Data Sheet
SS/264XD_4

2600T Series Pressure Transmitters

Model 264DD Differential/Gauge
Model 264HD Gauge
Model 264ND Absolute
with flanged direct mount seal

- **Base accuracy : ±0.075%**
- **Span limits**
  – 0.54 to 16000kPa; 2.14inH_2O to 2320psi
  – 1.1 to 16000kPa abs; 8mmHg to 2320psia
- **Reliable sensing system coupled with very latest digital technologies**
- **Comprehensive sensor choice**
  – optimize in-use total performance and stability
- **5–year stability**
- **Flexible configuration facilities**
  – provided locally via local keys combined with LCD indicator or via hand held terminal or PC configuration platform
- **Multiple protocol availability**
  – provides integration with HART®, PROFIBUS PA and FOUNDATION Fieldbus platforms offering interchangeability and transmitter upgrade capabilities
- **Broad selection of variants, options, fill fluids and wetted materials**
  – allows total flexibility maximizing cost-effective aspect, also providing applications with critical process media at extended temperature range
- **PED compliance to sound engineering practice (SEP)**



ABB 2600T Series
Engineered solutions
for all applications

General Description

Model 264DD, 264HD and 264ND detailed in this data sheet apply for those transmitters which include on high pressure measuring side, a direct mount seal which is integral to the transducer by a short capillary connection inside a protective rigid tube. This construction forms a standalone single assembly suitable to be mounted to the process by the seal mounting facilities.
By properly selecting the high and low pressure side variant in the ordering codes model 264DD can be in the following versions :

a) one direct mount seal and one flange for process connection, direct 1/4 – 18 NPT or 1/2 – 14 NPT through adapter; this allows also to connect the other leg (wet or dry) for differential measurement.
   A proper filter is supplied as standard when 1/4 – 18 NPT connection is selected, in order to plug the unused entry, leaving it vented for gauge measurement with reference to atmosphere.
b) one direct mount seal and one remote seal with capillary; the two seals allow again a differential measurement and must be selected of same type/size.

Model 264HD and 264ND have the direct mount seal on the positive side, respectively with the reference at atmospheric or vacuum pressure, for gauge or absolute measurements.
Allowed types of direct mount seal are mainly used for chemical application:

- flush diaphragm flange mounted seal
- extended diaphragm flange mounted seal
- off-line threaded connection seal
- off-line flanged connection seal

These are suitable also for other process applications including food and sanitary, using FDA approved filling, which are defined as food fills and are Generally Recognized As Safe (GRAS) by the US Food and Drug Administration (FDA). Refer to seal data sheet for all data and details relevant to seal element. The following table list the types of standard seal which can be mounted with 264DD, 264HD and 264ND transmitters (the mnemonic is used as reference in the compatibility table).

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

All following specification data apply for identical characteristics of the two seals when the transmitter has the remote seal in addition to the direct mount one.

Functional Specifications

Range and span limits

Sensor Code	Upper Range Limit (URL)	Lower Range Limit (LRL)			Minimum span	Compatibility (allowed seal for 264DD)	
		264DD Direct mount differential	264DD Direct mount gauge	264HD/264ND Direct mount gauge/absolute		Direct mount seal only	Direct mount and one remote seal (max length in m.)
E	16kPa 160mbar 64inH2O	–16kPa –160mbar –64inH2O	–16kPa –160mbar –64inH2O		0.54kPa 5.4mbar 2.14inH2O	P2 (•), P3 E3 (•) T2.5	P3 (3) E3 (2) (•)
F	40kPa 400mbar 160inH2O	–40kPa –400mbar –160inH2O	–40kPa –400mbar –160inH2O		0.67kPa 6.7mbar 2.67inH2O	P2, P3 E2 (•), E3 T2.5	P2 (2) (•), P3 (5) E3 (3) T2.5 (2)
G	65kPa 650mbar 260inH2O	–65kPa –650mbar –260inH2O	–65kPa –650mbar –260inH2O	–65kPa/0.07kPa abs (§) –650mbar/0.7mbar abs (§) –260inH2O/0.5mmHg (§)	1.1kPa 11mbar 4.35inH2O	P2, P3 E2 (•), E3 T2.5	P2 (2) (•), P3 (5) E3 (3) T2.5 (2)
H	160kPa 1600mbar 642inH2O	–160kPa –1600mbar –642inH2O	0.07kPa abs (§) 0.7mbar abs (§) 0.5mmHg (§)	0.07kPa abs (§) 0.7mbar abs (§) 0.5mmHg (§)	2.67kPa 26.7mbar 10.7inH2O	P1.5 P2, P3 E2, E3 T2.5	P1.5 (2) P2 (5), P3 (8) E2 (4), E3 (6) T2.5 (6)
M	600kPa 6bar 87psi	–600kPa –6bar –87psi	0.07kPa abs (§) 0.7mbar abs (§) 0.5mmHg (§)	0.07kPa abs (§) 0.7mbar abs (§) 0.5mmHg (§)	10kPa 0.1bar 1.45psi	P1.5 P2, P3 E2, E3 T2.5	P1.5 (3) P2 (8), P3 (8) E2 (6), E3 (8) T2.5 (6)
P	2400kPa 24bar 348psi	–2400kPa –24bar –348psi	0.07kPa abs (§) 0.7mbar abs (§) 0.5mmHg (§)	0.07kPa abs (§) 0.7mbar abs (§) 0.5mmHg (§)	40kPa 0.4bar 5.8psi	P1.5 P2, P3 E2, E3 T2.5	P1.5 (5) P2 (8), P3 (8) E2 (6), E3 (8) T2.5 (6)
Q	8000kPa 80bar 1160psi	–8000kPa –80bar –1160psi	0.07kPa abs (§) 0.7mbar abs (§) 0.5mmHg (§)	0.07kPa abs (§) 0.7mbar abs (§) 0.5mmHg (§)	134kPa 1.34bar 19.4psi	P1.5 P2, P3 E2, E3 T2.5	P1.5 (5) P2 (8), P3 (8) E2 (6), E3 (8) T2.5 (6)
S	16000kPa 160bar 2320psi	–16000kPa –160bar –2320psi	0.07kPa abs (§) 0.7mbar abs (§) 0.5mmHg (§)	0.07kPa abs (§) 0.7mbar abs (§) 0.5mmHg (§)	267kPa 2.67bar 38.7psi	P1.5 P2, P3 E2, E3 T2.5	P1.5 (5) P2 (8), P3 (8) E2 (6), E3 (8) T2.5 (6)

The combinations sensor code/seal type marked (•) modify the base accuracy rating and static pressure effect; refer to performance specifications.
ALL AVAILABLE SEALS FOR DIRECT MOUNT ARE SUITABLE FOR LISTED RANGES OF MODELS 264HD/ND WITHOUT LIMITATION.
(§) Lower Range Limit is 0.135kPa abs, 1.35mbar abs, 1mmHg for inert Galden or 0.4kPa abs, 4mbar abs, 3mmHg for inert Halocarbon.

Span limits

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

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

Zero suppression and elevation

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

– calibrated span ≥ minimum span

Damping

Selectable time constant : 0, 0.25, 0.5, 1, 2, 4, 8 or 16s.
This is in addition to sensor response time

Turn on time

Operation within specification in less than 1s with minimum damping.

Insulation resistance

> 100MΩ at 1000VDC (terminals to earth)

Operative limits

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

Temperature limits °C (°F) :

Ambient (is the operating temperature)

Filling	Model 264DD		Models 264HD/ND
	Sensors F to S	Sensor E	Sensors G to S
Silicone oil DC 200	–40 and +85 (–40 and +185)	–25 and +85 (–13 and +185)	–40 and +85 (–40 and +185)
Inert Galden	–20 and +85 (–4 and +185)	–10 and +85 (+14 and +185)	–20 and +85 (–4 and +185)
Inert Halocarbon	–20 and +85 (–4 and +185)	–10 and +85 (+14 and +185)	–20 and +85 (–4 and +185)

Lower ambient limit for LCD indicators: –20°C (–4°F)

Upper ambient limit for LCD indicators: +70°C (+158°F)

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

Process

Lower limit (side without seal for 264DD only)

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

Upper limit (side without seal for 264DD only)

– Silicone oil: 121°C (250°F) (1)

– Inert fluid: 100°C (212°F) (2)

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

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

The following table show characteristics of fill fluids when used in transmitters with direct mount seal on high pressure side.

FILL FLUIDS (APPLICATION)	OPERATING CONDITIONS			
	Tmax @ Pabs>of	Pmin mbar abs (psia)	Tmax @ P min	Tmin
Silicone oil-DC200 (General purpose)	200 (390) @ 35mbar	0.7 (0.01)	160 (320)	–40 (–40)
Silicone oil-AN140 (High temperature)	250 (480) @ 0.7mbar	0.7 (0.01)	250 (480)	–5 (+23)
Silicone Polymer–SylthermXLT (Low temperature)	100 (212) @ 110mbar	2 (0.03)	20 (68)	–100 (–148)
Vegetable oil-Neobee M-20 (Food-Sanitary) FDA	200 (390) @ 1bar	130 (1.9)	150 (300)	-18 (0)
Glycerin Water (70%) (Food-Sanitary) FDA	93 (200) @ 1bar	1000 (14.5)	93 (200)	–7 (+20)
Mineral oil-MARCOL 82 (Food-Sanitary) FDA	200 (390) @ 200mbar	33 (0.5)	40 (104)	–40 (–40)
Inert – Galden (Oxygen Service)	160 (320) @ 1bar	2 (0.03)	70 (158)	–20 (–4)
Inert – Halocarbon 4.2 (Oxygen Service)	180 (356) @ 400mbar	4 (0.06)	70 (158)	–20 (–4)

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

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

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

Limits for gaskets of flushing rings

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

Storage

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

Upper limit: +85°C (+185°F)

Pressure limits

Overpressure limits (without damage to the transmitter)

0.07kPa abs, 0.7mbar abs, 0.01psia (0.135kPa abs, 1.35mbar abs, 1mmHg for inert Galden or 0.4kPa abs, 4mbar abs, 3mmHg for inert Halocarbon) to transmitter sensor limit or flange rating of seal, whichever is less:

– 16MPa, 160bar, 2320psi for sensor code E of model 264DD

– 14MPa, 140bar, 2030psi for sensor codes G,H,M of model 264HD/ND

– 21MPa, 210bar, 3045psi for sensor codes F to S of model 264DD and for sensor codes P,Q,S of models 264HD and 264ND.

– maximum flange pressure rating (see tables below)

For model S264E flanged seal:

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

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

Rating/Class to ASME B16.5	Carbon Steel @100° F (38° C)	AISI 316 Stainless Steel @ 100° F (38° C)
Class 150	285psi	275psi
Class 300	740psi	720psi
Class 600	1480psi	1440psi
Class 900	2220psi	2160psi
Class 1500	3705psi	3600psi

For model S264G flanged seal:

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

For model S264M off-line flanged seal:

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

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

– PN16-40 to EN 1092-1: 34bar @20°C

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

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

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

Static pressure

Transmitters for differential pressure model 264DD operates within specifications between the following limits:

– 1.3kPa abs,13mbar abs, 0.2psia and 21MPa, 210bar, 3045psi (16MPa, 160bar, 2320psi for sensor code E) or flange rating of seal as above, whichever is less

– 0.07kPa abs, 0.7mbar abs, 0.01psia and 21MPa, 210bar, 3045psi (16MPa, 160bar, 2320psi for sensor code E) or flange rating of seal as above, whichever is less, using a second seal remote on negative pressure side.

Proof pressure

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

– 28MPa, 280bar, 4000psi for model 264DD and for sensor codes G,H,M of models 264HD and 264ND

– 40MPa, 400bar, 5900psi for sensor codes P,Q,S of models 264HD and 264ND

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

Meet ANSI/ISA–S 82.03 hydrostatic test requirements.

Environmental limits

Electromagnetic compatibility (EMC)

Comply with EN 61000–6–3 for emission and EN 61000–6–2 for immunity requirements and test;

Radiated electromagnetic immunity level: (according to IEC 1000–4–3, EN61000–4–3)	30V/m
Conducted electromagnetic immunity level : (according to IEC 1000–4-6, EN 61000–4–6)	30V
Surge immunity level (with surge protector): (according to IEC 1000-4–5 EN 61000–4–5)	4kV
Fast transient (Burst) immunity level: (according to IEC 1000–4–4 EN 61000–4–4)	4kV

Pressure equipment directive (PED)

Comply with 97/23/EEC following sound engineering practice (SEP).

Humidity

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

Vibration resistance

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

Shock resistance (according to IEC 60068-2-27)

Acceleration:	50g
Duration:	11ms

Wet and dust-laden atmospheres

The transmitter is dust and sand tight and protected against immersion effects as defined by EN 60529 (1989) to IP 67 (IP 68 on request) or by NEMA to 4X or by JIS to C0920. IP65 with Harting Han connector.

Hazardous atmospheres

With or without output meter/integral display
- COMBINED ATEX (Intrinsic safety and flameproof), FM and CSA ZELM approval. See below detailed classifications.
- COMBINED INTRINSIC SAFETY and FLAMEPROOF/EUROPE:
  ATEX/ZELM approval
  II 1 GD T50°C, EEx ia IIC T6 (–40°C ≤ Ta ≤+40°C)
  T95°C, EEx ia IIC T4 (–40°C ≤ Ta ≤+85°C)
  II 1/2 GD T85°C, EEx d IIC T6 (–40°C ≤ Ta ≤ +75°C)
- INTRINSIC SAFETY/EUROPE:
  ATEX/ZELM approval
  II 1 GD T50°C, EEx ia IIC T6 (–40°C ≤ Ta ≤+40°C)
  T95°C, EEx ia IIC T4 (–40°C ≤ Ta ≤+85°C)
- TYPE "N"/EUROPE:
  ATEX/ZELM type examination (for HART)
  II 3 GD T50°C, EEx nL IIC T6 (–40°C ≤ Ta ≤+40°C)
  T95°C, EEx nL IIC T4 (–40°C ≤ Ta ≤+85°C)
- FLAMEPROOF/EUROPE:
  ATEX/CESI approval
  II 1/2 GD T85°C, EEx d IIC T6 (–40°C ≤ Ta ≤ +75°C)
- CANADIAN STANDARDS ASSOCIATION and FACTORY MUTUAL:
  – Explosionproof: Class I, Div. 1, Groups A, B, C, D
  – Dust ignitionproof : Class II, Div. 1, Groups E, F, G
  – Suitable for : Class II, Div. 2, Groups F, G; Class III, Div. 1, 2
  – Nonincendive: Class I, Div. 2, Groups A, B, C, D
  – Intrinsically safe: Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G
  AEx ia IIC T6/T4, Zone 0 (FM)
- STANDARDS AUSTRALIA (SAA): TS Approval
  - Intrinsically safe Ex ia IIC T4/T5 (–20°C ≤ Ta ≤+80°C) only HART
  - No sparking Ex n IIC T4/T6 (–20°C ≤ Ta ≤+80°C) only HART
  - Flameproof Ex d IIC T4/T6 (–20°C ≤ Ta ≤+80°C)
  - Dust ignitionproof DIP A21 Ta T6 (–20°C ≤ Ta ≤+80°C)
- INTRINSIC SAFETY/CHINA
  NEPSI approval Ex ia IIC T4-T6
- FLAMEPROOF/CHINA
  NEPSI approval Ex d IIC T6
- GOST (Russia), GOST (Kazakhstan), Inmetro (Brazil) based on ATEX

Electrical Characteristics and Options

HART digital communication and 4 to 20mA output

Power Supply

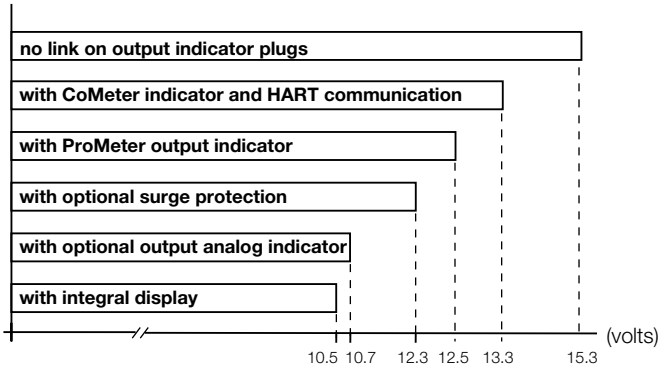
The transmitter operates from 10.5 to 42VDC with no load and is protected against reverse polarity connection (additional load allows operations over 42VDC).

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

Ripple

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

MINIMUM OPERATING VOLTAGES



Load limitations

4 to 20mA and HART total loop resistance :

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

A minimum of 250Ω is required for HART communication.

Optional indicators

Output meter

CoMeter and Prometer LCD :

5-digit (±99999 counts) programmable with 7.6mm. high (3in), 7-segment numeric characters plus sign and digital point for digital indication of output value in percentage, current or engineer unit;

10-segment bargraph display (10% per segment) for analog indication of output in percentage;

7-digit with 6mm. high (2.3in), 14-segment alphanumeric characters, for engineer units and configuration display

Analog : 36mm (1.4in) scale on 90°.

Integral display

LCD, 15 lines x 56 column dot matrix providing 2 lines indication as

– top: 5-digit (numeric) plus sign or 7-digit alphanumeric

– bottom: 7-digit alphanumeric

and additional 50-segment bargraph for indication of analog output in percentage.

User-definable matrix display mode with HART communication:

– process variable in pressure unit or

– output signal as percentage, current or engineering units

Display also indicates in/out transfer function, static pressure, sensor temperature and diagnostic messages and provides configuration facilities.

Optional surge protection

Up to 4kV

– voltage 1.2 μs rise time / 50 μs delay time to half value

– current 8 μs rise time / 20 μs delay time to half value

Output signal

Two–wire 4 to 20mA, user-selectable for linear or square root output, power of $^3/_2$ or $^5/_2$, 5th order or two 2nd order switching point selectable programmable polynomial output.

HART® communication provides digital process variable (%, mA or engineering units) superimposed on 4 to 20mA signal, with protocol based on Bell 202 FSK standard.

Output current limits (to NAMUR standard)

Overload condition

- Lower limit: 3.8mA
- Upper limit: 20.5mA

Transmitter failure mode (to NAMUR standard)

The output signal can be user-selected to a value of 3.7 or 22mA on gross transmitter failure condition, detected by self-diagnostics.

In case of CPU failure the output is driven <3.7mA or >22mA.

PROFIBUS PA output

Device type

Pressure transmitter compliant to Profiles 3.0 Class A & B; ident. number 052B HEX.

Power supply

The transmitter operates from 9 to 32VDC , polarity independent.

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

Current consumption

operating (quiescent): 10.5mA

fault current limiting: 20mA max.

Output signal

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

Output interface

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

Output update time

25ms

Function blocks

2 analog input, 1 transducer, 1 physical

Integral display

LCD, 15 lines x 56 column dot matrix providing 2 lines indication as

– top: 5-digit (numeric) plus sign or 7-digit alphanumeric

– bottom: 7-digit alphanumeric

and additional 50-segment bargraph for indication of output in percentage of the analog input function block assigned to the primary variable.

User-definable matrix display mode:

– process variable in pressure units or

– primary variable in engineering units (output of transducer block) or

– output as percentage or engineering units of analog input function blocks

Display also indicates diagnostic messages and provides configuration facilities.
Secondary variable, static pressure and sensor temperature can be read.

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 (20mA approx), for safety of the network.

FOUNDATION Fieldbus output

Device type

LINK MASTER DEVICE

Link Active Scheduler (LAS) capability implemented.

Power supply

The transmitter operates from 9 to 32VDC, polarity independent.

For EEx ia approval power supply must not exceed 24VDC (entity certification) or 17.5VDC (FISCO certification), according to FF–816.

Current consumption

operating (quiescent): 10.5mA

fault current limiting: 20mA max.

Output signal

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

Function blocks/execution period

2 enhanced Analog Input blocks/25ms max (each)
1 enhanced PID block/40ms max.
1 standard ARitmetic block/25ms
1 standard Input Selector block/25ms
1 standard Control Selector block/25ms
1 standard Signal Characterization block/25ms
1 standard Integrator/Totalizer block/25ms

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. 1.6; FF registration in progress.

Integral display

LCD, 15 lines x 56 column dot matrix providing 2 lines indication as

– top: 5-digit (numeric) plus sign or 7-digit alphanumeric

– bottom: 7-digit alphanumeric

and additional 50-segment bargraph for percentage indication of the analog input function block output, assigned to the primary variable.

User-definable matrix display mode:

– process variable in pressure units or

– primary variable in engineering units (output of transducer block) or

– output as percentage or engineering units of one or more selected function blocks

Display also indicates diagnostic messages. Secondary variable, static pressure and sensor temperature can be read.

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 (20mA approx), for safety of the network.

Performance specifications

Stated at reference condition to IEC 60770 ambient temperature of 20°C (68°F), relative humidity of 65%, atmospheric pressure of 1013hPa (1013mbar), mounting position with vertical diaphragm and zero based range for transmitter with isolating diaphragms in AISI 316 L ss or Hastelloy and silicone oil fill and digital trim values equal to span end points, in linear mode.

Unless otherwise specified, errors are quoted as % of span.

Some performance data are affected by the actual turndown (TD) as ratio between Upper Range Limit (URL) and calibrated span.

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

Accuracy rating

% of calibrated span, including combined effects of terminal based linearity, hysteresis and repeatability.

For fieldbus versions SPAN refer to analog input function block outscale range

Using direct mount seal sizes <DN 80/3in
– ±0.075% for TD from 1:1 to 10:1
(±0.10% for sensor code F
±0.10% for sensor code E for TD from 1:1 to 5:1)

– $\pm 0.0075\% \times \frac{URL}{Span}$ for TD from 10:1 to 20:1

$(\pm 0.01\% \times \frac{URL}{Span}$ for sensor code F

$\pm 0.02\% \times \frac{URL}{Span}$ for sensor code E for TD from 5:1 to 10:1)

Using direct mount seal sizes ≥DN 80/3in
– ±0.075% for TD from 1:1 to 10:1
(±0.10% for sensor code E for TD from 1:1 to 5:1)

– $\pm 0.0075\% \times \frac{URL}{Span}$ for TD from 10:1 to 20:1

$(\pm 0.02\% \times \frac{URL}{Span}$ for sensor code E for TD from 5:1 to 10:1)

Multiply the values by 1.5 for sensor/seal combination marked (•) and for transmitter with direct mount seal plus one remote seal.

Operating influences

Temperature effects

per 20K (36°F) ambient temperature change on transmitter sensor between the limits of –20°C to +65°C (–4 to +150°F) :

Transmitter effect:

– ±(0.04% URL + 0.065% span)

Direct mount seal additional effect:

Seal type size	Error		
	kPa	mbar	inH_20
Flush 1-1/2in (RJ only)	0.52	5.2	2.09
Flush 2in/DN50/A50	0.12	1.2	0.48
Flush 3–4in/DN80-100/A80-100	0.02	0.2	0.08
Extended 2in/DN50	0.2	2	0.8
Extended 3in/DN80	0.06	0.6	0.24
Extended 4in/DN100	0.02	0.2	0.08
Off-line 2-1/2in	0.10	1	0.4

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

Seal type size	Error		
	kPa	mbar	inH_20
Flush 1-1/2in (RJ only)	0.85	8.5	3.4
Flush 2in/DN50/A50	0.32	3.2	1.28
Flush 3–4in/DN80-100/A80-100	0.1	1	0.4
Extended 2in/DN50	0.35	3.5	1.4
Extended 3in/DN80	0.17	1.7	0.68
Extended 4in/DN100	0.1	1	0.4
Off-line 2-1/2in	0.25	2.5	1

Optional CoMeter and ProMeter ambient temperature

Total reading error per 20K (36°F) change between the ambient limits of –20 and +70°C (-4 and +158°F) :

±0.15% of max span (16mA).

Static pressure (zero errors can be calibrated out at line pressure)

seal effect additional to transmitter sensor effect applicable for differential measurement per 2MPa, 20bar or 290psi.

Model 264DD direct mount seal only
– zero error: ±0.15% of URL
– span error: ±0.15% of reading

Model 264DD direct mount plus remote seal
– zero error: ±0.20% of URL
– span error: ±0.20% of reading

Multiply by 1.5 the errors for sensor/seal combinations marked (•).

Supply voltage

Within voltage/load specified limits the total effect is less than 0.005% of URL per volt.

Load

Within load/voltage specified limits the total effect is negligible.

Electromagnetic field

Total effect : less than 0.10% of span from 20 to 1000MHz and for field strengths up to 30V/m when tested with shielded conduit and grounding, with or without meter.

Common mode interference

No effect from 100Vrms @ 50Hz, or 50VDC

Vibration effect

±0.10% of URL (according to IEC 61298–3)

Physical Specification

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

Materials

Model 264DD only

Low pressure side process isolating diaphragms (*)

AISI 316 L ss; Hastelloy C276™; Monel 400™; Tantalum; Hastelloy C276™ on AISI 316 L ss gasket seat.

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

Low pressure side process flanges, adapters, plugs and drain/vent valves (*)

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

Bolts and nuts

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

AISI 316 ss bolts and nuts Class A4–50 per UNI 7323 (ISO 3506), in compliance with NACE MR0175 Class II.

Gaskets (*)

Viton™; PTFE.

Model 264DD/HD/ND

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

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

Extension material

AISI 316 L ss (also for Diaflex and gold plated diaphragms);
Hastelloy C276™;
AISI 316 L ss or Hastelloy C276™ with coating same as diaphragm

High pressure side fill fluid (direct mount seal)

Silicone oil-DC200™; Silicone oil-AN 140™; Inert-Galden™;
Inert-Halocarbon™ 4.2; Silicone Polymer-Syltherm XLT™;
Vegetable oil-Neobee M-20™; Glycerin Water;
Mineral oil-MARCOL 82™.

Sensor fill fluid

Silicone oil (DC200™); inert fill (Halocarbon ™ 4.2 or Galden™);

Sensor housing

AISI 316 L ss.

Electronic housing and covers

Barrel version

– Aluminium alloy with baked epoxy finish;

– Copper-free content aluminium alloy with baked epoxy finish;

– AISI 316 L ss.

DIN version

– Aluminium alloy with baked epoxy finish.

Covers O-ring

Buna N.

Local zero and span adjustments:

Glass filled polycarbonate plastic (removable).

Tagging

AISI 316ss data plate attached to the electronics housing.

Calibration

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

Optional: at specified range and ambient conditions.

Optional extras

Output indicator

plug-in rotatable type, LCD or analog.

Supplemental customer tag

AISI 316 ss tag screwed/fastened to the transmitter for customer's tag data up to a maximum of 20 characters and spaces on one line for tag number and tag name, and up to a maximum of 3 spaced strings of 10 characters each for calibration details (lower and upper values plus unit). Special typing evaluated on request for charges.

Surge protection (only as external unit for PROFIBUS PA and FF)

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

Tag and manual language

Communication connectors

Seal flushing ring (with relevant plugs and gasket)

Process connections

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

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

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

on seal side (refer to drawings for details)

Flush diaphragm flanged seal (**):
2in or 3in ASME 150 to 1500 RF; 4in ASME 150-300 RF;
1-1/2in, 2in or 3in ASME 150 to 1500 RJ;
DN50 or DN80 DIN PN16–40, PN63–100;
DN100 PN16–40;
A50 or A80 Class 10K, 20K, 40K
A100 Class 10K, 20K.

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

Off-line flanged connection seal (***)
1/2in, 1in or 1-1/2in hole connection, ASME CL150-300;
DN25 or DN40, EN PN16-40.

Off-line threaded connection seal
1/4in, 1/2in, 3/4in, 1in or 1-1/2in NPT thread.

Gasket seat finish
smooth (ASME, EN or JIS): 0.8µm (Ra)
serrated (ASME or JIS): 3.2 to 6.3µm (Ra)
serrated (EN 1092-1 Type B1; up to PN40): 3.2 to 12.5µm (Ra)
serrated (EN 1092-1 Type B2; PN63-100): 0.8 to 3.2µm (Ra).

Wafer seal (remote only)
1-1/2in, 2in or 3in to ASME;
DN40, DN50 or DN80 to EN.

Electrical connections

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

Special communication connector (on request)

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

– FOUNDATION Fieldbus, PROFIBUS PA: M12x1 and 7/8.

Terminal block

HART version: three terminals for signal/external meter wiring up to 2.5mm^2 (14AWG) and three connection points for test and communication purposes.

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

Grounding

Internal and external 6mm^2 (10AWG) ground termination points are provided.

Mounting position

Transmitter can be mounted in any position.
Electronics housing may be rotated to any position. A positive stop prevents over travel.

Mass (without options)

7kg to 50kg approx (15 to 110lb) according to specified seal(s) options; add 1.5kg (3.4lb) for AISI housing.
Add 650g (1.5lb) for packing.

Packing

Carton

(*) Wetted parts of the transmitter.

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

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

Configuration

Transmitter with HART communication and 4 to 20 mA

Standard configuration

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

Engineering Unit	kPa
4 mA	Zero
20 mA	Upper Range Limit (URL)
Output	Linear
Damping	1 sec.
Transmitter failure mode	Upscale
Software tag (8 characters max)	Blank
Optional LCD indicator/display	0 to 100.0% linear

Any or all the above configurable parameters, including Lower range–value and Upper range-value which must be the same unit of measure, can be easily changed using the HART hand–held communicator or by a PC running the configuration software SMART VISION with DTM for 2600T.
The transmitter database is customized with specified flange type and material, O–ring and drain/vent materials and meter code option.
Custom configuration (option)
The following data may be specified in addition to the standard configuration parameters:

Descriptor	16 alphanumeric characters
Message	32 alphanumeric characters
Date	Day, month, year

Transmitter with PROFIBUS PA communication

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 sec.
Address (settable by local key)	126
Tag	32 alphanumeric characters

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 by a PC running the configuration software SMART VISION with DTM for 2600T.
The transmitter database is customized with specified flange type and material, O–ring and drain/vent materials and meter code option.
Custom configuration (option)
The following data may be specified in addition to the standard configuration parameters:

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

Transmitter with FOUNDATION Fieldbus communication

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 sec.
Tag	32 alphanumeric characters

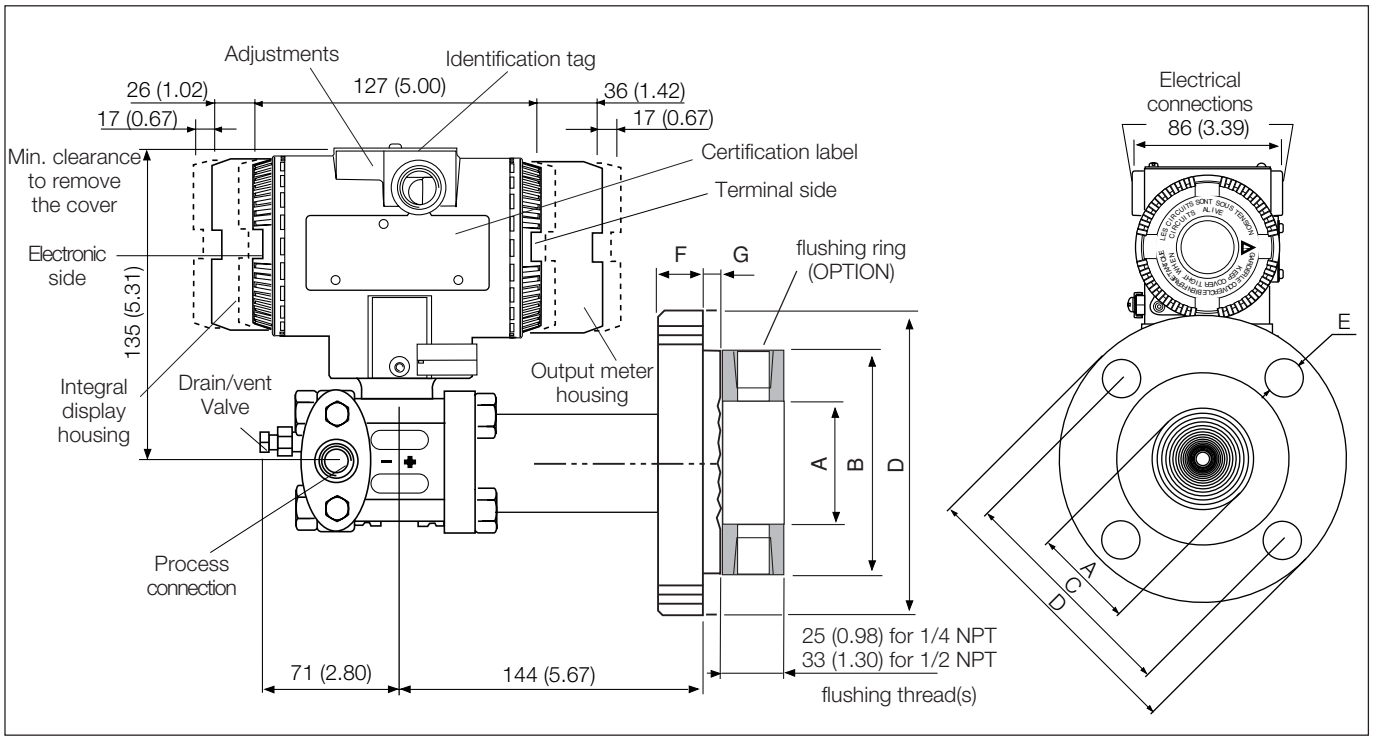
The analog input function block FB2 is configured for the sensor temperature measured in °C. Any or all the above configurable parameters, including the range values, can be changed using any host compliant to FOUNDATION fieldbus. The transmitter database is customized with specified flange type and material, O–ring and drain/vent materials and meter code option.

For any protocol available engineering units of pressure measure are :
Pa, kPa, MPa
inH_2O@4°C, mmH_2O@4°C, psi
inH_2O@20°C, ftH_2O@20°C, mmH_2O@20°C
inHg, mmHg, Torr
g/cm^2, kg/cm^2, atm
mbar, bar

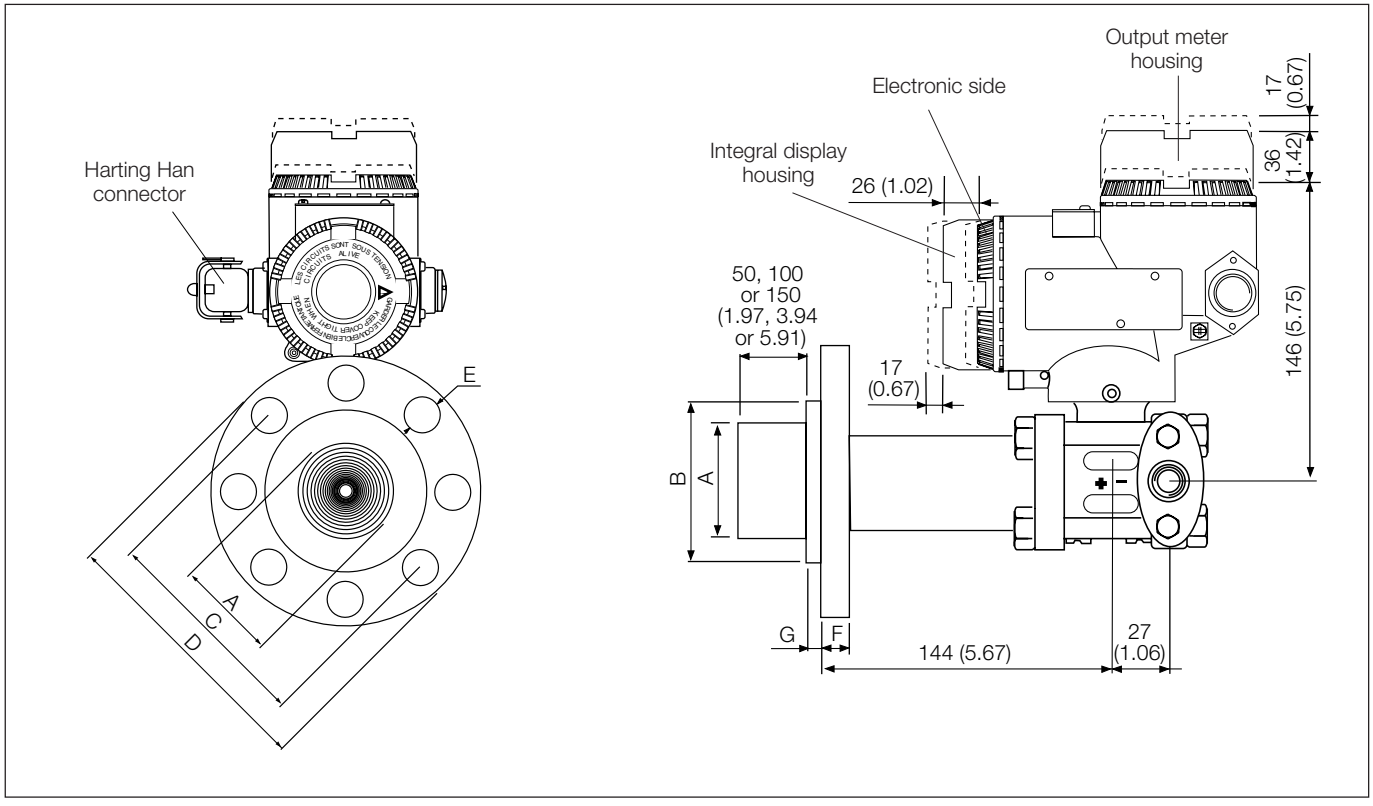
MOUNTING DIMENSIONS (not for construction unless certified) - dimensions in mm (in)

NOTE: For 264DD, low pressure side opposite to direct mount seal can be a conventional flange or suitable for capillary to remote seal. Conventional process flange connection (1/4 – 18 NPT direct or 1/2 – 14 NPT through adapter), gasket groove and gaskets are in accordance with DIN 19213. Bolting threads for fixing adapter or other devices on process flange is 7/16 – 20 UNF.

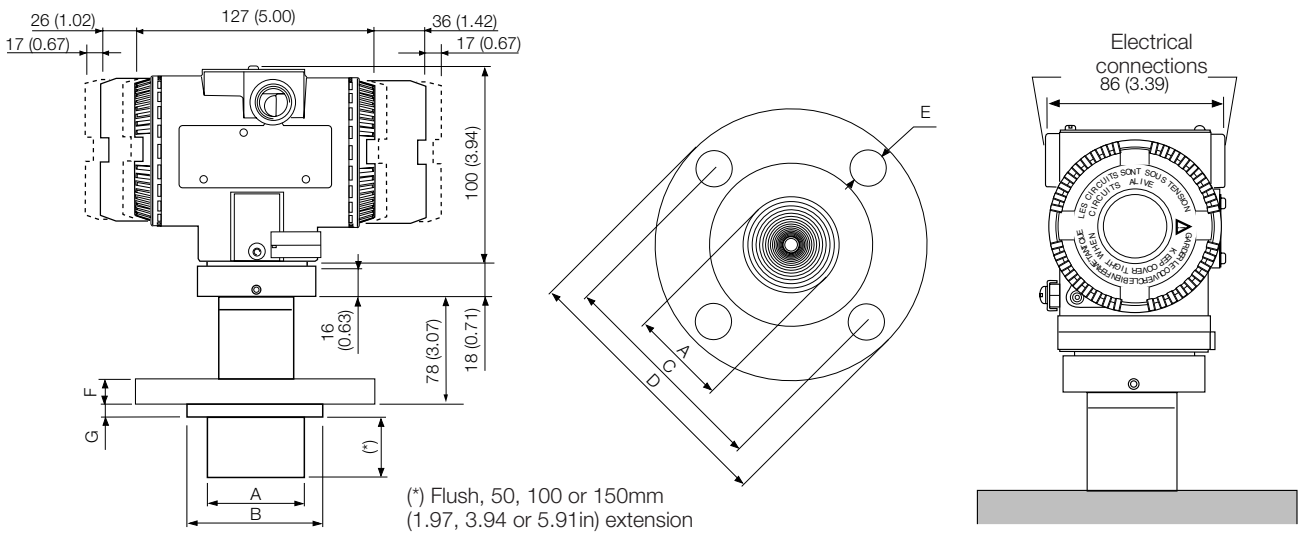
264DD with barrel housing and direct mount seal S264A/S264E/S264G flanged Raised Face flush diaphragm



264DD with DIN housing and direct mount seal S264A/S264E flanged Raised Face extended diaphragm



264HD/264ND with barrel housing and direct mount seal S264A/S264E flanged Raised Face extended diaphragm

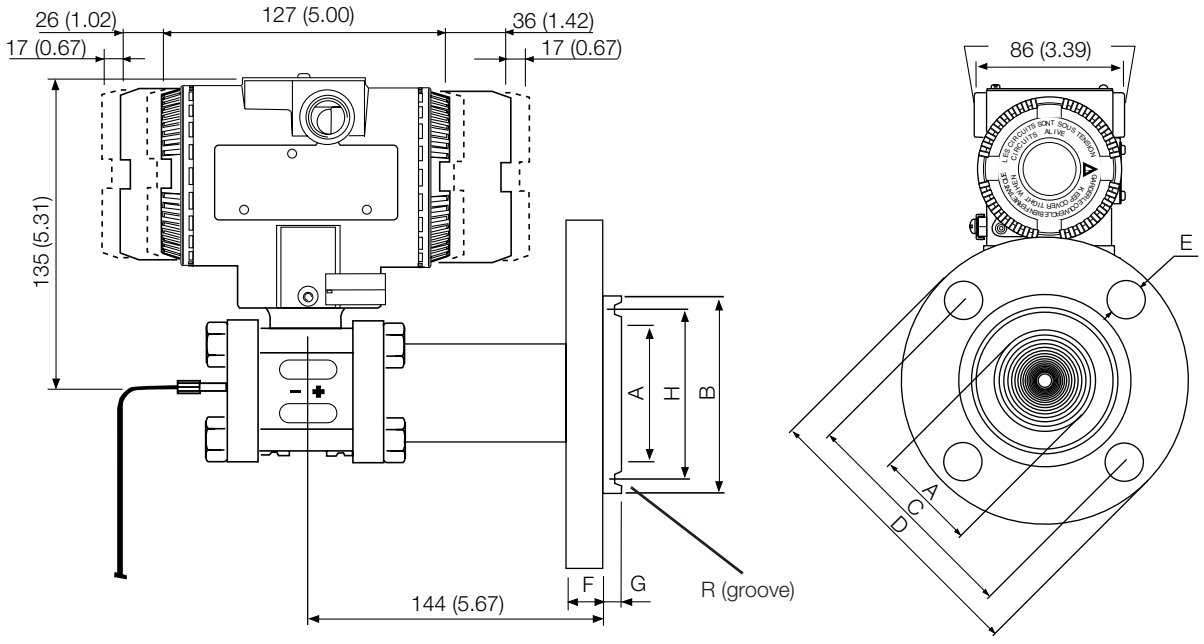


Size/Rating	Dimensions mm (in)									N° of holes
	A (dia) extended diaphragm	A (dia) flush diaphragm	A (dia) flushing ring internal dia	B (dia)	C (dia)	D (dia)	E (dia)	F	G	
2in ASME CL 150	48 (1.9)	60 (2.36)	62 (2.44)	92 (3.62)	120.65 (4.75)	152.4 (6)	20 (0.79)	19.05 (0.75)	9.5 (0.37)	4
2in ASME CL 300	48 (1.9)	60 (2.36)	62 (2.44)	92 (3.62)	127 (5)	165.1 (6.5)	20 (0.79)	22.35 (0.88)	9.5 (0.37)	8
2in ASME CL 600	NA	60 (2.36)	62 (2.44)	92 (3.62)	127 (5)	165.1 (6.5)	20 (0.79)	25.4 (1)	9.5 (0.37)	8
2in ASME CL 900	NA	60 (2.36)	62 (2.44)	92 (3.62)	165 (6.5)	215.9 (8.5)	26 (1.02)	38.1 (1.5)	9.5 (0.37)	8
2in ASME CL 1500	NA	60 (2.36)	62 (2.44)	92 (3.62)	165 (6.5)	215.9 (8.5)	26 (1.02)	38.1 (1.5)	9.5 (0.37)	8
3in ASME CL 150	72 (2.83)	89 (3.5)	92 (3.62)	127 (5)	152.4 (6)	190.5 (7.5)	20 (0.79)	23.87 (0.94)	9.5 (0.37)	4
3in ASME CL 300	72 (2.83)	89 (3.5)	92 (3.62)	127 (5)	168.15 (6.62)	209.55 (8.25)	22 (0.86)	28.44 (1.12)	9.5 (0.37)	8
3in ASME CL 600	NA	89 (3.5)	92 (3.62)	127 (5)	168.15 (6.62)	209.55 (8.25)	22 (0.86)	31.75 (1.25)	9.5 (0.37)	8
3in ASME CL 900	NA	89 (3.5)	92 (3.62)	127 (5)	190.5 (7.5)	241 (9.48)	26 (1.02)	38.1 (1.50)	9.5 (0.37)	8
3in ASME CL1500	NA	89 (3.5)	92 (3.62)	127 (5)	203.2 (8)	266.7 (10.5)	31.75 (1.25)	47.8 (1.88)	9.5 (0.37)	8
4in ASME CL 150	94 (3.7)	89 (3.5)	92 (3.62)	157.2 (6.2)	190.5 (7.5)	228.6 (9)	20 (0.79)	24 (0.94)	9.5 (0.37)	8
4in ASME CL 300	94 (3.7)	89 (3.5)	92 (3.62)	157.2 (6.2)	200.2 (7.88)	254 (10)	22 (0.86)	32 (1.26)	9.5 (0.37)	8

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

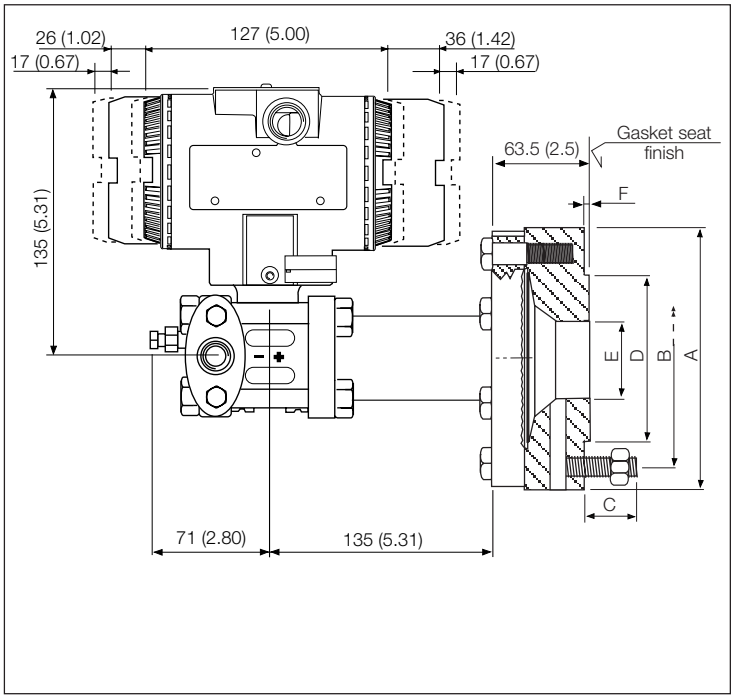
Size/Rating	Dimensions mm (in)							N° of holes
	A (dia) flush diaphragm	B (dia)	C (dia)	D (dia)	E (dia)	F	G	
A50 Class 10K	60 (2.36)	96 (3.78)	120 (4.72)	155 (6.1)	15 (0.59)	16 (0.63)	9.5 (0.37)	4
A50 Class 20K	60 (2.36)	96 (3.78)	120 (4.72)	155 (6.1)	19 (0.75)	18 (0.71)	9.5 (0.37)	4
A50 Class 40K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

264DD with barrel housing and direct mount seal S264R flanged Ring Joint flush diaphragm

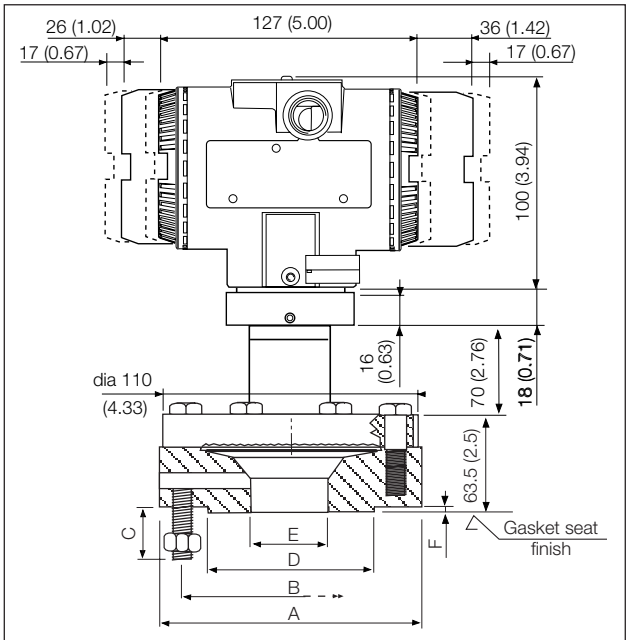


Size/Rating	Dimensions mm (in)								R	N° of holes
	A (dia)	B (dia)	C (dia)	D (dia)	E (dia)	F	G	H (dia)		
1-1/2in ASME CL 150	48 (1.89)	83 (3.27)	98.6 (3.88)	127 (5)	15.75 (0.62)	17.5 (0.69)	17.3 (0.68)	65.1 (2.56)	R19	4
1-1/2in ASME CL 300	48 (1.89)	90 (3.54)	114.3 (4.5)	155.5 (6.12)	22.35 (0.88)	20.6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

264DD with barrel housing and direct mount seal S264M off-line flanged

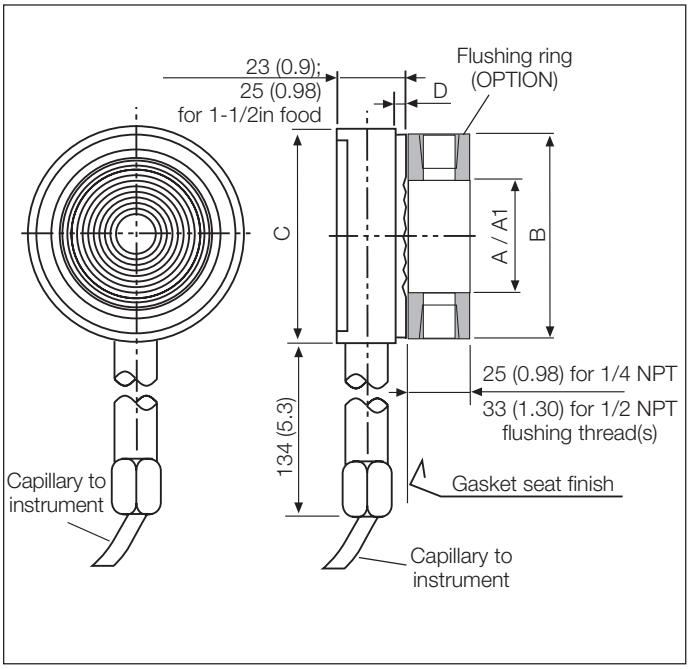


264HD/264ND with barrel housing and direct mount seal S264M off-line flanged



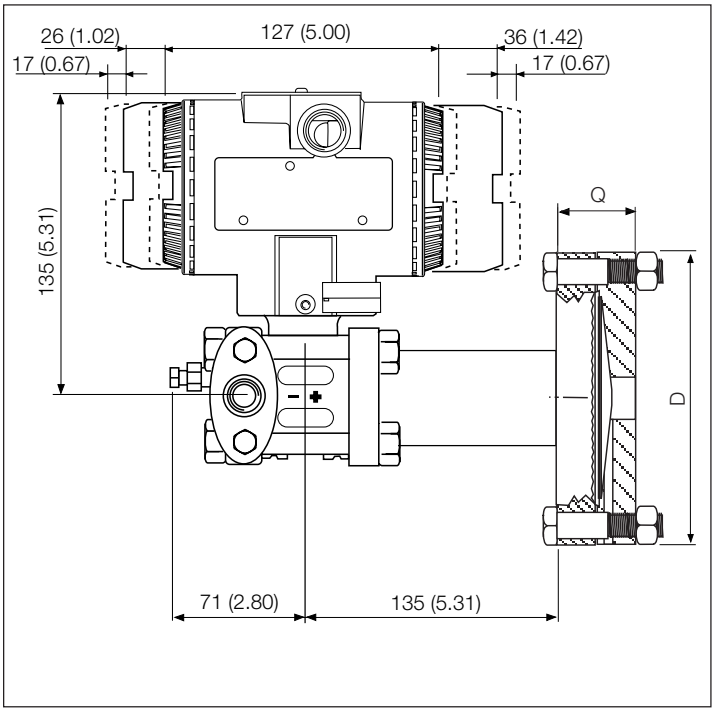
Connection		Dimensions mm (in)						
Size	Standard	A (dia)	B (dia)	C (4 studs)		D (dia)	E (dia)	F
				Length	Thread			
½in	ASME CL 150	110 (4.33)	60.5 (2.38)	39 (1.53)	1/2in – 13 UNC	35.1 (1.38)	15.8 (0.62)	1.6 (0.06)
	ASME CL 300	110 (4.33)	66.5 (2.62)	39 (1.53)	1/2in – 13 UNC			
1in	ASME CL 150	110 (4.33)	79.4 (3.12)	39 (1.53)	1/2in – 13 UNC	50.8 (2)	26.7 (1.05)	1.6 (0.06)
	ASME CL 300	124 (4.88)	88.9 (3.5)	51 (2)	5/8in – 11 UNC			
1 ½in	ASME CL 150	127 (5)	98.4 (3.87)	39 (1.53)	1/2in – 13 UNC	73 (2.87)	41 (1.61)	1.6 (0.06)
	ASME CL 300	155 (6.1)	114.3 (4.5)	57 (2.24)	3/4in – 10 UNC			
DN 25	EN PN 16-40	115 (4.52)	85 (3.34)	42 (1.65)	M12	68 (2.67)	28.5 (1.12)	2 (0.07)
DN 40	EN PN 16-40	150 (5.9)	110 (4.33)	48 (1.89)	M16	88 (3.46)	43.1 (1.69)	3 (0.12)

Wafer remote seal mod. S264W

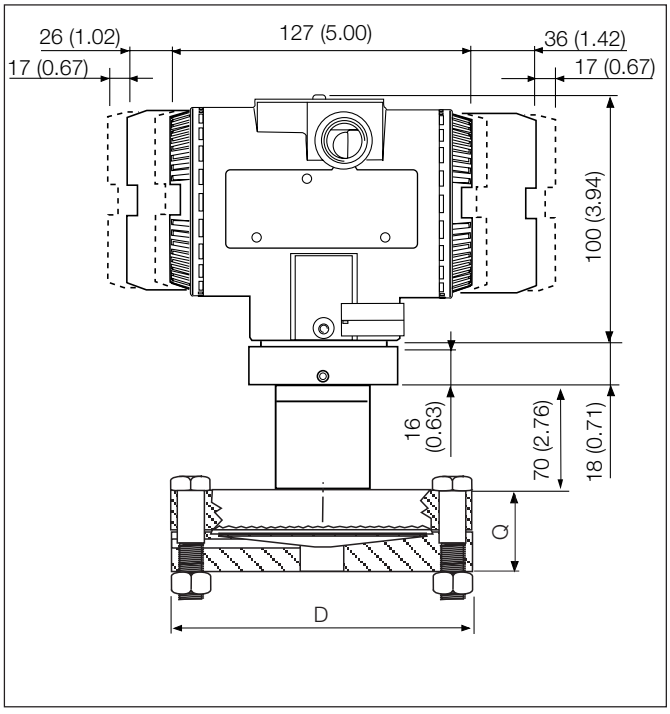


Size	DIMENSIONS mm (in)				
	A (dia) diaph.	A1 Flushing ring int. dia.	B (dia)	C	D
1 ½in	50 (1.97)	52 (2.05)	73 (2.87)	76.8 (3.02)	1.6 (0.06)
2in	60 (2.36)	62 (2.44)	92 (3.62)	95.8 (3.77)	
3in	89 (3.5)	92 (3.62)	127 (5)	130.8 (5.15)	
DN 40	50 (1.97)	52 (2.05)	88 (3.46)	92 (3.62)	3 (0.12)
DN 50	60 (2.36)	62 (2.44)	102 (4.02)	106 (4.17)	
DN 80	89 (3.5)	92 (3.62)	138 (5.43)	142 (5.59)	
1 ½in (food)	50 (1.97)	52 (2.05)	73 (2.87)	76.8 (3.02)	N.A.
3in (food)	89 (3.5)	92 (3.62)	127 (5)	130.8 (5.15)	3.7 (0.15)

264DD with barrel housing and direct mount seal S264T off-line threaded



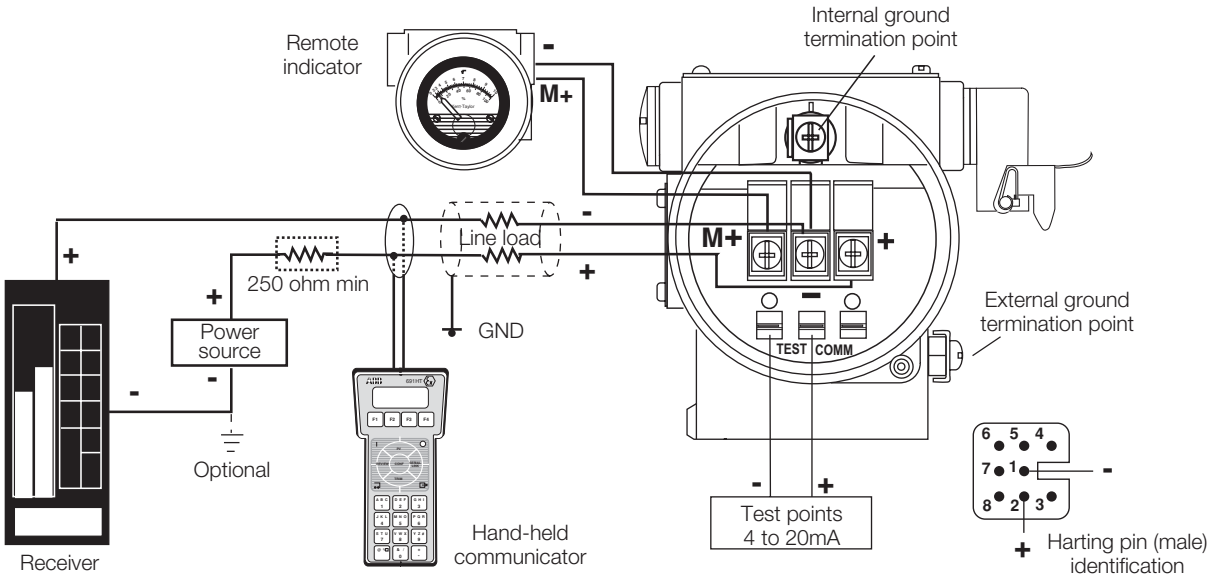
264HD/264ND with barrel housing and direct mount seal S264T off-line threaded



Size	Dimensions mm (in)	
	D (dia)	Q
1/4in NPT, 1/2in NPT	109.2 (4.3)	53.3 (2.1)
3/4in NPT, 1in NPT, 1 1/2in NPT	109.2 (4.3)	63.5 (2.5)

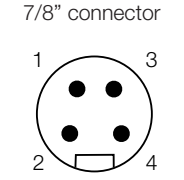
Electrical connections

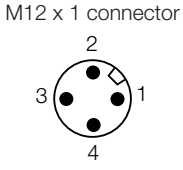
HART Version

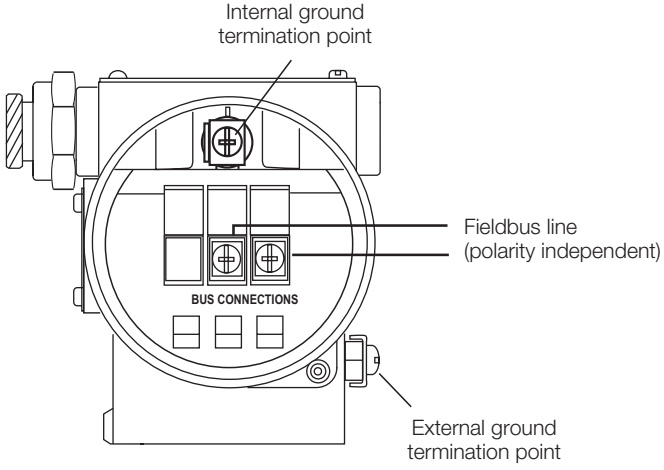


HART hand-held communicator may be connected at any wiring termination point in the loop, providing the minimum resistance is 250 ohm. If this is less than 250 ohm, additional resistance should be added to allow communications

FIELDBUS Versions







PIN (male) IDENTIFICATION		
	FOUNDATION Fieldbus	**PROFIBUS PA**
1	FF-	PA+
2	FF+	GROUND
3	SHIELD	PA–
4	GROUND	SHIELD

CONNECTOR IS SUPPLIED LOOSE WITHOUT MATING FEMALE PLUG

BASIC ORDERING INFORMATION model 264DD Differential Pressure Transmitter with direct mount seal

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

BASE MODEL – 1st to 5th characters			**2**	**6**	**4**	**D**	**D**	**X**	**S**	**X**	**X**	**X**	**Cont'd**
Differential Pressure Transmitter with direct mount seal(s) – BASE ACCURACY 0.075%													
SENSOR - Span limits – 6th character													
0.54 and 16kPa	5.4 and 160mbar	2.16 and 64inH_2O						E					
0.67 and 40kPa	6.7 and 400mbar	2.67 and 160inH_2O						F					
1.1 and 65kPa	11 and 650mbar	4.35 and 260inH_2O						G					
2.67 and 160kPa	26.7 and 1600mbar	10.7 and 642inH_2O						H					
10 and 600kPa	0.1 and 6bar	1.45 and 87psi						M					
40 and 2400kPa	0.4 and 24bar	5.8 and 348psi						P					
134 and 8000kPa	1.34 and 80bar	19.4 and 1160psi						Q					
267 and 16000kPa	2.67 and 160bar	38.7 and 2320psi						S					
Use code – 7th character									S				
Diaphragm material / Fill fluid (wetted parts) – 8th character													
AISI 316 L ss	Silicone oil	(one seal to be quoted separately)								S			
Hastelloy C276™ (on AISI seat)	Silicone oil	(one seal to be quoted separately)						NACE		H			
Hastelloy C276™	Silicone oil	(one seal to be quoted separately)						NACE		K			
Monel 400™	Silicone oil	(one seal to be quoted separately)						NACE		M			
Tantalum	Silicone oil	(one seal to be quoted separately)						NACE		T			
AISI 316 L ss	Inert fluid-Galden	(one seal to be quoted separately)			(Note 1)					A			
Hastelloy C276™ (on AISI seat)	Inert fluid-Galden	(one seal to be quoted separately)			(Note 1)			NACE		B			
Hastelloy C276™	Inert fluid-Galden	(one seal to be quoted separately)			(Note 1)			NACE		F			
Monel 400™	Inert fluid-Galden	(one seal to be quoted separately)			(Note 1)			NACE		C			
Tantalum	Inert fluid-Galden	(one seal to be quoted separately)			(Note 1)			NACE		D			
AISI 316 L ss	Inert fluid-Halocarbon	(one seal to be quoted separately)			(Note 1)					L			
Hastelloy C276™ (on AISI seat)	Inert fluid-Halocarbon	(one seal to be quoted separately)			(Note 1)			NACE		Q			
Hastelloy C276™	Inert fluid-Halocarbon	(one seal to be quoted separately)			(Note 1)			NACE		P			
Monel 400™	Inert fluid-Halocarbon	(one seal to be quoted separately)			(Note 1)			NACE		4			
Tantalum	Inert fluid-Halocarbon	(one seal to be quoted separately)			(Note 1)			NACE		5			
AISI 316 L ss	Silicone oil	(two seals to be quoted separately)								R			
AISI 316 L ss	Inert fluid-Galden	(two seals to be quoted separately)			(Note 1)					2			
AISI 316 L ss	Inert fluid-Halocarbon	(two seals to be quoted separately)			(Note 1)					W			
Process flanges/adapters material and connection (wetted parts) – 9th character													
AISI 316 L ss for two seals construction					(Note 2)			NACE			R		
AISI 316 L ss (Horizontal connection)	1/4 – 18 NPT-f direct (7/16 – 20 UNF U.S. drilling)				(Note 3)			NACE			A		
AISI 316 L ss (Horizontal connection)	1/2 – 14 NPT-f through adapter (7/16 – 20 UNF U.S. drilling)				(Note 3)			NACE			B		
Hastelloy C276™ (Horizontal connection)	1/4 – 18 NPT-f direct (7/16 – 20 UNF U.S. drilling)				(Notes 3, 4)			NACE			D		
Hastelloy C276™ (Horizontal connection)	1/2 – 14 NPT-f through adapter (7/16 – 20 UNF U.S. drilling)				(Notes 3, 4)			NACE			E		
Monel 400™ (Horizontal connection)	1/4 – 18 NPT-f direct (7/16 – 20 UNF U.S. drilling)				(Notes 3, 4)			NACE			G		
Monel 400™ (Horizontal connection)	1/2 – 14 NPT-f through adapter (7/16 – 20 UNF U.S. drilling)				(Notes 3, 4)			NACE			H		
Bolts/Gasket (wetted parts) – 10th character													
AISI 316 ss (NACE) without gaskets for two seals construction - (MWP = 16MPa)					(Note 2)			NACE				R	
AISI 316 ss without gaskets for two seals construction					(Note 2)							S	
AISI 316 ss		Viton™			(Note 3)							1	
AISI 316 ss		PTFE			(Notes 1, 3)							2	
AISI 316 ss (NACE) - (MWP = 16MPa)		Viton™			(Note 3)			NACE				3	
AISI 316 ss (NACE) - (MWP = 16MPa)		PTFE			(Notes 1, 3)			NACE				4	

BASIC ORDERING INFORMATION 264DD				**X**	**X**
Housing material and electrical connection – 11th character					
Aluminium alloy (Barrel version)	½ – 14 NPT			A	
Aluminium alloy (Barrel version)	M20 x 1.5 (CM 20)			B	
Aluminium alloy (Barrel version)	Pg 13.5			D	
Aluminium alloy (Barrel version)	½ GK			C	
Aluminium alloy (Barrel version)	Harting Han connector	(general purpose only)	(Note 5)	E	
Aluminium alloy (Barrel version)	Fieldbus connector	(general purpose only)	(Note 5)	G	
Aluminium alloy copper-free (Barrel version)	½ – 14 NPT			H	
Aluminium alloy copper-free (Barrel version)	M20 x 1.5 (CM 20)			L	
Aluminium alloy copper-free (Barrel version)	Pg 13.5			N	
Aluminium alloy copper-free (Barrel version)	½ GK			M	
Aluminium alloy copper-free (Barrel version)	Harting Han connector	(general purpose only)	(Note 5)	P	
Aluminium alloy copper-free (Barrel version)	Fieldbus connector	(general purpose only)	(Note 5)	R	
AISI 316 L ss (Barrel version)	½ – 14 NPT			S	
AISI 316 L ss (Barrel version)	M20 x 1.5 (CM20)			T	
AISI 316 L ss (Barrel version)	Pg 13.5			V	
AISI 316 L ss (Barrel version)	½ GK			U	
AISI 316 L ss (Barrel version)	Fieldbus connector	(general purpose only)	(Note 5)	Z	
Aluminium alloy (DIN version)	M20 x 1.5 (CM 20)	(general purpose only)		J	
Aluminium alloy (DIN version)	Pg 13.5	(general purpose only)		Y	
Aluminium alloy (DIN version)	Harting Han connector	(general purpose only)	(Note 5)	K	
Output/Additional options – 12th character					
HART digital communication and 4 to 20mA	No additional options		(Notes 6, 7)		H
HART digital communication and 4 to 20mA	Options requested (to be ordered by "Additional ordering code")		(Note 6)		1
PROFIBUS PA	No additional options		(Notes 6, 7)		P
PROFIBUS PA	Options requested (to be ordered by "Additional ordering code")		(Note 7)		2
FOUNDATION Fieldbus	No additional options		(Notes 6, 7)		F
FOUNDATION Fieldbus	Options requested (to be ordered by "Additional ordering code")		(Note 7)		3

ADDITIONAL ORDERING INFORMATION for model 264DD

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

				XX	XX	XX	XX	XX	XX	XX	XX	Cont'd
Drain/vent valve (material and position) (wetted parts)												
AISI 316 L ss	on process axis	(Note 8)	NACE	V1								
AISI 316 L ss	on flange side top	(Note 8)	NACE	V2								
AISI 316 L ss	on flange side bottom	(Note 8)	NACE	V3								
Hastelloy C276™	on process axis	(Note 9)	NACE	V4								
Hastelloy C276™	on flange side top	(Note 9)	NACE	V5								
Hastelloy C276™	on flange side bottom	(Note 9)	NACE	V6								
Monel 400™	on process axis	(Note 10)	NACE	V7								
Monel 400™	on flange side top	(Note 10)	NACE	V8								
Monel 400™	on flange side bottom	(Note 10)	NACE	V9								
Electrical certification												
ATEX Group II Category 1 GD – Intrinsic Safety EEx ia					E1							
ATEX Group II Category 1/2 GD – Flameproof EEx d					E2							
ATEX Group II Category 3 GD – Type of protection "N" EEx nL design compliance (Note 11)					E3							
Canadian Standard Association (CSA) (only ½–14NPT, M20 and Pg 13.5 electrical connection)					E4							
Standards Australia SAA (Not Ex ia and Ex n for PROFIBUS PA and FOUNDATION Fieldbus)					E5							
Factory Mutual (FM) approval (only with ½–14NPT, M20 and Pg 13.5 electrical connection)					E6							
Combined ATEX - Intrinsic Safety and Flameproof					E7							
Combined ATEX, FM, CSA (only with ½–14NPT, M20 and Pg 13.5 electrical connection) (Note 11)					EN							
NEPSI (China) - Intrinsic Safety Ex ia					EY							
NEPSI (China) - Flameproof Ex d					EZ							
GOST (Russia) EEx ia					W1							
GOST (Russia) EEx d					W2							
GOST (Kazakhstan) EEx ia					W3							
GOST (Kazakhstan) EEx d					W4							
Inmetro (Brazil) EEx ia					W5							
Inmetro (Brazil) EEx d					W6							
Inmetro (Brazil) EEx nL					W7							
Metrologic (Russia)					WC							
Metrologic (Kazakhstan)					WD							
Output meter												
ProMeter, Standard calibration		(Note 11)				D1						
ProMeter, Special calibration		(Note 11)				D2						
Analog output indicator linear 0–100% scale		(Note 11)				D3						
Analog output indicator square root 0–10 scale		(Note 11)				D4						
Analog output indicator, special graduation (to be specified for linear scale)		(Note 11)				D5						
Analog output indicator, special graduation (to be specified for square root scale)		(Note 11)				D6						
Programmable signal meter and HART configurator (CoMeter)		(Note 11)				D7						
Programmable signal meter and HART configurator (CoMeter – customer configuration)		(Note 11)				D8						
Integral LCD												
Digital LCD integral display							L1					
Surge												
Surge/Transient Protector (Internal for HART / 4-20mA)												
Surge/Transient Protector (External supplied loose for PROFIBUS PA and FOUNDATION Fieldbus only suitable with ½–14NPT and M20 electrical connection and with ATEX, FM and CSA certifications, no DUST)								S1				
Operating manual												
German									M1			
Italian									M2			
Spanish									M3			
French									M4			
Labels & tag language												
German										T1		
Italian										T2		
Spanish										T3		
French										T4		
Additional tag plate												
Laser printing of tag on stainless steel plate											I2	

		XX	XX	XX	XX
Configuration					
Standard – Pressure = inH_2O/psi at 20° C; Temperature = deg. F		N2			
Standard – Pressure = inH_2O/psi at 4° C; Temperature = deg. F		N3			
Standard – Pressure = inH_2O/psi at 20° C; Temperature = deg.C		N4			
Standard – Pressure = inH_2O/psi at 4° C; Temperature = deg. C		N5			
Custom		N6			
Certificates					
Inspection certificate EN 10204–3.1 of calibration (9-point)			C1		
Certificate of compliance with the order EN 10204–2.1 of instrument design			C6		
Material traceability					
Certificate of compliance with the order EN 10204–2.1 of process wetted parts				H1	
Inspection certificate EN 10204–3.1 of process wetted parts				H3	
Connector					
Fieldbus 7/8 (Recommended for FOUNDATION Fieldbus) - (supplied loose without mating female plug)	(Notes 7, 12)				U1
Fieldbus M12x1 (Recommended for PROFIBUS PA) - (supplied loose without mating female plug)	(Notes 7, 12)				U2
Harting Han – straight entry	(Notes 6, 12)				U3
Harting Han – angle entry	(Notes 6, 12)				U4

Note 1: Suitable for oxygen service

Note 2: Not available with low side diaphragm code S, H, K, M, T, A, B, F, C, D, L, Q, P, 4, 5

Note 3: Not available with low side diaphragm code R, 2, W

Note 4: Not available with diaphragm material/fill fluid code S, H, A, B, L, Q

Nota 5: Select type in additional ordering code

Note 6: Not available with Electronic Housing code Z, R, G

Note 7: Not available with Electronic Housing code P, E and K

Note 8: Not available with Process flanges/adapters code D, E, G, H, R

Note 9: Not available with Process flanges/adapters code A, B, G, H, R

Note 10: Not available with Process flanges/adapters code A, B, D, E, R

Note 11: Not available with PROFIBUS PA and FF output code 2 or 3

Note 12: Not available with Electronic housing code U, S, T, V, H, M, L, N, D, C, A, B, J, Y

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

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

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

BASIC ORDERING INFORMATION model 264HD Gauge Pressure Transmitter with direct mount seal

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

BASE MODEL – 1st to 5th characters				**2**	**6**	**4**	**H**	**D**	**X**	**X**	**X**	**X**	**X**
Gauge Pressure Transmitter with direct mount seal – BASE ACCURACY 0.075%													
SENSOR - Span limits – 6th character													
1.1 and 65kPa	11 and 650mbar	4.35 and 260inH_2O							G				
2.67 and 160kPa	26.7 and 1600mbar	10.7 and 642inH_2O							H				
10 and 600kPa	0.1 and 6bar	1.45 and 87psi							M				
40 and 2400kPa	0.4 and 24bar	5.8 and 348psi							P				
134 and 8000kPa	1.34 and 80bar	19.4 and 1160psi							Q				
267 and 16000kPa	2.67 and 160bar	38.7 and 2320psi							S				
Diaphragm material / Fill fluid – 7th character													
AISI 316 L ss		Silicone oil								R			
AISI 316 L ss		Inert fluid-Galden	(Note 1)							2			
AISI 316 L ss		Inert fluid-Halocarbon	(Note 1)							W			
Process connection – 8th character													
Direct mount seal		(one seal to be quoted separately)									M		
Housing material and electrical connection – 9th character													
Aluminium alloy (Barrel version)		1/2 – 14 NPT										A	
Aluminium alloy (Barrel version)		M20 x 1.5 (CM 20)										B	
Aluminium alloy (Barrel version)		Pg 13.5										D	
Aluminium alloy (Barrel version)		1/2 GK										C	
Aluminium alloy (Barrel version)		Harting Han connector	(general purpose only)				(Note 2)					E	
Aluminium alloy (Barrel version)		Fieldbus connector	(general purpose only)				(Note 2)					G	
Aluminium alloy copper-free (Barrel version)		1/2 – 14 NPT										H	
Aluminium alloy copper-free (Barrel version)		M20 x 1.5 (CM 20)										L	
Aluminium alloy copper-free (Barrel version)		Pg 13.5										N	
Aluminium alloy copper-free (Barrel version)		1/2 GK										M	
Aluminium alloy copper-free (Barrel version)		Harting Han connector	(general purpose only)				(Note 2)					P	
Aluminium alloy copper-free (Barrel version)		Fieldbus connector	(general purpose only)				(Note 2)					R	
AISI 316 L ss (Barrel version)		1/2 – 14 NPT										S	
AISI 316 L ss (Barrel version)		M20 x 1.5 (CM20)										T	
AISI 316 L ss (Barrel version)		Pg 13.5										V	
AISI 316 L ss (Barrel version)		1/2 GK										U	
AISI 316 L ss (Barrel version)		Fieldbus connector	(general purpose only)				(Note 2)					Z	
Output/Additional options – 10th character													
HART digital communication and 4 to 20mA		No additional options					(Notes 3, 4)						H
HART digital communication and 4 to 20mA		Options requested (to be ordered by "Additional ordering code")					(Note 3)						1
PROFIBUS PA		No additional options					(Notes 3, 4)						P
PROFIBUS PA		Options requested (to be ordered by "Additional ordering code")					(Note 4)						2
FOUNDATION Fieldbus		No additional options					(Notes 3, 4)						F
FOUNDATION Fieldbus		Options requested (to be ordered by "Additional ordering code")					(Note 4)						3

ADDITIONAL ORDERING INFORMATION for model 264HD

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

		XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
Electrical certification												
ATEX Group II Category 1 GD – Intrinsic Safety EEx ia		E1										
ATEX Group II Category 1/2 GD – Flameproof EEx d		E2										
ATEX Group II Category 3 GD – Type of protection "N" EEx nL design compliance	(Note 5)	E3										
Canadian Standard Association (CSA) (only ½–14NPT, M20 and Pg 13.5 electrical connection)		E4										
Standards Australia SAA (Not Ex ia and Ex n for PROFIBUS PA and FOUNDATION Fieldbus)		E5										
Factory Mutual (FM) approval (only with ½–14NPT, M20 and Pg 13.5 electrical connection)		E6										
Combined ATEX - Intrinsic Safety and Flameproof		E7										
Combined ATEX, FM and CSA (only with ½–14NPT, M20 and Pg 13.5 electrical connection)	(Note 5)	EN										
NEPSI (China) - Intrinsic Safety Ex ia		EY										
NEPSI (China) - Flameproof Ex d		EZ										
GOST (Russia) EEx ia		W1										
GOST (Russia) EEx d		W2										
GOST (Kazakhstan) EEx ia		W3										
GOST (Kazakhstan) EEx d		W4										
Inmetro (Brazil) EEx ia		W5										
Inmetro (Brazil) EEx d		W6										
Inmetro (Brazil) EEx nL		W7										
Metrologic (Russia)		WC										
Metrologic (Kazakhstan)		WD										
Output meter												
ProMeter, Standard calibration	(Note 5)		D1									
ProMeter, Special calibration	(Note 5)		D2									
Analog output indicator linear 0–100% scale	(Note 5)		D3									
Analog output indicator, special graduation (to be specified for linear scale)	(Note 5)		D5									
Programmable signal meter and HART configurator (CoMeter)	(Note 5)		D7									
Programmable signal meter and HART configurator (CoMeter – customer configuration)	(Note 5)		D8									
Integral LCD												
Digital LCD integral display				L1								
Surge												
Surge/Transient Protector (Internal for HART / 4-20mA)												
Surge/Transient Protector (External supplied loose for PROFIBUS PA and FOUNDATION Fieldbus only suitable with ½–14NPT and M20 electrical connection and with ATEX, FM and CSA certifications, no DUST)					S1							
Operating manual												
German						M1						
Italian						M2						
Spanish						M3						
French						M4						
Labels & tag language												
German							T1					
Italian							T2					
Spanish							T3					
French							T4					
Additional tag plate												
Laser printing of tag on stainless steel plate								I2				
Configuration												
Standard – Pressure = inH2O/psi at 20° C; Temperature = deg. F									N2			
Standard – Pressure = inH2O/psi at 4° C; Temperature = deg. F									N3			
Standard – Pressure = inH2O/psi at 20° C; Temperature = deg.C									N4			
Standard – Pressure = inH2O/psi at 4° C; Temperature = deg. C									N5			
Custom									N6			
Certificates												
Inspection certificate EN 10204–3.1 of calibration (9-point)										C1		
Certificate of compliance with the order EN 10204–2.1 of instrument design										C6		
Material traceability												
Certificate of compliance with the order EN 10204–2.1 of process wetted parts											H1	
Inspection certificate EN 10204–3.1 of process wetted parts											H3	
Connector												
Fieldbus 7/8 (Recommended for FOUNDATION Fieldbus) - (supplied loose without mating female plug)							(Notes 4, 6)					U1
Fieldbus M12x1 (Recommended for PROFIBUS PA) - (supplied loose without mating female plug)							(Notes 4, 6)					U2
Harting Han – straight entry							(Notes 3, 6)					U3
Harting Han – angle entry							(Notes 3, 6)					U4

Note 1: Suitable for oxygen service

Note 2: Select type in additional ordering code

Note 3: Not available with Electronic Housing code Z, R, G

Note 4: Not available with Electronic Housing code P, E

Note 5: Not available with PROFIBUS PA and FF output code 2 or 3

Note 6: Not available with Electronic housing code U, S, T, V, H, M, L, N, D, C, A, B

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

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

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

BASIC ORDERING INFORMATION model 264ND Absolute Pressure Transmitter with direct mount seal

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

BASE MODEL – 1st to 5th characters				**2**	**6**	**4**	**N**	**D**	**X**	**X**	**X**	**X**	**X**
Absolute Pressure Transmitter with direct mount seal – BASE ACCURACY 0.075%													
SENSOR - Span limits – 6th character													
1.1 and 65kPa	11 and 650mbar	8 and 480mmHg							G				
2.67 and 160kPa	26.7 and 1600mbar	20 and 1200mmHg							H				
10 and 600kPa	0.1 and 6bar	1.45 and 87psi							M				
40 and 2400kPa	0.4 and 24bar	5.8 and 348psi							P				
134 and 8000kPa	1.34 and 80bar	19.4 and 1160psi							Q				
267 and 16000kPa	2.67 and 160bar	38.7 and 2320psi							S				
Diaphragm material / Fill fluid – 7th character													
AISI 316 L ss		Silicone oil								R			
AISI 316 L ss		Inert fluid-Galden	(Note 1)							2			
AISI 316 L ss		Inert fluid-Halocarbon	(Note 1)							W			
Process connection – 8th character													
Direct mount seal		(one seal to be quoted separately)									M		
Housing material and electrical connection – 9th character													
Aluminium alloy (Barrel version)		½ – 14 NPT										A	
Aluminium alloy (Barrel version)		M20 x 1.5 (CM 20)										B	
Aluminium alloy (Barrel version)		Pg 13.5										D	
Aluminium alloy (Barrel version)		½ GK										C	
Aluminium alloy (Barrel version)		Harting Han connector	(general purpose only)				(Note 2)					E	
Aluminium alloy (Barrel version)		Fieldbus connector	(general purpose only)				(Note 2)					G	
Aluminium alloy copper-free (Barrel version)		½ – 14 NPT										H	
Aluminium alloy copper-free (Barrel version)		M20 x 1.5 (CM 20)										L	
Aluminium alloy copper-free (Barrel version)		Pg 13.5										N	
Aluminium alloy copper-free (Barrel version)		½ GK										M	
Aluminium alloy copper-free (Barrel version)		Harting Han connector	(general purpose only)				(Note 2)					P	
Aluminium alloy copper-free (Barrel version)		Fieldbus connector	(general purpose only)				(Note 2)					R	
AISI 316 L ss (Barrel version)		½ – 14 NPT										S	
AISI 316 L ss (Barrel version)		M20 x 1.5 (CM20)										T	
AISI 316 L ss (Barrel version)		Pg 13.5										V	
AISI 316 L ss (Barrel version)		½ GK										U	
AISI 316 L ss (Barrel version)		Fieldbus connector	(general purpose only)				(Note 2)					Z	
Output/Additional options – 10th character													
HART digital communication and 4 to 20mA		No additional options					(Notes 3, 4)						H
HART digital communication and 4 to 20mA		Options requested (to be ordered by "Additional ordering code")					(Note 3)						1
PROFIBUS PA		No additional options					(Notes 3, 4)						P
PROFIBUS PA		Options requested (to be ordered by "Additional ordering code")					(Note 4)						2
FOUNDATION Fieldbus		No additional options					(Notes 3, 4)						F
FOUNDATION Fieldbus		Options requested (to be ordered by "Additional ordering code")					(Note 4)						3

ADDITIONAL ORDERING INFORMATION for model 264ND

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

		XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
Electrical certification												
ATEX Group II Category 1 GD – Intrinsic Safety EEx ia		E1										
ATEX Group II Category 1/2 GD – Flameproof EEx d		E2										
ATEX Group II Category 3 GD – Type of protection "N" EEx nL design compliance	(Note 5)	E3										
Canadian Standard Association (CSA) (only ½–14NPT, M20 and Pg 13.5 electrical connection)		E4										
Standards Australia SAA (Not Ex ia and Ex n for PROFIBUS PA and FOUNDATION Fieldbus)		E5										
Factory Mutual (FM) approval (only with ½–14NPT, M20 and Pg 13.5 electrical connection)		E6										
Combined ATEX - Intrinsic Safety and Flameproof		E7										
Combined ATEX, FM and CSA (only with ½–14NPT, M20 and Pg 13.5 electrical connection)	(Note 5)	EN										
NEPSI (China) - Intrinsic Safety Ex ia		EY										
NEPSI (China) - Flameproof Ex d		EZ										
GOST (Russia) EEx ia		W1										
GOST (Russia) EEx d		W2										
GOST (Kazakhstan) EEx ia		W3										
GOST (Kazakhstan) EEx d		W4										
Inmetro (Brazil) EEx ia		W5										
Inmetro (Brazil) EEx d		W6										
Inmetro (Brazil) EEx nL		W7										
Metrologic (Russia)		WC										
Metrologic (Kazakhstan)		WD										
Output meter												
ProMeter, Standard calibration	(Note 5)		D1									
ProMeter, Special calibration	(Note 5)		D2									
Analog output indicator linear 0–100% scale	(Note 5)		D3									
Analog output indicator, special graduation (to be specified for linear scale)	(Note 5)		D5									
Programmable signal meter and HART configurator (CoMeter)	(Note 5)		D7									
Programmable signal meter and HART configurator (CoMeter – customer configuration)	(Note 5)		D8									
Integral LCD												
Digital LCD integral display				L1								
Surge												
Surge/Transient Protector (Internal for HART / 4-20mA)												
Surge/Transient Protector (External supplied loose for PROFIBUS PA and FOUNDATION Fieldbus only suitable with ½–14NPT and M20 electrical connection and with ATEX, FM and CSA certifications, no DUST)					S1							
Operating manual												
German						M1						
Italian						M2						
Spanish						M3						
French						M4						
Labels & tag language												
German							T1					
Italian							T2					
Spanish							T3					
French							T4					
Additional tag plate												
Laser printing of tag on stainless steel plate								I2				
Configuration												
Standard – Pressure = inH2O/psi at 20° C; Temperature = deg. F									N2			
Standard – Pressure = inH2O/psi at 4° C; Temperature = deg. F									N3			
Standard – Pressure = inH2O/psi at 20° C; Temperature = deg.C									N4			
Standard – Pressure = inH2O/psi at 4° C; Temperature = deg. C									N5			
Custom									N6			
Certificates												
Inspection certificate EN 10204–3.1 of calibration (9-point)										C1		
Certificate of compliance with the order EN 10204–2.1 of instrument design										C6		
Material traceability												
Certificate of compliance with the order EN 10204–2.1 of process wetted parts											H1	
Inspection certificate EN 10204–3.1 of process wetted parts											H3	
Connector												
Fieldbus 7/8 (Recommended for FOUNDATION Fieldbus) - (supplied loose without mating female plug)							(Notes 4, 6)					U1
Fieldbus M12x1 (Recommended for PROFIBUS PA) - (supplied loose without mating female plug)							(Notes 4, 6)					U2
Harting Han – straight entry							(Notes 3, 6)					U3
Harting Han – angle entry							(Notes 3, 6)					U4

Note 1: Suitable for oxygen service

Note 2: Select type in additional ordering code

Note 3: Not available with Electronic Housing code Z, R, G

Note 4: Not available with Electronic Housing code P, E

Note 5: Not available with PROFIBUS PA and FF output code 2 or 3

Note 6: Not available with Electronic housing code U, S, T, V, H, M, L, N, D, C, A, B

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

– General purpose (no electrical certification)

– No meter/display, no mounting bracket, no surge protection

– English manual and labels

– Configuration with kPa and deg. C units

– No test, inspection or material traceability certificates

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

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

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

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

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

Note 1: Not available with size code E

Note 2: Not available with mounting flange rating code 3, 4, 5

Note 3: Not available with extensions length and material code 2, 4, 6

Note 4: Not available with extensions length and material code 1, 2, 3, 4, 5, 6

Note 5: Not available with diaphragm material code M, L, T, N, K, Y, W and H when selected with extension length and material code F, 2, 4, 6

Note 6: Not available with capillary protection code A, B

Note 7: Not available with capillary protection code N

Note 8: Suitable for oxygen service

Note 9: Suitable for food application

Note 10: Not available with Flushing ring: hole and thread code 2, 3, 4, 5

Note 11: Not available with Flushing ring: hole and thread code N

Note 12: Not available with Seal surface finish code 1

Note 13: Not available with Hastelloy C276 flushing ring material code H

Note 14: Not available with AISI 316L flushing ring material code A

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

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

Category / Option	Detail	Note		Code
BASE MODEL – 1st to 5th characters				S 2 6 4 E X X X X X X X X X X Cont'd
Flanged Remote seal (flush and extended) to EN 1092-1				
Transmitter side of connection – 6th character				
High side				H
Low side				L
Mounting flange – 7th character				
Rotating				R
Size – 8th character				
DN 50				C
DN 80				D
DN 100				E
Rating – 9th character				
PN 16				1
PN 40				2
PN 63	(Not for DN 100 size)	(Note 1)		3
PN 100	(Not for DN 100 size)	(Note 1)		4
Mounting flange material – 10th character				
Carbon steel				A
AISI 316 ss				B
Extensions length and material – 11th character				
Flush (see next for diaphragm material)				F
50mm (2in)	AISI 316 L ss	(Note 2)		1
50mm (2in)	Hastelloy 276™	(Note 2)		2
100mm (4in)	AISI 316 L ss	(Note 2)		3
100mm (4in)	Hastelloy 276™	(Note 2)		4
150mm (6in)	AISI 316 L ss	(Note 2)		5
150mm (6in)	Hastelloy 276™	(Note 2)		6
Diaphragm material (seal) – 12th character				
AISI 316 L ss		(Note 3)	NACE	S
Hastelloy C276™			NACE	H
Hastelloy C2000™ - (not for extended diaphragm)		(Note 4)	NACE	M
Inconel 625 - (not for extended diaphragm)		(Note 4)	NACE	L
Tantalum - (not for extended diaphragm)		(Note 4)		T
AISI 316 L ss gold plated - (not for extended diaphragm)		(Note 4)	NACE	N
AISI 316 L ss with anti-stick coating		(Note 3)	NACE	K
Hastelloy C276™ with anti-stick coating			NACE	Y
AISI 316 L ss with anti-corrosion and anti-stick coating		(Note 3)		W
Diaflex (AISI with Anti Abrasion treatment)		(Note 3)		F
Superduplex ss (UNS S32750 to ASTM SA479) - (not for extended diaphragm)		(Note 4)		E
Seal surface finish – 13th character				
Serrated		(Notes 3, 5)		1
Smooth				2
Capillary protection – 14th character				
AISI 316 L ss armour	(RECOMMENDED FOR HIGH TEMPERATURE)			A
AISI 316 L ss armour with PVC protective cover				B
Extension tube for direct mount seal				N
Capillary length m (feet) – 15th character				
Internal short for direct mount construction			(Note 6)	1
1 (3)			(Note 7)	A
1.5 (5)			(Note 7)	B
2 (7)			(Note 7)	C
2.5 (8)			(Note 7)	D
3 (10)			(Note 7)	E
3.5 (12)			(Note 7)	F
4 (13)			(Note 7)	G
4.5 (15)			(Note 7)	H
5 (17)			(Note 7)	J
5.5 (18)			(Note 7)	K
6 (20)			(Note 7)	L
6.5 (22)			(Note 7)	M
7 (23)			(Note 7)	N
7.5 (25)			(Note 7)	P
8 (27)			(Note 7)	Q
9 (30)			(Note 7)	R
10 (33)			(Note 7)	S
12 (40)			(Note 7)	T
14 (47)			(Note 7)	U
16 (53)			(Note 7)	V

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

Note 1: Not available with size code E

Note 2: Not available with mounting flange rating code 3, 4

Note 3: Not available with extensions length and material code 2, 4, 6

Note 4: Not available with extensions length and material code 1, 2, 3, 4, 5, 6

Note 5: Not available with diaphragm material code M, L, T, N, K, Y, W and H when selected with extension length and material code F, 2, 4, 6

Note 6: Not available with capillary protection code A, B

Note 7: Not available with capillary protection code N

Note 8: Suitable for oxygen service

Note 9: Suitable for food application

Note 10: Not available with Flushing ring: hole and thread code 2, 3, 4, 5

Note 11: Not available with Flushing ring: hole and thread code N

Note 12: Not available with Seal surface finish code 1

Note 13: Not available with Hastelloy C276 flushing ring material code H

Note 14: Not available with AISI 316L flushing ring material code A

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

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

BASE MODEL – 1st to 5th characters	**S**	**2**	**6**	**4**	**G**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**Cont'd**
Flanged seal (flush) to JIS															
Transmitter side of connection – 6th character															
High side						H									
Low side						L									
Mounting flange – 7th character															
Rotating							R								
Size – 8th character															
A50								B							
A80								C							
A100								D							
Rating – 9th character															
10K									2						
20K									4						
40K (Note 1)									6						
Mounting flange material – 10th character															
Carbon steel										A					
AISI 316 ss										B					
Extensions length and material – 11th character															
Flush (see next for diaphragm material)											F				
Diaphragm material (seal) – 12th character															
AISI 316 L ss								NACE				S			
Hastelloy C276™								NACE				H			
Hastelloy C2000™								NACE				M			
Inconel 625								NACE				L			
Tantalum												T			
AISI 316 L ss gold plated								NACE				N			
AISI 316 L ss with anti–stick coating								NACE				K			
Hastelloy C276™ with anti–stick coating								NACE				Y			
AISI 316 L ss with anti-corrosion and anti-stick coating								NACE				W			
Superduplex ss (UNS S32750 to ASTM SA479)								NACE				E			
Seal surface finish – 13th character															
Serrated (Note 2)													1		
Smooth													2		
Capillary protection – 14th character															
AISI 316 L ss armour (RECOMMENDED FOR HIGH TEMPERATURE)														A	
AISI 316 L ss armour with PVC protective cover														B	
Extension tube for direct mount seal														N	
Capillary length m (feet) – 15th character															
Internal short for direct mount construction							(Note 3)								1
1 (3)							(Note 4)								A
1.5 (5)							(Note 4)								B
2 (7)							(Note 4)								C
2.5 (8)							(Note 4)								D
3 (10)							(Note 4)								E
3.5 (12)							(Note 4)								F
4 (13)							(Note 4)								G
4.5 (15)							(Note 4)								H
5 (17)							(Note 4)								J
5.5 (18)							(Note 4)								K
6 (20)							(Note 4)								L
6.5 (22)							(Note 4)								M
7 (23)							(Note 4)								N
7.5 (25)							(Note 4)								P
8 (27)							(Note 4)								Q
9 (30)							(Note 4)								R
10 (33)							(Note 4)								S
12 (40)							(Note 4)								T
14 (47)							(Note 4)								U
16 (53)							(Note 4)								V

BASIC ORDERING INFORMATION S264G		**X**	**X**	**X**	**X**	**X**
Fill fluid – 16th character						
Silicone oil		S				
Inert fluid - Galden	(Note 3)	N				
Inert fluid - Halocarbon	(Note 3)	D				
SIlicone oil for high temperature		H				
Silicone polymer for low temperature		C				
Mineral oil (FDA approved)	(Note 4)	W				
Vegetable oil (FDA approved)	(Note 4)	A				
Glycerin-water (FDA approved)	(Note 4)	B				
Certification – 17th character						
None			1			
Flushing ring: hole and thread – 18th character						
None				N		
Flushing ring material – 19th character						
None					N	
Flushing ring: plug and gasket – 20th character						
No plug - no gasket						N

Note 1: Not available with A100 size code D

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

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

Note 4: Not available with capillary protection code N

Note 5: Suitable for oxygen service

Note 6: Suitable for food application

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

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

BASE MODEL – 1st to 5th characters						**S**	**2**	**6**	**4**	**M**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**
Off-line mini-flanged seal																					
Transmitter side of connection – 6th character																					
High side											H										
Low side											L										
Mounting flange– 7th character																					
Integral with seal												P									
Size/Mounting flange rating – 8th character																					
1/2in	ASME CL 150												6								
1/2in	ASME CL 300												7								
1in	ASME CL 150												A								
1in	ASME CL 300												C								
1 1/2in	ASME CL 150												B								
1 1/2in	ASME CL 300												D								
DN25	EN PN 16/40												M								
DN40	EN PN 16/40												N								
Mounting flange/Seat form (seal) – 9th character																					
AISI 316 ss	Form RF (raised face) – serrated finish		(Note 1)		NACE									D							
AISI 316 ss	EN 1092-1 Type B1 – serrated finish		(Note 2)		NACE									L							
Hastelloy C276™	Form RF (raised face) – serrated finish		(Note 1)		NACE									U							
Hastelloy C276™	EN 1092-1 Type B1 – serrated finish		(Note 2)		NACE									V							
Diaphragm material (seal) – 10th character																					
AISI 316 L ss					NACE									S							
Hastelloy C276™					NACE									H							
Hastelloy C2000™					NACE									M							
Inconel 625					NACE									L							
Tantalum														T							
AISI 316 L ss gold plated														N							
Capillary protection – 11th character																					
AISI 316 L ss armour		(RECOMMENDED FOR HIGH TEMPERATURE)													A						
AISI 316 L ss armour with PVC protective cover															B						
Extension tube for direct mount seal															N						
Capillary length m (feet) – 12th character																					
Internal short for direct mount construction					(Note 3)											1					
1 (3)					(Note 4)											A					
1.5 (5)					(Note 4)											B					
2 (7)					(Note 4)											C					
2.5 (8)					(Note 4)											D					
3 (10)					(Note 4)											E					
3.5 (12)					(Note 4)											F					
4 (13)					(Note 4)											G					
4.5 (15)					(Note 4)											H					
5 (17)					(Note 4)											J					
5.5 (18)					(Note 4)											K					
6 (20)					(Note 4)											L					
6.5 (22)					(Note 4)											M					
7 (23)					(Note 4)											N					
7.5 (25)					(Note 4)											P					
8 (27)					(Note 4)											Q					
9 (30)					(Note 4)											R					
Fill fluid – 13th character																					
Silicone oil																	S				
Inert fluid - Galden		(Note 5)															N				
Inert fluid - Halocarbon		(Note 5)															D				
SIlicone oil for high temperature																	H				
Silicone polymer for low temperature																	C				
Mineral oil (FDA approved)		(Note 6)															W				
Vegetable oil (FDA approved)		(Note 6)															A				
Glycerin-water (FDA approved)		(Note 6)															B				
Flushing connections – 14th character																					
Not required																		1			
Provided																		Q			
Gasket – 15th character																					
PTFE																					2
Viton ™																					3
Graphite																					7

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

Note 2: Not available with size/mounting flange rating code A, B, C, D, 6, 7

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

Note 4: Not available with capillary protection code N

Note 5: Suitable for oxygen service

Note 6: Suitable for food application

BASIC ORDERING INFORMATION model S264T Off-line threaded seal

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

BASE MODEL – 1st to 5th characters			**S**	**2**	**6**	**4**	**T**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**
Off-line threaded seal																				
Transmitter side of connection – 6th character																				
High side								H												
Low side								L												
Size – 7th character																				
1/4in NPT-f									1											
1/2in NPT-f									2											
3/4in NPT-f									5											
1in NPT-f									3											
1-1/2in NPT-f									4											
Bolts – 8th character																				
AISI 316 L ss										1										
Carbon steel										2										
Alloy steel		NACE								3										
Flange material – 9th character																				
AISI 316 ss		NACE									1									
Hastelloy C276™		NACE									2									
Diaphragm material – 10th character																				
AISI 316 L ss		NACE										S								
Hastelloy C276™		NACE										H								
Hastelloy C2000™		NACE										M								
Inconel 625		NACE										L								
Tantalum												T								
AISI 316 L ss gold plated												N								
Capillary protection – 11th character																				
AISI 316 L ss armour	(RECOMMENDED FOR HIGH TEMPERATURE)												A							
AISI 316 L ss armour with PVC protective cover													B							
Extension tube for direct mount seal													N							
Capillary length m (feet) – 12th character																				
Internal short for direct mount construction						(Note 1)										1				
1 (3)						(Note 2)										A				
1.5 (5)						(Note 2)										B				
2 (7)						(Note 2)										C				
2.5 (8)						(Note 2)										D				
3 (10)						(Note 2)										E				
3.5 (12)						(Note 2)										F				
4 (13)						(Note 2)										G				
4.5 (15)						(Note 2)										H				
5 (17)						(Note 2)										J				
5.5 (18)						(Note 2)										K				
6 (20)						(Note 2)										L				
6.5 (22)						(Note 2)										M				
7 (23)						(Note 2)										N				
7.5 (25)						(Note 2)										P				
8 (27)						(Note 2)										Q				
9 (30)						(Note 2)										R				
Fill fluid – 13th character																				
Silicone oil																	S			
Inert fluid - Galden	(Note 3)																N			
Inert fluid - Halocarbon	(Note 3)																D			
Sllicone oil for high temperature																	H			
Silicone polymer for low temperature																	C			
Mineral oil (FDA approved)	(Note 4)																W			
Vegetable oil (FDA approved)	(Note 4)																A			
Glycerin-water (FDA approved)	(Note 4)																B			
Flushing connections – 14th character																				
Not required																		1		
Provided	(Note 5)																	Q		
Gasket – 15th character																				
PTFE																				2
Viton ™																				3
Graphite																				7

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

Note 2: Not available with capillary protection code N

Note 3: Suitable for oxygen service

Note 4: Suitable for food application

Note 5: Not available with size code 4

BASIC ORDERING INFORMATION model S264R Flanged seal - Ring Joint

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

BASE MODEL – 1st to 5th characters	**S**	**2**	**6**	**4**	**R**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**Cont'd**
Flanged seal Ring joint to ASME B16.5															
Transmitter side of connection – 6th character															
High side						H									
Low side						L									
Mounting flange – 7th character															
Rotating							R								
Size – 8th character															
1-1/2in								B							
2in								C							
3in								D							
Rating – 9th character															
ASME CL 150									1						
ASME CL 300									2						
ASME CL 600									3						
ASME CL 900									4						
ASME CL 1500									5						
Mounting flange material – 10th character															
Carbon steel										A					
AISI 316 ss										B					
Extensions length and material – 11th character															
Flush (see next for diaphragm material)											F				
Diaphragm material – 12th character															
AISI 316 L ss								NACE				S			
Hastelloy C276™								NACE				H			
Inconel 625								NACE				L			
Seal surface finish – 13th character															
Ring joint													3		
Capillary protection – 14th character															
AISI 316 L ss armour (RECOMMENDED FOR HIGH TEMPERATURE)														A	
AISI 316 L ss armour with PVC protective cover														B	
Extension tube for direct mount seal														N	
Capillary length m (feet) – 15th character															
Internal short for direct mount construction (Note 1)															1
1 (3) (Note 2)															A
1.5 (5) (Note 2)															B
2 (7) (Note 2)															C
2.5 (8) (Note 2)															D
3 (10) (Note 2)															E
3.5 (12) (Note 2)															F
4 (13) (Note 2)															G
4.5 (15) (Note 2)															H
5 (17) (Note 2)															J
5.5 (18) (Note 2)															K
6 (20) (Note 2)															L
6.5 (22) (Note 2)															M
7 (23) (Note 2)															N
7.5 (25) (Note 2)															P
8 (27) (Note 2)															Q
9 (30) (Note 2)															R
10 (33) (Note 2)															S
12 (40) (Note 2)															T
14 (47) (Note 2)															U
16 (53) (Note 2)															V

BASIC ORDERING INFORMATION S264R		**X**	**X**	**X**	**X**	**X**
Fill fluid – 16th character						
Silicone oil		S				
Inert fluid - Galden	(Note 3)	N				
Inert fluid - Halocarbon	(Note 3)	D				
Sllicone oil for high temperature		H				
Silicone polymer for low temperature		C				
Mineral oil (FDA approved)	(Note 4)	W				
Vegetable oil (FDA approved)	(Note 4)	A				
Glycerin-water (FDA approved)	(Note 4)	B				
Certification – 17th character						
None			1			
Flushing ring: hole and thread – 18th character						
Not fitted				N		
Flushing ring material – 19th character						
None					N	
Flushing ring: plug and gasket – 20th character						
None						N

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

Note 2: Not available with capillary protection code N

Note 3: Suitable for oxygen service

Note 4: Suitable for food application

BASIC ORDERING INFORMATION model S264W Wafer Remote seal

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

Description	Notes	NACE	S 2 6 4 W X X X X F X X X X X Cont'd
BASE MODEL – 1st to 5th characters			S264W
Wafer Remote Seal			
Transmitter side of connection – 6th character			
High side			H
Low side			L
Centering system – 7th character			
Seat on back diameter (suitable for ASME backup flange)			B
Size – 8th character			
1 1/2in ASME			A
2in ASME			B
3in ASME			C
1 1/2in ASME food design			1
3in ASME food design			2
EN DN40			D
EN DN50			E
EN DN80			F
Seat finish – 9th character			
Serrated finish (suitable for ASME)	(Notes 1, 2)		D
Smooth finish (suitable for ASME)	(Note 1)		E
Serrated finish to EN 1092-1 Type B1; up to PN40	(Notes 2, 3)		R
Serrated finish to EN 1092-1 Type B2; PN63 to PN100	(Notes 2, 3)		S
Smooth finish (suitable for EN)	(Notes 2, 3)		T
Use code – 10th character			F
Diaphragm material – 11th character			
AISI 316 L ss		NACE	S
Hastelloy C276™	(Notes 2, 4)	NACE	H
Hastelloy C2000™	(Notes 2, 4)	NACE	M
Inconel 625	(Notes 2, 4)	NACE	L
Tantalum	(Notes 2, 4)		T
AISI 316 L ss gold plated	(Notes 2, 4)	NACE	N
AISI 316 L ss with anti–stick coating	(Notes 2, 4)	NACE	K
Hastelloy C276™ with anti–stick coating	(Notes 2, 4)	NACE	Y
AISI 316 L ss with anti-corrosion and anti-stick coating	(Notes 2, 4)	NACE	W
Diaflex (AISI with Anti Abrasion treatment)	(Note 2)	NACE	F
Superduplex ss (UNS S32750 to ASTM SA479)	(Note 2)	NACE	E
Capillary protection – 12th character			
AISI 316 L ss armour	(RECOMMENDED FOR HIGH TEMPERATURE)		A
AISI 316 L ss armour with PVC protective cover			B
Capillary length m (feet) – 13th character			
1 (3)			A
1.5 (5)			B
2 (7)			C
2.5 (8)			D
3 (10)			E
3.5 (12)			F
4 (13)			G
4.5 (15)			H
5 (17)			J
5.5 (18)			K
6 (20)			L
6.5 (22)			M
7 (23)			N
7.5 (25)			P
8 (27)			Q
9 (30)			R
10 (33)			S
12 (40)			T
14 (47)			U
16 (53)			V
Fill fluid – 14th character			
Silicone oil			S
Inert fluid - Galden	(Notes 2, 5)		N
Inert fluid - Halocarbon	(Notes 2, 5)		D
SIlicone oil for high temperature	(Note 2)		H
Silicone polymer for low temperature	(Note 2)		C
Mineral oil (FDA approved)	(Note 6)		W
Vegetable oil (FDA approved)	(Note 6)		A
Glycerin-water (FDA approved)	(Note 6)		B
Certification – 15th character			
None			1

BASIC ORDERING INFORMATION S264W			X	X	X
Flushing ring: hole and thread – 16th character					
None			N		
1 hole - 1/2in NPT			2		
2 holes - 1/2in NPT			3		
1 hole - 1/4in NPT			4		
2 holes - 1/4in NPT			5		
Flushing ring material – 17th character					
None	(Note 7)			N	
AISI 316 L ss	(Note 8)	NACE		A	
Hastelloy C276	(Notes 4, 8)	NACE		H	
Flushing ring: plug and gasket – 18th character					
No plug - no gasket					N
No plug - garlock	(Note 8)				A
No plug - PTFE	(Note 8)				B
No plug - graphite	(Note 8)				C
AISI 316 L ss - no gasket	(Notes 8, 9)				D
AISI 316 L ss - garlock	(Notes 8, 9)				E
AISI 316 L ss - PTFE	(Notes 8, 9)				F
AISI 316 L ss - graphite	(Notes 8, 9)				G
Hastelloy C276 - no gasket	(Notes 8, 10)				H
Hastelloy C276 - garlock	(Notes 8, 10)				L
Hastelloy C276 - PTFE	(Notes 8, 10)				M
Hastelloy C276 - graphite	(Notes 8, 10)				P

Note 1: Not available with EN size code D, E, F

Note 2: Not available with food design size code 1, 2

Note 3: Not available with ASME size code A, B, C

Note 4: Not available with serrated seat finish code D, R, S

Note 5: Suitable for oxygen service

Note 6: Suitable for food application

Note 7: Not available with flushing ring - hole and thread code 2, 3, 4, 5

Note 8: Not available with flushing ring - hole and thread code N

Note 9: Not available with flushing ring material code H

Note 10: Not available with AISI 316L flushing ring material code A

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