

Model 266MRT Differential
Model 266GRT Gauge
Model 266RRT and 266ART Absolute

2600T Series Pressure Transmitters
Engineered solutions for all
applications



Base accuracy

from 0.04 % of calibrated span

Reliable sensing system coupled with very latest digital technologies

provides large turn down ratio up to 60:1

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 (1oo1) and SIL3 (1oo2) applications

Full compliance with PED Category III

Model 266MRT Differential Model 266GRT Gauge Model 266RRT and 266ART Absolute

General description

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

a) model 266MRT which allows a differential measurement using either two remote seals of same type and size or one remote seal (on positive or negative side) and a standard threaded connection direct 1/4 – 18 NPT on flange or 1/2 – 14 NPT through adapter, for the wet or dry leg on the side opposite to seal.

b) models 266GRT respectively 266ART / 266RRT having the remote seal on the positive side allow gauge measurement with reference to atmosphere respectively absolute measurement with reference to vacuum. The following table lists the types of standard seal which can be combined with 266xRT transmitters. Refer to seal data sheet DS/S26 for all data and details relevant to seal element. All following data apply for identical characteristics of the two sides when the transmitter is differential with two seals.

Seal model	Seal type	Seal diaphragm size (thickness)	Mnemonic
S26WA S26WE	Wafer (ASME and EN standards)	1.5 in. / DN 40	P1.5
		2 in. / DN 50	P2
		3 in. / DN 80	P3
		1.5 in. / DN 40 (low)	F1.5
		2 in. / DN 50 (low)	F2
		3 in. / DN 80 (low)	F3
S26FA S26FE S26RA S26RE	Flanged flush diaphragm (ASME and EN standards; fixed and rotating flange)	2 in. / DN 50	P2
		3 in. / DN 80	P3
		4 in. / DN 100	P3
		2 in. / DN 50 (low)	F2
	Flanged extended diaphragm (ASME and EN standards; only rotating flange S26RA and S26RE)	3 in. / DN 80 (low)	F3
		4 in. / DN 100 (low)	F3
		2 in. / DN 50	E2
		3 in. / DN 80	E3
S26RJ	Flanged flush diaphragm (JIS standards; only rotating flange)	4 in. / DN 100	P3
		A 50	P2
		A 80	P3
S26RR	Flanged flush diaphragm (Ring Joint ASME standards; rotating flange)	A 100	P3
		1.5 in.	P1.5
		2 in.	P2
S26CN	Flanged Chemical Tee	3 in.	P3
S26TT	Threaded off-line flanged	2 1/2 in.	T 2.5
S26MA, S26ME	Off-line flanged (ASME and EN standards)	2 1/2 in.	T 2.5
S26SS	Union nut Triclamp Cherry Burrel Sanitary, Aseptic	3 in.	P3
		1 1/2 in.	K 1.5
		2 in. / F50	S2
		3 in. / F80	S3
S26VN	Saddle and Socket	4 in.	S3
S26UN	Union connection type	2 1/2 in.	P1.5
S26BN	Button type	1 1/2 in.	Z1.5
S26PN	Urea service flanged	1 in.	B1
		1 1/2 in.	U1.5
		2 1/2 in.	U2.5

Functional Specifications

Range and span limits

Sensor Code	Upper Range Limit (URL)	Lower Range Limit (LRL)				Minimum span	
		266MRT differential	266GRT gauge	266RRT absolute	266ART absolute	266MRT 266GRT	266RRT 266ART
C	6 kPa 60 mbar 24 inH2O	-6 kPa -60 mbar -24 inH2O	-6 kPa -60 mbar -24 inH2O		0.07 kPa abs 0.7 mbar abs 0.5 mmHg	0.6 kPa 6 mbar 2.41 inH2O	1.2 kPa abs (Δ) 12 mbar abs (Δ) 9 mmHg (Δ)
F	40 kPa 400 mbar 160 inH2O	-40 kPa -400 mbar -160 inH2O	-40 kPa -400 mbar -160 inH2O	0.07 kPa abs (§) 0.7 mbar abs (§) 0.5 mmHg (§)	0.07 kPa abs 0.7 mbar abs 0.5 mmHg	0.67 kPa 6.7 mbar 2.67 inH2O	2 kPa abs 20 mbar abs 15 mmHg
L	250 kPa 2500 mbar 1000 inH2O	-250 kPa -2500 mbar -1000 inH2O	0.07 kPa abs (§) 0.7 mbar abs (§) 0.5 mmHg (§)	0.07 kPa abs (§) 0.7 mbar abs (§) 0.5 mmHg (§)	0.07 kPa abs (§) 0.7 mbar abs (§) 0.5 mmHg (§)	4.17 kPa 41.67 mbar 16.73 inH2O	12.5 kPa abs 125 mbar abs 93.8 mmHg
D	1000 kPa 10 bar 145 psi		0.07 kPa abs (§) 0.7 mbar abs (§) 0.5 mmHg (§)		0.07 kPa abs (§) 0.7 mbar abs (§) 0.5 mmHg (§)	16.7 kPa 167 mbar 2.42 psi	50 kPa abs (Δ) 500 mbar abs (Δ) 7.25 psia (Δ)
N	2000 kPa 20 bar 290 psi	-2000 kPa -20 bar -290 psi		0.07 kPa abs (§) 0.7 mbar abs (§) 0.5 mmHg (§)		33.3 kPa 333 mbar 4.83 psi	100 kPa abs (#) 1 bar abs (#) 14.5 psia (#)
U	3000 kPa 30 bar 450 psi		0.07 kPa abs (§) 0.7 mbar abs (§) 0.5 mmHg (§)		0.07 kPa abs (§) 0.7 mbar abs (§) 0.5 mmHg (§)	50 kPa 500 mbar 7.25 psi	150 kPa abs (Δ) 1.5 bar abs (Δ) 21.7 psia (Δ)
R	10000 kPa 100 bar 1450 psi	-10000 kPa -100 bar -1450 psi	0.07 kPa abs (§) 0.7 mbar abs (§) 0.5 mmHg (§)		0.07 kPa abs (§) 0.7 mbar abs (§) 0.5 mmHg (§)	167 kPa 1.67 bar 24.17 psi	500 kPa abs (Δ) 5 bar abs (Δ) 72.6 psia (Δ)
V	60000 kPa 600 bar 8700 psi		0.07 kPa abs (§) 0.7 mbar abs (§) 0.5 mmHg (§)			1000 kPa 10 bar 145 psi	

(§) Lower Range Limit is 0.135 kPa abs, 1.35 mbar abs, 1 mmHg for inert Galden.

(Δ) only for 266ART

(#) only for 266RRT

Span limits

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

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

Zero suppression and elevation

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

- calibrated span ≥ minimum span

Damping

Selectable time constant 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 MΩ at 500 V DC (terminals to earth)

Model 266MRT Differential Model 266GRT Gauge Model 266RRT and 266ART Absolute

Operative limits

REFER ALSO TO DS/S26 DATA SHEET FOR POSSIBLE FURTHER LIMITATION DUE TO SEAL VARIANTS

Pressure limits

Overpressure limits

Without damage to the transmitter

Models 266MRT and 266RRT	Fill fluid	Overpressure limits
Sensor C to R	Silicone oil	0.07 kPa abs., 0.7 mbar abs., 0.5 mmHg and 16 MPa, 160 bar, 2320 psi, or 25 MPa, 250 bar, 3625 psi, or 41 MPa, 410 bar, 5945 psi depending on code variant selected
Sensor C to R	Inert (Galden)	17.5 kPa abs., 175 mbar abs., 131 mmHg and 16 MPa, 160 bar, 2320 psi, or 25 MPa, 250 bar, 3625 psi, or 41 MPa, 410 bar, 5945 psi depending on code variant selected

Models 266GRT and 266ART	Fill fluid	Overpressure limits
Sensor C, F	-	0.07 kPa abs., 0.7 mbar abs., 0.5 mmHg and 1 MPa, 10 bar, 145 psi
Sensor L	Silicone oil	0.07 kPa abs., 0.7 mbar abs., 0.5 mmHg and 0.5 MPa, 5 bar, 72.5 psi
Sensor D	Silicone oil	0.07 kPa abs., 0.7 mbar abs., 0.5 mmHg and 2 MPa, 20 bar, 290 psi
Sensor U	Silicone oil	0.07 kPa abs., 0.7 mbar abs., 0.5 mmHg and 6 MPa, 60 bar, 870 psi
Sensor R	Silicone oil	0.07 kPa abs., 0.7 mbar abs., 0.5 mmHg and 20 MPa, 200 bar, 2900 psi
Sensor V	Silicone oil	0.07 kPa abs., 0.7 mbar abs., 0.5 mmHg and 90 MPa, 900 bar, 13050 psi
Sensor L	Inert (Galden)	0.135 kPa abs., 1.35 mbar abs., 1 mmHg and 0.5 MPa, 5 bar, 72.5 psi
Sensor D	Inert (Galden)	0.135 kPa abs., 1.35 mbar abs., 1 mmHg and 2 MPa, 20 bar, 290 psi
Sensor U	Inert (Galden)	0.135 kPa abs., 1.35 mbar abs., 1 mmHg and 6 MPa, 60 bar, 870 psi
Sensor R	Inert (Galden)	0.135 kPa abs., 1.35 mbar abs., 1 mmHg and 20 MPa, 200 bar, 2900 psi
Sensor V	Inert (Galden)	0.135 kPa abs., 1.35 mbar abs., 1 mmHg and 90 MPa, 900 bar, 13050 psi

Static pressure limits

Transmitters for differential pressure model 266MRT operate within specifications between the following limits:

Sensors	Fill fluid	Static pressure limits
Sensor C to R	Silicone oil	3.5 kPa abs., 35 mbar abs., 0.5 psia and 16 MPa, 160 bar, 2320 psi, or 25 MPa, 250 bar, 3625 psi, or 41 MPa, 410 bar, 5945 psi depending on code variant selected
Sensor C to R	Inert (Galden)	17.5 kPa abs., 175 mbar abs., 131 mmHg and 16 MPa, 160 bar, 2320 psi, or 25 MPa, 250 bar, 3625 psi, or 41 MPa, 410 bar, 5945 psi depending on code variant selected

Overpressure and static upper limit can be derated by the flange rating of seal; refer to relevant DS/S26 data sheet.

Proof pressure

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

Model	Proof pressure
266MRT	1.5 times the static pressure limits simultaneously on both sides ¹⁾
266RRT	1 time the static pressure limits ¹⁾
266GRT / 266ART	The overpressure limits of the sensor ¹⁾

1) Or two times the flange rating of seal, whichever is less. Meet ANSI/ISA-S 82.03 hydrostatic test requirements.

Temperature limits °C (°F)

Ambient

Is the operating temperature.

Models 266MRT – 266RRT	Ambient temperature limits
Silicone oil for sensor C to R	-40 and 85 °C (-40 and 185 °F)
Inert (Galden) for sensor C to R	-40 and 85 °C (-40 and 185 °F)

Models 266GRT – 266ART	Ambient temperature limits
Silicone oil for sensor C to V	-40 and 85 °C (-40 and 185 °F)
Inert (Galden) for sensor C to V	-40 and 85 °C (-40 and 185 °F)

Models 266XRT	Ambient temperature limits
LCD integral display ¹⁾	-40 and 85 °C (-40 and 185 °F)

1) 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

Model 266MRT (side without seal)	Process temperature limits
Silicone oil for sensor C to R	-40 and 121 °C (-40 and 250 °F) ¹⁾
Inert (Galden) for sensor C to R	-40 and 121 °C (-40 and 250 °F) ²⁾
Viton gasket	-20 and 121 °C (-4 and 250 °F)
PTFE gasket	-20 and 85 °C (-4 and 185 °F)

1) 85 °C (185 °F) for application below 10 kPa, 100 mbar abs., 1.45 psia down to 3.5 kPa abs., 35 mbar abs., 26 mmHg

2) 85 °C (185 °F) for application below atmospheric pressure down to 17.5 kPa abs., 175 mbar abs., 131 mmHg

The following table show characteristics of fill fluids when used in transmitters with remote seal(s).

Fill fluid (application)	Process temperature and pressure limits			
	Tmax °C (°F) @ Pabs > of	Pmin mbar abs (mmHg)	Tmax °C (°F) @ Pmin	Tmin °C (°F)
Silicone oil DC 200 10 cSt	250 (480) @ 385 mbar	0.7 (0.5)	130 (266)	-40 (-40)
Silicone oil Baysilone PD5 5 cSt	250 (480) @ 900 mbar	0.7 (0.5)	45 (123)	-50 (-58)
Inert oil Galden G5 (oxygen service)	160 (320) @ 1 bar	2.1 (1.52)	60 (140)	-20 (-4)
Inert oil Halocarbon 4.2 (oxygen service)	180 (356) @ 425 mbar	4 (3)	70 (158)	-20 (-4)
Silicone polymer Syltherm XLT (cryogenic service)	110 (230) @ 118 mbar	2.1 (1.52)	20 (68)	-100 (-148)
Silicone oil DC 704 (high temperature)	375 (707) @ 1 bar	0.7 (0.5)	220 (328)	-10 (14)
Vegetable oil Neobee M-20 (food – sanitary) FDA approved	200 (390) @ 1 bar	10 (7.2)	20 (68)	-18 (0)
Mineral oil Esso Marcol 122 (food - sanitary) FDA approved	250 (480) @ 630 mbar	0.7 (0.5)	110 (230)	-6 (21)
Glycerin Water 70 % (food sanitary) FDA approved	93 (200) @ 1 bar	1000 (760)	93 (200)	-7 (-20)

Flushing ring gasket material	Process limits		
	Pressure (max.)	Temperature	P x T
Garlock	6.9 MPa, 69 bar, 1000 psi	-73 and 204 °C (-100 and 400 °F)	250000 (°F x psi)
Graphite	2.5 MPa, 25 bar, 362 psi	-100 and 380 °C (-148 and 716 °F)	
PTFE	6 MPa, 60 bar, 870 psi	-100 and 250 °C (-148 and 482 °F)	

Storage

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

Model 266MRT Differential Model 266GRT Gauge Model 266RRT and 266ART Absolute

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 Directive 97/23/EC 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. IP 65 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 and

II 1/2 G Ex ia IIC T6 (-40 °C ≤ Ta ≤ +40 °C);

II 1 D Ex iaD 20 T 95 °C and

II 1/2D Ex iaD 21 T95 °C

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 IP67 T85 °C

TYPE "N":

ATEX Europe (code E3) and IEC Ex (code ER)

type examination

II 3 G Ex nL IIC T6 and

II 3 D Ex tD A22 IP67 T85 °C

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
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
-

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 Ex 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:

$$R \text{ (k}\Omega\text{)} = \frac{\text{Voltage supply} - \text{Minimum operating voltage (V DC)}}{22 \text{ mA}}$$

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 4 kV

– 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

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

Model 266MRT Differential

Model 266GRT Gauge

Model 266RRT and 266ART Absolute

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 (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

Function blocks / execution period

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

1 enhanced 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 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; FF registration in progress.

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 DP 50170 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 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.
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 self-diagnostics, the output signal can be driven to defined conditions, selectable by the user as safe, last valid or calculated value.
If electronic failure or short circuit occur the transmitter consumption is electronically limited at a defined value (20 mA approx), for safety of the network.

Model 266MRT Differential Model 266GRT Gauge Model 266RRT and 266ART Absolute

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 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.

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	Accuracy
266MRT	F to R	from 1:1 to 10:1	± 0.04 %
with seals	F to R	from 10:1 to 60:1	± (0.04 + 0.005 x TD - 0.05) %
mnemonic	C	from 1:1 to 5:1	± 0.04 %
P3, F3, E3, S3, F2	C	from 5:1 to 10:1	± (0.008 x TD) %
266MRT	F to R	from 1:1 to 10:1	± 0.065 %
with seals	F to R	from 10:1 to 60:1	± (0.0065 x TD) %
mnemonic	C	from 1:1 to 5:1	± 0.065 %
different	C	from 5:1 to 10:1	± (0.013 x TD) %
from above			

Model	Sensor	For TD up to	Accuracy
266RRT	F, L, N	from 1:1 to 10:1	± 0.04 %
with seals	F, L, N	from 10:1 to 20:1	± (0.04 + 0.005 x TD - 0.05) %
mnemonic			
P3, F3, E3, S3, F2			
266RRT	F, L, N	from 1:1 to 10:1	± 0.065 %
with seals	F, L, N	from 10:1 to 20:1	± (0.0065 x TD) %
mnemonic			
different			
from above			

Model	Sensor	For TD up to	Accuracy
266GRT	F to V	from 1:1 to 10:1	± 0.04 %
with seals	F to V	from 10:1 to 60:1	± (0.04 + 0.005 x TD - 0.05) %
mnemonic	C	from 1:1 to 5:1	± 0.04 %
P3, F3, E3, S3, F2	C	from 5:1 to 10:1	± (0.008 x TD) %
266GRT	F to V	from 1:1 to 10:1	± 0.065 %
with seals	F to V	from 10:1 to 60:1	± (0.0065 x TD) %
mnemonic	C	from 1:1 to 5:1	± 0.065 %
different	C	from 5:1 to 10:1	± (0.013 x TD) %
from above			

Model	Sensor	For TD up to	Accuracy
266ART	F to R	from 1:1 to 10:1	± 0.04 %
with seals	F to R	from 10:1 to 20:1	± (0.04 + 0.005 x TD - 0.05) %
mnemonic	C	from 1:1 to 5:1	± 0.04 %
P3, F3, E3, S3, F2			
266ART	F to R	from 1:1 to 10:1	± 0.065 %
with seals	F to R	from 10:1 to 20:1	± (0.0065 x TD) %
mnemonic	C	from 1:1 to 5:1	± 0.065 %
different			
from above			

Pabs-Sensor (second sensor for 266MRT)
range 41 MPa, 410 bar, 5945 psi

Model	Sensor	
266MRT	C to R	80 kPa, 800 mbar, 321 inH2O

Ambient temperature

Transmitter effect per 20 K change between the limits of -40 to 85 °C

(Transmitter effect per 36 °F change between the limits of -40 to 185 °F):

Model	Sensor	For TD up to	
266MRT	C to R	10:1	± (0.03 % URL + 0.045 % span)
266RRT	F, L, N	10:1	± (0.05 % URL + 0.08 % span)
266GRT	C and F	10:1	± (0.06 % URL + 0.09 % span)
266GRT	L to V	10:1	± (0.03 % URL + 0.045 % span)
266ART	C and F	5:1 (C), 10:1 (F)	± (0.06 % URL + 0.09 % span)
266ART	L to R	10:1	± (0.03 % URL + 0.045 % span)

Model 266MRT / Absolute pressure sensor

For the entire temperature range of 125 K, between the limits of -40 °C to 85 °C:

Zero signal

For sensors C to R:
40 kPa, 400 mbar, 160 inH2O
(absolute pressure sensor 41MPa, 410 bar, 5945 psi)

Span

For sensors C to R:
0.3 kPa, 3 bar, 43.5 psi
(absolute pressure sensor 41 MPa, 410 bar, 5945 psi)

REFER TO DS/S26 SEALS DATA SHEET FOR TEMPERATURE ADDITIONAL EFFECTS OF REMOTE SEAL(S)

The entire temperature may be defined as the combined effect of the above factors on the transmitter plus the remote seal influences, depending on the operating temperature.

Static pressure

Model 266MRT with remote seal(s)
(zero errors can be calibrated out at line pressure)

Measuring range	Sensor C, F, L, N	Sensor R
Zero error	Up to 100 bar: 0.05 % URL	Up to 100 bar: 0.1 % URL
	> 100 bar: 0.05 % URL/100 bar	> 100 bar: 0.1 % URL/100 bar
Span error	Up to 100 bar: 0.05 % span	Up to 100 bar: 0.1 % span
	> 100 bar: 0.05 % span/100 bar	> 100 bar: 0.1 % span/100 bar

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 100 V rms @ 50 Hz, or 50 V DC

Model 266MRT Differential Model 266GRT Gauge Model 266RRT and 266ART Absolute

Physical specification

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

Materials

Model 266MRT only – side without seal

Process isolating diaphragms (*)

AISI 316L ss (1.4435);

Hastelloy C276;

Monel 400; Tantalum

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

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

AISI 316L ss; Hastelloy C276; Monel 400

Bolts and nuts

AISI 316 ss bolts Class A4-80 and nuts Class A4-70 per UNI 7323 (ISO 3506);

AISI 316 ss bolts and nuts Class A4-50 and per

UNI 7323 (ISO 3506), in compliance with

NACE MR0175 Class II.

Gaskets (*)

Viton (FPM); Perbunan (NBR); EPDM; PTFE; Graphite

Model 266MRT, 266RRT, 266GRT, 266ART

Seal side process diaphragm (remote seal) (*)

AISI 316 L ss; Hastelloy C-276;

Hastelloy C-2000; Inconel 625; Tantalum;

AISI 316 L ss or Hastelloy C-276 with anti-stick coating;

AISI 316 L ss with anti-corrosion coating;

AISI 316 L ss gold plated;

Superduplex ss (UNS S32750 to ASTM SA479);

Diaflex (AISI with anti-abrasion treatment)

Extension material (*)

AISI 316 L ss (also for Diaflex and gold plated diaphragms);

Hastelloy C-276; AISI 316 L ss or Hastelloy C-276 with coating same as diaphragm

Seal side fill fluid (remote seal)

Silicone oil-DC200; Silicone oil-DC704; Inert-Galden;

Inert-Halocarbon 4.2; Silicone Polymer-Syltherm XLT;

Low viscosity silicone oil-Baysilone M5; Glycerin Water;

Vegetable oil-Neobee M-20; Mineral oil-Essomarcot 122

Sensor fill fluid

Silicone oil; Inert fill (Galden)

Sensor housing

AISI 316L ss

Electronic housing and covers

Aluminium alloy (copper content ≤ 0.3 %) with baked epoxy finish (colour RAL9002); AISI 316L ss.

Covers O-ring

Buna N (perbunan)

Mounting bracket (**)

Zinc plated carbon steel with chrome passivation;

AISI 316 L ss.

Local adjustments (zero, span and write protect)

Glass filled polyphenylene oxide (removable)

Plates

AISI 316 ss 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.

(*) Wetted parts of the transmitter.

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

Calibration

Standard:

- At maximum span, zero based range, ambient temperature and pressure

Optional:

- At specified range and ambient conditions

Optional extras

Mounting brackets

For vertical and horizontal 60 mm (2 in.) 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 characters x 4 lines) wired-on transmitter housing

Surge protection

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

Tag and manual language

Communication connectors

Process connections

On conventional flanges: 1/4–18 NPT on process axis

On adapters: 1/2–14 NPT on process axis

Fixing threads: 7/16–20 UNF at 41.3 mm centre distance

Refer to DS/S26 seal data sheet for process connection variants through remote seal

Electrical connections

Two 1/2-14 NPT or M20 x 1.5 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: M12 x 1 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 mm² (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 and seals)

Models 266MRT, 266RRT: 3.7 kg approx (8.2 lb)

Models 266GRT, 266ART: 2 kg approx (4.4 lb)

Add 1.5 kg (3.4 lb) for AISI housing.

Add 650 g (1.5 lb) for packing

Consider additional weight up to 50 kg (110 lb) for seals.

Packing

Carton

Model 266MRT Differential Model 266GRT Gauge Model 266RRT and 266ART Absolute

Configuration

Transmitter with HART communication and 4 to 20 mA Standard configuration

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

Engineering Unit	kPa
4 mA	Zero
20 mA	Upper Range Limit (URL)
Output	Linear
Damping	1 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:

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
Tag	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:

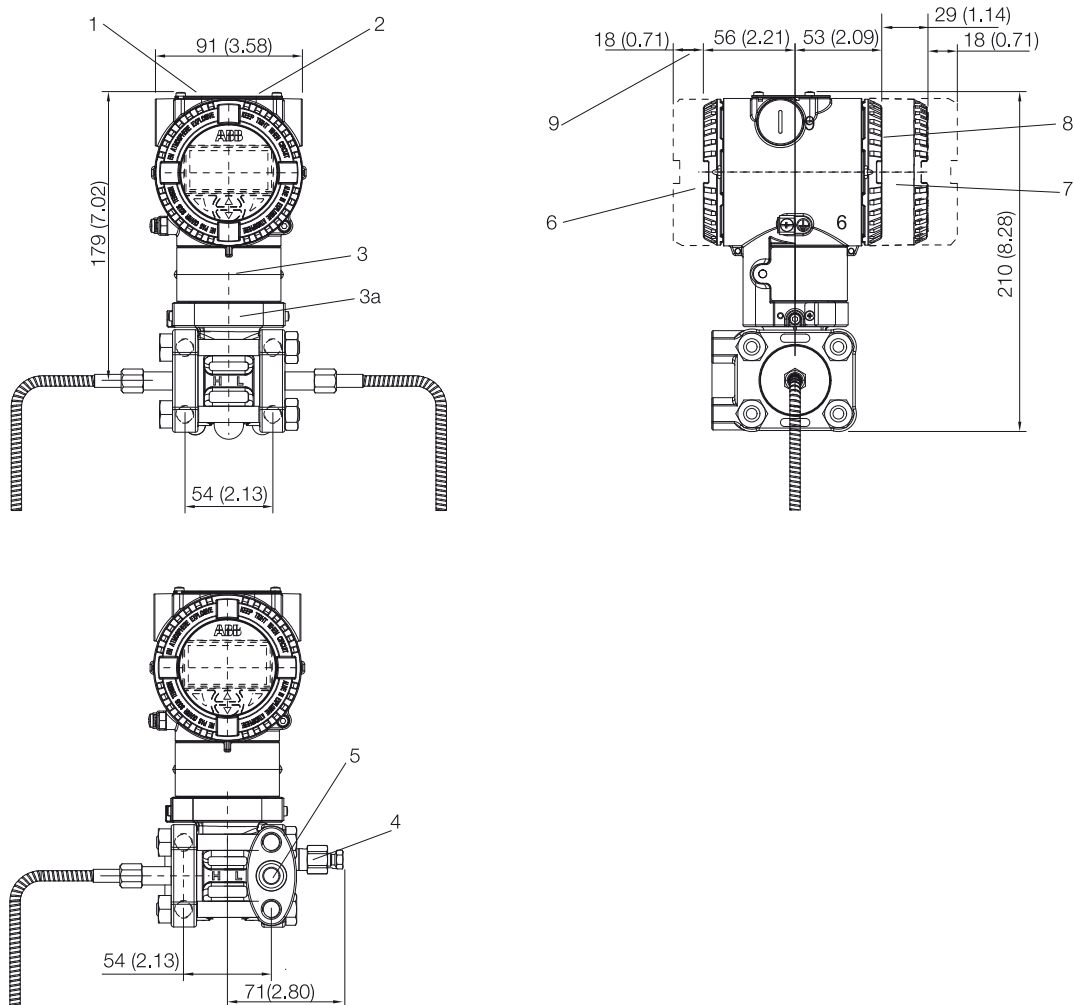
Measure Profile	Pressure
Engineering Unit	kPa
Output scale 0 %	Lower Range Limit (LRL)
Output scale 100 %	Upper Range Limit (URL)
Output	Linear
Hi-Hi Limit	Upper Range Limit (URL)
Hi Limit	Upper Range Limit (URL)
Low Limit	Lower Range Limit (LRL)
Low-Low Limit	Lower Range Limit (LRL)
Limits hysteresis	0.5 % of output scale
PV filter time	0 s
Tag	32 alphanumeric characters
Optional LCD display	PV in kPa; output in percentage on bargraph

The analog input function blocks 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.

Model 266MRT Differential Model 266GRT Gauge Model 266RRT and 266ART Absolute

Mounting Dimensions

(not for construction unless certified) – dimensions in mm (in.)
Models 266MRT, 266RRT with barrel housing



M10029

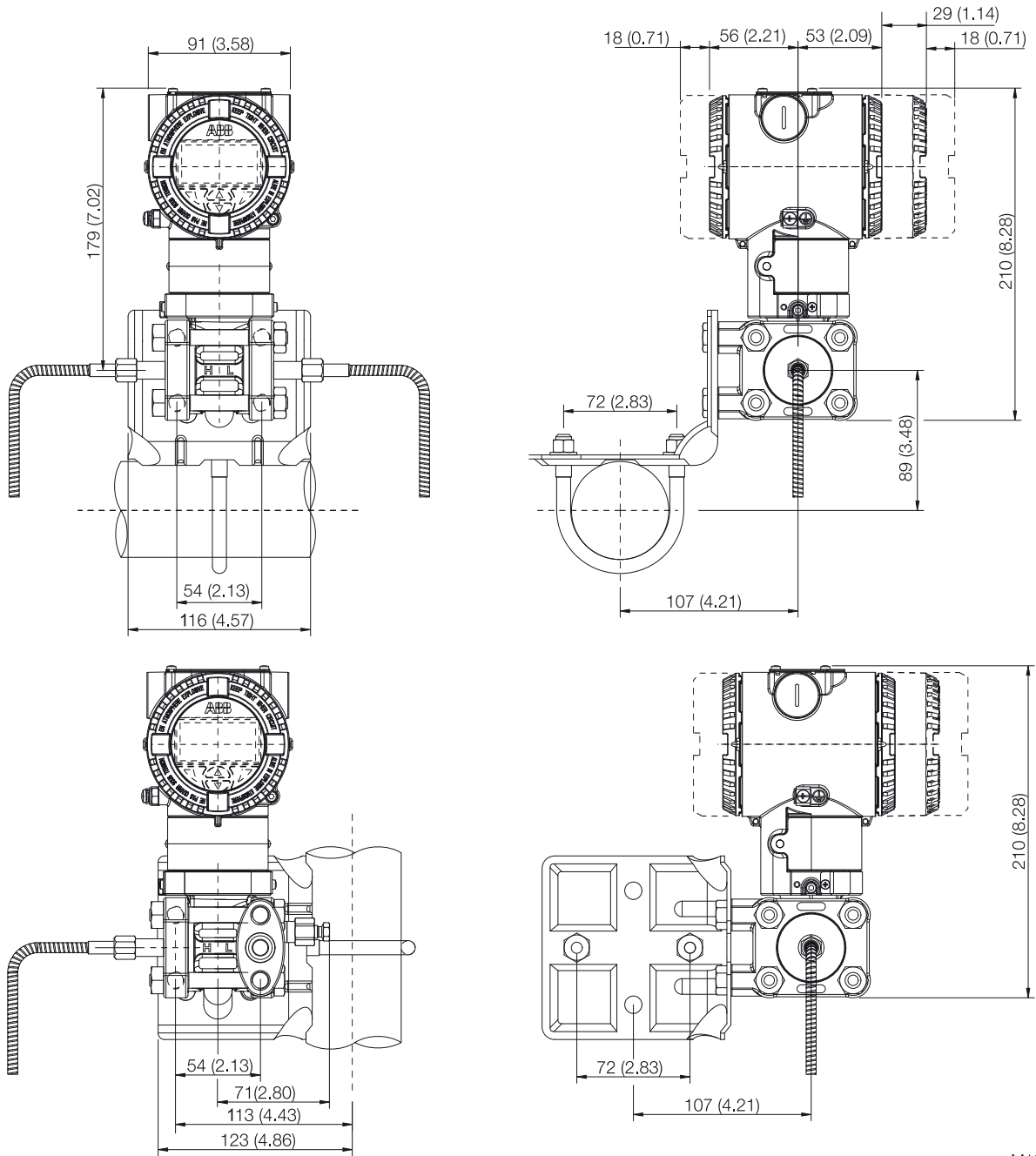
Fig. 1: Dimensions – Barrel housing

1 Adjustments | 2 Identification plate | 3 Certification plate | 3a Optional plate (Code I2) | 4 Drain / vent valve | 5 Process connection | 6 Terminal side | 7 Integral display housing | 8 Electronic side | 9 Space for cover removal

Note

For 266MRT using one seal only, the threaded connection (1/4 – 18 NPT direct or 1/2 – 14 NPT through adapter) of conventional flange, gasket groove and gaskets are in accordance with IEC 61518. Bolting threads for fixing adapter or other devices (i.e. manifold etc.) on process flange is 7/16-20 UNF.

Models 266MRT, 266RRT with barrel housing on bracket for vertical or horizontal 60 mm (2 in.) pipe

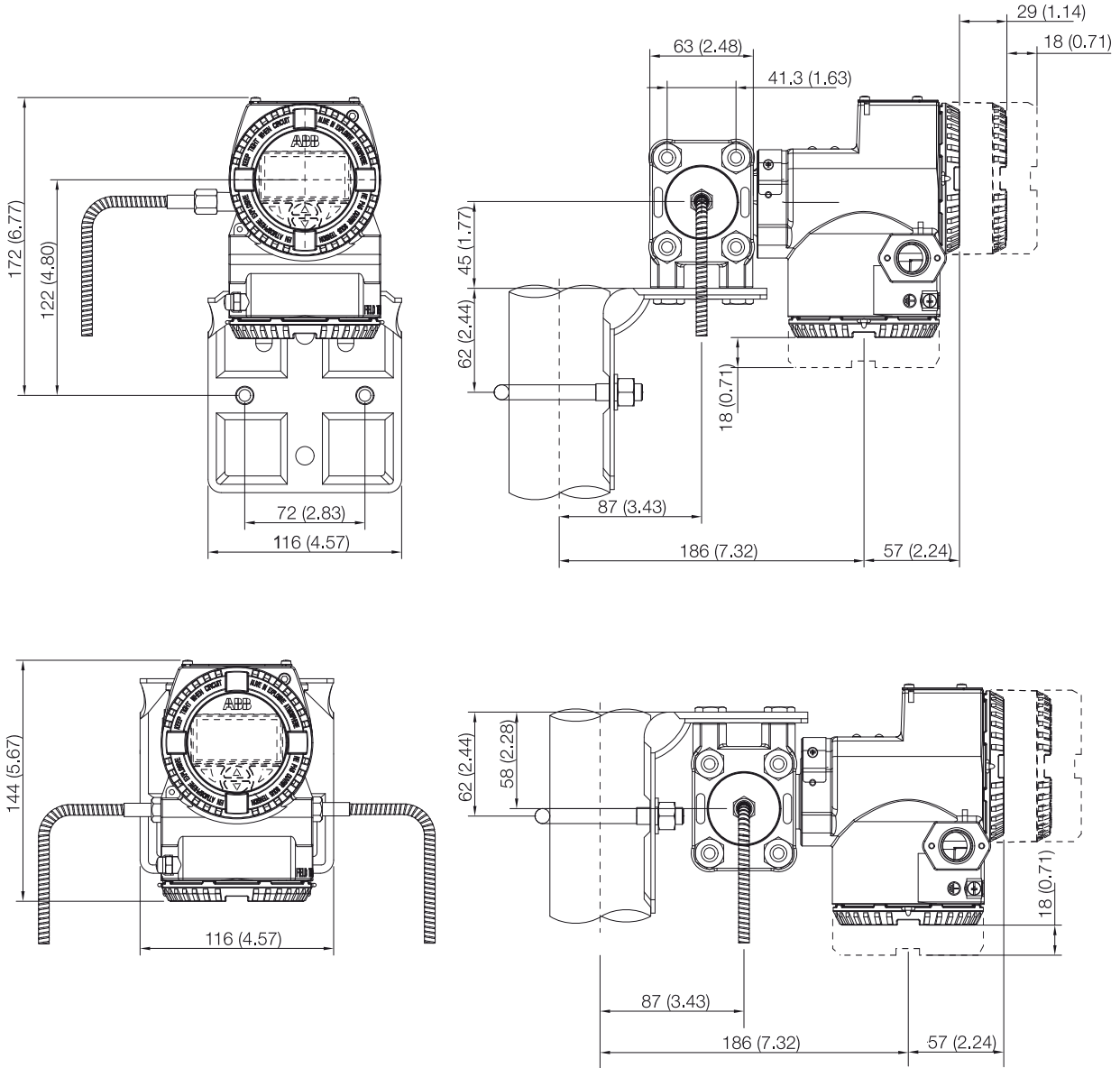


M10030

Fig. 2: Dimensions – Barrel housing on bracket for vertical or horizontal 60 mm (2 in.) pipe

Model 266MRT Differential
 Model 266GRT Gauge
 Model 266RRT and 266ART Absolute

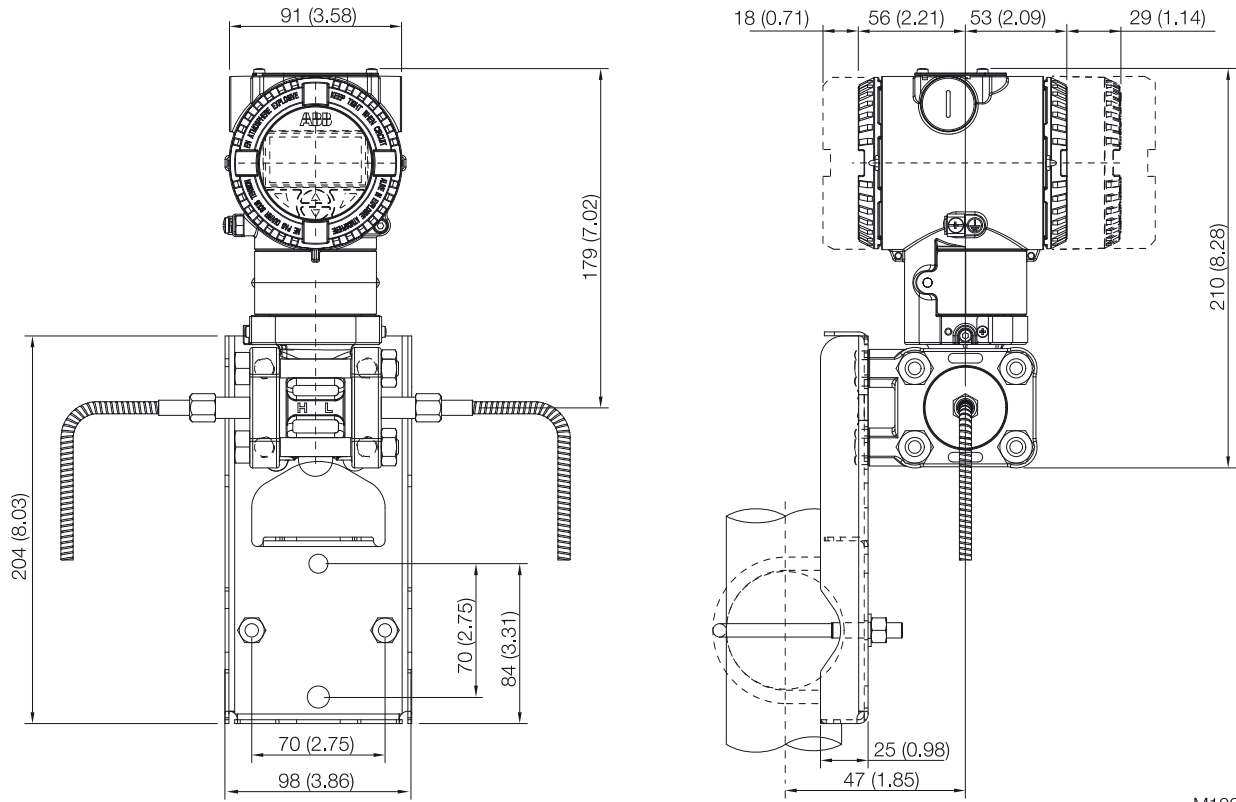
Models 266MRT, 266RRT with DIN housing on bracket for vertical or horizontal 60 mm (2 in.) pipe



M10031

Fig. 3: Dimensions – DIN housing on bracket for vertical or horizontal 60 mm (2 in.) pipe

Models 266MRT with barrel housing on flat bracket for vertical or horizontal 60 mm (2 in.) pipe

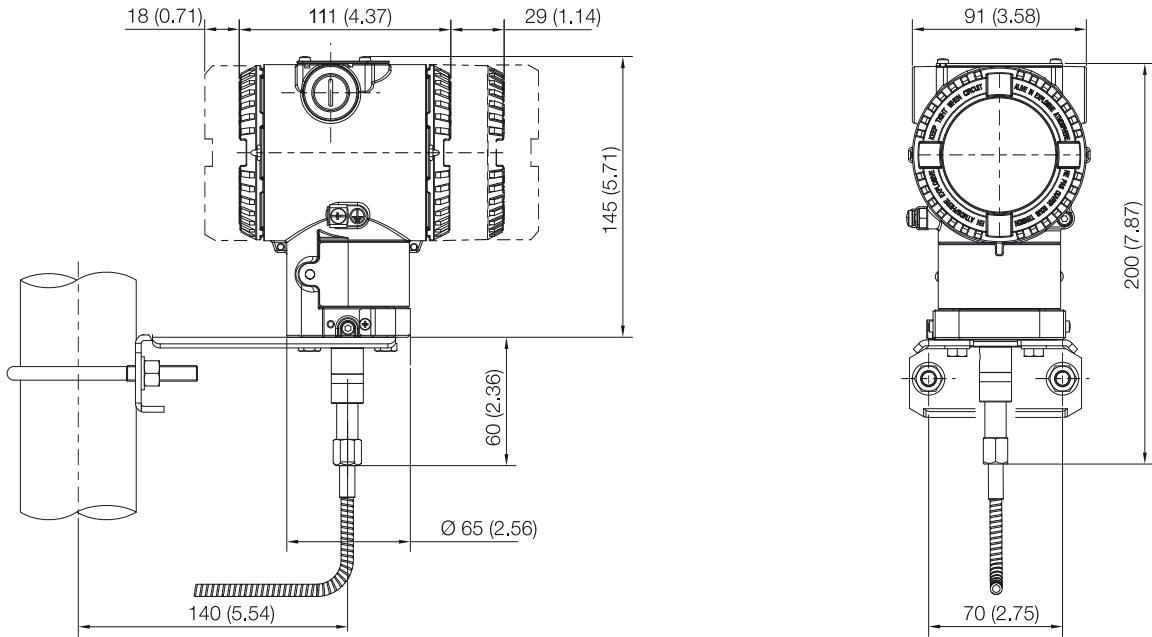


M10032

Fig. 4: Dimensions – Barrel housing on flat bracket for vertical or horizontal 60 mm (2 in.) pipe

Model 266MRT Differential Model 266GRT Gauge Model 266RRT and 266ART Absolute

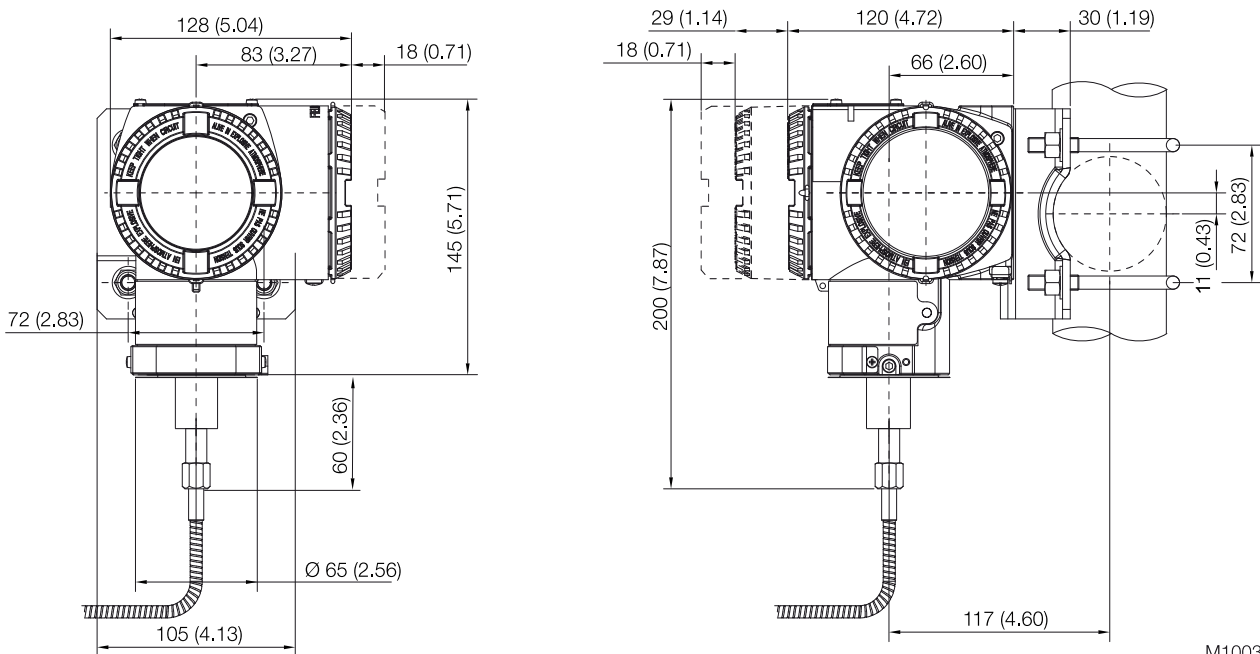
Models 266GRT, 266ART with barrel housing on bracket for vertical or horizontal 60 mm (2 in.) pipe



M10033

Fig. 5: Dimensions – Barrel housing on bracket for vertical or horizontal 60 mm (2 in.) pipe

Models 266GRT, 266ART with DIN housing on bracket for vertical or horizontal 60 mm (2 in.) pipe

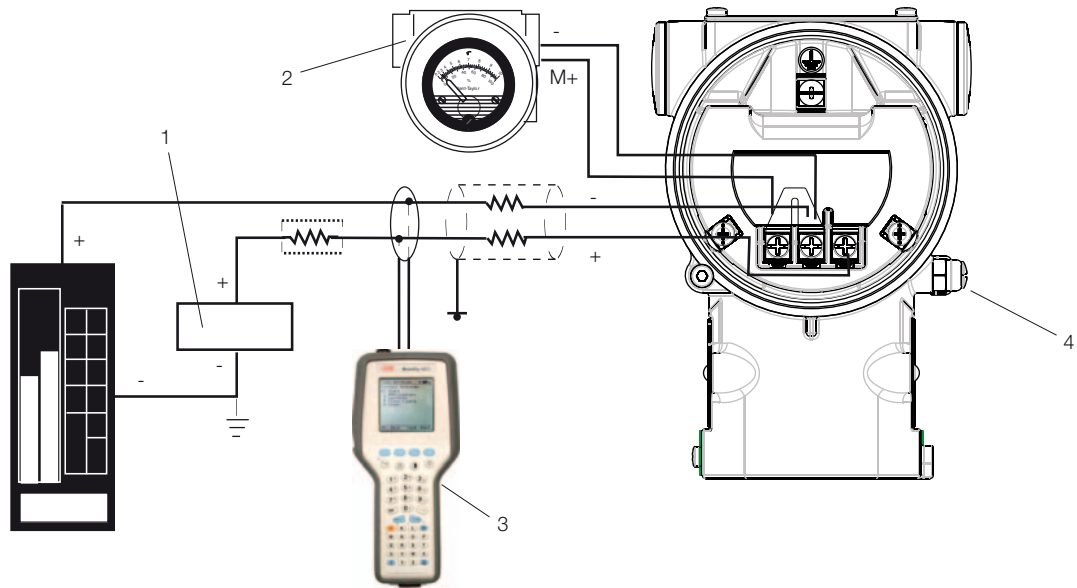


M10034

Fig. 6: Dimensions – DIN housing on bracket for vertical or horizontal 60 mm (2 in.) pipe

Electrical connections

HART Version



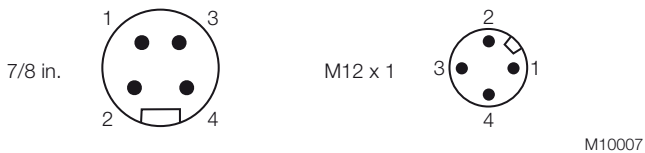
M10023

Fig. 7: Electrical connections – HART version

1 Power source | 2 Remote indicator | 3 Hand-held communicator | 4 External ground termination point

HART hand-held communicator may be connected at any wiring termination point in the loop, providing the minimum resistance is 250 Ω . If this is less than 250 Ω , additional resistance should be added to allow communications.

Fieldbus Versions

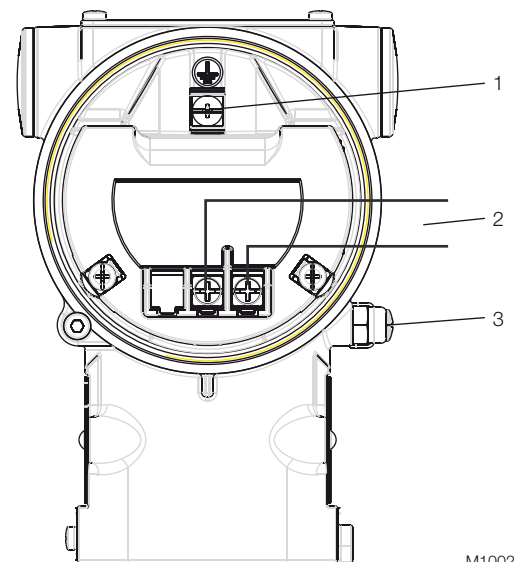


M10007

Fig. 8: Connector – Fieldbus versions

PIN (male) IDENTIFICATION		
Pin number	FOUNDATION Fieldbus	PROFIBUS PA
1	DATA –	DATA +
2	DATA +	GROUND
3	SHIELD	DATA –
4	GROUND	SHIELD

Connector is supplied loose without mating female plug



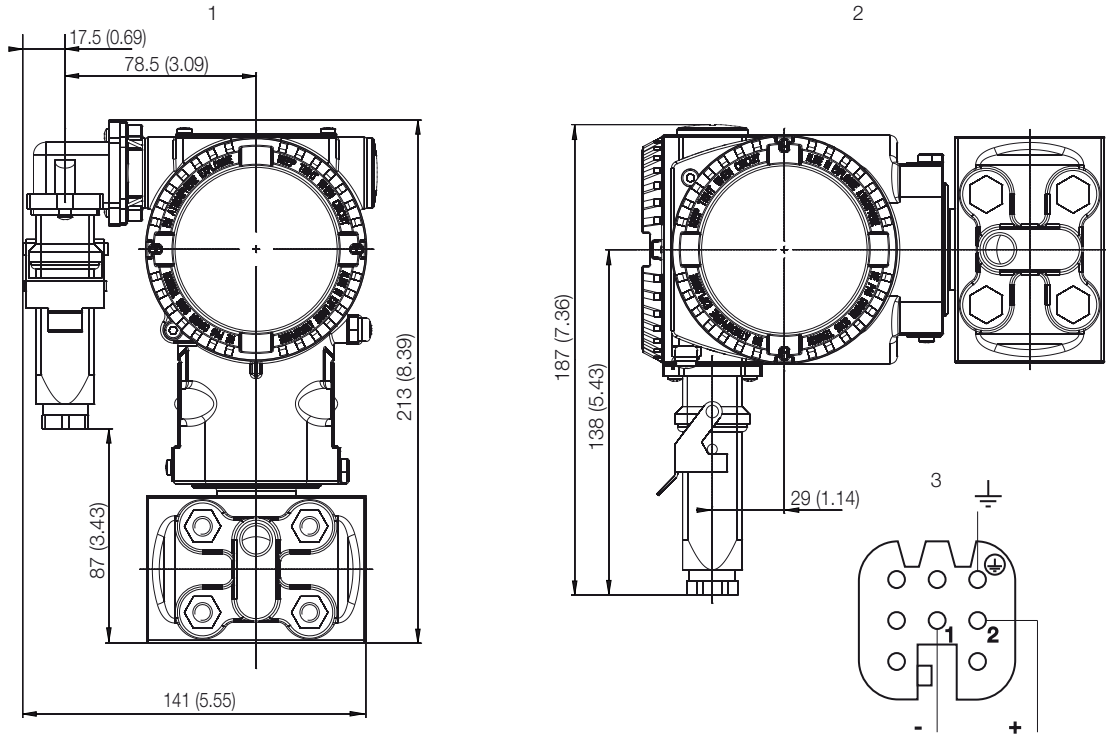
M10024

Fig. 9: Standard terminal strip

1 Internal ground termination point | 2 Fieldbus line (polarity independent) | 3 External ground termination point

Model 266MRT Differential Model 266GRT Gauge Model 266RRT and 266ART Absolute

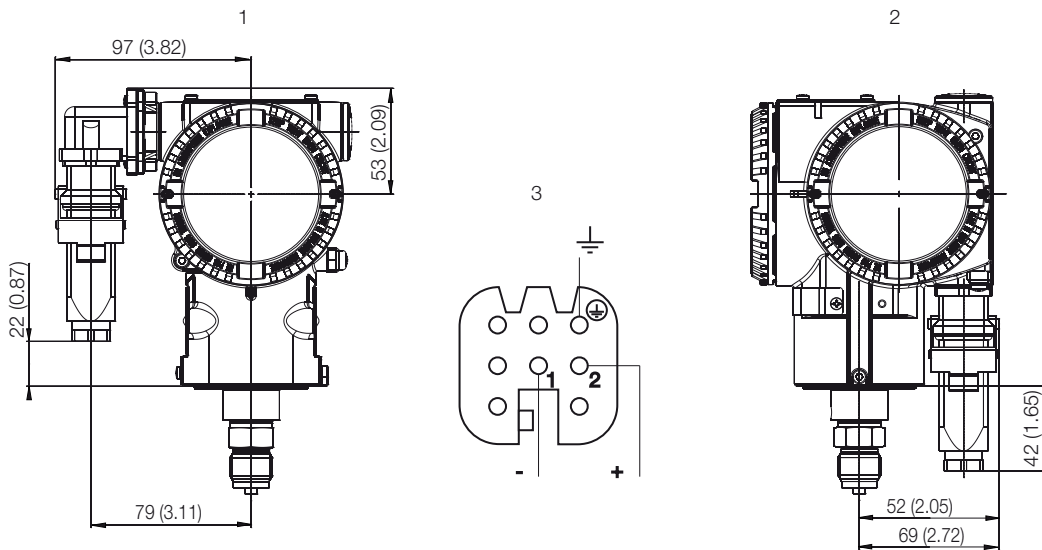
HART Version



M10008

Fig. 10: Harting Han connector - Differential pressure transmitter (example of application)

1 Barrel housing | 2 DIN housing | 3 Harting Han 8D (8U) socket insert for mating plug supplied (view of sockets)



M10028

Fig. 11: Harting Han connector - Pressure / absolute pressure transmitter (example of application)

1 Barrel housing | 2 DIN housing | 3 Harting Han 8D (8U) socket insert for mating plug supplied (view of sockets)

Ordering information

BASIC ORDERING INFORMATION model 266MRT Differential Pressure Transmitter with remote seal(s), maximum working pressure depending on seal / sensor limits.

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 – 1 st to 6 th characters			266MRT	X	X	X	X	X	X	X
Differential Pressure Transmitter with remote seal(s), BASE ACCURACY 0.04 %										
Sensor Span Limits – 7 th character										continued see next page
0.2 and 6 kPa	2 and 60 mbar	0.8 and 24 in. H2O		C						
0.4 and 40 kPa	4 and 400 mbar	1.6 and 160 in. H2O		F						
2.5 and 250 kPa	25 and 2500 mbar	10 and 1000 in. H2O		L						
20 and 2000 kPa	0.2 and 20 bar	2.9 and 290 psi		N						
100 and 10000 kPa	1 and 100 bar	14.5 and 1450 psi		R						
Maximum Working Pressure – 8 th character										
16 MPa	160 bar	2320 psi						C		
25 MPa	250 bar	3625 psi						Z		
41 MPa	410 bar	5945 psi						T		
Diaphragm Material / Fill Fluid – 9 th character										
AISI 316L SST (1.4435)	Silicone oil		NACE					S		
Hastelloy C-276	Silicone oil		NACE					K		
Monel 400	Silicone oil		NACE					M		
Monel 400 gold-plated	Silicone oil		NACE					V		
Tantalum	Silicone oil		NACE					T		
AISI 316L SST (1.4435)	Inert fluid – Galden (Suitable for oxygen applications)		NACE					A		
Hastelloy C-276	Inert fluid – Galden (Suitable for oxygen applications)		NACE					F		
Monel 400	Inert fluid – Galden (Suitable for oxygen applications)		NACE					C		
Monel 400 gold-plated	Inert fluid – Galden (Suitable for oxygen applications)		NACE					Y		
Tantalum	Inert fluid – Galden (Suitable for oxygen applications)		NACE					D		
Remote seal	Silicone oil (Seal to be quoted separately)							R		
With remote seal	Inert fluid - Galden (Seal to be quoted separately)							2		
Process Flanges and Adapters Material / Connection – 10 th character										
AISI 316L SST (1.4404 / 1.4408)	1/4-18 NPT female direct	(horizontal connection)	NACE					A		
AISI 316L SST (1.4404 / 1.4408)	1/2-14 NPT female through adapter	(horizontal connection)	NACE					B		
AISI 316L SST (1.4404 / 1.4408)	1/4-18 NPT female direct (DIN 19213)	(horizontal connection)	NACE					C		
Hastelloy C-276	1/4-18 NPT female direct	(horizontal connection)	NACE					D		
Hastelloy C-276	1/2-14 NPT female through adapter	(horizontal connection)	NACE					E		
Monel 400	1/4-18 NPT female direct	(horizontal connection)	NACE					G		
Monel 400	1/2-14 NPT female through adapter	(horizontal connection)	NACE					H		
AISI 316L SST (1.4404 / 1.4408)	For two seals construction		NACE					R		

Model 266MRT Differential Model 266GRT Gauge Model 266RRT and 266ART Absolute

BASIC ORDERING INFORMATION model 266MRT Differential Pressure Transmitter				X	X	X
Bolts Material / Gaskets Material – 11 th character						
AISI 316L SST / Viton (Suitable for oxygen applications)		NACE		3		
AISI 316L SST / PTFE (Max. 25 MPa / 250 bar / 3625 psi)		NACE		4		
AISI 316L SST / EPDM		NACE		5		
AISI 316L SST / Perbunan		NACE		6		
AISI 316L SST / Graphite		NACE		7		
AISI 316L SST / Without gaskets (For two seals construction)				R		
Housing Material / Electrical Connection – 12 th character						
Aluminium alloy (Barrel type)	1/2-14 NPT					A
Aluminium alloy (Barrel type)	M20 x 1,5					B
Aluminium alloy (Barrel type)	Harting Han connector	(General purpose only)	(Note 1)			E
Aluminium alloy (Barrel type)	Fieldbus connector	(General purpose only)	(Note 1)			G
AISI 316L SST (Barrel type)	1/2-14 NPT					S
AISI 316L SST (Barrel type)	M20 x 1,5					T
Aluminium alloy (DIN type)	M20 x 1,5					J
Aluminium alloy (DIN type)	Harting Han connector	(General purpose only)	(Note 1)			K
Aluminium alloy (DIN type)	Fieldbus connector	(General purpose only)	(Note 1)			W
AISI 316L SST (Barrel type)	Fieldbus connector	(General purpose only)	(Note 1)			Z
Output – 13 th character						
HART digital communication and 4 ... 20 mA (No additional options)						H
HART digital communication and 4 ... 20 mA (Options requested by "Additional ordering code")						1
PROFIBUS PA (No additional options)						P
PROFIBUS PA (Options requested by "Additional ordering code")						2
FOUNDATION Fieldbus (No additional options)						F
FOUNDATION Fieldbus (Options requested by "Additional ordering code")						3
HART digital communication and 4 ... 20 mA, SIL2 and SIL3 certified to IEC 61508 (No additional options)						T
HART digital communication and 4 ... 20 mA, SIL2 and SIL3 certified to IEC 61508 (Options requested by "Additional ordering code")						8

ADDITIONAL ORDERING INFORMATION for model 266MRT

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

				xx	xx
Vent and Drain Valve Material / Position					
AISI 316L SST (1.4404)	On process axis	NACE		V1	
AISI 316L SST (1.4404)	On flanges side top	NACE		V2	
AISI 316L SST (1.4404)	On flanges side bottom	NACE		V3	
Hastelloy C-276	On process axis	NACE		V4	
Hastelloy C-276	On flanges side top	NACE		V5	
Hastelloy C-276	On flanges side bottom	NACE		V6	
Monel 400	On process axis	NACE		V7	
Monel 400	On flanges side top	NACE		V8	
Monel 400	On flanges side bottom	NACE		V9	
Explosion Protection Certification					
ATEX Group II Category 1 GD - Intrinsic Safety Ex ia					E1
ATEX Group II Category 1/2 GD - Flameproof Ex d					E2
ATEX Group II Category 3 GD - Type of protection "N" Ex nL design compliance					E3
FM approval (Canada, CSA) Class I, II, Div. 1, 2, Group A to F (XP, IS, NI) (Only available with 1/2-14 NPT or M20 electrical connections)					E4
FM approval (USA) Class I, II, Div. 1, 2, Group A to F (XP, IS, NI) (Only available with 1/2-14 NPT or M20 electrical connections)					E6
Combined ATEX - Intrinsic Safety, Flameproof and Type „N“					EW
FM approvals (USA and Canada) Intrinsic Safety					EA
FM approvals (USA and Canada) Explosion Proof					EB
FM approvals (USA and Canada) Non Incendive					EC
Combined ATEX, FM and CSA (Only available with 1/2-14 NPT or M20 electrical connections)					EN
IEC Approval Group II Category 1 GD - Intrinsic Safety Ex ia					E8
IEC Approval Group II Category 1/2 GD - Flameproof Ex d					E9
IEC Approval Group II Category 3 GD - Type of protection "N" Ex nL design compliance					ER

Model 266MRT Differential

Model 266GRT Gauge

Model 266RRT and 266ART Absolute

ADDITIONAL ORDERING INFORMATION for model 266MRT	xx	xx	xx	xx	xx	xx
Other Explosion Protection Certifications						
GOST (Russia) Ex ia	W1					
GOST (Russia) Ex d	W2					
GOST (Kazakhstan) Ex ia	W3					
GOST (Kazakhstan) Ex d	W4					
Inmetro (Brasil) Ex ia	W5					
Inmetro (Brasil) Ex d	W6					
Inmetro (Brasil) Ex nL	W7					
Integral LCD						
With integral LCD display					L1	
TTG (Through The Glass) integral digital LCD display					L5	
Mounting Bracket Shape / Material						
For pipe mounting / Carbon steel (Not suitable for AISI housing)						B1
For pipe mounting / AISI 316 SST (1.4401) (Not suitable for AISI housing)						B2
For wall mounting / Carbon steel (Not suitable for AISI housing)						B3
For wall mounting / AISI 316 SST (1.4401) (Not suitable for AISI housing)						B4
Flat type bracket / AISI 316 SST (1.4401) (Suitable for AISI housing)						B5
Surge / Transient Protector						
With integral surge / transient protector						S2
Language of Documentation						
German						M1
Italian						M2
Spanish						M3
French						M4
English						M5
Label and Tag Language						
German						T1
Italian						T2
Spanish						T3
French						T4

ADDITIONAL ORDERING INFORMATION for model 266MRT		xx	xx	xx	xx
Additional Tag Plate					
Supplemental wired-on stainless steel plate (4 lines, 32 characters each)		I1			
Laser printing of tag on stainless steel plate		I2			
Configuration					
Standard pressure = in. H2O / psi at 68 °F			N2		
Standard pressure = in. H2O / psi at 39.2 °F			N3		
Standard pressure = in. H2O / psi at 20 °C			N4		
Standard pressure = in. H2O / psi at 4 °C			N5		
Custom			N6		
Certificates					
Inspection certificate 3.1 acc. EN 10204 of calibration				C1	
Inspection certificate 3.1 acc. EN 10204 of the cleanliness stage				C3	
Inspection certificate 3.1 acc. EN 10204 of helium leakage test of the sensor module				C4	
Declaration of compliance with the order 2.1 acc. EN 10204 for instrument design				C6	
Overfill protection approval				C9	
Separate calibration record				CC	
Printed record of configured data of transmitter				CG	
PMI test on wetted parts				CT	
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

Model 266MRT Differential

Model 266GRT Gauge

Model 266RRT and 266ART Absolute

ADDITIONAL ORDERING INFORMATION for model 266MRT	xx	xx	xx
Material Traceability			
Certificate of compliance with the order 2.1 acc. EN 10204 for process wetted parts	H1		
Inspection certificate 3.1 acc. EN 10204 of pressure-bearing and process wetted parts with analysis certificates as material verification (Note 2)	H3		
Material certificate 2.2 acc. EN 10204 of the pressure bearing and process wetted parts	H4		
Connector			
Fieldbus 7/8 in. (Recommended for FOUNDATION Fieldbus, supplied loose without female plug)	U1		
Fieldbus M12 x 1 (Recommended for PROFIBUS PA, supplied loose without female plug)	U2		
Harting Han 8D (8U), straight entry	U3		
Harting Han 8D (8U), angle entry	U4		
Harting Han 7D	U5		
With cable gland M20 x 1.5	U8		
Housing Accessories			
Four-wire add-on unit: Power supply 24 V UC / Output signal 0 ... 20 mA (Note 3)			A4
Four-wire add-on unit: Power supply 24 V UC / Output signal 4 ... 20 mA (Note 3)			A6
Four-wire add-on unit: Power supply 230 V AC / Output signal 0 ... 20 mA (Note 3)			A5
Four-wire add-on unit: Power supply 230 V AC / Output signal 4 ... 20 mA (Note 3)			A7
Seal Type High / Low Pressure Side			
For ordering information please refer to seal data sheet DS/S26.			

Note 1: Select connector with additional ordering code
 Note 2: Minor parts with factory certificate acc. EN 10204
 Note 3: Only available with Housing Material / Electrical Connection code J (DIN housing)

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

- Adapter supplied loose
- Plug on axis of process flange (no vent / drain valve)
- General purpose (no electrical certification)
- No display, no mounting bracket, no surge protection
- English manual and labels
- Configuration with kPa and deg. C units
- No test, inspection or material traceability certificates

THE SELECTION OF SUITABLE WETTED PARTS AND FILLING FLUID FOR COMPATIBILITY WITH THE PROCESS MEDIA IS A CUSTOMER'S RESPONSIBILITY, IF NOT OTHERWISE NOTIFIED BEFORE MANUFACTURING.

NACE CONFORMITY IS ACCORDING TO RECOMMENDATIONS PER MR0175. AISI 316 AND HASTELLOY C-276 ALSO COMPLY WITH MR0103 IF ALREADY WITH MR0175.

BASIC ORDERING INFORMATION model 266RRT Absolute Pressure Transmitter with remote seal, overload capability depending on seal / sensor limits.

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 – 1 st to 6 th characters				266RRT	X	X	X	X	X	X
Absolute Pressure Transmitter with remote seal, BASE ACCURACY 0.04 %										
Sensor Span Limits – 7 th character										
2 and 40 kPa	20 and 400 mbar	8 and 160 in. H2O	15 and 300 mm Hg	F						
12.5 and 250 kPa	125 and 2500 mbar	50 and 1000 in. H2O	95 and 1875 mm Hg	L						
100 and 2000 kPa	1 and 20 bar	15 and 290 psi		N						
Maximum Working Pressure – 8 th character										
16 MPa	160 bar	2320 psi					C			
25 MPa	250 bar	3625 psi					Z			
41 MPa	410 bar	5945 psi					T			
Diaphragm Material / Fill Fluid – 9 th character										
Diaphragm seal	Silicone oil (Seal to be quoted separately)						R			
With remote seal	Inert fluid - Galden (Seal to be quoted separately)						2			
Process Connection Material / Type – 10 th character										
Diaphragm seal (Except button type, seal to be quoted separately)									R	
Housing Material / Electrical Connection – 11 th character										
Aluminium alloy (Barrel type)	1/2-14 NPT									A
Aluminium alloy (Barrel type)	M20 x 1,5									B
Aluminium alloy (Barrel type)	Harting Han connector		(General purpose only)	(Note 1)						E
Aluminium alloy (Barrel type)	Fieldbus connector		(General purpose only)	(Note 1)						G
AISI 316L SST (Barrel type)	1/2-14 NPT									S
AISI 316L SST (Barrel type)	M20 x 1,5									T
Aluminium alloy (DIN type)	M20 x 1,5									J
Aluminium alloy (DIN type)	Harting Han connector		(General purpose only)	(Note 1)						K
Aluminium alloy (DIN type)	Fieldbus connector		(General purpose only)	(Note 1)						W
AISI 316L SST (Barrel type)	Fieldbus connector		(General purpose only)	(Note 1)						Z
Output – 12 th character										
HART digital communication and 4 ... 20 mA (No additional options)										H
HART digital communication and 4 ... 20 mA (Options requested by "Additional ordering code")										1
PROFIBUS PA (No additional options)										P
PROFIBUS PA (Options requested by "Additional ordering code")										2
FOUNDATION Fieldbus (No additional options)										F
FOUNDATION Fieldbus (Options requested by "Additional ordering code")										3
HART digital communication and 4 ... 20 mA, SIL2 and SIL3 certified to IEC 61508 (No additional options)										T
HART digital communication and 4 ... 20 mA, SIL2 and SIL3 certified to IEC 61508 (Options requested by "Additional ordering code")										8

Model 266MRT Differential

Model 266GRT Gauge

Model 266RRT and 266ART Absolute

ADDITIONAL ORDERING INFORMATION for model 266RRT

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

	xx	xx
Explosion Protection Certification		
ATEX Group II Category 1 GD - Intrinsic Safety Ex ia	E1	
ATEX Group II Category 1/2 GD - Flameproof Ex d	E2	
ATEX Group II Category 3 GD - Type of protection "N" Ex nL design compliance	E3	
FM approval (Canada, CSA) Class I, II, Div. 1, 2, Group A to F (XP, IS, NI) (Only available with 1/2-14 NPT or M20 electrical connections)	E4	
FM approval (USA) Class I, II, Div. 1, 2, Group A to F (XP, IS, NI) (Only available with 1/2-14 NPT or M20 electrical connections)	E6	
Combined ATEX - Intrinsic Safety, Flameproof and Type „N“	EW	
FM approvals (USA and Canada) Intrinsic Safety	EA	
FM approvals (USA and Canada) Explosion Proof	EB	
FM approvals (USA and Canada) Non Incendive	EC	
Combined ATEX, FM and CSA (Only available with 1/2-14 NPT or M20 electrical connections)	EN	
IEC Approval Group II Category 1 GD - Intrinsic Safety Ex ia	E8	
IEC Approval Group II Category 1/2 GD - Flameproof Ex d	E9	
IEC Approval Group II Category 3 GD - Type of protection "N" Ex nL design compliance	ER	
Other Explosion Protection Certifications		
GOST (Russia) Ex ia		W1
GOST (Russia) Ex d		W2
GOST (Kazakhstan) Ex ia		W3
GOST (Kazakhstan) Ex d		W4
Inmetro (Brasil) Ex ia		W5
Inmetro (Brasil) Ex d		W6
Inmetro (Brasil) Ex nL		W7

ADDITIONAL ORDERING INFORMATION for model 266RRT	xx	xx	xx	xx	xx	xx
Integral LCD						
With integral LCD display	L1					
TTG (Through The Glass) integral digital LCD display	L5					
Mounting Bracket Shape / Material						
For pipe mounting / Carbon steel (Not suitable for AISI housing)	B1					
For pipe mounting / AISI 316 SST (1.4401) (Not suitable for AISI housing)	B2					
For wall mounting / Carbon steel (Not suitable for AISI housing)	B3					
For wall mounting / AISI 316 SST (1.4401) (Not suitable for AISI housing)	B4					
Flat type bracket / AISI 316 SST (1.4401) (Suitable for AISI housing)	B5					
Surge / Transient Protector						
With integral surge / transient protector			S2			
Language of Documentation						
German				M1		
Italian				M2		
Spanish				M3		
French				M4		
English				M5		
Label and Tag Language						
German					T1	
Italian					T2	
Spanish					T3	
French					T4	
Additional Tag Plate						
Supplemental wired-on stainless steel plate (4 lines, 32 characters each)						I1
Laser printing of tag on stainless steel plate						I2

Model 266MRT Differential

Model 266GRT Gauge

Model 266RRT and 266ART Absolute

ADDITIONAL ORDERING INFORMATION for model 266RRT	xx	xx	xx	xx
Configuration				
Standard pressure = in. H2O / psi at 68 °F	N2			
Standard pressure = in. H2O / psi at 39.2 °F	N3			
Standard pressure = in. H2O / psi at 20 °C	N4			
Standard pressure = in. H2O / psi at 4 °C	N5			
Custom	N6			
Certificates				
Inspection certificate 3.1 acc. EN 10204 of calibration		C1		
Inspection certificate 3.1 acc. EN 10204 of the cleanliness stage		C3		
Inspection certificate 3.1 acc. EN 10204 of helium leakage test of the sensor module		C4		
Declaration of compliance with the order 2.1 acc. EN 10204 for instrument design		C6		
Separate calibration record		CC		
Printed record of configured data of transmitter		CG		
PMI test on wetted parts		CT		
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 2.1 acc. EN 10204 for process wetted parts				H1
Inspection certificate 3.1 acc. EN 10204 of pressure-bearing and process wetted parts with analysis certificates as material verification (Note 2)				H3
Material certificate 2.2 acc. EN 10204 of the pressure bearing and process wetted parts				H4

ADDITIONAL ORDERING INFORMATION for model 266RRT

xx xx

Connector

Fieldbus 7/8 in. (Recommended for FOUNDATION Fieldbus, supplied loose without female plug)	U1
Fieldbus M12 x 1 (Recommended for PROFIBUS PA, supplied loose without female plug)	U2
Harting Han 8D (8U), straight entry	U3
Harting Han 8D (8U), angle entry	U4
Harting Han 7D	U5
With cable gland M20 x 1.5	U8

Housing Accessories

Four-wire add-on unit: Power supply 24 V UC / Output signal 0 ... 20 mA	(Note 3)	A4
Four-wire add-on unit: Power supply 24 V UC / Output signal 4 ... 20 mA	(Note 3)	A6
Four-wire add-on unit: Power supply 230 V AC / Output signal 0 ... 20 mA	(Note 3)	A5
Four-wire add-on unit: Power supply 230 V AC / Output signal 4 ... 20 mA	(Note 3)	A7
Plug upside welded		A8
Plug bottom welded		A9

Seal Type High Pressure Side

For ordering information please refer to seal data sheet DS/S26.

- Note 1: Select connector with additional ordering code
Note 2: Minor parts with factory certificate acc. EN 10204
Note 3: Only available with Housing Material / Electrical Connection code J (DIN housing)

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

- General purpose (no electrical certification)
- No display, no mounting bracket, no surge protection
- English manual and labels
- Configuration with kPa and deg. C units
- No test, inspection or material traceability certificates

THE SELECTION OF SUITABLE WETTED PARTS AND FILLING FLUID FOR COMPATIBILITY WITH THE PROCESS MEDIA IS A CUSTOMER'S RESPONSIBILITY, IF NOT OTHERWISE NOTIFIED BEFORE MANUFACTURING.

NACE CONFORMITY IS ACCORDING TO RECOMMENDATIONS PER MR0175. AISI 316 AND HASTELLOY C-276 ALSO COMPLY WITH MR0103 IF ALREADY WITH MR0175.

Model 266MRT Differential

Model 266GRT Gauge

Model 266RRT and 266ART Absolute

BASIC ORDERING INFORMATION model 266GRT Gauge Pressure Transmitter with remote seal, overload capability depending on seal / sensor limits.

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 – 1 st to 6 th characters				266GRT	X	X	X	X	X
Gauge Pressure Transmitter with remote seal, BASE ACCURACY 0.04 %									
Sensor Span Limits – 7th character									
0.2 and 6 kPa	2 and 60 mbar	0.8 and 24 in. H2O			C				
0.4 and 40 kPa	4 and 400 mbar	1.6 and 160 in. H2O			F				
2.5 and 250 kPa	25 and 2500 mbar	10 and 1000 in. H2O			L				
10 and 1000 kPa	0.1 and 10 bar	1.45 and 145 psi			D				
30 and 3000 kPa	0.3 and 30 bar	4.35 and 435 psi			U				
100 and 10000 kPa	1 and 100 bar	14.5 and 1450 psi			R				
600 and 60000 kPa	6 and 600 bar	87 and 8700 psi			V				
Diaphragm Material / Fill Fluid – 8th character									
Diaphragm seal	Silicone oil (Seal to be quoted separately)						R		
With remote seal	Inert fluid - Galden (Seal to be quoted separately)						2		
Diaphragm seal	White oil (Seal to be quoted separately)						N		
Diaphragm seal	No filling (Seal to be quoted separately)			(Note 1)			O		
Process Connection Material / Type – 9th character									
Diaphragm seal (Except button type, seal to be quoted separately)								R	
Button type diaphragm seal (Button seal to be quoted separately)								G	
Housing Material / Electrical Connection – 10th character									
Aluminium alloy (Barrel type)	1/2-14 NPT								A
Aluminium alloy (Barrel type)	M20 x 1,5								B
Aluminium alloy (Barrel type)	Harting Han connector	(General purpose only)	(Note 2)						E
Aluminium alloy (Barrel type)	Fieldbus connector	(General purpose only)	(Note 2)						G
AISI 316L SST (Barrel type)	1/2-14 NPT								S
AISI 316L SST (Barrel type)	M20 x 1,5								T
Aluminium alloy (DIN type)	M20 x 1,5								J
Aluminium alloy (DIN type)	Harting Han connector	(General purpose only)	(Note 2)						K
Aluminium alloy (DIN type)	Fieldbus connector	(General purpose only)	(Note 2)						W
AISI 316L SST (Barrel type)	Fieldbus connector	(General purpose only)	(Note 2)						Z
Output – 11th character									
HART digital communication and 4 ... 20 mA (No additional options)									H
HART digital communication and 4 ... 20 mA (Options requested by "Additional ordering code")									1
PROFIBUS PA (No additional options)									P
PROFIBUS PA (Options requested by "Additional ordering code")									2
FOUNDATION Fieldbus (No additional options)									F
FOUNDATION Fieldbus (Options requested by "Additional ordering code")									3
HART digital communication and 4 ... 20 mA, SIL2 and SIL3 certified to IEC 61508 (No additional options)									T
HART digital communication and 4 ... 20 mA, SIL2 and SIL3 certified to IEC 61508 (Options requested by "Additional ordering code")									8

ADDITIONAL ORDERING INFORMATION for model 266GRT

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

	xx	xx
Explosion Protection Certification		
ATEX Group II Category 1 GD - Intrinsic Safety Ex ia		E1
ATEX Group II Category 1/2 GD - Flameproof Ex d	(Note 3)	E2
ATEX Group II Category 3 GD - Type of protection "N" Ex nL design compliance		E3
FM approval (Canada, CSA) Class I, II, Div. 1, 2, Group A to F (XP, IS, NI) (Only available with 1/2-14 NPT or M20 electrical connections)	(Note 3)	E4
FM approval (USA) Class I, II, Div. 1, 2, Group A to F (XP, IS, NI) (Only available with 1/2-14 NPT or M20 electrical connections)	(Note 3)	E6
Combined ATEX - Intrinsic Safety, Flameproof and Type „N“	(Note 3)	EW
FM approvals (USA and Canada) Intrinsic Safety		EA
FM approvals (USA and Canada) Explosion Proof		EB
FM approvals (USA and Canada) Non Incendive		EC
Combined ATEX, FM and CSA (Only available with 1/2-14 NPT or M20 electrical connections)	(Note 3)	EN
IEC Approval Group II Category 1 GD - Intrinsic Safety Ex ia		E8
IEC Approval Group II Category 1/2 GD - Flameproof Ex d	(Note 3)	E9
IEC Approval Group II Category 3 GD - Type of protection "N" Ex nL design compliance		ER
Other Explosion Protection Certifications		
GOST (Russia) Ex ia		W1
GOST (Russia) Ex d	(Note 3)	W2
GOST (Kazakhstan) Ex ia		W3
GOST (Kazakhstan) Ex d	(Note 3)	W4
Inmetro (Brasil) Ex ia		W5
Inmetro (Brasil) Ex d	(Note 3)	W6
Inmetro (Brasil) Ex nL		W7

Model 266MRT Differential
 Model 266GRT Gauge
 Model 266RRT and 266ART Absolute

ADDITIONAL ORDERING INFORMATION for model 266GRT		xx	xx	xx	xx	xx	xx
Integral LCD							
With integral LCD display		L1					
TTG (Through The Glass) integral digital LCD display		L5					
Mounting Bracket Shape / Material							
For wall and pipe mounting / Carbon steel (Not suitable for AISI housing)			B1				
For wall and pipe mounting / AISI 316 SST (1.4401)			B2				
Surge / Transient Protector							
With integral surge / transient protector				S2			
Language of Documentation							
German					M1		
Italian					M2		
Spanish					M3		
French					M4		
English					M5		
Label and Tag Language							
German						T1	
Italian						T2	
Spanish						T3	
French						T4	
Additional Tag Plate							
Supplemental wired-on stainless steel plate (4 lines, 32 characters each)							I1
Laser printing of tag on stainless steel plate							I2

ADDITIONAL ORDERING INFORMATION for model 266GRT	xx	xx	xx	xx
Configuration				
Standard pressure = in. H2O / psi at 68 °F	N2			
Standard pressure = in. H2O / psi at 39.2 °F	N3			
Standard pressure = in. H2O / psi at 20 °C	N4			
Standard pressure = in. H2O / psi at 4 °C	N5			
Custom	N6			
Certificates				
Inspection certificate 3.1 acc. EN 10204 of calibration		C1		
Inspection certificate 3.1 acc. EN 10204 of the cleanliness stage		C3		
Inspection certificate 3.1 acc. EN 10204 of helium leakage test of the sensor module		C4		
Declaration of compliance with the order 2.1 acc. EN 10204 for instrument design		C6		
Overfill protection approval		C9		
Separate calibration record		CC		
Printed record of configured data of transmitter		CG		
PMI test on wetted parts		CT		
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 2.1 acc. EN 10204 for process wetted parts				H1
Inspection certificate 3.1 acc. EN 10204 of pressure-bearing and process wetted parts with analysis certificates as material verification (Note 4)				H3
Material certificate 2.2 acc. EN 10204 of the pressure bearing and process wetted parts				H4

Model 266MRT Differential

Model 266GRT Gauge

Model 266RRT and 266ART Absolute

ADDITIONAL ORDERING INFORMATION for model 266GRT		xx	xx
Connector			
Fieldbus 7/8 in. (Recommended for FOUNDATION Fieldbus, supplied loose without female plug)		U1	
Fieldbus M12 x 1 (Recommended for PROFIBUS PA, supplied loose without female plug)		U2	
Harting Han 8D (8U), straight entry		U3	
Harting Han 8D (8U), angle entry		U4	
Harting Han 7D		U5	
With cable gland M20 x 1.5		U8	
Housing Accessories			
Four-wire add-on unit: Power supply 24 V UC / Output signal 0 ... 20 mA	(Note 5)		A4
Four-wire add-on unit: Power supply 24 V UC / Output signal 4 ... 20 mA	(Note 5)		A6
Four-wire add-on unit: Power supply 230 V AC / Output signal 0 ... 20 mA	(Note 5)		A5
Four-wire add-on unit: Power supply 230 V AC / Output signal 4 ... 20 mA	(Note 5)		A7

Seal Type High Pressure Side

For ordering information please refer to seal data sheet DS/S26.

Note 1:	Only available with Sensor Span Limits code C, F
Note 2:	Select connector with additional ordering code
Note 3:	Not available with Sensor Span Limits code C, F
Note 4:	Minor parts with factory certificate acc. EN 10204
Note 5:	Only available with Housing Material / Electrical Connection code B (Barrel housing)

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

- General purpose (no electrical certification)
- No display, no mounting bracket, no surge protection
- English manual and labels
- Configuration with kPa and deg. C units
- No test, inspection or material traceability certificates

THE SELECTION OF SUITABLE WETTED PARTS AND FILLING FLUID FOR COMPATIBILITY WITH THE PROCESS MEDIA IS A CUSTOMER'S RESPONSIBILITY, IF NOT OTHERWISE NOTIFIED BEFORE MANUFACTURING.

NACE CONFORMITY IS ACCORDING TO RECOMMENDATIONS PER MR0175. AISI 316 AND HASTELLOY C-276 ALSO COMPLY WITH MR0103 IF ALREADY WITH MR0175.

BASIC ORDERING INFORMATION model 266ART Absolute Pressure Transmitter with remote seal, overload capability depending on seal / sensor limits.

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 – 1 st to 6 th characters				266ART	X	X	X	X	X
Absolute Pressure Transmitter with remote seal, BASE ACCURACY 0.04 %									
Sensor Span Limits – 7 th character									
0.3 and 6 kPa	3 and 60 mbar	1.2 and 24 in. H2O	2.25 and 45 mm Hg		C				
2 and 40 kPa	20 and 400 mbar	8 and 160 in. H2O	15 and 300 mm Hg		F				
12.5 and 250 kPa	125 and 2500 mbar	50 and 1000 in. H2O	95 and 1875 mm Hg		L				
50 and 1000 kPa	0.5 and 10 bar	7.25 and 145 psi			D				
150 and 3000 kPa	1.5 and 30 bar	21.7 and 435 psi			U				
500 and 10000 kPa	5 and 100 bar	72.5 and 1450 psi			R				
Diaphragm Material / Fill Fluid – 8 th character									
Diaphragm seal	Silicone oil (Seal to be quoted separately)				R				
With remote seal	Inert fluid - Galden (Seal to be quoted separately)				2				
Diaphragm seal	White oil (Seal to be quoted separately)				N				
Diaphragm seal	No filling (Seal to be quoted separately)			(Note 1)	O				
Process Connection Material / Type – 9 th character									
Diaphragm seal (Except button type, seal to be quoted separately)								R	
Button type diaphragm seal (Button seal to be quoted separately)								G	
Housing Material / Electrical Connection – 10 th character									
Aluminium alloy (Barrel type)	1/2-14 NPT								A
Aluminium alloy (Barrel type)	M20 x 1,5								B
Aluminium alloy (Barrel type)	Harting Han connector	(General purpose only)	(Note 2)						E
Aluminium alloy (Barrel type)	Fieldbus connector	(General purpose only)	(Note 2)						G
AISI 316L SST (Barrel type)	1/2-14 NPT								S
AISI 316L SST (Barrel type)	M20 x 1,5								T
Aluminium alloy (DIN type)	M20 x 1,5								J
Aluminium alloy (DIN type)	Harting Han connector	(General purpose only)	(Note 2)						K
Aluminium alloy (DIN type)	Fieldbus connector	(General purpose only)	(Note 2)						W
AISI 316L SST (Barrel type)	Fieldbus connector	(General purpose only)	(Note 2)						Z
Output – 11 th character									
HART digital communication and 4 ... 20 mA (No additional options)									H
HART digital communication and 4 ... 20 mA (Options requested by "Additional ordering code")									1
PROFIBUS PA (No additional options)									P
PROFIBUS PA (Options requested by "Additional ordering code")									2
FOUNDATION Fieldbus (No additional options)									F
FOUNDATION Fieldbus (Options requested by "Additional ordering code")									3
HART digital communication and 4 ... 20 mA, SIL2 and SIL3 certified to IEC 61508 (No additional options)									T
HART digital communication and 4 ... 20 mA, SIL2 and SIL3 certified to IEC 61508 (Options requested by "Additional ordering code")									8

Model 266MRT Differential

Model 266GRT Gauge

Model 266RRT and 266ART Absolute

ADDITIONAL ORDERING INFORMATION for model 266ART

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

	xx	xx
Explosion Protection Certification		
ATEX Group II Category 1 GD - Intrinsic Safety Ex ia		E1
ATEX Group II Category 1/2 GD - Flameproof Ex d	(Note 3)	E2
ATEX Group II Category 3 GD - Type of protection "N" Ex nL design compliance		E3
FM approval (Canada, CSA) Class I, II, Div. 1, 2, Group A to F (XP, IS, NI) (Only available with 1/2-14 NPT or M20 electrical connections)	(Note 3)	E4
FM approval (USA) Class I, II, Div. 1, 2, Group A to F (XP, IS, NI) (Only available with 1/2-14 NPT or M20 electrical connections)	(Note 3)	E6
Combined ATEX - Intrinsic Safety, Flameproof and Type „N“	(Note 3)	EW
FM approvals (USA and Canada) Intrinsic Safety		EA
FM approvals (USA and Canada) Explosion Proof		EB
FM approvals (USA and Canada) Non Incendive		EC
Combined ATEX, FM and CSA (Only available with 1/2-14 NPT or M20 electrical connections)	(Note 3)	EN
IEC Approval Group II Category 1 GD - Intrinsic Safety Ex ia		E8
IEC Approval Group II Category 1/2 GD - Flameproof Ex d	(Note 3)	E9
IEC Approval Group II Category 3 GD - Type of protection "N" Ex nL design compliance		ER
Other Explosion Protection Certifications		
GOST (Russia) Ex ia		W1
GOST (Russia) Ex d	(Note 3)	W2
GOST (Kazakhstan) Ex ia		W3
GOST (Kazakhstan) Ex d	(Note 3)	W4
Inmetro (Brasil) Ex ia		W5
Inmetro (Brasil) Ex d	(Note 3)	W6
Inmetro (Brasil) Ex nL		W7

ADDITIONAL ORDERING INFORMATION for model 266ART	xx	xx	xx	xx	xx	xx
Integral LCD						
With integral LCD display	L1					
TTG (Through The Glass) integral digital LCD display	L5					
Mounting Bracket Shape / Material						
For wall and pipe mounting / Carbon steel (Not suitable for AISI housing)	B1					
For wall and pipe mounting / AISI 316 SST (1.4401)	B2					
Surge / Transient Protector						
With integral surge / transient protector			S2			
Language of Documentation						
German					M1	
Italian					M2	
Spanish					M3	
French					M4	
English					M5	
Label and Tag Language						
German						T1
Italian						T2
Spanish						T3
French						T4
Additional Tag Plate						
Supplemental wired-on stainless steel plate (4 lines, 32 characters each)						I1
Laser printing of tag on stainless steel plate						I2

Model 266MRT Differential

Model 266GRT Gauge

Model 266RRT and 266ART Absolute

ADDITIONAL ORDERING INFORMATION for model 266ART	xx	xx	xx	xx
Configuration				
Standard pressure = in. H2O / psi at 68 °F	N2			
Standard pressure = in. H2O / psi at 39.2 °F	N3			
Standard pressure = in. H2O / psi at 20 °C	N4			
Standard pressure = in. H2O / psi at 4 °C	N5			
Custom	N6			
Certificates				
Inspection certificate 3.1 acc. EN 10204 of calibration		C1		
Inspection certificate 3.1 acc. EN 10204 of the cleanliness stage		C3		
Inspection certificate 3.1 acc. EN 10204 of helium leakage test of the sensor module		C4		
Declaration of compliance with the order 2.1 acc. EN 10204 for instrument design		C6		
Separate calibration record		CC		
Printed record of configured data of transmitter		CG		
PMI test on wetted parts		CT		
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 2.1 acc. EN 10204 for process wetted parts				H1
Inspection certificate 3.1 acc. EN 10204 of pressure-bearing and process wetted parts with analysis certificates as material verification			(Note 4)	H3
Material certificate 2.2 acc. EN 10204 of the pressure bearing and process wetted parts				H4

ADDITIONAL ORDERING INFORMATION for model 266ART**Connector**

Fieldbus 7/8 in. (Recommended for FOUNDATION Fieldbus, supplied loose without female plug)	U1	xx	xx
Fieldbus M12 x 1 (Recommended for PROFIBUS PA, supplied loose without female plug)	U2		
Harting Han 8D (8U), straight entry	U3		
Harting Han 8D (8U), angle entry	U4		
Harting Han 7D	U5		
With cable gland M20 x 1.5	U8		

Housing Accessories

Four-wire add-on unit: Power supply 24 V UC / Output signal 0 ... 20 mA	(Note 5)	A4
Four-wire add-on unit: Power supply 24 V UC / Output signal 4 ... 20 mA	(Note 5)	A6
Four-wire add-on unit: Power supply 230 V AC / Output signal 0 ... 20 mA	(Note 5)	A5
Four-wire add-on unit: Power supply 230 V AC / Output signal 4 ... 20 mA	(Note 5)	A7

Seal Type High Pressure Side

For ordering information please refer to seal data sheet DS/S26.

- Note 1: Only available with Sensor Span Limits code C, F
Note 2: Select connector with additional ordering code
Note 3: Not available with Sensor Span Limits code C, F
Note 4: Minor parts with factory certificate acc. EN 10204
Note 5: Only available with Housing Material / Electrical Connection code B (Barrel housing)

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

- General purpose (no electrical certification)
- No display, no mounting bracket, no surge protection
- English manual and labels
- Configuration with kPa and deg. C units
- No test, inspection or material traceability certificates

THE SELECTION OF SUITABLE WETTED PARTS AND FILLING FLUID FOR COMPATIBILITY WITH THE PROCESS MEDIA IS A CUSTOMER'S RESPONSIBILITY, IF NOT OTHERWISE NOTIFIED BEFORE MANUFACTURING.

NACE CONFORMITY IS ACCORDING TO RECOMMENDATIONS PER MR0175. AISI 316 AND HASTELLOY C-276 ALSO COMPLY WITH MR0103 IF ALREADY WITH MR0175.

Contact us

ABB Automation Products GmbH

Borsigstr. 2
63755 Alzenau, Germany
Phone: +49 551 905 534
Fax: +49 551 905 555
vertrieb.instrumentation@de.abb.com

ABB Limited

Oldends Lane, Stonehouse
Gloucestershire GL 10 3TA, UK
Phone: +44 1453 826 661
Fax: +44 1453 829 671
instrumentation@gb.abb.com

ABB S.p.A.

Via Statale 113
22016 Lenno (CO), Italy
Phone: +39 0344 58111
Fax: +39 0344 56278
abb.instrumentation@it.abb.com

www.abb.com/pressure

ABB Inc.

Automation Technology Products
125 E. County Line Rd
Warminster PA 18974-4995, USA
Phone: +1 215 674 6000
Fax: +1 215 674 7183
instrumentation@us.abb.com

ABB Engineering (Shanghai) Ltd.

No.5, Lane 369, Chuangye Road,
Kangqiao Town, Nanhui District
Shanghai, 201319, P.R. China
Phone: +86 (0) 21 61056666
Fax: +86 (0) 21 61056677
china.instrumentation@cn.abb.com

Note

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents - in whole or in parts - is forbidden without prior written consent of ABB.

Copyright© 2010 ABB
All rights reserved

™ Hastelloy C276 is a Cabot Corporation trademark

™ Hastelloy C-2000 is a Haynes International trademark

™ Monel is an International Nickel Co. trademark

™ Viton is a Dupont de Nemour trademark

™ DC200 is a Dow Corning Corporation trademark

™ DC704 is a Dow Corning Corporation trademark

™ Galden is a Montefluos trademark

™ Halocarbon is a Halocarbon Products Co. trademark

™ Neobee M 20 is a Stepan Company trademark

™ Esso Marcol 122 is an Esso Italiana trademark

™ Syltherm is a Dow Chemical Company trademark