Data Sheet DS/S26-EN Rev. A

# Model S26 seals for remote and direct mount

# 2600T Series Pressure Transmitters 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



#### 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.

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	Seal type	Seal diaphragm		Т	wo:	seal	s coi	nstru	uctio	n				0	ne s	seal o	const	tructi	on			Mnemonic
model		size (thickness)				S	ENS	OR								SEI	NSOF	3				
			в-с	Е	F	G	H-L	М	N-P	Q-R	s	С	Е	F	G	H-L	D-M	U-P	Q-R	s	٧	
		1.5 in. /DN 40	-	-	-	-	4	5	5	5	5	-	-	-	-	3	5	5	5	5	5	P1.5
	Wafer	2 in. / DN 50	-	-	3	3	8	8	8	8	8	-	-	2	2	6	8	8	8	8	8	P2
S26WA	(ASME and	3 in. / DN 80	1.5	3	6	6	8	16	16	16	16	-	1	4	4	10	10	10	10	10	10	P3
S26WE	EN standards)	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
		2 in. / DN 50	-	-	3	3	8	8	8	8	8	-	-	2	2	6	8	8	8	8	8	P2
	Flanged flush	3 in. / DN 80	1.5	3	6	6	8	16	16	16	16	-	1	4	4	10	10	10	10	10	10	P3
	diaphragm	4 in. / DN 100	1.5	3	6	6	8	16	16	16	16	-	1	4	4	10	10	10	10	10	10	P3
S26FA	(ASME and EN	2 in. / DN 50 (low)	1	2	4	4	8	12	16	16	16	1	-	3	3	8	12	16	16	16	16	F2
S26FE	standards)	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
S26RA		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
S26RE	Flanged extended	2 in. / DN 50	-	-	3	3	6	6	6	6	-	-	-	-	-	4	6	6	6	-	-	E2
	diaphragm (ASME	3 in. / DN 80	1	2	4	4	8	12	12	12	-	-	-	3	3	8	10	10	10	-	-	E3
	and EN standards)	4 in. / DN 100	1.5	3	6	6	8	16	16	16	16	-	1	4	4	10	10	10	10	10	10	P3
	Flanged flush	A 50	-	-	3	3	8	8	8	8	8	-	-	2	2	6	8	8	8	8	8	P2
S26RJ	diaphragm	A 80	1.5	3	6	6	8	16	16	16	16	-	1	4	4	10	10	10	10	10	10	P3
	(JIS standards)	A 100	1.5	3	6	6	8	16	16	16	16	-	1	4	4	10	10	10	10	10	10	P3
	Flanged flush	1.5 in.	-	-	-	-	4	5	5	5	5	-	-	-	-	3	5	5	5	5	5	P1.5
S26RR	diaphragm (Ring Joint	2 in.	-	-	3	3	8	8	8	8	8	-	-	2	2	6	8	8	8	8	8	P2
	ASME standard)	3 in.	1.5	3	6	6	8	16	16	16	16	-	1	4	4	10	10	10	10	10	10	P3
S26CN	Flanged Chemical Tee	3 in.	1.5	3	6	6	8	16	16	16	16	-	1	4	4	10	10	10	10	10	10	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	Off-line flanged (ASME	2 1/2 in.	1	2	3	3	8	12	12	12	12	-	2	3	3	8	8	8	8	8	8	T2.5
S26ME	and EN standards)																					
	Union nut, Triclamp	2 in. / F50	-	-	1	1	3	6	6	6	-	-	-	1	1	3	6	6	6	-	-	S2
S26SS	Cherry Burrel,	3 in. / F80	1.5	3	6	6	10	10	10	10	-	-	3	6	6	10	10	10	10	-	-	S3
	Sanitary, Aseptic	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	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	1 1/2 in.	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5	5	5	5	5	U1.5
	flanged	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

	Process to	mperature	and pressu	re limits	Specif	Specifications @ 25 °C (77°F)			
Fill fluid (application)	Tmax °C (°F)	Pmin	Tmax	Tmin	Specific	Kinematic	Thermal		
	@ Pabs	mbar abs	°C (°F)	°C (°F)	gravity	viscosity	expansion		
	> of	(mmHg)	@ Pmin		(kg/dm3)	(cst)	(x 10-3 /°C)		
Silicone oil DC 200 10 cSt	250 (480)	0.7	130	-40	0.934	10	1.08		
	@ 385 mbar	(0.5)	(266)	(-40)					
Silicone oil Baysilone PD5 5 cSt	250 (480)	0.7	45	-85	0.923	5	0.98		
	@ 900 mbar	(0.5)	(123)	(-121)					
Inert oil Galden G5 (oxygen service)	160 (320)	2.1	60	-20	1.82	4.4	1.1		
	@ 1 bar	(1.52)	(140)	(-4)					
Inert oil Halocarbon 4.2 (oxygen service)	180 (356)	4	70	-20	1.87	6.3	0.864		
	@ 425 mbar	(3)	(158)	(-4)					
Silicone polymer Syltherm XLT (cryogenic service)	100 (212)	2.1	20	-100	0.852	1.4	1		
	@ 118 mbar	(1.52)	(68)	(-148)					
Silicone oil DC 704 (high temperature)	375 (707)	0.7	220	-10	1.07	39	0.77		
	@ 1 bar	(0.5)	(428)	(14)					
Vegetable oil Neobee M-20 (food - sanitary) FDA approved	200 (390)	10	20	-18	0.92	9.8	1.2		
	@ 1 bar	(7.2)	(68)	(0)					
Mineral oil Esso Marcol 122 (food - sanitary) FDA approved	250 (480)	0.7	110	-6	0.849	34.2	0.79		
	@ 630 mbar	(0.5)	(230)	(21)					
Glycerin Water 70% (food - sanitary) FDA approved	93 (200)	1000	93	-7	1.08	2	0.36		
	@ 1 bar	(760)	(200)	(20)					

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)

### S26W 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 p	si
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		Process limits	
gasket material	Pressure (max.)	Temperature	PxT
Garlock	6.9 MPa, 69 bar,	-73 and 204 °C	250000
	1000 psi	(-100 and 400 °F)	(°F x psi)
Graphite	2.5 MPa, 25 bar,	-100 and 380 °C	
	362 psi	(-148 and 716 °F)	
PTFE	6 MPa, 60 bar,	-100 and 250 °C	
	870 psi	(-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)
Teflon anti-stick coating	204 °C (400 °F)
Teflon 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): 0.8µm (Ra) Serrated (ASME): 3.2 to 6.3µm (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  $^{\circ}\text{F})$  change, detailed separately for

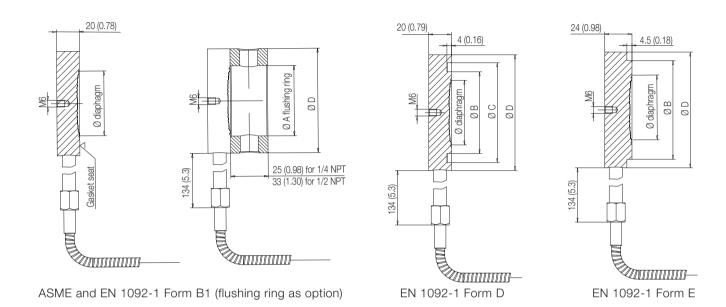
- a) the seal (one element), as process temperature error
- b) the capillary per meter
- c) the system (transmitter sensor when combined with a seal of specific size/type, either direct mount or remote) referred to silicone oil (DC 200) filling and AISI 316 L ss diaphragm materials.

For filling different from silicone oil (DC200) the errors can be multiplied by ratio between the thermal expansion coefficients of the selected filling divided by the one of DC200, 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

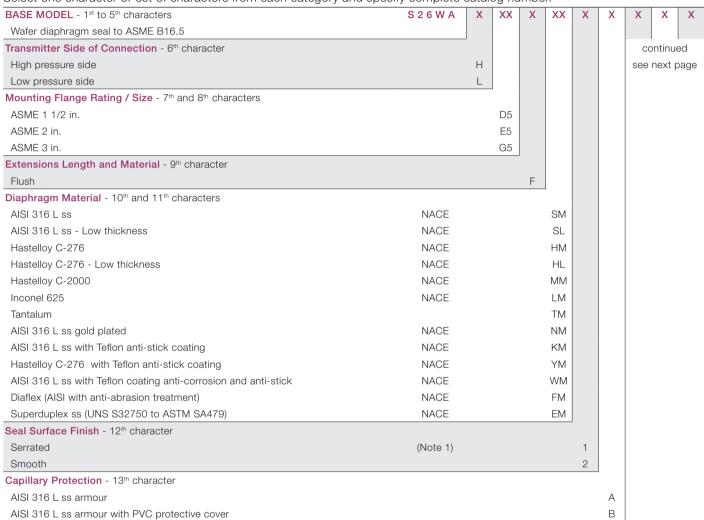
S26W wafer	Sensor URL	Seal error (process)	Remote mount	1 metre capillary
seal size - Mnemonic			error (ambient)	error (ambient)
1 1/2 in. / DN 40 - P1.5	≥ 160 kPa, 642 inH2O	0.74 kPa, 3 inH2O	0.62 kPa, 2.48 inH2O	0.31 kPa, 1.24 inH2O
1 1/2 in. / DN 40 - F1.5	65 kPa, 260 inH2O	0.15 kPa, 0.6 inH2O	0.15 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.



			Dimensions mn	n (in) for S26W			
Size/Rating	diaphra	gm (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	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)	

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



BASIC ORDERING INFORMATION model S26WA	S 2 6 W A X XX X XX	XX	Х	Х	X	Х
Capillary Length m (Feet) - 14th character						
1 (3)		Α			ontinue	
1.5 (5)		В		see	next p	age
2 (7)		С				
2.5 (8)		D				
3 (10)		Е				
3.5 (12)		F				
4 (13)		G				
4.5 (15)		Н				
5 (17)		J				
5.5 (18)		K				
6 (20)		L				
6.5 (22)		М				
7 (23.5)		Ν				
7.5 (25)		Р				
8 (27)		Q				
9 (30)		R				
10 (33)		S				
12 (40)		Т				
14 (47)		U				
16 (53)		V				
ill Fluid - 15th character						
Silicone oil DC200 10 cSt			S			
Silicone oil Baysilone PD5 5 cSt			Р			
Inert oil - Galden G5	(Note 2)		Ν			
Inert oil - Halocarbon 4.2	(Note 2)		D			
Silicone oil DC704			G			
Silicone polymer Syltherm XLT			С			
Mineral oil Esso Marcol 122 (FDA approved)	(Note 3)		W			
Vegetable oil Neobee M-20 (FDA approved)	(Note 3)		Α			
Glycerin-water 70% (FDA approved)	(Note 3)		В			

BASIC ORDERING INFORMATION model \$26WA	S 2 6 W	/ A X XX X XX X X X	X X X	Х	X
Flushing Ring: Hole and Thread - 16th character					
None			Ν		
1 hole - 1/2 in. NPT			2		
2 holes - 1/2 in. NPT			3		
1 hole - 1/4 in. NPT			4		
2 holes - 1/4 in. NPT			5		
Flushing Ring Material - 17th character				•	
None	(Note 4)			Ν	
AISI 316 L ss	(Note 5)	NACE		Α	
Hastelloy C-276	(Notes 5, 6)	NACE		Н	
Flushing Ring: Plug and Gasket - 18th character					
No plug - No gasket					Ν
No plug - garlock	(Note 5)				Α
No plug - PTFE	(Note 5)				В
No plug - graphite	(Note 5)				С
AISI 316 L ss - no gasket	(Notes 5, 7)	NACE			D
AISI 316 L ss - garlock	(Notes 5, 7)	NACE			Е
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			Н
Hastelloy C-276 - garlock	(Notes 5, 8)	NACE			L
Hastelloy C-276 - PTFE	(Notes 5, 8)	NACE			М
Hastelloy C-276 - graphite	(Notes 5, 8)	NACE			Р

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

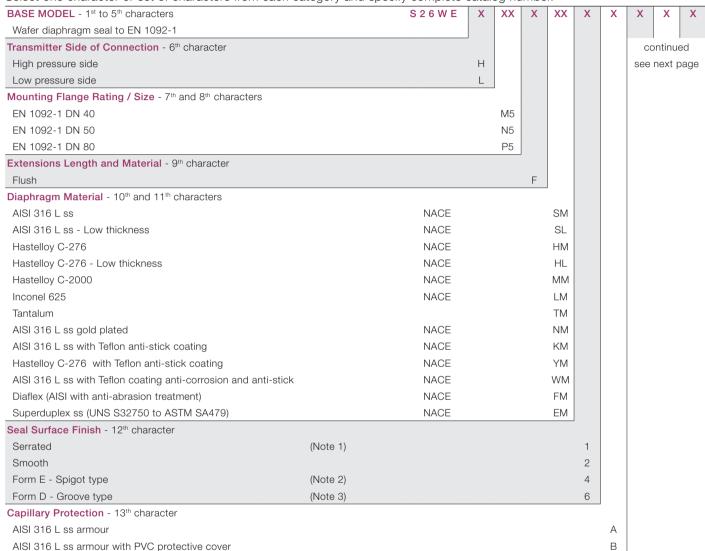
Note 4: Not available with Flushing ring: hole and thread code 2, 3, 4, 5 Note 5: Not available with Flushing ring: hole and thread code N  $\,$ 

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



BASIC ORDERING INFORMATION model S26WE	S 2 6 W E X XX X X	X X X	Х	X X X
Capillary Length m (Feet) - 14th character				
1 (3)		А		continued
1.5 (5)		В		see next page
2 (7)		С		
2.5 (8)		D		
3 (10)		Е		
3.5 (12)		F		
4 (13)		G		
4.5 (15)		Н		
5 (17)		J		
5.5 (18)		K		
6 (20)		L		
6.5 (22)		М		
7 (23.5)		N		
7.5 (25)		Р		
8 (27)		Q		
9 (30)		R		
10 (33)		S		
12 (40)		Т		
14 (47)		U		
16 (53)		V		
Fill Fluid - 15th character				
Silicone oil DC200 10 cSt			S	
Silicone oil Baysilone PD5 5 cSt			Р	
Inert oil - Galden G5	(Note 4)		Ν	
Inert oil - Halocarbon 4.2	(Note 4)		D	
Silicone oil DC704			G	
Silicone polymer Syltherm XLT			С	
Mineral oil Esso Marcol 122 (FDA approved)	(Note 5)		W	
Vegetable oil Neobee M-20 (FDA approved)	(Note 5)		Α	
Glycerin-water 70% (FDA approved)	(Note 5)		В	

BASIC ORDERING INFORMATION model S26WE	S 2 6 W	EXXXXXXXXX	X X	Χ	X
Flushing Ring: Hole and Thread - 16th character			_		
None			Ν		
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)			Ν	
AISI 316 L ss	(Note 8)	NACE		Α	
Hastelloy C-276	(Notes 8, 9)	NACE		Н	
Flushing Ring: Plug and Gasket - 18th character					
No plug - No gasket					١
No plug - garlock	(Note 8)				A
No plug - PTFE	(Note 8)				Е
No plug - graphite	(Note 8)				(
AISI 316 L ss - no gasket	(Notes 8, 10)	NACE			
AISI 316 L ss - garlock	(Notes 8, 10)	NACE			Е
AISI 316 L ss - PTFE	(Notes 8, 10)	NACE			F
AISI 316 L ss - graphite	(Notes 8, 10)	NACE			(
Hastelloy C-276 - no gasket	(Notes 8, 11)	NACE			Н
Hastelloy C-276 - garlock	(Notes 8, 11)	NACE			L
Hastelloy C-276 - PTFE	(Notes 8, 11)	NACE			Ν
Hastelloy C-276 - graphite	(Notes 8, 11)	NACE			F

Note 1: Not available with diaphragm material code MM, LM, TM, NM, KM, YM, WM
Note 2: Not available with diaphragm material code MM, LM, TM, NM, KM, YM, WM, FM, EM
Note 3: Not available with diaphragm material code 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  ${\rm H}$ 

Note 11: Not available with AISI 316 L flushing ring material code A

## S26C 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
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	
Teflon anti-stick coating	204 °C (400 °F)
Teflon 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

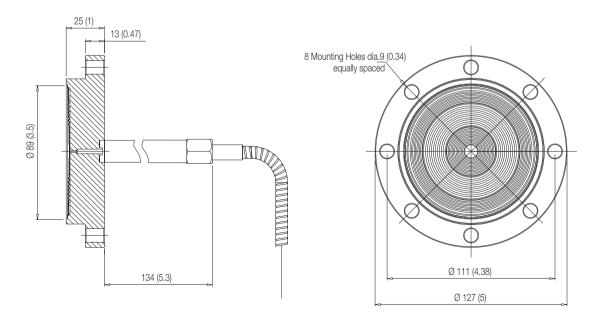
- a) the seal (one element), as process temperature error
- b) the capillary per meter
- c) the system (transmitter sensor when combined with a seal of specific size/type, either direct mount or remote) referred to silicone oil (DC 200) filling and AISI 316 L ss diaphragm materials.

For filling different from silicone oil (DC200) the errors can be multiplied by ratio between the thermal expansion coefficients of the selected filling divided by the one of DC200, 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	Sensor URL	Seal error (process)	Remote system	1 metre capillary
seal size - Mnemonic			error (ambient)	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 S26C 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	Х	Χ	Χ	XX	Χ	Х	Χ
Chemical Tee seal									
Transmitter Side of Connection - 6th character									
High pressure side			Н						
Low pressure side			L						
Mounting Flange Rating / Size - 7th character									
Integral with seal / 3 in. Proprietary				G					
Reserved - 8th character									
Reserved					Р				
Diaphragm Material - 9th and 10th characters									
AISI 316 L ss		NACE				SM			
Hastelloy C-276		NACE				НМ			
AISI 316 L ss with Teflon anti-stick coating		NACE				KM			
Hastelloy C-276 with Teflon anti-stick coating		NACE				ΥM			
AISI 316 L ss with Teflon 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							Α		
AISI 316 L ss armour with PVC protective cover							В		
Capillary Length m (Feet) - 12 <sup>th</sup> character									
1 (3)								Α	
1.5 (5)								В	
2 (7)								С	
2.5 (8)								D	
3 (10)								Е	
3.5 (12)								F	
4 (13)								G	
4.5 (15)								Н	
5 (17)								J	
Fill Fluid - 13th character									
Silicone oil DC200 10 cSt									S
Silicone oil Baysilone PD5 5 cSt									Р
Inert oil - Galden G5	(Note 1)								Ν
Inert oil - Halocarbon 4.2	(Note 1)								D
Silicone oil DC704									G
Silicone polymer Syltherm XLT									С
Mineral oil Esso Marcol 122 (FDA approved)	(Note 2)								W
Vegetable oil Neobee M-20 (FDA approved)	(Note 2)								Α
Glycerin-water 70% (FDA approved)	(Note 2)								В
Gasket - 14th character									
None									
PTFE with silica filler									
Graphite									

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

## 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	Carbon Steel	AISI 316 ss flange
to ASME B16.5	@ 100 °F (38 °C)	@ 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	Carbon steel flange	AISI 316 ss flange
to EN 1092-1	@ 120 °C	@ 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	Carbon steel flange	AISI 316 ss flange
to JIS B 2220	@ 120 °C	@ 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	Process limits						
gasket material	Pressure (max.)	Temperature	PxT				
Garlock	6.9 MPa, 69 bar,	-73 and 204 °C	250000				
	1000 psi	(-100 and 400 °F)	(°F x psi)				
Graphite	2.5 MPa, 25 bar,	-100 and 380 °C					
	362 psi	(-148 and 716 °F)					
PTFE	6 MPa, 60 bar,	-100 and 250 °C					
	870 psi	(-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)
Teflon anti-stick coating	204 °C (400 °F)
Teflon 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): 0.8µm (Ra) Serrated (ASME): 3.2 to 6.3µm (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

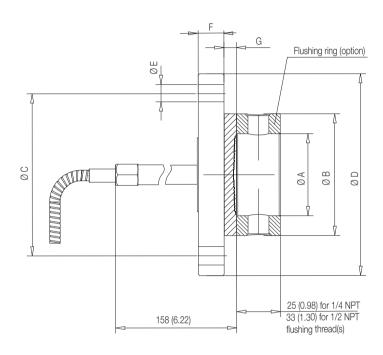
- a) the seal (one element), as process temperature error
- b) the capillary per meter
- c) the system (transmitter sensor when combined with a seal of specific size/type, either direct mount or remote) referred to silicone oil (DC 200) filling and AISI 316 L ss diaphragm materials.

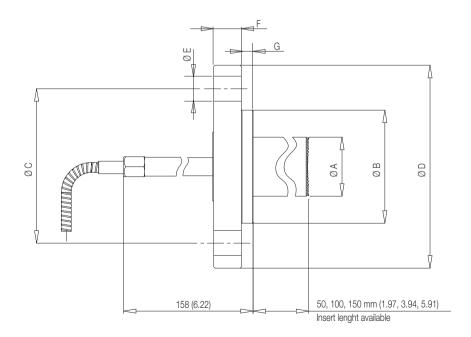
For filling different from silicone oil (DC200) the errors can be multiplied by ratio between the thermal expansion coefficients of the selected filling divided by the one of DC200, listed in the fill fluid characteristics table.

THE ERRORS IN TABLE CAN BE CONSIDERED DIVIDED BY 4 FOR TRANSMITTERS USING SAME REMOTE SEAL ON THE TWO SIDES

S26RA, S26RE, S26RJ	Sensor URL	Seal error (process)	Direct mount system	Remote system error	1 metre capillary
rotating flange			error (ambient)	(ambient)	error (ambient)
seal size - Mnemonic					
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	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
A80 / 100 - P3					
3 / 4 in. / DN 80 / 100	≥ 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
A80 / 100 - P3					
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.





	Dimensions mm (in) for S26RA												
Size/Rating		Α	(dia)										
	extended	flush dia	aphragm	flushing ring	B (dia)	C (dia)	D (dia)	E (dia)	F	G	N° of		
	diaphragm	std.	low thick.	internal dia					(Note 1)		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)	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		

		Dimensions mm (in) for S26RE											
Size/Rating		Α	(dia)										
	extended	flush dia	aphragm	flushing ring	B (dia)	C (dia)	D (dia)	E (dia)	F	G	N° of		
	diaphragm	std.	low thick.	internal dia					(Note 2)		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)	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		

	Dimensions mm (in) for S26RJ												
Size/Rating	A (dia)	B (dia)	C (dia)	D (dia)	E (dia)	F	G	N° of					
	flush diaphragm					(Note 3)		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 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.

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

BASE MODEL - 1st to 5th characters	and c	S 2 6 R A	X	XX	X	X	XX	Х	Х	Х	Χ	Х
Rotating flange diaphragm seal (flush and extended) to	ASME B16.5						701				^	
Transmitter Side of Connection - 6th character			J						CC	ntinuec	J .	
High pressure side			Н							next pa		
Low pressure side			L								-5-	
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					С							
AISI 316 ss					S							
Extensions Length and Material - 10th character												
Flush						F						
50 mm (2 in.)	SI 316 L ss	(Note 1)				1						
50 mm (2 in.)	astelloy C-276	(Note 1)				2						
100 mm (4 in.)	SI 316 L ss	(Note 1)				3						
100 mm (4 in.)	astelloy C-276	(Note 1)				4						
150 mm (6 in.)	SI 316 L ss	(Note 1)				5						
150 mm (6 in.)	astelloy C-276	(Note 1)				6						
Diaphragm Material - 11th and 12th characters												
AISI 316 L ss		(Note 2)		NA	CE		SM					
AISI 316 L ss - Low thickness (not for extended diaphra	gm)	(Note 3)		NA	CE		SL					
Hastelloy C-276				NA	CE		НМ					
Hastelloy C-276 - Low thickness (not for extended diaple	nragm)	(Note 3)		NA	CE		HL					
Hastelloy C-2000 (not for extended diaphragm)		(Note 3)		NA	CE		MM					
Hastelloy C-2000 diaphragm and body (not for extended	d diaphragm)	(Note 3)		NA	CE		ZM					
Inconel 625 (not for extended diaphragm)		(Note 3)		NA	CE		LM					
Tantalum (not for extended diaphragm)		(Note 3)					TM					
AISI 316 L ss gold plated (not for extended diaphragm)		(Note 3)		NA	CE		NM					
AISI 316 L ss with Teflon anti-stick coating		(Note 2)		NA	CE		KM					
Hastelloy C-276 with Teflon anti-stick coating				NA	CE		ΥM					
AISI 316 L ss with Teflon coating anti-corrosion and anti-	-stick	(Note 2)		NA	CE		WM					
Diaflex (AISI with anti-abrasion treatment)		(Note 2)		NA	CE		FM					
Superduplex ss (UNS S32750 to ASTM SA479) (not for	extended diaphragm)	(Note 3)		NA	CE		EM					

BASIC ORDERING INFORMATION model S26RA	S 2 6 R A X XX X X XX	Х	Х	Х	Х	Х	X	X
Seal Surface Finish - 13th character								
Serrated	(Note 4)	1				С	ontinue	ed
Smooth	(Note 15)	2				see	next p	age
Capillary Protection - 14th character								
AISI 316 L ss armour			Α					
AISI 316 L ss armour with PVC protective cover			В					
Extension tube for direct mount seal	(Note 5)		Ν					
Capillary Length m (Feet) - 15th character								
Direct-mount construction	(Note 6)			1				
1 (3)	(Note 7)			Α				
1.5 (5)	(Note 7)			В				
2 (7)	(Note 7)			С				
2.5 (8)	(Note 7)			D				
3 (10)	(Note 7)			Е				
3.5 (12)	(Note 7)			F				
4 (13)	(Note 7)			G				
4.5 (15)	(Note 7)			Н				
5 (17)	(Note 7)			J				
5.5 (18)	(Note 7)			K				
6 (20)	(Note 7)			L				
6.5 (22)	(Note 7)			М				
7 (23.5)	(Note 7)			Ν				
7.5 (25)	(Note 7)			Р				
8 (27)	(Note 7)			Q				
9 (30)	(Note 7)			R				
10 (33)	(Note 7)			S				
12 (40)	(Note 7)			Τ				
14 (47)	(Note 7)			U				
16 (53)	(Note 7)			V				
Fill Fluid - 16th character								
Silicone oil DC200 10 cSt					S			
Silicone oil Baysilone PD5 5 cSt					Р			
Inert oil - Galden G5	(Note 8)				Ν			
Inert oil - Halocarbon 4.2	(Note 8)				D			
Silicone oil DC704					G			
Silicone polymer Syltherm XLT					С			
Mineral oil Esso Marcol 122 (FDA approved)	(Note 9)				W			
Vegetable oil Neobee M-20 (FDA approved)	(Note 9)				Α			
Glycerin-water 70% (FDA approved)	(Note 9)				В			

BASIC ORDERING INFORMATION model S26RA	S 2 6 R A	X XX X X XX X X X X	X X	7
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)		Ν	
AISI 316 L ss	(Note 11)	NACE	А	
Hastelloy C-276	(Notes 11, 12)	NACE	Н	
Flushing Ring: Plug and Gasket - 19th character				
No plug - No gasket				
No plug - garlock	(Note 11)			
No plug - PTFE	(Note 11)			
No plug - graphite	(Note 11)			(
AISI 316 L ss - no gasket	(Notes 11, 13)	NACE		
AISI 316 L ss - garlock	(Notes 11, 13)	NACE		
AISI 316 L ss - PTFE	(Notes 11, 13)	NACE		
AISI 316 L ss - graphite	(Notes 11, 13)	NACE		
Hastelloy C-276 - no gasket	(Notes 11, 14)	NACE		
Hastelloy C-276 - garlock	(Notes 11, 14)	NACE		
Hastelloy C-276 - PTFE	(Notes 11, 14)	NACE		-
Hastelloy C-276 - graphite	(Notes 11, 14)	NACE		

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

BASE MODEL - 1st to 5th characters		S26RE	Χ	XX	Χ	Х	XX	Х	X	ХХ	X
Rotating flange diaphragm seal (flush and extended) to E	EN 1092-1										
Transmitter Side of Connection - 6th character			_						cont	inued	
High pressure side			Н						see ne	xt page	
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				РЗ							
PN 100 / DN 80				P4							
PN 16 / DN 100				Q1							
PN 40 / DN 100				Q2							
Mounting Flange Material - 9th character					,						
Carbon steel					С						
AISI 316 ss					S						
Extensions Length and Material - 10th character						•					
Flush						F					
50 mm (2in) Al	SI 316 L ss	(Note 1)				1					
50 mm (2in) Ha	astelloy C-276	(Note 1)				2					
100 mm (4in) Al	SI 316 L ss	(Note 1)				3					
100 mm (4in) Ha	astelloy C-276	(Note 1)				4					
150 mm (6 in) Al	SI 316 L ss	(Note 1)				5					
150 mm (6 in)	astelloy C-276	(Note 1)				6					
Diaphragm Material - 11th and 12th characters											
AISI 316 L ss		(Note 2)		NA	CE		SM				
AISI 316 L ss - Low thickness (not for extended diaphra	gm)	(Note 3)		NA	CE		SL				
Hastelloy C-276				NA	CE		НМ				
Hastelloy C-276 - Low thickness (not for extended diaph	nragm)	(Note 3)		NA	CE		HL				
Hastelloy C-2000 (not for extended diaphragm)		(Note 3)		NA	CE		MM				
Inconel 625 (not for extended diaphragm)		(Note 3)		NA	CE		LM				
Tantalum (not for extended diaphragm)		(Note 3)					TM				
AISI 316 L ss gold plated (not for extended diaphragm)		(Note 3)		NA	CE		NM				
AISI 316 L ss with Teflon anti-stick coating		(Note 2)		NA	CE		KM				
Hastelloy C-276 with Teflon anti-stick coating				NA	CE		ΥM				
AISI 316 L ss with Teflon coating anti-corrosion and anti	-stick	(Note 2)		NA	CE		WM				
Diaflex (AISI with anti-abrasion treatment)		(Note 2)		NA	CE		FM				
Superduplex ss (UNS S32750 to ASTM SA479) (not for	extended diaphragm)	(Note 3)		NA	CE		EM				

BASIC ORDERING INFORMATION model S26RE	S 2 6 R E X XX X X X	X	Х	Χ	Х	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			Α			
AISI 316 L ss armour with PVC protective cover			В			
Extension tube for direct mount seal	(Note 5)		Ν			
Capillary Length m (Feet) - 15th character						
Direct-mount construction	(Note 6)			1		
1 (3)	(Note 7)			Α		
1.5 (5)	(Note 7)			В		
2 (7)	(Note 7)			С		
2.5 (8)	(Note 7)			D		
3 (10)	(Note 7)			Е		
3.5 (12)	(Note 7)			F		
4 (13)	(Note 7)			G		
4.5 (15)	(Note 7)			Н		
5 (17)	(Note 7)			J		
5.5 (18)	(Note 7)			K		
6 (20)	(Note 7)			L		
6.5 (22)	(Note 7)			М		
7 (23.5)	(Note 7)			Ν		
7.5 (25)	(Note 7)			Р		
8 (27)	(Note 7)			Q		
9 (30)	(Note 7)			R		
10 (33)	(Note 7)			S		
12 (40)	(Note 7)			Т		
14 (47)	(Note 7)			U		
16 (53)	(Note 7)			V		
Fill Fluid - 16th character						
Silicone oil DC200 10 cSt					S	
Silicone oil Baysilone PD5 5 cSt					Р	
Inert oil - Galden G5	(Note 8)				Ν	
Inert oil - Halocarbon 4.2	(Note 8)				D	
Silicone oil DC704					G	
Silicone polymer Syltherm XLT					С	
Mineral oil Esso Marcol 122 (FDA approved)	(Note 9)				W	
Vegetable oil Neobee M-20 (FDA approved)	(Note 9)				А	
Glycerin-water 70% (FDA approved)	(Note 9)				В	

BASIC ORDERING INFORMATION model S26RE	S 2 6 R E	S26REXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			Х
Flushing Ring: Hole and Thread - 17th character			,		
None (TO BE SELECTED FOR EXTENDED VERSIONS)			Ν		
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)			Ν	
AISI 316 L ss	(Note 11)	NACE		Α	
Hastelloy C-276	(Notes 11, 12)	NACE		Н	
Flushing Ring: Plug and Gasket - 19th character					
No plug - No gasket					Ν
No plug - garlock	(Note 11)				Α
No plug - PTFE	(Note 11)				В
No plug - graphite	(Note 11)				С
AISI 316 L ss - no gasket	(Notes 11, 13)	NACE			D
AISI 316 L ss - garlock	(Notes 11, 13)	NACE			Ε
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			Н
Hastelloy C-276 - garlock	(Notes 11, 14)	NACE			L
Hastelloy C-276 - PTFE	(Notes 11, 14)	NACE			М
Hastelloy C-276 - graphite	(Notes 11, 14)	NACE			Р

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  ${\sf L}$ 

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

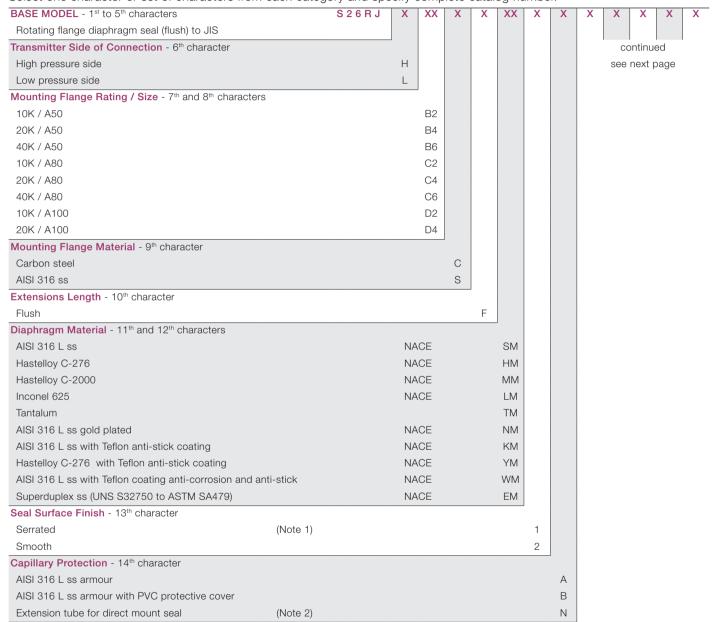
Note 11: Not available with Flushing ring: hole and thread code N

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

## BASIC ORDERING INFORMATION model S26RJ Rotating flange diaphragm seals (flush) to JIS



BASIC ORDERING INFORMATION model S26RJ	S 2 6 R J X XX X	XXXXXX	Х	X	Х
Capillary Length m (Feet) - 15th character					
Direct-mount construction	(Note 3)	1			
1 (3)	(Note 4)	Α			
1.5 (5)	(Note 4)	В			
2 (7)	(Note 4)	С			
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)	Н			
5 (17)	(Note 4)	J			
5.5 (18)	(Note 4)	K			
6 (20)	(Note 4)	L			
6.5 (22)	(Note 4)	М			
7 (23.5)	(Note 4)	N			
7.5 (25)	(Note 4)	Р			
8 (27)	(Note 4)	Q			
9 (30)	(Note 4)	R			
10 (33)	(Note 4)	S			
12 (40)	(Note 4)	Т			
14 (47)	(Note 4)	U			
16 (53)	(Note 4)	V			
Fill Fluid - 16th character			J		
Silicone oil DC200 10 cSt			S		
Silicone oil Baysilone PD5 5 cSt			Р		
Inert oil - Galden G5	(Note 5)		Ν		
Inert oil - Halocarbon 4.2	(Note 5)		D		
Silicone oil DC704			G		
Silicone polymer Syltherm XLT			С		
Mineral oil Esso Marcol 122 (FDA approved)	(Note 6)		W		
Vegetable oil Neobee M-20 (FDA approved)	(Note 6)		Α		
Glycerin-water 70% (FDA approved)	(Note 6)		В		
Flushing Ring: Hole and Thread - 17th character				J	
None				Ν	
Flushing Ring Material - 18th character					
None					Ν
Flushing Ring: Plug and Gasket - 19th character					
None					

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

### 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	Carbon Steel	AISI 316 ss flange
to ASME B16.5	@ 100 °F (38 °C)	@ 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

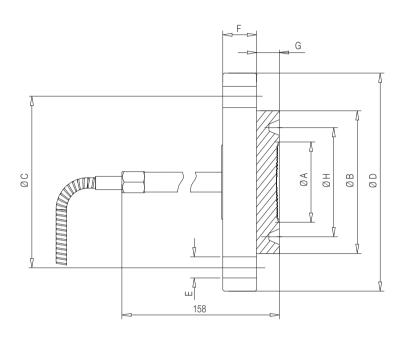
- a) the seal (one element), as process temperature error
- b) the capillary per meter
- c) the system (transmitter sensor when combined with a seal of specific size/type, either direct mount or remote) referred to silicone oil (DC 200) filling and AISI 316 L ss diaphragm materials.

For filling different from silicone oil (DC200) the errors can be multiplied by ratio between the thermal expansion coefficients of the selected filling divided by the one of DC200, 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

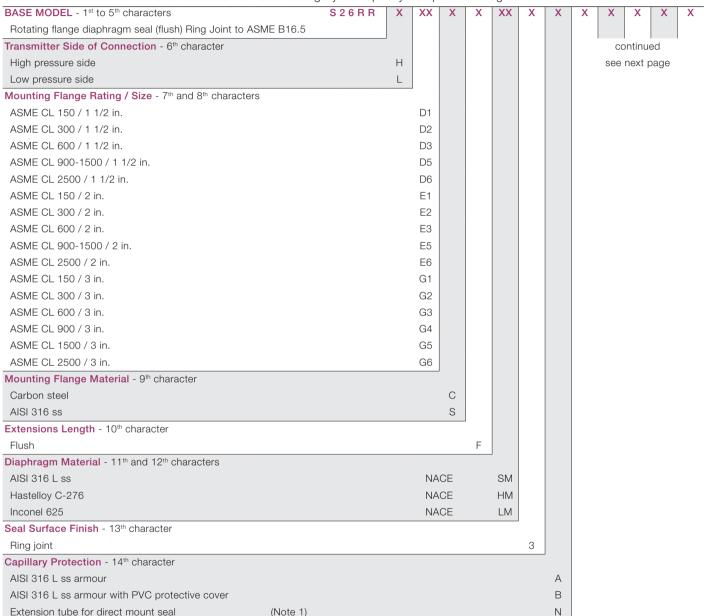
S26RR flanged RJ	Sensor URL	Seal error (process)	Direct mount system	Remote mount	1 metre capillary
seal size - Mnemonic			error (ambient)	error (ambient)	error (ambient)
1 1/2 in P1.5	≥ 160 kPa, 642 inH2O	0.74 kPa, 3 inH2O	0.67 kPa, 2.68 inH2O	0.62 kPa, 2.48 inH2O	0.31 kPa, 1.24 inH2O
2 in P2	40 - 65 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.



				Dimension	ons mm (in) fo	or S26RR				
Size/Rating	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

## BASIC ORDERING INFORMATION model S26RR Rotating flange diaphragm seals (flush) - Ring Joint



BASIC ORDERING INFORMATION model S26RR	S 2 6 R R X XX X	(XXXXX 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)	В		
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)	Н		
5 (17)	(Note 3)	J		
5.5 (18)	(Note 3)	K		
6 (20)	(Note 3)	L		
6.5 (22)	(Note 3)	М		
7 (23.5)	(Note 3)	N		
7.5 (25)	(Note 3)	Р		
8 (27)	(Note 3)	Q		
9 (30)	(Note 3)	R		
10 (33)	(Note 3)	S		
12 (40)	(Note 3)	Т		
14 (47)	(Note 3)	U		
16 (53)	(Note 3)	V		
Fill Fluid - 16th character				
Silicone oil DC200 10 cSt			S	
Silicone oil Baysilone PD5 5 cSt			P	
Inert oil - Galden G5	(Note 4)		N	
Inert oil - Halocarbon 4.2	(Note 4)		D	
Silicone oil DC704			G	
Silicone polymer Syltherm XLT			C	
Mineral oil Esso Marcol 122 (FDA approved)	(Note 5)	,	N	
Vegetable oil Neobee M-20 (FDA approved)	(Note 5)		A	
Glycerin-water 70% (FDA approved)	(Note 5)		В	
Flushing Ring: Hole and Thread - 17th character				
None			Ν	
Flushing Ring Material - 18th character				
None				Ν

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

None

Ν

## S26FA, S26FE Fixed flange diaphragm seals (flush)

These flush 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**

Class 150 230	
	isc
Class 300 600	osi
Class 600 120	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.

#### Gasket seat finish

Smooth (ASME or EN): 0.8µm (Ra) Serrated (ASME): 3.2 to 6.3µm (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

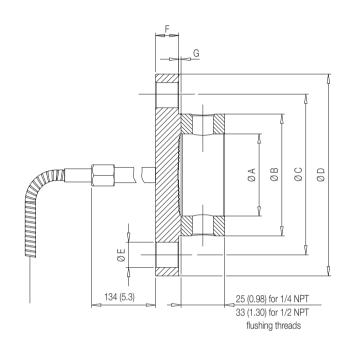
- a) the seal (one element), as process temperature error
- b) the capillary per meter
- c) the system (transmitter sensor when combined with a seal of specific size/type, either direct mount or remote) referred to silicone oil (DC 200) filling and AISI 316 L ss diaphragm materials.

For filling different from silicone oil (DC200) the errors can be multiplied by ratio between the thermal expansion coefficients of the selected filling divided by the one of DC200, listed in the fill fluid characteristics table.

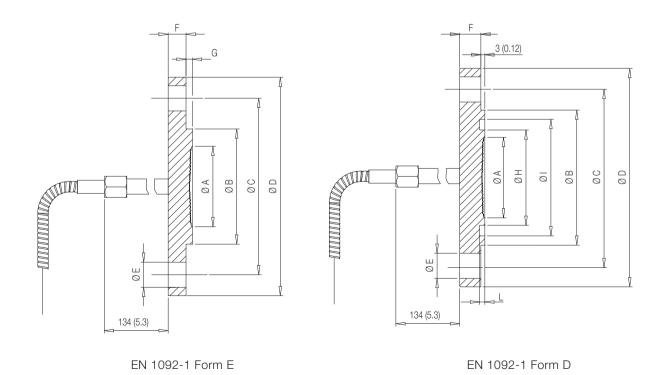
THE ERRORS IN TABLE CAN BE CONSIDERED DIVIDED BY 4 FOR TRANSMITTERS USING SAME REMOTE SEAL ON THE TWO SIDES

S26FA, S26FE	Sensor URL	Seal error (process)	Direct mount system	Remote system error	1 metre capillary		
fixed flange			error (ambient)	(ambient)	error (ambient)		
seal size - Mnemonic							
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		

MULTIPLY BY 10 THE kPa VALUES TO OBTAIN mbar.



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

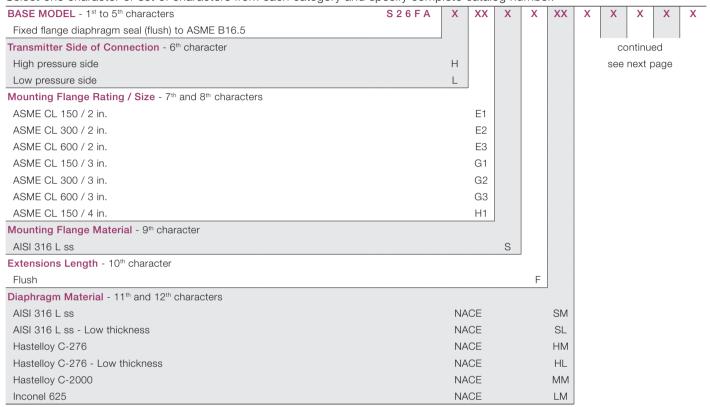


Note 1 - Flange thickness tolerance is +3.0 / -0.0 mm (+0.12 / 0.0 in.).

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.

	Dimensions mm (in) for S26FA													
Size/Rating	A (dia)													
	std. thickness	low thickness	flushing r	ing	B (dia)	С	C (dia)	D (dia)	E (	(dia)	F		G	N° of
	diaphragm	diaphragm	internal o	dia							(Note	1)		holes
2 in. ASME CL 150	60 (2.36)	58 (2.28)	62 (2.44	1) 9	92 (3.62)	120.6	5 (4.75)	152.4 (6)	19.1	(0.79)	17.5 (0.6)		(0.08)	4
2 in. ASME CL 300	60 (2.36)	58 (2.28)	62 (2.44	1) 9	92 (3.62)	12	7 (5)	165.1 (6.5	) 19.1	19.1 (0.79) 2		.8) 2	(0.08)	8
2 in. ASME CL 600	60 (2.36)	58 (2.28)	62 (2.44	1) 9	92 (3.62)	12	7 (5)	165.1 (6.5		19.1 (0.79) 25.4		1) 7	(0.27)	8
3 in. ASME CL 150	89 (3.5)	75 (2.95)	92 (3.62	2)	127 (5)	152	.4 (6)	190.5 (7.5	) 19.1	19.1 (0.79) 22.4 (0			(0.08)	4
3 in. ASME CL 300	89 (3.5)	75 (2.95)	92 (3.62	2)	127 (5)	168.1	5 (6.62)	209.6 (8.2		22.4 (0.86) 26			(0.08)	8
3 in. ASME CL 600	89 (3.5)	75 (2.95)	92 (3.62	2)	127 (5)	168.1	5 (6.62)	209.6 (8.2	5) 22.4			.3) 7	(0.27)	8
4 in. ASME CL 150	89 (3.5)	75 (2.95)	92 (3.62				5 (7.5)			(0.79)			(0.08)	8
		Dimensions mm (in) for S26FE smooth and Form B1												
Size/Rating		A (dia)											G	
	std. thickness	low thickness	ess flushing rin		ng B (dia)	C (dia)		D (dia)	E (	E (dia)				N° of
	diaphragm	diaphragm	internal o	dia							(Note	2)		holes
DN 50 EN PN 16	60 (2.36)	58 (2.28)	62 (2.44	l) 1	02 (4.02)	125	5 (4.92) 165 (6.5)		) 18 (	(0.71)	15 (0.5	(8)	(0.12)	4
DN 50 EN PN 40	60 (2.36)	58 (2.28)	62 (2.44				5 (4.92)	165 (6.5	165 (6.5) 18 (0.7		18 (0.67)		(0.12)	4
DN 50 EN PN 63	60 (2.36)	58 (2.28)	62 (2.44	_	02 (4.02)	_	5 (5.31)	· / / /		,	23 (0.9		(0.12)	4
DN 50 EN PN 100	60 (2.36)	58 (2.28)	62 (2.44	l) 1	02 (4.02)	145	5 (5.71)	195 (7.67) 26 (1.02)			27 (1.0		(0.12)	4
DN 80 EN PN 16	89 (3.5)	75 (2.95)	92 (3.62		38 (5.43)		0 (6.3)	200 (7.87) 18 (0.71)		(0.71)	17 (0.6	37) 3	(0.12)	8
DN 80 EN PN 40	89 (3.5)	75 (2.95)	92 (3.62	2) 1	38 (5.43)		0 (6.3)	200 (7.87	') 18 (				(0.12)	8
DN 80 EN PN 63	89 (3.5)	75 (2.95)	92 (3.62	2) 1	38 (5.43)			(0.86)	25 (0.9	98) 3	(0.12)	8		
DN 80 EN PN 100	89 (3.5)	75 (2.95)	92 (3.62	2) 1	38 (5.43)	180	(7.08)	230 (9.05	5) 26 (	26 (1.02) 33 (1		3) 3	(0.12)	8
DN 100 EN PN 16	89 (3.5)	75 (2.95)	92 (3.62	2) 1	58 (6.22)	180	(7.08)	220 (8.66	3) 18 (	(0.71)	17 (0.6	37) 3	(0.12)	8
				Dim	nensions	mm (in	) for S26	FE Form E						
Size/Rating	diaphr	agm A (dia)	(dia) B (dia)			ia)	D (dia	ı) E	(dia)	a) F (Note 2)		G		N° of
	std. thicknes	s low thickne	ss											holes
DN 50 EN PN 16	60 (2.36)	58 (2.28)	87 (3.	42)	125 (4.92)		165 (6.	5) 18	(0.71)	0.71) 13.5 (0.5		.53) 4.5 (0.1		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		).18)	4
DN 50 EN PN 63	60 (2.36)	58 (2.28)	87 (3.	42)	135 (5			08) 22	22 (0.86) 21		.5 (0.85) 4.5		).18)	4
DN 50 EN PN 100	60 (2.36)	58 (2.28)	87 (3.	42)	145 (5	5.71)	195 (7.6	37) 26	26 (1.02)		5.5 (1) 4.5		).18)	4
DN 80 EN PN 16	89 (3.5)	75 (2.95)	120 (4	.72)	160 (	6.3)	200 (7.8	37) 18	18 (0.71) 15		.5 (0.61) 4.5		).18)	8
DN 80 EN PN 40	89 (3.5)	75 (2.95)	120 (4	.72)	160 (	6.3)	200 (7.8	37) 18	18 (0.71) 19		9.5 (0.77) 4.5		).18)	8
DN 80 EN PN 63	89 (3.5)	75 (2.95)	120 (4	.72)	170 (	6.7)	215 (8.4	46) 22	6) 22 (0.86) 23		3.5 (0.92) 4.5		).18)	8
DN 80 EN PN 100	89 (3.5)	75 (2.95)	120 (4	.72)	180 (7	·.08)	230 (9.0	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 (8.6	36) 18	(0.71)	15	(0.59)	5 (0.	20)	8
Dimensions mm (in) for S26FE Form D														
Size/Rating	diaphragr	n A (dia)	B (dia)	C (d	lia) D	(dia)	E (dia)	F	H (di	ia)	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	4.92) 16	5 (6.5)	18 (0.71	) 15 (0.59	72 (2.	83) 8	38 (3.46)	4 (0	.16)	4
DN 50 EN PN 40	60 (2.36)	58 (2.28)	102 (4.02)	125 (4	4.92) 16	5 (6.5)	18 (0.71	) 18 (0.71	72 (2.	83) 8	38 (3.46)	4 (0	.16)	4
DN 50 EN PN 63	60 (2.36)	58 (2.28)	102 (4.02)	135 (5	5.31) 180	(7.08)	22 (0.86	) 23 (0.91	72 (2.	83) 8	38 (3.46)	4 (0	.16)	4
DN 50 EN PN 100	60 (2.36)	58 (2.28)	102 (4.02)	145 (5	5.71) 195	5 (7.67)	26 (1.02	) 27 (1.06	72 (2.	83) 8	38 (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) 1	21 (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) 1	21 (4.76)	4 (0	.16)	8
DN 80 EN PN 63	89 (3.5)	75 (2.95)	138 (5.43)	170 (	(6.7) 215	5 (8.46)	22 (0.86	) 25 (0.92	105 (4	.13) 1	21 (4.76)	4 (0	.16)	8
DN 80 EN PN 100	89 (3.5)	75 (2.95)	138 (5.43)	180 (7	7.08) 230	(9.05)	26 (1.02	) 33 (1.3)	105 (4	.13) 1	21 (4.76)	4 (0	.16)	8
DN 100 EN PN 16	89 (3.5)	75 (2.95)	158 (6.22)	180 (7	7.08) 220	(8.66)	18 (0.71	) 17 (0.67	128 (5	.04) 1	49 (5.91)	4.5 (0	0.18)	8
					1							1		

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



BASIC ORDERING INFORMATION model S26FA	S 2 6 F A X XX X X XX	Х	Х	Х	Χ	Х	х х
Seal Surface Finish - 13th character		J					
Serrated	(Note 1)	1				cont	inued
Smooth		2				see ne	xt page
Capillary Protection - 14th character							
AISI 316 L ss armour			Α				
AISI 316 L ss armour with PVC protective cover			В				
Extension tube for direct mount seal	(Note 2)		Ν				
Capillary Length m (Feet) - 15th character							
Direct-mount construction	(Note 3)			1			
1 (3)	(Note 4)			Α			
1.5 (5)	(Note 4)			В			
2 (7)	(Note 4)			С			
2.5 (8)	(Note 4)			D			
3 (10)	(Note 4)			Ε			
3.5 (12)	(Note 4)			F			
4 (13)	(Note 4)			G			
4.5 (15)	(Note 4)			Н			
5 (17)	(Note 4)			J			
5.5 (18)	(Note 4)			K			
6 (20)	(Note 4)			L			
6.5 (22)	(Note 4)			М			
7 (23.5)	(Note 4)			Ν			
7.5 (25)	(Note 4)			Р			
8 (27)	(Note 4)			Q			
9 (30)	(Note 4)			R			
10 (33)	(Note 4)			S			
12 (40)	(Note 4)			Т			
14 (47)	(Note 4)			U			
16 (53)	(Note 4)			V			
Fill Fluid - 16th character	,				,		
Silicone oil DC200 10 cSt					S		
Silicone oil Baysilone PD5 5 cSt					Р		
Inert oil - Galden G5	(Note 5)				Ν		
Inert oil - Halocarbon 4.2	(Note 5)				D		
Silicone oil DC704	, ,				G		
Silicone polymer Syltherm XLT					С		
Mineral oil Esso Marcol 122 (FDA approved)	(Note 6)				W		
Vegetable oil Neobee M-20 (FDA approved)	(Note 6)				Α		
Glycerin-water 70% (FDA approved)	(Note 6)				В		

BASIC ORDERING INFORMATION model S26FA	S 2 6 F A	X XX X X XX X X X	X X	X	Х
Flushing Ring: Hole and Thread - 17th character					
None			Ν		
1 hole - 1/2 in. NPT			2		
2 holes - 1/2 in. NPT			3		
1 hole - 1/4 in. NPT			4		
2 holes - 1/4 in. NPT			5		
Flushing Ring Material - 18th character					
None	(Note 7)			Ν	
AISI 316 L ss	(Note 8)	NACE		Α	
Hastelloy C-276	(Notes 8, 9)	NACE		Н	
Flushing Ring: Plug and Gasket - 19th character					
No plug - No gasket					Ν
No plug - garlock	(Note 8)				Α
No plug - PTFE	(Note 8)				В
No plug - graphite	(Note 8)				С
AISI 316 L ss - no gasket	(Notes 8, 10)	NACE			D
AISI 316 L ss - garlock	(Notes 8, 10)	NACE			Е
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			Н
Hastelloy C-276 - garlock	(Notes 8, 11)	NACE			L
Hastelloy C-276 - PTFE	(Notes 8, 11)	NACE			Μ
Hastelloy C-276 - graphite	(Notes 8, 11)	NACE			P

Note 1: Not available with diaphragm material code MM, LM

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

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

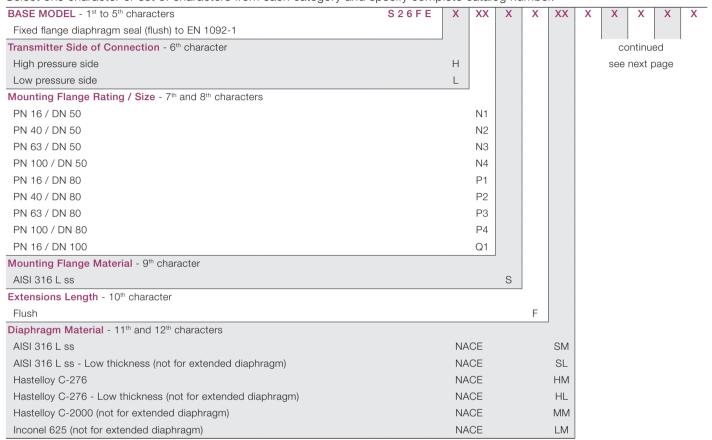
Note 9: Not available with Seal surface finish code 1

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

#### 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.



BASIC ORDERING INFORMATION model S26FE	S 2 6 F E X XX X X	XX X	X	Х	X	X X X
Seal Surface Finish - 13th character						
Serrated	(Note 1)	1				continued
Smooth		2				see next page
Form E - Spigot type	(Note 2)	4				
Form D - Groove type	(Note 3)	6				
Capillary Protection - 14th character						
AISI 316 L ss armour			Α			
AISI 316 L ss armour with PVC protective cover			В			
Extension tube for direct mount seal	(Note 4)		Ν			
Capillary Length m (Feet) - 15th character						
Direct-mount construction	(Note 5)			1		
1 (3)	(Note 6)			Α		
1.5 (5)	(Note 6)			В		
2 (7)	(Note 6)			С		
2.5 (8)	(Note 6)			D		
3 (10)	(Note 6)			Ε		
3.5 (12)	(Note 6)			F		
4 (13)	(Note 6)			G		
4.5 (15)	(Note 6)			Н		
5 (17)	(Note 6)			J		
5.5 (18)	(Note 6)			K		
6 (20)	(Note 6)			L		
6.5 (22)	(Note 6)			М		
7 (23.5)	(Note 6)			Ν		
7.5 (25)	(Note 6)			Р		
8 (27)	(Note 6)			Q		
9 (30)	(Note 6)			R		
10 (33)	(Note 6)			S		
12 (40)	(Note 6)			Т		
14 (47)	(Note 6)			U		
16 (53)	(Note 6)			V		
Fill Fluid - 16th character						
Silicone oil DC200 10 cSt					S	
Silicone oil Baysilone PD5 5 cSt					Р	
Inert oil - Galden G5	(Note 7)				Ν	
Inert oil - Halocarbon 4.2	(Note 7)				D	
Silicone oil DC704					G	
Silicone polymer Syltherm XLT					С	
Mineral oil Esso Marcol 122 (FDA approved)	(Note 8)				W	
Vegetable oil Neobee M-20 (FDA approved)	(Note 8)				Α	
Glycerin-water 70% (FDA approved)	(Note 8)				В	

BASIC ORDERING INFORMATION model S26FE	S 2 6 F E	X XX X X XX X X	X X X	Х	Х
Flushing Ring: Hole and Thread - 17th character					
None			Ν		
1 hole - 1/2 in. NPT	(Note 9)		2		
2 holes - 1/2 in. NPT	(Note 9)		3		
1 hole - 1/4 in. NPT	(Note 9)		4		
2 holes - 1/4 in. NPT	(Note 9)		5		
Flushing Ring Material - 18th character					
None	(Note 10)			Ν	
AISI 316 L ss	(Note 11)	NACE		Α	
Hastelloy C-276	(Notes 11, 12)	NACE		Н	
Flushing Ring: Plug and Gasket - 19th character					
No plug - No gasket					Ν
No plug - garlock	(Note 11)				Α
No plug - PTFE	(Note 11)				В
No plug - graphite	(Note 11)				С
AISI 316 L ss - no gasket	(Notes 11, 13)	NACE			D
AISI 316 L ss - garlock	(Notes 11, 13)	NACE			Ε
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			Н
Hastelloy C-276 - garlock	(Notes 11, 14)	NACE			L
Hastelloy C-276 - PTFE	(Notes 11, 14)	NACE			Μ
Hastelloy C-276 - graphite	(Notes 11, 14)	NACE			Р

Note 1: Not available with diaphragm material code MM, LM

Note 2: Not available with DN 100 size code Q1combined with diaphragm material code SM, HM, HL, MM, LM

Note 3: Not available with diaphragm material code HM, HL, MM,  $\stackrel{\cdot}{\text{LM}}$ 

Note 4: Not available with transmitter side of connection code L

Note 5: Not available with capillary protection code A, B

Note 6: Not available with capillary protection code N

Note 7: Suitable for oxygen service

Note 8: Suitable for food application

Note 9: Not available with Seal surface finish code 4, 6  $\,$ 

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

#### S26T 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	Temperature range	Pressure limit
S26TT bolting		
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.

TOT OP COME TANICAL TEST	
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

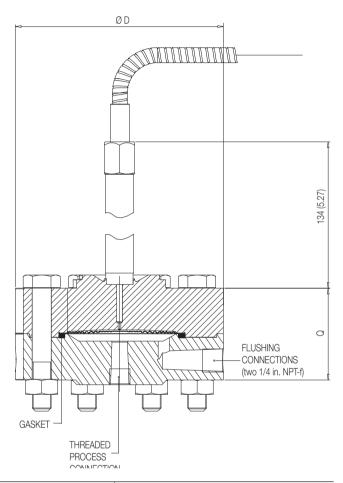
The following table shows temperature effect per 20 K (36 °F) change, detailed separately for

- 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 (DC 200) filling and AISI 316 L ss diaphragm materials.

For filling different from silicone oil (DC200) the errors can be multiplied by ratio between the thermal expansion coefficients of the selected filling divided by the one of DC200, 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

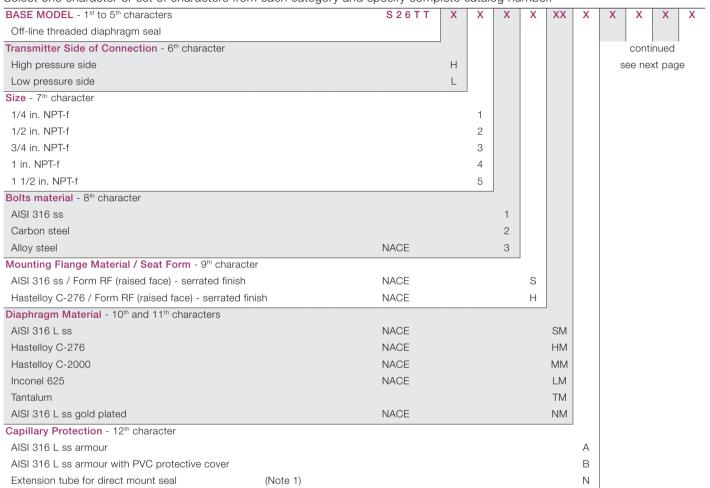
S26T off-line threaded	Sensor URL	Seal error (process)	Direct mount system	Remote system error	1 metre capillary
seal size - Mnemonic			error (ambient)	(ambient)	error (ambient)
2 1/2 in T2.5	≥ 4 kPa, 16 inH2O	0.26 kPa, 1.04 inH2O	0.11 kPa, 0.44 inH2O	0.1 kPa, 0.4 inH2O	0.08 kPa, 0.32 inH2O



	Dimensions mm (in) for S26T		
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)	

#### 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.



BASIC ORDERING INFORMATION model S26TT		S 2 6 T T X XX X XX X X	Х	Χ	Х
Capillary Length m (Feet) - 13th character					
Direct-mount construction	(Note 2)	1			
1 (3)	(Note 3)	А			
1.5 (5)	(Note 3)	В			
2 (7)	(Note 3)	С			
2.5 (8)	(Note 3)	D			
3 (10)	(Note 3)	Е			
3.5 (12)	(Note 3)	F			
4 (13)	(Note 3)	G			
4.5 (15)	(Note 3)	Н			
5 (17)	(Note 3)	J			
5.5 (18)	(Note 3)	K			
6 (20)	(Note 3)	L			
6.5 (22)	(Note 3)	М			
7 (23.5)	(Note 3)	N			
7.5 (25)	(Note 3)	Р			
8 (27)	(Note 3)	Q			
9 (30)	(Note 3)	R			
10 (33)	(Note 3)	S			
12 (40)	(Note 3)	Т			
Fill Fluid - 14th character			I		
Silicone oil DC200 10 cSt			S		
Silicone oil Baysilone PD5 5 cSt			Р		
Inert oil - Galden G5	(Note 4)		Ν		
Inert oil - Halocarbon 4.2	(Note 4)		D		
Silicone oil DC704			G		
Silicone polymer Syltherm XLT			С		
Mineral oil Esso Marcol 122 (FDA approved)	(Note 5)		W		
Vegetable oil Neobee M-20 (FDA approved)	(Note 5)		Α		
Glycerin-water 70% (FDA approved)	(Note 5)		В		
Flushing Connections - 15th character					
Not required				1	
Provided (2 off)	(Note 6)			Q	
Gasket - 16 <sup>th</sup> character	<u>.</u>				I
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

#### 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	AISI 316 L ss flange	Hastelloy C flange
to ASME B16.5	@ 25 °C (77 °F)	@ 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 6.3µm (Ra) Serrated (EN 1092-1 Type B1): 3.2 to 12.5 µm (Ra)

#### Temperature effect

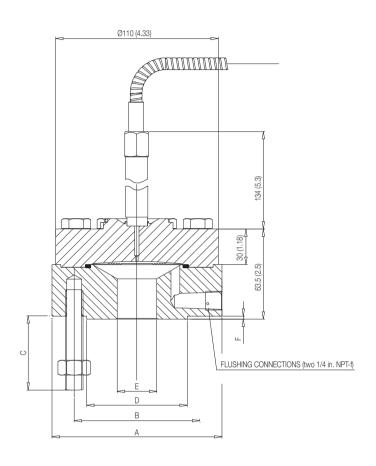
The following table shows temperature effect per 20 K (36 °F) change, detailed separately for

- 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 (DC 200) filling and AISI 316 L ss diaphragm materials.

For filling different from silicone oil (DC200) the errors can be multiplied by ratio between the thermal expansion coefficients of the selected filling divided by the one of DC200, 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

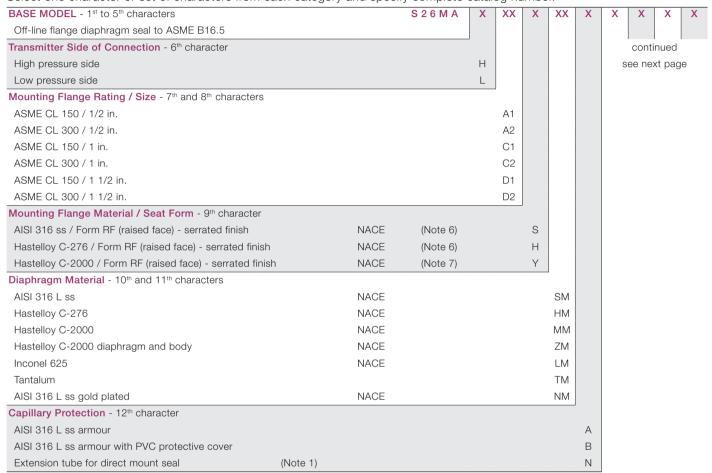
S26MA, S26ME off-line flange	Sensor URL	Seal error (process)	Direct mount system	Remote system error	1 metre capillary
seal size - Mnemonic			error (ambient)	(ambient)	error (ambient)
2 1/2 in T2.5	≥ 4 kPa, 16 inH2O	0.26 kPa, 1.04 inH2O	0.11 kPa, 0.44 inH2O	0.1 kPa, 0.4 inH2O	0.08 kPa, 0.32 inH2O



Size/Rating	Dimensions mm (in) for S26MA and S26ME								
	A (dia)	B (dia)	C (	C (4 studs)		E (dia)	F		
			Length	Thread					
1/2 in. ASME CL 150	110 (4.33)	60.5 (2.38)	39 (1.53)	1/2in - 13 UNC	35.1 (1.38)	15.8 (0.62)	1.6 (0.06)		
1/2 in. ASME CL 300	110 (4.33)	66.5 (2.62)	39 (1.53)	1/2in - 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)	1/2in - 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)	5/8in – 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)	1/2in - 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)	3/4in - 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)		

#### 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.



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)	В		
2 (7)	(Note 3)	С		
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)	Н		
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)	Р		
8 (27)	(Note 3)	Q		
9 (30)	(Note 3)	R		
10 (33)	(Note 3)	S		
12 (40)	(Note 3)	Т		
Fill Fluid - 14th character				
Silicone oil DC200 10 cSt		S		
Silicone oil Baysilone PD5 5 cSt		F		
Inert oil - Galden G5	(Note 4)	N	ı	
Inert oil - Halocarbon 4.2	(Note 4)		•	
Silicone oil DC704		G	i	
Silicone polymer Syltherm XLT		C	;	
Mineral oil Esso Marcol 122 (FDA approved)	(Note 5)	V	/	
Vegetable oil Neobee M-20 (FDA approved)	(Note 5)	Δ		
Glycerin-water 70% (FDA approved)	(Note 5)	Е	;	
Flushing Connections - 15th character				
Not required			1	
Provided (2 off)			Q	
Gasket - 16th character				
PTFE				2
Viton™	(Note 6)			3
Graphite	(Note 6)			7

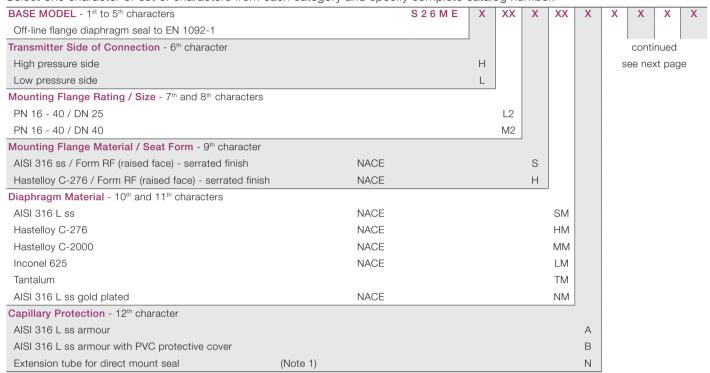
Note 1: Not available with transmitter side of connection code L

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

#### 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.



BASIC ORDERING INFORMATION model S26ME	S 2 6 M E X	XXXXXX X	Х	Х	X
Capillary Length m (Feet) - 13th character					
Direct-mount construction	(Note 2)	1			
1 (3)	(Note 3)	А			
1.5 (5)	(Note 3)	В			
2 (7)	(Note 3)	С			
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)	Н			
5 (17)	(Note 3)	J			
5.5 (18)	(Note 3)	K			
6 (20)	(Note 3)	L			
6.5 (22)	(Note 3)	М			
7 (23.5)	(Note 3)	N			
7.5 (25)	(Note 3)	Р			
8 (27)	(Note 3)	Q			
9 (30)	(Note 3)	R			
10 (33)	(Note 3)	S			
12 (40)	(Note 3)	Т			
Fill Fluid - 14th character					
Silicone oil DC200 10 cSt			S		
Silicone oil Baysilone PD5 5 cSt			Р		
Inert oil - Galden G5	(Note 4)		Ν		
Inert oil - Halocarbon 4.2	(Note 4)		D		
Silicone oil DC704			G		
Silicone polymer Syltherm XLT			С		
Mineral oil Esso Marcol 122 (FDA approved)	(Note 5)		W		
Vegetable oil Neobee M-20 (FDA approved)	(Note 5)		Α		
Glycerin-water 70% (FDA approved)	(Note 5)		В		
Flushing Connections - 15th character					
Not required				1	
Provided				Q	
Gasket - 16 <sup>th</sup> 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

#### S26S 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	-40 and 121 °C
EPDM 3-A 18-03 Class II	(-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

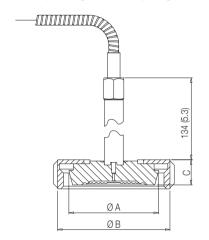
- a) the seal (one element), as process temperature error
- b) the capillary per meter
- c) the system (transmitter sensor when combined with a seal of specific size/type, either direct mount or remote) referred to silicone oil (DC 200) filling and AISI 316 L ss diaphragm materials.

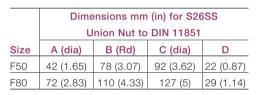
For filling different from silicone oil (DC200) the errors can be multiplied by ratio between the thermal expansion coefficients of the selected filling divided by the one of DC200, listed in the fill fluid characteristics table.

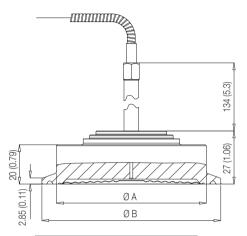
THE ERRORS IN TABLE CAN BE CONSIDERED DIVIDED BY 4 FOR TRANSMITTERS USING SAME REMOTE SEAL ON THE TWO SIDES

S26S sanitary and food-	Sensor URL	Seal error (process)	Direct mount system	Remote system error	1 metre capillary
seal size - Mnemonic			error (ambient)	(ambient)	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

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.

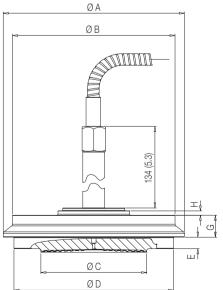






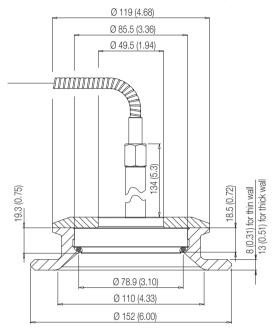
	Dimensions mm (in) for				
	S26SS Triclamp				
Size	A (dia)	B (dia)			
2 in.	56.3 (2.2)	64 (2.5)			
3 in.	83 (3.26)	91 (3.58)			
4 in.	110.3 (4.34)	119 (4.68)			

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.



	Dimensions mm (in) for S26S Cherry Burrell							
Size	A (dia)	B (dia)	C (dia)	D (dia)	E	F	G	Н
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)

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.

Ø 132.6 (5.22)

Weep hole

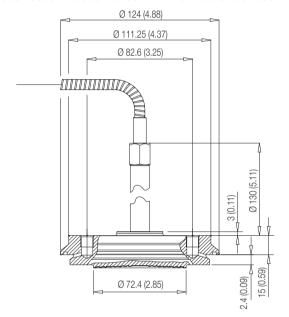
Weep hole

O-ring-341 Ethylene Propylene
70 Durometer (Standard O-Ring)
Ø 152 (5.96)

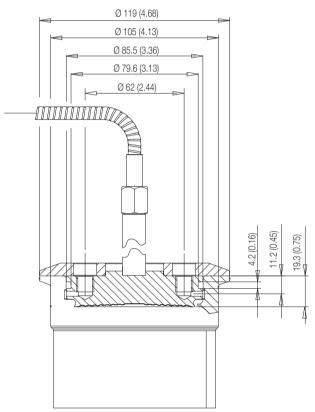
NOTE: The tank spud required for connection of this seal element must be welded to the process vessel prior to connecting the seal, following a recommended welding and pressure testing procedure.

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.

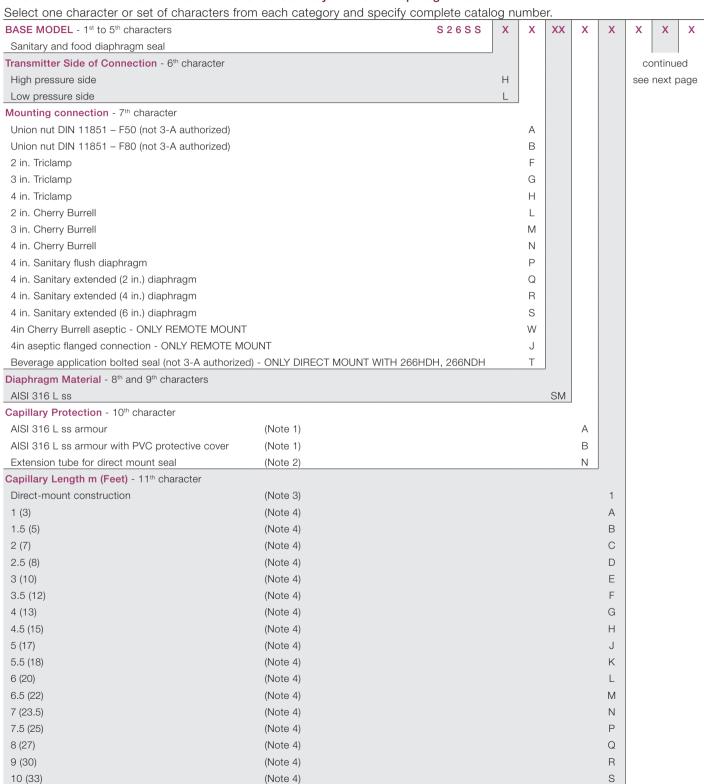


4 in. Cherry Burrell Aseptic



4 in. Aseptic Flanged Connection

#### BASIC ORDERING INFORMATION model S26S Sanitary and food diaphragm seals



BASIC ORDERING INFORMATION model S26SS		S 2 6 S S X X XX X X	Χ	Х	2
Fill Fluid - 12th character					
Silicone oil DC200 10 cSt			S		
Inert oil - Halocarbon 4.2	(Note 5)		D		
Silicone polymer Syltherm XLT			С		
Mineral oil Esso Marcol 122 (FDA approved)	(Note 6)		W		
Vegetable oil Neobee M-20 (FDA approved)	(Note 6)		Α		
Glycerin-water 70% (FDA approved)	(Note 6)		В		
Clamp/Fittings - 13th character					
None				1	
2 in. V-band Clamp (for 2 in. Triclamp)				Α	
3 in. V-band Clamp (for 3 in. Triclamp)				В	
4 in. V-band Clamp (for 4 in. Triclamp, 4 in. Cherry Burrell, 4 in. Sanitary flush and 4 in. aseptic flanged)				С	
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)				Ε	
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)			Н	
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)				Р	
Flanged tank spud with 6 holes (for 1 1/2 in. beverage seal)				K	
Gasket - 14 <sup>th</sup> character					,
None					
Ethylene propylene gasket DN100 (for 4 in. Sanitary extended seal) -	(EPDM 3-A 18-03 Class II)				
Ethylene propylene gasket (for 1 1/2 in. beverage seal)					
Ethylene propylene gasket DN50 (for F50 Union nut seal)					
Ethylene propylene gasket DN80 (for F80 Union nut seal)					
Ethylene propylene gasket (for 4 in. Sanitary flush and 4 in. aseptic) -	- (EPDM 3-A 18-03 Class II)				

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

#### S26P 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

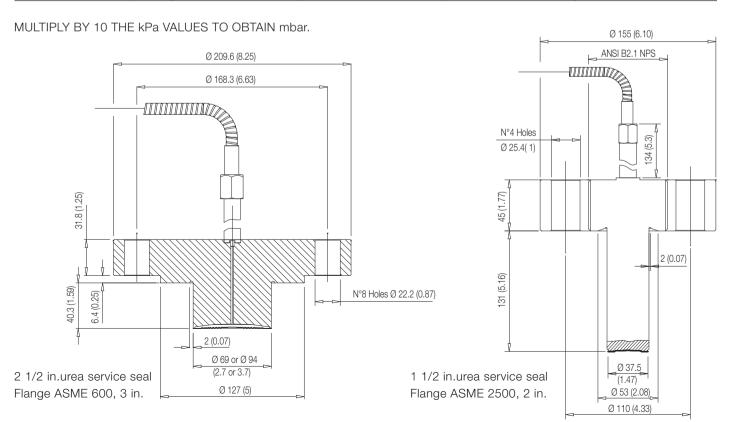
The following table shows temperature effect per 20 K (36 °F) change, detailed separately for

- 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 (DC 200) filling and AISI 316 L ss diaphragm materials.

For filling different from silicone oil (DC200) the errors can be multiplied by ratio between the thermal expansion coefficients of the selected filling divided by the one of DC200, listed in the fill fluid characteristics table.

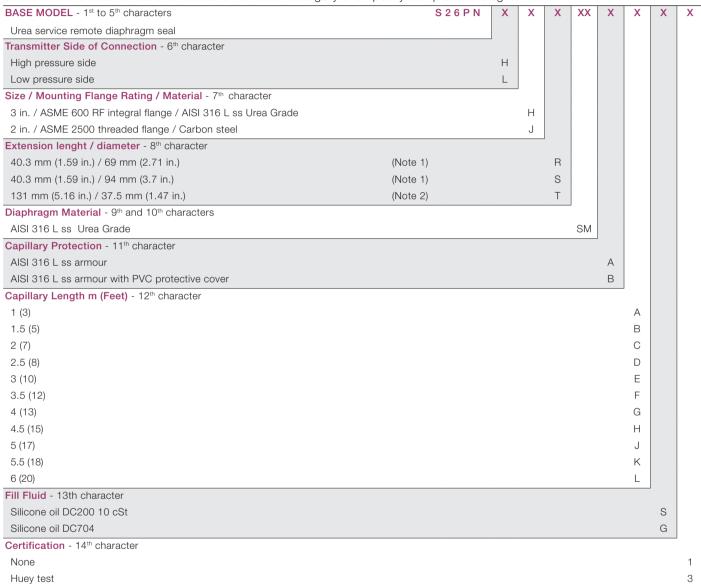
THE ERRORS IN TABLE CAN BE CONSIDERED DIVIDED BY 4 FOR TRANSMITTERS USING SAME REMOTE SEAL ON THE TWO SIDES

S26P urea service	Sensor URL	Seal error (process)	Remote system error	1 metre capillary
seal size - Mnemonic			(ambient)	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



#### BASIC ORDERING INFORMATION model S26P urea service remote diaphragm seals

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



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

#### S26B 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 S26B	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.

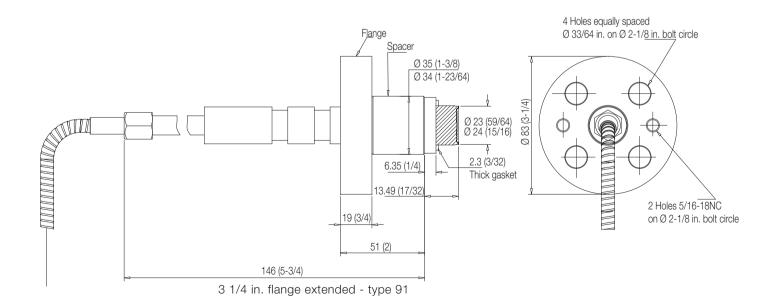
#### Temperature effect

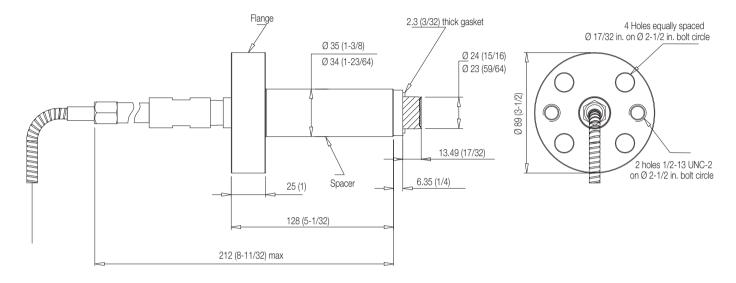
The following table shows temperature effect per 20 K (36 °F) change, detailed separately for

- 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 (DC 200) filling and AISI 316 L ss diaphragm materials.

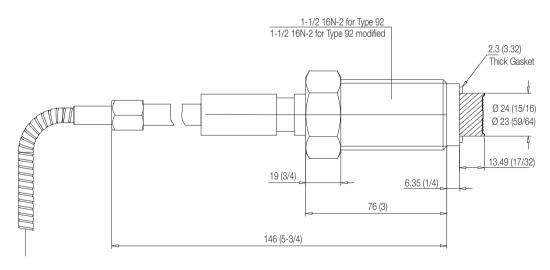
For filling different from silicone oil (DC200) the errors can be multiplied by ratio between the thermal expansion coefficients of the selected filling divided by the one of DC200, listed in the fill fluid characteristics table.

S26B Button type	Sensor URL	Seal error (process)	Remote system error	1 metre capillary
seal size - Mnemonic			(ambient)	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

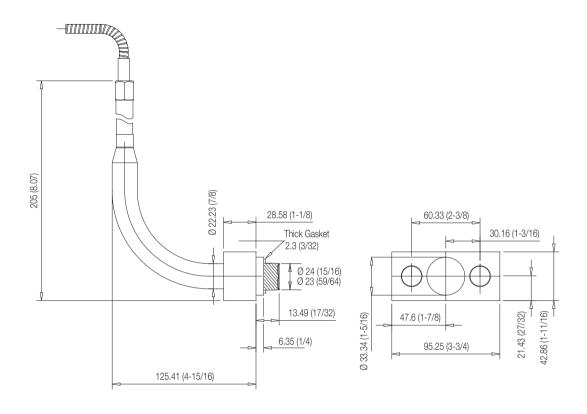




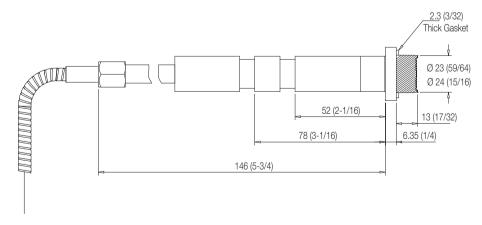
3 1/4 in. flange extended - type 91 modified



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



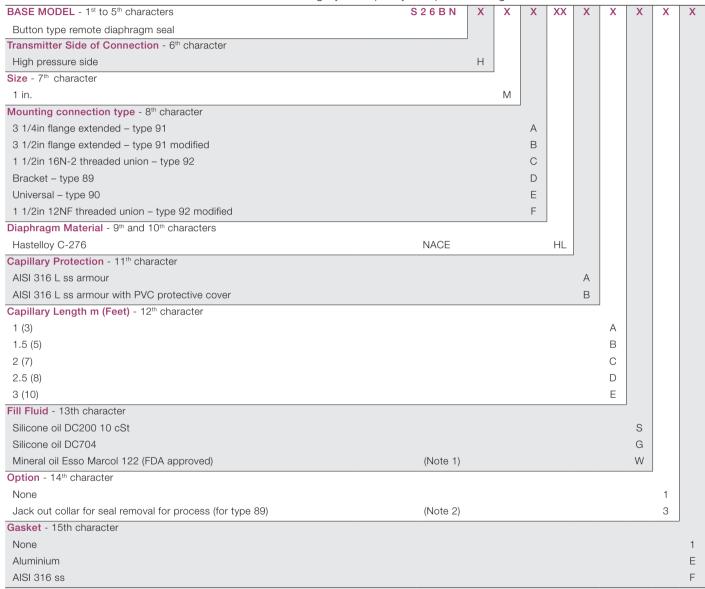
Bracket - type 89



Universal- type 90

#### BASIC ORDERING INFORMATION model S26B Button type remote diaphragm seals

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



Note 1: Suitable for food application

Note 2: Not available with mounting connection types code A, B, C, E, F

#### S26V 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	Temperature range	Pressure limit
S26VN bolting		
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

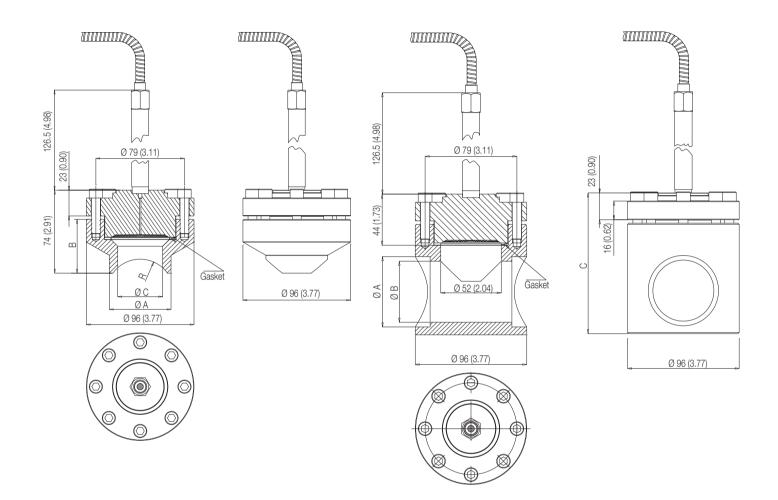
The following table shows temperature effect per 20 K (36 °F) change, detailed separately for

- 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 (DC 200) filling and AISI 316 L ss diaphragm materials.

For filling different from silicone oil (DC200) the errors can be multiplied by ratio between the thermal expansion coefficients of the selected filling divided by the one of DC200, 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

S26V saddle & socket	Sensor URL	Seal error (process)	Direct mount system	Remote mount	1 metre capillary
seal size - Mnemonic			error (ambient)	error (ambient)	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

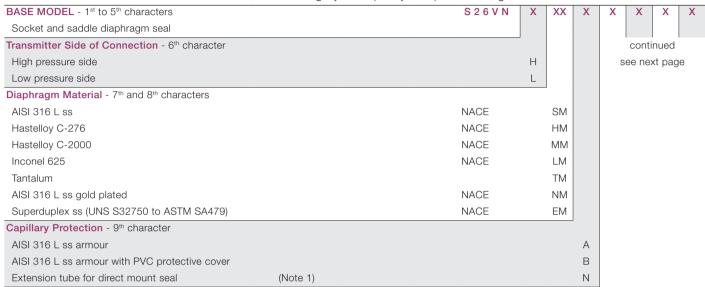


Fitting connection	Dimensions mm (in) for S2VN- saddle type				
Size	A (dia)	В	C (dia)	R	
Saddle 2 in.	55 (2.17)	48 (1.89)	40 (1.57)	30	
Saddle 2 1/2 in.	76 (3.0)	45 (1.77)	52 (2.05)	45	
Saddle 3 in.	76 (3.0)	45 (1.77)	50 (1.97)	45	
Saddle 4 in.	76 (3.0)	41 (1.61)	50 (1.97)	57	
Saddle 5 in.	76 (3.0)	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 S2VN- 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)	

#### 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.



BASIC ORDERING INFORMATION model S26VN		S 2 6 V N X XX X	X	Х	
Capillary Length m (Feet) - 10th character					
Direct-mount construction	(Note 2)	1			
1 (3)	(Note 3)	А			
1.5 (5)	(Note 3)	В			
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)	Н			
5 (17)	(Note 3)	J			
Fill Fluid - 11th character					
Silicone oil DC200 10 cSt			S		
Silicone oil Baysilone PD5 5 cSt			Р		
Inert oil - Galden G5	(Note 4)		Ν		
Inert oil - Halocarbon 4.2	(Note 4)		D		
Silicone oil DC704			G		
Silicone polymer Syltherm XLT			С		
Mineral oil Esso Marcol 122 (FDA approved)	(Note 5)		W		
Vegetable oil Neobee M-20 (FDA approved)	(Note 5)		Α		
Glycerin-water 70% (FDA approved)	(Note 5)		В		
Process Fitting Connections - 12th character				_	
Not required				Ν	
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.				Α	
Socket 3/4 in.				В	
Socket 1 in.				С	
Socket 1 1/2 in.				D	
Socket 2 in.				Е	
Gasket - 13th character					,
PTFE					
Graphite					

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

#### S26U 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 S26U	
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

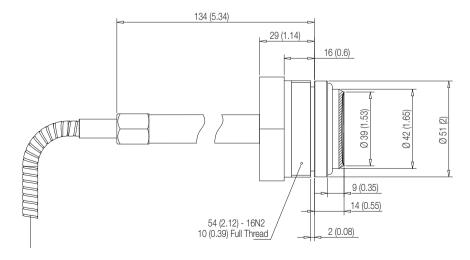
The following table shows temperature effect per 20 K (36 °F) change, detailed separately for

- 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 (DC 200) filling and AISI 316 L ss diaphragm materials.

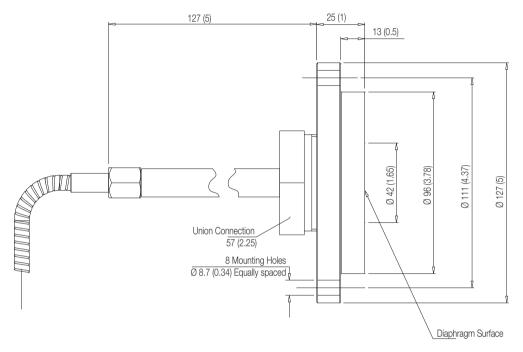
For filling different from silicone oil (DC200) the errors can be multiplied by ratio between the thermal expansion coefficients of the selected filling divided by the one of DC200, listed in the fill fluid characteristics table.

THE ERRORS IN TABLE CAN BE CONSIDERED DIVIDED BY 4 FOR TRANSMITTERS USING SAME REMOTE SEAL ON THE TWO SIDES

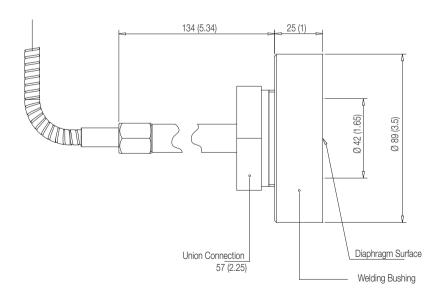
S26U Union connectin	Sensor URL	Seal error (process)	Remote system error	1 metre capillary
seal size - Mnemonic			(ambient)	error (ambient)
1 1/2 in Z1.5	≥ 160 kPa, 642 inH2O	0.29 kPa, 1.16 inH2O	0.62 kPa, 2.48 inH2O	0.31 kPa, 1.24 inH2O



Union connection remote seal - basic version



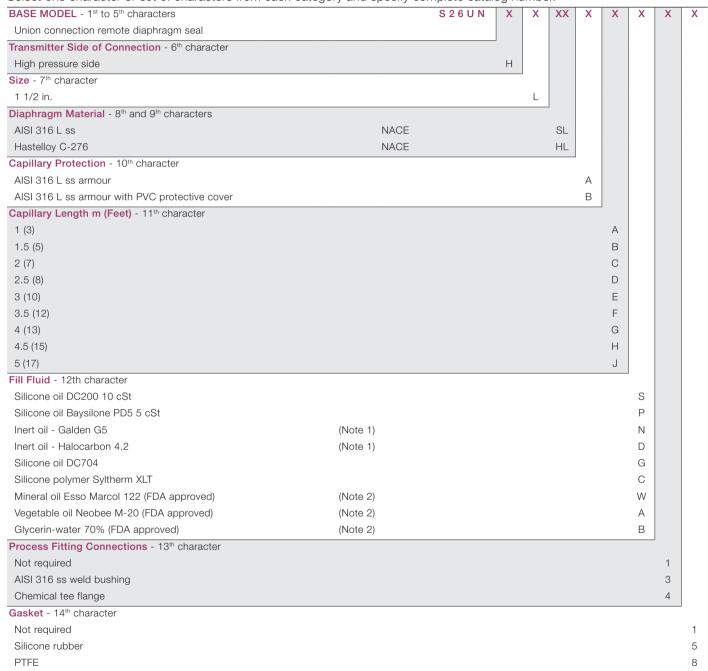
Union connection remote seal with Chemical Tee flange



Union connection remote seal with weld bushing

#### BASIC ORDERING INFORMATION model S26U Union connection remote diaphragm seals

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



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

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