

OK Profile Piston Seal is for medium to heavy-duty double-acting hydraulic piston seal applications

OK Profile Applications

Designed for higher temperatures and pressures, the OK Piston Seal is recommended for heavy-duty hydraulic applications. The OK sealing assembly is suitable for working pressures up to 7250 PSI (500 bar) and above in some specific situations. The OK Profile is an effective and less expensive alternative to costly capped T-Seals and PTFE loaded cap seals.

Advantages

- Lower installation costs
- Extended seal life
- High extrusion resistance at high pressures and large gaps due to the special compound properties of the cylinder sealing ring
- Resistant to high shock loads
- Low break-out and running friction even after lengthy stand-still under high pressures
- High abrasion resistance
- Premium static and dynamic sealing function
- Small profile
- Suitable housing according to ISO7425 -2
- Passes over ports without nibbling or extruding

Field of application

Working pressure: **7250 psi (500 bar)**
 Working temperature: **-40° F to 250° F**
 Surface speed: **3.28 f/s (1 m/s)**

Ease of Installation

This durable two-piece seal is designed to be compressed in the bore upon installation to minimize seepage at the gap. The OK piston seal's split design facilitates its installation on solid pistons without the necessity of auxiliary tools. The OK Profile can be snapped into closed-groove spaces. **Note:** The installation groove must be carefully deburred and cleaned of all foreign material. The cylinder bore must have a leading edge chamfer.



Compound formulated to extend seal life

The cylinder seal ring is produced of W4650, a glass reinforced nylon. The tensile strength and flexibility exhibited by W4650 provides maximum stretch during installation. Other beneficial characteristics of this material include the ability to capture and contain system contaminants such as metal chips, excellent compressive strength and the ability to resist extrusion or chipping when passing over cylinder ports. (See W4650 Physical Properties Table)

Expander Ring

This is an NBR-based elastomer with 70 shore A hardness. The rubber expander ring provides good compression set resistance which in turn increases potential seal life.

Contact Parker for More Information

For special requirements (pressure, temperature, speed etc.) please contact our technical services personnel, so that suitable materials and/or designs can be recommended.

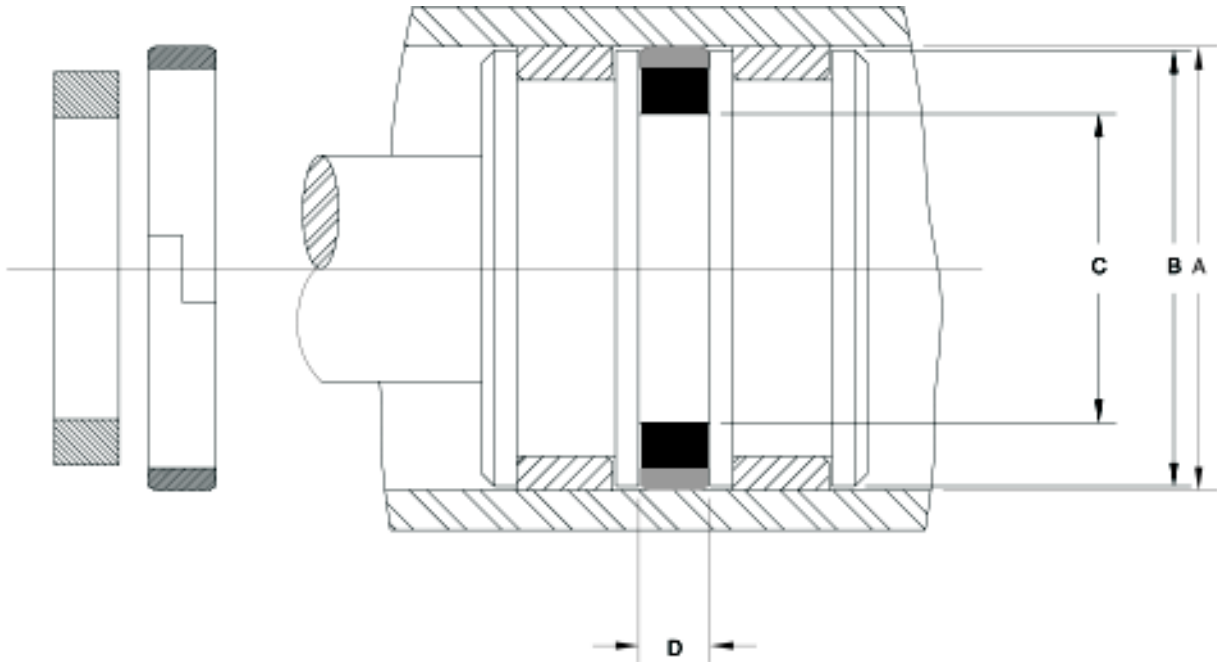
W4650 Physical Properties

Physical Property	ASTM Test Method	Values
Tensile Strength	D-638	17,000-23,000 PSI
Compressive Strength	D-695	21,000-28,000 PSI
Flexural Strength	D-790	23,000-30,000 PSI
Water Absorption	D-570	.50-.70%
Elongation	D-638	3-10%
Tensile Modulus	D-638	900,000 PSI
Shear Strength	D-732	10,000-12,000 PSI
Flexural Modulus	D-790	870,000-1,000,000
Hardness, Rockwell	D-785	119-121 R 94-96 M
Deformation Under Load (2000 PSI @ 122° F)	D-621	.2-.4%

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OK Piston Seal

Available Sizes



Part Number	A Bore Diameter	B Piston Diameter	C Groove Diameter	D Width
OK26902000-282A	2.000/2.005	1.970/1.975	1.457/1.462	0.282/0.287
OK26902500-312A	2.500/2.505	2.470/2.475	1.957/1.962	0.312/0.317
OK27903000-312A	3.000/3.005	2.970/2.975	2.437/2.442	0.312/0.317
OK27903250-312A	3.250/3.255	3.220/3.225	2.687/2.692	0.312/0.317
OK27903500-282A	3.500/3.505	3.470/3.475	2.937/2.942	0.282/0.287
OK27903500-312A	3.500/3.505	3.470/3.475	2.937/2.942	0.312/0.317
OK27904000-282A	4.000/4.005	3.970/3.975	3.437/3.442	0.282/0.287
OK27904500-282A	4.500/4.505	4.470/4.475	3.937/3.942	0.282/0.287
OK27905000-282A	5.000/5.005	4.970/4.975	4.437/4.442	0.282/0.287
OK29303543-492A	3.543/3.550	3.510/3.514	2.954/2.958	0.492/0.502
OK29904000-315A	4.000/4.005	3.970/3.975	3.398/3.402	0.315/0.319
OK38005500-377A	5.500/5.505	5.470/5.475	4.735/4.740	0.377/0.382
OK38006000-377A	6.000/6.005	5.970/5.975	5.235/5.240	0.377/0.382
OK38007000-377A	7.000/7.005	6.970/6.975	6.235/6.240	0.377/0.382
OK38008000-377A	8.000/8.005	7.970/7.975	7.235/7.240	0.377/0.382

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