

WHY SKF?

Wiper seals

Hydraulic cylinders operate in a variety of applications and environmental conditions, including exposure to dust, debris or outside weather conditions. To prevent these contaminants from entering the cylinder assembly and hydraulic system, wiper seals (also known as scrapers, excluders or dust seals) are fitted on the external side of the cylinder head.

Wiper seals maintain sealing contact with the piston rod when the equipment is stationary (static, no reciprocating motion of rod) and in use (dynamic, reciprocating rod). Without a wiper seal, the retracting piston rod could transport contaminants into the cylinder.

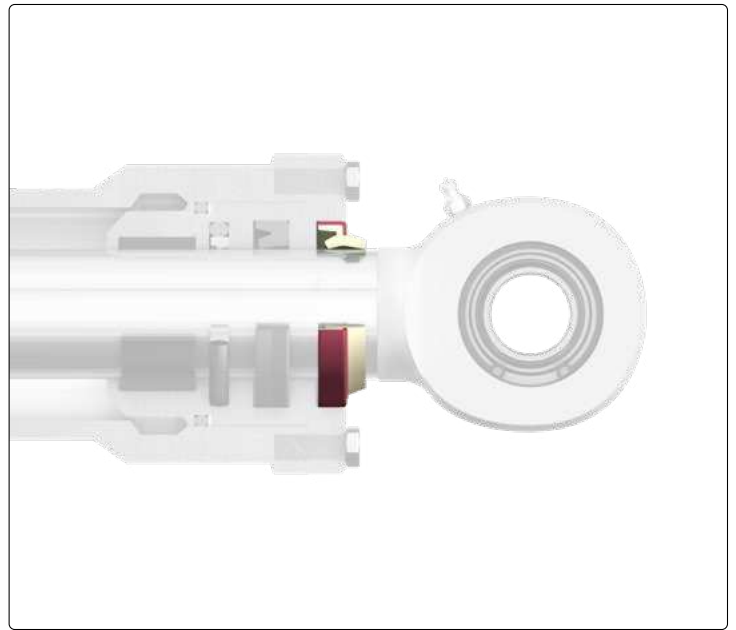
The outside static sealing of the wiper within the groove is also important to avoid moisture or particles from entering around the outside of the wiper seal.

Product features

- Wide range of profiles, sizes and materials for a wide variety of operating conditions and applications
- Press-in and snap-in wipers
- Single acting and double acting wipers

User benefits








- Improved sealing performance
- Extended system service life
- Increased productivity
- Reduced maintenance costs
- Increased mean time between failures (MTBF)
- Optimized design and development of fluid sealing systems for custom applications



Common applications

- Hydraulic cylinders used in off-highway equipment for:
 - Construction
 - Mining (mobile and stationary applications)
 - Agriculture
 - Forestry
- Industrial stationary cylinders and presses

Profile overview

Profile	Description	Profile	Description
PA 	Press-in wiper; steel sleeve; single-lip design; lip protrudes from head; small radial cross section; suitable for heavy-duty applications	DTW 	Snap-in wiper; single-lip design; static seal lips on the outside surface and outside face; vents in the inside edge
MCW 	Press-in wiper; steel sleeve; aggressive single-lip design; sits flush with head	DX 	Snap-in wiper; single-lip design; patented profile for heavy duty applications; vents in the inside edge
PAD 	Press-in wiper; steel sleeve; double-lip design improves rod sealing system performance	HW 	Snap-in wiper; double-lip design improves rod sealing system performance
PADV 	PADV PAD with a vent in the inside-facing lip		

More wiper seals

The wiper seals listed above represent the preferred profiles available in common sizes.

SKF supplies many additional sizes and profiles. SKF can manufacture a wide variety of wiper seal profiles with different materials and sizes both moulded and with its industry-leading SKF SEAL JET production system.

For additional information about these profiles or if the application requires a solution different from what is shown here, contact SKF. SKF can provide customized sealing solutions for the toughest application conditions.