

4.12 MECHANICAL SEALS - PRODUCT RANGE - SISS™/SISR™



KEY FEATURES:

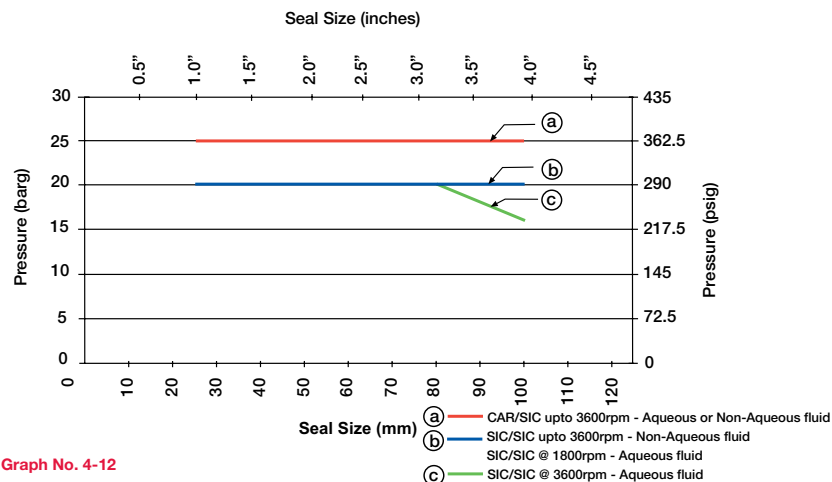
- Single multi-spring stationary pusher cartridge seal
- Hydraulically-balanced seal faces
- Stationary sprung faces
- Centroidally-loaded, shrink-fitted stationary face
- Flush port available as standard on SISS™ seal
- Quench, Drain and Flush environmental ports available on SISR™ seal
- Restriction bush option available with SISR™
- Modular components with the DISP™

SEAL ORIENTATION: Horizontal or vertical

OPERATING CONDITIONS:

- Temperature : -20°C to 180°C (-4°F to 356°F)
(Application and Seal Material Dependent)
- Pressure : Vacuum (-28"Hg) to 25 Bar g (363 psig) - OD pressurised only
- Speed : Up to 20 m/s (4000 ft/min) - soft v hard faces,
12 m/s (2400 ft/min) - hard v hard faces

PRESSURE DERATING CHART:



Graph No. 4-12

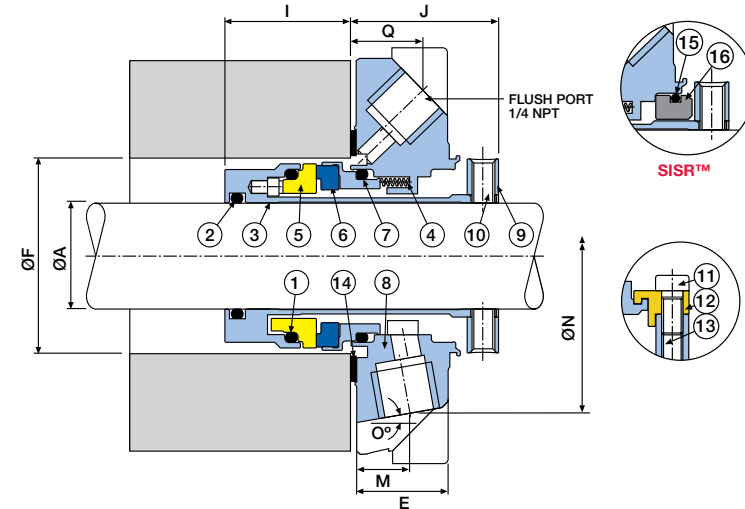


Figure No. 4-27

PART LIST:

Item	Description	Material
1	Rotary O Ring	Viton® / EPR / Kalrez® / Aflas®
2	Sleeve O Ring	Viton® / EPR / Kalrez® / Aflas®
3	Sleeve	316L Stainless Steel
4	Springs	Alloy 276
5	Rotary Face	SIC
6	Stationary Face	316L SS - Carbon / SiC
7	Stationary O Ring	Viton® / EPR / Kalrez® / Aflas®
8	Gland	316 Stainless Steel
9	Clamp Ring	316L Stainless Steel
10	Drive Screws	Stainless Steel
11	Clip Screws	Stainless Steel
12	Setting Clips	Brass
13	Anti-tamper Screws	Stainless Steel
14	Gasket	AF1 / GFT
15	R' Bush O Ring	Viton® / EPR / Kalrez® / Aflas®
16	Restriction Bushing	Carbon

Table No. 4-36

APPLICATION AREAS:

- Specifically designed for OEM and major contract customers

DIMENSIONAL INFORMATION CHARTS:

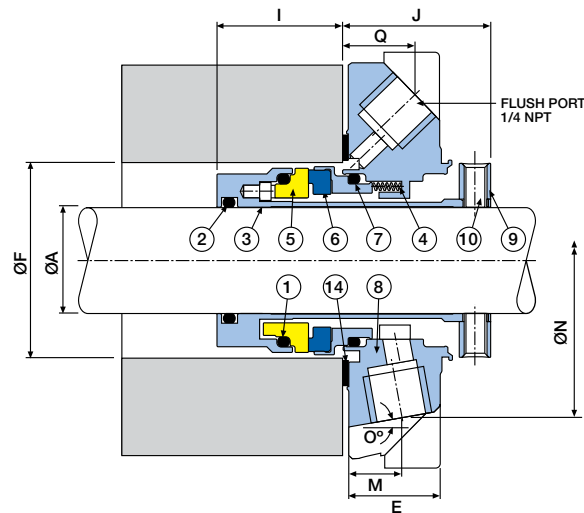
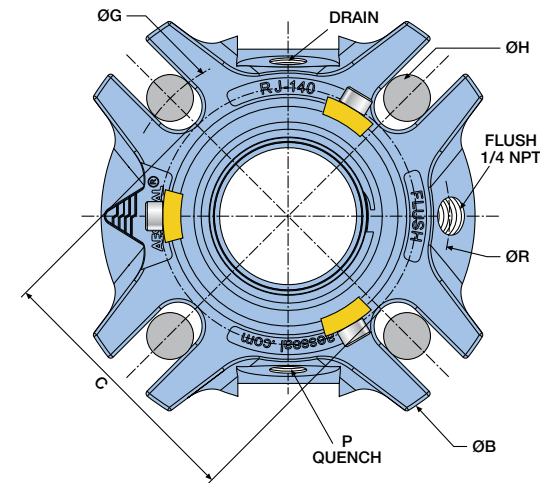


Figure No. 4-28



SISS™ - Dimensional Information (mm):

A	B	C	D	E	ØFMin	FMax	ØGMin	ØGMax	ØHMax	I	J	M	N	O	P	Q	R
24	104.8	57.2	-	23.8	41.0	48.6	71.2	92.8	12	28.2	38.3	15.0	71.4	10	1/4NPT	17.9	79.1
25	104.8	57.2	-	23.8	41.0	48.6	71.2	92.8	12	28.2	38.3	15.0	71.4	10	1/4NPT	17.9	79.1
28	108.0	60.4	-	23.8	44.0	52.6	74.3	96.0	12	28.2	38.3	14.1	76.2	10	1/4NPT	17.0	82.6
30	111.1	63.5	-	23.8	46.0	54.7	77.5	99.0	12	28.2	38.3	13.0	78.0	10	1/4NPT	17.8	84.1
32	111.1	63.5	-	23.8	48.0	54.7	77.5	99.0	12	28.2	38.3	13.0	78.5	10	1/4NPT	17.8	84.1
33	111.1	63.5	-	23.8	49.0	54.7	77.5	99.0	12	28.2	38.3	13.0	78.5	10	1/4NPT	17.8	84.1
33K	98.5	63.5	-	21.7	49.0	54.7	77.5	86.5	12	27.7	36.8	13.7	82.5	15	1/4NPT	13.7	90.7
35	111.1	66.7	-	23.8	51.0	58.6	80.7	99.0	12	28.2	38.3	13.0	78.5	10	1/4NPT	17.6	83.8
38	127.0	72.0	-	21.7	58.0	63.6	85.9	115.0	12	28.0	36.8	12.7	85.7	10	1/4NPT	16.2	92.1
40	127.0	72.0	-	21.7	60.0	64.7	85.9	115.0	12	28.0	36.8	12.7	85.7	10	1/4NPT	16.2	92.1
43	133.4	76.8	-	21.7	63.0	68.6	90.8	121.3	12	28.0	36.8	13.0	89.7	10	1/4NPT	16.1	94.9
43K	119.7	81.0	-	17.1	63.0	71.7	95.0	107.6	12	28.0	43.8	22.9	93.5	45	1/4NPT	18.9	101.6
45	133.4	76.8	-	21.7	65.0	70.2	90.8	121.4	12	28.0	36.8	12.7	88.9	10	1/4NPT	16.1	95.3
48	133.4	76.8	-	21.7	67.0	70.2	90.8	121.4	12	28.0	36.8	12.7	88.9	10	1/4NPT	16.2	95.3
50	139.7	86.0	-	21.7	70.0	77.7	100.0	127.7	12	28.0	36.8	12.7	95.3	10	1/4NPT	16.2	101.6
53	146.1	93.6	-	21.7	73.0	84.7	111.1	130.0	16	28.0	36.8	13.4	101.3	10	1/4NPT	16.2	108.0
55	146.1	93.6	-	21.7	75.0	84.7	111.1	130.0	16	28.0	36.8	13.4	101.3	10	1/4NPT	16.2	108.0
58	146.1	93.6	-	21.7	78.0	84.7	111.1	130.0	16	28.0	36.8	13.4	101.3	10	1/4NPT	16.2	108.0
60	152.4	100.0	-	21.7	80.0	89.6	117.5	136.4	16	28.0	36.8	13.7	104.4	10	1/4NPT	16.2	114.3
63	177.8	109.5	-	23.9	82.6	98.6	127.0	161.8	16	27.4	39.5	13.5	121.2	10	3/8NPT	18.8	126.8
65	177.8	109.5	-	23.9	85.7	98.7	127.0	161.8	16	27.4	39.5	13.5	121.2	10	3/8NPT	18.8	126.8
70	177.8	109.5	-	23.9	90.0	99.7	127.0	161.8	16	27.4	39.5	13.5	121.2	10	3/8NPT	18.8	126.8
75	190.5	125.4	-	23.9	98.4	113.5	142.9	174.5	16	33.0	39.7	13.8	130.6	10	3/8NPT	18.5	137.2
80	190.5	125.4	-	23.9	101.6	113.5	142.9	174.5	16	33.0	39.7	13.8	130.6	10	3/8NPT	18.0	138.1
85	203.2	135.0	-	23.9	108.0	121.5	156.0	185.0	20	33.0	39.7	13.4	140.2	10	3/8NPT	18.9	146.0

Note: The 33K and 43K gland designs are specifically designed to suit the KSB CPK pump with Quench and Drain connections at different angular positions.

Table No. 4-37

SISS™ - Dimensional Information (inches):

A	B	C	D	E	ØFMin	FMax	ØGMin	ØGMax	ØHMax	I	J	M	N	O	P	Q	R
1.000	4.125	2.25	-	0.937	1.625	1.937	2.812	3.625	0.500	1.110	1.508	0.590	2.812	10	1/4NPT	0.705	3.115
1.125	4.250	2.375	-	0.937	1.750	2.093	2.937	3.750	0.500	1.110	1.508	0.555	3.000	10	1/4NPT	0.705	3.250
1.250	4.375	2.500	-	0.937	1.875	2.154	3.062	3.875	0.500	1.110	1.508	0.511	3.091	10	1/4NPT	0.700	3.312
1.375	4.375	2.625	-	0.937	2.000	2.308	3.062	3.875	0.500	1.110	1.508	0.511	3.091	10	1/4NPT	0.693	3.300
1.500	5.000	2.832	-	0.854	2.250	2.500	3.375	4.500	0.500	1.103	1.449	0.500	3.375	10	1/4NPT	0.638	3.625
1.625	5.250	3.022	-	0.854	2.375	2.700	3.573	4.750	0.500	1.103	1.449	0.500	3.532	10	1/4NPT	0.638	3.737
1.750	5.250	3.022	-	0.854	2.500	2.750	3.573	4.750	0.500	1.103	1.449	0.500	3.500	10	1/4NPT	0.634	3.750
1.875	5.250	3.022	-	0.854	2.625	2.750	3.573	4.750	0.500	1.103	1.449	0.500	3.500	10	1/4NPT	0.638	3.750
2.000	5.500	3.386	-	0.854	2.750	3.062	3.937	5.000	0.500	1.103	1.449	0.500	3.750	10	1/4NPT	0.638	4.000
2.125	5.750	3.687	-	0.854	2.875	3.375	4.375	5.125	0.625	1.103	1.449	0.528	3.989	10	1/4NPT	0.638	4.250
2.250	5.750	3.687	-	0.854	3.000	3.375	4.375	5.125	0.625	1.103	1.449	0.528	3.989	10	1/4NPT	0.638	4.250
2.375	6.000	3.937	-	0.854	3.125	3.500	4.625	5.375	0.625	1.103	1.449	0.540	4.111	10	1/4NPT	0.638	4.500
2.500	7.000	4.312	-	0.942	3.250	3.875	5.000	6.375	0.625	1.083	1.556	0.532	4.772	10	3/8NPT	0.741	4.993
2.625	7.000	4.312	-	0.942	3.375	3.875	5.000	6.375	0.625	1.083	1.556	0.532	4.772	10	3/8NPT	0.741	4.993
2.750	7.000	4.312	-	0.942	3.625	3.937	5.000	6.375	0.625	1.083	1.556	0.532	4.772	10	3/8NPT	0.741	4.993
2.875	7.500	4.937	-	0.942	3.750	4.437	5.625	6.875	0.625	1.300	1.556	0.545	5.140	10	3/8NPT	0.742	5.375
3.000	7.500	4.937	-	0.942	3.875	4.500	5.625	6.875	0.625	1.300	1.563	0.545	5.142	10	3/8NPT	0.728	5.402
3.125	7.500	4.937	-	0.942	4.000	4.500	5.625	6.875	0.625	1.300	1.563	0.545	5.142	10	3/8NPT	0.709	5.438
3.250	8.000	5.312	-	0.942	4.125	4.750	6.125	7.250	0.750	1.300	1.562	0.528	5.520	10	3/8NPT	0.734	5.750
3.375	8.000	5.312	-	0.942	4.250	4.750	6.125	7.250	0.750	1.300	1.563	0.528	5.520	10	3/8NPT	0.744	5.750

Table No. 4-38