high-accuracy
measurement
instruments

FICHA TÉCNICA DE PRODUTO

PRODUCT DATASHEET

HMI – Automação e Instrumentação, Lda.

Rua dos 5 Caminhos, nº 570
4780-382 Santo Tirso
PORTUGAL

Tel. +351 252 850 501
Fax. +351 300 013 487

Web: www.hmi.pt

Email: hmi@hmi.pt

Data Sheet DS/S26-EN Rev. E

Model S26 seals for remote and direct mount

Measurement made easy

Engineered solutions for all applications

All welded constructions
combine an economically feasible and technically sound solution ensuring total reliability at line pressure down to full vacuum

Large selection of options, materials and fill fluids
meet nearly all process requirements

Wide range of remote seal types
allow optimum design for each application without compromise of performance

Special designed remote seals for individual process solutions
add flexibility for most demanding services

Power and productivity for a better world™

Model S26 seals for remote and direct mount

Remote Seals Overview

The S26 seals are used in combination with 2600T transmitters, allowing differential, gauge or absolute pressure measurements.
Connection of the seal(s) to the relevant transmitter can be achieved as follows :

- directly mounted with a short capillary connecting the „integral“ seal to the transmitter sensor;
- through a capillary system which link the transmitter sensor to a „remote“ seal of any version.

Using remote seal the transmitter can be selected with

- two seals using same fill fluid, capillary and diaphragm size
- one seal having the other side configured with a process flange for wet/dry leg connection or a blind flange providing vacuum or atmospheric reference.

Model 264HR/NR transmitters have always one remote seal only, with a selectable reference to atmosphere or vacuum respectively for gauge or absolute pressure measurements.
The S26 Series Seal System is a protective device used to isolate 2600T series transmitters from the process fluid.
The seal system provides a flexible diaphragm seal between the process fluid and a liquid filled capillary tube connected to the body of the transmitter. The diaphragm isolates the process fluid while the filled capillary tube hydraulically transmits the process pressure to the transmitter sensor. The capillary of remote seal is corrosion-resistant with robust costruction in stainless steel with spiral armour protection, also PVC jacket; PVC protection is always recommended except for high temperature application, where stainless steel armour is suggested. The all welded construction assures reliable operation over the widest range of operating temperature and under vacuum conditions.
For certain applications, use of seal is necessary to prevent the process fluid from leaving its enclosure, due to reasons such as :

- the process fluid has solids in suspension or is highly viscous and can foul impulse lines.
- the process fluid can solidify in impulse lines or the transmitter.
- the process fluid is too hazardous to enter the control area where the transmitter is located.
- the process temperature exceeds the recommended limits for the transmitter.
- the application is interface level or density measurement. Remote seals offer the required constant and equal specific gravity of the pressure transfer fluid on the high and low sides of the transmitter.
- the transmitter must be located away from the process for easier maintenance.

The S26 series is available with process connections for ASME, EN or JIS pipe flanges, wedge flow elements, chemical tees, and threaded pipe fittings. Extended diaphragm remote seals, suitable for connection to 2in - 3in or 4in flanged tank nozzles or flanged tees, permit the seal diaphragm to be located flush with the inside of a tank or pipe. Sanitary type seals meet the stringent requirements of sanitary food, dairy, pharmaceutical and BioTech applications, offering FDA approved fillings and compliance with 3-A Sanitary Standards. Fill fluids with FDA are defined as food fills and are Generally Recognized As Safe (GRAS) by the US Food and Drug Administration (FDA).

Seal system selection criteria

Application of an S26 system in direct mount or remote seal configuration to 2600T transmitters affects performances of original devices. Effects are evident in:

- Accuracy
- Temperature effects
- Dynamic response

Accuracy is only marginally affected when seal diaphragm stiffness is relevant compared with sensor stiffness.
This is the only characteristic of the S26 system which has role on accuracy performance. High stiffness of diaphragm associated with low URL might produce increased errors of linearity, hysteresis, and long term stability; when diaphragm stiffness is accuracy related also temperature effects are significantly affected.
Some basic considerations on diaphragm stiffness help understanding effects introduced by S26 system associated with transmitters. This is physically defined by the ratio between the pressure variation applied to the diaphragm and the corresponding volume variation. The stiffness is not linear along the whole diaphragm volumetric displacement, but the S26 design is such to maintain the system linear within the service conditions of the transmitter such as:

- Operating pressure range
- Operating static pressure (for differential transmitters)
- Ambient and process temperature limits

Diaphragm stiffness is a function of material and thickness (elastic coefficient), diameter (type), convolution shape and geometry (design defined).

S26 system has effect on temperature performance of the complete transmitter. This effect is mostly on zero of the instrument and is produced by the expansion of the fill fluid into the closed volume formed by the transmitter flange cavity the capillary volume and the remote seal volume. This volume filled with a fluid with specific expansion coefficient; change in temperature of the measuring device produce a volume variation which is absorbe by the remote diaphragm, whose stiffness produces a change in the fluid pressure: this is the zero error. In real application the transmitter/seal system is not the same and stable temperature.
Therefore the errors referred in this document for each type of diaphragm and different fluids should be taken as a reference for qualitatively evaluation and not a true behaviour in normal application conditions. Should again be recognized that the stiffness of diaphragm and in this case, the thermal coefficient of fluid are the parameter to take into account.

Application of S26 seal to transmitters increases the original time response. The amount of the increase depends from the number of elements and condition of the instrument as follow:
- transmitter sensor range
- physical configuration (i.e. a remote seal on other side)
- type of measure/number of seal (one or two)
- fill fluid viscosity of the S26 system applied
- ambient temperature (affects the transmitter and the capillary) and process temperature on the seal diaphragm
- capillary length

The delay introduced by the seal may be considered as an added constant time to the one of the associated transmitter.

For obtaining the best application solution :
- choose sensor code with URL closest to application SPAN
- select largest diameter diaphragm seal related to URL.
- keep the capillary length as short as possible
- select the fill fluid that suits the most extreme process conditions expected (highest temperature and lowest pressure) and it is compatible with the process fluid.
- In vacuum application, choose always the all welded version and mount the transmitter primary 30 cm/12 inches or more below the bottom seal connection.
- In a two-seal system use the same diaphragm size, capillary length and fill fluid on each side of the transmitter

Ordering Information

The transmitter and each seal system are each identified by a product code number. These code numbers are stamped on the transmitter nameplate and each character identifies specific product features. Refer to ordering information for a detailed explanation of the product code numbers.

Industrial application in chemical, sanitary, food and any other process industries may require seal configurations and/or process connection different from those reported in this document. Each “special” should be evaluated by ABB to check the correctness and its level of functionality. Ask for the “S26 series seal form” to define precisely the measuring problem and application requirements.

ABB can also cooperate with you by developing a special remote seal for problems requiring individual solutions.

PLEASE CONTACT YOUR LOCAL ABB OFFICE OR REPRESENTATIVE FOR ADDITIONAL INFORMATION, SPECIFIC SEAL DATA AND APPLICABILITY.

Model S26 seals
for remote and direct mount

The following table shows the types of standard seals considered in this leaflet, detailing the MAXIMUM CAPILLARY LENGTH according to the combination SEAL/TRANSMITTER SENSOR.
The mnemonics will be used as shortest cross references with the transmitter data sheet which should be read in conjunction with this data sheet.

Seal model	Seal type	Seal diaphragm size (thickness) [flange type]	Two seals construction SENSOR									One seal construction SENSOR										Mnemonic
			B-C	E	F	G	H-L	M	N-P	Q-R	S	C	E	F	G	H-L	D-M	U-P	Q-R	S	V	Z	
S26WA S26WE	Wafer (ASME and EN standards)	1.5 in. /DN 40	-	-	-	-	4	5	5	5	5	-	-	-	-	3	5	5	5	5	5	5	P1.5
		2 in. / DN 50	-	-	3	3	8	8	8	8	8	-	-	2	2	6	8	8	8	8	8	8	P2
		3 in. / DN 80	1.5	3	6	6	8	16	16	16	16	-	1	4	4	10	10	10	10	10	10	10	P3
		1.5 in. /DN 40 (low)	-	-	-	3	6	6	6	6	6	-	-	-	-	4	6	6	6	6	6	-	F1.5
		2 in. / DN 50 (low)	1	2	4	4	8	12	16	16	16	1	-	3	3	8	12	16	16	16	16	-	F2
		3 in. / DN 80 (low)	2	5	8	8	10	16	16	16	16	2	2	6	6	10	16	16	16	16	16	-	F3
S26FA S26FE S26RA S26RE	Flanged flush diaphragm (ASME and EN standards)	2 in. / DN 50	-	-	3	3	8	8	8	8	8	-	-	2	2	6	8	8	8	8	8	8	P2
		3 in. / DN 80	1.5	3	6	6	8	16	16	16	16	-	1	4	4	10	10	10	10	10	10	10	P3
		4 in. / DN 100	1.5	3	6	6	8	16	16	16	16	-	1	4	4	10	10	10	10	10	10	10	P3
		2 in. / DN 50 (low)	1	2	4	4	8	12	16	16	16	1	-	3	3	8	12	16	16	16	16	-	F2
		3 in. / DN 80 (low)	2	5	8	8	10	16	16	16	16	2	2	6	6	10	16	16	16	16	16	-	F3
		4 in. / DN 100 (low)	2	5	8	8	10	16	16	16	16	2	2	6	6	10	16	16	16	16	16	-	F3
	Flanged extended diaphragm (ASME and EN standards)	2 in. / DN 50	-	-	3	3	6	6	6	6	-	-	-	-	-	4	6	6	6	-	-	-	E2
		3 in. / DN 80	1	2	4	4	8	12	12	12	-	-	-	3	3	8	10	10	10	-	-	-	E3
		4 in. / DN 100	1.5	3	6	6	8	16	16	16	16	-	1	4	4	10	10	10	10	10	10	-	P3
		2 in. / DN 50 [fixed]	-	-	-	3	6	6	6	6	6	-	-	-	-	4	6	6	6	6	-	-	F1.5
		3 in. / DN 80 [fixed]	2	5	8	8	10	12	12	12	12	-	2	6	6	10	12	12	12	12	-	-	F2.5
		4 in. / DN100 [fixed]	2	5	8	8	10	12	12	12	12	-	2	6	6	10	12	12	12	12	-	-	F2.5
S26RJ	Flanged flush diaphragm (JIS standards)	A 50	-	-	3	3	8	8	8	8	8	-	-	2	2	6	8	8	8	8	8	8	P2
		A 80	1.5	3	6	6	8	16	16	16	16	-	1	4	4	10	10	10	10	10	10	10	P3
		A 100	1.5	3	6	6	8	16	16	16	16	-	1	4	4	10	10	10	10	10	10	10	P3
S26RR	Flanged flush diaphragm (Ring Joint ASME standard)	1.5 in.	-	-	-	-	4	5	5	5	5	-	-	-	-	3	5	5	5	5	5	5	P1.5
		2 in.	-	-	3	3	8	8	8	8	8	-	-	2	2	6	8	8	8	8	8	8	P2
		3 in.	1.5	3	6	6	8	16	16	16	16	-	1	4	4	10	10	10	10	10	10	10	P3
S26RH	Flanged to ISO 10423 flush diaphragm (API)	1 13/16 in.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5	H1.5
		2 1/16 in.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5	P1.5
S26CN	Flanged Chemical Tee	3 in.	1.5	3	6	6	8	8	8	8	8	-	1	4	4	8	8	8	8	8	8	-	P3
S26TT	Threaded off-line flanged	2 1/2 in.	1	2	3	3	8	12	12	12	12	-	2	3	3	8	8	8	8	8	8	-	T2.5
S26MA S26ME	Off-line flanged (ASME and EN standards)	2 1/2 in.	1	2	3	3	8	12	12	12	12	-	2	3	3	8	8	8	8	8	8	-	T2.5
S26SS	Union nut, Triclamp Cherry Burrel, Sanitary, Aseptic	2 in. / F50	-	-	1	1	3	6	6	6	-	-	-	1	1	3	6	6	6	-	-	-	S2
		3 in. / F80	1.5	3	6	6	10	10	10	10	-	-	3	6	6	10	10	10	10	-	-	-	S3
		4 in.	1.5	3	6	6	10	10	10	10	-	-	3	6	6	10	10	10	10	-	-	-	S3
S26VN	Saddle and Socket	2 1/2 in.	-	-	-	-	4	5	5	5	5	-	-	-	-	3	5	5	5	5	5	5	P1.5
S26UN	Union connection type	1 1/2 in.	-	-	-	-	-	-	-	-	-	-	-	-	-	3	5	5	5	5	-	-	Z1.5
S26BN	Button type	1 in.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3	3	-	B1
S26PN	Urea service flanged	1 1/2 in.	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5	5	5	5	5	-	U1.5
		2 1/2 in.	-	-	3	3	6	6	6	6	6	-	-	3	3	6	6	6	6	6	6	-	U2.5

Functional Specifications

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

FILL FLUID CHARACTERISTICS

Fill fluid (application)	Process temperature and pressure limits				Specifications @ 25 °C (77°F)		
	Tmax °C (°F) @ Pabs > of	Pmin mbar abs (mmHg)	Tmax °C (°F) @ Pmin	Tmin °C (°F)	Specific gravity (kg/dm3)	Kinematic viscosity (cst)	Thermal expansion (x 10-3 /°C)
Silicone oil PMX 200 10 cSt	250 (480) @ 385 mbar	0.7 (0.5)	130 (266)	-40 (-40)	0.934	10	1.08
Silicone oil Baysilone PD5 5 cSt	250 (480) @ 900 mbar	0.7 (0.5)	45 (113)	-85 (-121)	0.923	5	0.98
Inert oil Galden G5 (oxygen service)	160 (320) @ 1 bar	2.1 (1.52)	60 (140)	-20 (-4)	1.82	4.4	1.1
Inert oil Halocarbon 4.2 (oxygen service)	180 (356) @ 425 mbar	4 (3)	70 (158)	-20 (-4)	1.87	6.3	0.864
Silicone polymer Syltherm XLT (cryogenic service)	100 (212) @ 118 mbar	2.1 (1.52)	20 (68)	-100 (-148)	0.852	1.4	1
Silicone oil for high temperature	375 (707) @ 1 bar	0.7 (0.5)	220 (428)	-10 (14)	1.07	39	0.77
Vegetable oil Neobee M-20 (food - sanitary) FDA approved	200 (390) @ 1 bar	10 (7.2)	20 (68)	-18 (0)	0.92	9.8	1.2
Mineral oil Esso Marcol 122 (food - sanitary) FDA approved	250 (480) @ 630 mbar	0.7 (0.5)	110 (230)	-6 (21)	0.849	34.2	0.79
Glycerin Water 70% (food - sanitary) FDA approved	93 (200) @ 1 bar	1000 (760)	93 (200)	-7 (20)	1.08	2	0.36

Absolute viscosity (cP) = Kinematic Viscosity (cSt) x Specific gravity at specified temperature.
The absolute viscosity value is used for response time calculation.

SEALS DIMENSIONS ON FOLLOWING PAGES ARE IN mm (in)

Model S26 seals for remote and direct mount

S26WA, S26WE Model Wafer remote diaphragm seal

The wafer remote seal is designed to be clamped between two ASME or EN raised face flanges.
The diaphragm side of the seal faces the process flange and a blind back-up flange is used on the other side of the seal.

Pressure limits

Seal model S26WA to ASME B16.5
up to 41.37 MPa, 413.7 bar, 6000 psi

Seal model S26WE to EN 1092-1	
Form B1	40 MPa, 400 bar, 5800 psi
Form D	16 MPa, 160 bar 2320 psi
Form E	10 MPa, 100 bar, 1450 psi

but not greater then rating of mounting flange (NOT SUPPLIED

Vacuum service

Full vacuum subject to fill fluid limits.
Refer to FILL FLUID CHARACTERISTICS table. Minimum pressure with tantalum diaphragm is 1 kPa abs, 10 mbar abs, 0.15 psia.

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

Process temperature limits

Refer to FILL FLUID CHARACTERISTICS table and as follows for specific variants.

Material	
Tantalum diaphragm	260 °C (500 °F)
PFA anti-stick coating	204 °C (400 °F)
PFA anti-corrosion and anti-stick coating	250 °C (482 °F)
AISI gold plated diaphragm	320 °C (608 °F)

Gasket seat finish

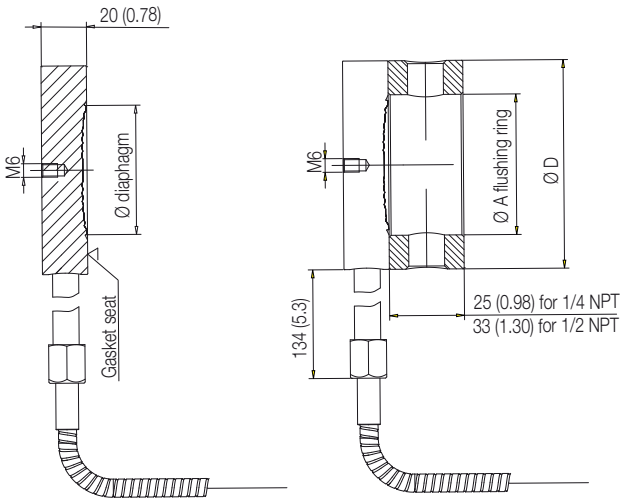
Smooth (ASME or EN): 0.8 µm (Ra)
Serrated (ASME): 3.2 to 6.3 µm (Ra)
Serrated (EN 1092-1 Type B1): 3.2 to 12.5 µm (Ra)
Serrated (EN 1092-1 Type D and E): according to standard

Temperature effect

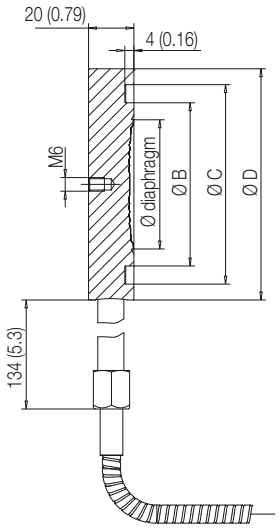
The following table shows temperature effect per 20 K (36 °F) change, detailed separately for
a) the seal (one element), as process temperature error
b) the capillary per meter
c) the system (transmitter sensor when combined with a seal of specific size/type, either direct mount or remote) referred to silicone oil (PMX 200) filling and AISI 316 L ss diaphragm materials.
For filling different from silicone oil (PMX 200) the errors can be multiplied by ratio between the thermal expansion coefficients of the selected filling divided by the one of PMX 200, listed in the fill fluid characteristics table.
THE ERRORS IN TABLE CAN BE CONSIDERED DIVIDED BY 4 FOR TRANSMITTERS USING SAME REMOTE SEAL ON THE TWO SIDES

S26W wafer seal size - Mnemonic	Sensor URL	Seal error (process)	Remote mount error (ambient)	1 metre capillary error (ambient)
1 1/2 in. / DN 40 - P1.5	≥ 160 kPa, 642 inH2O	0.74 kPa, 3 inH2O	0.62 kPa, 2.48 inH2O	0.31 kPa, 1.24 inH2O
1 1/2 in. / DN 40 - F1.5	65 kPa, 260 inH2O	0.15 kPa, 0.6 inH2O	0.15 kPa, 0.6 inH2O	0.12 kPa, 0.48 inH2O
1 1/2 in. / DN 40 - F1.5	≥ 160 kPa, 642 inH2O	0.15 kPa, 0.6 inH2O	0.15 kPa, 0.6 inH2O	0.08 kPa, 0.32 inH2O
2 in. / DN 50 - P2	40 - 65 kPa, 160 - 260 inH2O	0.23 kPa, 0.92 inH2O	0.14 kPa, 0.56 inH2O	0.11 kPa, 0.44 inH2O
2 in. / DN 50 - P2	≥160 kPa, 642 inH2O	0.23 kPa, 0.92 inH2O	0.14 kPa, 0.56 inH2O	0.07 kPa, 0.28 inH2O
2 in. / DN 50 - F2	≥ 4 kPa, 16 inH2O	0.05 kPa, 0.2 inH2O	0.04 kPa, 0.16 inH2O	0.03 kPa, 0.12 inH2O
3 in. / DN 80 - P3	4 - 16 kPa, 16 - 64 inH2O	0.08 kPa, 0.32 inH2O	0.02 kPa, 0.08 inH2O	0.02 kPa, 0.08 inH2O
3 in. / DN 80 - P3	≥ 40 kPa, 160 inH2O	0.08 kPa, 0.32 inH2O	0.02 kPa, 0.08 inH2O	0.03 kPa, 0.12 inH2O
3 in. / DN 80 - F3	≥ 4 kPa, 16 inH2O	0.02 kPa, 0.08 inH2O	0.02 kPa, 0.08 inH2O	0.01 kPa, 0.04 inH2O

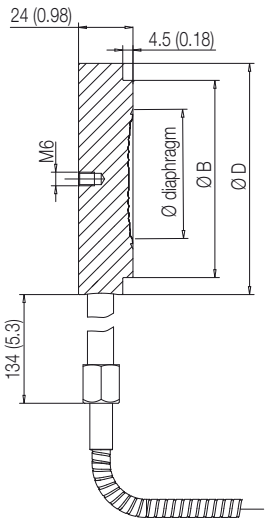
MULTIPLY BY 10 THE kPa VALUES TO OBTAIN mbar.



ASME and EN 1092-1 Form B1 smooth and serrated (flushing ring as option)



EN 1092-1 Form D



EN 1092-1 Form E

Size/Rating	Dimensions mm. (in.) for S26W					
	diaphragm (dia)		A flushing ring	B (dia)	C (dia)	D (dia)
	std. thickness	low thickness	internal dia			
1 1/2 in. ASME B16.5	47 (1.85)	47 (1.85)	52 (2.05)	NA	NA	73 (2.87)
2 in. ASME B16.5	60 (2.36)	58 (2.28)	62 (2.44)	NA	NA	92 (3.62)
3 in. ASME B16.5	89 (3.5)	75 (2.95)	92 (3.62)	NA	NA	127 (5)
DN 40 EN 1092-1 Form B1	47 (1.85)	47 (1.85)	52 (2.05)	NA	NA	88 (3.46)
DN 50 EN 1092-1 Form B1	60 (2.36)	58 (2.28)	62 (2.44)	NA	NA	102 (4.02)
DN 80 EN 1092-1 Form B1	89 (3.5)	75 (2.95)	92 (3.62)	NA	NA	138 (5.43)
DN 40 EN 1092-1 Form D	47 (1.85)	47 (1.85)	NA	60 (2.36)	76 (2.99)	88 (3.46)
DN 50 EN 1092-1 Form D	60 (2.36)	58 (2.28)	NA	72 (2.83)	88 (3.46)	102 (4.02)
DN 80 EN 1092-1 Form D	89 (3.5)	75 (2.95)	NA	105 (4.13)	121 (4.76)	138 (5.43)
DN 40 EN 1092-1 Form E	47 (1.85)	47 (1.85)	NA	75 (2.95)	NA	88 (3.46)
DN 50 EN 1092-1 Form E	60 (2.36)	58 (2.28)	NA	87 (3.42)	NA	102 (4.02)
DN 80 EN 1092-1 Form E	89 (3.5)	75 (2.95)	NA	120 (4.72)	NA	138 (5.43)

Model S26 seals
for remote and direct mount

BASIC ORDERING INFORMATION model S26WA Wafer diaphragm seal to ASME B16.5

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

BASE MODEL - 1st to 5th characters	S 2 6 W A	X	XX	X	XX	X	X	X	X	X
Wafer diaphragm seal to ASME B16.5										
Transmitter Side of Connection - 6th character										
High pressure side		H								
Low pressure side		L								
Mounting Flange Rating / Size - 7th and 8th characters										
ASME 1 1/2 in.			D5							
ASME 2 in.			E5							
ASME 3 in.			G5							
Extensions Length and Material - 9th character										
Flush				F						
Diaphragm Material - 10th and 11th characters										
AISI 316 L ss	NACE				SM					
AISI 316 L ss - Low thickness	NACE				SL					
Hastelloy C-276	NACE				HM					
Hastelloy C-276 - Low thickness	NACE				HL					
Hastelloy C-2000	NACE				MM					
Inconel 625	NACE				LM					
Tantalum					TM					
AISI 316 L ss gold plated	NACE				NM					
AISI 316 L ss with PFA anti-stick coating	NACE				KM					
Hastelloy C-276 with PFA anti-stick coating	NACE				YM					
AISI 316 L ss with PFA coating anti-corrosion and anti-stick	NACE				WM					
Diaflex (AISI with anti-abrasion treatment)	NACE				FM					
Superduplex ss (UNS S32750 to ASTM SA479)	NACE				EM					
Monel	NACE				GM					
Seal Surface Finish - 12th character										
Serrated	(Note 1)					1				
Smooth						2				
Capillary Protection - 13th character										
AISI 316 L ss armour							A			
AISI 316 L ss armour with PVC protective cover							B			

continued
see next page

BASIC ORDERING INFORMATION model S26WA			S 2 6 W A X XX X XX X X	X	X	X	X	X
Capillary Length m (Feet) - 14th character								
1 (3)				A		continued see next page		
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 (23.5)				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 - 15th character								
Silicone oil PMX 200 10 cSt	(-40 to 250 °C; -40 to 480 °F)				S			
Silicone oil Baysilone PD5 5 cSt	(-85 to 250 °C; -121 to 480 °F)				P			
Inert oil - Galden G5	(Oxygen service)	(Note 2)			N			
Inert oil - Halocarbon 4.2	(Oxygen service)	(Note 2)			D			
Silicone oil for high temperature	(-10 to 375 °C; 14 to 707 °F)				G			
Silicone polymer Syltherm XLT	(-100 to 100 °C; -148 to 212 °F)				C			
Mineral oil Esso Marcol 122	(FDA approved)	(Note 3)			W			
Vegetable oil Neobee M-20	(FDA approved)	(Note 3)			A			
Glycerin-water 70%	(FDA approved)	(Note 3)			B			

Model S26 seals for remote and direct mount

BASIC ORDERING INFORMATION model S26WA	S 2 6 W A X XX X XX X X X X	X	X	X
Flushing Ring: Hole and Thread - 16th character				
None		N		
1 hole - 1/2 in. NPT		2		
2 holes - 1/2 in. NPT		3		
1 hole - 1/4 in. NPT		4		
2 holes - 1/2 in. NPT		5		
Flushing Ring Material - 17th character				
None	(Note 4)		N	
AISI 316 L ss	(Note 5)	NACE	A	
Hastelloy C-276	(Notes 5, 6)	NACE	H	
Flushing Ring: Plug and Gasket - 18th character				
No plug - No gasket				N
No plug - garlock	(Note 5)			A
No plug - PTFE	(Note 5)			B
No plug - graphite	(Note 5)			C
AISI 316 L ss - no gasket	(Notes 5, 7)	NACE		D
AISI 316 L ss - garlock	(Notes 5, 7)	NACE		E
AISI 316 L ss - PTFE	(Notes 5, 7)	NACE		F
AISI 316 L ss - graphite	(Notes 5, 7)	NACE		G
Hastelloy C-276 - no gasket	(Notes 5, 8)	NACE		H
Hastelloy C-276 - garlock	(Notes 5, 8)	NACE		L
Hastelloy C-276 - PTFE	(Notes 5, 8)	NACE		M
Hastelloy C-276 - graphite	(Notes 5, 8)	NACE		P

Note 1: Not available with diaphragm material code MM, LM, TM, NM, KM, YM, WM
Note 2: Suitable for oxygen service
Note 3: Suitable for food application
Note 4: Not available with Flushing ring: hole and thread code 2, 3, 4, 5
Note 5: Not available with Flushing ring: hole and thread code N
Note 6: Not available with Seal surface finish code 1
Note 7: Not available with Hastelloy C-276 flushing ring material code H
Note 8: Not available with AISI 316 L flushing ring material code A

BASIC ORDERING INFORMATION model S26WE Wafer diaphragm seal to EN 1092-1

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

BASE MODEL - 1st to 5th characters		**S 2 6 W E**	**X**	**XX**	**X**	**XX**	**X**	**X**	**X**	**X**	**X**
Wafer diaphragm seal to EN 1092-1											
Transmitter Side of Connection - 6th character											
High pressure side			H								
Low pressure side			L								
Mounting Flange Rating / Size - 7th and 8th characters											
EN 1092-1 DN 40				M5							
EN 1092-1 DN 50				N5							
EN 1092-1 DN 80				P5							
Extensions Length and Material - 9th character											
Flush					F						
Diaphragm Material - 10th and 11th characters											
AISI 316 L ss		NACE				SM					
AISI 316 L ss - Low thickness		NACE				SL					
Hastelloy C-276		NACE				HM					
Hastelloy C-276 - Low thickness		NACE				HL					
Hastelloy C-2000		NACE				MM					
Inconel 625		NACE				LM					
Tantalum						TM					
AISI 316 L ss gold plated		NACE				NM					
AISI 316 L ss with PFA anti-stick coating		NACE				KM					
Hastelloy C-276 with PFA anti-stick coating		NACE				YM					
AISI 316 L ss with PFA coating anti-corrosion and anti-stick		NACE				WM					
Diaflex (AISI with anti-abrasion treatment)		NACE				FM					
Superduplex ss (UNS S32750 to ASTM SA479)		NACE				EM					
Monel		NACE				GM					
Seal Surface Finish - 12th character											
Serrated	(Note 1)						1				
Smooth							2				
Form E - Spigot type	(Note 2)						4				
Form D - Groove type	(Note 3)						6				
Capillary Protection - 13th character											
AISI 316 L ss armour								A			
AISI 316 L ss armour with PVC protective cover								B			

continued
see next page

Model S26 seals
for remote and direct mount

BASIC ORDERING INFORMATION model S26WE			**S 2 6 W E X XX X XX X X**	**X**	**X**	**X**	**X**	**X**
Capillary Length m (Feet) - 14th character								
1 (3)				A		continued		
1.5 (5)				B		see next page		
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 (23.5)				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 - 15th character								
Silicone oil PMX 200 10 cSt	(-40 to 250 °C; -40 to 480 °F)				S			
Silicone oil Baysilone PD5 5 cSt	(-85 to 250 °C; -121 to 480 °F)				P			
Inert oil - Galden G5	(Oxygen service)	(Note 4)			N			
Inert oil - Halocarbon 4.2	(Oxygen service)	(Note 4)			D			
Silicone oil for high temperature	(-10 to 375 °C; 14 to 707 °F)				G			
Silicone polymer Syltherm XLT	(-100 to 100 °C; -148 to 212 °F)				C			
Mineral oil Esso Marcol 122	(FDA approved)	(Note 5)			W			
Vegetable oil Neobee M-20	(FDA approved)	(Note 5)			A			
Glycerin-water 70%	(FDA approved)	(Note 5)			B			

BASIC ORDERING INFORMATION model S26WE	S 2 6 W E X XX X XX X X X X	X	X	X
Flushing Ring: Hole and Thread - 16th character				
None		N		
1 hole - 1/2 in. NPT	(Note 6)	2		
2 holes - 1/2 in. NPT	(Note 6)	3		
1 hole - 1/4 in. NPT	(Note 6)	4		
2 holes - 1/4 in. NPT	(Note 6)	5		
Flushing Ring Material - 17th character				
None	(Note 7)		N	
AISI 316 L ss	(Note 8) NACE		A	
Hastelloy C-276	(Notes 8, 9) 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, 10) NACE			D
AISI 316 L ss - garlock	(Notes 8, 10) NACE			E
AISI 316 L ss - PTFE	(Notes 8, 10) NACE			F
AISI 316 L ss - graphite	(Notes 8, 10) NACE			G
Hastelloy C-276 - no gasket	(Notes 8, 11) NACE			H
Hastelloy C-276 - garlock	(Notes 8, 11) NACE			L
Hastelloy C-276 - PTFE	(Notes 8, 11) NACE			M
Hastelloy C-276 - graphite	(Notes 8, 11) NACE			P

Note 1: Not available with diaphragm material code MM, LM, TM, NM, KM, YM, WM
Note 2: Not available with diaphragm material code SM, HM, MM, LM, TM, NM, KM, YM, WM, FM, EM
Note 3: Not available with diaphragm material code SM, HM, HL, MM, LM, TM, NM, KM, YM, WM, FM, EM
Note 4: Suitable for oxygen service
Note 5: Suitable for food application
Note 6: Not available with Seal surface finish code 4, 6
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 Seal surface finish code 1
Note 10: Not available with Hastelloy C-276 flushing ring material code H
Note 11: Not available with AISI 316 L flushing ring material code A

Model S26 seals
for remote and direct mount

S26CN Model Chemical Tee remote diaphragm seal

The chemical tee remote seal is designed to connect to a Wedge Flow Element or to any process fitting with appropriate mating condition. Chemical tee elements cannot be connected to a standard ASME pipe flange.

Pressure limits

Seal model S26C
2 MPa, 20 bar, 290 psi

Vacuum service

Full vacuum subject to fill fluid limits.
Refer to FILL FLUID CHARACTERISTICS table.

Process temperature limits

Refer to FILL FLUID CHARACTERISTICS table and as follows for specific variants.

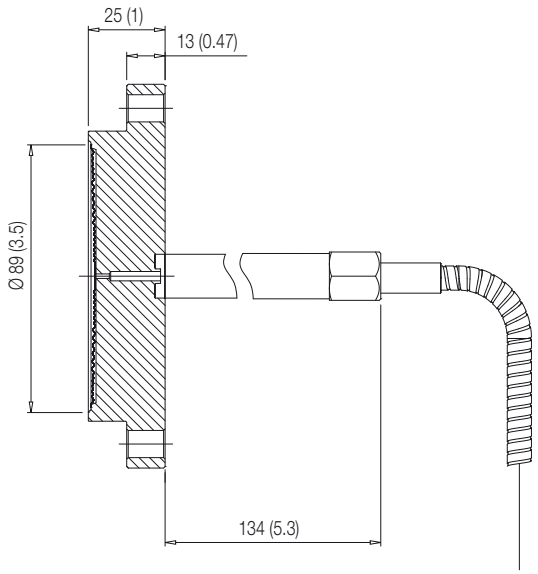
Material	
PFA anti-stick coating	204 °C (400 °F)
PFA anti-corrosion and anti-stick coating	250 °C (482 °F)
PTFE gasket	-100 and 260 °C (-148 and 500 °F)
graphite gasket	-100 and 340 °C (-148 and 644 °F)

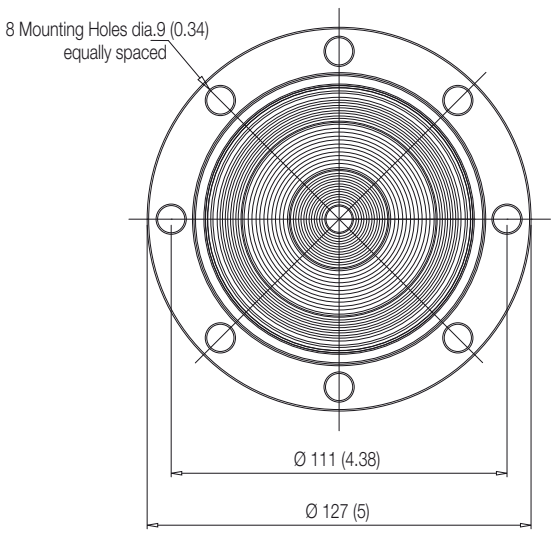
Temperature effect

The following table shows temperature effect per 20 K (36 °F) change, detailed separately for
a) the seal (one element), as process temperature error
b) the capillary per meter
c) the system (transmitter sensor when combined with a seal of specific size/type, either direct mount or remote) referred to silicone oil (PMX 200) filling and AISI 316 L ss diaphragm materials.
For filling different from silicone oil (PMX 200) the errors can be multiplied by ratio between the thermal expansion coefficients of the selected filling divided by the one of PMX 200, listed in the fill fluid characteristics table.
THE ERRORS IN TABLE CAN BE CONSIDERED DIVIDED BY 4 FOR TRANSMITTERS USING SAME REMOTE SEAL ON THE TWO SIDES

S26C Chemical Tee seal size - Mnemonic	Sensor URL	Seal error (process)	Remote system error (ambient)	1 metre capillary error (ambient)
3 in. - P3	4 - 16 kPa, 16 - 64 inH2O	0.08 kPa, 0.32 inH2O	0.02 kPa, 0.08 inH2O	0.02 kPa, 0.08 inH2O
3 in. - P3	≥ 40 kPa, 160 inH2O	0.08 kPa, 0.32 inH2O	0.02 kPa, 0.08 inH2O	0.03 kPa, 0.12 inH2O

MULTIPLY BY 10 THE kPa VALUES TO OBTAIN mbar.





BASIC ORDERING INFORMATION model S26CN Chemical Tee diaphragm 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 C N**	**X**	**XX**	**XX**	**X**	**X**	**X**	**X**
Chemical Tee seal								
Transmitter Side of Connection - 6th character								
High pressure side		H						
Low pressure side		L						
Mounting Flange Rating / Size - 7th and 8th characters								
Integral with seal / 3 in. Proprietary			GP					
Diaphragm Material - 9th and 10th characters								
AISI 316 L ss	NACE			SM				
Hastelloy C-276	NACE			HM				
AISI 316 L ss with PFA anti-stick coating	NACE			KM				
Hastelloy C-276 with PFA anti-stick coating	NACE			YM				
AISI 316 L ss with PFA coating anti-corrosion and anti-stick	NACE			WM				
Diaflex (AISI with anti-abrasion treatment)	NACE			FM				
Capillary Protection - 11th character								
AISI 316 L ss armour					A			
AISI 316 L ss armour with PVC protective cover					B			
Capillary Length m (Feet) - 12th 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		
6 (20)						L		
7 (23.5)						N		
8 (27)						Q		

Fill Fluid - 13th character				
Silicone oil PMX 200 10 cSt	(-40 to 250 °C; -40 to 480 °F)		S	
Silicone oil Baysilone PD5 5 cSt	(-85 to 250 °C; -121 to 480 °F)		P	
Inert oil - Galden G5	(Oxygen service)	(Note 1)	N	
Inert oil - Halocarbon 4.2	(Oxygen service)	(Note 1)	D	
Silicone oil for high temperature	(-10 to 375 °C; 14 to 707 °F)		G	
Silicone polymer Syltherm XLT	(-100 to 100 °C; -148 to 212 °F)		C	
Mineral oil Esso Marcol 122	(FDA approved)	(Note 2)	W	
Vegetable oil Neobee M-20	(FDA approved)	(Note 2)	A	
Glycerin-water 70%	(FDA approved)	(Note 2)	B	

Gasket - 14th character	
None	1
PTFE with silica filler	6
Graphite	7

Note 1: Suitable for oxygen service
Note 2: Suitable for food application

Model S26 seals for remote and direct mount

S26RA, S26RE, S26RJ Rotating flange diaphragm seals (flush and extended)

These extended and flush diaphragm seal are designed to connect to flanged pipe fitting, according to ASME, EN or JIS standards. For liquid level measurement installations, the seal connects to a flanged tank nozzle, compliant to relevant standard. The sealing is provided by a selectable gasket seat surface finish. The mounting flange is of rotating type.

Pressure limits

Seal model S26RA to ASME B16.5	Carbon Steel flange @ 100 °F (38 °C)	AISI 316 ss flange @ 100 °F (38 °C)
Class 150	285 psi	275 psi
Class 300	740 psi	720 psi
Class 600	1480 psi	1440 psi
Class 900	2220 psi	2160 psi
Class 1500	3705 psi	3600 psi

Seal model S26RE to EN 1092-1	Carbon steel flange @ 120 °C	AISI 316 ss flange @ 20 °C
PN 16	16 bar	16 bar
PN 40	40 bar	40 bar
PN 63	63 bar	63 bar
PN 100	100 bar	100 bar

Seal model S26RJ to JIS B 2220	Carbon steel flange @ 120 °C	AISI 316 ss flange @ 120 °C
10K	14 bar	14 bar
20K	36 bar	36 bar
40K	68 bar	68 bar

The pressure limit decreases with increasing temperature above the specified limit, according to the referred standards.

Vacuum service

Full vacuum subject to fill fluid limits.
Refer to FILL FLUID CHARACTERISTICS table. Minimum pressure with tantalum diaphragm is 1 kPa abs, 10 mbar abs, 0.15 psia.

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

Process temperature limits

Refer to FILL FLUID CHARACTERISTICS table and as follows for specific variants.

Material	
Tantalum diaphragm	260 °C (500 °F)
PFA anti-stick coating	204 °C (400 °F)
PFA anti-corrosion and anti-stick coating	250 °C (482 °F)
AISI gold plated diaphragm	320 °C (608 °F)

Gasket seat finish

Smooth (ASME or EN): 0.8 µm (Ra)
Serrated (ASME): 3.2 to 6.3 µm (Ra)
Serrated (EN 1092-1 Type B1): 3.2 to 12.5 µm (Ra)

Temperature effect

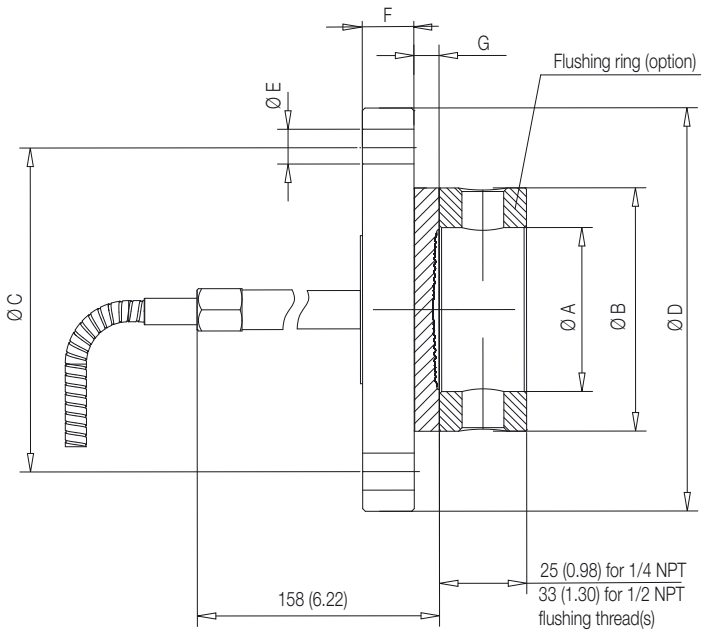
The following table shows temperature effect per 20 K (36 °F) change, detailed separately for
a) the seal (one element), as process temperature error
b) the capillary per meter
c) the system (transmitter sensor when combined with a seal of specific size/type, either direct mount or remote) referred to silicone oil (PMX 200) filling and AISI 316 L ss diaphragm materials.

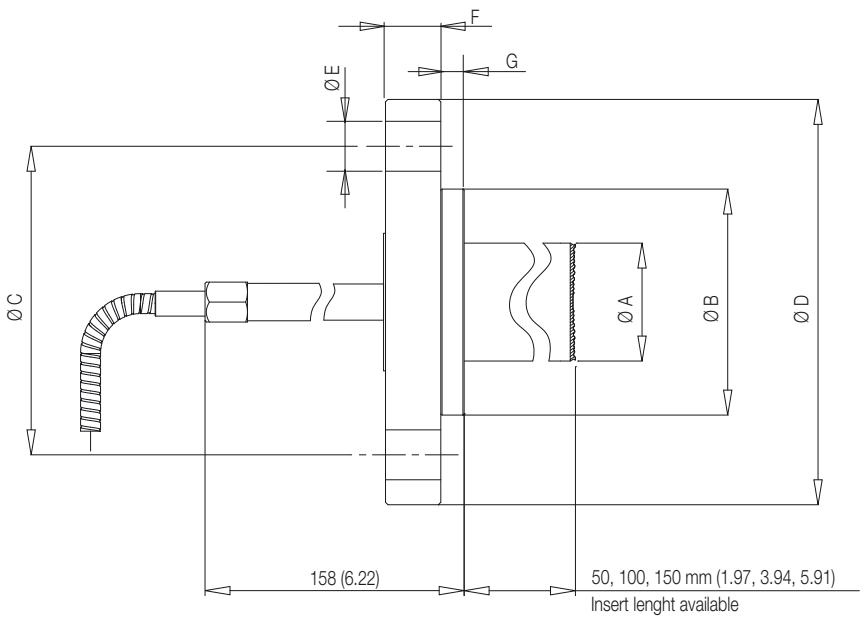
For filling different from silicone oil (PMX 200) the errors can be multiplied by ratio between the thermal expansion coefficients of the selected filling divided by the one of PMX 200, listed in the fill fluid characteristics table.
THE ERRORS IN TABLE CAN BE CONSIDERED DIVIDED BY 4 FOR TRANSMITTERS USING SAME REMOTE SEAL ON THE TWO SIDES

S26RA, S26RE, S26RJ rotating flange seal size - Mnemonic	Sensor URL	Seal error (process)	Direct mount system error (ambient)	Remote system error (ambient)	1 metre capillary error (ambient)
2 in. / DN 50 / A50 - P2	40 - 65 kPa, 160 - 260 inH2O	0.23 kPa, 0.92 inH2O	0.16 kPa, 0.64 inH2O	0.14 kPa, 0.56 inH2O	0.11 kPa, 0.44 inH2O
2 in. / DN 50 / A50 - P2	≥160 kPa, 642 inH2O	0.23 kPa, 0.92 inH2O	0.16 kPa, 0.64 inH2O	0.14 kPa, 0.56 inH2O	0.07 kPa, 0.28 inH2O
2 in. / DN 50 - F2	≥ 4 kPa, 16 inH2O	0.05 kPa, 0.2 inH2O	0.04 kPa, 0.16 inH2O	0.04 kPa, 0.16 inH2O	0.03 kPa, 0.12 inH2O
2 in. / DN 50 - E2	40 - 65 kPa, 160 - 260 inH2O	0.25 kPa, 1 inH2O	0.21 kPa, 0.84 inH2O	0.20 kPa, 0.80 inH2O	0.15 kPa, 0.60 inH2O
2 in. / DN 50 - E2	≥160 kPa, 642 inH2O	0.25 kPa, 1 inH2O	0.21 kPa, 0.84 inH2O	0.20 kPa, 0.80 inH2O	0.10 kPa, 0.40 inH2O
3 / 4 in. / DN 80 / 100 A80 / 100 - P3	4 - 16 kPa, 16 - 64 inH2O	0.08 kPa, 0.32 inH2O	0.02 kPa, 0.08 inH2O	0.02 kPa, 0.08 inH2O	0.02 kPa, 0.08 inH2O
3 / 4 in. / DN 80 / 100 A80 / 100 - P3	≥ 40 kPa, 160 inH2O	0.08 kPa, 0.32 inH2O	0.02 kPa, 0.08 inH2O	0.02 kPa, 0.08 inH2O	0.03 kPa, 0.12 inH2O
3 / 4 in. / DN 80 / 100 - F3	≥ 4 kPa, 16 inH2O	0.02 kPa, 0.08 inH2O	0.02 kPa, 0.08 inH2O	0.02 kPa, 0.08 inH2O	0.01 kPa, 0.04 inH2O
3 in. / DN 80 - E3	≥ 4 kPa, 16 inH2O	0.14 kPa, 0.56 inH2O	0.05 kPa, 0.20 inH2O	0.05 kPa, 0.20 inH2O	0.04 kPa, 0.16 inH2O

MULTIPLY BY 10 THE kPa VALUES TO OBTAIN mbar.

Model S26 seals
for remote and direct mount





Size/Rating	Dimensions mm. (in.) for S26RA										
	A (dia)				B (dia)	C (dia)	D (dia)	E (dia)	F (Note 1)	G	N° of holes
	extended diaphragm	flush diaphragm std.	flush diaphragm low thick.	flushing ring internal dia							
2 in. ASME CL 150	48 (1.9)	60 (2.36)	58 (2.28)	62 (2.44)	92 (3.62)	120.65 (4.75)	152.4 (6)	19.1 (0.79)	17.5 (0.6)	9.5 (0.37)	4
2 in. ASME CL 300	48 (1.9)	60 (2.36)	58 (2.28)	62 (2.44)	92 (3.62)	127 (5)	165.1 (6.5)	19.1 (0.79)	20.8 (0.8)	9.5 (0.37)	8
2 in. ASME CL 600	NA	60 (2.36)	58 (2.28)	62 (2.44)	92 (3.62)	127 (5)	165.1 (6.5)	19.1 (0.79)	25.4 (1)	9.5 (0.37)	8
2 in. ASME CL 900	NA	60 (2.36)	58 (2.28)	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
2 in. ASME CL 1500	NA	60 (2.36)	58 (2.28)	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
3 in. ASME CL 150	72 (2.83)	89 (3.5)	75 (2.95)	92 (3.62)	127 (5)	152.4 (6)	190.5 (7.5)	19.1 (0.79)	22.4 (0.88)	9.5 (0.37)	4
3 in. ASME CL 300	72 (2.83)	89 (3.5)	75 (2.95)	92 (3.62)	127 (5)	168.15 (6.62)	209.6 (8.25)	22.4 (0.88)	26.9 (1.1)	9.5 (0.37)	8
3 in. ASME CL 600	NA	89 (3.5)	75 (2.95)	92 (3.62)	127 (5)	168.15 (6.62)	209.6 (8.25)	22.4 (0.88)	31.8 (1.3)	9.5 (0.37)	8
3 in. ASME CL 900	NA	89 (3.5)	75 (2.95)	92 (3.62)	127 (5)	190.5 (7.5)	241 (9.48)	26 (1.02)	38.1 (1.5)	9.5 (0.37)	8
3 in. ASME CL1500	NA	89 (3.5)	75 (2.95)	92 (3.62)	127 (5)	203.2 (8)	266.7 (10.5)	31.75 (1.25)	47.7 (1.88)	9.5 (0.37)	8
4 in. ASME CL 150	94 (3.7)	89 (3.5)	75 (2.95)	92 (3.62)	157.2 (6.2)	190.5 (7.5)	228.6 (9)	19.1 (0.79)	22.4 (0.88)	9.5 (0.37)	8
4 in. ASME CL 300	94 (3.7)	89 (3.5)	75 (2.95)	92 (3.62)	157.2 (6.2)	200.2 (7.88)	254 (10)	22 (0.86)	30.2 (1.19)	9.5 (0.37)	8

Size/Rating	Dimensions mm. (in.) for S26RE										
	A (dia)				B (dia)	C (dia)	D (dia)	E (dia)	F (Note 2)	G	N° of holes
	extended diaphragm	flush diaphragm std.	flush diaphragm low thick.	flushing ring internal dia							
DN 50 EN PN 16	48 (1.9)	60 (2.36)	58 (2.28)	62 (2.44)	102 (4.02)	125 (4.92)	165 (6.5)	18 (0.71)	15 (0.58)	9.5 (0.37)	4
DN 50 EN PN 40	48 (1.9)	60 (2.36)	58 (2.28)	62 (2.44)	102 (4.02)	125 (4.92)	165 (6.5)	18 (0.71)	18 (0.71)	9.5 (0.37)	4
DN 50 EN PN 63	NA	60 (2.36)	58 (2.28)	62 (2.44)	102 (4.02)	135 (5.31)	180 (7.08)	22 (0.86)	23 (0.9)	9.5 (0.37)	4
DN 50 EN PN 100	NA	60 (2.36)	58 (2.28)	62 (2.44)	102 (4.02)	145 (5.71)	195 (7.67)	26 (1.02)	27 (1.06)	9.5 (0.37)	4
DN 80 EN PN 16	72 (2.83)	89 (3.5)	75 (2.95)	92 (3.62)	138 (5.43)	160 (6.3)	200 (7.87)	18 (0.71)	17 (0.67)	9.5 (0.37)	8
DN 80 EN PN 40	72 (2.83)	89 (3.5)	75 (2.95)	92 (3.62)	138 (5.43)	160 (6.3)	200 (7.87)	18 (0.71)	21 (0.83)	9.5 (0.37)	8
DN 80 EN PN 63	NA	89 (3.5)	75 (2.95)	92 (3.62)	138 (5.43)	170 (6.7)	215 (8.46)	22 (0.86)	25 (0.98)	9.5 (0.37)	8
DN 80 EN PN 100	NA	89 (3.5)	75 (2.95)	92 (3.62)	138 (5.43)	180 (7.08)	230 (9.05)	26 (1.02)	33 (1.3)	9.5 (0.37)	8
DN 100 EN PN 16	94 (3.7)	89 (3.5)	75 (2.95)	92 (3.62)	158 (6.22)	180 (7.08)	220 (8.66)	18 (0.71)	17 (0.67)	9.5 (0.37)	8
DN 100 EN PN 40	94 (3.7)	89 (3.5)	75 (2.95)	92 (3.62)	162 (6.38)	190 (7.48)	235 (9.25)	22 (0.86)	21 (0.83)	9.5 (0.37)	8

Size/Rating	Dimensions mm. (in.) for S26RJ							
	A (dia) flush diaphragm	B (dia)	C (dia)	D (dia)	E (dia)	F (Note 3)	G	N° of holes
A50 Class 10K	60 (2.36)	96 (3.78)	120 (4.72)	155 (6.1)	19 (0.75)	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)	8
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)	19 (0.75)	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

Note 1 - Flange thickness tolerance is +3.0 / -0.0 mm. (+0.12 / -0.0 in.).
Note 2 - Flange thickness tolerance is +1.0 / -1.3 mm. (+0.04 / -0.05 in.) up to 18 mm. or ±1.5 mm. (±0.06 in.) from 18 to 50 mm.
Note 3 - Flange thickness tolerance is +1.5 / -0.0 mm. (+0.06 / -0.0 in.) up to Class 20K or +2.0 / -0.0 mm. (+0.08 / -0.0 in.) from Class 20K to Class 50K.

Model S26 seals
for remote and direct mount

BASIC ORDERING INFORMATION model S26RA Rotating flange diaphragm seals (flush and extended) to ASME B16.5

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

BASE MODEL - 1st to 5th characters			S 2 6 R A	X	XX	X	X	XX	X	X	X	X	X
Rotating flange diaphragm seal (Raised face flush and extended) to ASME B16.5													
Transmitter Side of Connection - 6th character													
High pressure side				H									
Low pressure side				L									
Mounting Flange Rating / Size - 7th and 8th characters													
ASME CL 150 / 2 in.					E1								
ASME CL 300 / 2 in.					E2								
ASME CL 600 / 2 in.					E3								
ASME CL 900-1500 / 2 in.					E5								
ASME CL 150 / 3 in.					G1								
ASME CL 300 / 3 in.					G2								
ASME CL 600 / 3 in.					G3								
ASME CL 900 / 3 in.					G4								
ASME CL 1500 / 3 in.					G5								
ASME CL 150 / 4 in.					H1								
ASME CL 300 / 4 in.					H2								
Mounting Flange Material - 9th character													
Carbon steel						C							
AISI 316 ss						S							
Extensions Length and Material - 10th character													
Flush							F						
50 mm (2 in.)	AISI 316 L ss	(Note 1)					1						
50 mm (2 in.)	Hastelloy C-276	(Note 1)					2						
100 mm (4 in.)	AISI 316 L ss	(Note 1)					3						
100 mm (4 in.)	Hastelloy C-276	(Note 1)					4						
150 mm (6 in.)	AISI 316 L ss	(Note 1)					5						
150 mm (6 in.)	Hastelloy C-276	(Note 1)					6						
Diaphragm Material - 11th and 12th characters													
AISI 316 L ss		(Note 2)						NACE					SM
AISI 316 L ss - Low thickness (not for extended diaphragm)		(Note 3)						NACE					SL
Hastelloy C-276								NACE					HM
Hastelloy C-276 - Low thickness (not for extended diaphragm)		(Note 3)						NACE					HL
Hastelloy C-2000 (not for extended diaphragm)		(Note 3)						NACE					MM
Hastelloy C-2000 diaphragm and body (not for extended diaphragm)		(Note 3)						NACE					ZM
Inconel 625 (not for extended diaphragm)		(Note 3)						NACE					LM
Tantalum (not for extended diaphragm)		(Note 3)											TM
AISI 316 L ss gold plated (not for extended diaphragm)		(Note 3)						NACE					NM
AISI 316 L ss with PFA anti-stick coating		(Note 2)						NACE					KM
Hastelloy C-276 with PFA anti-stick coating								NACE					YM
AISI 316 L ss with PFA coating anti-corrosion and anti-stick		(Note 2)						NACE					WM
Diaflex (AISI with anti-abrasion treatment)		(Note 2)						NACE					FM
Superduplex ss (UNS S32750 to ASTM SA479) (not for extended diaphragm)		(Note 3)						NACE					EM
Monel (not for extended diaphragm)		(Note 3)						NACE					GM

continued
see next page

BASIC ORDERING INFORMATION model S26RA		S 2 6 R A X XX X X XX	X	X	X	X	X	X	X
Seal Surface Finish - 13th character									
Serrated		(Note 4)	1					continued	
Smooth		(Note 15)	2					see next page	
Capillary Protection - 14th character									
AISI 316 L ss armour				A					
AISI 316 L ss armour with PVC protective cover				B					
Extension tube for direct mount seal		(Note 5)		N					
Capillary Length m (Feet) - 15th character									
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 (23.5)		(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				
Fill Fluid - 16th character									
Silicone oil PMX 200 10 cSt	(-40 to 250 °C; -40 to 480 °F)					S			
Silicone oil Baysilone PD5 5 cSt	(-85 to 250 °C; -121 to 480 °F)					P			
Inert oil - Galden G5	(Oxygen service)	(Note 8)				N			
Inert oil - Halocarbon 4.2	(Oxygen service)	(Note 8)				D			
Silicone oil for high temperature	(-10 to 375 °C; 14 to 707 °F)					G			
Silicone polymer Syltherm XLT	(-100 to 100 °C; -148 to 212 °F)					C			
Mineral oil Esso Marcol 122	(FDA approved)	(Note 9)				W			
Vegetable oil Neobee M-20	(FDA approved)	(Note 9)				A			
Glycerin-water 70%	(FDA approved)	(Note 9)				B			

Model S26 seals
for remote and direct mount

BASIC ORDERING INFORMATION model S26RA	S 2 6 R A X XX X X XX X X X X	X	X	X
Flushing Ring: Hole and Thread - 17th character				
None (TO BE SELECTED FOR EXTENDED VERSIONS)		N		
1 hole - 1/2 in. NPT	(Note 3)	2		
2 holes - 1/2 in. NPT	(Note 3)	3		
1 hole - 1/4 in. NPT	(Note 3)	4		
2 holes - 1/4 in. NPT	(Note 3)	5		
Flushing Ring Material - 18th character				
None	(Note 10)		N	
AISI 316 L ss	(Note 11) NACE		A	
Hastelloy C-276	(Notes 11, 12) NACE		H	
Flushing Ring: Plug and Gasket - 19th 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) NACE			D
AISI 316 L ss - garlock	(Notes 11, 13) NACE			E
AISI 316 L ss - PTFE	(Notes 11, 13) NACE			F
AISI 316 L ss - graphite	(Notes 11, 13) NACE			G
Hastelloy C-276 - no gasket	(Notes 11, 14) NACE			H
Hastelloy C-276 - garlock	(Notes 11, 14) NACE			L
Hastelloy C-276 - PTFE	(Notes 11, 14) NACE			M
Hastelloy C-276 - graphite	(Notes 11, 14) NACE			P

Note 1: Not available with mounting flange rating code E3, E5, G3, G4, G5
Note 2: Not available with extensions length and material code 2, 4, 6
Note 3: Not available with extensions length and material code 1, 2, 3, 4, 5, 6
Note 4: Not available with diaphragm material code MM, LM, TM, NM, KM, YM, WM
Note 5: Not available with transmitter side of connection code L
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 C-276 flushing ring material code H
Note 14: Not available with AISI 316 L flushing ring material code A
Note 15: Not available with diaphragm material code ZM

BASIC ORDERING INFORMATION model S26RE Rotating flange diaphragm seals (flush and extended) to EN 1092-1

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

BASE MODEL - 1st to 5th characters			S 2 6 R E	X	XX	X	X	XX	X	X	X	X	X
Rotating flange diaphragm seal (flush and extended) to EN 1092-1													
Transmitter Side of Connection - 6th character													
High pressure side				H									
Low pressure side				L									
Mounting Flange Rating / Size - 7th and 8th characters													
PN 16 - 40 / DN 50					N2								
PN 63 / DN 50					N3								
PN 100 / DN 50					N4								
PN 16 / DN 80					P1								
PN 40 / DN 80					P2								
PN 63 / DN 80					P3								
PN 100 / DN 80					P4								
PN 16 / DN 100					Q1								
PN 40 / DN 100					Q2								
Mounting Flange Material - 9th character													
Carbon steel						C							
AISI 316 ss						S							
Extensions Length and Material - 10th character													
Flush							F						
50 mm (2 in.)	AISI 316 L ss	(Note 1)					1						
50 mm (2 in.)	Hastelloy C-276	(Note 1)					2						
100 mm (4 in.)	AISI 316 L ss	(Note 1)					3						
100 mm (4 in.)	Hastelloy C-276	(Note 1)					4						
150 mm (6 in.)	AISI 316 L ss	(Note 1)					5						
150 mm (6 in.)	Hastelloy C-276	(Note 1)					6						
Diaphragm Material - 11th and 12th characters													
AISI 316 L ss		(Note 2)			NACE			SM					
AISI 316 L ss - Low thickness (not for extended diaphragm)		(Note 3)			NACE			SL					
Hastelloy C-276					NACE			HM					
Hastelloy C-276 - Low thickness (not for extended diaphragm)		(Note 3)			NACE			HL					
Hastelloy C-2000 (not for extended diaphragm)		(Note 3)			NACE			MM					
Inconel 625 (not for extended diaphragm)		(Note 3)			NACE			LM					
Tantalum (not for extended diaphragm)		(Note 3)						TM					
AISI 316 L ss gold plated (not for extended diaphragm)		(Note 3)			NACE			NM					
AISI 316 L ss with PFA anti-stick coating		(Note 2)			NACE			KM					
Hastelloy C-276 with PFA anti-stick coating					NACE			YM					
AISI 316 L ss with PFA coating anti-corrosion and anti-stick		(Note 2)			NACE			WM					
Diaflex (AISI with anti-abrasion treatment)		(Note 2)			NACE			FM					
Superduplex ss (UNS S32750 to ASTM SA479) (not for extended diaphragm)		(Note 3)			NACE			EM					
Monel		(Note 3)			NACE			GM					

continued
see next page

Model S26 seals
for remote and direct mount

BASIC ORDERING INFORMATION model S26RE		S 2 6 R E X XX X X XX	X	X	X	X	X	X	X
Seal Surface Finish - 13th character									
Serrated		(Note 4)	1					continued	
Smooth			2					see next page	
Capillary Protection - 14th character									
AISI 316 L ss armour				A					
AISI 316 L ss armour with PVC protective cover				B					
Extension tube for direct mount seal		(Note 5)		N					
Capillary Length m (Feet) - 15th character									
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 (23.5)		(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				
Fill Fluid - 16th character									
Silicone oil PMX 200 10 cSt	(-40 to 250 °C; -40 to 480 °F)					S			
Silicone oil Baysilone PD5 5 cSt	(-85 to 250 °C; -121 to 480 °F)					P			
Inert oil - Galden G5	(Oxygen service)	(Note 8)				N			
Inert oil - Halocarbon 4.2	(Oxygen service)	(Note 8)				D			
Silicone oil for high temperature	(-10 to 375 °C; 14 to 707 °F)					G			
Silicone polymer Syltherm XLT	(-100 to 100 °C; -148 to 212 °F)					C			
Mineral oil Esso Marcol 122	(FDA approved)	(Note 9)				W			
Vegetable oil Neobee M-20	(FDA approved)	(Note 9)				A			
Glycerin-water 70%	(FDA approved)	(Note 9)				B			

BASIC ORDERING INFORMATION model S26RE	S 2 6 R E X XX X X XX X X X X	X	X	X
Flushing Ring: Hole and Thread - 17th character				
None (TO BE SELECTED FOR EXTENDED VERSIONS)		N		
1 hole - 1/2 in. NPT	(Note 3)	2		
2 holes - 1/2 in. NPT	(Note 3)	3		
1 hole - 1/4 in. NPT	(Note 3)	4		
2 holes - 1/4 in. NPT	(Note 3)	5		
Flushing Ring Material - 18th character				
None	(Note 10)		N	
AISI 316 L ss	(Note 11) NACE		A	
Hastelloy C-276	(Notes 11, 12) NACE		H	
Flushing Ring: Plug and Gasket - 19th 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) NACE			D
AISI 316 L ss - garlock	(Notes 11, 13) NACE			E
AISI 316 L ss - PTFE	(Notes 11, 13) NACE			F
AISI 316 L ss - graphite	(Notes 11, 13) NACE			G
Hastelloy C-276 - no gasket	(Notes 11, 14) NACE			H
Hastelloy C-276 - garlock	(Notes 11, 14) NACE			L
Hastelloy C-276 - PTFE	(Notes 11, 14) NACE			M
Hastelloy C-276 - graphite	(Notes 11, 14) NACE			P

Note 1: Not available with mounting flange rating code N3, N4, P3, P4
Note 2: Not available with extensions length and material code 2, 4, 6
Note 3: Not available with extensions length and material code 1, 2, 3, 4, 5, 6
Note 4: Not available with diaphragm material code MM, LM, TM, NM, KM, YM, WM
Note 5: Not available with transmitter side of connection code L
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 C-276 flushing ring material code H
Note 14: Not available with AISI 316 L flushing ring material code A

Model S26 seals
for remote and direct mount

BASIC ORDERING INFORMATION model S26RJ Rotating flange diaphragm seals (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 R J**	X	XX	X	X	XX	X	X	X	X	X	X	X	
Rotating flange diaphragm seal (flush) to JIS													
Transmitter Side of Connection - 6th character													
High pressure side	H												
Low pressure side	L												
Mounting Flange Rating / Size - 7th and 8th characters													
10K / A50		B2											
20K / A50		B4											
40K / A50		B6											
10K / A80		C2											
20K / A80		C4											
40K / A80		C6											
10K / A100		D2											
20K / A100		D4											
Mounting Flange Material - 9th character													
Carbon steel			C										
AISI 316 ss			S										
Extensions Length - 10th character													
Flush				F									
Diaphragm Material - 11th and 12th characters													
AISI 316 L ss					NACE	SM							
Hastelloy C-276					NACE	HM							
Hastelloy C-2000					NACE	MM							
Inconel 625					NACE	LM							
Tantalum						TM							
AISI 316 L ss gold plated					NACE	NM							
AISI 316 L ss with PFA anti-stick coating					NACE	KM							
Hastelloy C-276 with PFA anti-stick coating					NACE	YM							
AISI 316 L ss with PFA coating anti-corrosion and anti-stick					NACE	WM							
Superduplex ss (UNS S32750 to ASTM SA479)					NACE	EM							
Seal Surface Finish - 13th character													
Serrated (Note 1)							1						
Smooth							2						
Capillary Protection - 14th character													
AISI 316 L ss armour								A					
AISI 316 L ss armour with PVC protective cover								B					
Extension tube for direct mount seal (Note 2)								N					

continued
see next page

BASIC ORDERING INFORMATION model S26RJ			S 2 6 R J X XX X X XX X X	X	X	X	X	X
Capillary Length m (Feet) - 15th character								
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 (23.5)		(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				
Fill Fluid - 16th character								
Silicone oil PMX 200 10 cSt	(-40 to 250 °C; -40 to 480 °F)				S			
Silicone oil Baysilone PD5 5 cSt	(-85 to 250 °C; -121 to 480 °F)				P			
Inert oil - Galden G5	(Oxygen service)	(Note 5)			N			
Inert oil - Halocarbon 4.2	(Oxygen service)	(Note 5)			D			
Silicone oil for high temperature	(-10 to 375 °C; 14 to 707 °F)				G			
Silicone polymer Syltherm XLT	(-100 to 100 °C; -148 to 212 °F)				C			
Mineral oil Esso Marcol 122	(FDA approved)	(Note 6)			W			
Vegetable oil Neobee M-20	(FDA approved)	(Note 6)			A			
Glycerin-water 70%	(FDA approved)	(Note 6)			B			
Flushing Ring: Hole and Thread - 17th character								
None						N		
Flushing Ring Material - 18th character								
None							N	
Flushing Ring: Plug and Gasket - 19th character								
None								N

Note 1: Not available with diaphragm material code HM, MM, LM, TN, NM, KM, YM, WM
Note 2: Not available with transmitter side of connection code L
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

Model S26 seals for remote and direct mount

S26RR Rotating flange diaphragm seals - Ring Joint (RJ)

This flush diaphragm seal is designed to connect to ASME flanged pipe fitting, the sealing is provided by a metal ring in the provided groove. For liquid level measurement installations the seal connects to an ASME flanged tank nozzle.

Pressure limits

Seal model S26RR to ASME B16.5	Carbon Steel flange @ 100 °F (38 °C)	AISI 316 ss flange @ 100 °F (38 °C)
Class 150	285 psi	275 psi
Class 300	740 psi	720 psi
Class 600	1480 psi	1440 psi
Class 900	2220 psi	2160 psi
Class 1500	3705 psi	3600 psi
Class 2500	6170 psi	6000 psi

The pressure limit decreases with increasing temperature above 100 °F (38 °C), according to ASME B16.5 standards.

Vacuum service

Full vacuum subject to fill fluid limits.
Refer to FILL FLUID CHARACTERISTICS table.

Process temperature limits

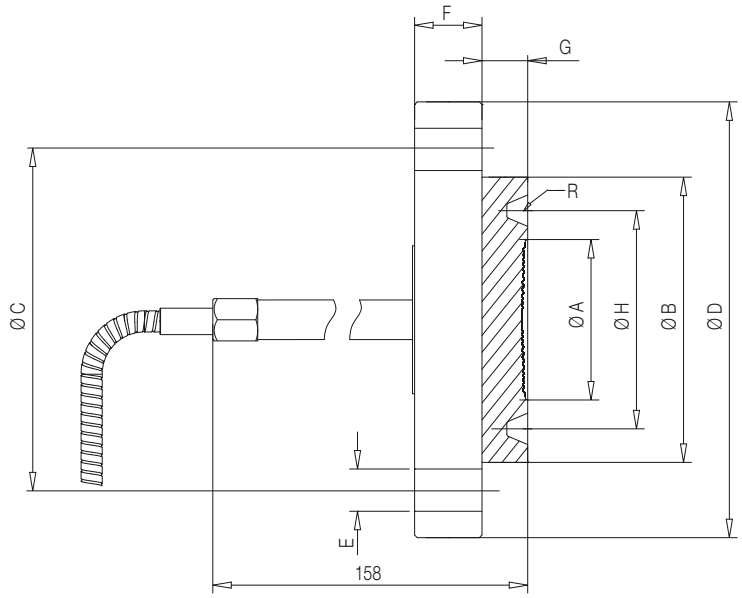
Refer to FILL FLUID CHARACTERISTICS table

Temperature effect

The following table shows temperature effect per 20 K (36 °F) change, detailed separately for
a) the seal (one element), as process temperature error
b) the capillary per meter
c) the system (transmitter sensor when combined with a seal of specific size/type, either direct mount or remote) referred to silicone oil (PMX 200) filling and AISI 316 L ss diaphragm materials.
For filling different from silicone oil (PMX 200) the errors can be multiplied by ratio between the thermal expansion coefficients of the selected filling divided by the one of PMX 200, listed in the fill fluid characteristics table.
THE ERRORS IN TABLE CAN BE CONSIDERED DIVIDED BY 4 FOR TRANSMITTERS USING SAME REMOTE SEAL ON THE TWO SIDES

S26RR flanged RJ seal size - Mnemonic	Sensor URL	Seal error (process)	Direct mount system error (ambient)	Remote mount error (ambient)	1 metre capillary error (ambient)
1 1/2 in. - P1.5	≥ 160 kPa, 642 inH2O	0.74 kPa, 3 inH2O	0.67 kPa, 2.68 inH2O	0.62 kPa, 2.48 inH2O	0.31 kPa, 1.24 inH2O
2 in. - P2	40 - 65 kPa, 160 - 260 inH2O	0.23 kPa, 0.92 inH2O	0.16 kPa, 0.64 inH2O	0.14 kPa, 0.56 inH2O	0.11 kPa, 0.44 inH2O
2 in. - P2	≥160 kPa, 642 inH2O	0.23 kPa, 0.92 inH2O	0.16 kPa, 0.64 inH2O	0.14 kPa, 0.56 inH2O	0.07 kPa, 0.28 inH2O
3 in. - P3	4 - 16 kPa, 16 - 64 inH2O	0.08 kPa, 0.32 inH2O	0.02 kPa, 0.08 inH2O	0.02 kPa, 0.08 inH2O	0.02 kPa, 0.08 inH2O
3 in. - P3	≥ 40 kPa, 160 inH2O	0.08 kPa, 0.32 inH2O	0.02 kPa, 0.08 inH2O	0.02 kPa, 0.08 inH2O	0.03 kPa, 0.12 inH2O

MULTIPLY BY 10 THE kPa VALUES TO OBTAIN mbar.



Size/Rating	Dimensions mm. (in.) for S26RR									
	A (dia)	B (dia)	C (dia)	D (dia)	E (dia)	F	G	H (dia)	R	N° of holes
1-1/2 in. 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
1-1/2 in. 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
1-1/2 in. 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
1-1/2 in. 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
1-1/2 in. ASME CL 2500	48 (1.89)	114 (4.49)	146.1 (5.75)	203.2 (8)	31.75 (1.25)	44.5 (1.75)	20.8 (0.82)	82.6 (3.25)	R23	4
2 in. 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
2 in. 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
2 in. 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
2 in. 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
2 in. ASME CL 2500	60 (2.36)	133 (5.24)	171.5 (6.75)	235 (9.25)	28.45 (1.12)	50.8 (2)	20.8 (0.82)	101.6 (4)	R26	8
3 in. 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
3 in. 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
3 in. 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
3 in. 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
3 in. 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
3 in. ASME CL 2500	89 (3.5)	168 (6.61)	228.6 (9)	304.8 (12)	35.05 (1.38)	66.5 (2.62)	20.8 (0.82)	127 (5)	R32	8

Model S26 seals
for remote and direct mount

BASIC ORDERING INFORMATION model S26RR Rotating flange diaphragm seals (flush) - 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 R R**	X	XX	X	X	XX	X	X	X	X	X	X	X	
Rotating flange diaphragm seal (flush) Ring Joint to ASME B16.5													
Transmitter Side of Connection - 6th character													
High pressure side	H												
Low pressure side	L												
Mounting Flange Rating / Size - 7th and 8th characters													
ASME CL 150 / 1 1/2 in.		D1											
ASME CL 300 / 1 1/2 in.		D2											
ASME CL 600 / 1 1/2 in.		D3											
ASME CL 900-1500 / 1 1/2 in.		D5											
ASME CL 2500 / 1 1/2 in.		D6											
ASME CL 150 / 2 in.		E1											
ASME CL 300 / 2 in.		E2											
ASME CL 600 / 2 in.		E3											
ASME CL 900-1500 / 2 in.		E5											
ASME CL 2500 / 2 in.		E6											
ASME CL 150 / 3 in.		G1											
ASME CL 300 / 3 in.		G2											
ASME CL 600 / 3 in.		G3											
ASME CL 900 / 3 in.		G4											
ASME CL 1500 / 3 in.		G5											
ASME CL 2500 / 3 in.		G6											
Mounting Flange Material - 9th character													
Carbon steel			C										
AISI 316 ss			S										
Extensions Length - 10th character													
Flush				F									
Diaphragm Material - 11th and 12th characters													
AISI 316 L ss		NACE			SM								
Hastelloy C-276		NACE			HM								
Inconel 625		NACE			LM								
Seal Surface Finish - 13th character													
Ring joint						3							
Capillary Protection - 14th character													
AISI 316 L ss armour							A						
AISI 316 L ss armour with PVC protective cover							B						
Extension tube for direct mount seal (Note 1)							N						

continued
see next page

BASIC ORDERING INFORMATION model S26RR			S 2 6 R R X XX X X XX X X	X	X	X	X	X
Capillary Length m (Feet) - 15th character								
Direct-mount construction		(Note 2)		1				
1 (3)		(Note 3)		A				
1.5 (5)		(Note 3)		B				
2 (7)		(Note 3)		C				
2.5 (8)		(Note 3)		D				
3 (10)		(Note 3)		E				
3.5 (12)		(Note 3)		F				
4 (13)		(Note 3)		G				
4.5 (15)		(Note 3)		H				
5 (17)		(Note 3)		J				
5.5 (18)		(Note 3)		K				
6 (20)		(Note 3)		L				
6.5 (22)		(Note 3)		M				
7 (23.5)		(Note 3)		N				
7.5 (25)		(Note 3)		P				
8 (27)		(Note 3)		Q				
9 (30)		(Note 3)		R				
10 (33)		(Note 3)		S				
12 (40)		(Note 3)		T				
14 (47)		(Note 3)		U				
16 (53)		(Note 3)		V				
Fill Fluid - 16th character								
Silicone oil PMX 200 10 cSt	(-40 to 250 °C; -40 to 480 °F)				S			
Silicone oil Baysilone PD5 5 cSt	(-85 to 250 °C; -121 to 480 °F)				P			
Inert oil - Galden G5	(Oxygen service)	(Note 4)			N			
Inert oil - Halocarbon 4.2	(Oxygen service)	(Note 4)			D			
Silicone oil for high temperature	(-10 to 375 °C; 14 to 707 °F)				G			
Silicone polymer Syltherm XLT	(-100 to 100 °C; -148 to 212 °F)				C			
Mineral oil Esso Marcol 122	(FDA approved)	(Note 5)			W			
Vegetable oil Neobee M-20	(FDA approved)	(Note 5)			A			
Glycerin-water 70%	(FDA approved)	(Note 5)			B			
Flushing Ring: Hole and Thread - 17th character								
None						N		
Flushing Ring Material - 18th character								
None							N	
Flushing Ring: Plug and Gasket - 19th character								
None								N

Note 1: Not available with transmitter side of connection code L and not available with CL 2500 mounting flange rating / size code D6, E6, G6
Note 2: Not available with capillary protection code A, B
Note 3: Not available with capillary protection code N
Note 4: Suitable for oxygen service
Note 5: Suitable for food application

Model S26 seals for remote and direct mount

S26RH Rotating flange diaphragm seals according to ISO 10423 (based on API 6A specification)

This flush diaphragm seal is designed to connect to ISO 10423 flanged pipe fitting, the sealing is provided by a metal ring in the provided groove. For liquid level measurement installations the seal connects to proper flanged tank nozzle.
This seal type is mainly dedicated to applications asking for high pressure/high temperature conditions.

Pressure limits

S26RH seal	AISI 316 ss flange	
flange rating	-29 ... 38 °c (-20 ... 100 °F)	@ 93 °C (200 °C)
API 10000	69.5 MPa, 10000 psi	60 MPa, 8687 psi
API 15000	103.5 MPa, 15000 psi	89.2 MPa, 12937 psi

The pressure limit decreases with increasing temperature.

Vacuum service

Full vacuum subject to fill fluid limits.
Refer to FILL FLUID CHARACTERISTICS table.

Process temperature limits

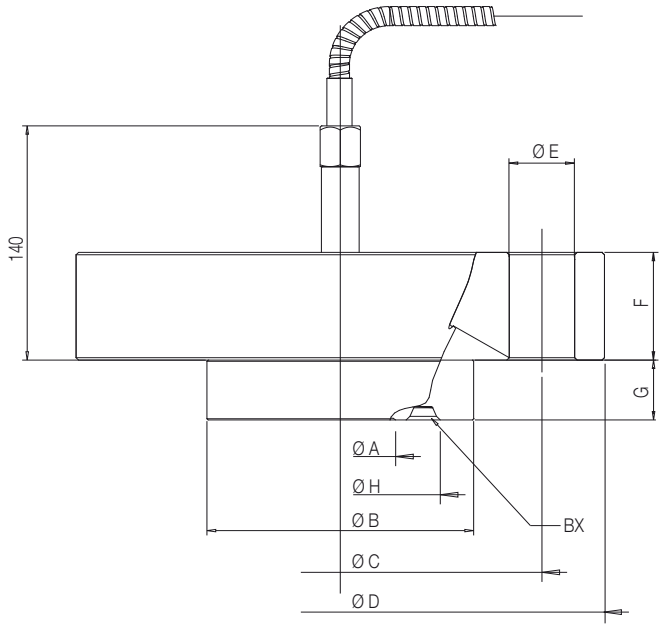
Refer to FILL FLUID CHARACTERISTICS table

Temperature effect

The following table shows temperature effect per 20 K (36 °F) change, detailed separately for
a) the seal (one element), as process temperature error
b) the capillary per meter
c) the system (transmitter sensor when combined with a seal of specific size/type, either direct mount or remote) referred to silicone oil (PMX 200) filling and AISI 316 L ss diaphragm materials.
For filling different from silicone oil (PMX 200) the errors can be multiplied by ratio between the thermal expansion coefficients of the selected filling divided by the one of PMX 200, listed in the fill fluid characteristics table.
THE ERRORS IN TABLE CAN BE CONSIDERED DIVIDED BY 4 FOR TRANSMITTERS USING SAME REMOTE SEAL ON THE TWO SIDES

S26RH flanged seal size - Mnemonic	Sensor URL	Seal error (process)	Direct mount system error (ambient)	Remote mount error (ambient)	1 metre capillary error (ambient)
1 13/16 in. - H1.5	≥ 60000 kPa, 8700 psi	0.74 kPa, 3 inH2O	0.67 kPa, 2.68 inH2O	0.62 kPa, 2.48 inH2O	0.31 kPa, 1.24 inH2O
2 1/16 in. - P1.5	≥ 60000 kPa, 8700 psi	0.64 kPa, 2.56 inH2O	1.25 kPa, 5.0 inH2O	1.14 kPa, 0.08 inH2O	0.38 kPa, 1.52 inH2O

MULTIPLY BY 10 THE kPa VALUES TO OBTAIN mbar.



Size/Rating	Dimensions mm. (in.) for S26RH									
	A (dia)	B (dia)	C (dia)	D (dia)	E (dia)	F	G	H (dia)	BX	N° of holes
1 13/16 in. API 10000	40 (1.57)	105.5 (4.15)	146.1 (5.75)	185 (7.28)	23 (0.91)	42.1 (1.66)	25 (0.98)	77.77 (3.06)	BX 151	8
1 13/16 in. API 15000	40 (1.57)	105.5 (4.15)	160.3 (6.31)	210 (8.27)	26 (1.02)	45 (1.77)	25 (0.98)	77.77 (3.06)	BX 151	8
2 1/16 in. API 10000	50 (1.97)	112.5 (4.43)	158.8 (6.25)	200 (7.87)	23 (0.91)	44.1 (1.74)	25 (0.98)	86.23 (3.40)	BX 152	8
2 1/16 in. API 15000	50 (1.97)	112.5 (4.43)	174.6 (6.87)	220 (8.66)	26 (1.02)	50.8 (2.00)	25 (0.98)	86.23 (3.40)	BX 152	8

Model S26 seals
for remote and direct mount

BASIC ORDERING INFORMATION model S26RH Rotating flange diaphragm seals (flush) to ISO 10423 (API standards)

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

BASE MODEL - 1st to 5th characters	**S 2 6 R H**	**X**	**XX**	**X**	**X**	**XX**	**X**	**X**	**X**	**X**	**X**	**X**	**X**
Rotating flange diaphragm seal (flush) to ISO 10423														
Transmitter Side of Connection - 6th character														
High pressure side		H												
Low pressure side		L												
Size / Rating - 7th and 8th characters														
ISO 10423 1 13/16 in. / API 10000 (69 MPa)			R1											
ISO 10423 1 13/16 in. / API 15000 (103.5 MPa)			R2											
ISO 10423 2 1/16 in. / API 10000 (69 MPa)			S1											
ISO 10423 2 1/16 in. / API 15000 (103.5 MPa)			S2											
Mounting Flange Material - 9th character														
AISI 316 ss				S										
Extensions Length - 10th character														
Flush					F									
Diaphragm Material - 11th and 12th characters														
AISI 316 L ss			NACE			SM								
Hastelloy C-276			NACE			HM								
Inconel 625			NACE			LM								
Seal Surface Finish - 13th character														
According to ISO 10423							H							
Capillary Protection - 14th character														
AISI 316 L ss armour								A						
AISI 316 L ss armour with PVC protective cover								B						
Extension tube for direct mount seal	(Note 1)							N						

continued
see next page

BASIC ORDERING INFORMATION model S26RH			S 2 6 R R X XX X X XX X X	X	X	X	X	X
Capillary Length m (Feet) - 15th character								
Direct-mount construction		(Note 2)		1				
1 (3)		(Note 3)		A				
1.5 (5)		(Note 3)		B				
2 (7)		(Note 3)		C				
2.5 (8)		(Note 3)		D				
3 (10)		(Note 3)		E				
3.5 (12)		(Note 3)		F				
4 (13)		(Note 3)		G				
4.5 (15)		(Note 3)		H				
5 (17)		(Note 3)		J				
Fill Fluid - 16th character								
Silicone oil PMX 200 10 cSt	(-40 to 250 °C; -40 to 480 °F)				S			
Silicone oil Baysilone PD5 5 cSt	(-85 to 250 °C; -121 to 480 °F)				P			
Inert oil - Galden G5	(Oxygen service)	(Note 4)			N			
Inert oil - Halocarbon 4.2	(Oxygen service)	(Note 4)			D			
Silicone oil for high temperature	(-10 to 375 °C; 14 to 707 °F)				G			
Silicone polymer Sylthern XLT	(-100 to 100 °C; -148 to 212 °F)				C			
Flushing Ring: Hole and Thread - 17th character								
None						N		
Flushing Ring Material - 18th character								
None							N	
Flushing Ring: Plug and Gasket - 19th character								
None								N

Note 1: Not available with transmitter side of connection code L
Note 2: Not available with capillary protection code A, B
Note 3: Not available with capillary protection code N
Note 4: Suitable for oxygen service
Note 5: Suitable for food application

Model S26 seals
for remote and direct mount

S26FA, S26FE Fixed flange diaphragm seals

These flush or extended diaphragm seal are designed to connect to flanged pipe fitting, according to ASME or EN standards.
For liquid level measurement installations, the seal connects to a flanged tank nozzle, compliant to relevant standard.
The sealing is provided by a selectable gasket seat surface finish. The „fixed“ mounting flange is integral with the seal.

Pressure limits

Seal model S26FA to ASME B16.5	AISI 316 L ss flange @ 100 °F (38 °C)
Class 150	230 psi
Class 300	600 psi
Class 600	1200 psi

Seal model S26FE to EN 1092-1	AISI 316 L ss flange @ 20 °C
PN 16	16 bar
PN 40	40 bar
PN 63	63 bar
PN 100	100 bar

The pressure limit decreases with increasing temperature above the specified limit, according to the referred standards.

Vacuum service

Full vacuum subject to fill fluid limits.

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

Process temperature limits

Refer to FILL FLUID CHARACTERISTICS table.

Gasket seat finish

Smooth (ASME or EN): 0.8 µm (Ra)
Serrated (ASME): 3.2 to 6.3 µm (Ra)
Serrated (EN 1092-1 Type B1): 3.2 to 12.5 µm (Ra)
Serrated (EN 1092-1 Type D and E): according to standard

Temperature effect

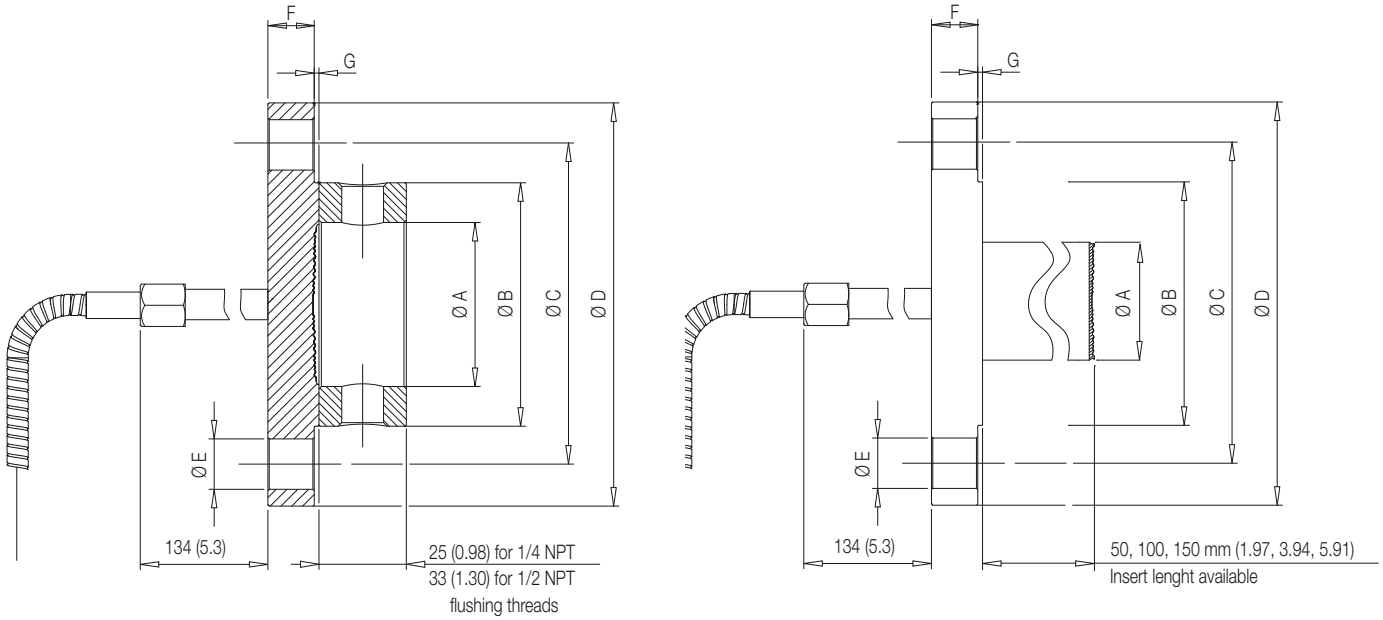
The following table shows temperature effect per 20 K (36 °F) change, detailed separately for
a) the seal (one element), as process temperature error
b) the capillary per meter
c) the system (transmitter sensor when combined with a seal of specific size/type, either direct mount or remote) referred to silicone oil (PMX 200) filling and AISI 316 L ss diaphragm materials.

For filling different from silicone oil (PMX 200) the errors can be multiplied by ratio between the thermal expansion coefficients of the selected filling divided by the one of PMX 200, listed in the fill fluid characteristics table.
THE ERRORS IN TABLE CAN BE CONSIDERED DIVIDED BY 4 FOR TRANSMITTERS USING SAME REMOTE SEAL ON THE TWO SIDES

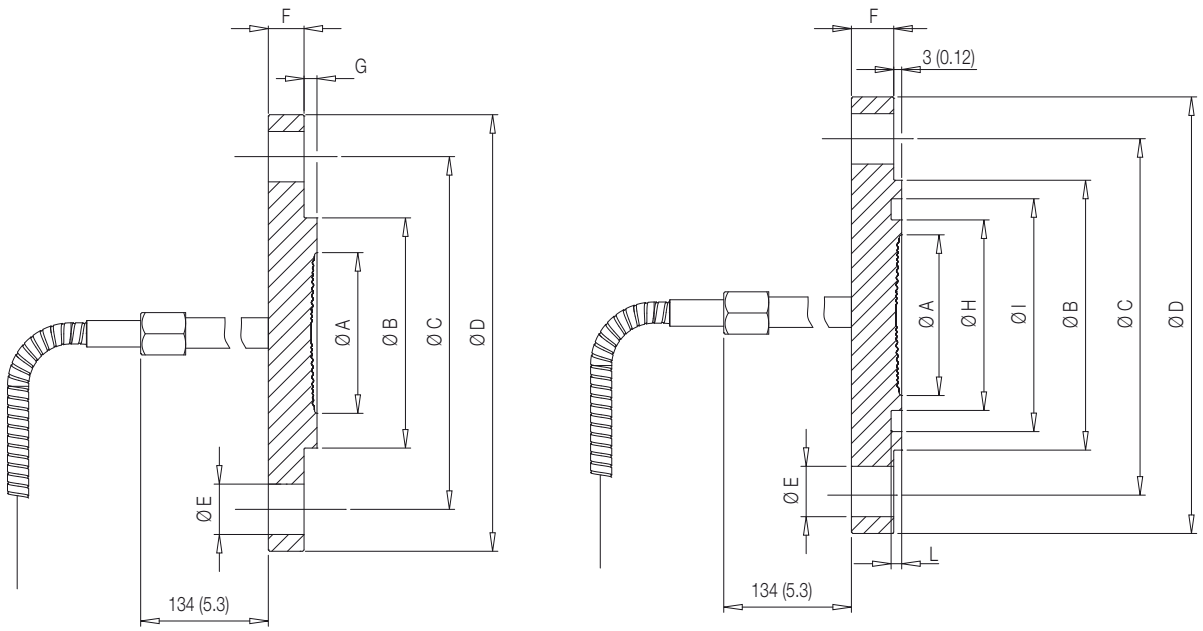
S26FA, S26FE fixed flange flush seal size - Mnemonic	Sensor URL	Seal error (process)	Direct mount system error (ambient)	Remote system error (ambient)	1 metre capillary error (ambient)
2 in. / DN 50 - P2	40 - 65 kPa, 160 - 260 inH2O	0.23 kPa, 0.92 inH2O	0.16 kPa, 0.64 inH2O	0.14 kPa, 0.56 inH2O	0.11 kPa, 0.44 inH2O
2 in. / DN 50 - P2	≥160 kPa, 642 inH2O	0.23 kPa, 0.92 inH2O	0.16 kPa, 0.64 inH2O	0.14 kPa, 0.56 inH2O	0.07 kPa, 0.28 inH2O
2 in. / DN 50 - F2	≥ 4 kPa, 16 inH2O	0.05 kPa, 0.2 inH2O	0.04 kPa, 0.16 inH2O	0.04 kPa, 0.16 inH2O	0.03 kPa, 0.12 inH2O
3 / 4 in. / DN 80 / 100 - P3	4 - 16 kPa, 16 - 64 inH2O	0.08 kPa, 0.32 inH2O	0.02 kPa, 0.08 inH2O	0.02 kPa, 0.08 inH2O	0.02 kPa, 0.08 inH2O
3 / 4 in. / DN 80 / 100 - P3	≥ 40 kPa, 160 inH2O	0.08 kPa, 0.32 inH2O	0.02 kPa, 0.08 inH2O	0.02 kPa, 0.08 inH2O	0.03 kPa, 0.12 inH2O
3 / 4 in. / DN 80 / 100 - F3	≥ 4 kPa, 16 inH2O	0.02 kPa, 0.08 inH2O	0.02 kPa, 0.08 inH2O	0.02 kPa, 0.08 inH2O	0.01 kPa, 0.04 inH2O
S26FA, S26FE fixed flange extended seal size - Mnemonic	**Sensor URL**	**Seal error (process)**	**Direct mount system error (ambient)**	**Remote system error (ambient)**	**1 metre capillary error (ambient)**
2 in. / DN 50 - F1.5	65 kPa, 260 inH2O	0.15 kPa, 0.60 inH2O	0.36 kPa, 1.44 inH2O	0.36 kPa, 1.44 inH2O	0.12 kPa, 0.48 inH2O
2 in. / DN 50 - F1.5	≥160 kPa, 642 inH2O	0.15 kPa, 0.60 inH2O	0.36 kPa, 1.44 inH2O	0.36 kPa, 1.44 inH2O	0.08 kPa, 0.32 inH2O
3 / 4 in. / DN 80 / 100 - F2.5	≥ 40 kPa, 160 inH2O	0.03 kPa, 0.12 inH2O	0.02 kPa, 0.08 inH2O	0.02 kPa, 0.08 inH2O	0.015 kPa, 0.06 inH2O
3 / 4 in. / DN 80 / 100 - F2.5	≥ 4 kPa, 16 inH2O	0.03 kPa, 0.12 inH2O	0.02 kPa, 0.08 inH2O	0.02 kPa, 0.08 inH2O	0.015 kPa, 0.06 inH2O

MULTIPLY BY 10 THE kPa VALUES TO OBTAIN mbar.

Model S26 seals
for remote and direct mount



ASME and EN 1092-1 smooth and Form B1 (flushing ring as option, only for flush version)



EN 1092-1 Form E

EN 1092-1 Form D

Note 1 - Flange thickness tolerance is +3.0 / -0.0 mm (+0.12 / -0.0 in.).
Note 2 - Flange thickness tolerance is +1.0 / -1.3 mm (+0.04 / -0.05 in.) up to 18 mm or ±1.5 mm (±0.06 in.) from 18 to 50 mm from 18 to 50 mm.

Size/Rating	Dimensions mm. (in.) for S26FA										
	A (dia)										N°
	extended	flush diaphragm		flushing ring							of
	diaphragm	std.	low thick.	internal dia	B (dia)	C (dia)	D (dia)	E (dia)	F (Note 1)	G	holes
2 in. ASME CL 150	48 (1.9)	60 (2.36)	58 (2.28)	62 (2.44)	92 (3.62)	120.65 (4.75)	152.4 (6)	19.1 (0.79)	17.5 (0.6)	2 (0.08)	4
2 in. ASME CL 300	48 (1.9)	60 (2.36)	58 (2.28)	62 (2.44)	92 (3.62)	127 (5)	165.1 (6.5)	19.1 (0.79)	20.8 (0.8)	2 (0.08)	8
2 in. ASME CL 600	48 (1.9)	60 (2.36)	58 (2.28)	62 (2.44)	92 (3.62)	127 (5)	165.1 (6.5)	19.1 (0.79)	25.4 (1)	7 (0.27)	8
3 in. ASME CL 150	72 (2.83)	89 (3.5)	75 (2.95)	92 (3.62)	127 (5)	152.4 (6)	190.5 (7.5)	19.1 (0.79)	22.4 (0.88)	2 (0.08)	4
3 in. ASME CL 300	72 (2.83)	89 (3.5)	75 (2.95)	92 (3.62)	127 (5)	168.15 (6.62)	209.6 (8.25)	22.4 (0.86)	26.9 (1.1)	2 (0.08)	8
3 in. ASME CL 600	72 (2.83)	89 (3.5)	75 (2.95)	92 (3.62)	127 (5)	168.15 (6.62)	209.6 (8.25)	22.4 (0.86)	31.8 (1.3)	7 (0.27)	8
4 in. ASME CL 150	94 (3.7)	89 (3.5)	75 (2.95)	92 (3.62)	157.2 (6.2)	190.5 (7.5)	228.6 (9)	19.1 (0.79)	22.4 (0.88)	2 (0.08)	8

Size/Rating	Dimensions mm. (in.) for S26FE smooth and Form B1										
	A (dia)										
	extended	flush diaphragm		flushing ring							N° of
	diaphragm	std.	low thick.	internal dia	B (dia)	C (dia)	D (dia)	E (dia)	F (Note 2)	G	holes
DN 50 EN PN 16	48 (1.9)	60 (2.36)	58 (2.28)	62 (2.44)	102 (4.02)	125 (4.92)	165 (6.5)	18 (0.71)	15 (0.58)	3 (0.12)	4
DN 50 EN PN 40	48 (1.9)	60 (2.36)	58 (2.28)	62 (2.44)	102 (4.02)	125 (4.92)	165 (6.5)	18 (0.71)	18 (0.67)	3 (0.12)	4
DN 50 EN PN 63	48 (1.9)	60 (2.36)	58 (2.28)	62 (2.44)	102 (4.02)	135 (5.31)	180 (7.08)	22 (0.86)	23 (0.9)	3 (0.12)	4
DN 50 EN PN 100	48 (1.9)	60 (2.36)	58 (2.28)	62 (2.44)	102 (4.02)	145 (5.71)	195 (7.67)	26 (1.02)	27 (1.06)	3 (0.12)	4
DN 80 EN PN 16	72 (2.83)	89 (3.5)	75 (2.95)	92 (3.62)	138 (5.43)	160 (6.3)	200 (7.87)	18 (0.71)	17 (0.67)	3 (0.12)	8
DN 80 EN PN 40	72 (2.83)	89 (3.5)	75 (2.95)	92 (3.62)	138 (5.43)	160 (6.3)	200 (7.87)	18 (0.71)	21 (0.83)	3 (0.12)	8
DN 80 EN PN 63	72 (2.83)	89 (3.5)	75 (2.95)	92 (3.62)	138 (5.43)	170 (6.7)	215 (8.46)	22 (0.86)	25 (0.98)	3 (0.12)	8
DN 80 EN PN 100	72 (2.83)	89 (3.5)	75 (2.95)	92 (3.62)	138 (5.43)	180 (7.08)	230 (9.05)	26 (1.02)	33 (1.3)	3 (0.12)	8
DN 100 EN PN 16	94 (3.7)	89 (3.5)	75 (2.95)	92 (3.62)	158 (6.22)	180 (7.08)	220 (8.66)	18 (0.71)	17 (0.67)	3 (0.12)	8

Size/Rating	Dimensions mm. (in.) for S26FE Form E								
	diaphragm A (dia)		B (dia)	C (dia)	D (dia)	E (dia)	F	G	N° of
	std. thickness	low thickness					(Note 2)		holes
DN 50 EN PN 16	60 (2.36)	58 (2.28)	87 (3.42)	125 (4.92)	165 (6.5)	18 (0.71)	13.5 (0.53)	4.5 (0.18)	4
DN 50 EN PN 40	60 (2.36)	58 (2.28)	87 (3.42)	125 (4.92)	165 (6.5)	18 (0.71)	15.5 (0.61)	4.5 (0.18)	4
DN 50 EN PN 63	60 (2.36)	58 (2.28)	87 (3.42)	135 (5.31)	180 (7.08)	22 (0.86)	21.5 (0.85)	4.5 (0.18)	4
DN 50 EN PN 100	60 (2.36)	58 (2.28)	87 (3.42)	145 (5.71)	195 (7.67)	26 (1.02)	25.5 (1)	4.5 (0.18)	4
DN 80 EN PN 16	89 (3.5)	75 (2.95)	120 (4.72)	160 (6.3)	200 (7.87)	18 (0.71)	15.5 (0.61)	4.5 (0.18)	8
DN 80 EN PN 40	89 (3.5)	75 (2.95)	120 (4.72)	160 (6.3)	200 (7.87)	18 (0.71)	19.5 (0.77)	4.5 (0.18)	8
DN 80 EN PN 63	89 (3.5)	75 (2.95)	120 (4.72)	170 (6.7)	215 (8.46)	22 (0.86)	23.5 (0.92)	4.5 (0.18)	8
DN 80 EN PN 100	89 (3.5)	75 (2.95)	120 (4.72)	180 (7.08)	230 (9.05)	26 (1.02)	31.5 (1.24)	4.5 (0.18)	8
DN 100 EN PN 16	89 (3.5)	75 (2.95)	149 (5.87)	180 (7.08)	220 (8.66)	18 (0.71)	15 (0.59)	5 (0.20)	8

Size/Rating	Dimensions mm (in) for S26FE Form D										
	diaphragm A (dia)		B (dia)	C (dia)	D (dia)	E (dia)	F	H (dia)	I (dia)	L	N° of
	std. thickness	low thickness					(Note 2)				holes
DN 50 EN PN 16	60 (2.36)	58 (2.28)	102 (4.02)	125 (4.92)	165 (6.5)	18 (0.71)	15 (0.59)	72 (2.83)	88 (3.46)	4 (0.16)	4
DN 50 EN PN 40	60 (2.36)	58 (2.28)	102 (4.02)	125 (4.92)	165 (6.5)	18 (0.71)	18 (0.71)	72 (2.83)	88 (3.46)	4 (0.16)	4
DN 50 EN PN 63	60 (2.36)	58 (2.28)	102 (4.02)	135 (5.31)	180 (7.08)	22 (0.86)	23 (0.91)	72 (2.83)	88 (3.46)	4 (0.16)	4
DN 50 EN PN 100	60 (2.36)	58 (2.28)	102 (4.02)	145 (5.71)	195 (7.67)	26 (1.02)	27 (1.06)	72 (2.83)	88 (3.46)	4 (0.16)	4
DN 80 EN PN 16	89 (3.5)	75 (2.95)	138 (5.43)	160 (6.3)	200 (7.87)	18 (0.71)	17 (0.67)	105 (4.13)	121 (4.76)	4 (0.16)	8
DN 80 EN PN 40	89 (3.5)	75 (2.95)	138 (5.43)	160 (6.3)	200 (7.87)	18 (0.71)	21 (0.83)	105 (4.13)	121 (4.76)	4 (0.16)	8
DN 80 EN PN 63	89 (3.5)	75 (2.95)	138 (5.43)	170 (6.7)	215 (8.46)	22 (0.86)	25 (0.92)	105 (4.13)	121 (4.76)	4 (0.16)	8
DN 80 EN PN 100	89 (3.5)	75 (2.95)	138 (5.43)	180 (7.08)	230 (9.05)	26 (1.02)	33 (1.3)	105 (4.13)	121 (4.76)	4 (0.16)	8
DN 100 EN PN 16	89 (3.5)	75 (2.95)	158 (6.22)	180 (7.08)	220 (8.66)	18 (0.71)	17 (0.67)	128 (5.04)	149 (5.91)	4.5 (0.18)	8

Model S26 seals
for remote and direct mount

BASIC ORDERING INFORMATION model S26FA Fixed flange diaphragm seals (flush) to ASME B16.5

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

BASE MODEL - 1st to 5th characters		**S 2 6 F A**	**X**	**XX**	**X**	**X**	**XX**	**X**	**X**	**X**	**X**	**X**
Fixed flange diaphragm seal (flush and extended) to ASME B16.5												
Transmitter Side of Connection - 6th character												
High pressure side			H									
Low pressure side			L									
Mounting Flange Rating / Size - 7th and 8th characters												
ASME CL 150 / 2 in.				E1								
ASME CL 300 / 2 in.				E2								
ASME CL 600 / 2 in.				E3								
ASME CL 150 / 3 in.				G1								
ASME CL 300 / 3 in.				G2								
ASME CL 600 / 3 in.				G3								
ASME CL 150 / 4 in.				H1								
Mounting Flange Material - 9th character												
AISI 316 L ss					S							
Extensions Length and Material - 10th character												
Flush						F						
50 mm (2 in.)	AISI 316 L ss					1						
100 mm (4 in.)	AISI 316 L ss					3						
150 mm (6 in.)	AISI 316 L ss					5						
Diaphragm Material - 11th and 12th characters												
AISI 316 L ss							NACE			SM		
AISI 316 L ss - Low thickness		(Note 1)					NACE			SL		
Hastelloy C-276							NACE			HM		
Hastelloy C-276 - Low thickness		(Note 1)					NACE			HL		
Hastelloy C-2000		(Note 1)					NACE			MM		
Inconel 625		(Note 1)					NACE			LM		

continued
see next page

BASIC ORDERING INFORMATION model S26FA		S 2 6 F A X XX X X XX	X	X	X	X	X	X	X
Seal Surface Finish - 13th character									
Serrated		(Note 2)	1						
Smooth			2						
Capillary Protection - 14th character									
AISI 316 L ss armour				A					
AISI 316 L ss armour with PVC protective cover				B					
Extension tube for direct mount seal		(Note 3)		N					
Capillary Length m (Feet) - 15th character									
Direct-mount construction		(Note 4)			1				
1 (3)		(Note 5)			A				
1.5 (5)		(Note 5)			B				
2 (7)		(Note 5)			C				
2.5 (8)		(Note 5)			D				
3 (10)		(Note 5)			E				
3.5 (12)		(Note 5)			F				
4 (13)		(Note 5)			G				
4.5 (15)		(Note 5)			H				
5 (17)		(Note 5)			J				
5.5 (18)		(Note 5)			K				
6 (20)		(Note 5)			L				
6.5 (22)		(Note 5)			M				
7 (23.5)		(Note 5)			N				
7.5 (25)		(Note 5)			P				
8 (27)		(Note 5)			Q				
9 (30)		(Note 5)			R				
10 (33)		(Note 5)			S				
12 (40)		(Note 5)			T				
14 (47)		(Notes1, 5)			U				
16 (53)		(Notes1, 5)			V				
Fill Fluid - 16th character									
Silicone oil PMX 200 10 cSt	(-40 to 250 °C; -40 to 480 °F)					S			
Silicone oil Baysilone PD5 5 cSt	(-85 to 250 °C; -121 to 480 °F)					P			
Inert oil - Galden G5	(Oxygen service)	(Note 6)				N			
Inert oil - Halocarbon 4.2	(Oxygen service)	(Note 6)				D			
Silicone oil for high temperature	(-10 to 375 °C; 14 to 707 °F)					G			
Silicone polymer Sylltherm XLT	(-100 to 100 °C; -148 to 212 °F)					C			
Mineral oil Esso Marcol 122	(FDA approved)	(Note 7)				W			
Vegetable oil Neobee M-20	(FDA approved)	(Note 7)				A			
Glycerin-water 70%	(FDA approved)	(Note 7)				B			

continued
see next page

Model S26 seals
for remote and direct mount

BASIC ORDERING INFORMATION model S26FA	S 2 6 F A X XX X X XX X X X X	X	X	X
Flushing Ring: Hole and Thread - 17th character				
None		N		
1 hole - 1/2 in. NPT	(Note 1)	2		
2 holes - 1/2 in. NPT	(Note 1)	3		
1 hole - 1/4 in. NPT	(Note 1)	4		
2 holes - 1/4 in. NPT	(Note 1)	5		
Flushing Ring Material - 18th character				
None	(Note 8)		N	
AISI 316 L ss	(Note 9) NACE		A	
Hastelloy C-276	(Notes 9, 10) NACE		H	
Flushing Ring: Plug and Gasket - 19th character				
No plug - No gasket				N
No plug - garlock	(Note 9)			A
No plug - PTFE	(Note 9)			B
No plug - graphite	(Note 9)			C
AISI 316 L ss - no gasket	(Notes 9, 11) NACE			D
AISI 316 L ss - garlock	(Notes 9, 11) NACE			E
AISI 316 L ss - PTFE	(Notes 9, 11) NACE			F
AISI 316 L ss - graphite	(Notes 9, 11) NACE			G
Hastelloy C-276 - no gasket	(Notes 9, 12) NACE			H
Hastelloy C-276 - garlock	(Notes 9, 12) NACE			L
Hastelloy C-276 - PTFE	(Notes 9, 12) NACE			M
Hastelloy C-276 - graphite	(Notes 9, 12) NACE			P

Note 1: Not available with extensions length and material code 1, 3, 5
Note 2: Not available with diaphragm material code MM, LM
Note 3: Not available with transmitter side of connection code L
Note 4: Not available with capillary protection code A, B
Note 5: Not available with capillary protection code N
Note 6: Suitable for oxygen service
Note 7: Suitable for food application
Note 8: Not available with Flushing ring: hole and thread code 2, 3, 4, 5
Note 9: Not available with Flushing ring: hole and thread code N
Note 10: Not available with Seal surface finish code 1
Note 11: Not available with Hastelloy C-276 flushing ring material code H
Note 12: Not available with AISI 316 L flushing ring material code A

BASIC ORDERING INFORMATION model S26FE Fixed flange diaphragm seals (flush) to EN 1092-1

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

BASE MODEL - 1st to 5th characters			S 2 6 F E	X	XX	X	X	XX	X	X	X	X	X
Fixed flange diaphragm seal (flush) to EN 1092-1													
Transmitter Side of Connection - 6th character													
High pressure side				H									
Low pressure side				L									
Mounting Flange Rating / Size - 7th and 8th characters													
PN 16 / DN 50					N1								
PN 40 / DN 50					N2								
PN 63 / DN 50					N3								
PN 100 / DN 50					N4								
PN 16 / DN 80					P1								
PN 40 / DN 80					P2								
PN 63 / DN 80					P3								
PN 100 / DN 80					P4								
PN 16 / DN 100					Q1								
Mounting Flange Material - 9th character													
AISI 316 L ss						S							
Extensions Length - 10th character													
Flush							F						
50 mm (2 in.)	AISI 316 L ss						1						
100 mm (4 in.)	AISI 316 L ss						3						
150 mm (6 in.)	AISI 316 L ss						5						
Diaphragm Material - 11th and 12th characters													
AISI 316 L ss					NACE			SM					
AISI 316 L ss - Low thickness (not for extended diaphragm)		(Note 1)			NACE			SL					
Hastelloy C-276					NACE			HM					
Hastelloy C-276 - Low thickness (not for extended diaphragm)		(Note 1)			NACE			HL					
Hastelloy C-2000 (not for extended diaphragm)		(Note 1)			NACE			MM					
Inconel 625 (not for extended diaphragm)		(Note 1)			NACE			LM					

continued
see next page

Model S26 seals
for remote and direct mount

BASIC ORDERING INFORMATION model S26FE	S 2 6 F E X XX X X XX	X	X	X	X	X	X	X
Seal Surface Finish - 13th character								
Serrated	(Note 2)	1				continued see next page		
Smooth		2						
Form E - Spigot type	(Notes 1, 3)	4						
Form D - Groove type	(Notes 1, 3, 4)	6						
Capillary Protection - 14th character								
AISI 316 L ss armour			A					
AISI 316 L ss armour with PVC protective cover			B					
Extension tube for direct mount seal	(Note 5)		N					
Capillary Length m (Feet) - 15th character								
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 (23.5)	(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)	(Notes 1, 7)			U				
16 (53)	(Notes 1, 7)			V				
Fill Fluid - 16th character								
Silicone oil PMX 200 10 cSt	(-40 to 250 °C; -40 to 480 °F)				S			
Silicone oil Baysilone PD5 5 cSt	(-85 to 250 °C; -121 to 480 °F)				P			
Inert oil - Galden G5	(Oxygen service)	(Note 8)			N			
Inert oil - Halocarbon 4.2	(Oxygen service)	(Note 8)			D			
Silicone oil for high temperature	(-10 to 375 °C; 14 to 707 °F)				G			
Silicone polymer Syltherm XLT	(-100 to 100 °C; -148 to 212 °F)				C			
Mineral oil Esso Marcol 122	(FDA approved)	(Note 9)			W			
Vegetable oil Neobee M-20	(FDA approved)	(Note 9)			A			
Glycerin-water 70%	(FDA approved)	(Note 9)			B			

BASIC ORDERING INFORMATION model S26FE	S 2 6 F E X XX X X XX X X X X	X	X	X
Flushing Ring: Hole and Thread - 17th character				
None		N		
1 hole - 1/2 in. NPT	(Notes 1, 10)	2		
2 holes - 1/2 in. NPT	(Notes 1, 10)	3		
1 hole - 1/4 in. NPT	(Notes 1, 10)	4		
2 holes - 1/4 in. NPT	(Notes 1, 10)	5		
Flushing Ring Material - 18th character				
None	(Note 11)		N	
AISI 316 L ss	(Note 12) NACE		A	
Hastelloy C-276	(Notes 12, 13) NACE		H	
Flushing Ring: Plug and Gasket - 19th character				
No plug - No gasket				N
No plug - garlock	(Note 12)			A
No plug - PTFE	(Note 12)			B
No plug - graphite	(Note 12)			C
AISI 316 L ss - no gasket	(Notes 12, 14) NACE			D
AISI 316 L ss - garlock	(Notes 12, 14) NACE			E
AISI 316 L ss - PTFE	(Notes 12, 14) NACE			F
AISI 316 L ss - graphite	(Notes 12, 14) NACE			G
Hastelloy C-276 - no gasket	(Notes 12, 15) NACE			H
Hastelloy C-276 - garlock	(Notes 12, 15) NACE			L
Hastelloy C-276 - PTFE	(Notes 12, 15) NACE			M
Hastelloy C-276 - graphite	(Notes 12, 15) NACE			P

Note 1: Not available with extensions length and material code 1, 3, 5
Note 2: Not available with diaphragm material code MM, LM
Note 3: Not available with DN 100 size code Q1
Note 4: Not available with diaphragm material code HM, HL, MM, LM
Note 5: Not available with transmitter side of connection code L
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 Seal surface finish code 4, 6
Note 11: Not available with Flushing ring: hole and thread code 2, 3, 4, 5
Note 12: Not available with Flushing ring: hole and thread code N
Note 13: Not available with Seal surface finish code 1
Note 14: Not available with Hastelloy C-276 flushing ring material code H
Note 15: Not available with AISI 316 L flushing ring material code A

Model S26 seals for remote and direct mount

S26TT Model off-line threaded diaphragm seal

The off-line threaded connection seals are designed to connect directly to a process pipe via the NPT connection in the lower housing . These elements are available with a flushing connection, on request, in the lower housing.

Pressure limits

Seal model S26TT bolting	Temperature range	Pressure limit
AISI 316 ss or	0 ... 100 °C (32 ... 212 °F)	21 MPa, 210 bar, 3045 psi
Carbon steel	-60 ... 0 °C (-76 ... 32 °F)	16 MPa, 160 bar, 2320 psi
	100 ... 360 °C (212 ... 680 °F)	16 MPa, 160 bar, 2320 psi
Alloy steel	0 ... 37.8 °C (32 ... 100 °F)	21 MPa, 210 bar, 3045 psi
	-48.3 ... 0 °C (-55 ... 32 °F)	16 MPa, 160 bar, 2320 psi
	37.8 ... 360 °C (100 ... 680 °F)	13 MPa, 130 bar, 1885 psi

Vacuum service

Full vacuum subject to fill fluid limits.
Refer to FILL FLUID CHARACTERISTICS table. Minimum pressure with tantalum diaphragm is 1 kPa abs, 10 mbar abs, 0.15 psia.

Process temperature limits

Refer to FILL FLUID CHARACTERISTICS table and as follows for specific variants.

Material	
Tantalum diaphragm	260 °C (500 °F)
AISI gold plated diaphragm	320 °C (608 °F)
PTFE gasket	-100 and 260 °C (-148 and 500 °F)
Viton gasket	-20 and 260 °C (-4 and 500 °F)
graphite gasket	-100 and 360 °C (-148 and 680 °F)

Bolts

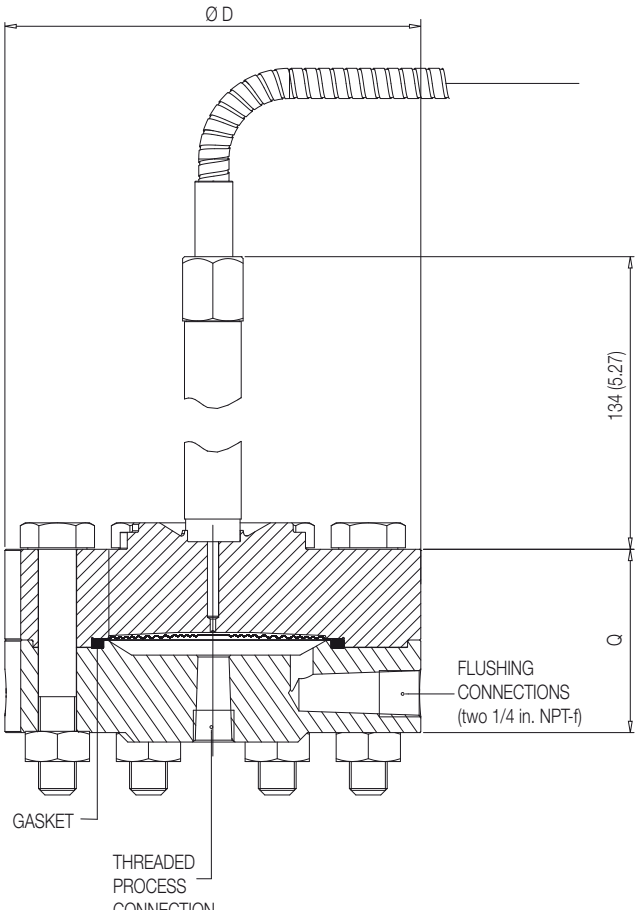
AISI 316 ss bolts Class A4-80 and nuts Class A4-70 per EN ISO 3506;
Carbon steel bolts Class 8.8 per EN ISO 4014 and nuts Class 8 per EN ISO 898/2;
Alloy steel bolts per ASTM-A-193-77a grade B7M and nuts per ASTM A194/A 194 M-90 grade 2HM, in compliance with NACEMR0175 Class II.

Temperature effect

The following table shows temperature effect per 20 K (36 °F) change, detailed separately for
a) the seal (one element), as process temperature error
b) the capillary per meter
c) the system (transmitter sensor when combined with a seal of specific size/type, either direct mount or remote) referred to silicone oil (PMX 200) filling and AISI 316 L ss diaphragm materials.
For filling different from silicone oil (PMX 200) the errors can be multiplied by ratio between the thermal expansion coefficients of the selected filling divided by the one of PMX 200, listed in the fill fluid characteristics table.
THE ERRORS IN TABLE CAN BE CONSIDERED DIVIDED BY 4 FOR TRANSMITTERS USING SAME REMOTE SEAL ON THE TWO SIDES

S26T off-line threaded seal size - Mnemonic	Sensor URL	Seal error (process)	Direct mount system error (ambient)	Remote system error (ambient)	1 metre capillary error (ambient)
2 1/2 in. - T2.5	≥ 4 kPa, 16 inH2O	0.26 kPa, 1.04 inH2O	0.11 kPa, 0.44 inH2O	0.1 kPa, 0.4 inH2O	0.08 kPa, 0.32 inH2O

MULTIPLY BY 10 THE kPa VALUES TO OBTAIN mbar.



	Dimensions mm. (in.) for S26TT	
Size (thread)	D (dia)	Q
1/4 in. NPT	109.2 (4.3)	53.3 (2.1)
1/2 in. NPT	109.2 (4.3)	53.3 (2.1)
3/4 in. NPT	109.2 (4.3)	63.5 (2.5)
1 in. NPT	109.2 (4.3)	63.5 (2.5)
1 1/2 in. NPT	109.2 (4.3)	63.5 (2.5)

Model S26 seals
for remote and direct mount

BASIC ORDERING INFORMATION model S26TT Off-line threaded diaphragm seals

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

BASE MODEL - 1st to 5th characters		**S 2 6 T T**	**X**	**X**	**X**	**X**	**XX**	**X**	**X**	**X**	**X**	**X**
Off-line threaded diaphragm seal												
Transmitter Side of Connection - 6th character											continued	
High pressure side			H								see next page	
Low pressure side			L									
Size - 7th character												
1/4 in. NPT-f				1								
1/2 in. NPT-f				2								
3/4 in. NPT-f				3								
1 in. NPT-f				4								
1 1/2 in. NPT-f				5								
Bolts material - 8th character												
AISI 316 ss					1							
Carbon steel					2							
Alloy steel		NACE			3							
Mounting Flange Material - 9th character												
AISI 316 ss		NACE				S						
Hastelloy C-276		NACE				H						
Diaphragm Material - 10th and 11th characters												
AISI 316 L ss		NACE					SM					
Hastelloy C-276		NACE					HM					
Hastelloy C-2000		NACE					MM					
Inconel 625		NACE					LM					
Tantalum							TM					
AISI 316 L ss gold plated		NACE					NM					
Capillary Protection - 12th character												
AISI 316 L ss armour								A				
AISI 316 L ss armour with PVC protective cover								B				
Extension tube for direct mount seal	(Note 1)							N				

BASIC ORDERING INFORMATION model S26TT			S 2 6 T T X XX X XX X	X	X	X	X
Capillary Length m (Feet) - 13th character							
Direct-mount construction		(Note 2)		1			
1 (3)		(Note 3)		A			
1.5 (5)		(Note 3)		B			
2 (7)		(Note 3)		C			
2.5 (8)		(Note 3)		D			
3 (10)		(Note 3)		E			
3.5 (12)		(Note 3)		F			
4 (13)		(Note 3)		G			
4.5 (15)		(Note 3)		H			
5 (17)		(Note 3)		J			
5.5 (18)		(Note 3)		K			
6 (20)		(Note 3)		L			
6.5 (22)		(Note 3)		M			
7 (23.5)		(Note 3)		N			
7.5 (25)		(Note 3)		P			
8 (27)		(Note 3)		Q			
9 (30)		(Note 3)		R			
10 (33)		(Note 3)		S			
12 (40)		(Note 3)		T			
Fill Fluid - 14th character							
Silicone oil PMX 200 10 cSt	(-40 to 250 °C; -40 to 480 °F)				S		
Silicone oil Baysilone PD5 5 cSt	(-85 to 250 °C; -121 to 480 °F)				P		
Inert oil - Galden G5	(Oxygen service)	(Note 4)			N		
Inert oil - Halocarbon 4.2	(Oxygen service)	(Note 4)			D		
Silicone oil for high temperature	(-10 to 375 °C; 14 to 707 °F)				G		
Silicone polymer Syltherm XLT	(-100 to 100 °C; -148 to 212 °F)				C		
Mineral oil Esso Marcol 122	(FDA approved)	(Note 5)			W		
Vegetable oil Neobee M-20	(FDA approved)	(Note 5)			A		
Glycerin-water 70%	(FDA approved)	(Note 5)			B		
Flushing Connections - 15th character							
Not required						1	
Provided (2 off)		(Note 6)				Q	
Gasket - 16th character							
PTFE							2
Viton							3
Graphite							7

Note 1: Not available with transmitter side of connection code L
Note 2: Not available with capillary protection code A, B
Note 3: Not available with capillary protection code N
Note 4: Suitable for oxygen service
Note 5: Suitable for food application
Note 6: Not available with size code 5

Model S26 seals for remote and direct mount

S26MA, S26ME Model off-line flanged diaphragm seal

The off-line flanged connection remote seals are designed to connect directly to ASME or EN flanged tank nozzles.
These elements are available with a flushing connection in the lower housing, selectable on request in the ordering code.

Pressure limits

Seal model S26ME to EN 1092-1	AISI 316 ss or Hastelloy C flange
PN 16 / 40	34 bar @ 25 °C (77 °F)

Seal model S26MA to ASME B16.5	AISI 316 L ss flange @ 25 °C (77 °F)	Hastelloy C flange @ 25 °C (77 °F)
Class 150	230 psi	290 psi
Class 300	600 psi	750 psi

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

Vacuum service

Full vacuum subject to fill fluid limits.
Refer to FILL FLUID CHARACTERISTICS table. Minimum pressure with tantalum diaphragm is 1 kPa abs, 10 mbar abs, 0.15 psia.

Process temperature limits

Refer to FILL FLUID CHARACTERISTICS table and as follows for specific variants.

Material	
Tantalum diaphragm	260 °C (500 °F)
AISI gold plated diaphragm	320 °C (608 °F)
PTFE gasket	-100 and 260 °C (-148 and 500 °F)
Viton gasket	-20 and 260 °C (-4 and 500 °F)
graphite gasket	-100 and 360 °C (-148 and 680 °F)

Bolts

Bolts (seal / flange): AISI 316 ss Class A4-70 per EN ISO 3506; studs with nuts (flange / process):
AISI 3xx per ASTM-SA-193/194 grade B8C or B8T

Gasket seat finish

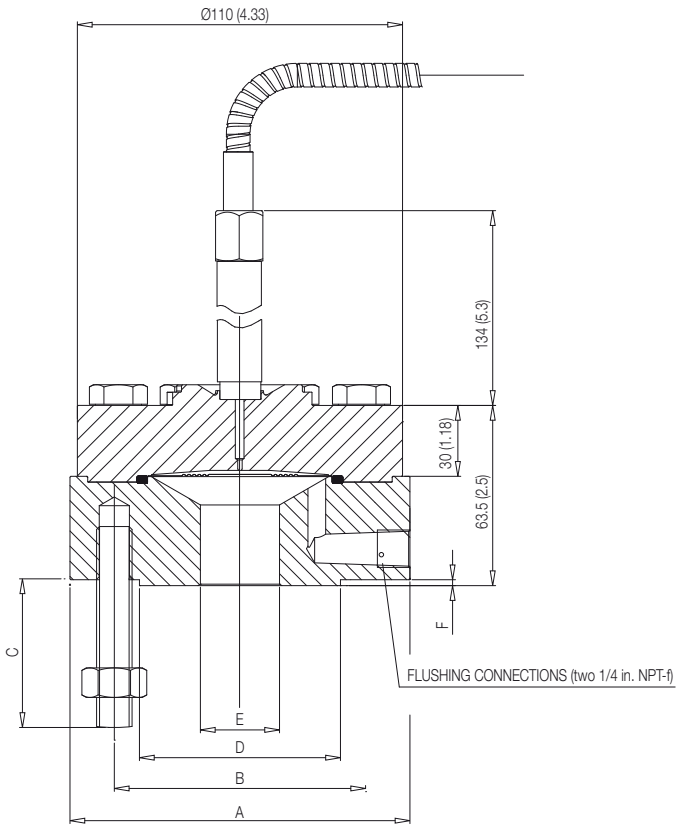
Serrated (ASME): 3.2 to 6.3 µm (Ra)
Serrated (EN 1092-1 Type B1): 3.2 to 12.5 µm (Ra)

Temperature effect

The following table shows temperature effect per 20 K (36 °F) change, detailed separately for
a) the seal (one element), as process temperature error
b) the capillary per meter
c) the system (transmitter sensor when combined with a seal of specific size/type, either direct mount or remote) referred to silicone oil (PMX 200) filling and AISI 316 L ss diaphragm materials.
For filling different from silicone oil (PMX 200) the errors can be multiplied by ratio between the thermal expansion coefficients of the selected filling divided by the one of PMX 200, listed in the fill fluid characteristics table.
THE ERRORS IN TABLE CAN BE CONSIDERED DIVIDED BY 4 FOR TRANSMITTERS USING SAME REMOTE SEAL ON THE TWO SIDES

S26MA, S26ME off-line flange seal size - Mnemonic	Sensor URL	Seal error (process)	Direct mount system error (ambient)	Remote system error (ambient)	1 metre capillary error (ambient)
2 1/2 in. - T2.5	≥ 4 kPa, 16 inH2O	0.26 kPa, 1.04 inH2O	0.11 kPa, 0.44 inH2O	0.1 kPa, 0.4 inH2O	0.08 kPa, 0.32 inH2O

MULTIPLY BY 10 THE kPa VALUES TO OBTAIN mbar.



Size/Rating	Dimensions mm. (in.) for S26MA and S26ME						
	A (dia)	B (dia)	C (4 studs)		D (dia)	E (dia)	F
			Length	Thread			
1/2 in. ASME CL 150	110 (4.33)	60.5 (2.38)	39 (1.53)	1/2 in. – 13 UNC	35.1 (1.38)	15.8 (0.62)	1.6 (0.06)
1/2 in. ASME CL 300	110 (4.33)	66.5 (2.62)	39 (1.53)	1/2 in. – 13 UNC	35.1 (1.38)	15.8 (0.62)	1.6 (0.06)
1 in. ASME CL 150	110 (4.33)	79.4 (3.12)	39 (1.53)	1/2 in. – 13 UNC	50.8 (2)	26.7 (1.05)	1.6 (0.06)
1 in. ASME CL 300	124 (4.88)	88.9 (3.5)	51 (2)	5/8 in. – 11 UNC	50.8 (2)	26.7 (1.05)	1.6 (0.06)
1 1/2 in. ASME CL 150	127 (5)	98.4 (3.87)	39 (1.53)	1/2 in. – 13 UNC	73 (2.87)	41 (1.61)	1.6 (0.06)
1 1/2 in. ASME CL 300	155 (6.1)	114.3 (4.5)	57 (2.24)	3/4 in. – 10 UNC	73 (2.87)	41 (1.61)	1.6 (0.06)
DN 25 PN 16-40	115 (4.52)	85 (3.34)	42 (1.65)	M12	68 (2.67)	28.5 (1.12)	2 (0.08)
DN 40 PN 16-40	150 (5.9)	110 (4.33)	48 (1.89)	M16	88 (3.46)	43.1 (1.69)	3 (0.12)

Model S26 seals
for remote and direct mount

BASIC ORDERING INFORMATION model S26MA Off-line flange diaphragm seals

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

BASE MODEL - 1st to 5th characters			**S 2 6 M A**	X	XX	X	XX	X	X	X	X	X
Off-line flange diaphragm seal to ASME B16.5												
Transmitter Side of Connection - 6th character												
High pressure side				H								
Low pressure side				L								
Mounting Flange Rating / Size - 7th and 8th characters												
ASME CL 150 / 1/2 in.					A1							
ASME CL 300 / 1/2 in.					A2							
ASME CL 150 / 1 in.					C1							
ASME CL 300 / 1 in.					C2							
ASME CL 150 / 1 1/2 in.					D1							
ASME CL 300 / 1 1/2 in.					D2							
Mounting Flange Material / Seat Form - 9th character												
AISI 316 ss / Form RF (raised face) - serrated finish		NACE	(Note 6)			S						
Hastelloy C-276 / Form RF (raised face) - serrated finish		NACE	(Note 6)			H						
Hastelloy C-2000 / Form RF (raised face) - serrated finish		NACE	(Note 7)			Y						
Diaphragm Material - 10th and 11th characters												
AISI 316 L ss		NACE					SM					
Hastelloy C-276		NACE					HM					
Hastelloy C-2000		NACE					MM					
Hastelloy C-2000 diaphragm and body		NACE					ZM					
Inconel 625		NACE					LM					
Tantalum							TM					
AISI 316 L ss gold plated		NACE					NM					
Capillary Protection - 12th character												
AISI 316 L ss armour								A				
AISI 316 L ss armour with PVC protective cover								B				
Extension tube for direct mount seal	(Note 1)							N				

continued
see next page

BASIC ORDERING INFORMATION model S26MA			S 2 6 M A X XX X XX X	X	X	X	X
Capillary Length m (Feet) - 13th character							
Direct-mount construction		(Note 2)		1			
1 (3)		(Note 3)		A			
1.5 (5)		(Note 3)		B			
2 (7)		(Note 3)		C			
2.5 (8)		(Note 3)		D			
3 (10)		(Note 3)		E			
3.5 (12)		(Note 3)		F			
4 (13)		(Note 3)		G			
4.5 (15)		(Note 3)		H			
5 (17)		(Note 3)		J			
5.5 (18)		(Note 3)		K			
6 (20)		(Note 3)		L			
6.5 (22)		(Note 3)		M			
7 (23.5)		(Note 3)		N			
7.5 (25)		(Note 3)		P			
8 (27)		(Note 3)		Q			
9 (30)		(Note 3)		R			
10 (33)		(Note 3)		S			
12 (40)		(Note 3)		T			
Fill Fluid - 14th character							
Silicone oil PMX 200 10 cSt	(-40 to 250 °C; -40 to 480 °F)				S		
Silicone oil Baysilone PD5 5 cSt	(-85 to 250 °C; -121 to 480 °F)				P		
Inert oil - Galden G5	(Oxygen service)	(Note 4)			N		
Inert oil - Halocarbon 4.2	(Oxygen service)	(Note 4)			D		
Silicone oil for high temperature	(-10 to 375 °C; 14 to 707 °F)				G		
Silicone polymer Syltherm XLT	(-100 to 100 °C; -148 to 212 °F)				C		
Mineral oil Esso Marcol 122	(FDA approved)	(Note 5)			W		
Vegetable oil Neobee M-20	(FDA approved)	(Note 5)			A		
Glycerin-water 70%	(FDA approved)	(Note 5)			B		
Flushing Connections - 15th character							
Not required						1	
Provided (2 off)						Q	
Gasket - 16th character							
PTFE							2
Viton		(Note 6)					3
Graphite		(Note 6)					7

Note 1: Not available with transmitter side of connection code L
Note 2: Not available with capillary protection code A, B
Note 3: Not available with capillary protection code N
Note 4: Suitable for oxygen service
Note 5: Suitable for food application
Note 6: Not available with diaphragm material code ZM
Note 7: Not available with diaphragm material code SM, HM, MM, LM, TM, NM

Model S26 seals
for remote and direct mount

BASIC ORDERING INFORMATION model S26ME Off-line flange diaphragm seals

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

BASE MODEL - 1st to 5th characters		**S 2 6 M E**	**X**	**XX**	**X**	**XX**	**X**	**X**	**X**	**X**	**X**
Off-line flange diaphragm seal to EN 1092-1											
Transmitter Side of Connection - 6th character											
High pressure side			H								
Low pressure side			L								
Mounting Flange Rating / Size - 7th and 8th characters											
PN 16 - 40 / DN 25				L2							
PN 16 - 40 / DN 40				M2							
Mounting Flange Material / Seat Form - 9th character											
AISI 316 ss / Form B1 - serrated finish		NACE			S						
Hastelloy C-276 / Form B1 - serrated finish		NACE			H						
Diaphragm Material - 10th and 11th characters											
AISI 316 L ss		NACE				SM					
Hastelloy C-276		NACE				HM					
Hastelloy C-2000		NACE				MM					
Inconel 625		NACE				LM					
Tantalum						TM					
AISI 316 L ss gold plated		NACE				NM					
Capillary Protection - 12th character											
AISI 316 L ss armour							A				
AISI 316 L ss armour with PVC protective cover							B				
Extension tube for direct mount seal	(Note 1)						N				

continued
see next page

BASIC ORDERING INFORMATION model S26ME			S 2 6 M E X XX X XX X	X	X	X	X
Capillary Length m (Feet) - 13th character							
Direct-mount construction		(Note 2)		1			
1 (3)		(Note 3)		A			
1.5 (5)		(Note 3)		B			
2 (7)		(Note 3)		C			
2.5 (8)		(Note 3)		D			
3 (10)		(Note 3)		E			
3.5 (12)		(Note 3)		F			
4 (13)		(Note 3)		G			
4.5 (15)		(Note 3)		H			
5 (17)		(Note 3)		J			
5.5 (18)		(Note 3)		K			
6 (20)		(Note 3)		L			
6.5 (22)		(Note 3)		M			
7 (23.5)		(Note 3)		N			
7.5 (25)		(Note 3)		P			
8 (27)		(Note 3)		Q			
9 (30)		(Note 3)		R			
10 (33)		(Note 3)		S			
12 (40)		(Note 3)		T			
Fill Fluid - 14th character							
Silicone oil PMX 200 10 cSt	(-40 to 250 °C; -40 to 480 °F)				S		
Silicone oil Baysilone PD5 5 cSt	(-85 to 250 °C; -121 to 480 °F)				P		
Inert oil - Galden G5	(Oxygen service)	(Note 4)			N		
Inert oil - Halocarbon 4.2	(Oxygen service)	(Note 4)			D		
Silicone oil for high temperature	(-10 to 375 °C; 14 to 707 °F)				G		
Silicone polymer Syltherm XLT	(-100 to 100 °C; -148 to 212 °F)				C		
Mineral oil Esso Marcol 122	(FDA approved)	(Note 5)			W		
Vegetable oil Neobee M-20	(FDA approved)	(Note 5)			A		
Glycerin-water 70%	(FDA approved)	(Note 5)			B		
Flushing Connections - 15th character							
Not required						1	
Provided						Q	
Gasket - 16th character							
PTFE							2
Viton							3
Graphite							7

Note 1: Not available with transmitter side of connection code L
Note 2: Not available with capillary protection code A, B
Note 3: Not available with capillary protection code N
Note 4: Suitable for oxygen service
Note 5: Suitable for food application

Model S26 seals for remote and direct mount

S26SS Model sanitary and food diaphragm seal

Sanitary diaphragm seals have been specifically developed for food, sanitary, chemical and pharmaceutical applications, complying with the stringent 3-A requirements.
Available with different process fittings (Triclamp, Cherry Burrell, Union Nut and Sanitary), this model highlights ABB's commitment to satisfy users needs approaching even the most demanding processes successfully.

Pressure limits

Seal model S26SS	Pressure limit
Triclamp 2 in.	3.8 MPa, 38 bar, 550 psi
Triclamp 3 in.	2.4 MPa, 24 bar, 350 psi
Triclamp 4 in.	1.7 MPa, 17 bar, 250 psi
Union nut F50	2.5 MPa, 25 bar, 360 psi
Union nut F80	2.5 MPa, 25 bar, 360 psi
Cherry Burrel 2 in.	1.9 MPa, 19 bar, 275 psi
Cherry Burrel 3 in.	1.9 MPa, 19 bar, 275 psi
Cherry Burrel 4 in.	1.9 MPa, 19 bar, 275 psi
Sanitary flush 4 in.	1.9 MPa, 19 bar, 275 psi
Sanitary extended 4 in.	1.9 MPa, 19 bar, 275 psi
Beverage bolted type 1 1/2 in.	4 MPa, 40 bar, 580 psi
V-band clamp option	1 MPa, 10 bar, 145 psi
4in schedule 5 V-band clamp option	0.7MPa, 7bar, 100psi

Vacuum service

Full vacuum subject to fill fluid limits.
Refer to FILL FLUID CHARACTERISTICS table.

Process temperature limits

Refer to FILL FLUID CHARACTERISTICS table and as follows for specific variants.

Material	
Ethylene Propylene EPDM 3-A 18-03 Class II	-40 and 121 °C (-40 and 250 °F)
Ethylene Propylene	-40 and 149 °C (-40 and 300 °F)

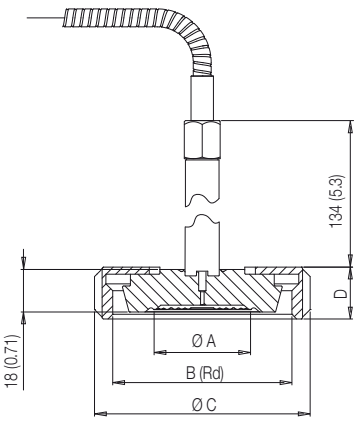
Temperature effect

The following table shows temperature effect per 20 K (36 °F) change, detailed separately for
a) the seal (one element), as process temperature error
b) the capillary per meter
c) the system (transmitter sensor when combined with a seal of specific size/type, either direct mount or remote) referred to silicone oil (PMX 200) filling and AISI 316 L ss diaphragm materials.
For filling different from silicone oil (PMX 200) the errors can be multiplied by ratio between the thermal expansion coefficients of the selected filling divided by the one of PMX 200, listed in the fill fluid characteristics table.
THE ERRORS IN TABLE CAN BE CONSIDERED DIVIDED BY 4 FOR TRANSMITTERS USING SAME REMOTE SEAL ON THE TWO SIDES

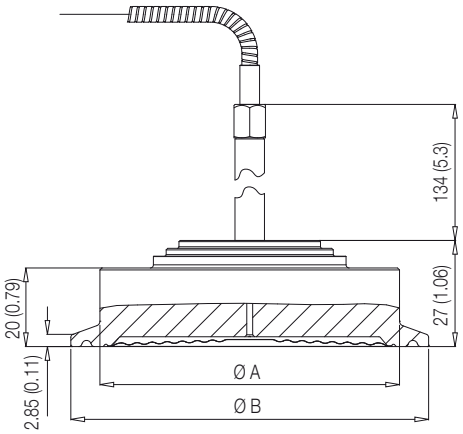
S26SS sanitary and food-seal size - Mnemonic	Sensor URL	Seal error (process)	Direct mount system error (ambient)	Remote system error (ambient)	1 metre capillary error (ambient)
2 in. / F50 - S2	40 - 65 kPa, 160 - 260 inH2O	0.7 kPa, 2.8 inH2O	0.93 kPa, 3.72 inH2O	0.87 kPa, 3.48 inH2O	0.68 kPa, 2.72 inH2O
2 in. / F50 - S2	≥160 kPa, 642 inH2O	0.7 kPa, 2.8 inH2O	0.93 kPa, 3.72 inH2O	0.87 kPa, 3.48 inH2O	0.44 kPa, 1.76 inH2O
3 / 4 in. / F80 - S3	4 - 16 kPa, 16 - 64 inH2O	0.06 kPa, 0.24 inH2O	0.02 kPa, 0.08 inH2O	0.02 kPa, 0.08 inH2O	0.01 kPa, 0.04 inH2O
3 / 4 in. / F80 - S3	≥ 40 kPa, 160 inH2O	0.06 kPa, 0.24 inH2O	0.02 kPa, 0.08 inH2O	0.02 kPa, 0.08 inH2O	0.03 kPa, 0.12 inH2O
1 1/2 in. - K1.5	≥ 65 kPa, 260 inH2O	0.2 kPa, 0.8 inH2O	0.5 kPa, 2 inH2O	NA	NA

MULTIPLY BY 10 THE kPa VALUES TO OBTAIN mbar.

The Union Nut and Triclamp seals are designed for connection by Union Nut according to DIN 11851 - F50 or F80 and 2 in, 3 in, 4 in Triclamp sanitary fittings. A variety of gaskets and clamp rings for the seals are available.

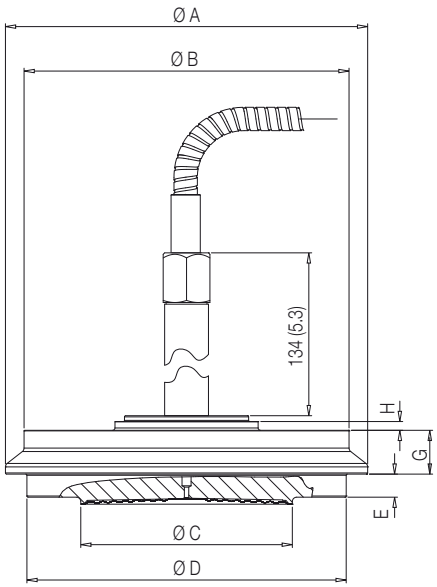


Size	Dimensions mm. (in.) for S26SS Union Nut to DIN 11851			
	A (dia)	B (Rd)	C (dia)	D
F50	42 (1.65)	78 (3.07)	92 (3.62)	22 (0.87)
F80	72 (2.83)	110 (4.33)	127 (5)	29 (1.14)



Size	Dimensions mm. (in.) for S26SS Triclamp	
	A (dia)	B (dia)
2 in.	56.3 (2.2)	64 (2.5)
3 in.	83 (3.26)	91 (3.58)
4 in.	110.3 (4.34)	119 (4.68)

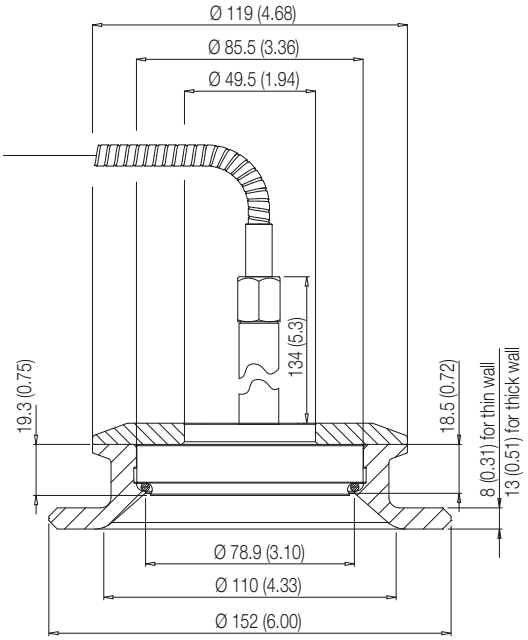
The Cherry Burrell seals are designed for connection to 2in, 3in or 4in Cherry Burrell I-Line sanitary fittings. A 4in V-band clamp is optionally available for the 4in variant.



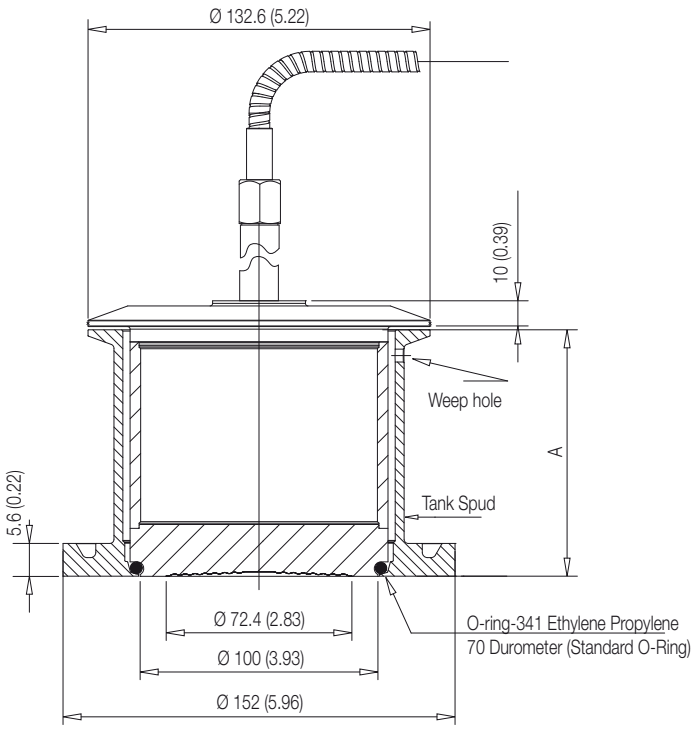
Size	Dimensions mm. (in.) for S26SS Cherry Burrell							
	A (dia)	B (dia)	C (dia)	D (dia)	E	F	G	H
2 in.	67 (2.64)	56 (2.2)	42 (1.65)	57 (2.24)	3.2 (0.13)	6.5 (0.26)	12.5 (0.49)	3 (0.12)
3 in.	98.4 (3.87)	81 (3.19)	72.42 (2.85)	83.8 (3.3)	2.4 (0.09)	7.9 (0.31)	15 (0.59)	3 (0.12)
4 in.	124 (4.88)	111.25 (4.38)	72.42 (2.85)	109.3 (4.3)	2.4 (0.09)	7.9 (0.31)	15 (0.59)	3 (0.12)

Model S26 seals
for remote and direct mount

The sanitary seal with flush diaphragm is designed to connect to a 4in sanitary tank spud. The tank spud and process gasket are available as options with the seal suitable V-band clamp is also available on request.

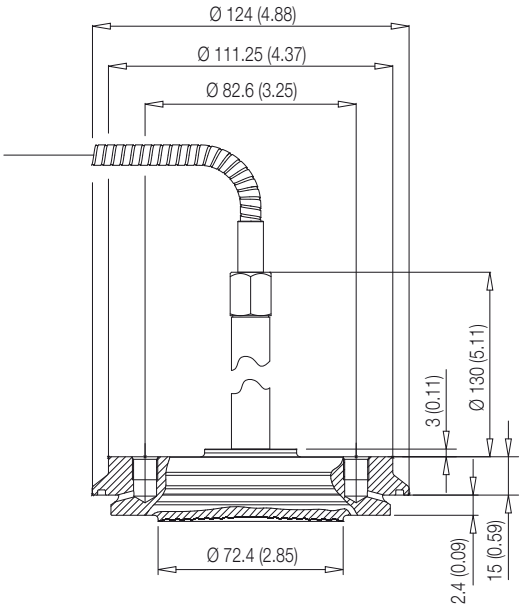


The sanitary seal with extended diaphragm is designed to connect to a 4in sanitary tank spud. The tank spud and process gasket are available with the seal.

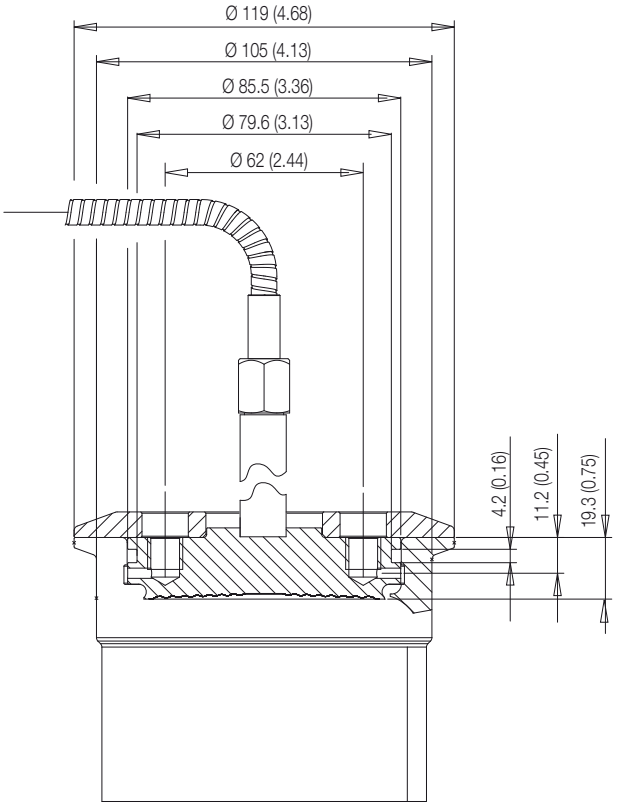


NOTE: The tank spud required for connection of this seal element must be welded to the process vessel prior to connecting the seal, following a recommended welding and pressure testing procedure.

The sanitary aseptic remote seal is designed to connect to a 4in sanitary fitting: either an aseptic tank spud or a 4in Cherry Burrell aseptic ferrule. The tank spud, gaskets and V-band clamp are available option with the seal element.
NOTE: The tank spud or ferrule required for connection of this seal element must be welded to the process vessel prior to connecting the element, following recommended welding and pressure testing procedure. Weld the Cherry Burrell ferrule to the process vessel in accordance with manufacturers recommandations.



4 in. Cherry Burrell Aseptic



4 in. Aseptic Flanged Connection

Model S26 seals
for remote and direct mount

BASIC ORDERING INFORMATION model S26S Sanitary and food diaphragm seals

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

BASE MODEL - 1st to 5th characters		S 2 6 S S	X	X	XX	X	X	X	X	X
Sanitary and food diaphragm seal										
Transmitter Side of Connection - 6th character										
High pressure side			H							
Low pressure side			L							
Mounting connection - 7th character										
Union nut DIN 11851 – F50 (not 3-A authorized)				A						
Union nut DIN 11851 – F80 (not 3-A authorized)				B						
2 in. Triclamp				F						
3 in. Triclamp				G						
4 in. Triclamp				H						
2 in. Cherry Burrell				L						
3 in. Cherry Burrell				M						
4 in. Cherry Burrell				N						
4 in. Sanitary flush diaphragm				P						
4 in. Sanitary extended (2 in.) diaphragm				Q						
4 in. Sanitary extended (4 in.) diaphragm				R						
4 in. Sanitary extended (6 in.) diaphragm				S						
4in Cherry Burrell aseptic - ONLY REMOTE MOUNT				W						
4in aseptic flanged connection - ONLY REMOTE MOUNT				J						
Beverage application bolted seal (not 3-A authorized) - ONLY DIRECT MOUNT WITH 266HDH, 266NDH				T						
Diaphragm Material - 8th and 9th characters										
AISI 316 L ss					SM					
Capillary Protection - 10th character										
AISI 316 L ss armour	(Note 1)					A				
AISI 316 L ss armour with PVC protective cover	(Note 1)					B				
Extension tube for direct mount seal	(Note 2)					N				
Capillary Length m (Feet) - 11th character										
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 (23.5)	(Note 4)						N			
7.5 (25)	(Note 4)						P			
8 (27)	(Note 4)						Q			
9 (30)	(Note 4)						R			
10 (33)	(Note 4)						S			

continued
see next page

BASIC ORDERING INFORMATION model S26SS			S 2 6 S S X X XX X X	X	X	X
Fill Fluid - 12th character						
Silicone oil PMX 200 10 cSt	(-40 to 250 °C; -40 to 480 °F)			S		
Inert oil - Halocarbon 4.2	(-40 to 250 °C; -40 to 480 °F)	(Note 5)		D		
Silicone polymer Syltherm XLT	(-100 to 100 °C; -148 to 212 °F)			C		
Mineral oil Esso Marcol 122	(FDA approved)	(Note 6)		W		
Vegetable oil Neobee M-20	(FDA approved)	(Note 6)		A		
Glycerin-water 70%	(FDA approved)	(Note 6)		B		
Clamp/Fittings - 13th character						
None					1	
2 in. V-band Clamp (for 2 in. Triclamp)					A	
3 in. V-band Clamp (for 3 in. Triclamp)					B	
4 in. V-band Clamp (for 4 in. Triclamp, 4 in. Cherry Burrell, 4 in. Sanitary flush and 4 in. aseptic flanged)					C	
4 in. Tank spud, tank wall up to 4.7mm (0.18) and 4 in. V-band Clamp (for 4 in. Sanitary flush seal)					D	
4 in. Tank spud, tank wall up to 9.5mm (0.37) and 4 in. V-band Clamp (for 4 in. Sanitary flush seal)					E	
4 in. schedule 5 V-band clamp (for 4 in. Sanitary extended seal)					F	
Tank spud for 2 in. extension and 4 in. schedule 5 V-band clamp (for 4 in. Sanitary extended 2 in. seal)					G	
Tank spud for 4 in. extension and 4 in. schedule 5 V-band clamp (for 4 in. Sanitary extended 4 in. seal)					H	
Tank spud for 6 in. extension and 4 in. schedule 5 V-band clamp (for 4 in. Sanitary extended 6 in. seal)					J	
Aseptic tank spud (for 4 in. aseptic flanged seal)					P	
Flanged tank spud with 6 holes (for 1 1/2 in. beverage seal)					K	
Gasket - 14th character						
None						1
Ethylene propylene gasket DN100 (for 4 in. Sanitary extended seal) - (EPDM 3-A 18-03 Class II)						A
Ethylene propylene gasket (for 1 1/2 in. beverage seal)						B
Ethylene propylene gasket DN50 (for F50 Union nut seal)						C
Ethylene propylene gasket DN80 (for F80 Union nut seal)						D
Ethylene propylene gasket (for 4 in. Sanitary flush and 4 in. aseptic) - (EPDM 3-A 18-03 Class II)						G

Note 1: Not available with beverage bolted seal connection code T
Note 2: Not available with transmitter side of connection code L or aseptic seals code W, J
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

Model S26 seals
for remote and direct mount

S26PN Model urea service remote diaphragm seal

Pressure limits

Seal model S26P	
3 in. ASME 600 integral flange	8 MPa, 80 bar, 1160 psi
2 in. ASME 2500 threaded flange	32 MPa, 320 bar, 4640 psi

Vacuum service

Full vacuum subject to fill fluid limits.
Refer to FILL FLUID CHARACTERISTICS table.

Process temperature limits

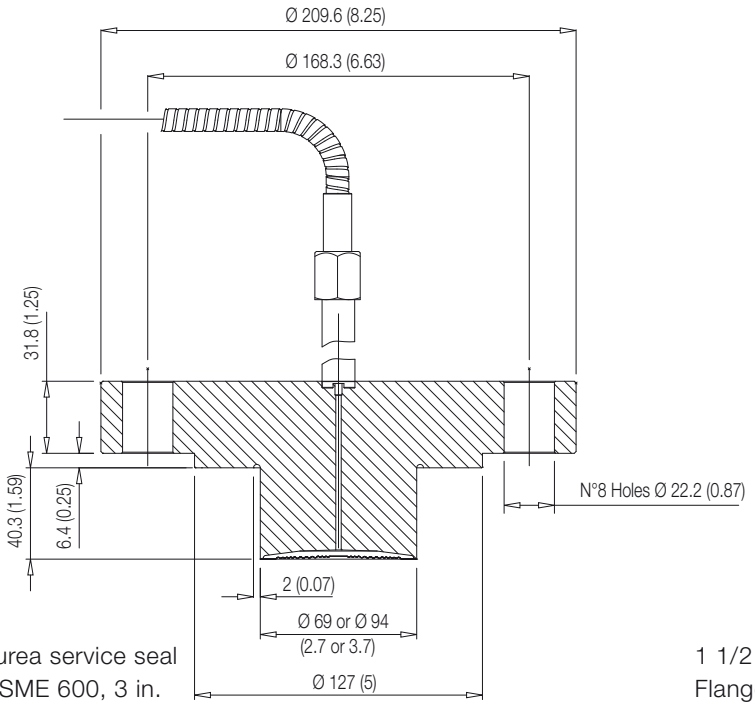
Refer to FILL FLUID CHARACTERISTICS table.

Temperature effect

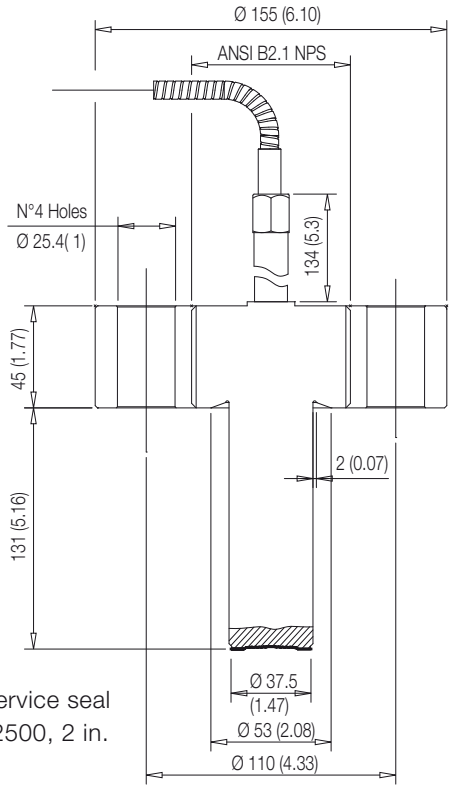
The following table shows temperature effect per 20 K (36 °F) change, detailed separately for
a) the seal (one element), as process temperature error
b) the capillary per meter
c) the system (transmitter sensor when combined with a seal of specific size/type, either direct mount or remote) referred to silicone oil (PMX 200) filling and AISI 316 L ss diaphragm materials.
For filling different from silicone oil (PMX 200) the errors can be multiplied by ratio between the thermal expansion coefficients of the selected filling divided by the one of PMX 200, listed in the fill fluid characteristics table.
THE ERRORS IN TABLE CAN BE CONSIDERED DIVIDED BY 4 FOR TRANSMITTERS USING SAME REMOTE SEAL ON THE TWO SIDES

S26PN urea service seal size - Mnemonic	Sensor URL	Seal error (process)	Remote system error (ambient)	1 metre capillary error (ambient)
1 1/2 in. - U1.5 (2 in. flange)	≥ 160 kPa, 642 inH2O	0.86 kPa, 3.44 inH2O	1.1 kPa, 4.4 inH2O	0.54 kPa, 2.16 inH2O
2 1/2 in. - U2.5 (3 in. flange)	≥ 40 kPa, 160 inH2O	0.18 kPa, 0.72 inH2O	0.06 kPa, 0.24 inH2O	0.11 kPa, 0.44 inH2O

MULTIPLY BY 10 THE kPa VALUES TO OBTAIN mbar.



2 1/2 in.urea service seal
Flange ASME 600, 3 in.



1 1/2 in.urea service seal
Flange ASME 2500, 2 in.

BASIC ORDERING INFORMATION model S26PN urea service remote diaphragm seals

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

BASE MODEL - 1st to 5th characters		S 2 6 P N	X	X	X	XX	X	X	X	X
Urea service remote diaphragm seal										
Transmitter Side of Connection - 6th character										
High pressure side			H							
Low pressure side			L							
Size / Mounting Flange Rating / Material - 7th character										
3 in. / ASME 600 RF integral flange / AISI 316 L ss Urea Grade				H						
2 in. / ASME 2500 threaded flange / Carbon steel				J						
Extension lenght / diameter - 8th character										
40.3 mm (1.59 in.) / 69 mm (2.71 in.)	(Note 1)				R					
40.3 mm (1.59 in.) / 94 mm (3.7 in.)	(Note 1)				S					
131 mm (5.16 in.) / 37.5 mm (1.47 in.)	(Note 2)				T					
Diaphragm Material - 9th and 10th characters										
AISI 316 L ss Urea Grade						SM				
Capillary Protection - 11th character										
AISI 316 L ss armour							A			
AISI 316 L ss armour with PVC protective cover							B			
Capillary Length m (Feet) - 12th 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)	(Note 1)							K		
6 (20)	(Note 1)							L		
Fill Fluid - 13th character										
Silicone oil PMX 200 10 cSt	(-40 to 250 °C; -40 to 480 °F)								S	
Silicone oil for high temperature	(-10 to 375 °C; 14 to 707 °F)								G	
Certification - 14th character										
None										1
Huey test										3

Note 1: Not available with Size/Mounting flange code J
Note 2: Not available with Size/Mounting flange code H

Model S26 seals
for remote and direct mount

S26BN Model Button type remote diaphragm seal

These remote seals are designed to connect directly to a process pipe via the NPT threaded connection or to match pipe fitting withan interface suitable for the provided mating flange. The button seals, due to their design, are dedicated for measurement with medium/high calibrated span (2 MPa/20 bar/290 psi approx. or greater).

Pressure limits

Seal model S26BN	Temp limits 20 and 120 °C (68 and 248 °F)
Types 89, 90 and 92	42 MPa, 420 bar, 6090 psi
Types 91	35 MPa, 350 bar, 5075 psi

Vacuum service

Full vacuum subject to fill fluid limits.
Refer to FILL FLUID CHARACTERISTICS table.

Process temperature limits

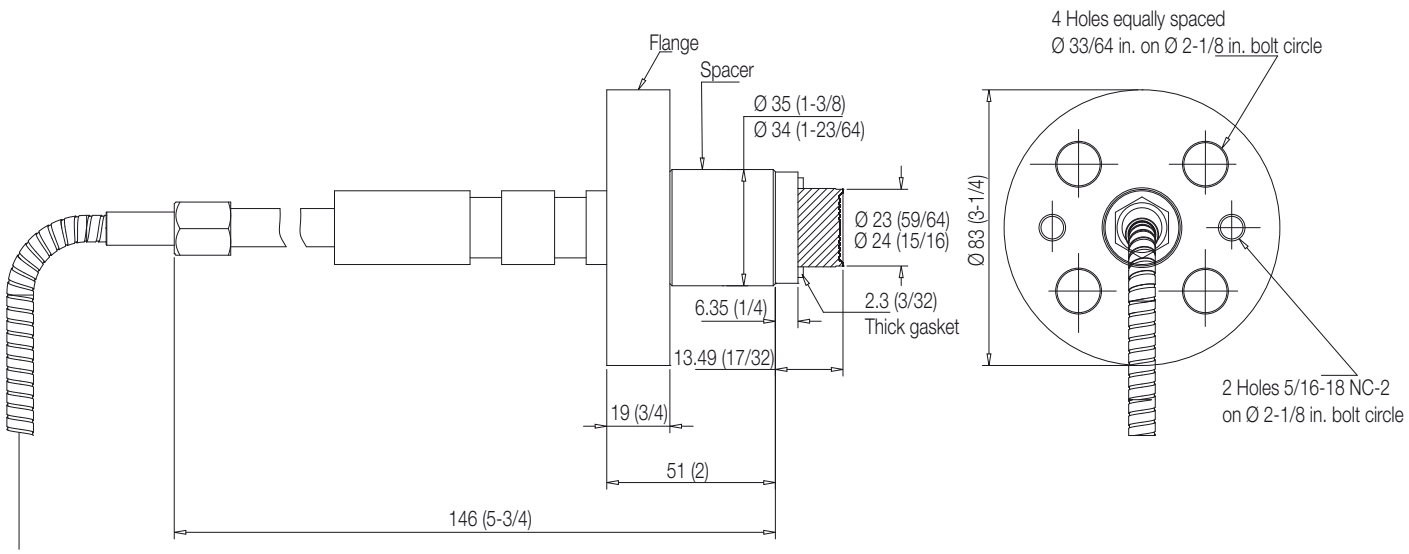
Refer to FILL FLUID CHARACTERISTICS table.

Temperature effect

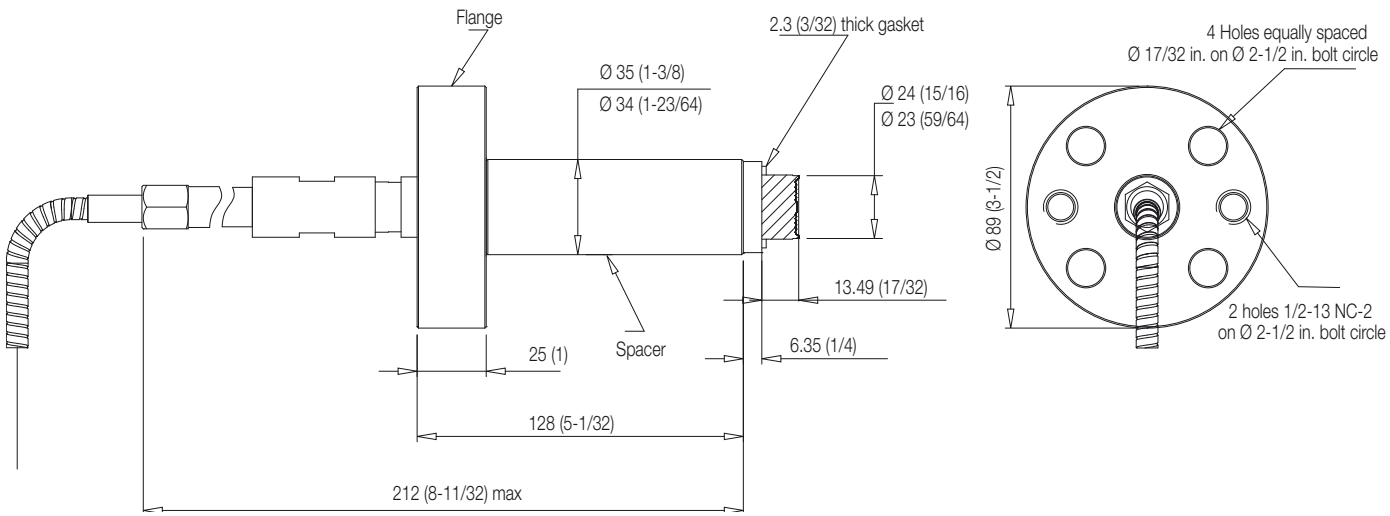
The following table shows temperature effect per 20 K (36 °F) change, detailed separately for
a) the seal (one element), as process temperature error
b) the capillary per meter
c) the system (transmitter sensor when combined with a seal of specific size/type, either direct mount or remote) referred to silicone oil (PMX 200) filling and AISI 316 L ss diaphragm materials.
For filling different from silicone oil (PMX 200) the errors can be multiplied by ratio between the thermal expansion coefficients of the selected filling divided by the one of PMX 200, listed in the fill fluid characteristics table.

S26BN Button type seal size - Mnemonic	Sensor URL	Seal error (process)	Remote system error (ambient)	1 metre capillary error (ambient)
1 in. - B1	≥ 8 MPa, 1160 psi	1.3 kPa, 5.2 inH2O	6.5 kPa, 26 inH2O	1.9 kPa, 7.6 inH2O

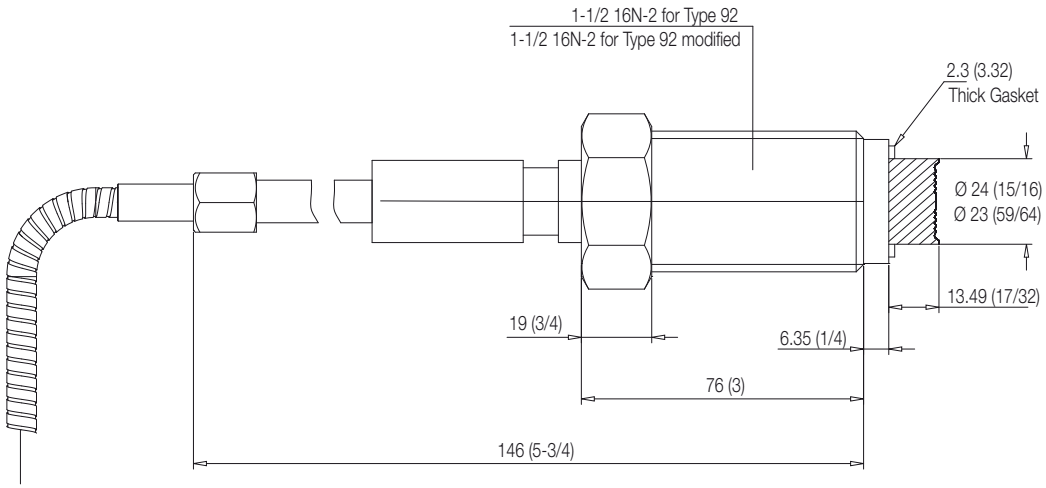
MULTIPLY BY 10 THE kPa VALUES TO OBTAIN mbar.



3 1/4 in. flange extended - type 91

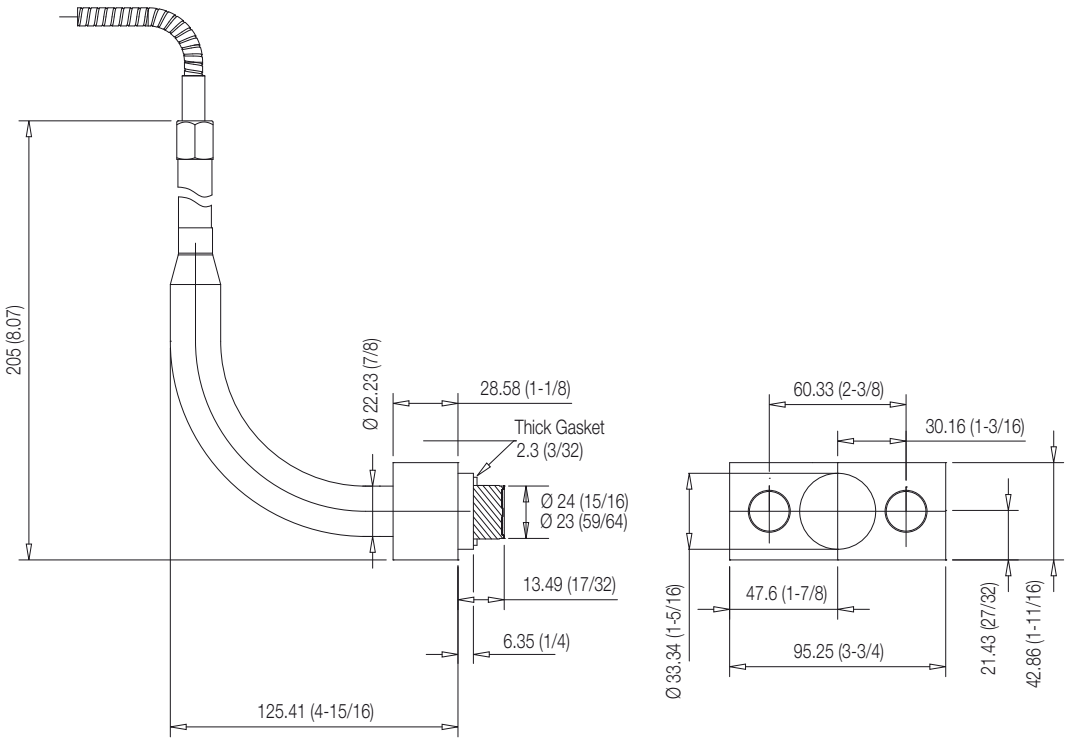


3 1/2 in. flange extended - type 91 modified

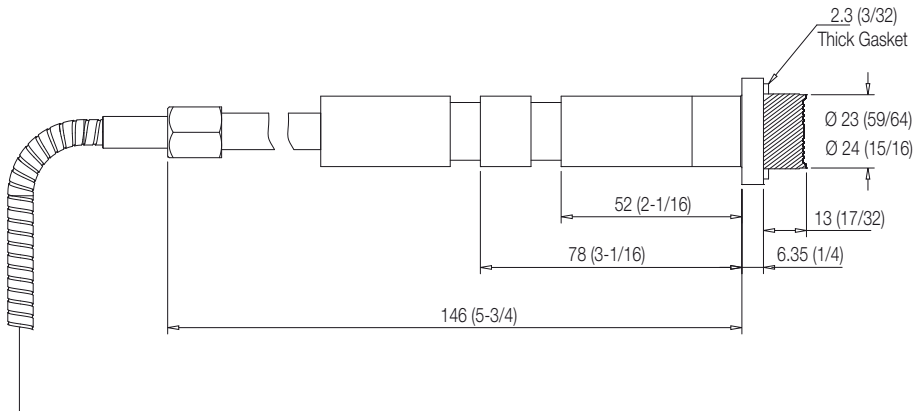


1 1/2 in. threaded union type 92/92 modified

Model S26 seals
for remote and direct mount



Bracket – type 89



Universal– type 90

BASIC ORDERING INFORMATION model S26BN Button type remote diaphragm seals

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

BASE MODEL - 1st to 5th characters			**S 2 6 B N**	**X**	**X**	**X**	**XX**	**X**	**X**	**X**	**X**	**X**
Button type remote diaphragm seal												
Transmitter Side of Connection - 6th character												
High pressure side				H								
Size - 7th character												
1 in.					M							
Mounting connection type - 8th character												
3 1/4 in. flange extended – type 91						A						
3 1/2 in. flange extended – type 91 modified						B						
1 1/2 in. 16N-2 threaded union – type 92						C						
Bracket – type 89						D						
Universal – type 90						E						
1 1/2 in. 12NF threaded union – type 92 modified						F						
Diaphragm Material - 9th and 10th characters												
Hastelloy C-276		NACE					HL					
Capillary Protection - 11th character												
AISI 316 L ss armour								A				
AISI 316 L ss armour with PVC protective cover								B				
Capillary Length m (Feet) - 12th character												
1 (3)									A			
1.5 (5)									B			
2 (7)									C			
2.5 (8)									D			
3 (10)									E			
Fill Fluid - 13th character												
Silicone oil PMX 200 10 cSt	(-40 to 250 °C; -40 to 480 °F)									S		
Silicone oil for high temperature	(-10 to 375 °C; 14 to 707 °F)									G		
Mineral oil Esso Marcol 122	(FDA approved)	(Note 1)								W		
Option - 14th character												
None											1	
Jack out collar for seal removal for process (not for type 89)		(Note 2)									2	
Gasket - 15th character												
None												1
Aluminium												E
AISI 316 ss												F

Note 1: Suitable for food application
Note 2: Not available with mounting connection types code D

Model S26 seals for remote and direct mount

S26VN Model saddle and socket diaphragm seal

The saddle and socket seal are the best solution when the diaphragm need to be as closest as possible to the process media. These are typically installed by welding to the process pipes with fluid at high viscosity. Saddle and socket process connection fittings are available as option selection, available only in AISI 316 L ss.

Pressure limits

Seal model S26VN bolting	Temperature range	Pressure limit
Alloy steel	0 ... 37.8 °C (32 ... 100 °F)	16 MPa, 160 bar, 2320 psi
	-48.3 ... 0 °C (-55 ... 32 °F)	10 MPa, 100 bar, 1450 psi
	37.8 ... 360 °C (100 ... 680 °F)	10 MPa, 100 bar, 1450 psi

Vacuum service

Full vacuum subject to fill fluid limits.
Refer to FILL FLUID CHARACTERISTICS table.

Process temperature limits

Refer to FILL FLUID CHARACTERISTICS table and as follows for specific variants.

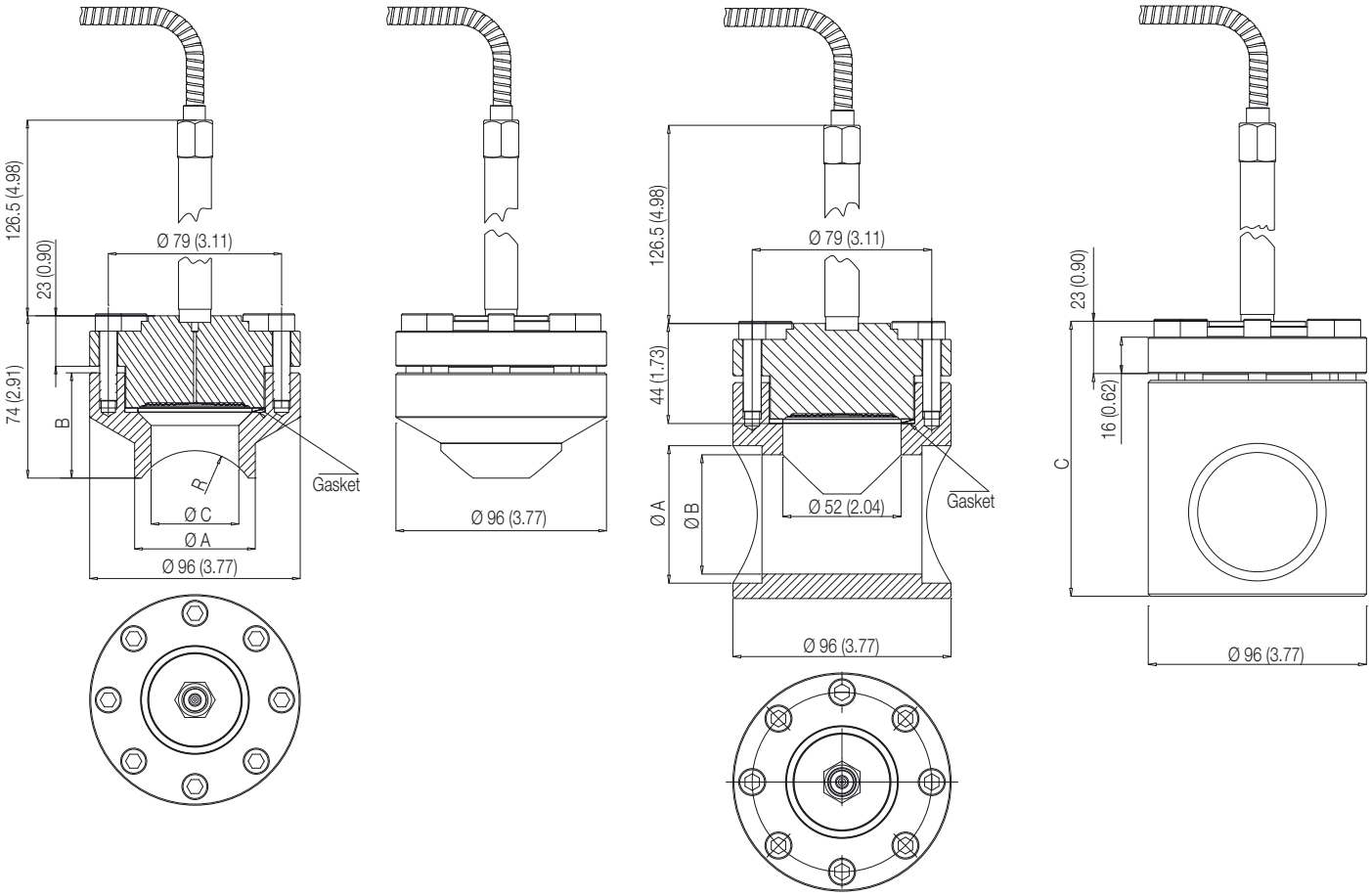
Seals model S26VN	Process temperature limits
PTFE gasket	-100 and 260 °C (-148 and 500 °F)
Graphite gasket	-100 and 360 °C (-148 and 680 °F)

Temperature effect

The following table shows temperature effect per 20 K (36 °F) change, detailed separately for
a) the seal (one element), as process temperature error
b) the capillary per meter
c) the system (transmitter sensor when combined with a seal of specific size/type, either direct mount or remote) referred to silicone oil (PMX 200) filling and AISI 316 L ss diaphragm materials.
For filling different from silicone oil (PMX 200) the errors can be multiplied by ratio between the thermal expansion coefficients of the selected filling divided by the one of PMX 200, listed in the fill fluid characteristics table.
THE ERRORS IN TABLE CAN BE CONSIDERED DIVIDED BY 4 FOR TRANSMITTERS USING SAME REMOTE SEAL ON THE TWO SIDES

S26VN saddle & socket seal size - Mnemonic	Sensor URL	Seal error (process)	Direct mount system error (ambient)	Remote mount error (ambient)	1 metre capillary error (ambient)
1 1/2 in. - P1.5	≥ 160 kPa, 642 inH2O	0.74 kPa, 3 inH2O	0.67 kPa, 2.68 inH2O	0.62 kPa, 2.48 inH2O	0.31 kPa, 1.24 inH2O

MULTIPLY BY 10 THE kPa VALUES TO OBTAIN mbar.



Fitting connection	Dimensions mm. (in.) for S26VN- saddle type			
Size	A (dia)	B	C (dia)	R
Saddle 2 in.	55 (2.17)	48 (1.89)	40 (1.57)	30
Saddle 2 1/2 in.	76 (3.0)	45 (1.77)	52 (2.05)	45
Saddle 3 in.	76 (3.0)	45 (1.77)	50 (1.97)	45
Saddle 4 in.	76 (3.0)	41 (1.61)	50 (1.97)	57
Saddle 5 in.	76 (3.0)	40 (1.57)	50 (1.97)	70
Saddle 6 in.	76 (3.0)	36 (1.42)	50 (1.97)	85

Fitting connection	Dimensions mm. (in.) for S26VN- socket type		
Size	A (dia)	B	C
Socket 1/2 in.	21.8 (0.86)	15.9 (0.63)	86 (3.39)
Socket 3/4 in.	27 (1.06)	21.2 (0.83)	96 (3.78)
Socket 1 in.	33.6 (1.32)	26.8 (1.06)	101 (3.98)
Socket 1 1/2 in.	48.5 (1.91)	41 (1.61)	121 (4.76)
Socket 2 in.	60.5 (2.38)	52.5 (2.07)	121 (4.76)

Model S26 seals
for remote and direct mount

BASIC ORDERING INFORMATION model S26VN Socket and saddle diaphragm seals

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

BASE MODEL - 1st to 5th characters		**S 2 6 V N**	**X**	**XX**	**X**	**X**	**X**	**X**	**X**
Socket and saddle diaphragm seal									
Transmitter Side of Connection - 6th character									
High pressure side			H						
Low pressure side			L						
Diaphragm Material - 7th and 8th characters									
AISI 316 L ss		NACE		SM					
Hastelloy C-276		NACE		HM					
Hastelloy C-2000		NACE		MM					
Inconel 625		NACE		LM					
Tantalum				TM					
AISI 316 L ss gold plated		NACE		NM					
Superduplex ss (UNS S32750 to ASTM SA479)		NACE		EM					
Capillary Protection - 9th character									
AISI 316 L ss armour					A				
AISI 316 L ss armour with PVC protective cover					B				
Extension tube for direct mount seal	(Note 1)				N				

continued
see next page

BASIC ORDERING INFORMATION model S26VN			S 2 6 V N X XX X	X	X	X	X
Capillary Length m (Feet) - 10th character							
Direct-mount construction		(Note 2)		1			
1 (3)		(Note 3)		A			
1.5 (5)		(Note 3)		B			
2 (7)		(Note 3)		C			
2.5 (8)		(Note 3)		D			
3 (10)		(Note 3)		E			
3.5 (12)		(Note 3)		F			
4 (13)		(Note 3)		G			
4.5 (15)		(Note 3)		H			
5 (17)		(Note 3)		J			
Fill Fluid - 11th character							
Silicone oil PMX 200 10 cSt	(-40 to 250 °C; -40 to 480 °F)				S		
Silicone oil Baysilone PD5 5 cSt	(-85 to 250 °C; -121 to 480 °F)				P		
Inert oil - Galden G5	(Oxygen service)	(Note 4)			N		
Inert oil - Halocarbon 4.2	(Oxygen service)	(Note 4)			D		
Silicone oil for high temperature	(-10 to 375 °C; 14 to 707 °F)				G		
Silicone polymer Syltherm XLT	(-100 to 100 °C; -148 to 212 °F)				C		
Mineral oil Esso Marcol 122	(FDA approved)	(Note 5)			W		
Vegetable oil Neobee M-20	(FDA approved)	(Note 5)			A		
Glycerin-water 70%	(FDA approved)	(Note 5)			B		
Process Fitting Connections - 12th character							
Not required						N	
Saddle 2 in.						1	
Saddle 2 1/2 in.						2	
Saddle 3 in.						3	
Saddle 4 in.						4	
Saddle 5 in.						5	
Saddle 6 in.						6	
Socket 1/2 in.						A	
Socket 3/4 in.						B	
Socket 1 in.						C	
Socket 1 1/2 in.						D	
Socket 2 in.						E	
Gasket - 13th character							
PTFE							2
Graphite							7

Note 1: Not available with transmitter side of connection code L
Note 2: Not available with capillary protection code A, B
Note 3: Not available with capillary protection code N
Note 4: Suitable for oxygen service
Note 5: Suitable for food application

Model S26 seals
for remote and direct mount

S26UN Model Union connection remote diaphragm seal

The union connection remote seal are used exclusively for pressure measurement with gauge pressure transmitter.
The seal is available with an optional weld bushing, or with an optional chemical tee flange.The remote seal with a weld bushing, includes a bushing which provides the mating surface for the seal element. The union connection seal with a chemical tee flange, is designed to connect to any process fitting which accepts a chemical tee seal element (refer to Chemical Tee Seal for more information). The union seal connects to the chemical tee flange which serves as an adaptor to permit connection of the union seal to a chemical tee type fitting.

Pressure limits

Seal model S26UN	
Union Connection)	10.3 MPa, 103 bar, 1500 psi
With Chemical Tee Flange	2 MPa, 20 bar, 300 psi

Vacuum service

Full vacuum subject to fill fluid limits.
Refer to FILL FLUID CHARACTERISTICS table.

Process temperature limits

Refer to FILL FLUID CHARACTERISTICS table and as follows for specific variants.

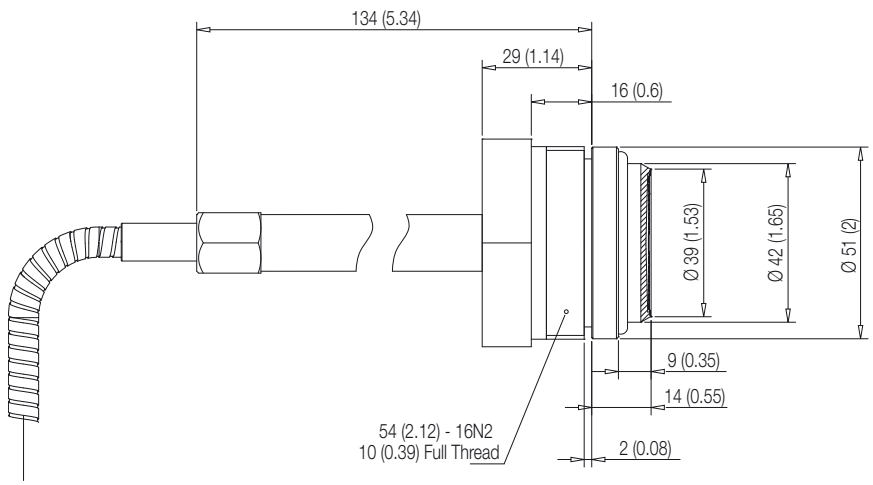
Material	
Silicone rubber gasket	-50 and 204 °C (-58 and 400 °F)
PTFE gasket	-100 and 260 °C (-148 and 500 °F)

Temperature effect

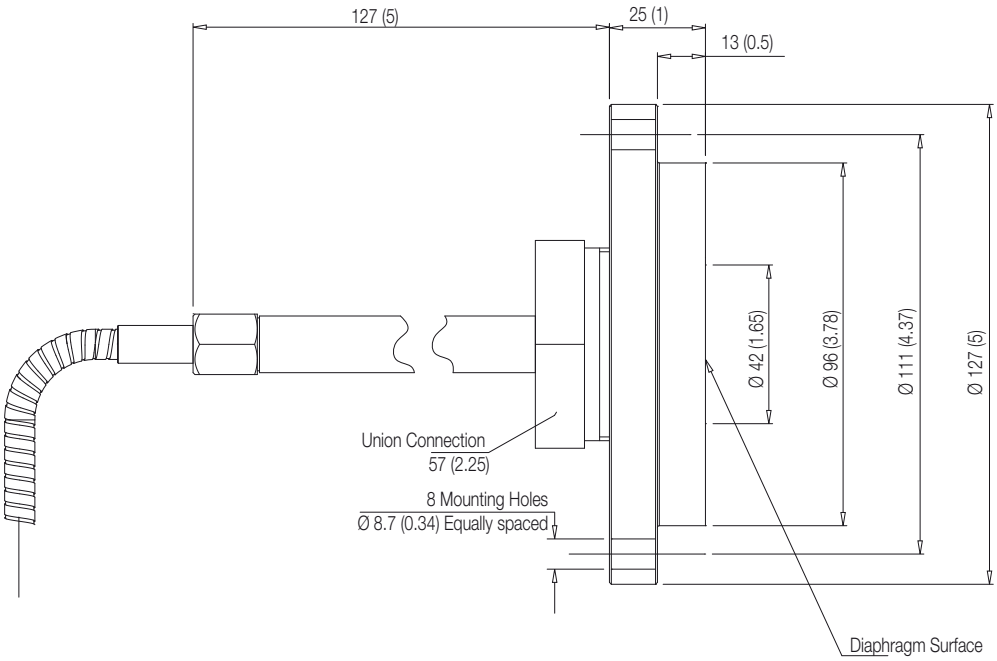
The following table shows temperature effect per 20 K (36 °F) change, detailed separately for
a) the seal (one element), as process temperature error
b) the capillary per meter
c) the system (transmitter sensor when combined with a seal of specific size/type, either direct mount or remote) referred to silicone oil (PMX 200) filling and AISI 316 L ss diaphragm materials.
For filling different from silicone oil (PMX 200) the errors can be multiplied by ratio between the thermal expansion coefficients of the selected filling divided by the one of PMX 200, listed in the fill fluid characteristics table.
THE ERRORS IN TABLE CAN BE CONSIDERED DIVIDED BY 4 FOR TRANSMITTERS USING SAME REMOTE SEAL ON THE TWO SIDES

S26UN Union connectin seal size - Mnemonic	Sensor URL	Seal error (process)	Remote system error (ambient)	1 metre capillary error (ambient)
1 1/2 in. - Z1.5	≥ 160 kPa, 642 inH2O	0.29 kPa, 1.16 inH2O	0.62 kPa, 2.48 inH2O	0.31 kPa, 1.24 inH2O

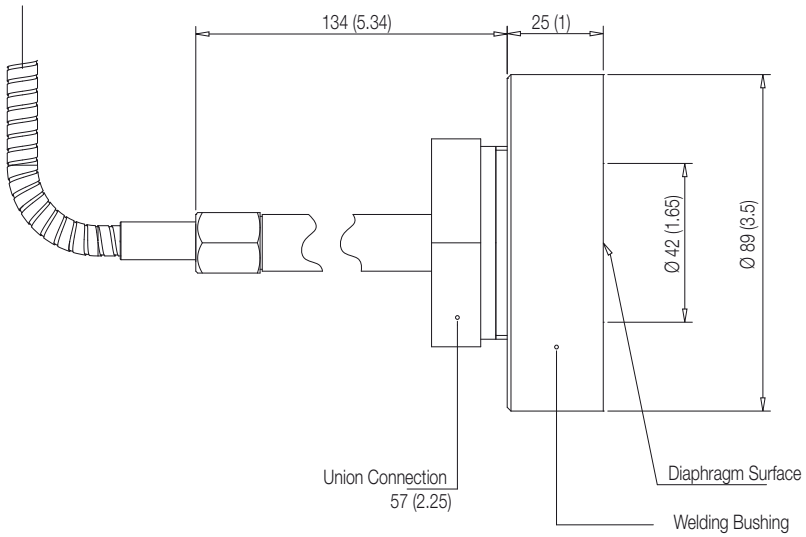
MULTIPLY BY 10 THE kPa VALUES TO OBTAIN mbar.



Union connection remote seal - basic version



Union connection remote seal with Chemical Tee flange



Union connection remote seal with weld bushing

Model S26 seals
for remote and direct mount

BASIC ORDERING INFORMATION model S26UN Union connection remote diaphragm seals

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

BASE MODEL - 1st to 5th characters	**S 2 6 U N**	**X**	**X**	**XX**	**X**	**X**	**X**	**X**	**X**
Union connection remote diaphragm seal										
Transmitter Side of Connection - 6th character										
High pressure side		H								
Size - 7th character										
1 1/2 in.			L							
Diaphragm Material - 8th and 9th characters										
AISI 316 L ss	NACE			SL						
Hastelloy C-276	NACE			HL						
Capillary Protection - 10th character										
AISI 316 L ss armour					A					
AISI 316 L ss armour with PVC protective cover					B					
Capillary Length m (Feet) - 11th 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				

Fill Fluid - 12th character				
Silicone oil PMX 200 10 cSt	(-40 to 250 °C; -40 to 480 °F)		S	
Silicone oil Baysilone PD5 5 cSt	(-85 to 250 °C; -121 to 480 °F)		P	
Inert oil - Galden G5	(Oxygen service)	(Note 1)	N	
Inert oil - Halocarbon 4.2	(Oxygen service)	(Note 1)	D	
Silicone oil for high temperature	(-10 to 375 °C; 14 to 707 °F)		G	
Silicone polymer Syltherm XLT	(-100 to 100 °C; -148 to 212 °F)		C	
Mineral oil Esso Marcol 122	(FDA approved)	(Note 2)	W	
Vegetable oil Neobee M-20	(FDA approved)	(Note 2)	A	
Glycerin-water 70%	(FDA approved)	(Note 2)	B	

Process Fitting Connections - 13th character		
Not required	1	
AISI 316 ss weld bushing	3	
Chemical tee flange	4	
Gasket - 14th character		
Not required		1
Silicone rubber		5
PTFE		8

Note 1: Suitable for oxygen service
Note 2: Suitable for food application

® Hastelloy is a registered trademark of Haynes International
® Monel is a registered trademark of Special Metals Corporation
® Viton is a registered trademark of E.I. DuPont de Nemour
® PMX 200 and Syltherm are registered trademarks of Dow Corning Corporation
® Galden is a registered trademark of Solvay Group
® Halocarbon is a registered trademark of Halocarbon Products Co.
® Baysilone is a registered trademark of Bayer
® Neobee is a registered trademark Stepan Specialty Products, LCC
® Esso Marcol 122 is a registered trademark Esso Italiana

high-accuracy
measurement
instruments

Our offering:

	Actuators and Positioners		Analytical Instruments
	Device Management, Fieldbus and Wireless		Flow Measurement
	Force Measurement		Level Measurement
	Natural Gas Measurement		Pressure Measurement
	Recorders and Controllers		Temperature Measurement

HMI – Automação e Instrumentação, Lda.

Rua dos 5 Caminhos, nº 570
4780-382 Santo Tirso
PORTUGAL

Tel. +351 252 850 501
Fax. +351 300 013 487

Web: www.hmi.pt

Email: hmi@hmi.pt

Contact us

ABB Ltd.
Process Automation
Howard Road
St. Neots
Cambridgeshire PE19 8EU
UK
Tel: +44 (0)1480 475321
Fax: +44 (0)1480 217948

ABB Inc.
Process Automation
125 E. County Line Road
Warminster
PA 18974
USA
Tel: +1 215 674 6000
Fax: +1 215 674 7183

ABB Automation Products GmbH
Process Automation
Schillerstr. 72
32425 Minden
Germany
Tel: +49 551 905 534
Fax: +49 551 905 555

ABB S.p.A.
Process Automation
Via Statale 113
22016 Tremezzina Loc. Lenno (CO)
Italy
Tel: +39 0344 58111
Fax: +39 0344 56278

www.abb.com

3KXP600003R1001

Sales

Service

Software

DS/S26-EN Rev. E 03.2015

Power and productivity
for a better world™