR OPTIMUM MEASURING ACCURACY, IT IS RECOMMENDED THAT YOU SELECT THE SENSOR CODE WHICH WILL PROVIDE THE LOWEST TD VALUE.

Dynamic performance (according to IEC 61298-1)

Sensors	Time constant (63.2% of total step response)
Sensor C to V (all)	150 ms
Reaction time for all sensors	40 ms

Response time (total) = reaction time + time constant

Measuring error (Elin)

% of calibrated span, consisting of terminal-based nonlinearity, hysteresis, and non repeatability. In the case of fieldbus devices, SPAN refers to the analog input function block output scaling.

Model	Sensors	for TD range	
	C to V	from 1:1 to 10:1	± 0.04 %
266GST	С	from 10:1 to 30:1	± (0.04 + 0.005 x TD - 0.05) %
200031	F to V	from 10:1 to 100:1	± (0.04 + 0.005 x TD - 0.05) %
	L to R	from 1:1 to 10:1	± 0.025 % (optional)
266AST	C to R	from 1:1 to 10:1	± 0.04 %
	C to R	from 10:1 to 20:1	± (0.04 + 0.005 x TD - 0.05) %

Ambient Temperature ($E \triangle Tz + E \triangle Ts$)

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

Model	Sensors	for TD up to	
266GST	C and F	10:1	± (0.06 % URL + 0.09 % span)
	L to V	10:1	± (0.03 % URL + 0.045 % span)
266AST	C and F	10:1	± (0.06 % URL + 0.09 % span)
LOOAST	L to R	10:1	± (0.03 % URL + 0.045 % span)

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In the case of an ambient temperature change between -10 and 60 °C (14 and 140 °F):

Model	Sensor	for TD up to	
266GST	C and F	10:1	± (0.08 % URL + 0.08 % span)
200651	L to V	10:1	± (0.06 % URL + 0.06 % span)
266AST	C and F	10:1	± (0.2 % URL + 0.1 % span)
266AST	L to R	10:1	± (0.06 % URL + 0.06 % span)

Per 10 K change within the limits of -40 to -10 °C or 60 to 85 °C

(per 18 °F change within the limits of -40 to 14 °F or 140 to 185 °F):

Model	Sensor	for TD up to	
266GST	C and F	10:1	± (0.04 % URL + 0.05 % span)
200651	L to V	10:1	± (0.03 % URL + 0.045 % span)
266AST	C and F	10:1	± (0.1 % URL + 0.05 % span)
	L to R	10:1	± (0.03 % URL + 0.045 % span)
	L to R	10:1	$\pm (0.03 \% \text{ URL} + 0.045 \% \text{ sp})$

... Specification - measuring accuracy

Power supply

Within the limit values for the voltage / load, the total influence is less than 0.005 % of the upper measuring range limit per volt.

Load

Within the load / voltage limits, the total influence is negligible.

Electromagnetic field

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

Common-mode interference

No influence from 100 V rms @ 50 Hz, or 50 V DC

Mounting position

Rotations in the plane of the diaphragm have a negligible effect. A tilt from the vertical of up to 90° causes a zero point shift of up to 0.35 kPa (3.5 mbar, 1.4 inH2O), which can be corrected by making an appropriate zero position adjustment. There is no effect on the measuring span. In applications where a dynamic inclined installation is required (e.g. naval applications with maximum vessel inclination of +/-22.5°), the maximum error can be up to 0,5 mbar for 266GST and 2 mbar for 266AST.

Such error might be resulting in a deviation from the standard accuracy with percentual magnitude depending on the range of the selected device.

In case of non-dynamic inclined installations, this effect can be eliminated by performing a zero calibration in the field.

Please contact ABB to assess more in details on the installation effects

Long-term stability

± 0.15 % of URL over a period of 10 years (± 0.05 % URL/year)

Total performance

Temperature change of 28 °C (50 °F),

only 2	66GST: wi	th base accu	racy option D1 (0.025 %)
Model	Sensor	for TD	Total performance
266GST	L to R	1:1	± 0.108 % of calibrated span
266AST	C to R	1:1	± 0.112 % of calibrated span

Within a temperature change range of -10 to 60 °C (14 to

± 0.112 % of calibrated span

140 °F) (DIN 16086),

only 2	66GST: with	base accuracy	option D1 (0.025 %)

Model	Sensor	for TD	Total performance
266GST	L to R	1:1	± 0.123 % of calibrated span
266AST	C to R	1:1	± 0.126 % of calibrated span

The total performance accuracy includes the measuring error (non-linearity including hysteresis and non repeatability), as well as the thermal change in the ambient temperature as regards the zero signal and span.

$$E_{perf} = \sqrt{(E_{\Delta Tz} + E_{\Delta Ts})^2 + E_{lin}^2}$$

E_{perf} = Total performance

 $E_{\Delta Tz}$ = Effect of the ambient temperature on zero $E_{\Delta Ts}$ = Effect of the ambient temperature on span Elin = Accuracy rating (for terminal-based linearity 0.04 %)

Specification – physical

(Please refer to the order information to check the availability of different versions of the relevant model)

Materials

Process isolating diaphragms* Hastelloy C276; Hastelloy C276, gold plated; stainless steel AISI 316L (1.4435)

Process connection* Stainless steel AISI 316L (1.4404), Hastelloy C276

Sensor filling fluid Silicone oil; fluorocarbon (Galden); white oil (FDA)

Mounting bracket **

Barrel version: Galvanized C steel with chromium passivation; Stainless steel AISI 316L (1.4404) DIN version: AISI 304 (1.4301)

Pressure sensor housing Stainless steel AISI 316L (1.4404)

Electronics housing and cover

Aluminum alloy (copper content \leq 0.3 %) with baked epoxy finish (color RAL9002); stainless steel AISI 316L.

O-ring cover

Buna N

Operating element for local zero point, measuring span, and write protection settings

Non-intrusive design (removable) made of glass fiber reinforced polypropylene oxide.

Plates

- Transmitter name plate: Stainless steel AISI 316 fastened to the electronics housing.
- Certification plate and optional measuring point tag plate / settings plate: Adhesive, fastened to the electronics housing or stainless steel AISI 316L fastened to the electronics housing with rivets or screws.
- Optional tag plate with customer data: Stainless steel AISI 316L.

The metal plates are laser engraved, the adhesive signs thermo-printed.

For stainless steel housings AISI 316L, the order option I2 or I3 must be selected for plates made from stainless steel AISI 316.

Calibration

Standard: 0 to measuring range upper limit, for ambient temperature and atmospheric pressure Optional: To specified measuring span

Transmitter parts that come into contact with fluid
 U-bolt material: stainless steel AISI 400;

screw material: high-strength alloy steel or stainless steel AISI 316

Optional extras

Mounting bracket For 60 mm (2 in) pipes or wall mounting

LCD display Can be rotated in 90° increments into 4 positions

Additional tag plates

Code I2: For for tag and/or calibration details (up to 20 characters), in stainless steel, fastened to the transmitter housing.

Code I1: For customer data (4 lines of 30 characters each), in stainless steel, wired to the transmitter housing

Overvoltage protection

Code S2

Cleaning stage for oxygen application (O2) Code P1

Certificates (inspection, implementation, characteristics, material certificate) Code Cx and Hx

Name plate and operating instruction language Code Tx and Mx

Communication plug connector Code Ux

Valve manifold installation Code A1: Factory installation and pressure test of the ABB

M26 valve manifold.

...Specification – physical

Process connections

1/2-14 NPT internal or external thread; DIN EN 837-1 G 1/2 B or G 1/2 B (HP) for convex seals; flush diaphragm; for ball valve

Electrical connections

Two 1/2-14 NPT or M20 x 1.5 threaded bores for cable glands, directly on housing.

Special communication connector (on request)

- HART: Straight or angled Harting Han 8D connector and one mating plug.
- FOUNDATION fieldbus, PROFIBUS PA: M12 x 1 or 7/8 in plug

Terminals

HART version: Three connections for signal / external display, for wire cross sections of up to 2.5 mm2 (14 AWG), and connection points for testing and communication purposes

Fieldbus versions: Two signal connections (bus connection) for wire cross sections of up to 2.5 mm2 (14 AWG)

Grounding

Internal and external ground terminals are provided for 6 mm2 (10 AWG) wire cross sections.

Mounting position

The transmitters can be installed in any position. The electronic housing can be rotated into any position. A stop is provided to prevent overturning.

Weight

Approx. 2 kg (4.4 lb); additional 1.5 kg (3.3 lb) for stainless steel housing.

Add 650 g (1.5 lb) for packaging.

Packaging

Carton with dimensions of 25 x 20 x 14 cm, approx. (10 x 8 x 6 in)

Specification – configuration

Transmitter with HART communication and 4 to 20 mA

Standard configuration

Transmitters are calibrated at the factory to the customer's specified measuring range. The calibrated range and measuring point number are provided on the name plate. If this data has not been specified, the transmitter will be delivered with the plate left blank and the following configuration:

Physical unit	kPa
4 mA	Zero
20 mA	Measuring range upper
	limit (URL)
Output	Linear
Damping	1 s
Transmitter interference mode	High alarm
Software tag	
(max. 8 characters)	Blank
Optional LCD display	PV in kPa; output in mA
	and in percent as
	bargraph

Any or all of the configurable parameters listed above including the lower and upper range values (with the same unit of measurement) - can easily be changed using a portable HART handheld communicator or a PC running the configuration software with the DTM for 266 models. Specifications concerning the flange type and materials, O-ring and vent / drain valve materials, and additional device options are stored in the transmitter database.

Customer-specific configuration (option N6)

The following information can be specified in addition to the standard configuration parameters:

Description	16 alphanumeric
	characters
Supplementary information	32 alphanumeric
	characters
Date	Day, month, year

For the HART protocol, the following physical units are available for pressure measurements: 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 calibrated at the factory to the customer's specified measuring range. The calibrated range and measuring point number are provided on the name plate. If this data has not been specified, the transmitter will be delivered with the plate left blank and the following configuration:

Pressure

kPa

0 s

Measuring profile Physical unit Output scale 0 % Output scale 100 % Output Upper alarm limit Upper warning limit Lower warning limit Lower alarm limit Hysteresis limit value PV filter time Address (set using local control buttons) 126 Measuring point tag Optional LCD display

Measuring range lower limit (LRL) Measuring range upper limit (URL) Linear Measuring range upper limit (URL) Measuring range upper limit (URL) Measuring range lower limit (LRL) Measuring range lower limit (LRL)

30 alphanumeric characters PV in kPa; output in percent as bargraph display

0.5 % of output scaling

Any or all of the configurable parameters listed above including the measuring range values (with the same unit of measurement) - can easily be changed using a PC running the configuration software with the DTM for 266 models. Specifications concerning the flange type and materials, O-ring and vent / drain valve materials, and additional device options are stored in the transmitter database.

Customer-specific configuration (option N6)

The following information car the standard configuration pa	•
Description	32 alphanumeric
	characters
Supplementary information	32 alphanumeric
	characters
Date	Day, month, year

... Specification - configuration

Transmitter with FOUNDATION fieldbus communication

Standard configuration

Transmitters are calibrated at the factory to the customer's specified measuring range. The calibrated range and measuring point number are provided on the name plate. If this data has not been specified, the transmitter will be delivered with the plate left blank and the analog input function block FB1 will be configured as follows:

Measuring profile	Pressure
Physical unit	kPa
Output scale 0 %	Measuring range lower limit (LRL)
Output scale 100 %	Measuring range upper limit (URL)
Output	Linear
Upper alarm limit	Measuring range upper limit (URL)
Upper warning limit	Measuring range upper limit (URL)
Lower warning limit	Measuring range lower limit (LRL)
Lower alarm limit	Measuring range lower limit (LRL)
Hysteresis limit value	0.5 % of output scaling
PV filter time	0 s
Measuring point tag	30 alphanumeric characters
Optional LCD display	PV in kPa; output in percent as
	bargraph display

The analog input function blocks FB2 and FB3 are each configured for the sensor temperature measured in °C and the static pressure measured in MPa. Any or all of the configurable parameters listed above - including the measuring range values - can easily be changed using a FOUNDATION fieldbus-compatible configuration tool. Specifications concerning the flange type and materials, O-ring and vent / drain valve materials, and additional device options are stored in the transmitter database.

Customer-specific configuration (option N6)

The following information can be specified in addition to the standard configuration parameters: Description 32 alphanumeric

52 alphanumene
characters
32 alphanumeric
characters
Day, month, year

Dimensions

(not design data) - dimensions in mm (inch)

Transmitter with barrel housing – 1/2 NPT female thread

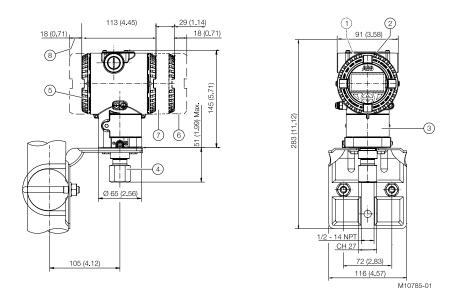


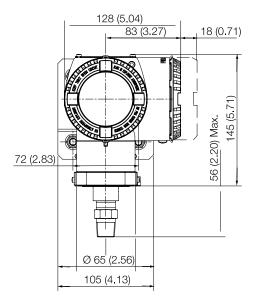
Figure 2 Dimensions - Barrel housing - 1/2 NPT female thread

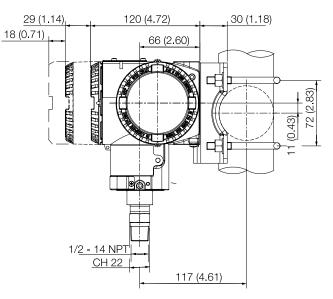
1 Settings | 2 Name plate | 3 Certification plate | 4 Process connection | 5 Terminal side | 6 LCD display housing cover |

7 Electronics side | 8 Space for removing the cover

...Dimensions

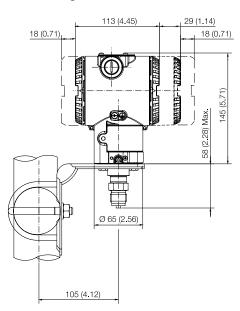
Transmitter with DIN aluminum housing - 1/2 NPT external thread





M10026

Figure 3 Dimensions - DIN aluminum housing – 1/2 NPT external thread



Transmitter with barrel housing – DIN-EN837-1 G 1/2 B connection

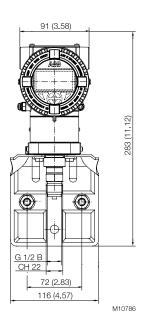


Figure 4 Dimensions - Barrel housing – DIN-EN837-1 G 1/2 B connection

Electrical connections

HART version

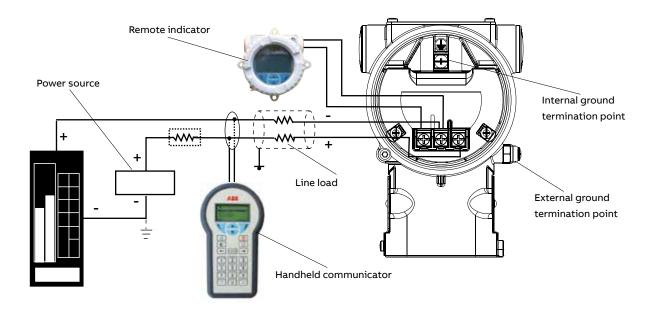


Figure 5 Electrical connection – HART Version

The HART handheld terminal can be connected to any wiring termination point in the loop as long as a minimum resistance of 250 Ω is present between handheld terminal and transmitter power supply. If it is less than 250 Ω , additional resistance wires must be installed to enable a communication.

...Electrical connections

Fieldbus version

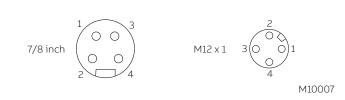


Figure 6 Plug connectors – fieldbus versions

Pin assignment (plug)		
Pin number	FOUNDATION Fieldbus	PROFIBUS PA
1	DATA –	DATA +
2	DATA +	GROUND
3	SHIELD	DATA –
4	GROUND	SHIELD

Delivery scope: plug connector without mating plug (female connector) supplied loose.

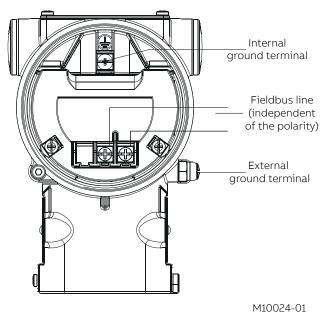


Figure 7 Standard terminal block

HART version

Mounting indications for connectors (supplied loose)

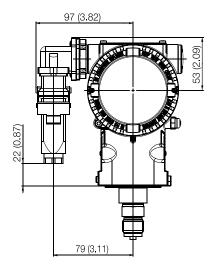
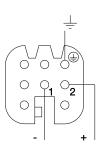
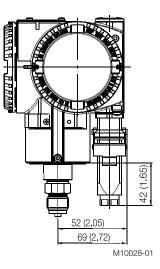


Figure 8 Harting Han connection – HART Version



Harting Han 8D (8U) socket insert for mating plug supplied (view of sockets)





Ordering information

Main ordering information for model 266GST gauge pressure transmitter

Select one or more characters from each category and enter the complete catalog number. Enter one or more codes for additional order information if you are purchasing optional extras for each transmitter.

Base model - 1st to 61	th characters			266GST	x	x	x	х	х	3
Gauge pressure tran	smitter – Base	accuracy 0.04 %								
Sensor Span Limits /	overpressure li	mit – 7th character			•					
0.2 and 6 kPa	(2 and 60 mb	ar, 0.8 and 24 inH2O) 1	MPa (10 bar, 14	5 psi)	с					
0.4 and 40 kPa	(4 and 400 m	bar, 1.6 and 160 inH2O) 1	MPa (10 bar, 14	5 psi)	F					
2.5 and 250 kPa	(25 and 2500	mbar, 10 and 1000 inH2O) 3	MPa (30 bar, 43	15 psi)	L					
10 and 1000 kPa			MPa (60 bar, 87	-	D					
30 and 3000 kPa			MPa (60 bar, 87	• •	U					
100 and 10000 kPa	-				R					
		-	0 MPa (300 bar,	-						
600 and 60000 kPa		•	0 MPa (900 bar,	13050 psi)	V					
Diaphragm material /	-					_				
Stainless steel AISI 3	16L (1.4435)	Silicone oil		NACE		s				
Hastelloy® C-276		Silicone oil		NACE		к				
Stainless steel AISI 3	16L (1.4435)	Fluorocarbon - Galden (suited to oxygen	applications)	NACE		A				
Hastelloy® C-276		Fluorocarbon - Galden (suited to oxygen	applications)	NACE		F				
Hastelloy® C-276 gol	d-plated	Silicone oil		NACE (Note 1)		G				
Hastelloy® C-276 gol	d plated	Fluorocarbon - Galden (suited to oxygen	applications)	NACE (Note 1)		E				
Stainless steel AISI 3	16L (1.4435)	White oil (FDA)		NACE		6				
Hastelloy® C-276		White oil (FDA)		NACE		z				
Process connection m	aterial / type -	9th character								
Stainless steel AISI 3	16L (1.4404)	1/2 in -14 NPT female		NACE			в			
Stainless steel AISI 3	16L (1.4404)	DIN EN 837-1 G 1/2 in B		NACE			Р			
Stainless steel AISI 3	16L (1.4404)	G 1/2 in, in front bonded diaphragm		NACE (Note 1)			s			
Stainless steel AISI 3	16L (1.4404)	1/2 in -14 NPT male		NACE			т			
Stainless steel AISI 3	16L (1.4404)	DIN EN 837-1 G 1/2 in B		NACE (Note 1)			υ			
Stainless steel AISI 3	16L (1.4404)	For ball valve connection		NACE (Note 2)			v			
Hastelloy® C-276		1/2 in -14 NPT female		NACE			Е			
Hastelloy® C-276		DIN EN 837-1 G 1/2 in B		NACE			D			
Hastelloy® C-276		1/2 in -14 NPT male		NACE			к			
Gasket Material – 10t	h character									
None								Ν		
Housing Material / Ele	ectrical Connec	tion – 11th character								
Aluminium alloy (Bar		1/2 in -14 NPT							А	
Aluminium alloy (Bar		M20 x 1.5					2)		B	
Aluminium alloy (Bar		Harting Han connector				Note			E	
Aluminium alloy (Bar AISI 316L SST (barrel		Fieldbus connector 1/2 in -14 NPT (I2 or I3 required)			(I	Note	23)		G S	
AISI 316L SST (barrel		M20 x 1.5 (I2 or I3 required)							T	
Aluminium alloy (DIN		M20 x 1.5							י J	
Aluminium alloy (DIN		Harting Han connector	(General pu	rpose onlv)	(Note	e 3)		ĸ	
Aluminium alloy (DIN		Fieldbus connector	(General pu			Note			w	
AISI 316L SST (barrel		Fieldbus connector	(General pu			Note			z	
Output – 12th charact			, F-	. ,,			,			1
HART digital commu		o 20 mA			(Note	e 7)			
PROFIBUS PA					-	Note				
FOUNDATION fieldbu	ıs					Note	-			
		o 20 mA, SIL2 and SIL3-certified in acc. wit	h IEC 61508		-	Note				

...Ordering information

Additional ordering information for model 266GST gauge pressure transmitter

· · · · · · · · · · · · · · · · · · ·	xx	XX	XX
Accuracy Base accuracy 0.025%	(Note 4) D1		
Explosion Protection Certification			
ATEX Intrinsic Safety Ex ia	(Note 9)	E1	
ATEX Explosion Proof Ex db tb	(Note 10)	E2	
ATEX Intrinsic Safety Ex ic tc	(Note 9)	E3	
FM Approvals (Canada) approval (XP, DIP, IS, NI)	(Note 10)	=0 E4	
FM Approvals (USA) approval (XP, DIP, IS, NI)	(Note 10)	E6	
FM Approvals (USA and Canada) Intrinsically safe	(Note 9)	EA	
FM Approvals (USA and Canada) Explosionproof	(Note 10)	EB	
FM Approvals (USA and Canada) Nonincendive	(Note 9)	EC	
Combined ATEX, IECEx and FM Approvals (USA and Canada)	(Note 10)	EN	
Combined ATEX Ex ia, Ex db tc and Ex ic tc	(Note 10)	EW	
IECEx Intrinsic Safety Ex ia	(Note 9)	E8	
IECEx Explosion Proof Ex db tb	(Note 10)	E9	
IECEx Intrinsic Safety Ex ic_tc	(Note 9)	ER	
Combined IEC Approval Ex ia and Ex db_tb	(Note 10)	EH	
Combined IEC Approval Ex ia, Ex db_tb and Ex ic_tc	(Note 10)	EI	
NEPSI Intrinsic Safety Ex ia_iaD	(Note 9)	EY	
NEPSI Explosion Proof Ex d_tD	(Note 10)	EZ	
NEPSI Intrinsic Safety Ex ic_nA_tD	(Note 9)	ES	
Combined NEPSI Ex ia_iaD and Ex d_tD	(Note 10)	EP	
Combined NEPSI Ex ia_iaD, Ex d_tD and Ex ic_nA_tD	(Note 10)	EQ	
Other Explosion Protection Certifications			1
For TR CU EAC Ex ia for Russia (incl. GOST Metrologic Approval)	(Notes 9, 12)		W1
For TR CU EAC Ex d for Russia (incl. GOST Metrologic Approval)	(Notes 10, 13)		W2
For TR CU EAC Ex ia for Kazakhstan (incl. GOST Metrologic Approval)	(Notes 9, 12)		W3
For TR CU EAC Ex d for Kazakhstan (incl. GOST Metrologic Approval)	(Notes 10, 13)		W4
For TR CU EAC Ex ia for Belarus (incl. GOST Metrologic Approval)	(Notes 9, 12)		WF
For TR CU EAC Ex d for Belarus (incl. GOST Metrologic Approval)	(Notes 10, 13)		WG
Integral LCD display			
With integral LCD display			
With integral touch screen LCD display (TTG)			

	XX	ХХ						
Mounting Bracket Shape / Material								
For horizontal or vertical pipe and wall mounting / carbon steel (Not suitable for AISI housing)	B6							
For horizontal or vertical pipe and wall mounting / AISI 316L (1.4401)	B7							
Surge		_						
Surge/Transient Protector		S2						
Language of documentation								
German (FOR HART, WirelessHART and PROFIBUS VERSIONS)			M1					
Italian (ONLY FOR HART VERSIONS)			M2					
Spanish (FOR HART, WirelessHART and FOUNDATION Fieldbus VERSIONS)			М3					
French (ONLY FOR HART VERSIONS)			M4					
English			M5					
Portuguese (ONLY FOR HART VERSIONS)			MA					
Russian (ONLY FOR HART VERSIONS)			MB					
Language for labels and tags								
German				Τ1				
Italian				Т2				
Spanish				Т3				
French				Τ4				
Additional Tag Plate								
Supplemental wired-on stainless steel plate					11			
Tag and certification stainless steel plates (laser printed)					12			
Tag, certification and supplemental wired-on stainless steel plates (laser printed)					13			
Configuration								
Standard pressure = inH2O / psi at 68 °F						N2		
Standard pressure = inH2O / psi at 39.2 °F						N3		
Standard pressure = inH2O / psi at 20 °C						N4		
Standard pressure = inH2O / psi at 4 °C						N5		
Custom						N6		
Configured for HART revision 5 (Note 5)						NH		
Preparation procedure								
Oxygen service clening, Pmax = 10 MPa (100 bar, 1450 psi) or sensor overpressure (lower value),								
Tmax = 60 °C / 140 °F (Only available with inert fill)							Ρ1	
Certificates								
Inspection certificate 3.1 to EN 10204 of calibration								C1
Inspection certificate 3.1 to EN 10204 of cleaning stage								C3
Inspection certificate 3.1 to EN 10204 of helium leakage test of measuring chamber								C4
Inspection certificate 3.1 to EN 10204 of pressure test								C5
Certificate of compliance with the order EN 10204–2.1 of instrument design								C6
PMI test of wetted parts								СТ

...Ordering information

...Additional ordering information for model 266GST gauge pressure transmitter

			XX X	(X XX	(XX
Approvals					
Metrologic Pattern for Russia	(NOT APPLICABLE WITH ANY HAZARDOUS AREA CERTIFICATION)	Y1		
Metrologic Pattern for Kazakhstan	(NOT APPLICABLE WITH ANY HAZARDOUS AREA CERTIFICATION)	Y2		
Metrologic Pattern for Belarus	(NOT APPLICABLE WITH ANY HAZARDOUS AREA CERTIFICATION)	Y4		
DNV GL approval		(Notes 14)	YA		
Conformity to NAMUR NE 021 (2004)	(NOT APPLICABLE WITH SURGE PROTECTOR CODE "S2")	(Notes 5, 11)	YE		
American Bureau of Shipping (ABS)		(Notes 1, 14)	YS		
Lloyd's Register Group Ltd. (LR) approval		(Notes 1, 14)	YB		
Combined Naval approvals (DNV / ABS / LI	LR)	(Notes 1, 14)	YM		
Material Traceability					
Inspection certificate EN 10204–3.1 of pro Test report EN 10204–2.2 of pressure bear	cess wetted parts (not for gaskets) (Note 6) ring and process wetted parts (not for gaskets)			13 14	
Plug connector					
Fieldbus 7/8 in (Recommended for FOUNE	DATION Fieldbus, supplied loose, without mating plug)			U1	
Fieldbus M12 x 1 (Recommended for PROF	IBUS PA, supplied loose, without mating plug)			U2	
Harting Han 8D (8U), straight entry (suppl	ied loose)			U3	
Harting Han 8D (8U), angle entry (supplied	l loose)			U4	
Harting Han 7D (supplied loose)				U5	
With cable gland M20 x 1.5 (Plastic, black,	supplied loose)			U8	
Housing accessories					
Manifold mounting and pressure test (NOT	FAVAILABLE WITH OXYGEN SERVICE CLEANING - PREPARATION PROC	EDURE CODE P1)			A1
Note 1: Not available with sensor span lim	nits / overpressure limit Code C. F				
Note 2: Not available with sensor span lin					
Note 3: Select connector with additional	• •				
Note 4: Only available with sensor span li	mits / overpressure limit Code L, D, U, R				
Note 5: Not available with Output code 2,					
Note 6: Minor parts with factory certifica					
Note 7: Not available with housing materi	-				
Note 8: Not available with housing mater					
-	ial / electrical connection code E, G, K, W, Z				
-	rial / electrical connection code E, G, J, K, W, Z				
5	a certification code E4, E6, EA, EB, EC, EN, EY, EZ, ES, EP, EQ, W1,	W2, W3, W4, WF, V	WG		
Note 12: The ambient temperature lower		, _, _, _, _, , , , , , , , , , , , , ,	-		
Note 13: The ambient temperature lower	-				
Note 14: Not available with option code Y	5				
Standard delivery scope (changes p	ossible with additional ordering code)				
 For standard applications (with 	2 .				
Na disalar a ponetions (me					

- No display, no mounting bracket, no surge protection
- Multilanguage short-form operating instruction and English labeling
- Configuration with kPa and °C units
- No test, inspection, or material certificates

Unless otherwise specified prior to manufacture, the customer shall be responsible for selecting suitable wetted parts and an appropriate filling fluid in order to ensure compatibility with the measuring fluid.

Compliance with the NACE regulation is based on recommendations MR0175 / ISO 15156. Additionally, stainless steel AISI 316, AISI 316L and Hastelloy C-276 automatically meet the criteria of MR0103, provided that they also meet the criteria of MR0175.

Ordering information

Main ordering information for model 266AST absolute pressure transmitter

Select one or more characters from each category and enter the complete catalog number. Enter one or more codes for additional order information if you are purchasing optional extras for each transmitter.

Base model - 1st to 6	th characters				266AST	х	х	x	х	х	Х
Absolute pressure tr	ansmitter – Base ac	curacy 0.04 %									
Sensor Span Limits /	overpressure limit -	7th character									
0.3 and 6 kPa	(3 and 60 mbar, 2.	25 and 45 mmHg)	1 MPa (10 bar, 145	psi)		с					
2 and 40 kPa	(20 and 400 mbar,	15 and 300 mmHg)	1 MPa (10 bar, 145	psi)		F					
12.5 and 250 kPa	(125 and 2500 mb	ar, 98.3 and 1875 mmHg)	3 MPa (30 bar, 435	psi)		L					
50 and 1000 kPa	(0.5 and 10 bar, 7.	25 and 145 psi)	6 MPa (60 bar, 870	psi)		D					
150 and 3000 kPa	(1.5 and 30 bar, 21		6 MPa (60 bar, 870	•		U					
500 and 10000 kPa	(5 and 100 bar, 72		30 MPa (300 bar, 43			R					
Diaphragm material /		• •	50 m a (500 bai, 4	550 p31)		ĸ					
	-			NACE			c				
Stainless steel AISI 3	16L (1.4435)	Silicone oil		NACE			S				
Hastelloy® C-276		Silicone oil		NACE			K				
Stainless steel AISI 3	16L (1.4435)	Fluorocarbon - Galden (suite		NACE			A				
Hastelloy® C-276		Fluorocarbon - Galden (suite	d to oxygen applications)	NACE			F				
Hastelloy® C-276 gol	d-plated	Silicone oil		NACE	(Note 1)		G				
Hastelloy® C-276 gol	d plated	Fluorocarbon - Galden (suite	d to oxygen applications)	NACE	(Note 1)		Е				
Stainless steel AISI 3	16L (1.4435)	White oil (FDA)		NACE			6				
Hastelloy® C-276		White oil (FDA)		NACE			Z				
Process connection m	aterial / type – 9th	character						1			
Stainless steel AISI 3	16L (1.4404)	1/2 in -14 NPT female		NACE				в			
Stainless steel AISI 3	16L (1.4404)	DIN EN 837-1 G 1/2 in B		NACE				Р			
Stainless steel AISI 3	16L (1.4404)	G 1/2 in, in front bonded dia	phragm	NACE	(Note 1)			s			
Stainless steel AISI 3	16L (1.4404)	1/2 in -14 NPT male		NACE				т			
Hastelloy® C-276		1/2 in -14 NPT female		NACE				Е			
Hastelloy® C-276		DIN EN 837-1 G 1/2 in B		NACE				D			
Hastelloy® C-276		1/2 in -14 NPT male		NACE				к			
Gasket Material – 10t	h character										
None									Ν		
Housing Material / Ele											
Aluminium alloy (Bar	21	1/2 in -14 NPT								Α	
Aluminium alloy (Bar		M20 x 1.5								В	
Aluminium alloy (Bar		Harting Han connector			(Note 2)					E	
Aluminium alloy (Bar		Fieldbus connector	N		(Note 2)					G	
Stainless steel (barre		1/2 in -14 NPT (I2 or I3 requi								S	
Stainless steel (barre		M20 x 1.5 (I2 or I3 required	1)							т	
Aluminium alloy (DIN		M20 x 1.5			AL					J	
Aluminium alloy (DIN		Harting Han connector	(General purpose only		(Note 2)					к	
Aluminium alloy (DIN		Fieldbus connector	(General purpose only		(Note 2)					W	
Stainless steel (barre Output - 12th charact		Fieldbus connector	(General purpose only	y)	(Note 2)					Z	
Output – 12th charact		mA			(Note 5)						
HART digital commu PROFIBUS PA	nication and 4 to 20	ma									
FOUNDATION fieldbu	16				(Note 6) (Note 6)						
		mA, SIL2 and SIL3-certified in a			(Note 6) (Note 5)						

...Ordering information

Additional ordering information for model 266AST absolute pressure transmitter

		XX XX	<
Explosion Protection Certification			
ATEX Intrinsic Safety Ex ia	(Note 7)	E1	
ATEX Explosion Proof Ex db_tb	(Note 8)	E2	
ATEX Intrinsic Safety Ex ic_tc	(Note 7)	E3	
FM Approvals (Canada) approval (XP, DIP, IS, NI)	(Note 8)	E4	
FM Approvals (USA) approval (XP, DIP, IS, NI)	(Note 8)	E6	
FM Approvals (USA and Canada) Intrinsically safe	(Note 7)	EA	
FM Approvals (USA and Canada) Explosionproof	(Note 8)	EB	
FM Approvals (USA and Canada) Nonincendive	(Note 7)	EC	
Combined ATEX, IECEx and FM Approvals (USA and Canada)	(Note 8)	EN	
Combined ATEX Ex ia, Ex db_tc and Ex ic_tc	(Note 8)	EW	
IECEx Intrinsic Safety Ex ia	(Note 7)	E8	
IECEx Explosion Proof Ex db_tb	(Note 8)	E9	
IECEx Intrinsic Safety Ex ic_tc	(Note 7)	ER	
Combined IEC Approval Ex ia and Ex db_tb	(Note 8)	ЕН	
Combined IEC Approval Ex ia, Ex db_tb and Ex ic_tc	(Note 8)	EI	
NEPSI Intrinsic Safety Ex ia_iaD	(Note 7)	EY	
NEPSI Explosion Proof Ex d_tD	(Note 8)	EZ	
NEPSI Intrinsic Safety Ex ic_nA_tD	(Note 7)	ES	
Combined NEPSI Ex ia_iaD and Ex d_tD	(Note 8)	EP	
Combined NEPSI Ex ia_iaD, Ex d_tD and Ex ic_nA_tD	(Note 8)	EQ	
Other Explosion Protection Certifications			
For TR CU EAC Ex ia for Russia (incl. GOST Metrologic Approval)	(Note 7, 11)	W	1
For TR CU EAC Ex d for Russia (incl. GOST Metrologic Approval)	(Note 8, 12)	Wa	2
For TR CU EAC Ex ia for Kazakhstan (incl. GOST Metrologic Approval)	(Note 7, 11)	W	3
For TR CU EAC Ex d for Kazakhstan (incl. GOST Metrologic Approval)	(Note 8, 12)	W	4
For TR CU EAC Ex ia for Belarus (incl. GOST Metrologic Approval)	(Note 7, 11)	W	F
For TR CU EAC Ex d for Belarus (incl. GOST Metrologic Approval)	(Note 8, 12)	w	G
ntegral LCD display			
With integral LCD display			
With integral touch screen LCD display (TTG)			

		ΧХ	XX	XX	ХХ	XX	ХХ	ХХ	XX
Mounting Bracket Shape / Material									
For horizontal or vertical pipe and wall mounting / carbon steel (Not suitable for AISI	housing)	B6							
For horizontal or vertical pipe and wall mounting / AISI 316L (1.4401)		Β7							
Surge			_						
Surge/Transient Protector			S2						
Language of documentation				_					
German (FOR HART, WirelessHART and PROFIBUS VERSIONS)				M1					
Italian (ONLY FOR HART VERSIONS)				M2					
Spanish (FOR HART, WirelessHART and FOUNDATION Fieldbus VERSIONS)				М3					
French (ONLY FOR HART VERSIONS)				M4					
English				M5					
Portuguese (ONLY FOR HART VERSIONS)				MA					
Russian (ONLY FOR HART VERSIONS)				MB					
Language for labels and tags					-				
German					Τ1				
Italian					Т2				
Spanish					Т3				
French					Τ4				
Additional Tag Plate						-			
Supplemental wired-on stainless steel plate						11			
Tag and certification stainless steel plates (laser printed)						12			
Tag, certification and supplemental wired-on stainless steel plates (laser printed)						13			
Configuration									
Standard pressure = inH2O / psi at 68 °F							N2		
Standard pressure = inH2O / psi at 39.2 °F							N3		
Standard pressure = inH2O / psi at 20 °C							N4		
Standard pressure = inH2O / psi at 4 °C							N5		
Custom							N6		
Configured for HART revision 5	(Note 3)						NH		
Preparation procedure									
Oxygen service clening, Pmax = 10 MPa (100 bar, 1450 psi) or sensor overpressure (lo	ower value),								
Tmax = 60 °C / 140 °F (Only available with fluorocarbon filling)								P1	
Certificates									
Inspection certificate 3.1 to EN 10204 of calibration	(Note 10)								C1
Inspection certificate 3.1 to EN 10204 of cleaning stage									C3
Inspection certificate 3.1 to EN 10204 of helium leakage test of measuring chamber									C4
Inspection certificate 3.1 to EN 10204 of pressure test									C5
Certificate of compliance with the order EN 10204-2.1 of instrument design									C6
PMI test of wetted parts									СТ

...Ordering information

...Additional ordering information for model 266AST absolute pressure transmitter

] xx	XX	ХХ	XX
Approvals						
Metrologic Pattern for Russia	(NOT APPLICABLE WITH ANY HAZARDOUS AREA CERTIFICATIO	N)	Y1			
Metrologic Pattern for Kazakhstan	(NOT APPLICABLE WITH ANY HAZARDOUS AREA CERTIFICATIO	N)	Y2			
Metrologic Pattern for Belarus	(NOT APPLICABLE WITH ANY HAZARDOUS AREA CERTIFICATIO	N)	Y4			
DNV GL approval		(Note 13)	YA			
Conformity to NAMUR NE 021 (2004)	(NOT APPLICABLE WITH SURGE PROTECTOR CODE "S2")	(Note 3, 9)	YE			
American Bureau of Shipping (ABS)		(Note 1, 13)	YS			
Lloyd's Register Group Ltd. (LR) approval Combined Naval approvals (DNV / ABS / LLR)		(Note 1, 13) (Note 1, 13)	YB YM			
Material Traceability		(Note 1, 15)	1141			
Inspection certificate EN 10204-3.1 of proces				Н3		
Test report EN 10204–2.2 of pressure bearing	and process wetted parts (not for gaskets)			H4		
Plug connector						
	ION Fieldbus, supplied loose, without mating plug)				U1	
Fieldbus M12 x 1 (Recommended for PROFIB					U2	
Harting Han 8D (8U), straight entry (supplied	-				U3	
Harting Han 8D (8U), angle entry (supplied lo	ose)				U4	
Harting Han 7D (supplied loose) With cable gland M20 x 1.5 (Plastic, black, sup	neliad loose)				U5 U8	
Housing accessories					08	
-	AILABLE WITH OXYGEN SERVICE CLEANING - PREPARATION PROC					A1
Note 1: Not available with measuring range	imits Code C, F					
Note 2: Select connector with additional orc	ler code					
Note 3: Not available with Output code 2, 3						
Note 4: Minor parts with factory certificate	according to EN 10204					
Note 5: Not available with housing material	/ electrical connection code G, W, Z					
Note 6: Not available with housing material	/ electrical connection code E, K					
Note 7: Not available with housing material	/ electrical connection code E, G, K, W, Z					
Note 8: Not available with housing material	/ electrical connection code E, G, J, K, W, Z					
-	ertification code E4, E6, EA, EB, EC, EN, EY, EZ, ES, EP, EQ, W1, ^v	w2. w3. w4. wf. \	NG			
Note 10: Not available with sensor C, if calib						
Note 11: The ambient temperature lower lim	5					
Note 12: The ambient temperature lower lim	.					
Note 13: Not available with option code YE						
Note 13. Not available with option code re						

Standard delivery scope (changes possible with additional ordering code)

- For standard applications (without explosion protection)
- No display, no mounting bracket, no surge protection
- Multilanguage short-form operating instruction and English labeling
- Configuration with kPa and °C units
- No test, inspection, or material certificates

Unless otherwise specified prior to manufacture, the customer shall be responsible for selecting suitable wetted parts and an appropriate filling fluid in order to ensure compatibility with the measuring fluid.

Compliance with the NACE regulation is based on recommendations MR0175 / ISO 15156. Additionally, stainless steel AISI 316, AISI 316L and Hastelloy C-276 automatically meet the criteria of MR0103, provided that they also meet the criteria of MR0175.

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