



Max. Operating Conditions	
Pressure (MPa)	without compression
Temperature (°C)	- 30 / + 110 / + 200
Speed (m/s)	≤ 12
Media: mineral and synthetic oils, air, water, emulsions and grease	

Recommended Surface Finish		
Surface roughness	R_a	R_t
Running surface	≤ 3,2 μm	≤ 16 μm

Material	
NBR	N
FKM (Viton®)	V

Technical Description

The V-ring type **VS** is an axially acting shaft sealing ring made of elastomer, appropriate for sealing against water, oil, grease, dust and dirt. The ring is seated on the shaft and turns with the shaft. The sealing lip slides and seals on a counterrotation surface that is normal to the shaft. A secure sealing is given even if the shaft is slightly inclined or turning eccentrically.

From a peripheral speed of 8 m/s it is recommended to axially support the V-ring.
 From 12 m/s the V-ring should be further secured with a strap retainer or through chambering.

At high peripheral speeds of over 20 m/s the sealing lip clears the counterrotation surface. Then the V-ring acts as a centrifugal ring.

Type designation		Ø d ₁	Profile- height b	Profilbreite before / after installation			Diameter max. min.	
				H ₁	H	L	Ø d ₂	Ø d ₃
	d min. - max.							
VS - 5	4,5 - 5,5	4,0	2	3,9	5,2	4,5+/-0,4	d+1	d+6
VS - 6	5,5 - 6,5	5,0	2	3,9	5,2	4,5+/-0,4	d+1	d+6
VS - 7	6,5 - 8,0	6,0	2	3,9	5,2	4,5+/-0,4	d+1	d+6
VS - 8	8,0 - 9,5	7,0	2	3,9	5,2	4,5+/-0,4	d+1	d+6
VS - 10	9,5 - 11,5	9,0	3	5,6	7,7	6,7+/-0,6	d+2	d+9
VS - 12	11,5 - 13,5	10,5	3	5,6	7,7	6,7+/-0,6	d+2	d+9
VS - 14	13,5 - 15,5	12,5	3	5,6	7,7	6,7+/-0,6	d+2	d+9
VS - 16	15,5 - 17,5	14,0	3	5,6	7,7	6,7+/-0,6	d+2	d+9
VS - 18	17,5 - 19,0	16,0	3	5,6	7,7	6,7+/-0,6	d+2	d+9
VS - 20	19,0 - 21,0	18,0	4	7,9	10,5	9,0+/-0,8	d+2	d+12
VS - 22	21,0 - 24,0	20,0	4	7,9	10,5	9,0+/-0,8	d+2	d+12
VS - 25	24,0 - 27,0	22,0	4	7,9	10,5	9,0+/-0,8	d+2	d+12
VS - 28	27,0 - 29,0	25,0	4	7,9	10,5	9,0+/-0,8	d+3	d+12
VS - 30	29,0 - 31,0	27,0	4	7,9	10,5	9,0+/-0,8	d+3	d+12
VS - 32	31,0 - 33,0	29,0	4	7,9	10,5	9,0+/-0,8	d+3	d+12
VS - 35	33,0 - 36,0	31,0	4	7,9	10,5	9,0+/-0,8	d+3	d+12
VS - 38	36,0 - 38,0	34,0	4	7,9	10,5	9,0+/-0,8	d+3	d+12
VS - 40	38,0 - 43,0	36,0	5	9,5	13,0	11,0+/-1,0	d+3	d+15
VS - 45	43,0 - 48,0	40,0	5	9,5	13,0	11,0+/-1,0	d+3	d+15
VS - 50	48,0 - 53,0	45,0	5	9,5	13,0	11,0+/-1,0	d+3	d+15
VS - 55	53,0 - 58,0	49,0	5	9,5	13,0	11,0+/-1,0	d+3	d+15
VS - 60	58,0 - 63,0	54,0	5	9,5	13,0	11,0+/-1,0	d+3	d+15
VS - 65	63,0 - 68,0	58,0	5	9,5	13,0	11,0+/-1,0	d+3	d+15
VS - 70	68,0 - 73,0	63,0	6	11,3	15,5	13,5+/-1,2	d+4	d+18
VS - 75	73,0 - 78,0	67,0	6	11,3	15,5	13,5+/-1,2	d+4	d+18
VS - 80	78,0 - 83,0	72,0	6	11,3	15,5	13,5+/-1,2	d+4	d+18

V-Ring Type

Dimension

Material

Ordering example: V-Ring 20 for shaft

Ø 19 - 21

NBR
Order designation:
VS -
20
- N
Designation of material:
N - NBR
V - FKM (Viton®)

Type designation			Profile- height	Profilbreite before / after installation			Diameter max. min.	
				d min. - max.	$\varnothing d_1$	b	H_1	H
VS - 85	83,0 - 88,0	76,0	6	11,3	15,5	13,5+/-1,2	d+4	d+18
VS - 90	88,0 - 93,0	81,0	6	11,3	15,5	13,5+/-1,2	d+4	d+18
VS - 95	93,0 - 98,0	85,0	6	11,3	15,5	13,5+/-1,2	d+4	d+18
VS - 100	98,0 - 105,0	90,0	6	11,3	15,5	13,5+/-1,2	d+4	d+18
VS - 110	105,0 - 115,0	99,0	7	13,1	18,0	15,5+/-1,5	d+4	d+21
VS - 120	115,0 - 125,0	108,0	7	13,1	18,0	15,5+/-1,5	d+4	d+21
VS - 130	125,0 - 135,0	117,0	7	13,1	18,0	15,5+/-1,5	d+4	d+21
VS - 140	135,0 - 145,0	126,0	7	13,1	18,0	15,5+/-1,5	d+4	d+21
VS - 150	145,0 - 155,0	135,0	7	13,1	18,0	15,5+/-1,5	d+4	d+21
VS - 160	155,0 - 165,0	144,0	8	15,0	20,5	18,0+/-1,8	d+5	d+24
VS - 170	165,0 - 175,0	153,0	8	15,0	20,5	18,0+/-1,8	d+5	d+24
VS - 180	175,0 - 185,0	162,0	8	15,0	20,5	18,0+/-1,8	d+5	d+24
VS - 190	185,0 - 195,0	171,0	8	15,0	20,5	18,0+/-1,8	d+5	d+24
VS - 199	195,0 - 210,0	180,0	8	15,0	20,5	18,0+/-1,8	d+5	d+24

Further dimension and in-between sizes upon request.