



Single Cartridge Seals



S141



S145/S145Q



S145Z / S145ZQ



S1450



S301 / S301Q



SFET



SFEM



S1502

Materials

Stationary	- Car / SiC / SSiC / TC
Rotary	- SiC / SSiC / TC
Elastomer	- NBR / EPDM / Viton / Aflas / FFKM

Working Conditions

Pressure	< 28 bar
Speed	< 25 m/s
Temperature	up to 205°C

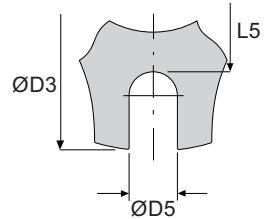
Features:

- Stationary Design
- Monolithic Faces
- Cushioned Faces
- Pressure balanced
- Springs outside the media

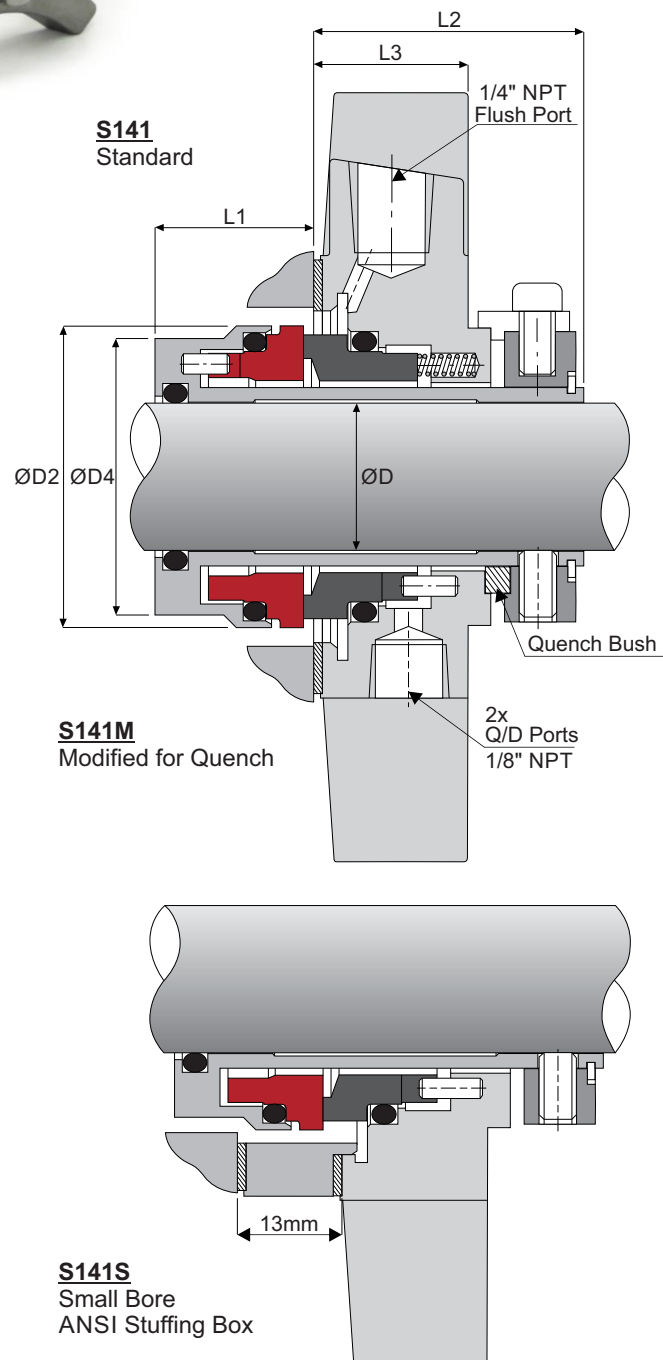


Gasket Sizes

ID = ØD2 + 2.5mm
OD = L5 - 1.5mm



Inches ØD	Metric ØD	ØD2	ØD3	ØD4	ØD5	L1	L2	L3	L5	ØD2 S141Z
1.000"	24	43.5	105	40.10	12.5	19.0	38	21.5	62	40.3
	25	43.5	105	40.10	12.5	19.0	38	21.5	62	40.3
1.125"	28	46.5	105	43.10	12.5	19.0	38	21.5	62	43.5
	30	48.5	105	45.10	12.5	19.0	38	21.5	65	46.6
1.250"	32	50.0	105	47.10	12.5	19.0	38	21.5	67	49.8
	33	50.0	105	47.10	12.5	19.0	38	21.5	67	49.8
1.375"	35	53.5	115	50.10	12.5	19.0	38	21.5	70	
1.500"	38	56.5	125	53.10	14.7	19.0	38	21.5	75	
	40	58.5	125	55.10	14.7	19.0	38	21.5	75	
1.625"		60.5	133	57.10	14.7	19.0	38	21.5	80	
	43	61.5	133	58.10	14.7	19.0	38	21.5	80	
1.750"	45	63.5	140	60.10	14.7	19.0	38	21.5	81	
1.875"	48	66.5	140	63.10	14.7	19.0	38	21.5	84	
2.000"	50	68.5	140	65.10	14.7	19.0	38	21.5	86	
2.125"	53	71.5	150	68.10	17.5	19.0	38	21.5	92	
	55	73.5	150	70.10	17.5	19.0	38	21.5	92	
2.250"		76.5	160	73.10	17.5	19.0	38	21.5	100	
2.375"	60	78.5	160	75.10	17.5	19.0	38	21.5	100	
2.500"		81.5	165	78.10	17.5	19.0	38	21.5	109	
	65	83.5	165	80.10	17.5	19.0	38	21.5	109	
2.625"		86.5	165	83.10	17.5	19.0	38	21.5	109	



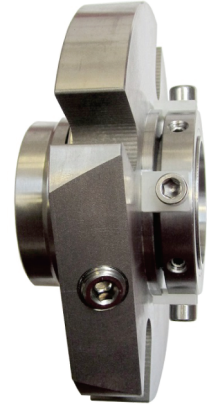
*S141Z for small stuffing box cross sections shaft ØD 1.000"-1.375"

Materials

Stationary	- Car / SiC / SiC / TC
Rotary	- SiC / SiC / TC
Elastomer	- NBR / EPDM / Viton / Aflas / FFKM

Working Conditions

Pressure	< 28 bar
Speed	< 25 m/s
Temperature	up to 205°C

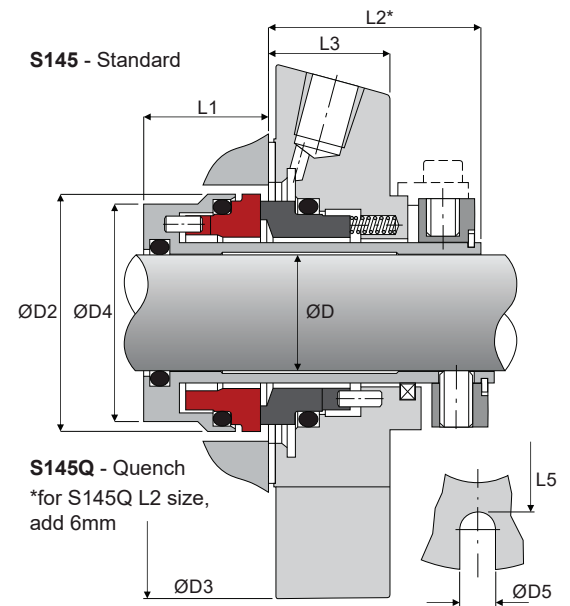


Inches ØD	Metric ØD	ØD2	ØD3	ØD4	ØD5	L1	L2	L3	L5
1.000"	24	43.5	104	40.10	12.5	19.0	38.0	21.5	62
	25	43.5	104	40.10	12.5	19.0	38.0	21.5	62
1.125"	28	46.5	104	43.10	12.5	19.0	38.0	21.5	62
-	30	48.5	104	45.10	12.5	19.0	38.0	21.5	65
1.250"	32	50.0	104	47.10	12.5	19.0	38.0	21.5	67
	33	50.0	104	47.10	12.5	19.0	38.0	21.5	67
1.375"	35	53.5	110	50.10	12.5	19.0	38.0	21.5	70
1.500"	38	56.5	125	53.10	14.7	19.0	38.0	21.5	75
-	40	58.5	125	55.10	14.7	19.0	38.0	21.5	75
1.625"	-	60.5	133	57.10	14.7	19.0	38.0	21.5	80
-	43	61.5	133	58.10	14.7	19.0	38.0	21.5	80
1.750"	45	63.5	140	60.10	14.7	19.0	38.0	21.5	81
1.875"	48	66.5	140	63.10	14.7	19.0	38.0	21.5	84
2.000"	50	68.5	140	65.10	14.7	19.0	38.0	21.5	87
2.125"	53	71.5	150	68.10	17.5	19.0	38.0	21.5	90
-	55	73.5	150	70.10	17.5	19.0	38.0	21.5	92
2.250"	-	76.5	160	73.10	17.5	19.0	38.0	21.5	95
2.375"	60	78.5	160	75.10	17.5	19.0	38.0	21.5	100
2.500"	-	81.5	170	78.10	17.5	19.0	38.0	21.5	103
-	65	83.5	165	80.10	17.5	19.0	38.0	21.5	105
2.625"	-	86.5	180	83.10	17.5	19.0	38.0	21.5	110
2.750"	70	88.5	180	85.10	17.5	19.0	38.0	21.5	120
2.875"	-	98.0	190	98.0	17.5	20.5	41.5	24.0	123
3.000"	75	100.0	190	100.0	17.5	20.5	41.5	24.0	125
3.125"	-	105.0	190	105.0	17.5	20.5	41.5	24.0	130
-	80	105.0	190	105.0	17.5	20.5	41.5	24.0	130
3.250"	-	108.0	220	108.0	17.5	20.5	41.5	24.0	133
3.375"	85	110.0	220	110.0	21.5	20.5	41.5	24.0	135
3.500"	90	115.0	220	115.0	21.5	20.5	41.5	24.0	140
3.625"	-	117.0	220	117.0	21.5	20.5	41.5	24.0	142
3.750"	95	120.0	220	120.0	21.5	20.5	41.5	24.0	145
3.875"	100	125.0	220	125.0	21.5	20.5	41.5	24.0	145
4.000"		125.0	220	125.0	21.5	20.5	41.5	24.0	150
4.125"	105	130.0	240	130.0	21.5	20.5	43.5	30.0	170
4.250"	110	135.0	240	135.0	21.5	20.5	43.5	30.0	170
4.375"	110	135.0	240	135.0	21.5	20.5	43.5	30.0	170
4.500"	115	140.0	250	140.0	21.5	20.5	43.5	30.0	180
4.625"	120	145.0	250	145.0	21.5	20.5	43.5	30.0	180
4.750"	120	145.0	250	145.0	21.5	20.5	43.5	30.0	180
4.875"	125	150.0	250	150.0	21.5	20.5	43.5	30.0	180
5.000"	130	155.0	260	155.0	21.5	20.5	43.5	30.0	190

S145 and S145Q Gasket Sizes

<73mm ID = ØD2 + 2.5mm
OD = L5 - 1.5mm

≥73mm ID = ØD2 + 3mm
OD = L5 - 1.5mm



Features:

- Stationary Design
- Monolithic Faces
- Cushioned Faces
- Pressure Balanced
- Springs outside the media

Materials

Stationary	- Car / SiC / SSiC / TC
Rotary	- SiC / SSiC / TC
Elastomer	- NBR / EPDM / Viton / Aflas / Perlast

Working Conditions

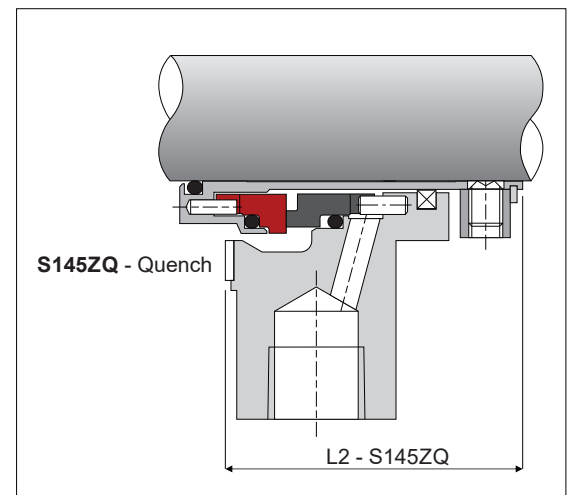
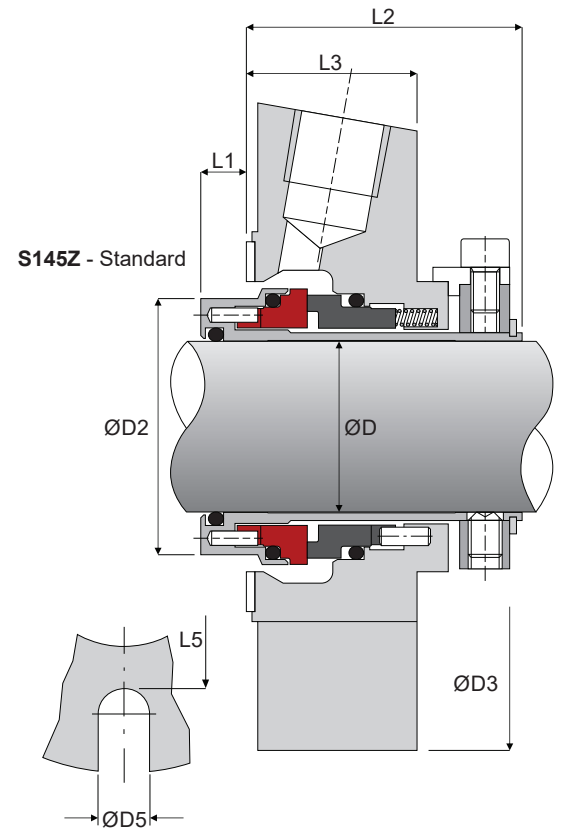
Pressure	< 28 bar
Speed	< 25 m/s
Temperature	up to 205°C



Gasket Sizes

<73mm	ID = $\text{ØD2} + 2.5\text{mm}$ OD = L5 - 1.5mm
≥73mm	ID = $\text{ØD2} + 3\text{mm}$ OD = L5 - 1.5mm

Shaft Size ØD		ØD2	ØD3	ØD5	L1	L2		L3	L5
Inches	mm					S145Z	S145ZQ		
1.000	25	40	104	12.5	8	49	55	30	62
1.125	28	43	104	12.5	8	49	55	30	62
1.250	30	45	104	12.5	8	49	55	30	67
	32	47	104	12.5	8	49	55	30	67
	33	47	104	12.5	8	49	55	30	67
1.375	35	50	110	12.5	8	49	55	30	70
1.500	38	53	125	14.7	8	49	55	30	75
1.625	40	55	125	14.7	8	49	55	30	75
	42	57	133	14.7	8	49	55	30	80
	43	58	133	14.7	8	49	55	30	80
1.750	45	60	140	14.7	8	49	55	30	82
1.875	48	63	140	14.7	8	49	55	30	82
2.000	50	65	140	14.7	8	49	55	30	87
2.125	53	68	150	17.5	8	49	55	30	92
	55	70	150	17.5	8	49	55	30	92
2.250	58	73	155	17.5	8	49	55	30	100
2.375	60	75	160	17.5	8	49	55	30	100
2.500	63	Use Standard S145 Seal for ANSI Stuffing Box							
2.625	65								
2.750	70								





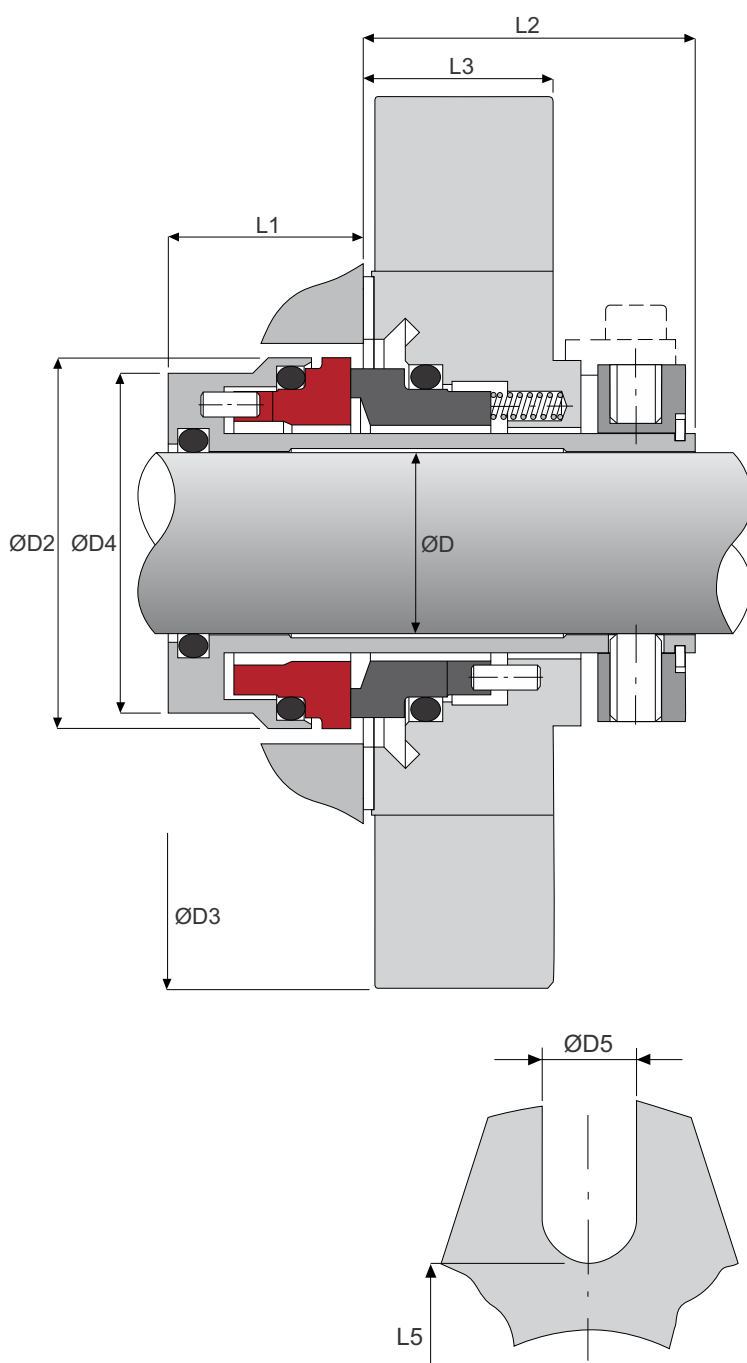
Materials

Stationary	- Car / SiC / SSiC / TC
Rotary	- SiC / SSiC / TC
Elastomer	- NBR / EPDM / Viton / Aflas

Working Conditions

Pressure	< 28 bar
Speed	< 35 m/s
Temperature	up to 205°C

Inches ØD	Metric ØD	ØD2	ØD3	ØD4	ØD5	L1	L2	L3	L5
1.000"	24	43.5	104	40.10	12.5	19.0	38	21.5	62
	25	43.5	104	40.10	12.5	19.0	38	21.5	62
1.125"	28	46.5	104	43.10	12.5	19.0	38	21.5	62
	30	48.5	104	45.10	12.5	19.0	38	21.5	67
1.250"	32	50.5	104	47.10	12.5	19.0	38	21.5	67
	33	50.5	104	47.10	12.5	19.0	38	21.5	67
1.375"	35	53.5	115	50.10	12.5	19.0	38	21.5	70
1.500"	38	56.5	125	53.10	14.7	19.0	38	21.5	75
	40	58.5	125	55.10	14.7	19.0	38	21.5	75
1.625"	42	60.5	133	57.10	14.7	19.0	38	21.5	81
	43	61.5	133	58.10	14.7	19.0	38	21.5	81
1.750"	45	63.5	133	60.10	14.7	19.0	38	21.5	81
1.875"	48	66.5	140	63.10	14.7	19.0	38	21.5	87
2.000"	50	68.5	140	65.10	14.7	19.0	38	21.5	87
2.125"	53	71.5	150	68.10	17.5	19.0	38	21.5	92
	55	73.5	150	70.10	17.5	19.0	38	21.5	92
2.250"	58	76.5	160	73.10	17.5	19.0	38	21.5	100
2.375"	60	78.5	160	75.10	17.5	19.0	38	21.5	100
2.500"		81.5	165	78.10	17.5	19.0	38	21.5	106
	65	83.5	165	80.10	17.5	19.0	38	21.5	106
2.625"		84.5	165	81.10	17.5	19.0	38	21.5	106
2.750"	70	88.5	180	85.10	17.5	19.0	38	21.5	120





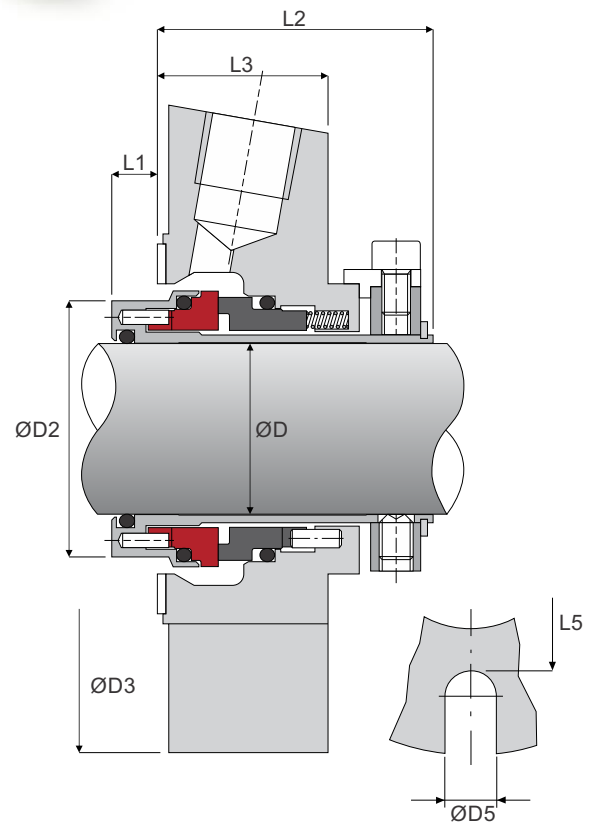
Materials

Stationary	- Car / SiC / SSiC / TC
Rotary	- SiC / SSiC / TC
Elastomer	- NBR / EPDM / Viton / Aflas / FFKM

Working Conditions

Pressure	< 28 bar
Speed	< 25 m/s
Temperature	up to 205°C

Shaft Size ØD		ØD2	ØD3	ØD5	L1	L2	L3	L5
Inches	mm							
1.000	25	40	104	12.5	8	49	30	62
1.125	28	43	104	12.5	8	49	30	62
1.250	30	45	104	12.5	8	49	30	67
	32	47	104	12.5	8	49	30	67
	33	47	104	12.5	8	49	30	67
1.375	35	50	110	12.5	8	49	30	70
1.500	38	53	125	14.7	8	49	30	75
1.625	40	55	125	14.7	8	49	30	75
	42	57	133	14.7	8	49	30	80
	43	58	133	14.7	8	49	30	80
1.750	45	60	140	14.7	8	49	30	82
1.875	48	63	140	14.7	8	49	30	82
2.000	50	65	140	14.7	8	49	30	87
2.125	53	68	150	17.5	8	49	30	92
	55	70	150	17.5	8	49	30	92
2.250	58	73	155	17.5	8	49	30	100
2.375	60	75	160	17.5	8	49	30	100
2.500	63	Use Standard S145 Seal for ANSI Stuffing Box						
2.625	65							
2.750	70							



Gasket Sizes

<73mm ID = ØD2 + 2.5mm
OD = L5 - 1.5mm

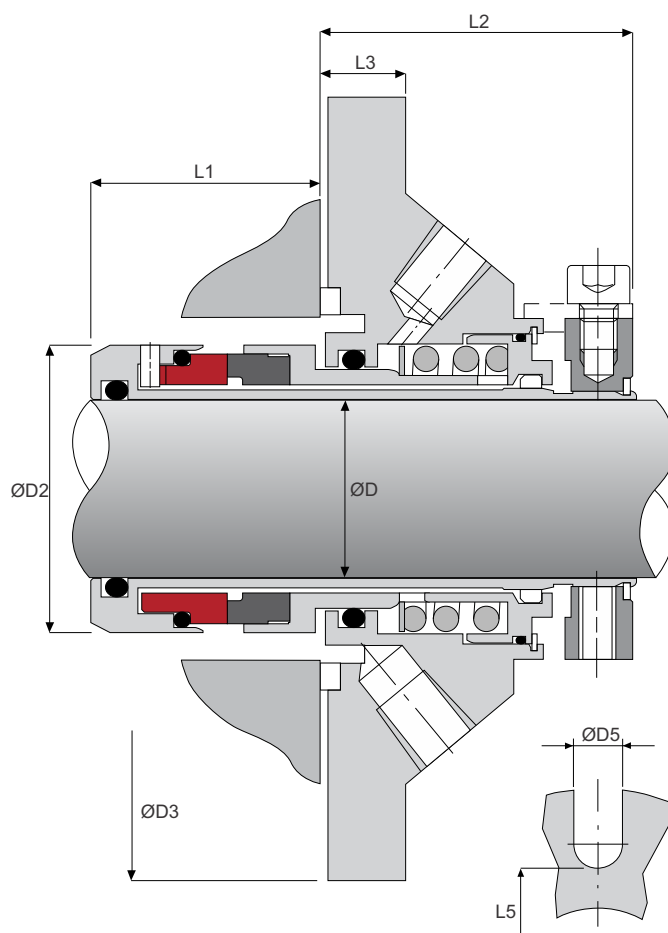
≥73mm ID = ØD2 + 3mm
OD = L5 - 1.5mm

Materials

Stationary	- Car, Sic, SSic, TC
Rotary	- Sic, SSic, TC
Elastomer	- NBR, EPDM, Viton, Aflas

Working Conditions

Pressure	< 21 bar
Speed	< 25 m/s
Temperature	up to 205°C



Seal Size ØD	Code	ØD2	ØD3	ØD5	L1	L2	L3	L5	S-Box Bore	
									Min	Max
25	0250	39.7	112	12	36	48.0	12	58.0	41.0	47.5
28	0280	42.7	116	12	36	48.0	12	61.0	44.0	50.5
30	0300	44.2	117	12	36	48.0	12	63.0	46.0	52.5
32	0320	46.2	119	12	36	48.0	12	65.0	48.0	54.5
33	0330	49.2	122	12	36	48.0	12	68.0	51.0	57.5
35	0350	49.2	122	12	36	48.0	12	68.0	51.0	57.5
38	0380	55.2	128	12	38	48.0	12	74.0	57.0	63.5
40	0400	58.2	136	14	38	48.0	12	76.5	60.0	66.5
43	0430	62.2	140	14	38	48.0	12	81.0	63.5	70.0
45	0450	62.2	140	14	38	48.0	12	81.0	63.5	70.0
48	0480	65	145	14	38	50.0	13	84.0	66.8	73.0
50	0500	68.2	150	14	38	50.0	13	87.0	70.0	76.5
53	0530	71.1	155	14	38	50.0	13	91.0	73.0	79.5
55	0550	71.1	155	14	38	50.0	13	91.0	73.0	79.5
60	0600	77.7	165	14	38	50.0	13	98.5	79.4	85.5
65	0650	87.9	190	17.5	44	57.0	13	111.5	90.0	96.5
70	0700	93.7	200	17.5	44	57.0	13	118.5	95.0	101.4
75	0750	99.9	205	17.5	44	57.0	13	125.0	101.6	108.0
80	0800	106.2	210	17.5	44	57.0	13	131.5	108.0	114.5
85	0850	109	240	17.5	46	60.5	13	138.0	111.0	124.0
90	0900	115.5	275	22	46	62.5	16	146.0	117.0	131.0
95	0950	118.5	275	22	46	62.5	16	146.0	120.5	131.0
100	1000	125	280	22	46	62.5	16	152.0	127.0	136.5

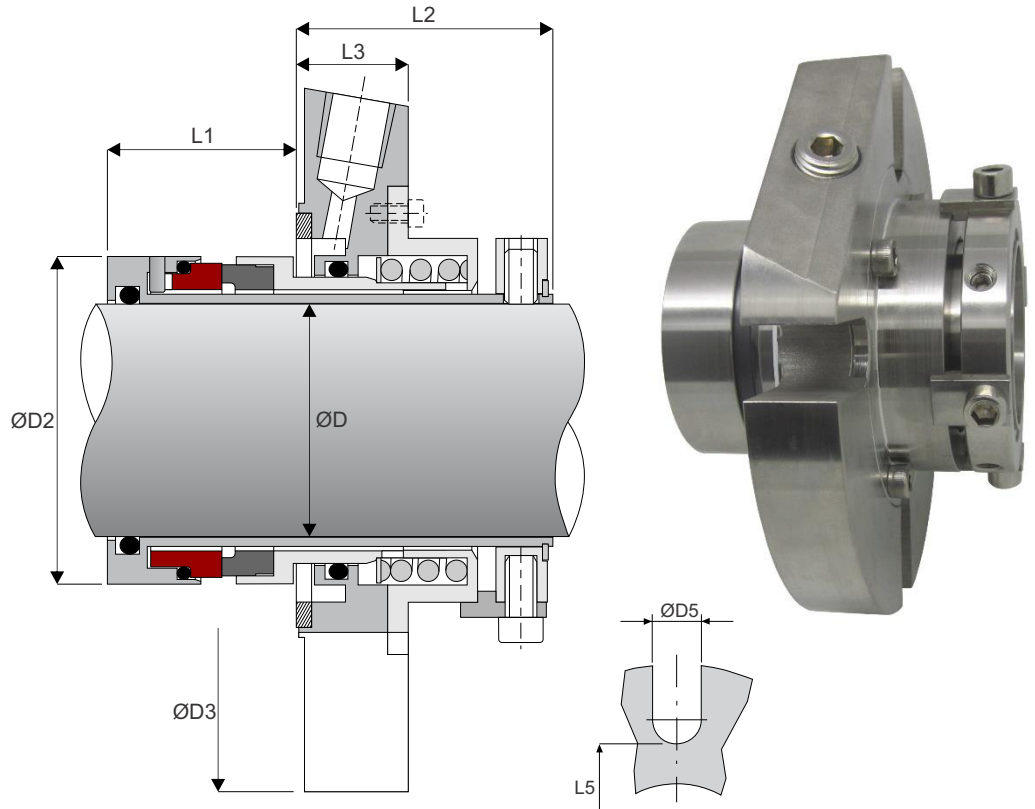
Materials

Stationary - Car, Sic, SSic, TC
 Rotary - Sic, SSic, TC
 Elastomer - NBR, EPDM, Viton, Aflas

Working Conditions

Pressure < 21 bar
 Speed < 25 m/s
 Temperature up to 205°C

Motion tolerance:
 <75mm - 1.5mm in either direction
 ≥75mm - 3mm in either direction



Seal Size ØD	Code	ØD2	ØD3	ØD5	L1	L2	L3	L5	S-Box Bore	
									Min	Max
25	0250	39.7	112	12.0	30	54.0	21.5	58.0	41.0	47.5
28	0280	42.7	116	12.0	30	54.0	21.5	61.0	44.0	50.5
30	0300	44.2	117	12.0	30	54.0	21.5	63.0	46.0	52.5
32	0320	46.2	119	12.0	30	54.0	21.5	65.0	48.0	54.5
33	0330	49.2	122	12.0	30	54.0	21.5	68.0	51.0	57.5
35	0350	49.2	122	12.0	30	54.0	21.5	68.0	51.0	57.5
38	0380	55.2	128	12.0	32	54.0	21.5	74.0	57.0	63.5
40	0400	58.2	136	14.0	32	54.0	21.5	76.5	60.0	66.5
43	0430	62.2	140	14.0	32	54.0	21.5	81.0	63.5	70.0
45	0450	62.2	140	14.0	32	54.0	21.5	81.0	63.5	70.0
48	0480	65.0	145	14.0	32	56.0	21.5	84.0	66.8	73.0
50	0500	68.2	150	14.0	32	56.0	21.5	87.0	70.0	76.5
53	0530	71.1	155	14.0	32	56.0	21.5	91.0	73.0	79.5
55	0550	71.1	155	14.0	32	56.0	21.5	91.0	73.0	79.5
60	0600	77.7	165	14.0	32	56.0	21.5	98.5	79.4	85.5
65	0650	87.9	190	17.5	38	63.0	21.5	111.5	90.0	96.5
70	0700	93.7	200	17.5	38	63.0	21.5	118.5	95.0	101.4
75	0750	99.9	205	17.5	38	63.0	24.0	125.0	101.6	108.0
80	0800	106.2	210	17.5	38	63.0	24.0	131.5	108.0	114.5
85	0850	109.0	240	17.5	40	66.5	24.0	138.0	111.0	124.0
90	0900	115.5	275	22.0	40	68.5	24.0	146.0	117.0	131.0
95	0950	118.5	275	22.0	40	68.5	24.0	146.0	120.5	131.0
100	1000	125.0	280	22.0	40	68.5	24.0	152.0	127.0	136.5



S1502

Materials

Stationary - SiC / SSiC / TC

Rotary - Car / SiC / SSiC / TC

Elastomer - EPDM / Viton

Working Conditions

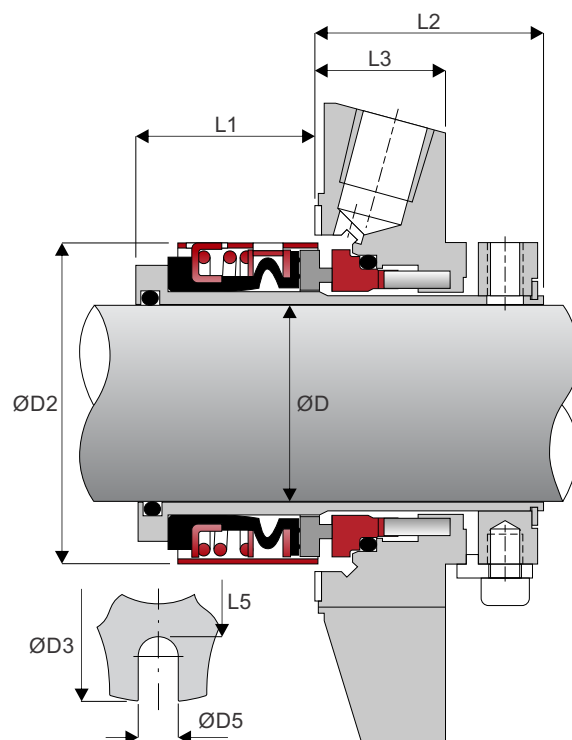
Pressure up to 28 bar

Speed ≤ 12 m/s

Temperature $\leq 150^{\circ}\text{C}$

Shaft Movement

Axial $\pm 1.5\text{mm}$ (3mm Total)



Shaft ØD		ØD2	ØD3	ØD5	L1	L2	L3	L5
Inches	Metric							
1.000"	24	44.0	105	12.5	33.7	38.0	21.5	62
	25							
1.125"	28	47.0	105	12.5	33.2	38.0	21.5	62
	30	49.0	105	12.5	33.7	38.0	21.5	65
1.250"	32	54.0	105	12.5	35.2	38.0	21.5	67
	33							
1.375"	35	56.0	115	12.5	35.2	38.0	21.5	70
1.500"	38	59.0	125	14.7	35.2	38.0	21.5	75
	40	61.0	125	14.7	35.2	38.0	21.5	75
1.625"	42	64.0	133	14.7	35.2	38.0	21.5	80
	43							
1.750"	45	66.0	140	14.7	37.2	38.0	21.5	81
1.875"	48	69.0	140	14.7	37.7	38.0	21.5	84
2.000"	50	71.0	140	14.7	37.7	38.0	21.5	86
2.125"	53	78.0	150	17.5	42.2	38.0	21.5	92
	55	80.0	150	17.5	41.7	38.0	21.5	92
2.250"	58	83.0	160	17.5	41.9	38.0	21.5	100
2.375"	60	85.0	160	17.5	41.7	38.0	21.5	100
2.500"	63	88.0	165	17.5	42.2	38.0	21.5	109
2.625"	65	89.0	165	17.5	48.2	38.0	21.5	109
2.750"	68	96.0	165	17.5	49.2	38.0	21.5	109
	70							
2.875"	75	104	190	17.5	50.2	41.5	24.0	125
3.000"								
3.125"	80	108	190	17.5	50.7	41.5	24.0	130
3.250"	85	114	220	21.5	55.7	41.5	24.0	135
3.375"								
3.500"	90	118	220	21.5	55.7	41.5	24.0	140
3.625"	95	124	220	21.5	55.7	41.5	24.0	145
3.750"								