

The piston seal type Aston Seals KDF is composed of:

- A seal element which 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
- An angular wear ring which guides the piston in the cylinder and supports radial loads
- Simple groove design

- Inexpensive sealing and guiding solution
- Extended service life
- High resistance against extrusion
- Excellent wear-resistance
- Good temperature resistance
- Easy installation without expensive auxiliaries

## **MATERIAL**



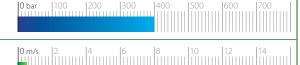
1 Type Polyurethane
Designation SEALPUR 93
Hardness 93 °ShA

2 **Type** Acetal resin with glass fibre **Designation** BEARITE

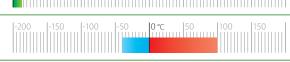
## FIELD OF APPLICATION

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 Static surface

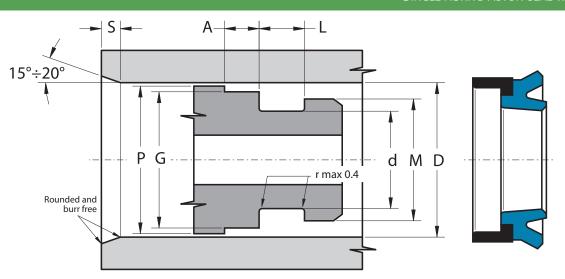
Ra  $\leq$  0.3  $\mu$ m Rt  $\leq$  2.5  $\mu$ m Ra  $\leq$  1.6  $\mu$ m Rt  $\leq$  6.3  $\mu$ m

## **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.

The above data are maximum values, they may be maintained for short periods and can not be used at the same time simultaneously.





Part.	D H10	d <sup>f8</sup>	L +0.25	A ±0.1	<b>G</b> -0.05	P ±0.2	М
KDF 32 20 8	32	20	9.0	6.35	28.50	30.5	24
KDF 35 22 9	35	22	10.0	6.35	31.40	33.5	27
KDF 40 25 8.5	40	25	9.5	6.35	35.40	38.5	30
KDF 40 26 8.5	40	26	9.5	6.35	35.40	38.5	31
KDF 40 30 8	40	30	9.0	6.35	35.40	38.5	34
KDF 40 30 8.5	40	30	9.5	6.35	35.40	38.5	34
KDF 45 30 9	45	30	10.0	6.35	40.40	43.7	35
KDF 45 35 8.5	45	35	9.5	6.35	40.40	43.7	39
KDF 50 30 13.5	50	30	14.5	6.35	44.30	48.5	35
KDF 50 35 10	50	35	11.0	6.35	45.35	48.5	40
KDF 50 40 10	50	40	11.0	6.35	45.40	48.5	44
KDF 55 40 10	55	40	11.0	6.35	50.35	53.5	45
KDF 60 40 13.5	60	40	14.5	6.35	55.40	58.5	45

Part.	D H10	d <sup>f8</sup>	L +0.25	A ±0.1	<b>G</b> -0.05	P ±0.2	М
KDF 60 45 10	60	45	11.0	6.35	55.40	58.5	50
KDF 63 45 10	63	45	11.0	6.35	58.40	61.5	50
KDF 65 50 10	65	50	11.0	6.35	60.40	63.5	55
KDF 70 50 13.5	70	50	14.5	6.35	64.20	68.3	55
KDF 80 60 12	80	60	13.0	6.35	74.15	78.3	65
KDF 80 60 13.5	80	60	14.5	6.35	74.15	78.3	65
KDF 90 70 12	90	70	13.0	6.35	84.15	88.3	75
KDF 90 70 13.5	90	70	14.5	6.35	84.15	88.3	75
KDF 100 80 13.5	100	80	14.5	6.35	93.15	98.0	85
KDF 100 80 13.5/A	100	80	14.5	6.35	94.15	98.3	85
KDF 110 95 12	110	95	13.0	6.35	103.10	108.0	100
KDF 120 100 13.5	120	100	14.5	6.35	113.10	118.1	105