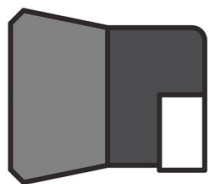


Compact seal type ERS



Type ERS is a two piece single acting rod seal which consists of a reinforced cotton fabric and nitrile rubber vulcanized together forming an integral sealing element and one thermoplastic back-up ring.

Characteristics

Type: ERS

Max. operating pressure: 400 bar

Maximum speed: 0.5 m/s

Application

- Mining equipment , after market , mobile hydraulics , presses and standard cylinders.

Technical Information

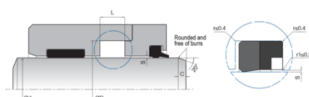
- Functions even with poor surfaces
- Reinforced cotton fabric base prevents the seal from extrusion
- Good sealing effect at low pressures
- Improved sealing gap due to the active back-up ring

Operating Principle

- Type ERS 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 all individual parts of the seal must be oiled with system oil.

Options

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



OPERATING CONDITIONS			
MEDIA	Mineral oils (DIN 51524)	HFA and HFB	HFC
TEMPERATURE	from -30°C till +105°C	from +5°C till +60°C	from -30°C till +60°C
PRESSURE	max. 400 Bar	max. 400 Bar	max. 400 Bar
SPEED	max. 0.5 m/s	max. 0.5 m/s	max. 0.5 m/s
Note: The above data are maximum values and cannot be used at the same time.			

SURFACE ROUGHNESS	Ra	Rmax
Sliding Surface	max. 0.4 µm	max. 3.2 µm
Groove Base	max. 1.8 µm	max. 6.3 µm
Groove Flanks	max. 3.2 µm	max. 16 µm
Note: It is recommended to have 50% to 90% of the working surface material contact area value.		

PERMISSIBLE SEALING GAP	
Pressure [Bar]	Smax [mm]
150	0.4
250	0.1
400	0.2

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.

PERMISSIBLE SEALING GAP

Pressure (Bar)

Smax (mm)

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 quite important to use the S value lower than the above indicated numbers.

Rod diameter mm	Groove diameter mm	Groove width mm	Material seal	Material back-up ring	Temperature range °C	Article
20	30	8.5	NBR/fabric	POM	-30 / 100	10018669
22	30	7	NBR/fabric	POM	-30 / 100	10018568
25	38	10	NBR/fabric	POM	-30 / 100	10018625
30	38	6.5	NBR/fabric	POM	-30 / 100	10018671
30	40	10.5	NBR/fabric	POM	-30 / 100	10018751
30	45	9	NBR/fabric	POM	-30 / 100	10018570
36	46	8.5	NBR/fabric	POM	-30 / 100	10018676
40	48	6.5	NBR/fabric	POM	-30 / 100	10018677
40	50	11	NBR/fabric	POM	-30 / 100	10018627
40	55	8	NBR/fabric	POM	-30 / 100	10018571
40	55	11	NBR/fabric	POM	-30 / 100	10018628
40	60	14.5	NBR/fabric	POM	-30 / 100	10018753
45	55	8	NBR/fabric	POM	-30 / 100	10018573
45	55	11	NBR/fabric	POM	-30 / 100	10018629
50	60	8	NBR/fabric	POM	-30 / 100	10018574
50	60	10.5	NBR/fabric	POM	-30 / 100	10018755
50	62	10	NBR/fabric	POM	-30 / 100	10018631
50	65	11	NBR/fabric	POM	-30 / 100	10018630
50	70	14.5	NBR/fabric	POM	-30 / 100	10018756
55	65	11	NBR/fabric	POM	-30 / 100	10018632
60	69.5	7	NBR/fabric	POM	-30 / 100	10018678
60	70	11	NBR/fabric	POM	-30 / 100	10018636
60	70	13	NBR/fabric	POM	-30 / 100	10018634
60	72	10	NBR/fabric	POM	-30 / 100	10018635
60	75	12.5	NBR/fabric	POM	-30 / 100	10018758
60	80	14.5	NBR/fabric	POM	-30 / 100	10018759
65	75	13.5	NBR/fabric	POM	-30 / 100	10018760
70	80	13	NBR/fabric	POM	-30 / 100	10018637
70	82	10.5	NBR/fabric	POM	-30 / 100	10018763
70	85	12.5	NBR/fabric	POM	-30 / 100	10018764
75	90	11.5	NBR/fabric	POM	-30 / 100	10018767
75	95	14.5	NBR/fabric	POM	-30 / 100	10018768
80	100	14.5	NBR/fabric	POM	-30 / 100	10018769
85	100	12	NBR/fabric	POM	-30 / 100	10018680
90	105	12.5	NBR/fabric	POM	-30 / 100	10018773
90	110	12.5	NBR/fabric	POM	-30 / 100	10018774
100	115	12.5	NBR/fabric	POM	-30 / 100	10018776
110	130	12.5	NBR/fabric	POM	-30 / 100	10018777
120	135	12.5	NBR/fabric	POM	-30 / 100	10018779
125	150	14.5	NBR/fabric	POM	-30 / 100	10018781
160	175	16	NBR/fabric	POM	-30 / 100	10018784
						10018572
						10018569
						10018772
						10018754
						10018757
						10018761

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.

Rod diameter mm	Groove diameter mm	Groove width mm	Material seal	Material back-up ring	Temperature range °C	Article
						10018771
			NBR/fabric			10018668
			NBR/fabric			10018674
			NBR/fabric			10018672
			NBR/fabric			10018675
			NBR/fabric			10018626
			NBR/fabric			10018670
			NBR/fabric			10018673

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.