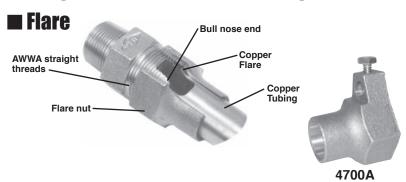
UNDERGROUND WATER SERVICE FITTINGS



A.Y. MCDONALD MFG. CO.
WATER SERVICE PRODUCTS

### **Underground Water Service Fittings & Couplings —**

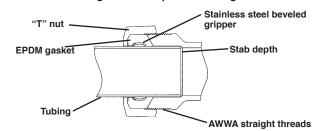


- **A.** Remove the flare nut from the valve or fitting and slip it onto the copper tubing.
- **B.** Flare the end of the copper tubing making sure the O.D. of the flare extends out to the threads in the flare nut. and is free of nicks and chips..
- **C.** Screw the flare nut with tubing back onto the matching bull nose end of the valve or fitting and securely wrench tighten.
- **D.** The flared portion of the copper tubing acts as a water-tight gasket and also is locked between the nut and coupling giving high pull-out resistance.

### **■** T, and TA Compression

Copper tube, CTS PE ("T") is stabbed thru nut to stab depth. The "T" nut is tightened to the required torque, which compresses the Buna-N or EPDM gasket and stainless steel beveled gripper, which creates a water-tight seal and pull-out strength.





A. Insert tubing through the "T" compression nut and into the machined socket of the valve or fitting.\*

- **B.** Tighten the "T" compresion nut securely onto the valve or fitting, using the information from the recommended torque chart. This will:
  - Provide a water-tight seal by compressing both edges of the EPDM gasket around the tubing and;
  - 2. Compress the stainless steel beveled gripper providing high pull-out resistance.

**NOTE:** "T" Compression and Mac-Pak -22 nuts have the same threads and are interchangeable.

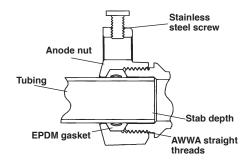


### Recommended Torque Chart for T Series Compression Nuts

Tighten to the following minimum torques:

3/4"	50 ft-lbs
1"	55 ft-lbs
1 1/4"	65 ft-lbs
1 1/2"	85 ft-lbs
2"	100 ft-lbs

4700TA

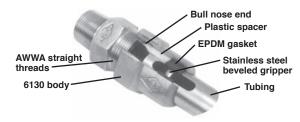


### "TA" Anode Compression Assembly

Copper tube is stabbed thru nut to stab depth. The "TA" nut is tightened to the required torque, which compresses the EPDM gasket and stainless steel beveled gripper, which creates a water-tight seal and pull-out strength. A copper wire that leads to a zinc anode is locked into the compression nut via the stainless steel screw.

For the electrical anode nut feature add "A" to the Model No.: 4701T = 4701TA

### **■** 6130 Compression Coupling Converts Flare End to Compression Assembly



The 6130 Compression Coupling converts any 3/4" or 1" flared joint into a tube size compression joint. For copper 6130CC or CTS polyethylene 6130CE.

- A. Remove the flare nut from the valve or fitting and replace with the 6130 Coupling.
- **B.** Squarely cut the end of the copper or polyethylene tubing and insert it into the 6130 Coupling until the tubing bottoms out.\*
- **C.** Tighten the 6130 Coupling onto the valve or fitting fingertight, then wrench tighten 2-3 more complete turns.

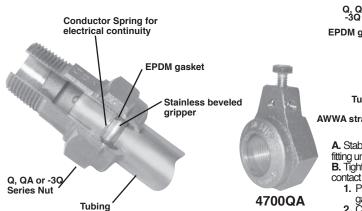
DO NOT OVERTIGHTEN.

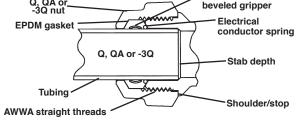
<sup>\*</sup>Also acceptable for use with 250# PSI polybutylene tubing. NOTE: Materials meet or exceed A.W.W.A. Standard C-800. Insert stiffeners are required on all flexible plastic connections. See page 5.

### Underground Water Service Fittings & Couplings

### **I** McQuik Compression - Q, QA and -3Q Series

Copper tube CTS PE (Q), QA or PEP (-3Q) is stabbed through the nut to stab depth. The Q, QA or -3Q nut is tightened to the stop/shoulder on the body, which compresses the EPDM gasket and stainless steel beveled gripper, which creates a water-tight seal and pull-out strength. The electrical conductor spring makes positive contact between the copper tubing and the brass nut/fitting. When using with CTS PE (Q) QA or PEP (-3Q), the electrical conductor spring becomes purposeless.





A. Stab tube\* through the Q, QA or -3Q Series nut and into the socket of the valve or fitting until it bottoms out (three part unions may or may not have an internal stop). **B.** Tighten the McQuik Q, QA or -3Q Series nut to the stop. The end face of the nut is to contact the stop face of the body. This will:

- Provide a water-tight seal by compressing both edges of the EPDM
- gasket around the tubing and;

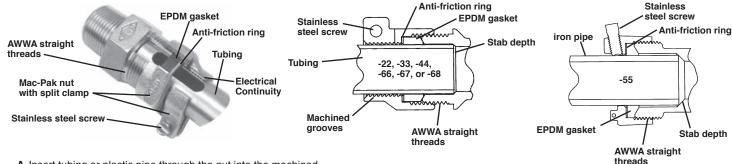
  2. Compress the stainless steel beveled gripper providing high pull-out resistance.

### lacktriangle Mac-Pak Compression - 22, -33, -44, -55, -66, -67 and -68 Compression

Copper tube or CTS PE ("-22"), PEP ("-33"), PVC (-44), IP (-55), strong lead (-66), extra strong lead (-67) or double extra strong lead (-68) is stabbed thru nut to stab depth. The nut is tightened to the required torque (see recommended torque chart for Mac-Pak compression), which compresses the EPDM gasket, which creates a water-tight seal. The stainless steel screw is tightened to the required torque (see chart), for pull-out strength.

Iron pipe (-55) is stabbed thru nut to stab depth. The nut is tightened to the required torque, which compresses the EPDM gasket,

which creates a water-tight seal. The stainless steel screw or screws are tightened to the required torque, for pull-out strength.



A. Insert tubing or plastic pipe through the nut into the machined socket in the valve or fitting.

- B. Wrench tighten the Mac-Pak nut securely onto the valve or fitting compressing the EPDM seal around the pipe or tubing, creating a water-tight seal.
- C. Secure the split clamp onto the pipe or tubing by tightening the stainless steel bolt on the side of the clamp. Machined grooves in the split clamp provide additional gripping and electrical continuity.
- D. Mac-Pak couplings are coded as follows:
  - -22 SERIES Tube size copper or P.E.\* -- CTS
  - -33 SERIES Pipe size P.E.\* PEP
  - -44 SERIES P.V.C. -- PVC
  - -55 SERIES Steel pipe -- IP
  - -66 SERIES Strong lead pipe -- S
  - -67 SERIES Extra strong lead pipe -- XS
  - -68 SERIES Extra, extra strong lead pipe -- XXS

Recommended Torque Chart for Mac-Pak Compression Nuts
Tighten to tthe following minimum torques:
"-22" "-33" "-44" "-55" Compression

For nut:	1"30 ft-lbs 1 1/4"35 ft-lbs	
	1"90-100 in-lbs	

### (in-lbs) Lead Mac-Pak Comp. "-66", "-67", "-68" Compression

=oua mac		p. 00	, ,	p. 000.011
For nut:	1/2"	. 25 ft-lbs	1" 40 ft-lbs	1 1/2" 50 ft-lbs
(ft-lbs)	5/8"	. 30 ft-lbs	1 1/4" 45 ft-lbs	2" 55 ft-lbs
	3/4"	35 ft-lhs		

For clamp 1	/2"70-80 i	n-lbs 1"	90-100 in-lbs	1 1/2'	'160-180 in-lbs
side screw: 5	5/8"75-85 i	n-lbs 1 1/4	"120-140 in-lbs	2"	160-180 in-lbs
(in-lhs) 3		n-lhe			



Any Q Series connection can be changed to a C903 Connection. Replace the "Q" in the model number with a "K." 3/4" or 1" only.



\*Also acceptable for use with 250# PSI polybutylene tubing. NOTE: Materials meet or exceed A.W.W.A. Standard C-800. Insert stiffeners are **required** on all flexible plastic connections. See page 5.

# Types of Pipe/Tubing for use with A.Y. McDonald Fittings (Outside Diameters listed)

			ONIGIT AND	IN INTIINATION	POLYBUTYLENE			POLYETHYLENE		LEAD PIPE	
TYPE K or L AS COPPER TUBE	AS	POLYETHYLENE ASTM D2737 SDR 9 TUBE SIZE		ASTM D2666 SDR 9 TUBE SIZE CLASS 250	AS IM D2002 SIDE / or POLYETHYLENE ASTM D2239 SIDE 7 PIPE SIZE	PVC ASTM D1785	STEEL	AS IN D3033 SDR 9 OD CONTROLLED PIPE SIZE	STRONG S or A	EXTRA STRONG XS or AA	DOUBLE EXTRA STRONG XXS or AAA
.62 <u>8</u> .628		<b>A</b> .629	<b>A</b> .621 .629	.633	<b>B</b> .79	.836	.836 .844		.783 .813	.861 .891	.997 1.027
								1.004	1.067 1.097	1.122 1.152	
.872		.871 .879	.871 .879	.883	1.045 1.110 (1.089)	1.046 1.054	1.046 1.054	1.046 1.054	1.141 1.171	1.197 1.227	1.321 1.351
1.121		<u>1.120</u> 1.130	1.120 1.130	1.125 1.135	1.329 1.399 (1.384)	1.320	1.310 1.320	1.310 1.320	1.41 <u>3</u> 1.443	1.477 1.507	<u>1.581</u> 1.611
1.371		1.370 1.380	1.370 1.380	1.375 1.385	1.832 (1.804)	1.665	1.655 1.665	<u>1.655</u> 1.665	1.655 1.685	1.75 <u>0</u> 1.780	1.874 1.874 1.904
1.621 1.630		1.61 <u>9</u> 1.631	1.619 1.631	1.625 1.637	2.050 2.141 (2.109)	1.894	1.894 1.906	1.894 1.906	1.969 1.999 1.999	2.061 2.091	2.257 2.287
2.120 2.130		<u>2.119</u> 2.131	<u>2.119</u> 2.131	<u>2.125</u> 2.137	2.742 (2.709)	<u>2.369</u> 2.381	2.369 2.381	<u>2.369</u> 2.381	2.488 2.518	<u>2.736</u> 2.766	2.993 <b>B</b> 3.023
-22, Q or T <b>D C</b>	1	-22*, Q* or T* <b>C</b>	-22*, Q* or T*	-22*, Q* or T*	-33* or -3Q*	-44 D	-55 <b>D</b>	-44*	-66 D	O 29-	-68 D

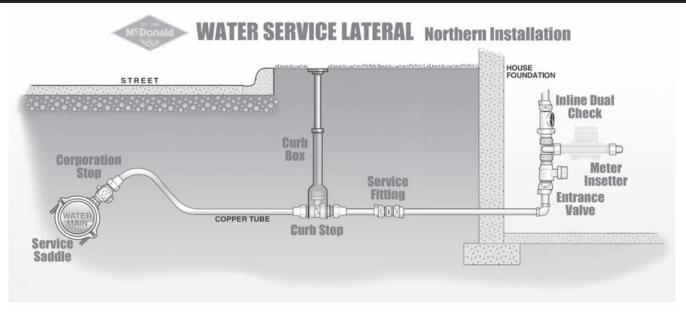
■ Shaded areas indicate where lead pipe may have to be shaved to fit compression end shown.

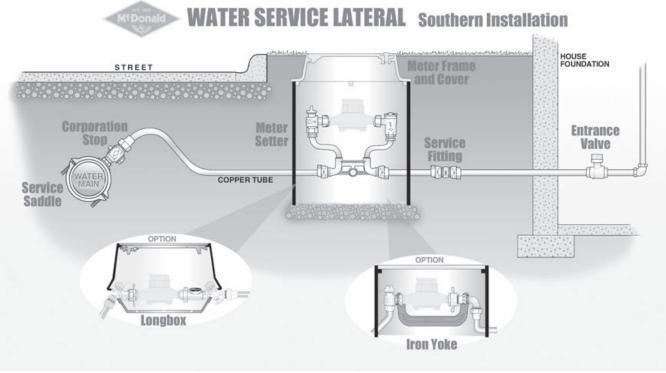
A · Need insert not available from A.Y. McDonald Mfg. Co.
B · No fitting from A.Y. McDonald Mfg. Co. available.
C · T and Q not available for 1/2" size.
D · Insert stifferen not required
E · -3Q only available in 3/4" and 1" sizes.

() • Maximum pipe O.D. that will work with A.Y. McDonald fittings.

\*Insert Stiffeners required on all flexible plastic connections

# Installation Information





# ■ Insert Stiffeners - Insert Stiffeners required on all flexible plastic connections

6131T · PLASTIC For copper tube size polyethylene ASTM D2737 SDR 9 - CTS



Sizes: 3/4", 1", 1 1/4", 1 1/2", 2"

**6133T** · STAINLESS STEEL

For copper tube

size polyethylene

**ASTM D2737 SDR 9 - CTS** 

**6136** · STAINLESS STEEL For ID Controlled PEP ASTM D2239 SIDR 7



Sizes: 3/4", 1", 1 1/4", 1 1/2", 2"

For OD controlled
PEP SDR9
ASTM D3035



Sizes: 3/4", 1", 1 1/4", 1 1/2", 2"

Sizes: 3/4", 1" Sizes: 3/4", 1", 1 1/4"

•Also acceptable for use with 250 PSI polybutylene tubing. ASTM D2666, SDR 9, CTS.

# **■ Flare and Compression Nut Assemblies**













	4/00	4/UUA	4/001	4/00IA	4/001GA	4/00-3Q	4/UU-3QGA
Size	Copper Flare Nut Only	Copper Flare Nut with Anode Connection	T CTS Comp. Nut Assembly (Gasket & Gripper)	TA CTS Comp. Anode Nut Assembly (Gasket & Gripper)	Gasket & Gripper Assembly Only T CTS Series	3Q PEP Comp. Nut Assembly (Gasket & Gripper)	Gasket & Gripper Assembly Only 3Q PEP Series
1/2"	•						
3/4"	•	•	•	•	•	•	•
1"	•	•	•	•	•	•	•
11/4"	•		•		•		
11/2"	•		•		•		
1½" RW			•		•		
2"	•		•		•		
2" RW			•		•		



Size 1/2" 3/4"

1½" RW 1½" RW 1½" RW 2" RW











4700-22 °	4700-22GA	4700-33 °	4700-33GA	4700-44	4700-44GA
22 CTS Comp. Nut Assembly (Gasket and Anti-Friction Ring)	Gasket and Anti-Friction Ring Only 22 CTS Series	33 PEP Comp. Nut Assembly (Gasket and Anti-Friction Ring)	Gasket and Anti-Friction Ring Only 33 PEP Series	44 PVC Comp. Nut Assembly (Gasket and Anti-Friction Ring)	Gasket and Anti-Friction Ring Only 44 PVC Series
•	•				
•	•	•	•	•	•
•	•	•	•	•	•
•	•	•	•	•	•
				•	•











	4700-55	4700-55GA	4700-00GA	4700-67GA	4700-68GA
Size	55 Steel Pipe Comp. Nut Assembly (Gasket and Anti-Friction Ring)	Gasket and Gripper Assembly Only 55 IP Series	Gasket and Gripper Assembly for Strong Lead 66 S Lead Series	Gasket and Gripper Assembly for XStrong Lead 67 XS Lead Series	Gasket and Gripper Assembly for XXStrong Lead 68 XXS Lead Series
1/2"				•	•
5/8"			•	•	•
3/4"	•	•	•	•	•
1"	•	•	•	•	•
11/4"				•	
11/2"	•	•		•	
2"	•	•		•	















	4700Q*	4700QA	4700QGA	4700CSS	4700CSL	4700K	4700KGR
Size	Q CTS Comp. Nut Assembly (Gasket & Gripper)	QA CTS Comp. Anode Nut Assembly (Gasket & Gripper)	Gasket and Gripper Assembly Only Q CTS Series	Clamp Screw-Small For Mac-Pak Nuts	Clamp Screw-Large For Mac-Pak Nuts	K C903 Comp. Nut, Ring, & Seal Assembly	K C903 Grip Ring Only
1/2"							
5/8"				Fits			
3/4"	•	•	•	these		•	•
1"	•	•	•	sizes		•	•
11/4"	•	•	•				
11/4" RW							
11/2"	•	•	•		Fits		
1½" RW					these		
2"	•	•	•		sizes		
2" RW							

RW=Reduced Weight \*Insert stiffeners are required on all flexible plastic connections. See page 5.

# ■ Straight Couplings - One End Male National Pipe Thread









SIZES AV	/AILA	BLE	4753°	4753T*	4753Q*	4753-22*
Size	NUT	MNPT	FLARE x MNPT	T CTS Comp x MNPT	Q CTS Comp x MNPT	22 CTS Comp x MNPT
1/2"	1/2"	1/2"	•			•
1/2" x 3/4"	1/2"	3/4"	•			•
3/4"	3/4"	3/4"	•	•	•	•
3/4" x 1/2"	3/4"	1/2"	•	•	•	•
3/4" x 1"	3/4"	1"	•	•	•	•
1"	1"	1"	•	•	•	•
1" x 3/4"	1"	3/4"	•	•	•	•
11/4"	11/4"	11/4"	•	•	•	•
11/4" x 3/4"	11/4"	3/4"		•	•	•
11/4" x 1"	11/4"	1"		•	•	•
11/4" x 11/2"	11/4"	11/2"		•	•	•
1½"	11/2"	<b>1</b> ½"	•	•	•	•
1½" x 1"	11/2"	1"		•	•	•
1½" x 1¼"	11/2"	11/4"		•	•	•
2"	2"	2"	•	•	•	•
2" x 1½"	2"	11/2"		•		•

For C903 tube - Replace "Q" with "K". On "Q" Series options only 3/4" x 1" ONLY

Anode/Thaw/Tracer nut available for 3/4" & 1" Flare & "T" Series and all sizes of "Q" Series.









SIZES AV	/AILAI	BLE	4753-3Q*	4753-33*	4753-44	4753-55
Size	NUT	MNPT	3Q PEP Comp x MNPT	33 PEP Comp x MNPT	44 PVC Comp. x MNPT	55 IP Comp. x MNPT
3/4"	3/4"	3/4"	•	•	•	•
3/4" x 1"	3/4"	1"	•	•	•	•
1"	1"	1"	•	•	•	•
1" x 3/4"	1"	3/4"	•	•	•	•
1" x 1½"	1"	11/2"	•	•	•	•
11/4"	11/4"	11/4"		•	•	
1¼" x 1"	11/4"	1"		•	•	
11/4" x 11/2"	11/4"	11/2"		•	•	
1½"	11/2"	11/2"		•	•	•
1½" x 1"	11/2"	1"			•	
1½" x 1¼"	11/2"	11/4"			•	
2"	2"	2"		•	•	•
2" x 1"	2"	1"		•	•	•

<sup>\*</sup>Insert stiffeners are **required** on all flexible plastic connections. See page 5.

<sup>\*</sup>See pages 18 & 19 for Flare conversion adapters

# Straight Couplings - One End Female National Pipe Thread









SIZES AV	/AILAI	BLE	4754°	4754T*	4754Q*	4754-22*
Size	NUT	FNPT	FLARE x FNPT	T CTS Comp x FNPT	Q CTS Comp x FNPT	22 CTS Comp x FNPT
1/2"	1/2"	1/2"	•			•
3/4"	3/4"	3/4"	•	•	•	•
3/4" x 1/2"	3/4"	1/2"	•	•		•
3/4" x 1"	3/4"	1"	•	•	•	•
1"	1"	1"	•	•	•	•
1" x 3/4"	1"	3/4"	•	•	•	•
1 x 1¼"	1"	11/4"	•	•	•	•
11/4"	11/4"	11/4"	•	•	•	•
11/4" x 3/4"	11/4"	3/4"		•	•	•
1¼" x 1"	11/4"	1"		•	•	•
11/2"	<b>1</b> ½"	<b>1</b> ½"	•	•	•	•
1½" x 1"	<b>1</b> ½"	1"		•	•	•
1½" x 1¼"	11/2"	11/4"		•	•	•
2"	2"	2"	•	•	•	•
2" x 1½"	2"	11/2"		•		•

For C903 tube - Replace "Q" with "K". On "Q" Series options only 3/4" x 1" ONLY









SIZES AV	/AILA	BLE	4754-3Q*	4754-33*	4754-44	4754-55
Size	NUT	FNPT	3Q PEP Comp x FNPT	33 PEP Comp. x FNPT	44 PVC Comp. x FNPT	55 IP Comp. x FNPT
1/2" x 1"	1/2"	1"			•	
3/4"	3/4"	3/4"	•	•	•	•
3/4" x 1/2"	3/4"	1/2"				
3/4" x 1"	3/4"	1"	•	•	•	•
1"	1"	1"	•	•	•	•
1" x 3/4"	1"	3/4"	•	•	•	•
1" x 11/4"	1"	11/4"		•	•	•
11/4"	11/4"	11/4"		•		
11/4" x 11/2"	11/4"	11/2"		•	•	
11/2"	11/2"	11/2"		•	•	•
1½" x 3/4"	11/2"	3/4"			•	
1½" x 1¼"	11/2"	11/4"			•	•
2"	2"	2"		•	•	•
2" x 3/4"	2"	3/4"		•	•	
2" x 1	2"	1		•	•	

<sup>\*</sup>Insert stiffeners are **required** on all flexible plastic connections. See page 5.

<sup>\*</sup>See pages 18 & 19 for Flare conversion adapters

# I Straight Couplings









SIZES AV	/AILAI	BLE	4758*	4758T*	4758Q*	4758-22*
Size	NUT	NUT	FLARE x FLARE	T CTS Comp x T CTS Comp	Q CTS Comp x Q CTS Comp	22 CTS Comp x 22 CTS Comp
1/2"	1/2"	1/2"	•			•
1/2" x 3/4"	1/2"	3/4"	•			•
3/4"	3/4"	3/4"	•	•	•	•
3/4" x 1"	3/4"	1"	•	•	•	•
3/4" x 11/4"	3/4"	11/4"		•	•	•
1"	1"	1"	•	•	•	•
1" x 1¼"	1"	11/4"		•	•	•
1" x 1½"	1"	11/2"		•	•	•
11/4"	11/4"	11/4"	•	•	•	•
11/2"	11/2"	11/2"	•	•	•	•
1½" x 2"	11/2"	2"		•		•
2"	2"	2"	•	•	•	•
<b>2</b> ½"	21/2"	21/2"				•

For C903 tube - Replace "Q" with "K". On "Q" Series options only 3/4" x 1" ONLY Anode/Thaw/Tracer nut available for 3/4" & 1" Flare & "T" Series and all sizes of "Q" Series.









SIZES A'	VAILAI	BLE	4758-3Q*	4758-33 <sup>*</sup>	4758-44	4758-55
Size	NUT	NUT	3Q PEP Comp x 3Q PEP Comp	33 PEP Comp. x 33 PEP Comp.	44 Comp. PVC x 44 Comp. PVC	55 IP Comp. x 55 IP Comp.
1/2"	1/2"	1/2"			•	
3/4"	3/4"	3/4"	•	•	•	•
3/4" x 1"	3/4"	1"	•	•	•	•
3/4" x 2"	3/4"	2"		•	•	•
1"	1"	1"	•	•	•	•
11/4"	11/4"	11/4"		•	•	
11/2"	11/2"	11/2"		•	•	•
2"	2"	2"		•	•	•









SIZES A	<u>VAILA</u>	BLE	4758CT*	4758CQ*	4758C-22*	4758C-3Q*
Size	NUT	NUT	FLARE x T CTS Comp	FLARE x Q CTS Comp	FLARE x 22 CTS Comp.	FLARE x 3Q PEP Comp
3/4"	3/4"	3/4"	•	•	•	
1"	1"	1"	•	•	•	
1" x 3/4"	1"	3/4"				•







SIZES AVAILABLE			4/580-33	4/58C-44	4/380-33
Size	NUT	NUT	FLARE x 33 PEP Comp	FLARE x 44 PVC Comp.	FLARE x IP Comp
3/4"	3/4"	3/4"	•	•	•
1"	1"	1"	•	•	•
1" x 3/4"	1"	3/4"	•	•	•
1" x 2"	1"	2"	•	•	•

<sup>\*</sup>Insert stiffeners are **required** on all flexible plastic connections. See page 5.

<sup>\*</sup>See pages 18 & 19 for Flare conversion adapters

# **■ Straight Couplings**







SIZES AV	/AILA	BLE	4758T*-22*	4758Q*-22 <i>*</i>	4758T*-33*
Size	NUT	NUT	T CTS Comp x 22 CTS Comp	Q CTS Comp x 22 CTS Comp	T CTS Comp x 33 PEP Comp
3/4"	3/4"	3/4"			•
3/4" x 1/2"	3/4"	1/2"	•	•	
1"	1"	1"	•		•
1" x 3/4"	1"	3/4"			•
1" x 2"	1"	2"			•
2"	2"	2"	•		•
2" x 1½"	2"	11/2"	•		









SIZES AVAILABLE 4758Q\*-33 \* 4758-22\*-33 \* 4758Q\*-3Q \* 4758T \* -44

					<u> </u>	
Size	NUT	NUT	Q CTS Comp x 33 PEP Comp	22 CTS Comp x 33 PEP Comp	Q CTS Comp x 3Q PEP Comp	T CTS Comp x 44 PVC Comp
3/4"	3/4"	3/4"	•	•	•	•
3/4" x 1"	3/4"	1"		•	•	•
1"	1"	1"	•	•	•	•
1" x 3/4"	1"	3/4"		•	•	•
1" x 1¼"	1"	11/4"		•		
1" x 2"	1"	2"	•	•		•
11/2"	11/2"	11/2"		•		•
1½" x 1¼"	11/2"	11/4"		•		
2	2	2	•	•		•









**SIZES** 

AVAILABLE 4758Q\*-44 4758-22\*-44 4758T\*-55 4758Q\*-55

A V A I I Z			.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		.,,	
Size	NUT	NUT	Q CTS Comp x 44 PVC Comp	22 CTS Comp x 44 PVC Comp	T CTS Comp x 55 IP Comp	Q CTS Comp x 55 IP Comp
1/2"	1/2"	1/2"		•		
3/4"	3/4"	3/4"	•	•	•	•
3/4" x 1"	3/4"	1"	•	•	•	•
1"	1"	1"	•	•	•	•
1" x 3/4"	1"	3/4"		•	•	•
1" x 11/4"	1"	11/4"		•		
1" x 2"	1"	2"	•	•	•	•
11/2"	11/2"	11/2"		•	•	
2"	2"	2"	•	•	•	•

<sup>\*</sup>Insert stiffeners are required on all flexible plastic connections. See page 5.

<sup>\*</sup>See pages 18 & 19 for Flare conversion adapters

### Underground Water Service Fittings & Couplings

# **Straight Couplings**







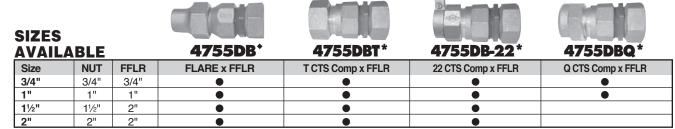
### **SIZES**

AVAILA	BLE		4/38-22"-33	4/58-33"-44	4/58-33"-55	4/38-44-33
Size	NUT	NUT	22 CTS Comp x 55 IP Comp	33 PEP Comp x 44 PVC Comp	33 PEP Comp x 55 IP Comp	44 PVC Comp x 55 IP Comp
3/4"	3/4"	3/4"	•	•	•	•
3/4" x 1"	3/4"	1"	•	•	•	•
3/4" x 2"	3/4"	2"		•	•	•
1"	1"	1"	•	•	•	•
1" x 3/4"	1"	3/4"	•	•	•	•
1" x 2"	1"	2"	•			
11/2"	11/2"	11/2"	•			
2"	2"	2"	•			

For C903 tube - Replace "Q" with "K". On "Q" Series options only 3/4" x 1" ONLY

Anode/Thaw/Tracer nut available for 3/4" & 1" Flare & "T" Series and all sizes of "Q" Series.

### **Di-Electric Unions**









4758DB-22\*

4758DBQ\*

4758DB-22\*-55

Size	NUT	FNPT	22 CTS Comp x 22 CTS Comp	Q CTS Comp x Q CTS Comp	22 CTS Comp x 55 IP Comp
3/4"	3/4"	3/4"	•	•	
1"	1"	1"	•	•	•
1" x 3/4"	1"	3/4"			•
11/2"	11/2"	2"	•	•	
2"	2"	2"	•	•	

# **3-Part Unions with Internal Pipe Stop**







SIZES A	VAILA	BLE	4759T "	4759Q "	4/59-22
Size	NUT	NUT	T CTS Comp x T CTS Comp	Q CTS Comp x Q CTS Comp	22 CTS Comp x 22 CTS Comp
1/2"	1/2"	1/2"	-		•
3/4"	3/4"	3/4"	•	•	•
1"	1"	1"	•	•	•
11/2"	11/2"	11/2"	•	•	•
2"	2"	2"	•	•	•









 SIZES AVAILABLE
 4759-3Q \*
 4759-33 \*
 4759-44
 4759-55

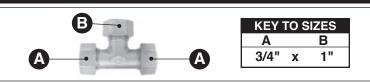
 Size
 NUT
 NUT
 3Q PEP Comp x 44 PVC Comp x 55 IP Comp x 55 IP Comp x 55 IP Comp x 64 PVC Comp x 64 PVC Comp x 65 IP Comp x 65 IP Comp x 65 IP Comp x 64 PVC Comp x 65 IP Comp x

<sup>\*</sup>Insert stiffeners are **required** on all flexible plastic connections. See page 5.

<sup>\*</sup>See pages 18 & 19 for Flare conversion adapters

# **Underground Water Service Fittings & Couplings —**

### **Tees**





### **SIZES**

AVAILA	BLE		4760	4760T*	4760Q*	4760-22*	4760-3Q*
Size	BOTH ENDS RUN	SIDE OUTLET	FLARE x FLARE x FLARE	T CTS Comp x T CTS Comp x T CTS Comp	Q CTS Comp x Q CTS Comp x Q CTS Comp	22 CTS Comp x 22 CTS Comp x 22 CTS Comp	3Q PEP Comp x 3Q PEP Comp x 3Q PEP Comp
1/2"	1/2"	1/2"	•				
3/4"	3/4"	3/4"	•	•	•	•	•
3/4" x 1"	3/4"	1"	•	•	•	•	
1"	1"	1"	•	•	•	•	•
1" x 3/4"	1"	3/4"	•	•	•	•	
1" x 1¼"	1"	11/4"	•	•	•	•	
1" x 1½"	1"	11/2"		•	•	•	
11/4"	11/4"	11/4"		•	•	•	
11/2"	11/2"	11/2"	•	•	•	•	
2"	2"	2"	•	•	•	•	

For C903 tube - Replace "Q" with "K". On "Q" Series options only 3/4" x 1" ONLY

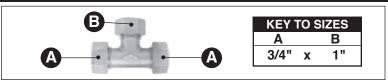
					NEV	WE W	NEW!
SIZES							
AVAILA	BLE		4760-33*	4760-44	4760P	4760-55	4760F
Size	BOTH ENDS RUN	SIDE OUTLET	33 PEP Comp x 33 PEP Comp x 33 PEP Comp	44 PVC Comp x 44 PVC Comp x 44 PVC Comp	MNPT x MNPT x MNPT	55 IP Comp x 55 IP Comp x 55 IP Comp	FNPT x FNPT x FNPT
3/4"	3/4"	3/4"	•	•	•	•	•
3/4" x 1" x 9"	3/4"	1"			● 9" end to end		
1"	1"	1"	•	•	•	•	•
1" x 3/4"	1"	3/4"					
1" x 11/4"	1"	11/4"					
1" x 1½"	1"	11/2"					
11/4"	11/4"	11/4"					•
11/2"	11/2"	11/2"	•	•	•		•
	1	1	1				

SIZE	S					
AVA	LAB	LE	4760A	4760-22*-33*	4760-22*-44	4760-22*-55
Size	BOTH ENDS RUN	SIDE OUTLET	FLARE x FLARE x FLARE Assembly Pressure Tested	22 CTS Comp x 22 CTS Comp x 33 PEP Comp	22 CTS Comp x 22 CTS Comp x 44 PVC Comp	22 CTS Comp x 22 CTS Comp x 55 IP Comp
1"	1"	1"		•	•	•
2" x 1"	2"	1"	•			

<sup>\*</sup>Insert stiffeners are **required** on all flexible plastic connections. See page 5.

<sup>\*</sup>See pages 18 & 19 for Flare conversion adapters

### **Underground Water Service Fittings & Couplings**





SIZES AV	/AILAI	BLE	4762°	4762T*	4762Q*	4762-22*
Size	BOTH ENDS RUN	SIDE OUTLET	FLARE x FLARE x MNPT	T CTS Comp x T CTS Comp x MNPT	Q CTS Comp x Q CTS Comp x MNPT	22 CTS Comp x 22 CTS Comp x MNPT
3/4"	3/4"	3/4"	•	•	•	•
3/4" x 1"	3/4"	1"	•	•	•	•
1"	1"	1"	•	•	•	•









<u>SIZES AV</u>	<u> </u>	BLE	<b>4763</b> *	4763T*	4763Q*	4763-22 *
Size	BOTH ENDS RUN	SIDE OUTLET	MNPT x MNPT x FLARE	MNPT x MNPT x T CTS Comp	MNPT x MNPT x Q CTS Comp	MNPT x MNPT x 22 CTS Comp
3/4"	3/4"	3/4"	•			
3/4" x 1"	3/4"	1"	•	•	•	•
3/4" x 1" x 9"	3/4"	1"	● 9" end to end	● 9" end to end	● 9" end to end	● 9" end to end
1"	1"	1"	•	•	•	•
1" x 1¼"	1"	11/4"	•	•	•	•
1" x 1½"	1"	11/2"		•	•	•

For C903 tube - Replace "Q" with "K". On "Q" Series options only 3/4" x 1" ONLY







SIZES AV	/AILAI	BLE	4764T*	4764Q*	4704-22 °
Size	BOTH ENDS RUN	SIDE OUTLET	T CTS Comp x T CTS Comp x FNPT	Q CTS Comp x Q CTS Comp x FNPT	22 CTS Comp x 22 CTS Comp x FNPT
3/4"	3/4"	3/4"	•	•	•
3/4" x 1"	3/4"	1"	•	•	•
1"	1"	1"	•	•	•
1½" x 3/4"	11/2"	3/4"	•	•	•
1½" x 1"	11/2"	1"	•	•	•
2" x 3/4"	2"	3/4"	•	•	•
2" x 1"	2"	1"	•	•	•

<sup>\*</sup>Insert stiffeners are **required** on all flexible plastic connections. See page 5. \*See pages 18 & 19 for Flare conversion adapters

# Elbows • 1/4 Bend









SIZES AVAILABLE		4779M°	4779MT*	4779MQ*	<b>79MQ* 4779M-22</b>	
Size	NUT	MNPT	FLARE x MNPT	T CTS Comp x	Q CTS Comp x	22 CTS Comp x

Size	NUT	MNPT	FLARE x MNPT	T CTS Comp x MNPT	Q CTS Comp x MNPT	22 CTS Comp x MNPT
3/4"	3/4"	3/4"	•	•	•	•
1"	1"	1"	•	•	•	•
1" x 3/4"	1"	3/4"	•	•	•	•
11/4" x 1"	11/4"	1"		•	•	•
11/2"	11/2"	11/2"	•	•	•	•
2"	2"	2"	•	•	•	•

For C903 tube - Replace "Q" with "K". On "Q" Series options only 3/4" x 1" ONLY









**SIZES AVAILABLE** 4779M-55

Size	NUT	MNPT	3Q PEP Comp x MNPT	33 PEP Comp x MNPT	44 PVC Comp x MNPT	55 IP Comp x MNPT
3/4"	3/4"	3/4"	•	•	•	•
1"	1"	1"	•	•	•	•
11/2"	11/2"	11/2"			•	•
2"	2"	2"		•	•	•

# Elbows • 1/8 Bend







SIZES AVAILABLE	4747°	4747T*	4747-22*

Size	NUT	FNPT	FLARE x FNPT	T CTS Comp x FNPT	22 CTS Comp x FNPT
3/4"	3/4"	3/4"	•		
3/4" x 1"	3/4"	1"	•		
1"	1"	1"	•	•	•
1" x 11/4"	1"	11/4"	•		

<sup>\*</sup>Insert stiffeners are **required** on all flexible plastic connections. See page 5. \*See pages 18 & 19 for Flare conversion adapters

# Elbows • 1/4 Bend







4779Q\* **SIZES AVAILABLE** 4779 4779T\*

Size	NUT	FNPT	FLARE x FNPT	T CTS Comp x FNPT	Q CTS Comp x FNPT
3/4"	3/4"	3/4"	•	•	•
3/4" x 1"	3/4"	1"	•	•	•
3/4" x 11/4"	3/4"	1 1/4"		•	•
1"	1"	1"	•	•	•
1" x 11/4"	1"	11/4"	•	•	•
11/2"	11/2"	11/2"	•	•	•
2"	2"	2"	•	•	•

For C903 tube - Replace "Q" with "K". On "Q" Series options only 3/4" x 1" ONLY







4779-22\* **SIZES AVAILABLE** 4779-55

Size	NUT	FNPT	22 CTS Comp x FNPT	44 PVC Comp x FNPT	55 IP Comp x FNPT
3/4"	3/4"	3/4"	•		
3/4" x 1"	3/4"	1"	•		
3/4" x 11/4"	3/4"	11/4"	•		
1"	1"	1"	•		
1" x 11/4"	1"	11/4"	•		
11/2"	11/2"	11/2"	•	•	
2"	2"	2"	•	•	•









4761 4761T\* 4761Q\* 4761-22\* **SIZES AVAILABLE** T CTS Comp x T CTS Comp Q CTS Comp x Q CTS Comp 22 CTS Comp x 22 CTS Comp FLARE x FLARE Size NUT NUT 3/4" 3/4" 3/4" • 1" 1" 1" 11/4" 11/4" 11/4" • • 11/2" 11/2" 11/2" 2" 2" 2" 











**SIZES** 

<b>AVAI</b>	LABL	E	4761-3Q *	4761-33 °	4761-44	4761-55	4761-44-55
Size	NUT	NUT	3Q PEP Comp x 3Q PEP Comp	33 PEP Comp x 33 PEP Comp	44 PVC Comp x 44 PVC Comp	55 IP Comp x 55 IP Comp	44 PVC Comp x 55 IP Comp
3/4"	3/4"	3/4"	•	•	•	•	
1"	1"	1"	•	•	•	•	
11/4"	11/4"	11/4"			•		
11/2"	11/2"	11/2"		•	•	•	
2"	2"	2"		•	•	•	•

<sup>\*</sup>Insert stiffeners are **required** on all flexible plastic connections. See page 5. \*See pages 18 & 19 for Flare conversion adapters

# Mac-Pak Lead Compression







**SIZES AVAILABLE** 

4753-66

4753-67

4753-68

Size	NUT	MNPT	66 Strong Lead Comp. x MNPT	67 X Strong Lead Comp. x MNPT	68 XX Strong Lead Comp. x
	. (0.11	2/411	INITAL I	-	
1/2" x 3/4"	1/2"	3/4"		•	•
5/8" x 3/4"	5/8"	3/4"	•	•	•
3/4"	3/4"	3/4"	•	•	•
1"	1"	1"	•	•	•
11/4"	11/4"	11/4"		•	
1¼" x 1"	11/4"	1"		•	
11/2"	11/2"	11/2"		•	
2"	2"	2"		•	







SIZES AVAILABLE			4754-66	4754-67	4754-68	
Size NUT FNPT		FNPT	66 Strong Lead Comp. x FNPT	67 X Strong Lead Comp. x FNPT	68 XX Strong Lead Comp. x FNPT	
1/2" x 3/4"	1/2"	3/4"			•	
5/8" x 3/4"	5/8"	3/4"	•	•	•	
5/8" x 1"	5/8"	1"		•		
3/4"	3/4"	3/4"	•	•	•	







**SIZES AVAILABLE** 

4758-66

**4759-67** 

4759-69

SIZES AVAILABLE		DLE	T/ 30-00	T/ 30-0/	<del>47 30-00</del>	
Size NUT NUT		NUT	66 Strong Lead Comp. x 66 Strong Lead Comp.	67 X Strong Lead Comp. x 67 X Strong Lead Comp.	68 XX Strong Lead Comp. x 68 XX Strong Lead Comp.	
1/2"	1/2"	1/2"		•		
5/8"	5/8"	5/8"		•	•	
3/4"	3/4"	3/4"	•	•	•	
1"	1"	1"	•	•		
11/4"	11/4"	11/4"		•		







SIZES AVAILABLE			4758C <sup>-</sup> -66	4758C'-67	4758C'-68	
Size	NUT	NUT	FLARE x 66 Strong Lead Comp.	FLARE x 67 X Strong Lead Comp.	FLARE x 68 XX Strong Lead Comp.	
3/4"	3/4"	3/4"	•	•	•	
3/4" x 1/2"	3/4"	1/2"		•	•	
3/4" x 5/8"	3/4"	5/8"	•	•	•	
1"	1"	1"	•	•	•	
1" x 1/2"	1"	1/2"			•	
1" x 5/8"	1"	5/8"	•	•	•	
1" x 3/4"	1"	3/4"	•	•	•	

<sup>\*</sup>See pages 18 & 19 for Flare conversion adapters

# **Mac-Pak Lead Compression**







SIZES AVAILABLE		BLE	4758-22 ° -00	4758-22 <i>*</i> -07	4758-22 <sup>-</sup> -08
Size	NUT	NUT	22 CTS Comp. x 66 Strong Lead Comp.	22 CTS Comp. x 67 X Strong Lead Comp.	22 CTS Comp. x 68 XX Strong Lead Comp.
3/4"	3/4"	3/4"	•	•	•
3/4" x 1/2"	3/4"	1/2"		•	•
3/4" x 5/8"	3/4"	5/8"	•	•	•
3/4" x 1"	3/4"	1"		•	•
1"	1"	1"	•	•	•
1" x 5/8"	1"	5/8"		•	•
1" x 3/4"	1"	3/4"	•	•	•
1" x 11/4"	1"	11/4"		•	
11/2"	11/2"	11/2"		•	
1½" x 1¼"	11/2"	11/4"		•	
2"	2"	2"		•	







SIZES AVAILABLE			4758-33*-66	4758-33*-67	4758-33*-68	
Size NUT NUT		NUT	33 PEP Comp x 66 X Strong Lead Comp.	33 PEP Comp x 67 X Strong Lead Comp.	T CTS Comp. x 68 XX Strong Lead Comp.	
3/4"	3/4"	3/4"	•			
3/4" x 1/2"	3/4"	1/2"		•	•	
3/4" x 5/8"	3/4"	5/8"	•	•	•	
1" x 3/4"	1"	3/4"			•	
11/2"	11/2"	11/2"		•		





<u>SIZES AV</u>	<u> </u>	BLE	4758T*-67	4758T*-68
Size NUT NUT		NUT	T CTS Comp. x 67 X Strong Lead Comp.	T CTS Comp. x 68 XX Strong Lead Comp.
3/4"	3/4"	3/4"	•	
3/4" x 1/2"	3/4"	1/2"		•
3/4" x 5/8"	3/4"	5/8"	•	•







SIZES AVAILABLE			3202	3205	3207	
Size	LEAD	END	X Strong Lead Flange x FNPT	X Strong Lead Flange x FLARE	X Strong Lead Flange x MNPT	
1/2"	1/2"	1/2"	•			
5/8"	5/8"	5/8"	•	•		
3/4"	3/4"	3/4"	•	•	•	
1"	1"	1"	•	•		









**SIZES AVAILABLE** 4742LF \* 4742LFT\* 4742LF-22\*

Size	LEAD	END	X Strong Lead Corp Flange x FLARE	X Strong Lead Corp Flange x T CTS Comp	X Strong Lead Corp Flange x 22 CTS Comp	Gasket For 4742LF
5/8"	5/8"	5/8"				•
5/8" x 3/4"	5/8"	3/4"	•			
3/4"	3/4"	3/4"	•			•
1"	1"	1"	•	•	•	•

<sup>\*</sup>See pages 18 & 19 for Flare conversion adapters
\*Insert stiffeners are **required** on all flexible plastic connections. See page 5.

# **■ Couplings for Use with Copper Flare Outlets**

NOTE: 4755G Copper Gasket included with all 4755 connections.



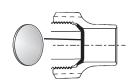


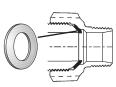




SIZES AV	/AILAI	BLE	4755°	4755T*	4755Q*	4755-22*
Size	NUT	FFLR	FLARE x FFLR	T CTS Comp x FFLR	Q CTS Comp x FFLR	22 CTS Comp x FFLR
1/2" x 3/4"	1/2"	3/4"	•			•
3/4"	3/4"	3/4"		•	•	•
3/4" x 1/2"	3/4"	1/2"	•	•	•	•
3/4" x 1"	3/4"	1"	•	•	•	•
1"	1"	1"		•	•	•
1" x 3/4"	1"	3/4"	•	•	•	•
1 x 11/4"	1"	11/4"	•	•		•
1 x 1½"	1"	11/2"	•	•		•
1 x 2"	1"	2"	•	•		•
11/4" x 1"	11/4"	1"	•	•	•	•
11/4" x 11/2"	11/4"	11/2"	•	•		•
11/4" x 2"	11/4"	2"	•	•	•	•
11/2"	11/2"	11/2"		•	•	•
1½" x 2"	11/2"	2"	•	•	•	•
2"	2"	2"		•	•	•

For C903 tube - Replace "Q" with "K". On "Q" Series options only 3/4" x 1" ONLY









SIZES AVAILABLE

6125

4755G

Female Copper Flare to CTS Compression Coupling 6130CE
Female Copper Flare to CTS
Compression Coupling

Size	FFLR	END	SOLID COPPER DISC	COPPER GASKET for 4755 Connections	FFLR x Copper Tube Comp	FFLR x CTS PE Comp Includes Stiffener
1/2"	1/2"	1/2"		•		
3/4"	3/4"	3/4"	•	•	•	•
1"	1"	1"	•	•	•	•
11/4"				•		
11/2"				•		
2"				•		













SIZES AVAILABLE

4755-3Q°

4755-33

4755-44

4 4755-55

5 4755

4755N

AVAIL	ARLI		4/33-34	4/33-33	4/33-44	4/33-33	4/336	4/33M
Size	NUT	FFLR	3Q PEP Comp x FFLR	33 PEP Comp x FFLR	44 PVC Comp x FFLR	55 IP Comp x FFLR	FNPT x FFLR	MNPT x FFLR
1/2"	1/2"	1/2"					•	
3/4"	3/4"	3/4"	•	•	•	•	•	•
3/4" x 1/2"	3/4"	1/2"					•	
1"	1"	1"	•	•	•	•	•	•
1" x 3/4"	1"	3/4"					•	
1 x 1¼"	1"	11/4"					•	
1 x 1½"	1"	1½"					•	
1 x 2"	1"	2"			•		•	
1¼" x 1"	11/4"	1"					•	
1¼" x 1½"	11/4"	1½"					•	
1¼" x 2"	11/4"	2"					•	
1½"	1½"	1½"					•	•
1½" x 2"	1½"	2"					•	
2"	2"	2"					•	•
2" x 1½"	2"	1½"					•	

<sup>\*</sup>Insert stiffeners are **required** on all flexible plastic connections. See page 5.

See pages 18 & 19 for Flare conversion adapters

### I Couplings for Use with Copper Flare Outlets

NOTE: 4755G Copper Gasket included with all connections on this page.







SIZES AVAILABLE		BLE	4750°	4750T*	4750-22*
Size	FFLR	NUT	FIXED FFLR x FLARE	FIXED FFLR x T CTS Comp	FIXED FFLR x 22 CTS Comp
3/4"	3/4"	3/4"	•	•	•
1"	1"	1"	•	•	•











### **SIZES**

AVAI	<b>LABLE</b>		4750S*	4750SQ*	4750ST*	4750S-22*	4750S-44
Size	SWIVEL FFLR	NUT	Swivel FFLR x FLARE	Swivel FFLR x Q CTS Comp	Swivel FFLR x T CTS Comp	Swivel FFLR x 22 CTS Comp	Swivel FFLR x 44 PVC Comp
3/4"	3/4"	3/4"	•			•	
1"	1"	1"	•	•	•	•	
11/2"	11/2"	11/2"	•	•	•	•	•
2"	2"	2"	•	•	•	•	•

For C903 tube - Replace "Q" with "K". On "Q" Series options only 3/4" x 1" ONLY Anode/Thaw/Tracer nut available for 3/4" & 1" Flare & "T" Series and all sizes of "Q" Series.









SIZES A	VAILAE	BLE	4776	4776T*	4776Q*	4776-22*
Size	FFLR	NUT	Fixed FFLR x FLARE	Fixed FFLR x T CTS Comp	Fixed FFLR x Q CTS Comp	Fixed FFLR x 22 CTS Comp
3/4"	3/4"	3/4"	•	•	•	•
1"	1"	1"	•	•	•	•
41/4"	41/."	41/."				









SIZES A	VAILAB	BLE	<b>47765</b>	4776ST*	47765Q*	4776S-22*
Size	SWIVEL	NUT	Swivel FFLR x FLARE	Swivel FFLR x T CTS Comp	Swivel FFLR x Q CTS Comp	Swivel FFLR x 22 CTS Comp
3/4"	3/4"	3/4"	•	•	•	•
1"	1"	1"	•	•	•	•
11/4" x 1"	1"	11/4"		•	•	•
1½"	11/2"	11/2"	•	•	•	•
2"	2"	2"	•	•	•	•









SIZES AVAILABLE 4776S-3Q* 4776S-33* 4776S-44 4776S-5
--

Size	SWIVEL FFLR	NUT	Swivel FFLR x 3Q PEP Comp	Swivel FFLR x 33 PEP Comp	Swivel FFLR x 44 PVC Comp	Swivel FFLR x 55 IP Comp
3/4"	3/4"	3/4"		-	_	
1"	1"	1"	•	•	•	•
11/2"	11/2"	<b>1</b> ½"			•	
2"	2"	2"		•	•	

<sup>\*</sup>Insert stiffeners are required on all flexible plastic connections. See page 5.

<sup>\*</sup>See pages 18 & 19 for Flare conversion adapters

### **Underground Water Service Fittings & Couplings —**

### **Y-Branches**



**All Y-Branches** Number of branches 2 = Two branches

3 = Three branches

4 = Four branches

S = Service fittings (all 2 branch)

Type of connection-Single opening end

C = Copper flare **K** = C903 Compression

L = Copper flare, less nut

 $\mathbf{M} = \mathbf{M} \dot{\mathbf{N}} \mathbf{P} \mathbf{T}$ 

**Q** = McQuik Compression

T = T Compression

**Z** = 3Q Compression 2 = 22 Compression

3 = 33 Compression

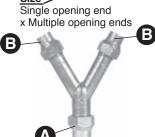
4 = 44 Compression

**5** = 55 Compression





Size









Type of

Multiple

connection-

opening ends

(Same codes

opening end)

as single





### OSYSCC · OSYSQQ \* OSYSKK \* SIZES AVAILABLE

Size	Single End	Multiple Ends	FLARE x FLARE	Q CTS Comp x Q CTS Comp	C903 Comp x C903 Comp	T CTS Comp x T CTS Comp	3Q PEP Comp x 3Q PEP Comp
1" x 3/4"	1"	3/4"	•	•	•	•	•
11/4" x 1"	11/4"	1"		•		•	
1½" x 1"	11/2"	1"		•		•	
2" x 1"	2"	1"		•		•	

For C903 tube - Replace "Q" with "K". On "Q" Series options only 3/4" x 1" ONLY









08YS22\* SIZES AVAILABLE 08YS55

Size	Single End	Multiple Ends	22 CTS Comp x 22 CTS Comp	33 PEP Comp x 33 PEP Comp	44 PVC Comp x 44 PVC Comp	55 IP Comp x 55 IP Comp
1" x 3/4"	1"	3/4"	•	•	•	•
11/4" x 1"	11/4"	1"	•			
1½" x 1"	11/2"	1"	•			
2" x 1"	2"	1"	•			









**08YSM2**\* O8YSMC\* **08YSMT\* 08YSMQ**\* SIZES AVAILABLE MNPT x MNPT x Q CTS Comp MNPT x MNPT x Size Single Multiple FLARE T CTS Comp 22 CTS Comp Fnd Ends

> Shown here is our basic line of service fittings. Other combinations not shown in this catalog may be available. Contact us for more information

1" x 3/4"

<sup>\*</sup>Insert stiffeners are **required** on all flexible plastic connections. See page 5.

See pages 18 & 19 for Flare conversion adapters

# ■ Y-Branches











SIZES AVAILABLE			<b>08Y2CC*</b>	<b>08Y2MC</b> *	<b>08Y2MQ*</b>	<b>08Y2MT*</b>	<b>08Y2M2</b> *
Size	Single End	Multiple Ends	FLARE x FLARE	MNPT x FLARE	MNPT x Q CTS Comp	MNPT x T CTS Comp	MNPT x 22 CTS Comp
1" x 3/4"	1"	3/4"	•				
1" x 1"	1"	1"	•				
11/4" x 3/4"	11/4"	3/4"	•				
11/4" x 1"	11/4"	1"	•				
1½" x 1"	11/2"	1"	•	•	•	•	•
2" x 1"	2"	1"	•	•	•	•	•

For C903 tube - Replace "Q" with "K". On "Q" Series options only 3/4" x 1" ONLY





SIZES AVAILABLE 08Y3CC\* 08Y3MC\*
Size Single Multiple FLARE x MNPT x

Size	Single End	Multiple Ends	FLARE x FLARE	MNPT x FLARE
1½" x 3/4"	11/2"	3/4"	•	•
1½" x 1"	11/2"	1"	•	•
2" x 1"	2"	1"	•	•









**08Y4CC**\* **08Y4QQ\* 08Y4TT**\* 08Y422\* SIZES AVAILABLE Q CTS Comp x Q CTS Comp 22 CTS Comp x 22 CTS Comp FLARE x T CTS Comp x Multiple Single FLARE T CTS Comp End Ends 2" x 3/4" 3/4" 1" 2" x 1" 2"



SIZES AVAILABLE			<b>08Y4MC</b> *	<b>08Y4MT*</b>	<b>08Y4MQ*</b>	08Y4M2*	4765
Size	Single End	Multiple Ends	MNPT x FLARE	MNPT x T CTS Comp	MNPT x Q CTS Comp	MNPT x 22 CTS Comp	FNPT x FNPT
2" x 3/4"	2"	3/4"	•	•	•	•	
2" x 1"	2"	1"	•	•		•	•

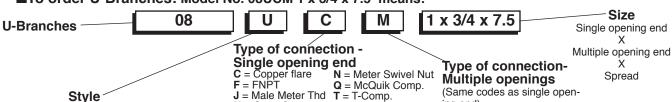
<sup>\*</sup>Insert stiffeners are **required** on all flexible plastic connections. See page 5.

<sup>\*</sup>See pages 18 & 19 for Flare conversion adapters

### **Underground Water Service Fittings & Couplings –**

### **■ U-Branches**

■To order U-Branches: Model No. 08UCM 1 x 3/4 x 7.5 means:



**K** = C903 Comp.

L = Copper flare,

 $\mathbf{M} = \mathsf{MNPT}$ 

less nut

 $\mathbf{Z} = 3Q$  Comp.

2 = 22 Comp.

3 = 33 Comp.

**4** = 44 Comp. **5** = 55 Comp. ing end)

U-Branches available with valve assembled - Contact Factory

**U** = Standard U-branch

T = Angle U-branch

# SIZES AVAILABLE OBUCM\* OBUTM\* OBUQM\* OBU2M\*

Size	Single End	Multiple Ends	Spread	FLARE x MNPT	T CTS Comp x MNPT	Q CTS Comp x MNPT	22 CTS Comp x MNPT
1" x 3/4" x 6.5"	1"	3/4"	6.5"	•	•	•	•
1" x 3/4" x 7.5"	1"	3/4"	7.5"	•	•	•	•
1" x 1" x 7.5"	1"	1"	7.5"	•	•	•	•
1" x 3/4" x 14"▲	1"	3/4"	14"	•	•	•	•
1" x 1" x 18"	1"	1"	18"	•	•	•	•
1½" x 3/4" x 7.5"	11/2	3/4"	7.5"		•	•	•
1½" x 1" x 9"	11/2	1"	9"		•	•	•

<sup>▲</sup> Assembled and tested

SIZES AVA	ILABI	LE		<b>08UZM</b> *	<b>08U3M</b> *	<b>08U4M</b>	<b>08U5M</b>
Size	Single End	Multiple Ends	Spread	3Q PEP Comp x MNPT	33 PEP Comp x MNPT	44 PVC Comp x MNPT	55 IP Comp x MNPT
1" x 3/4" x 7.5"	1"	3/4"	7.5"	•	•	•	•
1½" x 3/4" x 7 5"	11/2	3/4"	7.5"				

For C903 tube - Replace "Q" with "K". On "Q" Series options only 3/4" x 1" ONLY



SIZES AVA	ILABI	LE		08UFF *	O8UFM	MMU80	OBUJN
Size	Single End	Multiple Ends	Spread	FNPT x FNPT	FNPT x MNPT	MNPT x MNPT	Male Meter Thread x Meter Swivel Nuts
1" x 3/4" x 6.5"	1"	3/4"	6.5"		•		
1" x 3/4" x 7.5"	1"	3/4"	7.5"		•	•	
1" x 1" x 7.5"	1"	1"	7.5"		•	•	
1" x 3/4" x 14"▲	1"	3/4"	14"		•	•	
1" x 1" x 8" ▲	1"	1"	8"				•
1" x 1" x 14"▲	1"	1"	14"		•		
1" x 1" x 18"	1"	1"	18"	•	•	•	
1½" x 3/4" x 7.5"	11/2	3/4"	7.5"		•		
1½" x 1" x 9"	<b>1</b> ½	1"	9"			•	
1½" x 1" x 12"▲	<b>1</b> ½	1"	12"			•	
2" x 1" x 9"	2	1"	9"			•	

<sup>▲</sup> Assembled and tested

### ■ Angle U-Branches



Size	Single End	Multiple Ends	Spread	FLARE x MNPT	FNPT x MNPT	MNPT x MNPT	T CTS Comp x MNPT	22 CTS Comp x MNPT
1" x 3/4" x 6.5"	1"	3/4"	6.5"	•	•		•	•
1½" x 1" x 12"▲	<b>1</b> ½	1"	12"			•		
								•

<sup>\*</sup>Insert stiffeners are **required** on all flexible plastic connections. See page 5.

<sup>\*</sup>See pages 18 & 19 for Flare conversion adapters

### **Miscellaneous Service Fittings**

Swivel with increasing IP thread Gasket included













SIZES AVAILABLE

47835\* 47835T\* 4783SQ\* 4783S-22\* 4783S-3Q \*4783S-33\* Quarter Bend Quarter Bend Quarter Bend Quarter Bend Quarter Bend

							G. G. G. C.	G. G. G. C.
Size	SWIVEL	NUT	Swivel x FLARE	Swivel x T CTS Comp	Swivel x Q CTS Comp	Swivel x 22 CTS Comp	Swivel x 3Q PEP Comp	Swivel x 33 CTS Comp
5/8"	5/8"	3/4"	•	•		•		
3/4"	3/4"	3/4"	•	•	•	•		
1"	1"	1"	•	•		•		
1" x 3/4"	1"	3/4"		•	•	•	•	•

For C903 tube - Replace "Q" with "K". On "Q" Series options only 3/4" x 1" ONLY







SIZES AVAILABLE Quarter Bend Swivel with increasing IP thread-4000G gasket included

4000G Fiber Gasket 4756 Two-part union with "wedding ring" 4660 Copper Flare to Polyethylene Insert Coupling 4755G gasket included

Size	END	END	Swivel x MNPT	GASKET FOR 4000	SWIVEL SIZE	FLARE x FLARE	FFLR x Barbed
1/2"	1/2"	1/2"				•	
3/4"	3/4"	3/4"	•	4749G	1"	•	•
1"	1"	1"	•	•	11/4"	•	•
11/4"	11/4"	11/4"		•	11/2"	•	
11/2"	11/2"	11/2"	•	•	2"	•	
2"	2"	2"	•	•	21/2"	•	•



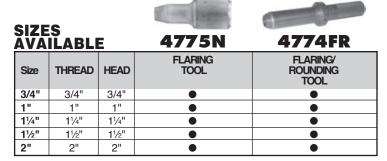








SIZES AVAILABLE		32060 32080 3208 Solid Solid Hollow Core Plug Core Plug Core Plug		32085 Hollow Core Plug (Short)	3209 Hollow Core Plug			
Size	THREAD	HEAD	AWWA CC x with 5/8" inside Driving Thread	MNPT x with 5/8" inside Driving Thread	AWWA CC x SQUARE HEAD	MNPT x SQUARE HEAD	MNPT x Square Head (Short)	MFLR x SQUARE HEAD
1/2"	1/2"	1/2"			•	•	•	
5/8"	5/8"	5/8"	•		•			
3/4"	3/4"	3/4"	•	•	•	•	•	•
1"	1"	1"	•	•	•	•		•
11/4"	11/4"	11/4"			•	•		•
11/2"	11/2"	11/2"			•	•	•	•
2"	2"	2"						



<sup>\*</sup>Insert stiffeners are **required** on all flexible plastic connections. See page 5. \*See pages 18 & 19 for Flare conversion adapters

### **Underground Water Service Fittings & Couplings -**

### **General Information**

### ABBREVIATIONS / DEFINITIONS

American Water Works Association Standard Thread / Corporation Cock, this thread has a steeper taper than Male National Pipe Threads **AWWA** 

CTS

Copper Tube Size, copper tube (type K or L) or copper tube size polyethylene (ASTM D2737 SDR 9) or Polybutylene (ASTM D2666 SDR 9), insert stiffeners are required when Suffix -22, T or Q

using polyethylene or polybutylene.

**FFLR** Female Copper Flared Connection Thread / inside thread, includes copper gasket.

**FLR** Flared end with nut, for use with copper tube

**FNPT** Female National Pipe Thread / inside tapered thread Iron Pipe / Galvanized Iron Pipe (not threaded)

Suffix -55

IPS or PEP I.D. based polyethylene pipe, for use with polyethylene (ASTM D2239 SIDR 7) or Polybutylene Suffix -33 (ASTM D 2662 SIDR 7), insert stiffeners are required when using polyethylene or polybutylene.

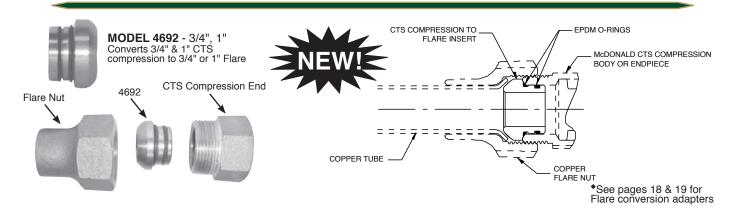
**MFLR** Male Copper Flared Connection Thread / outside thread. **MNPT** Male National Pipe Thread / outside tapered thread

PΕ Polyethylene

PVC Polyvinyl Chloride, ridged plastic pipe, Schedule 40 or 80 only (ASTM D1785)

Suffix -44

### NOTE: Materials meet or exceed A.W.W.A. standard C-800.



CTS COMPRESSION PLUG MODEL 4693 - 3/4", 1" Plugs 3/4" & 1" CTS



