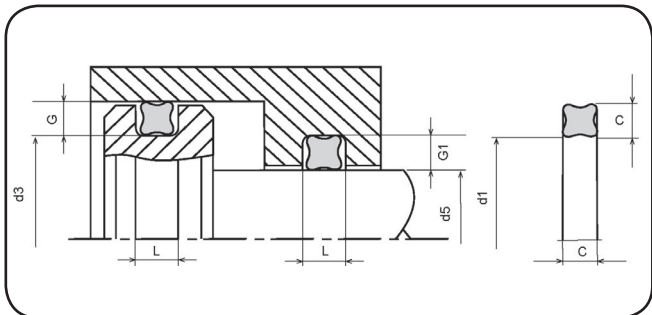




Q-RING SEAL



QR

DESCRIPTION

Four-lip square seal

DYNAMIC SURFACE MATERIAL

NBR Nitrile rubber
Hardness: 70 Shore A

OPERATING CONDITIONS

Pressure: Dynamic Application Reciprocating Motion 50 Bar (without anti-extrusion ring) 300 Bar. (with anti-extrusion ring) Rotary motion 150 Bar. (with anti-extrusion ring) Static Application 50 Bar. (without anti-extrusion ring) 400 Bar. (with anti-extrusion ring) Temperature: - 30 to + 110°C NBR Speed: 0.5 m/sec. Reciprocating motion. - 60 to + 200°C FKM 2.0 m/sec Rotary short.

Dynamic surface Ra < 0.3 µm Rt < 2.5 µm
Static surface Ra < 2 µm Rt < 10 µm

MAIN FEATURES

QR seals are vulcanised, single-piece, four-lip seals manufactured in different types of materials for sealing virtually all liquid and gaseous fluids. This type of seal can be used for a wide range of different applications.

° Dynamic: For sealing pistons, rods, in reciprocating motion. For sealing shafts, rotary seals, in rotary or helical motion.

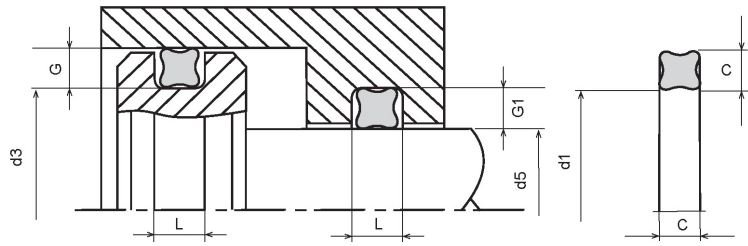
° Static: As a static seal on bushings, caps, plugs, etc. Mainly in applications where there is a risk of torsion with the O-Ring.

It offers a great advantage over O-rings, such as low friction, lower rubbing, higher sealing effect and longer service life. They are double-acting sealing elements, the sealing force is increased by deformation as the system pressure increases and is transmitted evenly over the entire contact surface.

Section C	HOUSING DEPTH		
	Dynamic G+ 0.05	Static G + 0.05	Width L + 0.2
1.78	1.53	1.40	2.00
2.62	2.33	2.25	3.00
3.53	3.25	3.10	4.00
5.33	4.90	4.70	6.00
6.99	6.40	6.20	8.00

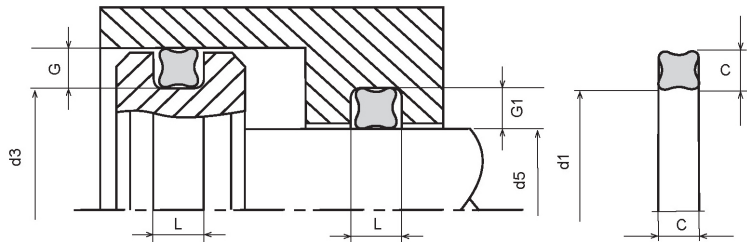


Size V - Viton



d1	C	Mat.	d1	C	Mat.	d1	C	Mat.	d1	C	Mat.
1.24	x 2.62		15.47	x 3.53		29.75	x 3.53		47.35	x 1.78	
2.06	x 2.62		15.54	x 2.62	V	29.82	x 2.62		48.90	x 2.62	
2.84	x 2.62		15.60	x 1.78		29.87	x 1.78		50.16	x 5.33	
2.90	x 1.78		16.81	x 5.33		31.11	x 5.33		50.40	x 3.53	
3.63	x 2.62		17.04	x 3.53		31.35	x 3.53		50.47	x 2.62	
3.68	x 1.78		17.12	x 2.62	V	31.42	x 2.62		50.52	x 1.78	
4.34	x 3.53		17.17	x 1.78		31.47	x 1.78		52.07	x 2.62	
4.42	x 2.62		18.41	x 5.33		32.69	x 5.33		53.35	x 5.33	
4.47	x 1.78		18.66	x 3.53	V	32.92	x 3.53		53.57	x 3.53	
5.23	x 2.62		18.72	x 2.62		32.99	x 2.62		53.70	x 1.78	
5.28	x 1.78	V	18.77	x 1.78		33.05	x 1.78		53.84	x 2.62	
5.94	x 3.53		19.99	x 5.33		34.29	x 5.33		55.25	x 2.62	
6.02	x 2.62		20.22	x 3.53		34.52	x 3.53	V	56.50	x 5.33	
6.07	x 1.78		20.29	x 2.62		34.59	x 2.62		56.75	x 3.53	
7.52	x 3.53		20.35	x 1.78		34.65	x 1.78		56.82	x 2.62	
7.59	x 2.62	V	21.59	x 5.33		36.09	x 3.53		56.87	x 1.78	
7.65	x 1.78		21.82	x 3.53		36.17	x 2.62		58.42	x 2.62	
8.75	x 5.33		21.89	x 2.62	V	37.20	x 1.78		59.70	x 5.33	
9.12	x 3.53		21.95	x 1.78		37.46	x 5.33		59.92	x 3.53	
9.20	x 2.62	V	23.16	x 5.33		37.70	x 3.53		60.00	x 2.62	
9.25	x 1.78	V	23.40	x 3.53	V	37.77	x 2.62		60.05	x 1.78	
10.46	x 5.33		23.47	x 2.62		39.20	x 5.33		61.60	x 2.62	
10.69	x 3.53		23.52	x 1.78		39.34	x 2.62		62.86	x 5.33	
10.77	x 2.62	V	24.76	x 5.33		40.64	x 5.33		63.10	x 3.53	
10.82	x 1.78		24.76	x 5.33		40.87	x 3.53		63.17	x 2.62	
11.70	x 2.62		25.00	x 3.53		40.95	x 2.62		63.22	x 1.78	
12.06	x 5.33		25.07	x 2.62		41.00	x 1.78		64.77	x 2.62	
12.29	x 3.53		25.12	x 1.78		42.52	x 2.62		66.05	x 5.33	
12.37	x 2.62	V	26.34	x 5.33		43.08	x 5.33		66.27	x 3.53	
12.42	x 1.78		26.58	x 3.53	V	43.82	x 5.33	V	66.34	x 2.62	
12.80	x 2.62		26.64	x 2.62		44.05	x 3.53		66.40	x 1.78	
13.64	x 5.33		26.70	x 1.78		44.12	x 2.62		67.94	x 2.62	
13.87	x 3.53		27.94	x 5.33		44.17	x 1.78		69.20	x 5.33	
13.95	x 2.62	V	28.17	x 3.53	V	45.69	x 2.62	V	69.45	x 3.53	
14.00	x 1.78	V	28.24	x 2.62		47.00	x 5.33		69.52	x 2.62	
14.80	x 2.62		28.30	x 1.78		47.22	x 3.53		69.57	x 1.78	
15.24	x 5.33		29.51	x 5.33		47.29	x 2.62		71.12	x 2.62	

QR

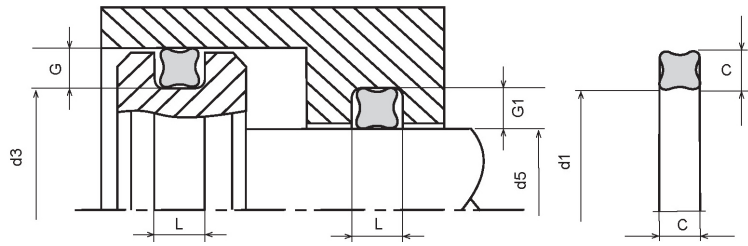


Size V - Viton

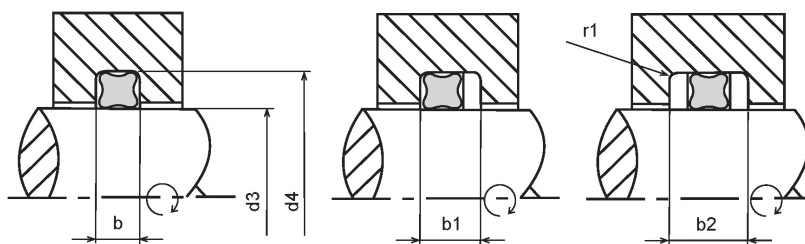
d1	C	Mat.	d1	C	Mat.	d1	C	Mat.	d1	C	Mat.
72.40	x 5.33		107.67	x 1.78		136.12	x 3.53		177.17	x 5.33	
72.62	x 3.53		110.50	x 5.33		139.06	x 5.33		177.40	x 3.53	
72.69	x 2.62		110.72	x 3.53		139.06	x 6.99		177.47	x 2.62	
72.75	x 1.78		113.19	x 5.33		139.30	x 3.53		181.00	x 6.99	
75.56	x 5.33		113.66	x 5.33		139.37	x 2.62		183.50	x 6.99	V
75.80	x 3.53		113.66	x 6.99		142.24	x 5.33		183.52	x 5.33	
75.87	x 2.62		113.90	x 3.53		142.24	x 6.99		183.75	x 3.53	
75.92	x 1.78		113.97	x 2.62		142.47	x 3.53		183.82	x 2.62	
78.75	x 5.33		114.02	x 1.78		145.40	x 6.99		187.30	x 6.99	
78.97	x 3.53		114.70	x 6.99		145.42	x 5.33		189.86	x 6.99	
81.90	x 5.33		116.84	x 5.33		145.65	x 3.53		189.87	x 5.33	
82.15	x 3.53		116.85	x 6.99		145.72	x 2.62		190.10	x 3.53	
82.22	x 2.62		117.07	x 3.53		148.60	x 6.99		190.17	x 2.62	
82.27	x 1.78		120.00	x 6.99		148.82	x 3.53		193.70	x 6.99	
85.10	x 5.33		120.02	x 5.33		151.76	x 5.33		196.20	x 6.99	
85.32	x 3.53		120.25	x 3.53		151.76	x 6.99		196.22	x 5.33	
88.26	x 5.33		120.32	x 2.62		152.00	x 3.53		196.45	x 3.53	
88.50	x 3.53		120.37	x 1.78		152.07	x 2.62		196.52	x 2.62	
88.57	x 2.62		123.20	x 6.99		155.60	x 6.99		202.56	x 6.99	
88.62	x 1.78		123.42	x 3.53		158.10	x 6.99		202.57	x 5.33	
91.45	x 5.33		124.60	x 6.99		158.12	x 5.33		202.80	x 3.53	
91.67	x 3.53		126.36	x 6.99		158.35	x 3.53		202.87	x 2.62	
94.60	x 5.33		126.37	x 5.33		158.42	x 2.62		208.92	x 5.33	
94.85	x 3.53		126.60	x 3.53		159.50	x 6.99		209.15	x 3.53	
94.92	x 2.62		126.67	x 2.62		161.90	x 6.99		209.22	x 2.62	
94.97	x 1.78		126.72	x 1.78		164.46	x 6.99		215.27	x 2.62	
97.80	x 5.33		129.54	x 5.33		164.47	x 5.33		215.27	x 5.33	
98.02	x 3.53		129.55	x 6.99		164.70	x 3.53		215.30	x 6.99	
100.96	x 5.33	V	129.77	x 3.53		164.77	x 2.62		215.50	x 3.53	
101.20	x 3.53		132.70	x 6.99		166.70	x 6.99		221.62	x 5.33	
101.27	x 2.62		132.72	x 5.33		168.30	x 6.99		221.85	x 3.53	
101.32	x 1.78		132.95	x 3.53		170.81	x 5.33		221.92	x 2.62	
104.15	x 5.33	V	133.02	x 2.62		170.81	x 6.99		227.67	x 5.33	
104.37	x 3.53		133.07	x 1.78		171.05	x 3.53		228.00	x 6.99	
107.30	x 5.33		134.50	x 6.99		171.11	x 2.62		228.20	x 3.53	
107.55	x 3.53		135.89	x 5.33		174.60	x 6.99		228.27	x 2.62	
107.62	x 2.62		135.90	x 6.99		177.16	x 6.99		234.32	x 5.33	



Size V - Viton



d1	C	Mat.	d1	C	Mat.	d1	C	Mat.	d1	C	Mat.
234.55	x 3.53		278.99	x 3.53		380.40	x 6.99		494.16	x 6.99	
234.62	x 2.62		291.47	x 5.33		380.59	x 3.53		506.48	x 5.33	
240.67	x 5.33		291.50	x 6.99		393.10	x 6.99		506.86	x 6.99	
240.70	x 6.99		291.69	x 3.53		405.26	x 3.53		532.18	x 5.33	
240.90	x 3.53		304.00	x 3.53		405.26	x 5.33		532.26	x 6.99	
240.97	x 2.62		304.17	x 5.33		405.26	x 6.99		557.58	x 5.33	
247.02	x 5.33		304.20	x 6.99		417.96	x 6.99		557.66	x 6.99	
247.25	x 3.53		316.90	x 6.99		430.65	x 5.33		582.68	x 5.33	
247.32	x 2.62		329.00	x 3.53		430.65	x 6.99		582.69	x 6.99	
253.37	x 5.33		329.57	x 5.33		430.66	x 3.53		608.08	x 5.33	
253.40	x 6.99		329.60	x 6.99		443.36	x 6.99		608.08	x 6.99	
253.60	x 3.53		342.30	x 6.99		456.06	x 3.53		633.48	x 6.99	
266.07	x 5.33		354.97	x 5.33		456.06	x 5.33		637.48	x 5.33	
266.10	x 6.99		355.00	x 6.99		456.06	x 6.99		658.87	x 6.99	
266.29	x 3.53		355.19	x 3.53		468.76	x 6.99		658.88	x 5.33	
278.77	x 5.33		367.70	x 6.99		481.38	x 5.33				
278.80	x 6.99		380.37	x 5.33		481.46	x 6.99				



Dimensions QR			Axis Ø d 3	Support Ring	Ø d 4 H 8	Housing width			Radius r 1
						b +0.2	b1+0.2	b 2+0.2	
6.07	x	1.78	6	AP-010	7.20	2.00	3.20	4.40	0.20
7.66	x	1.78	7	AP-011	10.50	2.00	3.20	4.40	0.20
9.25	x	1.78	9	AP-012	12.20	2.00	3.20	4.40	0.20
10.20	x	2.62	10	AP-013	14.80	2.80	4.00	5.20	0.30
12.37	x	2.62	12	AP-112	16.80	2.80	4.00	5.20	0.30
15.54	x	2.62	15	AP-114	19.80	2.80	4.00	5.20	0.30
17.12	x	2.62	16	AP-115	20.80	2.80	4.00	5.20	0.30
18.72	x	2.62	18	AP-116	22.80	2.80	4.00	5.20	0.30
20.22	x	3.53	20	AP-211	26.70	3.80	5.40	7.00	0.40
23.40	x	3.53	22	AP-213	28.70	3.80	5.40	7.00	0.40
26.58	x	3.53	25	AP-215	31.70	3.80	5.40	7.00	0.40
29.75	x	3.53	28	AP-217	34.70	3.80	5.40	7.00	0.40
31.34	x	3.35	30	AP-218	36.70	3.80	5.40	7.00	0.40
32.92	x	3.53	32	AP-219	38.70	3.80	5.40	7.00	0.40
36.10	x	3.53	35	AP-221	41.70	3.80	5.40	7.00	0.40
37.69	x	3.53	36	AP-222	42.70	3.80	5.40	7.00	0.40
40.65	x	5.33	40	AP-326	49.90	6.00	8.00	10.00	0.40
43.82	x	5.33	42	AP-327	51.90	6.00	8.00	10.00	0.40
46.99	x	5.33	45	AP-328	54.90	6.00	8.00	10.00	0.40
50.16	x	5.33	48	AP-329	57.90	6.00	8.00	10.00	0.40
53.34	x	5.33	50	AP-330	59.90	6.00	8.00	10.00	0.40
56.52	x	5.33	55	AP-331	64.90	6.00	8.00	10.00	0.40
56.52	x	5.33	56	AP-331	65.90	6.00	8.00	10.00	0.40
62.87	x	5.33	60	AP-333	69.90	6.00	8.00	10.00	0.40
66.04	x	5.33	63	AP-334	72.90	6.00	8.00	10.00	0.40
66.04	x	5.33	65	AP-334	74.90	6.00	8.00	10.00	0.40
72.40	x	5.33	70	AP-336	79.90	6.00	8.00	10.00	0.40
78.74	x	5.33	75	AP-338	84.90	6.00	8.00	10.00	0.40
81.92	x	5.33	80	AP-339	89.90	6.00	8.00	10.00	0.40
88.27	x	5.33	85	AP-340	94.90	6.00	8.00	10.00	0.40
94.62	x	5.33	90	AP-343	99.90	6.00	8.00	10.00	0.40
97.80	x	5.33	95	AP-344	104.90	6.00	8.00	10.00	0.40
104.14	x	5.33	100	AP-346	109.90	6.00	8.00	10.00	0.40
110.49	x	5.33	105	AP-348	114.90	6.00	8.00	10.00	0.40
116.84	x	6.99	110	AP-426	123.30	7.70	10.20	12.70	0.60
120.02	x	6.99	115	AP-427	128.30	7.70	10.20	12.70	0.60
123.19	x	6.99	120	AP-428	133.30	7.70	10.20	12.70	0.60
129.54	x	6.99	125	AP-430	138.30	7.70	10.20	12.70	0.60
135.89	x	6.99	130	AP-432	143.30	7.70	10.20	12.70	0.60