

MSeals Co., Ltd.



experience quality and performance at low cost

Mechanical Seals
Product catalog

MSeals (YuTong) Mechanical Seals Cross Reference Table

Page	MSeals YuTong Type	Previous YuTong Designation	Equivalent						
			Burgmann	BT	John Crane	Pac-seal	Roten	US Seal	Other Manufacturers
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4	YT632		M32						
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7	YT642		H12N						
7	YT647		H17GN						
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23	YT579				9T	9T			
24	YT853	WB2							
25	YT466	DY46							Latty 166
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Introduction to MSeals (YuTong)



MSeals (YuTong) supplies various types of elastomer bellows or diaphragm single and double non-pusher seals, single coil pusher seals, multiple springs pusher seals, multiple springs PTFE wedge pusher seals, PTFE bellows seals, and cartridge seals, which are interchangeable to equivalent Burgmann, BT, Fristam, John Crane, Latty, Pac-seal, Roten, Sealol, and US Seal brand products.

For specific mechanical seals not listed in this brochure, please contact us for availability and customizing possibility.

experience quality and performance at low cost

MSeals is a newly established subsidiary of YuTong Mechanical Seals Co. Ltd., which has been designing and manufacturing mechanical seals for various industries since 1985, and is dedicated for serving international customers. By providing premium quality, reliable technology, best price and prompt delivery, MSeals (YuTong) today is supplying products to customers at over twenty countries in Europe, North America, East Asia and South America.

MSeals supplies a broad range of component seals and cartridge seals

equivalent to brand products. In addition, MSeals also manufactures seal face materials including alumina ceramics, carbon graphites, silicon carbides, silicon nitrides, tungsten carbides and various filled PTFE. Our new facility, located at Fenghua, Zhejiang Province, China, provides high manufacturing capacity and full test platforms. For regular customers, MSeals keeps a large stock for minimizing their inventories.

MSeals is certified according to ISO 9002.

What does MSeals have to offer?

- broad range of mechanical seals;
- wide variety of seal face materials;
- custom made parts and seal assemblies to your specifications;
- high quality finish ceramic and carbide shaft sleeves and bearings;
- seal failure analysis service;
- face material test and identification;
- high volume metal and plastic components manufacturing.



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YT 610/612/613/614

EQUIVALENTS OF BURGMANN MG SERIES



Technical features

- Single seal
- Unbalanced
- Single spring
- Bi-directional
- Elastomer bellows
- Equivalent to Burgmann MG1/MG12/MG13/MG1S20

Operating limits

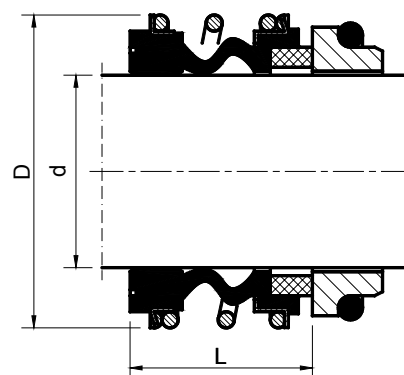
- $d_1 = 10 - 100 \text{ mm}$
- $p_1 = 1.2 \text{ MPa}$
- $t = -20 - 180 \text{ }^\circ\text{C}$
- $v_g = 10 \text{ m/s}$

Materials

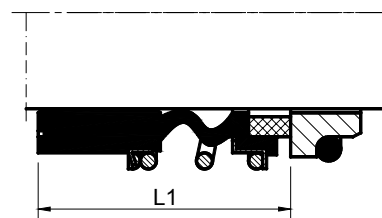
- Seal faces: silicon carbide, tungsten carbide, carbon graphite (resin-impreg.)
- Stationary seats: silicon carbide, alumina ceramic, carbon graphite (resin-impreg.), Cr-Mo steel
- Bellows: Neoprene, NBR, FPM, EPDM
- Springs, "L"-rings: AISI 304, 316, 316Ti
- Secondary seals: Neoprene, NBR, FPM, EPDM

Stationary seats

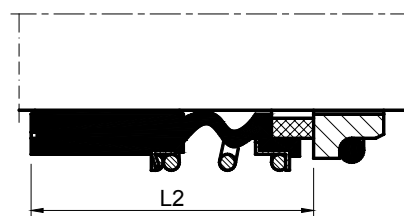
- G6, G60, G9, G606 (to DIN 24960)
- G4, G50



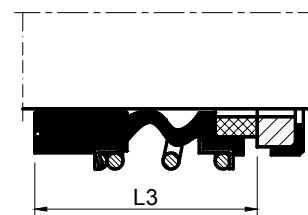
YT610



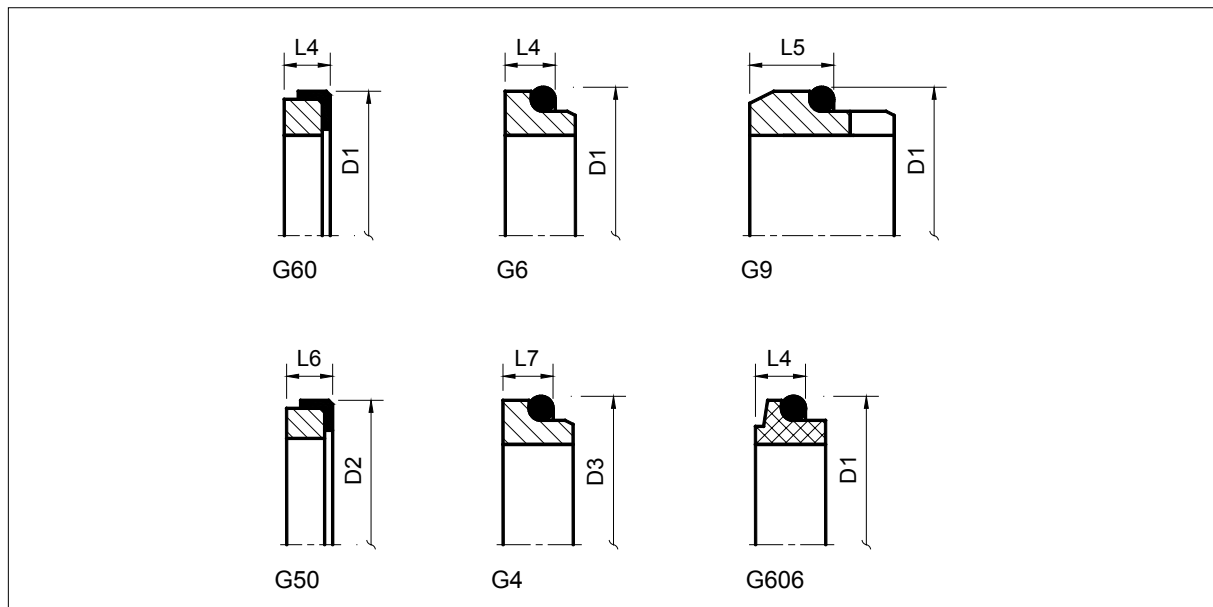
YT612



YT613



YT614



d	D	D1	D2	D3	L	L1	L2	L3	L4	L5	L6	L7
10	22.5	21	24.60	19.2	14.5	25.9	33.4	25.0	6.6	10.0	9.0	6.6
12	25.0	23	27.80	21.6	15.0	25.9	33.4	25.0	6.6	10.0	9.0	5.6
14	28.5	25	30.95	24.6	17.0	28.4	33.4	25.0	6.6	10.0	10.5	5.6
15	28.5	27	30.95	24.6	17.0	28.4	33.4	25.0	6.6	10.0	10.5	6.6
16	28.5	27	30.95	28.0	17.0	28.4	33.4	25.0	6.6	10.0	10.5	7.5
18	32.0	33	34.15	30.0	19.5	30.0	37.5	25.0	7.5	11.5	10.5	8.0
20	37.0	35	35.70	35.0	21.5	30.0	37.5	25.0	7.5	11.5	10.5	7.5
22	37.0	37	37.30	35.0	21.5	30.0	37.5	25.0	7.5	11.5	10.5	7.5
24	42.5	39	40.50	38.0	22.5	32.5	42.5	25.0	7.5	11.5	10.5	7.5
25	42.5	40	40.50	38.0	23.0	32.5	42.5	25.0	7.5	11.5	10.5	7.5
28	49.0	43	47.65	42.0	26.5	35.0	42.5	33.0	7.5	11.5	12.0	9.0
30	49.0	45	50.80	45.0	26.5	35.0	42.5	33.0	7.5	11.5	12.0	10.5
32	53.5	48	50.80	48.0	27.5	35.0	47.5	33.0	7.5	11.5	12.0	10.5
33	53.5	48	54.00	50.0	27.5	35.0	47.5	33.0	7.5	11.5	12.0	11.0
35	57.0	50	54.00	52.0	28.5	35.0	47.5	33.0	7.5	11.5	12.0	11.0
38	59.0	56	57.15	55.0	30.0	36.0	46.0	33.0	9.0	14.0	12.0	10.3
40	62.0	58	60.35	58.0	30.0	36.0	46.0	33.0	9.0	14.0	12.0	10.8
42	65.5	61	63.50	60.0	30.0	36.0	51.0	51.0	9.0	14.0	12.0	12.0
43	65.5	61	63.50	62.0	30.0	36.0	51.0	51.0	9.0	14.0	12.0	12.0
45	68.0	63	63.50	64.0	30.0	36.0	51.0	51.0	9.0	14.0	12.0	11.6
48	70.5	66	66.70	68.4	30.5	36.0	51.0	51.0	9.0	14.0	12.0	11.6
50	74.0	70	69.85	69.3	30.5	36.0	50.5	50.5	9.5	15.0	13.5	11.6
53	78.5	73	73.05	72.3	33.0	36.5	59.0	59.0	11.0	15.0	13.5	12.3
55	81.0	75	76.20	75.4	35.0	36.5	59.0	59.0	11.0	15.0	13.5	13.3
58	85.5	78	79.40	78.4	37.0	41.5	59.0	59.0	11.0	15.0	13.5	13.3
60	88.5	80	79.40	80.4	38.0	41.5	59.0	59.0	11.0	15.0	13.5	13.3
65	93.5	85	92.10	85.4	40.0	41.5	69.0	69.0	11.0	15.0	16.0	13.0
68	96.5	90	95.25	91.5	40.0	41.5	68.7	68.7	11.3	18.0	16.0	13.7
70	99.5	92	95.25	92.0	40.0	48.7	68.7	68.7	11.3	18.0	16.0	13.0
75	107.0	97	101.60	99.0	40.0	48.7	68.7	68.7	11.3	18.0	16.0	14.0
80	112.0	105	114.30	104.0	40.0	48.0	78.0	78.0	12.0	18.2	20.0	15.0
85	120.0	110	117.50	109.0	41.0	46.0	76.0	76.0	14.0	18.2	20.0	14.8
90	127.0	115	123.85	114.0	45.0	51.0	76.0	76.0	14.0	18.2	20.0	14.8
95	132.0	120	127.00	120.3	46.0	51.0	76.0	76.0	14.0	17.2	20.0	15.8
100	137.0	125	133.35	123.3	47.0	51.0	76.0	76.0	14.0	17.2	20.0	15.8

YT612 conforms to DIN 24960 L_{IK} length standard; YT613 conforms to DIN 24960 L_{IN} length standard.

Dimensions in mm.

YT 630/632/637/638

EQUIVALENTS OF BURGMANN M3 SERIES



Technical features

- Single seal
- Unbalanced
- Conical spring
- Uni-directional
- To DIN 24960
- Equivalent to Burgmann M3N/M32/M37/M37G

Operating limits

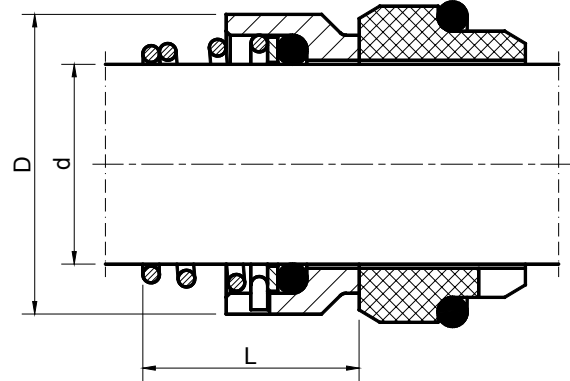
- $d_1 = 10 - 80 \text{ mm}$
- $p_1 = 1.0 \text{ MPa}$
- $t = -40 - 205 \text{ }^\circ\text{C}$
- $v_g = 10 \text{ m/s}$

Materials

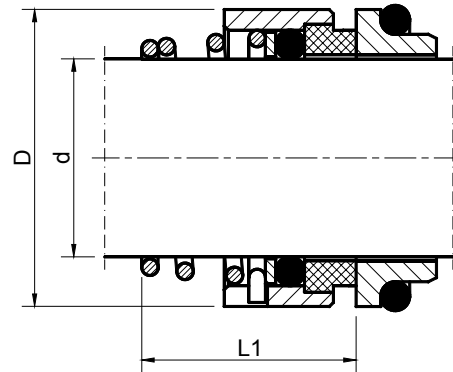
- Seal faces: Cr-Mo steel (YT630), resin-impreg. carbon graphite (YT632), silicon carbide (YT637), tungsten carbide (YT638)
- Stationary seats: silicon carbide, alumina ceramic, carbon graphite (resin-impreg.), Cr-Mo steel
- Springs, face housing: AISI 316, 316Ti
- Secondary seals: NBR, FPM, EPDM

Stationary seats

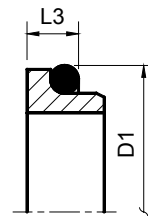
- YT630: G9, G13
- YT632: G6, G9, G4
- YT637: G6, G9, G4
- YT638: G6, G9, G4



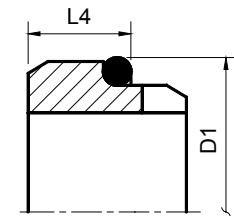
YT630: seal face with solid steel



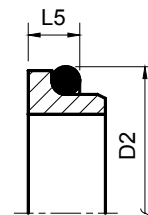
YT632: seal face with shrink-fitted carbon



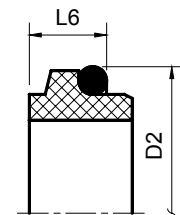
G6



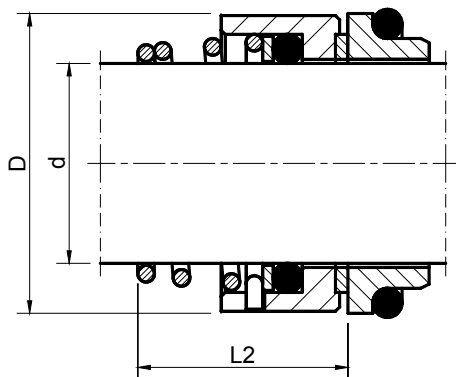
G9



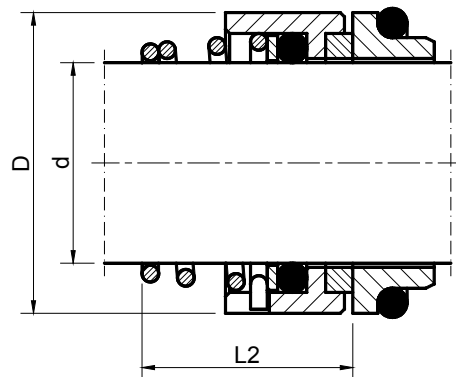
G4



G13



YT637: seal face with brazed tungsten carbide



YT638: seal face with shrink-fitted silicon carbide

d	D	D1	D2	L	L1	L2	L3	L4	L5	L6
10	19	21	19.2	15.5	16.9	-	6.6	10.0	6.6	7.1
12	21	23	21.6	16.0	17.4	-	6.6	10.0	5.6	7.6
14	23	25	24.6	16.5	17.4	16.5	6.6	10.0	5.6	7.6
15	24	27	24.6	18.0	17.4	16.5	6.6	10.0	6.6	8.6
16	26	27	28.0	18.0	19.5	16.5	6.6	10.0	7.5	9.0
18	29	33	30.0	19.5	20.5	18.0	7.5	11.5	8.0	10.0
20	31	35	35.0	22.0	22.0	19.0	7.5	11.5	7.5	9.5
22	33	37	35.0	21.5	23.5	20.5	7.5	11.5	7.5	9.5
24	35	39	38.0	23.5	25.0	22.0	7.5	11.5	7.5	9.5
25	36	40	38.0	26.5	26.5	23.5	7.5	11.5	7.5	9.5
28	40	43	42.0	26.5	26.5	24.5	7.5	11.5	9.0	11.0
30	43	45	45.0	26.5	25.0	24.5	7.5	11.5	10.5	11.0
32	46	48	48.0	28.5	28.5	28.0	7.5	11.5	10.5	11.0
33	47	48	50.0	28.5	28.5	28.0	7.5	11.5	11.0	11.5
35	49	50	52.0	28.5	28.5	28.0	7.5	11.5	11.0	11.5
38	53	56	55.0	33.5	32.2	31.0	9.0	14.0	10.3	11.5
40	56	58	58.0	36.0	34.7	34.0	9.0	14.0	10.8	11.5
42	59	61	60.0	37.5	37.3	35.0	9.0	14.0	12.0	14.3
43	59	61	62.0	38.5	37.3	36.0	9.0	14.0	12.0	14.3
45	61	63	64.0	39.5	39.2	36.5	9.0	14.0	11.6	14.3
48	64	66	68.4	46.0	44.7	42.0	9.0	14.0	11.6	14.3
50	66	70	69.3	45.0	45.7	43.0	9.5	15.0	11.6	14.3
53	69	73	72.3	47.0	49.0	43.0	11.0	15.0	12.3	15.3
55	71	75	75.4	49.0	49.0	47.0	11.0	15.0	13.3	15.3
58	76	78	78.4	55.0	52.0	50.0	11.0	15.0	13.3	15.3
60	78	80	80.4	55.0	3.0	51.0	11.0	15.0	13.3	15.3
65	84	85	85.4	55.0	54.3	52.0	11.0	15.0	13.0	15.3
68	88	90	91.5	55.0	55.3	52.7	11.3	18.0	13.7	16.0
70	90	92	92.0	57.0	56.3	54.0	11.3	18.0	13.0	15.3
75	98	97	99.0	62.0	56.3	54.0	11.3	18.0	14.0	15.3
80	100	105	104.0	61.8	59.3	58.0	12.0	18.2	15.0	16.3

Dimensions in mm.

YT 620

EQUIVALENTS OF BURGMANN M2



Technical features

- Single seal
- Unbalanced
- Conical spring
- Uni-directional
- To DIN 24960
- Equivalent to Burgmann M2

Operating limits

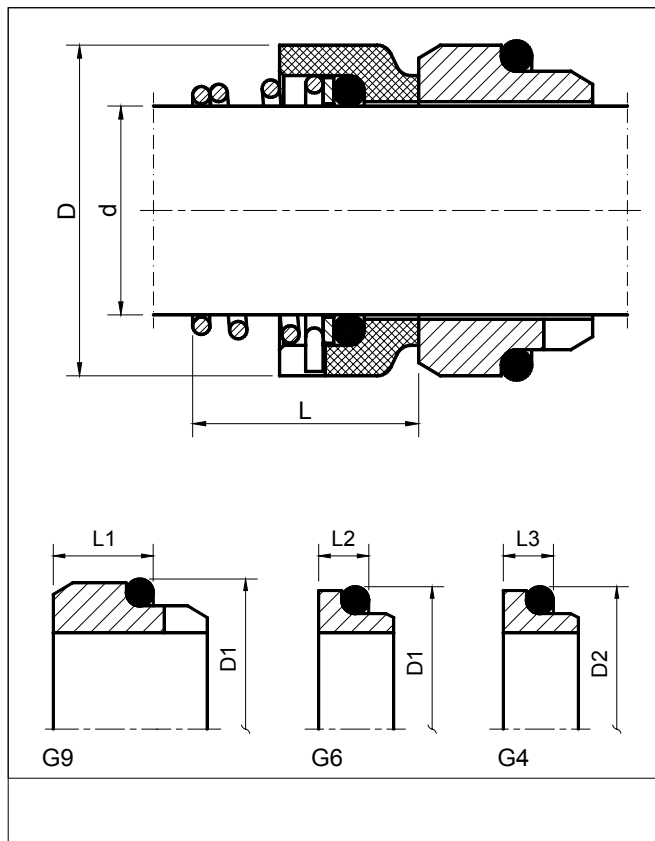
- $d_1 = 6 - 38 \text{ mm}$
- $p_1 = 1.0 \text{ MPa}$
- $t = -40 - 205 \text{ }^\circ\text{C}$
- $v_g = 15 \text{ m/s}$

Materials

- Seal faces: carbon graphite (resin-impreg.)
- Stationary seats: silicon carbide, alumina ceramic, carbon graphite (resin-impreg.), Cr-Mo steel
- Springs: AISI 316, 316Ti
- Secondary seals: NBR, FPM, EPDM

Stationary seats

- G6, G9 (to DIN 24960)
- G4



d	D	D1	D2	L	L1	L2	L3
6	15	-	16.0	-	-	-	5.6
8	18	-	19.2	-	-	-	7.0
10	20	21	19.2	17.5	10.0	6.6	6.6
12	22	23	21.6	17.5	10.0	6.6	7.0
14	25	25	24.6	17.5	10.0	6.6	7.0
15	27	-	24.6	-	-	-	6.6
16	27	27	28.0	19.5	10.0	6.6	7.5
18	30	33	30.0	20.5	11.5	7.5	8.0
20	32	35	35.0	22.0	11.5	7.5	7.5
22	35	37	35.0	23.5	11.5	7.5	7.5
24	38	39	38.0	25.0	11.5	7.5	7.5
25	40	40	38.0	26.5	11.5	7.5	7.5
26	41	-	40.0	-	-	-	8.0
28	43	43	42.0	26.5	11.5	7.5	9.0
30	47	-	45.0	-	-	-	10.5
32	48	-	48.0	-	-	-	10.5
35	53	-	52.0	-	-	-	11.0
38	56	-	55.0	-	-	-	10.3

Dimensions in mm.

YT 642/647

EQUIVALENTS OF BURGMANN H12N SERIES



Technical features

- Single seal
- Balanced
- Conical spring
- Uni-directional
- To DIN 24960
- Equivalent to Burgmann H12N/H17GN

Operating limits

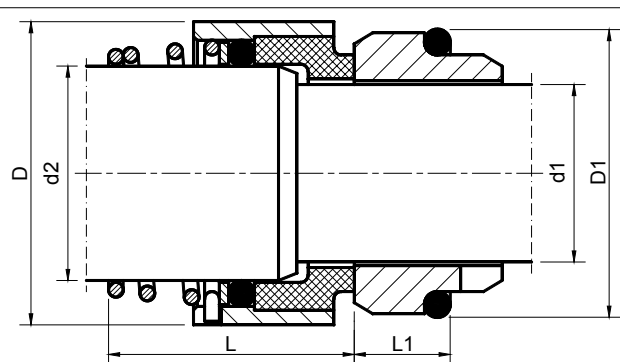
- $d_1 = 10 - 80 \text{ mm}$
- $p_1 = 2.4 \text{ MPa}$
- $t = -40 - 205 \text{ }^\circ\text{C}$
- $v_g = 15 \text{ m/s}$

Materials

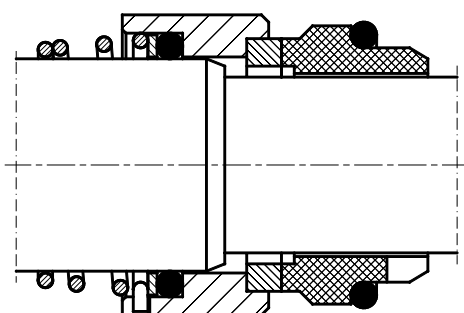
- Seal faces: carbon graphite (resin-impreg.), silicon carbide
- Stationary seats: silicon carbide, alumina ceramic, carbon graphite (resin-impreg.), Cr-Mo steel
- Springs, face housings: AISI 316, 316Ti
- Secondary seals: NBR, FPM, EPDM

Stationary seats

- G9 (to DIN 24960)



YT642: seal face with shrink-fitted carbon graphite



YT647: seal face with shrink-fitted silicon carbide

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

Dimensions in mm.

YT 670/674

EQUIVALENTS OF BURGMANN M7 SERIES



Technical features

- Single seal
- Unbalanced
- Bi-directional
- To DIN 24960
- Equivalent to Burgmann M7N/M74

Operating limits

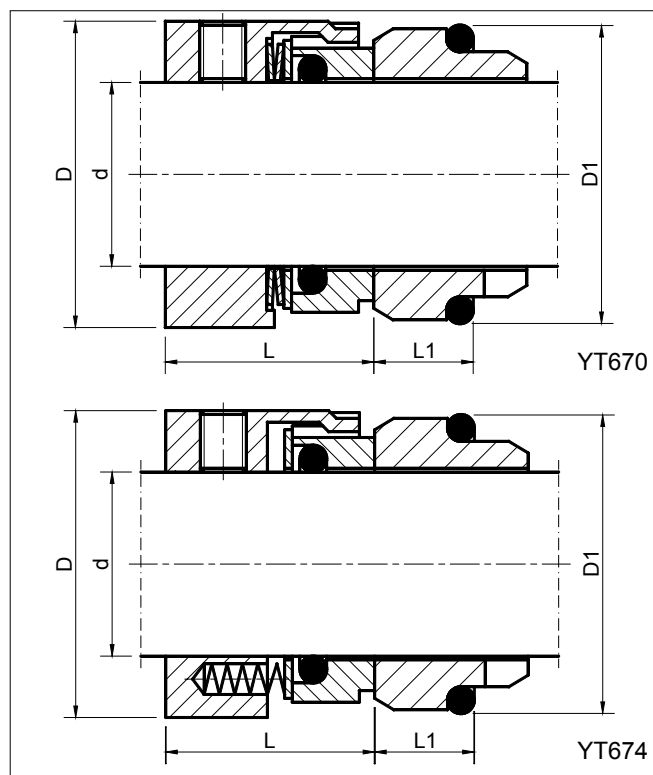
- $d_1 = 14 - 100 \text{ mm}$
(105 - 200 mm available pending request)
- $p_1 = 1.5 \text{ MPa}$
- $t = -40 - 205 \text{ }^\circ\text{C}$
- $v_g = 20 \text{ m/s}$

Materials

- Seal faces: silicon carbide, alumina ceramic, Cr-Mo steel
- Stationary seats: silicon carbide, carbon graphite (resin-impreg.)
- Springs, collars: AISI 316, 316Ti
- Secondary seals: FPM, EPDM

Stationary seats

- G6, G9 (to DIN 24960)
- G4, G13



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

See page 4 for dimensions of stationary seats G4, G6 and G13.
Dimensions in mm.

YT 675/677

EQUIVALENTS OF BURGMANN H7 SERIES



Technical features

- Single seal
- Balanced
- Bi-directional
- To DIN 24960
- Equivalent to Burgmann H75/H7N

Operating limits

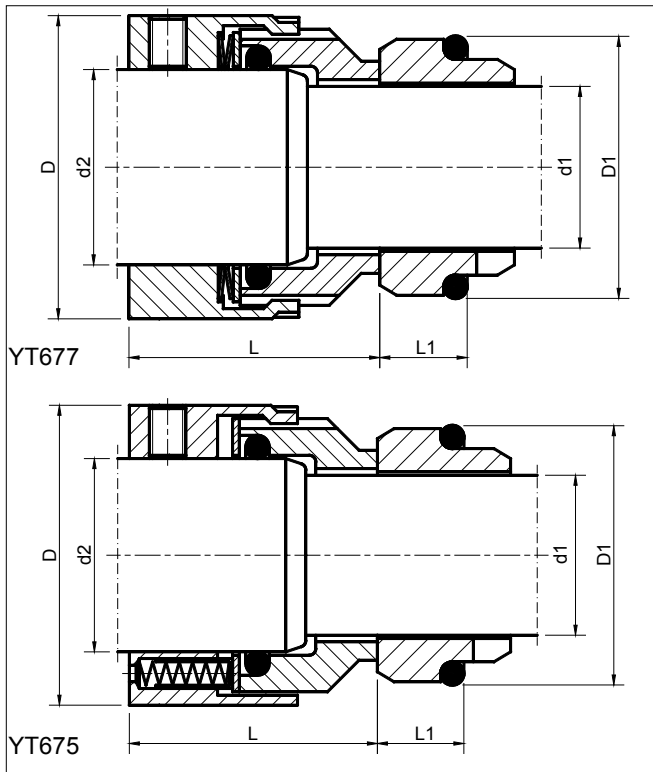
- $d_1 = 14 - 100 \text{ mm}$
(105 - 200 mm available pending request)
- $p_1 = 2.4 \text{ MPa}$
- $t = -40 - 205 \text{ }^\circ\text{C}$
- $v_g = 20 \text{ m/s}$

Materials

- Seal faces: silicon carbide, alumina ceramic, Cr-Mo steel
- Stationary seats: silicon carbide, carbon graphite (resin-impreg.)
- Springs, collars: AISI 316, 316Ti
- Secondary seals: NBR, FPM, EPDM

Stationary seats

- G9 (to DIN 24960)



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

Dimensions in mm.

YT 692/697

EQUIVALENTS OF BURGMANN HJ SERIES



Technical features

- Single seal
- Balanced
- Wave spring
- Bi-directional
- To DIN 24960
- Equivalent to Burgmann HJ92/HJ977GN

Operating limits

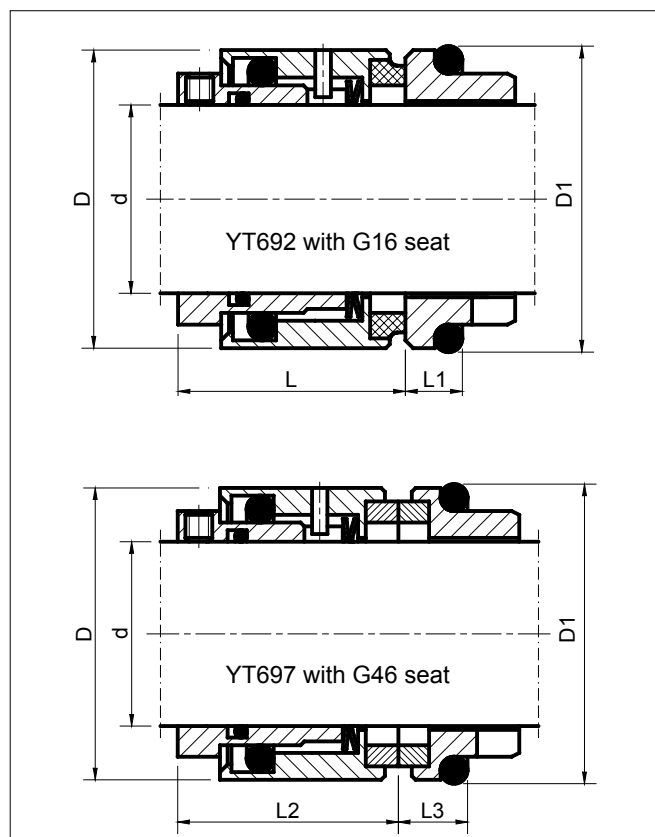
- $d_1 = 18 - 100 \text{ mm}$
- $p_1 = 2.4 \text{ MPa}$
- $t = -40 - 205 \text{ }^\circ\text{C}$
- $v_g = 20 \text{ m/s}$

Materials

- Seal faces: (for YT692) carbon graphite (resin-impreg.); (for YT697) silicon carbide, tungsten carbide
- Stationary seats: (for G16) silicon carbide, alumina ceramic; (for G46) silicon carbide, tungsten carbide
- Springs, collars, face housings: AISI 316, 316Ti
- Secondary seals: FPM, EPDM

Stationary seats

- G16, G46 (to DIN 24960)

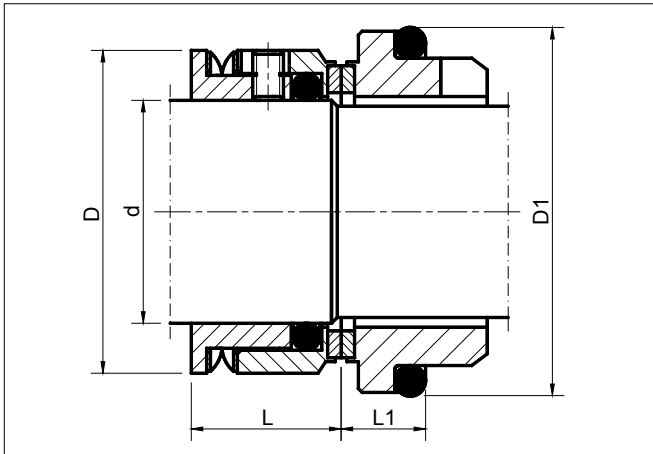


d	D	D1	L	L1	L2	L3
18	32	33	30.5	7.0	28.5	9.0
20	34	35	30.5	7.0	28.5	9.0
22	36	37	30.5	7.0	28.5	9.0
24	38	39	33.0	7.0	31.0	9.0
25	39	40	33.0	7.0	31.0	9.0
28	42	43	35.5	7.0	33.0	9.5
30	44	45	35.5	7.0	33.0	9.5
32	47	48	35.5	7.0	33.0	9.5
33	47	48	35.5	7.0	33.0	9.5
35	49	50	35.5	7.0	33.0	9.5
38	54	56	37.0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

Dimensions in mm.

YT 307

EQUIVALENTS OF ROTEN 7K



d	D	D1	L	L1
10	21	18.1	18.0	5.5
12	23	20.6	18.0	5.5
14	25	23.1	18.0	6.0
15	26	26.9	19.1	7.0
16	29	26.9	19.1	7.0
18	29	30.9	19.1	8.0
20	32	30.9	19.1	8.0
22	35	35.4	19.1	8.0
24	37	35.4	19.1	8.0
25	41	38.2	19.1	8.5
28	41	43.3	19.1	9.0
30	47	43.3	19.1	9.0
32	47	43.3	19.1	9.0
33	48	53.5	19.1	11.5
35	49	53.5	19.1	11.5
38	53	60.5	21.1	11.5
40	55	60.5	21.1	11.5
43	60	60.5	21.1	11.5
45	60	65.5	21.1	11.5
48	65	65.5	21.1	11.5
50	65	72.5	21.1	11.5
55	74	72.5	22.1	11.5
60	79	79.3	25.8	11.5
65	87	84.5	25.8	11.5
70	93	89.5	25.8	11.5
75	98	94.5	25.8	11.5
80	104	99.5	25.8	11.5
85	108	105.5	25.8	13.5
90	113	111.5	25.8	13.5
95	118	116.5	25.8	13.5
100	123	119.5	25.8	13.5

Dimensions according to DIN 24960 are available pending request.

Dimensions in mm.



Technical features

- Single seal
- Balanced
- Wave spring
- Bi-directional
- Short axial length
- Equivalent to ROTEN 7K

Operating limits

- $d_1 = 10 - 100 \text{ mm}$
- $p_1 = 1.2 \text{ MPa}$
- $t = -40 - 205 \text{ }^\circ\text{C}$
- $v_g = 15 \text{ m/s}$

Materials

- Seal faces: silicon carbide, tungsten carbide, Cr-Mo steel, AISI 316
- Stationary seats: silicon carbide, tungsten carbide, carbon graphite (resin-impreg.), PTFE (alumina-filled)
- Springs, collars, face housings: AISI 316, 316Ti
- Secondary seals: NBR, FPM, EPDM

YT 341/343

EQUIVALENTS OF BT-BURGMANN RN SERIES



Technical features

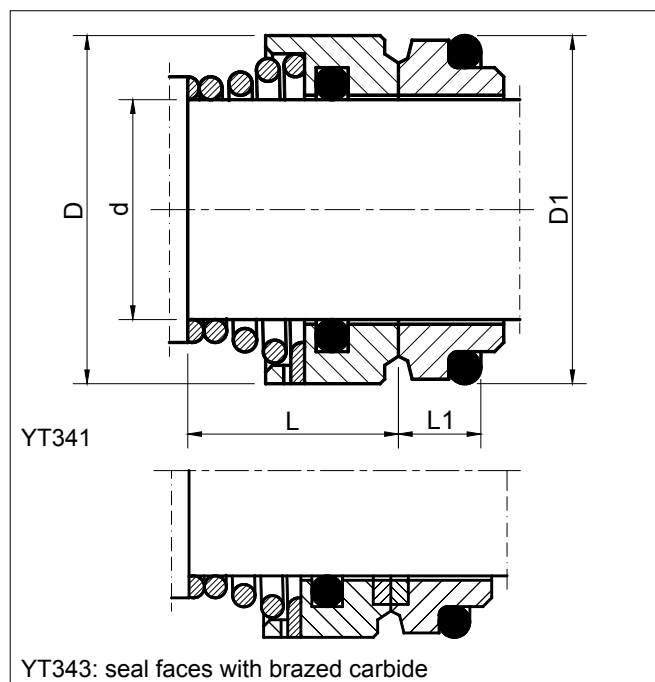
- Single seal
- Unbalanced
- Uni-directional
- Equivalent to BT-Burgmann RN/RN3, Roten type 2

Operating limits

- $d_1 = 6 - 110 \text{ mm}$
- $p_1 = 1.0 \text{ MPa}$
- $t = -40 - 205 \text{ }^\circ\text{C}$
- $v_g = 20 \text{ m/s}$

Materials

- Seal faces: AISI 316, Cr-Mo steel, silicon carbide, tungsten carbide
- Stationary seats: AISI 316, Cr-Mo steel, silicon carbide, tungsten carbide
- Springs, face housings: AISI 304, 316, 316Ti
- Secondary seals: NBR, FPM, EPDM

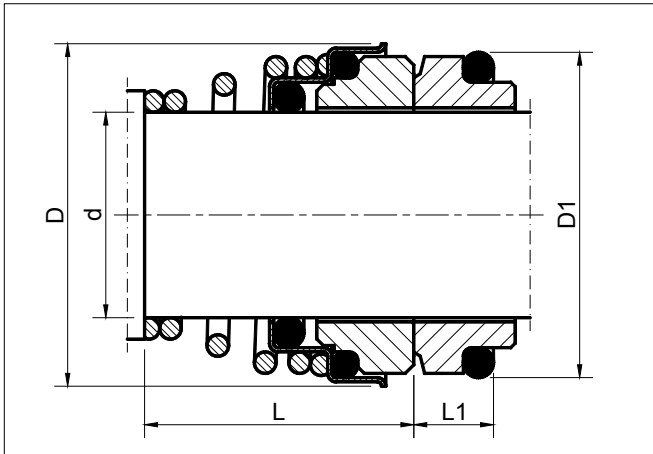


d	D	D1	L	L1
6	12	13.1	15	4.5
8	16	17.1	15	5.5
10	20	18.1	15	5.5
12	22	20.6	18	5.5
14	24	23.1	22	6.0
15	24	26.9	22	7.0
16	26	26.9	23	7.0
17	26	26.9	23	7.0
18	32	30.9	24	8.0
19	32	30.9	25	8.0
20	34	30.9	25	8.0
22	36	35.4	25	8.0
24	38	35.4	27	8.0
25	39	38.2	27	8.5
26	39	38.2	27	8.5
28	42	43.3	29	9.0
30	44	43.3	30	9.0
32	46	43.3	30	9.0
33	47	53.5	39	11.5
35	49	53.5	39	11.5
38	54	60.5	39	11.5
40	56	60.5	39	11.5
42	57	60.5	39	11.5
45	61	65.5	41	11.5
48	64	65.5	41	11.5
50	66	72.5	45	11.5
55	71	72.5	47	11.5
60	80	79.3	49	11.5
65	85	84.5	51	11.5
70	90	89.5	51	11.5
75	99	94.5	57	11.5
80	104	99.5	59	11.5
85	109	105.5	59	13.5
90	114	111.5	62	13.5
95	119	116.5	62	13.5
100	124	119.5	75	13.5
110	143	132.2	75	17.5

Dimensions in mm.

YT 355

EQUIVALENTS OF BT-BURGMANN FN / ROTEN 3



Technical features

- Single seal
- Unbalanced
- Conical spring
- Uni-directional
- Equivalent to BT-Burgmann FN, Roten type 3

Operating limits

- $d_1 = 10 - 40 \text{ mm}$
- $p_1 = 1.0 \text{ MPa}$
- $t = -20 - 180 \text{ }^\circ\text{C}$
- $v_g = 20 \text{ m/s}$

Materials

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

d	D	D1	L	L1
10	20	18.1	15	5.5
11	22	20.6	18	5.5
12	22	20.6	18	5.5
13	25	23.1	22	6.0
14	25	23.1	22	6.0
15	29	26.9	22	7.0
16	29	26.9	23	7.0
17	29	26.9	23	7.0
18	33	30.9	24	8.0
19	33	30.9	25	8.0
20	33	30.9	25	8.0
22	38	35.4	25	8.0
24	38	35.4	27	8.0
25	40	38.2	27	8.5
28	46	43.3	29	9.0
30	46	43.3	30	9.0
32	46	43.3	30	9.0
35	50	53.5	39	11.5
38	55	60.5	39	11.5
40	55	60.5	39	11.5

Dimensions in mm.

YT 301

EQUIVALENTS OF BT-BURGMANN AR



Technical features

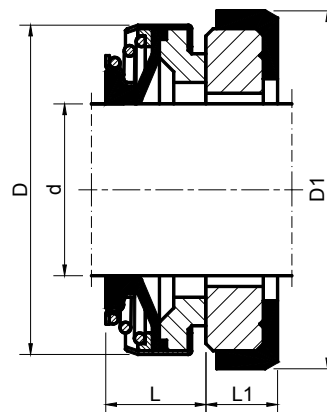
- Single seal
- Unbalanced
- Single spring
- Bi-directional
- Elastomer bellows
- Equivalent to BT-Burgmann AR, Pac-seal type 17, A.J. Roten type 37B

Operating limits

- $d_1 = 6 - 70 \text{ mm}$
- $p_1 = 0.6 \text{ MPa}$
- $t = -20 - 180 \text{ }^{\circ}\text{C}$
- $v_g = 10 \text{ m/s}$

Materials

- Seal faces: carbon graphite (resin-impreg.), silicon carbide, tungsten carbide, hot-pressed graphite
- Stationary seats: alumina ceramic, Ni-resist, silicon carbide, tungsten carbide
- Bellows: NBR, FPM, EPDM
- Springs, collars, lock rings: AISI 304, 316, 316Ti
- Secondary seals: Neoprene, NBR, FPM, EPDM

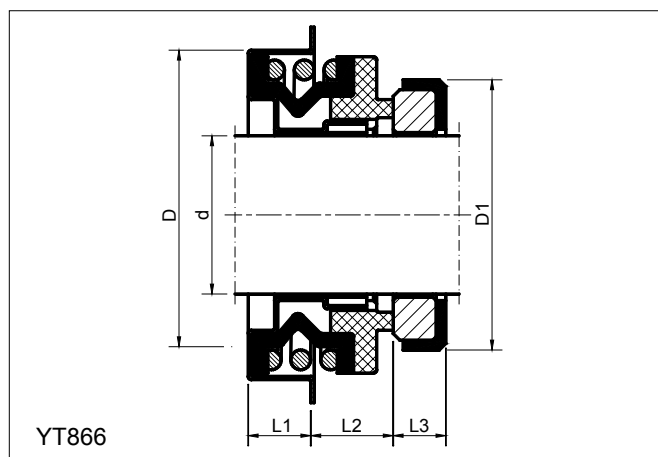


d	D	D1	L	L1
6	18	22.0	8	4
8a	20	26.0	11	4
8b	20	22.0	11	4
8c	24	26.0	11	8
9	24	26.0	11	8
10	24	26.0	11	8
11	24	26.0	11	8
12a	24	26.0	11	8
12b	24	26.0	13	8
12c	32	35.0	13	8
13	24	26.0	13	8
14a	28	25.0	13	7
14b	28	28.5	13	8
14c	32	29.5	13	8
14d	32	35.0	13	8
15a	32	29.5	13	8
15b	32	38.0	13	8
15c	35	38.0	13	8
16a	32	29.5	13	8
16b	35	38.0	13	8
16c	39	38.0	13	8
16d	39	42.0	13	8
17	39	42.0	13	8
18	39	42.0	13	8
19	39	42.0	13	8
20a	39	42.0	13	8
20b	42	45.0	13	10
22	42	45.0	13	10
23	47	50.0	14	10
24	47	50.0	14	10
25a	42	50.0	14	10
25b	47	50.0	14	10
26	47	50.0	14	10
28	54	57.0	15	10
30	54	57.0	15	10
32	54	57.0	15	10
35	60	63.0	16	10
38	65	68.0	18	12
40	65	68.0	18	12
45	70	73.0	20	12
50	85	88.0	23	15
55	85	88.0	23	15
60	105	110.0	30	15
70	105	110.0	32	15

Dimensions in mm.

YT 866/867

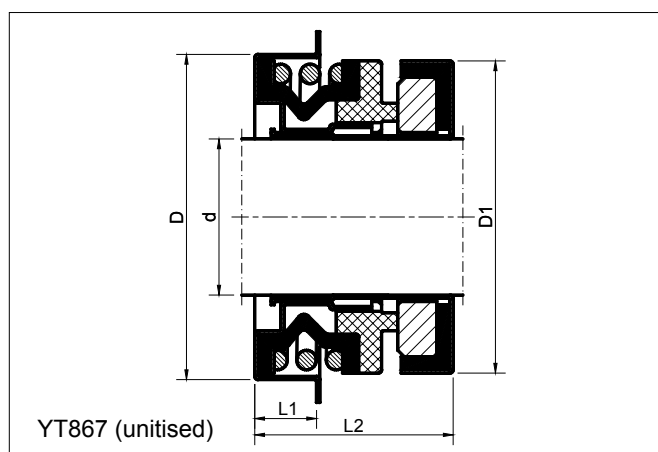
EQUIVALENTS OF CRANE 6A / PAC-SEAL 68



YT866

	d	D	D1	L1	L2	L3
in metric	12	30	24.0	9.5	5.5	4.5
	13	30	25.0	8.5	5.2	5.0
	17	35	30.0	9.0	10.5	7.5
	20	40	35.0	9.5	12.0	7.0
	25	50	41.5	12.0	10.0	8.0
	28	52	45.0	10.0	9.5	7.5
	30	52	48.0	10.0	9.5	8.0
	35	58	50.0	10.0	12.0	8.0
in inches	0.375a	1.125	0.875	0.31	0.065	0.165
	0.375b	1.125	0.875	0.31	0.065	0.312
	0.375c	1.125	1.000	0.31	0.065	0.203
	0.500a	1.125	1.000	0.35	0.187	0.250
	0.500b	1.125	1.000	0.35	0.187	0.312
	0.625a	1.437	1.187	0.35	0.265	0.343
	0.625b	1.437	1.250	0.35	0.265	0.375
	0.625c	1.437	1.250	0.35	0.265	0.406
	0.625d	1.437	1.375	0.35	0.265	0.187
	0.625e	1.437	1.375	0.35	0.265	0.406
	0.750a	1.575	1.375	0.35	0.265	0.375
	0.750b	1.575	1.375	0.35	0.265	0.406
	1.000	1.812	1.625	0.41	0.312	0.437

Other seat dimensions are available pending request.



YT867 (unitised)



Technical features

- Single seal
- Unbalanced
- Single spring
- Bi-directional
- Elastomer bellows
- Equivalent to BT-Burgmann A2, John crane type 6A, Pac-seal type 68, US Seal type B

Operating limits

- $d_1 = 10 - 35 \text{ mm}$ (3/8 - 1")
- $p_1 = 0.4 \text{ MPa}$
- $t = -20 - 180 \text{ }^\circ\text{C}$
- $v_g = 10 \text{ m/s}$

Materials

- Seal faces: carbon graphite (resin-impreg.), Cr-Mo steel, hot-pressed graphite, silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, Ni-resist, silicon carbide, tungsten carbide
- Springs, collars: AISI 304, 316, 316Ti
- Bellows, secondary seals: Neoprene, NBR, FPM, EPDM

d	D	D1	L	L1
10	23.5	30.00	13.70	8.5
12	25.0	30.00	17.70	8.0
12	25.0	33.30	17.70	6.0
12	25.0	28.55	17.70	8.0
12	28.5	30.00	14.70	7.0
13	25.0	30.00	18.20	8.5
15	32.5	36.45	19.40	8.2
16	32.5	36.45	19.40	8.2
16	32.5	38.10	19.70	8.2
17	29.5	35.00	22.50	9.0
0.500"	28.5	30.00	14.70	7.0
0.625"	30.0	34.20	17.85	5.6
0.625"	30.0	36.45	19.20	8.0
0.625"	30.0	38.10	19.20	8.0

Other seat dimensions are available pending request.

YT 801/811

EQUIVALENTS OF CRANE TYPE 1/1A



Technical features

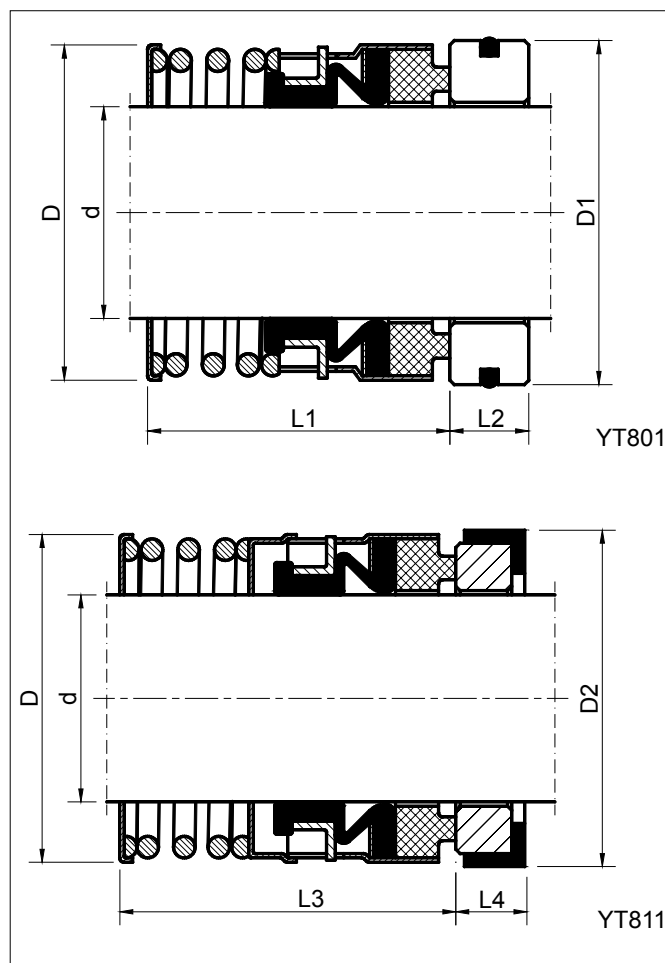
- Single seal
- Unbalanced
- Single spring
- Bi-directional
- Elastomer diaphragm
- Equivalent to John Crane type 1/1A, Pac-seal type 51 US Seal type E

Operating limits

- $d_1 = 1 - 3 \frac{1}{4}"$
- $p_1 = 1.6 \text{ MPa}$
- $t = -40 - 205 \text{ }^{\circ}\text{C}$
- $v_g = 30 \text{ m/s}$

Materials

- Seal faces: carbon graphite (resin-impreg.), silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, Ni-resist, silicon carbide, tungsten carbide
- Bellows: Neoprene, NBR, FPM, EPDM
- Springs, other metal components: AISI 304, 316, 316Ti
- Secondary seals: Neoprene, NBR, FPM, EPDM

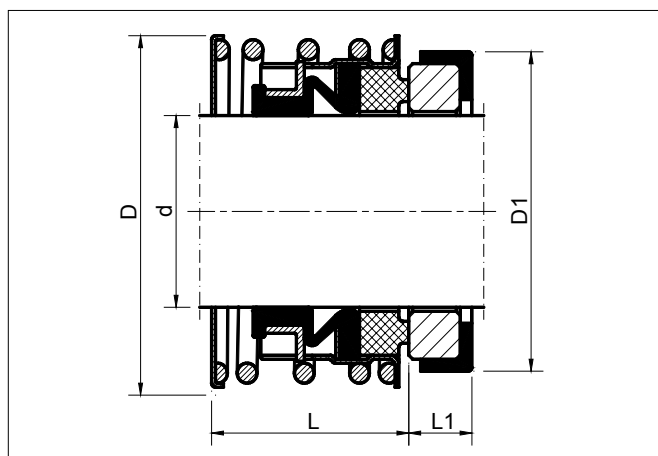


d	D	D1	D2	L1	L2	L3	L4
1.000	1.500	1.625	1.594	1.562	0.437	1.719	0.406
1.125	1.625	1.750	1.875	1.625	0.437	2.375	0.469
1.250	1.812	1.875	2.000	1.625	0.437	2.375	0.469
1.375	1.875	2.000	2.125	1.687	0.437	2.375	0.469
1.500	2.000	2.125	2.250	1.687	0.437	2.375	0.469
1.625	2.250	2.375	2.375	2.000	0.500	2.375	0.469
1.750	2.375	2.500	2.500	2.000	0.500	2.781	0.469
1.875	2.500	2.625	2.625	2.125	0.500	2.781	0.469
2.000	2.625	2.750	2.750	2.125	0.500	2.781	0.531
2.125	2.812	3.000	2.875	2.375	0.562	2.781	0.531
2.250	2.937	3.125	3.000	2.375	0.562	2.781	0.531
2.375	3.062	3.250	3.125	2.500	0.562	2.781	0.531
2.500	3.187	3.375	3.250	2.500	0.562	2.781	0.531
2.625	3.375	3.375	3.625	2.750	0.625	2.750	0.625
2.750	3.500	3.500	3.750	2.750	0.625	2.750	0.625
2.875	3.625	3.750	3.875	2.875	0.625	2.875	0.625
3.000	3.750	3.875	4.000	2.875	0.625	2.875	0.625
3.250	4.125	4.125	4.500	3.125	0.781	3.125	0.781

Dimensions in inches.

YT 802/803

EQUIVALENTS OF CRANE TYPE 2



	d	D1	D	L	L1
YT802 (in metric)	16	30	34.0	25	8
	18	32	36.8	25	8
	20	34	36.8	25	8
	22	36	41.5	25	8
	25	39	44.8	26	8
	28	43	48.5	26	8
	30	48	52.0	26	8
	35	53	57.0	30	10
	40	58	67.0	34	10
	45	63	73.0	36	10
	50	68	79.0	42	10
	55	73	84.0	41	12
	60	79	90.0	41	12
	65	86	98.5	49	12
	70	91	103.5	52	12
	75	96	110.5	52	12
	80	105	120.0	56	14
	85	110	125.0	56	14
YT803 (in inches, U.S. standard dimensions)	90	115	132.0	56	14
	95	120	137.0	56	14
	100	125	144.0	62	14
	110	135	157.0	62	16
	120	145	169.5	72	16
	0.625	1.312	1.250	0.875	0.406
	0.750	1.437	1.275	0.875	0.406
	0.875a	1.562	1.437	0.921	0.265
	0.875b	1.562	1.500	0.937	0.406
	1.000	1.750	1.625	1.062	0.437
	1.125	1.875	1.750	1.062	0.437
	1.250	2.000	1.875	1.062	0.437
	1.375	2.187	2.000	1.125	0.437
	1.500	2.312	2.125	1.125	0.437
	1.625	2.718	2.375	1.375	0.500
	1.750	2.750	2.500	1.375	0.500
	1.875	2.875	2.625	1.500	0.500
	2.000	3.000	2.750	1.500	0.500
	2.125	3.250	3.000	1.687	0.562
	2.250	3.375	3.125	1.688	0.562
	2.375	3.500	3.250	1.812	0.562
	2.500	3.625	3.375	1.812	0.562
	2.750	4.000	3.500	1.937	0.625
	3.000	4.250	3.875	2.062	0.625
	3.250	4.685	4.125	2.062	0.781



Technical features

- Single seal
- Unbalanced
- Single spring
- Bi-directional
- Elastomer diaphragm
- Equivalent to John Crane type 2, Pac-seal type 52, US Seal type D

Operating limits

- $d_1 = 16 - 120 \text{ mm}$ (YT802)
 $5/8 - 3 \frac{1}{4}"$ (YT803)
- $p_1 = 1.6 \text{ MPa}$
- $t = -40 - 205 \text{ }^\circ\text{C}$
- $v_g = 25 \text{ m/s}$

Materials

- Seal faces: carbon graphite (resin-impreg.), silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, Ni-resist, silicon carbide, tungsten carbide
- Bellows: Neoprene, NBR, FPM, EPDM
- Springs, other matel components: AISI 304, 316, 316Ti
- Secondary seals: Neoprene, NBR, FPM, EPDM

YT 860

EQUIVALENTS OF CRANE TYPE 6



Technical features

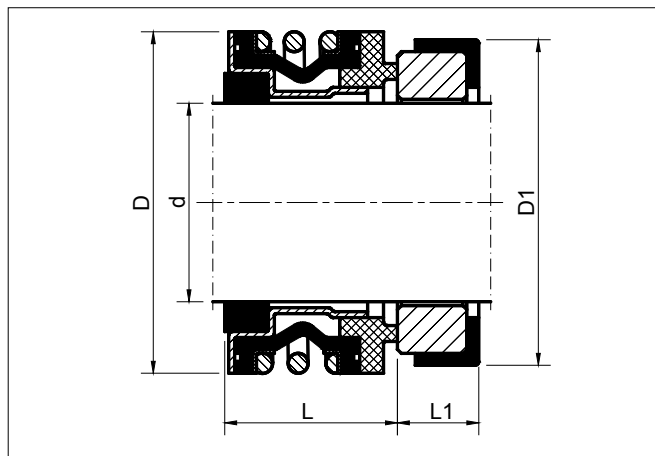
- Single seal
- Unbalanced
- Single spring
- Bi-directional
- Elastomer bellows
- Equivalent to John Crane type 6, Pac-seal type 16, US Seal type A

Operating limits

- $d_1 = 3/8 - 1"$
- $p_1 = 0.8 \text{ MPa}$
- $t = -40 - 205 \text{ }^\circ\text{C}$
- $v_g = 15 \text{ m/s}$

Materials

- Seal faces: carbon graphite (resin-impreg.), silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, Ni-resist, silicon carbide, tungsten carbide
- Bellows: Neoprene, NBR, FPM, EPDM
- Springs, other metal components: AISI 304, 316, 316Ti
- Secondary seals: Neoprene, NBR, FPM, EPDM



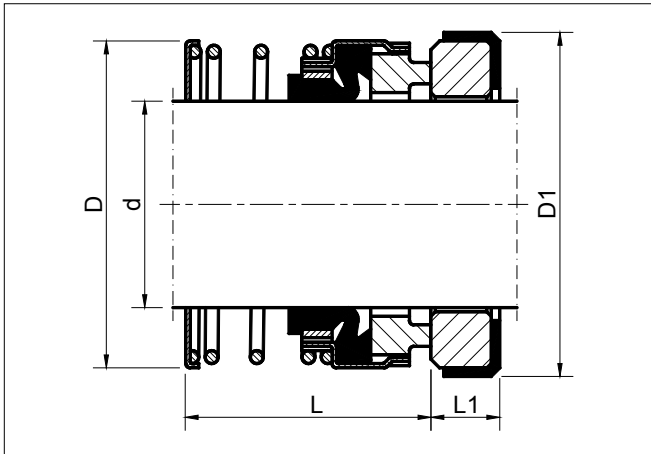
d	D	D1	L	L1
0.375a	0.917	0.875	0.656	0.250
0.375b	0.917	1.000	0.656	0.312
0.437	0.917	1.000	0.656	0.312
0.500a	0.917	1.000	0.656	0.250
0.500b	0.917	1.000	0.656	0.312
0.625a	1.185	1.250	0.718	0.343
0.625b	1.185	1.187	0.718	0.406
0.625c	1.185	1.250	0.812	0.406
0.750a	1.302	1.375	0.718	0.406
0.750b	1.302	1.375	0.812	0.406
0.875	1.429	1.500	0.812	0.406
1.000	1.552	1.625	0.812	0.437

Other seat dimensions are available pending request.

Dimensions in inches.

YT 820/821/824

EQUIVALENTS OF CRANE TYPE 21/521



Technical features

- Single seal
- Unbalanced
- Single spring
- Bi-directional
- Elastomer diaphragm
- Equivalent to John Crane type 21/521, Pac-seal type 21, US Seal type C

Operating limits

- $d_1 = 3/8 - 3"$ (YT820/821)
12 - 75 mm (YT824)
- $p_1 = 1.6$ MPa
- $t = -40 - 205$ °C
- $v_g = 15$ m/s

Materials

- Seal faces: carbon graphite (resin-impreg.), silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, Ni-resist, silicon carbide, tungsten carbide
- Bellows: Neoprene, NBR, FPM, EPDM
- Springs, other matel components: AISI 304, 316, 316Ti
- Secondary seals: Neoprene, NBR, FPM, EPDM

YT821 (US standard), dimensions in inches

d	D	D1	L	L1	D1	L	L1
0.375	0.812	0.875	0.812	0.284	0.968	1.000	0.344
0.500	0.937	1.000	0.812	0.312	1.094	1.000	0.344
0.625	1.062	1.250	0.875	0.406	1.218	1.000	0.406
0.750	1.187	1.375	0.875	0.406	1.344	1.000	0.406
0.875	1.312	1.500	0.937	0.406	1.468	1.000	0.406
1.000	1.687	1.625	1.000	0.437	1.594	1.000	0.406
1.125	1.812	1.750	1.062	0.437	1.875	1.299	0.469
1.250	1.937	1.875	1.062	0.437	2.000	1.299	0.469
1.375	2.062	2.000	1.125	0.437	2.125	1.299	0.469
1.500	2.187	2.125	1.125	0.437	2.250	1.299	0.469
1.625	2.500	2.375	1.375	0.500	2.375	1.299	0.469
1.750	2.625	2.500	1.375	0.500	2.500	1.615	0.469
1.875	2.750	2.625	1.500	0.500	2.625	1.615	0.469
2.000	2.875	2.750	1.500	0.500	2.750	1.615	0.531
2.125	3.000	3.000	1.687	0.562	2.875	1.615	0.531
2.250	3.125	3.125	1.687	0.562	3.000	1.615	0.531
2.375	3.250	3.250	1.812	0.562	3.125	1.615	0.531
2.500	3.343	3.375	1.812	0.562	3.250	1.615	0.531
2.625	3.500	3.375	1.937	0.625	3.625	1.937	0.625
2.750	3.750	3.500	1.937	0.625	3.750	1.937	0.625
2.875	3.875	3.750	2.062	0.625	3.875	2.062	0.625
3.000	4.000	3.875	2.062	0.625	4.000	2.062	0.625

YT820 (UK standard)

YT824 (to DIN 24960), dimensions in mm

d	D	D1	L	L1
12	21.7	23.0	23.9	8.6
14	23.9	25.0	26.4	8.6
16	26.7	27.0	26.4	8.6
18	30.4	33.0	27.5	10.0
20	33.4	35.0	27.5	10.0
22	33.4	37.0	27.5	10.0
24	38.0	39.0	30.0	10.0
25	39.3	40.0	30.0	10.0
28	42.0	43.0	32.5	10.0
30	44.0	45.0	32.5	10.0
32	45.8	48.0	32.5	10.0
33	45.8	48.0	32.5	10.0
35	49.0	50.0	34.0	11.0
38	52.8	56.0	34.0	11.0
40	55.8	58.0	34.0	11.0

d	D	D1	L	L1
43	58.8	61.0	34.0	11.0
45	61.0	63.0	34.0	11.0
48	64.0	66.0	34.0	11.0
50	66.0	70.0	34.5	13.0
55	71.7	75.0	34.5	13.0
58	78.4	78.0	39.5	13.0
60	78.4	80.0	39.5	13.0
63	81.5	83.0	39.5	13.0
65	84.3	85.0	39.5	13.0
68	89.7	90.0	37.2	15.3
70	89.7	92.0	37.2	15.3
75	96.8	97.0	44.7	15.3
80	104.0	105.0	44.3	15.7
85	109.0	110.0	44.3	15.7

Conform to DIN 24960 L_{IK} length standard.

YT 852

EQUIVALENTS OF CRANE TYPE 502



Technical features

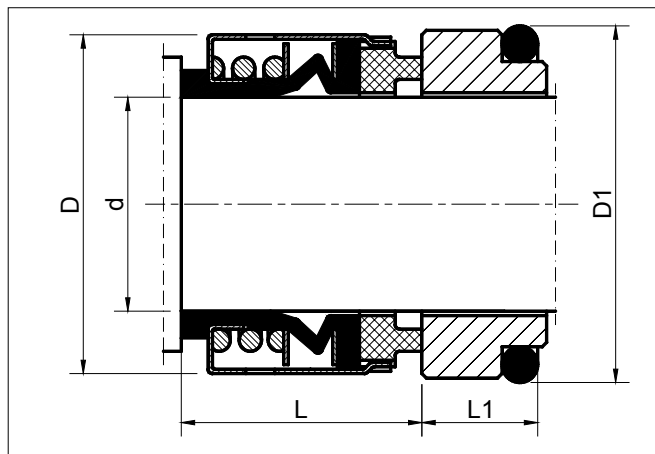
- Single seal
- Unbalanced
- Single spring
- Bi-directional
- Elastomer bellows
- To DIN 24960
- Equivalent to John Crane type 502

Operating limits

- $d_1 = 14 - 100 \text{ mm}$
- $p_1 = 4.0 \text{ MPa}$
- $t = -40 - 205 \text{ }^{\circ}\text{C}$
- $v_g = 13 \text{ m/s}$

Materials

- Seal faces: carbon graphite (resin-impreg.), silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, silicon carbide, tungsten carbide
- Bellows: NBR, FPM, EPDM
- Springs, other metal components: AISI 304, 316, 316Ti
- Secondary seals: NBR, FPM, EPDM



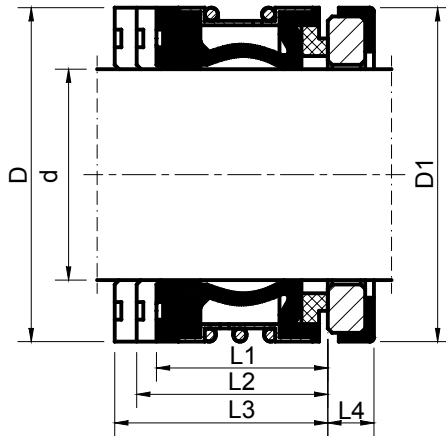
d	D	D1	L	L1
14	24	25	23.0	12.0
16	26	27	23.0	12.0
18	32	33	24.0	13.5
20	34	35	24.0	13.5
22	36	37	24.0	13.5
24	38	39	26.7	13.5
25	39	40	27.0	13.0
28	42	43	30.0	12.5
30	44	45	30.5	12.0
32	46	48	30.5	12.0
33	47	48	30.5	12.0
35	49	50	30.5	12.0
38	54	56	32.0	13.0
40	56	58	32.0	13.0
43	59	61	32.0	13.0
45	61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

Conform to DIN 24960 L_{IK} length standard.

Dimensions in mm.

YT 210

EQUIVALENT OF JOHN CRANE TYPE 2100



Dimensions in mm

d	D	D1	L1	L2	L3	L4
10	20	21	15	27.5	35.0	5
12	22	23	15	26.5	34.0	6
14	24	25	15	29.0	34.0	6
15	25	26	15	29.0	34.0	6
16	26	27	15	29.0	34.0	6
18	32	33	20	31.5	39.0	6
20	34	35	20	31.5	39.0	6
22	36	37	20	31.5	39.0	6
24	38	39	20	34.0	44.0	6
25	39	40	20	34.0	44.0	6
28	42	43	26	36.5	44.0	6
30	44	45	26	35.5	43.0	7
32	46	48	26	35.5	48.0	7
33	47	48	26	35.5	48.0	7
35	49	50	26	34.5	47.0	8
38	54	56	30	37.0	47.0	8
40	56	58	30	37.0	47.0	8
43	59	61	30	37.0	52.0	8
45	61	63	30	37.0	52.0	8
48	64	66	30	35.0	50.0	10
50	66	70	30	37.5	50.0	10
53	69	73	30	37.5	60.0	10
55	71	75	30	37.5	60.0	10
58	78	78	33	42.5	60.0	10
60	80	80	33	40.5	58.0	12
63	83	83	33	40.5	58.0	12
65	85	85	33	40.5	68.0	12
68	88	90	33	40.5	68.0	12
70	90	92	33	48.0	68.0	12
75	99	97	40	48.0	68.0	12
80	104	105	40	47.5	77.5	14
85	109	110	40	47.5	77.5	14
90	114	115	40	52.5	77.5	14
95	119	120	40	52.5	77.5	14
100	124	125	40	52.5	77.5	14

L_2 and L_3 conform to DIN 24960 L_{1K} and L_{1N} length standard respectively.

Dimensions in inches

d	D	D1	L1	L4
0.375	0.787	0.875	0.591	0.284
0.500	0.945	1.000	0.591	0.312
0.625	1.024	1.250	0.591	0.406
0.750	1.260	1.375	0.787	0.406
0.875	1.417	1.500	0.787	0.406
1.000	1.535	1.625	0.787	0.437
1.125	1.654	1.750	1.024	0.437



Technical features

- Single seal
- Unbalanced
- Single spring
- Elastomer bellows
- Bayonet drive
- To DIN 24960, ISO3069
- Equivalent to John Crane type 2100

Operating limits

- $d_1 = 10 - 100 \text{ mm}$, 3/8 - 4"
- $p_1 = 1.8 \text{ MPa}$
- $t = -40 - 205 \text{ }^\circ\text{C}$
- $v_g = 15 \text{ m/s}$

Materials

- Seal faces: carbon graphite (resin-impreg.), silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, Ni-resist, silicon carbide, tungsten carbide
- Bellows: Neoprene, NBR, FPM, EPDM
- Springs, drive bands: AISI 304, 316, 316Ti
- Secondary seals: Neoprene, NBR, FPM, EPDM

d	D	D1	L1	L4
1.250	1.811	1.875	1.024	0.437
1.375	1.929	2.000	1.024	0.437
1.500	2.126	2.125	1.181	0.437
1.625	2.205	2.375	1.181	0.500
1.750	2.402	2.500	1.181	0.500
1.875	2.520	2.625	1.181	0.500
2.000	2.598	2.750	1.181	0.500
2.125	2.717	3.000	1.181	0.562
2.250	3.031	3.125	1.299	0.562
2.375	3.150	3.250	1.299	0.562
2.500	3.268	3.375	1.299	0.562
2.625	3.465	3.375	1.299	0.625
2.750	3.504	3.500	1.299	0.625
2.875	3.780	3.750	1.299	0.625
3.000	3.898	3.875	1.575	0.625

YT 858/859

EQUIVALENTS OF CRANE TYPE 58U/59U



Technical features

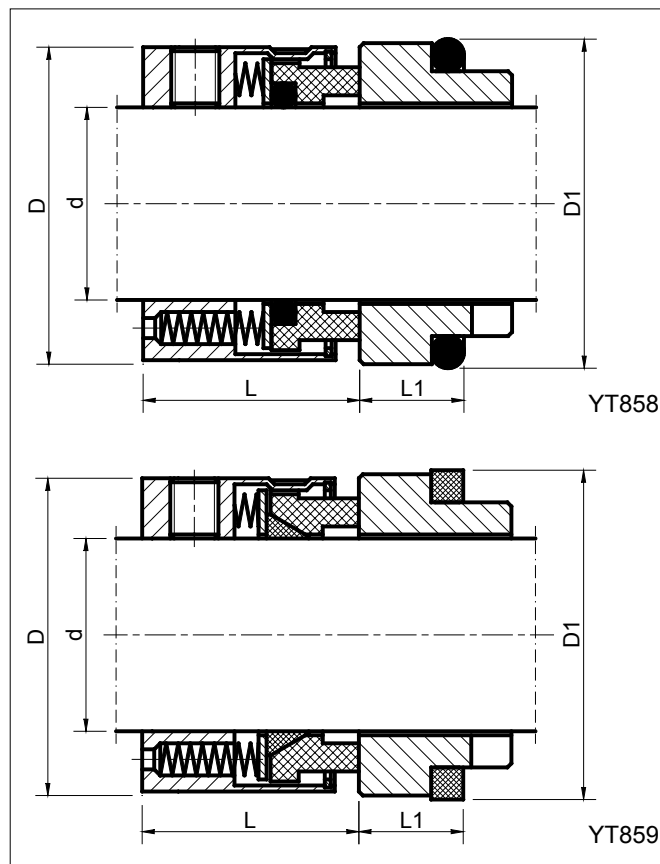
- Single seal
- Unbalanced
- Multiple springs
- Bi-directional
- To DIN 24960
- Equivalent to John Crane type 58U/59U
- Balanced types are available pending request

Operating limits

- $d_1 = 14 - 100 \text{ mm}$
- $p_1 = 2.4 \text{ MPa}$
- $t = -40 - 205 \text{ }^\circ\text{C}$
- $v_g = 20 \text{ m/s}$

Materials

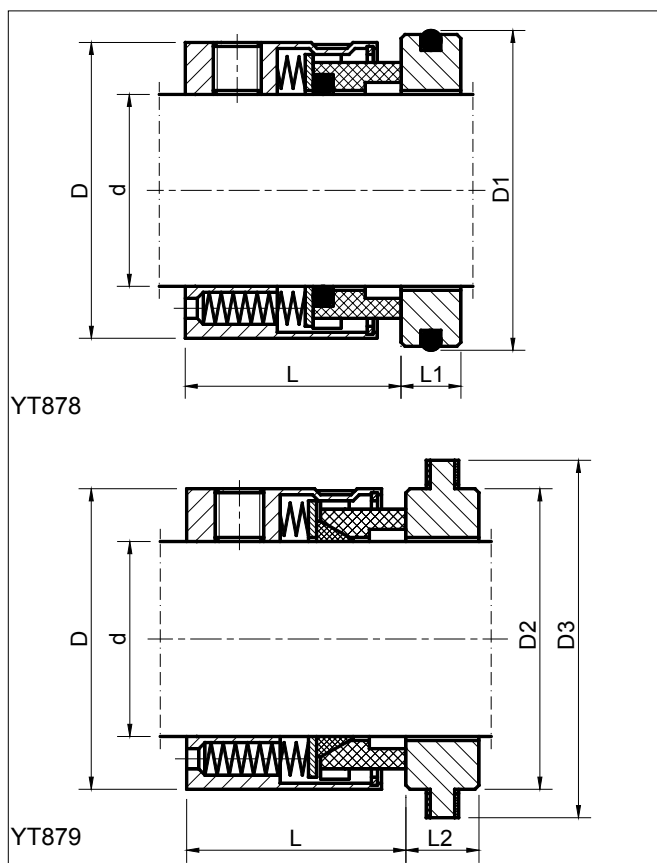
- Seal faces: carbon graphite (resin-impreg.), silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, silicon carbide, tungsten carbide
- Springs, other metal components: AISI 304, 316, 316Ti
- Secondary seals: NBR, FPM, EPDM (for YT858), and PTFE (for YT859)



d	D	D1	L	L1
14	24	25	23.0	12.0
16	26	27	23.0	12.0
18	32	33	24.0	13.5
20	34	35	24.0	13.5
22	36	37	24.0	13.5
24	38	39	26.7	13.3
25	39	40	27.0	13.0
28	42	43	30.0	12.5
30	44	45	30.5	12.0
32	46	48	30.5	12.0
33	47	48	30.5	12.0
35	49	50	30.5	12.0
38	54	56	32.0	13.0
40	56	58	32.0	13.0
43	59	61	32.0	13.0
45	61	63	32.0	13.0
48	64	66	32.0	13.0
50	66	70	34.0	13.5
53	69	73	34.0	13.5
55	71	75	34.0	13.5
58	78	78	39.0	13.5
60	80	80	39.0	13.5
63	83	83	39.0	13.5
65	85	85	39.0	13.5
68	88	90	39.0	13.5
70	90	92	45.5	14.5
75	95	97	45.5	14.5
80	104	105	45.0	15.0
85	109	110	45.0	15.0
90	114	115	50.0	15.0
95	119	120	50.0	15.0
100	124	125	50.0	15.0

Conform to DIN 24960 L_{IK} length standard.

Dimensions in mm.



d	D	D1	D2	D3	L	L1	L2
0.750	1.190	1.375	1.312	1.718	0.937	0.406	0.812
0.875	1.315	1.500	1.437	1.843	0.937	0.406	0.812
1.000	1.440	1.625	1.562	1.968	1.000	0.437	0.812
1.125	1.565	1.750	1.687	2.093	1.000	0.437	0.812
1.250	1.690	1.875	1.812	2.218	1.000	0.437	0.812
1.375	1.940	2.000	2.062	2.593	1.375	0.437	0.875
1.500	1.940	2.125	2.062	2.593	1.125	0.437	0.875
1.625	2.250	2.375	2.375	2.906	1.156	0.500	0.875
1.750	2.315	2.500	2.437	2.968	1.375	0.500	0.875
1.875	2.500	2.625	2.625	3.156	1.375	0.500	0.875
2.000	2.625	2.750	2.750	3.406	1.375	0.500	1.000
2.125	2.812	3.000	2.937	3.593	1.687	0.562	1.000
2.250	2.843	3.125	2.968	3.625	1.375	0.562	1.000
2.375	3.000	3.250	3.125	3.781	1.687	0.562	1.000
2.500	3.125	3.375	3.250	3.906	1.375	0.562	1.000
2.625	3.250	3.375	3.375	4.031	1.687	0.625	1.000
2.750	3.375	3.500	3.500	4.156	1.687	0.625	1.000
2.875	3.500	3.750	3.625	4.281	1.687	0.625	1.000
3.000	3.625	3.875	3.750	4.406	1.687	0.625	1.000
3.125	3.750	4.000	3.875	4.531	1.687	0.781	1.000
3.250	3.875	4.125	4.000	4.656	1.687	0.781	1.000
3.375	4.000	4.250	4.125	4.781	1.687	0.781	1.000
3.500	4.125	4.375	4.250	4.906	1.687	0.781	1.000
3.625	4.250	4.500	4.375	5.031	1.687	0.781	1.000
3.750	4.375	4.625	4.500	5.156	1.687	0.781	1.000
3.875	4.500	4.750	4.625	5.281	1.687	0.781	1.000
4.000	4.625	4.875	4.750	5.406	1.687	0.781	1.000

Dimensions in inches.

YT 878/879

EQUIVALENTS OF CRANE TYPE 8T/9T



Technical features

- Single seal
- Unbalanced
- Multiple springs
- Bi-directional
- Equivalent to John Crane type 8T/9T, Pac-seal type 8T/9T
- Balanced types are available pending request

Operating limits

- $d_1 = 3/4 - 4"$
- $p_1 = 2.4 \text{ MPa}$
- $t = -40 - 205^\circ \text{C}$
- $v_g = 20 \text{ m/s}$

Materials

- Seal faces: carbon graphite (resin-impreg.), silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, silicon carbide, tungsten carbide
- Springs, other metal components: AISI 304, 316, 316Ti
- Secondary seals: NBR, FPM, EPDM (for YT878), and PTFE (for YT879)

YT 853

NON-PUSHER PTFE BELLOWS SEAL



Technical features

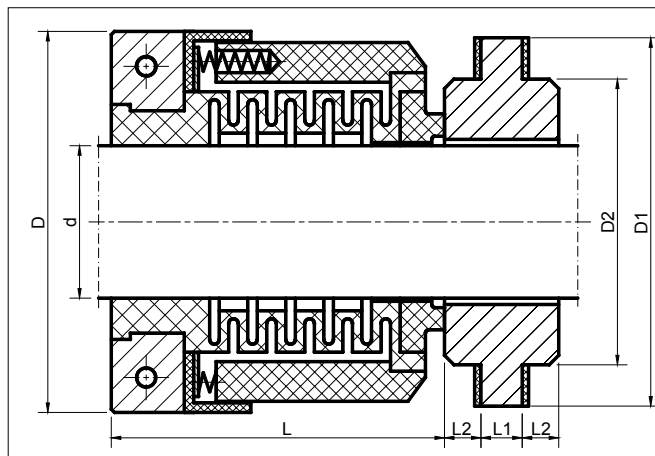
- Single seal
- Multiple springs
- Bi-directional
- PTFE bellows
- Externally mounted
- Replaceable seal face
- Evolved from John Crane type 10R

Operating limits

- $d_1 = 25 - 65 \text{ mm}$
- $p_1 = 1.0 \text{ MPa}$
- $t = -40 - 120 \text{ }^\circ\text{C}$
- $v_g = 16 \text{ m/s}$

Materials

- Seal faces: carbon graphite (resin-impreg.), filled PTFE, silicon carbide
- Stationary seats: alumina ceramic, silicon carbide
- Springs, clamps: AISI 304, 316, 316Ti
- Secondary seals, bellows: PTFE
- Collar: filled PTFE

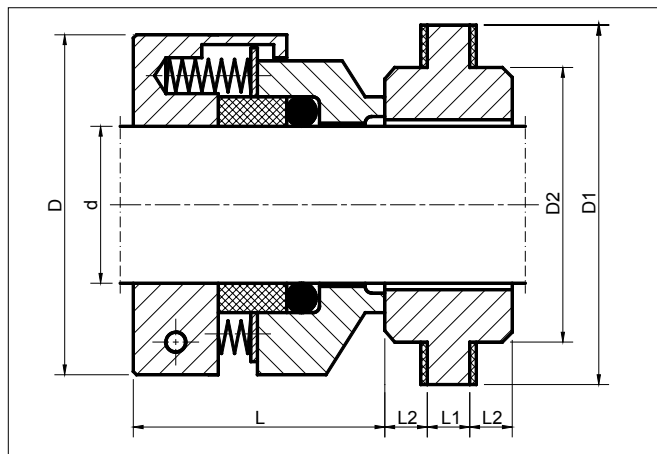


d	D	D1	D2	L	L1	L2
25	60	60	47	43.5	11	8.0
25.400	60	60	47	43.5	11	8.0
28.575	67	65	53	43.5	11	8.0
30	67	65	53	43.5	11	8.0
34.925	72	70	57	43.5	11	8.0
35	72	70	57	43.5	11	7.5
40	78	76	62	43.5	11	7.5
45	84	80	70	47.5	11	8.0
50	88	85	72	47.5	11	8.0
55	93	90	77	47.5	11	8.0
60	98	95	82	52.0	11	8.0
65	103	100	87	52.0	11	8.0

Dimensions in mm.

YT 466

EQUIVALENTS OF LATTY TYPE 166 A3



d	D	D1	D2	L	L1	L2
18	44	47	36.5	38	8.0	4.8
20	46	50	39.7	38	8.0	4.8
22	48	50	39.7	38	8.0	4.8
24	50	53	42.8	38	8.0	4.8
25	52	53	42.8	38	8.0	4.8
28	55	63	50.8	38	11.0	8.0
30	58	66	54.0	38	11.0	8.0
32	60	66	54.0	38	11.0	8.0
33	60	69	57.1	38	11.0	8.0
35	62	69	57.1	38	11.0	8.0
38	65	76	63.5	38	11.0	8.0
40	68	79	66.6	38	11.0	8.0
43	70	82	69.8	38	11.0	8.0
45	72	82	69.8	42	11.0	8.0
48	75	95	79.4	42	14.3	9.5
50	78	95	79.4	42	14.3	9.5
53	80	98	82.5	42	14.3	9.5
55	80	101	85.7	42	14.3	9.5
58	83	106	88.9	42	14.3	9.5
60	86	106	88.9	42	14.3	9.5
63	90	108	92.0	42	14.3	9.5
65	93	111	95.2	42	14.3	9.5
68	98	114	98.4	42	14.3	9.5
70	98	114	98.4	42	14.3	9.5
75	105	119	103.2	42	14.3	9.5
80	109	130	114.3	42	14.3	9.5
85	114	136	120.6	42	14.3	9.5
90	120	142	127.0	42	14.3	9.5
95	125	142	127.0	42	14.3	9.5
100	130	149	133.3	42	14.3	9.5

Dimensions in mm.



Technical features

- Single seal
- Balanced
- Multiple springs
- Bi-directional
- Externally mounted
- Equivalent to Latty Seal type 166 A3

Operating limits

- $d_1 = 18 - 100$ mm
- $p_1 = 1.0$ MPa
- $t = -40 - 205$ °C
- $v_g = 15$ m/s

Materials

- Seal faces: carbon graphite (resin-impreg.), silicon carbide
- Stationary seats: alumina ceramic, silicon carbide
- Springs, other metal components: AISI 304, 316, 316Ti
- Secondary seals: PTFE

YT 250

EQUIVALENTS OF EAGLE TYPE H1



Technical features

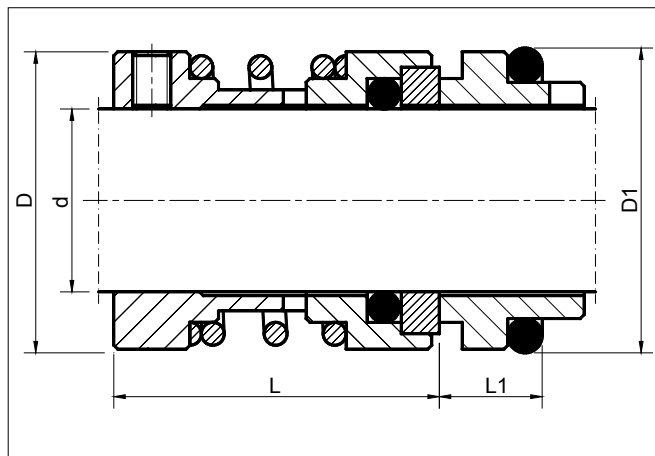
- Single seal
- Unbalanced
- Single spring
- Bi-directional
- Bayonet drive
- To DIN 24960
- Equivalent to Eagle type H1

Operating limits

- $d_1 = 20 - 85 \text{ mm}$
- $p_1 = 1.2 \text{ MPa}$
- $t = -40 - 205 \text{ }^\circ\text{C}$
- $v_g = 20 \text{ m/s}$

Materials

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

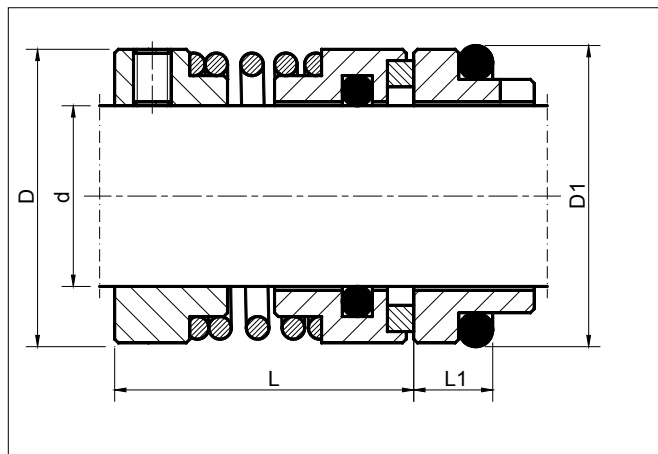


d	D	D1	L	L1
20	34	35	41	13
22	36	37	41	13
24	38	39	43	13
25	39	40	43	13
28	42	43	45	13
30	44	45	45	13
33	47	48	45	13
35	49	50	49	13
38	54	56	53	13
40	56	58	55	13
43	59	61	55	13
45	61	63	55	13
48	64	66	55	13
50	66	68	60	13
53	69	71	61	13
55	71	73	61	13
58	76	79	63	16
60	78	81	63	16
63	81	84	63	16
65	83	86	67	16
70	90	92	68	16
75	95	97	72	16
80	100	105	72	16
85	105	110	77	16

Dimensions in mm.

YT 527

SINGLE COIL PUSHER SEAL



d	D	D1	L	L1
20	34	35	35.0	10.0
25	39	40	40.0	10.0
28	42	43	40.0	10.0
30	44	45	40.0	10.0
32	46	48	45.0	10.0
35	49	50	45.0	10.0
38	54	56	44.0	11.0
40	56	58	44.0	11.0
45	61	63	49.0	11.0
50	66	70	49.0	11.0
55	71	75	57.0	13.0
60	80	80	57.0	13.0
65	85	85	67.0	13.0
70	90	92	67.0	13.0
75	99	97	64.7	15.3
80	104	105	74.3	15.7
85	109	110	74.3	15.7
90	114	115	74.3	15.7
95	119	120	74.3	15.7
100	124	125	74.3	15.7

Dimensions in mm.



Technical features

- Single seal
- Unbalanced
- Single spring
- Bi-directional
- To DIN 24960
- Equivalent to Sealol type 1527

Operating limits

- $d_1 = 20 - 100 \text{ mm}$
- $p_1 = 1.0 \text{ MPa}$
- $t = -40 - 205 \text{ }^\circ\text{C}$
- $v_g = 16 \text{ m/s}$

Materials

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



YT 524

SINGLE COIL PUSHER SEAL



Technical features

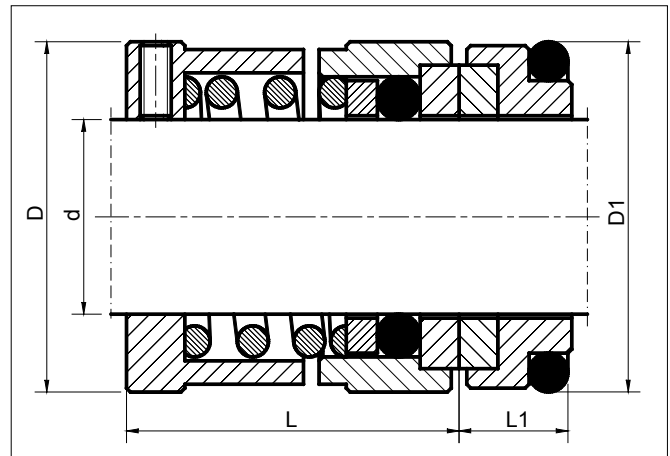
- Single seal
- Unbalanced
- Single spring
- Bi-directional
- Bayonet drive
- To DIN 24960, ISO3069

Operating limits

- $d_1 = 30 - 100 \text{ mm}$
- $p_1 = 0.8 \text{ MPa}$
- $t = -20 - 180 \text{ }^\circ\text{C}$
- $v_g = 20 \text{ m/s}$

Materials

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

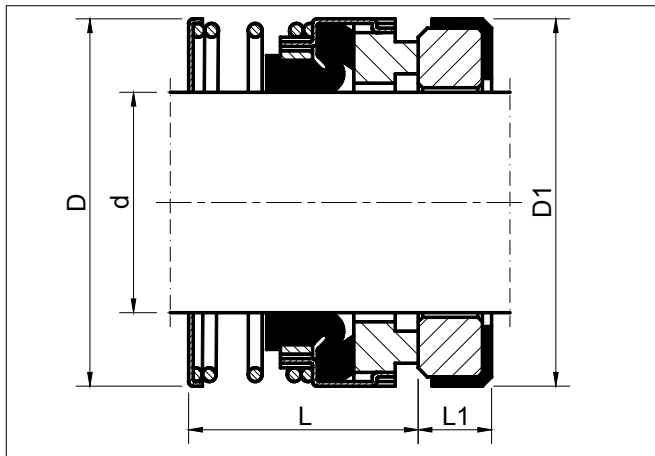


d	D	D1	L	L1
30	50	50	48	19
35	55	55	48	19
40	60	60	50	22
45	65	65	50	22
50	70	70	54	27
55	75	75	54	27
60	80	80	54	27
70	92	92	54	27
90	114	114	58	29
100	125	125	65	32

Dimensions in mm.

YT 822

ELASTOMER BELLOWS SINGLE SEAL



d	D	D1	L	L1
14	26.5	30	18.7	5.0
16	28.0	32	21.0	5.0
18	29.5	35	22.5	7.5
20	31.6	35	21.0	8.0
25	40.0	40	25.5	8.0
28	42.5	43	25.5	8.0
30	45.0	45	25.5	9.0
32	47.5	48	33.5	9.0
33	47.5	48	33.5	9.0
35	50.0	50	33.5	9.0
38	54.5	56	33.5	9.0
40	57.0	58	33.5	9.0
43	60.5	61	33.5	9.5
45	63.0	63	38.0	9.5
48	64.0	66	38.0	9.5
50	67.8	70	38.0	9.5
53	71.0	73	41.0	9.5
55	74.0	75	41.0	9.5
58	80.0	78	42.0	9.5
60	82.5	80	42.0	9.5
65	85.0	85	42.0	10.0
70	92.0	92	45.0	11.0
80	105.0	104	55.0	12.0
85	110.0	109	64.2	12.0
90	115.0	111	66.2	12.0

Dimensions in mm.



Technical features

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

Operating limits

- $d_1 = 14 - 90 \text{ mm}$
- $p_1 = 1.0 \text{ MPa}$
- $t = -40 - 205 \text{ }^\circ\text{C}$
- $v_g = 15 \text{ m/s}$

Materials

- Seal faces: carbon graphite (resin-impreg.), silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, Ni-resist, silicon carbide, tungsten carbide
- Bellows: Neoprene, NBR, FPM, EPDM
- Springs, other matel components: AISI 304, 316, 316Ti
- Secondary seals: Neoprene, NBR, FPM, EPDM

YT 560

ELASTOMER BELLOWS SINGLE SEAL



Technical features

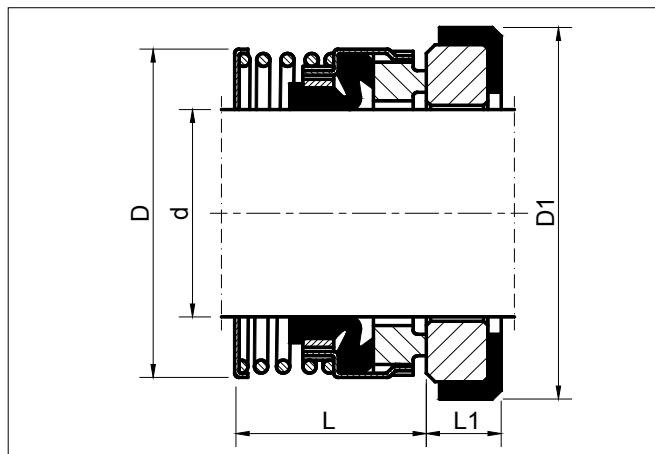
- Single seal
- Unbalanced
- Single spring
- Bi-directional
- Elastomer diaphragm

Operating limits

- $d_1 = 8 - 50 \text{ mm}$
- $p_1 = 0.5 \text{ MPa}$
- $t = -40 - 205 \text{ }^\circ\text{C}$
- $v_g = 6 \text{ m/s}$

Materials

- Seal faces: carbon graphite (resin-impreg.), silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, Ni-resist, silicon carbide, tungsten carbide
- Bellows: Neoprene, NBR, FPM, EPDM
- Springs, other metal components: AISI 304, 316, 316Ti
- Secondary seals: Neoprene, NBR, FPM, EPDM

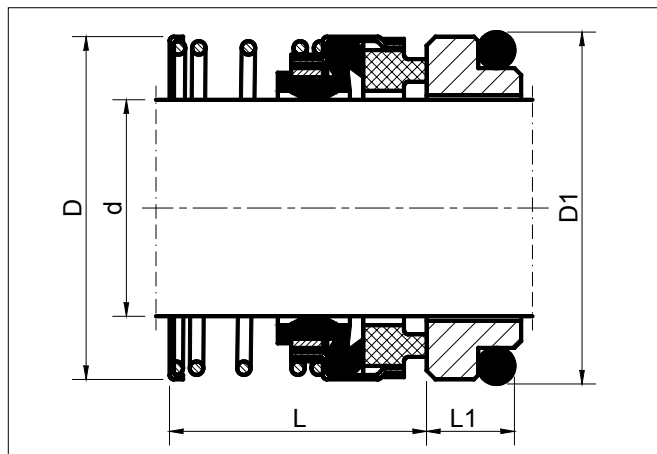


d	D	D1	L	L1
8	18.2	21	11	7
9	18.2	24	16	7
10	20.6	24	16	7
11	21.8	24	16	7
12	21.8	26	17	7
13	26.4	26	17	7
14	26.4	28	18	7
15	26.4	28	18	7
16	29.5	32	19	8
17	29.5	32	19	8
18	29.5	35	18	8
19	29.5	35	18	8
20	31.6	38	20	8
22	33.6	40	20	8
25	39.6	44	20	9
28	45.0	46	21	9
30	46.6	50	22	9
32	46.6	54	24	9
35	50.8	58	26	10
38	54.3	60	27	10
40	57.3	64	28	10
45	61.3	66	30	10
50	67.8	72	32	10

Dimensions in mm.

YT 843

EQUIVALENTS OF SEALOL TYPE 43



d	D	D1	L	L1
10	20.0	21.0	23.9	8.6
12	22.0	23.0	23.9	8.6
14	26.5	25.0	26.4	8.6
16	28.0	27.0	26.4	8.6
18	29.5	33.0	27.5	10.0
20	31.6	35.0	27.5	10.0
22	31.6	37.0	27.5	10.0
24	40.0	39.0	30.0	10.0
25	40.0	40.0	30.0	10.0
28	42.5	43.0	32.5	10.0
30	45.0	45.0	32.5	10.0
32	47.5	48.0	32.5	10.0
33	47.5	48.0	32.5	10.0
35	50.0	50.0	32.5	10.0
38	54.5	56.0	34.0	11.0
40	57.0	58.0	34.0	11.0
43	60.5	61.0	34.0	11.0
45	63.0	63.0	34.0	11.0
48	64.0	66.0	34.0	11.0
50	67.8	70.0	34.5	13.0
53	71.0	73.0	34.5	13.0
55	74.0	75.0	34.5	13.0
58	80.0	78.0	39.5	13.0
60	82.5	80.0	39.5	13.0
63	82.5	83.0	39.5	13.0
65	85.0	85.0	39.5	13.0
68	85.0	90.0	37.2	15.3
70	92.0	92.0	44.7	15.3
75	100.0	97.0	44.7	15.3
80	105.0	105.0	44.3	15.7
85	110.0	110.0	44.3	15.7
90	115.0	115.0	49.3	15.7
95	119.0	120.0	49.3	15.7
100	124.0	125.0	49.3	15.7

Conform to DIN 24960 L_{1K} length standard.

Dimensions in mm.



Technical features

- Single seal
- Unbalanced
- Single spring
- Bi-directional
- Elastomer diaphragm
- To DIN 24960
- Equivalent to Sealol type 43

Operating limits

- $d_1 = 10 - 100 \text{ mm}$
- $p_1 = 1.0 \text{ MPa}$
- $t = -40 - 205 \text{ }^\circ\text{C}$
- $v_g = 10 \text{ m/s}$

Materials

- Seal faces: carbon graphite (resin-impreg.), silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, Ni-resist, silicon carbide, tungsten carbide
- Bellows: Neoprene, NBR, FPM, EPDM
- Springs, other metal components: AISI 304, 316, 316Ti
- Secondary seals: Neoprene, NBR, FPM, EPDM

YT 156

ELASTOMER BELLOWS SINGLE SEAL



Technical features

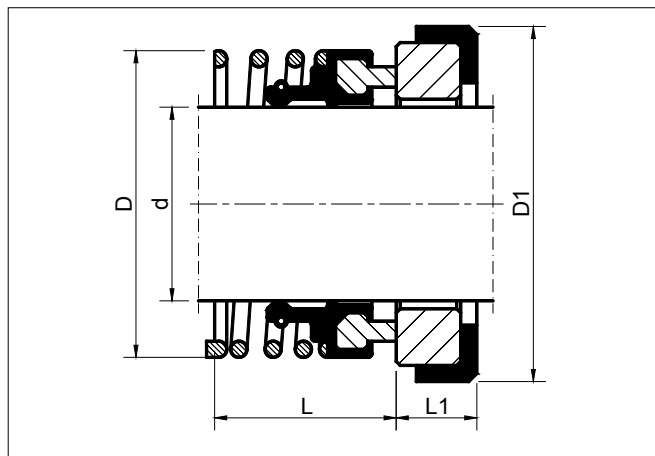
- Single seal
- Unbalanced
- Single spring
- Bi-directional
- Elastomer diaphragm

Operating limits

- $d_1 = 8 - 50 \text{ mm}$
- $p_1 = 0.5 \text{ MPa}$
- $t = -40 - 205 \text{ }^\circ\text{C}$
- $v_g = 10 \text{ m/s}$

Materials

- Seal faces: carbon graphite (resin-impreg.), silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, Ni-resist, silicon carbide, tungsten carbide
- Bellows: Neoprene, NBR, FPM, EPDM
- Springs, other metal components: AISI 304, 316, 316Ti
- Secondary seals: Neoprene, NBR, FPM, EPDM

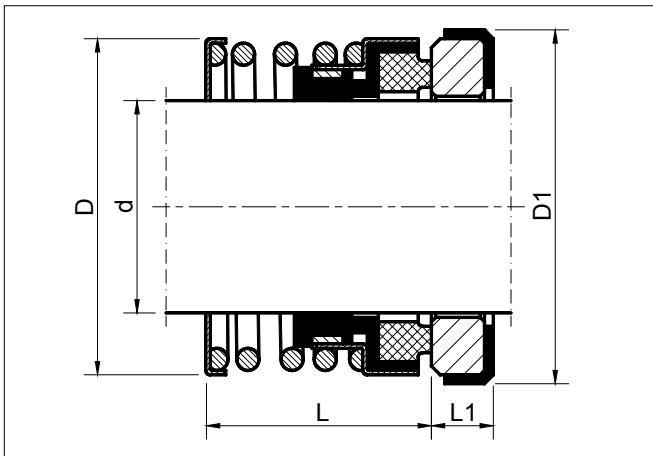


d	D	D1	L	L1
8	16.0	18	9	9
9	19.0	21	14	9
10	21.0	20	14	9
11	21.0	24	14	9
12	23.0	26	15	9
13	23.0	26	15	9
14	24.5	28	16	9
15	24.5	28	16	9
16	28.5	32	17	10
17	28.5	32	17	10
18	31.5	35	19	10
19	31.5	35	19	10
20	33.5	38	21	10
22	34.5	40	22	10
25	37.5	44	22	11
28	40.5	46	23	11
30	44.5	50	24	11
32	47.5	54	26	11
35	50.5	58	28	12
38	53.5	60	30	12
40	56.5	64	31	12
45	61.5	66	33	12
50	66.5	72	35	12

Dimensions in mm.

YT 108

ELASTOMER BELLOWS SINGLE SEAL



d	D	D1	L	L1
9	20.0	21	15	5
10	20.0	21	15	5
11	22.0	24	15	5
12	22.0	26	15	5
14	24.5	26	20	5
15	26.5	27	20	5
16	26.5	27	20	5
17	32.0	33	20	5
18	32.0	33	20	5
19	34.0	35	20	5
20	34.0	35	20	5
22	36.0	37	22	6
25	39.0	40	25	7
28	42.0	43	28	7
30	44.0	45	28	7
35	49.0	50	29	8
40	56.0	60	31	9
45	61.0	65	31	9

Dimensions in mm.



Technical features

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

Operating limits

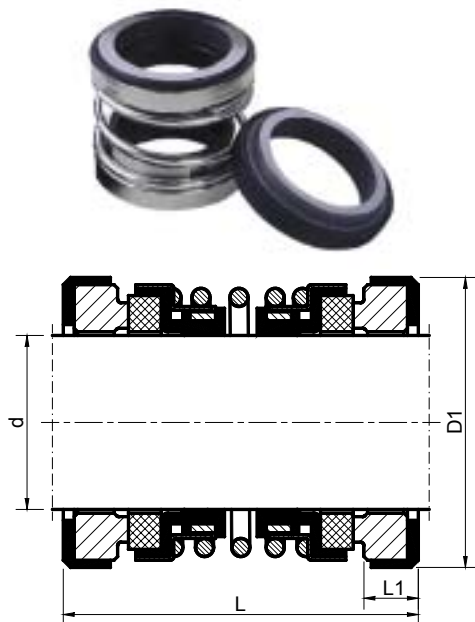
- $d_1 = 9 - 45 \text{ mm}$
- $p_1 = 0.8 \text{ MPa}$
- $t = -20 - 140 \text{ }^\circ\text{C}$
- $v_g = 6 \text{ m/s}$

Materials

- Seal faces: carbon graphite (resin-impreg.), silicon carbide
- Stationary seats: alumina ceramic, Ni-resist, silicon carbide
- Bellows: Neoprene, NBR
- Springs, other matel components: AISI 304, 316
- Secondary seals: Neoprene, NBR

YT 202

ELASTOMER BELLOWS DOUBLE SEAL



Operating limits

- $d_1 = 14 - 25 \text{ mm}$
- $p_1 = 0.6 \text{ MPa}$
- $t = -40 - 205 \text{ }^{\circ}\text{C}$
- $v_g = 10 \text{ m/s}$

Materials

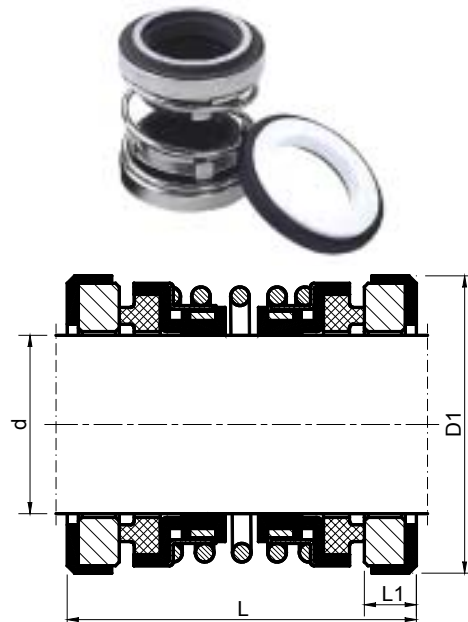
- Seal faces: carbon graphite (resin-impreg.), silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, Ni-resist, silicon carbide, tungsten carbide
- Bellows: Neoprene, NBR, FPM, EPDM
- Springs, other matel components: AISI 304, 316, 316Ti
- Secondary seals: Neoprene, NBR, FPM, EPDM

d	D1	L	L1
14a	26	38.3	7
14b	28	38.3	7
14c	30	38.3	7
15a	28	38.3	7
15b	30	38.3	7
16a	28	38.3	7
16b	30	38.3	7
18	34	38.3	7
20	36	40.3	7
25	41	51.3	9

Dimensions in mm.

YT 208

ELASTOMER BELLOWS DOUBLE SEAL



Operating limits

- $d_1 = 10 - 35 \text{ mm}$
- $p_1 = 0.5 \text{ MPa}$
- $t = -40 - 205 \text{ }^{\circ}\text{C}$
- $v_g = 10 \text{ m/s}$

Materials

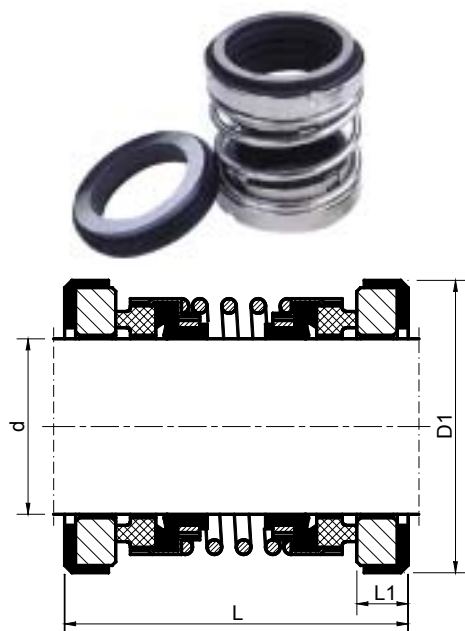
- Seal faces: carbon graphite (resin-impreg.), silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, Ni-resist, silicon carbide, tungsten carbide
- Bellows: Neoprene, NBR, FPM, EPDM
- Springs, other matel components: AISI 304, 316, 316Ti
- Secondary seals: Neoprene, NBR, FPM, EPDM

d	D1	L	L1
10	21	30.3	5
12	26	30.3	5
14	26	38.3	5
16	27	38.3	5
20	33	38.3	5
25	35	40.3	5
30	40	48.3	7
35	45	51.3	7
40	50	51.3	8

Dimensions in mm.

YT 472

ELASTOMER BELLOWS DOUBLE SEAL



Operating limits

- $d_1 = 20 - 60$ mm
- $p_1 = 0.4$ MPa
- $t = -20 - 140$ °C
- $v_g = 10$ m/s

Materials

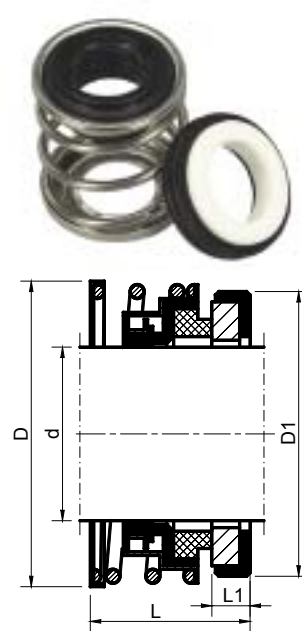
- Seal faces: carbon graphite (resin-impreg.), silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, Ni-resist, silicon carbide, tungsten carbide
- Bellows: Neoprene, NBR, EPDM
- Springs, other matel components: AISI 304, 316, 316Ti
- Secondary seals: Neoprene, NBR, EPDM

d	D1	L	L1
20	35	46.8	8.0
25	40	52.3	8.0
28	43	52.3	8.0
30	45	54.3	9.0
32	48	64.3	9.0
35	50	64.3	9.0
40	58	64.3	9.0
45	63	71.3	9.5
50	70	71.3	9.5
55	75	75.3	9.5
60	80	77.3	9.5

Dimensions in mm.

YT 470

ELASTOMER BELLOWS SINGLE SEAL



Operating limits

- $d_1 = 15 - 40$ mm
- $p_1 = 0.6$ MPa
- $t = -20 - 140$ °C
- $v_g = 6$ m/s

Materials

- Seal faces: carbon graphite (resin-impreg.), silicon carbide, tungsten carbide
- Stationary seats: alumina ceramic, silicon carbide, tungsten carbide
- Bellows: Neoprene, NBR, EPDM
- Springs, other matel components: AISI 304, 316, 316Ti
- Secondary seals: Neoprene, NBR, EPDM

d	D	D1	L	L1
15	32.0	30	32	8.0
16	32.0	30	32	8.0
20	37.0	35	20	5.0
25	44.2	40	22	5.5
30	48.6	45	24	6.0
35	54.0	50	26	6.5
40	60.4	58	28	7.5

Dimensions in mm.

SEAL FACE MATERIAL

PROPERTIES DATA SHEETS

MSeals (YuTong) supplies custom made seal face parts, shaft sleeves, and bearings according to users' specifications with prompt delivery. The following materials are currently available, covering a broad range of corrosive-abrasive sealing conditions:

- alumina ceramic (up to 99.5%)
- carbon graphite (antimony, and resin impregnated)
- hot-pressed graphite
- Ni-resist cast iron (type 1)
- PTFE (virgin, alumina, carbon, and glass fiber filled)
- silicon carbide (reaction bonded, and α -sintered)
- tungsten carbide (cobalt, and nickel bonded)

Alumina ceramics

		Al ₂ O ₃ - 99%	Al ₂ O ₃ - 97%
Purity	%	>99.5	>97.0
Density	g/cm ³	3.89	3.71
Hardness Vickers 1kg	kg/mm ²	2000	1900
Modulus of Elasticity	GPa	330	280
Fracture toughness	MPa·m ^{1/2}	3.8	3.5
Flexural Strength (MOR)	MPa	330	320
Compressive Strength	MPa	2600	2300
Thermal Expansion (CTE)	10 ⁻⁶ /K	8.2	8.0
Thermal Conductivity	W/(m·K)	30.0	26.0

Hot-pressed graphite

Density	g/cm ³	1.68
Hardness	HS	65-80
Compressive Strength	MPa	147
Flexural Strength (MOR)	MPa	54
Frictional Coefficient	-	0.15
Porosity	%	0.3

Carbon Graphite

Epoxy Impregnated (H)		M106H	M120H	M205H	M252H	
Density	g/cm ³	1.75	1.70	1.70	1.72	
Hardness	HS	85	80	70	45	
Flexural Strength (MOR)	MPa	65	60	60	45	
Compressive Strength	MPa	200	180	180	120	
Furan Impregnated (K)		M106K	M120K	M205K	M252K	KC170
Density	g/cm ³	1.75	1.70	1.70	1.72	1.82
Hardness	HS	90	85	70	48	80
Flexural Strength (MOR)	MPa	67	62	62	47	68
Compressive Strength	MPa	200	180	180	120	200
Phenolic Impregnated (F)		M106F	M120F	M205F	M252F	KC573
Density	g/cm ³	1.75	1.70	1.70	1.72	1.85
Hardness	HS	85	80	70	45	110
Flexural Strength (MOR)	MPa	60	55	55	40	85
Compressive Strength	MPa	200	180	180	120	370



SEAL FACE MATERIALS

PROPERTIES DATA SHEETS



Silicon carbide

		RB-SiC	α-SSiC
Purity	%	>90	>98
Density	g/cm ³	>2.98	>3.10
Hardness Vickers 1kg	kg/mm ²	2200	2400
Modulus of Elasticity	GPa	390	420
Fracture toughness	MPa·m ^{1/2}	4.3	4.5
Flexural Strength (MOR)	MPa	420	450
Compressive Strength	MPa	2500	3200
Thermal Expansion (CTE)	10 ⁻⁶ /K	4.3	4.4
Thermal Conductivity	W/(m·K)	120	140



PTFE		unfilled		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

		WC-Co 6%	WC-Co 11%	WC-Ni 6%
Density	g/cm ³	14.9	14.4	14.6
Hardness HRA	-	90.8	89.5	90.0
Modulus of Elasticity	GPa	600	570	610
Flexural Strength (MOR)	MPa	1800	2400	1900
Thermal Expansion (CTE)	10 ⁻⁶ /K	4.5	4.8	5.0
Thermal Conductivity	W/(m·K)	84	82	96



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