



O-RING

O-RINGS, BACKUP RINGS AND O-RING KITS



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Material

MATERIAL	TENSILE STRENGTH (KG/CM ²)	ELONGATION(%)	TEMPERATURE RANGE(°C)	HRSX°C	%MAX
NITRILE 70 (NBR 70)	160	300	-30°C ~100°C	70H x 100°C	20
NITRILE 90 (NBR90)	175	150	-25°C ~100°C	70H x 100°C	25
HNBR 70	200	300	-40°C~120°C	70H x 100°C	25
FLUORO- CARBON 70 (FKM 70)	125	200	-20°C~200°C	70H x 200°C	18
POLYA- CRYLATE 70 (AR 70)	120	170	-20°C~150°C	70H x 150°C	30
SILICONE 70 (SE 70)	65	200	-50°C~200°C	70H x 225°C	12
ETHYLENE PROPYLE 70 (EPDM 70)	140	250	-40°C~120°C	70H x 100°C	25

Physical and chemical properties of the most important elastomers

Compound	N	V	S	AS
Basic Polymer	Nitrile	Fluorocarbon	Silicone	Aflas
ASTM-Code	NBR	FKM	VMQ	-
Shore Hardness(Shore A)	60-95	60-90	30-80	70
Non inflammable hydraulic fluids	-	x to xxxx	xx	xxxx
Hydraulic oils and lubricating oils	xxxx	xxxx	xx	xxxx
Fuel oils	xx	xxxx	x	xxxx
Animal and vegetable oils and fats	xxxx	xxxx	xxx	xxxx
Brake Fluid	-	-	xx	xxxx
Silicone and Grease	xx	xxxx	xx	xxxx
Gasoline	xxx	xxxx	x	xxxx
Premium grade gasoline	xx	xxxx	-	xxxx
Kerosene	xxx	xxxx	x	xxxx
Aromatic Hydrocarbon	x	xxxx	-	xxxx
Aliphatic Hydrocarbon	xxx	xxxx	x	xxxx
Water (under + 80°C)	xxx	xxxx	xxxx	xxxx
Water (over + 80°C)	x	xx	xxx	xxxx
Alcohols	xx	x to xxxx	xxxx	xxxx
Ketones	-	-	xx	xxx
Acid(concentrated)	-	xxx	x	xxx
Acid(diluted)	x	xxxx	xx	xxxx
Lye	x	xx	xx	xxx
Chlorinated Hydrocarbon	x	xxx	-	xxx
Ozone and Sunlight	x	xxxx	xxxx	xxx

key : xxxx very good

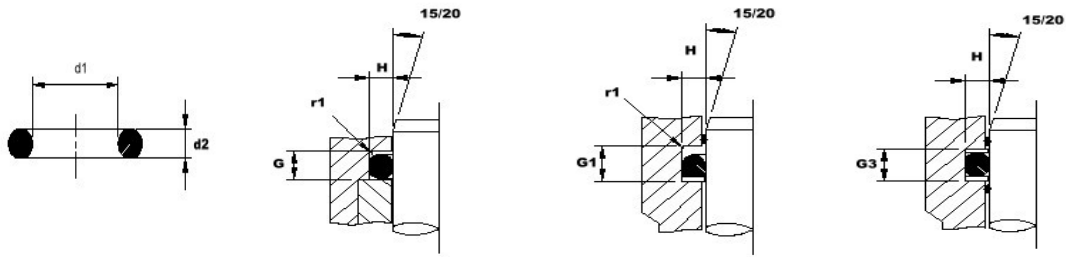
xxx good

xx satisfactory

x poor

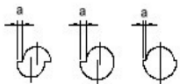
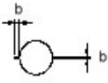
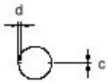

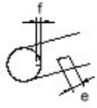
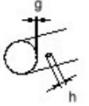
- unsatisfactory

Gland dimensions



C/S d2 (mm)	Pressure			No Back-Up 100 Bar max		One Back-Up >100 Bar		Two Back-Up 100 Bar alternatin		Radius r1 (mm)
	stat	Dynam.	Pneum	H (mm)	G (mm)	H (mm)	G1 (mm)	H (mm)	G2 (mm)	
1.00	x			0.70	1.40	-	-	-	-	0.20
1.50	x			1.14	2.40	-	-	-	-	0.30
1.60	x			1.21	2.40	-	-	-	-	0.30
1.78	x	x		1.49	2.50	1.50	4.16	1.50	6.16	0.40
1.78			x	1.58	2.50	-	-	-	-	0.40
1.90	x			1.40	2.60	-	-	-	-	0.40
1.90		x		1.55	2.60	1.55	4.00	1.55	5.40	0.40
2.00	x	x		1.68	2.80	1.70	4.20	1.70	5.60	0.40
2.40		x		1.80	3.30	2.05	4.70	2.05	6.10	0.50
2.40			x	2.16	3.30	-	-	-	-	0.50
2.40	x			1.90	3.20	-	-	-	-	0.50
2.50		x		2.12	3.50	2.15	4.90	2.15	6.30	0.50
2.50	x		x	2.28	3.50	-	-	-	-	0.50
2.62	x	x		2.25	3.25	2.28	4.65	2.28	6.50	0.60
2.62			x	2.36	3.25	-	-	-	-	0.60
2.70	x	x		2.30	3.60	2.30	5.00	2.30	6.40	0.60
2.95	x	x		2.20	3.90	2.50	5.30	2.50	5.30	0.60
3.00		x		2.58	4.10	2.60	5.50	2.60	6.90	0.60
3.00			x	2.72	4.10	-	-	-	-	0.60
3.00	x			2.45	3.80	-	-	-	-	0.60
3.10	x	x		2.50	4.10	2.70	5.50	2.70	6.90	0.60
3.50	x	x		2.65	4.60	3.05	6.00	3.05	7.40	0.60
3.53	x	x		2.70	4.80	3.10	6.20	3.10	7.60	0.80
3.53			x	3.21	4.40	-	-	-	-	0.80
3.60	x	x		2.28	4.80	3.15	6.20	3.15	7.60	0.80
4.00	x	x		3.46	5.40	3.51	6.80	3.51	8.20	0.80
4.50	x	x		3.50	5.80	4.00	7.50	4.00	9.20	0.80
5.00	x	x		4.45	6.70	4.46	8.50	4.46	10.30	0.80
5.00			x	4.65	6.70	-	-	-	-	0.80
5.30	x	x		4.72	6.45	4.75	7.66	4.75	10.26	1.20
5.30			x	4.85	6.45	-	-	-	-	1.20
5.70	x	x		4.60	7.20	5.00	8.90	5.00	10.60	1.20
6.00	x	x		5.06	7.60	5.12	9.40	5.12	11.20	1.20
6.00			x	5.30	7.40	-	-	-	-	1.20
6.99	x	x		6.05	8.75	6.10	10.12	6.10	13.55	1.50
6.99			x	6.22	8.75	-	-	-	-	1.50
8.40		x		7.65	11.10	7.68	13.30	7.68	15.50	1.50
8.40			x	7.85	11.10	-	-	-	-	1.50
8.40	x			7.35	9.10	-	-	-	-	1.50

Surface imperfections

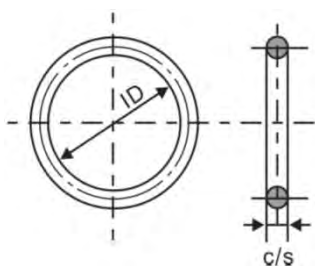
illustration(schematic)	category of surface imperfections	letter symbol	maximum acceptable limits(mm)									
			grade N (general purpose)					grade S (general purpose)				
			cross section					cross section				
			0 2.25	2.25 3.15	3.15 4.50	4.50 2.25	6.30 8.00	0 2.25	2.25 3.15	3.15 4.50	4.50 6.30	6.30 8.00
	off register and mismatch	a	0.08	0.10	0.13	0.15	0.15	0.08	0.08	0.10	0.12	0.13
	combined flash, offset and parting line projection	b	0.10	0.12	0.14	0.16	0.18	0.10	0.10	0.13	0.15	0.15
	backrind	c	0.18	0.27	0.36	0.53	0.07	0.10	0.15	0.20	0.20	0.30
		d	0.08	0.08	0.10	0.10	0.13	0.05	0.08	0.10	0.10	0.13
	excessive trimming	Departure from a circular cross section due to trimming is permissible providing the resulting surface is smoothly blended and is within the tolerances.										
	flow marks, radial orientation is not permissible	e	0.05*I.D. or					0.03*I.D. or				
		f	1.50	1.50	6.50	6.50	6.50	1.50	1.50	5.00	5.00	5.00
	foreign materials non fills, indentations, including parting line	g	0.60	0.80	1.00	1.30	1.70	0.15	0.25	0.40	0.63	1.00
		h	0.08	0.08	0.10	0.10	0.13	0.08	0.08	0.10	0.10	0.13

Dimensional tolerances

Dimensional tolerances(DIN 3771/1, ISO 3601/1)

ID	Cross section					ID	Cross section					ID	Cross section				
(mm)						(mm)						(mm)					
Toll						Toll						Toll					
±						±						±					
(mm)	1.80+/-0.08	2.65+/-0.09	3.55+/-0.10	5.30+/-0.13	7.00+/-0.15	(mm)	1.80+/-0.08	2.65+/-0.09	3.55+/-0.10	5.30+/-0.13	7.00+/-0.15	(mm)	1.80+/-0.08	2.65+/-0.09	3.55+/-0.10	5.30+/-0.13	7.00+/-0.15
1.80	0.13	-	-	-	-	36.50	-	0.35	0.35	-	-	165.00	-	-	1.31	1.31	-
2.00	0.13	-	-	-	-	37.50	-	0.36	0.36	-	-	170.00	-	-	1.34	1.34	-
2.24	0.13	-	-	-	-	38.70	-	0.37	0.37	-	-	175.00	-	-	1.38	1.38	-
2.50	0.13	-	-	-	-	40.00	-	-	0.38	0.38	-	180.00	-	-	1.41	1.41	-
2.80	0.14	-	-	-	-	41.20	-	-	0.39	0.39	-	185.00	-	-	1.44	1.44	-
3.15	0.14	-	-	-	-	42.50	-	-	0.40	0.40	-	190.00	-	-	1.48	1.48	-
3.55	0.14	-	-	-	-	43.70	-	-	0.41	0.41	-	195.00	-	-	1.51	1.51	-
3.75	0.14	-	-	-	-	45.00	-	-	0.42	0.42	-	200.00	-	-	1.55	1.55	-
4.00	0.14	-	-	-	-	46.20	-	-	0.43	0.43	-	206.00	-	-	-	1.59	1.59
4.50	0.14	-	-	-	-	47.50	-	-	0.44	0.44	-	212.00	-	-	-	1.63	1.63
4.87	0.15	-	-	-	-	48.70	-	-	0.45	0.45	-	218.00	-	-	-	1.67	1.67
5.00	0.15	-	-	-	-	50.00	-	-	0.46	0.46	-	224.00	-	-	-	1.71	1.71
5.15	0.15	-	-	-	-	51.50	-	-	0.47	0.47	-	230.00	-	-	-	1.75	1.75
5.30	0.15	-	-	-	-	53.00	-	-	0.48	0.48	-	236.00	-	-	-	1.79	1.79
5.60	0.15	-	-	-	-	54.50	-	-	0.50	0.50	-	243.00	-	-	-	1.83	1.83
6.00	0.15	-	-	-	-	56.00	-	-	0.51	0.51	-	250.00	-	-	-	1.88	1.88
6.30	0.15	-	-	-	-	58.00	-	-	0.52	0.52	-	258.00	-	-	-	1.93	1.93
6.70	0.16	-	-	-	-	60.00	-	-	0.54	0.54	-	265.00	-	-	-	1.98	1.98
6.90	0.16	-	-	-	-	61.50	-	-	0.55	0.55	-	272.00	-	-	-	2.02	2.02
7.10	0.16	-	-	-	-	63.00	-	-	0.56	0.56	-	280.00	-	-	-	2.08	2.08
7.50	0.16	-	-	-	-	65.00	-	-	0.58	0.58	-	290.00	-	-	-	2.14	2.14
8.00	0.16	-	-	-	-	67.00	-	-	0.59	0.59	-	300.00	-	-	-	2.21	2.21
8.50	0.16	-	-	-	-	69.00	-	-	0.61	0.61	-	307.00	-	-	-	2.25	2.25
8.76	0.17	-	-	-	-	71.00	-	-	0.63	0.63	-	315.00	-	-	-	2.30	2.30
9.00	0.17	-	-	-	-	73.00	-	-	0.64	0.64	-	325.00	-	-	-	2.37	2.37
9.50	0.17	-	-	-	-	75.00	-	-	0.66	0.66	-	335.00	-	-	-	2.43	2.43
10.00	0.17	-	-	-	-	77.50	-	-	0.67	0.67	-	345.00	-	-	-	2.49	2.49
10.60	0.18	-	-	-	-	80.00	-	-	0.69	0.69	-	355.00	-	-	-	2.56	2.56
11.20	0.18	-	-	-	-	82.50	-	-	0.71	0.71	-	365.00	-	-	-	2.62	2.62
11.80	0.19	-	-	-	-	85.00	-	-	0.73	0.73	-	375.00	-	-	-	2.68	2.68
12.50	0.19	-	-	-	-	87.50	-	-	0.75	0.75	-	387.00	-	-	-	2.76	2.76
13.20	0.19	-	-	-	-	90.00	-	-	0.77	0.77	-	400.00	-	-	-	2.84	2.84
14.00	0.19	0.19	-	-	-	92.50	-	-	0.79	0.79	-	412.00	-	-	-	-	2.91
15.00	0.20	0.20	-	-	-	95.00	-	-	0.81	0.81	-	425.00	-	-	-	-	2.99
16.00	0.20	0.20	-	-	-	97.50	-	-	0.83	0.83	-	437.00	-	-	-	-	3.07
17.00	0.21	0.21	-	-	-	100.00	-	-	0.84	0.84	-	450.00	-	-	-	-	3.15
18.00	-	0.21	0.21	-	-	103.00	-	-	0.87	0.87	-	462.00	-	-	-	-	3.22
19.00	-	0.22	0.22	-	-	106.00	-	-	0.89	0.89	-	475.00	-	-	-	-	3.30
20.00	-	0.22	0.22	-	-	109.00	-	-	0.91	0.91	-	487.00	-	-	-	-	3.37
21.20	-	0.23	0.23	-	-	112.00	-	-	0.93	0.93	-	500.00	-	-	-	-	3.45
22.40	-	0.24	0.24	-	-	115.00	-	-	0.95	0.95	-	515.00	-	-	-	-	3.54
23.60	-	0.24	0.24	-	-	118.00	-	-	0.97	0.97	-	530.00	-	-	-	-	3.63
25.00	-	0.25	0.25	-	-	122.00	-	-	1.00	1.00	-	545.00	-	-	-	-	3.72
25.80	-	0.26	0.26	-	-	125.00	-	-	1.03	1.03	-	560.00	-	-	-	-	3.81
26.50	-	0.26	0.26	-	-	128.00	-	-	1.05	1.05	-	580.00	-	-	-	-	3.93
28.00	-	0.28	0.28	-	-	132.00	-	-	1.08	1.08	-	600.00	-	-	-	-	4.06
30.00	-	0.29	0.29	-	-	136.00	-	-	1.10	1.10	-	615.00	-	-	-	-	4.13
31.50	-	0.31	0.31	-	-	140.00	-	-	1.13	1.13	-	630.00	-	-	-	-	4.22
32.50	-	0.32	0.32	-	-	145.00	-	-	1.17	1.17	-	650.00	-	-	-	-	4.34
33.50	-	0.32	0.32	-	-	150.00	-	-	1.20	1.20	-	670.00	-	-	-	-	4.46
34.50	-	0.33	0.33	-	-	155.00	-	-	1.24	1.24	-						
35.50	-	0.34	0.34	-	-	160.00	-	-	1.27	1.27	-						

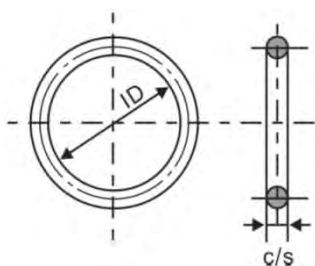
O-RING—AS



MATERIAL	
NBR	FKM
HNBR	SILICONE

ITEM	ID	C/S	VOL(cm³)	ITEM	ID	C/S	VOL(cm³)
001	0.74	1.02	0.005	036	60.04	1.78	0.483
001 1/2	1.78	1.02	0.007	037	63.22	1.78	0.508
002	1.07	1.27	0.009	038	66.4	1.78	0.533
003	1.42	1.53	0.017	039	69.57	1.78	0.558
004	1.78	1.78	0.028	040	72.75	1.78	0.583
005	2.57	1.78	0.034	041	75.92	1.78	0.607
006	2.9	1.78	0.037	042	82.27	1.78	0.657
007	3.69	1.78	0.043	043	88.62	1.78	0.707
008	4.47	1.78	0.049	044	94.97	1.78	0.756
009	5.29	1.78	0.055	045	101.32	1.78	0.806
010	6.07	1.78	0.061	046	107.67	1.78	0.856
011	7.65	1.78	0.074	047	114.02	1.78	0.905
012	9.25	1.78	0.086	048	120.37	1.78	0.955
013	10.82	1.78	0.099	049	126.72	1.78	1.005
014	12.42	1.78	0.111	050	133.07	1.78	1.054
015	14	1.78	0.123	102	1.24	2.62	0.065
016	15.6	1.78	0.136	103	2.05	2.62	0.079
017	17.17	1.78	0.148	104	2.84	2.62	0.092
018	18.77	1.78	0.161	105	3.63	2.62	0.106
019	20.35	1.78	0.173	106	4.42	2.62	0.119
020	21.95	1.78	0.186	107	5.23	2.62	0.133
021	23.52	1.78	0.198	108	6.02	2.62	0.146
022	25.12	1.78	0.210	109	7.6	2.62	0.173
023	26.7	1.78	0.223	110	9.19	2.62	0.200
024	28.3	1.78	0.235	111	10.77	2.62	0.227
025	29.87	1.78	0.247	112	12.37	2.62	0.254
026	31.47	1.78	0.260	113	13.95	2.62	0.281
027	33.05	1.78	0.272	114	15.54	2.62	0.308
028	34.65	1.78	0.285	115	17.12	2.62	0.334
029	37.82	1.78	0.310	116	18.72	2.62	0.361
030	41	1.78	0.334	117	20.29	2.62	0.388
031	44.17	1.78	0.359	118	21.9	2.62	0.415
032	47.35	1.78	0.384	119	23.47	2.62	0.442
033	50.52	1.78	0.409	120	25.07	2.62	0.469
034	53.7	1.78	0.434	121	26.65	2.62	0.496
035	56.87	1.78	0.459	122	28.25	2.62	0.523

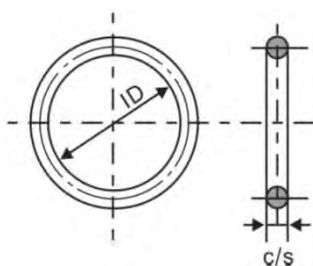
O-RING—AS



MATERIAL	
NBR	FKM
HNBR	SILICONE

ITEM	ID	C/S	VOL(cm ³)	ITEM	ID	C/S	VOL(cm ³)
123	29.82	2.62	0.549	159	126.6	2.62	2.189
124	31.42	2.62	0.577	160	133.02	2.62	2.297
125	32.99	2.62	0.603	161	139.37	2.62	2.405
126	34.6	2.62	0.630	162	145.7	2.62	2.512
127	36.17	2.62	0.657	163	152	2.62	2.619
128	37.77	2.62	0.684	164	158.42	2.62	2.728
129	39.35	2.62	0.711	165	164.7	2.62	2.834
130	40.95	2.62	0.738	166	171.1	2.62	2.942
131	42.52	2.62	0.765	167	177.4	2.62	3.049
132	44.12	2.62	0.792	168	183.8	2.62	3.157
133	45.7	2.62	0.818	169	190.1	2.62	3.264
134	47.3	2.62	0.846	170	196.5	2.62	3.373
135	48.9	2.62	0.873	171	202.8	2.62	3.479
136	50.47	2.62	0.899	172	209.2	2.62	3.588
137	52.07	2.62	0.926	173	215.5	2.62	3.694
138	53.65	2.62	0.953	174	221.9	2.62	3.803
139	55.25	2.62	0.980	175	228.6	2.62	3.916
140	56.82	2.62	1.007	176	234.6	2.62	4.018
141	58.42	2.62	1.034	177	240.9	2.62	4.125
142	60	2.62	1.061	178	247.3	2.62	4.233
143	61.6	2.62	1.088	201	4.34	3.53	0.242
144	63.17	2.62	1.114	202	5.94	3.53	0.291
145	64.7	2.62	1.140	203	7.52	3.53	0.340
146	66.3	2.62	1.167	204	9.12	3.53	0.389
147	67.9	2.62	1.194	205	10.69	3.53	0.437
148	69.5	2.62	1.222	206	12.29	3.53	0.486
149	71.1	2.62	1.249	207	13.87	3.53	0.535
150	72.7	2.62	1.276	208	15.47	3.53	0.584
151	75.87	2.62	1.329	209	17.04	3.53	0.632
152	82.22	2.62	1.437	210	18.64	3.53	0.682
153	88.57	2.62	1.545	211	20.22	3.53	0.730
154	94.92	2.62	1.652	212	21.82	3.53	0.779
155	101.2	2.62	1.758	213	23.4	3.53	0.828
156	107.6	2.62	1.867	214	25	3.53	0.877
157	113.9	2.62	1.974	215	26.57	3.53	0.925
158	120.3	2.62	2.082	216	28.17	3.53	0.975

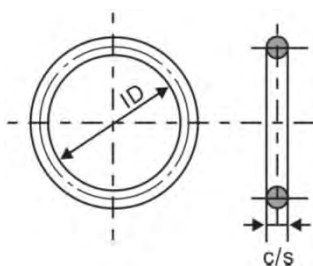
O-RING—AS



MATERIAL	
NBR	FKM
HNBR	SILICONE

ITEM	ID	C/S	VOL(cm ³)	ITEM	ID	C/S	VOL(cm ³)
217	29.75	3.53	1.023	253	136.12	3.53	4.294
218	31.34	3.53	1.072	254	139.3	3.53	4.391
219	32.92	3.53	1.121	255	142.47	3.53	4.489
220	34.52	3.53	1.170	256	145.65	3.53	4.587
221	36.1	3.53	1.218	257	148.82	3.53	4.684
222	37.69	3.53	1.267	258	152	3.53	4.782
223	40.87	3.53	1.365	259	158.35	3.53	4.977
224	44.05	3.53	1.463	260	164.7	3.53	5.172
225	47.22	3.53	1.560	261	171.05	3.53	5.368
226	50.4	3.53	1.658	262	177.4	3.53	5.563
227	53.57	3.53	1.756	263	183.75	3.53	5.758
228	56.74	3.53	1.853	264	190.1	3.53	5.953
229	59.92	3.53	1.951	265	196.45	3.53	6.149
230	63.1	3.53	2.049	266	202.8	3.53	6.344
231	66.27	3.53	2.146	267	209.15	3.53	6.539
232	69.44	3.53	2.244	268	215.5	3.53	6.734
233	72.62	3.53	2.341	269	221.85	3.53	6.930
234	75.79	3.53	2.439	270	228.2	3.53	7.125
235	78.97	3.53	2.537	271	234.55	3.53	7.320
236	82.14	3.53	2.634	272	240.9	3.53	7.515
237	85.32	3.53	2.732	273	247.25	3.53	7.711
238	88.49	3.53	2.829	274	253.6	3.53	7.906
239	91.67	3.53	2.927	275	266.3	3.53	8.296
240	94.84	3.53	3.025	276	279	3.53	8.687
241	98.02	3.53	3.122	277	291.7	3.53	9.077
242	101.19	3.53	3.220	278	304.4	3.53	9.468
243	104.37	3.53	3.318	279	329.8	3.53	10.249
244	107.54	3.53	3.415	280	355.2	3.53	11.030
245	110.72	3.53	3.513	281	380.6	3.53	11.811
246	113.89	3.53	3.610	282	405.26	3.53	12.569
247	117.05	3.53	3.707	283	430.66	3.53	13.350
248	120.24	3.53	3.805	284	456.06	3.53	14.131
249	123.42	3.53	3.903	309	10.46	5.33	1.107
250	126.59	3.53	4.001	310	12.07	5.33	1.220
251	129.77	3.53	4.098	311	13.64	5.33	1.330
252	132.94	3.53	4.196	312	15.24	5.33	1.442

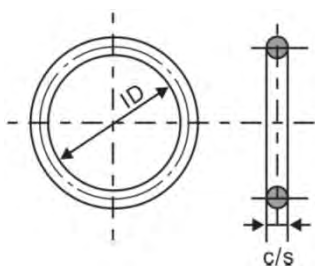
O-RING—AS



MATERIAL	
NBR	FKM
HNBR	SILICONE

ITEM	ID	C/S	VOL(cm ³)	ITEM	ID	C/S	VOL(cm ³)
313	16.81	5.33	1.552	349	113.67	5.33	8.341
314	18.42	5.33	1.665	350	116.84	5.33	8.564
315	19.99	5.33	1.775	351	120.02	5.33	8.787
316	21.59	5.33	1.887	352	123.19	5.33	9.009
317	23.16	5.33	1.997	353	126.37	5.33	9.232
318	24.77	5.33	2.110	354	129.54	5.33	9.454
319	26.34	5.33	2.220	355	132.72	5.33	9.677
320	27.94	5.33	2.332	356	135.89	5.33	9.899
321	29.51	5.33	2.442	357	139.07	5.33	10.122
322	31.12	5.33	2.555	358	142.24	5.33	10.344
323	32.69	5.33	2.665	359	145.42	5.33	10.567
324	34.29	5.33	2.777	360	148.59	5.33	10.789
325	37.46	5.33	2.999	361	151.77	5.33	11.012
326	40.65	5.33	3.223	362	158.12	5.33	11.457
327	43.82	5.33	3.445	363	164.47	5.33	11.902
328	46.99	5.33	3.667	364	170.82	5.33	12.347
329	50.16	5.33	3.890	365	177.17	5.33	12.793
330	53.34	5.33	4.113	366	183.52	5.33	13.238
331	56.52	5.33	4.335	367	189.87	5.33	13.683
332	59.69	5.33	4.558	368	196.22	5.33	14.128
333	62.86	5.33	4.780	369	202.57	5.33	14.573
334	66.04	5.33	5.003	370	208.92	5.33	15.018
335	69.22	5.33	5.226	371	215.27	5.33	15.463
336	72.39	5.33	5.448	372	221.62	5.33	15.908
337	75.6	5.33	5.673	373	227.97	5.33	16.354
338	78.74	5.33	5.893	374	234.32	5.33	16.799
339	81.92	5.33	6.116	375	240.67	5.33	17.244
340	85.09	5.33	6.338	376	247.02	5.33	17.689
341	88.27	5.33	6.561	377	253.37	5.33	18.134
342	91.44	5.33	6.783	378	266.07	5.33	19.024
343	94.62	5.33	7.006	379	278.77	5.33	19.914
344	97.79	5.33	7.228	380	291.47	5.33	20.805
345	100.96	5.33	7.451	381	304.17	5.33	21.695
346	104.14	5.33	7.673	382	329.55	5.33	23.474
347	107.32	5.33	7.896	383	354.97	5.33	25.256
348	110.49	5.33	8.119	384	380.37	5.33	27.036

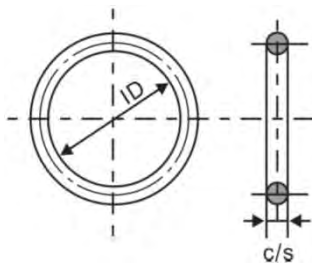
O-RING—AS



MATERIAL	
NBR	FKM
HNBR	SILICONE

ITEM	ID	C/S	VOL(cm³)	ITEM	ID	C/S	VOL(cm³)
385	405.26	5.33	28.781	437	151.76	6.98	19.083
386	430.65	5.33	30.561	438	158.12	6.98	19.847
387	456.06	5.33	32.342	439	164.46	6.98	20.609
388	481.46	5.33	34.122		167	6.98	20.915
389	506.85	5.33	35.902	440	170.82	6.98	21.374
390	532.25	5.33	37.682	441	177.16	6.98	22.136
391	557.65	5.33	39.463	442	183.52	6.98	22.901
392	582.65	5.33	41.215	443	189.86	6.98	23.663
393	608.1	5.33	42.999	444	196.22	6.98	24.427
394	633.5	5.33	44.780	445	202.56	6.98	25.190
395	658.88	5.33	46.559	446	215.26	6.98	26.716
	57	6.98	7.691	447	227.96	6.98	28.243
	62	6.98	8.292	448	240.67	6.98	29.771
	67	6.98	8.893	449	253.36	6.98	31.296
	72	6.98	9.494	450	266.07	6.98	32.824
	77	6.98	10.096	451	278.76	6.98	34.350
	82	6.98	10.697	452	291.47	6.98	35.878
	87	6.98	11.298	453	304.16	6.98	37.403
	92	6.98	11.899	454	316.87	6.98	38.931
	97	6.98	12.500	455	329.56	6.98	40.457
	102	6.98	13.101	456	342.27	6.98	41.985
	107	6.98	13.702	457	354.96	6.98	43.510
	112	6.98	14.303	458	367.66	6.98	45.037
425	113.67	6.98	14.504	459	380.36	6.98	46.563
426	116.84	6.98	14.885	460	393.07	6.98	48.091
427	120.02	6.98	15.267	461	405.26	6.98	49.557
428	123.19	6.98	15.648	462	417.96	6.98	51.083
429	126.36	6.98	16.029	463	430.66	6.98	52.610
430	129.54	6.98	16.412	464	443.36	6.98	54.137
431	132.72	6.98	16.794	465	456.06	6.98	55.664
432	135.89	6.98	17.175	466	468.76	6.98	57.190
433	139.06	6.98	17.556	467	481.46	6.98	58.717
434	142.24	6.98	17.938	468	494.16	6.98	60.244
435	145.42	6.98	18.321	469	506.86	6.98	61.770
	147	6.98	18.510	470	532.26	6.98	64.824
436	148.59	6.98	18.702	471	557.65	6.98	67.876

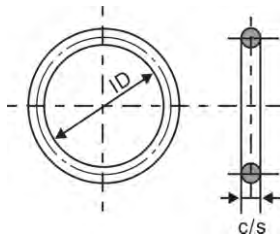
O-RING—AS



MATERIAL	
NBR	FKM
HNBR	SILICONE

ITEM	ID	C/S	VOL(cm ³)	ITEM	ID	C/S	VOL(cm ³)
472	582.68	6.98	70.885	909	17.94	2.46	0.305
473	608.08	6.98	73.938	910	19.18	2.46	0.323
474	633.50	6.98	76.994	911	21.92	2.95	0.534
475	658.88	6.98	80.045	912	23.47	2.95	0.567
901	4.7	1.42	0.030	913	25.04	2.95	0.601
902	6.07	1.63	0.050	914	26.6	2.95	0.635
903	7.65	1.63	0.061	916	29.74	2.95	0.702
904	8.92	1.83	0.089	918	34.42	2.95	0.802
905	10.52	1.83	0.102	920	37.46	3	0.898
906	11.89	1.98	0.134	924	43.68	3	1.037
907	13.46	2.08	0.166	928	53.09	3	1.246
908	16.36	2.21	0.224	932	59.36	3	1.385

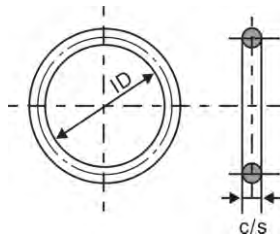
O-RING—P



MATERIAL	
NBR	FKM
HNBR	SILICONE

ITEM	ID	C/S	VOL(cm³)	ITEM	ID	C/S	VOL(cm³)
003	2.8	1.9	0.042	034	33.7	3.5	1.124
004	3.8	1.9	0.051	035	34.7	3.5	1.155
005	4.8	1.9	0.060	35.5	35.2	3.5	1.170
006	5.8	1.9	0.069	036	35.7	3.5	1.185
007	6.8	1.9	0.077	037	36.7	3.5	1.215
008	7.8	1.9	0.086	038	37.7	3.5	1.245
009	8.8	1.9	0.095	039	38.7	3.5	1.276
010	9.8	1.9	0.104	040	39.7	3.5	1.306
010A	9.8	2.4	0.173	041	40.7	3.5	1.336
011	10.8	2.4	0.188	042	41.7	3.5	1.366
011.2	11	2.4	0.190	044	43.7	3.5	1.427
012	11.8	2.4	0.202	045	44.7	3.5	1.457
012.5	12.3	2.4	0.209	046	45.7	3.5	1.487
013	12.8	2.4	0.216	048	47.7	3.5	1.548
014	13.8	2.4	0.230	049	48.7	3.5	1.578
015	14.8	2.4	0.244	050	49.7	3.5	1.608
016	15.8	2.4	0.259	046A	45.7	5.7	4.121
017	16.8	2.4	0.273	048A	47.6	5.7	4.273
018	17.8	2.4	0.287	050A	49.6	5.7	4.433
019	18.8	2.4	0.301	052	51.6	5.7	4.594
020	19.8	2.4	0.316	053	52.6	5.7	4.674
021	20.8	2.4	0.330	055	54.6	5.7	4.834
022	21.8	2.4	0.344	056	55.6	5.7	4.914
022A	21.7	3.5	0.762	058	57.6	5.7	5.075
022.4	22.1	3.5	0.774	060	59.6	5.7	5.235
024	23.7	3.5	0.822	062	61.6	5.7	5.395
025	24.7	3.5	0.852	063	62.6	5.7	5.475
025.5	25.2	3.5	0.867	065	64.6	5.7	5.636
026	25.7	3.5	0.883	067	66.6	5.7	5.796
028	27.7	3.5	0.943	068	67.6	5.7	5.876
029	28.7	3.5	0.973	070	69.6	5.7	6.037
029.5	29.2	3.5	0.988	071	70.6	5.7	6.117
030	29.7	3.5	1.003	075	74.6	5.7	6.437
031	30.7	3.5	1.034	080	79.6	5.7	6.838
031.5	31.2	3.5	1.049	085	84.6	5.7	7.239
032	31.7	3.5	1.064	090	89.6	5.7	7.640

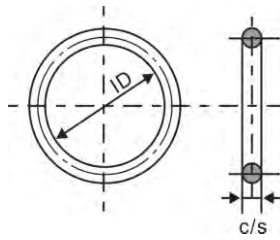
O-RING—P



MATERIAL	
NBR	FKM
HNBR	SILICONE

ITEM	ID	C/S	VOL(cm ³)	ITEM	ID	C/S	VOL(cm ³)
095	94.6	5.7	8.041	245	244.5	8.4	44.030
100	99.6	5.7	8.442	250	249.5	8.4	44.901
102	101.6	5.7	8.602	255	254.5	8.4	45.771
105	104.6	5.7	8.842	260	259.5	8.4	46.642
110	109.6	5.7	9.243	265	264.5	8.4	47.512
112	111.6	5.7	9.403	270	269.5	8.4	48.383
115	114.6	5.7	9.644	275	274.5	8.4	49.253
120	119.6	5.7	10.045	280	279.5	8.4	50.124
125	124.6	5.7	10.446	285	284.5	8.4	50.994
130	129.6	5.7	10.846	290	289.5	8.4	51.865
132	131.6	5.7	11.007	295	294.5	8.4	52.735
135	134.6	5.7	11.247	300	299.5	8.4	53.606
140	139.6	5.7	11.648	305	304.5	8.4	54.476
145	144.6	5.7	12.049	310	309.5	8.4	55.347
150	149.6	5.7	12.450	315	314.5	8.4	56.217
145A	144.5	8.4	26.620	320	319.5	8.4	57.088
150A	149.5	8.4	27.490	325	324.5	8.4	57.958
155	154.5	8.4	28.361	330	329.5	8.4	58.829
160	159.5	8.4	29.231	335	334.8	8.4	59.751
165	164.5	8.4	30.102	340	339.5	8.4	60.570
170	169.5	8.4	30.973	345	344.5	8.4	61.440
175	174.5	8.4	31.843	350	349.5	8.4	62.311
180	179.5	8.4	32.714	355	354.5	8.4	63.181
185	184.5	8.4	33.584	360	359.5	8.4	64.052
190	189.5	8.4	34.455	365	364.5	8.4	64.922
195	194.5	8.4	35.325	370	369.5	8.4	65.793
200	199.5	8.4	36.196	375	374.5	8.4	66.663
205	204.5	8.4	37.066	380	379.5	8.4	67.534
209	208.5	8.4	37.762	385	384.5	8.4	68.404
210	209.5	8.4	37.937	390	389.5	8.4	69.275
215	214.5	8.4	38.807	395	394.5	8.4	70.145
220	219.5	8.4	39.678	400	399.5	8.4	71.016
225	224.5	8.4	40.548	405	404.5	8.4	71.886
230	229.5	8.4	41.419	410	409.5	8.4	72.757
235	234.5	8.4	42.289	415	414.5	8.4	73.627
240	239.5	8.4	43.160	420	419.5	8.4	74.498

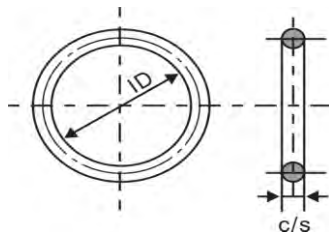
O-RING—P



MATERIAL	
NBR	FKM
HNBR	SILICONE

ITEM	ID	C/S	VOL(cm ³)	ITEM	ID	C/S	VOL(cm ³)
425	424.5	8.4	75.368	465	464.5	8.4	82.332
430	429.5	8.4	76.239	470	469.5	8.4	83.203
435	434.5	8.4	77.109	475	474.5	8.4	84.073
440	439.5	8.4	77.980	480	479.5	8.4	84.944
445	444.5	8.4	78.850	485	484.5	8.4	85.814
450	449.5	8.4	79.721	490	489.5	8.4	86.685
455	454.5	8.4	80.591	495	494.5	8.4	87.555
460	459.5	8.4	81.462	500	499.5	8.4	88.426

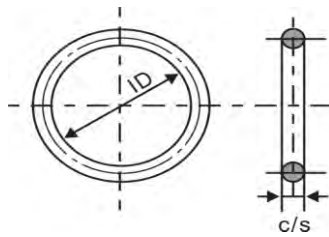
O-RING—G



MATERIAL	
NBR	FKM
HNBR	SILICONE

ITEM	ID	C/S	VOL(cm ³)	ITEM	ID	C/S	VOL(cm ³)
025	24.4	3.1	0.652	180	179.3	5.7	14.831
030	29.4	3.1	0.771	185	184.3	5.7	15.232
035	34.4	3.1	0.889	190	189.3	5.7	15.632
040	39.4	3.1	1.008	195	194.3	5.7	16.033
042	41.4	3.1	1.055	200	199.3	5.7	16.434
045	44.4	3.1	1.126	205	204.3	5.7	16.835
050	49.4	3.1	1.245	210	209.3	5.7	17.236
055	54.4	3.1	1.363	215	214.3	5.7	17.637
058	57.4	3.1	1.435	220	219.3	5.7	18.037
060	59.4	3.1	1.482	225	224.3	5.7	18.438
063	62.4	3.1	1.553	230	229.3	5.7	18.839
065	64.4	3.1	1.601	235	234.3	5.7	19.240
068	67.4	3.1	1.672	240	239.3	5.7	19.641
070	69.4	3.1	1.719	245	244.3	5.7	20.042
075	74.4	3.1	1.838	250	249.3	5.7	20.442
080	79.4	3.1	1.956	255	254.3	5.7	20.843
085	84.4	3.1	2.075	260	259.3	5.7	21.244
087	86.4	3.1	2.122	265	264.3	5.7	21.645
090	89.4	3.1	2.193	270	269.3	5.7	22.046
095	94.4	3.1	2.312	275	274.3	5.7	22.447
100	99.4	3.1	2.430	280	279.3	5.7	22.847
105	104.4	3.1	2.549	285	284.3	5.7	23.248
110	109.4	3.1	2.668	290	289.3	5.7	23.649
115	114.4	3.1	2.786	295	294.3	5.7	24.050
120	119.4	3.1	2.905	300	299.3	5.7	24.451
125	124.4	3.1	3.023	305	304.3	5.7	24.852
130	129.4	3.1	3.142	310	309.4	5.7	25.260
135	134.4	3.1	3.260	315	314.4	5.7	25.661
140	139.4	3.1	3.379	320	319.3	5.7	26.054
145	144.4	3.1	3.497	325	324.3	5.7	26.455
150	149.3	5.7	12.426	330	329.3	5.7	26.856
155	154.3	5.7	12.827	335	334.3	5.7	27.257
160	159.3	5.7	13.227	340	339.3	5.7	27.657
165	164.3	5.7	13.628	345	344.4	5.7	28.066
170	169.3	5.7	14.029	350	349.3	5.7	28.459
175	174.3	5.7	14.430	355	354.3	5.7	28.860

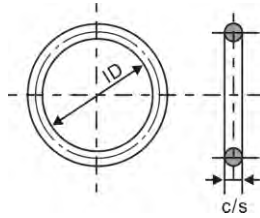
O-RING—G



MATERIAL	
NBR	FKM
HNBR	SILICONE

ITEM	ID	C/S	VOL(cm ³)	ITEM	ID	C/S	VOL(cm ³)
360	359.3	5.7	29.261	435	434.4	5.7	35.281
365	364.3	5.7	29.662	440	439.3	5.7	35.674
370	369.3	5.7	30.062	445	444.4	5.7	36.083
375	374.3	5.7	30.463	450	449.3	5.7	36.476
380	379.3	5.7	30.864	455	454.3	5.7	36.876
385	384.3	5.7	31.265	460	459.3	5.7	37.277
390	389.3	5.7	31.666	465	464.4	5.7	37.686
395	394.3	5.7	32.066	470	469.4	5.7	38.087
400	399.4	5.7	32.475	475	474.4	5.7	38.488
405	404.4	5.7	32.876	480	479.3	5.7	38.881
410	409.4	5.7	33.277	485	484.4	5.7	39.289
415	414.3	5.7	33.670	490	489.4	5.7	39.690
420	419.4	5.7	34.079	495	494.3	5.7	40.083
425	424.4	5.7	34.479	500	499.4	5.7	40.492
430	429.3	5.7	34.872				

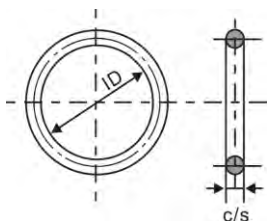
O-RING—GS



MATERIAL	
NBR	FKM
HNBR	SILICONE

ITEM	ID	C/S	VOL(cm ³)	ITEM	ID	C/S	VOL(cm ³)
150	149.3	3.1	3.614	285	284.3	3.1	6.815
155	154.3	3.1	3.732	290	289.3	3.1	6.933
160	159.3	3.1	3.851	295	294.3	3.1	7.052
162	161.3	3.1	3.898	300	299.3	3.1	7.170
165	164.3	3.1	3.969	305	304.3	3.1	7.289
170	169.3	3.1	4.088	310	309.3	3.1	7.408
175	174.3	3.1	4.206	315	314.3	3.1	7.526
180	179.3	3.1	4.325	320	319.3	3.1	7.645
185	184.3	3.1	4.444	330	329.3	3.1	7.882
190	189.3	3.1	4.562	340	339.3	3.1	8.119
195	194.3	3.1	4.681	350	349.3	3.1	8.356
200	199.3	3.1	4.799	355	354.3	3.1	8.475
205	204.3	3.1	4.918	360	359.3	3.1	8.593
210	209.3	3.1	5.036	365	364.3	3.1	8.712
215	214.3	3.1	5.155	370	369.3	3.1	8.830
220	219.3	3.1	5.274	380	379.3	3.1	9.067
225	224.3	3.1	5.392	400	399.3	3.1	9.542
230	229.3	3.1	5.511	406	405.3	3.1	9.684
232	231.3	3.1	5.558	410	409.3	3.1	9.779
235	234.3	3.1	5.629	415	414.3	3.1	9.897
240	239.3	3.1	5.748	420	419.3	3.1	10.016
245	244.3	3.1	5.866	430	429.3	3.1	10.253
250	249.5	3.1	5.990	440	439.3	3.1	10.490
255	254.3	3.1	6.103	450	449.3	3.1	10.727
260	259.3	3.1	6.222	460	459.3	3.1	10.964
265	264.3	3.1	6.341	470	469.3	3.1	11.201
270	269.3	3.1	6.459	480	479.3	3.1	11.439
275	274.3	3.1	6.578	490	489.3	3.1	11.676
280	279.3	3.1	6.696	500	499.3	3.1	11.913

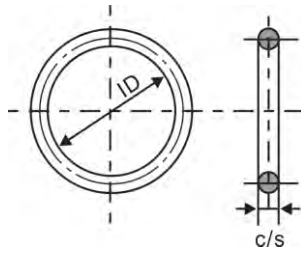
O-RING—S



MATERIAL	
NBR	FKM
HNBR	SILICONE

ITEM	ID	C/S	VOL(cm ³)	ITEM	ID	C/S	VOL(cm ³)
003	2.5	1.5	0.022	040	39.5	2	0.410
004	3.5	1.5	0.028	042	41.5	2	0.429
005	4.5	1.5	0.033	044	43.5	2	0.449
006	5.5	1.5	0.039	045	44.5	2	0.459
007	6.5	1.5	0.044	046	45.5	2	0.469
008	7.5	1.5	0.050	048	47.5	2	0.489
009	8.5	1.5	0.056	050	49.5	2	0.508
010	9.5	1.5	0.061	053	52.5	2	0.538
011.2	10.7	1.5	0.068	055	54.5	2	0.558
012	11.5	1.5	0.072	056	55.5	2	0.568
012.5	12	1.5	0.075	060	59.5	2	0.607
014	13.5	1.5	0.083	063	62.5	2	0.637
015	14.5	1.5	0.089	065	64.5	2	0.656
016	15.5	1.5	0.094	067	66.5	2	0.676
017	16.5	1.5	0.100	070	69.5	2	0.706
018	17.5	1.5	0.105	071	70.5	2	0.716
020	19.5	1.5	0.117	075	74.5	2	0.755
021	20.8	1.5	0.124	080	79.5	2	0.804
022	21.5	1.5	0.128	085	84.5	2	0.854
022.4	21.9	2	0.236	090	89.5	2	0.903
024	23.5	2	0.252	095	94.5	2	0.952
025	24.5	2	0.262	100	99.5	2	1.002
026	25.5	2	0.271	105	104.5	2	1.051
028	27.5	2	0.291	110	109.5	2	1.100
029	28.5	2	0.301	112	111.5	2	1.120
030	29.5	2	0.311	115	114.5	2	1.150
031.5	31	2	0.326	120	119.5	2	1.199
032	31.5	2	0.331	125	124.5	2	1.249
034	33.5	2	0.350	130	129.5	2	1.298
035	34.5	2	0.360	132	131.5	2	1.318
035.5	35	2	0.365	135	134.5	2	1.347
036	35.5	2	0.370	140	139.5	2	1.397
037	36.5	2	0.380	145	144.5	2	1.446
038	37.5	2	0.390	150	149.5	2	1.495
039	38.5	2	0.400				

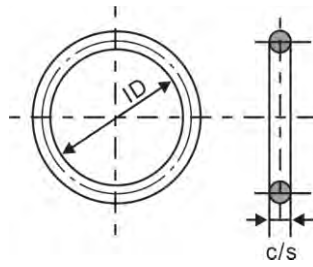
O-RING—V



MATERIAL	
NBR	FKM
HNBR	SILICONE

ITEM	ID	C/S	VOL(cm³)
015	14.5	4	0.730
024	23.5	4	1.086
034	33.5	4	1.480
040	39.5	4	1.717
055	54.5	4	2.309
070	69	4	2.882
085	84	4	3.474
100	99	4	4.066
120	119	4	4.856
150	148.5	4	6.020
175	173	4	6.988
225	222.5	6	20.297
275	272	6	24.694
325	321.5	6	29.091
380	376	6	33.932
430	425.5	6	38.329
480	475.5	10	119.793
530	524.5	10	131.883
585	579	10	145.331
640	633.5	10	158.778
690	683	10	170.992
740	732.5	10	183.205
790	782	10	195.419
845	836.5	10	208.866
950	940.5	10	234.528
1055	1044	10	260.065

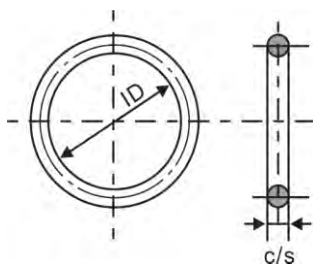
O-RING—JASO 1000



MATERIAL	
NBR	FKM
HNBR	SILICONE

ITEM	ID	OD	C/S	VOL(cm³)
1003	2.8	6.6	1.9	0.042
1004	3.8	7.6	1.9	0.051
1005	4.8	8.6	1.9	0.060
1006	5.8	9.6	1.9	0.069
1007	6.8	10.6	1.9	0.077
1008	7.8	11.6	1.9	0.086
1009	8.8	12.6	1.9	0.095
1010	9.8	13.6	1.9	0.104
1011	11	14.8	1.9	0.115
1012	12.3	16.1	1.9	0.126
1013	13	16.8	1.9	0.133
1014	13.8	17.6	1.9	0.140
1015	14.8	18.6	1.9	0.149
1016	15.8	19.6	1.9	0.158
1017	16.8	20.6	1.9	0.167
1018	17.8	21.6	1.9	0.175
1019	18.8	22.6	1.9	0.184
1020	19.8	23.6	1.9	0.193
1021	21	24.8	1.9	0.204
1022	22.1	25.9	1.9	0.214
1023	23.3	27.1	1.9	0.224
1025	24.7	28.5	1.9	0.237
1026	26.2	30	1.9	0.250
1028	27.7	31.5	1.9	0.264
1030	29.7	33.5	1.9	0.281
1031	31.2	35	1.9	0.295
1033	33.2	37	1.9	0.313
1035	35.2	39	1.9	0.330

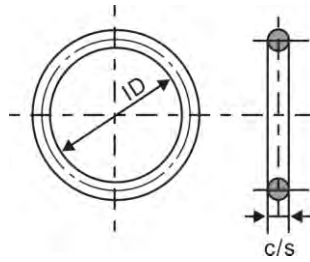
O-RING—JASO 2000



MATERIAL	
NBR	FKM
HNBR	SILICONE

ITEM	ID	OD	C/S	VOL(cm ³)
2010	9.8	14.6	2.4	0.173
2011	11	15.8	2.4	0.190
2012	12.3	17.1	2.4	0.209
2013	13	17.8	2.4	0.219
2014	13.8	18.6	2.4	0.230
2015	14.8	19.6	2.4	0.244
2016	15.8	20.6	2.4	0.259
2017	16.8	21.6	2.4	0.273
2018	17.8	22.6	2.4	0.287
2019	18.8	23.6	2.4	0.301
2020	19.8	24.6	2.4	0.316
2021	20.8	25.6	2.4	0.330
2022	22.1	26.9	2.4	0.348
2023	23.3	28.1	2.4	0.365
2025	24.7	29.5	2.4	0.385
2026	26.2	31	2.4	0.406
2028	27.7	32.5	2.4	0.428
2030	29.7	34.5	2.4	0.456
2031	31.2	36	2.4	0.478
2033	33.2	38	2.4	0.506
2035	35.2	40	2.4	0.534
2037	37.2	42	2.4	0.563
2040	39.7	44.5	2.4	0.598
2042	42.2	47	2.4	0.634
2045	44.7	49.5	2.4	0.669
2047	47.2	52	2.4	0.705
2050	49.7	54.5	2.4	0.740
2053	52.6	57.4	2.4	0.782
2056	55.6	60.4	2.4	0.824
2060	59.6	64.4	2.4	0.881
2063	62.6	67.4	2.4	0.924
2067	66.6	71.4	2.4	0.981
2071	70.6	75.4	2.4	1.037

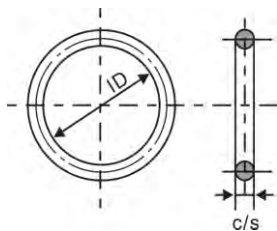
O-RING—JASO 3000



MATERIAL	
NBR	FKM
HNBR	SILICONE

ITEM	ID	OD	C/S	VOL(cm³)	ITEM	ID	OD	C/S	VOL(cm³)
3020	19.7	26.7	3.5	0.701	3070	69.6	76.6	3.5	2.210
3022	22.1	29.1	3.5	0.774	3071	70.6	77.6	3.5	2.240
3024	23.7	30.7	3.5	0.822	3075	74.6	81.6	3.5	2.361
3025	24.7	31.7	3.5	0.852	3080	79.6	86.6	3.5	2.512
3026	25.7	32.7	3.5	0.883	3085	84.6	91.6	3.5	2.663
3028	27.7	34.7	3.5	0.943	3088	87.6	94.6	3.5	2.754
3030	29.7	36.7	3.5	1.003	3090	89.6	96.6	3.5	2.814
3031	31.2	38.2	3.5	1.049	3092	91.6	98.6	3.5	2.874
3034	33.7	40.7	3.5	1.124	3095	94.6	101.6	3.5	2.965
3035	35.2	42.2	3.5	1.170	3100	99.6	106.6	3.5	3.116
3038	37.7	44.7	3.5	1.245	3105	104.6	111.6	3.5	3.267
3039	38.7	45.7	3.5	1.276	3106	105.6	112.6	3.5	3.298
3040	39.7	46.7	3.5	1.306	3110	109.6	116.6	3.5	3.419
3042	41.7	48.7	3.5	1.366	3112	111.6	118.6	3.5	3.479
3044	43.7	50.7	3.5	1.427	3115	114.6	121.6	3.5	3.570
3045	44.7	51.7	3.5	1.457	3118	117.6	124.6	3.5	3.660
3048	47.7	54.7	3.5	1.548	3120	119.6	126.6	3.5	3.721
3050	49.7	56.7	3.5	1.608	3125	124.6	131.6	3.5	3.872
3053	52.6	59.6	3.5	1.696	3130	129.6	136.6	3.5	4.023
3056	55.6	62.6	3.5	1.786	3132	131.6	138.6	3.5	4.084
3060	59.6	66.6	3.5	1.907	3135	134.6	141.6	3.5	4.174
3063	62.6	69.6	3.5	1.998	3140	139.6	146.6	3.5	4.325
3065	64.6	71.6	3.5	2.058	3145	144.6	151.6	3.5	4.476
3067	66.6	73.6	3.5	2.119	3150	149.6	156.6	3.5	4.628

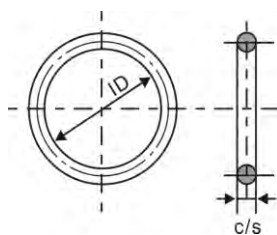
O-RING—1mm / SS



MATERIAL	
NBR	FKM
HNBR	SILICONE

ID	OD	C/S	VOL(cm³)	SS系列
2.0	4.0	1	0.007	SS
2.5	4.5	1	0.009	SS
3.0	5.0	1	0.010	SS
3.5	5.5	1	0.011	SS
4.0	6.0	1	0.012	SS
4.5	6.5	1	0.014	SS
5.0	7.0	1	0.015	SS
5.5	7.5	1	0.016	SS
6.0	8.0	1	0.017	SS
6.5	8.5	1	0.019	SS
7.0	9.0	1	0.020	SS
7.5	9.5	1	0.021	SS
8.0	10.0	1	0.022	SS
8.5	10.5	1	0.023	SS
9.0	11.0	1	0.025	SS
9.5	11.5	1	0.026	SS
10.0	12.0	1	0.027	SS
10.5	12.5	1	0.028	SS
11.0	13.0	1	0.030	SS
11.5	13.5	1	0.031	SS
12.0	14.0	1	0.032	SS
13.0	15.0	1	0.035	SS
14.0	16.0	1	0.037	SS
15.0	17.0	1	0.039	SS
16.0	18.0	1	0.042	SS
17.0	19.0	1	0.044	SS
18.0	20.0	1	0.047	SS
19.0	21.0	1	0.049	SS
20.0	22.0	1	0.052	SS
22.0	24.0	1	0.057	SS
25.0	27.0	1	0.064	SS
27.6	29.6	1	0.071	SS
28.0	29.0	1	0.072	SS
30.0	32.0	1	0.076	SS
31.5	33.5	1	0.080	SS
32.0	34.0	1	0.081	SS
34.0	36.0	1	0.086	SS
40.0	42.0	1	0.101	SS

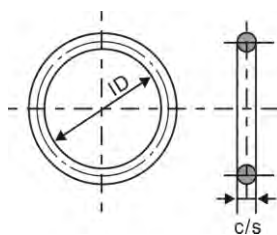
O-RING—2mm



MATERIAL	
NBR	FKM
HNBR	SILICONE

ID	OD	C/S	VOL(cm ³)	ID	OD	C/S	VOL(cm ³)
3	7	2	0.049	40	44	2	0.415
4	8	2	0.059	41	45	2	0.424
5	9	2	0.069	42	46	2	0.434
6	10	2	0.079	43	47	2	0.444
7	11	2	0.089	44	48	2	0.454
8	12	2	0.099	45	49	2	0.464
9	13	2	0.109	46	50	2	0.474
9.5	13.5	2	0.114	47	51	2	0.484
10	14	2	0.118	48	52	2	0.493
11	15	2	0.128	49	53	2	0.503
12	16	2	0.138	50	54	2	0.513
13	17	2	0.148	51	55	2	0.523
14	18	2	0.158	52	56	2	0.533
15	19	2	0.168	53	57	2	0.543
16	20	2	0.178	54	58	2	0.553
17	21	2	0.188	55	59	2	0.563
18	22	2	0.197	56	60	2	0.572
19	23	2	0.207	57	61	2	0.582
20	24	2	0.217	58	62	2	0.592
21	25	2	0.227	59	63	2	0.602
21.5	25.5	2	0.232	60	64	2	0.612
22	26	2	0.237	61	65	2	0.622
23	27	2	0.247	62	66	2	0.632
24	28	2	0.257	63	67	2	0.642
25	29	2	0.266	64	68	2	0.651
26	30	2	0.276	65	69	2	0.661
27	31	2	0.286	66	70	2	0.671
28	32	2	0.296	67	71	2	0.681
29	33	2	0.306	68	72	2	0.691
30	34	2	0.316	69	73	2	0.701
32	36	2	0.336	70	74	2	0.711
33	37	2	0.345	71	75	2	0.720
34	38	2	0.355	72	76	2	0.730
36	40	2	0.375	73	77	2	0.740
37	41	2	0.385	74	78	2	0.750
38	42	2	0.395	75	79	2	0.760
39	43	2	0.405	76	80	2	0.770

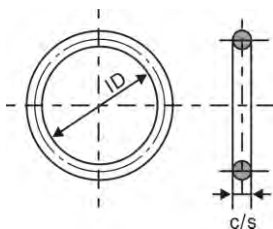
O-RING—2mm



MATERIAL	
NBR	FKM
HNBR	SILICONE

ID	OD	C/S	VOL(cm ³)	ID	OD	C/S	VOL(cm ³)
77	81	2	0.780	97	101	2	0.977
78	82	2	0.790	98	102	2	0.987
79	83	2	0.799	99	103	2	0.997
80	84	2	0.809	100	104	2	1.007
81	85	2	0.819	105	109	2	1.056
82	86	2	0.829	107	111	2	1.076
83	87	2	0.839	110	114	2	1.105
84	88	2	0.849	112	116	2	1.125
85	89	2	0.859	114	118	2	1.145
86	90	2	0.869	115	119	2	1.155
87	91	2	0.878	118	122	2	1.184
88	92	2	0.888	120	124	2	1.204
89	93	2	0.898	122	126	2	1.224
90	94	2	0.908	125	129	2	1.253
91	95	2	0.918	128	132	2	1.283
92	96	2	0.928	130	134	2	1.303
92.5	96.5	2	0.933	135	139	2	1.352
93	97	2	0.938	140	144	2	1.401
94	98	2	0.947	145	149	2	1.451
95	99	2	0.957	150	154	2	1.500
96	100	2	0.967				

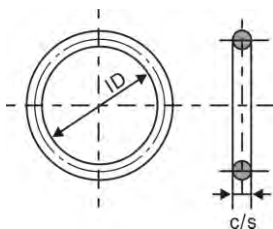
O-RING—3mm



MATERIAL	
NBR	FKM
HNBR	SILICONE

ID	OD	C/S	VOL(cm³)	ID	OD	C/S	VOL(cm³)
3	9	3	0.133	36	42	3	0.866
4	10	3	0.155	37	43	3	0.888
4.5	10.5	3	0.167	38	44	3	0.910
5	11	3	0.178	39	45	3	0.933
5.5	11.5	3	0.189	40	46	3	0.955
6	12	3	0.200	41	47	3	0.977
6.5	12.5	3	0.211	42	48	3	0.999
7	13	3	0.222	43	49	3	1.022
8	14	3	0.244	44	50	3	1.044
9	15	3	0.266	45	51	3	1.066
10	16	3	0.289	46	52	3	1.088
11	17	3	0.311	47	53	3	1.110
12	18	3	0.333	48	54	3	1.133
13	19	3	0.355	49	55	3	1.155
14	20	3	0.378	50	56	3	1.177
15	21	3	0.400	51	57	3	1.199
16	22	3	0.422	52	58	3	1.221
17	23	3	0.444	53	59	3	1.244
18	24	3	0.466	54	60	3	1.266
18.5	25	3	0.477	55	61	3	1.288
19	25	3	0.489	56	62	3	1.310
20	26	3	0.511	57	63	3	1.332
21	27	3	0.533	58	64	3	1.355
22	28	3	0.555	59	65	3	1.377
23	29	3	0.577	60	66	3	1.399
23.5	29.5	3	0.588	61	67	3	1.421
24	30	3	0.600	62	68	3	1.443
25	31	3	0.622	63	69	3	1.466
26	32	3	0.644	64	70	3	1.488
27	33	3	0.666	65	71	3	1.510
28	34	3	0.688	66	72	3	1.532
29	35	3	0.711	67	73	3	1.554
30	36	3	0.733	68	74	3	1.577
31	37	3	0.755	69	75	3	1.599
32	38	3	0.777	70	76	3	1.621
33	39	3	0.799	71	77	3	1.643
34	40	3	0.822	72	78	3	1.666
35	41	3	0.844	73	79	3	1.688

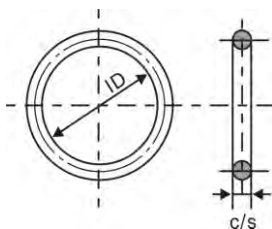
O-RING—3mm



MATERIAL	
NBR	FKM
HNBR	SILICONE

ID	OD	C/S	VOL(cm ³)	ID	OD	C/S	VOL(cm ³)
74	80	3	1.710	113	119	3	2.576
75	81	3	1.732	114	120	3	2.598
76	82	3	1.754	115	121	3	2.620
77	83	3	1.777	117	123	3	2.665
78	84	3	1.799	120	126	3	2.731
79	85	3	1.821	122	128	3	2.776
80	86	3	1.843	124	130	3	2.820
81	87	3	1.865	125	131	3	2.842
82	88	3	1.888	126	132	3	2.865
83	89	3	1.910	128	134	3	2.909
84	90	3	1.932	130	136	3	2.953
85	91	3	1.954	132	138	3	2.998
86	92	3	1.976	133	139	3	3.020
87	93	3	1.999	134	140	3	3.042
88	94	3	2.021	135	141	3	3.065
89	95	3	2.043	138	144	3	3.131
90	96	3	2.065	139	145	3	3.153
91	97	3	2.087	140	146	3	3.176
92	98	3	2.110	145	151	3	3.287
93	99	3	2.132	146	152	3	3.309
94	100	3	2.154	148	154	3	3.353
95	101	3	2.176	150	156	3	3.398
96	102	3	2.198	155	161	3	3.509
97	103	3	2.221	160	166	3	3.620
98	104	3	2.243	162	168	3	3.664
99	105	3	2.265	165	171	3	3.731
100	106	3	2.287	166	172	3	3.753
101	107	3	2.309	170	176	3	3.842
102	108	3	2.332	173	179	3	3.908
103	109	3	2.354	174	180	3	3.931
104	110	3	2.376	175	181	3	3.953
105	111	3	2.398	178	184	3	4.019
106	112	3	2.421	180	186	3	4.064
107	113	3	2.443	185	191	3	4.175
108	114	3	2.465	189	195	3	4.264
109	115	3	2.487	190	196	3	4.286
110	116	3	2.509	195	201	3	4.397
112	118	3	2.554	200	206	3	4.508

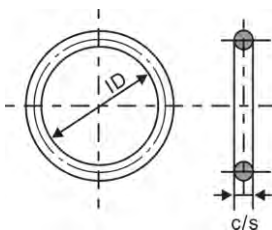
O-RING—3mm



MATERIAL	
NBR	FKM
HNBR	SILICONE

ID	OD	C/S	VOL(cm ³)	ID	OD	C/S	VOL(cm ³)
205	211	3	4.619	260	266	3	5.840
210	216	3	4.730	265	271	3	5.951
215	221	3	4.841	270	276	3	6.062
220	226	3	4.952	275	281	3	6.173
225	231	3	5.063	280	286	3	6.284
230	236	3	5.174	285	291	3	6.396
232	238	3	5.219	290	296	3	6.507
235	241	3	5.285	295	301	3	6.618
240	246	3	5.396	300	306	3	6.729
245	251	3	5.507	310	316	3	6.951
250	256	3	5.618	325	331	3	7.284
255	261	3	5.729	330	336	3	7.395

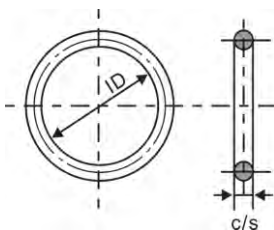
O-RING—4mm



MATERIAL	
NBR	FKM
HNBR	SILICONE

ID	OD	C/S	VOL(cm³)	ID	OD	C/S	VOL(cm³)
8	16	4	0.474	45	53	4	1.934
9	17	4	0.513	46	54	4	1.974
10	18	4	0.553	47	55	4	2.013
11	19	4	0.592	48	56	4	2.053
12	20	4	0.632	49	57	4	2.092
13	21	4	0.671	50	58	4	2.132
14	22	4	0.711	51	59	4	2.171
15	23	4	0.750	52	60	4	2.211
16	24	4	0.790	53	61	4	2.250
17	25	4	0.829	54	62	4	2.290
18	26	4	0.869	55	63	4	2.329
19	27	4	0.908	56	64	4	2.369
20	28	4	0.947	57	65	4	2.408
21	29	4	0.987	58	66	4	2.448
22	30	4	1.026	59	67	4	2.487
23	31	4	1.066	60	68	4	2.527
24	32	4	1.105	61	69	4	2.566
25	33	4	1.145	62	70	4	2.606
26	34	4	1.184	63	71	4	2.645
27	35	4	1.224	64	72	4	2.685
28	36	4	1.263	65	73	4	2.724
29	37	4	1.303	66	74	4	2.764
30	38	4	1.342	67	75	4	2.803
31	39	4	1.382	68	76	4	2.842
32	40	4	1.421	69	77	4	2.882
33	41	4	1.461	70	78	4	2.921
34	42	4	1.500	71	79	4	2.961
35	43	4	1.540	72	80	4	3.000
36	44	4	1.579	73	81	4	3.040
37	45	4	1.619	74	82	4	3.079
38	46	4	1.658	75	83	4	3.119
39	47	4	1.698	76	84	4	3.158
40	48	4	1.737	77	85	4	3.198
41	49	4	1.777	78	86	4	3.237
42	50	4	1.816	79	87	4	3.277
43	51	4	1.855	80	88	4	3.316
44	52	4	1.895	81	89	4	3.356

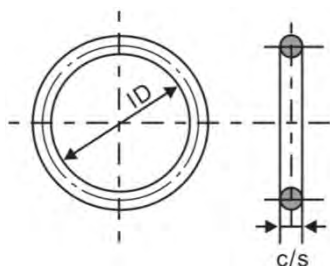
O-RING—4mm



MATERIAL	
NBR	FKM
HNBR	SILICONE

ID	OD	C/S	VOL(cm³)	ID	OD	C/S	VOL(cm³)
82	90	4	3.395	125	133	4	5.093
83	91	4	3.435	126	134	4	5.132
84	92	4	3.474	129	137	4	5.251
85	93	4	3.514	130	138	4	5.290
86	94	4	3.553	132	140	4	5.369
87	95	4	3.593	134	142	4	5.448
88	96	4	3.632	135	143	4	5.488
89	97	4	3.672	140	148	4	5.685
90	98	4	3.711	142	150	4	5.764
91	99	4	3.750	144	152	4	5.843
92	100	4	3.790	145	153	4	5.882
93	101	4	3.829	150	158	4	6.080
94	102	4	3.869	152	160	4	6.159
95	103	4	3.908	155	163	4	6.277
96	104	4	3.948	158	166	4	6.396
97	105	4	3.987	160	168	4	6.474
98	106	4	4.027	165	173	4	6.672
99	107	4	4.066	170	178	4	6.869
100	108	4	4.106	171.3	179	4	6.921
102	110	4	4.185	172	180	4	6.948
104	112	4	4.264	173	181	4	6.988
105	113	4	4.303	175	183	4	7.067
106	114	4	4.343	180	188	4	7.264
108	116	4	4.422	185	193	4	7.461
110	118	4	4.501	190	198	4	7.659
112	120	4	4.580	195	203	4	7.856
114	122	4	4.658	200	208	4	8.054
115	123	4	4.698	210	218	4	8.448
116	124	4	4.737	220	228	4	8.843
117	125	4	4.777	230	238	4	9.238
118	126	4	4.816	232	240	4	9.317
120	128	4	4.895	240	248	4	9.633
122	130	4	4.974	250	258	4	10.028
123	131	4	5.014	348	356	4	13.896
124	132	4	5.053				

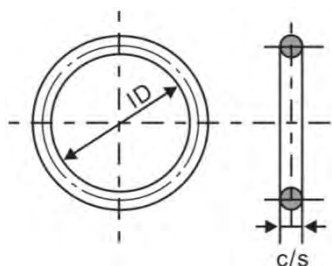
O-RING—POLYURETHANE O-RING



APPLICATION	
MATERIAL	POLYURETHANE
TEMP.	-40°C~100°C

ITEM	ID	C/S	COLOUR
P-016	15.8	2.4	GREEN
P-018	17.8	2.4	GREEN
P-022A	21.7	3.5	GREEN
P-025	24.7	3.5	GREEN
P-026	25.7	3.5	IVORY
P-028	27.7	3.5	GREEN
P-030	29.7	3.5	GREEN
P-032	31.7	3.5	GREEN,IVORY
P-035	34.7	3.5	GREEN
P-035.5	35.2	3.5	GREEN,IVORY
P-038	37.7	3.5	GREEN
P-045	44.7	3.5	GREEN
P-048	47.7	3.5	GREEN
P-070	69.6	5.7	GREEN
P-080	79.6	5.7	GREEN
P-085	84.6	5.7	GREEN
P-090	89.6	5.7	GREEN
P-100	99.6	5.7	GREEN
P-110	109.6	5.7	GREEN
P-115	114.6	5.7	GREEN
P-120	119.6	5.7	GREEN
P-125	124.6	5.7	GREEN
P-130	129.6	5.7	GREEN
P-135	134.6	5.7	GREEN
P-140	139.6	5.7	GREEN
P-150	149.6	5.7	GREEN
G-030	29.4	3.1	BLUE
G-060	59.4	3.1	GREEN
G-066	65.4	3.1	IVORY
G-080	79.4	3.1	GREEN
G-195	194.3	5.7	BLACK
G-210	209.3	5.7	BLACK
AS-008	4.47	1.78	IVORY
AS-009	5.28	1.78	IVORY

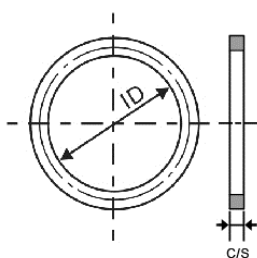
O-RING—POLYURETHANE O-RING



APPLICATION	
MATERIAL	POLYURETHANE
TEMP.	-40°C~100°C

ITEM	ID	C/S	COLOUR
AS-010	6.07	1.78	IVORY
AS-016	15.6	1.78	IVORY
AS-227	53.57	3.53	IVORY
AS-230	63.10	3.53	IVORY
AS-345	100.96	5.33	IVORY
AS-347	107.32	5.33	IVORY
AS-348	110.49	5.33	IVORY
AS-350	116.84	5.33	IVORY
mm	47	5	GREEN
mm	70	5	GREEN
mm	76	8	GREEN
mm	86	8	GREEN
mm	90	5	GREEN
mm	112	8	GREEN
mm	53.4	3.8	IVORY

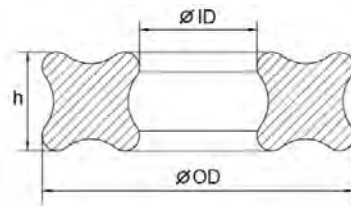
SQUARE RING-AS-568 SERIES(SQ)



MATERIAL	
NBR70	NBR90
FKM70	SILICONE70

ITEM	ID	C/S
SQ-131	42.8	2.5
SQ-135	48.9	2.5
SQ-139	55.25	2.5
SQ-155	101.27	2.5
SQ-218	31.34	3.4
SQ-222	38.1	3.4
SQ-228	56.74	3.4
SQ-234	76.2	3.4
SQ-254	139.29	3.4
SQ-332	59.69	5.16
SQ-334	66.04	5.16
SQ-336	72.39	5.16
SQ-339	81.92	5.16
SQ-348	110.49	5.16
SQ-426	116.84	6.73
SQ-427	120.02	6.73
SQ-431	132.72	6.73
SQ-438	158.12	6.73
SQ-442	183.52	6.73

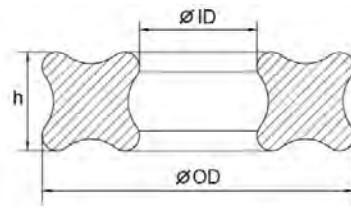
X-RING



NBR70

ITEM	ID	C/S	VOL(cm ³)	ITEM	ID	C/S	VOL(cm ³)
001	0.74	1.02	0.005	039	69.57	1.78	0.558
002	1.07	1.27	0.009	040	72.75	1.78	0.583
003	1.42	1.53	0.017	041	75.92	1.78	0.607
004	1.78	1.78	0.028	042	82.27	1.78	0.657
005	2.57	1.78	0.034	043	88.62	1.78	0.707
006	2.9	1.78	0.037	044	94.97	1.78	0.756
007	3.69	1.78	0.043	045	101.32	1.78	0.806
008	4.47	1.78	0.049	046	107.62	1.78	0.855
009	5.29	1.78	0.055	047	114.02	1.78	0.905
010	6.07	1.78	0.061	048	120.37	1.78	0.955
011	7.65	1.78	0.074	049	126.72	1.78	1.005
012	9.25	1.78	0.086	050	133.07	1.78	1.054
013	10.82	1.78	0.099	102	1.24	2.62	0.065
014	12.42	1.78	0.111	103	2.05	2.62	0.079
015	14	1.78	0.123	104	2.84	2.62	0.092
016	15.6	1.78	0.136	105	3.63	2.62	0.106
017	17.17	1.78	0.148	106	4.42	2.62	0.119
018	18.77	1.78	0.161	107	5.23	2.62	0.133
019	20.35	1.78	0.173	108	6.02	2.62	0.146
020	21.95	1.78	0.186	109	7.6	2.62	0.173
021	23.52	1.78	0.198	110	9.19	2.62	0.200
022	25.12	1.78	0.210	111	10.77	2.62	0.227
023	26.7	1.78	0.223	112	12.37	2.62	0.254
024	28.3	1.78	0.235	113	13.95	2.62	0.281
025	29.87	1.78	0.247	114	15.54	2.62	0.308
026	31.47	1.78	0.260	115	17.12	2.62	0.334
027	33.05	1.78	0.272	116	18.72	2.62	0.361
028	34.65	1.78	0.285	117	20.29	2.62	0.388
029	37.82	1.78	0.310	118	21.9	2.62	0.415
030	41	1.78	0.334	119	23.47	2.62	0.442
031	44.17	1.78	0.359	120	25.07	2.62	0.469
032	47.35	1.78	0.384	121	26.65	2.62	0.496
033	50.52	1.78	0.409	122	28.25	2.62	0.523
034	53.7	1.78	0.434	123	29.82	2.62	0.549
035	56.87	1.78	0.459	124	31.42	2.62	0.577
036	60.04	1.78	0.483	125	32.99	2.62	0.603
037	63.22	1.78	0.508	126	34.6	2.62	0.630
038	66.4	1.78	0.533	127	36.17	2.62	0.657

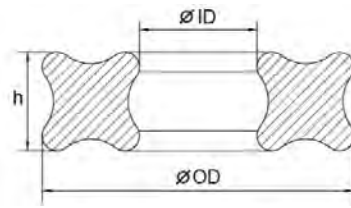
X-RING



NBR70

ITEM	ID	C/S	VOL(cm ³)	ITEM	ID	C/S	VOL(cm ³)
128	37.77	2.62	0.684	166	171.1	2.62	2.942
129	39.35	2.62	0.711	167	177.4	2.62	3.049
130	40.95	2.62	0.738	168	183.8	2.62	3.157
131	42.52	2.62	0.765	169	190.1	2.62	3.264
132	44.12	2.62	0.792	170	196.5	2.62	3.373
133	45.7	2.62	0.818	171	202.8	2.62	3.479
134	47.3	2.62	0.846	172	209.2	2.62	3.588
135	48.9	2.62	0.873	173	215.5	2.62	3.694
136	50.47	2.62	0.899	174	221.9	2.62	3.803
137	52.07	2.62	0.926	175	228.6	2.62	3.916
138	53.65	2.62	0.953	176	234.6	2.62	4.018
139	55.25	2.62	0.980	177	240.9	2.62	4.125
140	56.82	2.62	1.007	178	247.3	2.62	4.233
141	58.42	2.62	1.034	201	4.34	3.53	0.242
142	60	2.62	1.061	202	5.94	3.53	0.291
143	61	2.62	1.078	203	7.52	3.53	0.340
144	63.1	2.62	1.113	204	9.12	3.53	0.389
145	64.7	2.62	1.140	205	10.69	3.53	0.437
146	66.3	2.62	1.167	206	12.29	3.53	0.486
147	67.9	2.62	1.194	207	13.87	3.53	0.535
148	69.5	2.62	1.222	208	15.47	3.53	0.584
149	71.1	2.62	1.249	209	17.04	3.53	0.632
150	72.7	2.62	1.276	210	18.64	3.53	0.682
151	75.87	2.62	1.329	211	20.22	3.53	0.730
152	82.22	2.62	1.437	212	21.82	3.53	0.779
153	88.57	2.62	1.545	213	23.4	3.53	0.828
154	94.92	2.62	1.652	214	25	3.53	0.877
155	101.2	2.62	1.758	215	26.57	3.53	0.925
156	107.6	2.62	1.867	216	28.17	3.53	0.975
157	113.9	2.62	1.974	217	29.75	3.53	1.023
158	120.3	2.62	2.082	218	31.34	3.53	1.072
159	126.6	2.62	2.189	219	32.92	3.53	1.121
160	133	2.62	2.297	220	34.52	3.53	1.170
161	139.3	2.62	2.404	221	36.1	3.53	1.218
162	145.7	2.62	2.512	222	37.7	3.53	1.268
163	152	2.62	2.619	223	40.87	3.53	1.365
164	158.7	2.62	2.732	224	44.05	3.53	1.463
165	164.7	2.62	2.834	225	47.22	3.53	1.560

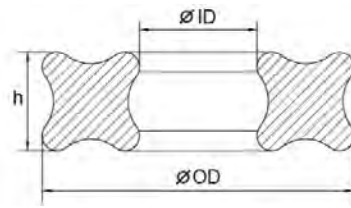
X-RING



NBR70

ITEM	ID	C/S	VOL(cm ³)	ITEM	ID	C/S	VOL(cm ³)
226	50.4	3.53	1.658	264	190.1	3.53	5.953
227	53.57	3.53	1.756	265	196.45	3.53	6.149
228	56.75	3.53	1.853	266	202.8	3.53	6.344
229	59.92	3.53	1.951	267	209.15	3.53	6.539
230	63.1	3.53	2.049	268	215.5	3.53	6.734
231	66.27	3.53	2.146	269	221.85	3.53	6.930
232	69.44	3.53	2.244	270	228.2	3.53	7.125
233	72.62	3.53	2.341	271	234.55	3.53	7.320
**234	75.79	3.53	2.439	272	240.9	3.53	7.515
235	78.97	3.53	2.537	273	247.25	3.53	7.711
236	82.14	3.53	2.634	274	253.6	3.53	7.906
237	85.32	3.53	2.732	275	266.3	3.53	8.296
238	88.49	3.53	2.829	276	279	3.53	8.687
239	91.67	3.53	2.927	277	291.7	3.53	9.077
240	94.84	3.53	3.025	278	304.4	3.53	9.468
241	98.02	3.53	3.122	279	329.8	3.53	10.249
242	101.19	3.53	3.220	280	355.2	3.53	11.030
243	104.37	3.53	3.318	281	380.6	3.53	11.811
244	107.54	3.53	3.415	282	405.26	3.53	12.569
245	110.72	3.53	3.513	283	430.66	3.53	13.350
246	113.89	3.53	3.610	284	456.06	5.33	32.342
247	117.07	3.53	3.708	309	10.46	5.33	1.107
248	120.24	3.53	3.805	310	12.07	5.33	1.220
249	123.42	3.53	3.903	311	13.64	5.33	1.330
250	126.59	3.53	4.001	312	15.24	5.33	1.442
251	129.77	3.53	4.098	313	16.81	5.33	1.552
252	132.94	3.53	4.196	314	18.42	5.33	1.665
253	136.12	3.53	4.294	315	19.99	5.33	1.775
254	139.3	3.53	4.391	316	21.59	5.33	1.887
255	142.47	3.53	4.489	317	23.16	5.33	1.997
256	145.65	3.53	4.587	318	24.77	5.33	2.110
257	148.82	3.53	4.684	319	26.34	5.33	2.220
258	152	3.53	4.782	320	27.94	5.33	2.332
259	158.35	3.53	4.977	321	29.51	5.33	2.442
260	164.7	3.53	5.172	322	31.12	5.33	2.555
261	171.05	3.53	5.368	323	32.69	5.33	2.665
262	177.4	3.53	5.563	324	34.29	5.33	2.777
263	183.75	3.53	5.758	325	37.47	5.33	3.000

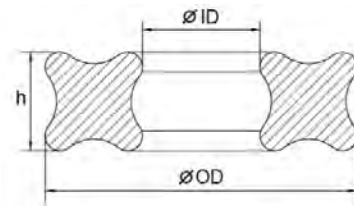
X-RING



NBR70

ITEM	ID	C/S	VOL(cm ³)	ITEM	ID	C/S	VOL(cm ³)
326	40.65	5.33	3.223	364	170.82	5.33	12.347
327	43.82	5.33	3.445	365	177.17	5.33	12.793
328	46.99	5.33	3.667	366	183.52	5.33	13.238
329	50.16	5.33	3.890	367	189.87	5.33	13.683
330	53.34	5.33	4.113	368	196.22	5.33	14.128
331	56.52	5.33	4.335	369	202.57	5.33	14.573
332	59.69	5.33	4.558	370	208.92	5.33	15.018
333	62.87	5.33	4.781	371	215.27	5.33	15.463
334	66.04	5.33	5.003	372	221.62	5.33	15.908
335	69.22	5.33	5.226	373	227.97	5.33	16.354
336	72.39	5.33	5.448	374	234.32	5.33	16.799
337	75.6	5.33	5.673	375	240.67	5.33	17.244
338	78.74	5.33	5.893	376	247.02	5.33	17.689
339	81.92	5.33	6.116	377	253.37	5.33	18.134
340	85.09	5.33	6.338	378	266.07	5.33	19.024
341	88.27	5.33	6.561	379	278.77	5.33	19.914
342	91.44	5.33	6.783	380	291.47	5.33	20.805
343	94.62	5.33	7.006	381	304.17	5.33	21.695
344	97.79	5.33	7.228	382	329.55	5.33	23.474
345	100.96	5.33	7.451	383	354.97	5.33	25.256
346	104.14	5.33	7.673	384	380.37	5.33	27.036
347	107.32	5.33	7.896	385	405.26	5.33	28.781
348	110.49	5.33	8.119	386	430.65	5.33	30.561
349	113.67	5.33	8.341	387	456.06	5.33	32.342
350	116.84	5.33	8.564	388	481.46	5.33	34.122
351	120.02	5.33	8.787	389	506.86	5.33	35.903
352	123.19	5.33	9.009	390	532.26	5.33	37.683
353	126.37	5.33	9.232	391	557.66	5.33	39.464
354	129.54	5.33	9.454	392	582.65	5.33	41.215
355	132.72	5.33	9.677	393	608.1	5.33	42.999
356	135.89	5.33	9.899	394	633.5	5.33	44.780
357	139.07	5.33	10.122	395	658.85	5.33	46.557
358	142.24	5.33	10.344	425	113.67	6.99	14.547
359	145.42	5.33	10.567	426	116.84	6.99	14.929
360	148.59	5.33	10.789	427	120.02	6.99	15.312
361	151.77	5.33	11.012	428	123.19	6.99	15.694
362	158.12	5.33	11.457	429	126.37	6.99	16.078
363	164.47	5.33	11.902	430	129.54	6.99	16.460

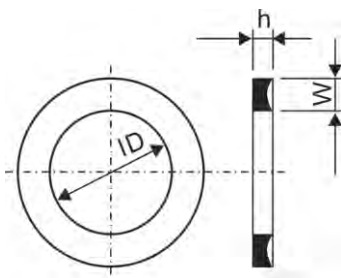
X-RING



NBR70

ITEM	ID	C/S	VOL(cm ³)	ITEM	ID	C/S	VOL(cm ³)
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432	135.89	6.99	17.225	455	329.57	6.99	40.575
433	139.07	6.99	17.609	456	342.27	6.99	42.106
434	142.24	6.99	17.991	457	354.97	6.99	43.637
435	145.42	6.99	18.374	458	367.67	6.99	45.168
436	148.59	6.99	18.756	459	380.37	6.99	46.699
437	151.77	6.99	19.140	460	393.03	6.99	48.226
438	158.12	6.99	19.905	461	405.26	6.99	49.700
439	164.47	6.99	20.671	462	417.96	6.99	51.231
440	170.82	6.99	21.436	463	430.66	6.99	52.762
441	177.17	6.99	22.202	464	443.36	6.99	54.293
442	183.52	6.99	22.968	465	456.06	6.99	55.824
443	189	6.99	23.628	466	468.76	6.99	57.355
444	196.22	6.99	24.499	467	481.46	6.99	58.887
445	202.57	6.99	25.264	468	494.16	6.99	60.418
446	215.27	6.99	26.795	469	506.86	6.99	61.949
447	227.97	6.99	28.326	470	532.26	6.99	65.011
448	240.67	6.99	29.857	471	557.66	6.99	68.073
449	253.37	6.99	31.388	472	582.65	6.99	71.086
450	266.07	6.99	32.920	473	608.1	6.99	74.154
451	278.77	6.99	34.451	474	633.5	6.99	77.216
452	291.47	6.99	35.982	475	658.85	6.99	80.272
453	304.17	6.99	37.513				

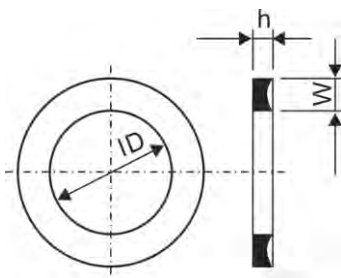
BACKUP RING—80 SERIES



NBR90

ITEM	ID	W	h	ITEM	ID	W	h
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005	3.23	1.35	1.24	043	89.36	1.35	1.24
006	3.56	1.35	1.24	044	95.71	1.35	1.24
007	4.34	1.35	1.24	045	102.06	1.35	1.24
008	5.13	1.35	1.24	046	108.41	1.35	1.24
009	5.94	1.35	1.24	047	114.76	1.35	1.24
010	6.73	1.35	1.24	048	121.11	1.35	1.24
011	8.31	1.35	1.24	049	127.46	1.35	1.24
012	9.91	1.35	1.24	050	133.81	1.35	1.24
013	11.56	1.35	1.24	102	1.96	2.18	1.35
014	13.16	1.35	1.24	103	2.77	2.18	1.35
015	14.73	1.35	1.24	104	3.56	2.18	1.35
016	16.33	1.35	1.24	105	4.34	2.18	1.35
017	17.91	1.35	1.24	106	5.13	2.18	1.35
018	19.51	1.35	1.24	107	5.91	2.18	1.35
019	21.08	1.35	1.24	108	6.73	2.18	1.35
020	22.68	1.35	1.24	109	8.31	2.18	1.35
021	24.26	1.35	1.24	110	9.91	2.18	1.35
022	25.86	1.35	1.24	111	11.48	2.18	1.35
023	27.43	1.35	1.24	112	13.08	2.18	1.35
024	29.03	1.35	1.24	113	14.66	2.18	1.35
025	30.61	1.35	1.24	114	16.26	2.18	1.35
026	32.21	1.35	1.24	115	17.83	2.18	1.35
027	33.78	1.35	1.24	116	19.43	2.18	1.35
028	35.38	1.35	1.24	117	21.11	2.18	1.35
029	38.56	1.35	1.24	118	22.68	2.18	1.35
030	41.73	1.35	1.24	119	24.28	2.18	1.35
031	44.91	1.35	1.24	120	25.86	2.18	1.35
032	48.08	1.35	1.24	121	27.46	2.18	1.35
033	51.26	1.35	1.24	122	29.03	2.18	1.35
034	54.43	1.35	1.24	123	30.63	2.18	1.35
035	57.61	1.35	1.24	124	32.21	2.18	1.35
036	60.78	1.35	1.24	125	33.81	2.18	1.35
037	63.96	1.35	1.24	126	35.38	2.18	1.35
038	67.13	1.35	1.24	127	36.98	2.18	1.35
039	70.31	1.35	1.24	128	38.56	2.18	1.35
040	73.48	1.35	1.24	129	40.16	2.18	1.35
041	76.66	1.35	1.24	130	41.73	2.18	1.35

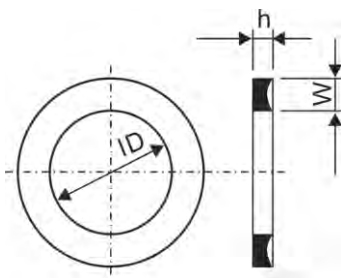
BACKUP RING—80 SERIES



NBR90

ITEM	ID	W	h	ITEM	ID	W	h
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132	44.91	2.18	1.35	170	197.31	2.18	1.35
133	46.51	2.18	1.35	171	203.66	2.18	1.35
134	48.08	2.18	1.35	172	210.01	2.18	1.35
135	49.68	2.18	1.35	173	216.36	2.18	1.35
136	51.26	2.18	1.35	174	222.71	2.18	1.35
137	52.86	2.18	1.35	175	229.06	2.18	1.35
138	54.43	2.18	1.35	176	235.41	2.18	1.35
139	56.03	2.18	1.35	177	241.76	2.18	1.35
140	57.61	2.18	1.35	178	248.11	2.18	1.35
141	59.21	2.18	1.35	201	5.13	3	1.27
142	60.78	2.18	1.35	202	6.73	3	1.27
143	62.38	2.18	1.35	203	8.31	3	1.27
144	63.96	2.18	1.35	204	9.91	3	1.27
145	65.56	2.18	1.35	205	11.56	3	1.27
146	67.13	2.18	1.35	206	13.16	3	1.27
147	68.73	2.18	1.35	207	14.73	3	1.27
148	70.31	2.18	1.35	208	16.33	3	1.27
149	71.91	2.18	1.35	209	17.91	3	1.27
150	73.48	2.18	1.35	210	19.46	3	1.27
151	76.66	2.18	1.35	211	21.03	3	1.27
152	83.01	2.18	1.35	212	22.63	3	1.27
153	89.36	2.18	1.35	213	24.21	3	1.27
154	95.71	2.18	1.35	214	25.81	3	1.27
155	102.06	2.18	1.35	215	27.38	3	1.27
156	108.41	2.18	1.35	216	28.98	3	1.27
157	114.76	2.18	1.35	217	30.56	3	1.27
158	121.11	2.18	1.35	218	32.16	3	1.27
159	127.46	2.18	1.35	219	33.88	3	1.27
160	133.81	2.18	1.35	220	35.48	3	1.27
161	140.16	2.18	1.35	221	37.06	3	1.27
162	146.51	2.18	1.35	222	38.66	3	1.27
163	152.86	2.18	1.35	223	41.83	3	1.27
164	159.21	2.18	1.35	224	45.01	3	1.27
165	165.56	2.18	1.35	225	48.18	3	1.27
166	171.91	2.18	1.35	226	51.36	3	1.27
167	178.26	2.18	1.35	227	54.53	3	1.27
168	184.61	2.18	1.35	228	57.71	3	1.27

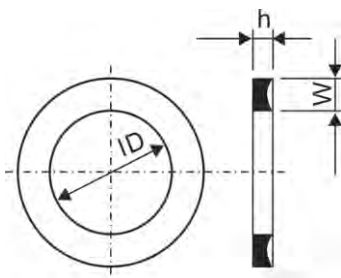
BACKUP RING—80 SERIES



NBR90

ITEM	ID	W	h	ITEM	ID	W	h
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230	64.06	3	1.27	268	216.36	3	1.27
231	66.83	3	1.27	269	222.71	3	1.27
232	70.00	3	1.27	270	229.06	3	1.27
233	73.18	3	1.27	271	235.41	3	1.27
234	76.35	3	1.27	272	241.76	3	1.27
235	79.53	3	1.27	273	248.11	3	1.27
236	82.70	3	1.27	274	254.46	3	1.27
237	85.88	3	1.27	275	267.16	3	1.27
238	89.05	3	1.27	276	279.86	3	1.27
239	92.23	3	1.27	277	292.56	3	1.27
240	95.40	3	1.27	278	305.26	3	1.27
241	98.58	3	1.27	279	330.66	3	1.27
242	101.75	3	1.27	280	356.06	3	1.27
243	104.93	3	1.27	281	381.46	3	1.27
244	108.10	3	1.27	282	406.12	3	1.27
245	111.28	3	1.27	283	431.52	3	1.27
246	114.45	3	1.27	284	456.92	3	1.27
247	117.63	3	1.27	309	11.43	4.65	1.93
248	121.11	3	1.27	310	13.03	4.65	1.93
249	124.28	3	1.27	311	14.61	4.65	1.93
250	127.46	3	1.27	312	16.21	4.65	1.93
251	130.63	3	1.27	313	17.78	4.65	1.93
252	133.81	3	1.27	314	19.38	4.65	1.93
253	136.98	3	1.27	315	20.96	4.65	1.93
254	140.16	3	1.27	316	22.56	4.65	1.93
255	143.33	3	1.27	317	24.13	4.65	1.93
256	146.51	3	1.27	318	25.74	4.65	1.93
257	149.68	3	1.27	319	27.31	4.65	1.93
258	152.86	3	1.27	320	28.91	4.65	1.93
259	159.21	3	1.27	321	30.42	4.65	1.93
260	165.56	3	1.27	322	32.08	4.65	1.93
261	171.91	3	1.27	323	33.43	4.65	1.93
262	178.26	3	1.27	324	35.26	4.65	1.93
263	184.61	3	1.27	325	38.43	4.65	1.93
264	190.96	3	1.27	326	41.61	4.65	1.93
265	197.31	3	1.27	327	44.78	4.65	1.93
266	203.66	3	1.27	328	47.96	4.65	1.93

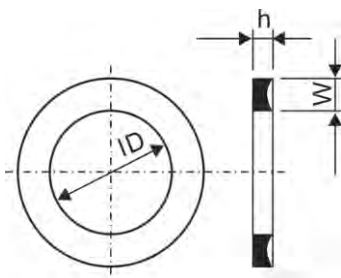
BACKUP RING—80 SERIES



NBR90

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331	57.61	4.65	1.93	369	203.91	4.65	1.93
332	60.78	4.65	1.93	370	210.26	4.65	1.93
333	63.96	4.65	1.93	371	216.61	4.65	1.93
334	67.13	4.65	1.93	372	222.96	4.65	1.93
335	70.31	4.65	1.93	373	229.31	4.65	1.93
336	73.48	4.65	1.93	374	235.66	4.65	1.93
337	76.66	4.65	1.93	375	242.01	4.65	1.93
338	79.83	4.65	1.93	376	248.36	4.65	1.93
339	83.13	4.65	1.93	377	254.71	4.65	1.93
340	86.31	4.65	1.93	378	267.41	4.65	1.93
341	89.48	4.65	1.93	379	280.11	4.65	1.93
342	92.66	4.65	1.93	380	292.81	4.65	1.93
343	95.83	4.65	1.93	381	305.51	4.65	1.93
344	99.01	4.65	1.93	382	330.91	4.65	1.93
345	102.31	4.65	1.93	383	356.31	4.65	1.93
346	105.49	4.65	1.93	384	381.71	4.65	1.93
347	108.66	4.65	1.93	385	406.60	4.65	1.93
348	111.84	4.65	1.93	386	432.00	4.65	1.93
349	115.01	4.65	1.93	387	457.40	4.65	1.93
350	118.19	4.65	1.93	388	482.75	4.65	1.93
351	121.36	4.65	1.93	389	508.15	4.65	1.93
352	124.54	4.65	1.93	390	533.55	4.65	1.93
353	127.71	4.65	1.93	391	558.95	4.65	1.93
354	130.89	4.65	1.93	392	584.02	4.65	1.93
355	134.06	4.65	1.93	393	609.42	4.65	1.93
356	137.24	4.65	1.93	394	634.82	4.65	1.93
357	140.41	4.65	1.93	395	660.22	4.65	1.93
358	143.59	4.65	1.93	425	115.60	5.99	2.97
359	146.76	4.65	1.93	426	118.77	5.99	2.97
360	149.94	4.65	1.93	427	121.95	5.99	2.97
361	153.11	4.65	1.93	428	125.12	5.99	2.97
362	159.46	4.65	1.93	429	128.30	5.99	2.97
363	165.81	4.65	1.93	430	131.47	5.99	2.97
364	172.16	4.65	1.93	431	134.65	5.99	2.97
365	178.51	4.65	1.93	432	137.82	5.99	2.97
366	184.86	4.65	1.93	433	141.00	5.99	2.97

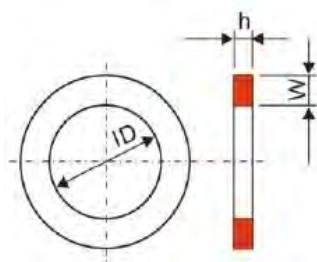
BACKUP RING—80 SERIES



NBR90

ITEM	ID	W	h	ITEM	ID	W	h
434	144.17	5.99	2.97	455	330.81	5.99	2.97
435	147.35	5.99	2.97	456	343.51	5.99	2.97
436	150.52	5.99	2.97	457	356.21	5.99	2.97
437	153.70	5.99	2.97	458	368.91	5.99	2.97
438	159.36	5.99	2.97	459	381.61	5.99	2.97
439	165.71	5.99	2.97	460	394.31	5.99	2.97
440	172.06	5.99	2.97	461	406.50	5.99	2.97
441	178.41	5.99	2.97	462	419.20	5.99	2.97
442	184.76	5.99	2.97	463	431.90	5.99	2.97
443	191.11	5.99	2.97	464	444.60	5.99	2.97
444	197.46	5.99	2.97	465	457.30	5.99	2.97
445	203.81	5.99	2.97	466	470.00	5.99	2.97
446	216.51	5.99	2.97	467	482.70	5.99	2.97
447	229.21	5.99	2.97	468	495.40	5.99	2.97
448	241.91	5.99	2.97	469	508.10	5.99	2.97
449	254.61	5.99	2.97	470	533.50	5.99	2.97
450	267.31	5.99	2.97	471	558.90	5.99	2.97
451	280.01	5.99	2.97	472	584.30	5.99	2.97
452	292.71	5.99	2.97	473	609.70	5.99	2.97
453	305.41	5.99	2.97	474	635.10	5.99	2.97
454	318.11	5.99	2.97	475	660.50	5.99	2.97

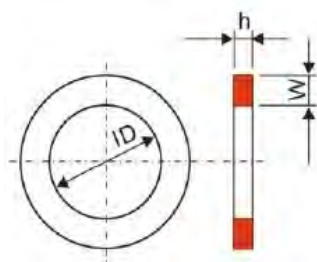
BACKUP RING—AS-568 SERIES



APPLICATION	
MATERIAL	HYTREL
TEMP.	-55°C~100°C

ITEM	ID	OD	h	ITEM	ID	OD	h
008	5.371	7.809	1.14	115	18.065	22.079	1.25
009	6.157	8.595	1.14	116	19.636	23.65	1.25
010	6.968	9.406	1.14	117	21.232	25.246	1.25
011	8.538	10.976	1.14	118	22.803	26.817	1.25
012	10.135	12.573	1.14	119	24.399	28.413	1.25
013	11.705	14.143	1.14	120	25.97	29.984	1.25
014	13.302	15.74	1.14	121	27.566	31.58	1.25
015	14.873	17.311	1.14	122	29.137	33.151	1.25
016	16.469	18.907	1.14	123	30.733	34.747	1.25
017	18.04	20.478	1.14	124	32.304	36.318	1.25
018	19.636	22.074	1.14	125	33.9	37.914	1.25
019	21.207	23.645	1.14	126	35.471	39.485	1.25
020	22.803	25.241	1.14	127	37.067	41.081	1.25
021	24.374	26.812	1.14	128	38.638	42.652	1.25
022	25.970	28.408	1.14	129	40.234	44.248	1.25
023	27.541	29.979	1.14	130	41.805	45.819	1.25
024	29.137	31.575	1.14	131	43.401	47.415	1.25
025	30.708	33.146	1.14	132	44.972	48.986	1.25
026	32.304	34.742	1.14	133	46.568	50.582	1.25
027	33.875	36.313	1.14	134	48.139	52.153	1.25
028	35.471	37.909	1.14	136	51.306	55.32	1.25
029	38.638	41.076	1.14	137	52.903	56.917	1.25
030	41.805	44.243	1.14	140	57.641	61.655	1.25
031	44.972	47.41	1.14	141	59.237	63.251	1.25
032	48.139	50.577	1.14	142	60.808	64.822	1.25
033	51.306	53.744	1.14	143	62.404	66.418	1.25
034	54.473	56.911	1.14	144	63.975	67.989	1.25
035	57.641	60.079	1.14	145	65.571	69.585	1.25
036	60.808	63.246	1.14	146	67.142	71.156	1.25
040	73.476	75.914	1.14	147	68.738	72.752	1.25
043	89.311	91.749	1.14	148	70.309	74.323	1.25
110	10.135	14.149	1.25	149	71.905	75.919	1.25
111	11.731	15.745	1.25	152	82.977	86.991	1.25
112	13.302	17.316	1.25	153	89.311	93.325	1.25
113	14.898	18.912	1.25	154	95.645	99.659	1.25
114	16.469	20.483	1.25	155	101.979	105.993	1.25

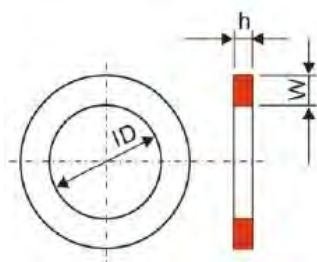
BACKUP RING—AS-568 SERIES



APPLICATION	
MATERIAL	HYTREL
TEMP.	-55°C~100°C

ITEM	ID	OD	h	ITEM	ID	OD	h
159	127.316	131.33	1.25	241	98.888	104.426	1.25
160	133.65	137.664	1.25	242	102.055	107.593	1.25
163	152.652	156.666	1.25	243	104.589	110.127	1.25
206	13.378	18.916	1.25	244	108.39	113.928	1.25
209	18.116	23.654	1.25	245	111.557	117.095	1.25
210	19.712	25.25	1.25	246	114.724	120.262	1.25
211	21.283	26.821	1.25	247	117.891	123.429	1.25
212	22.879	28.417	1.25	248	121.058	126.596	1.25
213	24.45	29.988	1.25	249	124.225	129.763	1.25
214	26.046	31.584	1.25	250	127.932	133.47	1.25
215	27.617	33.155	1.25	251	130.559	136.097	1.25
216	29.213	34.751	1.25	252	133.726	139.264	1.25
217	30.784	36.322	1.25	253	136.893	142.431	1.25
218	32.38	37.918	1.25	254	140.06	145.598	1.25
219	33.951	39.489	1.25	255	143.227	148.765	1.25
220	35.547	41.085	1.25	256	146.394	151.932	1.25
221	37.118	42.656	1.25	257	149.561	155.099	1.25
222	38.714	44.252	1.25	258	152.728	158.266	1.25
223	41.881	47.419	1.25	259	159.063	164.601	1.25
224	45.048	50.586	1.25	260	165.397	170.935	1.25
225	48.215	53.753	1.25	261	171.731	177.269	1.25
226	51.382	56.92	1.25	262	178.065	183.603	1.25
227	54.549	60.087	1.25	263	184.399	189.937	1.25
228	57.717	63.255	1.25	264	190.733	196.271	1.25
229	60.884	66.422	1.25	265	197.067	202.605	1.25
230	64.051	69.589	1.25	266	203.401	208.939	1.25
231	67.218	72.756	1.25	267	209.736	215.274	1.25
232	70.385	75.923	1.25	268	216.07	221.608	1.25
233	73.552	79.09	1.25	269	222.404	227.942	1.25
234	76.719	82.257	1.25	270	228.738	234.276	1.25
235	79.886	85.424	1.25	271	235.072	240.61	1.25
236	83.053	88.591	1.25	272	241.406	246.944	1.25
237	86.22	91.758	1.25	273	247.74	253.278	1.25
238	89.387	94.925	1.25	274	254.074	259.612	1.25
239	92.554	98.092	1.25	279	330.084	335.622	1.25
240	95.721	101.259	1.25	309	11.959	20.443	1.7

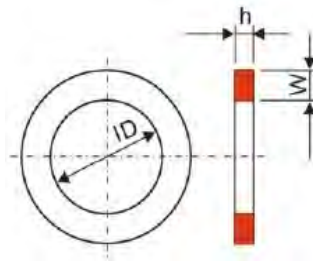
BACKUP RING—AS-568 SERIES



APPLICATION	
MATERIAL	HYTREL
TEMP.	-55°C~100°C

ITEM	ID	OD	h	ITEM	ID	OD	h
316	23.056	31.59	1.7	357	140.238	148.772	1.7
318	26.223	34.757	1.7	358	143.405	151.939	1.7
322	32.557	41.091	1.7	359	146.572	155.106	1.7
324	35.72	44.2	1.7	361	152.906	161.44	1.7
325	38.892	47.426	1.7	370	209.913	218.447	1.7
326	42.059	50.593	1.7	425	115.230	123.764	2.4
327	45.226	53.76	1.7	426	118.397	126.931	2.4
328	48.393	56.927	1.7	427	121.565	130.099	2.4
329	51.56	60.094	1.7	428	124.732	133.266	2.4
330	54.727	63.261	1.7	429	127.899	136.433	2.4
331	57.894	66.428	1.7	430	131.066	139.6	2.4
332	61.061	69.595	1.7	431	134.233	142.767	2.4
333	64.228	72.762	1.7	432	137.400	145.934	2.4
334	67.395	75.929	1.7	433	140.567	149.101	2.4
335	70.562	79.096	1.7	434	143.734	152.268	2.4
336	73.729	82.263	1.7	435	146.901	155.435	2.4
337	76.896	85.43	1.7	436	150.068	158.602	2.4
338	80.063	88.597	1.7	437	153.235	161.769	2.4
339	83.23	91.764	1.7	438	159.569	168.103	2.4
340	86.397	94.931	1.7	439	165.903	174.437	2.4
341	89.565	98.099	1.7	440	172.238	183.618	2.4
342	92.732	101.266	1.7	441	178.572	189.952	2.4
343	95.899	104.433	1.7	442	184.906	196.286	2.4
344	99.066	107.6	1.7	443	191.24	202.62	2.4
345	102.233	110.767	1.7	444	197.574	208.954	2.4
346	105.400	113.934	1.7	445	203.908	215.288	2.4
347	108.567	117.101	1.7	446	216.576	227.956	2.4
348	111.734	120.268	1.7	447	229.245	240.625	2.4
349	114.901	123.435	1.7	448	241.913	253.293	2.4
350	118.068	126.602	1.7	449	254.581	265.961	2.4
351	121.235	129.769	1.7	450	267.249	278.629	2.4
352	124.402	132.936	1.7	451	279.918	291.298	2.4
353	127.569	136.103	1.7	452	292.586	303.966	2.4
354	130.736	139.27	1.7	453	305.254	316.634	2.4
355	133.903	142.437	1.7	454	317.922	326.456	2.4
356	137.07	145.604	1.7	455	330.591	339.125	2.4

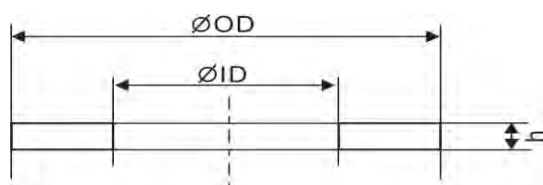
BACKUP RING—AS-568 SERIES



APPLICATION	
MATERIAL	HYTREL
TEMP.	-55°C~100°C

ITEM	ID	OD	h	ITEM	ID	OD	h
456	343.259	351.793	2.4	459	381.264	289.798	2.4
457	355.927	364.461	2.4	460	393.932	402.466	2.4
458	368.595	377.129	2.4				

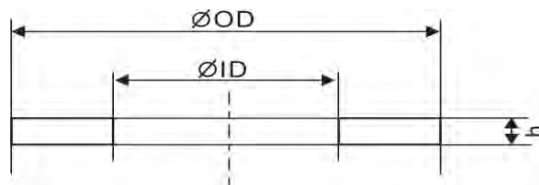
HY-P BACKUP RING



APPLICATION	
MATERIAL	HY
TEMP.	-40°C~100°C

ITEM	ID	OD	h	ITEM	ID	OD	h
HY-P-003	3	6	1.25	HY-P-039	39	45	1.25
HY-P-004	4	7	1.25	HY-P-040	40	46	1.25
HY-P-005	5	8	1.25	HY-P-041	41	47	1.25
HY-P-006	6	9	1.25	HY-P-042	42	48	1.25
HY-P-007	7	10	1.25	HY-P-044	44	50	1.25
HY-P-008	8	11	1.25	HY-P-045	45	51	1.25
HY-P-009	9	12	1.25	HY-P-046	46	52	1.25
HY-P-010	10	13	1.25	HY-P-048	48	54	1.25
HY-P-010	10	14	1.25	HY-P-049	49	55	1.25
HY-P-011	11	15	1.25	HY-P-050	50	56	1.25
HY-P-011.2	11.2	15.2	1.25	HY-P-048	48	58	1.9
HY-P-012	12	16	1.25	HY-P-050A	50	60	1.9
HY-P-012.5	12.5	16.5	1.25	HY-P-052	52	62	1.9
HY-P-014	14	18	1.25	HY-P-053	53	63	1.9
HY-P-015	15	19	1.25	HY-P-055	55	65	1.9
HY-P-016	16	20	1.25	HY-P-056	56	66	1.9
HY-P-018	18	22	1.25	HY-P-058	58	68	1.9
HY-P-020	20	24	1.25	HY-P-060	60	70	1.9
HY-P-021	21	25	1.25	HY-P-062	62	72	1.9
HY-P-022	22	26	1.25	HY-P-063	63	73	1.9
HY-P-022	22	28	1.25	HY-P-065	65	75	1.9
HY-P-022.4	22.4	28.4	1.25	HY-P-067	67	77	1.9
HY-P-024	24	30	1.25	HY-P-070	70	80	1.9
HY-P-025	25	31	1.25	HY-P-071	71	81	1.9
HY-P-025.5	25.5	31.5	1.25	HY-P-075	75	85	1.9
HY-P-026	26	32	1.25	HY-P-080	80	90	1.9
HY-P-028	28	34	1.25	HY-P-085	85	95	1.9
HY-P-029	29	35	1.25	HY-P-090	90	100	1.9
HY-P-029.5	29.5	35.5	1.25	HY-P-095	95	105	1.9
HY-P-030	30	36	1.25	HY-P-100	100	110	1.9
HY-P-031	31	37	1.25	HY-P-102	102	112	1.9
HY-P-031.5	31.5	37.5	1.25	HY-P-105	105	115	1.9
HY-P-032	32	38	1.25	HY-P-110	110	120	1.9
HY-P-034	34	40	1.25	HY-P-112	112	122	1.9
HY-P-035	35	41	1.25	HY-P-115	115	125	1.9
HY-P-035.5	35.5	41.5	1.25	HY-P-120	120	130	1.9
HY-P-036	36	42	1.25	HY-P-125	125	135	1.9
HY-P-038	38	44	1.25	HY-P-130	130	140	1.9

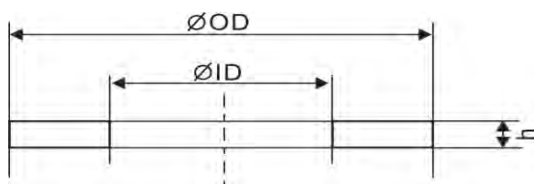
HY-P BACKUP RING



APPLICATION	
MATERIAL	HY
TEMP.	-40°C~100°C

ITEM	ID	OD	h	ITEM	ID	OD	h
HY-P-132	132	142	1.9	HY-P-235	235	250	2.1
HY-P-135	135	145	1.9	HY-P-240	240	255	2.1
HY-P-140	140	150	1.9	HY-P-245	245	260	2.1
HY-P-145	145	155	1.9	HY-P-250	250	265	2.1
HY-P-150	150	160	1.9	HY-P-255	255	270	2.1
HY-P-150A	150	165	2.1	HY-P-260	260	275	2.1
HY-P-155	155	170	2.1	HY-P-265	265	280	2.1
HY-P-160	160	175	2.1	HY-P-270	270	285	2.1
HY-P-165	165	180	2.1	HY-P-275	275	290	2.1
HY-P-170	170	185	2.1	HY-P-280	280	295	2.1
HY-P-175	175	190	2.1	HY-P-285	285	300	2.1
HY-P-180	180	195	2.1	HY-P-290	290	305	2.1
HY-P-185	185	200	2.1	HY-P-295	295	310	2.1
HY-P-190	190	205	2.1	HY-P-300	300	315	2.1
HY-P-195	195	210	2.1	HY-P-315	315	330	2.1
HY-P-200	200	215	2.1	HY-P-320	320	335	2.1
HY-P-205	205	220	2.1	HY-P-335	335	350	2.1
HY-P-209	209	224	2.1	HY-P-340	340	355	2.1
HY-P-210	210	225	2.1	HY-P-355	355	370	2.1
HY-P-215	215	230	2.1	HY-P-360	360	375	2.1
HY-P-220	220	235	2.1	HY-P-375	375	390	2.1
HY-P-225	225	240	2.1	HY-P-385	385	400	2.1
HY-P-230	230	245	2.1	HY-P-400	400	415	2.1

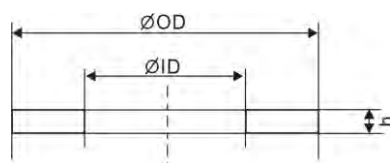
HY-G BACKUP RING



APPLICATION	
MATERIAL	HY
TEMP.	-40°C~100°C

ITEM	ID	OD	h	ITEM	ID	OD	h
HY-G-025	25	30	1.25	HY-G-140	140	145	1.25
HY-G-030	30	35	1.25	HY-G-145	145	150	1.25
HY-G-035	35	40	1.25	HY-G-150	150	160	1.9
HY-G-040	40	45	1.25	HY-G-155	155	165	1.9
HY-G-045	45	50	1.25	HY-G-160	160	170	1.9
HY-G-050	50	55	1.25	HY-G-165	165	175	1.9
HY-G-055	55	60	1.25	HY-G-170	170	180	1.9
HY-G-060	60	65	1.25	HY-G-175	175	185	1.9
HY-G-065	65	70	1.25	HY-G-180	180	190	1.9
HY-G-070	70	75	1.25	HY-G-185	185	195	1.9
HY-G-075	75	80	1.25	HY-G-190	190	200	1.9
HY-G-080	80	85	1.25	HY-G-195	195	205	1.9
HY-G-085	85	90	1.25	HY-G-200	200	210	1.9
HY-G-090	90	95	1.25	HY-G-210	210	220	1.9
HY-G-095	95	100	1.25	HY-G-220	220	230	1.9
HY-G-100	100	105	1.25	HY-G-230	230	240	1.9
HY-G-105	105	110	1.25	HY-G-240	240	250	1.9
HY-G-110	110	115	1.25	HY-G-250	250	260	1.9
HY-G-115	115	120	1.25	HY-G-260	260	270	1.9
HY-G-120	120	125	1.25	HY-G-270	270	280	1.9
HY-G-125	125	130	1.25	HY-G-280	280	290	1.9
HY-G-130	130	135	1.25	HY-G-290	290	300	1.9
HY-G-135	135	140	1.25	HY-G-300	300	310	1.9

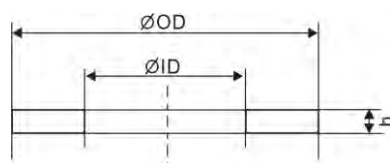
BACKUP RING—4F-P SERIES



APPLICATION	
MATERIAL	PTFE
TEMP.	-55°C ~200°C

ITEM	ID	OD	W	h	ITEM	ID	OD	W	h
4F-P-003	3	6	1.5	1.25	4F-P-038	38	44	3	1.25
4F-P-004	4	7	1.5	1.25	4F-P-039	39	45	3	1.25
4F-P-005	5	8	1.5	1.25	4F-P-040	40	46	3	1.25
4F-P-006	6	9	1.5	1.25	4F-P-041	41	47	3	1.25
4F-P-007	7	10	1.5	1.25	4F-P-042	42	48	3	1.25
4F-P-008	8	11	1.5	1.25	4F-P-044	44	50	3	1.25
4F-P-009	9	12	1.5	1.25	4F-P-045	45	51	3	1.25
4F-P-010	10	13	1.5	1.25	4F-P-046	46	52	3	1.25
4F-P-010A	10	14	2	1.25	4F-P-048	48	54	3	1.25
4F-P-011	11	15	2	1.25	4F-P-049	49	55	3	1.25
4F-P-011.2	11.2	15.2	2	1.25	4F-P-050	50	56	3	1.25
4F-P-012	12	16	2	1.25	4F-P-048	48	58	5	1.9
4F-P-012.5	12.5	16.5	2	1.25	4F-P-050A	50	60	5	1.9
4F-P-014	14	18	2	1.25	4F-P-052	52	62	5	1.9
4F-P-015	15	19	2	1.25	4F-P-053	53	63	5	1.9
4F-P-016	16	20	2	1.25	4F-P-055	55	65	5	1.9
4F-P-018	18	22	2	1.25	4F-P-056	56	66	5	1.9
4F-P-020	20	24	2	1.25	4F-P-058	58	68	5	1.9
4F-P-021	21	25	2	1.25	4F-P-060	60	70	5	1.9
4F-P-022	22	26	2	1.25	4F-P-062	62	72	5	1.9
4F-P-022A	22	28.1	3.05	1.25	4F-P-063	63	73	5	1.9
4F-P-022.4	22.4	28.4	3	1.25	4F-P-065	65	75	5	1.9
4F-P-024	24	30	3	1.25	4F-P-067	67	77	5	1.9
4F-P-025	25	31	3	1.25	4F-P-070	70	80	5	1.9
4F-P-025.5	25.5	31.5	3	1.25	4F-P-071	71	81	5	1.9
4F-P-026	26	32	3	1.25	4F-P-075	75	85	5	1.9
4F-P-028	28	34	3	1.25	4F-P-080	80	90	5	1.9
4F-P-029	29	35	3	1.25	4F-P-085	85	95	5	1.9
4F-P-029.5	29.5	35.5	3	1.25	4F-P-090	90	100	5	1.9
4F-P-030	30	36	3	1.25	4F-P-095	95	105	5	1.9
4F-P-031	31	37	3	1.25	4F-P-100	100	110	5	1.9
4F-P-031.5	31.5	37.5	3	1.25	4F-P-102	102	112	5	1.9
4F-P-032	32	38	3	1.25	4F-P-105	105	115	5	1.9
4F-P-034	34	40	3	1.25	4F-P-110	110	120	5	1.9
4F-P-035	35	41	3	1.25	4F-P-112	112	122	5	1.9
4F-P-035.5	35.5	41.5	3	1.25	4F-P-115	115	125	5	1.9
4F-P-036	36	42	3	1.25	4F-P-120	120	130	5	1.9

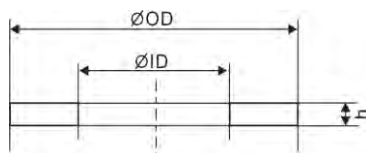
BACKUP RING—4F-P SERIES



APPLICATION	
MATERIAL	PTFE
TEMP.	-55°C ~200°C

ITEM	ID	OD	W	h	ITEM	ID	OD	W	h
4F-P-125	125	135	5	1.9	4F-P-230	230	245	7.5	2.75
4F-P-130	130	140	5	1.9	4F-P-235	235	250	7.5	2.75
4F-P-132	132	142	5	1.9	4F-P-240	240	255	7.5	2.75
4F-P-135	135	145	5	1.9	4F-P-245	245	260	7.5	2.75
4F-P-140	140	150	5	1.9	4F-P-250	250	265	7.5	2.75
4F-P-145	145	155	5	1.9	4F-P-255	255	270	7.5	2.75
4F-P-150	150	160	5	1.9	4F-P-260	260	275	7.5	2.75
4F-P-150A	150	165	7.5	2.75	4F-P-265	265	280	7.5	2.75
4F-P-155	155	170	7.5	2.75	4F-P-270	270	285	7.5	2.75
4F-P-160	160	175	7.5	2.75	4F-P-275	275	290	7.5	2.75
4F-P-165	165	180	7.5	2.75	4F-P-280	280	295	7.5	2.75
4F-P-170	170	185	7.5	2.75	4F-P-285	285	300	7.5	2.75
4F-P-175	175	190	7.5	2.75	4F-P-290	290	305	7.5	2.75
4F-P-180	180	195	7.5	2.75	4F-P-295	295	310	7.5	2.75
4F-P-185	185	200	7.5	2.75	4F-P-300	300	315	7.5	2.75
4F-P-190	190	205	7.5	2.75	4F-P-315	315	330	7.5	2.75
4F-P-195	195	210	7.5	2.75	4F-P-320	320	335	7.5	2.75
4F-P-200	200	215	7.5	2.75	4F-P-335	335	350	7.5	2.75
4F-P-205	205	220	7.5	2.75	4F-P-340	340	355	7.5	2.75
4F-P-209	209	224	7.5	2.75	4F-P-355	355	370	7.5	2.75
4F-P-210	210	225	7.5	2.75	4F-P-360	360	375	7.5	2.75
4F-P-215	215	230	7.5	2.75	4F-P-375	375	390	7.5	2.75
4F-P-220	220	235	7.5	2.75	4F-P-385	385	400	7.5	2.75
4F-P-225	225	240	7.5	2.75	4F-P-400	400	415	7.5	2.75

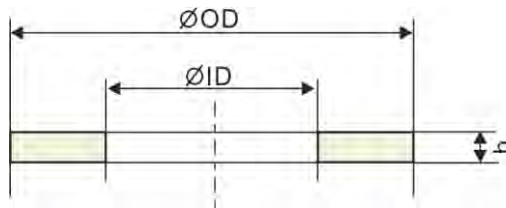
BACKUP RING—4F-G SERIES



APPLICATION	
MATERIAL	PTFE
TEMP.	-55°C~200°C

ITEM	ID	OD	W	h	ITEM	ID	OD	W	h
4F-G-025	25	30	2.5	1.25	4F-G-140	140	145	2.5	1.25
4F-G-030	30	35	2.5	1.25	4F-G-145	145	150	2.5	1.25
4F-G-035	35	40	2.5	1.25	4F-G-150	150	160	5	1.9
4F-G-040	40	45	2.5	1.25	4F-G-155	155	165	5	1.9
4F-G-045	45	50	2.5	1.25	4F-G-160	160	170	5	1.9
4F-G-050	50	55	2.5	1.25	4F-G-165	165	175	5	1.9
4F-G-055	55	60	2.5	1.25	4F-G-170	170	180	5	1.9
4F-G-060	60	65	2.5	1.25	4F-G-175	175	185	5	1.9
4F-G-065	65	70	2.5	1.25	4F-G-180	180	190	5	1.9
4F-G-070	70	75	2.5	1.25	4F-G-185	185	195	5	1.9
4F-G-075	75	80	2.5	1.25	4F-G-190	190	200	5	1.9
4F-G-080	80	85	2.5	1.25	4F-G-195	195	205	5	1.9
4F-G-085	85	90	2.5	1.25	4F-G-200	200	210	5	1.9
4F-G-090	90	95	2.5	1.25	4F-G-210	210	220	5	1.9
4F-G-095	95	100	2.5	1.25	4F-G-220	220	230	5	1.9
4F-G-100	100	105	2.5	1.25	4F-G-230	230	240	5	1.9
4F-G-105	105	110	2.5	1.25	4F-G-240	240	250	5	1.9
4F-G-110	110	115	2.5	1.25	4F-G-250	250	260	5	1.9
4F-G-115	115	120	2.5	1.25	4F-G-260	260	270	5	1.9
4F-G-120	120	125	2.5	1.25	4F-G-270	270	280	5	1.9
4F-G-125	125	130	2.5	1.25	4F-G-280	280	290	5	1.9
4F-G-130	130	135	2.5	1.25	4F-G-290	290	300	5	1.9
4F-G-135	135	140	2.5	1.25	4F-G-300	300	310	5	1.9

BACKUP RING—POLYURETHANE P,G SERIES(PU)



APPLICATION	
MATERIAL	PU
TEMP.	-35℃~100℃

ITEM	ID	OD	h
PU-P-018	18	22	1.25
PU-P-045	45	51	1.25
PU-P-075	75	85	1.9
PU-P-090	90	100	1.9
PU-P-100	100	110	1.9
PU-P-145	145	155	1.9
PU-P-145	145	160	2.1
PU-P-215	215	230	2.1
PU-P-235	235	250	2.1
PU-P-155	155	170	2.5
PU-P-170	170	185	2.75
PU-G-035	35	40	1.25
PU-G-040	40	45	1.25
PU-G-045	45	50	1.25

O-RING KIT—AS-568 SERIES



ITEM	SPECIFICATION
KIT-AS568-NBR70	RED CASE, 378PCS
KIT-AS568-NBR90	RED CASE, 378PCS

INCLUDING 30 SIZES,TOTAL 378PCS,DETAILS AS BELOW:

ITEM	ID	OD	C/S	Q'TY
AS-006	2.90	6.46	1.78	18
AS-007	3.68	7.25	1.78	18
AS-008	4.47	8.03	1.78	20
AS-009	5.28	8.84	1.78	20
AS-010	6.07	9.63	1.78	20
AS-011	7.65	11.21	1.78	20
AS-012	9.25	12.81	1.78	20
AS-110	9.19	14.44	2.62	13
AS-111	10.77	16.01	2.62	13
AS-112	12.37	17.61	2.62	13
AS-113	13.95	19.19	2.62	13
AS-114	15.54	20.78	2.62	13
AS-115	17.12	22.36	2.62	13
AS-116	18.72	23.96	2.62	13
AS-210	18.64	25.70	3.53	10
AS-211	20.22	27.28	3.53	10
AS-212	21.82	28.88	3.53	10
AS-213	23.40	30.46	3.53	10
AS-214	24.99	32.06	3.53	10
AS-215	26.57	33.63	3.53	10
AS-216	28.17	35.23	3.53	10
AS-217	29.75	36.81	3.53	10
AS-218	31.34	38.40	3.53	10
AS-219	32.92	39.98	3.53	10
AS-220	34.52	41.58	3.53	10
AS-221	36.10	43.16	3.53	10
AS-222	37.69	44.76	3.53	10
AS-325	37.46	48.15	5.33	7
AS-326	40.64	51.33	5.33	7
AS-327	43.82	54.50	5.33	7

O-RING KIT—AS-568 SERIES



ITEM		SPECIFICATION		
KIT-AS568-FKM75		BLUE CASE, 378PCS		
INCLUDING 30 SIZES,TOTAL 378PCS,DETAILS AS BELOW:				
ITEM	ID	OD	C/S	Q'TY
AS-006	2.90	6.46	1.78	18
AS-007	3.68	7.25	1.78	18
AS-008	4.47	8.03	1.78	20
AS-009	5.28	8.84	1.78	20
AS-010	6.07	9.63	1.78	20
AS-011	7.65	11.21	1.78	20
AS-012	9.25	12.81	1.78	20
AS-110	9.19	14.44	2.62	13
AS-111	10.77	16.01	2.62	13
AS-112	12.37	17.61	2.62	13
AS-113	13.95	19.19	2.62	13
AS-114	15.54	20.78	2.62	13
AS-115	17.12	22.36	2.62	13
AS-116	18.72	23.96	2.62	13
AS-210	18.64	25.70	3.53	10
AS-211	20.22	27.28	3.53	10
AS-212	21.82	28.88	3.53	10
AS-213	23.40	30.46	3.53	10
AS-214	24.99	32.06	3.53	10
AS-215	26.57	33.63	3.53	10
AS-216	28.17	35.23	3.53	10
AS-217	29.75	36.81	3.53	10
AS-218	31.34	38.40	3.53	10
AS-219	32.92	39.98	3.53	10
AS-220	34.52	41.58	3.53	10
AS-221	36.10	43.16	3.53	10
AS-222	37.69	44.76	3.53	10
AS-325	37.46	48.15	5.33	7
AS-326	40.64	51.33	5.33	7
AS-327	43.82	54.50	5.33	7

O-RING KIT—JIS P&G SERIES



ITEM	SPECIFICATION
KIT-JIS P&G-NBR70	YELLOW CASE, 394PCS
KIT-JIS P&G-NBR90	YELLOW CASE, 388PCS

INCLUDING 30 SIZES,TOTAL 394(388)PCS,DETAILS AS BELOW :

ITEM	ID	OD	C/S	NBR70	NBR90
				Q'TY	Q'TY
P-003	2.80	6.60	1.90	20	18
P-004	3.80	7.60	1.90	20	18
P-005	4.80	8.60	1.90	18	18
P-006	5.80	9.60	1.90	18	18
P-007	6.80	10.60	1.90	18	17
P-008	7.80	11.60	1.90	18	18
P-009	8.80	12.60	1.90	18	18
P-010A	9.80	14.60	2.40	14	14
P-011	10.80	15.60	2.40	14	14
P-012	11.80	16.60	2.40	14	14
P-014	13.80	18.60	2.40	14	14
P-016	15.80	20.60	2.40	14	14
P-018	17.80	22.60	2.40	14	14
P-020	19.80	24.60	2.40	13	13
	20.00	26.00	3.00	11	11
	22.00	28.00	3.00	11	11
P-022.4	22.10	29.10	3.50	10	10
G-025	24.40	30.60	3.10	11	11
P-025	24.70	31.70	3.50	10	10
P-026	25.70	32.70	3.50	10	9
G-030	29.40	35.60	3.10	11	11
P-030	29.70	36.70	3.50	10	10
P-032	31.70	38.70	3.50	10	10
P-034	33.70	40.70	3.50	10	10
G-035	34.40	40.60	3.10	11	11
P-036	35.70	42.70	3.50	10	10
G-040	39.40	45.60	3.10	11	11
P-040	39.70	46.70	3.50	10	10
G-045	44.40	50.60	3.10	11	11
P-048	47.70	54.70	3.50	10	10

O-RING KIT—METRIC SERIES



ITEM	SPECIFICATION
KIT-METRIC-NBR70	BLUE CASE, 382PCS
KIT-METRIC-NBR90	BLUE CASE, 382PCS

INCLUDING 30 SIZES,TOTAL 382PCS,DETAILS AS BELOW :

ID	OD	C/S	Q'TY
3.00	7.00	2.00	18
4.00	8.00	2.00	18
5.00	9.00	2.00	17
6.00	10.00	2.00	17
7.00	11.00	2.00	17
8.00	12.00	2.00	17
10.00	14.00	2.00	17
10.00	15.00	2.50	13
11.00	16.00	2.50	13
12.00	17.00	2.50	13
14.00	19.00	2.50	13
16.00	21.00	2.50	13
17.00	22.00	2.50	13
19.00	24.00	2.50	13
19.00	25.00	3.00	11
20.00	26.00	3.00	11
22.00	28.00	3.00	11
24.00	30.00	3.00	11
25.00	31.00	3.00	11
27.00	33.00	3.00	11
28.00	34.00	3.00	11
30.00	36.00	3.00	11
32.00	38.00	3.00	11
33.00	39.00	3.00	11
35.00	41.00	3.00	11
36.00	42.00	3.00	11
38.00	44.00	3.00	11
38.00	46.00	4.00	9
42.00	50.00	4.00	9
45.00	53.00	4.00	9

O-RING KIT—JASO SERIES



ITEM		SPECIFICATION		
KIT-JASO-NBR90		BLUE CASE, 1120PCS		
INCLUDING 28 SIZES,TOTAL 1120PCS,DETAILS AS BELOW :				
ITEM	ID	OD	C/S	Q'TY
1003	2.8	6.6	1.9	40
1004	3.8	7.6	1.9	40
1005	4.8	8.6	1.9	40
1006	5.8	9.6	1.9	40
1007	6.8	10.6	1.9	40
1008	7.8	11.6	1.9	40
1009	8.8	12.6	1.9	40
1010	9.8	13.6	1.9	40
1011	11.0	14.8	1.9	40
1012	12.3	16.1	1.9	40
1013	13.0	16.8	1.9	40
1014	13.8	17.6	1.9	40
1015	14.8	18.6	1.9	40
1016	15.8	19.6	1.9	40
1017	16.8	20.6	1.9	40
1018	17.8	21.6	1.9	40
1019	18.8	22.6	1.9	40
1020	19.8	23.6	1.9	40
1021	21.0	24.8	1.9	40
1022	22.1	25.9	1.9	40
1023	23.3	27.1	1.9	40
1025	24.7	28.5	1.9	40
1026	26.2	30.0	1.9	40
1028	27.7	31.5	1.9	40
1030	29.7	33.5	1.9	40
1031	31.2	35.0	1.9	40
1033	33.2	37.0	1.9	40
1035	35.2	39.0	1.9	40

BACKUP RING KIT— 4F-JIS P&G SERIES



INCLUDING 29 SIZES,TOTAL 384PCS:

ITEM	ID	OD	C/S	Q'TY	ITEM	ID	OD	C/S	Q'TY
P-003	3	6	1.25	18	P-022	22	26	1.25	15
P-004	4	7	1.25	18	P-022A	22	28	1.25	10
P-005	5	8	1.25	18	P-025	25	31	1.25	10
P-006	6	9	1.25	18	P-026	26	32	1.25	10
P-007	7	10	1.25	18	P-030	30	36	1.25	10
P-008	8	11	1.25	18	P-032	32	38	1.25	10
P-009	9	12	1.25	18	P-034	34	40	1.25	10
P-010A	10	14	1.25	14	P-036	36	42	1.25	10
P-011	11	15	1.25	14	P-040	40	46	1.25	10
P-012	12	16	1.25	14	P-048	48	54	1.25	10
P-014	14	18	1.25	14	G-025	25	30	1.25	11
P-016	16	20	1.25	14	G-030	30	35	1.25	11
P-018	18	22	1.25	14	G-035	35	40	1.25	11
P-020	20	24	1.25	14	G-040	40	45	1.25	11
					G-045	45	50	1.25	11

4F-AS 568 SERIES



INCLUDING 36 SIZES,TOTAL 325PCS:

ITEM	ID	OD	C/S	Q'TY	ITEM	ID	OD	C/S	Q'TY
AS-005	3.15	5.85	1.25	15	AS-114	16.26	20.62	1.25	10
AS-006	3.56	6.26	1.25	15	AS-115	17.83	22.19	1.25	10
AS-007	4.34	7.04	1.25	15	AS-116	19.43	23.79	1.25	10
AS-008	5.13	7.83	1.25	15	AS-117	21.1	25.46	1.25	5
AS-009	5.94	8.64	1.25	15	AS-118	22.7	27.06	1.25	5
AS-010	6.73	9.43	1.25	15	AS-119	24.3	28.66	1.25	5
AS-011	8.3	11	1.25	15	AS-120	25.9	30.26	1.25	5
AS-012	9.9	12.6	1.25	15	AS-121	27.48	31.84	1.25	5
AS-013	11.56	14.26	1.25	10	AS-210	19.46	25.46	1.25	5
AS-014	13.16	15.86	1.25	10	AS-211	21.03	27.03	1.25	5
AS-015	14.73	17.43	1.25	10	AS-214	25.81	31.81	1.25	5
AS-016	16.33	19.03	1.25	10	AS-215	27.38	33.38	1.25	5
AS-017	17.91	20.61	1.25	10	AS-217	30.56	36.56	1.25	5
AS-018	19.51	22.21	1.25	10	AS-218	32.1	38.1	1.25	5
AS-110	9.91	14.27	1.25	10	AS-219	34.138	40.138	1.25	5
AS-111	11.48	15.84	1.25	10	P-022.4	22.4	28.4	1.25	5
AS-112	13.08	17.44	1.25	10	P-024	24	30	1.25	5
AS-113	14.66	19.02	1.25	10	P-029	29	35	1.25	5

O-RING KIT





PICTURE	DESCRIPTION	MATERIAL
	JIS PG SERIES (30 sizes, 394/388pcs)	NBR70 NBR90
	JASO SERIES	NBR90
	AS 568 SERIES (30 sizes, 378pcs)	NBR70 NBR90
	AS568 SERIES	FKM75
	METRIC SERIES (30 sizes, 382pcs)	NBR70 NBR90
	HITACHI (36 sizes, 350pcs)	NBR
	CAT. 4C-8253 (32 sizes, 149 pcs)	SILCONE
	CAT. 4C-4782 (32 sizes, 570 pcs)	NBR

O-RING KIT



PICTURE	DESCRIPTION	MATERIAL
	CAT. D-RING 4C-4784 (9 sizes, 80 pcs)	NBR
	KOMATSU	NBR
	KOMATSU contains high pressure polyurethane o ring 21T series 10 sizes for hydraulic hose fittings and standard 07000-1 series 20 sizes, 239 pcs	PU / NBR
	HITACHI E12979373 O-RING KIT	FKM
	BRASS O RING PICK SET	BRASS

BACKUP-RING KIT

PICTURE	DESCRIPTION	MATERIAL
	JIS PG SERIES (29 sizes, 384 pcs)	PTFE
	AS 568 SERIES (36 sizes, 325 pcs)	PTFE

CONTROL VALVE O RING KITS



MODEL	PART NO.
FOR HITACHI:	
ZAX200	4S00689
EX200-5	4S00690
EX200-2 / EX200-3	4S00691
ZAX200-3	4S00727
ZAX330	4S00735
ZAX330-3	4S00736
ZAX230	4S00762
ZAX240-3	4S00763



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