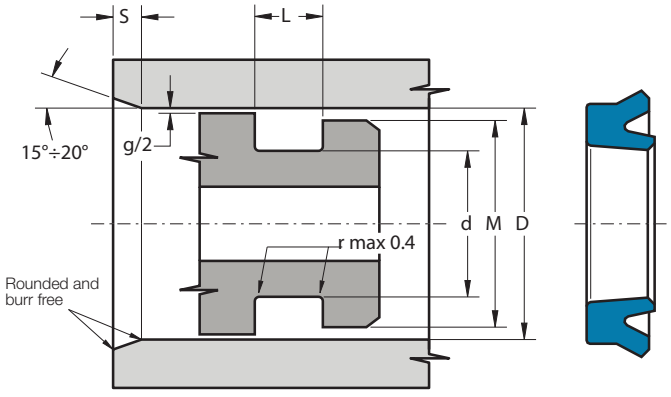
KD

Piston seal with asymmetric lips



Description

Single acting piston seal with asymmetric lips

Material

Type:	Polyurethane
Designation:	SEALPUR 93
Hardness:	93 °ShA

Main features

The piston seal type KD assures a good reaction against shock pressure peaks and low friction in the low pressure range.

The asymmetric lips are designed to differentiate the behaviour of the lips on the static and dynamic surfaces: the static lip is flexible, more sensitive to pressure fluctuations and it guaranties a wide contact area; the dynamic lip is shorter and stronger to concentrate load against the dynamic surface.

They can also be used in back-to-back arrangement for double acting piston.

- Extended service life
- Simple groove design
- Insensitive to structural deflections
- High resistance against extrusion
- Excellent wear-resistance
- Good temperature resistance
- Easy installation without expensive auxiliaries

Field of application

Pressure	≤ 400 bar
Speed	≤ 0.5 m/s
Temperature	–40°C ÷ +100°C
Fluids	Hydraulic oils (mineral oil based).
	For other fluids contact our technical department

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 appearing in operation on the non-pressurised side:

• 50 bar	1.20 mm
• 100 bar	0.80 mm
• 200 bar	0.40 mm
• 300 bar	0.25 mm
• 400 bar	0.17 mm

Lead-in chamfers	D	Smin
	• less 100	5 mm
	• 100÷200	7 mm
	• over 200	10 mm

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

Part.	D H10	d f8	L +0.25	M
KD 20 10 7.5	20	10	8.5	14
KD 20 12 5.3	20	12	5.8	15
KD 22 12 8	22	12	9.0	16
KD 25 13 7	25	13	8.0	17
KD 25 15 8	25	15	9.0	19
KD 30 15 10	30	15	11.0	20
KD 30 20 8	30	20	9.0	24
KD 30 22 6	30	22	7.0	25
KD 31.75 19 7	31.75	19	8.0	24
KD 32 17 10	32	17	11.0	22
KD 32 22 10	32	22	11.0	26
KD 32 26 6	32	26	7.0	29
KD 35 20 10	35	20	11.0	25
KD 35 22.5 6	35	22.5	7.0	27

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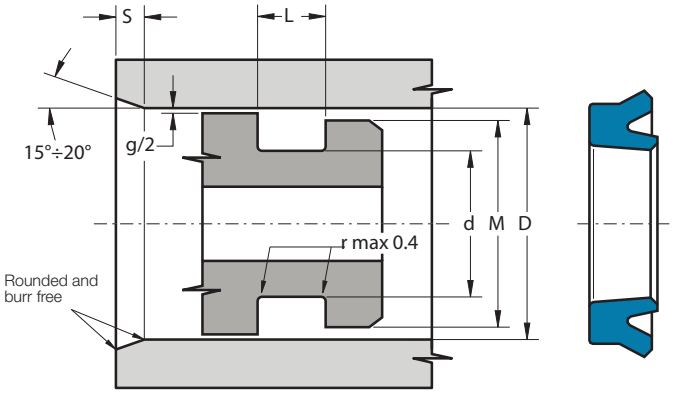

Part.	D H10	d f8	L +0.25	M
KD 35 25 8	35	25	9.0	29
KD 38 31 4.7	38	31	5.2	34
KD 40 25 10	40	25	11.0	30
KD 40 30 6.5	40	30	7.5	34
KD 40 33 8	40	33	9.0	36
KD 42 32 10	42	32	11.0	36
KD 45 30 10	45	30	11.0	35
KD 46 39.4 4	46	39.4	4.5	42
KD 50 35 10	50	35	11.0	40
KD 50 40 5	50	40	5.5	44
KD 50 40 10	50	40	11.0	44
KD 50 42 5.5	50	42	6.0	45
KD 50 42 8	50	42	9.0	45
KD 55 40 10	55	40	11.0	45
KD 55 45 6.5	55	45	7.5	49
KD 56 46 7	56	46	8.0	50
KD 60 40 12	60	40	13.0	45
KD 60 40 13.5	60	40	14.5	45
KD 60 45 10	60	45	11.0	50
KD 60 50 7	60	50	8.0	54
KD 63 45 10	63	45	11.0	50
KD 63 48 10	63	48	11.0	53
KD 63 48 12	63	48	13.0	53
KD 63 53 7	63	53	8.0	57
KD 65 45 12	65	45	13.0	50
KD 65 50 10	65	50	11.0	55
KD 65 55 10	65	55	11.0	59

Part.	D H10	d f8	L +0.25	M
KD 70 50 12	70	50	13.0	55
KD 70 50 15	70	50	16.0	55
KD 70 60 7	70	60	8.0	64
KD 70 60 8	70	60	9.0	64
KD 70 60 12	70	60	13.0	64
KD 75 65 5	75	65	5.5	69
KD 75 65 7	75	65	8.0	69
KD 75 65 10	75	65	11.0	69
KD 75 65 12	75	65	13.0	69
KD 80 60 12	80	60	13.0	65
KD 80 60 13.5	80	60	14.5	65
KD 80 65 12	80	65	13.0	70
KD 80 70 7	80	70	8.0	74
KD 80 70 12	80	70	13.0	74
KD 85 65 13.5	85	65	14.5	70
KD 90 70 12	90	70	13.0	75
KD 90 70 13.5	90	70	14.5	75
KD 90 75 10	90	75	11.0	80
KD 90 75 12	90	75	13.0	80
KD 90 80 5	90	80	5.5	84
KD 90 80 10	90	80	11.0	84
KD 90 80 12	90	80	13.0	84
KD 95 85 7	95	85	8.0	89
KD 95 85 8.5	95	85	9.5	89
KD 95 87 4	95	87	4.5	91
KD 100 80 12	100	80	13.0	85
KD 100 85 12	100	85	13.0	90
KD 100 90 8	100	90	9.0	94
KD 105 85 12	105	85	13.0	90
KD 110 100 7	110	100	8.0	104
KD 120 100 12	120	100	13.0	105
KD 125 105 12	125	105	13.0	110
KD 160 140 8.25	160	140	8.5	145
KD 170 152 7	170	152	8.0	157
KD 180 160 13.5	180	160	14.5	165
KD 190 172 7	190	172	8.0	177
Inch sizes				
KD 3000 2385 0345	76.20	60.60	14.6	66.2
KD 4250 3640 0345	107.95	92.45	14.6	97.9