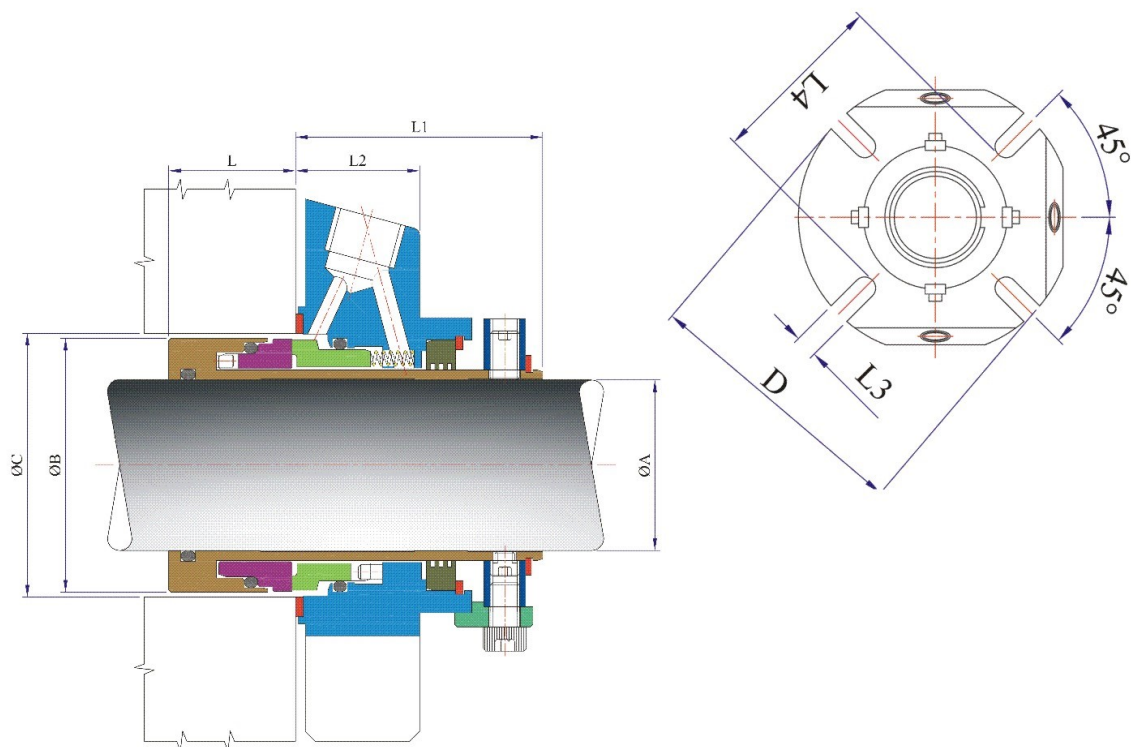


Type: CS 22



Seal Size	ØA	ØB	ØC Min	ØC Max	L	L1	L2	L3	L4	D
25.0	25.0	42.0	44.0	51.5	26.0	50.6	25.5	13.5	62.0	105.0
28.0	28.0	45.0	47.0	52.0	26.0	50.6	25.5	13.5	62.0	105.0
30.0	30.0	47.0	49.0	56.0	26.0	50.6	25.5	13.5	65.0	105.0
32.0	32.0	48.8	51.0	57.0	26.0	50.6	25.5	13.5	67.0	110.0
33.0	33.0	48.8	51.0	57.0	26.0	50.6	25.5	13.5	67.0	110.0
35.0	35.0	52.0	54.0	61.5	26.0	50.6	25.5	13.5	70.0	113.0
38.0	38.0	55.0	57.0	66.0	26.0	50.6	25.5	13.5	75.0	123.0
40.0	40.0	57.0	59.0	68.0	26.0	50.6	25.5	14.5	75.0	123.0
42.0	42.0	59.5	61.5	69.0	26.0	50.6	25.5	14.5	80.0	133.0
43.0	43.0	59.5	61.5	70.5	26.0	50.6	25.5	14.5	80.0	133.0
45.0	45.0	61.5	64.0	73.0	26.0	50.6	25.5	14.5	81.0	138.0
48.0	48.0	64.5	67.0	75.0	26.0	50.6	25.5	14.5	84.0	138.0
50.0	50.0	67.0	69.0	78.0	26.0	50.6	25.5	14.5	87.0	145.0
53.0	53.0	71.0	73.0	83.0	26.0	50.6	25.5	18.0	97.0	145.0
55.0	55.0	72.0	74.0	87.0	26.0	50.6	25.5	18.0	90.0	145.0
60.0	60.0	77.0	79.0	91.0	26.0	50.6	25.5	18.0	102.0	155.0
65.0	65.0	83.8	85.7	98.5	26.0	50.6	25.5	18.0	109.0	163.0
70.0	70.0	92.0	95.0	108.0	26.0	50.6	25.5	18.0	118.0	175.0
75.0	75.0	99.0	101.6	118.0	34.0	57.5	28.0	18.0	129.0	178.0
80.0	80.0	105.5	108.0	124.0	34.0	57.5	28.0	18.0	135.0	195.0
85.0	85.0	108.5	111.1	128.0	34.0	57.5	28.0	22.0	139.0	198.0
90.0	90.0	115.0	117.5	135.0	34.0	57.5	28.0	22.0	145.0	205.0
95.0	95.0	118.0	120.7	138.0	34.0	57.5	28.0	22.0	148.0	208.0
100.0	100.0	124.5	127.0	144.0	34.0	57.5	28.0	22.0	154.0	218.0

Due to continuous improvement in our design the dimensions may change without prior notice.

- Single seal
- Balanced
- Independent of direction of rotation
- Cartridge unit
- Easy installation

Application:

This seal is used for handling slurries, sludges, syrups. The springs are isolated from media being sealed by dynamic elastomer.

Operating Condition:

- Temperature : -20°C to $+220^{\circ}\text{C}$
- Pressure : Upto 25 bar
- Speed : 20 m/s

Type: CS 22 D

Features:

- Double seal
- Balanced
- Independent of direction of rotation Cartridge unit
- Easy to install

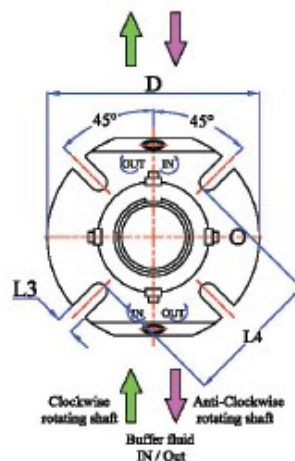
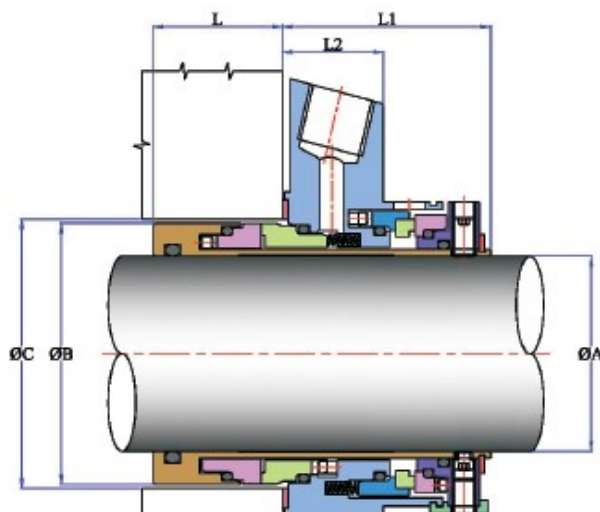
Application:

Generally cartridge multiple spring seal is used for slurries, sludges, syrups.

The springs are isolated from media being sealed by dynamic elastomer.

Operating Condition:

- Temperature : -20°C to $+220^{\circ}\text{C}$
- Pressure : Upto 25 bar
- Speed : 20 m/s





Seal Size	ØA	ØB	ØC Min	ØC Max	L	L1	L2	L3	L4	D
25.0	25.0	42.0	44.0	51.0	33.0	53.5	26.0	13.5	62.0	105.0
28.0	28.0	45.0	47.0	52.0	33.0	53.5	26.0	13.5	65.0	105.0
30.0	30.0	47.0	49.0	56.0	33.0	53.5	26.0	13.5	67.0	105.0
32.0	32.0	47.8	51.0	57.0	33.0	53.5	26.0	13.5	70.0	110.0
33.0	33.0	48.8	51.0	57.0	33.0	53.5	26.0	13.5	70.0	110.0
35.0	35.0	52.0	54.0	61.5	33.0	53.5	26.0	13.5	72.0	113.0
38.0	38.0	55.0	57.0	66.0	33.0	53.5	26.0	13.5	75.0	123.0
40.0	40.0	57.0	59.0	68.0	33.0	53.5	26.0	14.5	77.0	123.0
42.0	42.0	59.5	61.5	69.0	33.0	53.5	26.0	14.5	80.0	133.0
43.0	43.0	59.5	61.5	70.5	33.0	53.5	26.0	14.5	80.0	133.0
45.0	45.0	61.5	64.0	73.0	33.0	53.5	26.0	14.5	82.0	138.0
48.0	48.0	64.5	67.0	75.0	33.0	53.5	26.0	14.5	85.0	138.0
50.0	50.0	67.0	69.0	78.0	33.0	53.5	26.0	14.5	87.0	148.0
53.0	53.0	71.0	73.0	87.0	33.0	53.5	26.0	18.0	97.0	148.0
55.0	55.0	72.0	74.0	83.0	33.0	53.5	26.0	18.0	92.0	148.0

Type: CS BF

Features:

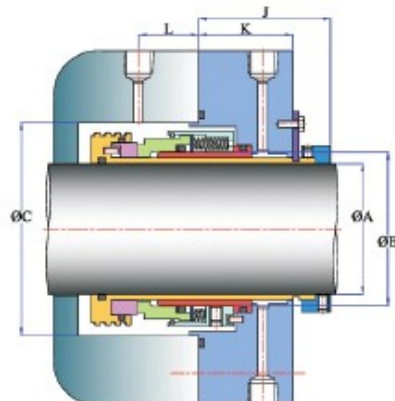
- Single seal
- Cartridge unit
- Balanced
- Inside mounted
- Dependent of direction of rotation

Application:

This seal is generally used for Boiler feed water pump, Booster pump & condensate pump stationary spring design makes it suitable for high speed application.

Operating Condition:

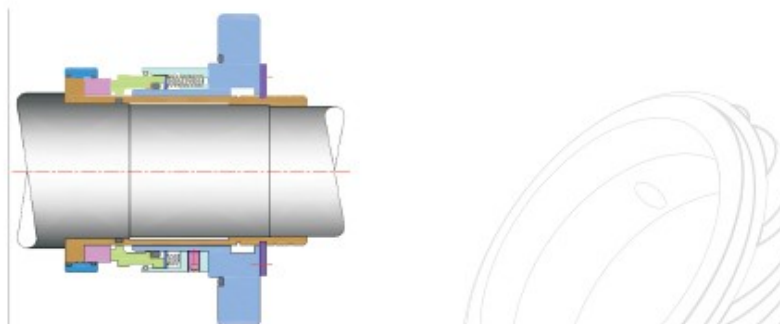
- Temperature : -20°C to +250°C
- Pressure : Upto 60 bar
- Speed : 50 m/s



Seal Size	ØA	ØB	ØC	L	K	J
1.000	1.000	1.500	2.625	1.687	1.937	3.062

1.125	1.125	1.625	2.875	2.000	1.937	3.062
1.250	1.250	1.750	3.000	2.000	1.937	3.062
1.375	1.375	1.875	3.125	2.125	1.937	3.062
1.500	1.500	2.000	3.250	2.125	1.937	3.062
1.625	1.625	2.125	3.500	2.437	1.937	3.062
1.750	1.750	2.250	3.625	2.437	1.937	3.062
1.875	1.875	2.375	3.750	2.562	1.937	3.062
2.000	2.000	2.500	3.875	2.562	1.937	3.062
2.125	2.125	2.625	4.000	2.562	1.937	3.062
2.250	2.250	2.750	4.125	2.562	1.937	3.062
2.375	2.375	2.875	4.250	2.687	1.937	3.062
2.500	2.500	3.000	4.312	2.687	1.937	3.062
2.625	2.625	3.125	4.437	2.687	1.937	3.062
2.750	2.750	3.250	4.625	2.687	1.937	3.062
2.875	2.875	3.375	4.875	2.812	2.125	3.250
3.000	3.000	3.500	5.000	2.812	2.125	3.250
3.125	3.125	3.625	5.125	2.812	2.125	3.250
3.250	3.250	3.750	5.250	2.812	2.125	3.250
3.375	3.375	3.875	5.375	2.812	2.125	3.250
3.500	3.500	4.000	5.500	2.812	2.125	3.250
3.625	3.625	4.125	5.750	2.812	2.125	3.250
3.750	3.750	4.250	5.750	2.812	2.125	3.250
3.875	3.875	4.375	5.875	2.812	2.125	3.250
4.000	4.000	4.500	6.125	2.812	2.125	3.250

Variants for CS-BF



Type: CSET

Features:

- Cartridge seal
- Heavy Duty drive
- Stationary external spring improves tolerance to clogging
- Easy installation

Application:

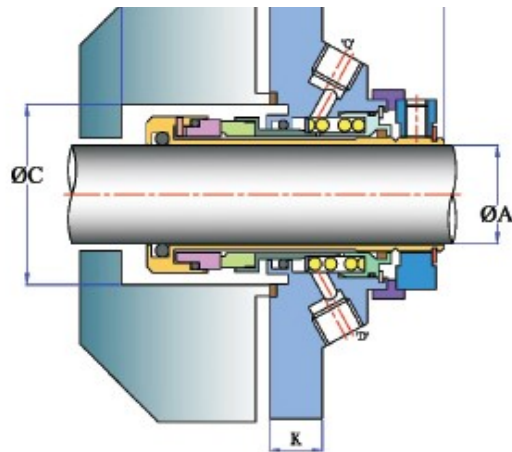
This seal is used for a variety of duties from chemicals to oil to water, abrasive and crystallizing duties also it is used in paper and pulp industries, food processing.

On top entering agitators on variation of the design is available for use hygienic applications.

Operating Condition:

- Temperature : 45°C to +205°C
- Pressure : Upto 20 bar
- Speed : 25 m/s





Seal Size	ØA	ØC Min.	ØC Max.	J	K	S
25.0	25.0	41.0	47.5	48.0	12.0	38.0
28.0	28.0	44.0	50.5	48.0	12.0	38.0
30.0	30.0	46.0	52.5	48.0	12.0	38.0
32.0	32.0	48.0	54.5	48.0	12.0	38.0
33.0	33.0	51.0	57.5	48.0	12.0	38.0
35.0	35.0	51.0	57.5	48.0	12.0	38.0
38.0	38.0	57.0	63.5	48.0	12.0	40.0
40.0	40.0	60.0	66.5	48.0	12.0	40.0
43.0	43.0	63.5	70.0	48.0	12.0	40.0
45.0	45.0	63.5	70.0	48.0	12.0	40.0
48.0	48.0	66.8	73.0	50.0	13.0	40.0
50.0	50.0	70.0	76.5	50.0	13.0	40.0
53.0	53.0	73.0	79.5	50.0	13.0	40.0
55.0	55.0	73.0	79.5	50.0	13.0	40.0
60.0	60.0	79.4	85.5	50.0	13.0	40.0
65.0	65.0	90.0	96.5	57.0	13.0	48.0
70.0	70.0	95.0	101.4	57.0	13.0	48.0
75.0	75.0	101.6	108.0	57.0	13.0	48.0
80.0	80.0	108.0	114.5	57.0	13.0	48.0
85.0	85.0	111.0	124.0	60.5	13.0	48.0
90.0	90.0	117.5	131.0	62.5	16.0	48.0
95.0	95.0	120.5	131.0	62.5	16.0	48.0
100.0	100.0	127.0	136.5	62.5	16.0	48.0

Type: CSRA

Features:

- Cartridge seal
- Anti distortion rotary face
- Multiple injection point
- Easy installation

Application:

This seal is used for in paper and pulp industries, chemicals and food

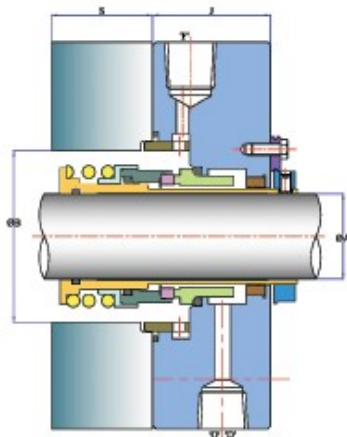


processing petrochemicals etc.

CSRA is ideally suited for use on light hydrocarbons.

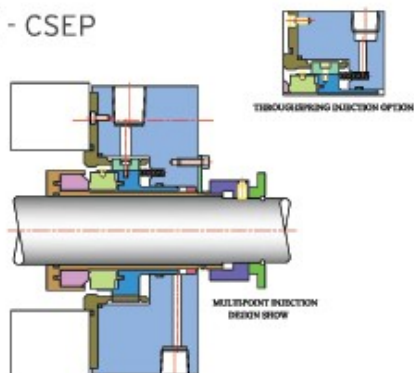
Operating Condition:

- Temperature : -40°C to +250°C
- Pressure : Upto 40 bar
- Speed : 25 m/s



Seal Size ØA	ØB	S	J
15	41	27.0	62.0
18	44	28.5	62.0
21	48	33.5	62.0
25	50	34.5	62.0
29	56	40.5	63.0
33	61	42.5	63.0
38	66	42.5	63.0
43	73	44.5	70.0
46	78	44.5	70.0
49	81	47.5	70.0
53	85	50.5	70.0
56	90	50.5	70.0
60	93	53.5	70.0
63	102	55.5	70.0
68	107	55.5	70.0
73	111	58.0	70.0
78	118	58.0	70.0
83	122	61.0	70.0
88	127	61.0	73.0
93	134	64.0	73.0
98	141	65.5	73.0
100	149	66.5	73.0

Variants for Cartridge Seal - CSEP



Type: CS 18

Features:

- Balanced
- Cartridge unit
- Stationary spring
- Easy installation

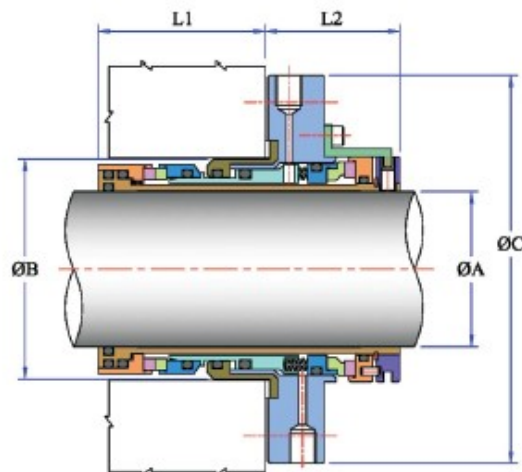
Application:

This seal can be used for in pulp and paper industry and power plants process industry.



Operating Condition:

- Temperature : 120°C
- Pressure : Upto 15 bar
- Speed : 20 m/s



Seal Size (Inches)	ØA	ØB	ØC	D	L1	L2
35.0	35.0	58.0	130.0	70.0	57.0	49.0
38.0	38.0	62.0	130.0	73.0	59.0	52.0
40.0	40.0	62.0	130.0	75.0	59.0	52.0
43.0	43.0	67.0	140.0	80.0	59.0	52.0
45.0	45.0	69.0	140.0	80.0	59.0	52.0
48.0	48.0	72.0	140.0	83.0	60.0	53.0
50.0	50.0	74.0	160.0	86.0	60.0	53.0
53.0	53.0	76.0	160.0	90.0	60.0	53.0
55.0	55.0	79.0	160.0	90.0	64.0	53.0
58.0	58.0	83.0	160.0	94.0	64.0	53.0
60.0	60.0	85.0	160.0	98.0	64.0	53.0
63.0	63.0	90.0	160.0	102.0	72.0	60.0
65.0	65.0	93.0	160.0	102.0	72.0	60.0
68.0	68.0	95.0	210.0	112.0	72.0	60.0
70.0	70.0	95.0	210.0	112.0	72.0	60.0
80.0	80.0	109.0	210.0	117.0	74.0	65.0
85.0	85.0	114.0	210.0	123.0	78.0	70.0
90.0	90.0	119.0	210.0	134.0	78.0	70.0
95.0	95.0	125.0	210.0	136.0	78.0	70.0
100.0	100.0	129.0	210.0	140.0	78.0	70.0

85.0	85.0	114.0	210.0	129.0	78.0	70.0
90.0	90.0	119.0	210.0	134.0	78.0	70.0
95.0	95.0	125.0	210.0	136.0	78.0	70.0
100.0	100.0	129.0	210.0	140.0	78.0	70.0

Variants for CS 18 Double

