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# Zurcon<sup>®</sup> Excluder<sup>®</sup> 500



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Double Acting

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Rubber Energized

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Flexible Double-acting Scraper

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**Material:**  
Zurcon<sup>®</sup>

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## ■ Zurcon® Excluder® 500\*



### Description

Zurcon® Excluder® 500 is a patented double-acting scraper. It has an identical design and function as that of the Turcon® Excluder® 5 and is fully interchangeable with this scraper. It is more flexible and thus easy to install, but cannot withstand such high speeds and temperatures as the Excluder® 5. The Excluder® 500 is injection moulded from high-grade wear-resistant polyurethane. It is suitable as an inexpensive scraper element where large quantities are required. It is preferably used in conjunction with our rod seal Turcon® Stepseal® 2K with hydrodynamic back-pumping function.

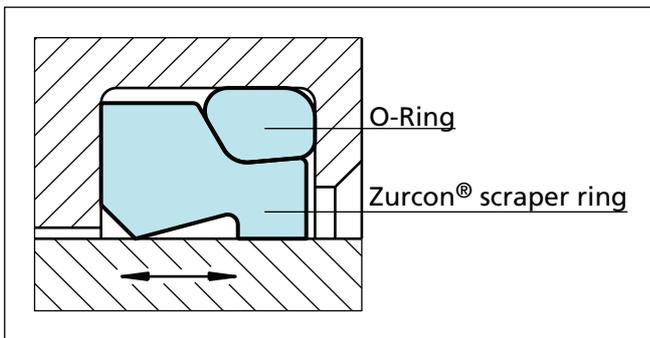


Figure 5 Zurcon® Excluder® 500

### Advantages

- High abrasion resistance, suitable for heavy-duty applications
- Good scraping effect both internal and external
- High flexibility
- Compensates radial deflections of the piston rod
- Identical in installation with Excluder® 5
- Low cost, economical solution
- ISO/DIN 6195 Type D installation dimensions

### Technical Data

Speed:	Max. 1 m/s
Temperature:	-30 °C to +80 °C
Media:	Mineral oil-based hydraulic fluids.

#### Important Note:

The above data are maximum values and cannot be used at the same time. e.g. the maximum operating speed depends on material type, pressure, temperature and gap value. Temperature range also dependent on medium.

### Materials

Standard material:

Excluder® 500:	Zurcon® Z05
Colour:	Turquoise
O-Ring:	NBR, 70 Shore A
Set Code:	Z05N

### Design and Installation Instructions

Excluder 500® scrapers can be installed in split and closed grooves. Installation in closed grooves is possible above a rod diameter of 25 mm. For smaller diameters, a split groove is recommended.

For new constructions we recommend the scraper DA 24.

\* Patent No. EP 023 5568



## Installation Recommendation

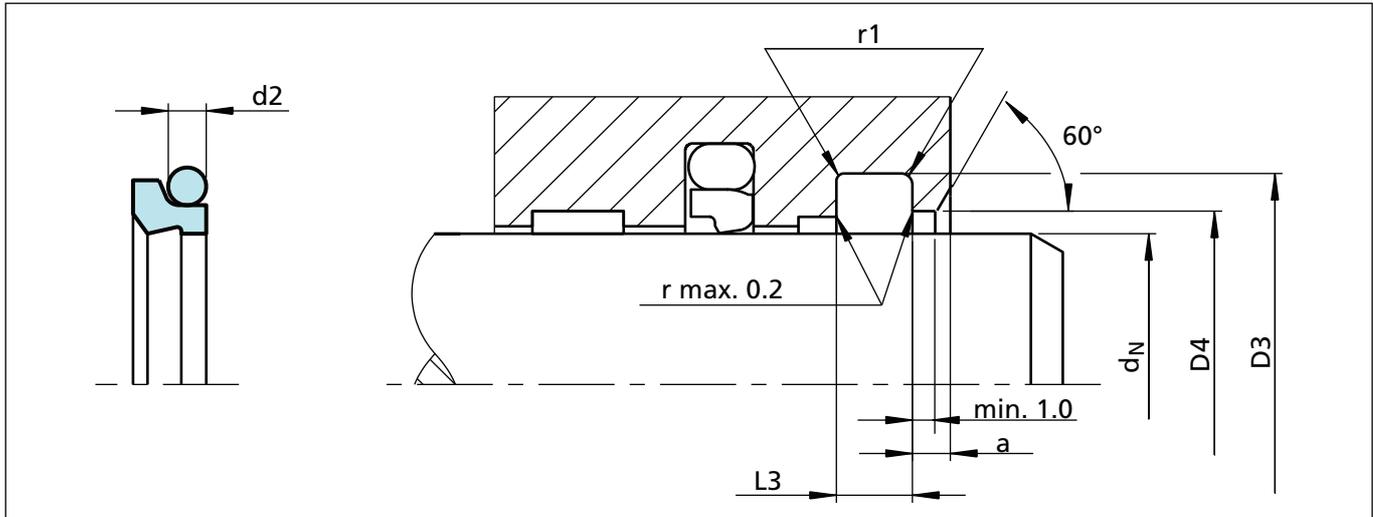


Figure 6 Installation drawing

Table X Installation dimensions

Series No.	Rod Diameter	Groove Diameter	Groove Width	Bore Diameter	Step Width	O-Ring Cross Section
	$d_N$ f8/h9	$D_3$ H9	$L_3 + 0.2$	$D_4$ H11	a min	$d_2$
WEP0	12.0 - 36.0	$d_N + 7.6$	4.2	$d_N + 1.5$	3.0	2.62
WEP1	36.0 - 65.0	$d_N + 8.8$	6.3	$d_N + 1.5$	3.0	2.62
WEP2	70.0 - 130.0	$d_N + 12.2$	8.1	$d_N + 2.0$	4.0	3.53

Up to 25 mm diameter we recommend the use of a split groove.

### Ordering Example

Zurcon® Excluder 500® with O-Ring  
 Rod diameter:  $d_N = 50.0$  mm  
 Series: WEP1 (from Table X)  
 TSS Part No.: WEP100500 (from Table XI)  
 Materials: Excluder® of Zurcon® Z05  
 O-Ring of NBR 70 Shore A

TSS Article No.	WEP1	00500	-	Z05	N
TSS Series No.					
Rod diameter x 10					
Quality Index (Standard)					
Material code (scraper)					
Material code (O-Ring)					



Table XI Installation dimensions / TSS part numbers

Rod Diameter	Groove Diameter	Groove Width	Bore Diameter	Radius	Step Width	TSS Part No.	O-Ring Size
dN f8/h9	D <sub>3</sub> H9	L <sub>3</sub> +0.2	D <sub>4</sub> H11	r <sub>1</sub> max	a min.		
<b>12.0</b>	<b>19.6</b>	<b>4.2</b>	<b>13.5</b>	<b>0.8</b>	<b>3.0</b>	<b>WEP000120</b>	<b>15.00 x 2.62</b>
<b>14.0</b>	<b>21.6</b>	<b>4.2</b>	<b>15.5</b>	<b>0.8</b>	<b>3.0</b>	<b>WEP000140</b>	<b>17.12 x 2.62</b>
<b>18.0</b>	<b>25.6</b>	<b>4.2</b>	<b>19.5</b>	<b>0.8</b>	<b>3.0</b>	<b>WEP000180</b>	<b>20.29 x 2.62</b>
<b>20.0</b>	<b>27.6</b>	<b>4.2</b>	<b>21.5</b>	<b>0.8</b>	<b>3.0</b>	<b>WEP000200</b>	<b>21.89 x 2.62</b>
<b>22.0</b>	<b>29.6</b>	<b>4.2</b>	<b>23.5</b>	<b>0.8</b>	<b>3.0</b>	<b>WEP000220</b>	<b>25.07 x 2.62</b>
<b>25.0</b>	<b>32.6</b>	<b>4.2</b>	<b>26.5</b>	<b>0.8</b>	<b>3.0</b>	<b>WEP000250</b>	<b>28.24 x 2.62</b>
<b>28.0</b>	<b>35.6</b>	<b>4.2</b>	<b>29.5</b>	<b>0.8</b>	<b>3.0</b>	<b>WEP000280</b>	<b>29.82 x 2.62</b>
30.0	37.6	4.2	31.5	0.8	3.0	WEP000300	32.99 x 2.62
<b>32.0</b>	<b>39.6</b>	<b>4.2</b>	<b>33.5</b>	<b>0.8</b>	<b>3.0</b>	<b>WEP000320</b>	<b>34.59 x 2.62</b>
35.0	42.6	4.2	36.5	0.8	3.0	WEP000350	37.77 x 2.62
<b>36.0</b>	<b>43.6</b>	<b>4.2</b>	<b>37.5</b>	<b>0.8</b>	<b>3.0</b>	<b>WEP000360</b>	<b>37.77 x 2.62</b>
<b>36.0</b>	<b>44.8</b>	<b>6.3</b>	<b>37.5</b>	<b>0.8</b>	<b>3.0</b>	<b>WEP100360</b>	<b>39.34 x 2.62</b>
<b>40.0*)</b>	<b>48.8</b>	<b>6.3</b>	<b>41.5</b>	<b>0.8</b>	<b>3.0</b>	<b>WEP100400</b>	<b>44.12 x 2.62</b>
<b>45.0*)</b>	<b>53.8</b>	<b>6.3</b>	<b>46.5</b>	<b>0.8</b>	<b>3.0</b>	<b>WEP100450</b>	<b>48.90 x 2.62</b>
<b>50.0*)</b>	<b>58.8</b>	<b>6.3</b>	<b>51.5</b>	<b>0.8</b>	<b>3.0</b>	<b>WEP100500</b>	<b>53.64 x 2.62</b>
55.0	63.8	6.3	56.5	0.8	3.0	WEP100550	58.42 x 2.62
<b>56.0*)</b>	<b>64.8</b>	<b>6.3</b>	<b>57.5</b>	<b>0.8</b>	<b>3.0</b>	<b>WEP100560</b>	<b>59.99 x 2.62</b>
60.0	68.8	6.3	61.5	0.8	3.0	WEP100600	63.17 x 2.62
<b>63.0*)</b>	<b>71.8</b>	<b>6.3</b>	<b>64.5</b>	<b>0.8</b>	<b>3.0</b>	<b>WEP100630</b>	<b>66.34 x 2.62</b>
65.0	73.8	6.3	66.5	0.8	3.0	WEP100650	67.95 x 2.62
<b>70.0*)</b>	<b>82.2</b>	<b>8.1</b>	<b>72.0</b>	<b>1.0</b>	<b>4.0</b>	<b>WEP200700</b>	<b>75.79 x 3.53</b>
75.0	87.2	8.1	77.0	1.0	4.0	WEP200750	78.97 x 3.53
<b>80.0*)</b>	<b>92.2</b>	<b>8.1</b>	<b>82.0</b>	<b>1.0</b>	<b>4.0</b>	<b>WEP200800</b>	<b>85.32 x 3.53</b>
85.0	97.2	8.1	87.0	1.0	4.0	WEP200850	88.49 x 3.53
<b>90.0*)</b>	<b>102.2</b>	<b>8.1</b>	<b>92.0</b>	<b>1.0</b>	<b>4.0</b>	<b>WEP200900</b>	<b>94.84 x 3.53</b>
95.0	107.2	8.1	97.0	1.0	4.0	WEP200950	101.19 x 3.53
<b>100.0*)</b>	<b>112.2</b>	<b>8.1</b>	<b>102.0</b>	<b>1.0</b>	<b>4.0</b>	<b>WEP201000</b>	<b>104.37 x 3.53</b>
105.0	117.2	8.1	107.0	1.0	4.0	WEP201050	110.72 x 3.53
<b>110.0*)</b>	<b>122.2</b>	<b>8.1</b>	<b>112.0</b>	<b>1.0</b>	<b>4.0</b>	<b>WEP201100</b>	<b>113.89 x 3.53</b>
120.0	132.2	8.1	122.0	1.0	4.0	WEP201200	123.42 x 3.53
<b>125.0*)</b>	<b>137.2</b>	<b>8.1</b>	<b>127.0</b>	<b>1.0</b>	<b>4.0</b>	<b>WEP201250</b>	<b>129.77 x 3.53</b>
130.0	142.2	8.1	132.0	1.0	4.0	WEP201300	132.94 x 3.53

The rod diameters in **bold** type comply with the recommendations of ISO 3320.

\*) Installation in grooves according to ISO 6195 Type D.

Other dimensions on request.