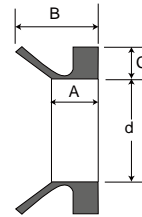
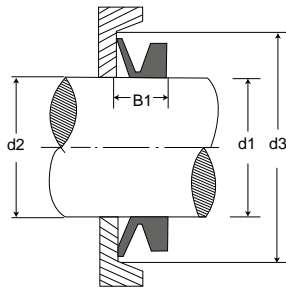


V-Seal Standard Size

The V-Seal is an all-rubber seal that mounts directly on the shaft and seals axially against counterface, housing, seal case or similar surface. The long flexible lip is designed to act like a mechanical face seal. It can retain lubricants and exclude contaminants. V-Seal can be used as a primary seal or as a secondary back-up seal.



It performs well in dry applications and is capable of handling a greater amount of eccentricity and misalignment than most radial lip type seals.

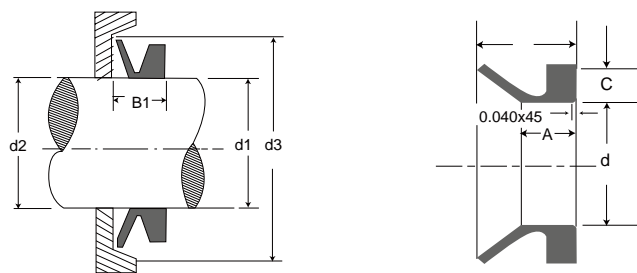


SIZE NUMBERS	d1	d	c	A	B	d2	d3	B1
VA-003	2.7 - 3.5	2.5	1.5	2.0	3.0	d1+1	d1+4	2.5 ± 0.3
VA-004	3.5 - 4.5	3.2	2.0	2.4	3.7	d1+1	d1+6	3.0 ± 0.4
VA-005	4.5 - 5.5	4.0	2.0	2.4	3.7	d1+1	d1+6	3.0 ± 0.4
VA-006	5.5 - 6.5	5.0	2.0	2.4	3.7	d1+1	d1+6	3.0 ± 0.4
VA-007	6.5 - 8.0	6.0	2.0	2.4	3.7	d1+1	d1+6	3.0 ± 0.4
VA-008	8.0 - 9.5	7.0	2.0	2.4	3.7	d1+1	d1+6	3.0 ± 0.4
VA-010	9.5 - 11.5	9.0	3.0	3.4	5.5	d1+2	d1+9	4.5 ± 0.6
VA-0012	11.5 - 13.5	10.5	3.0	3.4	5.5	d1+2	d1+9	4.5 ± 0.6
VA-0013	13.5 - 15.5	11.7	3.0	3.4	5.5	d1+2	d1+9	4.5 ± 0.6
VA-0014	15.5 - 17.5	12.5	3.0	3.4	5.5	d1+2	d1+9	4.5 ± 0.6
VA-0016	15.5 - 17.5	14.0	3.0	3.4	5.5	d1+2	d1+9	4.5 ± 0.6
VA-0018	17.5 - 19.0	16.0	3.0	3.4	5.5	d1+2	d1+9	4.5 ± 0.6
VA-0020	19.0 - 21.0	18.0	4.0	4.7	7.5	d1+2	d1+12	6.0 ± 0.8
VA-0022	21.0 - 24.0	20.0	4.0	4.7	7.5	d1+2	d1+12	6.0 ± 0.8
VA-0025	24.0 - 27.0	22.0	4.0	4.7	7.5	d1+2	d1+12	6.0 ± 0.8
VA-0028	27.0 - 29.0	25.0	4.0	4.7	7.5	d1+3	d1+12	6.0 ± 0.8
VA-0030	29.0 - 31.0	27.0	4.0	4.7	7.5	d1+3	d1+12	6.0 ± 0.8
VA-0032	31.0 - 33.0	29.0	4.0	4.7	7.5	d1+3	d1+12	6.0 ± 0.8
VA-0035	33.0 - 36.0	31.0	4.0	4.7	7.5	d1+3	d1+12	6.0 ± 0.8
VA-0038	36.0 - 38.0	34.0	4.0	4.7	7.5	d1+3	d1+12	6.0 ± 0.8
VA-0040	38.0 - 43.0	36.0	5.5	5.5	9.0	d1+3	d1+15	7.0 ± 1.0
VA-0045	43.0 - 48.0	40.0	5.0	5.5	9.0	d1+3	d1+15	7.0 ± 1.0
VA-0050	48.0 - 53.0	45.0	5.0	5.5	9.0	d1+3	d1+15	7.0 ± 1.0
VA-0055	53.0 - 58.0	49.0	5.0	5.5	9.0	d1+3	d1+15	7.0 ± 1.0
VA-0060	58.0 - 63.0	54.0	5.0	5.5	9.0	d1+3	d1+15	7.0 ± 1.0
VA-0065	63.0 - 68.0	58.0	5.0	5.5	9.0	d1+3	d1+15	7.0 ± 1.0
VA-0070	68.0 - 73.0	63.0	6.0	6.8	11.0	d1+4	d1+18	9.0 ± 1.2
VA-0075	73.0 - 78.0	67.0	6.0	6.0	6.8	d1+4	d1+18	9.0 ± 1.2
VA-0080	78.0 - 83.0	72.0	6.0	6.8	11.0	d1+4	d1+18	9.0 ± 1.2
VA-0085	83.0 - 88.0	76.0	6.0	6.8	11.0	d1+4	d1+18	9.0 ± 1.2
VA-0090	88.0 - 83.0	81.0	6.0	6.8	11.0	d1+4	d1+18	9.0 ± 1.2
VA-0095	93.0 - 98.0	85.0	6.0	6.8	11.0	d1+4	d1+18	9.0 ± 1.2
VA-0100	98.0 - 105.0	90.0	6.0	6.8	11.0	d1+4	d1+18	9.0 ± 1.2
VA-0110	105.0 - 115.0	99.0	7.0	7.9	12.8	d1+4	d1+21	10.5 ± 1.5
VA-0120	115.0 - 125.0	108.0	7.0	7.9	12.8	d1+4	d1+21	10.5 ± 1.5
VA-0130	125.0 - 135.0	117.0	7.0	7.9	12.8	d1+4	d1+21	10.5 ± 1.5
VA-0140	135.0 - 145.0	126.0	7.0	7.9	12.8	d1+4	d1+21	10.5 ± 1.5
VA-0150	145.0 - 155.0	135.0	7.0	7.9	12.8	d1+4	d1+21	10.5 ± 1.5
VA-0160	155.0 - 165.0	144.0	8.0	9.0	14.5	d1+5	d1+24	12.0 ± 1.8
VA-0170	165.0 - 175.0	153.0	8.0	9.0	14.5	d1+5	d1+24	12.0 ± 1.8

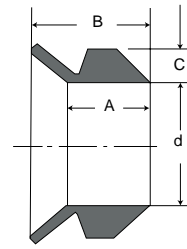
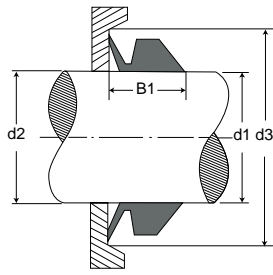
VA Standard Sizes

SIZE NUMBERS	d1	d	c	A	B	d2	d3	B1
VA-0180	175.0 - 185.0	162.0	8.0	9.0	14.5	d1+5	d1+24	12.0 ± 1.8
VA-0190	185.0 - 195.0	171.0	8.0	9.0	14.5	d1+5	d1+24	12.0 ± 1.8
VA-0199	195.0 - 210.0	180.0	8.0	9.0	14.5	d1+5	d1+24	12.0 ± 1.8
VA-0200	190.0 - 210.0	180.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-0220	210.0 - 235.0	198.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-0250	235.0 - 265.0	225.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-0275	265.0 - 290.0	247.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-0300	290.0 - 310.0	270.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-0325	310.0 - 335.0	292.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-0350	335.0 - 365.0	315.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-0375	365.0 - 390.0	337.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-0400	390.0 - 430.0	360.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-0450	430.0 - 480.0	405.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-0500	480.0 - 530.0	450.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-0550	530.0 - 580.0	495.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-0600	580.0 - 630.0	540.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-0650	630.0 - 665.0	600.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-0700	665.0 - 705.0	630.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-0725	705.0 - 745.0	670.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-0750	745.0 - 785.0	705.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-0800	785.0 - 830.0	745.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-0850	830.0 - 875.0	785.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-0900	875.0 - 920.0	825.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-0950	920.0 - 965.0	865.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-1000	965.0 - 1015.0	910.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-1050	1015.0 - 1065.0	955.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-1100	1065.0 - 1115.0	1000.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-1150	1115.0 - 1165.0	1045.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-1200	1165.0 - 1215.0	1090.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-1250	1215.0 - 1270.0	1135.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-1300	1270.0 - 1320.0	1180.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-1350	1320.0 - 1370.0	1225.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-1400	1370.0 - 1420.0	1270.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-1450	1420.0 - 1470.0	1315.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-1500	1470.0 - 1520.0	1360.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-1550	1520.0 - 1570.0	1405.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-1600	1570.0 - 1620.0	1450.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-1650	1620.0 - 1670.0	1495.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-1670	1670.0 - 1720.0	1540.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-1750	1720.0 - 1770.0	1585.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-1800	1770.0 - 1820.0	1630.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-1850	1820.0 - 1870.0	1675.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-1900	1870.0 - 1920.0	1720.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-1950	1920.0 - 1970.0	1765.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0
VA-2000	1970.0 - 2020.0	1810.0	15.0	14.0	25.0	d1+10	d1+45	20.0 ± 4.0

V-Seal Standard Size



SIZE NUMBERS	d1	d	c	A	B	d2	d3	B1
VL-110	105.0 - 115.0	99.0	6.5	6.0	10.5	C+5	C+20	8.0 ± 1.5
VL-120	115.0 - 125.0	108.0	6.5	6.0	10.5	C+5	C+20	8.0 ± 1.5
VL-130	125.0 - 135.0	117.0	6.5	6.0	10.5	C+5	C+20	8.0 ± 1.5
VL-140	135.0 - 145.0	126.0	6.5	6.0	10.5	C+5	C+20	8.0 ± 1.5
VL-150	145.0 - 155.0	135.0	6.5	6.0	10.5	C+5	C+20	8.0 ± 1.5
VL-160	155.0 - 165.0	144.0	6.5	6.0	10.5	C+5	C+20	8.0 ± 1.5
VL-170	165.0 - 175.0	153.0	6.5	6.0	10.5	C+5	C+20	8.0 ± 1.5
VL-180	175.0 - 185.0	162.0	6.5	6.0	10.5	C+5	C+20	8.0 ± 1.5
VL-190	185.0 - 195.0	171.0	6.5	6.0	10.5	C+5	C+20	8.0 ± 1.5
VL-200	195.0 - 210.0	182.0	6.5	6.0	10.5	C+5	C+20	8.0 ± 1.5
VL-220	210.0 - 233.0	198.0	6.5	6.0	10.5	C+5	C+20	8.0 ± 1.5
VL-250	233.0 - 260.0	225.0	6.5	6.0	10.5	C+5	C+20	8.0 ± 1.5
VL-275	260.0 - 285.0	247.0	6.5	6.0	10.5	C+5	C+20	8.0 ± 1.5
VL-300	285.0 - 310.0	270.0	6.5	6.0	10.5	C+5	C+20	8.0 ± 1.5
VL-325	310.0 - 335.0	292.0	6.5	6.0	10.5	C+5	C+20	8.0 ± 1.5
VL-350	335.0 - 365.0	315.0	6.5	6.0	10.5	C+5	C+20	8.0 ± 1.5
VL-375	365.0 - 385.0	337.0	6.5	6.0	10.5	C+5	C+20	8.0 ± 1.5
VL-400	385.0 - 410.0	360.0	6.5	6.0	10.5	C+5	C+20	8.0 ± 1.5
VL-425	410.0 - 440.0	382.0	6.5	6.0	10.5	C+5	C+20	8.0 ± 1.5
VL-450	440.0 - 480.0	405.0	6.5	6.0	10.5	C+5	C+20	8.0 ± 1.5
VL-500	480.0 - 530.0	450.0	6.5	6.0	10.5	C+5	C+20	8.0 ± 1.5
VL-525	510.0 - 540.0	472.0	6.5	6.0	10.5	C+5	C+20	8.0 ± 1.5
VL-550	530.0 - 580.0	495.0	6.5	6.0	10.5	C+5	C+20	8.0 ± 1.5
VL-600	580.0 - 630.0	540.0	6.5	6.0	10.5	C+5	C+20	8.0 ± 1.5



SIZE NUMBERS	d1	d	c	A	B	d2	d3	B1
VS-005	4.5 - 5.5	4.0	2.0	3.9	5.2	d1+1	d1+6	4.5 ± 0.4
VS-006	5.5 - 6.5	5.0	2.0	3.9	5.2	d1+1	d1+6	4.5 ± 0.4
VS-007	6.5 - 8.0	6.0	2.0	3.9	5.2	d1+1	d1+6	4.5 ± 0.4
VS-008	8.0 - 9.5	7.0	2.0	3.9	5.2	d1+1	d1+6	4.5 ± 0.4
VS-010	9.5 - 11.5	9.0	3.0	5.6	7.7	d1+2	d1+9	6.7 ± 0.6
VS-012	11.5 - 13.5	10.5	3.0	5.6	7.7	d1+2	d1+9	6.7 ± 0.6
VS-014	13.5 - 15.5	12.5	3.0	5.6	7.7	d1+2	d1+9	6.7 ± 0.6
VS-016	15.5 - 17.5	14.0	3.0	5.6	7.7	d1+2	d1+9	6.7 ± 0.6
VS-018	17.5 - 19.0	16.0	3.0	5.6	7.7	d1+2	d1+9	6.7 ± 0.6
VS-020	19.0 - 21.0	18.0	4.0	7.9	10.5	d1+2	d1+12	9.0 ± 0.8
VS-022	21.0 - 24.0	20.0	4.0	7.9	10.5	d1+2	d1+12	9.0 ± 0.8
VS-025	24.0 - 27.0	22.0	4.0	7.9	10.5	d1+2	d1+12	9.0 ± 0.8
VS-028	27.0 - 29.0	25.0	4.0	7.9	10.5	d1+3	d1+12	9.0 ± 0.8
VS-030	29.0 - 31.0	27.0	4.0	7.9	10.5	d1+3	d1+12	9.0 ± 0.8
VS-032	31.0 - 33.0	29.0	4.0	7.9	10.5	d1+3	d1+12	9.0 ± 0.8
VS-035	33.0 - 36.0	31.0	4.0	7.9	10.5	d1+3	d1+12	9.0 ± 0.8
VS-038	36.0 - 38.0	34.0	4.0	7.9	10.5	d1+3	d1+12	9.0 ± 0.8
VS-040	38.0 - 43.0	36.0	5.0	9.5	13.0	d1+3	d1+15	11.0 ± 1.0
VS-045	43.0 - 48.0	40.0	5.0	9.5	13.0	d1+3	d1+15	11.0 ± 1.0
VS-050	48.0 - 53.0	45.0	5.0	9.5	13.0	d1+3	d1+15	11.0 ± 1.0
VS-055	53.0 - 58.0	49.0	5.0	9.5	13.0	d1+3	d1+15	11.0 ± 1.0
VS-060	58.0 - 63.0	54.0	5.0	9.5	13.0	d1+3	d1+15	11.0 ± 1.0
VS-065	63.0 - 68.0	58.0	5.0	9.5	13.0	d1+3	d1+15	11.0 ± 1.0
VS-070	68.0 - 73.0	63.0	6.0	11.3	15.5	d1+4	d1+18	13.5 ± 1.2
VS-075	73.0 - 78.0	67.0	6.0	11.3	15.5	d1+4	d1+18	13.5 ± 1.2
VS-080	78.0 - 83.0	72.0	6.0	11.3	15.5	d1+4	d1+18	13.5 ± 1.2
VS-085	83.0 - 88.0	76.0	6.0	11.3	15.5	d1+4	d1+18	13.5 ± 1.2
VS-090	88.0 - 93.0	81.0	6.0	11.3	15.5	d1+4	d1+18	13.5 ± 1.2
VS-095	93.0 - 98.0	85.0	6.0	11.3	15.5	d1+4	d1+18	13.5 ± 1.2
VS-100	98.0 - 105.0	90.0	6.0	11.3	15.5	d1+4	d1+18	13.5 ± 1.2
VS-110	105.0 - 115.0	99.0	7.0	13.1	18.0	d1+4	d1+21	15.5 ± 1.5
VS-120	115.0 - 125.0	108.0	7.0	13.1	18.0	d1+4	d1+21	15.5 ± 1.5
VS-130	125.0 - 135.0	117.0	7.0	13.1	18.0	d1+4	d1+21	15.5 ± 1.5
VS-140	135.0 - 145.0	126.0	7.0	13.1	18.0	d1+4	d1+21	15.5 ± 1.5
VS-150	135.0 - 155.0	135.0	7.0	13.1	18.0	d1+4	d1+21	15.5 ± 1.5
VS-160	155.0 - 165.0	144.0	8.0	15.0	20.5	d1+5	d1+24	18.0 ± 1.8
VS-170	165.0 - 175.0	153.0	8.0	15.0	20.5	d1+5	d1+24	18.0 ± 1.8
VS-180	175.0 - 185.0	162.0	8.0	15.0	20.5	d1+5	d1+24	18.0 ± 1.8
VS-190	185.0 - 195.0	171.0	8.0	15.0	20.5	d1+5	d1+24	18.0 ± 1.8
VS-199	195.0 - 210.0	180.0	8.0	15.0	20.5	d1+5	d1+24	18.0 ± 1.8