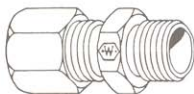


**Materials**

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**

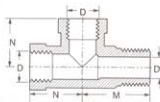
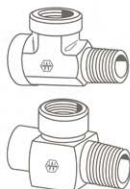
O-Ring Catalog Number	Base Material of Compound	Petroleum & Mineral Oil-Based Hydraulic Fluids	Straight Synthetic Hydraulic Fluids	Water-Based Hydraulic Fluids (Poly-glycols)	Air	Water	Lubricating Oils	Durometer Hardness	Temperature Range °F
4629x*	Buna-N	Excellent	Unsuitable	Good	Excellent	Good	Excellent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

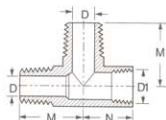
## Male Run Tee

Stainless Steel No. 3771x  
(Ref. SAE No. 140424)



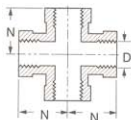
Fem. Pipe Thread	Male Pipe Thread	Catalog Number	D	D1	M	N	Across Flats
1/8	1/8	C3759x2	.332	.188	.78	.66	9/16
1/4	1/4	C3759x4	.437	.281	1.09	.88	3/4
3/8	3/8	C3759x6	.562	.406	1.22	1.02	7/8
1/2	1/2	C3759x8	.687	.531	1.47	1.23	1-1/16
3/4	3/4	C3759x12	.906	.719	1.59	1.36	1-5/16
1	1	C3759x16	1.125	.938	1.97	1.62	1-5/8
1/8	1/8	TF3759x2	.343	.188	.78	.66	5/8
1/4	1/4	TF3759x4	.437	.281	1.09	.88	3/4
3/8	3/8	TF3759x6	.562	.406	1.22	1.02	7/8
1/2	1/2	TF3759x8	.687	.531	1.47	1.23	1-1/8
3/4	3/4	TF3759x12	.906	.719	1.59	1.36	1-3/8
1	1	TF3759x16	1.125	.938	1.97	1.62	1-5/8
1-1/4	1-1/4	TF3759x20	1.468	1.250	2.68	1.70	2
1-1/2	1-1/2	TF3759x24	1.710	1.500	2.84	2.08	2-3/8
2	2	TF3759x32	2.180	1.938	3.00	2.39	2-7/8

## Female Run Tee



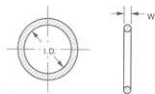
Fem. Pipe Thread	Male Pipe Thread	Catalog Number	D	D1	M	N	Across Flats
1/8	1/8	TF3805x2	.188	.343	.78	.66	5/8
1/4	1/4	TF3805x4	.281	.437	1.09	.88	3/4
3/8	3/8	TF3805x6	.406	.562	1.22	1.02	7/8
1/2	1/2	TF3805x8	.531	.687	1.47	1.23	1-1/8
3/4	3/4	TF3805x12	.719	.906	1.59	1.36	1-3/8
1	1	TF3805x16	.938	1.125	1.97	1.62	1-5/8
1-1/4	1-1/4	TF3805x20	1.250	1.468	2.38	1.70	2
1-1/2	1-1/2	TF3805x24	1.490	2.180	2.64	2.08	2-3/8

## Cross



Fem. Pipe Thread	Catalog Number	D	N	Across Flats
3/8	C3959x6	.562	1.02	7/8
1/2	C3959x8	.687	1.23	1-1/16
3/4	C3959x12	.906	1.36	1-5/16
1/8	TF3959x2	.343	.66	5/8
1/4	TF3959x4	.437	.88	3/4
3/8	TF3959x6	.562	1.02	7/8
1/2	TF3959x8	.687	1.23	1-1/8
3/4	TF3959x12	.906	1.36	1-3/8
1	TF3959x16	1.125	1.62	1-5/8
1-1/4	TF3959x20	1.468	1.70	2
1-1/2	TF3959x24	1.710	2.08	2-3/8
2	TF3959x32	2.180	2.39	2-7/8

## Straight Thread O-Ring



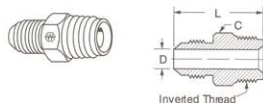
**Material:** Buna-N, 90 Durometer  
**Temperature Range:** -40°F to +250°F  
 (-40°C to +121°C)  
 Standard O-ring complies with SAE specification SAE J515 Type CH.

Tube O.D.	Catalog Number	W	I.D.
1/16	7629x1	.058	.185
1/8	7629x2	.064	.239
3/16	7629x3	.064	.301
1/4	7629x4	.072	.351
5/16	7629x5	.072	.414
3/8	7629x6	.078	.468
7/16	7629x7	.082	.530
1/2	7629x8	.087	.644
5/8	7629x10	.097	.755
3/4	7629x12	.116	.924
7/8	7629x14	.116	1.048
1	7629x16	.116	1.171
1-1/4	7629x20	.118	1.475
1-1/2	7629x24	.118	1.720
2	7629x32	.118	2.337

\* Available in stainless steel.

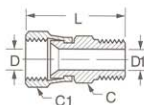
### Adapter

Example assembly No. C35880x4



Tube O.D.	Inverted Thread	Catalog Number	Hex C	D	L
1/4	7/16-24	C5880x4	1/2	.172	1.08
5/16	1/2-20	C5880x5	9/16	.234	1.14
3/8	5/8-18	C5880x6	11/16	.297	1.22
1/2	3/4-18	C5880x8	13/16	.391	1.46

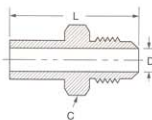
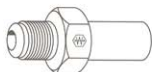
### Female JIC 37° Swivel to Male Pipe Adapter



Tube O.D.	Male Pipe Size	Catalog Number	Hex C	Hex C1	D	D1	L
1/4	1/4	9100x4x4	9/16	9/16	.172	.281*	1.50
5/16	1/4	9100x5x4	11/16	5/8	.234	.281*	1.57
3/8	1/4	9100x6x4	11/16	11/16	.297	.281	1.69
3/8	3/8	9100x6x6	11/16	11/16	.297	.406*	1.69
1/2	3/8	9100x8x6	7/8	7/8	.391	.406*	1.87
1/2	1/2	9100x8x8	7/8	7/8	.391	.531*	2.05
5/8	3/8	9100x10x6	1	1	.484	.406	1.91
5/8	1/2	9100x10x8	1	1	.484	.531*	2.11
3/4	1/2	9100x12x8	1-1/8	1-1/4	.609	.531	2.21
3/4	3/4	9100x12x12	1-1/8	1-1/4	.609	.719*	2.21
1	3/4	9100x16x12	1-3/8	1-1/2	.844	.719	2.36
1	1	9100x16x16	1-3/8	1-1/2	.844	.938*	2.55
1-1/4	1-1/4	9100x20x20	1-7/8	2	1.078	1.250*	2.73

\*Optional counterbore for D1.

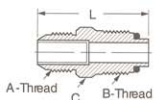
### Male JIC 37° to Male Metric Standpipe



Tube O.D.	Tube O.D. (mm)	Catalog Number	Hex C	L	D
1/4	6MM	MC5019x4x6	9/16	1.58	.16
1/4	8MM	MC5019x4x8	9/16	1.68	.17
3/8	10MM	MC5019x6x10	3/4	1.67	.28
1/2	12MM	MC5019x8x12	7/8	1.97	.32
1/2	14MM	MC5019x8x14	7/8	1.89	.39
5/8	15MM	MC5019x10x15	1	2.03	.43
5/8	16MM	MC5019x10x16	1	2.07	.47
3/4	16MM	MC5019x12x16	1-1/4	2.22	.47
3/4	18MM	MC5019x12x18	1-1/4	2.12	.55
3/4	20MM	MC5019x12x20	1-1/4	2.38	.61
1	22MM	MC5019x16x22	1-1/2	2.21	.67
1	25MM	MC5019x16x25	1-1/2	2.54	.79

For metric flareless nuts and sleeves see page 211.

### Male JIC 37° to O-Ring Port Adapter

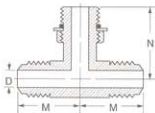


Tube Size	Port Size	Catalog Number	Replacement O-Ring	Thread A	Thread B	Hex C	L
1/4	1/4	41157x4	7629x1	7/16-20	7/16-24	7/16	1.33
3/8	3/8	41157x6	7629x3	9/16-18	5/8-18	3/4	1.91
1/2	1/2	41157x8	7629x5	3/4-16	3/4-16	3/4	1.47
5/8	5/8	41157x10	7629x7	7/8-14	7/8-14	15/16	2.23
3/4	3/4	41157x12	7629x8	1-1/16-12	1-1/16-16	1-1/8	2.13

### Straight Thread O-Ring Branch Tee

(Ref. SAE No. 070429)

Example assembly No. C35715x4

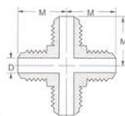


Replacement O-rings listed below.  
\*Special Order Only.

Tube O.D.	Port Size	Catalog Number	D	M	N	Across Flats
1/4	1/4	C5715x4	.172	.89	1.03	7/16
5/16	5/16	C5715x5*	.234	.95	1.09	9/16
3/8	3/8	C5715x6	.297	1.06	1.25	9/16
1/2	1/2	C5715x8	.391	1.25	1.45	3/4
5/8	5/8	C5715x10	.484	1.45	1.70	7/8
3/4	3/4	C5715x12	.609	1.66	1.94	1-1/16
1	1	C5715x16	.844	1.81	2.05	1-5/16
1/4	1/4	TF5715x4	.172	.89	1.03	7/16
5/16	5/16	TF5715x5	.234	.95	1.09	9/16
3/8	3/8	TF5715x6	.297	1.06	1.25	5/8
1/2	1/2	TF5715x8	.391	1.25	1.45	3/4
5/8	5/8	TF5715x10	.484	1.45	1.70	15/16
3/4	3/4	TF5715x12	.609	1.66	1.94	1-1/8
7/8	7/8	TF5715x14	.719	1.73	2.00	1-1/4
1	1	TF5715x16	.844	1.81	2.05	1-3/8
1-1/4	1-1/4	TF5715x20	1.078	2.06	2.25	1-3/4
1-1/2	1-1/2	TF5715x24	1.312	2.33	2.39	2

### Cross

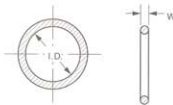
(Ref. SAE No. 070501)



#Stainless Steel Construction

Tube O.D.	Catalog Number	D	M	Across Flats
1/4	TF5955x4	.172	.89	1/2
5/16	TF5955x5	.234	.95	9/16
3/8	TF5955x6	.297	1.06	5/8
1/2	TF5955x8	.391	1.25	13/16
5/8	TF5955x10	.484	1.45	15/16
3/4	TF5955x12	.609	1.66	1-1/8
7/8	TF5955x14	.718	1.73	1-1/4
1	TF5955x16	.844	1.81	1-3/8
1-1/4	TF5955x20	1.078	2.06	1-3/4
1-1/2	TF5955x24	1.312	2.33	2
1/4	5967x4#	.172	.89	7/16
3/8	5967x6#	.297	1.06	9/16
1/2	5967x8#	.391	1.25	3/4

### Straight Thread O-Ring



Material: Buna-N 90 Durometer

Temperature Range: -40°F to +250°F

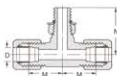
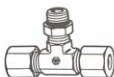
(-40°C to +121°C)

Standard O-ring complies with SAE specification SAE J515 Type CH.

Tube O.D.	Catalog Number	W	I.D.
1/16	7629x1	.058	.185
1/8	7629x2	.064	.239
3/16	7629x3	.064	.301
1/4	7629x4	.072	.351
5/16	7629x5	.072	.414
3/8	7629x6	.078	.468
7/16	7629x7	.082	.530
1/2	7629x8	.087	.644
5/8	7629x10	.097	.755
3/4	7629x12	.116	.924
7/8	7629x14	.116	1.048
1	7629x16	.116	1.171
1-1/4	7629x20	.118	1.475
1-1/2	7629x24	.118	1.720
2	7629x32	.118	2.337

## Ermeto® Straight Thread O-Ring Branch Tee

Stainless Steel No. 7727x  
(Ref. SAE No. 080429)

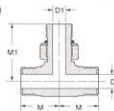


Replacement O-rings see below.

Tube O.D.	Port Size	Catalog Number	D	M	N	Across Flats
1/4	1/4	7715x4	.203	.89	1.03	7/16
3/8	3/8	7715x6	.281	1.05	1.25	9/16
1/2	1/2	7715x8	.422	1.25	1.45	3/4

## For-Seal® to Straight Thread O-Ring Branch Tee

(Ref. SAE No. 520429)

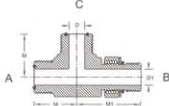


For replacement straight thread O-ring, see below.  
For replacement FOR-SEAL® O-ring, see page 163.

Tube O.D.	Port Size	Catalog Number	D	D1	M	M1	Across Flats
1/4	1/4	4715x4	.172	.172	.85	1.29	9/16
3/8	3/8	4715x6	.264	.264	.98	1.45	3/4
3/8	1/2	4715x6x8	.264	.391	1.04	1.60	3/4
1/2	1/2	4715x8	.378	.390	1.10	1.60	3/4
5/8	5/8	4715x10	.484	.484	1.31	1.97	1-1/16
3/4	3/4	4715x12	.609	.609	1.47	2.17	1-3/16
1	1	4715x16	.811	.811	1.64	2.35	1-1/16

## For-Seal® to Straight Thread Run Tee

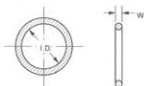
(Ref. SAE No. 520428)



For replacement straight thread O-ring, see below.  
For replacement FOR-SEAL® O-ring, see page 163.

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

## Straight Thread O-Ring



Material: Buna-N, 90 Durometer

Temperature Range: -40°F to +250°F  
(-40°C to +121°C)

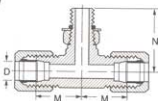
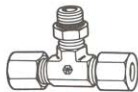
Standard O-ring complies with SAE specification J515 Type CH.

Port Size	Catalog Number	W	I.D.
1/16	7629x1	.058 ± .003	.185 ± .005
1/8	7629x2	.064 ± .003	.239 ± .005
3/16	7629x3	.064 ± .003	.301 ± .005
1/4	7629x4	.072 ± .003	.351 ± .005
5/16	7629x5	.072 ± .003	.414 ± .005
3/8	7629x6	.078 ± .003	.468 ± .005
7/16	7629x7	.082 ± .003	.530 ± .005
1/2	7629x8	.087 ± .003	.644 ± .005
5/8	7629x10	.097 ± .003	.755 ± .005
3/4	7629x12	.116 ± .004	.924 ± .006
7/8	7629x14	.116 ± .004	1.048 ± .006
1	7629x16	.116 ± .004	1.171 ± .006
1-1/4	7629x20	.118 ± .004	1.475 ± .010
1-1/2	7629x24	.118 ± .004	1.720 ± .010
2	7629x32	.118 ± .004	2.337 ± .010

• Available in stainless steel.

### Straight Thread O-Ring Branch Tee

Stainless Steel No. 7727x  
(Ref. SAE No. 080429)

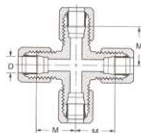
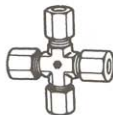


Replacement O-rings see below.

Tube O.D.	Port Size	Catalog Number	D	M	N	Across Flats
1/4	1/4	7715x4*	.203	.89	1.03	7/16
3/8	3/8	7715x6*	.281	1.05	1.25	9/16
1/2	1/2	7715x8	.422	1.25	1.45	3/4

### Cross

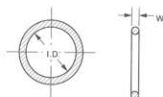
Stainless Steel No. 7967x  
(Ref. SAE No. 080501)



\*Brazed construction.

Tube O.D.	Catalog Number	D	M	Across Flats
1/4	7955x4*	.203	.89	9/16
3/8	7955x6*	.281	1.05	9/16
1/2	7955x8	.422	1.25	3/4

### Straight Thread O-Ring



Material: Buna-N 90 Durometer

Temperature Range: -40°F to +250°F  
(-40°C to +121°C)

Standard O-ring complies with SAE J515 Type CH.

Tube O.D.	Catalog Number	W	I.D.
1/16	7629x1	.058 ± .003	.185 ± .005
1/8	7629x2	.064 ± .003	.239 ± .005
3/16	7629x3	.064 ± .003	.301 ± .005
1/4	7629x4	.072 ± .003	.351 ± .005
5/16	7629x5	.072 ± .003	.414 ± .005
3/8	7629x6	.078 ± .003	.468 ± .005
7/16	7629x7	.082 ± .003	.530 ± .005
1/2	7629x8	.087 ± .003	.644 ± .005
5/8	7629x10	.097 ± .003	.755 ± .005
3/4	7629x12	.116 ± .004	.924 ± .006
7/8	7629x14	.116 ± .004	1.048 ± .006
1	7629x16	.116 ± .004	1.171 ± .006
1-1/4	7629x20	.118 ± .004	1.475 ± .010
1-1/2	7629x24	.118 ± .004	1.720 ± .010
2	7629x32	.118 ± .004	2.337 ± .010

\* Available in stainless steel.

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.