K48 is a four piece double acting heavy duty piston seal which consists of one TPE profile ring, one elastomeric nitrile rubber to pre load sealing element and two thermoplastic back-up rings.

PRODUCT ADVANTAGES
- Simple groove design
- Superior performance in high and variable pressure
- Long service life
- Very good sealing performance at shock pressures
- High resistance to abrasion
- Ultimate resistance in water based f luids.

APPLICATION
- Mining industry
- Heavy duty applications

MATERIAL		CODE
NBR	80 SHORE A	NB8001
POM		PM9901
TPE		TP5501

OPERATING CONDITIONS		
MEDIA	Mineral oils (DIN 51524)	HFA and HFB
TEMPERATURE	-30°C +105°C	+5°C +60°C
PRESSURE	≤700 Bar	≤700 Bar
SPEED	≤0.3 m/sn	≤0.3 m/sn

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

SURFACE ROUGHNESS		Ra	Rmax
Sliding Surface	Ød	≤0.4 µm	≤3.2 µm
Groove Base	ØD	≤1.6 µm	≤10 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
Easily assembled into one-piece piston because the back-up rings are been produced in split forms. 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.

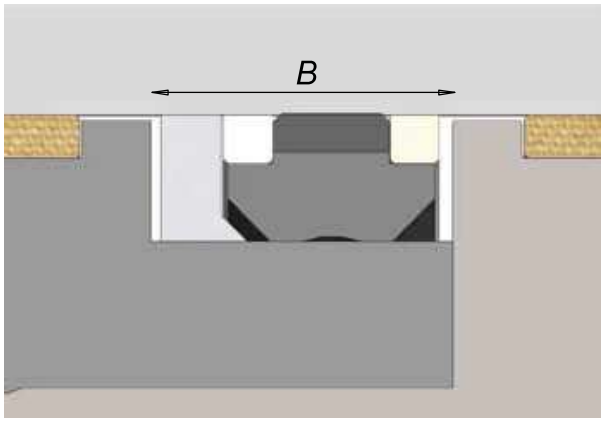
NOTES
It is recommended to choose suitable material and quantity for guiding element regarding the purpose of application.

PERMISSIBLE SEALING GAP

Pressure (Bar)	Smax (mm)
P≤350	0.45
350<P≤700	0.25

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.

K48 with back-up ring



If a back up ring is used in unpressurized side, the seal could resist up to 1500 bar static pressure.

*Note: Please add "**a**" to B dimension.*

ØD	*a*
≤200	*4 mm*
>200	*5 mm*