

#### **Contents**

Pag	е
Numbering System	3
How the Pack Joint Works	4
How the Quick Joint Works	4
How the Grip Joint Works	4
How the Ultra-Tite Works	5
How the Lead-Pack Works	5
Code Marks for Ford Coupling Nuts	5
Types of Pipe and Tubing - Explanation of Abbreviations	
Accessories	
Insert Stiffeners	
Dimensions Comparison Table for Plastic, Copper, and Galvanized Iron	
Copper Rounding ToolUltra-Tite Compression Fittings, Components and Tools	
	1
Straight and Ell Pack Joint Couplings  Straight and Ell Pack Joint Couplings for Copper or Plastic Tubing	ın
Straight and Ell Pack Joint Couplings for PE Pipe	
Straight and Ell Pack Joint Couplings for PVC Pipe	12
Straight and Ell Pack Joint Couplings for Galvanized Iron Pipe	4
Straight and Ell Pack Joint Couplings for Copper or Plastic Tubing by PEP, PVC or Galvanized Iron Pipe	
Straight and Ell Pack Joint for Galvanized Iron Pipe by PEP or PVC Pipe	
Pack Joint "Y's"	
Pack Joint Tees	
Cut-In Tees with Detachable Pack Joints	
Lead-Pack Couplings for Attaching Copper, Iron, Plastic or PVC to Existing Service Lines . 18 & 1	
No-Contact Couplings (patent pending)	
Compression Nuts and Parts	
Straight and Ell Flare Copper Couplings	٠.
Flare Copper by Female Iron Pipe Thread	22
Flare Copper by Male Iron Pipe Thread	
Flare Copper by Flare Copper Two Part Coupling with Wedding Ring	
Wedding Rings for Two Part Flare Copper Couplings	
Flare Copper by Flare Copper Three Part Couplings	:3 2⊿
Multi-Service Tees and "Y's"	
Adapters for Flare Copper Connections	
Tube Nuts, Copper Discs, Copper Gaskets and Brass End Caps	
Brass Bushings, Reducing Couplings, Ell Couplings and Plugs	
Insert Fittings for Plastic	
<b>O.D. Chart</b>	
<b>Warranty</b>	32

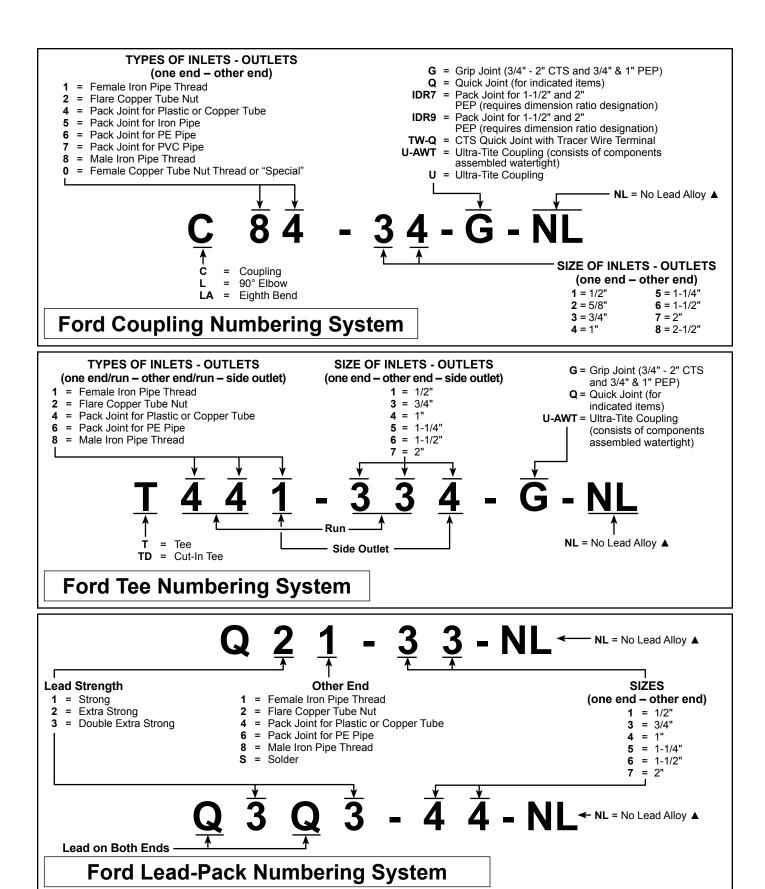
Ford offers many products that are classified to ANSI/NSF Standard 61. To verify if a product is classified to ANSI/NSF Standard 61, contact the Ford Meter Box Customer Service Department at 260-563-3171 or visit fordmeterbox.com. Ford Meter Box meets your need for ANSI/NSF Standard 61 approved items with products that are proven and reliable.

Due to design improvements, product images in the catalog do not always reflect the most current design detail.

Ford Meter Box no-lead brass products manufactured from UNS/CDA No. 89833 alloy shall contain no more than 0.25% total lead content by weight. United States federal and state laws allow the use of products manufactured from UNS C83600 85-5-5-5 brass alloy for only non-potable water systems within the United States.

Parties responsible for monitoring and maintaining proper water system design must exercise full responsibility in understanding and upholding the full intent and scope of applicable lead laws.

Ford, Ford Meter Box and Uni-Flange are trademarks of The Ford Meter Box Company, Inc. registered in the U.S.



▲ Ford Meter Box no-lead brass products manufactured from UNS/CDA No. 89833 alloy shall contain no more than 0.25% total lead content by weight. United States federal and state laws allow the use of products manufactured from UNS C83600 85-5-5-5 brass alloy for only non-potable water systems within the United States.

Parties responsible for monitoring and maintaining proper water system design must exercise full responsibility in understanding and upholding the full intent and scope of applicable lead laws.

**Note:** See product listings in catalog to ensure desired sizes and options are available.

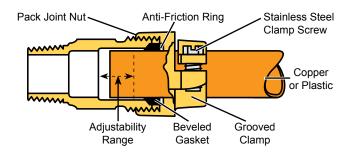
## \*Ford Pack Joint Couplings

## Pack Joint Connections - How the Pack Joint Works

- Tightening the large Pack Joint Nut compresses an EPDM beveled gasket to make it watertight around the pipe or tubing.
- 2. For copper or plastic tubing and pipe there is a split clamp locking device, which is drawn down securely on the tubing or pipe by tightening a stainless steel screw. For iron pipe, a stainless steel set screw is provided on the Pack Joint Nut to bite in and lock on the pipe.
- Machined grooves in the clamp provide additional gripping action.

#### FOR COPPER, PET, PEP OR PVC

(Metal inserts to be used with PET or PEP)



Installation instructions are shipped with product and posted on the Ford Meter Box website. Consult pipe or tubing manufacturer for specific installation requirements.

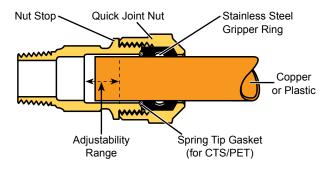
## \*Ford Quick Joint Couplings

The Ford Quick Joint Nut offers traditional Ford features of quality and reliability. This easy to use fitting is available on a wide variety of Ford products. Just stab the copper or plastic tubing into the fitting and tighten down the compression nut to the external stop. That's it! The Quick Joint provides excellent pullout resistance and superior hydraulic blow-off protection. Note: The Ford Quick Joint Nut is NOT interchangeable with other compression fittings.

## **Quick Joint Connections - How the Quick Joint Works**

- A large gasket and stainless steel gripper ring are drawn down together when the nut is tightened, providing the hydraulic seal and mechanical restraint.
- 2. A transparent fluorocarbon coating covers the interior of the nut, providing smooth torque transfer. This coating eliminates "back drive," reduces tightening torque and minimizes gasket distortion.
- **3.** A positive, external and visual stop ensures correct installation, providing maximum gasket seal.

## FOR 3/4" - 2" COPPER, PET (SDR9) OR 3/4" - 1" PEP (Metal inserts to be used with PET or PEP)



Installation instructions are shipped with product and posted on the Ford Meter Box website. Consult pipe or tubing manufacturer for specific installation requirements.

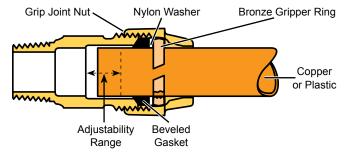
## \*Ford Grip Joint Couplings

## **Grip Joint Connections - How the Grip Joint Works**

- Tightening the Grip Joint Nut compresses an EPDM beveled gasket to make it watertight around the pipe or tubing.
- The bronze split ring is drawn down when the nut is tightened, providing the mechanical seal and lock on the pipe.
- Grip Joint Couplings are manufactured for copper and PET or 3/4" and 1" PEP.

#### ONE STEP COUPLING FOR COPPER, PET OR PEP

(Metal inserts to be used with PET or PEP)



Installation instructions are shipped with product and posted on the Ford Meter Box website. Consult pipe or tubing manufacturer for specific installation requirements.

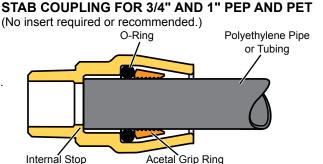
\* See table on page 6 for recommended PE pipe and tubing.

## Ford Ultra-Tite Couplings\*

The Ford Ultra-Tite Compression Coupling provides an immediate lock onto polyethylene pipe (PEP/IPS) or polyethylene tubing (PET/CTS) when inserted to the internal stop.

## **Ultra-Tite Connections - How the Ultra-Tite Works**

- **1.** An integral stop within the coupling ensures full pipe insertion.
- The directional serrations of the plastic grip ring engage the outside diameter of the pipe or tubing providing a mechanical seal and lock.
- 3. The internal O-ring provides a hydraulic seal.



Installation instructions are shipped with product and posted on the Ford Meter Box website. Consult pipe or tubing manufacturer for specific installation requirements.

Ultra-Tite couplings on corporation stops are assembled hand tight and must be removed for drilling or tapping machine adaptation to corporation stop outlet threads. Once the tap is made, the Ultra-Tite should be securely tightened to the corporation stop outlet thread. Unless otherwise requested, corporation stops with Ultra-Tite connections require a drilling/tapping (insertion) machine adapter for male iron pipe outlet threads. Contact the factory for Ultra-Tite corporation stops with optional outlet thread connections.

\*See table on page 6 for recommended PE pipe and PE tubing dimensions.

## **Lead-Pack Couplings**

Recognizing the potential hazard of lead service lines, the Environmental Protection Agency has a goal of eliminating lead lines. As buried lead services are unearthed because of construction or line failure, an opportunity exists to replace lead with a different type of material. By using the Lead-Pack you can attach copper, iron, plastic or PVC to an existing lead service line.

#### **Lead-Pack Connections - How the Lead-Pack Works**

- 1. Tightening the large Lead-Pack Nut compresses an EPDM beveled gasket to make it watertight around the pipe or tubing.
- 2. There is a split clamp locking device which is drawn down securely on the pipe by tightening a stainless steel screw.
- 3. Machined grooves in the clamp provide positive gripping action.
- 4. Lead-Pack Couplings are available with a variety of adapter connections, including female iron pipe threads, male iron pipe threads, flared copper, and compression fittings for copper, plastic or PVC.



Ford Pack Joint

## Code Marks for Ford Compression Coupling Nuts

CTS - Copper and PET S - Strong Lead Pipe
PEP - PE Pipe XS - Extra Strong Lead Pipe

**PVC** - PVC Pipe **XXS** - Double Extra Strong Lead Pipe

# Types of Pipe and Tubing Explanation of Abbreviations

**Copper Tube** - CTS - Copper tubing is widely used as a service line and the **outside diameter** is closely held by manufacturers. The outside diameter of copper tubing has become a standard in the industry and is known as "copper tube size."

**Plastic Tubing** - CTS - Flexible water service tubing in what is referred to as "copper tube size." Plastic tube refers to *any* plastic with the same **outside diameter** as corresponding sizes of copper tube. PET – polyethylene tubing.

**Plastic Pipe** - PEP - Flexible water service pipe in what is referred to as "pipe size." Plastic pipe refers to *any* pipe having the same **inside diameter** as corresponding sizes of standard iron pipe. PEP – polyethylene pipe.

**PVC Pipe** - PVC - Polyvinyl chloride rigid plastic pipe. PVC Pipe refers to polyvinyl chloride rigid plastic pipe having the same **outside diameter** as corresponding sizes of standard iron pipe.

Ford Pack Joints for PVC are recommended for use only with Schedule 40 and Schedule 80 PVC.

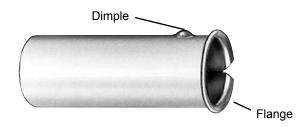
**Lead Pipe** - Lead pipe is controlled by the inside diameter. The outside diameter varies and is manufactured in three ranges; strong (S), extra strong (XS) and double extra strong (XXS).

J-5

#### **Accessories**

#### **Insert Stiffeners**

Ford Insert Stiffeners are a solid tubular 304 stainless steel design, dimpled and flanged to retain placement within the service line.



Before using Ford Insert Stiffeners, be sure inside tubing or pipe dimensions correspond to the table below.

Ford recommends using insert stiffeners with plastic pipe or tubing.

Note: Consult pipe or tubing manufacturer for specific installation requirements.

#### 50 Series For Polyethylene Tubing (PET)

CATALOG	Nominal	PET
Number	Size	ID
INSERT-51	3/4"	0.681
INSERT-52	1"	0.875
** INSERT-53-72	1-1/4"	1.069
*** INSERT-53-72-Q	1-1/4"	1.069
INSERT-54	1-1/2"	1.263
INSERT-55	2"	1.653
♦INSERT-54-Q	1-1/2"	1.263
♦INSERT-55-Q	2"	1.653

#### 70 Series For Polyethylene Pipe (PEP)

	•	•
CATALOG	Nominal	PEP
Number	Size	ID
INSERT-71	3/4"	0.824
** INSERT-53-72	1"	1.049
****INSERT-53-72-Q	1"	1.049
INSERT-73	1-1/4"	1.380
INSERT-74	1-1/2"	1.610
INSERT-75	2"	2.067

## Inserts For OD Controlled DR11 High Density Polyethylene (HDPE) Pipe with PVC O.D.

CATALOG	Nominal Size	DR	HDPE	Nominal
Number	AND PIPE TYPE	DK	OD	ID
** INSERT-53-72	1" IPS	11	1.315	1.06
INSERT-73-DR11	1-1/4" IPS	11	1.660	1.34
INSERT-74-DR11	1-1/2" IPS	11	1.900	1.53
INSERT-75-DR11	2" IPS	11	2.375	1.92

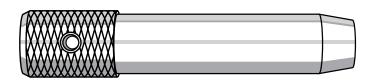
- \*\* INSERT-53-72 fits 1-1/4" plastic tubing (1.069 I.D.), 1" plastic pipe (1.049 I.D.) and 1" IPS HDPE (1.055 I.D.).
- \*\*\* INSERT-53-72-Q fits 1-1/4" plastic tubing (1.069 I.D.) and 1" plastic pipe (1.049 I.D.).
- These inserts are specifically designed and required for Quick Joint Fittings. They ARE NOT interchangeable for use with any
  other types of compression fittings.

#### DIMENSION COMPARISON TABLE FOR PLASTIC, COPPER AND GALVANIZED IRON

PIPE ANI	D TUBING	PSI	SDR	CONTROL		O.D.					1.1	D.																			
TY	PE	P31	SUK	SUK	CONTROL	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"														
Copper	_	_	_	OD	0.625	0.875	1.125	1.375	1.625	2.125	_	_	-	_	_	_															
PET	PE3408	200	SDR9	OD	0.625	0.875	1.125	1.375	1 625	2.125	_	0.681	0.875	1.069	1.263	1.653															
PEI	PE4710	250	SDK9	SDR9	SDR9	SDR9	SDR9	SDK9	SDR9	SDK9	SDK9	SDK9	SDK9	3DK9	SDR9	SDK9	OD	0.025	5 0.675	1.125	1.123	1.125	1.373 1.0	1.023	2.123	_	0.001	0.675	1.009	1.203	1.000
PEP	PE3408	200	SIDR7	ID		1.060	1.349	1.774	2.070	2 657		0.824	1.049	1.380	1 610	2.067															
FEF	PE4710	250	SIDKI	טו	_	1.000	1.349	1.774	2.070	2.057	_	0.024	1.049	1.360	1.010	2.007															
PVC	_	_	_	OD	0.840	1.050	1.315	1.660	1.900	2.375	_	_	-	_	_	_															
Galv IP	_	_	_	OD	0.840	1.050	1.315	1.660	1.900	2.375	_	_	_	_	_	_															

#### **Copper Rounding Tool**

When copper tubing is used, Ford recommends that it be checked to see if it is perfectly round. Compression couplings do not perform properly if the tubing is out-of-round. Unrounded copper can result in a marginal gasket seal that may eventually permit leakage. The Copper Rounding Tool forms the copper tubing for a proper fit.



CATALOG NUMBER	Tube Size	APPROX. Wt. Lbs.
CRT-3	3/4"	0.7
CRT-4	1"	1.4
CRT-5	1-1/4"	2.3
CRT-6	1-1/2"	3.8
CRT-7	2"	8.0

## **Ultra-Tite Compression Fittings**

#### For Polyethylene Pipe (PEP/IPS) or Polyethylene Tubing (PET/CTS)

The Ford Ultra-Tite Compression Fitting provides an immediate lock onto polyethylene pipe (PEP/IPS) or polyethylene tubing (PET/CTS) when inserted to the internal stop.





#### **Chamfer Tool and Parts**

Beveling the end of the pipe or tubing with the special chamfering tool permits proper engagement of the pipe or tubing into the socket.

CHAMFER	APPROX.		
CATALOG NUMBER	WT. LBS.		
PECT-4-CTS	1" PET/CTS	1.120 - 1.130	0.22
PECT-3-IPS	3/4" PEP/IPS	1.045 - 1.110	0.22
PECT-4-IPS	1" PEP/IPS	1.329 - 1.399	0.19

CHA	APPROX.						
CATALOG	Dan- On-	0	0 D D				
Number	PORT OPENING	Size	O.D. RANGE	WT. LBS.			
PECTS-3-CTS	0.400" x 0.810"	3/4" PET/CTS	0.871 - 0.879	0.16			
PECTS-4-CTS	0.580" x 1.060"	1" PET/CTS	1.120 - 1.130	0.22			
PECTS-3-IPS	0.580" x 1.020"	3/4" PEP/IPS	1.045 - 1.110	0.22			
PECTS-4-IPS	0.680" x 1.320"	1" PEP/IPS	1.329 - 1.399	0.19			
REPLACEMENT BLADE FOR 3/4" AND 1" CHAMFER TOOL							
PECT-BLADE	-230910			-			







Chamfer Tool



Gripper Ring Removal Tool

#### **Gripper Ring Removal Tool**

Removing the Ultra-Tite from the pipe or tubing requires a removal tool between the gripper and the pipe or tubing, to allow release of the compression.

REMOVAL TOOL PART NUMBER						
CATALOG NUMBER DESCRIPTION						
UTRT-520200	3/4" and 1" CTS-IPS					

<sup>1&</sup>quot; size requires the use of two removal tools.

#### **Ultra-Tite Component Parts**

O-ring and Gripper Ring replacement is recommended prior to reusing the fitting.

COMPONENT PARTS						
CATALOG NUMBER	DESCRIPTION					
UTGR4-3	3/4" PET Gripper Ring (red)					
UTGR4-4	1" PET Gripper Ring (red)					
UTGR6-3	3/4" PEP Gripper Ring (white)					
UTGR6-4	1" PEP Gripper Ring (white)					
ORING-650405-EP	3/4" CTS EPDM O-ring					
ORING-650407-EP	1" CTS EPDM O-ring					
ORING-650420-EP	3/4" IP EPDM O-ring					
ORING-650422-EP	1" IP EPDM O-ring					
CTC nelvethylene (DE	CTC not cethylana (DE) nor ACTM D2727 CDD 0					

CTS polyethylene (PE) per ASTM D2737 - SDR-9 IPS polyethylene (PE) per ASTM D2239 - SIDR-7



#### **Tubing/Pipe and Ford Ultra-Tite Compatibility Table**

Use this table to ensure pipe/tubing compatibility.

Nominal Size of Connection	MATERIAL	TUBING OR PIPE O.D. RANGE (IN.)	TUBING OR PIPE WALL THICKNESS RANGE (IN.)	TUBING OR PIPE I.D. RANGE (IN.)
3/4" CTS PE	Polyethylene (PE)	0.871 - 0.879	0.097 - 0.107	0.657 - 0.685
1" CTS PE	Polyethylene (PE)	1.120 - 1.130	0.125 - 0.137	0.846 - 0.880
3/4" IPS PE	Polyethylene (PE)	1.045 - 1.110	0.118 - 0.138	0.809 - 0.834
1" IPS PE	Polyethylene (PE)	1.329 - 1.399	0.150 - 0.170	1.029 - 1.059

## Pack Joint for Copper or Plastic Tubing





C84-44-G-NL (shown with grip joint nut option)

#### Copper or Plastic Tubing (CTS) Both Ends

CATALOG NUMBER         DESCRIPTION P.J. FOR CTS         APPROVED           *C44-11-NL         1/2"         1/2"         0.7           *C44-12-NL         1/2"         5/8"         0.8           *C44-13-NL         1/2"         3/4"         0.8           *C44-14-NL         1/2"         1"         0.9           *C44-22-NL         5/8"         5/8"         1.0           *C44-23-NL         5/8"         3/4"         1.0           *C44-33-NL         3/4"         0.9           *C44-33-NL         3/4"         1.4           *C44-34-NL         3/4"         1"         0.9           *C44-35-NL         3/4"         1-1/4"         1.7           *C44-44-NL         1"         1"         1.2           *C44-45-NL         1"         1"         1.2           *C44-45-NL         1"         1-1/4"         1.4           *C44-46-NL         1"         1-1/4										
STRAIGHT COUPLINGS           ◆C44-11-NL         1/2"         1/2"         0.7           ◆C44-12-NL         1/2"         5/8"         0.8           *C44-13-NL         1/2"         3/4"         0.8           *C44-14-NL         1/2"         1"         0.9           ◆C44-22-NL         5/8"         5/8"         1.0           *C44-23-NL         5/8"         3/4"         1.0           •C44-33-NL         3/4"         3/4"         0.9           •C44-33-NL         3/4"         1.4         1.4           •C44-34-NL         3/4"         1"         0.9           C44-35-NL         3/4"         1-1/4"         1.7           •C44-44-44-NL         1"         1"         1.2           ■ •C44-44-44-NL         1"         1"         1.2           C44-45-NL         1"         1-1/4"         1.4           •C44-45-NL         1"         1-1/4"         1.4           •C44-46-NL         1"         1-1/2"         2.2										
◆C44-11-NL       1/2"       1/2"       0.7         ◆C44-12-NL       1/2"       5/8"       0.8         *◆C44-13-NL       1/2"       3/4"       0.8         * C44-14-NL       1/2"       1"       0.9         ◆C44-22-NL       5/8"       5/8"       1.0         *◆C44-23-NL       5/8"       3/4"       1.0         •◆C44-33-NL       3/4"       3/4"       0.9         •◆C44-33-NL       3/4"       1"       1.4         •◆C44-34-NL       3/4"       1"       1.7         •◆C44-44-NL       1"       1"       1.2         •◆C44-44-44-75-NL       1"       1"       1.4/4"       1.4         •◆C44-45-NL       1"       1-1/4"       1.4         •◆C44-46-NL       1"       1-1/2"       2.2	<b>85.</b>									
◆C44-12-NL       1/2"       5/8"       0.8         *◆C44-13-NL       1/2"       3/4"       0.8         * C44-14-NL       1/2"       1"       0.9         ◆C44-22-NL       5/8"       5/8"       1.0         *◆C44-23-NL       5/8"       3/4"       1.0         •◆C44-33-NL       3/4"       1.0       3/4"       0.9         •◆C44-33-NL       3/4"       3/4"       1.4         ▶ ◆C44-34-NL       3/4"       1"       0.9         C44-35-NL       3/4"       1-1/4"       1.7         •◆C44-44-47-75-NL       1"       1"       1.2         C44-45-NL       1"       1-1/4"       1.4         ◆C44-46-NL       1"       1-1/4"       1.4         ◆C44-46-NL       1"       1-1/2"       2.2										
**C44-13-NL 1/2" 3/4" 0.8  * C44-14-NL 1/2" 1" 0.9  • C44-22-NL 5/8" 5/8" 1.0  • C44-23-NL 5/8" 3/4" 1.0  • C44-33-NL 3/4" 3/4" 0.9  • C44-33-NL 3/4" 3/4" 1.4  • C44-34-NL 3/4" 1" 0.9  C44-35-NL 3/4" 1" 1.7  • C44-44-NL 1" 1" 1.2  • C44-44-NL 1" 1" 1.2  • C44-45-NL 1" 1.74" 1.4  • C44-46-NL 1" 1.74" 1.4										
* C44-14-NL 1/2" 1" 0.9  ◆ C44-22-NL 5/8" 5/8" 1.0  * ◆ C44-23-NL 5/8" 3/4" 1.0  • ◆ C44-33-NL 3/4" 3/4" 0.9  ■ ◆ C44-34-NL 3/4" 1" 0.9  C44-35-NL 3/4" 1" 0.9  C44-44-NL 1" 1" 1.7  ■ ◆ C44-44-NL 1" 1" 2.0  C44-45-NL 1" 1" 1.4  ◆ C44-46-NL 1" 1-1/4" 1.4  ◆ C44-46-NL 1" 1-1/4" 1.4										
◆C44-22-NL       5/8"       5/8"       1.0         *◆C44-23-NL       5/8"       3/4"       1.0         ◆◆C44-33-NL       3/4"       3/4"       0.9         ■◆C44-33-4-75-NL       3/4"       1"       0.9         C44-34-NL       3/4"       1"       0.9         C44-35-NL       3/4"       1-1/4"       1.7         ◆◆C44-44-NL       1"       1"       1.2         ■◆C44-44-475-NL       1"       1"       2.0         C44-45-NL       1"       1-1/4"       1.4         ◆C44-46-NL       1"       1-1/2"       2.2										
*◆C44-23-NL 5/8" 3/4" 1.0  ◆◆C44-33-NL 3/4" 3/4" 0.9  ■◆C44-33-NL 3/4" 3/4" 1.4  ▶◆C44-34-NL 3/4" 1" 0.9  C44-35-NL 3/4" 1-1/4" 1.7  ◆◆C44-44-NL 1" 1" 1.2  ■◆C44-44-NL 1" 1" 2.0  C44-45-NL 1" 1-1/4" 1.4  ◆C44-46-NL 1" 1-1/4" 1.4										
••C44-33-NL       3/4"       3/4"       0.9         ••C44-33-4-75-NL       3/4"       3/4"       1.4         ••C44-34-NL       3/4"       1"       0.9         C44-35-NL       3/4"       1-1/4"       1.7         ••C44-44-NL       1"       1"       1"       1.2         ••C44-44-4-T5-NL       1"       1"       2.0         C44-45-NL       1"       1-1/4"       1.4         •C44-46-NL       1"       1-1/2"       2.2										
■+C44-33-4-75-NL 3/4" 3/4" 1.4  ►+C44-34-NL 3/4" 1" 0.9  C44-35-NL 3/4" 1-1/4" 1.7  ●+C44-44-NL 1" 1" 1.2  ■+C44-44-475-NL 1" 1" 2.0  C44-45-NL 1" 1-1/4" 1.4  +C44-46-NL 1" 1-1/2" 2.2										
▶ ◆ C44-34-NL       3/4"       1"       0.9         C44-35-NL       3/4"       1-1/4"       1.7         ◆ C44-44-NL       1"       1"       1"       1.2         ■ ◆ C44-44-47-5-NL       1"       1"       2.0         C44-45-NL       1"       1-1/4"       1.4         ◆ C44-46-NL       1"       1-1/2"       2.2										
C44-35-NL       3/4"       1-1/4"       1.7         ◆ C44-44-NL       1"       1"       1.2         ■ C44-44-4-75-NL       1"       1"       2.0         C44-45-NL       1"       1-1/4"       1.4         ◆ C44-46-NL       1"       1-1/2"       2.2										
◆◆C44-44-NL       1"       1"       1.2         ■◆C44-44-4-75-NL       1"       1"       2.0         C44-45-NL       1"       1-1/4"       1.4         ◆C44-46-NL       1"       1-1/2"       2.2										
■+C44-44-4-75-NL     1"     1"     2.0       C44-45-NL     1"     1-1/4"     1.4       +C44-46-NL     1"     1-1/2"     2.2										
C44-45-NL         1"         1-1/4"         1.4           ◆C44-46-NL         1"         1-1/2"         2.2										
<b>♦C44-46-NL</b> 1" 1-1/2" 2.2										
. O 4 4 5 5 5 1										
◆C44-55-NL 1-1/4" 1-1/4" 2.1										
<b>C44-56-NL</b> 1-1/4" 1-1/2" 2.8										
◆C44-66-NL 1-1/2" 1-1/2" 3.0										
<b>C44-67-NL</b> 1-1/2" 2" 3.5										
◆C44-77-NL 2" 2" 4.5										
<b>C44-88-NL</b> 2-1/2" 2-1/2" 7.1										
ELL COUPLINGS										
▶◆L44-33-NL 3/4" 1.0										
▶◆L44-34-NL 3/4" 1" 1.1										
▶◆L44-44-NL 1" 1.4										
<b>L44-55-NL</b> 1-1/4" 1-1/4" 2.1										
<b>◆L44-66-NL</b> 1-1/2" 1-1/2" 3.5										
† <b>♦ L44-77-NL</b> 2" 2" 9.5										
EIGHTH BEND COUPLINGS										
◆LA44-33-NL 3/4" 0.9										
<b>◆LA44-44-NL</b> 1" 1" 1.3										

## Male Iron Pipe Thread to Pack Joint for Copper or Plastic Tubing (CTS)

CATALOG NUMBER         DESCRIPTION MALE IRON PIPE         P.J. FOR CTS         WT. LBS.           STRAIGHT COUPLINGS	or Plastic Tubing (CTS)				
STRAIGHT COUPLINGS         ◆ C84-11-NL       1/2"       1/2"       0.5         C84-12-NL       1/2"       5/8"       0.6         ◆ C84-31-NL       1/2"       3/4"       0.6         ◆ C84-31-NL       3/4"       1/2"       0.5         ◆ C84-32-NL       3/4"       1/2"       0.6         ◆ C84-33-NL       3/4"       5/8"       0.6         ◆ C84-33-NL       3/4"       3/4"       0.6         ● C84-33-NL       3/4"       3/4"       1.1         ◆ C84-34-NL       1"       0.7       0.7         C84-42-NL       1"       5/8"       0.7         ▶ C84-43-NL       1"       1"       0.9         ● C84-44-NL       1"       1"       1.5         ◆ C84-44-NL       1"       1"       1.5         ◆ C84-44-NL       1"       1.1/4"       1.3         ◆ C84-45-NL       1"       1.1/4"       1.3         ◆ C84-46-NL       1"       1.1/2"       1.8         C84-54-NL       1-1/4"       1"       1.4         C84-55-NL       1.1/4"       1.1/2"       1.8         ◆ C84-56-NL       1.1/2"       1.1/2"       2.6	CATALOG			APPROX.	
◆ C84-11-NL       1/2"       1/2"       0.5         C84-12-NL       1/2"       5/8"       0.6         ◆ C84-13-NL       1/2"       3/4"       0.6         ◆ C84-31-NL       3/4"       1/2"       0.5         ◆ C84-32-NL       3/4"       5/8"       0.6         ◆ C84-33-NL       3/4"       5/8"       0.6         ◆ C84-33-NL       3/4"       3/4"       1.1         ◆ C84-33-A-75-NL       3/4"       1"       0.7         C84-42-NL       1"       5/8"       0.7         ▶ C84-43-NL       1"       1"       0.9         ■ C84-43-NL       1"       1"       0.9         ■ C84-44-NL       1"       1"       1.5         ← C84-43-NL       1"       1.1/4"       1.5         ← C84-44-NL       1"       1.1/4"       1.3         ← C84-45-NL       1"       1.1/4"       1.3         ← C84-45-NL       1"       1.1/2"       1.8         C84-56-NL       1.1/4"       1.1/2"       1.8         C84-56-NL       1.1/4"       1.1/2"       1.8         ← C84-67-NL       1.1/2"       1.1/2"       2.6         ← C84-77-NL <td< th=""><th>Number</th><th>MALE IRON PIPE</th><th>P.J. FOR CTS</th><th>Wt. Lbs.</th></td<>	Number	MALE IRON PIPE	P.J. FOR CTS	Wt. Lbs.	
C84-12-NL 1/2" 5/8" 0.6  ◆ C84-13-NL 1/2" 3/4" 0.6  ◆ C84-31-NL 3/4" 1/2" 0.5  ◆ C84-32-NL 3/4" 5/8" 0.6  ◆ C84-33-NL 3/4" 3/4" 0.6  ■◆ C84-33-NL 3/4" 3/4" 1.1  ◆ C84-33-4-75-NL 3/4" 1" 0.7  C84-42-NL 1" 5/8" 0.7  ▶ C84-43-NL 1" 1" 0.7  C84-43-NL 1" 1" 0.9  ■◆ C84-43-NL 1" 1" 1.5  ◆ C84-44-NL 1" 1" 1.5  ◆ C84-45-NL 1" 1.5  ◆ C84-45-NL 1" 1.1  ◆ C84-45-NL 1" 1.1  ◆ C84-46-NL 1" 1.1/4" 1.3  ◆ C84-55-NL 1.1/4" 1.1  ◆ C84-55-NL 1.1/4" 1.1  ◆ C84-56-NL 1.1/4" 1.1/2" 1.8  ◆ C84-67-NL 1.1/2" 1.8  ◆ C84-67-NL 1.1/2" 1.8  ◆ C84-67-NL 1.1/2" 1.1/2" 2.6  ◆ C84-77-NL 2" 2" 3.1  ELL COUPLINGS  L84-11-Q-NL 1/2" 1/2" 0.6  ▶ L84-33-NL 3/4" 1" 0.8  ▶ L84-33-NL 3/4" 1" 0.8  ▶ L84-33-NL 3/4" 1" 0.8  ▶ L84-46-NL 1.1/2" 1.1/2" 2.5  ◆ L84-77-NL 2" 2" 3.9  EIGHTH BEND COUPLINGS  LA84-33-NL 3/4" 3/4" 0.6	S.	TRAIGHT COUP	LINGS		
◆ C84-13-NL       1/2"       3/4"       0.6         ◆ C84-31-NL       3/4"       1/2"       0.5         ◆ C84-32-NL       3/4"       5/8"       0.6         ◆ C84-33-NL       3/4"       3/4"       0.6         ● C84-33-A-75-NL       3/4"       1.1       0.6         ● C84-34-NL       3/4"       1.1       0.7         C84-34-NL       1"       5/8"       0.7         ▶ C84-43-NL       1"       1"       0.9         ■ C84-43-NL       1"       1"       1.5         ◆ C84-44-NL       1"       1"       1.5         ◆ C84-44-NL       1"       1-1/4"       1.3         ◆ C84-45-NL       1"       1-1/4"       1.3         ◆ C84-46-NL       1"       1-1/2"       1.8         ← C84-55-NL       1-1/4"       1-1/4"       1.4         ← C84-55-NL       1-1/4"       1-1/2"       1.8         ◆ C84-66-NL       1-1/2"       1-1/2"       2.6         ◆ C84-67-NL       1-1/2"       2"       2.6         ◆ C84-77-NL       2"       2.6         ◆ C84-77-NL       1/2"       1/2"       0.6         ▶ L84-33-NL       3/4"	♦ C84-11-NL	1/2"	1/2"	0.5	
◆ C84-31-NL       3/4"       1/2"       0.5         ◆ C84-32-NL       3/4"       5/8"       0.6         • ◆ C84-33-NL       3/4"       3/4"       0.6         • ◆ C84-33-A-75-NL       3/4"       3/4"       1.1         • ◆ C84-34-NL       1"       0.7         • ★ C84-34-NL       1"       5/8"       0.7         ▶ ◆ C84-43-NL       1"       3/4"       0.7         • ◆ C84-43-NL       1"       1"       0.9         ■ ◆ C84-44-NL       1"       1"       1.5         • C84-44-NL       1"       1-1/4"       1.3         • C84-45-NL       1"       1-1/2"       1.8         • C84-46-NL       1"       1-1/2"       1.8         • C84-54-NL       1-1/4"       1-1/4"       1.4         • C84-55-NL       1-1/4"       1-1/4"       1.4         • C84-56-NL       1-1/4"       1-1/2"       2.1         • C84-66-NL       1-1/2"       2"       2.6         • C84-77-NL       2"       2"       3.1         • C84-77-NL       2"       2"       3.1         • L84-33-NL       3/4"       3/4"       0.8         • L84-33-NL       3/4	C84-12-NL	1/2"	5/8"	0.6	
◆ C84-32-NL       3/4"       5/8"       0.6         • ◆ C84-33-NL       3/4"       3/4"       0.6         ■ ◆ C84-33-A-75-NL       3/4"       1"       0.7         • C84-34-NL       3/4"       1"       0.7         C84-42-NL       1"       5/8"       0.7         ▶ ◆ C84-43-NL       1"       3/4"       0.7         • ◆ C84-43-NL       1"       1"       0.9         ■ ◆ C84-44-NL       1"       1"       1.5         ◆ C84-45-NL       1"       1-1/4"       1.3         ◆ C84-45-NL       1"       1-1/2"       1.8         C84-54-NL       1"       1-1/2"       1.8         C84-55-NL       1-1/4"       1-1/4"       1.4         C84-56-NL       1-1/4"       1-1/2"       2.1         C84-66-NL       1-1/2"       1-1/2"       2.1         C84-67-NL       1-1/2"       2"       2.6         ◆ C84-77-NL       2"       2"       3.1         ELL COUPLINGS         L84-11-Q-NL       1/2"       1/2"       0.6         ▶ L84-33-NL       3/4"       3/4"       0.8         ▶ L84-34-NL       1-1/2"       1-1/2"       2.5	♦ C84-13-NL	1/2"	3/4"	0.6	
● C84-33-NL 3/4" 3/4" 0.6  ■ C84-33-4-75-NL 3/4" 1.1  ● C84-34-NL 3/4" 1" 0.7  C84-42-NL 1" 5/8" 0.7  ▶ C84-43-NL 1" 3/4" 0.7  ● C84-43-NL 1" 1" 0.9  ■ C84-44-NL 1" 1" 1" 1.5  ◆ C84-45-NL 1" 1-1/4" 1.3  ◆ C84-45-NL 1" 1-1/2" 1.8  C84-54-NL 1-1/4" 1" 1.1  ◆ C84-55-NL 1-1/4" 1" 1.1  ◆ C84-55-NL 1-1/4" 1-1/2" 1.8  C84-56-NL 1-1/4" 1-1/2" 1.8  ◆ C84-66-NL 1-1/2" 1-1/2" 2.1  C84-67-NL 2" 2" 3.1  ELL COUPLINGS  L84-11-Q-NL 1/2" 1/2" 0.6  ▶ L84-33-NL 3/4" 3/4" 0.8  ▶ L84-34-NL 1-1/2" 1-1/2" 2.5  ◆ L84-66-NL 1-1/2" 1-1/2" 2.5  ◆ L84-77-NL 2" 2.5  ■ EIGHTH BEND COUPLINGS  LA84-33-NL 3/4" 3/4" 0.6	♦ C84-31-NL	3/4"		0.5	
● C84-33-NL 3/4" 3/4" 0.6  ■ C84-33-4-75-NL 3/4" 1.1  ● C84-34-NL 3/4" 1" 0.7  C84-42-NL 1" 5/8" 0.7  ▶ C84-43-NL 1" 3/4" 0.7  ● C84-43-NL 1" 1" 0.9  ■ C84-44-NL 1" 1" 1" 1.5  ◆ C84-45-NL 1" 1-1/4" 1.3  ◆ C84-45-NL 1" 1-1/2" 1.8  C84-54-NL 1-1/4" 1" 1.1  ◆ C84-55-NL 1-1/4" 1" 1.1  ◆ C84-55-NL 1-1/4" 1-1/2" 1.8  C84-56-NL 1-1/4" 1-1/2" 1.8  ◆ C84-66-NL 1-1/2" 1-1/2" 2.1  C84-67-NL 2" 2" 3.1  ELL COUPLINGS  L84-11-Q-NL 1/2" 1/2" 0.6  ▶ L84-33-NL 3/4" 3/4" 0.8  ▶ L84-34-NL 1-1/2" 1-1/2" 2.5  ◆ L84-66-NL 1-1/2" 1-1/2" 2.5  ◆ L84-77-NL 2" 2.5  ■ EIGHTH BEND COUPLINGS  LA84-33-NL 3/4" 3/4" 0.6	♦ C84-32-NL	3/4"	5/8"	0.6	
● C84-34-NL 3/4" 1" 0.7  C84-42-NL 1" 5/8" 0.7  ▶ C84-43-NL 1" 3/4" 0.7  ● C84-43-NL 1" 1" 0.9  ■ C84-44-75-NL 1" 1" 1.5  ◆ C84-45-NL 1" 1-1/4" 1.3  ◆ C84-46-NL 1" 1-1/2" 1.8  C84-54-NL 1-1/4" 1" 1.1  ◆ C84-55-NL 1-1/4" 1" 1.1  ◆ C84-56-NL 1-1/4" 1-1/2" 1.8  ◆ C84-66-NL 1-1/2" 1-1/2" 1.8  ◆ C84-67-NL 1-1/2" 1-1/2" 2.1  C84-67-NL 1-1/2" 2" 2.6  ◆ C84-77-NL 2" 2" 2.6  ◆ C84-77-NL 2" 2" 3.1  ELL COUPLINGS  L84-11-Q-NL 1/2" 1/2" 0.6  ▶ L84-33-NL 3/4" 3/4" 0.8  ▶ L84-34-NL 1" 1" 0.8  ▶ L84-33-NL 3/4" 1" 0.8  ▶ L84-66-NL 1-1/2" 1-1/2" 2.5  ◆ L84-77-NL 2" 2.5  ◆ C84-77-NL 2" 2.5  ◆ C84-77-NL 3/4" 3/4" 0.8	●◆ C84-33-NL	3/4"	3/4"	0.6	
C84-42-NL       1"       5/8"       0.7         ▶ C84-43-NL       1"       3/4"       0.7         • C84-44-NL       1"       1"       0.9         • C84-44-75-NL       1"       1.5       1.5         • C84-45-NL       1"       1-1/4"       1.3         • C84-46-NL       1"       1-1/2"       1.8         C84-54-NL       1-1/4"       1"       1.1         • C84-55-NL       1-1/4"       1-1/4"       1.4         C84-56-NL       1-1/4"       1-1/2"       1.8         • C84-66-NL       1-1/2"       1-1/2"       2.1         C84-67-NL       1-1/2"       2"       2.6         • C84-77-NL       2"       2"       3.1         ELL COUPLINGS         L84-11-Q-NL       1/2"       1/2"       0.6         ▶ L84-33-NL       3/4"       1"       0.8         ▶ L84-44-NL       1"       1"       0.8         ▶ L84-44-NL       1"       1"       1.1         • L84-66-NL       1-1/2"       1-1/2"       2.5         • L84-77-NL       2"       2"       3.9         EIGHTH BEND COUPLINGS         LA84-33-NL <th>■◆ C84-33-4-75-NL</th> <th>3/4"</th> <th></th> <th>1.1</th>	■◆ C84-33-4-75-NL	3/4"		1.1	
► C84-43-NL 1" 3/4" 0.7  • C84-44-NL 1" 1" 0.9  ■ C84-44-NL 1" 1" 1.5  • C84-45-NL 1" 1-1/4" 1.3  • C84-46-NL 1" 1-1/2" 1.8  • C84-55-NL 1-1/4" 1" 1.1  • C84-55-NL 1-1/4" 1" 1.1  • C84-56-NL 1-1/4" 1-1/4" 1.4  • C84-56-NL 1-1/4" 1-1/2" 1.8  • C84-66-NL 1-1/2" 1-1/2" 2.1  • C84-67-NL 1-1/2" 2" 2.6  • C84-77-NL 2" 2" 3.1  ELL COUPLINGS  L84-11-Q-NL 1/2" 1/2" 0.6  ▶ L84-33-NL 3/4" 3/4" 0.8  ▶ L84-44-NL 1" 1" 0.8  ▶ L84-46-NL 1-1/2" 1-1/2" 2.5  • L84-77-NL 2" 2" 3.9	●◆ C84-34-NL		1"	0.7	
● C84-44-NL 1" 1" 0.9  ■ C84-44-A-75-NL 1" 1" 1.5	C84-42-NL		5/8"	0.7	
■ C84-44-4-75-NL 1" 1" 1.5	► ♦ C84-43-NL		3/4"	0.7	
♦ C84-45-NL       1"       1-1/4"       1.3         ♦ C84-46-NL       1"       1-1/2"       1.8         C84-54-NL       1-1/4"       1"       1.1         ♦ C84-55-NL       1-1/4"       1-1/4"       1.4         C84-56-NL       1-1/4"       1-1/2"       1.8         ♦ C84-66-NL       1-1/2"       1-1/2"       2.1         C84-67-NL       1-1/2"       2"       2.6         ♦ C84-77-NL       2"       2"       3.1         ELL COUPLINGS         L84-11-Q-NL       1/2"       1/2"       0.6         ▶ ♦ L84-33-NL       3/4"       3/4"       0.8         ▶ L84-34-NL       3/4"       1"       0.8         ▶ L84-44-NL       1"       1"       1.1         ♦ L84-66-NL       1-1/2"       1-1/2"       2.5         ♦ L84-77-NL       2"       2"       3.9         EIGHTH BEND COUPLINGS         LA84-33-NL       3/4"       0.6	●◆ C84-44-NL	1"		0.9	
♦ C84-46-NL       1"       1-1/2"       1.8         C84-54-NL       1-1/4"       1"       1.1         ♦ C84-55-NL       1-1/4"       1-1/4"       1.4         C84-56-NL       1-1/4"       1-1/2"       1.8         ♦ C84-66-NL       1-1/2"       1-1/2"       2.1         C84-67-NL       1-1/2"       2"       2.6         ♦ C84-77-NL       2"       2"       3.1         ELL COUPLINGS         L84-11-Q-NL       1/2"       1/2"       0.6         ▶ L84-33-NL       3/4"       3/4"       0.8         ▶ L84-34-NL       3/4"       1"       0.8         ▶ L84-44-NL       1"       1"       1.1         ★ L84-66-NL       1-1/2"       1-1/2"       2.5         ★ L84-77-NL       2"       2"       3.9         EIGHTH BEND COUPLINGS         LA84-33-NL       3/4"       0.6	■◆ C84-44-4-75-NL		1"		
C84-54-NL 1-1/4" 1" 1.1  ◆ C84-55-NL 1-1/4" 1-1/4" 1.4  C84-56-NL 1-1/4" 1-1/2" 1.8  ◆ C84-66-NL 1-1/2" 1-1/2" 2.1  C84-67-NL 1-1/2" 2" 2.6  ◆ C84-77-NL 2" 2" 3.1  ELL COUPLINGS  L84-11-Q-NL 1/2" 1/2" 0.6  ▶ ◆ L84-33-NL 3/4" 3/4" 0.8  ▶ ◆ L84-4-NL 1" 1" 0.8  ▶ ◆ L84-4-NL 1" 1" 1.1  ◆ L84-66-NL 1-1/2" 1.1/2" 2.5  ★ L84-77-NL 2" 2.5  EIGHTH BEND COUPLINGS  LA84-33-NL 3/4" 3/4" 0.6	♦ C84-45-NL	1"	1-1/4"	1.3	
◆ C84-55-NL       1-1/4"       1-1/4"       1.4         C84-56-NL       1-1/4"       1-1/2"       1.8         ◆ C84-66-NL       1-1/2"       1-1/2"       2.1         C84-67-NL       1-1/2"       2"       2.6         ◆ C84-77-NL       2"       3.1         ELL COUPLINGS         L84-11-Q-NL       1/2"       1/2"       0.6         ▶ L84-33-NL       3/4"       3/4"       0.8         ▶ L84-34-NL       3/4"       1"       0.8         ▶ L84-44-NL       1"       1"       1.1         ◆ L84-66-NL       1-1/2"       1-1/2"       2.5         ◆ L84-77-NL       2"       2"       3.9         EIGHTH BEND COUPLINGS         LA84-33-NL       3/4"       0.6	♦ C84-46-NL		1-1/2"	1.8	
C84-56-NL       1-1/4"       1-1/2"       1.8         ◆ C84-66-NL       1-1/2"       1-1/2"       2.1         C84-67-NL       1-1/2"       2"       2.6         ◆ C84-77-NL       2"       2"       3.1         ELL COUPLINGS         L84-11-Q-NL       1/2"       1/2"       0.6         ▶ L84-33-NL       3/4"       3/4"       0.8         ▶ L84-34-NL       3/4"       1"       0.8         ▶ L84-44-NL       1"       1"       1.1         ◆ L84-66-NL       1-1/2"       1-1/2"       2.5         ◆ L84-77-NL       2"       2"       3.9         EIGHTH BEND COUPLINGS         LA84-33-NL       3/4"       0.6	C84-54-NL		1"	1.1	
◆ C84-66-NL       1-1/2"       1-1/2"       2.1         C84-67-NL       1-1/2"       2"       2.6         ◆ C84-77-NL       2"       2"       3.1         ELL COUPLINGS         L84-11-Q-NL       1/2"       1/2"       0.6         ▶ ◆ L84-33-NL       3/4"       3/4"       0.8         ▶ L84-34-NL       3/4"       1"       0.8         ▶ ◆ L84-44-NL       1"       1"       1.1         ◆ L84-66-NL       1-1/2"       1-1/2"       2.5         ◆ L84-77-NL       2"       2"       3.9         EIGHTH BEND COUPLINGS         LA84-33-NL       3/4"       0.6	♦ C84-55-NL	1-1/4"		1.4	
C84-67-NL     1-1/2"     2"     2.6       ◆ C84-77-NL     2"     2"     3.1       ELL COUPLINGS       L84-11-Q-NL     1/2"     1/2"     0.6       ▶ ◆ L84-33-NL     3/4"     3/4"     0.8       ▶ ★ L84-34-NL     3/4"     1"     0.8       ▶ ◆ L84-44-NL     1"     1"     1.1       ◆ L84-66-NL     1-1/2"     1-1/2"     2.5       ◆ L84-77-NL     2"     2"     3.9       EIGHTH BEND COUPLINGS       LA84-33-NL     3/4"     0.6	C84-56-NL				
ELL COUPLINGS       L84-11-Q-NL     1/2"     1/2"     0.6       ▶ ◆ L84-33-NL     3/4"     3/4"     0.8       ▶ L84-34-NL     3/4"     1"     0.8       ▶ ◆ L84-44-NL     1"     1"     1.1       ◆ L84-66-NL     1-1/2"     1-1/2"     2.5       ◆ L84-77-NL     2"     2"     3.9       EIGHTH BEND COUPLINGS       LA84-33-NL     3/4"     3/4"     0.6	♦ C84-66-NL		1-1/2"	2.1	
ELL COUPLINGS       L84-11-Q-NL     1/2"     1/2"     0.6       ▶ ◆ L84-33-NL     3/4"     3/4"     0.8       ▶ L84-34-NL     3/4"     1"     0.8       ▶ ◆ L84-44-NL     1"     1"     1.1       ◆ L84-66-NL     1-1/2"     1-1/2"     2.5       ◆ L84-77-NL     2"     2"     3.9       EIGHTH BEND COUPLINGS       LA84-33-NL     3/4"     3/4"     0.6	C84-67-NL		2"		
L84-11-Q-NL     1/2"     1/2"     0.6       ▶ L84-33-NL     3/4"     3/4"     0.8       ▶ L84-34-NL     3/4"     1"     0.8       ▶ L84-44-NL     1"     1"     1.1       ◆ L84-66-NL     1-1/2"     1-1/2"     2.5       ◆ L84-77-NL     2"     2"     3.9       EIGHTH BEND COUPLINGS       LA84-33-NL     3/4"     0.6	♦ C84-77-NL	2"	2"	3.1	
▶ ◆ L84-33-NL       3/4"       3/4"       0.8         ▶ L84-34-NL       3/4"       1"       0.8         ▶ ◆ L84-44-NL       1"       1"       1.1         ◆ L84-66-NL       1-1/2"       1-1/2"       2.5         ◆ L84-77-NL       2"       2"       3.9         EIGHTH BEND COUPLINGS         LA84-33-NL       3/4"       3/4"       0.6					
▶ L84-34-NL       3/4"       1"       0.8         ▶ L84-44-NL       1"       1"       1.1         ◆ L84-66-NL       1-1/2"       1-1/2"       2.5         ◆ L84-77-NL       2"       2"       3.9         EIGHTH BEND COUPLINGS         LA84-33-NL       3/4"       3/4"       0.6					
► L84-44-NL 1" 1" 1.1  L84-66-NL 1-1/2" 1-1/2" 2.5  L84-77-NL 2" 2" 3.9  EIGHTH BEND COUPLINGS  LA84-33-NL 3/4" 3/4" 0.6	▶	3/4"		0.8	
◆ L84-66-NL       1-1/2"       1-1/2"       2.5         ◆ L84-77-NL       2"       2"       3.9         EIGHTH BEND COUPLINGS         LA84-33-NL       3/4"       3/4"       0.6	► L84-34-NL			0.8	
◆ L84-77-NL         2"         2"         3.9           EIGHTH BEND COUPLINGS           LA84-33-NL         3/4"         3/4"         0.6					
EIGHTH BEND COUPLINGS  LA84-33-NL 3/4" 3/4" 0.6					
<b>LA84-33-NL</b> 3/4" 0.6				3.9	
<b>LA84-44-NL</b> 1" 1" 0.8		3/4"			
	LA84-44-NL	1"	1"	0.8	

**Grip Joint** for CTS (3/4" - 2") is available. Add "-G" to the catalog number.

- ◆ Quick Joint is available. Add "-Q" to the catalog number.
- \* **Grip Joint** option is available on larger side (3/4" or 1"), pack joint nut on the other side.
- ▶ Ultra-Tite is available. Add "U-AWT" to the catalog number. (Consists of components assembled watertight.)
- **Ultra-Tite** is available. Add "-U" to the catalog number.
- Extended coupling length (4-3/4")
- † Uses Ballcorp style pack joint nut.

#### **Pack Joint for Copper or Plastic Tubing**

## Female Iron Pipe Thread to Pack Joint for Copper or Plastic Tubing (CTS)

CATALOG DESCRIPTION APPROX.					
CATALOG Number	FEMALE IRON PIPE	P.J. FOR CTS	APPROX. Wt. Lbs.		
			WI. LBS.		
STRAIGHT COUPLINGS					
◆ C14-11-NL	1/2"	1/2"	0.5		
C14-12-NL	1/2"	5/8"	0.5		
C14-13-NL	1/2"	3/4"	0.5		
C14-31-NL	3/4"	1/2"	0.6		
●◆ C14-33-NL	3/4"	3/4"	0.6		
●◆ C14-34-NL	3/4"	1"	0.7		
C14-35-NL	3/4"	1-1/4"	1.2		
► + C14-43-NL	1"	3/4"	0.7		
●◆ C14-44-NL	1"	1"	0.9		
C14-45-NL	1"	1-1/4"	1.2		
▶*◆ PJA4-44-C14-54-NL	1-1/4"	1"	0.9		
*◆ PJA4-45-C14-55-NL	1-1/4"	1-1/4"	1.4		
* PJA4-46-C14-56-NL	1-1/4"	1-1/2"	1.7		
+ C14-66-NL	1-1/2"	1-1/2"	2.3		
C14-67-NL	1-1/2"	2"	2.7		
C14-76-NL	2"	1-1/2"	2.8		
+ C14-77-NL	2"	2"	2.9		
◆ C14-87-NL	2-1/2"	2"	4.6		
C14-88-NL	2-1/2"	2-1/2"	5.4		
	ELL COUPLINGS				
L14-11-Q-NL	1/2"	1/2"	0.7		
▶ ♦ L14-33-NL	3/4"	3/4"	0.9		
▶♦ L14-43-NL	1"	3/4"	0.9		
▶♦ L14-44-NL	1"	1"	1.7		
♦ L14-54-NL	1-1/4"	1"	1.5		
♦ L14-66-NL	1-1/2"	1-1/2"	3.3		
♦ L14-77-NL	2"	2"	6.7		
EIGHTH BEND COUPLINGS					
♦ LA14-33-NL	3/4"	3/4"	0.8		
▶	1"	3/4"	0.7		
♦ LA14-44-NL	1"	1"	1.3		
► LA14-54-NL	1-1/4"	1"	1.1		
LA14-76-NL	2"	1-1/2"	2.8		
LA14-87-NL	2-1/2"	2"	5.2		



C14-44-Q-NL (shown with quick joint nut option)



#### Flare Copper to Pack Joint for Copper or Plastic Tubing (CTS)

· ····································	oomicioi ooppoi		( /	
CATALOG	DESCRIPT	DESCRIPTION		
Number	FLARE COPPER	P.J. FOR CTS	Wt. Lbs.	
	STRAIGHT COUPLING	GS		
► C24-13-NL	1/2"	3/4"	0.7	
► C24-33-NL	3/4"	3/4"	1.0	
► C24-34-NL	3/4"	1"	1.0	
► C24-44-NL	1"	1"	1.6	
C24-45-NL	1"	1-1/4"	1.9	
ELL COUPLINGS				
▶♦ L24-33-NL	3/4"	3/4"	1.1	
▶ ♦ L24-44-NL	1"	1"	1.5	

Grip Joint for CTS (3/4" - 2") is available. Add "-G" to the catalog number.

- ◆ Quick Joint is available. Add "-Q" to the catalog number.
- ► Ultra-Tite is available. Add "U-AWT" to the catalog number. (Consists of components assembled watertight.)
- Ultra-Tite is available. Add "-U" to the catalog number.
- \* Pack Joint compression assemblies also used with KH-4-NL Kornerhorns and 274 Series Coppersetters.

#### **Pack Joint for Copper or Plastic Tubing**



C04-44-NL

**Grip Joint** for CTS (3/4" - 2") is available. Add "-G" to the catalog number.

- ◆ Quick Joint is available. Add "-Q" to the catalog number.
- ► Ultra-Tite is available. Add "U2-AWT" to the catalog number. (Consists of components assembled watertight.)
- Ultra-Tite is available. Add "-U" to the catalog number.
- † Consists of two individual pieces assembled watertight.

## Female Copper Thread to Pack Joint for Copper or Plastic Tubing (CTS) (replaces flare nut)

	CATALOG	DESCRIP	APPROX.				
	Number	FEMALE COP. THREAD		Wt. Lbs.			
	STRAIGHT COUPLINGS						
	C04-23-NL	5/8"	3/4"	0.7			
•+	C04-33-NL	3/4"	3/4"	0.7			
•+	C04-34-NL	3/4"	1"	0.7			
<b>→</b>	C04-43-NL	1"	3/4"	1.0			
•+	C04-44-NL	1"	1"	1.0			
<b>*</b>	C04-45-NL	1"	1-1/4"	1.4			
<b>*</b>	C04-54-NL	1-1/4"	1"	1.1			
<b>*</b>	C04-55-NL	1-1/4"	1-1/4"	1.6			
<b>*</b>	C04-66-NL	1-1/2"	1-1/2"	2.5			
<b>*</b>	C04-77-NL	2"	2"	4.4			
		ELL COUPLING					
<b>&gt;</b> +		3/4"	3/4"	0.9			
	L04-34-NL	3/4"	1"	0.9			
<u> </u>	L04-44-NL	1"	1"	1.3			
	L04-45-NL	1"	1-1/4"	1.7			
	L04-66-NL	1-1/2"	1-1/2"	3.5			
	L04-77-NL	2"	2"	6.5			
		ELL COUPLINGS WITI					
<b>&gt;</b> +	L04-33S-NL	3/4"	3/4"	1.0			
<b>&gt;</b> +	L04-44S-NL	1"	1"	1.7			
<u> </u>	L04-66S-NL	1-1/2"	1-1/2"	3.8			
<u> </u>	L04-77S-NL	2"	2"	6.9			
		EIGHTH BEND COU					
<u> </u>	LA04-33-NL	3/4"	3/4"	0.7			
▶	LA04-44-NL	1"	1"	1.1			
	LA04-66-NL	1-1/2"	1-1/2"	2.6			
	LA04-77-NL	2"	2"	4.3			
	EIGH1	TH BEND COUPLINGS					
<b>&gt;</b> +	LA04-33S-NL	3/4"	3/4"	0.9			
▶_	LA04-44S-NL	1"	1"	1.2			
_‡	LA04-66S-NL	1-1/2"	1-1/2"	4.1			
土	LA04-77S-NL	2"	2"	6.5			

#### Pack Joint for Polyethylene Pipe (PEP)





C86-33-NL

#### Plastic Pipe (PEP) Both Ends

	CATALOG	DESCRIP	TION	APPROX.
	Number	P.J. FOR PEP	P.J. FOR PEP	Wt. Lbs.
		STRAIGHT COUP	LINGS	
•+	C66-33-NL	3/4"	3/4"	1.3
ightharpoons	C66-34-NL	3/4"	1"	1.5
•+	C66-44-NL	1"	1"	2.2
	C66-55-NL	1-1/4"	1-1/4"	2.7
	C66-66-IDR7-NL	1-1/2"	1-1/2"	4.6
	C66-77-IDR7-NL	2"	2"	6.8
		ELL COUPLING	GS	
<b>&gt;</b> +	L66-33-NL	3/4"	3/4"	1.4
ightharpoons	L66-44-NL	1"	1"	2.3
	L66-66-IDR7-NL	1-1/2"	1-1/2"	5.0
	L66-77-IDR7-NL	2"	2"	8.2

#### Male Iron Pipe Thread to Pack Joint for Polyethylene Pipe

	CATALOG	DESCRIP	TION	APPROX.	
	Number	MALE IRON PIPE	P.J. FOR PEP	Wt. Lbs.	
		STRAIGHT COUP	LINGS		
•+	C86-33-NL	3/4"	3/4"	0.8	
•+	C86-34-NL	3/4"	1"	1.3	
•+	C86-44-NL	1"	1"	1.4	
	C86-54-NL	1-1/4"	1"	1.5	
	C86-55-NL	1-1/4"	1-1/4"	1.6	
	C86-65-NL	1-1/2"	1-1/4"	1.8	
	C86-66-IDR7-NL	1-1/2"	1-1/2"	2.6	
	C86-77-IDR7-NL	2"	2"	5.0	
		ELL COUPLING	GS		
<b>•</b>	L86-33-NL	3/4"	3/4"	0.9	
<b>•</b>	L86-44-NL	1"	1"	1.5	
	L86-77-IDR7-NL	2"	2"	4.9	
	EIGHTH BEND COUPLINGS				
	LA86-44-NL	1"	1"	1.5	

Grip Joint for PEP (3/4" - 1") is available. Add "-G" to the catalog number.

- Quick Joint is available. Add "-Q" to the catalog number.
- ▶ Ultra-Tite is available. Add "U-AWT" to the catalog number. (Consists of components assembled watertight.)
- Ultra-Tite is available. Add "-U" to the catalog number.

#### Pack Joint for Polyethylene Pipe (PEP)

Female Iron Pipe Thread to Pack Joint for Polyethylene Pipe

CATALOG	DESCRIP	TION	APPROX.	
Number	FEMALE IRON PIPE	P.J. FOR PEP	Wt. Lbs.	
S	TRAIGHT COUPLING	S		
●◆ C16-33-NL	3/4"	3/4"	0.7	
• C16-34-NL	3/4"	1"	1.3	
●♦ C16-44-NL	1"	1"	1.2	
▶* PJA6-44-C16-54-NL	1-1/4"	1"	1.4	
* PJA6-45-C16-55-NL	1-1/4"	1-1/4"	1.5	
* PJA6-46-C16-56-IDR7-NL	1-1/4"	1-1/2"	2.6	
C16-65-NL	1-1/2"	1-1/4"	2.1	
C16-66-IDR7-NL	1-1/2"	1-1/2"	2.7	
C16-77-IDR7-NL	2"	2"	4.7	
ELL COUPLINGS				
► L16-33-NL	3/4"	3/4"	1.0	
► L16-44-NL	1"	1"	2.0	









Flare Copper to Pack Joint for Polyethylene Pipe

CATALOG	DESCRIP	DESCRIPTION		
Number	FLARE COPPER	P.J. FOR PE PIPE	WT. LBS.	
STRAIGHT COUPLINGS				
► C26-33-NL	3/4"	3/4"	1.0	
► C26-34-NL	3/4"	1"	1.7	
► C26-44-NL	1"	1"	1.9	

Female Copper Thread to Pack Joint for Polyethylene Pipe (replaces flare nut)

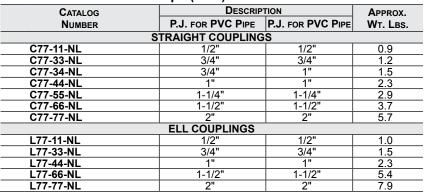
CATALOG	DESCRIP	TION	APPROX.	
Number	FEMALE COP. THRD	P.J. FOR PEP	Wt. Lbs.	
S	TRAIGHT COUPLING	S		
● C06-33-NL	3/4"	3/4"	0.8	
• C06-34-NL	3/4"	1"	1.3	
► C06-43-NL	1"	3/4"	1.0	
◆ C06-44-NL	1"	1"	1.4	
C06-45-NL	1"	1-1/4"	1.8	
C06-55-NL	1-1/4"	1-1/4"	1.8	
C06-66-IDR7-NL	1-1/2"	1-1/2"	3.0	
C06-77-IDR7-NL	2"	2"	5.2	
	ELL COUPLINGS			
► L06-33-NL	3/4"	3/4"	0.9	
► L06-44-NL	1"	1"	1.3	
EIGHTH BEND COUPLINGS				
► LA06-33-NL	3/4"	3/4"	0.9	
► LA06-44-NL	1"	1"	1.7	

Grip Joint for PEP (3/4" and 1") is available. Add "-G" to the catalog number.

- Quick Joint is available. Add "-Q" to the catalog number.
- ▶ Ultra-Tite is available. Add "U-AWT" to the catalog number. (Consists of components assembled watertight.)
- Ultra-Tite is available. Add "-U" to the catalog number.
- Pack Joint compression assemblies also used with KH-4-NL Kornerhorns and 274 Series Coppersetters.

#### Pack Joint for Polyvinyl Chloride Pipe (PVC)

#### **PVC Pipe (PVC) Both Ends**





## Pack Joint for Polyvinyl Chloride Pipe (PVC)



C87-33-NL







#### Male Iron Pipe Thread to Pack Joint for PVC Pipe

CATALOG	Descri	DESCRIPTION		
Number	MALE IRON PIPE	P.J. FOR PVC PIPE	Wt. Lbs.	
	STRAIGHT COUPL	INGS		
C87-11-NL	1/2"	1/2"	0.6	
C87-31-NL	3/4"	1/2"	0.6	
C87-33-NL	3/4"	3/4"	8.0	
■ C87-33-4-75-NL	3/4"	3/4"	1.2	
C87-34-NL	3/4"	1"	1.2	
C87-43-NL	1"	3/4"	0.9	
C87-44-NL	1"	1"	1.4	
C87-45-NL	1"	1-1/4"	1.7	
C87-46-NL	1"	1-1/2"	2.2	
C87-47-NL	1"	2"	2.6	
C87-54-NL	1-1/4"	1"	1.4	
C87-55-NL	1-1/4"	1-1/4"	1.7	
C87-65-NL	1-1/2"	1-1/4"	2.1	
C87-66-NL	1-1/2"	1-1/2"	2.4	
C87-77-NL	2"	2"	3.7	
ELL COUPLINGS				
L87-31-NL	3/4"	1/2"	0.8	
L87-33-NL	3/4"	3/4"	0.9	
L87-34-NL	3/4"	1"	1.5	
L87-44-NL	1"	1"	1.5	
L87-77-NL	2"	2"	5.1	

<sup>■</sup> Extended coupling length (4-3/4")

#### Female Iron Pipe Thread to Pack Joint for PVC Pipe

	po imoda to i de		
CATALOG	Descri	PTION	APPROX.
Number	FEMALE IRON PIPE	P.J. FOR PVC PIPE	Wt. Lbs.
	STRAIGHT COUPL	INGS	
C17-31-NL	3/4"	1/2"	0.5
C17-33-NL	3/4"	3/4"	0.7
C17-34-NL	3/4"	1"	1.2
C17-36-NL	3/4"	1-1/2"	2.0
C17-44-NL	1"	1"	2.1
* PJA7-44-C17-54-NL	1-1/4"	1"	1.4
* PJA7-45-C17-55-NL	1-1/4"	1-1/4"	1.6
* PJA7-46-C17-56-NL	1-1/4"	1-1/2"	2.4
C17-66-NL	1-1/2"	1-1/2"	2.6
C17-77-NL	2"	2"	4.5
ELL COUPLINGS			
L17-31-NL	3/4"	1/2"	1.0
L17-33-NL	3/4"	3/4"	1.0
L17-44-NL	1"	1"	2.0
L17-66-NL	1-1/2"	1-1/2"	3.8

<sup>\*</sup> Pack Joint compression assemblies also used with KH-4-NL Kornerhorns and 274 Series Coppersetters.

#### Flare Copper to Pack Joint for PVC Pipe

CATALOG	DESCRI	PTION	APPROX.	
Number	FLARE COPPER	P.J. FOR PVC PIPE	WT. LBS.	
STRAIGHT COUPLINGS				
C27-31-NL	3/4"	1/2"	1.0	
C27-33-NL	3/4"	3/4"	1.1	
C27-34-NL	3/4"	1"	1.6	
C27-44-NL	1"	1"	1.9	
ELL COUPLINGS				
L27-31-NL	3/4"	1/2"	1.1	

## Female Copper Thread to Pack Joint for PVC Pipe (Replaces Flare Nut)

CATALOG	DESCRI	PTION	APPROX.
Number	FEMALE COP. THRD.	P.J. FOR PVC PIPE	Wt. Lbs.
	STRAIGHT COUPL	INGS	
C07-11-NL	1/2"	1/2"	0.7
C07-13-NL	1/2"	3/4"	0.7
C07-33-NL	3/4"	3/4"	8.0
C07-34-NL	3/4"	1"	1.3
C07-44-NL	1"	1"	1.4
C07-54-NL	1-1/4"	1"	1.6
C07-55-NL	1-1/4"	1-1/4"	1.9
C07-66-NL	1-1/2"	1-1/2"	3.0
C07-77-NL	2"	2"	4.7

**Note:** Ford Pack Joints for PVC are recommended for schedule 40 and schedule 80 pipe only.

#### **Pack Joint for Iron Pipe**

#### Pack Joint for Iron Pipe (both ends)



i ack boilt for front tipe (both ends)					
CATALOG	Descri	PTION	APPROX.		
Number	P.J. FOR IRON PIPE	P.J. FOR IRON PIPE	WT. LBS.		
	STRAIGHT COUPL	INGS			
C55-11-NL	1/2"	1/2"	0.8		
C55-13-NL	1/2"	3/4"	0.8		
C55-33-NL	3/4"	3/4"	0.9		
C55-34-NL	3/4"	1"	1.1		
C55-44-NL	1"	1"	1.6		
C55-55-NL	1-1/4"	1-1/4"	2.2		
C55-66-NL	1-1/2"	1-1/2"	2.9		
C55-77-NL	2"	2"	4.2		
	ELL COUPLING	iS			
L55-11-NL	1/2"	1/2"	0.9		
L55-33-NL	3/4"	3/4"	1.2		
L55-44-NL	1"	1"	1.7		
L55-77-NL	2"	2"	6.5		

#### Male Iron Pipe Thread to Pack Joint for Iron Pipe

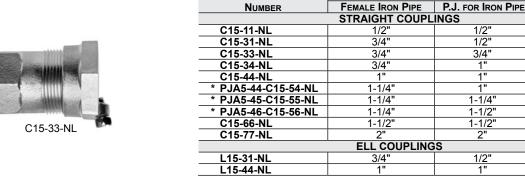


maio non i po imoda to i don come io non i po						
CATALOG	CATALOG DESCRIPTION					
Number	MALE IRON PIPE	P.J. FOR IRON PIPE	WT. LBS.			
	STRAIGHT COUPL	INGS				
C85-11-NL	1/2"	1/2"	0.5			
C85-31-NL	3/4"	1/2"	0.6			
C85-33-NL	3/4"	3/4"	0.6			
■ C85-33-4-75-NL	3/4"	3/4"	1.2			
C85-34-NL	3/4"	1"	1.0			
C85-43-NL	1"	3/4"	0.7			
C85-44-NL	1"	1"	1.1			
C85-55-NL	1-1/4"	1-1/4"	1.3			
C85-66-NL	1-1/2"	1-1/2"	1.9			
C85-77-NL	2"	2"	2.7			
	ELL COUPLING	SS				
L85-31-NL	3/4"	1/2"	0.5			
L85-33-NL	3/4"	3/4"	0.7			
L85-44-NL	1"	1"	1.2			
	=					

<sup>■</sup> Extended coupling length (4-3/4")

#### Female Iron Pipe Thread to Pack Joint for Iron Pipe

**DESCRIPTION** 



CATALOG



APPROX.

WT. LBS.

0.4

0.5

0.6

0.9

0.9

1.3

1.8

2.2 3.4

0.8

1.7

<sup>\*</sup> Pack Joint compression assemblies also used with KH-4-NL Kornerhorns and 274 Series Coppersetters.

#### **Pack Joint for Iron Pipe**





#### Flare Copper to Pack Joint for Iron Pipe

CATALOG	Descri	PTION APPROX.		
Number	FLARE COPPER	P.J. FOR IRON PIPE	WT. LBS.	
	STRAIGHT CO	UPLINGS		
C25-11-NL	1/2"	1/2"	0.6	
C25-31-NL	3/4"	1/2"	0.9	
C25-33-NL	3/4"	3/4"	0.9	
C25-34-NL	3/4"	1"	1.3	
C25-44-NL	1"	1"	1.6	
C25-45-NL	1"	1-1/4"	1.8	
	ELL COUPL	INGS		
L25-33-NL	3/4"	3/4"	1.0	

## Female Copper Thread to Pack Joint for Iron Pipe (replaces flare nut)

(ropiacco naro nat)					
CATALOG	Descri	PTION	APPROX.		
Number	FEMALE COP. THRD.	P.J. FOR IRON PIPE	Wt. Lbs.		
	STRAIGHT COUPLINGS				
C05-33-NL	3/4"	3/4"	0.6		
C05-44-NL	1"	1"	1.2		
C05-55-NL	1-1/4"	1-1/4"	1.5		
C05-66-NL	1-1/2"	1-1/2"	2.5		
C05-77-NL	2"	2"	3.7		

#### Pack Joint by Pack Joint For Connecting Dissimilar Types of Pipe and Tubing





## Pack Joint for Copper or Plastic Tubing (CTS) to Plastic Pipe (PEP)

	to i lastic i ipe (i Li )					
CATALOG	Descri	PTION	APPROX.			
Number	P.J. FOR CTS	P.J. FOR PE PIPE	Wt. Lbs.			
	STRAIGHT CO	UPLINGS				
▶ ♦ C46-33-NL	3/4"	3/4"	1.0			
► C46-34-NL	3/4"	1"	1.7			
▶ ♦ C46-43-NL	1"	3/4"	1.2			
► ◆ C46-44-NL	1"	1"	1.5			
C46-65-NL	1-1/2"	1-1/4"	3.1			
ELL COUPLINGS						
► L46-33-NL	3/4"	3/4"	1.2			
► L46-44-NL	1"	1"	1.9			

**Grip Joint** for CTS or PEP (3/4" and 1" only) is available. Add "-G" to the catalog number.

◆ Quick Joint is available. Add "-Q" to the catalog number.

## Pack Joint for Copper or Plastic Tubing (CTS) to PVC Pipe (PVC)

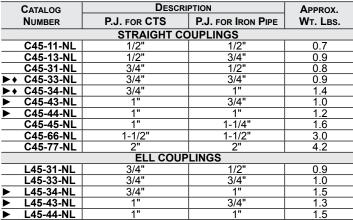
to PVC Pipe (PVC)				
CATALOG	Descri	PTION	APPROX.	
Number	P.J. FOR CTS	P.J. FOR PVC PIPE	Wt. Lbs.	
	STRAIGHT CO	UPLINGS		
C47-11-NL	1/2"	1/2"	0.8	
C47-31-NL	3/4"	1/2"	0.9	
▶♦ C47-33-NL	3/4"	3/4"	1.0	
▶♦ C47-34-NL	3/4"	1"	1.6	
► C47-43-NL	1"	3/4"	1.1	
► C47-44-NL	1"	1"	1.6	
C47-45-NL	1"	1-1/4"	2.2	
C47-66-NL	1-1/2"	1-1/2"	3.3	
C47-77-NL	2"	2"	5.0	
	ELL COUP	LINGS		
► L47-33-NL	3/4"	3/4"	1.8	
► L47-34-NL	3/4"	1"	1.8	
► L47-44-NL	1"	1"	1.9	

**Grip Joint** for CTS is available. Add "-G" to the catalog number.

- Quick Joint for CTS end is available. Add "-Q" to the catalog number.
- ► Ultra-Tite is available. Add "U-AWT" to the catalog number. (Consists of components assembled watertight.)

#### Pack Joint by Pack Joint Couplings and "Y's"





**Grip Joint** for CTS (3/4" - 2") is available. Add "-G" to the catalog number.

◆ Quick Joint for CTS end is available. Add "-Q" to the catalog number.

#### Pack Joint for Iron Pipe to Plastic Pipe (PEP)

	CATALOG	DESCRI	DESCRIPTION APPR	
Number		P.J. FOR IRON PIPE	P.J. FOR IRON PIPE P.J. FOR PE PIPE	
		STRAIGHT CO	OUPLINGS	
<b></b>	C56-33-NL	3/4"	3/4"	1.0
ightharpoons	C56-34-NL	3/4"	1"	1.4
<b></b>	C56-44-NL	1"	1"	1.9

**Grip Joint** for PEP (3/4" and 1") is available. Add "-G" to the catalog number.

#### Pack Joint for Iron Pipe to PVC Pipe (PVC)

CATALOG	DESCRIPTION APPROX		APPROX.	
Number	P.J. FOR IRON PIPE	P.J. FOR PVC PIPE	Wt. Lbs.	
	STRAIGHT CO	UPLINGS		
C57-11-NL	1/2"	1/2"	0.9	
C57-33-NL	3/4"	3/4"	1.0	
C57-34-NL	3/4"	1"	1.4	
C57-44-NL	1"	1"	1.9	
C57-66-NL	1-1/2"	1-1/2"	3.4	
C57-77-NL	2"	2"	5.2	

Note: Ford Pack Joints for PVC are recommended for schedule 40 and schedule 80 pipe only.

#### Pack Joint for PE Pipe to PVC Pipe (PVC)

	CATALOG	Descri	RIPTION APPROX			
	NUMBER	WT. LBS.				
	STRAIGHT COUPLINGS					
<b></b>	C67-33-NL	3/4"	3/4"	1.2		
▶	C67-44-NL	1"	1"	2.2		

Grip Joint for PEP (3/4" and 1") is available. Add "-G" to the catalog number.Note: Ford Pack Joints for PVC are recommended for schedule 40 and schedule 80 pipe only.

#### Pack Joint "Y's"

	CATALOG	Des	CRIPTION	APPROX.
	Number	SINGLE BRANCH END	Multi-Branch End	WT. LBS.
•	Y44-233-NL	3/4" cop. or plastic tubing (CTS)	Two 3/4" cop. or plastic tubing (CTS)	1.6
• +	Y44-243-NL	1" cop. or plastic tubing (CTS)	Two 3/4" cop. or plastic tubing (CTS)	1.6
•	Y44-244-NL	1" cop. or plastic tubing (CTS)	Two 1" cop. or plastic tubing (CTS)	2.5
	Y44-254-NL	1-1/4" cop. or plastic tubing (CTS)	Two 1" cop. or plastic tubing (CTS)	3.1
•	Y44-263-NL	1-1/2" cop. or plastic tubing (CTS)	Two 3/4" cop. or plastic tubing (CTS)	3.2
•	Y44-264-NL	1-1/2" cop. or plastic tubing (CTS)	Two 1" cop. or plastic tubing (CTS)	3.6
	Y44-274-NL	2" cop. or plastic tubing (CTS)	Two 1" cop. or plastic tubing (CTS)	4.1
•	Y48-234-NL	1" male iron pipe thread	Two 3/4" cop. or plastic tubing (CTS)	1.3
	Y48-246-NL	1-1/2" male iron pipe thread	Two 1" cop. or plastic tubing (CTS)	2.4
	Y48-347-NL	2" male iron pipe thread	Three 1" cop. or plastic tubing (CTS)	4.6
▶	Y66-243-NL	1" PE pipe P.J.	Two 3/4" PE pipe P.J.	3.1
	Y68-337-NL	2" male iron pipe thread	Three 3/4" PE pipe P.J.	4.7
<u> </u>				

Grip Joint for CTS or PEP (3/4" and 1") is available. Add "-G" to the catalog number.

- Quick Joint is available. Add "-Q" to the catalog number.
- ▶ Ultra-Tite is available. Add "U-AWT" to the catalog number. (Consists of components assembled watertight.)
- **Ultra-Tite** is available. Add "-U" to the catalog number.









#### **Pack Joint Tees**







T884-333-NL

#### **Pack Joint Tees**

Number   PACK JOINT BOTH ENDS (RUN)   X   Side OUTLET   WT. LBS.		Pack Joint Te	ees						
T444-111-NL	CATALOG	Des	CRIPTIC	ON	APPROX.				
T444-911-NL 1/2° cop. or plastic tubing (CTS) x 3/4° cop. or plastic tubing (CTS) 1.5  • T444-33-NL 3/4° cop. or plastic tubing (CTS) x 3/4° cop. or plastic tubing (CTS) 1.5  • T444-33-NL 3/4° cop. or plastic tubing (CTS) x 1° cop. or plastic tubing (CTS) 1.9  • T444-33-NL 12° cop. or plastic tubing (CTS) x 1° cop. or plastic tubing (CTS) 3.1  • T444-43-NL 11° cop. or plastic tubing (CTS) x 3/4° cop. or plastic tubing (CTS) 1.8  • T444-44-NL 11° cop. or plastic tubing (CTS) x 1° cop. or plastic tubing (CTS) 2.0  • T444-44-NL 11° cop. or plastic tubing (CTS) x 1° cop. or plastic tubing (CTS) 2.0  • T444-46-NL 11° cop. or plastic tubing (CTS) x 1° cop. or plastic tubing (CTS) 2.5  • T444-46-NL 11° cop. or plastic tubing (CTS) x 1° cop. or plastic tubing (CTS) 3.0  • T444-66-NL 11° cop. or plastic tubing (CTS) x 1° cop. or plastic tubing (CTS) 3.0  • T444-66-NL 11° cop. or plastic tubing (CTS) x 1° cop. or plastic tubing (CTS) 4.1  • T444-66-NL 11° cop. or plastic tubing (CTS) x 1° cop. or plastic tubing (CTS) 4.9  • T444-77-NL 11° cop. or plastic tubing (CTS) x 1° cop. or plastic tubing (CTS) 4.9  • T444-77-NL 2° cop. or plastic tubing (CTS) x 1° cop. or plastic tubing (CTS) 5.9  • T444-77-NL 2° cop. or plastic tubing (CTS) x 1° cop. or plastic tubing (CTS) 5.9  • T444-77-NL 2° cop. or plastic tubing (CTS) x 1° cop. or plastic tubing (CTS) 5.9  • T444-77-NL 10° cop. or plastic tubing (CTS) x 1° cop. or plastic tubing (CTS) 5.9  • T444-77-NL 10° cop. or plastic tubing (CTS) x 1° cop. or plastic tubing (CTS) 5.9  • T444-77-NL 2° cop. or plastic tubing (CTS) x 1° cop. or plastic tubing (CTS) 13.6  • T446-44-NL 11° cop. or plastic tubing (CTS) x 1° cop. or plastic tubing (CTS) 13.6  • T446-44-NL 11° cop. or plastic tubing (CTS) x 1° cop. or plastic tubing (CTS) 13.6  • T446-44-NL 11° cop. or plastic tubing (CTS) x 1° cop. or plastic tubing (CTS) 13.6  • T446-44-NL 11° cop. or plastic tubing (CTS) x 1° cop. or plastic tubing (CTS) 13.6  • T446-44-NL 11° cop. or plastic tubing (CTS) x 1° cop. or plastic tubing (CTS) x					Wt. Lbs.				
▶ ↑ T444-33-NL         3/4" cop. or plastic tubing (CTS)         x         3/4" cop. or plastic tubing (CTS)         1.5           ↑ T444-33-NL         3/4" cop. or plastic tubing (CTS)         x         1" cop. or plastic tubing (CTS)         3.1           ↑ T444-33-NL         1" cop. or plastic tubing (CTS)         x         3.4" cop. or plastic tubing (CTS)         3.3" cop. or plastic tubing (CTS)         1.8           ▶ ↑ T444-443-NL         1" cop. or plastic tubing (CTS)         x         3.4" cop. or plastic tubing (CTS)         2.0           ↑ T444-445-NL         1" cop. or plastic tubing (CTS)         x         1" cop. or plastic tubing (CTS)         2.5           ↑ T444-465-NL         1" cop. or plastic tubing (CTS)         x         1-1/2" cop. or plastic tubing (CTS)         x         1-1/2" cop. or plastic tubing (CTS)         3.0           • ↑ T444-663-AWT-NL         1-1/2" cop. or plastic tubing (CTS)         x         1" cop. or plastic tubing (CTS)         4.9         4.9           • ↑ T444-773-AWT-NL         2" cop. or plastic tubing (CTS)         x         3" cop. or plastic tubing (CTS)         3.3" cop. or plastic tubing (CTS)         5.6         4.4           • ↑ T444-374-NL         2" cop. or plastic tubing (CTS)         x         3" cop. or plastic tubing (CTS)         5.6         4.7         4.4         4.7         4.9         4.9	PACK JOINT BOTH ENDS (RUN) BY PACK JOINT SIDE OUTLET								
▶ ↑ T444-33A-NL         3/4" cop. or plastic tubing (CTS)         x 1" cop. or plastic tubing (CTS)         3.1           ↑ T444-33A-NL         3/4" cop. or plastic tubing (CTS)         x 3/4" cop. or plastic tubing (CTS)         3.1           ▶ ↑ T444-443-NL         1" cop. or plastic tubing (CTS)         x 3/4" cop. or plastic tubing (CTS)         1.8           ▶ ↑ T444-444-NL         1" cop. or plastic tubing (CTS)         x 1-1/4" cop. or plastic tubing (CTS)         2.0           ↑ T444-445-NL         1" cop. or plastic tubing (CTS)         x 1-1/4" cop. or plastic tubing (CTS)         2.5           ↑ T444-465-NL         1" cop. or plastic tubing (CTS)         x 1-1/4" cop. or plastic tubing (CTS)         3.0           ↑ T444-665-NL         1-1/2" cop. or plastic tubing (CTS)         x 3/4" cop. or plastic tubing (CTS)         4.1           ↑ T444-73-AWT-NL         1-1/2" cop. or plastic tubing (CTS)         x 2" cop. or plastic tubing (CTS)         4.1           ↑ T444-77-NL         2" cop. or plastic tubing (CTS)         x 1" cop. or plastic tubing (CTS)         5.9           ↑ T444-77-NL         2" cop. or plastic tubing (CTS)         x 1" cop. or plastic tubing (CTS)         5.2           ↑ T444-77-NL         2" cop. or plastic tubing (CTS)         x 1" PE pipe P.J.         3.0           ↑ T444-77-NL         2" cop. or plastic tubing (CTS)         x 1" PE pipe P.J.         3.0 <th>T444-111-NL</th> <th>1/2" cop. or plastic tubing (CTS)</th> <th>Х</th> <th>1/2" cop. or plastic tubing (CTS)</th> <th>1.2</th>	T444-111-NL	1/2" cop. or plastic tubing (CTS)	Х	1/2" cop. or plastic tubing (CTS)	1.2				
* T444-39-NL	▶ ♦ T444-333-NL		X	3/4" cop. or plastic tubing (CTS)	1.5				
▶ ↑ 7444-44N.L         1" cop. or plastic tubling (CTS)         x         3/4" cop. or plastic tubling (CTS)         2.0           ▶ ↑ 7444-44N.L         1" cop. or plastic tubling (CTS)         x         1 cop. or plastic tubling (CTS)         2.5           7444-445-NL         1" cop. or plastic tubling (CTS)         x         1 -1/4" cop. or plastic tubling (CTS)         2.5           * ↑ 7444-465-NL         1" cop. or plastic tubling (CTS)         x         1 -1/2" cop. or plastic tubling (CTS)         x         1 -1/2" cop. or plastic tubling (CTS)         x         1 -1/2" cop. or plastic tubling (CTS)         4 -1/2" cop. or plastic tubling (CTS)         4 -1/2" cop. or plastic tubling (CTS)         4 -9         <	▶ ♦ T444-334-NL	3/4" cop. or plastic tubing (CTS)	X	1" cop. or plastic tubing (CTS)	1.9				
▶ ↑ T444-444-NI.         1" cop. or plastic tubing (CTS)         x         1.1 cop. or plastic tubing (CTS)         2.0           7444-445-NI.         1" cop. or plastic tubing (CTS)         x         1.1/4" cop. or plastic tubing (CTS)         2.5           7444-466-NI.         1" cop. or plastic tubing (CTS)         x         1.1/2" cop. or plastic tubing (CTS)         3.0           * 7444-668-NI.         1-1/2" cop. or plastic tubing (CTS)         x         3/4" cop. or plastic tubing (CTS)         4.1           7444-668-NI.         1-1/2" cop. or plastic tubing (CTS)         x         3/4" cop. or plastic tubing (CTS)         4.9           * 7444-773-AWT-NI.         2" cop. or plastic tubing (CTS)         x         2" cop. or plastic tubing (CTS)         5.9           * 7444-773-AWT-NI.         2" cop. or plastic tubing (CTS)         x         2" cop. or plastic tubing (CTS)         5.9           * 7444-774-NI.         2" cop. or plastic tubing (CTS)         x         1" cop. or plastic tubing (CTS)         x         1" cop. or plastic tubing (CTS)         3.0           * 7446-444-NI.         1" cop. or plastic tubing (CTS)         x         1" PE pipe P.J.         2.5           * 7446-444-NI.         1" cop. or plastic tubing (CTS)         x         1-1/4" PE pipe P.J.         2.5           * 7466-333-NI.         3/4" PE pipe P.J.	* T444-336-AWT-NL	3/4" cop. or plastic tubing (CTS)	X	1-1/2" cop. or plastic tubing (CTS)	3.1				
T444.446.NL         1" cop. or plastic tubling (CTS)         x         1.1/4" cop. or plastic tubing (CTS)         3.0           * 7444.466.NL         1" cop. or plastic tubing (CTS)         x         1.1/2" cop. or plastic tubing (CTS)         3.0           * 7444.663.AWT-NL         1-1/2" cop. or plastic tubing (CTS)         x         3.4" cop. or plastic tubing (CTS)         4.1           * 7444.666.NL         1-1/2" cop. or plastic tubing (CTS)         x         3.4" cop. or plastic tubing (CTS)         4.9           * 7444.773.AWT-NL         1-1/2" cop. or plastic tubing (CTS)         x         3.4" cop. or plastic tubing (CTS)         5.9           * 7444.774.NL         2" cop. or plastic tubing (CTS)         x         3.4" cop. or plastic tubing (CTS)         5.9           * 7444.774.NL         2" cop. or plastic tubing (CTS)         x         2" cop. or plastic tubing (CTS)         5.9           * 7444.774.NL         2" cop. or plastic tubing (CTS)         x         1" PE pipe P.J.         2.5           * 7444.474.NL         1" cop. or plastic tubing (CTS)         x         1" PE pipe P.J.         3.0           * 7444.644.NL         1" cop. or plastic tubing (CTS)         x         1" PE pipe P.J.	▶ ♦ T444-443-NL	1" cop. or plastic tubing (CTS)	Х	3/4" cop. or plastic tubing (CTS)	1.8				
T444.466.NL         1" cop. or plastic tubing (CTS)         x 1-1/2" cop. or plastic tubing (CTS)         x 1.1/2" cop. or plastic tubing (CTS)         4.1           T444.666.NL         1.1/2" cop. or plastic tubing (CTS)         x 1.1/2" cop. or plastic tubing (CTS)         x 2" cop. or plastic tubing (CTS)         16.5           * T444.773.AWT-NL         2" cop. or plastic tubing (CTS)         x 3/4" cop. or plastic tubing (CTS)         5.9           * T444.773.AWT-NL         2" cop. or plastic tubing (CTS)         x 2" cop. or plastic tubing (CTS)         5.9           * T444.774.NL         2" cop. or plastic tubing (CTS)         x 2" cop. or plastic tubing (CTS)         6.2           * T444.474.NL         1" cop. or plastic tubing (CTS)         x 1" PE pipe P.J.         2.5           * T446.444.NL         1" cop. or plastic tubing (CTS)         x 1.1/4" PE pipe P.J.         3.0           * T666.333.NL         3/4" PE pipe P.J.         x 3/4" PE pipe P.J.         2.0           * T666.334.NL         3/4" PE pipe P.J.         x 3/4" PE pipe P.J.         3.0           * T666.334.NL         1" PE pipe P.J.         x 1" PE pipe P.J.         3.0           * T666.343.NL         1" PE pipe P.J.         x 1" PE pipe P.J.         3.0 <td< th=""><th>► ♦ T444-444-NL</th><th></th><th>Х</th><th>1" cop. or plastic tubing (CTS)</th><th>2.0</th></td<>	► ♦ T444-444-NL		Х	1" cop. or plastic tubing (CTS)	2.0				
* ↑ T444-663-AWT-NL         1-1/2" cop. or plastic tubing (CTS)         x 3/4" cop. or plastic tubing (CTS)         4.1           T444-666-NL         1-1/2" cop. or plastic tubing (CTS)         x 1-1/2" cop. or plastic tubing (CTS)         4.9           * T444-667-AWT-NL         1-1/2" cop. or plastic tubing (CTS)         x 2" cop. or plastic tubing (CTS)         5.9           * T444-773-AWT-NL         2" cop. or plastic tubing (CTS)         x 3/4" cop. or plastic tubing (CTS)         5.9           * T444-774-NL         2" cop. or plastic tubing (CTS)         x 2" cop. or plastic tubing (CTS)         5.9           * T444-774-NL         2" cop. or plastic tubing (CTS)         x 2" cop. or plastic tubing (CTS)         13.6           * T444-774-NL         2" cop. or plastic tubing (CTS)         x 1" cop. or plastic tubing (CTS)         13.6           * T444-44-774-NL         1" cop. or plastic tubing (CTS)         x 1" PE pipe P.J.         2.5           * T444-44-NL         1" cop. or plastic tubing (CTS)         x 1" 1/4" PE pipe P.J.         2.5           * T446-445-NL         1" cop. or plastic tubing (CTS)         x 1" 1/4" PE pipe P.J.         2.5           * T666-334-NL         3/4" PE pipe P.J.         x 3/4" PE pipe P.J.         2.5           * T666-433-NL         3/4" PV pipe P.J.         x 3/4" PV pipe P.J.         3.7           * T777-11-NL <t< th=""><th>T444-445-NL</th><th></th><th>Х</th><th></th><th></th></t<>	T444-445-NL		Х						
T444-666.NL         1-1/2" cop. or plastic tubing (CTS)         x 1-1/2" cop. or plastic tubing (CTS)         x 2" cop. or plastic tubing (CTS)         4.9           * T444-667-AWT-NL         1-1/2" cop. or plastic tubing (CTS)         x 2" cop. or plastic tubing (CTS)         5.9           * T444-773-AWT-NL         2" cop. or plastic tubing (CTS)         x 3/4" cop. or plastic tubing (CTS)         5.9           * T444-774-NL         2" cop. or plastic tubing (CTS)         x 1" cop. or plastic tubing (CTS)         6.2           * T444-777-NL         2" cop. or plastic tubing (CTS)         x 2" cop. or plastic tubing (CTS)         13.6           T446-444-NL         1" cop. or plastic tubing (CTS)         x 3/4" PE pipe P.J.         2.5           T446-444-NL         1" cop. or plastic tubing (CTS)         x 3/4" PE pipe P.J.         3.0           ▶ T666-333-NL         3/4" PE pipe P.J.         x 3/4" PE pipe P.J.         2.0           ▶ T666-444-NL         1" PE pipe P.J.         x 1" PE pipe P.J.         3.0           ▶ T666-444-NL         1" PE pipe P.J.         x 1/2" PVC pipe P.J.         3.7           * T777-333-NL         3/4" PVC pipe P.J.         x 1/2" PVC pipe P.J.         3.8           * T777-333-NL         3/4" PVC pipe P.J.         x 3/4" PVC pipe P.J.         3.3           * T777-444-NL         1" PVC pipe P.J.         x 3/4"			X						
* T444-667-AWT-NL  * 1-1/2" cop. or plastic tubing (CTS)  * 1444-773-AWT-NL  * 2" cop. or plastic tubing (CTS)  * 1444-773-AWT-NL  * 2" cop. or plastic tubing (CTS)  * 1444-774-NL  * 2" cop. or plastic tubing (CTS)  * 1" EP pipe P.J.  * 2.5  * 1444-478-NL  * 1" cop. or plastic tubing (CTS)  * 1" EP pipe P.J.  * 3.0  * 3.0  * 1" EP pipe P.J.  * 3.0  * 3.0  * 1" EP pipe P.J.  * 3.0  * 3.0  * 1" EP pipe P.J.  * 3.0  * 3.0  * 1" EP pipe P.J.  * 3.0  * 3.0  * 1" EP pipe P.J.  * 3.0  * 3.0  * 1" EP pipe P.J.  * 3.0  * 3.0  * 1" EP pipe P.J.  * 3.0  * 3.0  * 1" EP pipe P.J.  * 3.0  * 3.0  * 1" EP pipe P.J.  * 3.0  * 3.0  * 1" EP pipe P.J.  * 3.0  * 3.0  * 1" EP pi			X	31					
* T444-773-AWT-NL 2" cop. or plastic tubing (CTS) x 3/4" cop. or plastic tubing (CTS) 5.9  * T444-774-NL 2" cop. or plastic tubing (CTS) x 1" cop. or plastic tubing (CTS) 13.6  * T444-774-NL 2" cop. or plastic tubing (CTS) x 2" cop. or plastic tubing (CTS) 13.6  * T446-444-NL 1" cop. or plastic tubing (CTS) x 2" cop. or plastic tubing (CTS) 13.6  * T446-444-NL 1" cop. or plastic tubing (CTS) x 1" PE pipe P.J. 2.5  * T446-445-NL 1" cop. or plastic tubing (CTS) x 1.11/PE pipe P.J. 3.0  * T666-333-NL 3/4" PE pipe P.J. x 3/4" PE pipe P.J. 2.0  * T666-333-NL 3/4" PE pipe P.J. x 1" PE pipe P.J. 2.5  * T666-443-NL 1" PE pipe P.J. x 1" PE pipe P.J. 3.0  * T666-443-NL 1" PE pipe P.J. x 1" PE pipe P.J. 3.0  * T666-444-NL 1" PE pipe P.J. x 1" PE pipe P.J. 3.7  * T777-111-NL 12" PVC pipe P.J. x 12" PVC pipe P.J. 3.7  * T777-111-NL 12" PVC pipe P.J. x 12" PVC pipe P.J. 3.8  * T777-33-NL 3/4" PVC pipe P.J. x 1" PVC pipe P.J. 3.8  * T777-33-NL 1" PVC pipe P.J. x 3/4" PVC pipe P.J. x 3/4" PVC pipe P.J. 3.3  * T777-443-AWT-NL 1" PVC pipe P.J. x 1" PVC pipe P.J. 3.3  * T777-444-NL 1" PVC pipe P.J. x 1" PVC pipe P.J. 3.8  * T777-33-NL 1" PVC pipe P.J. x 1" PVC pipe P.J. 3.8  * T777-33-NL 1" PVC pipe P.J. x 1" PVC pipe P.J. 3.8  * T777-343-AWT-NL 1" PVC pipe P.J. x 1" PVC pipe P.J. 3.8  * T777-343-NL 1" PVC pipe P.J. x 1" PVC pipe P.J. 3.8  * T777-344-NL 1" PVC pipe P.J. x 1" PVC pipe P.J. 3.8  * T777-7-NL 2" PVC pipe P.J. x 1" PVC pipe P.J. 12.2  * PACK JOINT BOTH ENDS (RUN) BY FIP SIDE OUTLET  * * T441-334-NL 1" PVC pipe P.J. x 1" Female iron pipe 1.2  * * T441-334-NL 1" PVC pipe P.J. x 1" Female iron pipe 1.3  * T441-77-NL 2" cop. or plastic tubing (CTS) x 1" Female iron pipe 1.3  * T441-77-NL 2" cop. or plastic tubing (CTS) x 1" Female iron pipe 1.3  * T661-774-IDR7-AWT-NL 2" cop. or plastic tubing (CTS) x 1" Female iron pipe 1.2  * T441-664-NL 1-1/2" cop. or plastic tubing (CTS) x 3/4" female iron pipe 1.2  * T444-664-NL 1-1/2" cop. or plastic tubing (CTS) x 3/4" female iron pipe 1.2  * T448-333-NL 3/4" cop. or plastic tubin			X						
+ T444-774-NL         2" cop. or plastic tubing (CTS)         x         1" cop. or plastic tubing (CTS)         1.36           † + T444-777-NL         2" cop. or plastic tubing (CTS)         x         2" cop. or plastic tubing (CTS)         x         1" PE pipe P.J.         2.5           T446-444-NL         1" cop. or plastic tubing (CTS)         x         1-1/4" PE pipe P.J.         2.5           T446-445-NL         1" cop. or plastic tubing (CTS)         x         1-1/4" PE pipe P.J.         3.0           ▶ T666-333-NL         3/4" PE pipe P.J.         x         3/4" PE pipe P.J.         2.0           ▶ T666-443-NL         1" PE pipe P.J.         x         3/4" PE pipe P.J.         3.0           ▶ T666-443-NL         1" PE pipe P.J.         x         3/4" PE pipe P.J.         3.0           T777-344-AWT-NL         3/4" PVC pipe P.J.         x         1/2" PVC pipe P.J.         3.3           T777-344-AWT-NL         3/4" PVC pipe P.J.         x         1/2" PVC pipe P.J.         3.8           T777-344-AWT-NL         1" PVC pipe P.J.         x         3/4" PVC pipe P.J.         3.3           T777-444-NL         3/4" PVC pipe P.J.         x         3/4" PVC pipe P.J.         3.3           T777-444-NL         1" PVC pipe P.J.         x         3/4" PVC pipe P.J. <th< th=""><th>1777-001-ATT1-ITE</th><th></th><th>X</th><th></th><th></th></th<>	1777-001-ATT1-ITE		X						
↑ ▼ 1444-777-NL         2" cop. or plastic tubing (CTS)         x         2" cop. or plastic tubing (CTS)         13.6           T446-444-NL         1" cop. or plastic tubing (CTS)         x         1" PE pipe P.J.         2.5           T446-444-NL         1" cop. or plastic tubing (CTS)         x         1-1/4" PE pipe P.J.         3.0           ▶ T666-333-NL         3/4" PE pipe P.J.         x         3/4" PE pipe P.J.         2.0           ▶ T666-333-NL         3/4" PE pipe P.J.         x         1" PE pipe P.J.         2.5           ▶ T666-443-NL         1" PE pipe P.J.         x         3/4" PE pipe P.J.         3.0           ▶ T666-443-NL         1" PE pipe P.J.         x         3/4" PE pipe P.J.         3.0           ▶ T666-444-NL         1" PE pipe P.J.         x         1" PVC pipe P.J.         3.7           T777-11-NL         1/2" PVC pipe P.J.         x         1" PVC pipe P.J.         3.8           T777-333-NL         3/4" PVC pipe P.J.         x         3/4" PVC pipe P.J.         3.8           T777-443-AWT-NL         1" PVC pipe P.J.         x         3/4" PVC pipe P.J.         3.8           T777-77-NL         2" PVC pipe P.J.         x         2" PVC pipe P.J.         3.8           T777-77-NL         2" PVC pipe P.J.									
T446-444-NL       1" cop. or plastic tubing (CTS)       x       1" PE pipe P.J.       2.5         T446-445-NL       1" cop. or plastic tubing (CTS)       x       1-1/4" PE pipe P.J.       3.0         ▶ T666-333-NL       3/4" PE pipe P.J.       x       3/4" PE pipe P.J.       2.0         ▶ T666-334-NL       3/4" PE pipe P.J.       x       1" PE pipe P.J.       2.5         ▶ T666-443-NL       1" PE pipe P.J.       x       3/4" PE pipe P.J.       3.0         ▶ T666-444-NL       1" PE pipe P.J.       x       1" PE pipe P.J.       3.7         T777-111-NL       1/2" PVC pipe P.J.       x       1" PVC pipe P.J.       3.7         T777-333-NL       3/4" PVC pipe P.J.       x       3/4" PVC pipe P.J.       3.8         T777-333-NL       3/4" PVC pipe P.J.       x       3/4" PVC pipe P.J.       2.0         * T777-334-WT-NL       1" PVC pipe P.J.       x       3/4" PVC pipe P.J.       3.3         T777-444-NL       1" PVC pipe P.J.       x       1" PVC pipe P.J.       3.8         T777-777-NL       2" PVC pipe P.J.       x       3/4" remale iron pipe       1.2         • T441-333-NL       3/4" cop. or plastic tubing (CTS)       x       3/4" remale iron pipe       1.2         • T441-333-NL       3			X						
T446-445-NL         1" cop. or plastic tubing (CTS)         x         1-1/4" PE pipe P.J.         3.0           ▶ T666-333-NL         3/4" PE pipe P.J.         x         3/4" PE pipe P.J.         x         3/4" PE pipe P.J.         2.0           ▶ T666-334-NL         3/4" PE pipe P.J.         x         1" PE pipe P.J.         3.0           ▶ T666-443-NL         1" PE pipe P.J.         x         3/4" PE pipe P.J.         3.0           ▶ T666-444-NL         1" PE pipe P.J.         x         3/4" PE pipe P.J.         3.7           * T777-344-AWT-NL         3/4" PVC pipe P.J.         x         1" PVC pipe P.J.         3.8           * T777-333-NL         3/4" PVC pipe P.J.         x         3/4" PVC pipe P.J.         3.3           * T777-433-AWT-NL         1" PVC pipe P.J.         x         3/4" PVC pipe P.J.         3.3           * T777-433-AWT-NL         1" PVC pipe P.J.         x         3/4" PVC pipe P.J.         3.3           * T777-444-NL         1" PVC pipe P.J.         x         1" PVC pipe P.J.         3.3           * T777-444-NL         1" PVC pipe P.J.         x         2" PVC pipe P.J.         3.8           * T777-757-NL         2" PVC pipe P.J.         x         3/4" female iron pipe         1.2           * T441-334-NL									
▶ T666-333-NL         3/4" PE pipe P.J.         x         3/4" PE pipe P.J.         2.5           ▶ T666-334-NL         3/4" PE pipe P.J.         x         1" PE pipe P.J.         3.0           ▶ T666-443-NL         1" PE pipe P.J.         x         3/4" PE pipe P.J.         3.0           ▶ T666-444-NL         1" PE pipe P.J.         x         1" PE pipe P.J.         3.7           T777-344-AWT-NL         1/2" PVC pipe P.J.         x         1/2" PVC pipe P.J.         1.5           * T777-344-AWT-NL         3/4" PVC pipe P.J.         x         3/4" PVC pipe P.J.         3.8           T777-333-NL         3/4" PVC pipe P.J.         x         3/4" PVC pipe P.J.         3.8           T777-444-NL         1" PVC pipe P.J.         x         3/4" PVC pipe P.J.         3.8           T777-444-NL         1" PVC pipe P.J.         x         3/4" PVC pipe P.J.         3.8           T777-77-NL         2" PVC pipe P.J.         x         3/4" PVC pipe P.J.         3.8           T777-444-NL         1" PVC pipe P.J.         x         3/4" PVC pipe P.J.         3.8           T777-77-NL         2" PVC pipe P.J.         x         3/4" female iron pipe         1.2           ▶ T441-44-44-NL         1" cop. or plastic tubing (CTS)         x         1" femal			X						
▶ T666-334-NL         3/4" PE pipe P.J.         x         1" PE pipe P.J.         3.0           ▶ T666-444-NL         1" PE pipe P.J.         x         3/4" PE pipe P.J.         3.0           ▶ T666-444-NL         1" PE pipe P.J.         x         1" PE pipe P.J.         3.7           T777-111-NL         1/2" PVC pipe P.J.         x         1/2" PVC pipe P.J.         1.5           * T777-344-AWT-NL         3/4" PVC pipe P.J.         x         3/4" PVC pipe P.J.         3.8           * T777-333-NL         3/4" PVC pipe P.J.         x         3/4" PVC pipe P.J.         3.3           * T777-444-NL         1" PVC pipe P.J.         x         3/4" PVC pipe P.J.         3.3           T777-77-NL         2" PVC pipe P.J.         x         3/4" PVC pipe P.J.         3.8           T777-77-NL         2" PVC pipe P.J.         x         3/4" female iron pipe         1.2           ▶ T441-333-NL         3/4" cop. or plastic tubing (CTS)         x         3/4" female iron pipe         1.2           ▶ T441-663-NL         1-1/2" cop. or plastic tubing (CTS)         x         1" female iron pipe         1.7           T441-663-NL         1-1/2" cop. or plastic tubing (CTS)         x         1" female iron pipe         3.4           * T661-774-IDR7-AWT-NL         2" cop.									
▶ T666-443-NL         1" PE pipe P.J.         x         3/4" PE pipe P.J.         3.0           ▶ T666-444-NL         1" PE pipe P.J.         x         1" PE pipe P.J.         3.7           T777-111-NL         1/2" PVC pipe P.J.         x         1/2" PVC pipe P.J.         1.5           * T777-344-AWT-NL         3/4" PVC pipe P.J.         x         1" PVC pipe P.J.         3.8           T777-343-AWT-NL         1" PVC pipe P.J.         x         3/4" PVC pipe P.J.         x         3/4" PVC pipe P.J.         3.3           T777-444-NL         1" PVC pipe P.J.         x         1" PVC pipe P.J.         x         3/4" PVC pipe P.J.         3.8           T777-77-NL         2" PVC pipe P.J.         x         1" PVC pipe P.J.         x         3/4" PVC pipe P.J.         3.8           T777-77-NL         2" PVC pipe P.J.         x         1" PVC pipe P.J.         3.8           T777-77-NL         2" PVC pipe P.J.         x         1" PVC pipe P.J.         3.8           * T441-333-NL         3/4" cop. or plastic tubing (CTS)         x         3/4" female iron pipe         1.2           * T441-334-NL         3/4" cop. or plastic tubing (CTS)         x         3/4" female iron pipe         1.7           * T441-663-NL         1-1/2" cop. or plastic tubing (CTS)									
▶ T666-444-NL         1" PE pipe P.J.         X         1" PE pipe P.J.         3.7           T777-111-NL         1/2" PVC pipe P.J.         X         1/2" PVC pipe P.J.         1.5           * T777-334-AWT-NL         3/4" PVC pipe P.J.         X         1" PVC pipe P.J.         3.8           T777-433-AWT-NL         1" PVC pipe P.J.         X         3/4" PVC pipe P.J.         2.0           * T777-433-AWT-NL         1" PVC pipe P.J.         X         3/4" PVC pipe P.J.         3.3           T777-7444-NL         1" PVC pipe P.J.         X         1" PVC pipe P.J.         3.8           T777-777-NL         2" PVC pipe P.J.         X         2" PVC pipe P.J.         3.8           T777-777-NL         2" PVC pipe P.J.         X         2" PVC pipe P.J.         12.2           PACK JOINT BOTH ENDS (RUN) BY FIP SIDE OUTLET           P+ T441-333-NL         3/4" cop. or plastic tubing (CTS)         X         3/4" female iron pipe         1.2           P+ T441-334-NL         1" cop. or plastic tubing (CTS)         X         1" female iron pipe         1.3           P+ T441-334-NL         1" cop. or plastic tubing (CTS)         X         1" female iron pipe         1.7           T441-664-NL         1" cop. or plastic tubing (CTS)         X         1" female iron pipe<				1" PE pipe P.J.					
* T777-111-NL									
* T777-344-AWT-NL 3/4" PVC pipe P.J. x 1" PVC pipe P.J. x 3/4" PVC pipe P.J. 2.0  * T777-333-NL 3/4" PVC pipe P.J. x 3/4" PVC pipe P.J. 2.0  * T777-433-AWT-NL 1" PVC pipe P.J. x 3/4" PVC pipe P.J. 3.3  * T777-444-NL 1" PVC pipe P.J. x 3/4" PVC pipe P.J. 3.8  * T777-747-NL 2" PVC pipe P.J. x 1" PVC pipe P.J. 3.8  * T777-777-NL 2" PVC pipe P.J. x 2" PVC pipe P.J. 12.2  * PACK JOINT BOTH ENDS (RUN) BY FIDE OUTLET  PACK JOINT BOTH ENDS (RUN) BY FIDE OUTLET  * T441-333-NL 3/4" cop. or plastic tubing (CTS) x 3/4" female iron pipe 1.2  * T441-334-NL 1" cop. or plastic tubing (CTS) x 1" female iron pipe 1.3  * T441-663-NL 1-1/2" cop. or plastic tubing (CTS) x 1" female iron pipe 3.4  * T441-664-NL 1-1/2" cop. or plastic tubing (CTS) x 1" female iron pipe 3.4  * T441-773-NL 2" cop. or plastic tubing (CTS) x 3/4" female iron pipe 5.2  * T661-774-IDR7-AWT-NL 2" cop. or plastic tubing (CTS) x 1" female iron pipe 5.3  * T661-774-IDR7-AWT-NL 2" cop. or plastic tubing (CTS) x 1" female iron pipe 5.3  * T661-774-IDR7-AWT-NL 2" cop. or plastic tubing (CTS) x 1" female iron pipe 5.3  * T440-663-NL 1-1/2" cop. or plastic tubing (CTS) x 1" female iron pipe 5.3  * T440-664-NL 1-1/2" cop. or plastic tubing (CTS) x 1" female AWWA taper 3.4  * T440-664-NL 1-1/2" cop. or plastic tubing (CTS) x 3/4" female AWWA taper 3.4  * T440-664-NL 1-1/2" cop. or plastic tubing (CTS) x 1" female AWWA taper 5.3  * T440-773-NL 2" cop. or plastic tubing (CTS) x 1" female AWWA taper 5.3  * T440-774-NL 2" cop. or plastic tubing (CTS) x 1" female AWWA taper 5.3  * T440-774-NL 2" cop. or plastic tubing (CTS) x 1" female AWWA taper 5.3  * T440-774-NL 2" cop. or plastic tubing (CTS) x 1" female AWWA taper 5.3  * T448-333-NL 3/4" cop. or plastic tubing (CTS) x 1" female AWWA taper 5.3  * T684-333-NL 3/4" cop. or plastic tubing (CTS) x 1" female AWWA taper 5.3  * T684-333-NL 3/4" cop. or plastic tubing (CTS) x 1" female AWWA taper 5.3  * T684-333-NL 3/4" male iron pipe x 1" cop. or plastic tubing (CTS) 1.0  * T884-333-NL 3/4" male iron pipe x 1" cop. or plast			-						
T777-333-NL         3/4" PVC pipe P.J.         x         3/4" PVC pipe P.J.         2.0           * T777-433-AWT-NL         1" PVC pipe P.J.         x 3/4" PVC pipe P.J.         3.3           T777-444-NL         1" PVC pipe P.J.         x 1" PVC pipe P.J.         3.8           T777-777-NL         2" PVC pipe P.J.         x 2" PVC pipe P.J.         12.2           PACK JOINT BOTH ENDS (RUN) BY FIP SIDE OUTLET           ▶ 1441-333-NL         3/4" cop. or plastic tubing (CTS)         x 3/4" female iron pipe         1.2           ▶ 1441-334-NL         3/4" cop. or plastic tubing (CTS)         x 1" female iron pipe         1.3           ▶ 1441-334-NL         1" cop. or plastic tubing (CTS)         x 1" female iron pipe         1.7           T441-663-NL         1-1/2" cop. or plastic tubing (CTS)         x 1" female iron pipe         3.4           T441-664-NL         1-1/2" cop. or plastic tubing (CTS)         x 3/4" female iron pipe         5.2           T441-773-NL         2" cop. or plastic tubing (CTS)         x 1" female iron pipe         5.3           * T661-774-IDR7-AWT-NL         2" PE pipe P.J.         x 1" female iron pipe         5.3           * T661-774-IDR7-AWT-NL         2" cop. or plastic tubing (CTS)         x 3/4" female AWWA taper         3.4           T440-663-NL         1-1/2" cop. or plastic tub		1/2" PVC pipe P.J.							
* T777-433-AWT-NL 1" PVC pipe P.J. x 3/4" PVC pipe P.J. x 3/4" PVC pipe P.J. 3.3  T777-444-NL 1" PVC pipe P.J. x 1" PVC pipe P.J. 3.8  T777-T7T-NL 2" PVC pipe P.J. x 2" PVC pipe P.J. 12.2  PACK JOINT BOTH ENDS (RUN) BY FIP SIDE OUTLET  → T441-333-NL 3/4" cop. or plastic tubing (CTS) x 3/4" female iron pipe 1.2  → T441-344-NL 1" cop. or plastic tubing (CTS) x 1" female iron pipe 1.7  T441-663-NL 1-1/2" cop. or plastic tubing (CTS) x 3/4" female iron pipe 1.7  T441-663-NL 1-1/2" cop. or plastic tubing (CTS) x 3/4" female iron pipe 3.4  T441-773-NL 2" cop. or plastic tubing (CTS) x 1" female iron pipe 3.4  T441-773-NL 2" cop. or plastic tubing (CTS) x 3/4" female iron pipe 5.2  T441-774-NL 2" cop. or plastic tubing (CTS) x 1" female iron pipe 5.2  T441-774-NL 2" cop. or plastic tubing (CTS) x 1" female iron pipe 5.3  * T661-774-IDR7-AWT-NL 2" cop. or plastic tubing (CTS) x 1" female iron pipe 5.3  * T440-663-NL 1-1/2" cop. or plastic tubing (CTS) x 1" female iron pipe 5.3  * T440-664-NL 1-1/2" cop. or plastic tubing (CTS) x 1" female AWWA taper 3.4  T440-664-NL 1-1/2" cop. or plastic tubing (CTS) x 3/4" female AWWA taper 3.4  T440-773-NL 2" cop. or plastic tubing (CTS) x 3/4" female AWWA taper 5.3  T440-773-NL 2" cop. or plastic tubing (CTS) x 1" female AWWA taper 5.3  * T440-774-NL 2" cop. or plastic tubing (CTS) x 3/4" female AWWA taper 5.3  * T440-774-NL 2" cop. or plastic tubing (CTS) x 3/4" female AWWA taper 5.3  * T440-774-NL 2" cop. or plastic tubing (CTS) x 1" female AWWA taper 5.3  * T440-774-NL 2" cop. or plastic tubing (CTS) x 1" female iron pipe 1.2  * T448-333-NL 3/4" cop. or plastic tubing (CTS) x 1" female iron pipe 1.2  * T48-446-NL 1" cop. or plastic tubing (CTS) x 1" female iron pipe 1.2  * T48-333-NL 3/4" cop. or plastic tubing (CTS) x 1" male iron pipe 1.2  * T48-43-33-NL 3/4" cop. or plastic tubing (CTS) x 1" repute tubing (CTS) 1.0  * T884-333-NL 3/4" cop. or plastic tubing (CTS) x 1" repute tubing (CTS) 1.0  * T884-333-NL 3/4" cop. or plastic tubing (CTS) x 1" repute tubing (CTS) 1.0  * T88	1///-344-WAAA1-IAF	3/4" PVC pipe P.J. x 1" PVC pipe P.J.							
T777-444-NL 1" PVC pipe P.J. x 1" PVC pipe P.J. 12.2  PACK JOINT BOTH ENDS (RUN) BY FIP SIDE OUTLET  ▶ T441-333-NL 3/4" cop. or plastic tubing (CTS) x 3/4" female iron pipe 1.2  ▶ T441-334-NL 1" cop. or plastic tubing (CTS) x 1" female iron pipe 1.7  T441-663-NL 1-1/2" cop. or plastic tubing (CTS) x 1" female iron pipe 1.7  T441-663-NL 1-1/2" cop. or plastic tubing (CTS) x 1" female iron pipe 3.4  T441-773-NL 2" cop. or plastic tubing (CTS) x 1" female iron pipe 3.4  T441-773-NL 2" cop. or plastic tubing (CTS) x 3/4" female iron pipe 3.4  T441-774-NL 2" cop. or plastic tubing (CTS) x 1" female iron pipe 5.2  T441-774-NL 2" cop. or plastic tubing (CTS) x 1" female iron pipe 5.3  * T661-774-IDR7-AWT-NL 2" cop. or plastic tubing (CTS) x 1" female iron pipe 5.3  * T664-NL 1-1/2" cop. or plastic tubing (CTS) x 1" female iron pipe 5.3  * T664-NL 1-1/2" cop. or plastic tubing (CTS) x 1" female a iron pipe 5.3  * T664-NL 1-1/2" cop. or plastic tubing (CTS) x 1" female a iron pipe 5.3  * T664-NL 1-1/2" cop. or plastic tubing (CTS) x 1" female a iron pipe 5.3  * T664-NL 1-1/2" cop. or plastic tubing (CTS) x 3/4" female AWWA taper 3.4  T440-663-NL 1-1/2" cop. or plastic tubing (CTS) x 3/4" female AWWA taper 3.4  T440-664-NL 1-1/2" cop. or plastic tubing (CTS) x 3/4" female AWWA taper 5.3  T440-773-NL 2" cop. or plastic tubing (CTS) x 1" female a AWWA taper 5.3  T440-774-NL 2" cop. or plastic tubing (CTS) x 1" female a AWWA taper 5.3  T440-774-NL 2" cop. or plastic tubing (CTS) x 1" female iron pipe 1.1  ▶ T448-333-NL 3/4" cop. or plastic tubing (CTS) x 1" male iron pipe 1.2  ** T48-446-NL 1" cop. or plastic tubing (CTS) x 1" male iron pipe 1.2  ** T488-333-NL 3/4" cop. or plastic tubing (CTS) x 1" male iron pipe 1.2  ** T488-333-NL 3/4" male iron pipe x 3/4" cop. or plastic tubing (CTS) x 1.1 male iron pipe 1.2  ** T884-333-NL 3/4" male iron pipe x 3/4" cop. or plastic tubing (CTS) x 1.0  ** T884-333-NL 3/4" male iron pipe x 1" cop. or plastic tubing (CTS) 1.0  ** T884-333-NL 3/4" male iron pipe x 1" cop. or plastic tubi									
T777-77-NL         2" PVC pipe P.J.         x         2" PVC pipe P.J.         12.2           PACK JOINT BOTH ENDS (RUN) BY FIP SIDE OUTLET           ▶ ↑ T441-333-NL         3/4" cop. or plastic tubing (CTS)         x         3/4" female iron pipe         1.2           ▶ ↑ T441-334-NL         3/4" cop. or plastic tubing (CTS)         x         1" female iron pipe         1.3           ▶ ↑ T441-444-NL         1" cop. or plastic tubing (CTS)         x         1" female iron pipe         1.7           T441-663-NL         1-1/2" cop. or plastic tubing (CTS)         x         3/4" female iron pipe         3.4           T441-773-NL         2" cop. or plastic tubing (CTS)         x         1" female iron pipe         5.2           T441-774-NL         2" cop. or plastic tubing (CTS)         x         1" female iron pipe         5.3           * T661-774-IDR7-AWT-NL         2" PE pipe P.J.         x         1" female iron pipe         5.3           * T661-774-IDR7-AWT-NL         2" PE pipe P.J.         x         1" female iron pipe         12.3           PACK JOINT BOTH ENDS (RUN) BY SIDE OUTLET TAPPED FOR AWWA/CC CORP STOP         T440-663-NL         1-1/2" cop. or plastic tubing (CTS)         x         3/4" female AWWA taper         3.4           T440-673-NL         1-1/2" cop. or plastic tubing (CTS)         x	1///- <del>1</del> 00-700/1-14F								
PACK JOINT BOTH ENDS (RUN) BY FIP SIDE OUTLET           ▶ ↑ T441-333-NL         3/4" cop. or plastic tubing (CTS)         x         3/4" female iron pipe         1.2           ▶ ↑ T441-334-NL         3/4" cop. or plastic tubing (CTS)         x         1" female iron pipe         1.3           ▶ ↑ T441-444-NL         1" cop. or plastic tubing (CTS)         x         1" female iron pipe         3.4           T441-663-NL         1-1/2" cop. or plastic tubing (CTS)         x         3/4" female iron pipe         3.4           T441-664-NL         1-1/2" cop. or plastic tubing (CTS)         x         3/4" female iron pipe         3.4           T441-773-NL         2" cop. or plastic tubing (CTS)         x         3/4" female iron pipe         5.2           T441-774-NL         2" cop. or plastic tubing (CTS)         x         1" female iron pipe         5.3           * T661-774-IDR7-AWT-NL         2" PE pipe P.J.         x         1" female iron pipe         12.3           * T440-663-NL         1-1/2" cop. or plastic tubing (CTS)         x         3/4" female AWWA taper         3.4           T440-663-NL         1-1/2" cop. or plastic tubing (CTS)         x         3/4" female AWWA taper         3.4           T440-673-NL         2" cop. or plastic tubing (CTS)         x         3/4" female AWWA taper<									
▶ ↑ T441-333-NL         3/4" cop. or plastic tubing (CTS)         x         3/4" female iron pipe         1.2           ▶ ↑ T441-334-NL         3/4" cop. or plastic tubing (CTS)         x         1" female iron pipe         1.3           ▶ ↑ T441-344-NL         1" cop. or plastic tubing (CTS)         x         1" female iron pipe         1.7           T441-663-NL         1-1/2" cop. or plastic tubing (CTS)         x         3/4" female iron pipe         3.4           T441-773-NL         2" cop. or plastic tubing (CTS)         x         1" female iron pipe         5.2           T441-774-NL         2" cop. or plastic tubing (CTS)         x         1" female iron pipe         5.3           * T661-774-IDR7-AWT-NL         2" PE pipe P.J.         x         1" female iron pipe         5.3           * T661-774-IDR7-AWT-NL         2" PE pipe P.J.         x         1" female iron pipe         5.3           * T440-663-NL         1-1/2" cop. or plastic tubing (CTS)         x         3/4" female AWWA taper         3.4           T440-663-NL         1-1/2" cop. or plastic tubing (CTS)         x         3/4" female AWWA taper         3.4           T440-664-NL         1-1/2" cop. or plastic tubing (CTS)         x         3/4" female AWWA taper         5.3           T448-333-NL         3/4" cop. or plastic tubing (CTS)	1///-///-NL	2 PVC pipe P.J.		P CIDE OUTLIET	12.2				
▶ ↑ T441-334-NL         3/4" cop. or plastic tubing (CTS)         x         1" female iron pipe         1.3           ▶ ↑ T441-444-NL         1" cop. or plastic tubing (CTS)         x         1" female iron pipe         1.7           T441-663-NL         1-1/2" cop. or plastic tubing (CTS)         x         3/4" female iron pipe         3.4           T441-664-NL         1-1/2" cop. or plastic tubing (CTS)         x         1" female iron pipe         3.4           T441-773-NL         2" cop. or plastic tubing (CTS)         x         3/4" female iron pipe         5.2           T441-774-NL         2" cop. or plastic tubing (CTS)         x         1" female iron pipe         5.3           * T661-774-IDR7-AWT-NL         2" cop. or plastic tubing (CTS)         x         1" female iron pipe         5.3           * T440-663-NL         1-1/2" cop. or plastic tubing (CTS)         x         3/4" female iron pipe         1.2           T440-663-NL         1-1/2" cop. or plastic tubing (CTS)         x         3/4" female AWWA taper         3.4           T440-673-NL         2" cop. or plastic tubing (CTS)         x         3/4" female AWWA taper         3.4           T440-774-NL         2" cop. or plastic tubing (CTS)         x         1" female AWWA taper         5.3           PACK JOINT BOTH ENDS (RUN) BY MIP SIDE OUTLET	► A T///1-333-NI				1.2				
▶ ↑ T441-444-NL         1" cop. or plastic tubing (CTS)         x         1" female iron pipe         1.7           T441-663-NL         1-1/2" cop. or plastic tubing (CTS)         x         3/4" female iron pipe         3.4           T441-664-NL         1-1/2" cop. or plastic tubing (CTS)         x         1" female iron pipe         3.4           T441-773-NL         2" cop. or plastic tubing (CTS)         x         3/4" female iron pipe         5.3           T441-773-NL         2" cop. or plastic tubing (CTS)         x         1" female iron pipe         5.3           * T661-774-IDR7-AWT-NL         2" PE pipe P.J.         x         1" female iron pipe         5.3           * T661-774-IDR7-AWT-NL         2" PE pipe P.J.         x         1" female iron pipe         12.3           PACK JOINT BOTH ENDS (RUN) BY SIDE OUTLET TAPPED FOR AWWA/CC CORP STOP         T440-663-NL         1-1/2" cop. or plastic tubing (CTS)         x         3/4" female AWWA taper         3.4           T440-664-NL         1-1/2" cop. or plastic tubing (CTS)         x         3/4" female AWWA taper         3.4           T440-773-NL         2" cop. or plastic tubing (CTS)         x         3/4" female AWWA taper         5.3           T440-774-NL         2" cop. or plastic tubing (CTS)         x         3/4" female awwWA taper         5.3									
T441-663-NL         1-1/2" cop. or plastic tubing (CTS)         x         3/4" female iron pipe         3.4           T441-664-NL         1-1/2" cop. or plastic tubing (CTS)         x         1" female iron pipe         3.4           T441-773-NL         2" cop. or plastic tubing (CTS)         x         3/4" female iron pipe         5.2           T441-774-NL         2" cop. or plastic tubing (CTS)         x         1" female iron pipe         5.3           * T661-774-IDR7-AWT-NL         2" PE pipe P.J.         x         1" female iron pipe         5.3           PACK JOINT BOTH ENDS (RUN) BY SIDE OUTLET TAPPED FOR AWWA/CC CORP STOP         7									
T441-664-NL         1-1/2" cop. or plastic tubing (CTS)         x         1" female iron pipe         3.4           T441-773-NL         2" cop. or plastic tubing (CTS)         x         3/4" female iron pipe         5.2           T441-774-NL         2" cop. or plastic tubing (CTS)         x         1" female iron pipe         5.3           * T661-774-IDR7-AWT-NL         2" PE pipe P.J.         x         1" female iron pipe         5.3           PACK JOINT BOTH ENDS (RUN) BY SIDE OUTLET TAPPED FOR AWWA/CC CORP STOP           T440-663-NL         1-1/2" cop. or plastic tubing (CTS)         x         3/4" female AWWA taper         3.4           T440-664-NL         1-1/2" cop. or plastic tubing (CTS)         x         3/4" female AWWA taper         3.4           T440-773-NL         2" cop. or plastic tubing (CTS)         x         3/4" female AWWA taper         5.3           T440-774-NL         2" cop. or plastic tubing (CTS)         x         1" female AWWA taper         5.3           T448-333-NL         3/4" cop. or plastic tubing (CTS)         x         1" female AWWA taper         5.3           T448-334-NL         3/4" cop. or plastic tubing (CTS)         x         1" male iron pipe         1.1           ▶ 1 448-333-NL         3/4" cop. or plastic tubing (CTS)         x									
T441-773-NL         2" cop. or plastic tubing (CTS)         x         3/4" female iron pipe         5.2           T441-774-NL         2" cop. or plastic tubing (CTS)         x         1" female iron pipe         5.3           * T661-774-IDR7-AWT-NL         2" PE pipe P.J.         x         1" female iron pipe         12.3           PACK JOINT BOTH ENDS (RUN) BY SIDE OUTLET TAPPED FOR AWWA/CC CORP STOP           T440-663-NL         1-1/2" cop. or plastic tubing (CTS)         x         3/4" female AWWA taper         3.4           T440-664-NL         1-1/2" cop. or plastic tubing (CTS)         x         1" female AWWA taper         3.4           T440-773-NL         2" cop. or plastic tubing (CTS)         x         3/4" female AWWA taper         5.3           PACK JOINT BOTH ENDS (RUN) BY MIP SIDE OUTLET           + T448-333-NL         3/4" cop. or plastic tubing (CTS)         x         1" male iron pipe         1.1           • T448-333-NL         3/4" cop. or plastic tubing (CTS)         x         1-1/2" male iron pipe         1.2           T448-446-NL         1" cop. or plastic tubing (CTS)         x         1-1/2" male iron pipe         1.8           MALE IRON PIPE THREADS BOTH ENDS (RUN) BY PACK JOINT SIDE OUTLET           • T884-333-NL         3/4" male iron pipe         x         1" cop. or plastic t									
T441-774-NL         2" cop. or plastic tubing (CTS)         x         1" female iron pipe         5.3           * T661-774-IDR7-AWT-NL         2" PE pipe P.J.         x         1" female iron pipe         12.3           PACK JOINT BOTH ENDS (RUN) BY SIDE OUTLET TAPPED FOR AWWA/CC CORP STOP           T440-663-NL         1-1/2" cop. or plastic tubing (CTS)         x         3/4" female AWWA taper         3.4           T440-664-NL         1-1/2" cop. or plastic tubing (CTS)         x         1" female AWWA taper         3.4           T440-773-NL         2" cop. or plastic tubing (CTS)         x         3/4" female AWWA taper         5.3           T440-774-NL         2" cop. or plastic tubing (CTS)         x         1" female AWWA taper         5.3           PACK JOINT BOTH ENDS (RUN) BY MIP SIDE OUTLET         **         **         **         **           * T448-333-NL         3/4" cop. or plastic tubing (CTS)         x         3/4" male iron pipe         1.1           * T448-446-NL         1" cop. or plastic tubing (CTS)         x         1-1/2" male iron pipe         1.8           * T884-333-NL         3/4" male iron pipe         x         3/4" cop. or plastic tubing (CTS)         0.9           * T884-333-NL         3/4" male iron pipe         x         1" cop. or plastic tubing (CTS)         0.9 </th <th></th> <th></th> <th></th> <th></th> <th></th>									
* T661-774-IDR7-AWT-NL 2" PE pipe P.J. x 1" female iron pipe 12.3  ** PACK JOINT BOTH ENDS (RUN) BY SIDE OUTLET TAPPED FOR AWWA/CC CORP STOP  ** T440-663-NL 1-1/2" cop. or plastic tubing (CTS) x 3/4" female AWWA taper 3.4  ** T440-664-NL 1-1/2" cop. or plastic tubing (CTS) x 1" female AWWA taper 3.4  ** T440-773-NL 2" cop. or plastic tubing (CTS) x 3/4" female AWWA taper 5.3  ** T440-774-NL 2" cop. or plastic tubing (CTS) x 1" female AWWA taper 5.3  ** PACK JOINT BOTH ENDS (RUN) BY MIP SIDE OUTLET  ** T448-333-NL 3/4" cop. or plastic tubing (CTS) x 3/4" male iron pipe 1.1  ** T448-334-NL 3/4" cop. or plastic tubing (CTS) x 1" male iron pipe 1.2  ** T448-446-NL 1" cop. or plastic tubing (CTS) x 1-1/2" male iron pipe 1.8  ** MALE IRON PIPE THREADS BOTH ENDS (RUN) BY PACK JOINT SIDE OUTLET  ** T884-333-NL 3/4" male iron pipe x 3/4" cop. or plastic tubing (CTS) 0.9  ** T884-334-NL 3/4" male iron pipe x 1" cop. or plastic tubing (CTS) 1.0  ** T884-334-NL 1" male iron pipe x 1" cop. or plastic tubing (CTS) 1.0  ** T884-444-NL 1" male iron pipe x 1" cop. or plastic tubing (CTS) 1.0  ** FEMALE IRON PIPE TO MALE IRON PIPE THREAD (RUN) BY PACK JOINT SIDE OUTLET  ** T184-664-NL 1-1/2" FIP to 1-1/2" MIP x 1" cop. or plastic tubing (CTS) 2.3									
PACK JOINT BOTH ENDS (RUN) BY SIDE OUTLET TAPPED FOR AWWA/CC CORP STOP           T440-663-NL         1-1/2" cop. or plastic tubing (CTS)         x         3/4" female AWWA taper         3.4           T440-664-NL         1-1/2" cop. or plastic tubing (CTS)         x         1" female AWWA taper         3.4           T440-773-NL         2" cop. or plastic tubing (CTS)         x         3/4" female AWWA taper         5.3           T440-774-NL         2" cop. or plastic tubing (CTS)         x         1" female AWWA taper         5.3           PACK JOINT BOTH ENDS (RUN) BY MIP SIDE OUTLET           T448-333-NL         3/4" cop. or plastic tubing (CTS)         x         3/4" male iron pipe         1.1           T448-334-NL         3/4" cop. or plastic tubing (CTS)         x         1" male iron pipe         1.2           T448-433-NL         1" cop. or plastic tubing (CTS)         x         1-1/2" male iron pipe         1.8           MALE IRON PIPE THREADS BOTH ENDS (RUN) BY PACK JOINT SIDE OUTLET         D.9           T884-334-NL         3/4" male iron pipe         x         3/4" cop. or plastic tubing (CTS)         0.9           T884-334-NL         3/4" male iron pipe         x         1" cop. or plastic tubing (CTS)         1.0           T884-444-NL         1" male iron pipe         x         1" cop. or plast									
T440-663-NL         1-1/2" cop. or plastic tubing (CTS)         x         3/4" female AWWA taper         3.4           T440-664-NL         1-1/2" cop. or plastic tubing (CTS)         x         1" female AWWA taper         3.4           T440-773-NL         2" cop. or plastic tubing (CTS)         x         3/4" female AWWA taper         5.3           T440-774-NL         2" cop. or plastic tubing (CTS)         x         1" female AWWA taper         5.3           PACK JOINT BOTH ENDS (RUN) BY MIP SIDE OUTLET           ↑ T448-333-NL         3/4" cop. or plastic tubing (CTS)         x         3/4" male iron pipe         1.1           ▶ ↑ T448-334-NL         3/4" cop. or plastic tubing (CTS)         x         1" male iron pipe         1.2           T448-446-NL         1" cop. or plastic tubing (CTS)         x         1-1/2" male iron pipe         1.8           MALE IRON PIPE THREADS BOTH ENDS (RUN) BY PACK JOINT SIDE OUTLET         D.9         D.9         D.9           ▶ ↑ T884-334-NL         3/4" male iron pipe         x         3/4" cop. or plastic tubing (CTS)         0.9           ▶ ↑ T884-334-NL         3/4" male iron pipe         x         1" cop. or plastic tubing (CTS)         1.0           ▶ ↑ T884-344-NL         1" male iron pipe         x         1" cop. or plastic tubing (CTS)         1.3 <tr< th=""><th></th><th></th><th></th><th></th><th></th></tr<>									
T440-664-NL         1-1/2" cop. or plastic tubing (CTS)         x         1" female AWWA taper         3.4           T440-773-NL         2" cop. or plastic tubing (CTS)         x         3/4" female AWWA taper         5.3           T440-774-NL         2" cop. or plastic tubing (CTS)         x         1" female AWWA taper         5.3           PACK JOINT BOTH ENDS (RUN) BY MIP SIDE OUTLET           ↑ T448-333-NL         3/4" cop. or plastic tubing (CTS)         x         3/4" male iron pipe         1.1           ▶ ↑ T448-334-NL         3/4" cop. or plastic tubing (CTS)         x         1" male iron pipe         1.2           T448-446-NL         1" cop. or plastic tubing (CTS)         x         1-1/2" male iron pipe         1.8           MALE IRON PIPE THREADS BOTH ENDS (RUN) BY PACK JOINT SIDE OUTLET         D.9         D.9 <th></th> <th></th> <th></th> <th></th> <th>3.4</th>					3.4				
T440-774-NL         2" cop. or plastic tubing (CTS)         x         1" female AWWA taper         5.3           PACK JOINT BOTH ENDS (RUN) BY MIP SIDE OUTLET           ◆ T448-333-NL         3/4" cop. or plastic tubing (CTS)         x         3/4" male iron pipe         1.1           ▶ ↑ T448-334-NL         3/4" cop. or plastic tubing (CTS)         x         1" male iron pipe         1.2           T448-446-NL         1" cop. or plastic tubing (CTS)         x         1-1/2" male iron pipe         1.8           MALE IRON PIPE THREADS BOTH ENDS (RUN) BY PACK JOINT SIDE OUTLET           ▶ ↑ T884-333-NL         3/4" male iron pipe         x         3/4" cop. or plastic tubing (CTS)         0.9           ▶ ↑ T884-334-NL         3/4" male iron pipe         x         1" cop. or plastic tubing (CTS)         1.0           ▶ ↑ T884-444-NL         1" male iron pipe         x         1" cop. or plastic tubing (CTS)         1.3           FEMALE IRON PIPE TO MALE IRON PIPE THREAD (RUN) BY PACK JOINT SIDE OUTLET           T184-664-NL         1-1/2" FIP to 1-1/2" MIP         x         1" cop. or plastic tubing (CTS)         2.3	T440-664-NL								
T440-774-NL         2" cop. or plastic tubing (CTS)         x         1" female AWWA taper         5.3           PACK JOINT BOTH ENDS (RUN) BY MIP SIDE OUTLET           ◆ T448-333-NL         3/4" cop. or plastic tubing (CTS)         x         3/4" male iron pipe         1.1           ▶ ↑ T448-334-NL         3/4" cop. or plastic tubing (CTS)         x         1" male iron pipe         1.2           T448-446-NL         1" cop. or plastic tubing (CTS)         x         1-1/2" male iron pipe         1.8           MALE IRON PIPE THREADS BOTH ENDS (RUN) BY PACK JOINT SIDE OUTLET           ▶ ↑ T884-333-NL         3/4" male iron pipe         x         3/4" cop. or plastic tubing (CTS)         0.9           ▶ ↑ T884-334-NL         3/4" male iron pipe         x         1" cop. or plastic tubing (CTS)         1.0           ▶ ↑ T884-444-NL         1" male iron pipe         x         1" cop. or plastic tubing (CTS)         1.3           FEMALE IRON PIPE TO MALE IRON PIPE THREAD (RUN) BY PACK JOINT SIDE OUTLET           T184-664-NL         1-1/2" FIP to 1-1/2" MIP         x         1" cop. or plastic tubing (CTS)         2.3	T440-773-NL	2" cop. or plastic tubing (CTS)	х	3/4" female AWWA taper	5.3				
PACK JOINT BOTH ENDS (RUN) BY MIP SIDE OUTLET           ◆ T448-333-NL         3/4" cop. or plastic tubing (CTS)         x         3/4" male iron pipe         1.1           ▶ ◆ T448-334-NL         3/4" cop. or plastic tubing (CTS)         x         1" male iron pipe         1.2           T448-446-NL         1" cop. or plastic tubing (CTS)         x         1-1/2" male iron pipe         1.8           MALE IRON PIPE THREADS BOTH ENDS (RUN) BY PACK JOINT SIDE OUTLET         National pipe         x         3/4" cop. or plastic tubing (CTS)         0.9           ▶ ◆ T884-333-NL         3/4" male iron pipe         x         1" cop. or plastic tubing (CTS)         1.0           ▶ ◆ T884-334-NL         1" male iron pipe         x         1" cop. or plastic tubing (CTS)         1.3           FEMALE IRON PIPE TO MALE IRON PIPE THREAD (RUN) BY PACK JOINT SIDE OUTLET         T184-664-NL         1-1/2" FIP to 1-1/2" MIP         x         1" cop. or plastic tubing (CTS)         2.3	T440-774-NL								
▶ ↑ T448-334-NL       3/4" cop. or plastic tubing (CTS)       x       1" male iron pipe       1.2         T448-446-NL       1" cop. or plastic tubing (CTS)       x       1-1/2" male iron pipe       1.8         MALE IRON PIPE THREADS BOTH ENDS (RUN) BY PACK JOINT SIDE OUTLET         ▶ ↑ T884-333-NL       3/4" male iron pipe       x       3/4" cop. or plastic tubing (CTS)       0.9         ▶ ↑ T884-334-NL       3/4" male iron pipe       x       1" cop. or plastic tubing (CTS)       1.0         ▶ ↑ T884-444-NL       1" male iron pipe       x       1" cop. or plastic tubing (CTS)       1.3         FEMALE IRON PIPE TO MALE IRON PIPE THREAD (RUN) BY PACK JOINT SIDE OUTLET         T184-664-NL       1-1/2" FIP to 1-1/2" MIP       x       1" cop. or plastic tubing (CTS)       2.3			BY MI						
T448-446-NL         1" cop. or plastic tubing (CTS)         x         1-1/2" male iron pipe         1.8           MALE IRON PIPE THREADS BOTH ENDS (RUN) BY PACK JOINT SIDE OUTLET         T884-333-NL         3/4" male iron pipe         x         3/4" cop. or plastic tubing (CTS)         0.9           ▶ ↑ T884-334-NL         3/4" male iron pipe         x         1" cop. or plastic tubing (CTS)         1.0           ▶ ↑ T884-444-NL         1" male iron pipe         x         1" cop. or plastic tubing (CTS)         1.3           FEMALE IRON PIPE TO MALE IRON PIPE THREAD (RUN) BY PACK JOINT SIDE OUTLET           T184-664-NL         1-1/2" FIP to 1-1/2" MIP         x         1" cop. or plastic tubing (CTS)         2.3	♦ T448-333-NL	3/4" cop. or plastic tubing (CTS)	х	3/4" male iron pipe	1.1				
T448-446-NL         1" cop. or plastic tubing (CTS)         x         1-1/2" male iron pipe         1.8           MALE IRON PIPE THREADS BOTH ENDS (RUN) BY PACK JOINT SIDE OUTLET         T884-333-NL         3/4" male iron pipe         x         3/4" cop. or plastic tubing (CTS)         0.9           ▶ ↑ T884-334-NL         3/4" male iron pipe         x         1" cop. or plastic tubing (CTS)         1.0           ▶ ↑ T884-444-NL         1" male iron pipe         x         1" cop. or plastic tubing (CTS)         1.3           FEMALE IRON PIPE TO MALE IRON PIPE THREAD (RUN) BY PACK JOINT SIDE OUTLET           T184-664-NL         1-1/2" FIP to 1-1/2" MIP         x         1" cop. or plastic tubing (CTS)         2.3	► ◆ T448-334-NL		Х	1" male iron pipe	1.2				
▶ T884-333-NL         3/4" male iron pipe         x         3/4" cop. or plastic tubing (CTS)         0.9           ▶ T884-334-NL         3/4" male iron pipe         x         1" cop. or plastic tubing (CTS)         1.0           ▶ T884-444-NL         1" male iron pipe         x         1" cop. or plastic tubing (CTS)         1.3           FEMALE IRON PIPE TO MALE IRON PIPE THREAD (RUN) BY PACK JOINT SIDE OUTLET           T184-664-NL         1-1/2" FIP to 1-1/2" MIP         x         1" cop. or plastic tubing (CTS)         2.3					1.8				
▶ ↑ T884-334-NL         3/4" male iron pipe         x         1" cop. or plastic tubing (CTS)         1.0           ▶ ↑ T884-444-NL         1" male iron pipe         x         1" cop. or plastic tubing (CTS)         1.3           FEMALE IRON PIPE TO MALE IRON PIPE THREAD (RUN) BY PACK JOINT SIDE OUTLET           T184-664-NL         1-1/2" FIP to 1-1/2" MIP         x         1" cop. or plastic tubing (CTS)         2.3			N) BY						
► ► T884-444-NL 1" male iron pipe x 1" cop. or plastic tubing (CTS) 1.3  FEMALE IRON PIPE TO MALE IRON PIPE THREAD (RUN) BY PACK JOINT SIDE OUTLET  T184-664-NL 1-1/2" FIP to 1-1/2" MIP x 1" cop. or plastic tubing (CTS) 2.3									
FEMALE IRON PIPE TO MALE IRON PIPE THREAD (RUN) BY PACK JOINT SIDE OUTLET  T184-664-NL 1-1/2" FIP to 1-1/2" MIP x 1" cop. or plastic tubing (CTS) 2.3									
<b>T184-664-NL</b> 1-1/2" FIP to 1-1/2" MIP x 1" cop. or plastic tubing (CTS) 2.3					1.3				
T184-664-NL         1-1/2" FIP to 1-1/2" MIP         x         1" cop. or plastic tubing (CTS)         2.3           T184-774-NL         2" FIP to 2" MIP         x         1" cop. or plastic tubing (CTS)         2.6									
T184-774-NL 2" FIP to 2" MIP x 1" cop. or plastic tubing (CTS) 2.6									
	T184-774-NL	2" FIP to 2" MIP	Х	1" cop. or plastic tubing (CTS)	2.6				

**Grip Joint** for CTS or PEP (3/4" and 1") is available. Add "-G" to the catalog number.

- ◆ Quick Joint is available. Add "-Q" to the catalog number.
- \* Note: Item manufactured from multiple components assembled watertight.
- † Uses Ballcorp style Pack Joint nut.
- ▶ Ultra-Tite is available. Add "U-AWT" to the catalog number. (Consists of components assembled watertight)

**Pack Joint Tees** 

#### **Cut-In Tees with Detachable Pack Joints**

An extra customer can be served from an existing service line by removing a 2-3/4" section to accommodate the body of a tee (4" section for 1" service lines). Slip the detachable Pack Joints onto the ends of the line, screw them tight on each end of the tee. Tighten the Pack Joint nuts and stainless steel set screws (for iron pipe) or stainless steel clamp screws (for copper tube or tube-size plastic, or for iron pipe size plastic).



TD442-333-NL Side Outlet Flared Copper



TD441-333-NL Side Outlet Female Iron Pipe Thread







TD448-333-NL Side Outlet Male Iron Pipe Thread

#### **Cut-In Tees with Detachable Pack Joints**

CATALOG	DESCRIPTION			Approx.		
Number	Both Ends (Run)	х	SIDE OUTLET	WT. LBS.		
	SIDE OUTLET FOR FLARE COPPER					
◆TD442-113-NL	1/2" cop. or plastic tubing (CTS) P.J.	Х	3/4" flare copper	2.1		
TD552-113-NL	1/2" iron pipe P.J.	Х	3/4" flare copper	2.0		
◆TD442-333-NL	3/4" cop. or plastic tubing (CTS) P.J.	Х	3/4" flare copper	2.1		
TD552-333-NL	3/4" iron pipe P.J.	Х	3/4" flare copper	2.1		
TD442-443-NL	1" cop. or plastic tubing (CTS) P.J.	Х	3/4" flare copper	2.5		
TD552-443-NL	1" iron pipe P.J.	Х	3/4" flare copper	3.1		
*TD002-NL	less P.J. assemblies	Х	3/4" flare copper	1.0		
	SIDE OUTLET FOR FEMAL	E IRO	N PIPE THREADS			
◆TD441-113-NL	1/2" cop. or plastic tubing (CTS) P.J.	Х	3/4" female iron pipe threads	1.8		
TD551-113-NL	1/2" iron pipe P.J.	Х	3/4" female iron pipe threads	1.6		
► +TD441-333-NL	3/4" cop. or plastic tubing (CTS) P.J.	Х	3/4" female iron pipe threads	1.8		
TD551-333-NL	3/4" iron pipe P.J.	Х	3/4" female iron pipe threads	1.7		
► TD441-443-NL	1" cop. or plastic tubing (CTS) P.J.	Х	3/4" female iron pipe threads	2.3		
TD551-443-NL	1" iron pipe P.J.	Х	3/4" female iron pipe threads	2.5		
*TD001-NL	less P.J. assemblies	Х	3/4" female iron pipe threads	0.7		
	SIDE OUTLET FOR MALE	IRON	I PIPE THREADS			
♦TD448-113-NL	1/2" cop. or plastic tubing (CTS) P.J.	Х	3/4" male iron pipe threads	1.8		
TD558-113-NL	1/2" iron pipe P.J.	Х	3/4" male iron pipe threads	-		
▶ +TD448-333-NL	3/4" cop. or plastic tubing (CTS) P.J.	Х	3/4" male iron pipe threads	1.8		
TD558-333-NL	3/4" iron pipe P.J.	Х	3/4" male iron pipe threads	1.7		
► TD448-443-NL	1" cop. or plastic tubing (CTS) P.J.	Х	3/4" male iron pipe threads	2.3		
TD558-443-NL	1" iron pipe P.J.	Х	3/4" male iron pipe threads	2.8		
*TD008-NL	less P.J. assemblies	Х	3/4" male iron pipe threads	0.7		

<sup>\*</sup> To purchase Pack Joint assemblies for PET, PEP, PVC and iron pipe, refer to section B under Pack Joint assemblies for No. 1 Kornerhorn.

Grip Joint for CTS or PEP (3/4" & 1") is available. Add "-G" to the catalog number.

- Quick Joint is available. Add "-Q" to the catalog number.
- ▶ Ultra-Tite is available. Add "U-AWT" to the catalog number. (Consists of components assembled watertight.)

## **Lead-Pack Couplings**

CATALOG NUMBER DESCRIPTION					
NUMBER	LEAD PIPE TO FEMALE IRON	PIPE	THREAD	Wt. Lbs.	
1/2" dbl. eytra strong lead (YYS)					
* Q11-23-Q31-13-NL	or 5/8" strong lead (S)	Х	3/4" female iron pipe thread	8.0	
Q21-23-NL (C16-33-NL)	5/8" extra strong lead (XS)	Χ	3/4" female iron pipe thread	0.7	
* Q11-33-Q31-23-NL	5/8" dbl. extra strong lead (XXS) or 3/4" strong lead (S)	x	3/4" female iron pipe thread	0.7	
Q21-33-NL	3/4" extra strong lead (XS)	Χ	3/4" female iron pipe thread	1.0	
Q31-33-NL	3/4" dbl. extra strong lead (XXS)	Х	3/4" female iron pipe thread	1.2	
Q21-44-NL	1" extra strong lead (XS)	X	1" female iron pipe thread	1.5	
	AD PIPE TO SOLDER FITTING FO			0.5	
Q2S-13-NL	1/2" extra strong lead (XS)	Х	3/4" solder fit. copper tubing	0.5	
* Q1S-23-Q3S-13-NL	1/2" dbl. extra strong lead (XXS) or 5/8" strong lead (S)	х	3/4" solder fit. copper tubing	0.9	
Q2S-23-NL	5/8" extra strong lead (XS)	Х	3/4" solder fit. copper tubing	0.7	
* Q1S-33-Q3S-23-NL	5/8" dbl. extra strong lead (XXS) or 3/4" strong lead (S)	Х	3/4" solder fit. copper tubing	0.7	
Q2S-33-NL	3/4" extra strong lead (XS)	Х	3/4" solder fit. copper tubing	1.0	
Q1S-44-AWT-NL	1" strong lead (S)	Х	1" solder fit. copper tubing	1.5	
** Q2S-44-AWT-NL	1" extra strong lead (XS)	Х	1" solder fit. copper tubing	2.0	
** Q3S-44-AWT-NL	1" dbl. extra strong lead (XXS)  LEAD PIPE TO LEAD	X	1" solder fit. copper tubing	2.0	
Q2Q2-11-NL (C44-33-NL)	1/2" extra strong lead (XS)	X	1/2" extra strong lead (XS)	0.9	
•	1/2" dbl. extra strong lead (XXS)		1/2" dbl. extra strong lead (XXS)		
* Q1Q1-22-Q3Q3-11-NL	or 5/8" strong lead (S)	Х	or 5/8" strong lead (S)	1.1	
Q2Q2-22-NL (C66-33-NL)	5/8" extra strong lead (XS)	Х	5/8" extra strong lead (XS)	1.2	
* Q1Q1-33-Q3Q3-22-NL	5/8" dbl. extra strong lead (XXS) or 3/4" strong lead (S)	х	5/8" dbl. extra strong lead (XXS) or 3/4" strong lead (S)	1.2	
Q2Q2-33-NL	3/4" extra strong lead (XS)	Х	3/4" extra strong lead (XS)	1.7	
Q3Q3-33-NL	3/4" dbl. extra strong lead (XXS)	Х	3/4" dbl. extra strong lead (XXS)	2.2	
Q1Q1-44-NL	1" strong lead (S)	Х	1" strong lead (S)	2.8	
Q2Q2-44-NL	1" extra strong lead (XS)	Х	1" extra strong lead (XS)	2.8	
Q3Q3-44-NL	1" dbl. extra strong lead (XXS)	Х	1" dbl. extra strong lead (XXS)	2.8	
Q2Q2-55-NL (C66-55-NL)	1-1/4" extra strong lead (XS)	Х	1-1/4" extra strong lead (XS)	3.0	
Q2Q2-66-NL (C66-66-IDR7-NL)	1-1/2" extra strong lead (XS)	X	1-1/2" extra strong lead (XS)	4.5	
	PE TO PACK JOINT FOR COPPER				
Q24-13-NL (C44-33-NL)	1/2" extra strong lead (XS)	Х	3/4" cop. or plastic tubing (CTS)	0.9	
Q14-22-Q34-12-NL	1/2" dbl. extra strong lead (XXS) or 5/8" dbl. extra strong lead (XXS)	Х	5/8" cop. or plastic tubing (CTS)	1.1	
* Q14-23-Q34-13-NL	1/2" dbl. extra strong lead (XXS) or 5/8" strong lead (S)	х	3/4" cop. or plastic tubing (CTS)	1.1	
+ Q24-23-NL (C46-33-NL)	5/8" extra strong lead (XS)	Х	3/4" cop. or plastic tubing (CTS)	1.0	
• Q24-24-NL (C46-43-NL)	5/8" extra strong lead (XS)	Х	1" cop. or plastic tubing (CTS)	1.2	
Q34-24-NL * Q14-33-Q34-23-NL	5/8" dbl. extra strong lead (XXS) 5/8" dbl. extra strong lead (XXS)	X	1" cop. or plastic tubing (CTS)  3/4" cop. or plastic tubing (CTS)	1.2 1.1	
◆ Q24-33-NL	or 3/4" strong lead (S) 3/4" extra strong lead (XS)		3/4" cop. or plastic tubing (CTS)	1.3	
Q24-34-NL	3/4" extra strong lead (XS)	X	1" cop. or plastic tubing (CTS)	1.3	
Q34-33-NL	3/4" dbl. extra strong lead (XXS)	X	3/4" cop. or plastic tubing (CTS)	1.7	
Q24-43-NL	1" extra strong lead (XS)	×	3/4" cop. or plastic tubing (CTS)	1.7	
Q34-43-NL	1" dbl. extra strong lead (XXS)	X	3/4" cop. or plastic tubing (CTS)	1.7	
Q14-44-NL	1" strong lead (S)	Х	1" cop. or plastic tubing (CTS)	1.8	
Q24-44-NL	1" extra strong lead (XS)	Х	1" cop. or plastic tubing (CTS)	1.8	
Q34-44-NL	1" dbl. extra strong lead (XXS)	Х	1" cop. or plastic tubing (CTS)	1.8	
Q24-56-C46-65-NL	1-1/4" extra strong lead (XS)	Х	1-1/2" cop. or plastic tubing (CTS)	3.0	
Q24-66-C46-66-IDR7-NL	1-1/2" extra strong lead (XS)	Х	1-1/2" cop. or plastic tubing (CTS)	3.8	
Q24-77-NL	2" extra strong lead (XS)	X	2" cop. or plastic tubing (CTS)	6.3	
006 42 NII (046 02 NII )	LEAD PIPE TO PACK JOINT			1.0	
Q26-13-NL (C46-33-NL)	1/2" extra strong lead (XS)	X	3/4" PE pipe P.J.	1.0	
Q26-23-NL (C66-33-NL)	5/8" extra strong lead (XS) 5/8" dbl. extra strong lead (XXS)	X	3/4" PE pipe P.J. 3/4" PE pipe P.J.	1.2 1.2	
Q36-23-NL Q36-33-NL	3/4" dbl. extra strong lead (XXS)	X	3/4" PE pipe P.J. 3/4" PE pipe P.J.	1.5	
Q36-34-NL	3/4" dbl. extra strong lead (XXS)	X	1" PE pipe P.J.	2.2	
Q26-66-NL (C66-66-IDR7-NL)	1-1/2" extra strong lead (XS)	X	1-1/2" PE pipe P.J.	4.5	
*Those items fit two types/sizes of les					

<sup>\*</sup>These items fit two types/sizes of lead pipe as shown in the description. When ordering use complete catalog number.

**NOTE:** Numbers in parentheses indicate that some Lead-Pack couplings are the same as couplings found elsewhere in this catalog section for other types of tubing and pipe; however, Grip Joint couplings are not compatible with lead pipe.

<sup>\*\*</sup>This item is not one piece, it is two pieces assembled watertight.

<sup>◆</sup> Quick Joint is available. Add "-Q" to the catalog number.

## **Lead-Pack Couplings (continued)**

Lead-Pack Couplings for Attaching Copper, Iron, Plastic or PVC to Existing Lead Service Lines

**Lead-Pack Couplings** 

Catalog Number	DESCRIPTION			Approx. Wt. Lbs.
	LEAD PIPE TO MALE IRON PIPE THRE	AD		
Q28-13-NL (C84-33-NL)	1/2" extra strong lead (XS)	Х	3/4" male iron pipe threads	0.6
*Q18-23-Q38-13-NL	1/2" dbl. extra strong lead (XXS) or 5/8" strong lead (S)	Х	3/4" male iron pipe threads	0.7
Q28-23-NL (C86-33-NL)	5/8" extra strong lead (XS)	Х	3/4" male iron pipe threads	8.0
*Q18-33-Q38-23-NL	5/8" dbl. extra strong lead (XXS) or 3/4" strong lead (S)	Х	3/4" male iron pipe threads	0.8
Q28-33-NL	3/4" extra strong lead (XS)	Χ	3/4" male iron pipe threads	1.0
Q38-33-NL	3/4" dbl. extra strong lead (XXS)	Х	3/4" male iron pipe threads	1.3
Q18-44-NL	1" strong lead (S)	Х	1" male iron pipe threads	1.5
Q28-44-NL	1" extra strong lead (XS)	Χ	1" male iron pipe threads	1.5
Q38-44-NL	1" dbl. extra strong lead (XXS)	Х	1" male iron pipe threads	1.5
Q28-55-NL (C86-55-NL)	1-1/4" extra strong lead (XS)	Χ	1-1/4" male iron pipe threads	1.7
Q28-66-NL (C86-66-IDR7-NL)	1-1/2" extra strong lead (XS)	Х	1-1/2" male iron pipe threads	2.8
Q28-77-NL	2" extra strong lead (XS)	Х	2" male iron pipe threads	4.7
	LEAD PIPE TO FLARE COPPER			
Q22-13-NL (C24-33-NL)	1/2" extra strong lead (XS)	Χ	3/4" flare copper	0.9
*Q12-23-Q32-13-NL	1/2" dbl. extra strong lead (XXS) or 5/8" strong lead (S)	Х	3/4" flare copper	1.1
Q22-23-NL (C26-33-NL)	5/8" extra strong lead (XS)	Χ	3/4" flare copper	1.1
Q22-24-NL	5/8" extra strong lead (XS)	Х	1" flare copper	1.7
Q12-33-Q32-23-NL	5/8" dbl. extra strong lead (XXS) or 3/4" strong lead (S)	Х	3/4" flare copper	1.1
Q22-33-NL	3/4" extra strong lead (XS)	Χ	3/4" flare copper	1.3
Q32-33-NL	3/4" dbl. extra strong lead (XXS)	Х	3/4" flare copper	1.6
*Q12-34-Q32-24-NL	5/8" dbl. extra strong lead (XXS) or 3/4" strong lead (S)	Χ	1" flare copper	1.7
Q22-34-NL	3/4" extra strong lead (XS)	Χ	1" flare copper	1.7
Q12-44-NL	1" strong lead (S)	Χ	1" flare copper	1.6
Q22-44-NL	1" extra strong lead (XS)	Х	1" flare copper	2.0
Q32-44-NL	1" dbl. extra strong lead (XXS)	Х	1" flare copper	2.0

<sup>\*</sup>These items fit two types/sizes of lead pipe as shown in the description. When ordering use complete catalog number.

**NOTE:** Numbers in parentheses indicate that some Lead-Pack couplings are the same as couplings found elsewhere in this catalog section for other types of tubing and pipe; however, Grip Joint couplings are not compatible with lead pipe.

## **No-Contact Coupling**

(patent pending)

The No-Contact coupling employs a permanently installed plastic liner to prevent direct contact of lead plumbling lines with other metallic water system components.

CATALOG NUMBER	Description			APPROX. Wt. Lbs.
*Q11-33-Q31-23-NC-NL	5/8" dbl. extra strong lead (XXS) or 3/4" strong lead (S)	Х	3/4" female iron pipe thread	1.2
*Q14-33-Q34-23-NC-NL	5/8" dbl. extra strong lead (XXS) or 3/4" strong lead (S)	Х	3/4" cop. or plastic tubing (CTS)	1.5
*Q18-33-Q38-23-NC-NL	5/8" dbl. extra strong lead (XXS) or 3/4" strong lead (S)	Х	3/4" male iron pipe threads	1.2
Q22-33-NC-NL	3/4" extra strong lead (XS)	х	3/4" flare copper	1.4
Q22-34-NC-NL	3/4" extra strong lead (XS)	Х	1" flare copper	1.9
Q24-33-NC-NL	3/4" extra strong lead (XS)	Х	3/4" cop. or plastic tubing (CTS)	1.3
Q24-34-NC-NL	3/4" extra strong lead (XS)	Х	1" cop. or plastic tubing (CTS)	1.5
Q28-33-NC-NL	3/4" extra strong lead (XS)	Х	3/4" male iron pipe threads	1.1
Q21-44-NC-NL	1" extra strong lead (XS)	Х	1" female iron pipe thread	1.8
Q22-44-NC-NL	1" extra strong lead (XS)	Х	1" flare copper	2.4
Q24-44-NC-NL	1" extra strong lead (XS)	Х	1" cop. or plastic tubing (CTS)	1.4
Q28-44-NC-NL	1" extra strong lead (XS)	Х	1" male iron pipe threads	1.7

<sup>\*</sup>These items fit two types/sizes of lead pipe as shown in the description.

#### **Lead Pipe Dimensions**







SIZE (I.D.) AND TYPE OF LEAD PIPE	APPROX. AVG. SIZE O.D.
1/2" Extra Strong	0.876
1/2" Double Extra Strong	1.012
5/8" Strong	1.019
5/8" Extra Strong	1.082
5/8" Double Extra Strong	1.137
3/4" Strong	1.156
3/4" Extra Strong	1.212
3/4" Double Extra Strong	1.336
1" Strong	1.428
1" Extra Strong	1.492
1" Double Extra Strong	1.596
1 1/4" Extra Strong	1.765
1 1/2" Extra Strong	2.076
2" Extra Strong	2.751

## **Compression Nuts and Parts**





#### **Pack Joint Compression Nuts and Parts**

PACK JOINT	NUT & GASKET ASSEMBLY	BEVELED RUBBER GASKET ONLY		CLAMP / SET SCREW
NUT SIZE AND TYPE	COMPLETE CATALOG NUMBER	CATALOG NUMBER	CATALOG NUMBER	CATALOG NUMBER
		R OR PLASTIC TUBING (CTS)		
1/2"	NG-AA4	GT-1	FR-A	CS-A
5/8"	NG-B4	GT-24	FR-A-5	CS-A
3/4"	NG-D4 (box qty. 50)	GT-1-5	FR-A-5	CS-A
1"	NG-F4	GT-5	FR-D	CS-A
1" (Corp/Ballcorp)	NG-FF4	GT-7	FR-E	CS-A
1-1/4"	NG-F6-NG-H4	GT-10	FR-F	CS-A
1-1/4" (Ballcorp)	NG-FF6-NG-HH4	GT-10-5	FR-G	CS-A
1-1/2"	NG-J4	GT-14	FR-H	CS-B
1-1/2" (Ballcorp)	NG-JJJ4	GT-28	FR-T	CS-B
2"	NG-K4	GT-17	FR-K	CS-B
2" (Ballcorp)	NG-KKK4	GT-25	FR-R	CS-B
2-1/2"	NG-L4	GT-61	FR-S	CS-B
		IRON PIPE SIZE		
1/2"	NG-A5	GT-1-5	FR-A-5	SS-A
3/4"	NG-D5	GT-3	FR-D	SS-A
1"	NG-F5	GT-9	FR-F	SS-C
1-1/4"	NG-H5	GT-15	FR-H	SS-C
1-1/2"	NG-J5	GT-16	FR-J	SS-C
2"	NG-K5	GT-18	FR-M	SS-C
		PE PIPE SIZE		
3/4"	NG-D6	GT-3	FR-D	CS-A
3/4" (Corp/Ballcorp)	NG-DD6	GT-4	FR-E	CS-A
1"	NG-F6-NG-H4	GT-10	FR-F	CS-A
1" (Corp/Ballcorp)	NG-FF6-NG-HH4	GT-10-5	FR-G	CS-A
1-1/4"	NG-H6	GT-15-5	FR-H	CS-A
1-1/4" (Ballcorp)	NG-HH6	GT-49	FR-J	CS-A
1-1/2"	NG-JJ6-IDR7	GT-17	FR-K	CS-B
1-1/2" (Ballcorp)	NG-JJJ6-IDR7	GT-25	FR-R	CS-B
2"	NG-KK6-IDR7	GT-27	FR-S	CS-B
		PVC PIPE		
1/2"	NG-A7	GT-1-5	FR-A-5	CS-A
3/4"	NG-D7	GT-3	FR-D	CS-A
3/4" (Corp/Ballcorp)	NG-DD7	GT-4	FR-E	CS-A
1"	NG-F7	GT-9	FR-F	CS-A
1" (Corp/Ballcorp)	NG-FF7	GT-10-5	FR-G	CS-A
1-1/4"	NG-H7	GT-15	FR-H	CS-B
1-1/4" (Ballcorp)	NG-HH7	GT-48	FR-J	CS-B
* 1-1/2" (Ballcorp)	NG-JJ7	GT-16	FR-J	CS-B
2"	NG-K7	GT-18	FR-M	CS-B
2" (Ballcorp)	NG-KK7	GT-31	FR-R	CS-B
		LEAD PIPE		
1/2" XS	NG-AAX	GT-1-5	FR-A-5	CS-A
1/2" XXS	NG-AAAX	GT-3	FR-D	CS-A
5/8" S	NG-BX	GT-3	FR-D	CS-A
5/8" XS	NG-BBX	GT-3	FR-D	CS-A
5/8" XXS	NG-BBBX	GT-5	FR-D	CS-A
3/4" S	NG-DX	GT-5	FR-D	CS-A
3/4" XS	NG-DDX	GT-39	FR-X	CS-A
3/4" XXS	NG-DDDX	GT-10	FR-F	CS-A
1" S	NG-FX	GT-12	FR-G	CS-A
1"XS	NG-FFX	GT-12	FR-G	CS-A
1" XXS	NG-FFFX	GT-13	FR-G	CS-A
1-1/4"S	NG-H7	GT-15	FR-H	CS-A
1-1/4" XS	NG-HX	GT-15-5	FR-H	CS-A
1-1/2" XS	NG-JX	GT-17	FR-K	CS-B
2" XS	NG-KX	GT-26	_	SS-C
* * * * * * * * * * * * * * * * * * * *				

<sup>\*</sup> All 1-1/2" PVC couplings and elbows will use a Ballcorp nut.

## **Compression Nuts and Parts**



#### **Grip Joint Compression Nuts and Parts**

		•		
GRIP JOINT NUT SIZE AND TYPE	Nut, Gasket and Gripper Assembly Complete Catalog Number	BEVELED RUBBER GASKET ONLY CATALOG NUMBER	NYLON WASHER CATALOG NUMBER	GRIPPER RING ONLY CATALOG NUMBER
	CO	PPER OR PLASTIC TUBING (CT	rs)	
3/4"	<b>GJN4-3</b> (box qty. 72)	GT-1-5	FG-AAT	GJNGR4-3
1"	GJN4-4	GT-5	FG-FFT	GJNGR4-4
1" (Corp/Ballcorp)	GJCN4-4	GT-7	FG-GG	GJNGR4-4
1-1/4"	GJN6-4-GJN4-5	GT-10	FG-HH	GJNGR6-4
1-1/4" (Ballcorp)	GJCN4-5	GT-10-5	FG-JJ	GJNGR6-4
1-1/2"	GJN4-6	GT-14	FG-RR	GJNGR4-6
1-1/2" (Ballcorp)	GJCN4-6	GT-28	FG-SS	GJNGR4-6
2"	GJN4-7	GT-17	FG-TT	GJNGR4-7
2" (Ballcorp)	GJCN4-7	GT-25	FG-VV	GJNGR4-7
		PE PIPE		
3/4"	GJN6-3	GT-3	FG-FF	GJNGR6-3
3/4" (Corp/Ballcorp)	GJCN6-3	GT-4	FG-GG	GJNGR6-3
1"	GJN6-4-GJN4-5	GT-10	FG-HH	GJNGR6-4
1" (Corp/Ballcorp)	GJCN6-4	GT-10-5	FG-JJ	GJNGR6-4



#### **Quick Joint Compression Nuts and Parts**

	•			
Quick Joint	NUT, GASKET & GRIPPER	GASKET AND GRIPPER		
NUT SIZE AND TYPE	ASSEMBLY	RING ASSEMBLY		
NUI SIZE AND TYPE	COMPLETE CATALOG NUMBER	CATALOG NUMBER		
CC	PPER OR PLASTIC TUBING (	CTS)		
1/2"	QJN4-1	QJNGA4-1		
5/8"	QJN4-2	QJNGA4-2		
3/4"	QJN4-3	QJNGA4-3		
1"	QJN4-4	QJNGA4-4		
1-1/4"	QJN4-5	QJNGA4-5		
1-1/2"	QJN4-6	QJNGA4-6		
2"	QJN4-7	QJNGA4-7		
PE PIPE				
3/4"	QJN6-3	QJNGA6-3		
1"	QJN6-4	QJNGA6-4		

# Flared Copper Couplings Female Iron Pipe Thread and Male Iron Pipe Thread



C21-33-NL

#### Flare Copper to Female Iron Pipe Thread

CATALOG DESCRIPTION APPROX						
CATALOG	DESCRI	PTION	APPROX.			
Number	FLARE COPPER	FEMALE IRON PIPE	WT. LBS.			
	STRAIGHT COUPLINGS					
C21-11-NL	1/2"	1/2"	0.4			
C21-23-NL	5/8"	3/4"	0.6			
C21-31-NL	3/4"	1/2"	0.5			
C21-33-NL	3/4"	3/4"	0.7			
C21-34-NL	3/4"	1"	8.0			
C21-35-NL	3/4"	1-1/4"	0.9			
C21-43-NL	1"	3/4"	1.0			
C21-44-NL	1"	1"	1.1			
C21-45-NL	1"	1-1/4"	1.2			
C21-46-NL	1"	1-1/2"	1.6			
C21-55-NL	1-1/4"	1-1/4"	1.7			
C21-66-NL	1-1/2"	1-1/2"	2.5			
C21-67-NL	1-1/2"	2"	3.4			
C21-77-NL	2"	2"	4.6			
C21-78-NL	2"	2-1/2"	6.1			
	ELL COUPLI					
L21-33-NL	3/4"	3/4"	1.0			
L21-44-NL	1"	1"	1.9			
L21-66-NL	1-1/2"	1-1/2"	3.7			
L21-77-NL	2"	2"	6.3			
	EIGHTH BEND COUPLINGS					
LA21-33-NL	3/4"	3/4"	0.8			
LA21-44-NL	1"	1"	1.4			

#### Flare Copper to Male Iron Pipe Thread

CATALOG	Descri	APPROX.	
Number	FLARE COPPER	MALE IRON PIPE	Wt. Lbs.
	STRAIGHT COU	PLINGS	
C28-11-NL	1/2"	1/2"	0.4
C28-13-NL	1/2"	3/4"	0.5
C28-21-NL	5/8"	1/2"	0.5
C28-23-NL	5/8"	3/4"	0.6
C28-31-NL	3/4"	1/2"	0.6
C28-33-NL	3/4"	3/4"	0.7
C28-34-NL	3/4"	1"	0.7
C28-43-NL	1"	3/4"	1.0
C28-44-NL	1"	1"	1.1
C28-54-NL	1-1/4"	1"	1.4
C28-55-NL	1-1/4"	1-1/4"	1.6
C28-65-NL	1-1/2"	1-1/4"	2.9
C28-66-NL	1-1/2"	1-1/2"	2.9
C28-77-NL	2"	2"	5.0
	ELL COUPLI	NGS	
L28-11-NL	1/2"	1/2"	0.5
L28-33-NL	3/4"	3/4"	0.8
* L28-34-AWT-NL	3/4"	1"	1.0
L28-43-NL	1"	3/4"	1.1
L28-44-NL	1"	1"	1.3
L28-66-NL	1-1/2"	1-1/2"	2.9
L28-77-NL	2"	2"	5.3

<sup>\*</sup> This item is manufactured from two castings assembled watertight.



C28-33-NL

## **Flared Copper Couplings**

## Flare Copper to Flare Copper



## Flare Copper to Flare Copper (2 part) Coupling (supplied with wedding ring)

CATALOG	Descri	APPROX.			
Number	FLARE COPPER	FLARE COPPER	WT. LBS.		
	STRAIGHT COUPLINGS				
CS22-33-NL	3/4"	3/4"	0.6		
CS22-44-NL	1"	1"	0.9		
CS22-55-NL	1-1/4"	1-1/4"	0.9		
CS22-66-NL	1-1/2"	1-1/2"	4.0		
CS22-77-NL	2"	2"	6.7		



#### Wedding Ring Only for (2 part) Coupling

	<u> </u>	
CATALOG Number	SIZE AND COUPLING APPLICATIONS	APPROX. Wt. Lbs.
1102.11	WEDDING RINGS	
	WEDDING KINGS	
WR-3-NL	3/4" for CS22-33-NL	0.1
WR-4-NL	1" for CS22-44-NL	0.1
WR-5-NL	1-1/4" for CS22-55-NL	0.1
WR-6-NL	1-1/2" for CS22-66-NL	1.4
WR-7-NL	2" for CS22-77-NL	2.2



C22-33-NL

#### Flare Copper to Flare Copper (3 part) Coupling

CATALOG	Descri	APPROX.			
Number	FLARE COPPER	FLARE COPPER	Wt. Lbs.		
STRAIGHT COUPLINGS					
C22-11-NL	1/2"	1/2"	0.6		
C22-12-NL	1/2"	5/8"	0.7		
C22-13-NL	1/2"	3/4"	0.8		
C22-22-NL	5/8"	5/8"	0.8		
C22-23-NL	5/8"	3/4"	1.0		
C22-33-NL	3/4"	3/4"	1.0		
C22-34-NL	3/4"	1"	1.3		
C22-44-NL	1"	1"	1.9		
C22-55-NL	1-1/4"	1-1/4"	2.7		
C22-66-NL	1-1/2"	1-1/2"	4.5		
C22-77-NL	2"	2"	8.4		
	ELL COU	PLINGS			
L22-33-NL	3/4"	3/4"	1.0		
L22-34-NL	3/4"	1"	1.4		
L22-44-NL	1"	1"	1.8		
L22-66-NL	1-1/2"	1-1/2"	4.8		
L22-77-NL	2"	2"	8.5		

## Flared Copper Couplings

#### **Branch Connections and Service Tees**





#### "Y" Branch Connections

CATALOG	DES	APPROX.		
Number	MULTI-BRANCH END	Х	SINGLE BRANCH END	WT. LBS.
	TWO BRANCH CO	ONNE	ECTIONS	•
Y21-246-NL	Two 1" flare cop. conns.	Х	1-1/2" female iron pipe	2.7
Y21-247-NL	Two 1" flare cop. conns.	Х	2" female iron pipe	4.1
Y22-243-NL	Two 3/4" flare cop. conns.	Х	1" flare copper	1.8
Y22-246-NL	Two 1" flare cop. conns.	Х	1-1/2" flare copper	4.4
Y22-247-NL	Two 1" flare cop. conns.	Х	2" flare copper	6.0
Y28-234-NL	Two 3/4" flare cop. conns.	Х	1" male iron pipe	1.3
Y28-246-NL	Two 1" flare cop. conns.	Х	1-1/2" male iron pipe	2.7
Y28-247-NL	Two 1" flare cop. conns.	Х	2" male iron pipe	2.7
Y88-247-NL	Two 1" male iron pipe conns.	Х	2" male iron pipe	1.7
	THREE BRANCH C	CONN	IECTIONS	
Y21-347-NL	Three 1" flare cop. conns.	Х	2" female iron pipe	5.7
Y22-346-NL	Three 1" flare cop. conns.	Х	1-1/2" flare copper	6.8
Y22-347-NL	Three 1" flare cop. conns.	Х	2" flare copper	8.6
Y28-346-NL	Three 1" flare cop. conns.	Х	1-1/2" male iron pipe	5.3
Y28-347-NL	Three 1" flare cop. conns.	X	2" male iron pipe	5.1

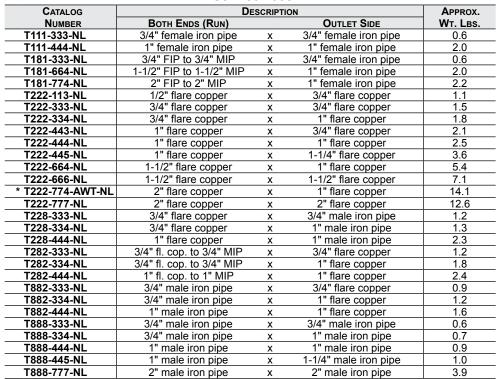


Y11-474-NL

#### Multi-Service "Y"

CATALOG		APPROX.		
Number	SINGLE INLET X MULTI-OUTLET			Wt. Lbs.
Y11-474-NL	2" female iron pipe	Х	Four 1" female iron pipe	3.2

#### **Service Tees**







T882-333-NL



00

Γ11-674-NI

#### **Multi-Service Tee**

CATALOG	DE	APPROX.		
Number	SINGLE INLET	Х	MULTI-OUTLET	Wt. Lbs.
T11-663-NL	1-1/2" female iron pipe	Х	Six 3/4" female iron pipe	1.6
T11-674-NL	2" female iron pipe	X	Six 1" female iron pipe	2.9

## **Flared Copper Couplings**

## **Service Tees and Adapters**

#### Adapters for Flare Copper Connections (replaces flare nut)















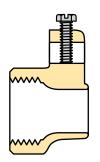
CATALOG NUMBER	DESCRIPTION			APPROX. Wt. Lbs.
	PPER TUBE NUTS WITH MALE	RO		
C08-33-NL	3/4" female copper thread	Х	3/4" male iron pipe	0.3
C08-43-NL	1" female copper thread	Х	3/4" male iron pipe	0.6
C08-44-NL	1" female copper thread	Х	1" male iron pipe	0.7
C08-45-NL	1" female copper thread	Х	1-1/4" male iron pipe	0.8
C08-66-NL	1-1/2" female copper thread	Χ	1-1/2" male iron pipe	1.5
C08-77-NL	2" female copper thread	Χ	2" male iron pipe	2.6
	PER TUBE NUTS WITH FEMAL			
C01-11-NL	1/2" female copper thread	Х	1/2" female iron pipe	0.4
C01-13-NL	1/2" female copper thread	Х	3/4" female iron pipe	0.4
C01-33-NL	3/4" female copper thread	Х	3/4" female iron pipe	0.4
C01-34-NL	3/4" female copper thread	Х	1" female iron pipe	0.7
C01-43-NL	1" female copper thread	Χ	3/4" female iron pipe	0.7
C01-44-NL	1" female copper thread	Х	1" female iron pipe	0.8
C01-55-NL	1-1/4" female copper thread	Х	1-1/4" female iron pipe	1.0
C01-65-NL	1-1/2" female copper thread	Х	1-1/4" female iron pipe	1.7
C01-66-NL	1-1/2" female copper thread	Х	1-1/2" female iron pipe	1.4
C01-67-NL	1-1/2" female copper thread	Х	2" female iron pipe	1.5
C01-75-NL	2" female copper thread	Х	1-1/4" female iron pipe	3.1
C01-77-NL	2" female copper thread	X	2" female iron pipe	2.6
C02 22 NI	PIGGY BACK NUT			0.7
C02-23-NL C02-31-NL	5/8" female copper thread	X	3/4" flare copper 1/2" flare copper	0.7 0.5
C02-31-NL	3/4" female copper thread 3/4" female copper thread	X	5/8" flare copper	0.6
C02-32-NL			3/4" flare copper	0.6
C02-33-NL C02-34-NL	3/4" female copper thread	X	1" flore copper	1.0
C02-34-NL	3/4" female copper thread 1" female copper thread	X	1" flare copper 3/4" flare copper	1.0
C02-43-NL	1" female copper thread	_ <u>^</u>	1" flare copper	1.3
C02-44-NL	1" female copper thread	×	1-1/4" flare copper	1.7
C02-45-NL	1-1/4" female copper thread	X	1" flare copper	1.4
C02-64-NL		X	1" flare copper	1.9
C02-65-NL	1-1/2" female copper thread 1-1/2" female copper thread	X	1-1/4" flare copper	2.4
C02-74-NL	2" female copper thread	X	1" flare copper	3.0
C02-74-NL	2" female copper thread	X	1-1/4" flare copper	3.9
C02-76-NL	2" female copper thread	X	1-1/2" flare copper	4.2
002-70-IVL	QUARTER BE			7.2
L02-33-NL	3/4" female copper thread	X	3/4" flare copper	1.0
L02-44-NL	1" female copper thread	X	1" flare copper	1.6
L02-66-NL	1-1/2" female copper thread	X	1-1/2" flare copper	3.5
L02-77-NL	2" female copper thread	X	2" flare copper	7.0
	SWIVEL QUA		TER BENDS	
L02-33S-NL	3/4" fem. cop. thrd. swivel nut	Х	3/4" flare copper	1.1
L02-44S-NL	1" fem. cop. thrd. swivel nut	Х	1" flare copper	1.6
L02-66S-NL	1-1/2" fem. cop. thrd. swivel nut	Х	1-1/2" flare copper	4.6
L02-77S-NL	2" fem. cop. thrd. swivel nut	Х	2" flare copper	8.0
	EIGHTH BEN	ID C	COUPLINGS	
LA02-33-NL	3/4" female copper thread	Х	3/4" flare copper	0.7
LA02-44-NL	1" female copper thread	Χ	1" flare copper	1.3
LA02-66-NL	1-1/2" female copper thread	Χ	1-1/2" flare copper	3.4
LA02-77-NL	2" female copper thread	Х	2" flare copper	6.4
1 400 555 1::	SWIVEL EIG			1.0
LA02-33S-NL	3/4" fem. cop. thrd. swivel nut	Х	3/4" flare copper	1.0
LA02-44S-NL	1" fem. cop. thrd. swivel nut	Х	1" flare copper	1.5
	1-1/2" fem. cop. thrd. swivel nut	Х	1-1/2" flare copper	4.3
LA02-77S-NL		Х	2" flare copper	7.7

To order C02, L02 and LA02 adapters less the copper tube nut, add "-LN" to the catalog number.

Copper gaskets included on sizes 3/4" and above.

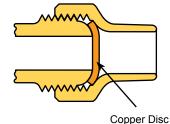
# **Copper Tube Nuts, Discs, Copper Gaskets** and Brass End Caps



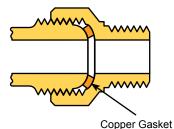












**Copper Tube Nuts** 

CATALOG Number	DESCRIPTION CONNECTION SIZE	APPROX. Wt. Lbs.
CTN-1	1/2"	0.2
CTN-2	5/8"	0.2
CTN-3	3/4"	0.3
CTN-4	1"	0.5
CTN-5	1-1/4"	0.7
CTN-6	1-1/2"	1.2
CTN-7	2"	2.2

#### **Thaw Wire Copper Tube Nuts**

CATALOG Number	DESCRIPTION CONNECTION SIZE	Approx. Wt. Lbs.
CTN-3-THW	3/4"	0.4
CTN-4-THW	1"	0.7

These copper tube nuts have a lug attachment for connecting an electric thawing wire.

## Copper Discs - To Plug Service At Flare Copper Connections

CATALOG Number	DESCRIPTION CONNECTION SIZE	APPROX. Wt. Lbs.
DISC-2	5/8"	0.01
DISC-3	3/4"	0.04
DISC-4	1"	0.06
DISC-5	1-1/4"	0.07
DISC-6	1-1/2"	0.09
DISC-7	2"	0.18

#### Copper Gaskets - To Use With Adapters Replacing Flare Nuts

CATALOG	DESCRIPTION	APPROX.				
Number	CONNECTION SIZE	Wt. Lbs.				
SLC-3	3/4"	0.01				
SLC-4	1"	0.02				
SLC-5	1-1/4"	0.03				
SLC-6	1-1/2"	0.04				
SLC-7	2"	0.08				

#### **Brass End Caps**

Catalog Number	Valve Size	Type of Corporation Stops/Couplings	Approx. Wt. Lbs.
CAP-24-3-NL	3/4"	Flare Copper Corp and CTS Compression Corp	0.3
CAP-2-4-NL	1"	Flare Copper Corp and CTS Compression Corp - Also fits 3/4" PVC Corp and 3/4" PEP Corp	0.5
CAP-4-4-NL	1"	CTS Pack Joint Coupling and CTS Grip Joint Coupling	0.6
CAP-2-5-NL	1-1/4"	Flare Copper Corp and CTS Compression Corp (excluding Quick Joint) - Also fits 1" PEP Corp and 1" PVC Corp	0.7
CAP-4-5-Q-NL	1-1/4"	CTS Quick Joint Corp	0.8
CAP-4-5-NL	1-1/4"	CTS Pack Joint Corp and CTS Grip Joint Coupling - Also fits 1" PEP Coupling	0.9
CAP-2-6-NL	1-1/2"	Flare Copper Corp, CTS Compression Corp (excluding Quick Joint) and PVC Coupling	1.0
CAP-4-6-Q-NL	1-1/2"	CTS Quick Joint Corp	1.0
CAP-2-7-NL	2"	Flare Copper Corp, CTS Compression Corp (excluding Quick Joint) and PVC Corp - Also fits 2-1/2" CTS Pack & Grip Coupling	1.6
CAP-4-7-Q-NL	2"	CTS Quick Joint Corp	1.7
CAP-4-7-NL	2"	CTS Pack Joint Coupling and CTS Grip Joint Coupling - Also fits 1-1/2" PEP Pack Joint (IDR7)	1.7



## **Bushings, Unions, Couplings and Plugs**







CATALOG Number		CRIPTION		APPROX. Wt. Lbs.
C18-13-NL	1/2" female iron pipe	Х	3/4" male iron pipe	0.1
C18-14-NL	1/2" female iron pipe	Х	1" male iron pipe	0.3
C18-31-NL	3/4" female iron pipe	Х	1/2" male iron pipe	0.4
C18-34-NL	3/4" female iron pipe	Х	1" male iron pipe	0.2
C18-35-NL	3/4" female iron pipe	Х	1-1/4" male iron pipe	0.5
C18-36-NL	3/4" female iron pipe	Х	1-1/2" male iron pipe	0.9
C18-37-NL	3/4" female iron pipe	Х	2" male iron pipe	0.7
C18-43-NL	1" female iron pipe	Х	3/4" male iron pipe	0.4
C18-45-NL	1" female iron pipe	Х	1-1/4" male iron pipe	0.4
C18-46-NL	1" female iron pipe	Х	1-1/2" male iron pipe	0.8
C18-47-NL	1" female iron pipe	Х	2" male iron pipe	0.7
C18-54-NL	1-1/4" female iron pipe	Х	1" male iron pipe	0.7
C18-56-NL	1-1/4" female iron pipe	Х	1-1/2" male iron pipe	0.6
C18-57-NL	1-1/4" female iron pipe	Х	2" male iron pipe	1.1
C18-67-NL	1-1/2" female iron pipe	Х	2" male iron pipe	0.8
C18-76-NL	2" female iron pipe	Х	1-1/2" male iron pipe	1.7
C18-78-NL	2" female iron pipe	Х	2-1/2" male iron pipe	1.3

<sup>\*</sup>Also commonly referred to as a coupling (increasing or decreasing) for waterworks applications



#### **Brass Unions**

CATALOG Number	Des	APPROX. Wt. Lbs.		
UNION-3-NL	3/4" female iron pipe	Х	3/4" female iron pipe	0.8
UNION-4-NL	1" female iron pipe	Х	1" female iron pipe	1.0



#### **Couplings and Reducing Couplings**

CATALOG NUMBER	Des	APPROX. Wt. Lbs.		
C11-33-NL	3/4" female iron pipe	Х	3/4" female iron pipe	0.4
C11-43-NL	1" female iron pipe	Х	3/4" female iron pipe	0.4
C11-44-NL	1" female iron pipe	Х	1" female iron pipe	0.5
C11-54-NL	1-1/4" female iron pipe	Х	1" female iron pipe	0.6
C11-64-NL	1-1/2" female iron pipe	Х	1" female iron pipe	0.7
C11-66-NL	1-1/2" female iron pipe	Х	1-1/2" female iron pipe	0.8
C11-74-NL	2" female iron pipe	Х	1" female iron pipe	1.5
C11-75-NL	2" female iron pipe	Х	1-1/4" female iron pipe	1.5
C88-45-NL	1-1/4" male iron pipe	Х	1" male iron pipe	0.6



#### **Ell Couplings**

			<b>3</b> -	
CATALOG Number	Descri	APPROX. Wt. Lbs.		
L18-33-NL	3/4" female iron pipe	Х	3/4" male iron pipe	0.5
L18-44-NL	1" female iron pipe	Х	1" male iron pipe	0.9
L18-76S-NL	2" female iron pipe (swivel nut)	Х	1-1/2" male iron pipe	3.2
L18-87S-NL	2-1/2" female iron pipe (swivel nut)	Х	2" male iron pipe	4.0
L88-33-NL	3/4" male iron pipe	Х	3/4" male iron pipe	0.5
L88-77-NL	2" male iron pipe	Х	2" male iron pipe	2.4



**Eighth Bend Couplings** 

CATALOG NUMBER		APPROX. Wt. Lbs.		
LA81-44-NL	1" male iron pipe	х	1" female iron pipe	0.9



#### **Brass Service Plugs**

CATALOG Number	Desc	APPROX. Wt. Lbs.		
	PIPE	PLUGS	3	
CSP-3-I-NL	3/4" male iron pipe thread	Х	square wrench head	0.2
CSP-4-I-NL	1" male iron pipe Thread	0.4		
CSP-3-NL	male cop. thrd. for 3/4" CTN	Х	square wrench head	0.2
CSP-4-NL	male cop. thrd. for 1" CTN	Х	square wrench head	0.4

## **Insert Fittings for Plastic**

#### Straight Insert Fittings for SIDR-7 PE Plastic Pipe



Both ends ribbed insert for PE pipe



Female copper thread to ribbed insert for PE pipe (replaces flare nut)



Male iron pipe thread to ribbed insert for PE pipe



Female iron pipe to ribbed insert for PE pipe



Solder socket for copper to ribbed insert for PE pipe



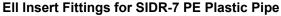
Nose for solder connection into sweat fitting to ribbed insert for PE pipe

#### Straight Insert Fittings for PE Plastic Pipe

CATALOG Number	DESCRIPT	APPROX. Wt. Lbs.		
	BOTH ENDS RIBBED IN	SERT FO	OR PE PIPE	
PTP-1-NL	3/4" PE pipe	Х	3/4" PE pipe	0.3
PTP-21-NL	3/4" PE pipe	Х	1" PE pipe	0.4
PTP-2-NL	1" PE pipe	Х	1" PE pipe	0.4
PTP-3-NL	1-1/4" PE pipe	Х	1-1/4" PE pipe	0.5
PTP-32-NL	1-1/4" PE pipe	Х	1" PE pipe	0.5
PTP-4-NL	1-1/2" PE pipe	Х	1-1/2" PE pipe	0.8
PTP-5-NL	2" PE pipe	Х	2" PE pipe	1.1
	<b>FEMALE COPPER THREAD TO R</b>	IBBED II		
PTC-1-NL	3/4" female cop. thrd.	Х	3/4" PE pipe	0.3
PTC-21-NL	3/4" female cop. thrd.	Х	1" PE pipe	0.4
PTC-2-NL	1" female cop. thrd.	Х	1" PE pipe	0.7
PTC-4-NL	1-1/2" female cop. thrd.	X	1-1/2" PE pipe	1.4
PTC-5-NL	2" female cop. thrd.	2" PE pipe	2.5	
	MALE IRON PIPE THREAD TO RI	BBED IN		
PTM-1-NL	3/4" male iron pipe	Х	3/4" PE pipe	0.3
PTM-21-NL	3/4" male iron pipe	Х	1" PE pipe	0.4
PTM-2-NL	1" male iron pipe	Х	1" PE pipe	0.5
PTM-3-NL	1-1/4" male iron pipe	Х	1-1/4" PE pipe	8.0
PTM-4-NL	1-1/2" male iron pipe	Х	1-1/2" PE pipe	1.0
PTM-5-NL	2" male iron pipe	Х	2" PE pipe	1.1
	FEMALE IRON PIPE THREAD TO F	RIBBED		
PTF-1-NL	3/4" female iron pipe	Х	3/4" PE pipe	0.5
PTF-21-NL	3/4" female iron pipe	X	1" PE pipe	0.5
PTF-2-NL	1" female iron pipe	X	1" PE pipe	0.6
	OLDER SOCKET FOR COPPER TO			
PTSS-1-NL	3/4" solder socket for cop.	Х	3/4" PE pipe	0.3
PTSS-2-NL	1" solder socket for cop.	X	1" PE pipe	0.5
PTSS-3-NL	1-1/4" solder socket for cop.	X	1-1/4" PE pipe	0.8
	SOLDER NOSE FOR COPPER TO			
PTS-1-NL	3/4" solder nose for cop.	Х	3/4" PE pipe	0.2
PTS-2-NL	1" solder nose for cop.	Х	1" PE pipe	0.3
PTS-3-NL	1-1/4" solder nose for cop.	Х	1-1/4" PE pipe	0.8

## **Insert Fittings for Plastic**



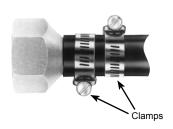


CATALOG Number	DESCRIPTION	Approx. Wt. Lbs.		
PTPL-4-NL	1-1/2" PE Pipe x 1-1/2" PE Pipe	1.0		
PTPL-5-NL	2" PE Pipe x 2" PE Pipe	1.5		



#### Service Tee Insert Fitting for 1" SIDR-7 PE Plastic Pipe

CATALOG Number	DESCRIPTION	APPROX. Wt. Lbs.
PTPT-2-NL	1" PE Pipe x 1" PE Pipe x 1" PE Pipe	0.7



## Stainless Steel Screw-Type Clamp for PE Pipe and Ford Insert Fittings

CATALOG Number	DESCRIPTION	APPROX. Wt. Lbs.
CLAMP-16	For 3/4" PE Pipe	0.05
CLAMP-20	For 1" PE Pipe	0.05
CLAMP-24	For 1-1/4" PE Pipe	0.05
CLAMP-32	For 1-1/2" PE Pipe	0.06
CLAMP-40	For 2" PE Pipe	0.07



## Flare Nuts for SIDR-7 PE Pipe (replaces copper flare nut)

CATALOG Number	DESCRIPTION	APPROX. Wt. Lbs.
FPN-3	For 3/4" PE Pipe	0.3
FPN-4	For 1" PE Pipe	0.8



SI-C02-33-AWT-NL

#### **Service Insulator Couplings**

Catalog Number	Descri	PTIO	N	Components
SI-C02-33-AWT-NL	3/4" female copper thread	Х	3/4" flare copper	C08-33-NL/DB-34/C21-34-AWT-NL
♦ SI-C04-44-AWT-NL	1" female copper thread	Х	1" pack joint (CTS)	C08-44-NL/DB-45/C14-54-AWT-NL
◆ SI-C04-66-AWT-NL	1-1/2" female copper thread	Χ	1-1/2" pack joint (CTS)	C08-66-NL/DB-67/C14-76-AWT-NL
♦ SI-C04-77-AWT-NL	2" female copper thread	Х	2" pack joint (CTS)	C08-77-NL/DB-78/C14-87-AWT-NL
SI-C22-33-AWT-NL	3/4" flare copper	Х	3/4" flare copper	C21-34-NL/DB-34/C28-33-AWT-NL
SI-C22-44-AWT-NL	1" flare copper	Х	1" flare copper	C21-45-NL/DB-45/C28-44-AWT-NL
♦ SI-C44-33-AWT-NL	3/4" pack joint (CTS)	Х	3/4" pack joint (CTS)	C14-43-NL/DB-34/C84-33-AWT-NL
♦ SI-C44-44-AWT-NL	1" pack joint (CTS)	Х	1" pack joint (CTS)	C84-44-NL/DB-45/PJA4-44-C14-54-NL
♦ SI-C44-55-AWT-NL	1-1/4" pack joint (CTS)	Х	1-1/4" pack joint (CTS)	C84-55-NL/DB-56/C21-66-LN-NL/C01-65-NL/C84-55-AWT-NL
♦ SI-C44-66-AWT-NL	1-1/2" pack joint (CTS)	Х	1-1/2" pack joint (CTS)	C84-66-NL/DB-67/C14-76-AWT-NL
♦ SI-C44-77-AWT-NL	2" pack joint (CTS)	Х	2" pack joint (CTS)	C84-77-NL/DB-78/C14-87-AWT-NL
♦ SI-C77-44-AWT-NL	1" pack joint (PVC)	Х	1" pack joint (PVC)	C17-54-NL/DB45/C87-44-AWT-NL

Note: These products are manufactured from components assembled watertight.

**Grip Joint** for CTS is available. Add "-G" to the catalog number.

◆ Quick Joint is available. Add "-Q" to the catalog number.

**Note**: Various service line connection types are available.

## O.D. Chart

<u>U.i.</u>	J. GI										
PIPE	PVC/HDPE			ILE / CAST	IRON		ASBESTOS-CE		STI	EEL	COPPER
SIZE	(Steel Size) O.D.	C900/C905 O.D.	Pit	sses Spun	O.D.	Class	Machined End O.D.	Rough Barrel O.D. Min - Max	Type	O.D.	O.D.
1/2"	.84	U.D.	FIL	Spuii			O.D.	IVIIII - IVIAX	STD.	.84	.625
3/4"	1.05								STD.	1.05	.875
1"	1.32								STD.	1.32	1.125
1-1/4"	1.66								STD.	1.66	1.375
1-1/2"	1.90								STD.	1.90	1.625
2"	2.38				2.50				STD.	2.38	2.125
2-1/2"	2.88		Λ		3.80	100	3.74	4.00	STD.	2.88	2.625
3"	3.50		B, C, D	50 - 350	3.80	150	3.74	4.00 4.10	O.D.	3.00	3.125
3	3.30		D, C, D	30 - 330	3.30	200	3.84	4.29	STD.	3.50	3.123
3-1/2"						200	0.04	4.20	STD.	4.00	3.625
			Α	50 - 350	4.80	100	4.64	4.79 - 5.14	O.D.	4.00	
4"	4.50	4.80	B, C, D		5.00	150	4.81	4.97 - 5.27			4.125
						200	4.81	5.22 - 5.57	STD.	4.50	
4-1/2"									STD.	5.00	5.405
5"			Λ	50 - 350	6.00	100	6.01	7.05 - 7.40	STD.	5.56	5.125
6"	6.63	6.90	A B, C, D,	50 - 350	6.90 7.10	150	6.91 6.91	7.05 - 7.40	O.D.	6.00	6.125
ľ	0.03	0.90	E, F		7.10	200	6.91	7.26 - 7.56	STD.	6.63	0.123
7"			, .		7.22	200	0.01	1.20 1.00	STD.	7.63	
			A, B,	50 - 300	9.05	100	9.11	9.22 - 9.57	O.D.	8.00	
8"	8.63	9.05	C, D,	350	9.30	150	9.11	9.27 - 9.57			
			E, F		9.42	200	9.11	9.39 - 9.74	STD.	8.63	
9"									STD.	9.63	
40"	40 ==	44.45	A, B,	50 - 200	11.10	100	11.24	11.42 - 11.77	O.D.	10.00	
10"	10.75	11.10	C, D,	250 - 350	11.40	150	11.66	11.82 - 12.12	STD.	10.75	
			E, F	F0 200	11.60	200	11.66	11.77 - 12.12			
12"	10.75	12.20	A, B,	50 - 200 250 - 350	13.20 13.50	100 150	13.44 13.92	13.69 - 14.04 14.08 - 14.38	O.D.	12.00	
12	12.75	13.20	<u>C, D,</u> E, F	250 - 350	13.76	200	13.92	14.03 - 14.38	STD.	12.75	
			A, B,	50 - 100	15.30	100	15.07	15.40 - 15.80			
14"	14.00	15.30	C, D,	150 - 300	15.65	150	16.22	16.38 - 16.73	STD.	14.00	
• •	11.00	10.00	E, F	100 000	15.98	200	16.22	16.48 - 16.88	015.	11.00	
			A, B,	50 - 100	17.40	100	17.14	17.54 - 17.94			
16"	16.00	17.40	C, D,	150 - 300	17.80	150	18.46	18.62 - 18.97	STD.	16.00	
			E, F		18.16	200	18.46	18.79 - 19.19			
			A, B	50 - 100	19.50	100	19.90	20.44			
18"	18.00	19.50	C, D	150 - 250	19.92	150	20.94	21.20	STD.	18.00	
						200	22.18				
			A, B,	50 - 100	21.60	100	22.12	22.50			
20"	20.00	21.60	C, D	150 - 250	22.06	150	23.28	23.54	STD.	20.00	
00"						200	24.66		OTD	00.00	
22"			A D	FO 100	25.80	100	26.40	07.47	STD.	22.00	
24"	24.00	25.80	A, B, C, D	50 - 100 150 - 250	26.32	150	26.48 27.96	27.17 28.22	STD.	24.00	
24	24.00	25.60	C, D	150 - 250	20.32	200	29.62	20.22	SID.	24.00	
			Α		31.74	200	29.02				
			В	50 - 350	32.00	1			0.70		
30"	30.00	32.00	C	33 333	32.40				STD.	30.00	
			D		32.74					<u></u>	
			Α		37.96						
36"	36.00	38.30	В	50 - 350	38.30				STD.	36.00	
30	30.00	30.30	С		38.70				SID.	30.00	
			D		39.16						
			A	50 050	44.20	-					
42"		44.50	B C	50 - 350	44.50	-			STD.	42.00	
			D		45.10 45.58	-					
			A		50.50						
			В	50 - 350	50.80						
48"		50.80	C	33 333	51.40				STD.	48.00	
			D		51.98						
			Α		56.66						
			В		57.10						
54"				50 - 350	57.56				STD.	54.00	
			С		57.80						
			D	50 050	58.40						
				50 - 350	61.61						
60"			A		62.80				CTD	60.00	
60"			B C		63.40 64.20	-			STD.	60.00	
			D		64.82						
			_					one listed above are		1	

**Note**:Due to variations in outside diameters and specifications, dimensions listed above are approximate. For this reason, determine the pipe O.D. before ordering.

Notes

# Section J

# Ford<sup>®</sup> Couplings For Pipe And Tubing

### Warranty

All merchandise is warranted to be free from defects in material and factory workmanship for one year from date of shipment from our factory. We will provide, free of charge, new products in equal quantities for any that prove defective within one year from date of shipment from our factory. Manufacturer shall not be liable for any loss, damage, or injury, direct or consequential, arising out of the use of or the inability to use the product. Before using, user shall determine the suitability of the product for user's intended use and user assumes all risk and liability whatever in connection therewith. No claims for labor or consequential damage will be allowed. The foregoing may not be changed except by agreement signed by an officer of the manufacturer.

No other warranties are applicable or may be implied, including the implied warranty of merchantability and the implied warranty of fitness for particular purpose and any warranty relating to infringement or the like, all of which are disclaimed.

Parties responsible for monitoring and maintaining proper water system design must exercise full responsibility in understanding and upholding the full intent and scope of applicable lead laws.

#### **Please Note:**

Consult The Ford Meter Box Company, Inc. website (www.fordmeterbox.com) for the most recent catalog information. The Ford Meter Box Company considers the information in this catalog to be correct at the time of publication. Items and option availability, including specifications, are subject to change without notice. Please verify that your product information is current.