



K751 is a two piece single acting piston seal which consists of a PTFE u-ring with metal spring as a tension component.

PRODUCT ADVANTAGES

- Superior static and dynamic sealing effect by the metal spring
- High resistance to chemicals and temperature changes
- Low friction, free of stick-slip
- High sliding speed
- Long service life
- Good dry running conditions
- Can be sterilized
- Low static and dynamic friction values

APPLICATION

Hydraulic and pneumatic cylinders, hot water valves, pumps, hot steam valves, food processing, chemical and medical technology.

MATERIAL	CODE
PTFE	PT6002
STAINLESS STEEL SPRING	CN9902

OPERATING CONDITIONS

MEDIA	Hydraulic oils, hot air, water, steam, all media that do not react PTFE and stainless steel
TEMPERATURE	-150°C +250°C
PRESSURE	≤350 Bar
SPEED	≤15.0 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. If the operating media is gas we recommend having Ra value not to be above 0.15 μm.

INSTALLATION

K751 is to be assembled into open and closed grooves. 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

Depending on the PTFE material application values and their resistance can change. The permissible sealing gap values of K751 spring loaded piston seal is given in the below table.

PERMISSIBLE SEALING GAP

B (mm)	Smax (mm)			
	50 Bar	150 Bar	250 Bar	350 Bar
2.4-3.6	0.10	0.075	0.05	0.05
4.8	0.20	0.10	0.075	0.06
7.1	0.25	0.15	0.10	0.075
9.5	0.30	0.15	0.13	0.075

Note: The largest sealing gap value occurring on the non-pressurized side of the seal is vital 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.