



K95 is a single acting piston - rod seal and designed to have symmetrical lips in order to be used both for rod and piston applications.

PRODUCT ADVANTAGES

- Superior static and dynamic sealing effect
- Wide range of dimensions
- Easy assembly into closed grooves
- Although designed for hydraulic cylinders, it is used in special pneumatic cylinders as well
- Simple groove design
- Economical sealing solution

APPLICATION

Fork-lift trucks, injection moulding machines, agricultural machinery, and standard cylinders.

MATERIAL	CODE	
NBR	90 SHORE A	NB9001

OPERATING CONDITIONS			
MEDIUM	Mineral oils (DIN 51524)	HFA and HFB	HFC
TEMPERATURE	-30°C +105°C	+5°C +60°C	-30°C +60°C
PRESSURE	≤150 Bar	≤150 Bar	≤150 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	$\varnothing D - \varnothing d$	≤0.4 μm	≤3.2 μm
Groove Base	$\varnothing d_p - \varnothing D_b$	≤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 closed grooves according to the minimum diameter values that are given in the below table. Open grooves or special assembly tools should be used for the values that are outside this table. Before installation the sealing element must be oiled with system oil.

MINIMUM DIAMETER VALUES FOR CLOSED TYPE OF GROOVES

(D-d)/2 (mm)	4	5	6	7.7	10	12.5	15
d min (mm)	25	30	40	50	80	100	105

NOTES

For special applications that require high temperatures, K95 can be produced in FKM material. The permissible sealing gap values of K95 piston - rod seal is given in the below table.

PERMISSIBLE SEALING GAP

t=(D-d)/2	Smax (mm)		
	50 bar	100 bar	150 bar
t≤5	0.40	0.20	0.10
t>5	0.45	0.25	0.15

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.