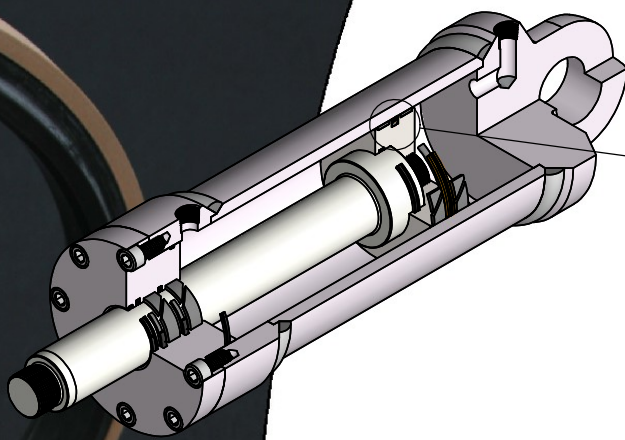
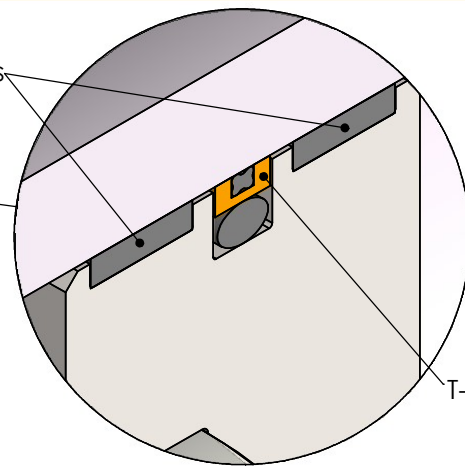




Wear Rings



T-LON® "TOQ" Seal

Description:

The TOQ hydraulic piston seal is a proven reliable "zero-leak" seal for both low and high pressure systems for applications requiring holding loads for an extended time period.

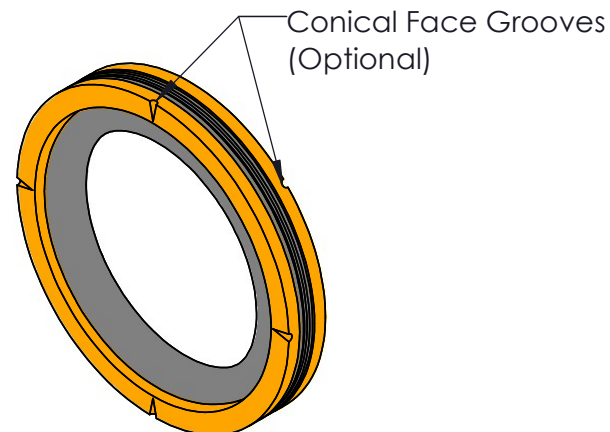
The TOQ seal is a double-acting filled T-LON® PTFE compound with an o-ring elastomer energizer designed for reciprocating applications along with an x-ring elastomer energizer on the OD to minimize leakage / OD blow-by. The filled PTFE seal ring is manufactured with an interference fit with the bore and optimum compression with the o-ring and x-ring energizers. This offers excellent sealability at low pressures and high pressures when the cylinder experiences ballooning.

Advantages:

- Low seal drag/friction (Minimize energy loss)
- No Stick-slip (Smooth Operation)
- Long seal life from T-LON® filled PTFE compounds
- Available for cylinders up to 20" dia

Face Grooves (Optional):

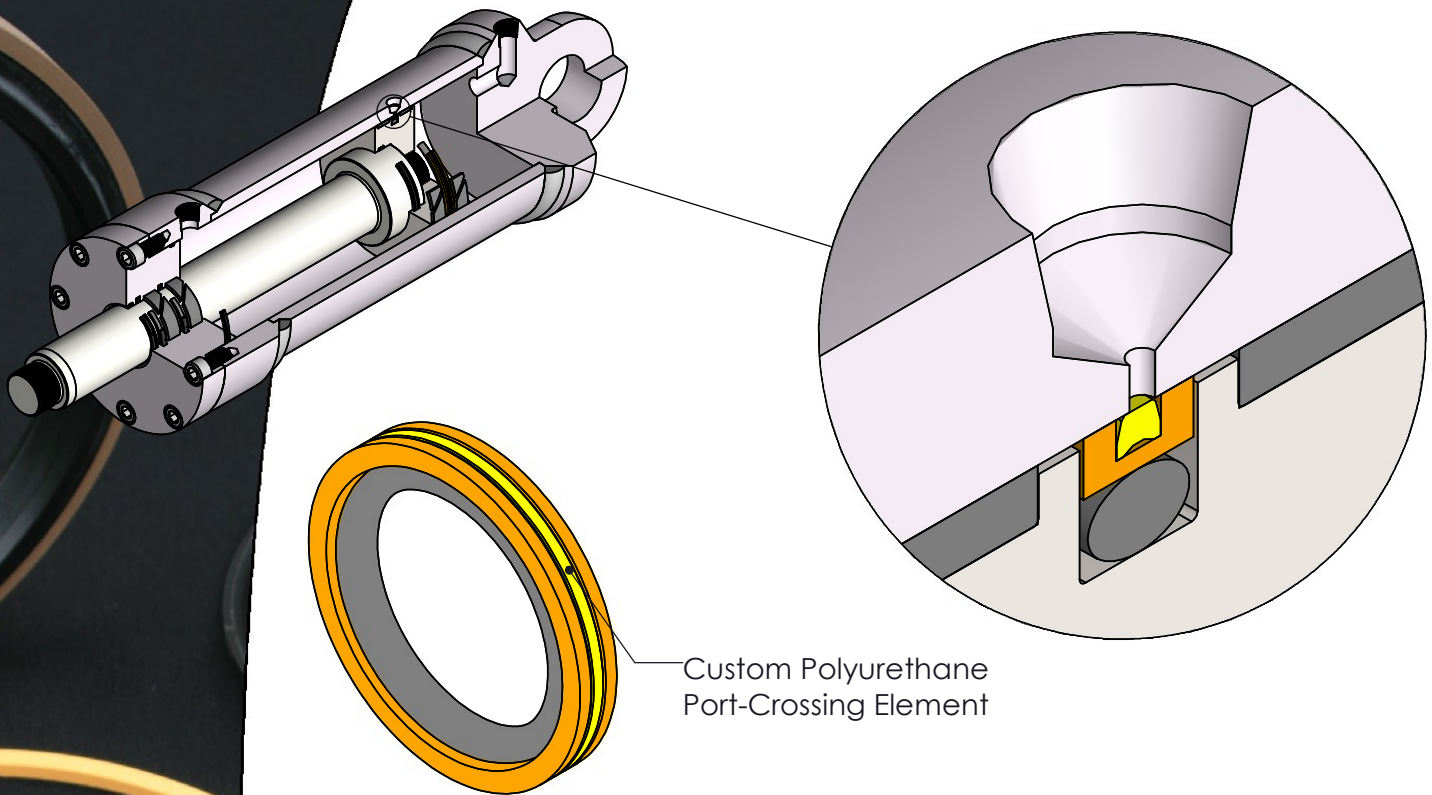
For applications of high pressure rise rates, pressure spikes, and rapid change of direction, the seal is apt to experience blow-by. To prevent blow-by and to energize the seal rapidly, conical face grooves are added to both sides of the seal. The redesigned conical face grooves, "N", have been tested to eliminate energizer nibbling



Applications:

- Accumulators
- Mobile Hydraulic Cylinders
- Lift Cylinders
- Agriculture Equipment
- Holding Cylinders
- Filling Machines
- Testing Machinery





Custom Polyurethane
Port-Crossing Element

Port-crossing Element (optional):

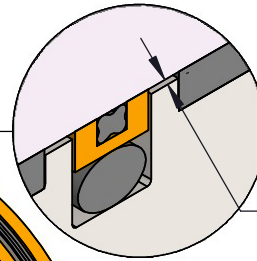
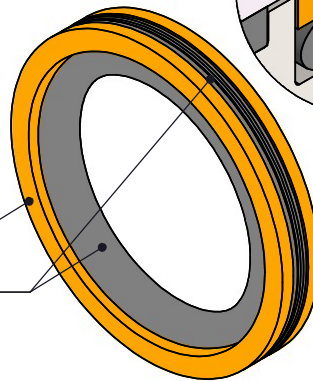
For applications with disruptions in the bore, the x-ring will extrude and/or get damaged. Replacing the x-ring with this port-crossing element will alleviate this potential issue and maintain all of the benefits of the "TOQ" seal.

Polyurethane ("U")

- Working Temp. Range -30°F to 230°F
- Commonly used with greases, aliphatic hydrocarbon mineral and vegetable oils, and various hydraulic fluids
- Resistance to Hydrolysis

Applications:

- Rephasing/Resynchronizing Cylinders
- Air purge over piston seal
- Cylinders with hydraulic port in seal path



Loaders

MAXIMUM E-GAP (40% BZ PTFE)***			
SIZE	1000 PSI	3000 PSI	5075 PSI
	(in)	(in)	(in)
-2-	0.018	0.006	0.004
-3-	0.024	0.008	0.005
-4-	0.030	0.010	0.006
-4HD-	0.030	0.010	0.006

- Working Temp. Range -10°F to 400°F
- Commonly used in higher temperature applications or with acids, alcohols, fuels, and transmission fluids.

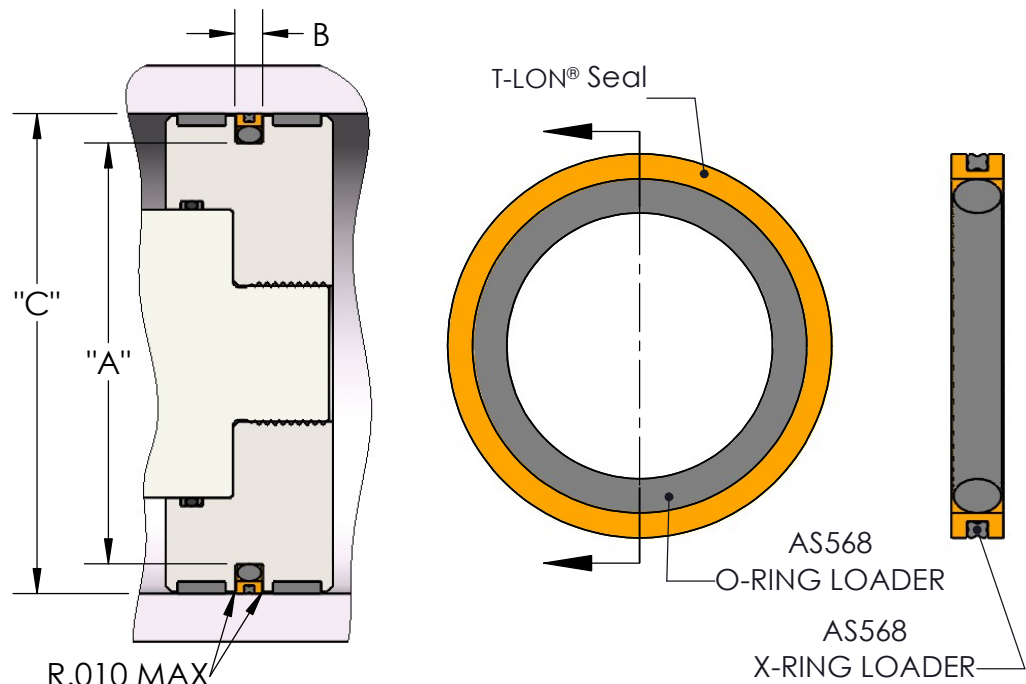
Ø
 "0150" = 1.50"
 "1050" = 10.50"
 "2" = 200 SERIES AS568
 "3" = 300 SERIES AS568
 "4" = 400 SERIES AS568
 "31" = 15% GLASS/ 5% MoS₂ PTFE
 "21" = 40% BRONZE PTFE
 "22" = 60% BRONZE PTFE

BORE
LOADERS
TYP
E
MATERIAL

GROOVE
OPTION
PACKAGING
MATERIAL

OMIT IF NO PORT CROSSING REQ'D
 "U" = URETHANE ELEMENT
 OMIT IF NO LOADERS REQ'D
 "P" = O-RING NBR 70A
 "V" = FKM 75A
 OMIT IF NO LOADERS REQ'D
 "B" = BULK PACKAGE COMPONENTS
 "I" = INDIVIDUALLY PACKAGE SEALS
 OMIT IF NO FACE GROOVES REQ'D
 "N" = CONICAL FACE GROOVES
 "G" = THRU RADIAL FACE GROOVES

SHEET 3 OF 4



T-LON® "TOQ" Series Piston Seal Sizes (More Available Upon Request)

Groove dimensions for "TOQ" Series

Size	Bore Dia (C)	T O L	Groove Dimension			O-Ring Loader No.	X-Ring Loader No.
			Dia (A)	T O L	Width (B) +.008 / -.000		
0075-2	0.750	+0.003 / -.000	0.317	+.000 / -.003	0.165	-203	-016
0100-2	1.000		0.567			-207	-020
0125-2	1.250		0.817			-211	-024
0150-2	1.500		1.067			-215	-028
0200-3	2.000		1.390		0.248	-324	-032
0225-3	2.250		1.640			-326	-034
0250-3	2.500		1.890			-328	-036
0275-3	2.750		2.140			-330	-038
0300-3	3.000		2.390			-332	-040
0325-4	3.250		2.423	+.000 / -.005	0.319	-408	-151
0350-4	3.500		2.673			-410	-152
0375-4	3.750		2.923			-412	-153
0400-4	4.000		3.173			-414	-154
0425-4	4.250		3.423			-416	-155
0450-4	4.500		3.673			-418	-156
0475-4	4.750		3.923			-420	-157
0500-4	5.000		4.173			-422	-158
0550-4HD	5.500	+.005 / -.000	4.535			-425	-160
0600-4HD	6.000		5.035			-429	-162
0650-4HD	6.500		5.535			-433	-164
0700-4HD	7.000		6.035			-437	-166
0750-4HD	7.500		6.535			-439	-168
0800-4HD	8.000		7.035			-441	-170
0900-4HD	9.000		8.035			-445	-174