



GEFA SHIP SUPPLY

MECHANICAL SEAL





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Ship Supply

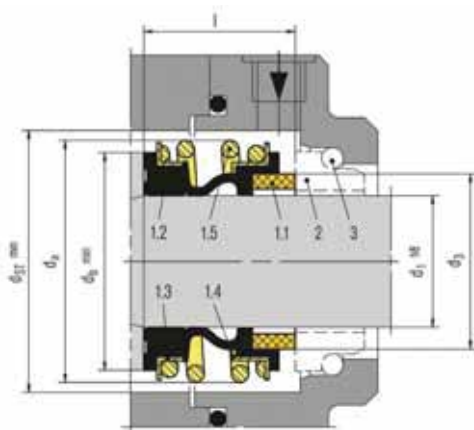
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Ship Supply





► GF 1 1	► GF 12 / GF 13 2	► GF 30 3	► GF 32 / GF 32 N 4	► GF 52 5
► GF 53 6	► GF 70 7	► GF 71 8	► GF 75 9	► GF 78 10
► GF 755 11	► GF 757 12	► GF 759 13	► GF 764 / GF 765 14	► GF 708 15
► GF 850 16	► SPECIAL MODELS 17	► SPECIAL MODELS 18	► SPECIAL MODELS 19	► SPECIAL MODELS 20
► SPECIAL MODELS 21	► SPECIAL MODELS 22	► SPECIAL MODELS 23	► PTFE PACKINGS 24	► PTFE PACKINGS 25
► PTFE PACKINGS 26	► GLASS FIBER PACKINGS 27	► GLASS FIBER PACKINGS 28	► CERAMIC PACKINGS 29	► OILY PACKINGS 30
► GRAPHITE PACKINGS 31	► GRAPHITE PACKINGS 32	► GASKET MODELS 33		



PART IDENTIFICATION

1,1	Rolling Element Surface
1,2	Belows
1,3-1,4	Spring Case
1,5	Spring
2	Fixed Element
3	O-ring or L-ring

OPERATING LIMITATION

d1	10 - 100 mm
p	16 (max) bar
v	0,5 - 1 bar
t	-40 / +180 °C
Vg	10 m / sn

SURFACE OPTIONS

Rolling Element Surface Option :
Carbon, Siliciumcarbur, Tungstencarbur

Fixed Element Surface Option :
Siliciumcarbur, Tungstencarbur, Ceramic, Carbon, Cr-Ni

Elastomers :

Viton (FKM), EPKM, Nitrile (NBR)



d1	d3	d6	d7	d8	d11	d12	d14	d16	da	db ^(*)	dm ^(*)	ds ^(*)	dST	l	l1	l1k	l1N	l1S	l2	l3	l5	l6	l7	l8	l9	l10	l12	l14	l15	l16	l17	l28	l29	R
10	15.7	17	21	3	15.5	19.2	11.0	24.60	22.5	20.5	18	18	24	14.5	25.9	32.5	40	34.0	33.4	25	1.5	4	8.5	17.5	10.0	7.5	7.5	6.6	1.2	3.8	7.5	6.6	9.0	1.2
12	17.7	19	23	3	17.5	21.6	13.5	27.80	25.0	22.5	20	20	26	15.0	25.9	32.5	40	34.0	33.4	25	1.5	4	8.5	17.5	10.0	7.5	6.5	5.6	1.2	3.8	7.5	6.6	9.0	1.2
14	19.7	21	25	3	20.5	24.6	17.0	30.95	28.5	26.5	22	22	30	17.0	28.4	35.0	40	35.5	33.4	25	1.5	4	8.5	17.5	10.0	7.5	6.5	5.6	1.2	3.8	9.0	6.6	10.5	1.2
15	20.8	-	-	-	20.5	24.6	17.0	30.95	28.5	26.5	22	22	30	17.0	28.4	-	-	35.5	33.4	25	-	-	-	-	-	7.5	6.6	1.2	3.8	9.0	-	10.5	1.2	
16	21.0	23	27	3	22.0	28.0	17.0	30.95	28.5	26.5	22	22	30	17.0	28.4	35.0	40	35.5	33.4	25	1.5	4	8.5	17.5	10.0	7.5	8.5	7.5	1.5	5.0	9.0	6.6	10.5	1.5
18	23.7	27	33	3	24.0	30.0	20.0	34.15	32.0	29.0	29	26	33	19.5	30.0	37.5	45	35.5	37.5	25	2.0	5	9.0	19.5	11.5	8.5	9.0	8.0	1.5	5.0	9.0	7.5	10.5	1.5
19	26.7	-	-	-	-	20.0	34.15	37.0	33.0	33	28	38	38	21.5	30.0	-	-	35.5	37.5	25	-	-	-	-	-	-	-	-	-	-	9.0	-	10.5	-
20	26.7	29	35	3	29.5	35.0	21.5	35.70	37.0	33.0	33	28	38	21.5	30.0	37.5	45	35.5	37.5	25	2.0	5	9.0	19.5	11.5	8.5	8.5	7.5	1.5	5.0	9.0	7.5	10.5	1.5
22	27.7	31	37	3	29.5	35.0	23.0	37.30	37.0	33.0	33	28	38	21.5	30.0	37.5	45	35.5	37.5	25	2.0	5	9.0	19.5	11.5	8.5	8.5	7.5	1.5	5.0	9.0	7.5	10.5	1.5
24	31.2	33	39	3	32.0	38.0	26.5	40.50	42.5	38.0	38	32	44	22.5	32.5	40.0	50	35.5	42.5	25	2.0	5	9.0	19.5	11.5	8.5	8.5	7.5	1.5	5.0	9.0	7.5	10.5	1.5
25	31.2	34	40	3	32.0	38.0	26.5	40.50	42.5	38.0	38	32	44	23.0	32.5	40.0	50	35.5	42.5	25	2.0	5	9.0	19.5	11.5	8.5	8.5	7.5	1.5	5.0	9.0	7.5	10.5	1.5
28	35.0	37	43	3	36.0	42.0	29.5	47.65	49.0	44.0	37	37	50	26.5	35.0	42.5	50	45.0	42.5	33	2.0	5	9.0	19.5	11.5	8.5	10.0	9.0	1.5	5.0	10.5	7.5	12.0	1.5
30	37.0	39	45	3	39.2	45.0	32.5	50.80	49.0	44.0	37	37	50	26.5	35.0	42.5	50	45.0	42.5	33	2.0	5	9.0	19.5	11.5	8.5	11.5	10.5	1.5	5.0	10.5	7.5	12.0	1.5
32	40.2	42	48	3	42.2	48.0	32.5	50.80	53.5	46.0	41	41	55	27.5	35.0	42.5	55	45.0	47.5	33	2.0	5	9.0	19.5	11.5	8.5	11.5	10.5	1.5	5.0	10.5	7.5	12.0	1.5
33	40.2	42	48	3	44.2	50.0	36.5	54.00	53.5	46.0	41	41	55	27.5	35.0	42.5	55	45.0	47.5	33	2.0	5	9.0	19.5	11.5	8.5	12.0	11.0	1.5	5.0	10.5	7.5	12.0	1.5
35	43.2	44	50	3	46.2	52.0	36.5	54.00	57.0	50.0	44	44	59	28.5	35.0	42.5	55	45.0	47.5	33	2.0	5	9.0	19.5	11.5	8.5	12.0	11.0	1.5	5.0	10.5	7.5	12.0	1.5
38	46.2	49	56	4	49.2	55.0	39.5	57.15	59.0	53.0	53	47	61	30.0	36.0	45.0	55	45.0	46.0	33	2.0	6	9.0	22.0	14.0	10.0	11.3	10.3	1.5	5.0	10.5	9.0	12.0	1.5
40	48.8	51	58	4	52.2	58.0	42.5	60.35	62.0	55.0	55	49	64	30.0	36.0	45.0	55	45.0	46.0	33	2.0	6	9.0	22.0	14.0	10.0	11.8	10.8	1.5	5.0	10.5	9.0	12.0	1.5
42	51.8	-	-	-	53.3	62.0	46.0	63.50	65.5	58.0	53	53	67	30.0	36.0	-	-	53.0	51.0	41	-	-	-	-	-	-	13.2	12.0	2.0	6.0	10.5	-	12.0	2.5
43	51.8	54	61	4	53.3	62.0	46.0	63.50	65.5	58.0	53	53	67	30.0	36.0	45.0	60	53.0	51.0	41	2.0	6	9.0	22.0	14.0	10.0	13.2	12.0	2.0	6.0	10.5	9.0	12.0	2.5
45	53.8	56	63	4	55.3	64.0	46.0	63.50	68.0	60.0	55	55	70	30.0	36.0	45.0	60	53.0	51.0	41	2.0	6	9.0	22.0	14.0	10.0	12.8	11.6	2.0	6.0	10.5	9.0	12.0	2.5
48	56.8	59	66	4	59.7	68.4	49.0	66.70	70.5	63.0	58	58	74	30.5	36.0	45.0	60	53.0	51.0	41	2.0	6	9.0	22.0	14.0	10.0	12.8	11.6	2.0	6.0	10.5	9.0	12.0	2.5
50	58.8	62	70	4	60.8	69.3	52.0	69.85	74.0	65.0	60	60	77	30.5	38.0	47.5	60	54.5	50.5	41	2.5	6	9.0	23.0	15.0	10.5	12.8	11.6	2.0	6.0	12.0	9.5	13.5	2.5
53	62.2	65	73	4	63.8	72.3	55.5	73.05	78.5	70.0	63	63	81	33.0	36.5	47.5	70	54.5	59.0	41	2.5	6	9.0	23.0	15.0	12.0	13.5	12.3	2.0	6.0	12.0	11.0	13.5	2.5
55	64.2	67	75	4	66.5	75.4	58.5	76.20	81.0	72.0	65	65	83	35.0	36.5	47.5	70	54.5	59.0	41	2.5	6	9.0	23.0	15.0	12.0	14.5	13.3	2.0	6.0	12.0	11.0	13.5	2.5
58	67.2	70	78	4	69.5	78.4	61.5	79.40	85.5	75.0	68	68	88	37.0	41.5	52.5	70	54.5	59.0	41	2.5	6	9.0	23.0	15.0	12.0	14.5	13.3	2.0	6.0	12.0	11.0	13.5	2.5
60	70.0	72	80	4	71.5	80.4	61.5	79.40	88.5	79.0	70	70	91	38.0	41.5	52.5	70	54.5	59.0	41	2.5	6	9.0	23.0	15.0	12.0	14.5	13.3	2.0	6.0	12.0	11.0	13.5	2.5
65	75.0	77	85	4	76.5	85.4	68.0	92.10	93.5	84.0	77	77	96	40.0	41.5	52.5	80	65.0	69.0	49	2.5	6	9.0	23.0	15.0	12.0	14.2	13.0	2.0	6.0	14.5	11.0	16.0	2.5
68	78.0	81	90	4	82.7	91.5	71.0	95.25	96.5	88.0	80	80	100	40.0	41.2	52.5	80	65.0	68.7	49	2.5	7	9.0	26.0	18.0	12.5	14.9	13.7	2.0	6.0	14.5	11.3	16.0	2.5
70	80.0	83	92	4	83.0	92.0	71.0	95.25	99.5	90.0	82	82	103	40.0	48.7	60.0	80	65.0	68.7	49	2.5	7	9.0	26.0	18.0	12.5	14.2	13.0	2.0	6.0	14.5	11.3	16.0	2.5
75	85.5	88	97	4	90.2	99.0	77.5	101.60	107.0	95.0	87	87	110	40.0	48.7	60.0	80	68.0	68.7	52	2.5	7	9.0	26.0	18.0	12.5	15.2	14.0	2.0	6.0	14.5	11.3	16.0	2.5
80	90.5	95	105	4	95.2	104.0	84.0	114.30	112.0	100.0	92	92	116	40.0	48.0	60.0	90	76.0	78.0	56	3.0	7	9.0	26.2	18.2	13.0	16.2	15.0	2.0	6.0	18.5	12.0	20.0	2.5
85	96.0	100	110	4	100.2	109.0	87.0	117.50	120.0	107.0	97	97	124	41.0	46.0	60.0	90	76.0	76.0	56	3.0	7	9.0	26.2	18.2	15.0	16.0	14.8	2.0	6.0	18.5	14.0	20.0	2.5
90	102.0	105	115	4	105.2	114.0	93.5	123.85	127.0	114.0	104	104	131	45.0	51.0	65.0	90	79.0	76.0	59	3.0	7	9.0	26.2	18.2	15.0	16.0	14.8	2.0	6.0	18.5	14.0	20.0	2.5
95	107.0	110	120	4	111.6	120.3	96.5	127.00	132.0	119.0	109	109	136	46.0	51.0	65.0	90	79.0	76.0	59	3.0	7	9.0	25.2	17.2	15.0	17.0	15.8	2.0	6.0	18.5	14.0	20.0	2.5
100	112.0	115	125	4	114.5	123.3	103.0	133.35	137.0	124.0	114	114	140	47.0	51.0	65.0	90	82.0	76.0	62	3.0	7	9.0	25.2	17.2	15.0	17.0	15.8	2.0	6.0	18.5	14.0	20.0	2.5



PART IDENTIFICATION

1,1	Rolling Element Surface
1,2	Belows
1,3-1,4	Spring Case
1,5	Spring
2	Fixed Element
3	O-ring or L-ring

OPERATING LIMITATION

d1	10 - 100 mm
p	16 (max) bar
v	0,5 - 1 bar
t	-40 / +180 °C
Vg	10 m / sn

SURFACE OPTIONS

Rolling Element Surface Option :

Carbon, Siliciumcarbur, Tungstencarbur

Fixed Element Surface Option :

Siliciumcarbur, Tungstencarbur, Ceramic, Carbon, Cr-Ni

Elastomers :

Viton (FKM), EPKM, Nitrile (NBR)

G-60

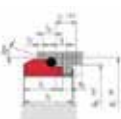
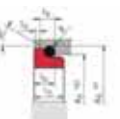
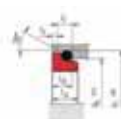
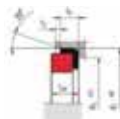
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G-50

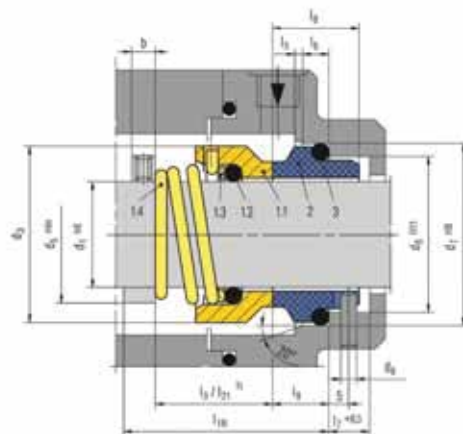
G-4

G-9

G-606



d1	d3	d6	d7	d8	d11	d12	d14	d16	da	db ^(*)	dm ^(*)	ds ^(*)	dST	l	l1	l1k	l1N	l1S	l2	l3	l5	l6	l7	l8	l9	l10	l12	l14	l15	l16	l17	l28	l29	R
10	15.7	17	21	3	15.5	19.2	11.0	24.60	22.5	20.5	18	18	24	14.5	25.9	32.5	40	34.0	33.4	25	1.5	4	8.5	17.5	10.0	7.5	7.5	6.6	1.2	3.8	7.5	6.6	9.0	1.2
12	17.7	19	23	3	17.5	21.6	13.5	27.80	25.0	22.5	20	20	26	15.0	25.9	32.5	40	34.0	33.4	25	1.5	4	8.5	17.5	10.0	7.5	6.5	5.6	1.2	3.8	7.5	6.6	9.0	1.2
14	19.7	21	25	3	20.5	24.6	17.0	30.95	28.5	26.5	22	22	30	17.0	28.4	35.0	40	35.5	33.4	25	1.5	4	8.5	17.5	10.0	7.5	6.5	5.6	1.2	3.8	9.0	6.6	10.5	1.2
15	20.8	-	-	-	20.5	24.6	17.0	30.95	28.5	26.5	22	22	30	17.0	28.4	-	-	35.5	33.4	25	-	-	-	-	-	7.5	6.6	1.2	3.8	9.0	-	10.5	1.2	
16	21.0	23	27	3	22.0	28.0	17.0	30.95	28.5	26.5	22	22	30	17.0	28.4	35.0	40	35.5	33.4	25	1.5	4	8.5	17.5	10.0	7.5	8.5	7.5	1.5	5.0	9.0	6.6	10.5	1.5
18	23.7	27	33	3	24.0	30.0	20.0	34.15	32.0	29.0	29	26	33	19.5	30.0	37.5	45	35.5	37.5	25	2.0	5	9.0	19.5	11.5	8.5	9.0	8.0	1.5	5.0	9.0	7.5	10.5	1.5
19	26.7	-	-	-	-	20.0	34.15	37.0	33.0	33	28	38	38	21.5	30.0	-	-	35.5	37.5	25	-	-	-	-	-	-	-	-	-	-	9.0	-	10.5	-
20	26.7	29	35	3	29.5	35.0	21.5	35.70	37.0	33.0	33	28	38	21.5	30.0	37.5	45	35.5	37.5	25	2.0	5	9.0	19.5	11.5	8.5	8.5	7.5	1.5	5.0	9.0	7.5	10.5	1.5
22	27.7	31	37	3	29.5	35.0	23.0	37.30	37.0	33.0	33	28	38	21.5	30.0	37.5	45	35.5	37.5	25	2.0	5	9.0	19.5	11.5	8.5	8.5	7.5	1.5	5.0	9.0	7.5	10.5	1.5
24	31.2	33	39	3	32.0	38.0	26.5	40.50	42.5	38.0	38	32	44	22.5	32.5	40.0	50	35.5	42.5	25	2.0	5	9.0	19.5	11.5	8.5	8.5	7.5	1.5	5.0	9.0	7.5	10.5	1.5
25	31.2	34	40	3	32.0	38.0	26.5	40.50	42.5	38.0	38	32	44	23.0	32.5	40.0	50	35.5	42.5	25	2.0	5	9.0	19.5	11.5	8.5	8.5	7.5	1.5	5.0	9.0	7.5	10.5	1.5
28	35.0	37	43	3	36.0	42.0	29.5	47.65	49.0	44.0	37	37	50	26.5	35.0	42.5	50	45.0	42.5	33	2.0	5	9.0	19.5	11.5	8.5	10.0	9.0	1.5	5.0	10.5	7.5	12.0	1.5
30	37.0	39	45	3	39.2	45.0	32.5	50.80	49.0	44.0	37	37	50	26.5	35.0	42.5	50	45.0	42.5	33	2.0	5	9.0	19.5	11.5	8.5	11.5	10.5	1.5	5.0	10.5	7.5	12.0	1.5
32	40.2	42	48	3	42.2	48.0	32.5	50.80	53.5	46.0	41	41	55	27.5	35.0	42.5	55	45.0	47.5	33	2.0	5	9.0	19.5	11.5	8.5	11.5	10.5	1.5	5.0	10.5	7.5	12.0	1.5
33	40.2	42	48	3	44.2	50.0	36.5	54.00	53.5	46.0	41	41	55	27.5	35.0	42.5	55	45.0	47.5	33	2.0	5	9.0	19.5	11.5	8.5	12.0	11.0	1.5	5.0	10.5	7.5	12.0	1.5
35	43.2	44	50	3	46.2	52.0	36.5	54.00	57.0	50.0	44	44	59	28.5	35.0	42.5	55	45.0	47.5	33	2.0	5	9.0	19.5	11.5	8.5	12.0	11.0	1.5	5.0	10.5	7.5	12.0	1.5
38	46.2	49	56	4	49.2	55.0	39.5	57.15	59.0	53.0	53	47	61	30.0	36.0	45.0	55	45.0	46.0	33	2.0	6	9.0	22.0	14.0	10.0	11.3	10.3	1.5	5.0	10.5	9.0	12.0	1.5
40	48.8	51	58	4	52.2	58.0	42.5	60.35	62.0	55.0	55	49	64	30.0	36.0	45.0	55	45.0	46.0	33	2.0	6	9.0	22.0	14.0	10.0	11.8	10.8	1.5	5.0	10.5	9.0	12.0	1.5
42	51.8	-	-	-	53.3	62.0	46.0	63.50	65.5	58.0	53	53	67	30.0	36.0	-	-	53.0	51.0	41	-	-	-	-	-	-	13.2	12.0	2.0	6.0	10.5	-	12.0	2.5
43	51.8	54	61	4	53.3	62.0	46.0	63.50	65.5	58.0	53	53	67	30.0	36.0	45.0	60	53.0	51.0	41	2.0	6	9.0	22.0	14.0	10.0	13.2	12.0	2.0	6.0	10.5	9.0	12.0	2.5
45	53.8	56	63	4	55.3	64.0	46.0	63.50	68.0	60.0	55	55	70	30.0	36.0	45.0	60	53.0	51.0	41	2.0	6	9.0	22.0	14.0	10.0	12.8	11.6	2.0	6.0	10.5	9.0	12.0	2.5
48	56.8	59	66	4	59.7	68.4	49.0	66.70	70.5	63.0	58	58	74	30.5	36.0	45.0	60	53.0	51.0	41	2.0	6	9.0	22.0	14.0	10.0	12.8	11.6	2.0	6.0	10.5	9.0	12.0	2.5
50	58.8	62	70	4	60.8	69.3	52.0	69.85	74.0	65.0	60	60	77	30.5	38.0	47.5	60	54.5	50.5	41	2.5	6	9.0	23.0	15.0	10.5	12.8	11.6	2.0	6.0	12.0	9.5	13.5	2.5
53	62.2	65	73	4	63.8	72.3	55.5	73.05	78.5	70.0	63	63	81	33.0	36.5	47.5	70	54.5	59.0	41	2.5	6	9.0	23.0	15.0	12.0	13.5	12.3	2.0	6.0	12.0	11.0	13.5	2.5
55	64.2	67	75	4	66.5	75.4	58.5	76.20	81.0	72.0	65	65	83	35.0	36.5	47.5	70	54.5	59.0	41	2.5	6	9.0	23.0	15.0	12.0	14.5	13.3	2.0	6.0	12.0	11.0	13.5	2.5
58	67.2	70	78	4	69.5	78.4	61.5	79.40	85.5	75.0	68	68	88	37.0	41.5	52.5	70	54.5	59.0	41	2.5	6	9.0	23.0	15.0	12.0	14.5	13.3	2.0	6.0	12.0	11.0	13.5	2.5
60	70.0	72	80	4	71.5	80.4	61.5	79.40	88.5	79.0	70	70	91	38.0	41.5	52.5	70	54.5	59.0	41	2.5	6	9.0	23.0	15.0	12.0	14.5	13.3	2.0	6.0	12.0	11.0	13.5	2.5
65	75.0	77	85	4	76.5	85.4	68.0	92.10	93.5	84.0	77	77	96	40.0	41.5	52.5	80	65.0	69.0	49	2.5	6	9.0	23.0	15.0	12.0	14.2	13.0	2.0	6.0	14.5	11.0	16.0	2.5
68	78.0	81	90	4	82.7	91.5	71.0	95.25	96.5	88.0	80	80	100	40.0	41.2	52.5	80	65.0	68.7	49	2.5	7	9.0	26.0	18.0	12.5	14.9	13.7	2.0	6.0	14.5	11.3	16.0	2.5
70	80.0	83	92	4	83.0	92.0	71.0	95.25	99.5	90.0	82	82	103	40.0	48.7	60.0	80	65.0	68.7	49	2.5	7	9.0	26.0	18.0	12.5	14.2	13.0	2.0	6.0	14.5	11.3	16.0	2.5
75	85.5	88	97	4	90.2	99.0	77.5	101.60	107.0	95.0	87	87	110	40.0	48.7	60.0	80	68.0	68.7	52	2.5	7	9.0	26.0	18.0	12.5	15.2	14.0	2.0	6.0	14.5	11.3	16.0	2.5
80	90.5	95	105	4	95.2	104.0	84.0	114.30	112.0	100.0	92	92	116	40.0	48.0	60.0	90	76.0	78.0	56	3.0	7	9.0	26.2	18.2	13.0	16.2	15.0	2.0	6.0	18.5	12.0	20.0	2.5
85	96.0	100	110	4	100.2	109.0	87.0	117.50	120.0	107.0	97	97	124	41.0	46.0	60.0	90	76.0	76.0	56	3.0	7	9.0	26.2	18.2	15.0	16.0	14.8	2.0	6.0	18.5	14.0	20.0	2.5
90	102.0	105	115	4	105.2	114.0	93.5	123.85	127.0	114.0	104	104	131	45.0	51.0	65.0	90	79.0	76.0	59	3.0	7	9.0	26.2	18.2	15.0	16.0	14.8	2.0	6.0	18.5	14.0	20.0	2.5
95	107.0	110	120	4	111.6	120.3	96.5	127.00	132.0	119.0	109	109	136	46.0	51.0	65.0	90	79.0	76.0	59	3.0	7	9.0	25.2	17.2	15.0	17.0	15.8	2.0	6.0	18.5	14.0	20.0	2.5
100	112.0	115	125	4	114.5	123.3	103.0	133.35	137.0	124.0	114	114	140	47.0	51.0	65.0	90	82.0	76.0	62	3.0	7	9.0	25.2	17.2	15.0	17.0	15.8	2.0	6.0	18.5	14.0	20.0	2.5



PART IDENTIFICATION

- 1,1 Rolling Element Surface
- 1,2 Rolling Element O-ring
- 1,3 Washer
- 1,4 Spring (Right Left Hand)
- 2 Fixed Element
- 3 O-ring or L-ring

OPERATING LIMITATION

- d1** 6 - 80 mm
- p** 10 bar
- t** -40 / +220 °C
- Vg** 15 m / sn
- Vg** 10 m / sn

SURFACE OPTIONS

- Rolling Element Surface Option :**
- Carbon, Sic, Tuc
- Fixed Element Surface Option :**
- Viton (FKM), EPKM, Nitrile (NBR), Silicone

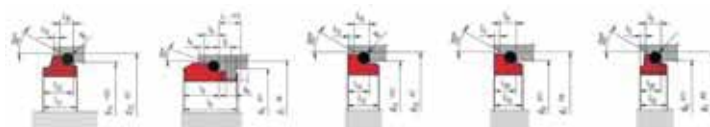
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G-13

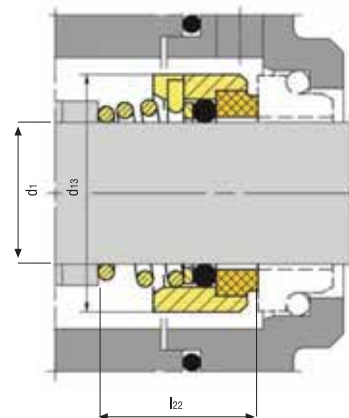
G-6

G-60

G-4



d ₁	d ₃	d ₆	d ₇	d ₈	d ₁₁ ⁽¹⁾	d ₁₂ ⁽¹⁾	d ₁₃	d _b	l _{1N}	l ₃ ⁽³⁾	l ₅	l ₆	l ₇	l ₈	l ₉	l ₁₀	l ₁₁	l ₁₂	l ₁₃	l ₁₄	l ₁₅	l ₁₆	l ₁₈	l ₁₉	l ₂₁ ⁽³⁾	l ₂₂	l ₂₃	l ₂₈	b ⁽²⁾	R
6	14	—	—	—	11.5	16.0	16	8	—	—	—	—	—	—	—	—	9.0	6.5	7.1	5.6	1.2	3.8	—	—	10.5	11.9	—	—	—	1.2
8	18	—	—	—	15.5	19.2	18	11	—	—	—	—	—	—	—	—	9.0	8.0	7.1	7.0	1.2	3.8	—	—	15.5	16.9	—	—	—	1.2
10*	19	17	21	3	15.5	19.2	20	13	40	15.5	1.5	4	8.5	17.5	10.0	7.5	9.0	7.5	7.1	6.6	1.2	3.8	—	—	15.5	16.9	—	6.6	(8)	1.2
12*	21	19	23	3	17.5	21.6	22	16	40	16.0	1.5	4	8.5	17.5	10.0	7.5	10.0	6.5	7.6	5.6	1.2	3.8	—	—	15.5	17.4	—	6.6	(8)	1.2
14*	23	21	25	3	20.5	24.6	24	18	40	16.5	1.5	4	8.5	17.5	10.0	7.5	10.0	6.5	7.6	5.6	1.2	3.8	—	—	15.5	17.4	16.5	6.6	(8)	1.2
15	24	—	—	—	20.5	24.6	25	19	—	—	—	—	—	—	—	—	11.0	7.5	8.6	6.6	1.2	3.8	—	—	15.5	17.4	—	—	—	1.2
16*	26	23	27	3	22.0	28.0	26	21	40	18.0	1.5	4	8.5	17.5	10.0	7.5	11.5	8.5	9.0	7.5	1.5	5.0	—	—	17.5	19.5	16.5	6.6	(8)	1.5
18*	29	27	33	3	24.0	30.0	31	23	45	19.5	2.0	5	9.0	19.5	11.5	8.5	12.5	9.0	10.0	8.0	1.5	5.0	15	7	18.5	20.5	18.0	7.5	(8)	1.5
20*	31	29	35	3	29.5	35.0	34	26	45	22.0	2.0	5	9.0	19.5	11.5	8.5	12.5	8.5	9.5	7.5	1.5	5.0	15	7	20.0	22.0	19.0	7.5	(8)	1.5
22*	33	31	37	3	29.5	35.0	36	28	45	21.5	2.0	5	9.0	19.5	11.5	8.5	12.5	8.5	9.5	7.5	1.5	5.0	15	7	21.5	23.5	20.5	7.5	(8)	1.5
24*	35	33	39	3	32.0	38.0	38	30	50	23.5	2.0	5	9.0	19.5	11.5	8.5	12.5	8.5	9.5	7.5	1.5	5.0	15	7	23.0	25.0	22.0	7.5	(8)	1.5
25*	36	34	40	3	32.0	38.0	39	31	50	26.5	2.0	5	9.0	19.5	11.5	8.5	12.5	8.5	9.5	7.5	1.5	5.0	15	7	24.5	26.5	23.5	7.5	(8)	1.5
26	37	—	—	—	34.0	40.0	40	32	—	—	—	—	9.0	—	—	—	13.0	9.0	10.0	8.0	1.5	5.0	—	—	24.5	26.5	23.5	—	—	1.5
28*	40	37	43	3	36.0	42.0	42	35	50	26.5	2.0	5	9.0	19.5	11.5	8.5	14.0	10.0	11.0	9.0	1.5	5.0	15	7	24.5	26.5	24.5	7.5	(8)	1.5
30*	43	39	45	3	39.2	45.0	44	37	50	26.5	2.0	5	9.0	19.5	11.5	8.5	14.0	11.5	11.0	10.5	1.5	5.0	15	7	24.5	25.0	24.5	7.5	(8)	1.5
32*	46	42	48	3	42.2	48.0	46	39	55	28.5	2.0	5	9.0	19.5	11.5	8.5	14.0	11.5	11.0	10.5	1.5	5.0	15	7	28.0	28.5	28.0	7.5	(8)	1.5
33*	47	42	48	3	—	—	47	40	55	28.5	2.0	5	9.0	19.5	11.5	8.5	—	12.0	—	—	—	—	15	7	—	—	—	7.5	(8)	1.5
35*	49	44	50	3	46.2	52.0	49	43	55	28.5	2.0	5	9.0	19.5	11.5	8.5	14.5	12.0	11.5	11.0	1.5	5.0	15	7	28.0	28.5	28.0	7.5	(8)	1.5
38*	53	49	56	4	49.2	55.0	54	45	55	33.5	2.0	6	9.0	22.0	14.0	10.0	14.5	11.3	11.5	10.3	1.5	5.0	16	8	31.0	32.2	31.0	9.0	7.5	1.5
40*	56	51	58	4	52.2	58.0	56	49	55	36.0	2.0	6	9.0	22.0	14.0	10.0	14.5	11.8	11.5	10.8	1.5	5.0	16	8	34.0	34.7	34.0	9.0	(8)	1.5
42	59	—	—	—	53.3	62.0	58	52	—	—	—	—	9.0	—	—	—	17.0	13.2	14.3	12.0	2.0	6.0	—	—	35.0	37.3	35.0	—	—	2.5
43*	59	54	61	4	—	—	59	52	60	38.5	2.0	6	9.0	22.0	14.0	10.0	—	13.2	—	—	2.0	—	16	8	—	—	—	9.0	7.5	2.5
45*	61	56	63	4	55.3	64.0	61	55	60	39.5	2.0	6	9.0	22.0	14.0	10.0	17.0	12.8	14.3	11.6	2.0	6.0	16	8	36.5	39.2	36.5	9.0	(8)	2.5
48*	64	59	66	4	59.7	68.4	64	58	60	46.0	2.0	6	9.0	22.0	14.0	10.0	17.0	12.8	14.3	11.6	2.0	6.0	16	8	42.0	44.7	42.0	9.0	(8)	2.5
50*	66	62	70	4	60.8	69.3	66	61	60	45.0	2.5	6	9.0	23.0	15.0	10.5	17.0	12.8	14.3	11.6	2.0	6.0	17	9.5	43.0	45.7	43.0	9.5	(8)	2.5
53*	69	65	73	4	—	—	69	64	70	47.0	2.5	6	9.0	23.0	15.0	12.0	—	13.5	—	—	—	—	17	9.5	—	—	—	11.0	8.0	2.5
55*	71	67	75	4	66.5	75.4	71	66	70	49.0	2.5	6	9.0	23.0	15.0	12.0	18.0	14.5	15.3	13.3	2.0	6.0	17	9.5	47.0	49.0	47.0	11.0	(8)	2.5
58*	76	70	78	4	69.5	78.4	78	69	70	55.0	2.5	6	9.0	23.0	15.0	12.0	18.0	14.5	15.3	13.3	2.0	6.0	18	10.5	50.0	52.0	50.0	11.0	(8)	2.5
60*	78	72	80	4	71.5	80.4	79	71	70	55.0	2.5	6	9.0	23.0	15.0	12.0	18.0	14.5	15.3	13.3	2.0	6.0	18	10.5	51.0	55.0	51.0	11.0	(8)	2.5
63*	83	75	83	4	—	—	83	74	70	55.0	2.5	6	9.0	23.0	15.0	12.0	—	14.2	—	—	—	—	18	10.5	—	—	—	11.0	(8)	2.5
65*	84	77	85	4	76.5	85.4	85	77	80	55.0	2.5	6	9.0	23.0	15.0	12.0	18.0	14.2	15.3	13.0	2.0	6.0	18	10.5	52.0	54.3	52.0	11.0	(8)	2.5
68*	88	81	90	4	82.7	91.5	88	80	80	55.0	2.5	7	9.0	26.0	18.0	12.5	19.0	14.9	16.0	13.7	2.0	6.0	18.5	11	53.0	55.3	52.7	11.3	(8)	2.5
70*	90	83	92	4	83.0	92.0	90	83	80	57.0	2.5	7	9.0	26.0	18.0	12.5	18.0	14.2	15.3	13.0	2.0	6.0	19	11.5	54.0	56.3	54.0	11.3	(10)	2.5
75*	98	88	97	4	90.2	99.0	98	88	80	62.0	2.5	7	9.0	26.0	18.0	12.5	18.0	15.2	15.3	14.0	2.0	6.0	19	11.5	55.0	56.3	54.0	11.3	(10)	2.5
80*	100	95	105	4	95.2	104.0	103	93	90	61.8	3.0	7	9.0	26.2	18.2	13.0	19.0	16.2	16.3	15.0	2.0	6.0	19	11.5	58.0	59.3	58.0	12.0	10.0	2.5



PART IDENTIFICATION

- 1,1 Rolling Element Surface
- 1,2 Rolling Element O-ring
- 1,3 Washer
- 1,4 Spring (Right Left Hand)
- 2 Fixed Element
- 3 O-ring or L-ring

OPERATING LIMITATION

- d1** 6 - 80 mm
- p** 10 bar
- t** -40 / +220 °C
- Vg** 15 m / sn (RS 32)
- Vg** 10 m / sn (RS 37)

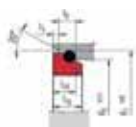
SURFACE OPTIONS

- Rolling Element Surface Option :**
Carbon, Sic, Tuc
- Fixed Element Surface Option :**
Viton (FKM), EPKM, Nitrile (NBR), Silicone

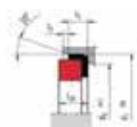
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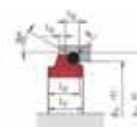
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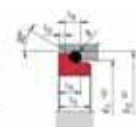
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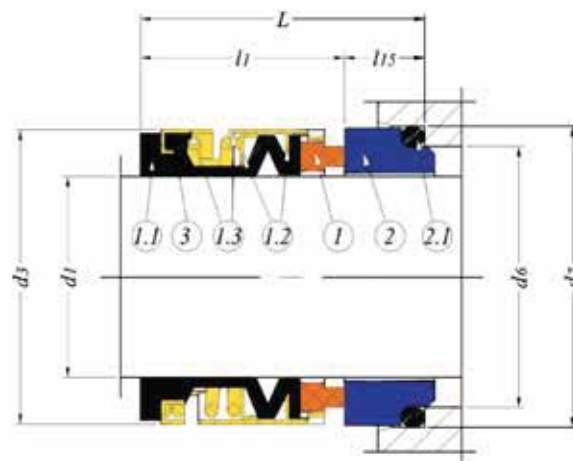
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G-4



d1	d3	d6	d7	d8	d11 ¹⁾	d12 ¹⁾	d13	db	l1N	I3 ³⁾	I5	I6	I7	I8	I9	I10	I11	I12	I13	I14	I15	I16	I18	I19	I21 ³⁾	I22	I23	I28	b ²⁾	R
6	14	-	-	-	11.5	16.0	16	8	-	-	-	-	-	-	-	-	9.0	6.5	7.1	5.6	1.2	3.8	-	-	10.5	11.9	-	-	-	1.2
8	18	-	-	-	15.5	19.2	18	11	-	-	-	-	-	-	-	-	9.0	8.0	7.1	7.0	1.2	3.8	-	-	15.5	16.9	-	-	-	1.2
10*	19	17	21	3	15.5	19.2	20	13	40	15.5	1.5	4	8.5	17.5	10.0	7.5	9.0	7.5	7.1	6.6	1.2	3.8	-	-	15.5	16.9	-	6.6	(8)	1.2
12*	21	19	23	3	17.5	21.6	22	16	40	16.0	1.5	4	8.5	17.5	10.0	7.5	10.0	6.5	7.6	5.6	1.2	3.8	-	-	15.5	17.4	-	6.6	(8)	1.2
14*	23	21	25	3	20.5	24.6	24	18	40	16.5	1.5	4	8.5	17.5	10.0	7.5	10.0	6.5	7.6	5.6	1.2	3.8	-	-	15.5	17.4	16.5	6.6	(8)	1.2
15	24	-	-	-	20.5	24.6	25	19	-	-	-	-	-	-	-	-	11.0	7.5	8.6	6.6	1.2	3.8	-	-	15.5	17.4	-	-	-	1.2
16*	26	23	27	3	22.0	28.0	26	21	40	18.0	1.5	4	8.5	17.5	10.0	7.5	11.5	8.5	9.0	7.5	1.5	5.0	-	-	17.5	19.5	16.5	6.6	(8)	1.5
18*	29	27	33	3	24.0	30.0	31	23	45	19.5	2.0	5	9.0	19.5	11.5	8.5	12.5	9.0	10.0	8.0	1.5	5.0	15	7	18.5	20.5	18.0	7.5	(8)	1.5
20*	31	29	35	3	29.5	35.0	34	26	45	22.0	2.0	5	9.0	19.5	11.5	8.5	12.5	8.5	9.5	7.5	1.5	5.0	15	7	20.0	22.0	19.0	7.5	(8)	1.5
22*	33	31	37	3	29.5	35.0	36	28	45	21.5	2.0	5	9.0	19.5	11.5	8.5	12.5	8.5	9.5	7.5	1.5	5.0	15	7	21.5	23.5	20.5	7.5	(8)	1.5
24*	35	33	39	3	32.0	38.0	38	30	50	23.5	2.0	5	9.0	19.5	11.5	8.5	12.5	8.5	9.5	7.5	1.5	5.0	15	7	23.0	25.0	22.0	7.5	(8)	1.5
25*	36	34	40	3	32.0	38.0	39	31	50	26.5	2.0	5	9.0	19.5	11.5	8.5	12.5	8.5	9.5	7.5	1.5	5.0	15	7	24.5	26.5	23.5	7.5	(8)	1.5
26	37	-	-	-	34.0	40.0	40	32	-	-	-	-	9.0	-	-	-	13.0	9.0	10.0	8.0	1.5	5.0	-	-	24.5	26.5	23.5	-	-	1.5
28*	40	37	43	3	36.0	42.0	42	35	50	26.5	2.0	5	9.0	19.5	11.5	8.5	14.0	10.0	11.0	9.0	1.5	5.0	15	7	24.5	26.5	24.5	7.5	(8)	1.5
30*	43	39	45	3	39.2	45.0	44	37	50	26.5	2.0	5	9.0	19.5	11.5	8.5	14.0	11.5	11.0	10.5	1.5	5.0	15	7	24.5	25.0	24.5	7.5	(8)	1.5
32*	46	42	48	3	42.2	48.0	46	39	55	28.5	2.0	5	9.0	19.5	11.5	8.5	14.0	11.5	11.0	10.5	1.5	5.0	15	7	28.0	28.5	28.0	7.5	(8)	1.5
33*	47	42	48	3	-	-	47	40	55	28.5	2.0	5	9.0	19.5	11.5	8.5	-	12.0	-	-	-	-	15	7	-	-	-	7.5	(8)	1.5
35*	49	44	50	3	46.2	52.0	49	43	55	28.5	2.0	5	9.0	19.5	11.5	8.5	14.5	12.0	11.5	11.0	1.5	5.0	15	7	28.0	28.5	28.0	7.5	(8)	1.5
38*	53	49	56	4	49.2	55.0	54	45	55	33.5	2.0	6	9.0	22.0	14.0	10.0	14.5	11.3	11.5	10.3	1.5	5.0	16	8	31.0	32.2	31.0	9.0	7.5	1.5
40*	56	51	58	4	52.2	58.0	56	49	55	36.0	2.0	6	9.0	22.0	14.0	10.0	14.5	11.8	11.5	10.8	1.5	5.0	16	8	34.0	34.7	34.0	9.0	(8)	1.5
42	59	-	-	-	53.3	62.0	58	52	-	-	-	-	9.0	-	-	-	17.0	13.2	14.3	12.0	2.0	6.0	-	-	35.0	37.3	35.0	-	-	2.5
43*	59	54	61	4	-	-	59	52	60	38.5	2.0	6	9.0	22.0	14.0	10.0	-	13.2	-	-	2.0	-	16	8	-	-	-	9.0	7.5	2.5
45*	61	56	63	4	55.3	64.0	61	55	60	39.5	2.0	6	9.0	22.0	14.0	10.0	17.0	12.8	14.3	11.6	2.0	6.0	16	8	36.5	39.2	36.5	9.0	(8)	2.5
48*	64	59	66	4	59.7	68.4	64	58	60	46.0	2.0	6	9.0	22.0	14.0	10.0	17.0	12.8	14.3	11.6	2.0	6.0	16	8	42.0	44.7	42.0	9.0	(8)	2.5
50*	66	62	70	4	60.8	69.3	66	61	60	45.0	2.5	6	9.0	23.0	15.0	10.5	17.0	12.8	14.3	11.6	2.0	6.0	17	9.5	43.0	45.7	43.0	9.5	(8)	2.5
53*	69	65	73	4	-	-	69	64	70	47.0	2.5	6	9.0	23.0	15.0	12.0	-	13.5	-	-	-	-	17	9.5	-	-	-	11.0	8.0	2.5
55*	71	67	75	4	66.5	75.4	71	66	70	49.0	2.5	6	9.0	23.0	15.0	12.0	18.0	14.5	15.3	13.3	2.0	6.0	17	9.5	47.0	49.0	47.0	11.0	(8)	2.5
58*	76	70	78	4	69.5	78.4	78	69	70	55.0	2.5	6	9.0	23.0	15.0	12.0	18.0	14.5	15.3	13.3	2.0	6.0	18	10.5	50.0	52.0	50.0	11.0	(8)	2.5
60*	78	72	80	4	71.5	80.4	79	71	70	55.0	2.5	6	9.0	23.0	15.0	12.0	18.0	14.5	15.3	13.3	2.0	6.0	18	10.5	51.0	55.0	51.0	11.0	(8)	2.5
63*	83	75	83	4	-	-	83	74	70	55.0	2.5	6	9.0	23.0	15.0	12.0	-	14.2	-	-	-	-	18	10.5	-	-	-	11.0	(8)	2.5
65*	84	77	85	4	76.5	85.4	85	77	80	55.0	2.5	6	9.0	23.0	15.0	12.0	18.0	14.2	15.3	13.0	2.0	6.0	18	10.5	52.0	54.3	52.0	11.0	(8)	2.5
68*	88	81	90	4	82.7	91.5	88	80	80	55.0	2.5	7	9.0	26.0	18.0	12.5	19.0	14.9	16.0	13.7	2.0	6.0	18.5	11	53.0	55.3	52.7	11.3	(8)	2.5
70*	90	83	92	4	83.0	92.0	90	83	80	57.0	2.5	7	9.0	26.0	18.0	12.5	18.0	14.2	15.3	13.0	2.0	6.0	19	11.5	54.0	56.3	54.0	11.3	(10)	2.5
75*	98	88	97	4	90.2	99.0	98	88	80	62.0	2.5	7	9.0	26.0	18.0	12.5	18.0	15.2	15.3	14.0	2.0	6.0	19	11.5	55.0	56.3	54.0	11.3	(10)	2.5
80*	100	95	105	4	95.2	104.0	103	93	90	61.8	3.0	7	9.0	26.2	18.2	13.0	19.0	16.2	16.3	15.0	2.0	6.0	19	11.5	58.0	59.3	58.0	12.0	10.0	2.5



OPERATING LIMITATION

d1 12 - 100 mm

p 40 bar

t -30 / +200 °C

Vg 20 m / sn

SURFACE OPTIONS

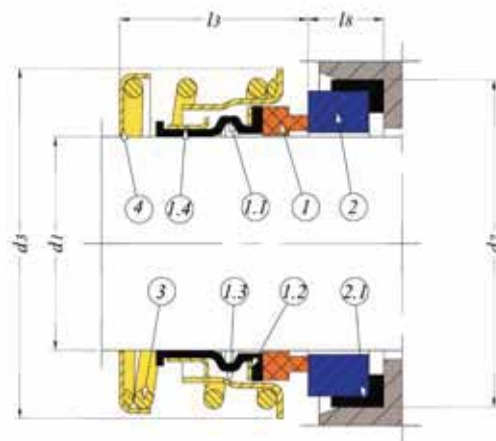
Rolling Element Surface Option :

Carbon, Sic

Fixed Element Surface Option :

Viton (FKM), EPKM, Nitrile (NBR)

d1 (mm)	d3 (mm)	d7 (mm)	l1 (mm)	l1 (mm)
12	22	23	23.9	8.6
14	24.1	25	26.4	8.6
16	26.2	27	26.4	8.6
18	32.2	33	27.5	10
20	33.9	35	27.5	10
22	36.1	37	27.5	10
24	38.1	39	30	10
25	38.8	40	30	10
28	42.1	43	32.5	10
30	44.2	45	32.5	10
32	45.8	48	32.5	10
33	46.9	48	32.5	10
35	48.8	50	32.5	10
38	54.2	56	34	11
40	56.1	58	34	11
43	58.8	61	34	11
45	60.9	63	34	11
48	64.1	66	34	11
50	66.2	70	34.5	13
53	69.1	73	34.5	13
55	71.1	75	34.5	13
58	78.2	78	39.5	13
60	79.9	80	39.5	13
63	82.8	83	39.5	13
65	85.1	85	39.5	13
70	90	92	44.7	15.3
75	97	97	44.7	15.3
80	104	105	44.3	15.7
85	108	110	44.3	15.7
90	114	115	49.3	15.7
95	118	120	49.3	15.7
100	124	125	49.3	15.7



OPERATING LIMITATION

d1 1/2" - 3"

d1 12,7 - 76,2 mm

p 16 bar

t -30 / +180 °C

Vg 20 m / sn

SURFACE OPTIONS

Rolling Element Surface Option :

Carbon, Sic

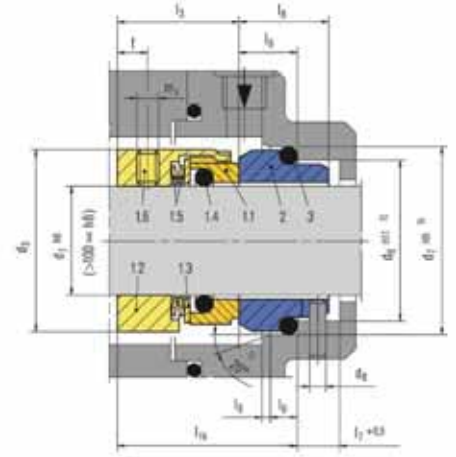
Fixed Element Surface Option :

Viton (FKM), EPKM, Nitrile (NBR)

inch	d1 (mm)	d3 (mm)	d7 (mm)	3	
1/2	12.7	30.2	25.4	20.7	7.9
5/8	15.8	33.3	31.7	22.2	10.3
3/4	19.1	36.5	34.9	22.2	10.3
7/8	22.2	39.7	38.1	23.8	10.3
1	25.4	45.3	41.2	25.4	11.1
1 1/8	28.6	48.5	44.4	27	11.1
1 1/4	31.7	52.8	47.6	27	11.1
1 3/8	34.9	56	50.8	28.6	11.1
1 1/2	38.1	59.2	53.9	28.6	11.1
1 5/8	41.2	67	60.3	34.9	12.7
1 3/4	44.4	70.1	63.5	34.9	12.7
1 7/8	47.6	73.2	66.6	38.1	12.7
2	50.8	76.5	69.8	38.1	12.7
2 1/8	53.9	82.7	76.2	42.8	14.3
2 1/4	57.1	85.9	79.3	42.8	14.3
2 3/8	60.3	89.1	82.5	46	14.3
2 1/2	63.5	92.2	85.7	46	14.3
	66.6	98.4	85.7	49.2	15.9
2 3/4	69.8	101.6	88.9	49.2	15.9
	73	104.8	95.2	52.4	15.9
3	76.2	108	98.4	52.4	15.9



GF70 (YAPRAK YAYLI)



PART IDENTIFICATION

- 1,1 Rolling Element Surface
- 1,2 Shell
- 1,3 Washer
- 1,4 Rolling Element O-ring
- 1,5 Springs
- 1,6 Setskur
- 2,0 Fixed Element
- 3,0 Fixed Element O-ring

OPERATING LIMITATION

- d1** 14 - 200 mm
- p** 25 bar
- t** -50 / +220 °C
- Vg** 20 m / sn

SURFACE OPTIONS

- Rolling Element Surface Options :**
- Cr-Ni, Carbon, Sic, Tuc
- Fixed Element Surface Options :**
- Carbon, Sic, Tuc, Cr-Ni, Ceramic
- Elastomers :**
- Viton (FKM), EPKM, Nitrile (NBR), Silicone

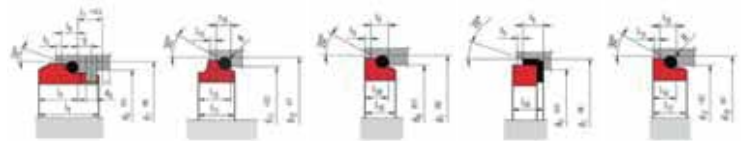
G-9

G-13

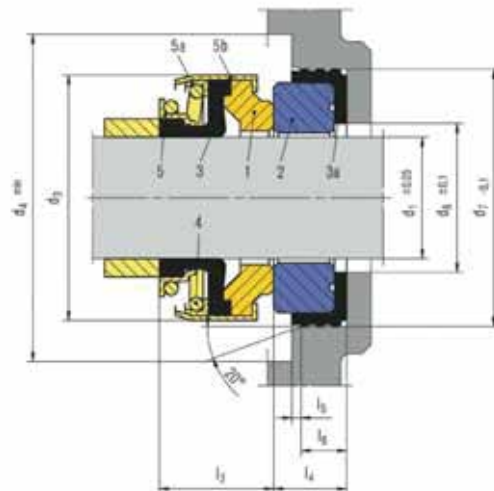
G-6

G-60

G-4



d ₁	d ₃	d ₆	d ₇	d ₈	d ₁₁	d ₁₂	d ₂₄	d _s	l _{1k}	l ₃	l ₅	l ₆	l ₇	l ₈	l ₉	l ₁₀	l ₁₁	l ₁₂	l ₁₃	l ₁₄	l ₁₅	l ₁₆	l ₂₈	b	f	m _x	u _{max.}	t	R
14*	25	21.0	25.0	3	20.5	24.6	16	34	35.0	25.0	1.5	4	8.5	17.5	10.0	7.5	10.0	6.5	7.6	5.6	1.2	3.8	6.6	4	6	M5	10	1.5	1.2
16*	27	23.0	27.0	3	22.0	28.0	18	36	35.0	25.0	1.5	4	8.5	17.5	10.0	7.5	11.5	8.5	9.0	7.5	1.2	3.8	6.6	4	6	M5	10	1.5	1.5
18*	33	27.0	33.0	3	24.0	30.0	20	38	37.5	26.0	2.0	5	9.0	19.5	11.5	8.5	12.5	9.0	10.0	8.0	1.5	5.0	7.5	5	7	M5	12	1.1	1.5
20*	35	29.0	35.0	3	29.5	35.0	22	40	37.5	26.0	2.0	5	9.0	19.5	11.5	8.5	12.5	8.5	9.5	7.5	1.5	5.0	7.5	5	7	M5	12	1.1	1.5
22*	37	31.0	37.0	3	29.5	35.0	24	42	37.5	26.0	2.0	5	9.0	19.5	11.5	8.5	12.5	8.5	9.5	7.5	1.5	5.0	7.5	6	7	M5	12	1.5	1.5
24*	39	33.0	39.0	3	32.0	38.0	26	44	40.0	28.5	2.0	5	9.0	19.5	11.5	8.5	12.5	8.5	9.5	7.5	1.5	5.0	7.5	6	8	M5	12	1.5	1.5
25*	40	34.0	40.0	3	32.0	38.0	27	45	40.0	28.5	2.0	5	9.0	19.5	11.5	8.5	12.5	8.5	9.5	7.5	1.5	5.0	7.5	6	8	M5	12	1.5	1.5
28*	43	37.0	43.0	3	36.0	42.0	30	47	42.5	31.0	2.0	5	9.0	19.5	11.5	8.5	14.0	10.0	11.0	9.0	1.5	5.0	7.5	6	8	M6	13	1.5	1.5
30*	45	39.0	45.0	3	39.2	45.0	32	49	42.5	31.0	2.0	5	9.0	19.5	11.5	8.5	14.0	11.5	11.0	10.5	1.5	5.0	7.5	6	8	M6	13	1.5	1.5
32*	47	42.0	48.0	3	42.2	48.0	34	51	42.5	31.0	2.0	5	9.0	19.5	11.5	8.5	14.0	11.5	11.0	10.5	1.5	5.0	7.5	6	8	M6	13	1.5	1.5
33*	48	42.0	48.0	3	44.2	50.0	35	51	42.5	31.0	2.0	5	9.0	19.5	11.5	8.5	14.5	12.0	11.5	10.5	1.5	5.0	7.5	6	8	M6	13	1.5	1.5
35*	50	44.0	50.0	3	46.2	52.0	37	54	42.5	31.0	2.0	5	9.0	19.5	11.5	8.5	14.5	12.0	11.5	11.0	1.5	5.0	7.5	6	8	M6	13	1.5	1.5
38*	55	49.0	56.0	4	49.2	55.0	40	59	45.0	31.0	2.0	6	9.0	22.0	14.0	10.0	14.5	11.3	11.5	10.3	1.5	5.0	9.0	6	8	M6	13	1.5	1.5
40*	57	51.0	58.0	4	52.2	58.0	42	61	45.0	31.0	2.0	6	9.0	22.0	14.0	10.0	14.5	11.8	11.5	10.8	1.5	5.0	9.0	6	8	M6	13	1.5	1.5
43*	60	54.0	61.0	4	53.3	62.0	45	65	45.0	31.0	2.0	6	9.0	22.0	14.0	10.0	17.0	13.2	14.3	12.0	2.0	6.0	9.0	6	8	M6	13	1.5	2.5
45*	62	56.0	63.0	4	55.3	64.0	47	66	45.0	31.0	2.0	6	9.0	22.0	14.0	10.0	17.0	12.8	14.3	11.6	2.0	6.0	9.0	6	8	M6	13	1.5	2.5
48*	65	59.0	66.0	4	59.7	68.4	50	69	45.0	31.0	2.0	6	9.0	22.0	14.0	10.0	17.0	12.8	14.3	11.6	2.0	6.0	9.0	6	8	M6	13	1.5	2.5
50*	67	62.0	70.0	4	60.8	69.3	52	71	47.5	32.5	2.5	6	9.0	23.0	15.0	10.5	17.0	12.8	14.3	11.6	2.0	6.0	9.5	6	8	M6	13	1.5	2.5
53*	70	65.0	73.0	4	63.8	72.3	55	75	47.5	32.5	2.5	6	9.0	23.0	15.0	12.0	17.0	13.5	14.3	12.3	2.0	6.0	11.0	6	8	M6	13	1.5	2.5
55*	72	67.0	75.0	4	66.5	75.4	57	76	47.5	32.5	2.5	6	9.0	23.0	15.0	12.0	18.0	14.5	15.3	13.3	2.0	6.0	11.0	6	8	M6	13	1.5	2.5
58*	79	70.0	78.0	4	69.5	78.4	60	83	52.5	37.5	2.5	6	9.0	23.0	15.0	12.0	18.0	14.5	15.3	13.3	2.0	6.0	11.0	8	9	M8	13	1.9	2.5
60*	81	72.0	80.0	4	71.5	80.4	62	85	52.5	37.5	2.5	6	9.0	23.0	15.0	12.0	18.0	14.5	15.3	13.3	2.0	6.0	11.0	8	9	M8	13	1.9	2.5
63*	84	75.0	83.0	4	74.5	83.4	65	88	52.5	37.5	2.5	6	9.0	23.0	15.0	12.0	18.0	14.2	15.3	13.3	2.0	6.0	11.0	8	9	M8	13	1.9	2.5
65*	86	77.0	85.0	4	76.5	85.4	67	95	52.5	37.5	2.5	6	9.0	23.0	15.0	12.0	18.0	14.2	15.3	13.0	2.0	6.0	11.0	8	9	M8	13	1.9	2.5
68*	89	81.0	90.0	4	82.7	91.5	70	93	52.5	34.5	2.5	7	9.0	26.0	18.0	12.5	19.0	14.9	16.0	13.7	2.0	6.0	11.3	8	9	M8	13	1.9	2.5
70*	91	83.0	92.0	4	83.0	92.0	72	95	60.0	42.0	2.5	7	9.0	26.0	18.0	12.5	18.0	14.2	15.3	13.0	2.0	6.0	11.3	8	9	M8	16	1.9	2.5
75*	99	88.0	97.0	4	90.2	99.0	77	105	60.0	42.0	2.5	7	9.0	26.0	18.0	12.5	18.0	15.2	15.3	14.0	2.0	6.0	11.3	8	10	M8	16	1.9	2.5
80*	104	95.0	105.0	4	95.2	104.0	82	109	60.0	41.8	3.0	7	9.0	26.2	18.2	13.0	19.0	16.2	16.3	15.0	2.0	6.0	12.0	8	10	M8	16	1.9	2.5
85*	109	100.0	110.0	4	100.2	109.0	87	114	60.0	41.8	3.0	7	9.0	26.2	18.2	15.0	19.0	16.0	16.3	14.8	2.0	6.0	14.0	8	10	M8	16	1.9	2.5
90*	114	105.0	115.0	4	105.2	114.0	92	119	65.0	46.8	3.0	7	9.0	26.2	18.2	15.0	19.0	16.0	16.3	14.8	2.0	6.0	14.0	10	10	M8	20	2.3	2.5
95*	119	110.0	120.0	4	111.6	120.3	97	124	65.0	47.8	3.0	7	9.0	25.2	17.2	15.0	20.0	17.0	17.3	15.8	2.0	6.0	14.0	10	10	M8	20	2.3	2.5
100*	124	115.0	125.0	4	114.5	123.3	102	129	65.0	47.8	3.0	7	9.0	25.2	17.2	15.0	20.0	17.0	17.3	15.8	2.0	6.0	14.0	10	10	M8	20	2.3	2.5



PART IDENTIFICATION

- 1 Rolling Element Surface
- 2 Fixed Element Surface
- 3 Belows
- 3a L-ring (Cap)
- 4 Springs
- 5 Washer
- 5a Lock Washer
- 6a Rotary Element Sleeve

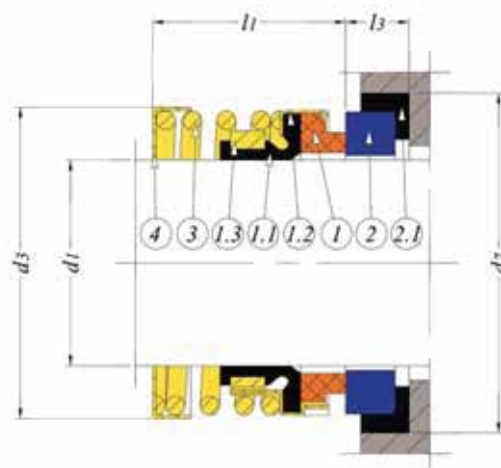
OPERATING LIMITATION

- d1 6 - 60 mm
- p 6 bar
- v 0,5 bar
- t -20 / +200 °C
- Vg 10 m / sn

SURFACE OPTIONS

- Rolling Element Surface Options :**
- Carbon, Sic, Tuc
- Fixed Element Surface Options :**
- Ceramic, Sic, Tuc, Cr-Ni
- Elastomers :**
- Viton (FKM), EPKM, Nitrile (NBR)

d ₁	d ₃	d ₄	d ₆	d ₇	l ₃	tol ₃	l ₄	l ₅	l ₆
6	18	23	8	22.0	8.0	+0.5/0	4.0	0.5	3.5
8S	20	23	10	22.0	11.0	+0.5/0	4.0	0.5	3.5
8	24	27	10	26.0	11.0	+0.5/0	8.0	1.0	6
3/8"	24	27	12	25.4	11.0	+0.5/0	5.5	0.5	4.5
3/8"	24	27	12	25.4	11.0	+0.5/0	7.5	1.0	5.5
10	24	27	12	26.0	11.0	+0.5/0	8.0	1.0	6
11	24	27	13	26.0	11.0	+0.5/0	8.0	1.0	6
12C	24	27	14	26.0	11.0	+0.5/0	8.0	1.0	6
12	24	27	14	26.0	12.8	+0.7/0	8.0	1.0	6
1/2"	24	27	15	25.4	12.8	+0.7/0	7.5	1.0	5.5
13	24	27	15	26.0	12.8	+0.7/0	8.0	1.0	6.0
14S	28	30	18	28.5	12.8	+0.7/0	7.5	1.0	5.5
14L	28	30	18	28.5	15.3	± 0.8	7.5	1.0	5.5
14	32	35	16	29.5	12.8	+0.7/0	8.0	1.0	6.0
15	32	35	17	29.5	12.8	+0.7/0	8.0	1.0	6.0
16R	32	35	18	29.5	12.8	+0.7/0	8.0	1.0	6.0
16	39	43	18	38.0	12.8	+0.7/0	8.0	1.0	6.0
16	39	43	18	42.0	12.8	+0.7/0	8.0	1.0	6.0
17	39	43	19	42.0	12.8	+0.7/0	8.0	1.0	6.0
18	39	43	20	42.0	12.8	+0.7/0	8.0	1.0	6.0
19	39	43	21	42.0	12.8	+0.7/0	8.0	1.0	6.0
20	39	43	22	42.0	12.8	+0.7/0	8.0	1.0	6.0
20S	42	47	22	45.0	12.8	+0.7/0	10.0	1.0	8.0
22	42	47	24	45.0	12.8	+0.7/0	10.0	1.0	8.0
23	47	52	25	50.0	13.5	+1/0	10.0	1.0	8.0
24	47	52	26	50.0	13.5	+1/0	10.0	1.0	8.0
25R	42	52	27	50.0	13.5	+1/0	10.0	1.0	8.0
25	47	52	27	50.0	13.5	+1/0	10.0	1.0	8.0
26	47	52	29	50.0	13.5	+1/0	10.0	1.0	8.0
27	47	52	30	50.0	13.5	+1/0	10.0	1.0	8.0
28	54	60	31	57.0	15.0	+1/0	10.0	1.0	8.0
30	54	60	33	57.0	15.0	+1/0	10.0	1.0	8.0
32	54	60	35	57.0	15.0	+1/0	10.0	1.0	8.0
35	60	70	38	63.0	16.0	+1/0	10.0	1.0	8.0
38	65	75	41	68.0	18.0	+1/0	12.0	2.0	9.0
40	65	75	43	68.0	18.0	+1/0	12.0	2.0	9.0
45	70	80	48	73.0	20.0	+1/0	12.0	2.0	9.0
50	85	95	53	88.0	23.0	+1/0	15.0	2.0	12.0
60	105	115	63	110.0	30.0	+1/0	15.0	2.0	12.0



OPERATING LIMITATION

d1 14 - 85 mm

p 12 bar

t -30 / +200 °C

Vg 15 m / sn

SURFACE OPTIONS

Rolling Element Surface Option :

Carbon, Siliciumcarbur, Tungstencarbur

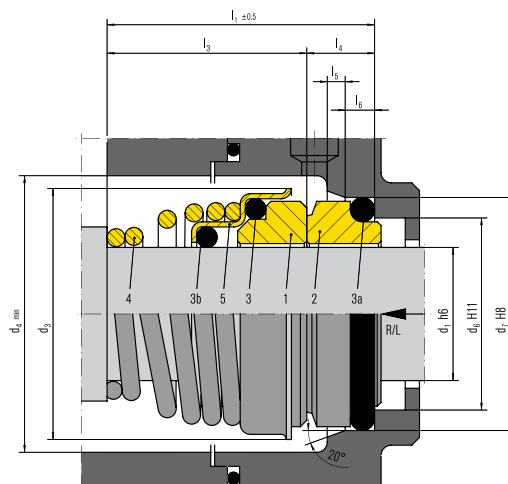
Fixed Element Surface Option :

Ceramic, Sic, Cr-Ni, Tuc

Elastomers :

Viton (FKM), EPKM, Nitrile (NBR)

d1	d3	d7	L1	L3
14	24.5	25	35.0	8
16	26.8	27	35.0	8
18	31.8	33	37.5	10
20	32.5	35	37.5	10
22	36.5	37	37.5	10
24	38.8	39	40.0	10
25	38.8	40	40.0	10
28	46.5	43	42.5	10
30	46.5	45	42.5	10
32	46.5	48	42.5	10
33	49.5	48	42.5	10
35	49.5	50	42.5	11
38	54.0	56	45.0	11
40	57.0	58	45.0	11
43	61.5	61	45.0	11
45	61.5	63	45.0	11
48	70.6	66	45.0	11
50	70.6	70	47.5	11
53	70.6	73	47.5	12
55	76.0	75	47.5	12
58	79.6	78	52.5	12
60	79.6	80	52.5	12
63	84.6	83	52.5	12
65	84.6	85	52.5	13
70	91.5	92	60	16
75	99	97	60	16



PART IDENTIFICATION

- 1 Rolling Element Surface
- 2 Fixed Element Surface
- 3 Rotary Part O-ring
- 3a Fixed Element O-ring
- 3b Shaft O-ring
- 4 Springs (Right Left Hand)
- 5 Shell
- A Sleeve
- B Pin Slot

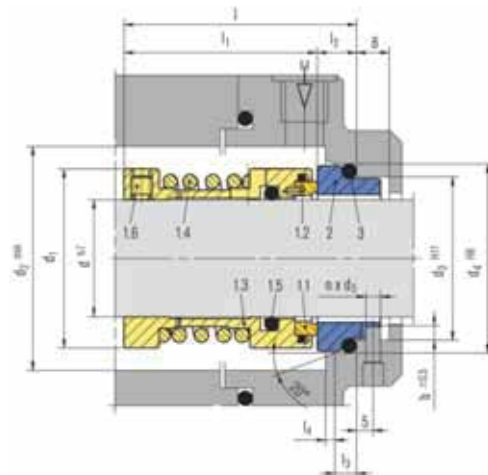
OPERATING LIMITATION

- d1** 10 - 40 mm
- p** 10 bar
- t** -20 / +180 °C
- Vg** 20 m / sn

SURFACE OPTIONS

- Rolling Element Surface Options :**
- Ceramic, Sic, Tuc, Carbon, Cr-Ni
- Fixed Element Surface Options :**
- Carbon, Sic, Tuc, Cr-Ni, Ceramic
- Elastomers :**
- Viton (FKM), EPKM, Nitrile (NBR)

d ₁	d ₃	d ₄	d ₆	d ₇	l ₁	l ₃	l ₄	l ₅	l ₆
10	19.5	22	14.0	18.1	20.5	15	5.5	1.2	3
11	22.5	25	16.5	20.6	23.5	18	5.5	1.2	3
12	22.5	25	16.5	20.6	23.5	18	5.5	1.2	3
13	24.5	28	19.0	23.1	28.0	22	6.0	1.2	3
14	24.5	28	19.0	23.1	28.0	22	6.0	1.2	3
15	29.0	32	21.0	26.9	29.0	22	7.0	1.5	4
16	29.0	32	21.0	26.9	30.0	23	7.0	1.5	4
17	29.0	32	21.0	26.9	30.0	23	7.0	1.5	4
18	32.5	36	25.0	30.9	32.0	24	8.0	1.5	4
19	32.5	36	25.0	30.9	33.0	25	8.0	1.5	4
20	32.5	36	25.0	30.9	33.0	25	8.0	1.5	4
22	37.5	42	30.0	35.4	33.0	25	8.0	2.0	4
24	37.5	42	30.0	35.4	35.0	27	8.0	2.0	4
25	40.0	45	33.0	38.2	35.5	27	8.5	2.0	4
28	46.0	51	38.0	43.3	38.0	29	9.0	2.0	4
30	46.0	51	38.0	43.3	39.0	30	9.0	2.0	4
32	46.0	51	38.0	43.3	39.0	30	9.0	2.0	4
35	50.0	55	45.0	53.5	50.5	39	11.5	2.0	6
38	58.0	68	52.0	60.5	50.5	39	11.5	2.0	6
40	58.0	68	52.0	60.5	50.5	39	11.5	2.0	6



PART IDENTIFICATION

- 1,1 Rolling Element Surface
- 1,2 O-ring
- 1,3 Shell
- 1,4 Springs
- 1,5 Shaft O-ring
- 1,6 Setskur
- 2 Fixed Element
- 2 Fixed Element O-ring

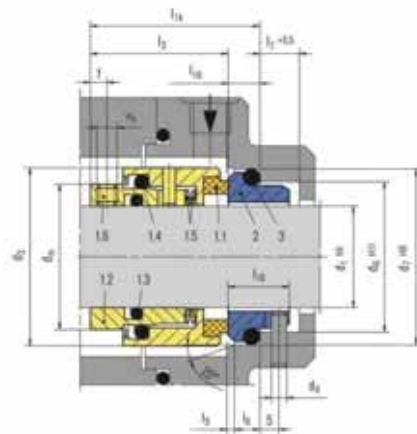
OPERATING LIMITATION

- d1 10 - 100 mm
- p 12 bar
- t -30 / +200 °C
- Vg 20 m / sn

SURFACE OPTIONS

- Rolling Element Surface Options :**
- Cr-Ni, Carbon, Sic, Tuc
- Fixed Element Surface Options :**
- Carbon, Sic, Tuc, Cr-Ni, Ceramic
- Elastomers :**
- Viton (FKM), EPKM, Nitrile (NBR), Silicone

d	d ₁	d ₂	d ₃	d ₄	d ₅	l	l ₁	l ₂	l ₃	l ₄	b
20	34	36	29	35	3	51	41	10.0	5,5	2.0	3.5
24	38	40	33	39	3	53	43	10.0	5,5	2.0	3.5
25	39	41	34	40	3	53	43	10.0	5,5	2.0	3.5
28	42	44	37	43	3	55	45	10.0	5,5	2.0	3.5
30	44	46	39	45	3	55	45	10.0	5,5	2.0	3.5
32	46	48	42	48	3	55	45	10.0	5,5	2.0	3.5
33	47	49	42	48	3	55	45	10.0	5,5	2.0	3.5
35	49	51	44	50	3	59	49	10.0	5,5	2.0	3.5
38	54	58	49	56	4	64	53	11.0	6	2.0	4.0
40	56	60	51	58	4	66	55	11.0	6	2.0	4.0
43	59	63	54	61	4	66	55	11.0	6	2.0	4.0
45	61	65	56	63	4	66	55	11.0	6	2.0	4.5
48	64	68	59	66	4	66	55	11.0	6	2.0	4.5
50	66	70	62	70	4	73	60	13.0	6	2.5	4.5
53	69	73	65	73	4	74	61	13.0	6	2.5	5.0
55	71	75	67	75	4	74	61	13.0	6	2.5	5.0
60	78	85	72	80	4	76	63	13.0	6	2.5	5.0
63	81	88	75	83	4	76	63	13.0	6	2.5	5.0
65	84	90	77	85	4	80	67	13.0	6	2.5	5.0
70	90	95	83	92	4	83	68	15.0	7	2.5	5.0
75	95	104	88	97	4	87	72	15.0	7	2.5	5.0
80	100	109	95	105	4	87.5	72	15.5	7	3.0	6.0
85	107	114	100	110	4	92.5	77	15.5	7	3.0	6.0
90	112	119	105	115	4	92.5	77	15.5	7	3.0	6.0
95	119	124	110	120	4	97.5	82	15.5	7	3.0	6.0
100	124	129	115	125	4	97.5	82	15.5	7	3.0	6.0



PART IDENTIFICATION

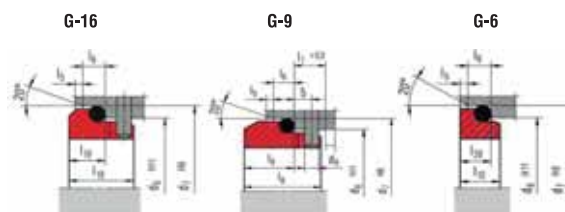
- 1,1 Rolling Element Surface
- 1,2 Pressing Bracelet
- 1,3 Shaft O-ring
- 1,4 Shell O-ring
- 1,5 Springs
- 1,6 Setskur
- 2,0 Fixed Element
- 3,0 Fixed Element O-ring

OPERATING LIMITATION

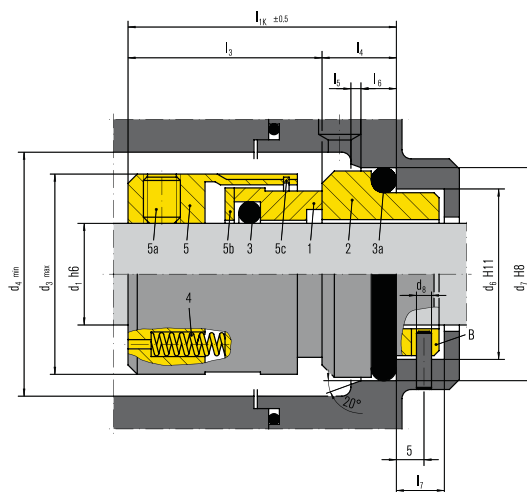
- d1 18 - 100 mm
- p 25 bar
- t -50 / +220 °C
- Vg 20 m / sn

SURFACE OPTIONS

- Rolling Element Surface Options :**
- Carbon, Sic, Tuc
- Fixed Element Surface Options :**
- Sic, Tuc, Cr-Ni, Ceramic
- Elastomers :**
- Viton (FKM), EPKM, Nitrile (NBR), Silicone



d ₁	d ₃	d ₆	d ₇	d ₈	d _m	l _{1K}	l ₃	l ₅	l ₆	l ₇	l ₁₈	l ₁₉	l ₁₁ ⁽¹⁾	l ₁₂ ⁽²⁾	l ₁₃	l ₃₈	l ₃₉	f	m _x
18	32	27	33	3	26.0	37.5	30.5	2.0	5	9	15.0	7.0	39.5	35.5	28.5	17.0	9.0	3.0	M4
20	34	29	35	3	28.0	37.5	30.5	2.0	5	9	15.0	7.0	39.5	35.5	28.5	17.0	9.0	3.0	M4
22	36	31	37	3	30.0	37.5	30.5	2.0	5	9	15.0	7.0	39.5	35.5	28.5	17.0	9.0	3.0	M4
24	38	33	39	3	32.5	40.0	33.0	2.0	5	9	15.0	7.0	42.0	38.0	31.0	17.0	9.0	3.5	M5
25	39	34	40	3	33.5	40.0	33.0	2.0	5	9	15.0	7.0	42.0	38.0	31.0	17.0	9.0	3.5	M5
28	42	37	43	3	36.5	42.5	35.5	2.0	5	9	15.0	7.0	45.0	40.0	33.0	17.5	9.5	3.5	M5
30	44	39	45	3	38.5	42.5	35.5	2.0	5	9	15.0	7.0	45.0	40.0	33.0	17.5	9.5	3.5	M5
32	47	42	48	3	41.5	42.5	35.5	2.0	5	9	15.0	7.0	45.0	40.0	33.0	17.5	9.5	3.5	M5
33	47	42	48	3	41.5	42.5	35.5	2.0	5	9	15.0	7.0	45.0	40.0	33.0	17.5	9.5	3.5	M5
35	49	44	50	3	43.5	42.5	35.5	2.0	5	9	15.0	7.0	45.0	40.0	33.0	17.5	9.5	3.5	M5
38	54	49	56	4	47.5	45.0	37.0	2.0	6	9	16.0	8.0	47.5	42.5	34.5	18.5	10.5	4.0	M5
40	56	51	58	4	49.5	45.0	37.0	2.0	6	9	16.0	8.0	47.5	42.5	34.5	18.5	10.5	4.0	M5
43	59	54	61	4	52.5	45.0	37.0	2.0	6	9	16.0	8.0	47.5	42.5	34.5	18.5	10.5	4.0	M5
45	61	56	63	4	54.5	45.0	37.0	2.0	6	9	16.0	8.0	47.5	42.5	34.5	18.5	10.5	4.0	M5
48	64	59	66	4	57.5	45.0	37.0	2.0	6	9	16.0	8.0	47.5	42.5	34.5	18.5	10.5	4.0	M5
50	66	62	70	4	59.5	47.5	38.0	2.5	6	9	17.0	9.5	50.0	45.0	35.5	19.5	12.0	4.5	M6
53	69	65	73	4	62.5	47.5	38.0	2.5	6	9	17.0	9.5	50.0	45.0	35.5	19.5	12.0	4.5	M6
55	71	67	75	4	64.5	47.5	38.0	2.5	6	9	17.0	9.5	50.0	45.0	35.5	19.5	12.0	4.5	M6
58	78	70	78	4	68.5	52.5	42.0	2.5	6	9	18.0	10.5	55.0	50.0	39.5	20.5	13.0	4.5	M6
60	80	72	80	4	70.5	52.5	42.0	2.5	6	9	18.0	10.5	55.0	50.0	39.5	20.5	13.0	4.5	M6
63	83	75	83	4	73.5	52.5	42.0	2.5	6	9	18.0	10.5	55.0	50.0	39.5	20.5	13.0	4.5	M6
65	85	77	85	4	75.5	52.5	42.0	2.5	6	9	18.0	10.5	55.0	50.0	39.5	20.5	13.0	4.5	M6
68	88	81	90	4	78.5	52.5	41.5	2.5	7	9	18.5	11.0	55.0	50.0	39.0	21.0	13.5	4.5	M6
70	90	83	92	4	80.5	60.0	48.5	2.5	7	9	19.0	11.5	62.5	57.5	46.0	21.5	14.0	5.0	M6
75	99	88	97	4	89.0	60.0	48.5	2.5	7	9	19.0	11.5	62.5	57.5	46.0	21.5	14.0	5.5	M8
80	104	95	105	4	94.0	60.0	48.5	3.0	7	9	19.0	11.5	62.5	57.5	46.0	21.5	14.0	5.5	M8
85	109	100	110	4	99.0	60.0	48.5	3.0	7	9	19.0	11.5	62.5	57.5	46.0	21.5	14.0	5.5	M8
90	114	105	115	4	104.0	65.0	52.0	3.0	7	9	20.5	13.0	67.5	62.5	49.5	23.0	15.5	5.5	M8
95	119	110	120	4	109.0	65.0	52.0	3.0	7	9	20.5	13.0	67.5	62.5	49.5	23.0	15.5	5.5	M8
100	124	115	125	4	114.0	65.0	52.0	3.0	7	9	20.5	13.0	67.5	62.5	49.5	23.0	15.5	5.5	M8



PART IDENTIFICATION

- 1 Rolling Element Surface
- 2 Fixed Element
- 3 O-ring / PTFE V-ring
- 3a O-ring / PTFE V-ring
- 4 Spring
- 5 Shell
- 5a Setscrew
- 5b Washer
- 5c Piston Ring
- B Shaft Center

OPERATING LIMITATION

- d1 20 - 100 mm
- p 15 bar
- t -70 / +200 °C
- Vg 20 m / sn

SURFACE OPTIONS

Rolling Element Surface Options :

Carbon, Sic, Tuc

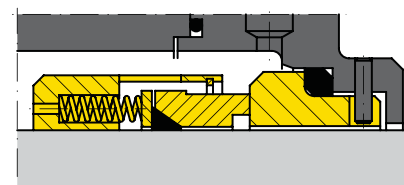
Fixed Element Surface Options :

Sic, Tuc, Ceramic, Cr-Ni, Carbon

Elastomers :

Viton (FKM), EPKM, Nitrile (NBR), P.T.F.E

GF 759 (PTFE)

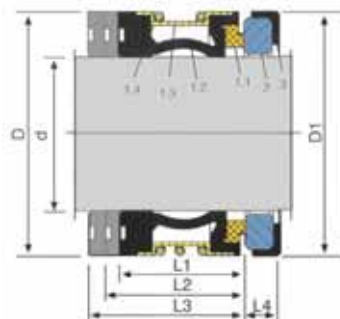


d ₁	d ₃	d ₄	d ₆	d ₇	d ₈	l _{1K}	l ₁	l ₃	l ₄	l ₅	l ₆	l ₇
20	34	36	29	35	3	37.5	34.0	24.0	10.0	2.0	5	9
22	36	38	31	37	3	37.5	34.0	24.0	10.0	2.0	5	9
24	38	40	33	39	3	40.0	37.0	27.0	10.0	2.0	5	9
25	39	41	34	40	3	40.0	37.0	27.0	10.0	2.0	5	9
28	42	44	37	43	3	42.5	40.0	30.0	10.0	2.0	5	9
30	44	46	39	45	3	42.5	40.0	30.0	10.0	2.0	5	9
32	46	48	42	48	3	42.5	40.0	30.0	10.0	2.0	5	9
33	47	49	42	48	3	42.5	40.0	30.0	10.0	2.0	5	9
35	49	51	44	50	3	42.5	40.0	30.0	10.0	2.0	5	9
38	54	58	49	56	4	45.0	43.0	32.0	11.0	2.0	6	9
40	56	60	51	58	4	45.0	43.0	32.0	11.0	2.0	6	9
43	59	63	54	61	4	45.0	43.0	32.0	11.0	2.0	6	9
45	61	65	56	63	4	45.0	43.0	32.0	11.0	2.0	6	9
48	64	68	59	66	4	45.0	43.0	32.0	11.0	2.0	6	9
50	66	70	62	70	4	47.5	47.5	34.5	13.0	2.5	6	9
53	69	73	65	73	4	47.5	47.5	34.5	13.0	2.5	6	9
55	71	75	67	75	4	47.5	47.5	34.5	13.0	2.5	6	9
58	78	83	70	78	4	52.5	52.5	39.5	13.0	2.5	6	9
60	80	85	72	80	4	52.5	52.5	39.5	13.0	2.5	6	9
63	83	88	75	83	4	52.5	52.5	39.5	13.0	2.5	6	9
65	85	90	77	85	4	52.5	52.5	39.5	13.0	2.5	6	9
68	88	93	81	90	4	52.5	52.5	37.5	15.0	2.5	7	9
70	90	95	83	92	4	60.0	60.0	45.0	15.0	2.5	7	9
75	99	104	88	97	4	60.0	60.0	45.0	15.0	2.5	7	9
80	104	109	95	105	4	60.0	60.0	44.5	15.5	3.0	7	9
85	109	114	100	110	4	60.0	60.0	44.5	15.5	3.0	7	9
90	114	119	105	115	4	65.0	65.0	49.5	15.5	3.0	7	9
95	119	124	110	120	4	65.0	65.0	49.5	15.5	3.0	7	9
100	124	129	115	125	4	65.0	65.0	49.5	15.5	3.0	7	9

GF764



GF765



PART IDENTIFICATION

- 1,1 Rolling Element Surface
- 1,2 Rubber Below
- 1,3 Rolling Element Shell
- 1,4 Spring
- 2 Fixed Element
- 3 O-ring or L-ring

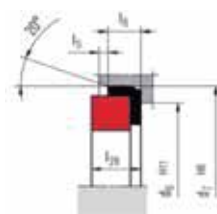
OPERATING LIMITATION

- d1 10 - 100 mm
- p 18 bar
- t -30 / +200 °C
- Vg 15 m / sn

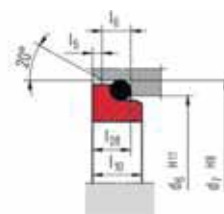
SURFACE OPTIONS

- Rolling Element Surface Options :**
- Carbon, Sic
- Fixed Element Surface Options :**
- Sic, Tuc, Ceramic, Cr-Ni
- Elastomers :**
- Viton (FKM), EPKM, Nitrile (NBR)

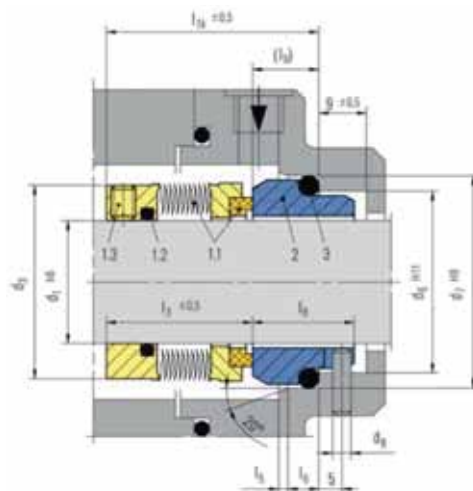
G-60



G-6



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



PART IDENTIFICATION

- 1,1 Rolling Element Surface and Metal Below
- 1,2 Rolling Element O-ring
- 1,3 Setskur
- 2 Fixed Element
- 3 Fixed Element O-ring

OPERATING LIMITATION

- d1 16 - 100 mm
- p 12 bar
- t -30 / +220 °C
- Vg 20 m / sn

SURFACE OPTIONS

Rolling Element Surface Options :

Carbon, Sic, Tur

Fixed Element Surface Options :

Sic, Tuc, Carbon, Cr-Ni, Ceramic

Elastomers :

Viton (FKM), EPKM, Nitrile (NBR), Silicone

G-9

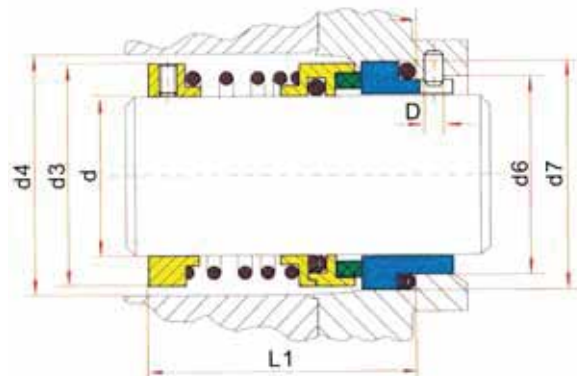
G-16

G-6

G-60



d ₁	d ₃	d ₆	d ₇	d ₈	d ₉	l _{1K}	l ₃	l ₅	l ₆	l ₈	l ₉	l ₁₈	l ₁₉	b	s
20	33.5	29	35	3	41	42.0	30.5	2.0	5	14.0	11.5	15.0	7.0	1.6	10.0
22	36.5	31	37	3	44	42.0	30.5	2.0	5	14.0	11.5	15.0	7.0	1.6	10.0
24	39.0	33	39	3	47	40.0	28.5	2.0	5	19.5	11.5	15.0	7.0	1.6	8.2
25	39.6	34	40	3	48	40.0	28.5	2.0	5	19.5	11.5	15.0	7.0	1.6	8.5
28	42.8	37	43	3	51	42.5	31.0	2.0	5	19.5	11.5	15.0	7.0	1.6	9.0
30	45.0	39	45	3	53	42.5	31.0	2.0	5	19.5	11.5	15.0	7.0	1.6	8.5
32	46.0	42	48	3	55	42.5	31.0	2.0	5	19.5	11.5	15.0	7.0	1.6	9.2
33	48.0	42	48	3	56	42.5	31.0	2.0	5	19.5	11.5	15.0	7.0	1.6	9.2
35	49.2	44	50	3	58	42.5	31.0	2.0	5	19.5	11.5	15.0	7.0	1.6	9.5
38	52.3	49	56	4	61	45.0	31.0	2.0	6	22.0	14.0	16.0	8.0	1.6	9.2
40	55.5	51	58	4	64	45.0	31.0	2.0	6	22.0	14.0	16.0	8.0	1.6	9.2
43	57.5	54	61	4	67	45.0	31.0	2.0	6	22.0	14.0	16.0	8.0	1.6	9.2
45	58.7	56	63	4	69	45.0	31.0	2.0	6	22.0	14.0	16.0	8.0	1.6	9.5
48	61.9	59	66	4	72	45.0	31.0	2.0	6	22.0	14.0	16.0	8.0	1.6	9.2
50	65.0	62	70	4	74	47.5	32.5	2.5	6	23.0	15.0	17.0	9.5	1.6	10.5
53	68.2	65	73	4	77	47.5	32.5	2.5	6	23.0	15.0	17.0	9.5	1.6	10.5
55	70.0	67	75	4	80	47.5	32.5	2.5	6	23.0	15.0	17.0	9.5	1.6	10.0
58	71.7	70	78	4	83	52.5	37.5	2.5	6	23.0	15.0	18.0	10.5	3.0	14.0
60	74.6	72	80	4	85	52.5	37.5	2.5	6	23.0	15.0	18.0	10.5	3.0	14.0
63	79.0	75	83	4	88	52.5	37.5	2.5	6	23.0	15.0	18.0	10.5	3.0	14.0
65	84.1	77	85	4	95	52.5	37.5	2.5	6	23.0	15.0	18.0	10.5	3.0	14.0
68	87.3	81	90	4	96	52.5	34.5	2.5	7	26.0	18.0	18.5	11.0	1.6	10.0
70	87.3	83	92	4	96	60.0	42.0	2.5	7	26.0	18.0	19.0	11.5	3.0	17.0
75	95.0	88	97	4	104	60.0	42.0	2.5	7	26.0	18.0	19.0	11.5	3.0	16.0
80	98.4	95	105	4	109	60.0	41.8	3.0	7	26.2	18.2	19.0	11.5	3.0	16.0
85	104.7	100	110	4	114	60.0	41.8	3.0	7	26.2	18.2	19.0	11.5	3.0	16.0
90	111.0	105	115	4	119	65.0	46.8	3.0	7	26.2	18.2	20.5	13.0	3.0	21.0
95	114.0	110	120	4	124	65.0	47.8	3.0	7	25.2	17.2	20.5	13.0	3.0	21.0
100	117.4	115	125	4	129	65.0	47.8	3.0	7	25.2	17.2	20.5	13.0	3.0	20.0



PART IDENTIFICATION

- 1,1 Rolling Element Surface
- 1,2 O-ring
- 1,3 Shell
- 1,4 Springs
- 1,5 Shaft O-ring
- 1,6 Setskur
- 2 Fixed Element
- 2 Fixed Element O-ring

OPERATING LIMITATION

- d1 10 - 100 mm
- p 12 bar
- t -30 / +200 °C
- Vg 20 m / sn

SURFACE OPTIONS

Rolling Element Surface Options :

Cr-Ni, Carbon, Sic, Tuc

Fixed Element Surface Options :

Carbon, Sic, Tuc, Cr-Ni, Ceramic

Elastomers :

Viton (FKM), EPKM, Nitrile (NBR), Silicone

d	d3	d4 min	d7	d6	D	L1 (±0.5)
25	39	41	40	34	3	50
28	42	44	43	37	3	50
30	44	46	45	39	3	50
32	46	48	48	42	3	55
33	47	49	48	42	3	55
35	49	51	50	44	3	55
38	54	58	56	49	4	55
40	56	60	58	51	4	55
43	59	63	61	54	4	60
45	62	68	63	56	4	60
48	64	65	66	59	4	60
50	66	70	70	62	4	60
53	69	73	73	65	4	70
55	71	75	75	67	4	70
58	78	83	78	70	4	70
60	80	85	80	72	4	70
63	83	88	83	75	4	70
65	85	90	85	77	4	80
68	88	93	90	81	4	80
70	90	95	92	83	4	80
75	98	104	97	88	4	80
80	103	109	105	95	4	90
85	108	114	110	100	4	90
90	113	119	115	105	4	90
95	118	124	120	110	4	90
100	123	129	125	115	4	90

► GF 08



► GF 09



► GF 18



► GF 32 H



► GF 32 N



► GF 35 X



► **GF 45 X**



► **GF 70 SS**



► **GF 70 M - 316**



► **GF 70 M (SiC)**



► **GF 70 KS**



► **GF 74 X**



► GF 78 A



► GF 78 W



► GF 79



► GF 0410



► GF 0609



► GF 850 A



► **GF 701**



► **GF 707 12-16**



► **GF 707-22**



► **GF 712**



► **GF 714**



► **GF 720**



► **GF 721 X**



► **GF 721 XP**



► **GF 723**



► **GF 755 X**



► **GF 757 X**



► **GF 760**



► GF 762 KSB



► GF 762 CR



► GF 762 W



► GF 771



► GF 772



► GF 0804



► **GF 1104**



► **GF 1409**



► **GF 3009**



► **GF 4100**



► **GF APV**

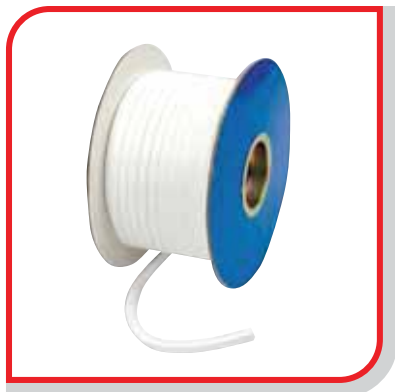


► **GF CRT X**



geofa





► PTFE PACKINGS - GF 4000

PTFE Packings have excellent corrosion resistance, self lubricating and bonding properties. This material also has low heat capacity, cold flow ability and great thermal expansion.

Technical Information		PTFE Packings	PTFE Oily Packings
		-150°C - ~ + 260°C	
Pressure	Gear Pumps	15 bar	15 bar
	Piston Pumps	100 bar	100 bar
	Valves	150 bar	200 bar
Shaft Speed		2	10
Ph Rate		m/s	0-14 m/s
Density		1.15~1.35 g/cm ³	1.55~1.75 g/cm ³



► PTFE OILY PACKINGS - GF 4001

Knitted from PTFE yarns treated with inert special oil. Retains its shape for a long time with minimum mounting pressure. Low friction coefficient significantly prevents heat build-up on the surface even at high speeds.

Technical Information						
Temperature	Pressure			Shaft Speed	Ph Rate	Density
	Gear Pumps	Piston Pumps	Valves			
-150°C - ~ + 260°C	15 bar	100 bar	200 bar	10 m/s	0-14	1.55~1.75 g/cm ³



► PTFE GRAPHITE PACKINGS - GF 4050

Graphite PTFE yarn is a homogeneous material developed by processing high quality PTFE resin and graphite powder. Has a low coefficient of friction and thermal conductivity. Can be used in most chemical environments. Knitted from PTFE graphite yarns. Its high thermal conductivity feature provides an effective sealing at high temperatures and speeds. Very little contamination due to the absence of free graphite grains on the surface.

Technical Information		Graphite PTFE Packing	Sulfur Grade Graphite PTFE Packing	Oily Graphite PTFE Packing
Temperature		-150°C~+280°C		
Pressure	Gear Pumps	20 bar	25 bar	15 bar
	Piston Pumps	100 bar	100 bar	100 bar
	Valves	150 bar	200 bar	200 bar
Shaft Speed		16 m/s	20 m/s	12 m/s
Ph Rate		0~14		
Density		1.2~1.4 g/cm ³		



► PTFE ARAMID PACKINGS - GF 4500

Square seal made of aramid yarn impregnated with PTFE and lubricants. High strength, good resistance to corrosion and organic solvents has dielectric and low flammability.

	Shaft	Piston Pumps	Valves
PH		2-13	
P (bar)	20	100	100
Vg (m/s)	10	1.5	2
T (°C)	-200~260		



► ARAMID PACKING WITH PTFE GRAPHITE - GF 4501

This packing is knitted from graphite PTFE thread and the corners are reinforced with aramid thread. Compared to the aramid corner braided white PTFE packing. This material provides better lubricity, better thermal permeability and the possibility to use in larger areas in high pressure working environments.

Operating Temperature		-150°C ~ +280°C
Pressure	Gear Pumps	25 bar
	Piston Pumps	150 bar
	Valves	200 bar
Shaft Speed		15 m/s
Ph Rate		2~12
Denstiy		1.45~1.65 g/cm³



► PTFE WHITE ARAMID PACKINGS - GF 4502

Packing corner made of PTFE impregnated aramid yarns. This structure increases the lubrication ability of aramid yarn and positively affects the strength of pure PTFE. This material is very good seal made of pure PTFE yarn and aramid yarn in a zebra shape.

Operating Temperature		-100°C ~ +280°C
Pressure	Gear Pumps	20 bar
	Piston Pumps	100 bar
	Valves	180 bar
Shaft Speed		12 m/s
Ph Rate		2~12
Denstiy		1.45~1.65 g/cm³



► PTFE FIBER PACKINGS - A-GF 5000

Knitted from high strength acrylic synthetic fiber preimpregnated with PTFE. This packing is again impregnated with a special PTFE dispersion. Has a tight structure, low friction and chemical resistance.

Operating Temperature		200 °C
Pressure	Gear Pumps	20 bar
	Piston Pumps	80 bar
	Valves	100 bar
Shaft Speed		20 m/s
Ph Rate		1-13
Denstiy (Acrylic Fiber Packing) (Oily Acrylic Fiber Packing)		1.1~1.3 g/cm³



► PTFE RAMIE FIBER PACKINGS - GF 5100

Made of high quality ramie fiber impregnated with PTFE. Then re-impregnated with a special PTFE dispersion. Does not stain the working environment, does not damage the shaft and spindle.

Operating Temperature		-40°C ~ +120°C
Pressure	Gear Pumps	20 bar
	Piston Pumps	20 bar
	Valves	30 bar
Shaft Speed		10 m/s
Ph Rate		5-11
Denstiy	(Ramie Fiber Packing)	1.1~1.3 g/cm³
	(Oily Ramie Fiber Packing)	1.35~1.55 g/cm³



► PTFE GRAPHITE RAMIE PACKING - GF 5101

Knitted from high quality ramie fiber and impregnated with graphite. Has low friction resistance and good corrosion resistance.

Operating Temperature		180°C
Pressure	Gear Pumps	15 bar
	Piston Pumps	15 bar
	Valves	20 bar
Shaft Speed		6 m/s
Ph Rate		6-8
Density		1.2 ~ 1.4 g/cm ³



► ADHESIVE PTFE PTFE PACKING - GF 5102

One side self adhesive expanded pure PTFE adhesive seal in strip form that can be used on all kinds of flanges. Can be used for all kinds of fluid sealing with excellent corrosion resistance. It has high pressure resistance, softness and elongation. Perfectly fits rough, scratched, pitted and damaged surfaces. It is an excellent packing especially for flanged connections such as plastic glass that must be subjected to low surface pressure. Peelable film lubricant makes it very easy to install this packing on horizontal and vertical surfaces.

Technical Information			
Pressure Kg./cm ²		Operating Temperature °C	Standart Roll Length mm
Fluid	Gas		
200	140	-240 ~ 260	10 ~ 20
Width x Thickness mm		5x 2, 7x2.5, 10x3, 12x4, 14x5, 14x2, 17x6, 20x7, 25x5, 30x5	



► CORD PTFE ROVING - GF 5103

Expanded PTFE cord made of 100 percent pure PTFE. Free of recycling material. It is used to seal the movement shafts and flanges of the valves used in food processing plants in the chemical industry in the pharmaceutical industry. With this material, the sealing of flanges, pipe connections, hydraulic and pneumatic system is easily and safely provided.

Technical Information					
Operating Temperature	Operating Pressure	Shaft Speed	Ph Rate	Thickness	Density
-150 ~ 260 °C	100 bar	100 m/s	0 - 14	5 - 18 mm	0.7 ~ 0.8 gr/cm ³



► FIBER GLASS SQUARE PACKING - GF 1100

Is a fully braided square/rectangular section seal with dense high tensile strength and performance. It is generally produced in sections varying between 5-100 mm by knitting glass fiber threads in the form of hair braids. Roll lengths can be 25, 50 and 100 mtr according to the cross sectional dimensions. In roll length 3 and 4 cross-knit square knit.

Average 1 meter weight of standard dimensions											
Profile mm ²	4x4	6x6	8x8	10x10	12x12	14x14	16x16	18x18	20x20	25x25	30x30
Gr / m	25	40	70	100	140	180	270	340	450	600	850



► FIBER GLASS ROVING PACKING - GF 1150

It is a fully braided circular section seal with dense high tensile strength and performance. Glass fiber threads are knitted in the form of braids and produced between 5-100 mm. Roll lengths can be 25, 50 and 100 meters.

Average 1 meter weight of standard dimensions													
Diameter mm	Ø 4	Ø 6	Ø 8	Ø 10	Ø 12	Ø 14	Ø 16	Ø 18	Ø 20	Ø 25	Ø 30	Ø 35	Ø 40
Gr / m	15	24	40	60	80	110	150	190	230	350	500	700	900



► FIBER GLASS GRAPHITE PACKING - GF 1200

The glass fiber packing is the passed through a graphite raphite coating reduces friction loss.

Technical Specifications		
	Fiber Glass Packing	Fiber Glass Graphite Packing
Operating Temperature	450°C-550°C	450°C ~ 550°C
Ph Rate	5-9	
Density	0.9-1.1 g/cm ³	1.1-1.3 g/cm ³



► FIBER GLASS FOLDED RIBBON PACKING - GF 1300

It is the material produced according to the desired size by coating and pressing the rubber-based material on the glass fiber fabric.

Average 1 meter weight of standard dimensions											
Profile (width x Thickness mm x mm)	20x5	20x3	25x5	25x3	30x5	30x3	40x5	40x3	50x5	50x3	
Fiber Glass Folded Packing	200	120	250	150	300	180	400	240	500	300	
Graphite Folded Fiber Glass Packing											
	233	140	291	175	349	209	466	279	582	349	



► GLASS FIBER WOVEN RIBBON PACKING - GF 1350

Glass fiber products are made of high temperature resistant glass fibers for environments with an operating temperature of 537 °C degrees. Excellent heat resistance, high tensile strength, low thermal permeability and very good chemical resistance. Robust mildew resistant harmless to health. It is an excellent material for industrial waterproofing sealing and gasket applications.



► FIBER GLASS CROCHET KNITTING - GF 1400

It has flexibility and longitudinal extension with different knitting technique.



► GLASS FIBER FABRIC - GF 1500

Weave Style : Straight
Weight : 600 -3000 g/m²
Thicknes : 0.80 - 5 mm
Wide : 1 - 1.5 m
Size : 30 - 50 m

Textured glass fiber fabric adhered from bulky yarns obtained by texturing glass fiber rovings with high pressure air. It has properties such as high temperature resistance, low thermal permeability coefficient, corrosion resistance, high dust retention abd high filtration.

Technical Specifications :

- * Operating Temperature : -70°C ~ 550°C
- * Tensile Strength : Weft : 1200 - 7500 N/5 cm
Warp : 1200 - 7500 N/5 cm
- * Chemical resistance, dimensional stability, good thermal property
- * Low moisture absorption, price advantage

Practice Areas :

- * All types of thermal protection and insulation.
- * Expansion connection safety equipment, pipe insulation.
- * In the ship industry.



► GLASS FIBER SILICONE COATED FABRIC - GF 1501

Weight : 500 g/m²
Thicknes : 0.50 mm
Wide : 1 m, 1.2 m, 1.5 m, 2 m
Silicone Type : Wet
Covered Surface : One Side

Silicone coated glass fiber fabric is coated with specially prepared silicone one side or both sides. It has high strength, flame retardancy, high temperature resistance, chemical resistance, non-toxicity and many conditions.

Technical Specifications :

- * Operating Temperature : -70°C ~ 300°C
- * Resistance to ozone, oxide, light and weather conditions
- * Suitability for outdoor use
- * Lifetime up to 10 years

Practice Areas :

- * Welding blanket
- * Heat Protection equipment in casting facilities
- * Conveyor belt
- * Expansion connections
- * Electric insulation
- * Chemical corrosion resistance

- * Aviation
- * Maritime
- * Chemical Industry
- * Energy Industry
- * Automobile Industry
- * Construction Industry
- * Pipe and gasket Industry



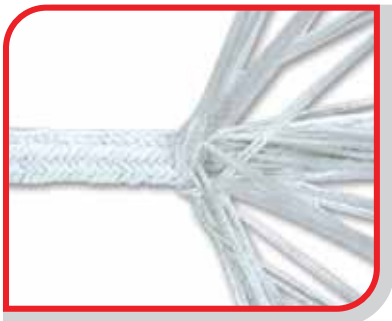
► CERAMIC SQUARE PACKING - GF 2000

Knitted from high quality ceramic yarn made of alumina silica material in 3 and 4 cross threads. This square-section material has high temperature resistance and stability, low thermal conductivity, low heat storage capacity, excellent thermal shock resistance, light weight and good corrosion resistance. Can be produced in desired size.



► CERAMIC ROVINGPACKING - GF 2100

Knitted from high quality ceramic yarn made of alumina silica material. Circular cross section, high temperature endurance and stability, low thermal stress also it has the characteristics of low heat storage capacity, excellent thermal shock resistance, light weight and good corrosion resistance. Stainless steel wire, nickel wire reinforcements are also available.



► CERAMIC AUGER PACKING - GF 2150

Knitted from high quality ceramic yarn made of alumina-silica material. Used for high temperature applications. The thread is reinforced with stainless steel wire, high alloy wire and glass fiber.



► CERAMIC FIBER WOVEN PACKING - GF 2200

Knitted from high quality ceramic yarn made of alumina-silica material. Used for high temperature applications. Ceramic strip is reinforced with glass fiber. Can be produced up to 2 mm - 10 mm thickness and 25 - 100 meters. Continuous working temperature is 982°C.



► CERAMIC FIBER FABRIC WIRE/WIRELESS PACKING - GF 2300

Biodegradable ceramic fiber fabric is a fabric woven from water soluble high quality yarn. Can be used up to 1000°C high temperature. Reinforced with glass fiber, stainless steel wire. It does not adversely affect the insulating property and contains some binder that can burn at different temperatures.

Technical Specifications :

Reinforcement material	: Glass Fiber
Weave Style	: Straight
Operating Temperature	: 1000°C
Thickness	: 1.50 - 5 mm
Width	: 1 m, 1.2 m, 1.5 m



► OILY YELLOW PACKING - GF 3000

It is manufactured in square cross-section with synthetic additive cotton yarn impregnated with paraffin and special oils and 2 - 3 layers of cross knitting.

Usage Place :

- * Ship Shafts
- * Cold Water Engines
- * Pipe Connections

	Shaft	Piston Pumps	Valve
PH		2-14	
P (bar)	8	20	60
Vg (m/s)	12	1.5	2
T (°C)		80	



► OILY WHITE PACKING - GF 3050

It is manufactured in square cross-section with 2 - 3 layers of diagonal knitting by impregnating synthetic additive cotton silk with paraffin and special oils.

Usage Place :

- * Ship Shafts
- * Cold Water Engines
- * Pipe Connections
- * Shaft Housing

	Shaft	Piston Pumps	Valve
PH		4-14	
P (bar)	8	20	60
Vg (m/s)	12	1.5	2
T (°C)		70	



► OILED HEMP PACKING - GF 3100

It is produced by knitting the threads obtained from hemp an industrial plant. Higher friction coefficient and durability.

Usage Place :

- * Pumps
- * In Boats
- * In Seawater Environments



► CARGO TANK COVER PACKING - GF 3200

The inner part is knitted with EPDM and nitrile roving oring with special oils and reinforced with the final layer of PTFE yarn. It acts as a gasket on the covers due to its flexible structure by sealing in chemical gases, petroleum products and fluids.

Usage Place :

- * In Tankers
- * In Refineries
- * In Filling Facilities



► GRAPHITE PACKING - GF 5500

Knitted from cotton yarn or glass fiber reinforced with high sulfur expanded graphite yarn. Provides good thermal conductivity, chemical resistance and high flexibility. Does not damage shafts and shaft pins with low friction coefficient.

Operating Temperature		-220 °C - ~ +550 °C (+650 °C steam)
Pressure, Shaft Speed	Gear Pumps	20 bar, 20 m/s
	Piston Pumps	100 bar, 2 m/s
	Valves	300 bar, 2 m/s
Ph Rate		0~14
Density		1.1~1.3 g/cm ³



► GRAPHITE REINFORCED PACKING - GF 5501

Manufactured from nickel wire reinforced low sulfur expanded graphite thread. While providing high mechanical strength, it preserves all the properties of the expanded graphite gasket without wire such as thermal permeability, chemical resistance, low coefficient of friction. Can be used on material such as stainless steel wire Anti-Corrosion feature can also be added.

Operating Temperature		-220 °C - ~ + 550°C (+ 650°C steam)
Pressure, Shaft Speed	Mixers	50 bar, 2 m/s
	Valves	400 bar, 2 m/s
Ph Rate		0~14
Density		1.1~1.3 g/cm ³



► FIBER REINFORCED PACKING - GF 5600

Carbon fiber reinforced graphite packings are made of high strength, high elastic modulus, continuous carbon fiber reinforced, low sulfur ratio expanded graphite ropes. Graphite powder is impregnated in a mixture of molybdenum disulphate and PTFE emulsion, and then cured under high temperature. As a result of this process, it gains excellent chemical stability, thermal permeability and high durability.

Technical Information		Carbon Fiber Reinforced Graphite Packings	Carbon Fiber Corner Braided Graphite Packings
Operating Temperature		-220 °C - ~ + 550°C (+ 650°C steam)	
Pressure, Shaft Speed	Gear Pumps	25 bar, 20 m/s	50 bar, 20 m/s
	Piston Pumps	100 bar, 2 m/s	150 bar, 2 m/s
	Valves	300 bar, 2 m/s	250 bar, 2 m/s
Ph Rate		0-14	
Density		1.2~1.4 g/cm ³	0.95~1.15 g/cm ³



▶ CRANK SEAL PACKING - GF 330

Crankshaft seal is the most important sealing element in a motor vehicle. It keeps the engine oil where it should be used and prevents foreign substances such as dust dirt from contaminating the oil. This packing is resistant to heavy conditions, heat and oil. Should not shrink in cold weather and expand in hot weather.



▶ GRAPHITE REINFORCED GASKET PACKING - GF 3500

This gasket made from reinforced graphite sheet or molds. It has excellent anti corrosion, high temperature resistance, excellent tightening and suspension. Used in pipelines, valves, pumps, pressure engines, heat exchangers condensers, generators, pressurized machines, exhaust pipes and coolers.

* Reinforcement materials : Perforated stainless steel, stainless steel foil, tinned perforated sheet, braided wire, glass fiber and aluminium foils.

* Gasket inner and outer edges are reinforced with a ring when desired.

Technical Information								
Carbon Rate	Ash Content	Chloride Rate	Sulfur Rate	Operating Temperature	Operating Pressure	Compression Rate	Retraction Rate	Ph
% 99	% 1	50 ppm	1200 ppm	650 °C	140 Bar	%15-%35	% 20	0-14



▶ GRAPHITE PURE RING PACKING - GF 3501

It is manufactured by combining pure expanded graphite layers together and compressing them in precision molds under high pressure.

Technical Information								
Density	Carbon Rate	Ash Content	Chloride Rate	Sulfur Rate	Operating Temperature	Operating Pressure	Speed	Ph
1.6-1.8 gr/cm ³	% 99	% 1	50 ppm	1200 ppm	550 °C	550 bar	2-10 m/s	0-14
Dimensions								
ID		OD		Thickness				
3-1000 mm		6-1100 mm		0.6 mm				



► BOILER COVER GASKET - GF 3400

It's impregnated with graphite and rubber material and it is produced by shaping glass fiber of ceramic fabric in desired dimensions. It will be easy adapts to uneven surfaces.

Single reinforced cover gasket : Available in wire reinforced fabric option upon request.

Technical Information				
	Tempretaure	Pressure	Ph Rate	Density
Boiler Cover Gasket	500°C	30 bar	1-14	1.20~1.40 g/cm ³
Wire Reinforced Boiler Cover Gasket	500°C	50 bar	1-14	1.40~1.52 g/cm ³



► SPIRAL WOUND GASKET - GF 8500

Spiral wound steel gaskets are used especially in areas where pressure and temperature are high. It is manufactured by using different winding and filling materials (PTFE, pure graphite etc.) It is also produced without inner and outer rings, with inner rings and both inner and outer rings according to the usage area.



► VALVE AND FLANGE GASKETS - GF 8501

Produced as valve and flange gaskets in accordance with international standards. Apart from the sizes in our catalog. Non standard special sizes of 15 - 10000 mm and larger can be produced.

Using Areas :

- * Food
- * Ship Building
- * Chemical Industry
- * Fluid and hot water facilities
- * In any sector that requires sealing under high pressure



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