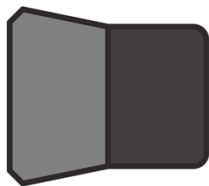


Compact seal type TSE



Type TSE is a single acting piston - rod seal which consists of reinforced cotton fabric and nitrile rubber vulcanized together forming an integral sealing element.

Characteristics

Type: TSE

Material seal: NBR/fabric

Max. operating pressure: 250 bar

Maximum speed: 0.5 m/s

Application

- Low to medium duty hydraulic cylinders , mobile hydraulics and presses.

Technical Information

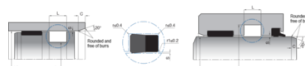
- Functions even with poor surfaces
- Reinforced cotton fabric base prevents the seal from extrusion
- Both rod and piston application
- Good sealing at low pressures

Operating Principle

- Type TSE is to be assembled into open grooves. It is very important that the assembly tools must be of soft material and have no sharp edges. Before installation the sealing element must be oiled with system oil.

Options

- The permissible sealing gap values of type TSE piston - rod seal is given in the below table.



Operating conditions			
Media	Mineral Oils [DIN 51524]	HFA and HFB	HFC
Temperature	-30°C + 105°C	+5°C + 60°C	-30°C + 60 °C
Pressure	≤250 bar	≤250 bar	≤250 bar
Speed	≤0,5 m/s	≤0,5 m/s	≤0,5 m/s

Note: The above data are maximum values, they may only be maintained for short periods of time and cannot be used at the same time simultaneously.

	Surface roughness	
	Ra	Rmax
Sliding Surface	≤0,4 µm	≤3,2 µm
Groove Base	≤1,8 µm	≤6,3 µm
Groove Flanks	≤3,2 µm	≤16 µm

Maximum permissible sealing gap - S [mm]	
150 bar	250 bar
0,20	0,10

Note: The largest sealing gap value occurring on the non-pressurized side of the seal does have a vital importance for the function of the seal and in this respect it is very important to use an S value lower than the above indicated numbers.

Hardware tolerances			
Dimension	Ød	ØD	L
Tolerance	h9 [rod] / f8 [piston]	H10 [rod] / H9 [piston]	+0,2/-0 mm

Disclaimer: The content of this document has been composed with the utmost care. However, it is possible that certain information changes over time, becomes inaccurate or incomplete. ERIKS does not guarantee that the information provided on this document is up to date, accurate and complete; the information provided is not intended to be advice. ERIKS shall never be liable for damage resulting from the use of the information provided.

Internal diameter mm	Outer diameter mm	Groove width mm	Temperature range °C	Article
				11204437
				10018594
				10018601
				11204579
				10018718
				11204689
				11204558
				11204561
				11204407
				10018828
				10018825
				10018947
				10018951
				10018647
				10018595
				11204686
				10018719
				11204438
				11204447
				11204670
				11204690
				10018907
				11204717
				10018826
				10018956
				10018944
				11204576
				10018645
				10018829
				11204562
				10018827
				10018950
				11204436
				11204444
				10018820
				11204692
				10018646
				11204411
				11204667
				11204556
				10018949
				11204410
				10018592
				11204672
				11204688
				10018587
16	24	6.3	-30 / 105	11182497
20	27	6.5	-30 / 105	10018715
20	28	7	-30 / 105	10018588
20	30	8.5	-30 / 105	10018716
22	30	7	-30 / 105	11204435
25	35	9	-30 / 105	10018589
30	38	6.4	-30 / 105	10018717

Disclaimer: The content of this document has been composed with the utmost care. However, it is possible that certain information changes over time, becomes inaccurate or incomplete. ERIKS does not guarantee that the information provided on this document is up to date, accurate and complete; the information provided is not intended to be advice. ERIKS shall never be liable for damage resulting from the use of the information provided.

Internal diameter	Outer diameter	Groove width	Temperature range	Article
mm	mm	mm	°C	
30	40	7	-30 / 105	10018590
30	50	14.5	-30 / 105	11204442
35	50	11.5	-30 / 105	11204553
38	50	9.5	-30 / 105	10018720
40	50	8	-30 / 105	10018596
40	60	14.5	-30 / 105	11204560
45	65	14.5	-30 / 105	10018823
50	60	8	-30 / 105	10018598
50	70	14.5	-30 / 105	11204575
55	65	8	-30 / 105	10018599
60	70	8	-30 / 105	10018600
60	72	10	-30 / 105	10018648
60	75	13	-30 / 105	11204668
70	82	9.6	-30 / 105	11204683
80	92	9.6	-30 / 105	10018721
90	102	9.6	-30 / 105	11204715
100	115	12	-30 / 105	10018831
110	125	12	-30 / 105	10018833
				10018822
				10018830
				10018908
				10018752
				10018824
				11204557

Disclaimer: The content of this document has been composed with the utmost care. However, it is possible that certain information changes over time, becomes inaccurate or incomplete. ERIKS does not guarantee that the information provided on this document is up to date, accurate and complete; the information provided is not intended to be advice. ERIKS shall never be liable for damage resulting from the use of the information provided.