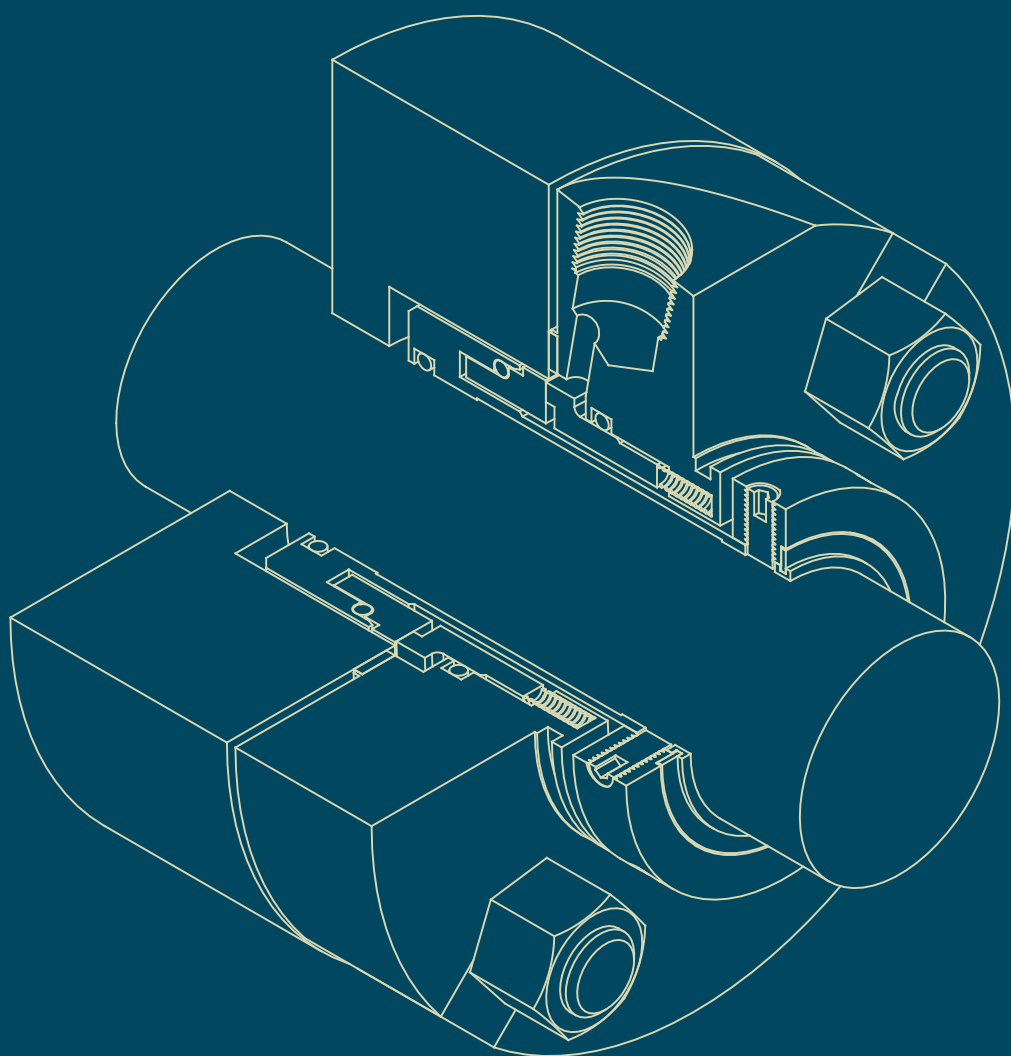




Mechanical Seals Product Catalog

YT 210/212/213/214/215

ELASTOMER BELLOWS SEALS



Technical features

- Single seal
- Unbalanced
- Single spring
- Elastomer bellows
- Bayonet drive
- To DIN 24960

Operating limits

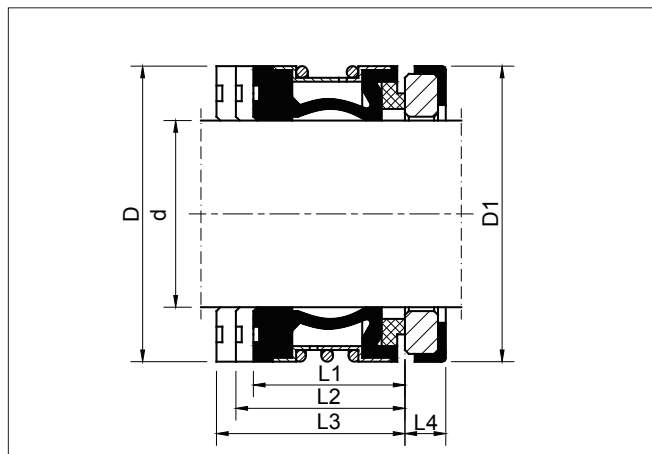
- $d_1 = 10 - 100 \text{ mm}$, 0.500" - 3.000"
- $p_1 = 1.8 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 15 \text{ m/s}$

Materials

- Rotary faces: carbon graphite, silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, silicon carbide, tungsten carbide
- Bellows: Neoprene, NBR, FPM, EPDM
- Springs, drive bands: AISI 304, 316
- Secondary seals: CR, NBR, FPM, EPDM

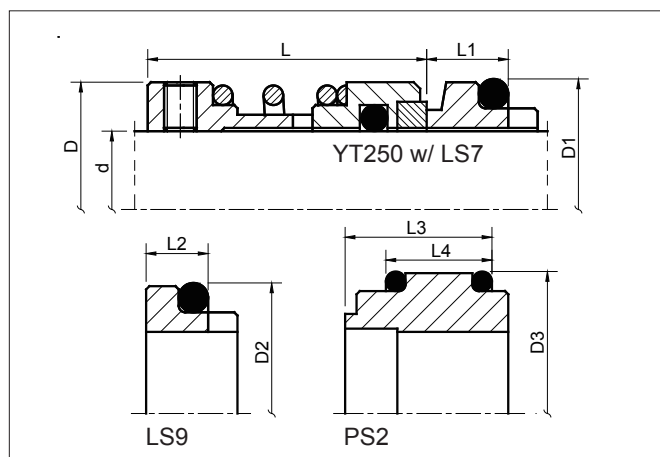
Stationary seats

- CS6 for YT210/212/213
- CS2 (standard) and OS1 for YT214/215



YT210 YT212 YT213					CS6		YT214 YT215			
d	D	L1	L2	L3	D1	L4	d	D	L1	L2
10	20	15	27.5	35.0	21	5	0.500	0.945	0.591	0.812
12	22	15	26.5	34.0	23	6	0.625	1.024	0.591	0.875
14	24	15	29.0	34.0	25	6	0.750	1.260	0.787	0.875
15	25	15	29.0	34.0	26	6	0.875	1.417	0.787	0.937
16	26	15	29.0	34.0	27	6	1.000	1.535	0.787	1.000
18	32	20	31.5	39.0	33	6	1.125	1.654	1.024	1.062
20	34	20	31.5	39.0	35	6	1.250	1.811	1.024	1.062
22	36	20	31.5	39.0	37	6	1.375	1.929	1.024	1.125
24	38	20	34.0	44.0	39	6	1.500	2.126	1.181	1.187
25	39	20	34.0	44.0	40	6	1.625	2.205	1.181	1.375
28	42	26	36.5	44.0	43	6	1.750	2.402	1.181	1.375
30	44	26	35.5	43.0	45	7	1.875	2.520	1.181	1.500
32	46	26	35.5	48.0	48	7	2.000	2.598	1.181	1.500
33	47	26	35.5	48.0	48	7	2.125	2.717	1.181	1.687
35	49	26	34.5	47.0	50	8	2.250	3.031	1.299	1.687
38	54	30	37.0	47.0	56	8	2.375	3.150	1.299	1.812
40	56	30	37.0	47.0	58	8	2.500	3.268	1.299	1.812
43	59	30	37.0	52.0	61	8	2.625	3.465	1.299	1.937
45	61	30	37.0	52.0	63	8	2.750	3.504	1.299	1.937
48	64	30	35.0	50.0	66	10	2.875	3.780	1.299	2.062
50	66	30	37.5	50.0	70	10	3.000	3.898	1.575	2.062
53	69	30	37.5	60.0	73	10				
55	71	30	37.5	60.0	75	10				
58	78	33	42.5	60.0	78	10				
60	80	33	40.5	58.0	80	12				
63	83	33	40.5	58.0	83	12				
65	85	33	40.5	68.0	85	12				
68	88	33	40.5	68.0	90	12				
70	90	33	48.0	68.0	92	12				
75	99	40	48.0	68.0	97	12				
80	104	40	47.5	77.5	105	14				
85	109	40	47.5	77.5	110	14				
90	114	40	52.5	77.5	115	14				
95	119	40	52.5	77.5	120	14				
100	124	40	52.5	77.5	125	14				

YT212 w/CS6 and YT213 w/CS6 conform to DIN 24960 L_{IK} and L_{IN} respectively.



YT250				LS7		LS9		PS2		
d	d (in)	D	L	D1	L1	D2	L2	D3	L3	L4
20	0.750	34	41	35	13	33.32	6.2	42	23	18
22	-	36	41	37	13	34.93	6.2	44	23	18
24	0.875	38	43	39	13	-	-	46	23	18
25	1.000	39	43	40	13	39.67	7.2	47	23	18
28	1.125	42	45	43	13	42.88	9.2	50	23	18
30	-	44	45	45	13	44.45	9.2	52	23	18
32	1.250	46	45	48	13	46.02	9.2	54	23	18
33	-	47	45	48	13	46.02	9.2	55	23	18
35	1.375	49	49	50	13	49.20	9.2	57	23	18
38	1.500	54	53	56	13	52.37	9.2	64	25	20
40	-	56	55	58	13	53.98	9.2	66	25	20
42	-	58	55	61	13	55.58	9.2	69	25	20
43	1.625	59	55	61	13	55.58	9.2	69	25	20
45	1.750	61	55	63	13	58.72	9.2	71	25	20
48	1.875	64	55	66	13	63.50	9.2	74	25	20
50	2.000	66	60	70	13	65.07	9.2	76	25	20
53	2.125	69	61	73	13	66.68	9.2	79	25	20
55	-	71	61	75	13	69.85	9.2	81	25	20
58	2.250	76	63	78	16	73.03	9.2	89	28	22
60	2.375	78	63	80	16	76.20	9.2	91	28	22
63	2.500	81	63	84	16	79.38	9.2	94	28	22
65	-	84	67	85	16	80.98	9.2	96	28	22
-	2.625	86	67	-	-	-	-	-	-	-
68	-	87	67	90	16	82.55	9.2	99	30	24
70	2.750	90	68	92	16	85.73	9.2	101	30	24
-	2.875	93	72	-	-	-	-	-	-	-
75	3.000	95	72	97	16	90.47	9.2	110	30	24
80	3.125	100	72	105	16	98.43	9.2	115	31	25
-	3.250	103	77	-	-	-	-	-	-	-
85	3.375	107	77	110	16	104.77	9.2	120	31	25
90	3.500	112	77	115	16	109.52	9.2	125	31	25
-	3.625	114	77	-	-	-	-	-	-	-
95	3.750	119	82	120	16	114.30	9.2	130	31	25
-	3.875	120	82	-	-	-	-	-	-	-
100	4.000	124	82	125	16	119.07	9.2	135	31	25

Dimensions in mm unless specified.

YT 250

SINGLE COIL SPRING O-RING MOUNTED SEAL



Technical features

- Single coil spring
- Unbalanced
- Bi-directional
- Bayonet drive
- To DIN 24960

Operating limits

- $d_1 = 20 - 100 \text{ mm}, 0.750'' - 4.000''$
- $p_1 = 1.2 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 20 \text{ m/s}$

Materials

- Rotary faces: silicon carbide, tungsten carbide
- Stationary seats: carbon, silicon carbide, tungsten carbide
- Springs, other metal components: AISI 304, 316
- Secondary seals: NBR, FPM, EPDM

Stationary seats

- LS7 (monolithic) / LS7S (inserted) for metric shaft sizes
- LS9 (monolithic) for metric shaft sizes
- PS2 (monolithic) / PS2S (inserted) for metric shaft sizes
- OS1 for imperial shaft sizes

YT 260/261

SINGLE COIL SPRING SEALS



Technical features

- Single coil spring
- Unbalanced
- Bi-directional
- Positive screw drive
- YT260 with O-ring mounted
- YT261 with PTFE wedge seal ring

Operating limits

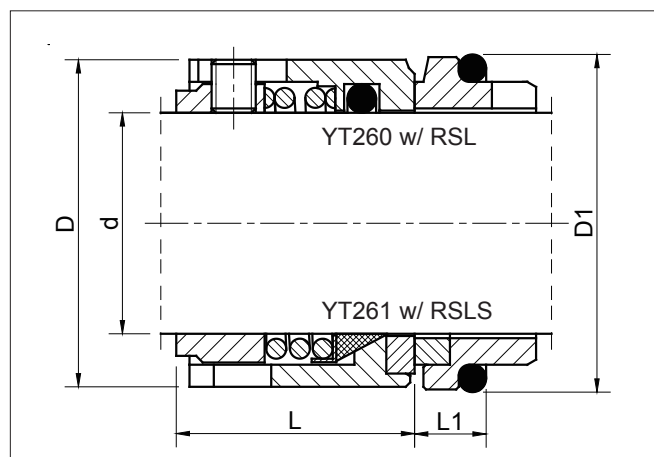
- $d_1 = 16 - 100 \text{ mm}$
- $p_1 = 1.2 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 15 \text{ m/s}$

Materials

- Rotary faces: stainless steel, silicon carbide, tungsten carbide
- Stationary seats: carbon, silicon carbide, tungsten carbide
- Springs, other metal components: AISI 304, 316
- Secondary seals: EPDM, FEP, FPM, FEPM, NBR

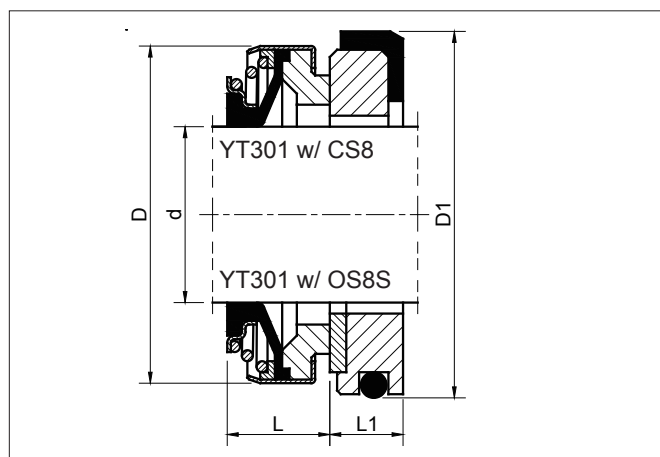
Stationary seats

- RSS (monolithic short seat)
- RSL (monolithic long seat w/ anti-rotation pin slot)
- RSLS (face shrink-fitted w/ anti-rotation pin slot)
- USS (monolithic short seat, to DIN 24960)
- USL (monolithic long seat w/ anti-rotation pin slot, to DIN 24960)
- USLS (face shrink-fitted w/ anti-rotation pin slot, to DIN 24960)



YT260/261			RSS / RSL / RSLS	
d	D	L	D1	L1
16	26	23	26.9	7.0
18	29	24	30.9	8.0
19	30	25	30.9	8.0
20	30	25	30.9	8.0
22	34	25	35.4	8.0
24	35	27	35.4	8.0
25	37	27	38.2	8.5
28	42	29	43.3	9.0
30	45	29	43.3	9.0
32	45	29	43.3	9.0
33	48	33	53.5	11.5
35	50	35	53.5	11.5
38	54	35	60.5	11.5
40	56	35	60.5	11.5
42	59	35	60.5	11.5
43	60	35	60.5	11.5
45	64	37	65.5	11.5
48	67	37	65.5	11.5
50	69	39	72.5	11.5
53	74	39	72.5	11.5
55	74	39	72.5	11.5
58	80	40	-	11.5
60	80	40	79.3	11.5
63	87	41	-	11.5
65	87	41	84.5	11.5
68	92	41	-	11.5
70	92	41	89.5	11.5
75	97	44	94.5	11.5
80	102	48	99.5	11.5
85	110	48	105.5	13.5
90	117	48	111.5	13.5
95	122	53	116.5	13.5
100	127	56	119.5	13.5

Dimensions in mm.



YT310			CS8 / OS8	
d	D	L	D1	L1
8a	20	11	26.0	4.0
8b	20	11	22.0	4.0
8c	24	11	26.0	8.0
9	24	11	26.0	8.0
10	24	11	26.0	8.0
11	24	11	26.0	8.0
12a	24	13	26.0	5.5
12b	24	13	26.0	8.0
12c	32	13	35.0	8.0
13	24	13	26.0	8.0
14a	28	13	25.0	7.0
14b	28	13	28.5	8.0
14c	32	13	29.5	8.0
14d	32	13	35.0	8.0
15a	32	13	29.5	8.0
15b	32	13	38.0	8.0
15c	35	13	38.0	8.0
16a	32	13	29.5	8.0
16b	35	13	38.0	8.0
16c	39	13	38.0	8.0
16d	39	13	42.0	8.0
17	39	13	42.0	8.0
18	39	13	42.0	8.0
19	39	13	42.0	8.0
20a	39	13	42.0	8.0
20b	42	13	45.0	10.0
22	42	13	45.0	10.0
23	47	14	50.0	10.0
24	47	14	50.0	10.0
25a	42	14	50.0	10.0
25b	47	14	50.0	10.0
26	47	14	50.0	10.0
28	54	15	57.0	10.0
30	54	15	57.0	10.0
32	54	15	57.0	10.0
35	60	16	63.0	10.0
38	65	18	68.0	12.0
40	65	18	68.0	12.0
45	70	20	73.0	12.0
50	85	23	88.0	15.0
55	85	23	88.0	15.0
60	105	30	110.0	15.0
65	105	30	110.0	15.0
70	105	32	110.0	15.0

Dimensions in mm.

YT 301

COMPACT ELASTOMER BELLOWS SEAL



Technical features

- Single seal
- Unbalanced
- Spring enclosed
- Bi-directional
- Elastomer bellows

Operating limits

- $d_1 = 8 - 70 \text{ mm}$
- $p_1 = 0.6 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 10 \text{ m/s}$

Materials

- Rotary faces: carbon, phenolic graphite, silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, silicon carbide, tungsten carbide
- Bellows, secondary seals: CR, EPDM, FPM, FEPM, HNBR, NBR
- Springs, collars, lock rings: AISI 304, 316

Stationary seat

- CS8 (standard)
- OS8 (monolithic) / OS8S (inserted)

YT 305/306/315/316

CONICAL SPRING O-RING MOUNTED SEALS



Technical features

- Single seal
- Unbalanced
- Uni-directional
- Conical spring
- YT315/316 to DIN 24960
- YT305N/306N/315N/316N with narrow rotary face identical to RSS stationary face

Operating limits

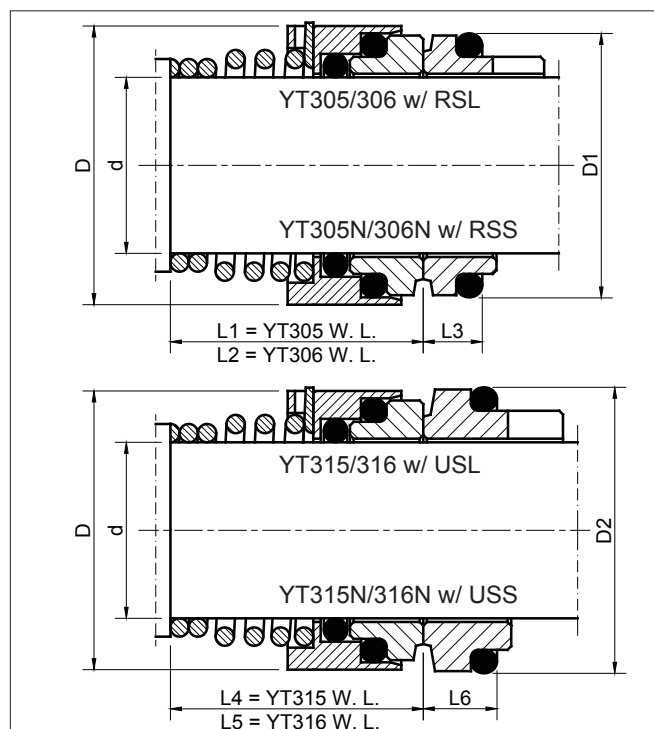
- $d_i = 10 - 100 \text{ mm}$
- $p_1 = 1.6 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 15 \text{ m/s}$

Materials

- Rotary faces: alumina ceramic, Cr-Mo steel, silicon carbide, tungsten carbide
- Stationary seats: carbon graphite, silicon carbide, tungsten carbide
- Springs, face housings: AISI 304, 316
- Secondary seals: EPDM, FEP, FPM, FEPM, NBR

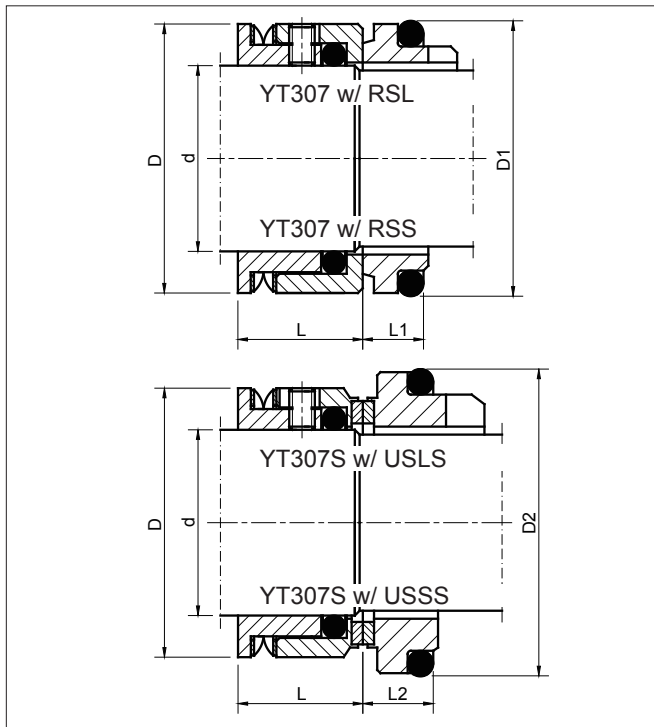
Stationary seats

- RSS (monolithic short seat), standard for YT305/305N and YT306/306N
- RSL (monolithic long seat w/ anti-rotation pin slot)
- RSLs (face shrink-fitted w/ anti-rotation pin slot)
- USS (monolithic short seat, to DIN 24960), standard for YT315/315N and YT316/316N
- USL (monolithic long seat w/ anti-rotation pin slot, to DIN 24960)
- USLS (face shrink-fitted w/ anti-rotation pin slot, to DIN 24960)



		YT305	YT306	YT315	YT316	RS-		US-	
d	D	L1	L2	L4	L5	D1	L3	D2	L6
10	19.3	20	15	15	25.5	18.1	5.5	21	7
12	21.8	22	18	18	25.5	20.6	5.5	23	7
14	24.4	27	22	22	28.0	23.1	6.0	25	7
15	28.5	27	22	23	28.0	26.9	7.0	27	7
16	28.5	28	23	23	28.0	26.9	7.0	27	7
18	32.5	30	24	24	27.5	30.9	8.0	33	10
19	32.5	30	25	25	27.5	30.9	8.0	35	10
20	32.5	30	25	25	27.5	30.9	8.0	35	10
22	37.0	30	25	25	27.5	35.4	8.0	37	10
24	37.0	32	27	27	30.0	35.4	8.0	39	10
25	40.6	33	27	27	30.0	38.2	8.5	40	10
28	46.5	36	29	29	32.5	43.3	9.0	43	10
30	46.5	37	30	30	32.5	43.3	9.0	45	10
32	46.5	37	30	30	32.5	43.3	9.0	48	10
33	56.5	48	39	39	32.5	53.5	11.5	48	10
35	56.5	48	39	39	32.5	53.5	11.5	50	10
38	56.5	48	39	42	32.0	60.5	11.5	56	13
40	63.5	48	39	42	32.0	60.5	11.5	58	13
43	63.5	48	39	47	32.0	60.5	11.5	61	13
45	68.5	51	41	47	32.0	65.5	11.5	63	13
48	68.5	51	41	47	32.0	65.5	11.5	66	13
50	74.5	55	45	46	33.5	72.5	11.5	70	14
53	74.5	57	47	56	33.5	72.5	11.5	73	14
55	74.5	57	47	56	33.5	72.5	11.5	75	14
58	82.9	61	49	56	38.5	79.3	11.5	78	14
60	82.9	61	49	56	38.5	79.3	11.5	80	14
63	88.1	63	51	56	38.5	84.5	11.5	83	14
65	88.1	63	51	66	38.5	84.5	11.5	85	14
68	93.1	63	51	64	36.5	89.5	11.5	90	16
70	93.1	63	51	64	44.0	89.5	11.5	92	16
75	98.1	68	57	64	44.0	94.5	11.5	97	16
80	103.5	70	59	72	42.0	99.5	11.5	105	18
85	109.5	72	59	72	42.0	105.5	13.5	110	18
90	115.5	75	62	72	47.0	111.5	13.5	115	18
95	123.0	75	62	72	47.0	116.5	13.5	120	18
100	129.0	85	75	72	47.0	119.5	13.5	125	18

Dimensions in mm.



YT307/307S			RS-		US-	
d	D	L	D1	L1	D2	L2
10	21	18.0	18.1	5.5	21	7
12	23	18.0	20.6	5.5	23	7
14	25	18.0	23.1	6.0	25	7
15	26	19.1	26.9	7.0	27	7
16	29	19.1	26.9	7.0	27	7
18	29	19.1	30.9	8.0	33	10
19	32	19.1	30.9	8.0	35	10
20	32	19.1	30.9	8.0	35	10
22	35	19.1	35.4	8.0	37	10
24	37	19.1	35.4	8.0	39	10
25	41	19.1	38.2	8.5	40	10
28	41	19.1	43.3	9.0	43	10
30	47	19.1	43.3	9.0	45	10
32	47	19.1	43.3	9.0	48	10
33	48	19.1	53.5	11.5	48	10
35	49	19.1	53.5	11.5	50	10
38	53	21.1	60.5	11.5	56	13
40	55	21.1	60.5	11.5	58	13
43	60	21.1	60.5	11.5	61	13
45	60	21.1	65.5	11.5	63	13
48	65	21.1	65.5	11.5	66	13
50	65	21.1	72.5	11.5	70	14
53	74	22.1	72.5	11.5	73	14
55	74	22.1	72.5	11.5	75	14
58	79	25.8	79.3	11.5	78	14
60	79	25.8	79.3	11.5	80	14
63	87	25.8	84.5	11.5	83	14
65	87	25.8	84.5	11.5	85	14
68	93	25.8	89.5	11.5	90	16
70	93	25.8	89.5	11.5	92	16
75	98	25.8	94.5	11.5	97	16
80	104	25.8	99.5	11.5	105	18
85	108	25.8	105.5	13.5	110	18
90	113	25.8	111.5	13.5	115	18
95	118	25.8	116.5	13.5	120	18
100	123	25.8	119.5	13.5	125	18

Dimensions in mm.

YT 307

COMPACT WAVE SPRING SEAL



Technical features

- Single seal
- Balanced
- Wave spring
- Bi-directional
- Short axial length
- Internal and external mounting allowed
- YT307S with carbide face shrink-fitted

Operating limits

- $d_1 = 10 - 100 \text{ mm}$
- $p_1 = 1.2 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 15 \text{ m/s}$

Materials

- Rotary faces: silicon carbide, tungsten carbide, AISI 304, AISI 316
- Stationary seats: silicon carbide, tungsten carbide, carbon graphite, PTFE (alumina-filled)
- Springs, collars, face housings: AISI 304, 316
- Secondary seals: EPDM, FEP, FPM, FEPM, NBR

Stationary seats

- RSS (monolithic short seat)
- RSL (monolithic long seat w/ anti-rotation pin slot)
- RSLS (face shrink-fitted w/ anti-rotation pin slot)
- USS (monolithic short seat, to DIN 24960)
- USL (monolithic long seat w/ anti-rotation pin slot, to DIN 24960)
- USLS (face shrink-fitted w/ anti-rotation pin slot, to DIN 24960)

YT 341/351/352

CONICAL SPRING O-RING MOUNTED SEALS



Technical features

- Single seal
- Unbalanced
- Uni-directional
- YT351/352 to DIN 24960
- YT341S/351S/352S with carbide face shrink-fitted

Operating limits

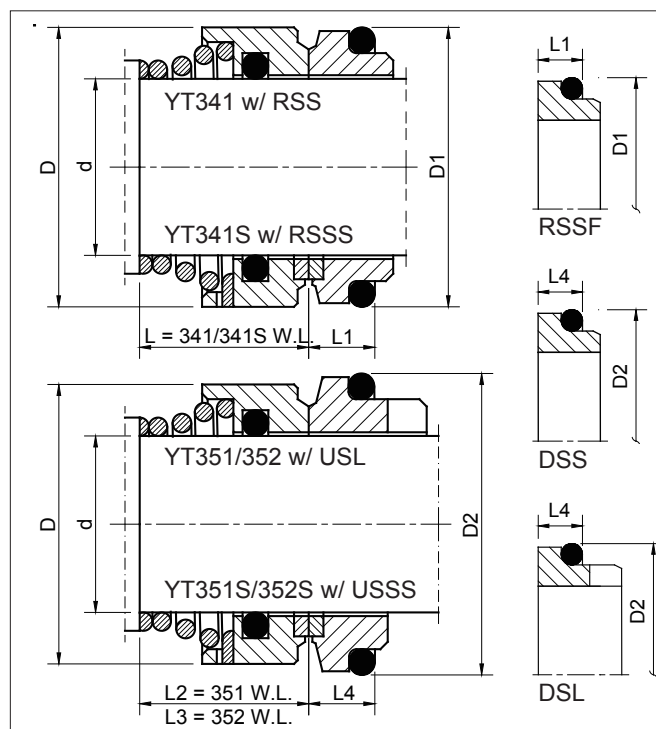
- $d_i = 8 - 100 \text{ mm}$
- $p_1 = 1.0 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 20 \text{ m/s}$

Materials

- Rotary faces: AISI 304, 316, silicon carbide, tungsten carbide
- Stationary seats: carbon graphite, silicon carbide, tungsten carbide
- Springs, face housings: AISI 304, 316
- Secondary seals: EPDM, FEP, FPM, FEPM, NBR

Stationary seats

- DSS (monolithic short seat w/ wide face, to DIN 24960)
- DSL (monolithic long seat w/ wide face and anti-rotation pin slot, to DIN 24960)
- RSS (monolithic short seat)
- RSSF (monolithic short seat w/ wide face)
- RSSS (face shrink-fitted short seat)
- RSL (monolithic long seat w/ anti-rotation pin slot)
- RLSL (face shrink-fitted w/ anti-rotation pin slot)
- USS (monolithic short seat, to DIN 24960)
- USL (monolithic long seat w/ anti-rotation pin slot, to DIN 24960)
- USSS (face shrink-fitted short seat, to DIN 24960)
- USLS (face shrink-fitted w/ anti-rotation pin slot, to DIN 24960)

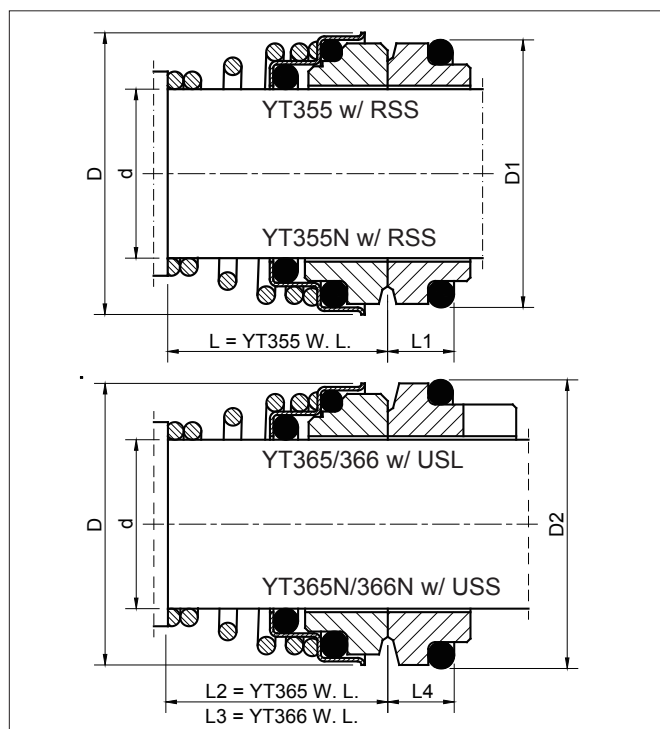


		YT341	YT351	YT352	RS-		DS-/US-	
d	D	L	L2	L3	D1	L1	D2	L4
8	16	15	-	-	17.1	5.5	-	-
10	20	15	15	32.5	18.1	5.5	21	7
12	22	18	18	32.5	20.6	5.5	23	7
14	24	22	22	35.0	23.1	6.0	25	7
15	24	22	-	-	26.9	7.0	-	-
16	26	23	23	35.0	26.9	7.0	27	7
17	26	23	-	-	26.9	7.0	-	-
18	32	24	24	37.5	30.9	8.0	33	10
19	32	25	-	-	30.9	8.0	-	-
20	34	25	25	37.5	30.9	8.0	35	10
22	36	25	25	37.5	35.4	8.0	37	10
24	38	27	27	40.0	35.4	8.0	39	10
25	39	27	27	40.0	38.2	8.5	40	10
26	39	27	-	-	38.2	8.5	-	-
28	42	29	29	42.5	43.3	9.0	43	10
30	44	30	30	42.5	43.3	9.0	45	10
32	46	30	30	42.5	43.3	9.0	48	10
33	47	39	39	42.5	53.5	11.5	48	10
35	49	39	39	42.5	53.5	11.5	50	10
38	54	39	42	45.0	60.5	11.5	56	13
40	56	39	42	45.0	60.5	11.5	58	13
42	57	39	-	-	60.5	11.5	-	-
43	57	39	47	45.0	60.5	11.5	61	13
45	61	41	47	45.0	65.5	11.5	63	13
48	64	41	47	45.0	65.5	11.5	66	13
50	66	45	46	47.5	72.5	11.5	70	14
53	69	45	56	47.5	72.5	11.5	73	14
55	71	47	56	47.5	72.5	11.5	75	14
58	76	47	56	52.5	-	11.5	78	14
60	80	49	56	52.5	79.3	11.5	80	14
63	81	49	56	52.5	-	11.5	83	14
65	85	51	66	52.5	84.5	11.5	85	14
68	87	51	64	52.5	-	11.5	90	16
70	90	51	64	60.0	89.5	11.5	92	16
75	99	57	64	60.0	94.5	11.5	97	16
80	104	59	72	60.0	99.5	11.5	105	18
85	109	59	72	60.0	105.5	13.5	110	18
90	114	62	72	65.0	111.5	13.5	115	18
95	119	62	72	65.0	116.5	13.5	120	18
100	124	75	72	65.0	119.5	13.5	125	18

Dimensions in mm.

YT 355/365/366

CONICAL SPRING O-RING MOUNTED SEALS



	YT355			YT365	YT366	RS-		US-	
d	D	L	L2	L3		D1	L1	D2	L4
10	20	15	15	32.5		18.1	5.5	21	7
11	22	18	-	-		20.6	5.5	-	-
12	22	18	18	32.5		20.6	5.5	23	7
13	25	22	-	-		23.1	6.0	-	-
14	25	22	22	35.0		23.1	6.0	25	7
15	29	22	-	-		26.9	7.0	-	-
16	29	23	23	35.0		26.9	7.0	27	7
17	29	23	-	-		26.9	7.0	-	-
18	33	24	24	37.5		30.9	8.0	33	10
19	33	25	-	-		30.9	8.0	-	-
20	33	25	25	37.5		30.9	8.0	35	10
22	38	25	25	37.5		35.4	8.0	37	10
24	38	27	27	40.0		35.4	8.0	39	10
25	40	27	27	40.0		38.2	8.5	40	10
28	46	29	29	42.5		43.3	9.0	43	10
30	46	30	30	42.5		43.3	9.0	45	10
32	46	30	30	42.5		43.3	9.0	48	10
33	48	39	39	42.5		53.5	11.5	48	10
35	50	39	39	42.5		53.5	11.5	50	10
38	55	39	42	45.0		60.5	11.5	56	13
40	55	39	42	45.0		60.5	11.5	58	13

Dimensions in mm.



Technical features

- Single seal
- Unbalanced
- Conical spring
- Uni-directional
- YT365/366 to DIN 24960
- YT355N/366N with narrow rotary face

Operating limits

- $d_1 = 10 - 40$ mm
- $p_1 = 1.0$ MPa
- $t = -35 - 160$ °C
- $v_g = 20$ m/s

Materials

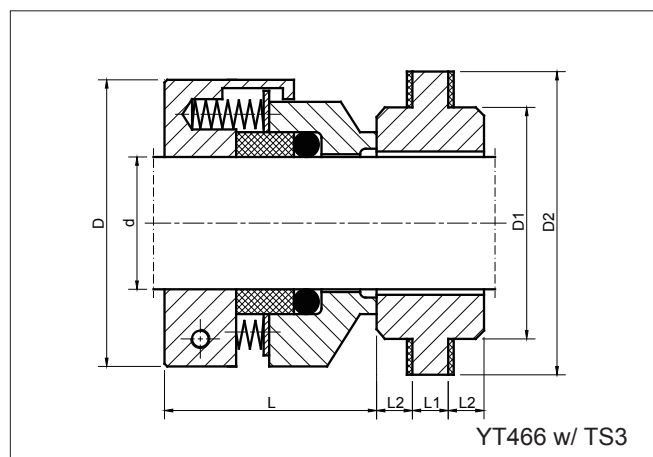
- Rotary faces: alumina ceramic, Cr-Mo steel, silicon carbide, tungsten carbide
- Stationary seats: carbon graphite, silicon carbide, tungsten carbide
- Springs, face housings: AISI 304, 316
- Secondary seals: EPDM, FEP, FPM, FEPM, NBR

Stationary seats

- RSS (monolithic short seat), standard for YT355(N)
- RSL (monolithic long seat w/ anti-rotation pin slot)
- RSLS (face shrink-fitted w/ anti-rotation pin slot)
- USS (monolithic short seat, to DIN 24960), standard for YT365(N) and YT366(N)
- USL (monolithic long seat w/ anti-rotation pin slot, to DIN 24960)
- USLS (face shrink-fitted w/ anti-rotation pin slot, to DIN 24960)

YT 466

MULTIPLE SPRINGS PTFE SEAL



Technical features

- Single seal
- Balanced
- Multiple springs
- Bi-directional
- Externally mounted

Operating limits

- $d_1 = 18 - 100 \text{ mm}, 0.750'' - 4.000''$
- $p_1 = 1.0 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 15 \text{ m/s}$

Materials

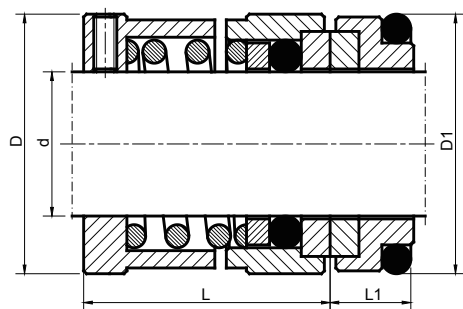
- Rotary faces: carbon graphite, silicon carbide
- Stationary seats: alumina ceramic, silicon carbide
- Springs, other matel components: AISI 304, 316
- Secondary seals: EPDM, FEP, FPM, FEPM, PTFE

Stationary seats

- Clamp seats: LS1, TS1, TS2, TS3 (standard), TS4

		YT466		TS3			
d (mm)	d (in)	D	L	D1	D2	L1	L2
18	0.750	44	38	36.4	47	8.0	4.8
20	-	46	38	39.6	50	8.0	4.8
22	0.875	48	38	39.6	50	8.0	4.8
24	-	50	38	42.7	53	8.0	4.8
25	1.000	52	38	42.7	53	8.0	4.8
28	1.125	55	38	50.7	63	11.0	8.0
30	-	58	38	53.9	66	11.0	8.0
32	1.250	60	38	53.9	66	11.0	8.0
33	-	60	38	57.0	69	11.0	8.0
35	1.375	62	38	57.0	69	11.0	8.0
38	1.500	65	38	63.4	76	11.0	8.0
40	1.625	68	38	66.5	79	11.0	8.0
43	-	70	38	69.7	82	11.0	8.0
45	1.750	72	42	69.7	82	11.0	8.0
48	-	75	42	79.3	95	14.3	9.5
50	2.000	78	42	79.3	95	14.3	9.5
53	2.125	80	42	82.4	98	14.3	9.5
55	2.250	80	42	85.6	101	14.3	9.5
58	-	83	42	88.8	106	14.3	9.5
60	2.375	86	42	88.8	106	14.3	9.5
63	2.500	90	42	91.9	108	14.3	9.5
65	2.625	93	42	95.1	111	14.3	9.5
68	-	98	42	98.3	114	14.3	9.5
70	2.750	98	42	98.3	114	14.3	9.5
75	3.000	105	42	103.1	119	14.3	9.5
80	3.250	109	42	114.2	130	14.3	9.5
85	3.500	114	42	120.5	136	14.3	9.5
90	-	120	42	126.9	142	14.3	9.5
95	3.750	125	42	126.9	142	14.3	9.5
100	4.000	130	42	133.2	149	14.3	9.5

Dimensions in mm unless specified.



YT524 w/ LS3

YT524			LS3/LS4	
d	D	L	D1	L1
30	50	48	50	19
35	55	48	55	19
40	60	50	60	22
45	65	50	65	22
50	70	54	70	27
55	75	54	75	27
60	80	54	80	27
70	92	54	92	27
90	114	58	114	29
100	125	65	125	32

Dimensions in mm.

YT 524

SINGLE COIL SPRING O-RING MOUNTED SEAL



Technical features

- Single seal
- Unbalanced
- Single spring
- Bi-directional
- Bayonet drive
- To DIN 24960

Operating limits

- $d_1 = 30 - 100 \text{ mm}$
- $p_1 = 1.2 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 20 \text{ m/s}$

Materials

- Rotary faces: silicon carbide, tungsten carbide
- Stationary seats: silicon carbide, tungsten carbide
- Springs, other metal components: AISI 304, 316
- Secondary seals: EPDM, FEP, FPM, FEPM

Stationary seats

- CS1
- LS3 (DIN Short)
- LS4 (DIN Long, standard)

YT 560

ELASTOMER DIAPHRAGM SEAL



Technical features

- Single seal
- Unbalanced
- Single spring
- Bi-directional
- Elastomer diaphragm

Operating limits

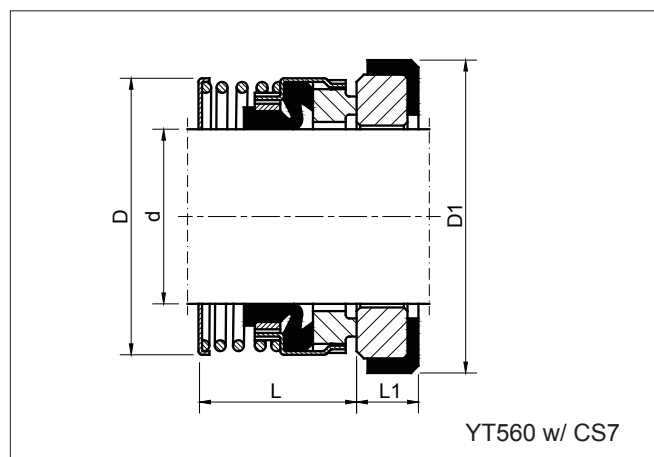
- $d_1 = 10 - 50 \text{ mm}$
- $p_1 = 0.5 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 16 \text{ m/s}$

Materials

- Rotary faces: carbon graphite, silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, silicon carbide, tungsten carbide
- Bellows, secondary seals: CR, EPDM, FPM, FEPM, HNBR, NBR
- Springs, other metal components: AISI 304

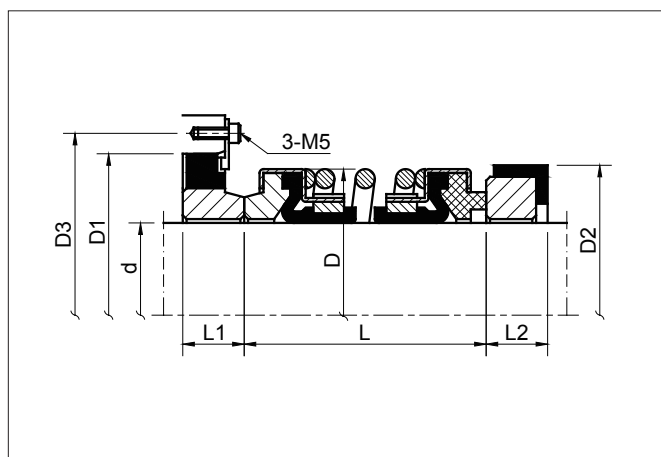
Stationary seats

- CS7



YT560			CS7	
d	D	L	D1	L1
10	20.6	16	24	7
11	21.8	16	24	7
12	21.8	17	26	7
13	26.4	17	26	7
14	26.4	18	28	7
15	26.4	18	28	7
16	29.5	19	32	8
17	29.5	19	32	8
18	29.5	18	35	8
19	29.5	18	35	8
20	31.6	20	38	8
22	33.6	20	40	8
25	39.6	20	44	9
28	45.0	21	46	9
30	46.6	22	50	9
32	46.6	24	54	9
35	50.8	26	58	10
38	54.3	27	60	10
40	57.3	28	64	10
45	61.3	30	66	10
50	67.8	32	72	10

Dimensions in mm.



YT562			YT562STAL		YT562STAU		D3
d	D	L	D1	L1	D2	L2	
15	27.0	26.0	30	5.0	30	5.0	-
16	27.0	26.0	30	5.0	30	5.0	-
20	34.0	32.5	44	8.5	38	8.0	60
25	39.5	34.5	50	8.0	44	8.5	60
30a	48.0	40.2	57	9.8	50	9.0	70
30b	48.0	40.7	57	9.8	44	8.5	70
35a	51.5	41.0	64	10.5	58	9.5	80
35b	51.5	41.0	64	10.5	54	9.5	80
35c	51.5	39.6	57	10.7	54	10.7	70
40a	57.0	42.5	70	12.0	64	10.0	85
40b	57.0	42.0	70	12.0	68	10.5	85
45a	62.9	43.0	70	12.0	66	10.0	90
45b	62.9	43.5	70	11.5	68	10.5	90

Dimensions in mm.

YT 562

ELASTOMER DIAPHRAGM DOUBLE SEAL



Technical features

- Double seal
- Unbalanced
- Bi-directional
- Elastomer diaphragm
- Retaining plate unavailable for 15 and 16 mm sizes

Operating limits

- $d_1 = 15 - 45 \text{ mm}$
- $p_1 = 0.5 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 16 \text{ m/s}$

Materials

- Rotary faces: carbon graphite, silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, silicon carbide, tungsten carbide
- Bellows, secondary seals: CR, EPDM, FPM, FEPM, HNBR, NBR
- Springs, other metal components: AISI 304

Stationary seats

- YT562STAL (rubber vulcanized)
- YT562STAU (cup mounted)

YT 610/612/613/614

ELASTOMER BELLOWS SEALS



Technical features

- Single seal
- Unbalanced
- Spring enclosed
- Elastomer bellows

Operating limits

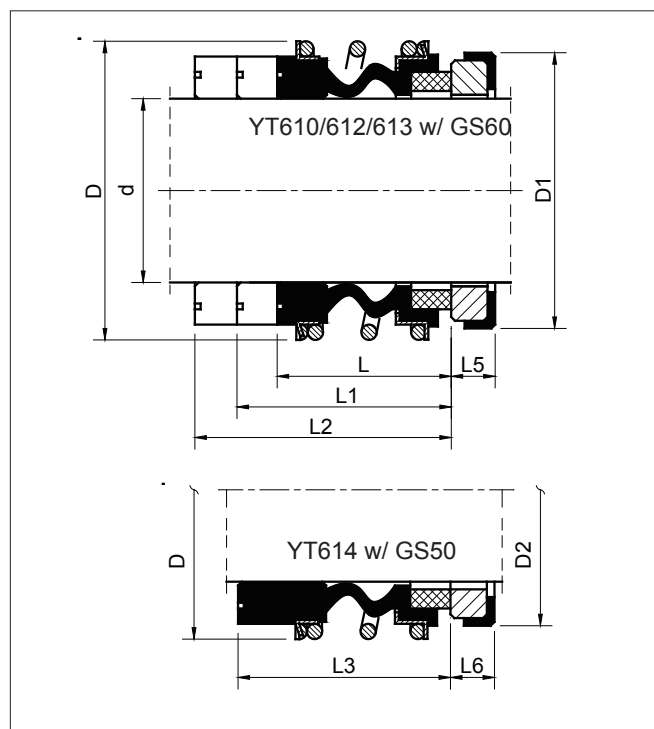
- $d_1 = 10 - 100 \text{ mm}$
- $p_1 = 1.2 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 10 \text{ m/s}$

Materials

- Rotary faces: silicon carbide, tungsten carbide, carbon graphite
- Stationary seats: silicon carbide, alumina ceramic, carbon graphite, Cr-Mo steel
- Bellows, secondary seals: CR, EPDM, FPM, FEPM, HNBR, NBR
- Springs, retaining plates: AISI 304, 316

Stationary seats

- GS60 (to DIN 24960), standard for YT610/612/613
- GS6, GS606, GS9 (to DIN 24960)
- GS50, standard for YT614
- GS4
- See page 46 for stationary dimensions

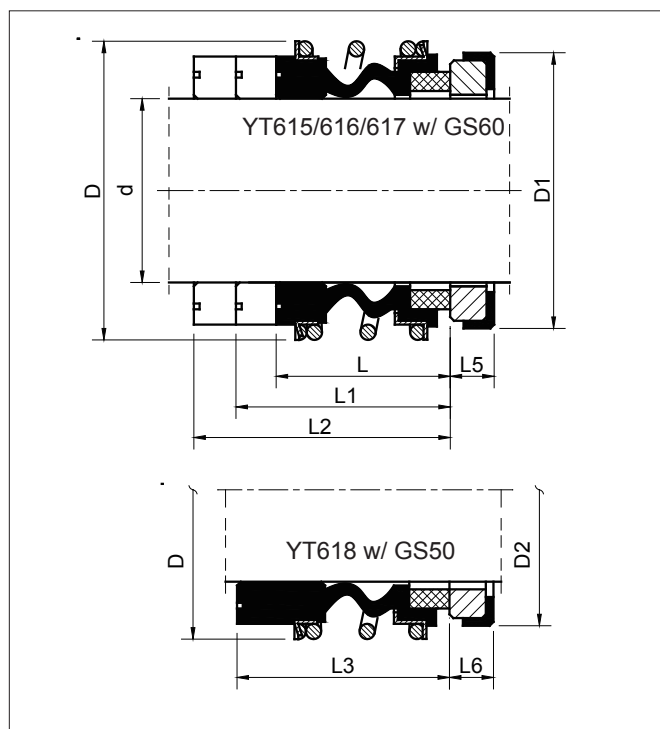


	YT610 YT612 YT613 YT614					GS60		GS50		
d	D	L	L1	L2	L3	D1	L5	D2	L6	
10	22.5	14.5	25.9	33.4	25.0	21	6.6	24.60	9.0	
12	25.0	15.0	25.9	33.4	25.0	23	6.6	27.80	9.0	
14	28.5	17.0	28.4	33.4	25.0	25	6.6	30.95	10.5	
15	28.5	17.0	28.4	33.4	25.0	27	6.6	30.95	10.5	
16	28.5	17.0	28.4	33.4	25.0	27	6.6	30.95	10.5	
18	32.0	19.5	30.0	37.5	25.0	33	7.5	34.15	10.5	
20	37.0	21.5	30.0	37.5	25.0	35	7.5	35.70	10.5	
22	37.0	21.5	30.0	37.5	25.0	37	7.5	37.30	10.5	
24	42.5	22.5	32.5	42.5	25.0	39	7.5	40.50	10.5	
25	42.5	23.0	32.5	42.5	25.0	40	7.5	40.50	10.5	
28	49.0	26.5	35.0	42.5	33.0	43	7.5	47.65	12.0	
30	49.0	26.5	35.0	42.5	33.0	45	7.5	50.80	12.0	
32	53.5	27.5	35.0	47.5	33.0	48	7.5	50.80	12.0	
33	53.5	27.5	35.0	47.5	33.0	48	7.5	54.00	12.0	
35	57.0	28.5	35.0	47.5	33.0	50	7.5	54.00	12.0	
38	59.0	30.0	36.0	46.0	33.0	56	9.0	57.15	12.0	
40	62.0	30.0	36.0	46.0	33.0	58	9.0	60.35	12.0	
42	65.5	30.0	36.0	51.0	41.0	61	9.0	63.50	12.0	
43	65.5	30.0	36.0	51.0	41.0	61	9.0	63.50	12.0	
45	68.0	30.0	36.0	51.0	41.0	63	9.0	63.50	12.0	
48	70.5	30.5	36.0	51.0	41.0	66	9.0	66.70	12.0	
50	74.0	30.5	38.0	50.5	41.0	70	9.5	69.85	13.5	
53	78.5	33.0	36.5	59.0	41.0	73	11.0	73.05	13.5	
55	81.0	35.0	36.5	59.0	41.0	75	11.0	76.20	13.5	
58	85.5	37.0	41.5	59.0	41.0	78	11.0	79.40	13.5	
60	88.5	38.0	41.5	59.0	41.0	80	11.0	79.40	13.5	
65	93.5	40.0	41.5	69.0	49.0	85	11.0	92.10	16.0	
68	96.5	40.0	41.5	68.7	49.0	90	11.3	95.25	16.0	
70	99.5	40.0	48.7	68.7	49.0	92	11.3	95.25	16.0	
75	107.0	40.0	48.7	68.7	52.0	97	11.3	101.60	16.0	
80	112.0	40.0	48.0	78.0	56.0	105	12.0	114.30	20.0	
85	120.0	41.0	46.0	76.0	56.0	110	14.0	117.50	20.0	
90	127.0	45.0	51.0	76.0	59.0	115	14.0	123.85	20.0	
95	132.0	46.0	51.0	76.0	59.0	120	14.0	127.00	20.0	
100	137.0	47.0	51.0	76.0	62.0	125	14.0	133.35	20.0	

Dimensions in mm.

YT 615/616/617/618

THIN PROFILE ELASTOMER BELLOWS SEALS



Technical features

- Single seal
- Unbalanced
- Spring enclosed
- Elastomer bellows
- Thin profile to DIN dimensions

Operating limits

- $d_1 = 10 - 75 \text{ mm}, 0.625'' - 3.000''$
- $p_1 = 1.2 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 10 \text{ m/s}$

Materials

- Rotary faces: silicon carbide, tungsten carbide, carbon graphite
- Stationary seats: silicon carbide, alumina ceramic, carbon graphite, Cr-Mo steel
- Bellows, secondary seals: CR, EPDM, FPM, FEPM, HNBR, NBR
- Springs, retaining plates: AISI 304, 316

Stationary seats

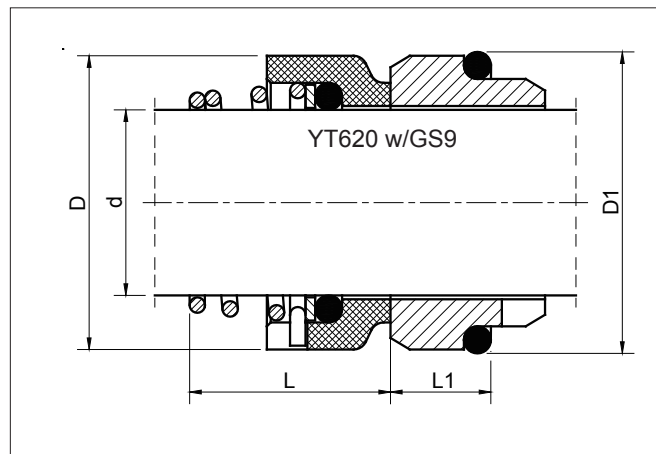
- GS60 (to DIN 24960), standard for YT615/616/617
- GS6, GS606, GS9 (to DIN 24960)
- GS50, standard for YT618
- GS4
- See page 46 for stationary dimensions

			YT615	YT616	YT617	YT618
d	d1 (in)	D	L	L1	L2	L3
10	-	20.0	13.4	25.9	33.4	25.4
12	-	22.0	14.4	25.9	33.4	25.4
14	-	24.0	14.4	28.4	33.4	25.4
15	-	25.0	14.4	28.4	33.4	25.4
16	0.625	26.0	14.4	28.4	33.4	25.4
18	0.750	32.0	18.5	30.0	37.5	25.4
20	-	34.0	18.5	30.0	37.5	25.4
22	0.875	36.0	18.5	30.0	37.5	25.4
24	-	38.0	18.5	32.5	42.5	25.4
25	1.000	39.0	18.5	32.5	42.5	25.4
28	1.125	42.0	24.5	35.0	42.5	33.0
30	-	44.0	25.5	35.0	42.5	33.0
32	1.250	46.0	25.5	35.0	47.5	33.0
33	-	47.0	25.5	35.0	47.5	33.0
35	1.375	49.0	26.5	35.0	47.5	33.0
38	1.500	54.0	29.0	36.0	46.0	33.0
40	1.625	56.0	29.0	36.0	46.0	33.0
42	-	59.0	29.0	36.0	51.0	41.0
43	-	59.0	29.0	36.0	51.0	41.0
45	1.750	61.0	29.0	36.0	51.0	41.0
48	1.875	64.0	31.0	36.0	51.0	41.0
50	2.000	66.0	30.5	36.0	50.5	41.0
53	2.125	69.0	29.0	36.5	59.0	41.0
55	-	71.0	29.0	36.5	59.0	41.0
58	2.250	78.0	32.0	41.5	59.0	41.0
60	2.375	80.0	34.0	41.5	59.0	41.0
63	2.500	83.0	-	41.0	-	41.0
65	2.625	85.0	34.0	41.5	69.0	49.0
68	-	88.0	33.7	41.5	68.7	49.0
70	2.750	90.0	33.7	48.7	68.7	49.0
75	3.000	99.0	40.7	48.7	68.7	49.0

Dimensions in mm except for d1.

YT 620

CONICAL SPRING O-RING MOUNTED SEAL



Technical features

- Single seal
- Unbalanced
- Conical spring
- Uni-directional
- To DIN 24960

Operating limits

- $d_i = 10 - 38 \text{ mm}$
- $p_1 = 1.0 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 15 \text{ m/s}$

Materials

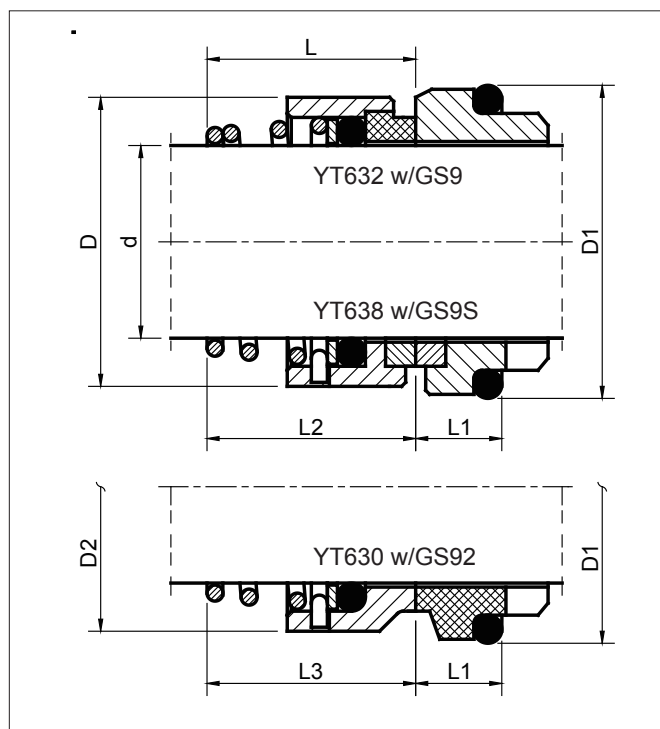
- Rotary faces: carbon graphite (resin-impreg.)
- Stationary seats: silicon carbide, alumina ceramic, Cr-Mo steel
- Springs: AISI 304, 316
- Secondary seals: EPDM, FEP, FPM, FEPM

Stationary seats

- GS9 (to DIN 24960), standard
- GS6 (to DIN 24960)
- GS4
- See page 46 for stationary dimensions

YT620			GS9	
d	D	L	D1	L1
10	20	17.5	21	10.0
12	22	17.5	23	10.0
14	25	17.5	25	10.0
15	27	18.0	27	10.0
16	27	19.5	27	10.0
18	30	20.5	33	11.5
20	32	22.0	35	11.5
22	35	23.5	37	11.5
24	38	25.0	39	11.5
25	40	26.5	40	11.5
26	41	26.5	-	-
28	43	26.5	43	11.5
30	47	26.5	45	11.5
32	48	28.5	48	11.5
35	53	28.5	50	11.5
38	56	33.5	56	14.0

Dimensions in mm.



		YT632	YT638	YT630		GS9/GS92	
d	D	L	L2	D2	L3	D1	L1
10	20	16.9	16.5	19	15.5	21	10.0
12	22	17.4	16.5	21	16.0	23	10.0
14	24	17.4	16.5	23	16.5	25	10.0
15	25	17.4	16.5	24	18.0	27	10.0
16	26	19.5	16.5	26	18.0	27	10.0
18	31	20.5	18.0	29	19.5	33	11.5
20	34	22.0	19.0	31	22.0	35	11.5
22	36	23.5	20.5	33	21.5	37	11.5
24	38	25.0	22.0	35	23.5	39	11.5
25	39	26.5	23.5	36	26.5	40	11.5
28	42	26.5	24.5	40	26.5	43	11.5
30	44	25.0	24.5	43	26.5	45	11.5
32	46	28.5	28.0	46	28.5	48	11.5
33	47	28.5	28.0	47	28.5	48	11.5
35	49	28.5	28.0	49	28.5	50	11.5
38	54	32.2	31.0	53	33.5	56	14.0
40	56	34.7	34.0	56	36.0	58	14.0
42	58	37.3	35.0	59	37.5	61	14.0
43	59	37.3	36.0	59	38.5	61	14.0
45	61	39.2	36.5	61	39.5	63	14.0
48	64	44.7	42.0	64	46.0	66	14.0
50	66	45.7	43.0	66	45.0	70	15.0
53	69	49.0	43.0	69	47.0	73	15.0
55	71	49.0	47.0	71	49.0	75	15.0
58	78	52.0	50.0	76	55.0	78	15.0
60	79	53.0	51.0	78	55.0	80	15.0
63	83	54.0	51.0	83	55.0	83	15.0
65	85	54.3	52.0	84	55.0	85	15.0
68	88	55.3	52.7	88	55.0	90	18.0
70	90	56.3	54.0	90	57.0	92	18.0
75	98	56.3	54.0	98	62.0	97	18.0
80	103	59.3	58.0	100	61.8	105	18.2

Dimensions in mm.

YT 630/632/638

CONICAL SPRING O-RING MOUNTED SEALS



Technical features

- Single seal
- Unbalanced
- Conical spring
- Uni-directional
- To DIN 24960

Operating limits

- $d_1 = 10 - 80 \text{ mm}$
- $p_1 = 1.0 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 10 \text{ m/s}$

Materials

- Rotary faces: Cr-Mo steel (YT630), carbon graphite (YT632), silicon carbide (YT638), tungsten carbide (YT638)
- Stationary seats: silicon carbide, alumina ceramic, carbon graphite, Cr-Mo steel
- Springs, face housing: AISI 304, 316
- Secondary seals: EPDM, FEP, FPM, FEPM

Stationary seats

- YT630: GS92 (carbon only, standard), GS13 (carbon only)
- YT632: GS6, GS9 (standard), GS9S (carbide face shrink-fitted), GS4
- YT638: GS6, GS9 (standard), GS9S (carbide face shrink-fitted), GS92 (carbon only), GS4, GS13 (carbon only)
- See page 46 for stationary dimensions

YT 642/647

CONICAL SPRING BALANCED SEALS



Technical features

- Single seal
- Balanced
- Conical spring
- Uni-directional
- To DIN 24960

Operating limits

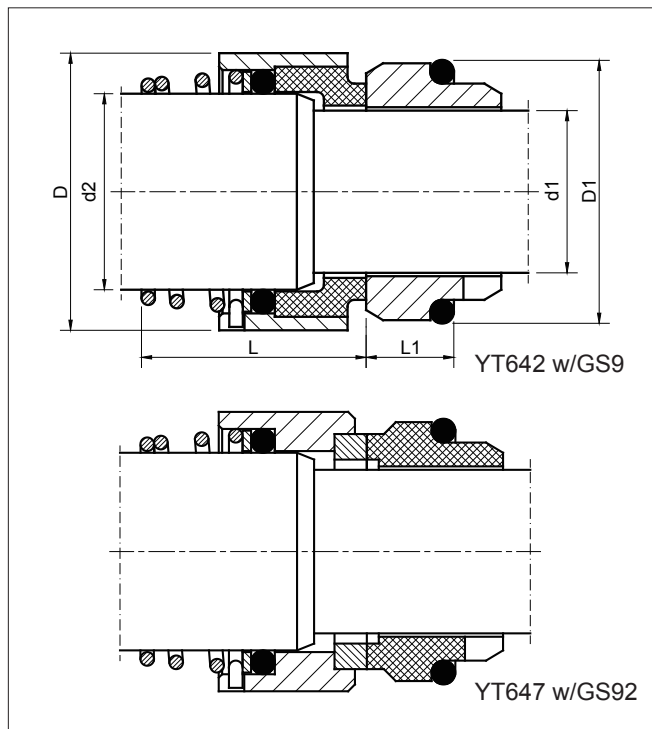
- $d_1 = 10 - 80 \text{ mm}$
- $p_1 = 2.4 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 15 \text{ m/s}$

Materials

- Rotary faces: carbon graphite (YT642), silicon carbide (YT647), tungsten carbide (YT647)
- Stationary seats: silicon carbide, alumina ceramic, carbon graphite, Cr-Mo steel
- Springs, face housings: AISI 304, 316
- Secondary seals: EPDM, FEP, FPM, FEPM

Stationary seats

- GS9, GS92 (to DIN 24960)

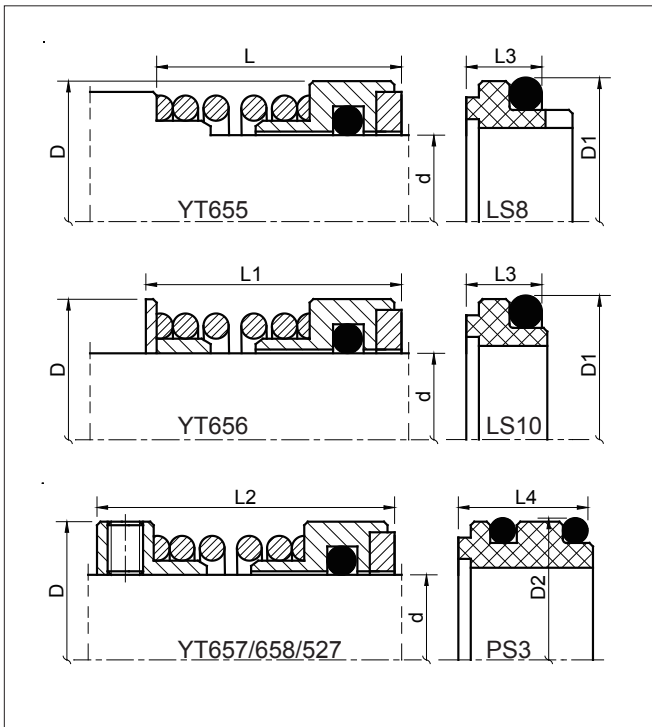


YT642/647				GS9/GS92	
d1	d2	D	L	D1	L1
10	14	24	25.5	21	10.0
12	16	26	26.5	23	10.0
14	18	31	29.5	25	10.0
16	20	34	31.0	27	10.0
18	22	36	32.5	33	11.5
20	24	38	32.5	35	11.5
22	26	40	32.5	37	11.5
24	28	42	32.5	39	11.5
25	30	44	33.5	40	11.5
28	33	47	35.5	43	11.5
30	35	49	35.5	45	11.5
32	38	54	39.5	48	11.5
33	38	54	39.5	48	11.5
35	40	56	43.5	50	11.5
38	43	59	46.0	56	14.0
40	45	61	48.0	58	14.0
43	48	64	51.0	61	14.0
45	50	66	55.0	63	14.0
48	53	69	55.0	66	14.0
50	55	71	58.0	70	15.0
53	58	78	60.0	73	15.0
55	60	79	60.0	75	15.0
58	63	83	60.0	78	15.0
60	65	85	60.0	80	15.0
63	68	88	60.0	83	15.0
65	70	90	61.0	85	15.0
70	75	98	63.0	92	18.0
75	80	105	68.0	97	18.0
80	85	109	68.0	105	18.2

Dimensions in mm.

YT 655/656/657/658

SINGLE COIL SPRING O-RING MOUNTED SEALS



Technical features

- Single coil spring seal
- Unbalanced
- Uni-directional

Operating limits

- $d_1 = 16 - 100 \text{ mm}, 0.625'' - 4.000''$
- $p_1 = 1.0 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 16 \text{ m/s}$

Materials

- Rotary faces: stainless steel, silicon carbide, tungsten carbide
- Stationary seats: carbon, silicon carbide, tungsten carbide
- Springs, other metal components: AISI 304, 316
- Secondary seals: EPDM, FEP, FPM, FEPM

Stationary seats

- YT655/656/657: LS8 (standard), LS8S (carbide face shrink-fitted), LS10
- YT658: PS3 (carbon only)
- YT527: LS4 (standard), LS4S (carbide face shrink-fitted)

		655	656	657	658	527	LS8/LS10	PS3		
d	d (in)	D	L	L1	L2	L2	D1	L3	D2	L4
16	0.625	29.0	24.5	26.0	32.5	-	28.58	9	-	-
18	0.750	32.5	24.5	26.0	32.5	-	31.75	9	-	-
20	-	34.5	27.5	29.0	35.5	38.0	33.32	9	37.0	23
22	0.875	35.0	26.0	27.5	35.5	38.0	34.93	9	39.0	23
25	1.000	38.1	30.0	31.5	39.0	38.0	39.67	10	40.0	23
28	1.125	42.9	31.5	33.0	41.0	40.0	42.88	10	44.0	23
30	-	45.5	31.5	33.0	41.0	40.0	44.44	10	47.0	24
32	1.250	47.0	34.5	36.0	44.0	40.0	46.02	10	48.0	24
33	-	49.0	34.5	36.0	44.0	-	46.02	10	-	-
35	1.375	50.0	37.5	39.0	47.0	40.0	49.20	10	51.0	24
38	1.500	53.0	37.5	39.0	47.0	45.0	52.37	10	54.0	24
40	-	55.0	37.5	39.0	47.0	45.0	53.98	10	57.0	24
42	1.625	55.5	37.5	39.0	47.0	50.0	55.58	10	60.5	24
43	-	55.5	37.5	39.0	47.0	-	55.58	10	-	-
45	1.750	60.0	37.5	39.0	47.0	50.0	58.72	10	61.0	24
48	1.875	62.0	42.5	44.0	55.0	55.0	63.50	10	64.0	24
50	-	66.0	45.5	47.0	58.5	55.0	65.07	10	67.0	24
-	2.000	66.7	45.5	47.0	58.5	-	66.68	10	-	-
55	2.125	71.0	47.0	48.5	60.0	58.0	69.85	10	73.0	24
58	2.250	73.0	47.0	48.5	60.0	58.0	73.03	10	76.0	24
60	2.375	77.0	50.5	52.0	63.0	60.0	76.20	10	80.0	26
63	2.500	79.4	50.5	52.0	63.0	60.0	79.38	10	83.0	26
65	-	82.0	53.5	55.0	66.0	62.0	80.98	10	86.0	26
68	2.625	82.6	53.5	55.0	66.0	62.0	82.55	10	89.0	26
70	2.750	87.0	53.5	55.0	66.0	65.0	85.73	10	89.0	26
73	2.875	90.0	56.5	60.0	71.0	-	88.90	10	-	-
75	-	91.5	56.5	60.0	71.0	65.0	90.47	10	95.0	26
-	3.000	95.3	63.0	66.0	77.5	-	95.25	10	-	-
80	3.125	99.5	63.0	66.0	77.5	70.0	98.43	10	99.0	26
-	3.250	101.6	63.0	66.0	77.5	-	101.6	10	-	-
85	3.375	105.5	63.0	66.0	77.5	70.0	104.8	10	105.0	26
-	3.500	108.0	63.0	66.0	77.5	-	108.0	10	-	-
90	-	110.5	68.0	71.0	82.0	70.0	109.5	10	111.0	26
95	-	115.5	68.0	71.0	82.0	75.0	114.3	10	114.0	26
100	-	120.0	68.0	71.0	82.0	75.0	119.0	10	118.0	26
-	4.000	124.5	72.5	75.5	88.5	-	123.8	10	-	-

Dimensions in mm unless specified.

YT 670/674

O-RING MOUNTED SEALS



Technical features

- Single seal, unbalanced
- Bi-directional
- To DIN 24960
- Non-welded continuous wave spring available per request
- Shrink-fitted rotary face available as YT670S/674S
- Retainer with pumping screw available as YT671

Operating limits

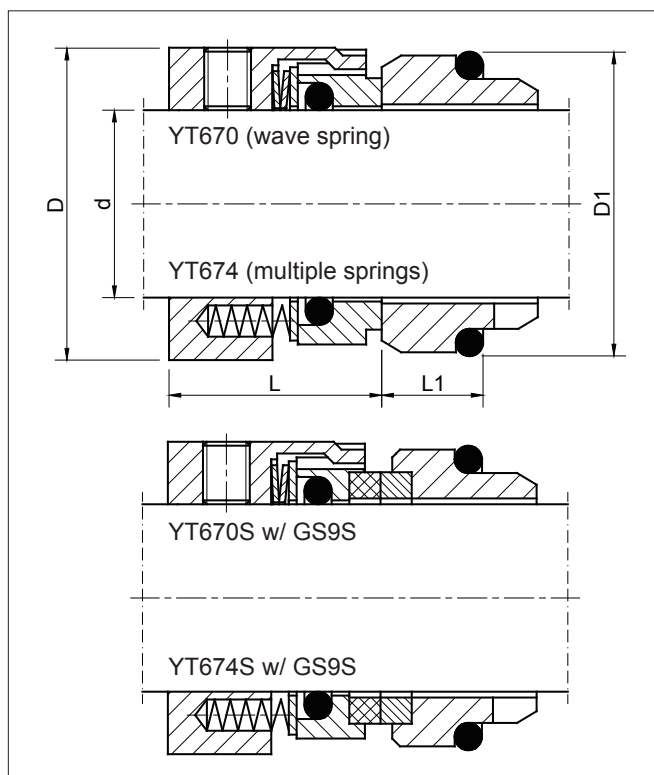
- $d_1 = 14 - 100 \text{ mm}$
(105 - 200 mm available per request)
- $p_1 = 1.5 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 20 \text{ m/s}$

Materials

- Rotary faces: silicon carbide, alumina ceramic, carbon graphite, Cr-Mo steel
- Stationary seats: silicon carbide, carbon graphite
- Springs, collars: AISI 304, 316
- Secondary seals: EPDM, FEP, FPM, FEPM

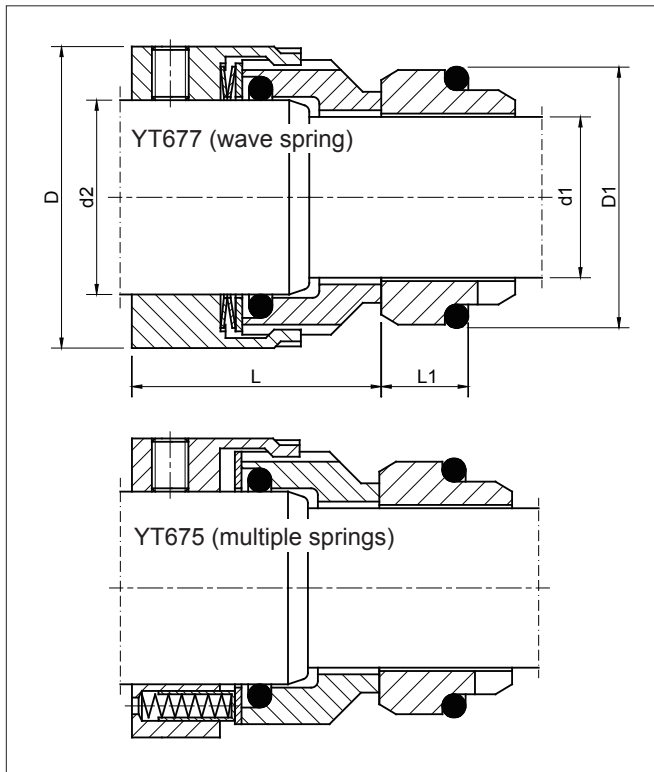
Stationary seats

- GS9 (standard), GS92 (carbon only), GS9S (carbide face shrink-fitted)
- GS4
- GS6
- GS13
- See page 46 for stationary dimensions



YT670/670S/674/674S			GS9/GS92/GS9S	
d	D	L	D1	L1
14	25	25.0	25	10.0
16	27	25.0	27	10.0
18	33	26.0	33	11.5
20	35	26.0	35	11.5
22	37	26.0	37	11.5
24	39	28.5	39	11.5
25	40	28.5	40	11.5
28	43	31.0	43	11.5
30	45	31.0	45	11.5
32	47	31.0	48	11.5
33	48	31.0	48	11.5
35	50	31.0	50	11.5
38	55	31.0	56	14.0
40	57	31.0	58	14.0
43	60	31.0	61	14.0
45	62	31.0	63	14.0
48	65	31.0	66	14.0
50	67	32.5	70	15.0
53	70	32.5	73	15.0
55	72	32.5	75	15.0
58	79	37.5	78	15.0
60	81	37.5	80	15.0
63	84	37.5	83	15.0
65	86	37.5	85	15.0
68	89	34.5	90	18.0
70	91	42.0	92	18.0
75	99	42.0	97	18.0
80	104	41.8	105	18.2
85	109	41.8	110	18.2
90	114	46.8	115	18.2
95	119	47.8	120	17.2
100	124	47.8	125	17.2

Dimensions in mm.



YT675/677				GS9/GS92	
d1	d2	D	L	D1	L1
14	18	33	32.5	25	10.0
16	20	35	32.5	27	10.0
18	22	37	33.5	33	11.5
20	24	39	33.5	35	11.5
22	26	41	33.5	37	11.5
24	28	43	36.0	39	11.5
25	30	45	36.0	40	11.5
28	33	48	38.5	43	11.5
30	35	50	38.5	45	11.5
32	38	55	38.5	48	11.5
33	38	55	38.5	48	11.5
35	40	57	38.5	50	11.5
38	43	60	38.5	56	14.0
40	45	62	38.5	58	14.0
43	48	65	38.5	61	14.0
45	50	67	38.5	63	14.0
48	53	70	38.5	66	14.0
50	55	72	42.5	70	15.0
53	58	79	42.5	73	15.0
55	60	81	42.5	75	15.0
58	63	84	47.5	78	15.0
60	65	86	47.5	80	15.0
63	68	89	47.5	83	15.0
65	70	91	47.5	85	15.0
70	75	99	52.0	92	18.0
75	80	104	52.0	97	18.0
80	85	109	51.8	105	18.2
85	90	114	56.8	110	18.2
90	95	119	56.8	115	18.2
95	100	124	57.8	120	17.2
100	105	129	57.8	125	17.2

Dimensions in mm.

YT 675/677

O-RING MOUNTED BALANCED SEALS



Technical features

- Single seal
- Balanced
- Bi-directional
- To DIN 24960
- Non-welded continuous wave spring available per request
- Retainer with pumping screw available as YT676

Operating limits

- $d_1 = 14 - 100 \text{ mm}$
(105 - 200 mm available per request)
- $p_1 = 2.4 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 20 \text{ m/s}$

Materials

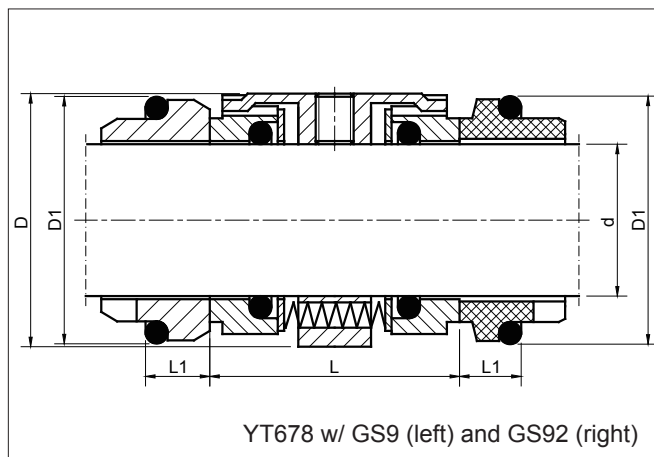
- Rotary faces: silicon carbide, alumina ceramic, carbon graphite, Cr-Mo steel
- Stationary seats: silicon carbide, carbon graphite
- Springs, collars: AISI 304, 316
- Secondary seals: EPDM, FEP, FPM, FEPM

Stationary seats

- GS9 (standard), GS92 (carbon only), GS9S (carbide face shrink-fitted)
- GS4
- GS6
- GS13
- See page 46 for stationary dimensions

YT 678

O-RING MOUNTED DOUBLE SEAL



YT678 w/ GS9 (left) and GS92 (right)

Technical features

- Double seal
- Unbalanced
- Bi-directional
- To DIN 24960

Operating limits

- $d_1 = 14 - 100 \text{ mm}$
(105 - 200 mm available per request)
- $p_1 = 1.5 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 20 \text{ m/s}$

Materials

- Rotary faces: silicon carbide, alumina ceramic, carbon graphite, Cr-Mo steel
- Stationary seats: silicon carbide, carbon graphite
- Springs, collars: AISI 304, 316
- Secondary seals: EPDM, FEP, FPM, FEPM

Stationary seats

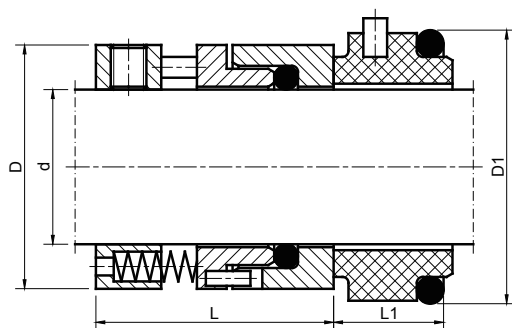
- GS9, GS92

YT678			GS9 / GS92	
d	D	L	D1	L1
18	33	38	33	11.5
20	35	38	35	11.5
22	37	38	37	11.5
24	39	38	39	11.5
25	40	38	40	11.5
28	43	39	43	11.5
30	45	39	45	11.5
32	47	39	48	11.5
33	48	39	48	11.5
35	50	39	50	11.5
38	55	41	56	14.0
40	57	42	58	14.0
43	60	42	61	14.0
45	62	42	63	14.0
48	65	42	66	14.0
50	67	43	70	15.0
53	70	43	73	15.0
55	72	43	75	15.0
58	79	56	78	15.0
60	81	56	80	15.0
63	84	55	83	15.0
65	86	55	85	15.0
68	89	55	90	18.0
70	91	56	92	18.0
75	99	56	97	18.0
80	104	56	105	18.2
85	109	56	110	18.2
90	114	56	115	18.2
95	119	56	120	17.2
100	124	56	125	17.2

Dimensions in mm.

YT 683/684

MULTIPLE SPRINGS PROCESS SEALS



YT683 w/ PS1



Technical features

- Single seal
- Unbalanced
- Multiple springs
- Bi-directional

Operating limits

- $d_1 = 20 - 100 \text{ mm}, 1.000'' - 4.500''$
- $p_1 = 1.2 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 25 \text{ m/s}$

Materials

- Rotary faces: alumina ceramic, silicon carbide, tungsten carbide
- Stationary seats: carbon, silicon carbide, tungsten carbide
- Springs, other metal components: AISI 304, 316, alloys
- Secondary seals: EPDM, FEP, FPM, FEPM

Stationary seats

- YT683: PS1
- YT684: PS2, LS7

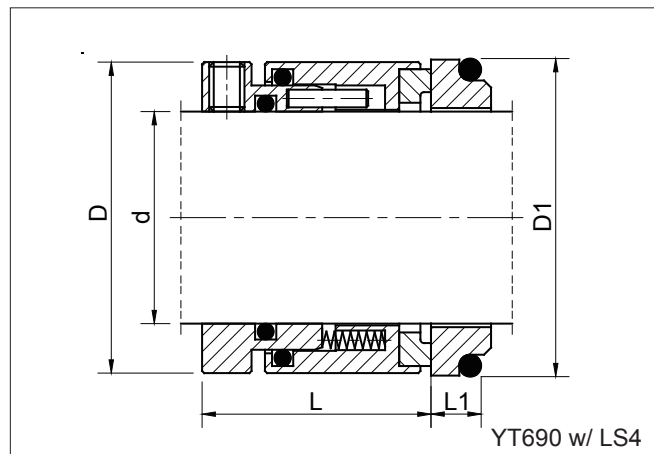
YT683			PS1		YT684		
d	D	L	D1	L1	d	D	L
1.000	1.563	1.625	1.500	0.810	20	34	35
1.125	1.687	1.625	1.875	0.810	22	36	35
1.187	1.750	1.625	1.937	0.810	24	38	35
1.250	1.812	1.625	2.000	0.810	25	39	35
1.375	1.937	1.625	2.125	0.810	28	42	35
1.437	2.000	1.625	2.187	0.810	30	44	35
1.500	2.062	1.625	2.250	0.810	32	46	35
1.625	2.312	1.750	2.375	0.810	33	47	35
1.750	2.375	1.750	2.500	0.810	35	49	35
1.875	2.562	1.750	2.625	0.810	38	54	38
2.000	2.687	1.750	2.750	0.810	40	56	38
2.125	2.812	1.750	2.875	0.810	43	59	38
2.250	2.937	1.750	3.000	0.810	45	61	38
2.375	3.062	1.750	3.125	0.810	48	64	38
2.500	3.187	1.750	3.250	0.810	50	66	39
2.625	3.312	1.750	3.375	0.810	53	69	40
2.750	3.437	1.750	3.500	0.810	55	71	40
2.875	3.562	1.750	3.625	0.810	58	76	41
3.000	3.687	1.750	3.750	0.810	60	78	41
3.125	4.000	1.750	4.062	0.810	63	81	41
3.250	4.125	1.750	4.187	0.810	65	83	41
3.375	4.250	1.750	4.312	0.810	68	86	41
3.500	4.375	1.750	4.437	0.810	70	90	42
3.625	4.500	1.750	4.562	0.810	75	95	42
3.750	4.625	1.812	4.687	0.810	80	100	42
3.875	4.750	1.812	4.812	0.810	85	105	43
4.000	4.875	1.812	4.937	0.810	90	110	45
4.250	5.125	2.062	5.187	0.810	95	115	45
4.500	5.375	2.062	5.437	0.810	100	120	45

Dimensions in inch.

Dimensions in mm.

YT 690

MULTIPLE SPRINGS BALANCED SEAL



Technical features

- Single seal
- Balanced
- Multiple springs
- Bi-directional
- To DIN 24960

Operating limits

- $d_1 = 18 - 100 \text{ mm}$, 0.750" - 4.000"
- $p_1 = 2.4 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 20 \text{ m/s}$

Materials

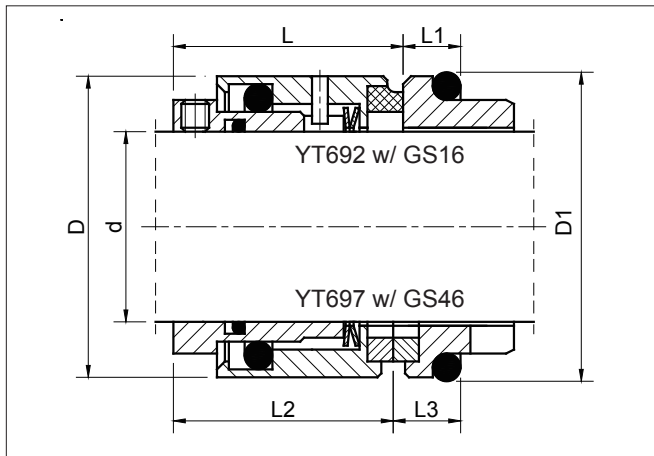
- Rotary faces: carbon graphite, silicon carbide, tungsten carbide
- Stationary seats: silicon carbide, tungsten carbide
- Springs, collars, face housings: AISI 304, 316
- Secondary seals: EPDM, FEP, FPM, FEFM

Stationary seats

- YT690: LS4 (to DIN 24960)
- YT691: OS1

YT690			LS4		YT691		
d	D	L	D1	L1	d	D	L
18	32	27.9	33.0	10.0	0.750	1.301	1.335
20	34	27.9	35.0	10.0	0.875	1.426	1.335
22	36	27.9	37.0	10.0	1.000	1.551	1.335
24	38	29.9	39.0	10.0	1.125	1.676	1.335
25	39	29.9	40.0	10.0	1.250	1.801	1.335
28	42	32.4	43.0	10.0	1.375	1.926	1.335
30	44	32.4	45.0	10.0	1.500	2.051	1.335
32	46	32.4	48.0	10.0	1.625	2.176	1.335
33	47	32.4	48.0	10.0	1.750	2.301	1.335
35	49	32.4	50.0	10.0	1.875	2.426	1.335
38	54	33.9	56.0	11.0	2.000	2.551	1.335
40	56	33.9	58.0	11.0	2.125	2.676	1.335
43	59	33.9	61.0	11.0	2.250	2.801	1.335
45	61	33.9	63.0	11.0	2.375	2.926	1.335
48	64	33.9	66.0	11.0	2.500	3.051	1.335
50	66	34.4	70.0	13.0	2.625	3.255	1.437
53	69	34.4	75.0	13.0	2.750	3.380	1.437
55	71	34.4	75.0	13.0	2.875	3.505	1.437
58	78	38.9	78.0	13.0	3.000	3.630	1.437
60	80	38.9	80.0	13.0	3.125	3.755	1.437
63	83	38.9	83.0	13.0	3.250	3.880	1.437
65	85	38.9	85.0	13.0	3.375	4.005	1.437
68	88	37.4	90.0	15.3	3.500	4.130	1.437
70	90	44.9	92.0	15.3	3.625	4.255	1.437
75	99	44.9	97.0	15.3	3.750	4.380	1.437
80	104	44.2	105.0	15.7	3.875	4.505	1.437
85	109	44.2	110.0	15.7	4.000	4.630	1.437
90	114	49.2	115.0	15.7			
95	119	49.2	120.0	15.7			
100	124	49.2	125.0	15.7			

Dimensions in mm.



d	D	YT692	YT697	D1	GS16	GS46
		L	L2		L1	L3
18	32	30.5	28.5	33	7.0	9.0
20	34	30.5	28.5	35	7.0	9.0
22	36	30.5	28.5	37	7.0	9.0
24	38	33.0	31.0	39	7.0	9.0
25	39	33.0	31.0	40	7.0	9.0
28	42	35.5	33.0	43	7.0	9.5
30	44	35.5	33.0	45	7.0	9.5
32	47	35.5	33.0	48	7.0	9.5
33	47	35.5	33.0	48	7.0	9.5
35	49	35.5	33.0	50	7.0	9.5
38	54	37.0	34.5	56	8.0	10.5
40	56	37.0	34.5	58	8.0	10.5
43	59	37.0	34.5	61	8.0	10.5
45	61	37.0	34.5	63	8.0	10.5
48	64	37.0	34.5	66	8.0	10.5
50	66	38.0	35.5	70	9.5	12.0
53	69	38.0	35.5	73	9.5	12.0
55	71	38.0	35.5	75	9.5	12.0
58	78	42.0	39.5	78	10.5	13.0
60	80	42.0	39.5	80	10.5	13.0
63	83	42.0	39.5	83	10.5	13.0
65	85	42.0	39.5	85	10.5	13.0
68	88	41.5	39.0	90	11.0	13.5
70	90	48.5	46.0	92	11.5	14.0
75	99	48.5	46.0	97	11.5	14.0
80	104	48.5	46.0	105	11.5	14.0
85	109	48.5	46.0	110	11.5	14.0
90	114	52.0	49.5	115	13.0	15.5
95	119	52.0	49.5	120	13.0	15.5
100	124	52.0	49.5	125	13.0	15.5

Dimensions in mm.

YT 692/697

WAVE SPRING SEALS



Technical features

- Single seal
- Balanced
- Wave spring
- Bi-directional
- To DIN 24960

Operating limits

- $d_1 = 18 - 100 \text{ mm}$
- $p_1 = 2.4 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 20 \text{ m/s}$

Materials

- Rotary faces: (for YT692) carbon graphite; (for YT697) silicon carbide, tungsten carbide
- Stationary seats: (for GS16) silicon carbide, alumina ceramic; (for GS46) silicon carbide, tungsten carbide
- Springs, collars, face housings: AISI 304, 316
- Secondary seals: EPDM, FEP, FPM, FEPM

Stationary seats

- YT692: GS16 (to DIN 24960)
- YT697: GS46 (to DIN 24960)

YT 801/805/811

ELASTOMER DIAPHRAGM SEALS



Technical features

- Unbalanced
- Single spring
- Bi-directional
- Elastomer diaphragm
- Machined head version available as YT805
- Two types of locking collar available as LC1 and LC2

Operating limits

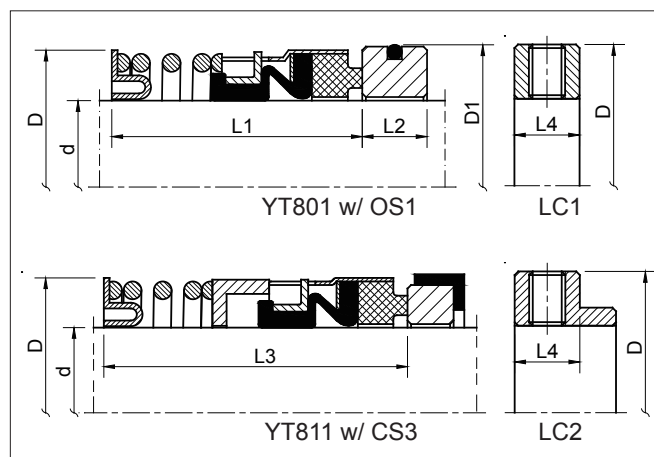
- $d_1 = 12 - 100 \text{ mm}$, 0.500" - 4.000"
- $p_1 = 2.0 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 20 \text{ m/s}$

Materials

- Rotary faces: carbon graphite, silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, silicon carbide, tungsten carbide
- Bellows, secondary seals: CR, EPDM, FPM, FEPM, HNBR, NBR
- Springs, other metal components: AISI 304, 316

Stationary seats

- YT801/805: OS1 (standard), CS2
- YT811: CS3 (standard), CS2, CS1
- see page 47 for other cup mounted and O-ring mounted seats

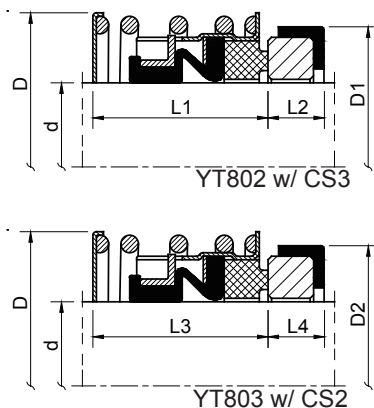


		YT801		YT811	OS1		LC1/LC2
d	d (mm)	D	L1	L3	D1	L2	L4
0.500	12	0.937	1.187	1.719	1.000	0.312	0.312
0.625	14-16	1.093	1.312	1.719	1.250	0.406	0.312
0.750	18	1.218	1.312	1.719	1.375	0.406	0.312
0.875	20-22	1.343	1.375	1.719	1.500	0.406	0.312
1.000	24-25	1.500	1.562	1.719	1.625	0.437	0.375
1.125	28	1.625	1.625	2.375	1.750	0.437	0.375
1.250	30-32	1.812	1.625	2.375	1.875	0.437	0.375
1.375	33-35	1.875	1.687	2.375	2.000	0.437	0.375
1.500	38	2.000	1.687	2.375	2.125	0.437	0.375
1.625	40	2.250	2.000	2.375	2.375	0.500	0.375
1.750	43-45	2.375	2.000	2.781	2.500	0.500	0.375
1.875	48	2.500	2.125	2.781	2.625	0.500	0.375
2.000	50	2.625	2.125	2.781	2.750	0.500	0.375
2.125	53	2.812	2.375	2.795	3.000	0.562	0.375
2.250	55	2.937	2.375	2.795	3.125	0.562	0.500
2.375	60	3.062	2.500	2.795	3.250	0.562	0.500
2.500	63	3.187	2.500	2.795	3.375	0.562	0.500
2.625	65	3.375	2.750	2.750	3.375	0.625	0.500
2.750	70	3.500	2.750	2.750	3.500	0.625	0.500
2.875	73	3.625	2.875	2.875	3.750	0.625	0.500
3.000	75	3.750	2.875	2.875	3.875	0.625	0.500
3.125	80	4.000	3.125	3.125	4.000	0.781	0.500
3.250	-	4.125	3.125	3.125	4.125	0.781	0.500
3.375	85	4.250	3.125	3.125	4.250	0.781	0.500
3.500	-	4.375	3.125	3.125	4.375	0.781	0.500
3.625	90	4.500	3.250	3.250	4.500	0.781	0.562
3.750	95	4.625	3.250	3.250	4.625	0.781	0.562
3.875	-	4.750	3.375	3.375	4.750	0.781	0.562
4.000	100	4.875	3.375	3.375	4.875	0.781	0.562

Dimensions in inches unless specified.

YT 802/803

ELASTOMER DIAPHRAGM SEALS



Technical features

- Unbalanced
- Single spring
- Bi-directional
- Elastomer diaphragm

Operating limits

- $d_1 = 12 - 120 \text{ mm}, 0.500'' - 4.750''$
- $p_1 = 2.0 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 20 \text{ m/s}$

Materials

- Rotary faces: carbon graphite, silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, silicon carbide, tungsten carbide
- Bellows, secondary seals: CR, EPDM, FPM, FEPM, HNBR, NBR
- Springs, other metal components: AISI 304, 316

Stationary seats

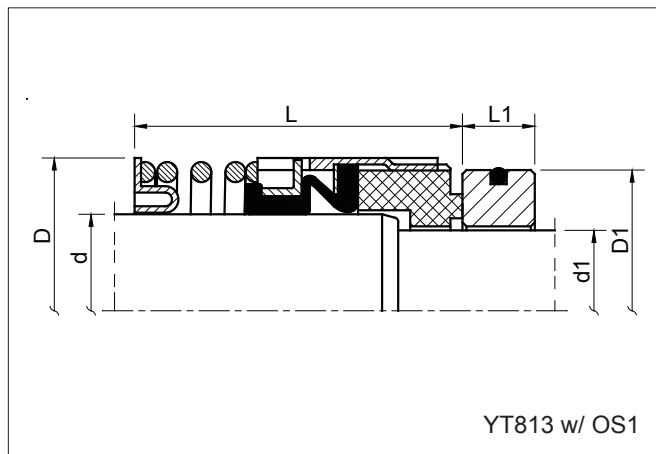
- YT802: CS3 (standard)
- YT803: CS2 (standard), OS1
- see page 47 for other cup mounted and O-ring mounted seats

d	d (mm)	D	YT802		YT803		CS3		CS2	
			L1	L3	L1	L3	D1	L2	D2	L4
0.500	12	1.187	1.000	0.813	1.094	0.344	1.000	0.312		
0.625	14-16	1.312	1.000	0.875	1.219	0.406	1.250	0.406		
0.750	18	1.437	1.000	0.875	1.344	0.406	1.375	0.406		
0.875	20-22	1.562	1.000	0.937	1.469	0.406	1.500	0.406		
1.000	24-25	1.791	1.000	1.000	1.594	0.406	1.625	0.437		
1.125	28	1.910	1.312	1.062	1.875	0.472	1.750	0.437		
1.250	30-32	2.061	1.312	1.062	2.000	0.472	1.875	0.437		
1.375	33-35	2.250	1.312	1.125	2.125	0.472	2.000	0.437		
1.500	38	2.375	1.312	1.125	2.250	0.472	2.125	0.437		
1.625	40	2.718	1.312	1.375	2.375	0.472	2.375	0.500		
1.750	43-45	2.750	1.594	1.375	2.500	0.472	2.500	0.500		
1.875	48	2.875	1.594	1.500	2.625	0.472	2.625	0.500		
2.000	50	3.000	1.594	1.500	2.750	0.531	2.750	0.500		
2.125	53	3.250	1.615	1.687	2.875	0.531	3.000	0.562		
2.250	55	3.375	1.615	1.687	3.000	0.531	3.125	0.562		
2.375	60	3.500	1.615	1.812	3.125	0.531	3.250	0.562		
2.500	63	3.625	1.615	1.812	3.250	0.531	3.375	0.562		
2.625	65	3.875	1.929	1.937	3.625	0.625	3.375	0.625		
2.750	70	4.000	1.929	1.937	3.750	0.625	3.500	0.625		
2.875	73	4.125	2.047	2.062	3.875	0.625	3.750	0.625		
3.000	75	4.250	2.047	2.062	4.000	0.625	3.875	0.625		
3.125	80	4.562	2.208	2.187	4.375	0.781	-	-		
3.250	-	4.687	2.208	2.187	4.500	0.781	-	-		
3.375	85	4.812	2.208	2.187	4.625	0.781	-	-		
3.500	-	4.937	2.208	2.187	4.750	0.781	-	-		
3.625	90	5.125	2.323	2.312	4.875	0.781	-	-		
3.750	95	5.250	2.323	2.312	5.000	0.781	-	-		
3.875	-	5.437	2.441	2.312	5.125	0.781	-	-		
4.000	100	5.562	2.441	2.312	5.250	0.781	-	-		
4.500	110	5.315	-	2.312	-	-	-	-		
4.750	120	5.709	-	2.835	-	-	-	-		

Dimensions in inches unless specified.

YT 813

BALANCED ELASTOMER DIAPHRAGM SEAL



Technical features

- Balanced
- Single spring
- Bi-directional
- Elastomer bellows
- YT813 available with machined head

Operating limits

- $d_1 = 1 - 4"$
- $p_1 = 5.0 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 50 \text{ m/s}$

Materials

- Rotary faces: carbon graphite, silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, silicon carbide, tungsten carbide
- Bellows, secondary seals: CR, EPDM, FPM, FEPM, HNBR, NBR
- Springs, other metal components: AISI 304, 316

Stationary seats

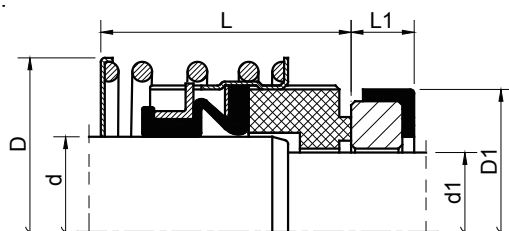
- OS1 (standard)
- see page 47 for other O-ring mounted seats

YT813				OS1	
d	d1	D	L	D1	L1
1.000	0.875	1.500	1.875	1.500	0.406
1.125	1.000	1.625	1.937	1.625	0.437
1.250	1.125	1.812	1.937	1.750	0.437
1.375	1.250	1.875	2.000	1.875	0.437
1.500	1.375	2.000	2.000	2.000	0.437
1.625	1.500	2.250	2.375	2.125	0.437
1.750	1.625	2.375	2.375	2.375	0.500
1.875	1.750	2.500	2.500	2.500	0.500
2.000	1.875	2.625	2.500	2.625	0.500
2.125	2.000	2.812	2.750	2.750	0.500
2.250	2.125	2.937	2.750	3.000	0.562
2.375	2.250	3.062	2.875	3.125	0.562
2.500	2.375	3.187	2.875	3.250	0.562
2.625	2.500	3.375	3.125	3.375	0.562
2.750	2.625	3.500	3.125	3.375	0.625
2.875	2.750	3.625	3.250	3.500	0.625
3.000	2.875	3.750	3.250	3.750	0.625
3.125	2.875	4.000	3.500	3.750	0.625
3.250	3.000	4.125	3.500	3.875	0.625
3.375	3.125	4.250	3.500	4.000	0.781
3.500	3.250	4.375	3.500	4.125	0.781
3.625	3.375	4.500	3.625	4.250	0.781
3.750	3.500	4.625	3.625	4.375	0.781
3.875	3.625	4.750	3.750	4.500	0.781
4.000	3.750	4.875	3.750	4.625	0.781

Dimensions in inches.

YT 814

BALANCED ELASTOMER DIAPHRAGM SEAL



YT814 w/ CS2



Technical features

- Balanced
- Single spring
- Bi-directional
- Elastomer bellows

Operating limits

- $d_1 = 1 - 4"$
- $p_1 = 5.0 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 50 \text{ m/s}$

Materials

- Rotary faces: carbon graphite, silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, silicon carbide, tungsten carbide
- Bellows, secondary seals: CR, EPDM, FPM, FEPM, HNBR, NBR
- Springs, other metal components: AISI 304, 316

Stationary seats

- CS2 (standard)
- see page 47 for other cup mounted and O-ring mounted seats

YT814				CS2	
d	d1	D	L	D1	L1
1.000	0.875	1.791	1.312	1.500	0.406
1.125	1.000	1.910	1.375	1.625	0.437
1.250	1.125	2.061	1.375	1.750	0.437
1.375	1.250	2.250	1.437	1.875	0.437
1.500	1.375	2.375	1.437	2.000	0.437
1.625	1.500	2.718	1.750	2.125	0.437
1.750	1.625	2.750	1.750	2.375	0.500
1.875	1.750	2.875	1.875	2.500	0.500
2.000	1.875	3.000	1.875	2.625	0.500
2.125	2.000	3.250	2.062	2.750	0.500
2.250	2.125	3.375	2.062	3.000	0.562
2.375	2.250	3.500	2.187	3.125	0.562
2.500	2.375	3.625	2.187	3.250	0.562
2.625	2.500	3.875	2.312	3.375	0.562
2.750	2.625	4.000	2.312	3.375	0.625
2.875	2.750	4.125	2.437	3.500	0.625
3.000	2.875	4.250	2.437	3.750	0.625
3.125	2.875	4.562	2.562	3.750	0.625
3.250	3.000	4.687	2.562	3.875	0.625
3.375	3.125	4.812	2.562	-	-
3.500	3.250	4.937	2.562	-	-
3.625	3.375	5.125	2.687	-	-
3.750	3.500	5.250	2.687	-	-
3.875	3.625	5.437	2.812	-	-
4.000	3.750	5.562	2.812	-	-

Dimensions in inches.

YT 82X/843

ELASTOMER DIAPHRAGM SEALS



Technical features

- Unbalanced
- Single spring
- Bi-directional
- Elastomer diaphragm
- Thin cross-section versions available as YT824/843
- Double seal version available as YT828

Operating limits

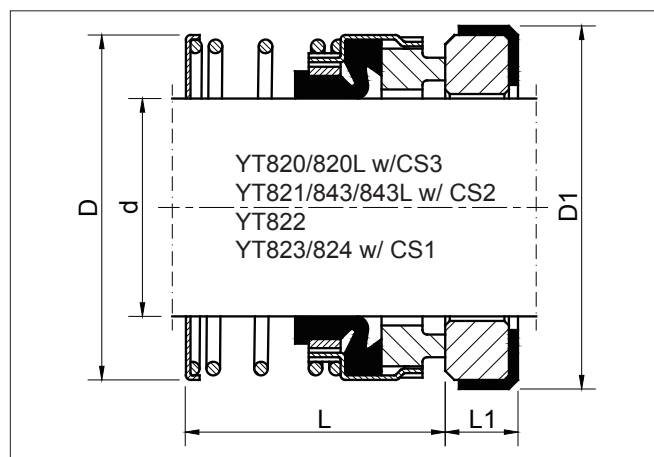
- $d_1 = 10 - 100 \text{ mm}$, 0.375" - 4.000"
- $p_1 = 1.6 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 15 \text{ m/s}$

Materials

- Rotary faces: carbon graphite, silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, silicon carbide, tungsten carbide
- Bellows, secondary seals: CR, EPDM, FPM, FEPM, HNBR, NBR
- Springs, other metal components: AISI 304, 316

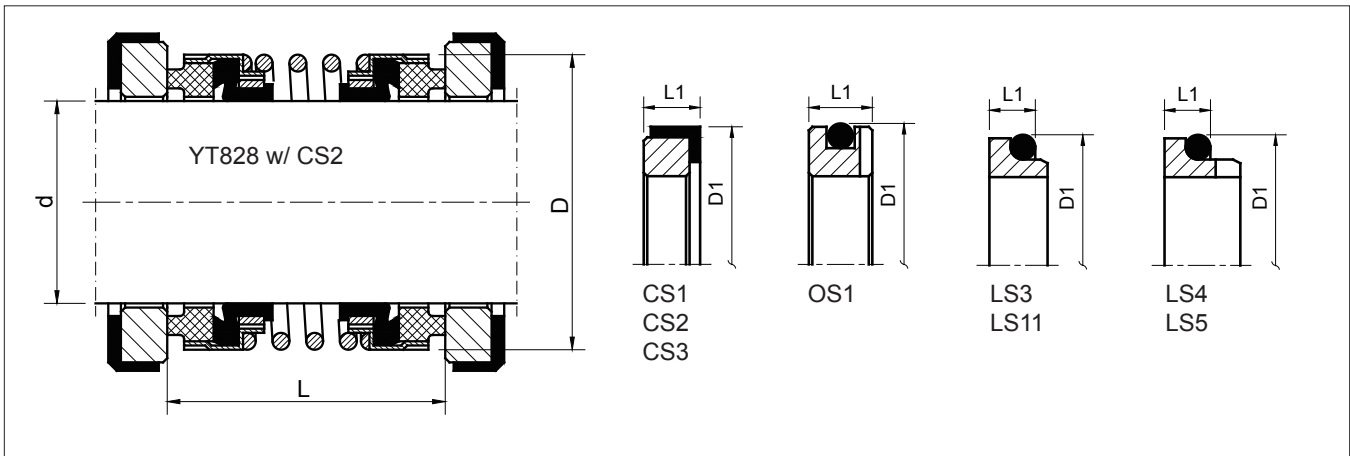
Stationary seats

- YT820/802L: CS3 (standard)
- YT821/828/843/843L: CS2 (standard), OS1
- YT824: CS1 (standard), LS3, LS4
- see page 47 for other cup mounted and O-ring mounted seats



d	YT822					YT823 YT824			CS1/LS3/LS4	
	D	L	D1	L1		D	L	L	D1	L1
10	-	-	-	-		20.1	16.0	23.9	21.0	8.6
12	-	-	-	-		22.8	16.5	23.9	23.0	8.6
14	26.5	18.7	30.0	5.0		22.8	16.5	26.4	25.0	8.6
16	28.0	21.0	32.0	5.0		26.4	17.6	26.4	27.0	8.6
18	29.5	22.5	35.0	7.5		29.5	19.6	27.5	33.0	10.0
19	-	-	-	-		29.5	-	27.5	35.0	10.0
20	31.6	21.0	35.0	8.0		33.6	20.6	27.5	35.0	10.0
22	-	-	-	-		33.6	22.1	27.5	37.0	10.0
24	-	-	-	-		38.0	23.6	30.0	39.0	10.0
25	40.0	25.5	40.0	8.0		39.1	25.1	30.0	40.0	10.0
28	42.5	25.5	43.0	8.0		42.5	26.6	32.5	43.0	10.0
30	45.0	25.5	45.0	9.0		44.0	26.6	32.5	45.0	10.0
32	47.5	33.5	48.0	9.0		45.6	30.1	32.5	48.0	10.0
33	47.5	33.5	48.0	9.0		45.6	30.1	32.5	48.0	10.0
35	50.0	33.5	50.0	9.0		49.0	30.4	34.0	50.0	10.0
38	54.5	33.5	56.0	9.0		52.0	33.6	34.0	56.0	11.0
40	57.0	33.5	58.0	9.0		55.8	36.6	34.0	58.0	11.0
42	60.5	33.5	61.0	9.5		60.6	-	34.0	61.0	11.0
43	60.5	33.5	61.0	9.5		60.6	-	34.0	61.0	11.0
45	63.0	38.0	63.0	9.5		60.6	41.4	34.0	63.0	11.0
48	64.0	38.0	66.0	9.5		63.8	46.9	34.0	66.0	11.0
50	67.8	38.0	70.0	9.5		65.6	47.9	34.5	70.0	13.0
53	71.0	41.0	73.0	9.5		71.6	52.8	34.5	75.0	13.0
55	74.0	41.0	75.0	9.5		71.6	55.8	34.5	75.0	13.0
58	80.0	42.0	78.0	9.5		78.4	-	39.5	78.0	13.0
60	82.5	42.0	80.0	9.5		78.4	56.8	39.5	80.0	13.0
63	85.0	42.0	85.0	10.0		81.2	-	39.5	83.0	13.0
65	85.0	42.0	85.0	10.0		84.5	57.8	39.5	85.0	13.0
68	-	-	-	-		89.6	59.5	37.2	90.0	15.3
70	92.0	45.0	92.0	11.0		89.6	59.8	44.7	92.0	15.3
75	-	-	-	-		96.6	60.8	44.7	97.0	15.3
80	105.0	55.0	104.0	12.0		104.0	-	44.3	105.0	15.7
85	110.0	64.2	109.0	12.0		107.7	-	44.3	110.0	15.7
90	115.0	66.2	111.0	12.0		111.0	-	49.3	115.0	15.7
95	-	-	-	-		119.0	-	49.3	120.0	15.7
100	-	-	-	-		124.0	-	49.3	125.0	15.7

Dimensions in mm.



YT820				820L				CS3 / LS11				YT821			YT843 843L YT828				CS2/OS1 LS5		
d	d(mm)	D (in - mm)	L (in - mm)	L (in - mm)	L (in - mm)	L (in - mm)	L (in - mm)	D1 (in - mm)	L1 (in - mm)	D1 (in - mm)	L1 (in - mm)	d	D	L	D	L	L	L	D1	L1	L1
0.375	10	0.858	21.8	1.000	25.4	1.719	43.7	0.968	24.6	0.344	8.7	0.375	0.812	0.812	0.791	0.812	1.187	-	0.875	0.312	0.261
0.500	12	0.898	22.8	1.000	25.4	1.719	43.7	1.094	27.8	0.344	8.7	0.500	0.937	0.812	0.898	0.812	1.187	-	1.000	0.312	0.261
0.625	14-16	1.039	26.4	1.000	25.4	1.719	43.7	1.219	31.0	0.406	10.3	0.625	1.062	0.875	1.039	0.875	1.312	-	1.250	0.406	0.297
0.750	18-19	1.161	29.5	1.000	25.4	1.719	43.7	1.344	34.2	0.406	10.3	0.750	1.187	0.875	1.161	0.875	1.312	-	1.375	0.406	0.297
0.813	20	1.323	33.6	1.000	25.4	1.719	43.7	1.406	35.7	0.406	10.3	0.813	1.312	0.937	1.323	0.937	1.375	-	1.375	0.406	0.297
0.875	22	1.323	33.6	1.000	25.4	1.719	43.7	1.469	37.3	0.406	10.3	0.875	1.312	0.937	1.323	0.937	1.375	-	1.500	0.406	0.297
1.000	24-25	1.677	42.6	1.000	25.4	1.719	43.7	1.594	40.5	0.406	10.3	1.000	1.687	1.000	1.539	1.000	1.562	1.625	1.625	0.437	0.297
1.125	28	1.803	45.8	1.312	33.3	2.375	60.3	1.875	47.6	0.472	12.0	1.125	1.812	1.062	1.673	1.062	1.625	1.625	1.750	0.437	0.297
1.250	30-32	1.890	48.0	1.312	33.3	2.375	60.3	2.000	50.8	0.472	12.0	1.250	1.937	1.062	1.795	1.062	1.625	1.625	1.875	0.437	0.297
1.375	33	2.063	52.4	1.312	33.3	2.375	60.3	2.125	53.9	0.472	12.0	1.375	2.062	1.125	1.929	1.125	1.687	1.625	2.000	0.437	0.297
1.437	35	2.063	52.4	1.312	33.3	2.375	60.3	2.125	53.9	0.472	12.0	1.437	2.187	1.125	2.047	1.125	1.687	1.625	2.125	0.437	0.297
1.500	38	2.189	55.6	1.312	33.3	2.375	60.3	2.250	57.2	0.472	12.0	1.500	2.187	1.125	2.047	1.125	1.687	1.625	2.125	0.437	0.297
1.625	40	2.252	57.2	1.312	33.3	2.375	60.3	2.375	60.3	0.472	12.0	1.625	2.500	1.375	2.252	1.375	2.000	2.125	2.375	0.500	0.335
1.750	42-45	2.559	65.0	1.594	40.5	2.781	70.6	2.500	63.5	0.472	12.0	1.750	2.625	1.375	2.386	1.375	2.000	2.125	2.500	0.500	0.335
1.875	48	2.614	66.4	1.594	40.5	2.781	70.6	2.625	66.7	0.472	12.0	1.875	2.750	1.500	2.512	1.500	2.125	3.000	2.625	0.500	0.335
2.000	50	2.701	68.6	1.594	40.5	2.781	70.6	2.750	69.8	0.531	13.5	2.000	2.875	1.500	2.583	1.500	2.125	2.125	2.750	0.500	0.335
2.125	53	2.886	73.3	1.615	41.0	2.795	71.0	2.875	73.0	0.531	13.5	2.125	3.000	1.687	2.819	1.687	2.375	2.125	3.000	0.562	0.375
2.250	55	3.079	78.2	1.615	41.0	2.795	71.0	3.000	76.2	0.531	13.5	2.250	3.125	1.687	3.028	1.687	2.375	2.125	3.125	0.562	0.375
2.375	58-60	3.213	81.6	1.615	41.0	2.795	71.0	3.125	79.4	0.531	13.5	2.375	3.250	1.812	3.087	1.812	2.500	2.125	3.250	0.562	0.375
2.500	63	3.319	84.3	1.615	41.0	2.795	71.0	3.250	82.5	0.531	13.5	2.500	3.343	1.812	3.197	1.812	2.500	2.125	3.375	0.562	0.375
2.625	65	3.449	87.6	1.929	49.0	2.750	69.9	3.625	92.1	0.625	15.9	2.625	3.500	1.937	3.327	1.937	2.750	-	3.375	0.625	0.375
2.750	70	3.630	92.2	1.929	49.0	2.750	69.9	3.750	95.2	0.625	15.9	2.750	3.750	1.937	3.528	1.937	2.750	2.500	3.500	0.625	0.375
2.875	73	3.724	94.6	2.047	52.0	2.875	73.0	3.875	98.4	0.625	15.9	2.875	3.875	2.062	3.701	2.062	2.875	2.500	3.750	0.625	0.473
3.000	75	4.031	102.4	2.047	52.0	2.875	73.0	4.000	101.6	0.625	15.9	3.000	4.000	2.062	3.803	2.062	2.875	2.500	3.875	0.625	0.473
3.125	-	4.094	104.0	2.208	56.1	3.125	79.4	4.375	111.1	0.781	19.8	3.125	-	-	-	-	-	-	4.000	0.781	0.473
3.250	80	4.094	104.0	2.208	56.1	3.125	79.4	4.500	114.3	0.781	19.8	3.250	-	-	-	-	-	2.875	4.125	0.781	0.473
3.375	85	4.252	108.0	2.208	56.1	3.125	79.4	4.625	117.5	0.781	19.8	3.375	-	-	-	-	-	-	4.250	0.781	0.473
3.500	-	4.409	112.0	2.208	56.1	3.125	79.4	4.750	120.7	0.781	19.8	3.500	-	-	-	-	-	-	4.375	0.781	0.473
3.625	90	4.488	114.0	2.323	59.0	3.250	82.6	4.875	123.8	0.781	19.8	3.625	-	-	-	-	-	-	4.500	0.781	0.513
3.750	95	4.685	119.0	2.323	59.0	3.250	82.6	5.000	127.0	0.781	19.8	3.750	-	-	-	-	-	-	4.625	0.781	0.513
3.875	-	4.764	121.0	2.441	62.0	3.375	85.7	5.125	130.2	0.781	19.8	3.875	-	-	-	-	-	-	4.750	0.781	0.513
4.000	100	4.882	124.0	2.441	62.0	3.375	85.7	5.250	133.4	0.781	19.8	4.000	-	-	-	-	-	-	4.875	0.781	0.513

Dimensions in inches unless specified.

YT 852

ELASTOMER DIAPHRAGM SEAL



Technical features

- Single seal
- Unbalanced
- Single spring
- Bi-directional
- Elastomer bellows
- To DIN 24960

Operating limits

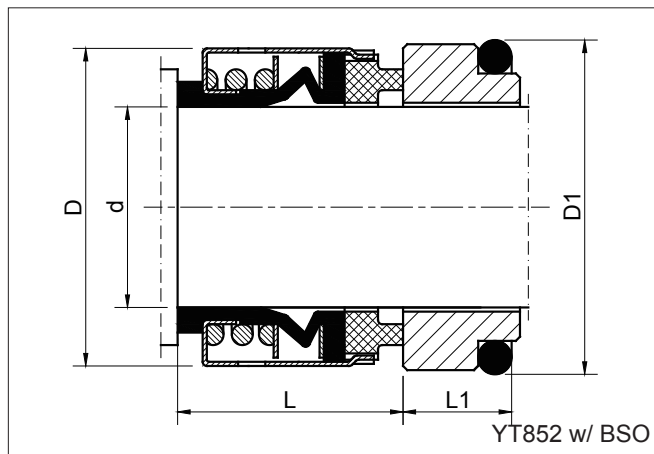
- $d_i = 14 - 100 \text{ mm}$
- $p_1 = 4.0 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 15 \text{ m/s}$

Materials

- Rotary faces: carbon graphite, silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, silicon carbide, tungsten carbide
- Bellows: NBR, FPM, EPDM
- Springs, other metal components: AISI 304, 316
- Secondary seals: EPDM, FPM, FEPM, HNBR, NBR

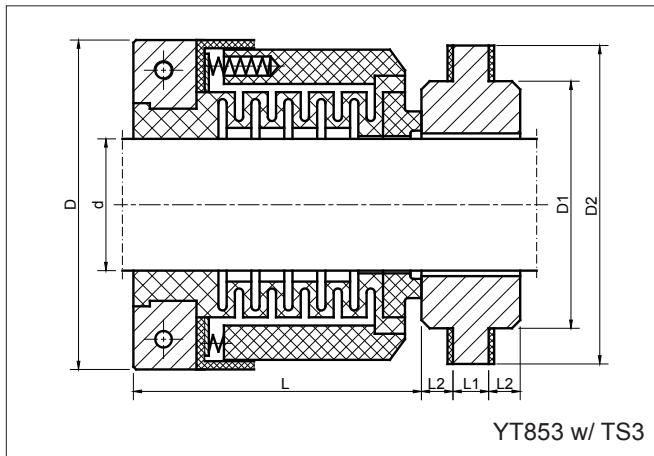
Stationary seats

- BSO (to DIN 24960)



YT852			BSO	
d	D	L	D1	L1
14	24	23.0	25	12.0
16	26	23.0	27	12.0
18	32	24.0	33	13.5
20	34	24.0	35	13.5
22	36	24.0	37	13.5
24	38	26.7	39	13.5
25	39	27.0	40	13.0
28	42	30.0	43	12.5
30	44	30.5	45	12.0
32	46	30.5	48	12.0
33	47	30.5	48	12.0
35	49	30.5	50	12.0
38	54	32.0	56	13.0
40	56	32.0	58	13.0
43	59	32.0	61	13.0
45	61	32.0	63	13.0
48	64	32.0	66	13.0
50	66	34.0	70	13.5
53	69	34.0	73	13.5
55	71	34.0	75	13.5
58	78	39.0	78	13.5
60	80	39.0	80	13.5
63	83	39.0	83	13.5
65	85	39.0	85	13.5
68	88	39.0	90	13.5
70	90	45.5	92	14.5
75	95	45.5	97	14.5
80	104	45.0	105	15.0
85	109	45.0	110	15.0
90	110	50.0	115	15.0
95	119	50.0	120	15.0
100	124	50.0	125	15.0

Dimensions in mm.



d	d (in)	YT853		YT854		TS3			
		D	L	D	L	D1	D2	L1	L2
19	0.750	-	-	54	31	36.4	47	8.0	4.8
20	-	-	-	57	31	39.6	50	8.0	4.8
22	0.875	-	-	57	31	39.6	50	8.0	4.8
24	-	-	-	61	33	42.7	53	8.0	4.8
25	1.000	60	43.5	61	33	42.7	53	8.0	4.8
28	1.125	60	43.5	67	36	50.7	63	11.0	8.0
30	-	67	43.5	70	37	53.9	66	11.0	8.0
32	1.250	-	-	70	37	53.9	66	11.0	8.0
33	-	72	43.5	73	38	57.0	69	11.0	8.0
35	1.375	72	43.5	73	38	57.0	69	11.0	8.0
38	1.500	-	-	76	38	63.4	76	11.0	8.0
40	1.625	78	43.5	80	40	66.5	79	11.0	8.0
43	-	-	-	83	40	69.7	82	11.0	8.0
45	1.750	84	47.5	83	40	69.7	82	11.0	8.0
48	-	-	-	89	43	79.3	95	14.3	9.5
50	2.000	88	47.5	89	43	79.3	95	14.3	9.5
53	2.125	-	-	103	53	82.4	98	14.3	9.5
55	2.250	93	47.5	107	53	85.6	101	14.3	9.5
58	-	-	-	110	53	88.8	106	14.3	9.5
60	2.375	98	52.0	110	53	88.8	106	14.3	9.5
63	2.500	-	-	113	53	91.9	108	14.3	9.5
65	2.625	103	52.0	116	53	95.1	111	14.3	9.5
68	-	-	-	118	53	98.3	114	14.3	9.5
70	2.750	-	-	118	53	98.3	114	14.3	9.5
75	3.000	-	-	126	53	103.1	119	14.3	9.5

Dimensions in mm unless specified.

YT 853/854

NON-PUSHER PTFE BELLOWS SEALS



Technical features

- Single seal
- Multiple springs
- Bi-directional
- PTFE bellows
- Externally mounted
- Replaceable seal face

Operating limits

- $d_1 = 19 - 75 \text{ mm}, 0.750'' - 3.000''$
- $p_1 = 1.0 \text{ MPa}$
- $t = -35 - 120 \text{ }^\circ\text{C}$
- $v_g = 15 \text{ m/s}$

Materials

- Rotary faces: carbon graphite, filled PTFE, silicon carbide
- Stationary seats: alumina ceramic, silicon carbide
- Springs, clamps: AISI 304, 316
- Secondary seals, bellows: PTFE
- Housing: filled PTFE

Stationary seats

- Clamp seats: LS1, TS1, TS2, TS3 (standard), TS4

YT 858/859/87X

MULTIPLE SPRINGS O-RING/PTFE WEDGE SEAL



Technical features

- Single seal
- Multiple springs
- Bi-directional
- Balanced versions available with suffix -B

Operating limits

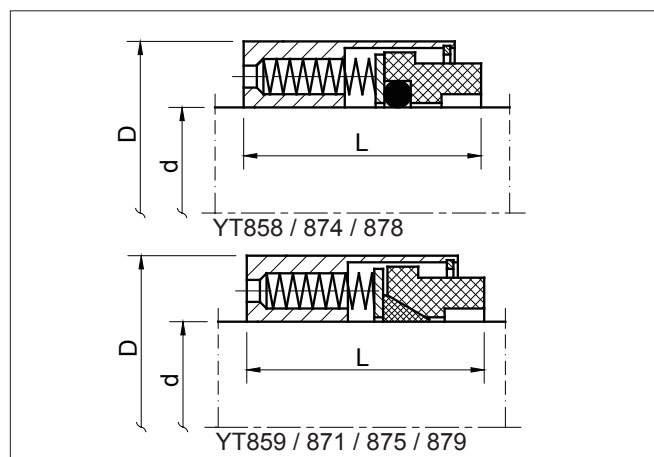
- $d_1 = 14 - 100 \text{ mm}$, 0.500 - 4.000"
- $p_1 = \text{up to } 2.4 \text{ MPa (unbalanced)}$
up to 4.0 MPa (balanced)
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = \text{up to } 25 \text{ m/s}$

Materials

- Rotary faces: carbon graphite, silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, silicon carbide, tungsten carbide
- Springs, other metal components: AISI 304, 316, alloys
- Secondary seals: CR, EPDM, FPM, FEPM, HNBR, NBR

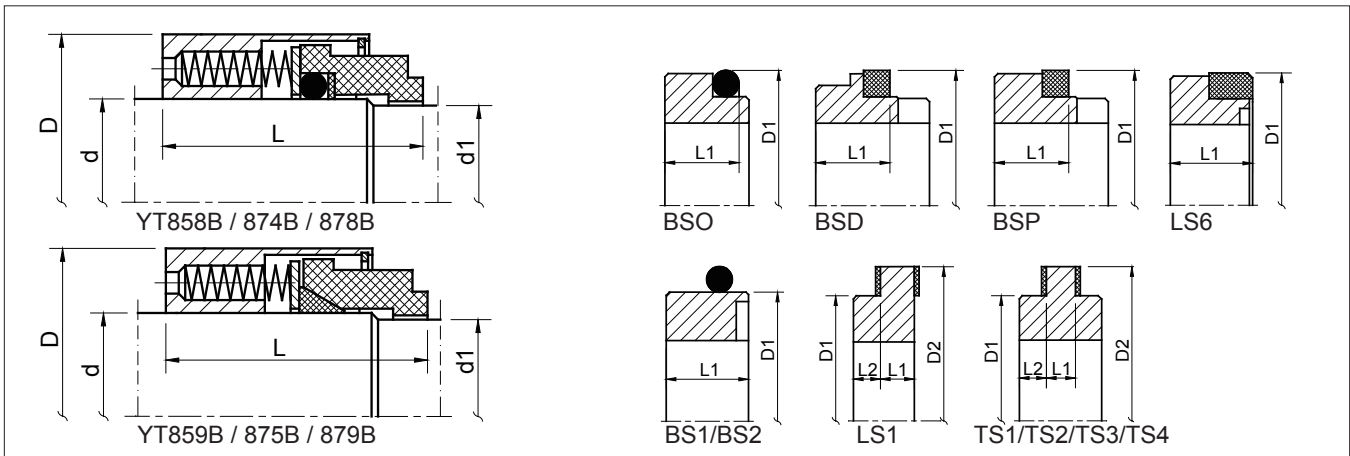
Stationary seats

- YT858: BSO, BSD (with O-ring), BSP (with O-ring, standard)
- YT859/871: BSD (with PTFE ring), BSP (with PTFE ring, standard)
- YT874/874B/878/878B: BS1, BS2, OS1 (standard), OS2, OS3
- YT875/875B/879/879B: LS1, LS6 (standard), TS1, TS2, TS3, TS4
- see page 47 for O-ring mounted seat dimensions



858/859			871		BSO/BSD/BSP		858B/859B			
d	D	L	D	L	D1	L1	d	d1	D	L
14	24	23.0	28.4	21	25	12.0	18	14	32	30.5
16	26	23.0	30.8	19	27	12.0	20	16	34	30.5
18	32	24.0	33.8	22	33	13.5	22	18	36	31.5
20	34	24.0	34.8	24	35	13.5	24	20	38	31.5
22	36	24.0	35.6	24	37	13.5	26	22	40	31.5
24	38	26.7	38.8	25	39	13.3	28	24	42	34.2
25	39	27.0	39.8	25	40	13.0	30	25	44	34.5
28	42	30.0	43.4	27	43	12.5	33	28	47	37.5
30	44	30.5	46.4	27	45	12.0	35	30	49	38.0
32	46	30.5	49.7	29	48	12.0	38	33	54	38.0
33	47	30.5	-	-	48	12.0	40	35	56	38.0
35	49	30.5	51.3	29	50	12.0	43	38	59	39.5
38	54	32.0	54.5	29	56	13.0	45	40	61	39.5
40	56	32.0	59.6	35	58	13.0	48	43	64	39.5
43	59	32.0	64.0	35	61	13.0	50	45	66	39.5
45	61	32.0	64.7	35	63	13.0	53	48	69	39.5
48	64	32.0	67.2	35	66	13.0	55	50	71	44.0
50	66	34.0	69.6	35	70	13.5	58	53	78	44.0
53	69	34.0	-	-	73	13.5	60	55	80	44.0
55	71	34.0	77.7	43	75	13.5	63	58	83	49.0
58	78	39.0	-	-	78	13.5	65	60	85	49.0
60	80	39.0	82.7	43	80	13.5	68	63	88	49.0
63	83	39.0	-	-	83	13.5	70	65	90	49.0
65	85	39.0	87.7	43	85	13.5	75	70	95	55.5
68	88	39.0	-	-	90	13.5	80	75	104	55.5
70	90	45.5	92.6	43	92	14.5	85	80	109	55.0
75	95	45.5	96.3	43	97	14.5	90	85	114	60.0
80	104	45.0	101.1	43	105	15.0	95	90	119	60.0
85	109	45.0	107.7	43	110	15.0	100	95	124	60.0
90	114	50.0	112.7	43	115	15.0	105	100	129	60.0
95	119	50.0	117.7	43	120	15.0				
100	124	50.0	122.7	43	125	15.0				

Dimensions in mm.



874B/875B				878B/879B		874/875			878/879		LS6/BS2		BS1		LS1/TS1				TS2			
d	d1	D	L	D	L	d	D	L	D	L	D1	L1	D1	L1	D1	D2	L1	L2	D1	D2	L1	L2
-	-	-	-	-	-	0.500	1.031	0.812	0.937	0.937	1.000	0.312	1.000	0.406	-	-	-	-	-	-	-	-
0.625	0.500	1.187	1.062	-	-	0.625	1.187	0.750	1.062	0.937	1.250	0.406	1.125	0.406	-	-	-	-	-	-	-	-
0.750	0.625	1.312	1.181	-	-	0.750	1.312	0.875	1.187	0.937	1.375	0.406	1.250	0.437	1.370	1.750	0.250	0.250	1.307	1.718	0.406	0.203
0.875	0.750	1.437	1.260	-	-	0.875	1.437	0.937	1.312	0.937	1.500	0.406	1.375	0.437	1.494	1.875	0.250	0.250	1.432	1.843	0.406	0.203
1.000	0.875	1.562	1.312	1.437	1.312	1.000	1.562	1.000	1.437	1.000	1.625	0.437	1.500	0.500	1.620	2.000	0.375	0.250	1.557	1.968	0.406	0.203
1.125	1.000	1.687	1.375	1.562	1.375	1.125	1.687	1.062	1.562	1.000	1.750	0.437	1.625	0.500	1.745	2.125	0.375	0.250	1.683	2.093	0.406	0.203
1.250	1.125	1.875	1.375	1.687	1.375	1.250	1.875	1.062	1.687	1.000	1.875	0.437	1.875	0.500	1.870	2.250	0.375	0.250	1.807	2.218	0.406	0.203
1.375	1.125	2.000	1.437	1.937	1.687	1.375	2.000	1.125	1.937	1.375	2.000	0.437	2.000	0.500	1.995	2.375	0.375	0.250	2.057	2.593	0.437	0.218
1.500	1.250	2.125	1.437	1.937	1.437	1.500	2.125	1.125	1.937	1.125	2.125	0.437	2.125	0.500	2.245	2.625	0.375	0.250	2.057	2.593	0.437	0.218
1.625	1.375	2.375	1.750	2.250	1.593	1.625	2.375	1.375	2.250	1.156	2.375	0.500	2.250	0.500	2.370	2.750	0.375	0.250	2.370	2.906	0.437	0.218
1.750	1.500	2.500	1.750	2.312	1.750	1.750	2.500	1.375	2.312	1.375	2.500	0.500	2.375	0.500	2.495	3.000	0.375	0.250	2.432	2.968	0.437	0.218
1.875	1.625	2.625	1.750	2.500	1.750	1.875	2.625	1.375	2.500	1.375	2.625	0.500	2.500	0.500	2.620	3.125	0.375	0.250	2.620	3.156	0.437	0.218
2.000	1.750	2.750	1.750	2.625	1.750	2.000	2.750	1.375	2.625	1.375	2.750	0.500	2.625	0.500	2.745	3.250	0.375	0.250	2.744	3.406	0.500	0.250
2.125	1.875	3.000	2.062	2.812	2.062	2.125	3.000	1.687	2.812	1.687	3.000	0.562	2.750	0.562	2.870	3.500	0.375	0.250	2.930	3.593	0.500	0.250
2.250	2.000	3.125	2.062	2.843	1.750	2.250	3.125	1.687	2.843	1.375	3.125	0.562	2.875	0.562	2.995	3.625	0.375	0.250	2.961	3.625	0.500	0.250
2.375	2.125	3.250	2.062	3.000	2.062	2.375	3.250	1.687	3.000	1.687	3.250	0.562	3.000	0.562	3.120	3.750	0.375	0.250	3.118	3.781	0.500	0.250
2.500	2.250	3.375	2.062	3.125	1.750	2.500	3.375	1.687	3.125	1.375	3.375	0.562	3.125	0.562	3.245	4.000	0.375	0.250	3.243	3.906	0.500	0.250
2.625	2.375	3.500	2.062	3.250	2.062	2.625	3.500	1.687	3.250	1.687	3.375	0.625	3.250	0.625	3.370	4.125	0.375	0.250	3.368	4.031	0.500	0.250
2.750	2.500	3.625	2.062	3.375	2.062	2.750	3.625	1.687	3.375	1.687	3.500	0.625	3.375	0.625	3.615	4.250	0.375	0.250	3.493	4.156	0.500	0.250
2.875	2.625	3.750	2.062	3.500	2.062	2.875	3.750	1.687	3.500	1.687	3.750	0.625	3.500	0.625	3.740	4.375	0.375	0.250	3.617	4.281	0.500	0.250
3.000	2.750	3.812	2.062	3.625	2.062	3.000	3.812	1.687	3.625	1.687	3.875	0.625	3.625	0.625	3.865	4.500	0.375	0.250	3.740	4.406	0.500	0.250
3.125	2.875	3.937	2.062	3.750	2.062	3.125	3.937	1.687	3.750	1.687	4.000	0.781	3.750	0.625	3.990	4.625	0.375	0.250	3.865	4.531	0.500	0.250
3.250	3.000	4.125	2.062	3.875	2.062	3.250	4.125	1.687	3.875	1.687	4.125	0.781	3.875	0.625	4.115	4.750	0.375	0.250	3.990	4.656	0.500	0.250
3.375	3.125	4.250	2.062	4.000	2.062	3.375	4.250	1.687	4.000	1.687	4.250	0.781	4.000	0.625	4.240	4.875	0.375	0.250	4.114	4.781	0.500	0.250
3.500	3.250	4.375	2.062	4.125	2.062	3.500	4.375	1.687	4.125	1.687	4.375	0.781	4.125	0.625	4.365	5.000	0.375	0.250	4.238	4.906	0.500	0.250
3.625	3.375	4.500	2.062	4.250	2.062	3.625	4.500	1.687	4.250	1.687	4.500	0.781	4.250	0.687	4.490	5.125	0.375	0.250	4.363	5.031	0.500	0.250
3.750	3.500	4.625	2.062	4.375	2.062	3.750	4.625	1.687	4.375	1.687	4.625	0.781	4.500	0.687	4.615	5.250	0.375	0.250	4.487	5.156	0.500	0.250
3.875	3.625	4.750	2.062	4.500	2.062	3.875	4.750	1.687	4.500	1.687	4.750	0.781	4.625	0.687	4.740	5.375	0.375	0.250	4.612	5.281	0.500	0.250
4.000	3.750	4.875	2.062	4.625	2.062	4.000	4.875	1.687	4.625	1.687	4.875	0.781	4.750	0.687	4.865	5.500	0.375	0.250	4.735	5.406	0.500	0.250

Dimensions in inches

Dimensions in inches. D1 and D2 on BS1, BS2, LS1, TS1, TS2, TS3 and TS4 are actual seat diameters.

		TS3				TS4						TS3				TS4			
d	d (mm)	D1	D2	L1	L2	D1	D2	L1	L2	d	d (mm)	D1	D2	L1	L2	D1	D2	L1	L2
0.750	18	1.426	1.850	0.315	0.189	-	-	-	-	2.500	63	3.610	4.252	0.563	0.374	3.490	4.114	0.563	0.374
0.875	20-22	1.551	1.948	0.315	0.189	-	-	-	-	2.625	65	3.740	4.370	0.563	0.374	3.615	4.272	0.563	0.374
1.000	24-25	1.676	2.067	0.315	0.189	-	-	-	-	2.750	68-70	3.865	4.488	0.563	0.374	3.740	4.370	0.563	0.374
1.125	28	1.990	2.480	0.437	0.313	1.801	2.303	0.437	0.313	2.875	73	3.927	4.526	0.563	0.374	3.865	4.488	0.563	0.374
1.250	30-32	2.115	2.598	0.437	0.313	1.990	2.500	0.437	0.313	3.000	75	4.053	4.685	0.563	0.374	3.927	4.547	0.563	0.374
1.375	33-35	2.240	2.717	0.437	0.313	2.115	2.579	0.437	0.313	3.125	-	4.240	4.921	0.563	0.374	4.053	4.705	0.563	0.374
1.500	38	2.490	2.992	0.437	0.313	2.240	2.736	0.437	0.313	3.250	80	4.490	5.118	0.563	0.374	4.240	4.870	0.563	0.374
1.625	40	2.615	3.110	0.437	0.313	2.490	3.011	0.437	0.313	3.375	-	4.615	5.276	0.563	0.374	4.490	5.000	0.563	0.374
1.750	43-45	2.740	3.228	0.437	0.313	2.615	3.130	0.437	0.313	3.500	85	4.740	5.354	0.563	0.374	4.490	5.138	0.563	0.374
1.875	-	2.865	3.386	0.437	0.313	2.740	3.248	0.437	0.313	3.625	-	4.865	5.511	0.563	0.374	4.740	5.250	0.563	0.374
2.000	48-50	3.115	3.740	0.563	0.374	2.865	3.366	0.437	0.313	3.750	90-95	4.990	5.591	0.563	0.374	4.740	5.374	0.563	0.374
2.125	53	3.240	3.858	0.563	0.374	3.115	3.760	0.563	0.374	3.875	-	5.115	5.767	0.563	0.374	4.865	5.500	0.563	0.374
2.250	55	3.365	3.976	0.563	0.374	3.240	3.878	0.563	0.374	4.000	100	5.240	5.866	0.563	0.374	4.990	5.610	0.563	0.374
2.375	58-60	3.490	4.173	0.563	0.374	3.365	3.996	0.563	0.374										

Dimensions in inches unless specified.

YT 816/860

ELASTOMER BELLOWS SEALS



Technical features

- Unbalanced
- Single spring
- Bi-directional
- Elastomer bellows

Operating limits

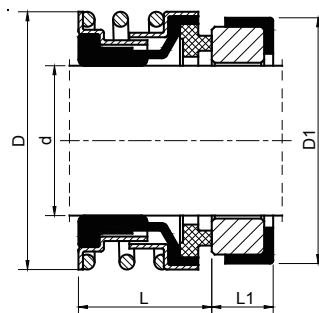
- $d_1 = 0.500'' - 1.000''$
- $p_1 = 0.5 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 10 \text{ m/s}$

Materials

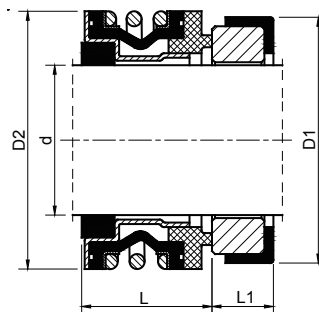
- Rotary faces: carbon graphite, phenolic graphite, silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, silicon carbide, tungsten carbide
- Bellows: CR, EPDM, FPM, FEPM, HNBR, NBR
- Springs, other metal components: AISI 304, 316

Stationary seats

- CS2 (standard)
- see page 47 for other cup mounted seats



YT816 w/CS2



YT860 w/CS2

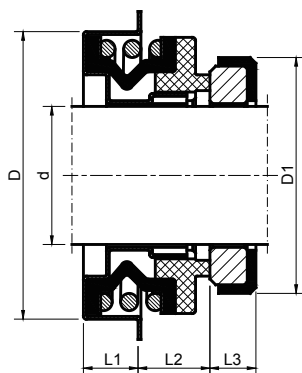
	YT816	YT860		CS2	
d	D	D2	L	D1	L1
0.500	0.917	1.062	0.656	1.000	0.312
0.625a	1.185	1.218	0.718	1.250	0.406
0.625b	1.185	1.218	0.812	1.250	0.406
0.750a	1.302	1.343	0.718	1.375	0.406
0.750b	1.302	1.343	0.812	1.375	0.406
0.875	1.429	1.687	0.812	1.500	0.406
1.000	1.552	1.687	0.812	1.625	0.437

Other seat dimensions are available upon request.

Dimensions in inches.

YT 866/867

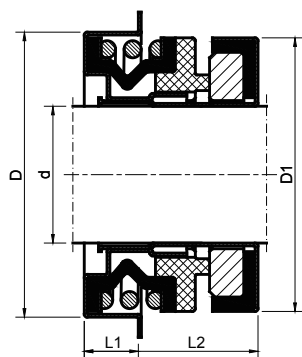
ELASTOMER BELLOWS SEALS



YT866

YT866							
		d	D	L1	L2	D1	L3
metric		12	30	9.5	5.5	24.0	4.5
		13	30	8.5	5.2	25.0	5.0
		17	35	9.0	10.5	30.0	7.5
		20	40	9.5	12.0	35.0	7.0
		25	50	12.0	10.0	41.5	8.0
inches		0.500	1.125	0.340	0.203	1.000	0.312
		0.625	1.437	0.340	0.265	1.250	0.406
		0.750	1.575	0.370	0.235	1.375	0.406
		1.000	1.850	0.394	0.315	1.625	0.437

Other seat dimensions are available upon request.



YT867 (unitised)

	d	D	D1	L1	L2
metric	12a	30.0	25.0	8.0	9.7
	12b	33.3	25.0	6.0	11.7
	12c	28.5	25.0	8.0	9.7
	12d	30.0	28.5	7.0	7.7
	13	30.0	25.0	8.5	9.7
	15	36.5	32.5	8.2	11.2
	16a	36.5	32.5	8.2	11.2
	16b	38.1	32.5	8.5	11.5
	17	35.0	29.5	9.0	13.5
	0.500	1.181	1.125	0.276	0.303
inches	0.625a	1.346	1.181	0.220	0.483
	0.625b	1.437	1.181	0.315	0.441
	0.625c	1.500	1.181	0.315	0.441



Technical features

- Unbalanced
- Single spring
- Bi-directional
- Elastomer bellows

Operating limits

- $d_1 = 12 - 25 \text{ mm}, 0.500 - 1.000''$
- $p_1 = 0.5 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 10 \text{ m/s}$

Materials

- Rotary faces: carbon graphite, phenolic graphite, silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, silicon carbide, tungsten carbide
- Bellows: CR, EPDM, FPM, FEP, HNBR, NBR
- Springs, other metal components: AISI 304, 316

Stationary seats

- CS2 (standard)
- see page 47 for other cup mounted seats

YT 881/882/883

MULTIPLE SPRING SEALS



Technical features

- Single seal
- Unbalanced
- Multiple springs
- Bi-directional

Operating limits

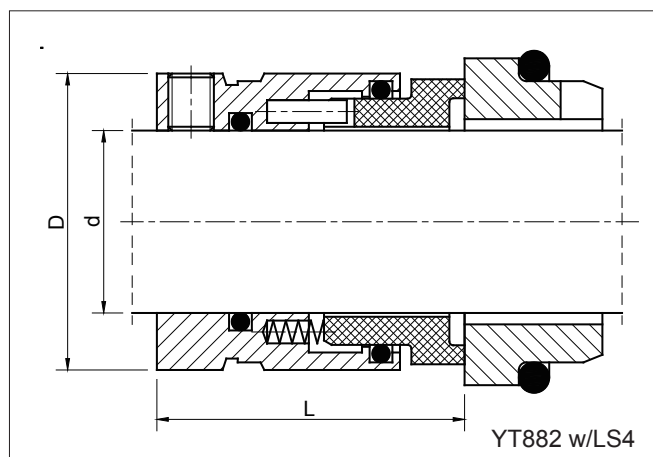
- $d_1 = 18 - 100 \text{ mm}$, $0.750 - 4.000''$
- $p_1 = 2.4 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 20 \text{ m/s}$

Materials

- Rotary faces: carbon graphite, silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, silicon carbide, tungsten carbide
- Springs, other metal components: AISI 304, 316, alloys
- Secondary seals: EPDM, FPM, FEPM, HNBR, NBR

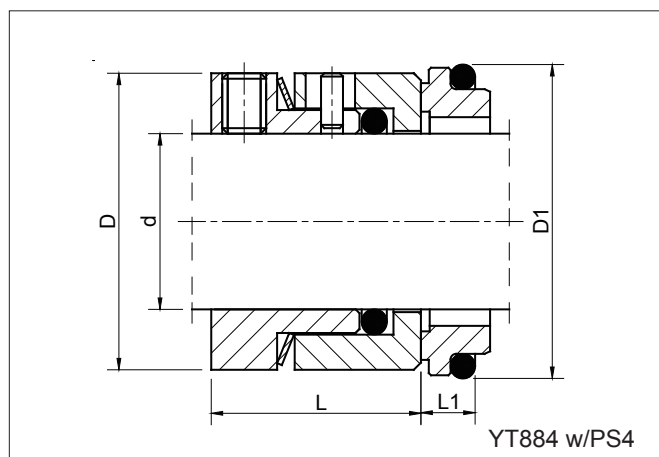
Stationary seats

- YT881 inch shaft sizes: LS1, LS5, OS1 and TS1
- YT881 metric shaft sizes / 882 / 883: GS5, LS3 and LS4



		YT881		YT883		YT882	
d (in)	d (mm)	D (in - mm)	L (in - mm)	L (mm)	D (mm)	L (mm)	
-	18	1.271 32.3	1.375 34.9	30.0	33	38	
0.750	20	1.350 34.3	1.375 34.9	30.0	35	38	
0.875	22	1.429 36.3	1.375 34.9	30.0	37	38	
-	24	1.508 38.3	1.375 34.9	30.0	40	38	
-	25	1.547 39.3	1.375 34.9	30.0	40	38	
1.000	-	1.562 39.7	1.375 34.9	-	-	-	
-	28	1.664 42.3	1.375 34.9	35.0	43	38	
1.125	-	1.687 42.8	1.375 34.9	-	-	-	
-	30	1.743 44.3	1.375 34.9	35.0	45	38	
1.187	-	1.750 44.5	1.750 44.4	-	-	-	
1.250	32	1.812 46.0	1.750 44.4	35.0	49	40	
-	33	1.861 47.3	1.750 44.4	35.0	49	40	
1.375	-	1.937 49.2	1.750 44.4	-	-	-	
-	35	1.929 49.0	1.750 44.4	35.0	50	40	
1.500	38	2.062 52.4	1.750 44.4	35.0	56	44	
-	40	2.187 55.5	1.750 44.4	35.0	56	44	
1.625	-	2.250 57.2	1.750 44.4	-	-	-	
1.687	42	2.312 58.7	1.750 44.4	35.0	60	44	
-	43	2.312 58.7	1.750 44.4	35.0	61	44	
1.750	45	2.375 60.3	1.750 44.4	35.0	61	44	
1.875	48	2.500 63.5	1.750 44.4	35.0	66	44	
2.000	50	2.625 66.7	1.750 44.4	35.0	66	44	
2.125	53	2.750 69.9	1.750 44.4	35.0	70	44	
-	55	2.750 69.9	1.750 44.4	35.0	71	44	
2.250	58	2.875 73.0	1.750 44.4	35.0	-	-	
2.375	60	3.000 76.2	1.750 44.4	35.0	77	44	
2.500	63	3.125 79.4	1.750 44.4	35.0	-	-	
2.625	65	3.250 82.6	1.750 44.4	35.0	83	50	
2.750	70	3.375 85.7	2.000 50.8	35.0	92	54	
2.875	73	3.500 88.9	2.000 50.8	-	-	-	
3.000	75	3.812 96.8	2.000 50.8	48.0	97	54	
3.125	-	3.937 100.0	2.000 50.8	-	-	-	
3.250	80	4.062 103.2	2.000 50.8	48.0	102	54	
3.375	85	4.187 106.3	2.000 50.8	48.0	107	54	
3.500	90	4.312 109.5	2.000 50.8	48.0	112	54	
3.750	95	4.562 115.9	2.000 50.8	48.0	117	54	
4.000	100	4.812 122.2	2.000 50.8	48.0	122	54	

YT882 and YT884: metric shaft sizes only



YT884				PS4	
d	d (in)	D	L	D1	L1
16	0.625	27.0	19.1	28.57	6.3
-	0.750	30.0	19.1	31.75	6.3
20	-	31.0	19.1	-	-
22	0.875	33.0	19.1	-	-
24	-	34.2	19.1	35.45	7.6
25	1.000	35.2	19.1	-	-
28	-	40.0	19.1	42.00	7.6
-	1.125	40.0	19.1	41.27	7.6
30	-	40.7	19.1	42.70	7.6
32	1.250	42.5	19.1	44.45	7.6
33	-	44.0	19.1	-	-
35	1.375	45.6	19.1	47.62	7.6
38	1.500	52.0	21.1	53.97	8.1
40	-	53.8	21.1	-	-
43	1.625	56.0	21.1	-	-
45	1.750	58.2	21.1	60.33	8.1
48	1.875	61.4	21.1	63.50	8.1
50	-	62.0	21.1	63.90	8.1
-	2.000	64.9	22.1	66.68	9.6
54	2.125	71.0	22.1	73.95	9.6
55	-	72.0	22.1	75.00	9.6
60	2.375	76.0	25.8	-	-
63	-	79.3	25.8	83.00	9.1
-	2.500	79.3	25.8	88.90	9.1
65	-	82.3	25.8	-	-
70	2.750	88.9	25.8	95.25	9.1
-	2.875	94.0	25.8	98.42	9.1
75	-	96.0	25.8	100.40	9.1
-	3.000	96.9	25.8	101.60	9.1
80	-	101.0	25.8	104.00	9.1
100	-	124.0	25.8	130.00	9.1
150	-	171.5	25.8	175.35	9.1

Dimensions in mm unless specified.

YT 884

WAVE SPRING SEAL



Technical features

- Single seal
- Unbalanced
- Wave spring
- Bi-directional

Operating limits

- $d_1 = 16 - 150 \text{ mm}, 0.625 - 3.000''$
- $p_1 = 1.5 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 15 \text{ m/s}$

Materials

- Rotary faces: stainless steel, silicon carbide, tungsten carbide
- Stationary seats: carbon, silicon carbide, tungsten carbide
- Springs, other matel components: AISI 304, 316
- Secondary seals: EPDM, FPM, FEPM, HNBR, NBR

Stationary seats

- PS4
- LS4

YT 885

WAVE SPRING SEAL



Technical features

- Single seal
- Unbalanced
- Wave spring
- Bi-directional

Operating limits

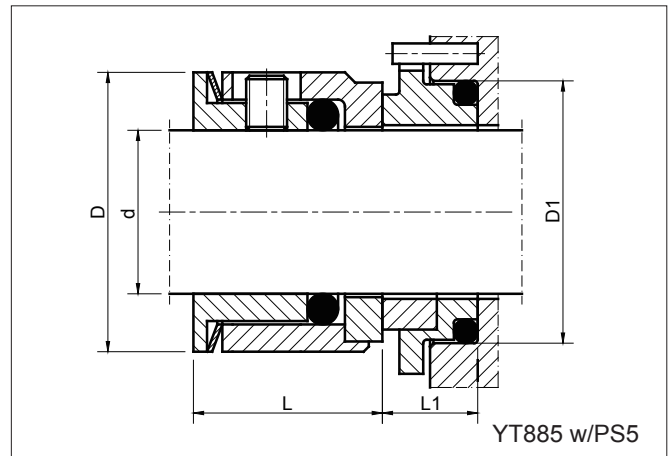
- $d_1 = 20 - 100 \text{ mm}$
- $p_1 = 1.5 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 15 \text{ m/s}$

Materials

- Rotary faces: stainless steel, silicon carbide, tungsten carbide
- Stationary seats: carbon, silicon carbide, tungsten carbide
- Springs, other metal components: AISI 304, 316
- Secondary seals: EPDM, FPM, FEPM, HNBR, NBR

Stationary seats

- PS5

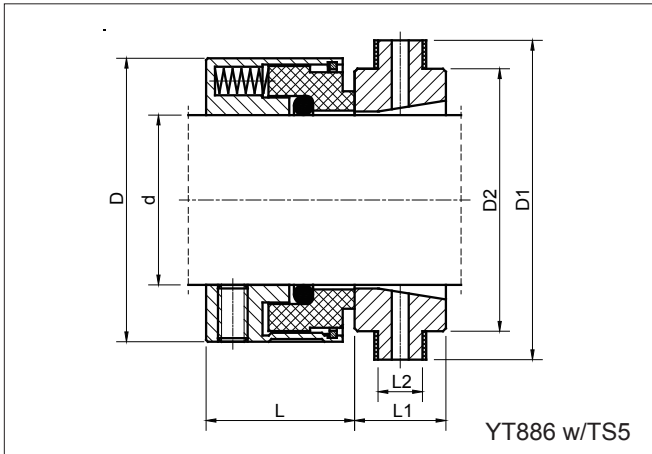


YT885			PS5	
d	D	L	D1	L1
20	32.4	20.0	30.00	10.5
30	44.0	21.4	41.30	11.1
35	50.8	22.0	46.95	12.0
38	55.0	22.0	50.34	12.0
45	62.4	22.9	58.25	12.6
55	76.0	29.3	69.55	13.2
60	83.0	29.8	75.20	13.7
65	89.0	30.3	80.85	14.2
75	99.2	31.1	92.15	14.4
80	105.0	31.6	97.80	14.9
100	125.0	33.1	120.4	16.4

Dimensions in mm.

YT 886

MULTIPLE SPRING O-RING MOUNTED SEAL



YT886			TS5			
d	D	L	D1	D2	L1	L2
1.000	1.750	1.000	-	-	-	-
1.125	1.875	1.000	2.335	1.863	1.000	0.500
1.187	1.937	1.000	-	-	-	-
1.250	2.000	1.000	2.480	1.988	1.000	0.500
1.375a	2.125	1.000	-	-	-	-
1.375b	2.125	1.125	-	-	-	-
1.375c	2.250	1.125	2.682	1.992	1.000	0.500
1.500a	2.250	1.000	-	-	-	-
1.500b	2.250	1.125	-	-	-	-
1.625	2.437	1.156	2.826	2.366	1.000	0.500
2.125a	3.125	1.156	3.326	2.866	1.000	0.500
2.125b	3.125	1.375	3.555	2.866	1.000	0.500
2.625a	3.582	1.250	-	-	-	-
2.625b	3.582	1.375	-	-	-	-
2.875	3.812	1.375	4.475	3.850	1.000	0.500

Dimensions in inches.



Technical features

- Single seal
- Multiple springs
- Bi-directional

Operating limits

- $d_1 = 1.000 - 2.875"$
- $p_1 = 2.0 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = \text{up to } 25 \text{ m/s}$

Materials

- Rotary faces: carbon graphite, silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, silicon carbide, tungsten carbide
- Springs, other metal components: AISI 304, 316, alloys
- Secondary seals: EPDM, FPM, FEPM, HNBR, NBR

Stationary seats

- TS5

YT 908

SINGLE CARTRIDGE SEAL



Technical features

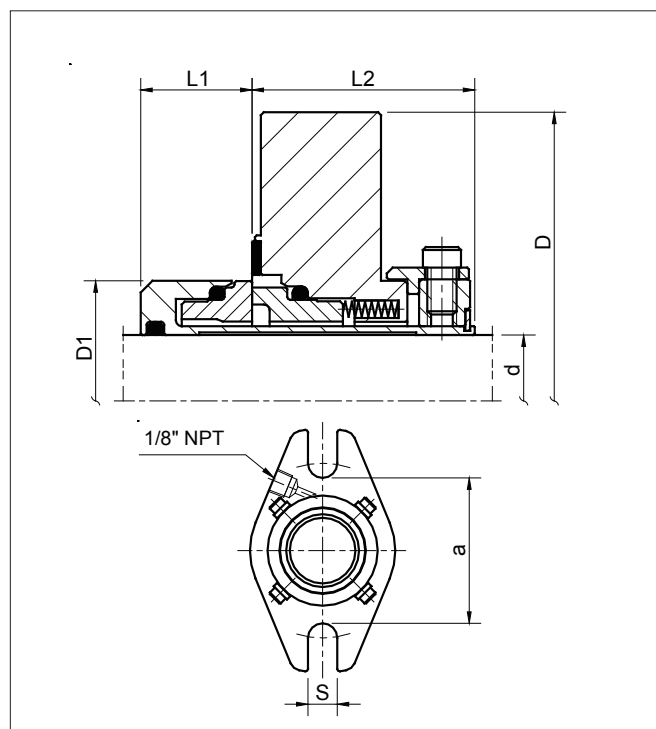
- Single cartridge seal
- Balanced
- Stationary multiple springs design
- Springs isolated from media
- Floating faces
- Quench port available upon request

Operating limits

- $d_1 = 24 - 100 \text{ mm}, 1.000 - 4.000''$
- $p_1 = 2.0 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 30 \text{ m/s}$

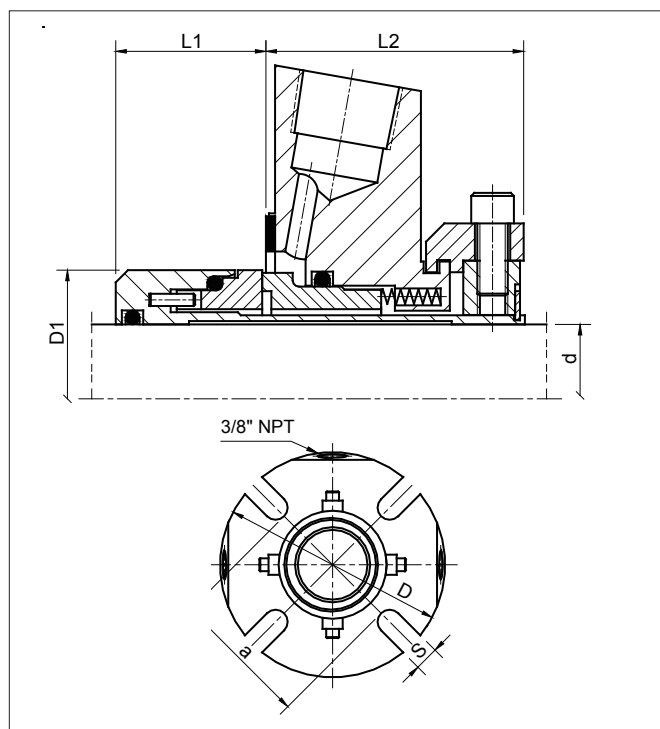
Materials

- Rotary faces: carbon graphite, silicon carbide, tungsten carbide
- Stationary seats: silicon carbide, tungsten carbide
- O-rings: EPDM, FPM, FEPM, HNBR
- Springs: AISI 316, alloys
- Other metal components: AISI 304, 316



d	d (in)	D	D1	L1	L2	a	S
24	-	104	43.5	19	38	62	12.5
25	1.000	104	43.5	19	38	62	12.5
28	1.125	104	46.5	19	38	62	12.5
30	-	104	48.5	19	38	65	12.5
32	1.250	104	50.0	19	38	67	12.5
33	-	104	50.0	19	38	67	12.5
35	1.375	115	53.5	19	38	70	12.5
38	1.500	125	56.5	19	38	75	14.7
40	-	125	58.5	19	38	75	14.7
42	1.625	133	60.5	19	38	80	14.7
43	-	133	61.5	19	38	80	14.7
45	1.750	140	63.5	19	38	81	14.7
48	1.875	140	66.5	19	38	84	14.7
50	2.000	140	68.5	19	38	87	14.7
53	2.125	150	71.5	19	38	90	17.5
55	-	150	73.5	19	38	92	17.5
58	2.250	155	76.6	19	38	95	17.5
60	2.375	160	78.5	19	38	100	17.5
63	2.500	165	81.5	19	38	103	17.5
65	-	165	83.5	19	38	105	17.5
-	2.625	170	85.5	19	38	110	17.5
68	-	170	86.5	19	38	110	17.5
70	2.750	180	88.5	19	38	120	17.5
-	2.875	190	98.0	26	36	123	17.5
75	3.000	190	100.0	26	36	125	17.5
80	3.125	190	105.0	26	36	130	17.5
-	3.250	220	108.0	26	36	133	20.5
85	3.375	220	110.0	26	36	135	20.5
90	3.500	220	115.0	26	36	140	20.5
-	3.625	220	117.0	26	36	142	20.5
95	3.750	220	120.0	26	36	145	20.5
100	4.000	220	125.0	26	36	150	20.5

Dimensions in mm unless specified.

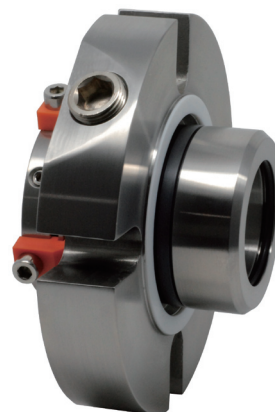


d	d (in)	D	D1	L1	L2	a	S
25	1.000	105	43.0	24.6	42.4	62.0	13.2
-	1.125a	105	43.5	24.6	42.4	65.0	13.2
28	1.125b	105	46.0	24.6	42.4	65.0	13.2
30	-	105	48.0	24.6	42.4	67.0	13.2
32	1.250	108	49.8	24.6	42.4	70.0	13.2
33	-	108	49.8	24.6	42.4	70.0	13.2
-	1.375a	113	49.8	24.6	42.4	72.0	13.2
35	1.375b	113	53.0	24.6	42.4	72.0	13.2
38	1.500	123	56.0	24.6	42.4	75.0	13.2
40	-	123	58.0	24.6	42.4	77.0	14.2
-	1.625	123	59.4	24.6	42.4	78.5	14.2
42	-	133	60.5	24.6	42.4	80.0	14.2
43	-	133	60.5	24.6	42.4	80.0	14.2
45	1.750	138	62.5	24.6	42.4	82.0	14.2
48	1.875	138	65.6	24.6	42.4	85.0	14.2
50	2.000	148	68.0	24.6	42.4	87.0	14.2
53	2.125	148	72.0	24.6	42.4	97.0	18.0
55	-	148	73.0	24.6	42.4	92.0	18.0
-	2.250	157	75.2	24.6	42.4	100.0	18.0
60	2.375	157	78.0	24.6	42.4	102.0	18.0
-	2.500	163	81.6	24.6	42.4	106.0	18.0
65	2.625	163	84.8	24.6	42.4	109.0	18.0
70	2.750	178	93.0	24.6	42.4	118.0	18.0
-	2.875	185	96.8	26.6	57.4	126.0	18.0
75	3.000	190	100.0	26.6	57.4	129.0	18.0
-	3.125	195	103.2	26.6	57.4	132.0	18.0
80	3.250	195	106.4	26.6	57.4	135.0	18.0
85	3.375	198	109.5	26.6	57.4	139.0	22.0
-	3.500	198	112.7	26.6	57.4	142.0	22.0
90	3.625	205	115.9	26.6	57.4	145.0	22.0
95	3.750	208	119.1	26.6	57.4	148.0	22.0
100	4.000	218	125.4	26.6	57.4	154.0	22.0

Dimensions in mm unless specified.

YT 910

SINGLE CARTRIDGE SEAL



Technical features

- Single cartridge seal
- Balanced
- Stationary multiple springs design
- Springs isolated from media
- Floating faces
- Quench ports available upon request (YT910Q)

Operating limits

- $d_1 = 25 - 100 \text{ mm}, 1.000 - 4.000''$
- $p_1 = 2.0 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 30 \text{ m/s}$

Materials

- Rotary faces: carbon graphite, silicon carbide, tungsten carbide
- Stationary seats: silicon carbide, tungsten carbide
- O-rings: EPDM, FPM, FEPM, HNBR
- Springs: AISI 316, alloys
- Other metal components: AISI 304, 316

YT 912

SINGLE CARTRIDGE SEAL



Technical features

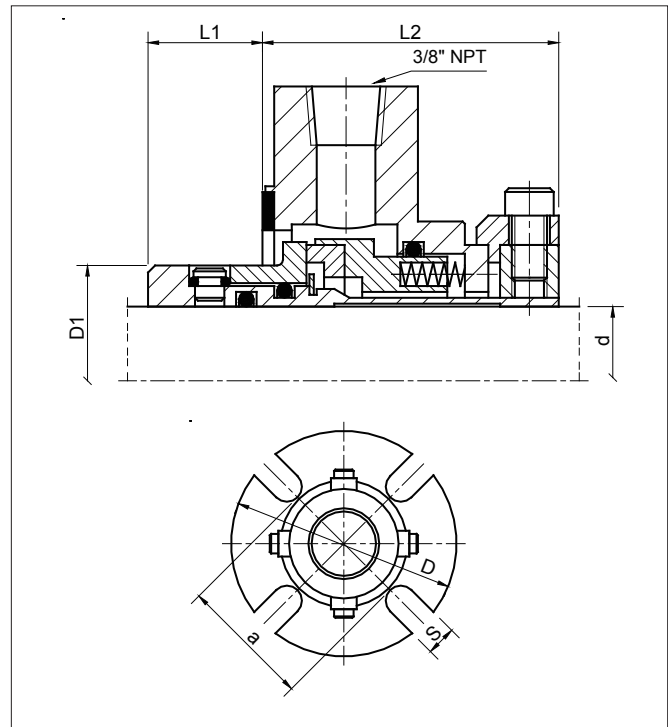
- Single cartridge seal
- Balanced
- Stationary multiple springs design
- Springs isolated from media
- Floating faces
- Quench ports available upon request

Operating limits

- $d_1 = 1.000 - 4.000''$
- $p_1 = 2.0 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 30 \text{ m/s}$

Materials

- Rotary faces: carbon graphite, silicon carbide, tungsten carbide
- Stationary seats: silicon carbide, tungsten carbide
- O-rings: EPDM, FPM, FEPM, HNBR
- Springs: AISI 316, alloys
- Other metal components: AISI 304, 316

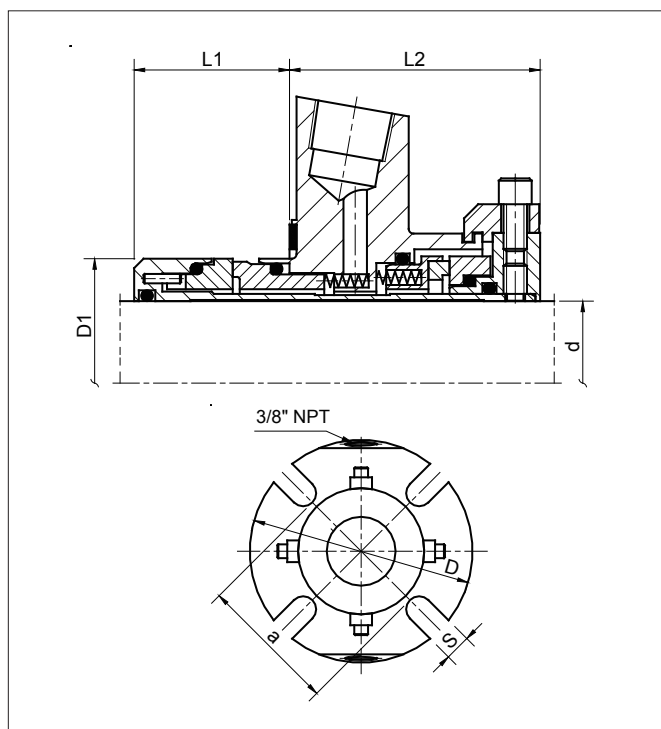


d	D	D1	L1	L2	a	S
1.000	3.750	1.50	0.88	1.880	2.341	0.588
1.125	3.875	1.62	0.88	1.880	2.461	0.588
1.250	4.250	1.75	0.88	1.880	2.581	0.588
1.375	4.250	1.88	0.88	1.880	2.711	0.588
1.500	4.750	2.12	0.88	1.880	3.021	0.588
1.625	4.750	2.25	0.88	1.880	3.151	0.588
1.750	5.000	2.38	0.88	1.880	3.211	0.588
1.875	5.000	2.50	0.88	1.880	3.341	0.588
2.000	5.125	2.62	0.88	1.880	3.586	0.713
2.125	6.000	2.75	0.88	1.880	3.716	0.713
2.250	6.500	2.88	0.88	1.880	3.836	0.713
2.375	6.500	3.12	0.88	2.000	4.086	0.713
2.500	6.625	3.25	0.88	2.000	4.216	0.713
2.625	7.250	3.38	0.88	2.000	4.461	0.838
2.750	7.750	3.50	0.88	2.000	4.591	0.838
2.875	8.000	3.62	0.88	2.000	4.711	0.838
3.000	8.125	3.75	0.88	2.000	4.831	0.838
3.125	8.250	3.88	0.88	2.000	4.961	0.838
3.250	8.375	4.00	0.88	2.000	5.091	0.838
3.375	8.500	4.12	0.88	2.000	5.211	0.838
3.500	8.625	4.25	0.88	2.000	5.331	0.838
3.625	8.750	4.38	0.88	2.000	5.461	0.838
3.750	8.875	4.50	0.88	2.000	5.591	0.838
3.875	9.000	4.62	0.88	2.000	5.711	0.838
4.000	9.000	4.75	0.88	2.000	5.831	0.838

Dimensions in inches.

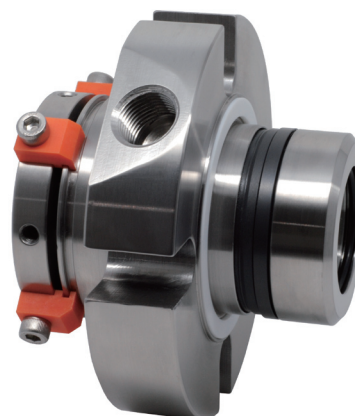
YT 920

DAUL CARTRIDGE SEAL



d	d (in)	D	D1	L1	L2	a	S
25	1.000	105	43.0	33.1	53.4	62.0	13.2
-	1.125a	105	43.5	33.1	53.4	65.0	13.2
28	1.125b	105	46.0	33.1	53.4	65.0	13.2
30	-	105	48.0	33.1	53.4	67.0	13.2
32	1.250	108	49.8	33.1	53.4	70.0	13.2
33	-	108	49.8	33.1	53.4	70.0	13.2
-	1.375a	113	49.8	33.1	53.4	72.0	13.2
35	1.375b	113	53.0	33.1	53.4	72.0	13.2
38	1.500	123	56.0	33.1	53.4	75.0	13.2
40	-	123	58.0	33.1	53.4	77.0	14.2
-	1.625	123	59.4	33.1	53.4	78.5	14.2
42	-	133	60.5	33.1	53.4	80.0	14.2
43	-	133	60.5	33.1	53.4	80.0	14.2
45	1.750	138	62.5	33.1	53.4	82.0	14.2
48	1.875	138	65.6	33.1	53.4	85.0	14.2
50	2.000	148	68.0	33.1	53.4	87.0	14.2
53	2.125	148	72.0	33.1	53.4	97.0	18.0
55	-	148	73.0	33.1	53.4	92.0	18.0
-	2.250	157	75.2	33.1	53.4	100.0	18.0
60	2.375	157	78.0	33.1	53.4	102.0	18.0
-	2.500	163	81.6	33.1	53.4	106.0	18.0
65	2.625	163	84.8	33.1	53.4	109.0	18.0
70	2.750	178	93.0	33.1	53.4	118.0	18.0
-	2.875	185	96.8	44.1	63.9	126.0	18.0
75	3.000	190	100.0	44.1	63.9	129.0	18.0
-	3.125	195	103.2	44.1	63.9	132.0	18.0
80	3.250	195	106.4	44.1	63.9	135.0	18.0
85	3.375	198	109.5	44.1	63.9	139.0	22.0
-	3.500	198	112.7	44.1	63.9	142.0	22.0
90	3.625	205	115.9	44.1	63.9	145.0	22.0
95	3.750	208	119.1	44.1	63.9	148.0	22.0
100	4.000	218	125.4	44.1	63.9	154.0	22.0

Dimensions in mm unless specified.



Technical features

- Daul cartridge seal
- Double balanced
- Stationary multiple springs design
- Springs isolated from media
- Floating faces

Operating limits

- $d_1 = 25 - 100 \text{ mm}, 1.000 - 4.000''$
- $p_1 = 2.5 \text{ MPa}$
- $t = -35 - 160 \text{ }^\circ\text{C}$
- $v_g = 30 \text{ m/s}$

Materials

- Rotary faces: carbon graphite, silicon carbide, tungsten carbide
- Stationary seats: silicon carbide, tungsten carbide
- O-rings: EPDM, FPM, FEPM, HNBR
- Springs: AISI 316, alloys
- Other matel components: AISI 304, 316

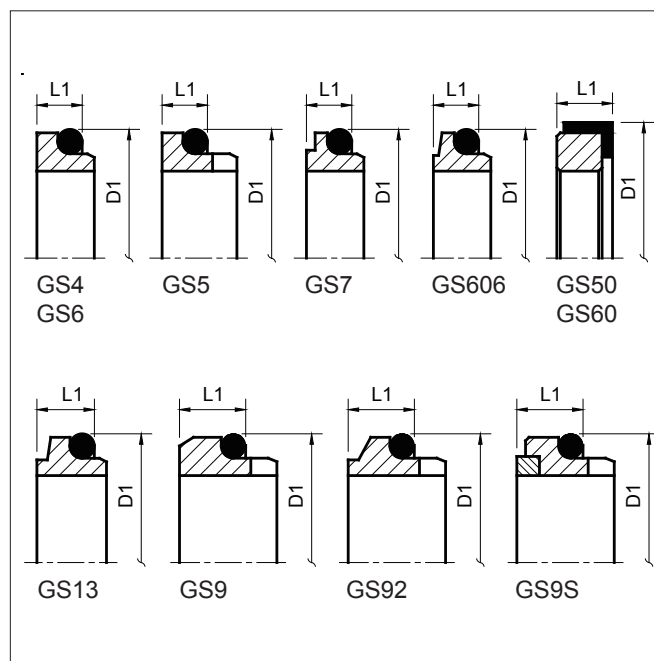
YT GS

STATIONARY SEATS



Description

- Stationary seats for metric shaft sizes
- GS4/GS5/GS6/GS7/GS9/GS50/GS60 available in alumina ceramic, stainless steel, silicon carbide, tungsten carbide
- GS606/GS13/GS92 typically available in carbon
- Face shrink-fitted version of GS4/GS5/GS6/GS9 available as GS4S/GS5S/GS6S/GS9S

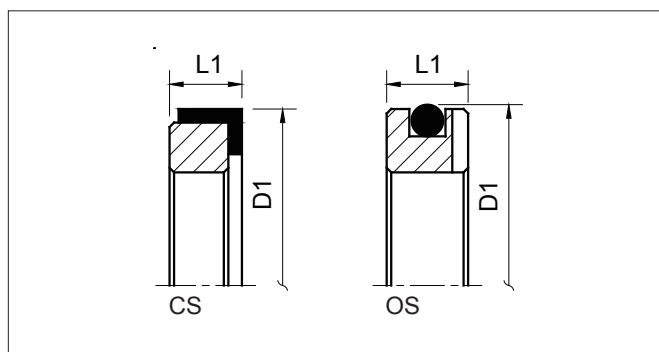


d	GS4 / GS5 / GS7		GS6 / GS60 / GS606		GS13		GS9 / GS92 / GS9S		GS50	
	D1	L1	D1	L1	D1	L1	D1	L1	D1	L1
10	19.2	6.6	21	6.6	19.2	7.1	21	10.0	24.60	9.0
12	21.6	5.6	23	6.6	21.6	7.6	23	10.0	27.80	9.0
14	24.6	5.6	25	6.6	24.6	7.6	25	10.0	30.95	10.5
15	24.6	6.6	27	6.6	24.6	9.0	27	10.0	30.95	10.5
16	28.0	7.5	27	6.6	28.0	9.0	27	10.0	30.95	10.5
18	30.0	8.0	33	7.5	30.0	10.0	33	11.5	34.15	10.5
20	35.0	7.5	35	7.5	35.0	9.5	35	11.5	35.70	10.5
22	35.0	7.5	37	7.5	35.0	9.5	37	11.5	37.30	10.5
24	38.0	7.5	39	7.5	38.0	9.5	39	11.5	40.50	10.5
25	38.0	7.5	40	7.5	38.0	11.0	40	11.5	40.50	10.5
28	42.0	9.0	43	7.5	42.0	11.0	43	11.5	47.65	12.0
30	45.0	10.5	45	7.5	45.0	11.0	45	11.5	50.80	12.0
32	48.0	10.5	48	7.5	48.0	11.0	48	11.5	50.80	12.0
33	50.0	11.0	48	7.5	50.0	11.5	48	11.5	54.00	12.0
35	52.0	11.0	50	7.5	52.0	11.5	50	11.5	54.00	12.0
38	55.0	10.3	56	9.0	55.0	11.5	56	14.0	57.15	12.0
40	58.0	10.8	58	9.0	58.0	11.5	58	14.0	60.35	12.0
42	60.0	12.0	61	9.0	60.0	14.3	61	14.0	63.50	12.0
43	62.0	12.0	61	9.0	62.0	14.3	61	14.0	63.50	12.0
45	64.0	11.6	63	9.0	64.0	14.3	63	14.0	63.50	12.0
48	68.4	11.6	66	9.0	68.4	14.3	66	14.0	66.70	12.0
50	69.3	11.6	70	9.5	69.3	14.3	70	15.0	69.85	13.5
53	72.3	12.3	73	11.0	72.3	14.3	73	15.0	73.05	13.5
55	75.4	13.3	75	11.0	75.4	15.3	75	15.0	76.20	13.5
58	78.4	13.3	78	11.0	78.4	15.3	78	15.0	79.40	13.5
60	80.4	13.3	80	11.0	80.4	15.3	80	15.0	79.40	13.5
63	83.4	13.3	83	11.0	83.4	15.3	83	15.0	82.50	13.5
65	85.4	13.0	85	11.0	85.4	15.3	85	15.0	92.10	16.0
68	91.5	13.7	90	11.3	91.5	16.0	90	18.0	95.25	16.0
70	92.0	13.0	92	11.3	92.0	15.3	92	18.0	95.25	16.0
75	99.0	14.0	97	11.3	99.0	15.3	97	18.0	101.60	16.0
80	104.0	15.0	105	12.0	104.0	16.3	105	18.2	114.30	20.0
85	109.0	14.8	110	14.0	109.0	16.3	110	18.2	117.50	20.0
90	114.0	14.8	115	14.0	114.0	16.3	115	18.2	123.85	20.0
95	120.3	15.8	120	14.0	120.3	17.3	120	17.2	127.00	20.0
100	123.3	15.8	125	14.0	123.3	17.3	125	17.2	133.35	20.0

Dimensions in mm.

YT CS/OS

CUP MOUNTED AND O-RING GROOVE SEATS



OS-	d	D1	L1
OS1-0375	0.375	0.875	0.312
OS2-0375	0.375	0.968	0.343
OS5-0437	0.437	0.995	0.313
OS4-0437	0.437	1.175	0.250
OS1-0500	0.500	1.000	0.312
OS2-0500	0.500	1.094	0.343
OS4-0625	0.625	1.187	0.343
OS2-0625	0.625	1.219	0.406
OS5-0625	0.625	1.250	0.375
OS1-0625	0.625	1.250	0.406
OS4-0750	0.750	1.187	0.406
OS2-0750	0.750	1.344	0.406
OS1-0750	0.750	1.375	0.406
OS2-0813	0.813	1.406	0.406
OS2-0875	0.875	1.469	0.406
OS1-0875	0.875	1.500	0.406
OS1-0937	0.937	1.562	0.437
OS2-1000	1.000	1.594	0.406
OS1-1000	1.000	1.625	0.437
OS5-1000	1.000	1.750	0.437
OS1-1125	1.125	1.750	0.437
OS4-1125	1.125	1.812	0.437
OS3-1125	1.125	1.875	0.437
OS2-1125	1.125	1.875	0.472
OS1-1250	1.250	1.875	0.437
OS3-1250	1.250	2.000	0.437
OS2-1250	1.250	2.000	0.472
OS1-1375	1.375	2.000	0.437
OS5-1375	1.375	2.000	0.687
OS3-1375	1.375	2.125	0.437
OS2-1375	1.375	2.125	0.472
OS4-1437	1.437	2.063	0.437
OS1-1437	1.437	2.125	0.437
OS5-1437	1.437	2.250	0.375
OS3-1437	1.437	2.250	0.437
OS6-1437	1.437	2.250	0.625
OS7-1437	1.437	2.312	0.357
OS6-1500	1.500	2.063	0.437
OS1-1500	1.500	2.125	0.437
OS5-1500	1.500	2.125	0.500
OS2-1500	1.500	2.250	0.472
OS4-1500	1.500	2.312	0.437
OS2-1625	1.625	2.375	0.472
OS1-1625	1.625	2.375	0.500
OS4-1625	1.625	2.625	0.500
OS4-1750	1.750	2.312	0.500
OS2-1750	1.750	2.500	0.472
OS1-1750	1.750	2.500	0.500
OS5-1750	1.750	2.625	0.500
OS6-1750	1.750	2.750	0.625
OS2-1875	1.875	2.625	0.472
OS1-1875	1.875	2.625	0.500

OS-	d	D1	L1
OS4-1875	1.875	2.687	0.500
OS1-2000	2.000	2.750	0.500
OS2-2000	2.000	2.750	0.531
OS4-2000	2.000	3.000	0.500
OS2-2125	2.125	2.875	0.531
OS3-2125	2.125	2.875	0.562
OS1-2125	2.125	3.000	0.562
OS2-2250	2.250	3.000	0.531
OS1-2250	2.250	3.125	0.562
OS2-2375	2.375	3.125	0.531
OS1-2375	2.375	3.250	0.562
OS5-2500	2.500	3.000	0.562
OS4-2500	2.500	3.250	0.437
OS2-2500	2.500	3.250	0.531
OS3-2500	2.500	3.250	0.562
OS1-2500	2.500	3.375	0.562
OS1-2625	2.625	3.375	0.625
OS2-2625	2.625	3.625	0.625
OS1-2750	2.750	3.500	0.625
OS5-2750	2.750	3.625	0.625
OS2-2750	2.750	3.750	0.625
OS4-2875	2.875	3.750	0.562
OS1-2875	2.875	3.750	0.625
OS2-2875	2.875	3.875	0.625
OS1-3000	3.000	3.875	0.625
OS5-3000	3.000	4.000	0.500
OS2-3000	3.000	4.000	0.625
OS4-3125	3.125	4.000	0.625
OS1-3125	3.125	4.000	0.781
OS2-3125	3.125	4.375	0.781
OS4-3250	3.250	4.125	0.625
OS1-3250	3.250	4.125	0.781
OS2-3250	3.250	4.500	0.781
OS4-3375	3.375	4.250	0.625
OS1-3375	3.375	4.250	0.781
OS2-3375	3.375	4.625	0.781
OS4-3500	3.500	4.375	0.625
OS1-3500	3.500	4.375	0.781
OS2-3500	3.500	4.750	0.781
OS4-3625	3.625	4.500	0.687
OS1-3625	3.625	4.500	0.781
OS2-3625	3.625	4.875	0.781
OS4-3750	3.750	4.625	0.687
OS1-3750	3.750	4.625	0.781
OS2-3750	3.750	5.000	0.781
OS4-3875	3.875	4.750	0.687
OS1-3875	3.875	4.750	0.781
OS2-3875	3.875	5.125	0.781
OS4-4000	4.000	4.875	0.687
OS1-4000	4.000	4.875	0.781
OS2-4000	4.000	5.250	0.781

Dimensions in inches.



CS-	d	D1	L1
CS2-0375	0.375	0.875	0.312
CS3-0375	0.375	0.968	0.344
CS4-0437	0.437	1.175	0.250
CS9-0500a	0.500	0.938	0.225
CS9-0500b	0.500	1.000	0.187
CS9-0500c	0.500	1.000	0.218
CS9-0500d	0.500	1.000	0.290
CS2-0500	0.500	1.000	0.312
CS3-0500	0.500	1.094	0.343
CS9-0625a	0.625	1.187	0.288
CS4-0625	0.625	1.187	0.343
CS3-0625	0.625	1.219	0.406
CS9-0625b	0.625	1.250	0.250
CS9-0625c	0.625	1.250	0.281
CS9-0625d	0.625	1.250	0.343
CS2-0625	0.625	1.250	0.406
CS9-0625e	0.625	1.270	0.406
CS5-0625	0.625	1.375	0.406
CS9-0625f	0.625	1.375	0.562
CS5-0750	0.750	1.275	0.281
CS4-0750	0.750	1.312	0.281
CS3-0750	0.750	1.344	0.406
CS9-0750a	0.750	1.375	0.250
CS9-0750b	0.750	1.375	0.281
CS2-0750	0.750	1.375	0.406
CS9-0750c	0.750	1.437	0.406
CS9-0750d	0.750	1.500	0.250
CS2-0813	0.813	1.375	0.406
CS3-0813	0.813	1.406	0.406
CS4-0875	0.875	1.437	0.265
CS3-0875	0.875	1.469	0.406
CS2-0875	0.875	1.500	0.406
CS5-0875	0.875	1.562	0.406
CS3-1000	1.000	1.594	0.406
CS9-1000a	1.000	1.625	0.385
CS4-1000	1.000	1.625	0.406
CS2-1000	1.000	1.625	0.437
CS5-1000	1.000	1.750	0.437
CS2-1125	1.125	1.750	0.437
CS5-1125	1.125	1.875	0.437
CS4-1125	1.125	1.875	0.437
CS3-1125	1.125	1.875	0.472
CS4-1187	1.187	1.750	0.437
CS2-1187	1.187	1.875	0.437
CS9-1250a	1.250	1.750	0.365
CS5-1250	1.250	1.762	0.365
CS2-1250	1.250	1.875	0.437
CS4-1250	1.250	2.000	0.437
CS3-1250	1.250	2.000	0.472
CS2-1375	1.375	2.000	0.437
CS4-1375	1.375	2.125	0.437
CS3-1375	1.375	2.125	0.472
CS2-1437	1.437	2.125	0.437
CS2-1500	1.500	2.125	0.437
CS5-1500	1.500	2.156	0.437
CS3-1500	1.500	2.250	0.472
CS4-1500	1.500	2.250	0.437
CS5-1625	1.625	2.312	0.500
CS3-1625	1.625	2.375	0.472
CS2-1625	1.625	2.375	0.500
CS4-1625	1.625	2.625	0.500
CS3-1750	1.750	2.500	0.472
CS2-1750	1.750	2.500	0.500
CS5-1750	1.750	2.625	0.500
CS3-1875	1.875	2.625	0.472
CS2-1875	1.875	2.625	0.500
CS4-2000	2.000	2.625	0.500
CS2-2000	2.000	2.750	0.500
CS3-2000	2.000	2.750	0.531
CS3-2125	2.125	2.875	0.531
CS2-2125	2.125	3.000	0.562
CS4-2125	2.125	3.000	0.625
CS3-2250	2.250	3.000	0.531
CS2-2250	2.250	3.125	0.562
CS3-2375	2.375	3.125	0.531
CS2-2375	2.375	3.250	0.562
CS3-2500	2.500	3.250	0.531
CS2-2500	2.500	3.375	0.562
CS2-2625	2.625	3.375	0.625
CS3-2625	2.625	3.625	0.625
CS2-2750	2.750	3.500	0.625
CS3-2750	2.750	3.750	0.625
CS2-2875	2.875	3.750	0.625
CS3-2875	2.875	3.875	0.625
CS2-3000	3.000	3.875	0.625
CS3-3000	3.000	4.000	0.625
CS3-3125	3.125	4.375	0.781
CS3-3250	3.250	4.500	0.781
CS3-3375	3.375	4.625	0.781
CS3-3500	3.500	4.750	0.781
CS3-3625	3.625	4.875	0.781
CS3-3750	3.750	5.000	0.781
CS3-3875	3.875	5.125	0.781
CS3-4000	4.000	5.250	0.781

Dimensions in inches.

SEAL FACE MATERIALS

PROPERTIES DATA SHEETS

We supply custom made seal faces, shaft, sleeves, and bearings according to user's specifications with prompt delivery. The following materials are currently available, for a broad range of corrosive-abrasive applications:

- alumina ceramic
- carbon graphite (antimony, and resin impregnated)
- phenolic graphite
- PTFE (pure, or alumina/graphite/glass fiber filled)
- silicon carbide (reaction bonded, and α -sintered)
- tungsten carbide (cobalt, and nickel bonded)
- hard coatings (NCB, chromium oxide, alumina-titanium oxide, tungsten carbide, etc.)

Alumina ceramics

		Al ₂ O ₃ -99.5%	Al ₂ O ₃ -99%	Al ₂ O ₃ -97%
Purity	%	99.5	>99.0	>97.0
Density	g/cm ³	3.90	3.88	3.71
Hardness Vickers 1kg	kg/mm ²	1950	1900	1750
Modulus of Elasticity	GPa	330	330	280
Fracture toughness	MPa*m ^{1/2}	3.7	3.7	3.5
Flexural Strength (MOR)	MPa	350	330	310
Compressive Strength	MPa	2300	2300	2300
Thermal Expansion (CTE)	10 ⁻⁶ /K	8.0	8.0	8.0
Thermal Conductivity	W/(m·K)	30.0	30.0	26.0

Phenolic graphite

Density	g/cm ³	1.72
Porosity	%	0.3
Hardness	HS	75
Flexural Strength (MOR)	MPa	61
Compressive Strength	MPa	147
Frictional Coefficient	-	0.15

Resin impregnated carbon graphite

		M106H	M106K	M106F
Resin Type		epoxy	furan	phenolic
Density	g/cm ³	1.75	1.75	1.75
Porosity	%	<1.0	<1.0	<1.0
Hardness	HS	85	90	85
Modulus of Elasticity	GPa	18	18	18
Flexural Strength (MOR)	MPa	65	67	60
Compressive Strength	MPa	200	200	200
Thermal Expansion (CTE)	10 ⁻⁶ /K	4.5	6.5	6.5
Working Temperature	°C	250	250	250



SEAL FACE MATERIALS

PROPERTIES DATA SHEETS



Silicon carbide

		RB-SiC	α -SSiC
Purity	%	>90	>98
Density	g/cm ³	3.04	3.10
Hardness Vickers 1kg	kg/mm ²	2200	2400
Modulus of Elasticity	GPa	390	400
Fracture toughness	MPa·m ^{1/2}	4.6	4.5
Flexural Strength (MOR)	MPa	420	440
Compressive Strength	MPa	2500	2800
Thermal Expansion (CTE)	10 ⁻⁶ /K	4.3	4.4
Thermal Conductivity	W/(m K)	120	140



PTFE

		pure	filled		
			alumina 18%	glass 25%	carbon 25%
Density	g/cm ³	2.08	2.20	2.16	2.08
Water Absorption	% (24h)	<0.01	0.02	0.02	0.05
Hardness	Shore D	D50	D68	D60	D62
Tensile Strength	MPa	26.5	13.8	14.3	12.9
Flexural Modulus	MPa	490	1310	1292	1088
Flexural Strength (MOR)	MPa	19.7	18.9	13.2	15.6
Compressive Strength	MPa	23.8	12.8	6.9	11.6
Thermal Expansion (CTE)	10 ⁻⁶ /K	135	92	115	108
Thermal Conductivity	W/(m K)	24.6·10 ⁻⁶	42.8·10 ⁻⁶	44.5·10 ⁻⁶	65.1·10 ⁻⁶
Max. Operating Temp.	°C	260	260	260	260



Tungsten carbide

		TC-Co 8%	TC-Co 11%	TC-Ni 6%
Density	g/cm ³	14.6	14.4	14.6
Hardness HRA	-	>90	>89	>90
Modulus of Elasticity	GPa	600	570	600
Flexural Strength (MOR)	MPa	1800	2400	1800
Thermal Expansion (CTE)	10 ⁻⁶ /K	4.6	4.8	4.5
Thermal Conductivity	W/(m K)	88	82	96

Antimony impregnated carbon graphite

		M106D	M120D	M254D
Density	g/cm ³	2.30	2.30	2.30
Porosity	%	<1.5	<1.5	<1.5
Hardness	HS	85	75	55
Modulus of Elasticity	GPa	20	20	20
Flexural Strength (MOR)	MPa	65	60	55
Compressive Strength	MPa	220	220	210
Thermal Expansion (CTE)	10 ⁻⁶ /K	7.2	7.2	6.5
Working Temperature	°C	400	400	400

