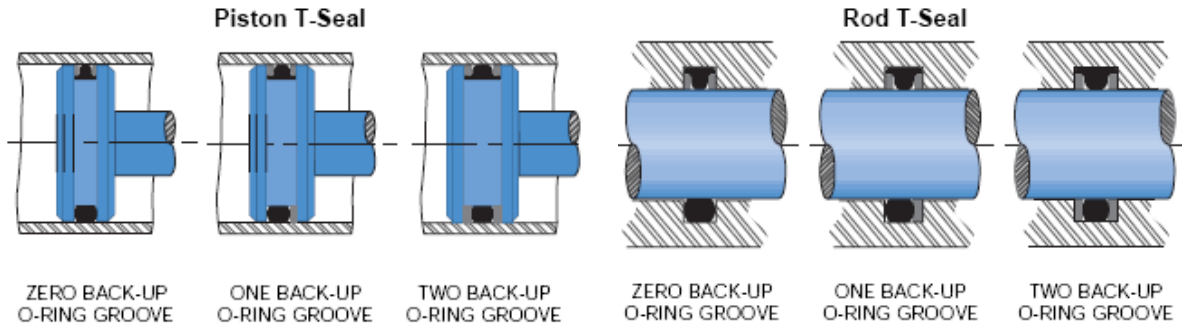


Aerospace T-Seals



Aerospace T-Seals employ the latest in compounding and design technology to deliver reliable, effective sealing. Parker Aerospace T-Seals are available for AS4716 / MIL-G-5514F and MS28775 cross-sections and diameters from Dash Size No. -006 through -460. They are available for rods and pistons, and for zero back-up, one backup and two back-up groove width O-ring replacements. Parker's Aerospace T-Seals are manufactured under strict procedures conforming to MIL-I-45208. Parker's manufacturing facilities are qualified and certified to the ISO 9001 standard. A wide range of seal and back-up compounds from Parker's advanced materials technology is available to match your application requirements. These seals meet all applicable military specifications.

Parker Aerospace T-Seal Materials

Materials used for Parker Aerospace T-Seal assemblies are chosen for their abrasion resistance, fluid compatibility and temperature range, but the seal element and backup rings have additional requirements unique to themselves. The seal element, for example, must also have high resistance to compression set, provide good adhesion for a lubricant film, high tear resistance, and long retention of its resilience. Back-up rings, in addition to the common requirements, must also have high shear strength, sufficient hardness to bridge large gaps without extrusion, and either the ability to hold a lubricant film or have self-lubricating properties.

Sealing Body Elastomeric Materials:

Standard Elastomeric Aerospace T-Seal Compounds

Compound Reference Number	Compound Type	Hardness (Shore A)	Service		Comments/Applications
			Fluids	Temp Range (°F)	
N304	Nitrile	75	General purpose sealing, petroleum oils and fluids, cold water	-65° to +275°	MIL-R-25732 Mil-R-3065 Mil-Std -417 (Military aircraft petroleum-based hydraulic fluids, fuels, lubes)
1267	Ethylene Propylene	80	Phosphate ester-based hydraulic fluids (Skydrol)	-65° to +300°	NAS 1613
V747	Fluoro-carbon	75	Petroleum oils, di-ester base lubricants, silicone fluids and greases	-15° to +400°	MIL-R-83248
V709	Fluoro-carbon	90	Petroleum oils, di-ester base lubricants, silicone fluids and greases	-15° to +400°	MIL-R-83248

Back-up Ring Materials:

Standard Back-up Ring Materials for Aerospace T-Seals

Compound Reference Number	Material	Color	Temp. Range (°F)*	Comments
0110	Virgin PTFE	White	-350° to +400°	Best for static applications requiring positive sealing. Mil-R-8791. Good in vacuum with low gas permeability. Low particulate generation. Excellent in cryogenics. Can be used in slow, infrequent dynamics. Recommended to 3000 psi.
0008	Carbon Fiber/PTFE	Brown	-250° to +550°	Excellent all-purpose material. Best for dynamic applications running on moderate to hard surfaces. High wear material with low abrasion. Recommended to 5000 psi.
0245	Graphite/PTFE	Dk. Gray	-250° to +550°	A dynamic material for softer surfaces and a static material for high temperatures. Good wear resistance with very low abrasion. Recommended to 4000 psi.
4655	Nylatron	Gray	-65° to +250°	Excellent chemical resistance. Recommended to 5000 psi on Dash Size # -006 to -149. Recommended to 10000 psi on Dash Size # -210 to -460.

*Overall temperature range dependent on sealing body elastomer.