



## TECHNICAL INFORMATION

# Scrapers | Turcon® Excluder® 2

### Description

The Turcon® Excluder® 2 is a double-acting scraper with two geometrically different scraper lips which are installed back-to-back. Excluder® 2 is always installed together with an elastic O-Ring in one groove.

The scraper function is performed by the Excluder® 2. The O-Ring maintains the pressure of the scraper lips against the sliding surface and can compensate any deflections of the piston rod.

Excluder® 2 has two functions:

- Scrape particles from the retracting piston rod and thus to protect the system from contamination
- Hold back the residual oil film on the extending piston rod on the medium side.

Excluder® 2 is used in conjunction with our rod seals Turcon® Stepseal® 2K or Zurcon® Rimseal, i.e. seals with hydrodynamic back pumping function.

### Advantages

- Outstanding sliding properties
- Stick-slip-free, no sticking
- Can compensate for deflections of the piston rod or plunger
- Space-saving construction
- Very good scraping effect against outside contaminants, even with firmly adhered dirt, etc.
- Very good scraping effect from the inside against the residual oil film adhering to the surface of the piston rod
- Very high resistance to hydraulic media
- Available many diameters up to 250 mm
- ISO/DIN 6195 Type D installation dimensions



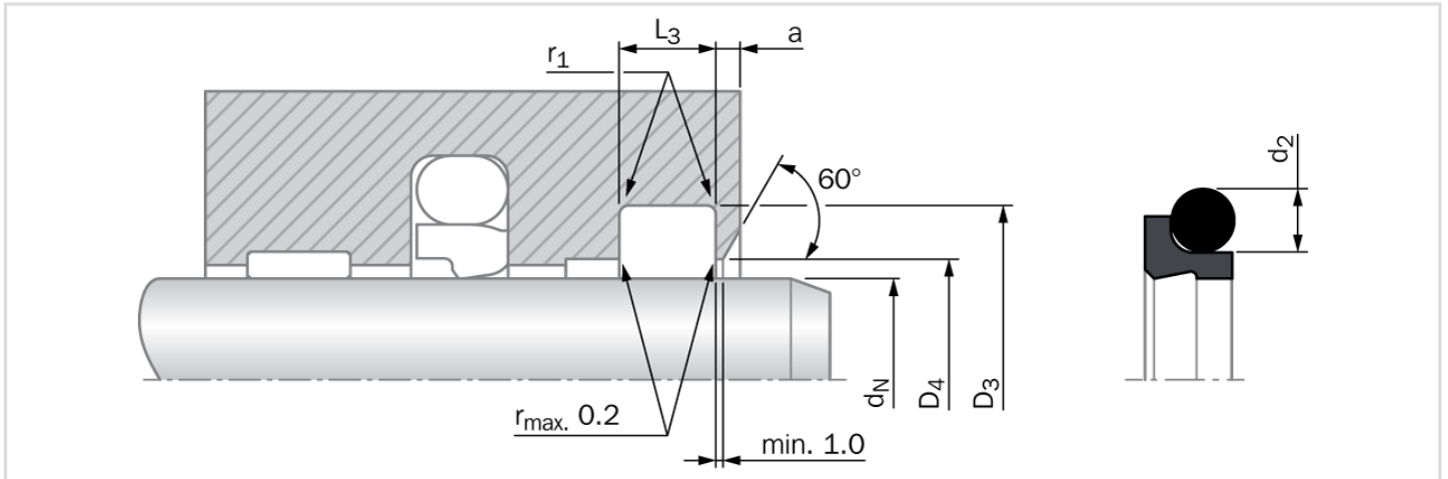
### Technical Data

Speed	: Up to 15 m/s
Temperature	: -30 °C to +200 °C (depending on O-Ring material)
Media	: Mineral oil-based hydraulic fluids, flame retardant hydraulic fluids, environmentally safe hydraulic fluids (bio-oils), phosphate ester and others, depending on the O-Ring material compatibility.



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### Installation dimensions - Standard recommendations

Series No.	Rod Diameter $d_N$ f8/h9		Groove Diameter $D_3$ H9	Groove Width $L_3 + 0.2$	Bore Diameter $D_4$ H11	Step Width a min.	O-Ring Cross-Section $d_2$
	Recommended Range	Extended Range					
WE30	4.0 - 11.9	4.0 - 130.0	$d_N + 4.8$	3.7	$d + 1.5$	2.0	1.78
WE31	12.0 - 64.9	10.0 - 245.0	$d_N + 6.8$	5.0	$d + 1.5$	2.0	2.62
WE32	65.0 - 250.9	25.0 - 400.0	$d_N + 8.8$	6.0	$d + 1.5$	3.0	3.53
WE33	251.0 - 420.9	40.0 - 655.0	$d_N + 12.2$	8.4	$d + 2.0$	4.0	5.33
WE34	421.0 - 650.9	110.0 - 655.0	$d_N + 16.0$	11.0	$d + 2.0$	4.0	7.00
WE35	651.0 - 999.9	140.0 - 999.9	$d_N + 20.0$	14.0	$d + 2.5$	5.0	8.40
WE35X	$\geq 1000.0$	$\geq 1000.0$	$d_N + 20.0$	14.0	$d + 2.5$	5.0	8.40

### Important Note

Installation suggestions, material recommendations, parameters and further data provided are always subject to the particular field of use and the application in which the seal is intended to be used, in particular the interaction of the seal with other components of the application. Therefore they neither constitute an agreement on the legal and factual nature nor a guarantee of quality. Technical changes and errors remain reserved.