

Zurcon® Wynseal



Double-acting

Rubber-energized plastic-faced seal

High static and dynamic sealing effect

Material:

Zurcon® + NBR





■ Zurcon® Wynseal



■ Description

The Zurcon® Wynseal is a double-acting seal consisting of a special polyurethane seal ring and an O-Ring as energizing element (Figure 154).

The particular characteristic of the seal is the special design of the seal edge profile. Two external seal edges act as primary seal for pressures from both sides and prevent any build-up of hydrodynamic pressure over the seal profile and the risk of the blow-by effect. The central back-up and sealing bulge increases the sealing effect*. Grooves are provided on both sides on the plane surfaces to provide activation of the energizing O-Ring. These ensure direct pressure loading of the seal under all operating conditions.

Since the installation groove is identical to that for the Turcon® Glyd Ring®, the seal is ideal for the standardisation of cylinder construction if, efficient and low cost seal elements are demanded in large quantities and, the cylinder can be adapted to meet different operating conditions. It has to be taken into consideration that in this case the gap dimension has to be checked!

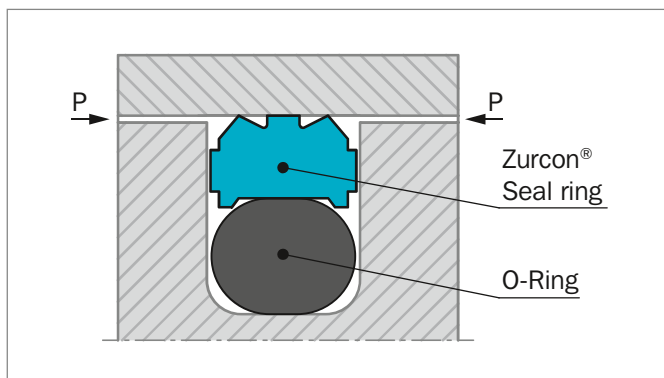


Figure 154: Zurcon® Wynseal

ADVANTAGES

- High static and dynamic sealing effect
- High abrasion resistance
- Simple groove design, one-piece piston possible
- Suitable for grooves to ISO 7425, Part 1.

* Only from PW42 and the following Series No.; PW40 and PW41 without sealing and supporting bulge.

APPLICATION EXAMPLES

The Zurcon® Wynseal is the recommended element for double acting pistons of hydraulic components in various sectors such as:

- Machine tools
- Forklifts and handling machinery
- Agriculture
- Industrial hydraulic light to medium duty

OPERATING CONDITIONS

Pressure:	Up to 25 MPa (Z20N)
Speed:	Up to 0.5 m/s
Temperature:	-35 °C to +110 °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 depends on media.

MATERIALS

Wynseal: Zurcon® Z20, 93 Shore A
 O-Ring: NBR 70 Shore A
 Set reference: Z20N



■ Installation Recommendation

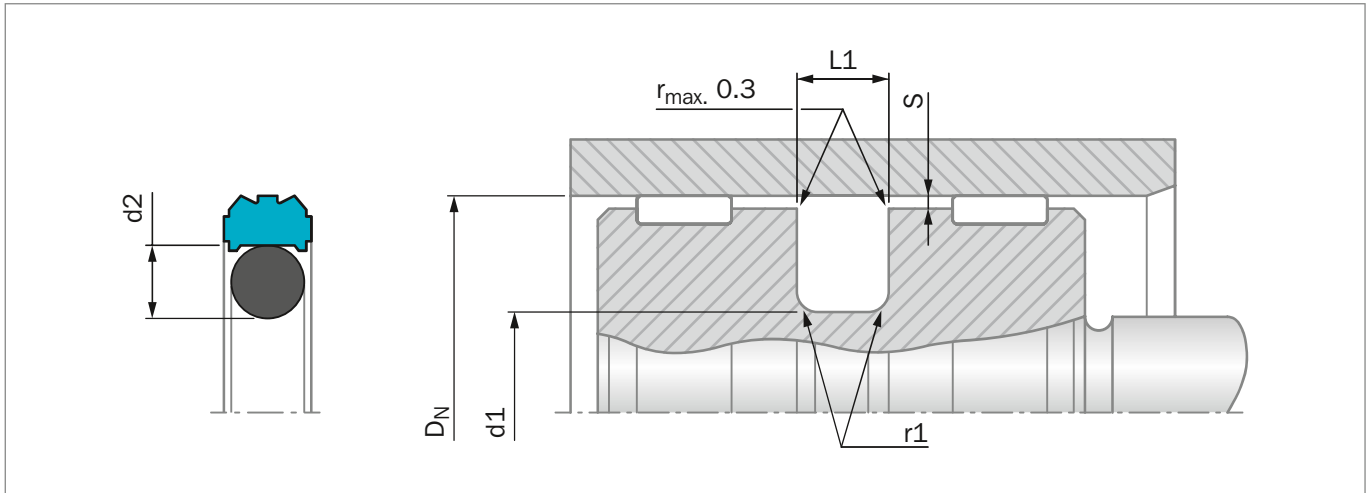


Figure 155: Installation Drawing

Table 147: Installation Dimensions

Series No.	Groove Diameter	Groove Width	Radius	Radial Clearance	O-Ring Cross Section
	d1 h9	L1 +0.2	r1	S _{max}	d2
PW40	DN - 4,9	2.2	0.4	0.20	1.78
PW41	DN - 7.5	3.2	0.6	0.25	2.62
PW42	DN - 11.0	4.2	1.0	0.25	3.53
PW43	DN - 15.5	6.3	1.3	0.30	5.33
PW44	DN - 21.0	8.1	1.8	0.30	7.00

ORDERING EXAMPLE

Wynseal for ISO groove

Bore Diameter:	D _N = 63 mm
Series No.:	PW43
TSS Part No.:	PW4300630 from Table 148
Material Code:	Z20
O-Ring Material Code:	N
Set Code:	Z20N

TSS Article No. **PW43 0 0630 - Z20 N**

TSS Series No. ————

Type (Standard) ————

Bore Diameter x 10 ————

Quality Index (Standard) ————

Material Code (Seal Ring) ————

Material Code (O-Ring) ————



Table 148: Installation Dimensions / TSS Part No.

Bore Diameter	Groove Diameter	Groove Width	TSS Part No.	Bore Diameter	Groove Diameter	Groove Width	TSS Part No.
D _N	d1	L1		D _N	d1	L1	
H9	h9	+0.2		H9	h9	+0.2	
12.0	7.1	2.2	PW4000120	95.0	79.5	6.3	PW4300950
12.0	4.5	3.2	PW4100120	100.0	84.5	6.3	PW4301000
16.0	8.5	3.2	PW4100160	105.0	89.5	6.3	PW4301050
20.0	12.5	3.2	PW4100200	110.0	94.5	6.3	PW4301100
22.0	14.5	3.2	PW4100220	115.0	99.5	6.3	PW4301150
24.0	16.5	3.2	PW4100240	120.0	104.5	6.3	PW4301200
25.0	17.5	3.2	PW4100250	125.0	109.5	6.3	PW4301250
25.0	14.0	4.2	PW4200250	125.0	104.0	8.1	PW4401250
30.0	22.5	3.2	PW4100300	130.0	114.5	6.3	PW4301300
32.0	24.5	3.2	PW4100320	135.0	114.0	8.1	PW4401350
32.0	21.0	4.2	PW4200320	140.0	119.0	8.1	PW4401400
35.0	27.5	3.2	PW4100350	150.0	129.0	8.1	PW4401500
35.0	24.0	4.2	PW4200350	160.0	139.0	8.1	PW4401600
36.0	28.5	3.2	PW4100360	170.0	149.0	8.1	PW4401700
38.0	30.5	3.2	PW4100380	180.0	159.0	8.1	PW4401800
40.0	32.5	3.2	PW4100400	190.0	169.0	8.1	PW4401900
40.0	29.0	4.2	PW4200400	200.0	179.0	8.1	PW4402000
45.0	34.0	4.2	PW4200450	210.0	189.0	8.1	PW4402100
45.0	29.5	6.3	PW4300450	220.0	199.0	8.1	PW4402200
50.0	39.0	4.2	PW4200500	230.0	209.0	8.1	PW4402300
50.0	34.5	6.3	PW4300500	250.0	229.0	8.1	PW4402500
52.0	36.5	6.3	PW4300520	300.0	279.0	8.1	PW4403000
55.0	44.0	4.2	PW4200550				
55.0	39.5	6.3	PW4300550				
56.0	45.0	4.2	PW4200560				
57.0	46.0	4.2	PW4200570				
60.0	49.0	4.2	PW4200600				
60.0	44.5	6.3	PW4300600				
63.0	52.0	4.2	PW4200630				
63.0	47.5	6.3	PW4300630				
65.0	54.0	4.2	PW4200650				
65.0	49.5	6.3	PW4300650				
70.0	59.0	4.2	PW4200700				
70.0	54.5	6.3	PW4300700				
75.0	64.0	4.2	PW4200750				
75.0	59.5	6.3	PW4300750				
80.0	69.0	4.2	PW4200800				
80.0	64.5	6.3	PW4300800				
85.0	69.5	6.3	PW4300850				
90.0	74.5	6.3	PW4300900				

The sizes printed in **bold** type are suitable for grooves to ISO 7425-1.
Additional dimensions can be delivered on request.