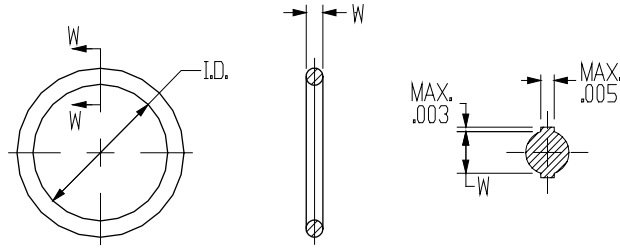


O-Rings For SAE J-1453 ORFS Ends



TUBE SIZE	STANDARD A-W PART #	ITEM #	OPTIONAL COMPOUND ITEM #			SAE AS568A REF. #	I.D.	W
	CH (BUNA-N) FF4000		HK (VITON) FF64001-	CH (HI-TEMP) ⁽¹⁾ FF64002-	CA (EPDM) FF64006-			
-4	FF4000-4	0100	0100	*	*	011	.301 ±.005	.070 ±.003
-6	FF4000-6	0200	0200	*	*	012	.364 ±.005	.070 ±.003
-8	FF4000-8	0300	0300	*	*	014	.489 ±.005	.070 ±.003
-10	FF4000-10	0400	0400	*	*	016	.614 ±.005	.070 ±.003
-12	FF4000-12	0500	0500	*	*	018	.739 ±.005	.070 ±.003
-16	FF4000-16	0600	0600	*	*	021	.926 ±.006	.070 ±.003
-20	FF4000-20	0700	0700	*	*	025	1.176 ±.006	.070 ±.003
-24	FF4000-24	0800	0800	*	*	029	1.489 ±.010	.070 ±.003
-32	FF4000-32	0900	0900	*	*	135	1.925 ±.017	.103 ±.003

SAE Type CH was SAE Type 1 Type CA was SAE Type 2 and Type HK was SAE Type 3.

Specification	SAE/ASTM Type CH	SAE/ASTM Type CA	SAE/ASTM Type HK
Usage	Nitrile Elastomer, 90 Durometer Hardness, for petroleum based fluids	EPDM Elastomer, 80 Durometer Hardness, for water based hydraulic or nonpetroleum based fluids	Fluorocarbon Elastomer, 90 Durometer Hardness, for petroleum or nonpetroleum based fluids
General Service	High pressure applications of pneumatics, water based hydraulic fluids, lubricating oils, hydraulic oils, and gasoline	High pressure applications of nonflammable hydraulic fluids of phosphate ester base type	High pressure, high temperature applications of pneumatic, water based hydraulic fluids, lubricating oils, hydraulic oils, and fuels
Temperature	-35°C to 125°C (-30°F to 250°F)	-40°C to 125°C (-40°F to 250°F)	-15°C to 275°C (5°F to 525°F)
Shore Hardness	90 pts ±5 pts	80 pts ±5 pts	90 pts ±5 pts
Elongation	100% min	150% min	100% min
Tensile	10 MPa min	10 MPa min	10 MPa min
Compound	Nitrile (Buna-N) to ASTM D 2000 or SAE J200 M4CH910B14E015E35Z1 Z1 = TR 10 temperature -21° C or lower. Alternate Low Temperature Product Test, 5 hours at -30° C, rings compressed 25% of ID, no cracks.	EPDM to ASTM D 2000 or SAE J200 M7CA810A25B35F17	M7HK910A1-11B38EF31E088Z1 Z1 = TR 10 temperature -15°C or lower (similar to MIL-R 83248 Type 1, Class 2)
Lubrication	When assembling Type CH O-rings with O-ring style fittings, the O-ring shall be coated with the fluid used or petrolatum before assembly to ease installation.	When assembling Type CA O-rings with O-ring style fittings, lubricate the O-ring with the fluid used in the system. Do not use a petroleum-based lubricant.	When assembling Type HK O-rings with O-ring style fittings, the O-ring shall be coated with the fluid used or petrolatum before assembly to ease installation.

1. Type CH(HI-TEMP) Air-Way part #FF4002, 90 Durometer Nitrile Compound, temperature range -32°C to 135°C(-25°F to 275°F). Approved compounds National O-ring Compound C67-90, Parker Seal Groove Compound N1059-90.

