

► K15

Piston Seal



K15 is a double-acting piston seal consisting of a specially profiled polyurethane sealing ring and an elastomer O-ring energizer. It is designed to provide efficient bidirectional sealing performance with excellent wear resistance and reliable preload through the energizer element.

Advantages

- Good sealing effect
- Simple installation
- Economical solution
- Groove dimensions acc.ISO 7425-1

Application

- Mobile machinery
- Injection moulding machines
- Forklifts
- Agricultural machinery
- Standard industrial cylinders

Operating Conditions

MOTION:	Linear		
PRESSURE (bar):	250 bar (max)		
SPEED (m/s):	0.5 m/s (max)		
TEMPERATURE (°C):	-30/+100 °C	+5/+50 °C	-30/+40 °C
MEDIA TYPE:	Mineral Oils	HFA/HFB	HFC

NOTE: The above values (speed, pressure, temperature) are maximum values, all cannot be used at the same time.

Material Information

Sealing Ring	Energizer Ring	Remarks
Polyurethane-PU9401	Elastomer-NB7001	Standard produced material code

Note: In the special application conditions (temperature, media, etc.) Can be produced from different materials. Table 2.6 for details, you can refer to Table 2.7 and Table 2.8, or you can contact the sales department.

Installation Information

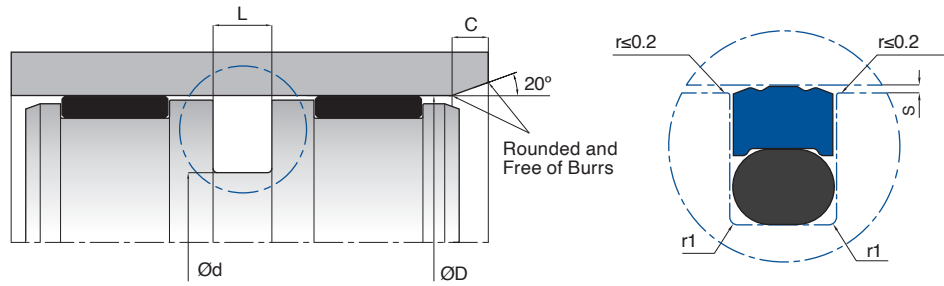
Easily assembled on one-piece piston. It is very important that the assembly tools must be of soft material and have no sharp edges. Before installation the sealing element must be oiled with system oil. (See Installation instructions Page 51-57)

Surface Roughness

	1 (boru)	2 (groove base)	3 (groove flanks)
Ra	0.1-0.4 µm	0.2-1.6 µm	0.2-3.2 µm
Rmax	< 3.2 µm	< 6.3 µm	< 15 µm
Rmr	When C = 0.25xRz on the dynamic work surface and reference line C _{ref} = 5% , the working surface contact area should be approximately between 50% and 70%.		



K15 Piston Seal



L (mm)	Max. Permissible Sealing Gap Value " S_{max} " (mm) for K15	
	160 bar	250 bar
3.2	0.30	-
4.2	0.30	0.20
6.3	0.35	0.25
8.1	0.35	0.25

S_{max} values are suitable for operating conditions up to 60 °C. See page 64 for the calculation of " S_{max} ".

KASTAŞ NO	D (H9)	d (h9)	L (+0.2/-0)	r1	C	O-Ring	KASTAŞ CODE
K15 015-007.5	15	7.5	3.2	0.6	3	7.60x2.62	10002298
K15 016-008.5	16	8.5	3.2	0.6	3	7.60x2.62	10002299
K15 020-012.5	20	12.5	3.2	0.6	3	11.91x2.62	10002300
K15 022-014.5	22	14.5	3.2	0.6	3	13.95x2.62	10002301
K15 025-014	25	14	4.2	1	4.5	13.87x3x53	10002302
K15 025-017.5	25	17.5	3.2	0.6	3	17.13x2.62	10002303
K15 030-022.5	30	22.5	3.2	0.6	3	21.89x2.62	10002304
K15 032-021	32	21	4.2	1	4.5	20.22x3x53	10002305
K15 032-024.5	32	24.5	3.2	0.6	3	23.81x2.62	10002306
K15 035-027.5	35	27.5	3.2	0.6	3	26.64x2.62	10002307
K15 038-030.5	38	30.5	3.2	0.6	3	29.82x2.62	10002308
K15 040-024.5	40	24.5	6.3	1.3	6	23.17x5.33	10002309
K15 040-029	40	29	4.2	1	4.5	28.17x3.53	10002310
K15 040-032.5	40	32.5	3.2	0.6	3	31.42x2.62	10002311
K15 045-029.5	45	29.5	6.3	1.3	6	29.51x5.33	10002312
K15 045-034	45	34	4.2	1	4.5	32.92x3.53	10002313
K15 048-037	48	37	4.2	1	4.5	36.1x3.53	10002314
K15 049-038	49	38	4.2	1	4.5	37.69x3.53	10002315
K15 050-034.5	50	34.5	6.3	1.3	6	32.69x5.33	10002316
K15 050-039	50	39	4.2	1	4.5	37.69x3.53	10002317
K15 052-036.5	52	36.5	6.3	1.3	6	34.29x5.33	10002318
K15 054-043	54	43	4.2	1	4.5	42.86x3.53	10002319
K15 055-039.5	55	39.5	6.3	1.3	6	37.47x5.33	10002320
K15 055-044	55	44	4.2	1	4.5	42.86x3.53	10002321
K15 057.15-046.15	57.15	46.15	4.2	1	4.5	46.04x3.53	10002322
K15 060-044.5	60	44.5	6.3	1.3	6	43.82x5.33	10002323
K15 060-049	60	49	4.2	1	4.5	47.63x3.53	10002324
K15 063-047.5	63	47.5	6.3	1.3	6	47x5.33	10002326
K15 063-052	63	52	4.2	1	4.5	50.8x3.53	10002327
K15 063.5-052.5	63.5	52.5	4.2	1	4.5	50.8x3.53	10002325
K15 065-049.5	65	49.5	6.3	1.3	6	47x5.33	10002329
K15 065-054	65	54	4.2	1	4.5	52.39x3.53	10002330
K15 070-054.5	70	54.5	6.3	1.3	6	53.34x5.33	10002331
K15 070-059	70	59	4.2	1	4.5	57.15x3.53	10002332
K15 075-059.5	75	59.5	6.3	1.3	6	56.52x5.33	10002333
K15 075-064	75	64	4.2	1	4.5	63.09x3.53	10002334
K15 080-059	80	59	8.1	1.8	8	58x6.99	10002335
K15 080-064.5	80	64.5	6.3	1.3	6	62.87x5.33	10002336



KASTAŞ NO	D (H9)	d (h9)	L (+0.2/-0)	r1	C	O-Ring	KASTAŞ CODE
K15 080-069	80	69	4.2	1	4.5	68.26x3.53	10002337
K15 085-069.5	85	69.5	6.3	1.3	6	69.22x5.33	10002338
K15 090-074.5	90	74.5	6.3	1.3	6	72.4x5.33	10002339
K15 095-079.5	95	79.5	6.3	1.3	6	78.74x5.33	10002340
K15 100-084.5	100	84.5	6.3	1.3	6	81.92x5.33	10002341
K15 100-089	100	89	4.2	1	4.5	85.32x3.53	10002342
K15 105-089.5	105	89.5	6.3	1.3	6	88.27x5.33	10002343
K15 110-094.5	110	94.5	6.3	1.3	6	91.44x5.33	10002344
K15 115-094	115	94	8.1	1.8	8	92x6.99	10002345
K15 115-099.5	115	99.5	6.3	1.3	6	97.80x5.33	10002346
K15 120-104.5	120	104.5	6.3	1.3	6	104.14x5.33	10002348
K15 125-104	125	104	8.1	1.8	8	102x6.99	10002349
K15 125-109.5	125	109.5	6.3	1.3	6	107.32x5.33	10002350
K15 130-114.5	130	114.5	6.3	1.3	6	110.49x5.33	10002351
K15 135-114	135	114	8.1	1.8	8	113.67x6.99	10002352
K15 140-119	140	119	8.1	1.8	8	116.84x6.99	10002353
K15 150-129	150	129	8.1	1.8	8	126.37x6.99	10002355
K15 160-139	160	139	8.1	1.8	8	135.9x6.99	10002356
K15 170-149	170	149	8.1	1.8	8	145.42x6.99	10002357
K15 180-159	180	159	8.1	1.8	8	155.6x6.99	10002358
K15 200-179	200	179	8.1	1.8	8	177.17x6.99	10002360
K15 250-229	250	229	8.1	1.8	8	227.97x6.99	10002361

