
Zurcon[®] Compact Seals



Double Acting

Combined Seal and
Guide Element

Material:
Zurcon[®], NBR + POM



■ PU DAS and Polypac® EUD



Description

The Compact Seals are double-acting piston seals with integrated guide rings. The combination of the elastomer energiser and the polyurethane special shaped sealing element provide excellent sealing effect and service life. The function of the guide rings is to guide the piston in the cylinder tube and to absorb transverse forces.

Type PU DAS

For the Compact Seal PU DAS is designed without Back-up rings. For easy installation in closed grooves, the combination into one stiff sealing element and one soft energizing element is required. Back-up rings are unnecessary thanks to the high extrusion resistance of the polyurethane material.

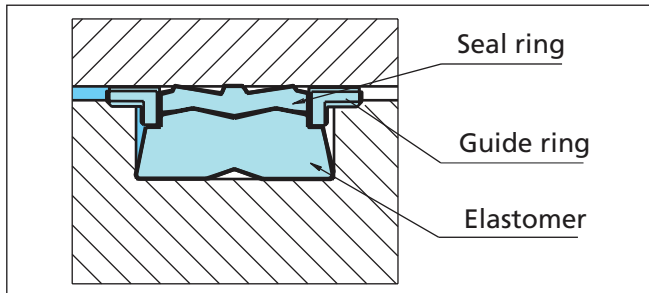


Figure 55 Compact Seal, Type PU DAS

Type Polypac® EUD

The Compact Seal EUD design includes T-shaped Back-up/guide rings and a combination of seal ring and energiser.

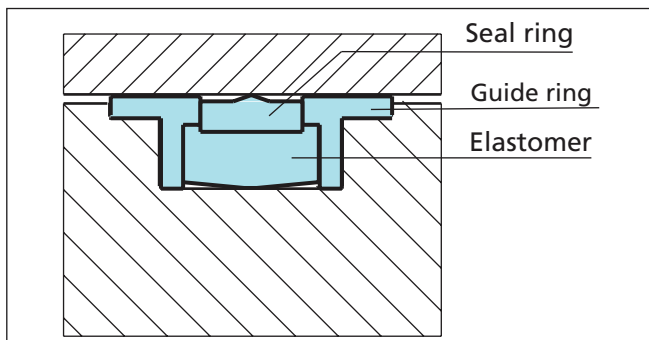


Figure 56 Compact Seal, Type EUD

Advantages

- High wear resistance
- Low compression set
- Optimal leakage control
- Easy installation into closed grooves
- Excellent service life

Application Examples

The Zurcon® Compact seals are the recommended sealing element for double acting pistons of hydraulic cylinders for:

- Truck cranes
- Mini excavators
- Heavy duty cylinders

Technical Data

Operating conditions

Pressure: Up to 40 MPa

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 dependent on medium.

Materials

- The Polyurethane Compact seals PU DAS and EUD are available in the following composition:

Sealing ring:	Zurcon® Polyurethane 93 Shore A	
Energiser:	NBR	
	70 Shore A	Type PU DAS
	78 Shore A	Type EUD
Guide rings:	HM061	Type PU DAS
	POM	Type EUD
Set references:	Z2052	Type PU DAS
	Z2053	Type EUD

■ Installation Recommendation, (PU DAS)

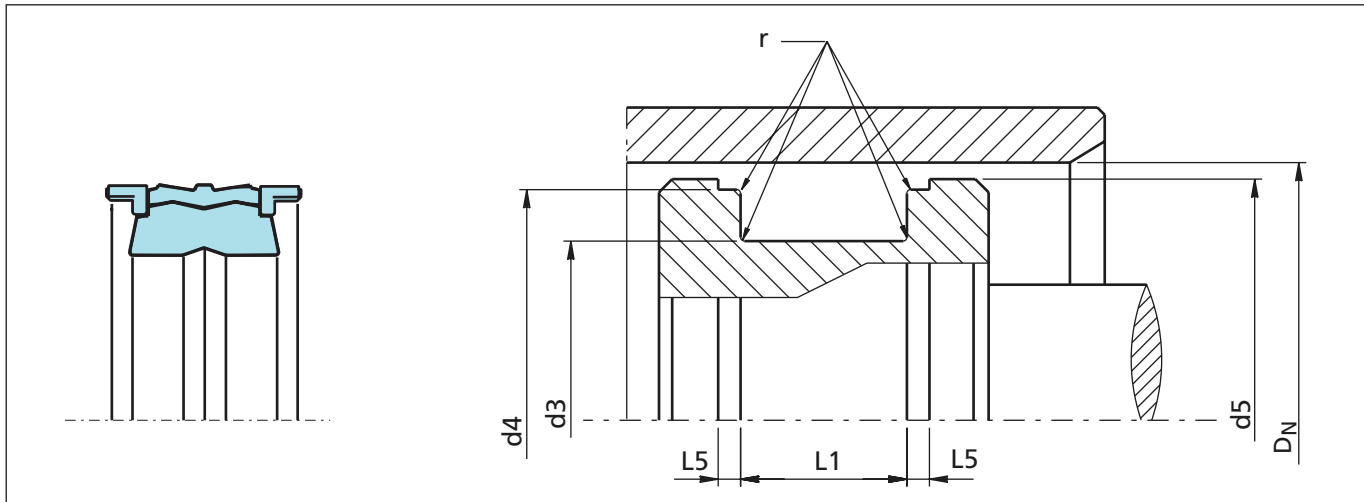


Figure 57 Installation drawing

Table LVI Installation dimensions / TSS Article No.

Bore Dia.	Groove Dimensions					Piston Dia.	TSS Article No.
D_N H9	d_3 h9	d_4 h9	$L_1 +0.2$	$L_5 +0.1$	r max	d_5 h11	
40.0	26.0	36.00	15.5	2.60	0.4	38.50	PCC000400-Z2052
45.0	31.0	41.00	15.5	2.60	0.4	44.00	PCC000450-Z2052
50.0	34.0	46.00	20.5	3.10	0.4	49.00	PCC000500-Z2052
55.0	39.0	51.00	20.5	3.10	0.4	54.00	PCC000550-Z2052
60.0	44.0	56.00	20.5	3.10	0.4	59.00	PCC000600-Z2052
63.0	47.0	59.00	20.5	3.10	0.4	62.00	PCC000630-Z2052
65.0	49.0	61.00	20.5	3.10	0.4	64.00	PCC000650-Z2052
70.0	54.0	66.00	20.5	3.10	0.4	69.00	PCC000700-Z2052
75.0	59.0	71.00	20.5	3.10	0.4	74.00	PCC000750-Z2052
80.0	62.0	76.00	22.5	3.60	0.4	79.00	PCC000800-Z2052
90.0	72.0	86.00	22.5	3.60	0.4	89.00	PCC000900-Z2052
100.0	82.0	96.00	22.5	3.60	0.4	99.00	PCC001000-Z2052
110.0	92.0	106.00	22.5	3.60	0.4	109.00	PCC001100-Z2052
125.0	103.0	121.00	26.5	5.10	0.8	124.00	PCC001250-Z2052
140.0	118.0	136.00	26.5	5.10	0.8	139.00	PCC001400-Z2052
150.0	128.0	146.00	26.5	5.10	0.8	149.00	PCC001500-Z2052
160.0	138.0	156.00	26.5	5.10	0.8	159.00	PCC001600-Z2052
165.0	143.0	161.00	26.5	5.10	0.8	164.00	PCC001650-Z2052
170.0	148.0	166.00	26.5	5.10	0.8	169.00	PCC001700-Z2052
180.0	158.0	176.00	26.5	5.10	0.8	179.00	PCC001800-Z2052
200.0	175.0	196.00	31.5	6.60	0.8	199.00	PCC002000-Z2052



Bore Dia.	Groove Dimensions					Piston Dia.	TSS Article No.
	D_N H9	d_3 h9	d_4 h9	L_1 +0.2	L_5 +0.1		
250.0	220.0	242.90	35.4	6.35	0.8	248.00	PCC002500-Z2052
270.0	240.0	262.90	35.4	6.35	0.8	267.00	PCC002700-Z2052



■ Installation Recommendation, Type EUD

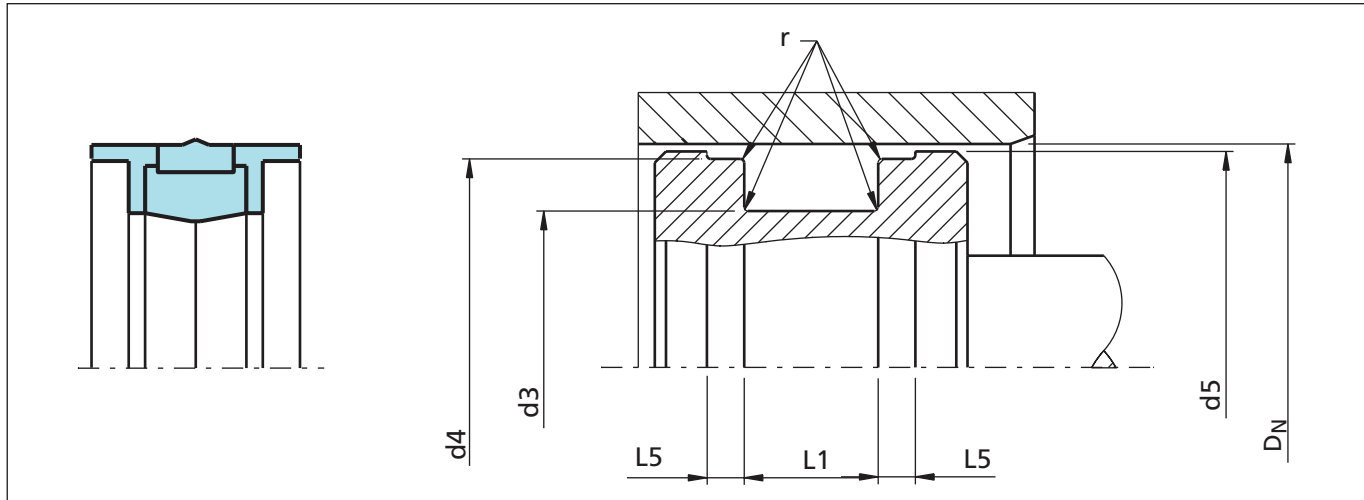


Figure 58 Installation drawing

Table LVII Installation dimensions / TSS Article No.

Bore Dia. D_N H9	Groove Dimensions					Piston Dia. d_5 h11	TSS Article No.	Description
	d_3 h9	d_4 h9	$L_1 +0.2$	$L_5 +0.1$	r max			
40.0	32.0	36.0	10.0	4.2	0.2	39.40	PCG000400-Z2053	EUD4032/1-Z20
50.0	38.0	46.0	20.5	4.2	0.2	49.40	PCG000500-Z2053	EUD5038-Z20
50.0	40.0	46.0	12.5	4.2	0.2	49.40	PCG100500-Z2053	EUD5040/1-Z20
55.0	43.0	51.0	20.5	4.2	0.2	54.40	PCG000550-Z2053	EUD5543-Z20
60.0	48.0	56.0	20.5	4.2	0.2	59.40	PCG000600-Z2053	EUD6048-Z20
63.0	51.0	59.0	20.5	4.2	0.2	62.40	PCG000630-Z2053	EUD6351-Z20
65.0	53.0	61.0	20.5	4.2	0.2	64.40	PCG000650-Z2053	EUD6553-Z20
65.0	55.0	61.0	12.5	4.2	0.2	64.40	PCG100650-Z2053	EUD6555/1-Z20
70.0	58.0	66.0	20.5	4.2	0.2	69.40	PCG000700-Z2053	EUD7058-Z20
80.0	66.0	76.0	22.5	5.2	0.2	79.40	PCG000800-Z2053	EUD8066-Z20
85.0	71.0	81.0	22.5	5.2	0.2	84.40	PCG000850-Z2053	EUD8571-Z20
90.0	76.0	86.0	22.5	5.2	0.2	89.40	PCG000900-Z2053	EUD9076-Z20
100.0	86.0	96.0	22.5	5.2	0.2	99.40	PCG001000-Z2053	EUD10086-Z20
110.0	96.0	106.0	22.5	5.2	0.2	109.40	PCG001100-Z2053	EUD11096-Z20
120.0	106.0	116.0	22.5	5.2	0.2	119.40	PCG001200-Z2053	EUD120106-Z20
125.0	108.0	121.0	26.5	7.2	0.4	124.40	PCG001250-Z2053	EUD125108-Z20
140.0	123.0	136.0	26.5	7.2	0.4	139.40	PCG001400-Z2053	EUD140123-Z20
160.0	143.0	156.0	26.5	7.2	0.4	159.40	PCG001600-Z2053	EUD160143-Z20