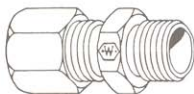


Materials

All Weatherhead Fittings are available in a variety of alloys on special order.

Carbon Steel Fittings – are precision machined from AISI 12L14 carbon steel. Shaped fittings such as elbows and tees with a "C" prefix are made from high-density forgings. Shaped fittings with a "TF" prefix are brazed. Straight fittings are from bar stock.

Stainless Steel Fittings – are made from type 316 stainless. Standard Ermeto® flareless sleeves are made from 17-4PH precipitation hardened stainless.

Finishes

Weathercote™ – is an exclusive Weatherhead® trademark for a protective coating that far exceeds the minimum requirements of the SAE specifications for a corrosion resistant finish for use with petroleum-based, synthetic, and water-based hydraulic fluids. It is readily identified by its dark appearance. Weathercote™ is an amorphous phosphate coating covered with a soluble rust-proof film

resulting in a coating of .0002" thick, yet providing full protection against electrolytic action, thread seizure or corrosive action of hydraulic fluids.

The lubricity of the rust-proof solvent film measurably reduces the amount of torque required to make leak-proof connections.

Zinc Plated – Weatherhead® fittings are given an electrolytic coating .0002" thick minimum.

Stainless Steel – fittings are supplied with natural surface finish except tube nuts which are coated with a bonded dry-film lubricant (black) to reduce assembly torque and prevent galling of threads. All Weatherhead® Stainless Steel Fittings are passivated to remove microscopic foreign particles from the surface of stainless steel as required. Process also leaves a film of corrosion protection.

Hydraulic Fluids

Modern hydraulic systems in use today employ a wide variety of high quality hydraulic fluids. There are three principle types in general use today – each best suited for particular conditions. They are discussed here briefly to clarify the fitting finishes compatible with each type.

Petroleum or Mineral Oil Based

Hydraulic Fluids – are good general purpose fluids available in a full range of viscosity specified as SAE 10, 20, 30, etc. These fluids are not fire resistant, making them unsuitable for use where there is a potential source of ignition. ALL Weatherhead® fittings and O-rings can be used with these fluids.

Straight Synthetic Hydraulic Fluids – is a general term applied to such products as Pydraul, Lindol, Cellulubes 90, 150, 180, 220, etc. used where fire hazards are high. Weathercote™ finish fittings are recommended for this type of fluid. O-rings MUST be made of a "Butyl" compound, or they will "swell" when contacted by synthetic fluids.

Water-Based Hydraulic Fluids – consist generally of a mixture of water and poly-glycols. They are non-flammable and serve the same purpose as the synthetic types. **Only Weathercote™ finish fittings are recommended for this type of fluid.** Zinc plate finishes will be dissolved by water-based fluids and damage to expensive components may result. These water-based fluids are usually less expensive than synthetic fluids and have little or no detrimental effects on Buna-N compounds used in o-rings.

O-Ring Compound and Application Chart

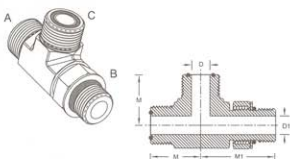
O-Ring Catalog Number	Base Material of Compound	Petroleum & Mineral Oil-Based Hydraulic Fluids	Straight Synthetic Hydraulic Fluids	Water-Based Hydraulic Fluids (Poly-glycols)	Air	Water	Lubricating Oils	Durometer Hardness	Temperature Range °F
4629x*	Buna-N	Excellent	Unsuitable	Good	Excellent	Good	Excellent	90	-40° to +250°
7629x*	Buna-N	Excellent	Unsuitable	Good	Excellent	Good	Excellent	90	-40° to +250°

*Standard O-ring complies with SAE J515 Type CH and ASTM specifications D2000.

All standard Weatherhead® straight thread fittings are supplied with this type O-ring, unless otherwise specified. (Viton O-Rings are available as special order items only).

Straight Thread O-Ring Run Tee

(Ref. SAE No. 520428)

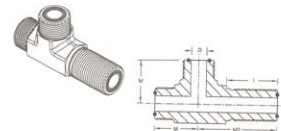


For replacement straight thread O-ring, see page 147.

Tube O.D.	Port Size	Tube O.D.	Catalog Number	D	D1	M	M1	M2	Across Flats
A	B	C							
1/4	1/4	1/4	4716x4	.172	.172	.85	1.29	.85	9/16
1/4	1/4	3/8	4716x4x4x6	.172	.264	1.39	1.45	1.39	3/4
3/8	3/8	3/8	4716x6	.264	.264	.98	1.45	.98	3/4
1/2	1/2	1/2	4716x8	.378	.391	1.10	1.60	1.10	7/8
5/8	5/8	5/8	4716x10	.484	.484	1.31	1.97	1.31	1-1/16
3/4	3/4	3/4	4716x12	.609	.609	1.47	2.17	1.47	1-3/16
3/4	3/4	1	4716x12x12x16	.609	.812	1.62	2.32	1.64	1-7/16
3/4	1	3/4	4716x12x16x12	.609	.812	1.62	2.35	1.62	1-7/16
1	1	3/4	4716x16x16x12	.812	.609	1.64	2.35	1.62	1-7/16
1	1	1	4716x16	.812	.845	1.64	2.35	1.64	1-7/16
1-1/4	1-1/4	1-1/4	4716x20	1.046	1.081	1.76	2.45	1.76	1-7/8
1-1/2	1-1/2	1-1/2	4716x24	1.313	1.313	1.92	2.59	1.92	1-7/8

Bulkhead Run Tee

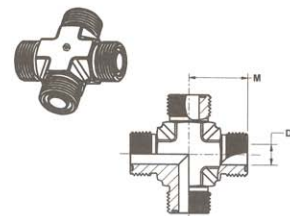
(Ref. SAE No. 520958)



For Bulkhead Nut, see page 157.

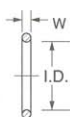
Tube O.D.	Catalog Number	D	I	M	M2	Across Flats
1/4	4726x4	.172	1.24	.89	1.85	9/16
3/8	4726x6	.264	1.34	1.02	2.05	3/4
1/2	4726x8	.378	1.44	1.14	2.18	3/4
5/8	4726x10	.484	1.60	1.36	2.48	1-1/16
3/4	4726x12	.609	1.64	1.52	2.65	1-3/16
1	4726x16	.812	1.66	1.67	2.80	1-7/16
1-1/4	4726x20	1.024	1.66	1.79	2.97	1-5/8
1-1/2	4726x24	1.260	1.66	1.95	3.13	1-7/8

Male For-Seal® Cross



Tube O.D.	Catalog Number	D	M	Across Flats
1/4	4955x4	.172	.89	9/16
3/8	4955x6	.264	1.02	3/4
1/2	4955x8	.378	1.14	7/8
5/8	4955x10	.484	1.36	1-1/16
3/4	4955x12	.609	1.52	1-5/16
1	4955x16	.812	1.67	1-5/8
1-1/4	4955x20	1.026	1.79	1-5/8
1-1/2	4955x24	1.262	1.95	1-7/8

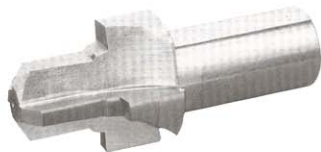
O-Ring, For-Seal®



Material: Buna N, 90 Durometer
 Temperature: -40°F to +250°F (-40°C to +121°C)
 Standard o-ring complies with SAE specification SAE J515 Type CH

Tube O.D.	Catalog Number	W	I.D.
1/4	4629x4	.070 ± .005	.301 ± .005
3/8	4629x6	.070 ± .005	.364 ± .005
1/2	4629x8	.070 ± .005	.489 ± .005
5/8	4629x10	.070 ± .005	.614 ± .005
3/4	4629x12	.070 ± .005	.739 ± .005
1	4629x16	.070 ± .006	.926 ± .006
1-1/4	4629x20	.070 ± .006	1.176 ± .006
1-1/2	4629x24	.070 ± .010	1.489 ± .010

Refer to safety information on page 1 & 2.



SAE Straight Thread O-Ring Boss Tapping and Counterboring Tools

These Weatherhead precision counterborer and tap tools are available in the full range of sizes. They provide the correct SAE contour and UNF-2B threads for proper containment of Weatherhead Flareless '7000' Series Ermeto® and Weatherhead Flare-Twin® straight-thread o-ring tube fittings.

Thread Tap Catalog No.	UNF-2B Thread Size of Thread Tap	Drill Size	For Fitting Size	For Tube O.D.	Counter-Borer Catalog No.
T-5002	5/16-24	I	2	1/8	T-5102
T-5003	3/8-24	O	3	3/16	T-5103
T-5004	7/16-20	W	4	1/4	T-5104
T-5005	1/2-20	29/64	5	5/16	T-5105
T-5006	9/16-18	1/2	6	3/8	T-5106
T-5008	3/4-16	11/16	8	1/2	T-5108
T-5010	7/8-14	51/64	10	5/8	T-5110
T-5012	1-1/16-12	31/32	12	3/4	T-5112
T-5014	1-3/16-12	1-3/32	14	7/8	T-5114
T-5016	1-5/16-12	1-7/32	16	1	T-5116
T-5020	1-5/8-12	1-17/32	20	1 1/4	T-5120
T-5024	1-7/8-12	1-25/32	24	1 1/2	T-5124
T-5032*	2-1/2-12	2-27/64	32	2	T-5132*

*Special order only.



RG-24 • Hydraulic O-Ring Assortment

Weatherhead's RG-24 is your solution to storing a useful inventory of hydraulic o-rings. This kit contains o-rings for Weatherhead's straight thread and FOR-SEAL® tube fitting applications as well as popular (code 61) split flange hydraulic applications. The RG-24 comes enclosed in a handy steel case with a carrying handle. Consider an RG-24 for an over-the-counter sales merchandiser or keep one in your equipment shop or maintenance trailer to prepare for those critical "got-to-have-it" applications.

Twenty-four individual compartments keep your hydraulic o-ring inventory separated by part number, and labelled illustrations on the inside of the assortment prevent the mix-up of o-rings. Compact, organized and reasonably priced, if you specialize in hydraulic applications which call for o-rings - we've got your number - RG-24.

RG-24 • O-Ring Assortment Contents

Part Number	Split Flange Quantity	Part Number	FOR-SEAL® Quantity	Part Number	Straight Thr. Quantity
8x252	12	4629x4	12	7629x4	12
12x252	12	4629x6	12	7629x5	12
16x252	12	4629x8	12	7629x6	12
20x252	12	4629x10	12	7629x8	12
24x252	12	4629x12	12	7629x10	12
32x252	12	4629x16	12	7629x12	12
		4629x20	12	7629x16	12
		4629x24	12	7629x20	12
				7629x24	12
				7629x32	12

O-rings conform to SAE J515 Type CH.