



K35 is a two piece single acting rod seal which consists of one special mixture PTFE profile ring and an o-ring as energizing element.

PRODUCT ADVANTAGES

- Low friction, free of stick-slip
- Thanks to the special profile it can be used in pair or in front of the u-ring
- Long service life
- High sliding speed
- Wide range of temperature and chemicals depending on the o-ring material
- Minimum static and dynamic friction coefficient for a minimum energy loss and operating temperature
- Simple groove design and low axial housing heights

APPLICATION

Injection moulding machines, fork-lift trucks, loading platforms, cranes, agricultural machinery, hydraulic breakers and servo cylinders.

MATERIAL		CODE
NBR	70 SHORE A	NB7001
PTFE		PT6003

OPERATING CONDITIONS

MEDIA	Mineral oils	HFA and	HFC
	(DIN 51524)	HFB	
TEMPERATURE	-30°C	+5°C	-30°C
	+105°C	+60°C	+60°C
PRESSURE	≤400 Bar	≤400 Bar	≤400 Bar
SPEED	≤5.0 m/sec	≤5.0 m/sec	≤5.0 m/sec

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

SURFACE ROUGHNESS		Ra	Rmax
Sliding Surface	Ød	≤0.2 µm	≤2.0 µm
Groove Base	ØD	≤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

We recommend using 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

K35 type of rod seal can be also used with double lip wipers. For special applications that require high temperatures or resistance to chemicals, piston seal is being manufactured with special mixture PTFE and FKM material. For heavy duty applications and high pressures the tolerances should change to H8/f8 and please contact our customer service to choose the suitable sealing element. The permissible sealing gap values of K35 rod seal is given in the below table.

PERMISSIBLE SEALING GAP

B (mm)	Smax (mm)		
	150 bar	250 bar	400 bar
2.2	0.25	0.15	0.10
3.2	0.35	0.20	0.10
4.2	0.35	0.20	0.15
6.3	0.45	0.25	0.15
8.1	0.55	0.30	0.20
8.1	0.55	0.30	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.