

DESCRIPTION

Single acting piston seal in PTFE with energizing metal spring inside

MATERIAL OF SEAL

Type: Polytetrafluoroethylene PTFE + carbon

Designation: SEALFLON + carbon

⇒ it can be provided with different materials according to working conditions

MATERIAL OF ENERGIIZING SPRING

Type: Stainless 1.4310

⇒ it can be provided with different materials according to working conditions

MAIN FEATURES

The KV is a single acting piston seal energized by a V-shaped metal spring resistant to corrosion.

The asymmetric profile, with appropriately designed dynamic lip, short and heavy, ensures a reduction of friction and a long operating life

The inside metal spring ensures a tight seal even at low pressures.

The possibility of combining different materials for the two components, allows the use of the seal in various areas: hydraulic, chemical, pharmaceutical and food industries.

- High compatibility with nearly all fluids
- Low friction, even in the absence of lubrication
- High speed allowed
- No tendency of stick-slip
- Excellent sealing capability even at low pressure
- Good wear-resistance
- High temperature resistance
- Extended service life

INSTALLATION

This seal should be mounted preferably in open housing. The snap-in installation is only possible in special designed housing (see figure).

FIELD OF APPLICATION

Pressure ≤ 300 bar

Speed ≤ 15 m/s

Temperature - 200°C ÷ +200°C

Fluids High compatibility with almost all fluids (which do not attack the PTFE and Stainless)

SURFACE ROUGHNESS

Dynamic surface Ra ≤ 0.3 µm Rt ≤ 2.5 µm

Static surface Ra ≤ 1.6 µm Rt ≤ 6.3 µm

GAP DIMENSION "g"

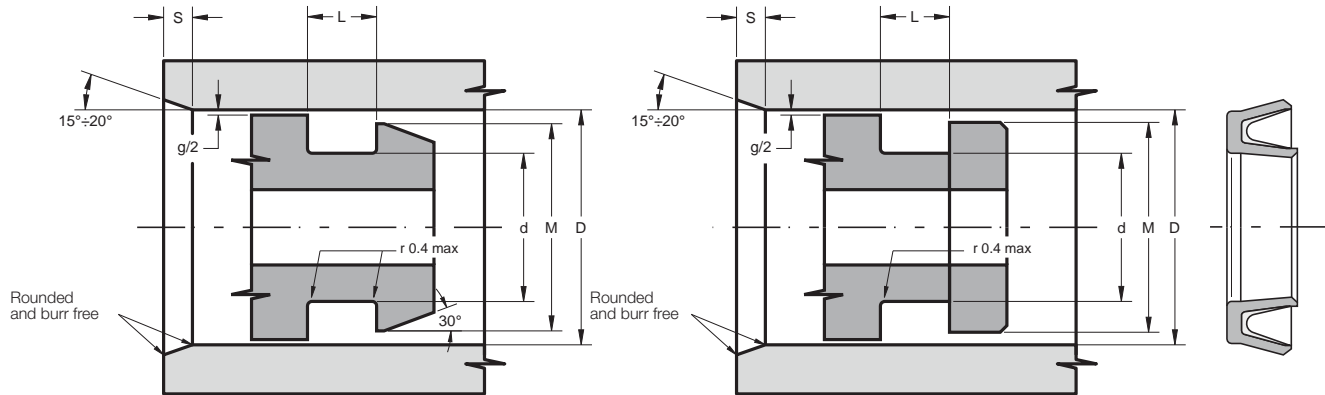
The largest gap dimension [mm] appearing in operation on the non-presurised side:

L	100 BAR	200 BAR	300 BAR
2.4	0.20	0.16	0.13
3.6	0.30	0.20	0.17
4.8	0.40	0.30	0.22
7.1	0.50	0.40	0.30
9.5	0.60	0.50	0.35

LEAD-IN CHAMFERS

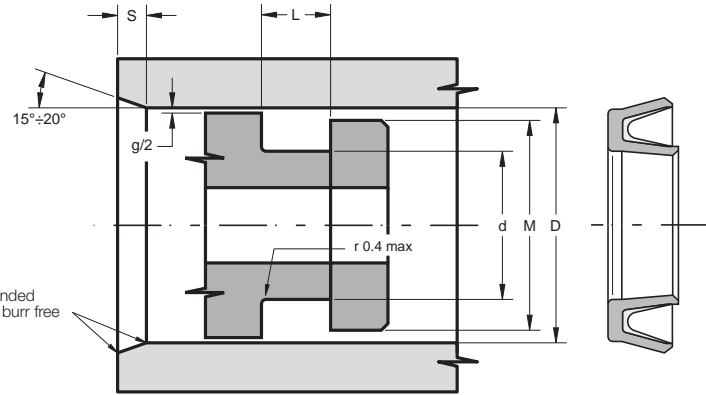
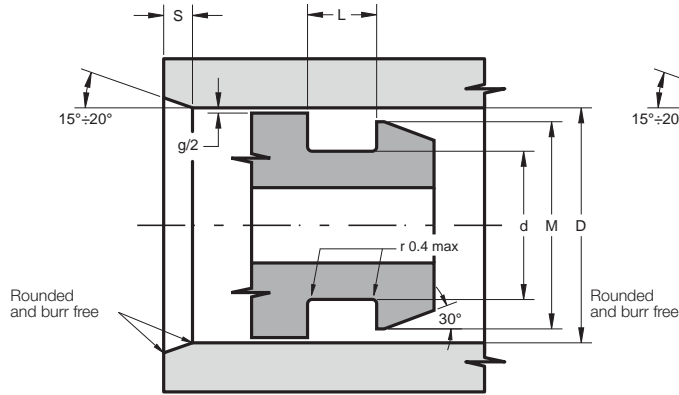
LEAD-IN CHAMFERS		LEAD-IN CHAMFERS	
L	S	L	S
2.4	2.0	7.1	5.0
3.6	2.5	9.5	6.5
4.8	3.5		

- to avoid damaging the seal during installation, housing must have rounded chamfers. Sharp edges and burrs within the installation area of the seal must be removed



Part.	D ^{H9}	d ^{h9}	L ^{+0.2}	M ^{min}
KV 8 5.1 2.4	8	5.1	2.4	5.9
KV 10 7.1 2.4	10	7.1	2.4	7.9
KV 12 9.1 2.4	12	9.1	2.4	9.9
KV 14 11.1 2.4	14	11.1	2.4	11.9
KV 15 10.5 3.6	15	10.5	3.6	11.7
KV 16 11.5 3.6	16	11.5	3.6	12.7
KV 18 13.5 3.6	18	13.5	3.6	14.7
KV 20 15.5 3.6	20	15.5	3.6	16.7
KV 22 17.5 3.6	22	17.5	3.6	18.7
KV 24 19.5 3.6	24	19.5	3.6	20.7
KV 25 20.5 3.6	25	20.5	3.6	21.7
KV 28 21.8 4.8	28	21.8	4.8	23.2
KV 30 23.8 4.8	30	23.8	4.8	25.2
KV 32 25.8 4.8	32	25.8	4.8	27.2
KV 35 28.8 4.8	35	28.8	4.8	30.2
KV 36 29.8 4.8	36	29.8	4.8	31.2
KV 38 31.8 4.8	38	31.8	4.8	33.2
KV 39 32.8 4.8	39	32.8	4.8	34.2
KV 40 33.8 4.8	40	33.8	4.8	35.2
KV 42 35.8 4.8	42	35.8	4.8	37.2
KV 45 38.8 4.8	45	38.8	4.8	40.2
KV 46 39.8 4.8	46	39.8	4.8	41.2
KV 48 38.6 7.1	48	38.6	7.1	40.2
KV 50 40.6 7.1	50	40.6	7.1	42.2
KV 52 42.6 7.1	52	42.6	7.1	44.2
KV 55 45.6 7.1	55	45.6	7.1	47.2
KV 57 47.6 7.1	57	47.6	7.1	49.2

Part.	D ^{H9}	d ^{h9}	L ^{+0.2}	M ^{min}
KV 60 50.6 7.1	60	50.6	7.1	52.2
KV 63 53.6 7.1	63	53.6	7.1	55.2
KV 64 54.6 7.1	64	54.6	7.1	56.2
KV 65 55.6 7.1	65	55.6	7.1	57.2
KV 70 60.6 7.1	70	60.6	7.1	62.2
KV 75 65.6 7.1	75	65.6	7.1	67.2
KV 80 70.6 7.1	80	70.6	7.1	72.2
KV 85 75.6 7.1	85	75.6	7.1	77.2
KV 89 79.6 7.1	89	79.6	7.1	81.2
KV 90 80.6 7.1	90	80.6	7.1	82.2
KV 95 85.6 7.1	95	85.6	7.1	87.2
KV 100 90.6 7.1	100	90.6	7.1	92.2
KV 105 95.6 7.1	105	95.6	7.1	97.2
KV 110 100.6 7.1	110	100.6	7.1	102.2
KV 115 105.6 7.1	115	105.6	7.1	107.2
KV 120 110.6 7.1	120	110.6	7.1	112.2
KV 125 115.6 7.1	125	115.6	7.1	117.2
KV 130 117.8 9.5	130	117.8	9.5	119.6
KV 132 119.8 9.5	132	119.8	9.5	121.6
KV 133 120.8 9.5	133	120.8	9.5	122.6
KV 135 122.8 9.5	135	122.8	9.5	124.6
KV 140 127.8 9.5	140	127.8	9.5	129.6
KV 145 132.8 9.5	145	132.8	9.5	134.6
KV 150 137.8 9.5	150	137.8	9.5	139.6
KV 154 141.8 9.5	154	141.8	9.5	143.6
KV 155 142.8 9.5	155	142.8	9.5	144.6
KV 160 147.8 9.5	160	147.8	9.5	149.6



Part.	D ^{H9}	d ^{h9}	L ^{+0.2}	M ^{min}
KV 165 152.8 9.5	165	152.8	9.5	154.6
KV 170 157.8 9.5	170	157.8	9.5	159.6
KV 175 162.8 9.5	175	162.8	9.5	164.6
KV 180 167.8 9.5	180	167.8	9.5	169.6
KV 185 172.8 9.5	185	172.8	9.5	174.6
KV 190 177.8 9.5	190	177.8	9.5	179.6
KV 200 187.8 9.5	200	187.8	9.5	189.6
KV 210 197.8 9.5	210	197.8	9.5	199.6
KV 220 207.8 9.5	220	207.8	9.5	209.6
KV 230 217.8 9.5	230	217.8	9.5	219.6
KV 240 227.8 9.5	240	227.8	9.5	229.6
KV 250 237.8 9.5	250	237.8	9.5	239.6
KV 260 247.8 9.5	260	247.8	9.5	249.6
KV 270 257.8 9.5	270	257.8	9.5	259.6
KV 280 267.8 9.5	280	267.8	9.5	269.6
KV 290 277.8 9.5	290	277.8	9.5	279.6
KV 300 287.8 9.5	300	287.8	9.5	289.6
KV 310 297.8 9.5	310	297.8	9.5	299.6
KV 320 307.8 9.5	320	307.8	9.5	309.6
KV 330 317.8 9.5	330	317.8	9.5	319.6
KV 340 327.8 9.5	340	327.8	9.5	329.6
KV 350 337.8 9.5	350	337.8	9.5	339.6
KV 360 347.8 9.5	360	347.8	9.5	349.6
KV 370 357.8 9.5	370	357.8	9.5	359.6
KV 380 367.8 9.5	380	367.8	9.5	369.6
KV 390 377.8 9.5	390	377.8	9.5	379.6
KV 400 387.8 9.5	400	387.8	9.5	389.6

Part.	D ^{H9}	d ^{h9}	L ^{+0.2}	M ^{min}
KV 410 397.8 9.5	410	397.8	9.5	399.6
KV 420 407.8 9.5	420	407.8	9.5	409.6
KV 430 417.8 9.5	430	417.8	9.5	419.6
KV 440 427.8 9.5	440	427.8	9.5	429.6
KV 450 437.8 9.5	450	437.8	9.5	439.6
KV 460 447.8 9.5	460	447.8	9.5	449.6
KV 470 457.8 9.5	470	457.8	9.5	459.6
KV 480 467.8 9.5	480	467.8	9.5	469.6
KV 490 477.8 9.5	490	477.8	9.5	479.6
KV 500 487.8 9.5	500	487.8	9.5	489.6

Other sizes not present in the above table can be provided in according to the following scheme:

D ^{H9}	d ^{h9}	L ^{+0.2}	M ^{min}
8-14	D - 2.9	2.4	D - 2.1
>14-25	D - 4.5	3.6	D - 3.3
>25-46	D - 6.2	4.8	D - 4.8
>46-125	D - 9.4	7.1	D - 7.8
>125-500	D - 12.2	9.5	D - 10.4