



K42 is a five piece double acting compact seal which consists of one multiple lip elastomeric nitrile rubber sealing element, two polyester elastomer back-up rings on both sides to prevent extrusion into the sealing gap and two special profiled thermoplastic guide rings to absorb transverse forces.

PRODUCT ADVANTAGES

- Effective sealing during vibration and shock loading
- Superior sealing effect in high pressures
- Maximum sealing efficiency with the least amount of friction
- Superior sealing performance

APPLICATION

Heavy duty cylinders, excavators, cranes, marine hydraulics and loading platforms.

MATERIAL		CODE
NBR	80 SHORE A	NB8001
TPE		TP5501
POM		PM9903

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	≤700 Bar	≤700 Bar	≤700 Bar
SPEED	≤0.5 m/sec	≤0.5 m/sec	≤0.5 m/sec

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

SURFACE ROUGHNESS		Ra	Rmax
Sliding Surface	∅D	≤0.4 μm	≤4.0 μm
Groove Base	∅d	≤1.6 μm	≤6.3 μm
Groove Flanks	B	≤3.2 μm	≤16 μm

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

INSTALLATION

K42 compact seal must be used in open housing due to the non split form of the back-up ring produced from TPE material. If it is necessary to have a closed groove, back-up rings should be cut with 45° angle in a way not to have any gap and installed afterwards. On this case after the assembly onto the piston the cut on the back-up ring should be checked carefully. 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

For special applications that require high temperatures, piston seal can be manufactured in FKM and PTFE material.