



Wipers

Type: WP 02

Equipped with two sealing lips, type WP 02 is a double-acting wiper. It consists of a PTFE profile ring and an O-ring as preload element.

The wiper function is taken over by the PTFE profile ring. The outside seal lip removes contaminants from the piston rod during its inward stroke. The inside seal lip reduces the lubricant film on the retracting piston rod.

These wipers are suited for use with mineral oil-based hydraulic fluids through to environment-friendly bio-oils, water, flame-resistant hydraulic fluids and air.

Wipers offer very good sliding behavior, slip-stick free behavior, dry-running property potential and also high wear resistance.

Operating media

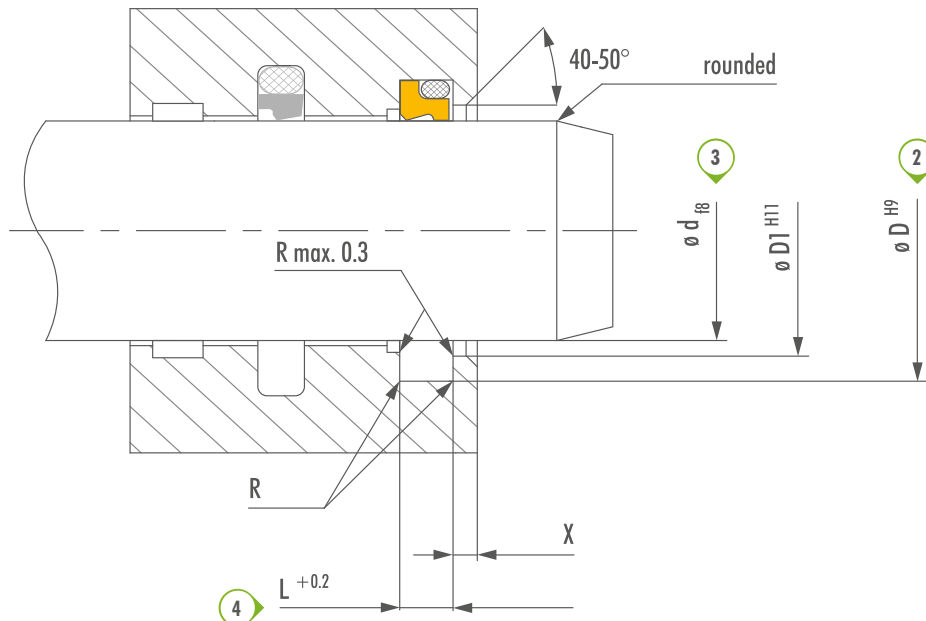
Mineral oil based hydraulic fluids	Environment-friendly bio-oils
Water	Flame-resistant hydraulic fluids
Air	Other media acc. to O-ring material

Operating range

Speed	up to 15 m/s
Temperature	- 30 °C to +200 °C (acc. to O-ring material)

Surface quality

Roughness	Ra	Rt
Contact surface	≤ 0.3 μm	≤ 3.0 μm
Groove base	≤ 1.6 μm	≤ 16.0 μm
Groove flank	≤ 1.6 μm	≤ 16.0 μm



Installation dimensions

Rods $\varnothing d$	Groove base $\varnothing D$	Collar diameter $\varnothing D1$	Groove width $L_{+0.2}$	Radius R	X min.	O-ring cross section \varnothing
15.0 - 64.9	$\varnothing d + 6.8$	$\varnothing d + 1.5$	5.0	0.7	2.0	2.62
65.0 - 250.9	$\varnothing d + 8.8$	$\varnothing d + 1.5$	6.0	1.0	3.0	3.53
251.0 - 420.9	$\varnothing d + 12.2$	$\varnothing d + 2.0$	8.4	1.2	3.0	5.33
421.0 - 650.9	$\varnothing d + 16.0$	$\varnothing d + 2.5$	11.0	1.5	4.0	7.0
651.0 - 900.0	$\varnothing d + 20.0$	$\varnothing d + 2.5$	14.0	1.5	5.0	8.4

Material selection PTFE profile ring

PTFE + bronze	Standard for hydraulic applications, good sliding behavior, particularly pressure and abrasion resistant, not for use in aqueous media or acids
PTFE + glass-MoS ₂	Particularly wear and abrasion resistant, can also be used in hydraulic media with poor lubricating properties, in water and also water-oil emulsions
PTFE + carbon	Exceptionally abrasion and extrusion resistant, can be used in water hydraulic systems

Find additional materials in our PTFE materials overview in the technical information section.

Selection of materials O-ring

Nitrile rubber NBR	Temperature range - 30 °C to + 120 °C
Fluorinated rubber FPM	Temperature range - 25 °C to + 200 °C

To place a quick order for the correct product, please use the order information system below.

SYSTEM: **WP02 Groove base $\varnothing D$ x Rod diameter $\varnothing d$ x Groove width L » Material**

① ② ③ ④ ⑤

EXAMPLE: **WP02 56.8 x 50 x 5.0 CCN-GL15M5**

① Wiper, two seal lips ② Groove base diameter $\varnothing D$ 56.8 mm
 ③ Rod diameter $\varnothing d$ 50 mm ④ Groove width L 5.0 mm ⑤ Material PTFE + glass/MoS₂