

Models S264 Remote Seals

Measurement made easy

Engineered solutions for all applications



Wide range of remote seal types

- allow optimum design for each application without compromise of performance

Large selection of options, materials and fill fluids

- meet nearly all process requirements

All welded constructions

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

Special designed remote seals for individual process solutions

- add flexibility for most demanding services

Remote Seals Overview

The S264x 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 S264x 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 construction 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 S264x series is available with process connections for ASME or EN 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 Bio Tech 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 S264x 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

Accuracy is only marginally affected when seal diaphragm stiffness is relevant compared with sensor stiffness. This is the only characteristic of the S264x 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 S264x 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 S264x 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 & process temperature limits

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

• Temperature effects

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 absorbed 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.

• Time response

Application of S264x 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 follows :

- 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 S264x 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.

A typical example of the product code stamping is as follows :

Transmitter Product Code 264DRFSSA1AH-V1E1D3

Seal System Product Code S264WHBCDFSBS1NNN

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 "S264x series seal form" to define precisely the measuring problem and application requirements.

The following table shows the types of standard seals considered in this leaflet. The mnemonics will be used as shortest cross references with the transmitter data sheet which should be read in conjunction with this data sheet.

Model	Seal type	Size	Mnemonic
S264W	Wafer Wafer (food)	1 1/2in / DN40 2in / DN50 3in / DN80	P1.5 P2 P3
S264C	Chemical tee flanged	3in	P3
S264A S264E S264G S264R	Flanged flush diaphragm (also Ring Joint and JIS standard)	1-1/2in (ASME RJ only) 2in / DN50 / A50 3-4in / DN80-100 / A80-100	P1.5 P2 P3
	Flanged extended diaphragm	2in / DN50 3in / DN80 4in / DN100	E2 E3 P3
S264U	Union	1 1/2in	Z1.5
S264T	Threaded off-line	2 1/2in	T2.5
S264M	Flanged off-line	2 1/2in	T2.5
S264S	Union nut Triclamp Cherry Burrel Sanitary, Aseptic	2in / F50 3in / F80 4in	S2 S3 S3
S264B	Button	1in	B1
S264P	Urea service flanged	1 1/2in 2 1/2in	U1.5 U2.5

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.

FILL FLUID CHARACTERISTICS (Table A)

FILL FLUIDS (APPLICATION)	OPERATING CONDITIONS				SPECIFICATION AT 25° C (77° F)		
	Tmax @ Pabs>of	Pmin mbar abs (psia)	Tmax @ P min	Tmin	Specific gravity	Kinematic viscosity (cSt)	Thermal expansion (x 10 ⁻³ / ° C)
Silicone oil-DC200™ (General purpose)	200 (390) @ 35mbar	0.7 (0.01)	160 (320)	-40 (-40)	0.934	10	1.08
Silicone oil (High temperature)	375 (707) @ 1bar	0.7 (0.01)	220 (428)	-10 (+14)	1.07	39	0.77
Silicone Polymer-Syltherm XLT™ (Low temperature)	100 (212) @ 110mbar	2 (0.03)	20 (68)	-100 (-148)	0.852	1.4	1
Vegetable oil-Neobee M-20™ (Food-Sanitary) FDA	200 (390) @ 1bar	130 (1.9)	150 (300)	-18 (0)	0.92	9.8	1.2
Glycerin Water (70%) (Food-Sanitary) FDA	93 (200) @ 1bar	1000 (14.5)	93 (200)	-7 (+20)	1.08	2.2	0.36
Mineral oil-MARCOL 82™ (Food-Sanitary) FDA	200 (390) @ 200mbar	33 (0.5)	40 (104)	-40 (-40)	0.84	26	1.04
Inert – Galden™ (Oxygen Service)	160 (320) @ 1bar	2 (0.03)	70 (158)	-20 (-4)	1.82	4.4	1.1
Inert – Halocarbon™ 4.2 (Oxygen Service)	180 (356) @ 400mbar	4 (0.06)	70 (158)	-20 (-4)	1.87	6.3	0.864

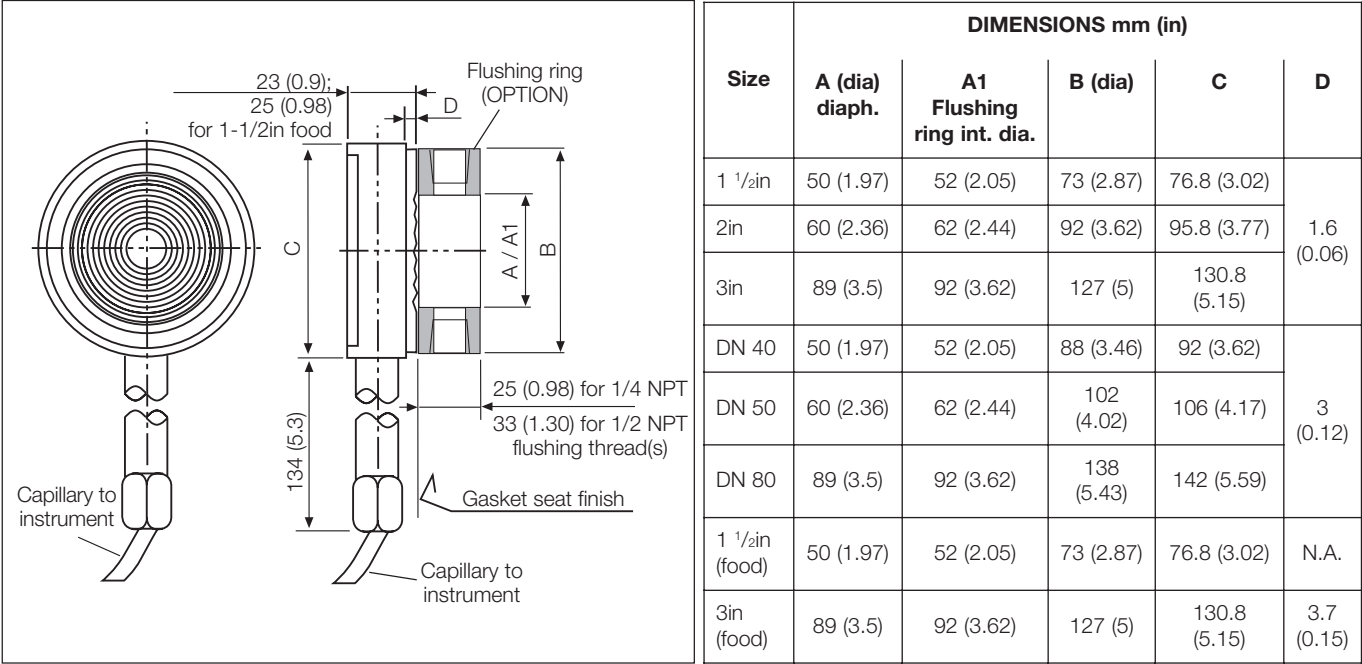
Absolute viscosity (cP) = Kinematic Viscosity (cSt) x Specific gravity at specified temperature.

The absolute viscosity value is used for response time calculation.

SEALS DIMENSIONS ON FOLLOWING PAGES ARE IN mm (in)

S264W Model Wafer Remote 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. The wafer variant is also available as food design for 1½in and 3in sizes.



Maximum Working Pressure

WAFFER SEAL ELEMENT : 16 MPa, 160 bar, 2320 psi but not greater than the backup flange rating (not supplied).

Vacuum Service

Full vacuum subject to fill fluid limits. Refer to table A.

Minimum pressure with tantalum diaphragm is 1kPa abs, 10mbar abs, 0.15psia.

Process Temperature Limits

Same as fill fluid limits. Refer to table A.

260°C (500°F) for Tantalum diaphragm.

204°C (400°F) for use with PFA anti-stick coating.

320°C (608°F) for AISI gold plated diaphragm.

Limits for gaskets of flushing rings

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

Gasket seat finish

Smooth (ASME or EN): 0.8µm (Ra)

Serrated (ASME): 3.2 to 6.3µm (Ra)

Serrated (EN 1092-1 Type B1; up to PN40): 3.2 to 12.5 µm (Ra)

Serrated (EN 1092-1 Type B2; PN63 - 100): 0.8 to 3.2 µm (Ra)

Temperature effect

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

a) the seal (one element)

b) the capillary per meter

c) the system (transmitter sensor when combined with a seal of specific size/type)

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

Wafer Seal Size	Seal error	1m Capillary Error	System (Sensor) Error
1 1/2in / DN 40	0.87kPa, 8.7mbar, 3.5inH ₂ O	0.3kPa, 3mbar, 1.2inH ₂ O	0.9kPa, 9mbar, 3.6inH ₂ O
2in / DN 50	0.29kPa, 2.9mbar, 1.16inH ₂ O	0.07kPa, 0.7mbar, 0.28inH ₂ O	0.2kPa, 2mbar, 0.8inH ₂ O
3in / DN 80	0.09kPa, 0.9mbar, 0.36inH ₂ O	0.03kPa, 0.3mbar, 0.12inH ₂ O	0.03kPa, 0.3mbar, 0.12inH ₂ O

BASIC ORDERING INFORMATION model S264W Wafer Remote Seal

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

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

2600T Pressure Transmitters

Models S264

DS/S264-EN Rev. J

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

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

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

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

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

Note 5: Suitable for oxygen service

Note 6: Suitable for food application

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

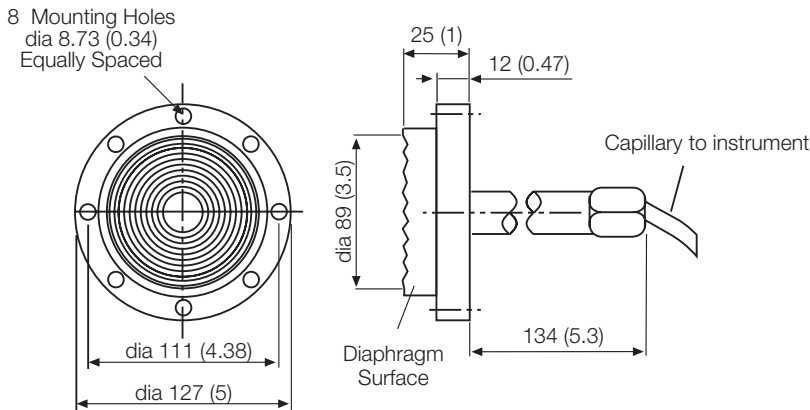
Note 8: Not available with flushing ring - hole and thread code N

Note 9: Not available with flushing ring material code H

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

S264C Model Chemical Tee Remote 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 or DIN pipe flange.



Maximum Working Pressure

2 MPa, 20 bar, 300 psi

Vacuum Service

Full vacuum subject to fill fluid limits.
Refer to table A.

Process Temperature Limits

Same as fill fluid limits. Refer to table A.
204°C (400°F) for use with PFA anti-stick coating.
-100°C (-148°F) to 260°C (500°F) with PTFE gasket
-100°C (-148°F) to 340°C (645°F) with graphite gasket

Temperature effect

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

- a) the seal (one element)
- b) the capillary per meter
- c) the system (transmitter sensor when combined with a seal of specific size/type)

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

Chemical Tee Seal Size	Seal error	1m Capillary Error	System (Sensor) Error
3in	0.09kPa, 0.9mbar, 0.36inH ₂ O	0.03kPa, 0.3mbar, 0.12inH ₂ O	0.03kPa, 0.3mbar, 0.12inH ₂ O

BASIC ORDERING INFORMATION model S264C Chemical Tee Remote Seal

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

BASE MODEL – 1 st to 5 th characters	S	2	6	4	C	X	X	X	P	X	X	X	X	X
Chemical Tee Remote Seal														
Transmitter side of connection – 6 th character														
High side						H								
Low side						L								
Mounting flange – 7 th character														
Integral with seal								P						
Size – 8 th character														
3in (proprietary standard; 20bar rating)									G					
Use code – 9 th character														
Diaphragm material – 10 th character														
AISI 316 L ss							NACE			S				
Hastelloy C276™							NACE			H				
AISI 316 L ss with anti-stick coating							NACE			K				
Hastelloy C276™ with anti-stick coating							NACE			Y				
AISI 316 L ss with anti-corrosion and anti-stick coating							NACE			W				
Capillary protection – 11 th character														
AISI 316 L ss armour												A		
AISI 316 L ss armour with PVC protective cover												B		
Capillary length m (feet) – 12 th character														
1 (3)													A	
1.5 (5)													B	
2 (7)													C	
2.5 (8)													D	
3 (10)													E	
3.5 (12)													F	
4 (13)													G	
4.5 (15)													H	
5 (17)													J	
5.5 (18)													K	
6 (20)													L	
6.5 (22)													M	
7 (23)													N	
7.5 (25)													P	
8 (27)													Q	
9 (30)													R	
10 (33)													S	
Fill fluid – 13 th character														
Silicone oil														S
Inert fluid - Galden														N
Inert fluid - Halocarbon														D
Silicone oil for high temperature														G
Silicone polymer for low temperature														C
Mineral oil (FDA approved)														W
Vegetable oil (FDA approved)														A
Glycerin-water (FDA approved)														B
Gasket – 14 th character														
None														1
PTFE with Silica filler														6
Graphite														7

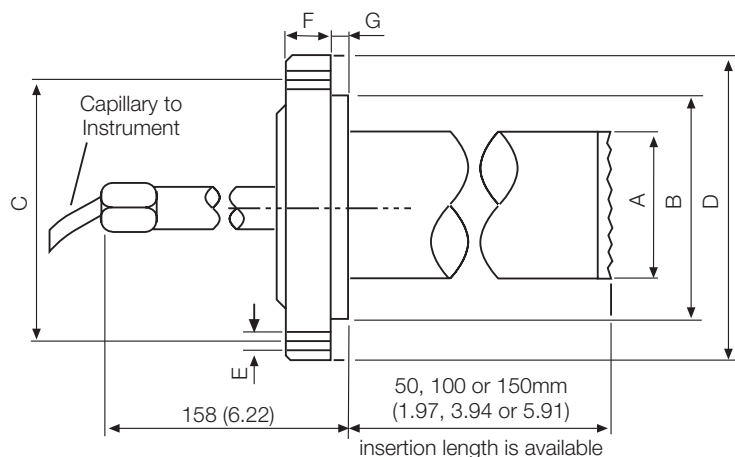
Note 1: Suitable for oxygen service

Note 2: Suitable for food application

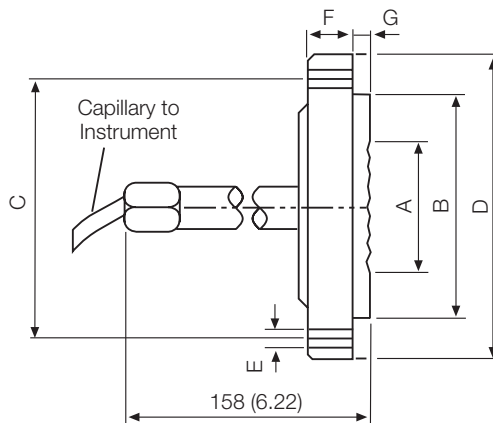
S264F Model Flanged Extended and Flush Diaphragm Remote Seal

The extended and flush diaphragm remote seal is designed to connect to ASME or EN flanged pipe fitting. For liquid level measurement installations the seal connects to an ASME or EN flanged tank nozzle (Schedule 40).

The sealing is provided by a selectable smooth or serrated gasket seat surface finish.



Flanged Extended Diaphragm Seal



Flanged Flush Diaphragm Seal

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

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

Maximum Working Pressure

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

The pressure limit decreases with increasing temperature above 120°C for carbon steel or 20°C for AISI 316 stainless steel, according to DIN 2401 standards.

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

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 table A.

Minimum pressure with tantalum diaphragm is 1kPa abs, 10mbar abs, 0.15psia.

Process Temperature Limits

Same as fill fluid limits. Refer to table A.

260°C (500°F) for Tantalum diaphragm.

204°C (400°F) for use with PFA anti-stick coating.

Gasket seat finish

Smooth (ASME or EN): 0.8µm (Ra)

Serrated (ASME): 3.2 to 6.3µm (Ra)

Serrated (EN 1092-1 Type B1; up to PN40): 3.2 to 12.5 µm (Ra)

Serrated (EN 1092-1 Type B2; PN63 - 100): 0.8 to 3.2 µm (Ra)

Temperature effect

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

- the seal (one element)
- the capillary per meter
- the system (transmitter sensor when combined with a seal of specific size/type)

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

Flanged Extended Diaphragm Remote Seal

Flanged Extended Diaphragm Seal Size	Seal error	1m Capillary Error	System (Sensor) Error
2in / DN 50	0.3kPa, 3mbar, 1.2inH ₂ O	0.1kPa, 1mbar, 0.4inH ₂ O	0.3kPa, 3mbar, 1.2inH ₂ O
3in / DN 80	0.15kPa, 1.5mbar, 0.6inH ₂ O	0.08kPa, 0.8mbar, 0.32inH ₂ O	0.07kPa, 0.7mbar, 0.28inH ₂ O
4in / DN 100	0.09kPa, 0.9mbar, 0.36inH ₂ O	0.03kPa, 0.3mbar, 0.12inH ₂ O	0.03kPa, 0.3mbar, 0.12inH ₂ O

Flanged Flush Diaphragm Remote Seal

Flanged Flush Diaphragm Seal Size	Seal error	1m Capillary Error	System (Sensor) Error
2in / DN 50	0.29kPa, 2.9mbar, 1.16inH ₂ O	0.07kPa, 0.7mbar, 0.28inH ₂ O	0.2kPa, 2mbar, 0.8inH ₂ O
3in / DN 80	0.09kPa, 0.9mbar, 0.36inH ₂ O	0.03kPa, 0.3mbar, 0.12inH ₂ O	0.03kPa, 0.3mbar, 0.12inH ₂ O
4in / DN 100	0.09kPa, 0.9mbar, 0.36inH ₂ O	0.03kPa, 0.3mbar, 0.12inH ₂ O	0.03kPa, 0.3mbar, 0.12inH ₂ O

BASIC ORDERING INFORMATION model S264F Flanged Remote Seal (flush and extended)

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

BASE MODEL – 1 st to 5 th characters					S	2	6	4	F	X	X	X	X	X	X	X	Cont'd
Flanged Remote seal (flush and extended)																	
Transmitter side of connection – 6 th character																	
High side										H							
Low side										L							
Mounting flange – 7 th character																	
Rotating											R						
Size – 8 th character																	
2in	ASME CL 150											A					
2in	ASME CL 300											D					
2in	ASME CL 600											G					
2in	ASME CL 900											J					
3in	ASME CL 150											B					
3in food design	ASME CL 150											1					
3in	ASME CL 300											E					
3in	ASME CL 600											H					
3in	ASME CL 900											K					
4in	ASME CL 150											C					
4in	ASME CL 300											F					
DN50	EN PN 16/40											M					
DN50	EN PN 63											P					
DN50	EN PN 100											R					
DN80	EN PN 16											N					
DN80	EN PN 40											L					
DN80	EN PN 63											Q					
DN80	EN PN 100											S					
DN100	EN PN 16											T					
DN100	EN PN 40											U					
Mounting flange/Seat form (seal) – 9 th character																	
Carbon steel	Form RF (raised face) – serrated finish	(Notes 1, 3)										A					
Carbon steel	Form RF (raised face) – smooth finish	(Notes 1, 3)										B					
Carbon steel	EN 1092-1 Type B1/B2 – serrated finish	(Notes 2, 3)										G					
Carbon steel	EN 1092-1 Type B1/B2 – smooth finish	(Notes 2, 3)										P					
AISI 316 ss	Form RF (raised face) – serrated finish	(Notes 1, 3)										D					
AISI 316 ss	Form RF (raised face) – smooth finish	(Note 1)										E					
AISI 316 ss	EN 1092-1 Type B1/B2 – serrated finish	(Notes 2, 3)										L					
AISI 316 ss	EN 1092-1 Type B1/B2 – smooth finish	(Notes 2, 3)										Q					
Extensions length and material – 10 th character																	
Flush (see next for diaphragm material)													F				
50mm (2in)	AISI 316 L ss	(Notes 3, 4)											1				
50mm (2in)	Hastelloy 276™	(Notes 3, 4, 6)											2				
100mm (4in)	AISI 316 L ss	(Notes 3, 4)											3				
100mm (4in)	Hastelloy 276™	(Notes 3, 4, 6)											4				
150mm (6in)	AISI 316 L ss	(Notes 3, 4)											5				
150mm (6in)	Hastelloy 276™	(Notes 3, 4, 6)											6				
Diaphragm material (seal) – 11 th character																	
AISI 316 L ss	(Note 5)										NACE		S				
Hastelloy C276™	(Note 6)										NACE		H				
Tantalum	(Notes 6, 7)												T				
AISI 316 L ss with anti-stick coating	(Notes 5, 6, 8)										NACE		K				
Hastelloy C276™ with anti-stick coating	(Notes 6, 8)										NACE		Y				
AISI 316 L ss with anti-corrosion and anti-stick coating	(Notes 5, 6)										NACE		W				
Capillary protection – 12 th character																	
AISI 316 L ss armour	(RECOMMENDED FOR HIGH TEMPERATURE)															A	
AISI 316 L ss armour with PVC protective cover																B	

BASIC ORDERING INFORMATION S264F													X	X	X
Capillary length m (feet) – 13 th character															
1 (3)													A		
1.5 (5)													B		
2 (7)													C		
2.5 (8)													D		
3 (10)													E		
3.5 (12)													F		
4 (13)													G		
4.5 (15)													H		
5 (17)													J		
5.5 (18)													K		
6 (20)													L		
6.5 (22)													M		
7 (23)													N		
7.5 (25)													P		
8 (27)													Q		
9 (30)													R		
10 (33)													S		
12 (40)													T		
14 (47)													U		
16 (53)													V		
Fill fluid – 14 th character															
Silicone oil													S		
Inert fluid - Galden								(Notes 3, 9)					N		
Inert fluid - Halocarbon								(Notes 3, 9)					D		
Silicone oil for high temperature								(Note 3)					G		
Silicone polymer for low temperature								(Note 3)					C		
Mineral oil (FDA approved)								(Note 10)					W		
Vegetable oil (FDA approved)								(Note 10)					A		
Glycerin-water (FDA approved)								(Note 10)					B		
Certification – 15 th character															
None															1

Note 1: Not available with EN mounting flange code M, P, R, N, L, Q, S, T, U

Note 2: Not available with ASME mounting flange code A, D, G, J, B, E, H, K, C, F

Note 3: Not available with 3in ASME CL150 food design size code 1

Note 4: Not available with ASME CL 600 and CL 900 mounting flange rating code G, J, H, K and with EN PN63, PN100 mounting flange code P, R, Q, S

Note 5: Not available with Hastelloy C276 extension code 2, 4, 6

Note 6: Not available with serrated seat finish code A, G, D, L

Note 7: Not available with extension code 1, 2, 3, 4, 5, 6

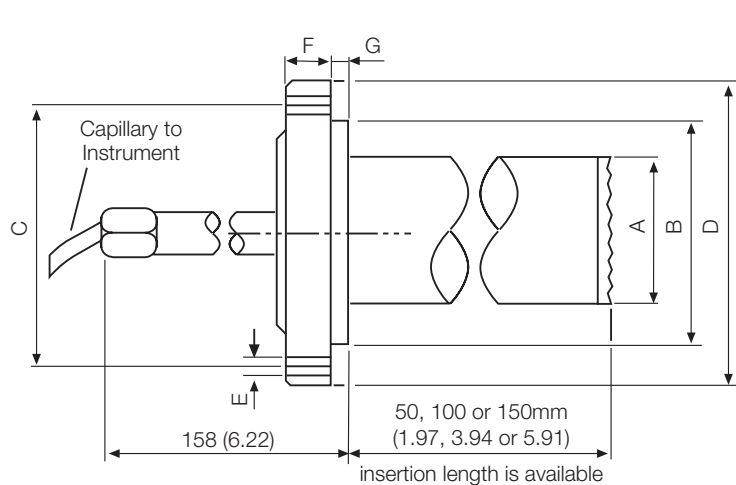
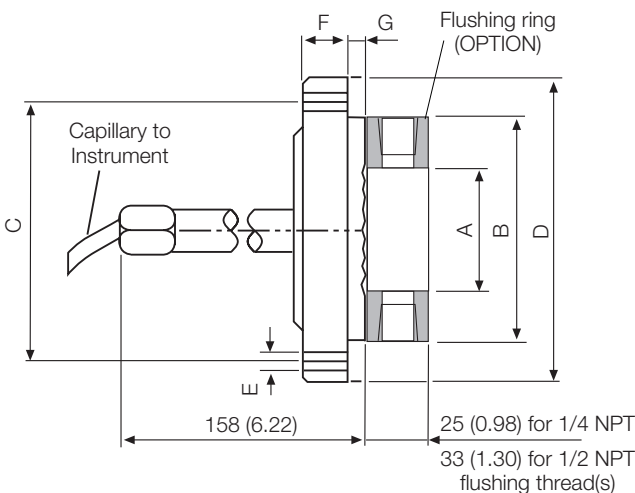
Note 8: Not available with 2in, DN50, DN80, DN100 mounting flange code A, D, G, J, M, P, R, N, L, Q, S, T, U

Note 9: Suitable for oxygen service

Note 10: Suitable for food application

S264A - S264E Models Flanged Extended and Flush Diaphragm Remote Seal

The extended and flush diaphragm remote seal is designed to connect to flanged pipe fitting, according to ASME (mod. S264A) or EN (mod. S264E) standards. For liquid level measurement installations the seal connects to an ASME or EN flanged tank nozzle (Schedule 40). The sealing is provided by a selectable smooth or serrated gasket seat surface finish.

*Flanged Extended Diaphragm Seal**Flanged Flush Diaphragm Seal*

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

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

Maximum Working Pressure

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

The pressure limit decreases with increasing temperature above 120°C for carbon steel or 20°C for AISI 316 stainless steel, according to DIN 2401 standards.

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

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 table A.

Minimum pressure with tantalum diaphragm is 1kPa abs, 10mbar abs, 0.15psia.

Process Temperature Limits

Same as fill fluid limits. Refer to table A.

260°C (500°F) for Tantalum diaphragm.

204°C (400°F) for use with PFA anti-stick coating.

320°C (608°F) for AISI gold plated diaphragm.

Limits for gaskets of flushing rings

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

Gasket seat finish

Smooth (ASME or EN): 0.8µm (Ra)

Serrated (ASME): 3.2 to 6.3µm (Ra)

Serrated (EN 1092-1 Type B1; up to PN40): 3.2 to 12.5 µm (Ra)

Serrated (EN 1092-1 Type B2; PN63 - 100): 0.8 to 3.2 µm (Ra)

Temperature effect

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

- the seal (one element)
- the capillary per meter
- the system (transmitter sensor when combined with a seal of specific size/type)

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

Flanged Extended Diaphragm Remote Seal

Flanged Extended Diaphragm Seal Size	Seal error	1m Capillary Error	System (Sensor) Error
2in / DN 50	0.3kPa, 3mbar, 1.2inH ₂ O	0.1kPa, 1mbar, 0.4inH ₂ O	0.3kPa, 3mbar, 1.2inH ₂ O
3in / DN 80	0.15kPa, 1.5mbar, 0.6inH ₂ O	0.08kPa, 0.8mbar, 0.32inH ₂ O	0.07kPa, 0.7mbar, 0.28inH ₂ O
4in / DN 100	0.09kPa, 0.9mbar, 0.36inH ₂ O	0.03kPa, 0.3mbar, 0.12inH ₂ O	0.03kPa, 0.3mbar, 0.12inH ₂ O

Flanged Flush Diaphragm Remote Seal

Flanged Flush Diaphragm Seal Size	Seal error	1m Capillary Error	System (Sensor) Error
2in / DN 50	0.29kPa, 2.9mbar, 1.16inH ₂ O	0.07kPa, 0.7mbar, 0.28inH ₂ O	0.2kPa, 2mbar, 0.8inH ₂ O
3in / DN 80	0.09kPa, 0.9mbar, 0.36inH ₂ O	0.03kPa, 0.3mbar, 0.12inH ₂ O	0.03kPa, 0.3mbar, 0.12inH ₂ O
4in / DN 100	0.09kPa, 0.9mbar, 0.36inH ₂ O	0.03kPa, 0.3mbar, 0.12inH ₂ O	0.03kPa, 0.3mbar, 0.12inH ₂ O

BASIC ORDERING INFORMATION model S264A Flanged Remote Seal (flush and extended)

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

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

2600T Pressure Transmitters

Models S264

DS/S264-EN Rev. J

BASIC ORDERING INFORMATION S264A				X	X	X	X	X
Fill fluid – 16 th character								
Silicone oil				S				
Inert fluid - Galden	(Note 6)			N				
Inert fluid - Halocarbon	(Note 6)			D				
Silicone oil for high temperature				G				
Silicone polymer for low temperature				C				
Mineral oil (FDA approved)	(Note 7)			W				
Vegetable oil (FDA approved)	(Note 7)			A				
Glycerin-water (FDA approved)	(Note 7)			B				
Certification – 17 th character								
None					1			
Flushing ring: hole and thread – 18 th character								
None (TO BE SELECTED FOR EXTENDED VERSIONS)						N		
1 hole - 1/2in NPT	(Note 4)					2		
2 holes - 1/2in NPT	(Note 4)					3		
1 hole - 1/4in NPT	(Note 4)					4		
2 holes - 1/4in NPT	(Note 4)					5		
Flushing ring material – 19 th character								
None	(Note 8)						N	
AISI 316 L ss	(Note 9)		NACE				A	
Hastelloy C276	(Notes 9, 10)		NACE				H	
Flushing ring: plug and gasket – 20 th character								
No plug - no gasket								N
No plug - garlock	(Note 9)							A
No plug - PTFE	(Note 9)							B
No plug - graphite	(Note 9)							C
AISI 316 L ss - no gasket	(Notes 9, 11)							D
AISI 316 L ss - garlock	(Notes 9, 11)							E
AISI 316 L ss - PTFE	(Notes 9, 11)							F
AISI 316 L ss - graphite	(Notes 9, 11)							G
Hastelloy C276 - no gasket	(Notes 9, 12)							H
Hastelloy C276 - garlock	(Notes 9, 12)							L
Hastelloy C276 - PTFE	(Notes 9, 12)							M
Hastelloy C276 - graphite	(Notes 9, 12)							P

Note 1: Not available with size code E

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

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

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

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

Note 6: Suitable for oxygen service

Note 7: Suitable for food application

Note 8: Not available with Flushing ring: hole and thread code 2, 3, 4, 5

Note 9: Not available with Flushing ring: hole and thread code N

Note 10: Not available with seal surface finish code 1 (serrated)

Note 11: Not available with flushing ring material code H

Note 12: Not available with AISI 316L flushing ring material code A

BASIC ORDERING INFORMATION model S264E Flanged Remote Seal (flush and extended)

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

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

BASIC ORDERING INFORMATION S264E				X	X	X	X	X
Fill fluid – 16 th character				S N D G C W A B				
Silicone oil								
Inert fluid - Galden	(Note 6)							
Inert fluid - Halocarbon	(Note 6)							
Silicone oil for high temperature								
Silicone polymer for low temperature								
Mineral oil (FDA approved)	(Note 7)							
Vegetable oil (FDA approved)	(Note 7)							
Glycerin-water (FDA approved)	(Note 7)							
Certification – 17 th character								
None								
Flushing ring: hole and thread – 18 th character								
None (TO BE SELECTED FOR EXTENDED VERSIONS)								
1 hole - 1/2in NPT	(Note 4)							
2 holes - 1/2in NPT	(Note 4)							
1 hole - 1/4in NPT	(Note 4)							
2 holes - 1/4in NPT	(Note 4)							
Flushing ring material – 19 th character								
None	(Note 8)							
AISI 316 L ss	(Note 9)	NACE						
Hastelloy C276	(Notes 9, 10)	NACE						
Flushing ring: plug and gasket – 20 th character								
No plug - no gasket								
No plug - garlock	(Note 9)							
No plug - PTFE	(Note 9)							
No plug - graphite	(Note 9)							
AISI 316 L ss - no gasket	(Notes 9, 11)							
AISI 316 L ss - garlock	(Notes 9, 11)							
AISI 316 L ss - PTFE	(Notes 9, 11)							
AISI 316 L ss - graphite	(Notes 9, 11)							
Hastelloy C276 - no gasket	(Notes 9, 12)							
Hastelloy C276 - garlock	(Notes 9, 12)							
Hastelloy C276 - PTFE	(Notes 9, 12)							
Hastelloy C276 - graphite	(Notes 9, 12)							

Note 1: Not available with size code E

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

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

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

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

Note 6: Suitable for oxygen service

Note 7: Suitable for food application

Note 8: Not available with Flushing ring: hole and thread code 2, 3, 4, 5

Note 9: Not available with Flushing ring: hole and thread code N

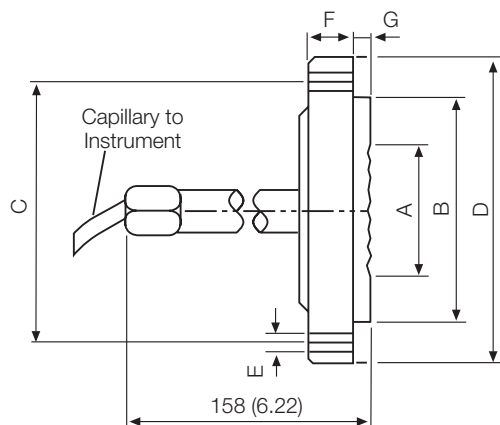
Note 10: Not available with seat surface finish code 1 (serrated)

Note 11: Not available with flushing ring material code H

Note 12: Not available with AISI 316L flushing ring material code A

S264G Model Flanged Flush Diaphragm Remote Seal to JIS

This model identifies a diaphragm remote seal designed to connect to flanged pipe fitting, according to JIS standards. For liquid level measurement installations, the seal connects to an JIS flanged tank nozzle. The sealing is provided by a selectable smooth or serrated gasket seat surface finish.



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

Maximum Working Pressure

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

The pressure limit decreases with increasing temperature above 120°C according to JIS B 2220 standards.

Vacuum Service

Full vacuum subject to fill fluid limits. Refer to table A.

Minimum pressure with tantalum diaphragm is 1kPa abs, 10mbar abs, 0.15psia.

Process Temperature Limits

Same as fill fluid limits. Refer to table A.

260°C (500°F) for Tantalum diaphragm.

204°C (400°F) for use with PFA anti-stick coating.

320°C (608°F) for AISI gold plated diaphragm.

Gasket seat finish

Smooth : 0.8µm (Ra)

Serrated : 3.2 to 6.3µm (Ra)

Temperature effect

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

- the seal (one element)
- the capillary per meter
- the system (transmitter sensor when combined with a seal of specific size/type)

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

Flanged Flush Diaphragm Remote Seal

Flanged Flush Diaphragm Seal Size	Seal error	1m Capillary Error	System (Sensor) Error
A50	0.29kPa, 2.9mbar, 1.16inH ₂ O	0.07kPa, 0.7mbar, 0.28inH ₂ O	0.2kPa, 2mbar, 0.8inH ₂ O
A80	0.09kPa, 0.9mbar, 0.36inH ₂ O	0.03kPa, 0.3mbar, 0.12inH ₂ O	0.03kPa, 0.3mbar, 0.12inH ₂ O
A100	0.09kPa, 0.9mbar, 0.36inH ₂ O	0.03kPa, 0.3mbar, 0.12inH ₂ O	0.03kPa, 0.3mbar, 0.12inH ₂ O

BASIC ORDERING INFORMATION model S264G Flanged Flush Remote Seal to JIS

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

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

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

Note 1: Not available with A100 size code D

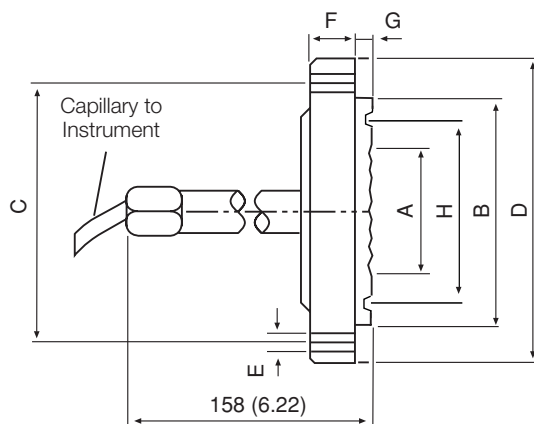
Note 2: Not available with diaphragm material code H, M, L, T, N, K, Y, W

Note 3: Suitable for oxygen service

Note 4: Suitable for food application

S264R Model Flanged Flush Diaphragm Remote Seal - Ring Joint

This flush diaphragm remote 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 (Schedule 40).



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

Maximum Working Pressure

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

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 table A.

Process Temperature Limits

Same as fill fluid limits. Refer to table A.

Temperature effect

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

- the seal (one element)
- the capillary per meter
- the system (transmitter sensor when combined with a seal of specific size/type)

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

Flanged Flush Diaphragm Remote Seal - Ring Joint

Flanged Flush Diaphragm Ring Joint Seal Size	Seal error	1m Capillary Error	System (Sensor) Error
1 1/2in	0.87kPa, 8.7mbar, 3.5inH ₂ O	0.3kPa, 3mbar, 1.2inH ₂ O	0.9kPa, 9mbar, 3.6inH ₂ O
2in	0.29kPa, 2.9mbar, 1.16inH ₂ O	0.07kPa, 0.7mbar, 0.28inH ₂ O	0.2kPa, 2mbar, 0.8inH ₂ O
3in	0.09kPa, 0.9mbar, 0.36inH ₂ O	0.03kPa, 0.3mbar, 0.12inH ₂ O	0.03kPa, 0.3mbar, 0.12inH ₂ O

BASIC ORDERING INFORMATION model S264R Flanged Remote Seal - Ring Joint

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

BASE MODEL – 1 st to 5 th characters					S	2	6	4	R	X	X	X	X	X	X	X	X	X	Cont'd
Flanged Remote seal Ring joint to ASME B16.5																			
Transmitter side of connection – 6 th character																			
High side										H									
Low side										L									
Mounting flange – 7 th character																			
Rotating											R								
Size – 8 th character																			
1-1/2in												B							
2in												C							
3in												D							
Rating – 9 th character																			
ASME CL 150													1						
ASME CL 300													2						
ASME CL 600													3						
ASME CL 900													4						
ASME CL 1500													5						
ASME CL 2500													6						
Mounting flange material – 10 th character																			
Carbon steel														A					
AISI 316 ss														B					
Extensions length and material – 11 th character																			
Flush (see next for diaphragm material)														F					
Diaphragm material – 12 th character																			
AISI 316 L ss												NACE			S				
Hastelloy C276™												NACE			H				
Inconel 625												NACE			L				
Seal surface finish – 13 th character																			
Ring joint																3			
Capillary protection – 14 th character																			
AISI 316 L ss armour																		A	
AISI 316 L ss armour with PVC protective cover																		B	
Capillary length m (feet) – 15 th character																			
1 (3)																		A	
1.5 (5)																		B	
2 (7)																		C	
2.5 (8)																		D	
3 (10)																		E	
3.5 (12)																		F	
4 (13)																		G	
4.5 (15)																		H	
5 (17)																		J	
5.5 (18)																		K	
6 (20)																		L	
6.5 (22)																		M	
7 (23)																		N	
7.5 (25)																		P	
8 (27)																		Q	
9 (30)																		R	
10 (33)																		S	
12 (40)																		T	
14 (47)																		U	
16 (53)																		V	

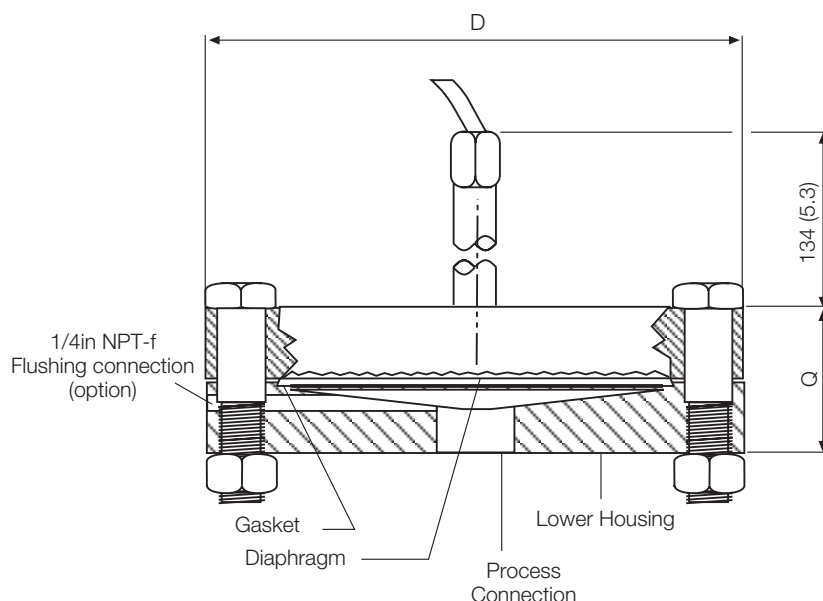
BASIC ORDERING INFORMATION S264R				X	X	X	X	X																
Fill fluid – 16 th character				S N D G C W A B																				
Silicone oil																								
Inert fluid - Galden (Note 1)																								
Inert fluid - Halocarbon (Note 1)																								
Silicone oil for high temperature																								
Silicone polymer for low temperature																								
Mineral oil (FDA approved) (Note 2)																								
Vegetable oil (FDA approved) (Note 2)																								
Glycerin-water (FDA approved) (Note 2)																								
Certification – 17 th character				1																				
None																								
Flushing ring: hole and thread – 18 th character				N																				
Not fitted																								
Flushing ring material – 19 th character				N																				
None																								
Flushing ring: plug and gasket – 20 th character																								
None																								

Note 1: Suitable for oxygen service

Note 2: Suitable for food application

S264T Model Off-line Threaded Connection Remote Seal

The off-line threaded connection remote 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.



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

Maximum Working Pressure

16 MPa, 160 bar, 2320 psi @ 20°C (68°F)

The pressure limit decreases with increasing temperature above 20°C (68°F)

Vacuum Service

Full vacuum subject to fill fluid limits. Refer to table A.

Minimum pressure with tantalum diaphragm is 1kPa abs, 10mbar abs, 0.15psia.

Process Temperature Limits

Same as fill fluid limits. Refer to table A.

260°C (500°F) for Tantalum diaphragm

320°C (608°F) for AISI gold plated diaphragm

–100°C (–148°F) to 260°C (500°F) with PTFE gasket

–20°C (–4°F) to 200°C (392°F) with Viton gasket

360°C (680°F) with Graphite gasket

Mounting flange

AISI 316 L ss, Hastelloy C

Gasket (flange to seal)

Viton, PTFE, Graphite

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 NACE MR0175 Class II.

Temperature effect

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

- the seal (one element)
- the capillary per meter
- the system (transmitter sensor when combined with a seal of specific size/type)

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

Off-Line Threaded Seal Size	Seal error	1m Capillary Error	System (Sensor) Error
2 1/2in	0.32kPa, 3.2mbar, 1.28inH ₂ O	0.18kPa, 1.8mbar, 0.72inH ₂ O	0.15kPa, 1.5mbar, 0.6inH ₂ O

BASIC ORDERING INFORMATION model S264T Off-Line Threaded Connection Remote Seal

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

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

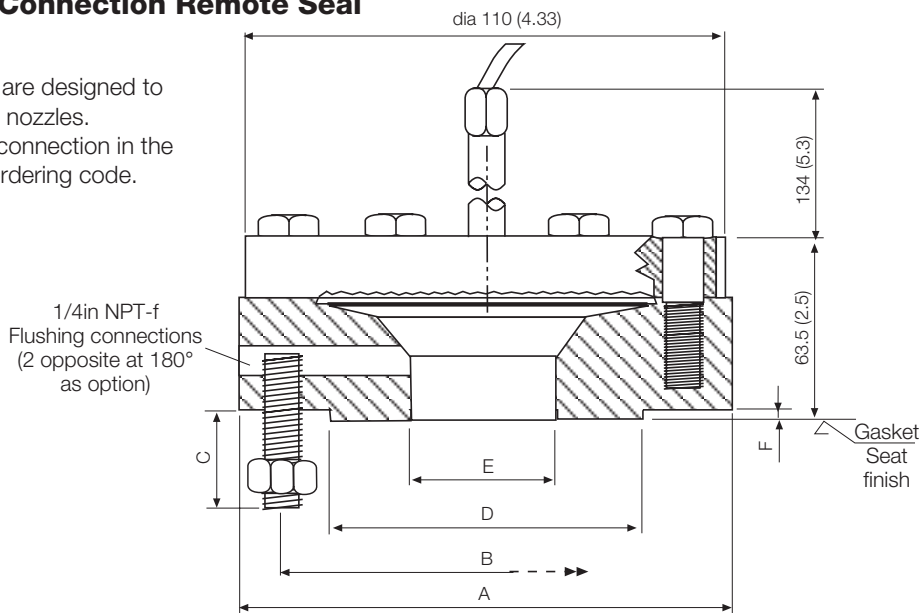
Note 1: Suitable for oxygen service

Note 2: Suitable for food application

Note 3: Not available with Size code 4

S264M Model Off-line Flanged Connection Remote 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.



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

Maximum Working Pressure

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

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

PN16-40 to EN 1092-1: 34bar @ 20°C

The pressure limit decreases with increasing temperature above to the specified values respectively for ASME B16.5 or EN 1092-1 std.

Vacuum Service

Full vacuum subject to fill fluid limits. Refer to table A.

Minimum pressure with tantalum diaphragm is 1kPa abs, 10mbar abs, 0.15psia.

Process Temperature Limits

Same as fill fluid limits. Refer to table A.

260°C (500°F) for Tantalum diaphragm

320°C (608°F) for AISI gold plated diaphragm

–100°C (–148°F) to 260°C (500°F) with PTFE gasket

–20°C (–4°F) to 200°C (392°F) with Viton gasket

360°C (680°F) with Graphite gasket

Gasket seat finish (flange to process)

serrated (ASME): 3.2 to 6.3µm (Ra)

serrated (EN 1092-1 Type B1): 3.2 to 12.5µm (Ra)

Mounting flange

AISI 316 L ss, Hastelloy C

Gasket (flange to seal)

Viton, PTFE, Graphite

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

Temperature effect

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

- the seal (one element)
- the capillary per meter
- the system (transmitter sensor when combined with a seal of specific size/type)

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 fluid characteristics table.

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

Off-Line Flanged Seal Size	Seal error	1m Capillary Error	System (Sensor) Error
2 1/2in	0.32kPa, 3.2mbar, 1.28inH ₂ O	0.18kPa, 1.8mbar, 0.72inH ₂ O	0.15kPa, 1.5mbar, 0.6inH ₂ O

BASIC ORDERING INFORMATION model S264M Off-line Flanged Connection Remote Seal

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

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

Note 1: Not available with EN mounting flange code M, N

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

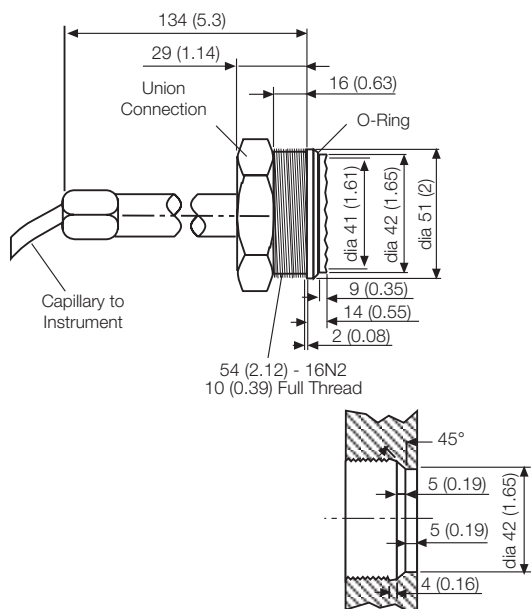
Note 3: Suitable for oxygen service

Note 4: Suitable for food application

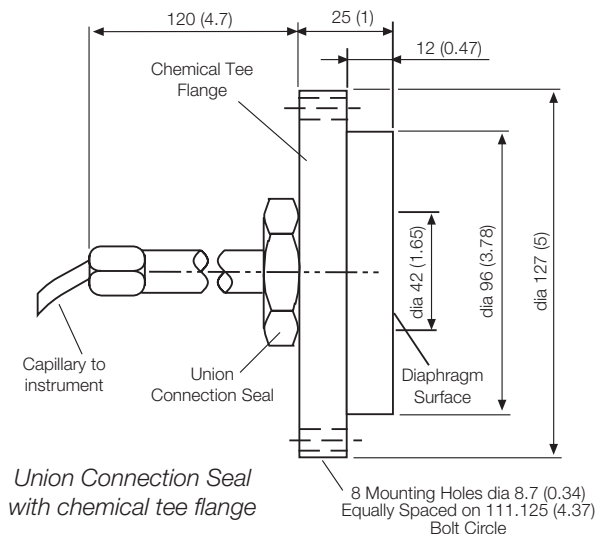
S264U Model Union Connection Remote Seal (To be used only for gauge pressure)

The union connection remote seal are used exclusively for pressure measurement with gauge pressure transmitter.

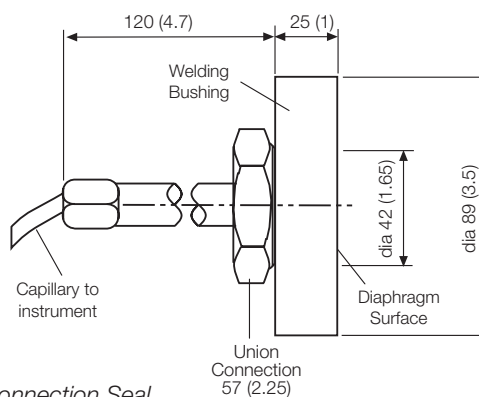
The seal is available with an optional weld bushing, or with an optional chemical tee flange. The remote seal with a weld bushing, includes a bushing which provides the mating surface for the seal element. The union connection seal with a chemical tee flange, is designed to connect to any process fitting 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.



Union Connection Seal without weld bushing



Union Connection Seal with chemical tee flange



Union Connection Seal with weld bushing

Maximum Working Pressure

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 table A.

Process Temperature Limits

Same as fill fluid limits.

Refer to table A.

–50°C (–58°F) to 204°C (400°F) with silicone rubber gasket

–100°C (–148°F) to 260°C (500°F) with PTFE gasket

Temperature effect

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

- the seal (one element)
- the capillary per meter
- the system (transmitter sensor when combined with a seal of specific size/type)

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.

Union Connection Seal Size	Seal error	1m Capillary Error	System (Sensor) Error
1 1/2in	0.87kPa, 8.7mbar, 3.5inH ₂ O	0.3kPa, 3mbar, 1.2inH ₂ O	0.9kPa, 9mbar, 3.6inH ₂ O

BASIC ORDERING INFORMATION model S264U Union Connection Remote Seal

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

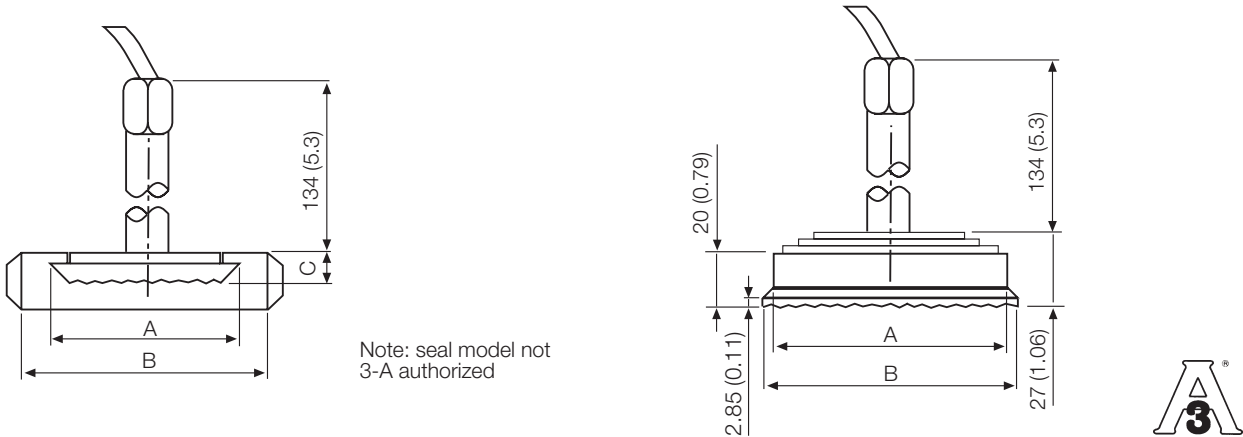
BASE MODEL – 1 st to 5 th characters					S	2	6	4	U	X	X	X	X	X	X	X	X
Union connection remote seal (MUST BE ONE ONLY FOR EACH TRANSMITTER)																	
Transmitter side of connection – 6 th character																	
High side											H						
Low side											L						
Size – 7 th character																	
1 1/2in												L					
Diaphragm material (seal) – 8 th character																	
AISI 316 L ss																S	
Hastelloy C 276™																H	
Capillary protection – 9 th character																	
AISI 316 L ss armour																	A
AISI 316 L ss armour with PVC protective cover																	B
Capillary length m (feet) – 10 th character																	
1 (3)																	A
1.5 (5)																	B
2 (7)																	C
2.5 (8)																	D
3 (10)																	E
Fill fluid – 11 th character																	
Silicone oil																	S
Inert fluid - Galden																	N
Inert fluid - Halocarbon																	D
Silicone oil for high temperature																	G
Silicone polymer for low temperature																	C
Mineral oil (FDA approved)																	W
Vegetable oil (FDA approved)																	A
Glycerin-water (FDA approved)																	B
Options – 12 th character																	
None																	1
AISI 316 ss weld bushing																	3
Chemical tee flange																	4
Gasket – 13 th character																	
Silicone rubber																	5
PTFE																	8

Note 1: Suitable for oxygen service

Note 2: Suitable for food application

S264S Food and Sanitary Remote Seals

The Union Nut and Triclamp remote 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.



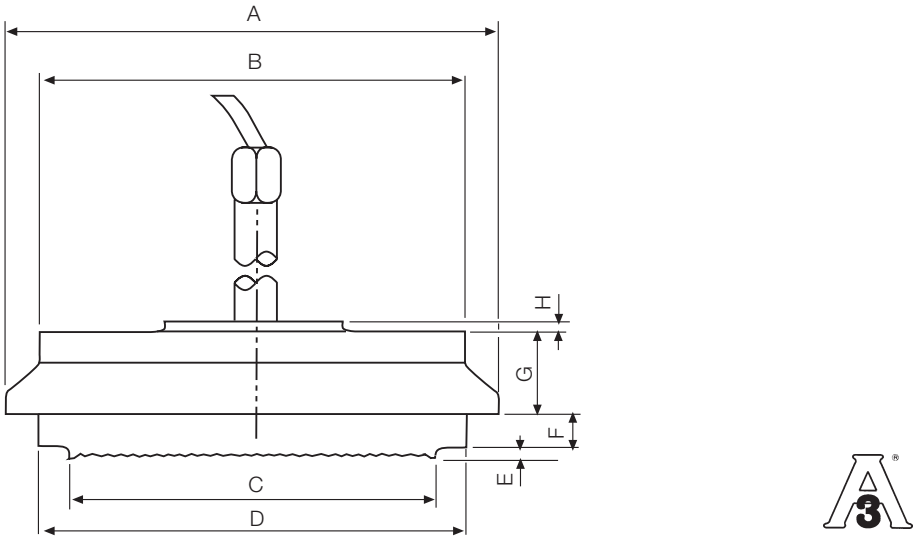
Union Nut Seal (to DIN 11851)

	Union Nut	
	F50	F80
A (dia)	68 (2.68)	100 (3.93)
B (RD)	78 (3.07)	110 (4.33)
C	16 (0.63)	19 (0.74)

Triclamp Seal

	Triclamp		
	2in	3in	4in
A (dia)	56.3 (2.2)	83 (3.26)	110.3 (4.34)
B (dia)	64 (2.5)	91 (3.58)	119 (4.68)

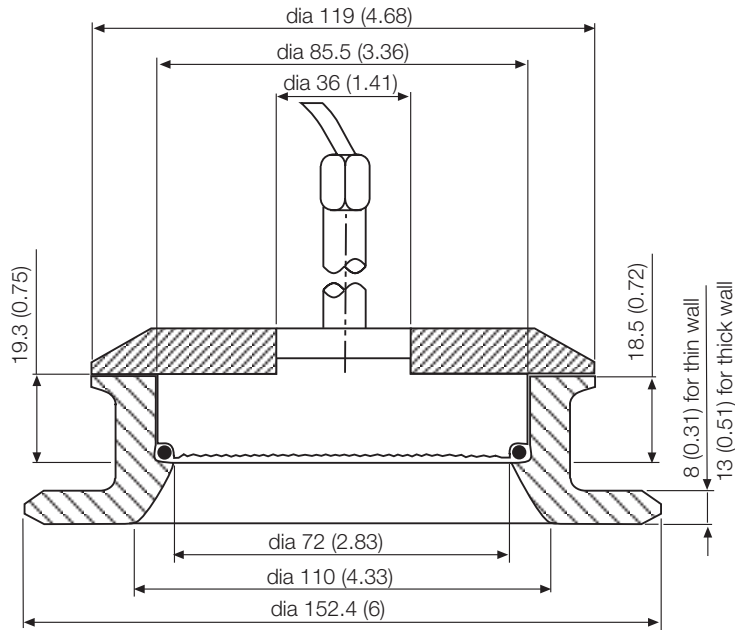
The Cherry Burrell remote seals are designed for connection to 2in, 3in or 4in Cherry Burrell I-Line sanitary fittings. A 4in V-band clamp is optionally available for the 4in variant.



Size	DIMENSIONS mm (in)							
	A (dia)	B (dia)	C (dia)	D (dia)	E	F	G	H
2in	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)
3in	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)
4in	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)

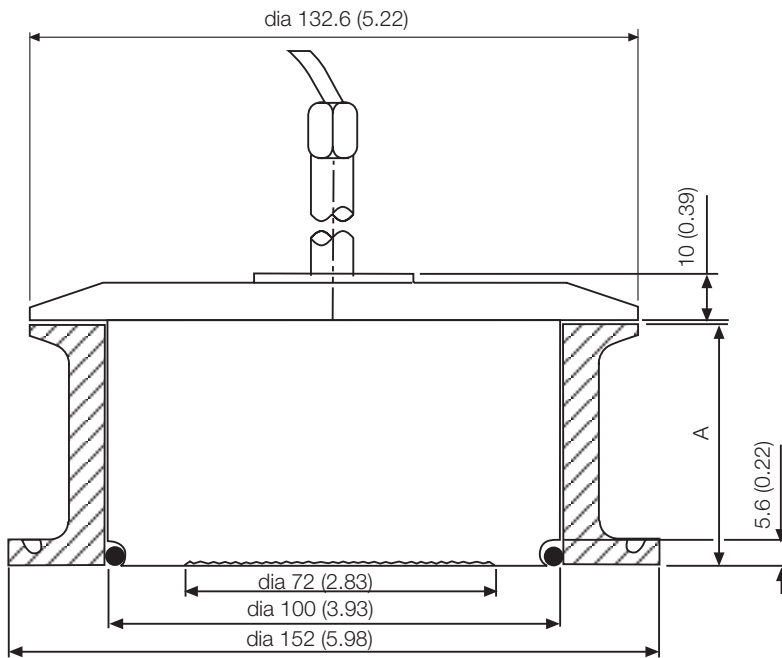
The sanitary remote seal with flush diaphragm is designed to connect to a 4in sanitary tank spud. The tank spud and process gasket are available as options with the seal suitable V-band clamp is also available on request.

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

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

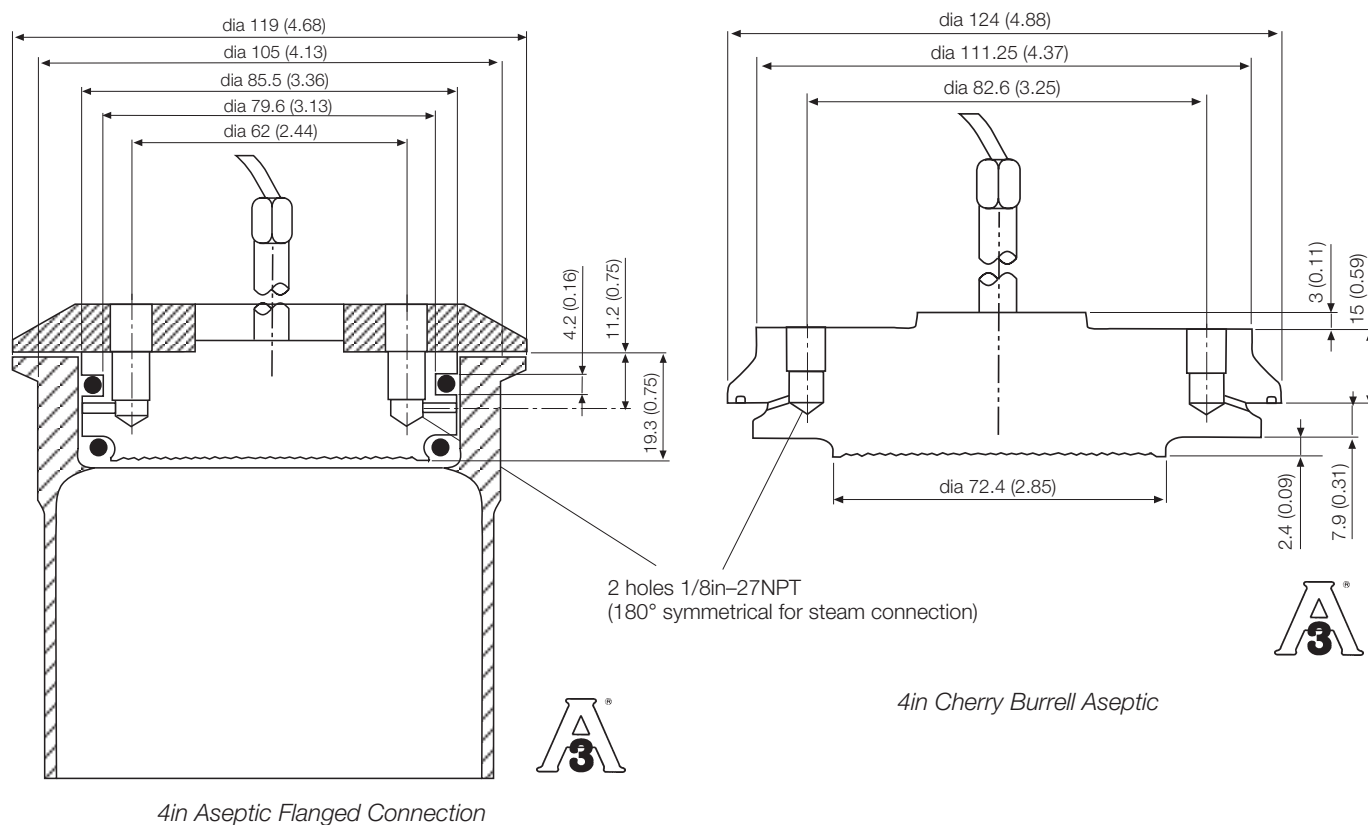


Size	Dimensions mm (in)
2in	53.3 (2.1)
4in	104.1 (4.1)
6in	154.9 (6.1)



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 recommendations.



Maximum Working Pressure @ 20°C (68°F)

- 2 in Triclamp : 3.8 MPa, 38 bar, 550 psi
- 3 in Triclamp : 2.4 MPa, 24 bar, 350 psi
- 4 in Triclamp : 1.7 MPa, 17 bar, 250 psi
- F50/F80 Union nut : 2.5 MPa, 25 bar, 360 psi
- Cherry Burrell: 1.9MPa, 19bar, 275psi
- 4in Sanitary flush or extended or aseptic: 1.9MPa, 19bar, 275psi
- 4in V-band clamp option: 1MPa, 10bar, 145psi
- 4in schedule 5 V-band clamp option: 0.7MPa, 7bar, 100psi @ 21°C.

Process Temperature Limits

Same as fill fluid limits. Refer to table A.

Process Gasket Temperature Limits

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

Vacuum Service

Full vacuum subject to fill fluid limits. Refer to table A.

Temperature effect

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

- a) the seal (one element)
- b) the capillary per meter
- c) the system (transmitter sensor when combined with a seal of specific size/type)

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

Union Nut, Triclamp, Cherry Burrell, Sanitary and Aseptic Seal Size	Seal error	1m Capillary Error	System (Sensor) Error
2in / F50	0.7kPa, 7mbar, 2.8inH ₂ O	0.42kPa, 4.2mbar, 1.7inH ₂ O	1.4kPa, 14mbar, 5.6inH ₂ O
3in / F80	0.06kPa, 0.6mbar, 0.24inH ₂ O	0.03kPa, 0.3mbar, 0.12inH ₂ O	0.03kPa, 0.3mbar, 0.12inH ₂ O
4in	0.06kPa, 0.6mbar, 0.24inH ₂ O	0.03kPa, 0.3mbar, 0.12inH ₂ O	0.03kPa, 0.3mbar, 0.12inH ₂ O

BASIC ORDERING INFORMATION model S264S Food and Sanitary Remote Seals

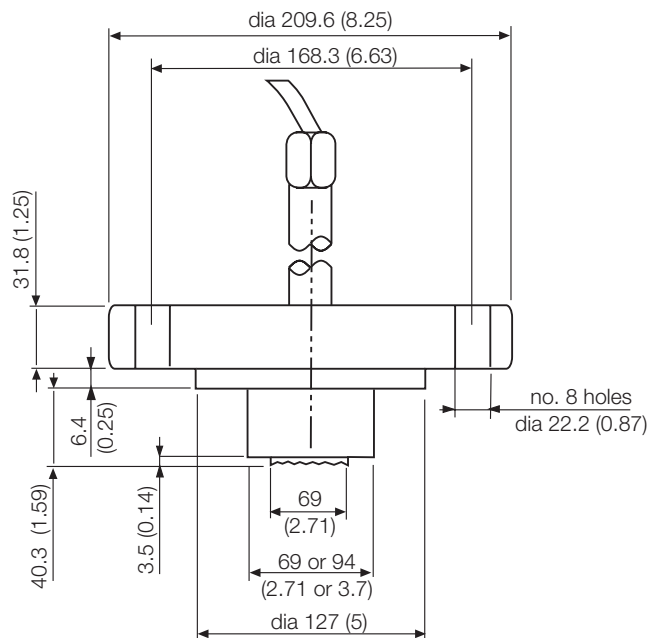
Select one character or set of characters from each category and specify complete catalog number.

BASE MODEL – 1 st to 5 th characters						S	2	6	4	S	X	X	X	X	X	X	X
Food and Sanitary remote seals																	
Transmitter side of connection – 6th character																	
High side											H						
Low side											L						
Mounting connection – 7th character																	
Union nut DIN 11851 – F50						(Note 1)						A					
Union nut DIN 11851 – F80						(Note 1)						B					
2in Triclamp												F					
3in Triclamp												G					
4in Triclamp												H					
2in Cherry Burrell												L					
3in Cherry Burrell												M					
4in Cherry Burrell												N					
4in Sanitary flush diaphragm												P					
4in Sanitary extended (2in) diaphragm												Q					
4in Sanitary extended (4in) diaphragm												R					
4in Sanitary extended (6in) diaphragm												S					
4in Cherry Burrell aseptic												W					
4in aseptic flanged connection												J					
Seal diaphragm material – 8th character																	
AISI 316 L ss														S			
Capillary protection – 9th character																	
AISI 316 L ss armour						(RECOMMENDED FOR HIGH TEMPERATURE)									A		
AISI 316 L ss armour with PVC protective cover															B		
Capillary length m (feet) – 10th character																	
1 (3)																A	
1.5 (5)																B	
2 (7)																C	
2.5 (8)																D	
3 (10)																E	
3.5 (12)																F	
4 (13)																G	
4.5 (15)																H	
5 (17)																J	
5.5 (18)																K	
6 (20)																L	
6.5 (22)																M	
7 (23)																N	
7.5 (25)																P	
8 (27)																Q	
9 (30)																R	
10 (33)																S	
Fill fluid – 11th character																	
Silicone oil																S	
Mineral oil (FDA approved)						(Note 2)										W	
Vegetable oil (FDA approved)						(Note 2)										A	
Glycerin-water (FDA approved)						(Note 2)										B	
Clamp/Fittings – 12th character																	
None																	1
2in V-band Clamp (for 2in Triclamp)																	A
3in V-band Clamp (for 3in Triclamp)																	B
4in V-band Clamp (for 4in Triclamp, 4in Cherry Burrell, 4in Sanitary flush and 4in aseptic flanged)																	C
4in Tank spud, tank wall up to 4.7mm (0.18) and 4in V-band Clamp (for 4in Sanitary flush seal)																	D
4in Tank spud, tank wall up to 9.5mm (0.37) and 4in V-band Clamp (for 4in Sanitary flush seal)																	E
4in schedule 5 V-band clamp (for 4in Sanitary extended seal)																	F
Tank spud for 2in extension and 4in schedule 5 V-band clamp (for 4in Sanitary extended 2in seal)																	G
Tank spud for 4in extension and 4in schedule 5 V-band clamp (for 4in Sanitary extended 4in seal)																	H
Tank spud for 6in extension and 4in schedule 5 V-band clamp (for 4in Sanitary extended 6in seal)																	J
Aseptic tank spud (for 4in aseptic flanged seal)																	P
Gasket – 13th character																	
None																	1
Ethylene propylene gasket DN100 (for 4in Sanitary extended seal) - (EPDM 3-A 18-03 Class II)																	A
Ethylene propylene gasket DN50 (for F50 Union nut seal)																	C
Ethylene propylene gasket DN80 (for F80 Union nut seal)																	D
Ethylene propylene gasket (for 4in sanitary flush and aseptic flanged seal) - (EPDM 3-A 18-03 Class II)																	G

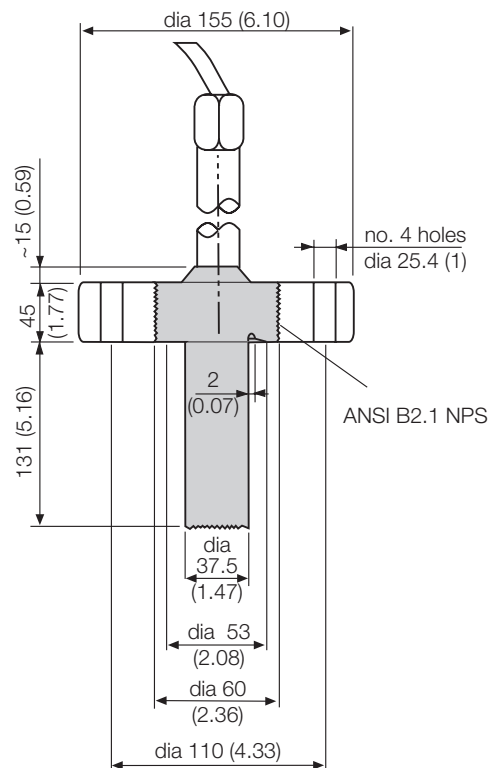
Note 1: Union nut DIN 11851 (F50 and F80) are not 3-A authorized models

Note 2: Suitable for food application

S264P Remote seal(s) for Urea Service



Flange ASME 600, 3in



Threaded Flange ASME 2500, 2in

Maximum Working Pressure @ 20°C (68°F)

- 3in, ASME 600 flange:
 - 8 MPa, 80 bar, 1160 psi
- 2in ASME 2500 threaded flange:
 - 32 MPa, 320 bar, 4640 psi

Vacuum Service

Full vacuum subject to fill fluid limits. Refer to table A.

Process Temperature Limits

Same as fill fluid limits. Refer to table A.

Temperature effect

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

- a) the seal (one element)
- b) the capillary per meter
- c) the system (transmitter sensor when combined with a seal of specific size/type)

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

Urea Service Flanged Seal Size	Seal error	1m Capillary Error	System (Sensor) Error
1 1/2in	1.4kPa, 14mbar, 5.6inH ₂ O	0.56kPa, 5.6mbar, 2.24inH ₂ O	1.8kPa, 18mbar, 7.2inH ₂ O
2 1/2in	0.22kPa, 2.2mbar, 0.88inH ₂ O	0.1kPa, 1mbar, 0.4inH ₂ O	0.09kPa, 0.9mbar, 0.36inH ₂ O

BASIC ORDERING INFORMATION model S264P Remote Seal for Urea Service

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

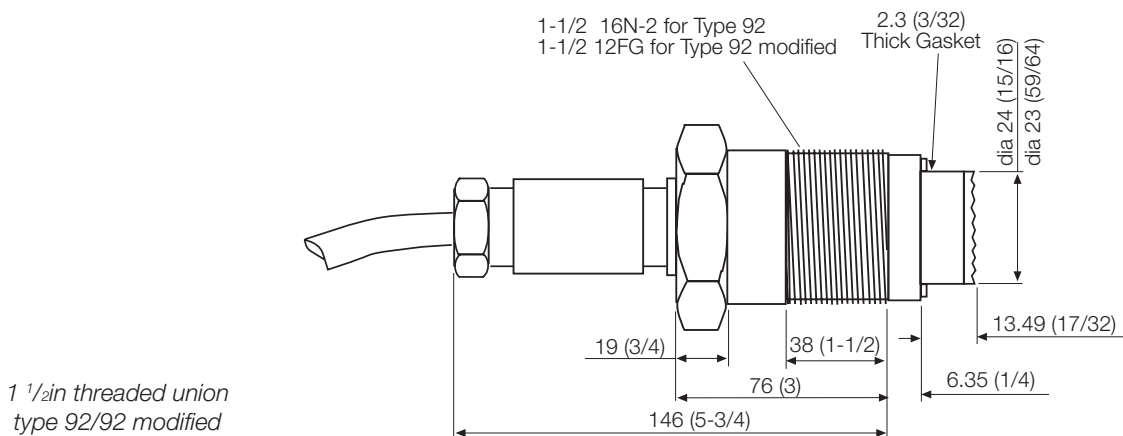
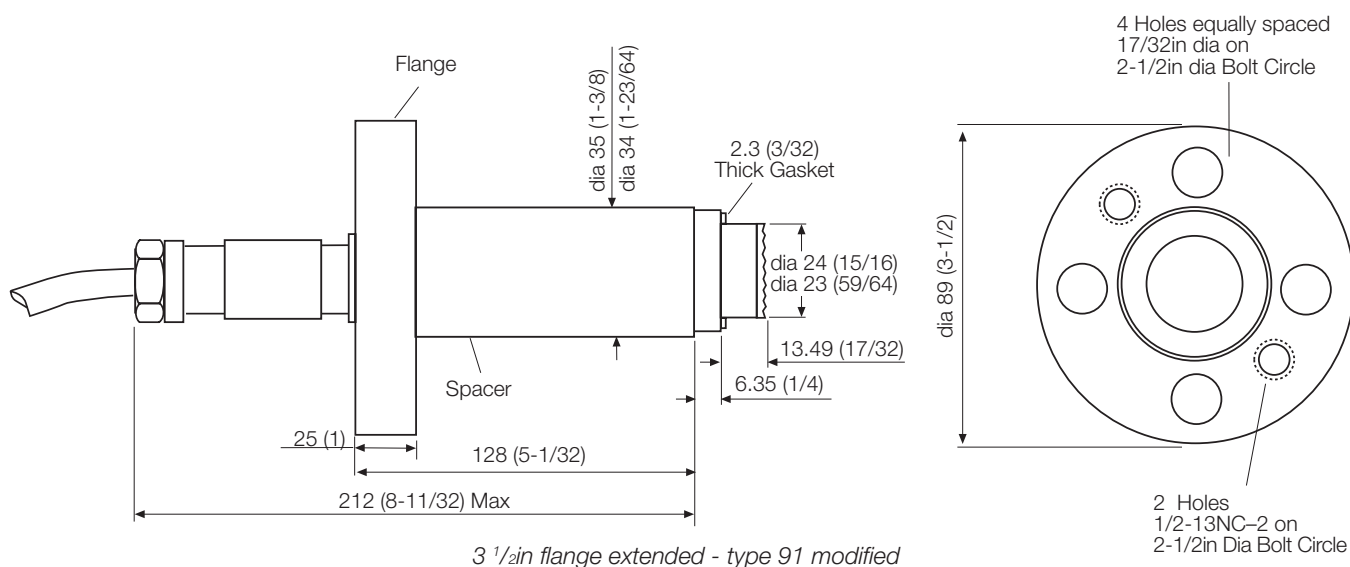
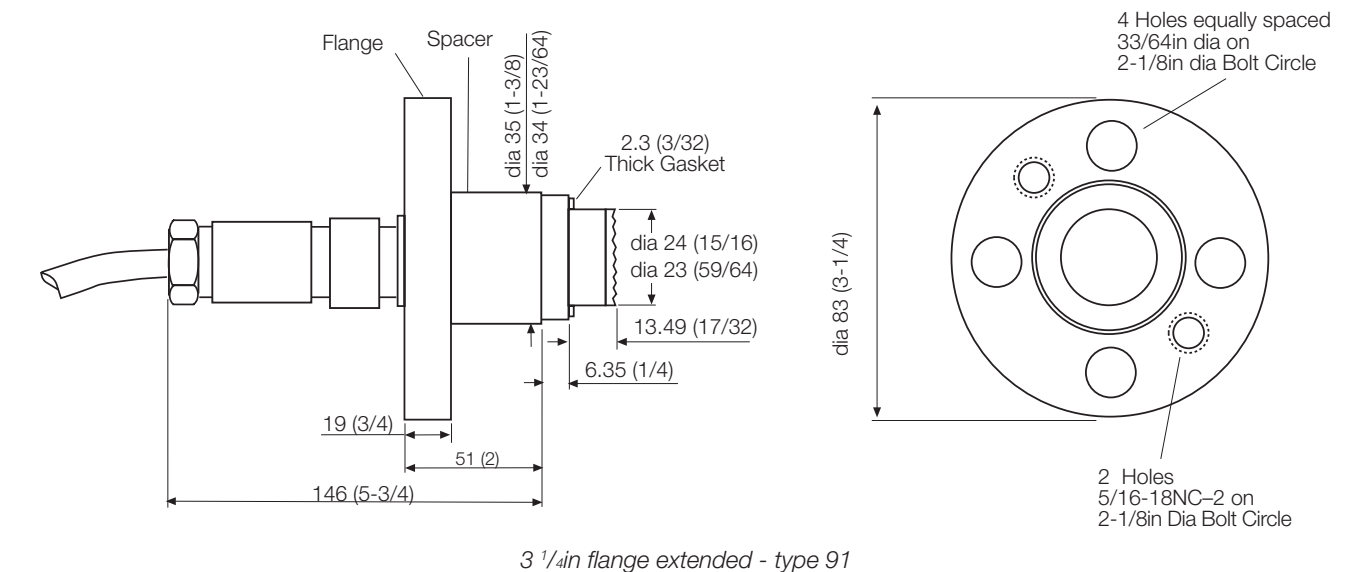
BASE MODEL – 1 st to 5 th characters				S	2	6	4	P	X	X	X	X	X	X	X	X	
Remote seal for Urea Service																	
Transmitter side of connection – 6 th character																	
High side														H			
Low side														L			
Size / Mounting rating / Material – 7 th character																	
3in	ASME 600 RF		AISI 316 L ss Urea Grade											H			
2in	Threaded flange		Carbon steel											J			
Extension length / Diameter – 8 th character																	
40.3mm (1.59in)		69mm (2.7in)		(Note 1)										R			
40.3mm (1.59in)		94mm (3.71in)		(Note 1)										S			
131mm (5.16in)		37.5mm (1.47in)		(Note 2)										T			
Diaphragm material (seal) – 9 th character																	
AISI 316 L ss Urea Grade															S		
Capillary protection – 10 th character																	
AISI 316 L ss armour			(RECOMMENDED FOR HIGH TEMPERATURE)												A		
AISI 316 L ss armour with PVC protective cover															B		
Capillary length m (feet) – 11 th character																	
1 (3)																A	
1.5 (5)																B	
2 (7)																C	
2.5 (8)																D	
3 (10)																E	
3.5 (12)																F	
4 (13)																G	
4.5 (15)																H	
5 (17)																J	
5.5 (18)																K	
6 (20)																L	
Fill fluid – 12 th character																	
Silicone oil																S	
Silicone oil for high temperature																G	
Option – 13 th character																	
None																	1
Huey test																	3

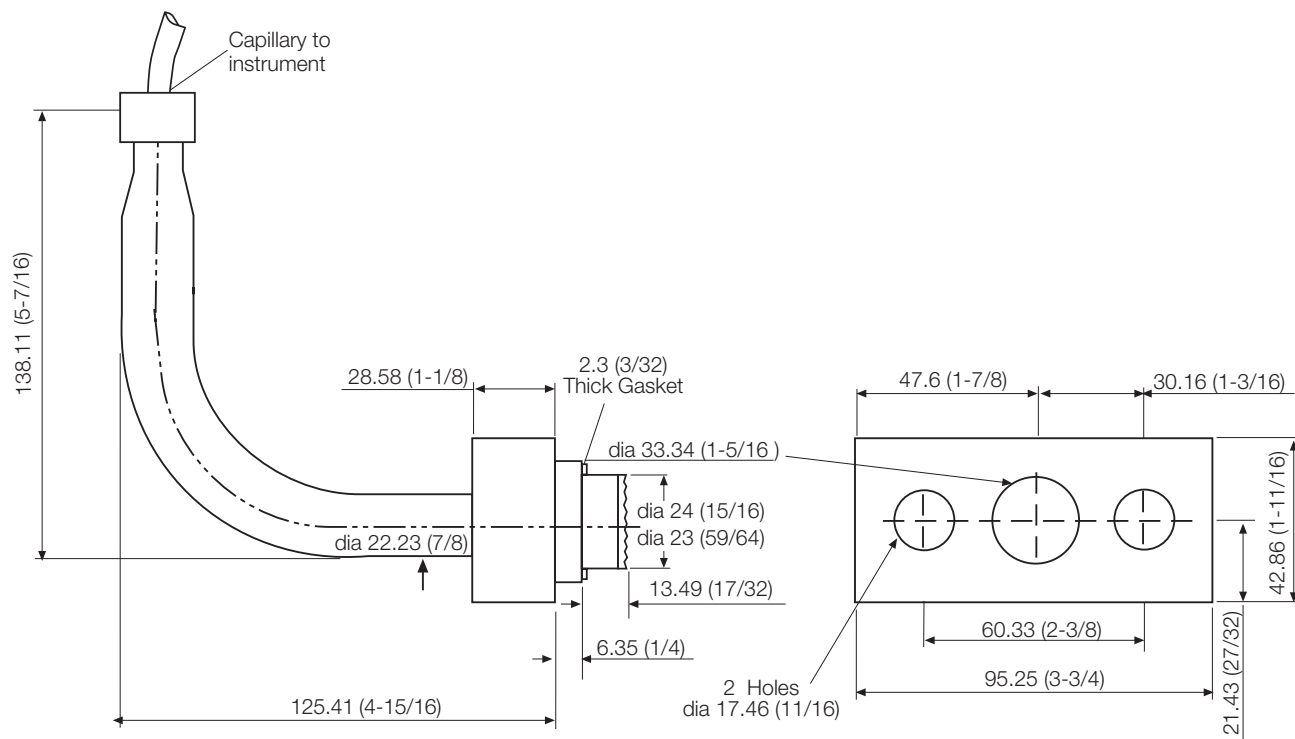
Note 1: Not available with Size/Mounting flange code J

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

S264B Model Button Type Remote Seal (To be used only for gauge pressure)

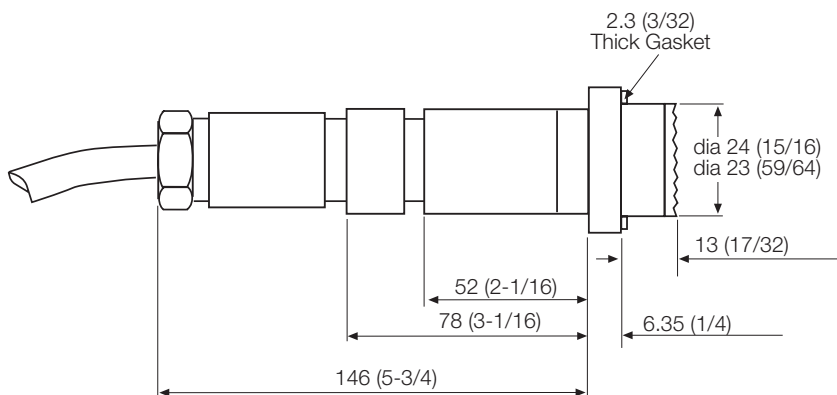
These remote seals are designed to connect directly to a process pipe via the NPT threaded connection or to match pipe fitting with an interface suitable for the provided mating flange. The button seals, due to their design, are dedicated for measurement with medium/high calibrated span (2 MPa/20 bar/290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





Bracket – type 89

Universal– type 90

**Maximum Working Pressure (20 to 120°C; 68 to 248°F)**

Types 89, 90 and 92: 42MPa, 420bar, 6090psi

Types 91: 35MPa, 350bar, 5075psi

Vacuum Service

Full vacuum subject to fill fluid limits.

Refer to table A.

Process Temperature Limits

Same as fill fluid limits. Refer to table A.

Temperature effect

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

- the seal (one element)
- the capillary per meter
- the system (transmitter sensor when combined with a seal of specific size/type)

referred to silicone oil for high temperature filling and Hastelloy C276 diaphragm materials.

Button Type Seal Size	Seal error	1m Capillary Error	System (Sensor) Error
1in	8kPa, 80mbar, 32inH ₂ O	1.8kPa, 18mbar, 72inH ₂ O	3.2kPa, 32mbar, 12.8inH ₂ O

BASIC ORDERING INFORMATION model S264B Button Type Remote Seal

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

BASE MODEL – 1 st to 5 th characters	S	2	6	4	B	X	X	X	X	X	X	X	X	X
Button type remote seal (MUST BE ONE ONLY FOR EACH TRANSMITTER)														
Transmitter side of connection – 6 th character														
High side						H								
Low side						L								
Size – 7 th character														
1in							M							
Mounting connection type – 8 th character														
3 1/4in flange extended – type 91								A						
3 1/2in flange extended – type 91 modified								B						
1 1/2in 16N-2 threaded union – type 92								C						
1 1/2in 12NF threaded union – type 92 modified								F						
Bracket – type 89								D						
Universal – type 90								E						
Diaphragm material (seal) – 9 th character														
Hastelloy C 276™								H						
Capillary protection – 10 th character														
AISI 316 L ss armour										A				
AISI 316 L ss armour with PVC protective cover										B				
Capillary length m (feet) – 11 th character														
1 (3)											A			
1.5 (5)											B			
2 (7)											C			
2.5 (8)											D			
3 (10)											E			
Fill fluid – 12 th character														
Silicone oil											S			
Silicone oil for high temperature											G			
Mineral oil (FDA approved)											W			
(Note 1)														
Option – 13 th character														
Not required													1	
Jack out collar for seal removal for process (not for type 89)													2	
Gasket – 14 th character														
None														1
Aluminium														E
AISI 316 ss														F

Note 1: Only available with Bracket type 89 version and suitable for food application

™ Hastelloy C276 is a Cabot Corporation trademark

™ Hastelloy C2000 is an Haynes International trademark

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™ Marcol is a Esso Italiana trademark

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