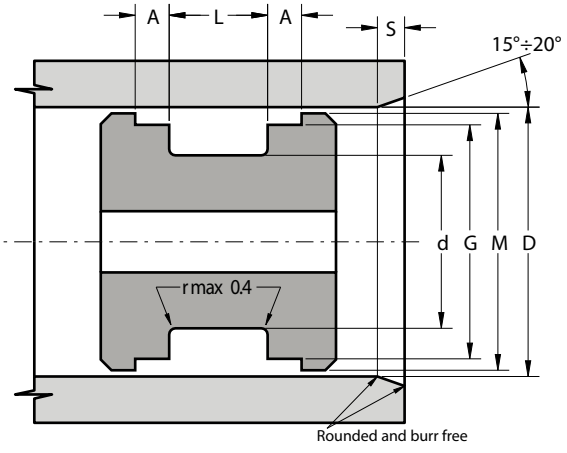
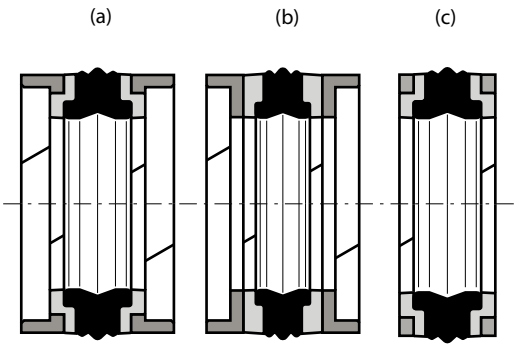
KGD

Double acting piston seal with wear rings





Description
Double acting piston seal with wear rings

Material of seal ring
Type: Nitril Rubber NBR
Designation: RUBSEAL 75
Hardness: 75 °ShA

Material of anti-extrusion rings
Type: Thermoplastic polyester resin
Designation: SEALITE 63
Hardness: 63 °ShD

Material of guide rings
Type: Acetal resin with glass fibre
Designation: BEARITE

Main features
The piston seal type KGD is composed of:

- A sealing rubber element with low permanent deformation which assures good sealing performance. Three compact and small seal edges ensure perfect fluid control and concentrate load against the dynamic surface. The cavities between the external seal edges keep small quantities of fluid reducing friction and wear. The special geometry of static side guaranties a wide contact area and prevents distortion inside the groove during installation
- Two anti-extrusion rings with stabilizers to avoid the rotation of the rubber element. A special geometry of grooves assures that pressure loads the energizing seal element without any risk of extrusion of it.
- Two angular wear rings which guide the piston in the cylinder tube and support radial loads. Special grooves ensure that pressure loads the energizing seal element in all work conditions

- Good sealing performance as well as at low pressure
- Simple one-part piston design
- High resistance against extrusion
- Good guide of piston and gap balancing
- Perfect fluid control
- Good mechanical stability at high temperature
- Easy installation without expensive auxiliaries
- High resistance against extrusion
- Good temperature resistance
- Easy installation on a solid piston

Field of application

Pressure	≤ 400 bar
Speed	≤ 0.5 m/s
Temperature	–40°C ÷ +110°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

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