

K753

K753 PISTON SEAL



K753 is a three piece double acting sealing set which consists of one special mixture PTFE profile ring, one X-ring as for main sealing element and an O-ring as energizing element.

PRODUCT ADVANTAGES

- Wide range of temperature and chemicals depending on the o-ring and x-ring material
- Low friction, free of stick-slip
- High sealing effect in applications requiring media separation
- Low gas permeation rate
- Minimum static and dynamic friction coefficient for a minimum energy loss and operating temperature
- Simple groove design and low axial housing heights

APPLICATION

Accumulators, heavy duty cylinders, presses and machine tools.

MATERIAL		CODE
NBR	70 SHORE A	NB7001
PTFE		PT6003

OPERATING CONDITIONS

MEDIA	Mineral oils (DIN 51524)	HFA and HFB	HFC
TEMPERATURE	-30°C +105°C	+5°C +60°C	-30°C +60°C
PRESSURE	≤400 Bar	≤400 Bar	≤400 Bar
SPEED	≤2.0 m/sec	≤2.0 m/sec	≤2.0 m/sec

Note: The above data are maximum values and cannot be used at the same time.

SURFACE ROUGHNESS		Ra	Rmax
Sliding Surface	∅D	≤0.2 µm	≤2.0 µm
Groove Base	∅d	≤1.6 µm	≤6.3 µm
Groove Flanks	B	≤3.2 µm	≤15 µm

Note: It is recommended to have 50% to 90% of the working surface material contact area value.

INSTALLATION

It is recommended to assembly into one piece piston with special assembly tool (See section; Hydraulic Sealing Elements General Installation Information). 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.

NOTES

It is recommended to use with minimum two piston guide rings in long stroke cylinders, minimum one guide ring in short stroke and low radial loaded cylinders. For special applications that require high temperatures or resistance to chemicals, piston seal is being manufactured with special mixture PTFE and FKM material. The permissible sealing gap values of K753 piston seal is given in the below table.

B (mm)	PERMISSIBLE SEALING GAP		
	Smax (mm)		
	150 Bar	250 Bar	400 Bar
4.2	0.25	0.15	0.10
6.3	0.30	0.20	0.15
8.1	0.30	0.20	0.15
9.5	0.50	0.25	0.20

Note: The largest sealing gap value occurring on the non-pressurized side of the seal does have a vital importance for the function of the seal and in this respect it is quite important to use the S value lower than the above indicated numbers.