



# Section J

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# Ford Couplings For Pipe And Tubing



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Ford offers many products listed to specific standards and classifications. Due to the forthcoming standards changes understood during the publication of this catalog, product listings will evolve to meet the changing standards requirements. Please contact the Ford Meter Box Customer Service Department at 260-563-3171 or local Ford distributor to verify a product meets a specific standard. Ford Meter Box meets your needs for products that are proven and reliable.

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

### TYPES OF INLETS - OUTLETS

(one end – other end)

- 1 = Female Iron Pipe Thread
- 2 = Flare Copper Tube Nut
- 4 = Pack Joint for Plastic or Copper Tube
- 5 = Pack Joint for Iron Pipe
- 6 = Pack Joint for PE Pipe
- 7 = Pack Joint for PVC Pipe
- 8 = Male Iron Pipe Thread
- 0 = Female Copper Tube Nut Thread or "Special"

G = Grip Joint (3/4" - 2" CTS and 3/4" & 1" PEP)

Q = Quick Joint (for indicated items)

IDR7 = Pack Joint for 1-1/2" and 2" PEP (requires dimension ratio designation)

IDR9 = Pack Joint for 1-1/2" and 2" PEP (requires dimension ratio designation)

TW-Q = CTS Quick Joint with Tracer Wire Terminal

U-AWT = Ultra-Tite Coupling (consists of components assembled watertight)

U = Ultra-Tite Coupling

NL = No Lead Alloy ▲

**C 8 4 - 3 4 - G - NL**

C = Coupling  
L = 90° Elbow  
LA = Eighth Bend

### SIZE OF INLETS - OUTLETS (one end – other end)

- 1 = 1/2"
- 2 = 5/8"
- 3 = 3/4"
- 4 = 1"
- 5 = 1-1/4"
- 6 = 1-1/2"
- 7 = 2"
- 8 = 2-1/2"

## Ford Coupling Numbering System

### TYPES OF INLETS - OUTLETS

(one end/run – other end/run – side outlet)

- 1 = Female Iron Pipe Thread
- 2 = Flare Copper Tube Nut
- 4 = Pack Joint for Plastic or Copper Tube
- 6 = Pack Joint for PE Pipe
- 8 = Male Iron Pipe Thread

### SIZE OF INLETS - OUTLETS

(one end – other end – side outlet)

- 1 = 1/2"
- 3 = 3/4"
- 4 = 1"
- 5 = 1-1/4"
- 6 = 1-1/2"
- 7 = 2"

G = Grip Joint (3/4" - 2" CTS and 3/4" & 1" PEP)

Q = Quick Joint (for indicated items)

U-AWT = Ultra-Tite Coupling (consists of components assembled watertight)

**T 4 4 1 - 3 3 4 - G - NL**

T = Tee  
TD = Cut-In Tee

Run  
Side Outlet

NL = No Lead Alloy ▲

## Ford Tee Numbering System

**Q 2 1 - 3 3 - NL**

NL = No Lead Alloy ▲

### Lead Strength

- 1 = Strong
- 2 = Extra Strong
- 3 = Double Extra Strong

### Other End

- 1 = Female Iron Pipe Thread
- 2 = Flare Copper Tube Nut
- 4 = Pack Joint for Plastic or Copper Tube
- 6 = Pack Joint for PE Pipe
- 8 = Male Iron Pipe Thread
- S = Solder

### SIZES (one end – other end)

- 1 = 1/2"
- 3 = 3/4"
- 4 = 1"
- 5 = 1-1/4"
- 6 = 1-1/2"
- 7 = 2"

**Q 3 Q 3 - 4 4 - NL**

Lead on Both Ends

NL = No Lead Alloy ▲

## Ford Lead-Pack Numbering System

▲ 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. The same UNS C83600 85-5-5-5 brass alloy, also referenced as gunmetal or LG2, is specified and used in potable water systems in most other countries.

Remove "-NL" from catalog number to have products manufactured from UNS C83600 85-5-5-5 brass alloy.

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.

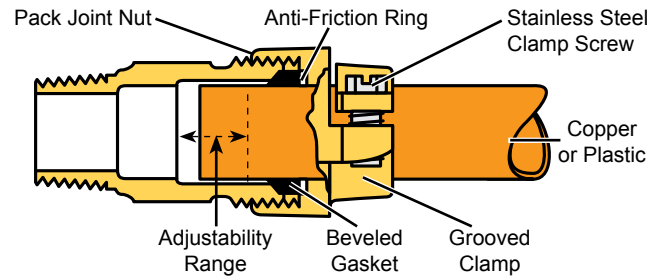
# \*Ford Pack Joint Couplings

## Pack Joint Connections - How the Pack Joint Works

1. 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.
3. Machined grooves in the clamp provide additional gripping action.

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

### FOR COPPER, PET, PEP OR PVC (Metal inserts to be used with PET or PEP)



# \*Ford Quick Joint Couplings

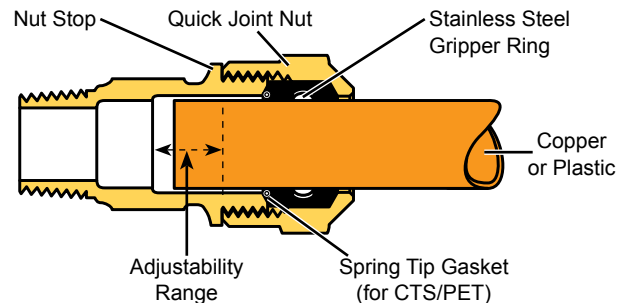
The Ford Quick Joint Nut offers traditional Ford features of quality and reliability. This easy to use fitting is available on a wide variety of Ford products. Just stab the copper or plastic tubing into the fitting and tighten down the compression nut to the external stop. That's it! The Quick Joint 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

1. A large Buna-N 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.

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

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



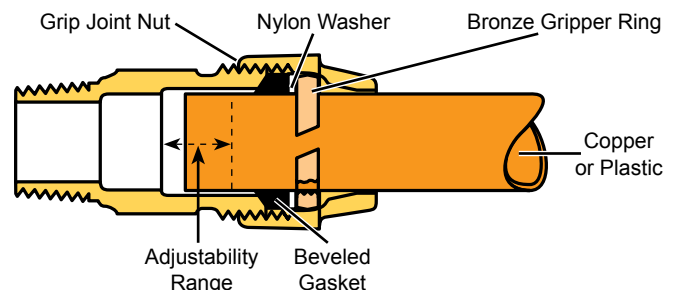
# \*Ford Grip Joint Couplings

## Grip Joint Connections - How the Grip Joint Works

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

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

### ONE STEP COUPLING FOR COPPER, PET OR PEP (Metal inserts to be used with PET or PEP)



\* 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

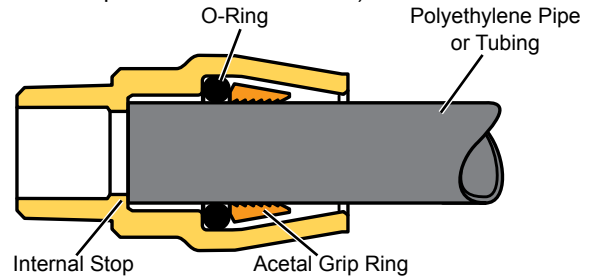
1. An integral stop within the coupling ensures full pipe insertion.
2. The directional serrations of the plastic grip ring engage the outside diameter of the pipe or tubing providing a mechanical seal and lock.
3. The internal O-ring provides a hydraulic seal.

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.

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

### STAB COUPLING FOR 3/4" AND 1" PEP AND PET (No insert required or recommended.)



## 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  
**PEP** - PE Pipe  
**PVC** - PVC Pipe

**S** - Strong Lead Pipe  
**XS** - Extra Strong Lead 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.

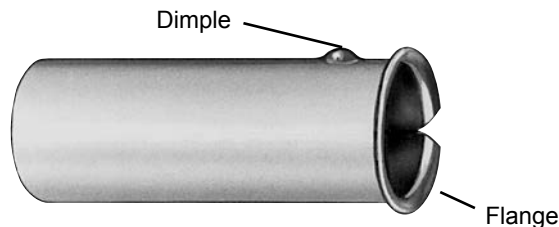
**Ford Pack Joints for PVC are recommended for use only with Schedule 40 and Schedule 80 PVC.**

**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).

# 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 NUMBER	NOMINAL SIZE	PET ID	APPROX. Wt. LBS.*	STD. PKG. QTY.
INSERT-51	3/4"	0.681	4.8	200
INSERT-52	1"	0.875	4.2	100
** INSERT-53-72	1-1/4"	1.069	2.4	50
**♦ INSERT-53-72-Q	1-1/4"	1.069	2.4	50
INSERT-54	1-1/2"	1.263	3.1	25
INSERT-55	2"	1.653	6.0	40
♦INSERT-54-Q	1-1/2"	1.263	2.6	30
♦INSERT-55-Q	2"	1.653	5.8	50

### 70 Series For Polyethylene Pipe (PEP)

CATALOG NUMBER	NOMINAL SIZE	PEP ID	APPROX. Wt. LBS.*	STD. PKG. QTY.
INSERT-71	3/4"	0.824	4.4	100
** INSERT-53-72	1"	1.049	2.9	50
**♦ INSERT-53-72-Q	1"	1.049	2.9	50
INSERT-73	1-1/4"	1.380	5.8	75
INSERT-74	1-1/2"	1.610	5.5	45
INSERT-75	2"	2.067	9.7	50

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

CATALOG NUMBER	NOMINAL SIZE AND PIPE TYPE	DR	HDPE OD	NOMINAL 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

\* Weights for insert stiffeners are for standard package quantities.

\*\* INSERT-53 (-Q) and INSERT-72 (-Q) fit 1-1/4" plastic tubing (1.069 I.D.), 1" plastic pipe (1.049 I.D.) and 1" IPS HDPE (1.055 I.D.)

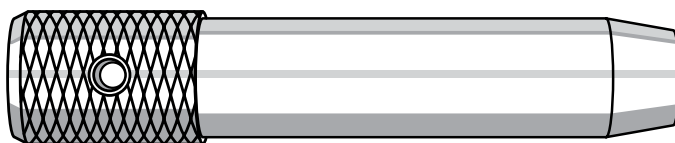
♦ These inserts are specifically designed and required for Quick Joint Fittings. They **ARE NOT** interchangeable for use with any other types of compression fittings.

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

PIPE AND TUBING TYPE	PSI	SDR	CONTROL	O.D.						I.D.					
				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
	PE4710 250			—	—	—	—	—	—	—	—	—	—	—	—
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
	PE4710 250			—	—	—	—	—	—	—	—	—	—	—	—
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

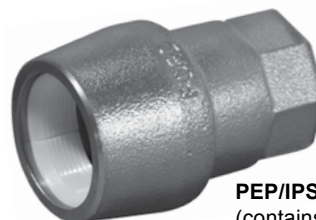
# Ultra-Tite Compression Fittings

## 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.



**PET/CTS Ultra-Tite**  
(contains red gripper ring)



**PEP/IPS Ultra-Tite**  
(contains white gripper ring)

## 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 Tool /  
Flow-Thru Port



Chamfer Tool

CHAMFER TOOL PART NUMBERS			APPROX. WT. LBS.
CATALOG NUMBER	SIZE	O.D. RANGE	
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

CHAMFER TOOL WITH FLOW-THRU PORT				
CATALOG NUMBER	PORT OPENING	SIZE	O.D. RANGE	APPROX. 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	-



Gripper Ring Removal Tool

## Gripper Ring Removal Tool

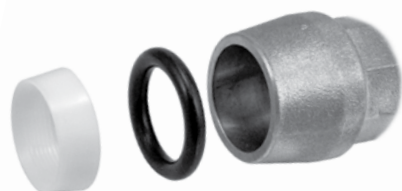
Removing the Ultra-Tite from the pipe or tubing requires a removal tool between the gripper and the pipe or tubing, to allow release of the compression.

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

1" 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

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

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

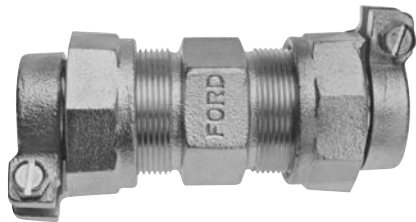
Use this table to ensure pipe/tubing compatibility.

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

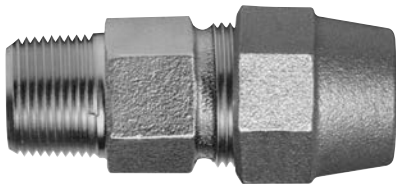
The Ford Ultra-Tite is for applications on Polyethylene Pipe (PEP) or tubing (PET) only.  
The use of a tubing insert is not required or recommended.

# Pack Joint Couplings

## Pack Joint for Copper or Plastic Tubing



C44-44-NL



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

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

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	P.J. FOR CTS	P.J. FOR CTS		
STRAIGHT COUPLINGS				
♦C44-11-NL	1/2"	1/2"	0.7	20
C44-12-NL	1/2"	5/8"	0.8	16
*♦C44-13-NL	1/2"	3/4"	0.8	16
* C44-14-NL	1/2"	1"	0.9	14
♦C44-22-NL	5/8"	5/8"	1.0	14
*♦C44-23-NL	5/8"	3/4"	1.0	14
♦♦C44-33-NL	3/4"	3/4"	0.9	14
■♦C44-33-4-75-NL	3/4"	3/4"	1.4	12
▶♦C44-34-NL	3/4"	1"	0.9	12
C44-35-NL	3/4"	1-1/4"	1.7	6
♦♦C44-44-NL	1"	1"	1.2	10
■♦C44-44-4-75-NL	1"	1"	2.0	18
C44-45-NL	1"	1-1/4"	1.4	10
♦C44-46-NL	1"	1-1/2"	2.2	4
♦C44-55-NL	1-1/4"	1-1/4"	2.1	4
C44-56-NL	1-1/4"	1-1/2"	2.8	5
♦C44-66-NL	1-1/2"	1-1/2"	3.0	10
C44-67-NL	1-1/2"	2"	3.5	2
♦C44-77-NL	2"	2"	4.5	6
C44-88-NL	2-1/2"	2-1/2"	7.1	1
ELL COUPLINGS				
▶♦L44-33-NL	3/4"	3/4"	1.0	12
▶♦L44-34-NL	3/4"	1"	1.1	10
▶♦L44-44-NL	1"	1"	1.4	6
L44-55-NL	1-1/4"	1-1/4"	2.1	4
♦L44-66-NL	1-1/2"	1-1/2"	3.5	3
†♦L44-77-NL	2"	2"	9.5	1

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

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	MALE IRON PIPE	P.J. FOR CTS		
STRAIGHT COUPLINGS				
♦ C84-11-NL	1/2"	1/2"	0.5	35
C84-12-NL	1/2"	5/8"	0.6	-
♦ C84-13-NL	1/2"	3/4"	0.6	25
♦ C84-31-NL	3/4"	1/2"	0.5	30
♦ C84-32-NL	3/4"	5/8"	0.6	20
♦♦ C84-33-NL	3/4"	3/4"	0.6	20
■♦ C84-33-4-75-NL	3/4"	3/4"	1.1	15
♦♦ C84-34-NL	3/4"	1"	0.7	18
C84-42-NL	1"	5/8"	0.7	-
►♦ C84-43-NL	1"	3/4"	0.7	20
♦♦ C84-44-NL	1"	1"	0.9	14
■♦ C84-44-4-75-NL	1"	1"	1.5	-
♦ C84-45-NL	1"	1-1/4"	1.3	12
C84-46-NL	1"	1-1/2"	1.8	5
C84-54-NL	1-1/4"	1"	1.1	5
♦ C84-55-NL	1-1/4"	1-1/4"	1.4	8
C84-56-NL	1-1/4"	1-1/2"	1.8	5
♦ C84-66-NL	1-1/2"	1-1/2"	2.1	8
C84-67-NL	1-1/2"	2"	2.6	4
♦ C84-77-NL	2"	2"	3.1	4
ELL COUPLINGS				
L84-11-Q-NL	1/2"	1/2"	0.6	25
►♦ L84-33-NL	3/4"	3/4"	0.8	16
► L84-34-NL	3/4"	1"	0.8	12
►♦ L84-44-NL	1"	1"	1.1	10
♦ L84-66-NL	1-1/2"	1-1/2"	2.5	4
♦ L84-77-NL	2"	2"	3.9	2
EIGHTH BEND COUPLINGS				
LA84-33-NL	3/4"	3/4"	0.6	15
LA84-44-NL	1"	1"	0.8	12

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 Couplings

## Pack Joint for Copper or Plastic Tubing

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



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

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	FEMALE IRON PIPE	P.J. FOR CTS		
STRAIGHT COUPLINGS				
♦ C14-11-NL	1/2"	1/2"	0.5	36
C14-12-NL	1/2"	5/8"	0.5	-
C14-13-NL	1/2"	3/4"	0.5	25
C14-31-NL	3/4"	1/2"	0.6	25
♦♦ C14-33-NL	3/4"	3/4"	0.6	25
♦♦ C14-34-NL	3/4"	1"	0.7	18
C14-35-NL	3/4"	1-1/4"	1.2	10
►♦ C14-43-NL	1"	3/4"	0.7	20
♦♦ C14-44-NL	1"	1"	0.9	15
C14-45-NL	1"	1-1/4"	1.2	10
►*♦ PJA4-44-C14-54-NL	1-1/4"	1"	0.9	12
*♦ PJA4-45-C14-55-NL	1-1/4"	1-1/4"	1.4	10
* PJA4-46-C14-56-NL	1-1/4"	1-1/2"	1.7	10
♦ C14-66-NL	1-1/2"	1-1/2"	2.3	5
C14-67-NL	1-1/2"	2"	2.7	4
C14-76-NL	2"	1-1/2"	2.8	4
♦ C14-77-NL	2"	2"	2.9	3
♦ C14-87-NL	2-1/2"	2"	4.6	3
C14-88-NL	2-1/2"	2-1/2"	5.4	2
ELL COUPLINGS				
L14-11-Q-NL	1/2"	1/2"	0.7	-
►♦ L14-33-NL	3/4"	3/4"	0.9	16
►♦ L14-43-NL	1"	3/4"	0.9	12
►♦ L14-44-NL	1"	1"	1.7	8
♦ L14-54-NL	1-1/4"	1"	1.5	8
♦ L14-66-NL	1-1/2"	1-1/2"	3.3	2
♦ L14-77-NL	2"	2"	6.7	2
EIGHTH BEND COUPLINGS				
LA14-33-NL	3/4"	3/4"	0.8	18
►♦ LA14-43-NL	1"	3/4"	0.7	18
LA14-44-NL	1"	1"	1.3	10
► LA14-54-NL	1-1/4"	1"	1.1	-
LA14-76-NL	2"	1-1/2"	2.8	4
LA14-87-NL	2-1/2"	2"	5.2	2

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



C24-33-NL

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	FLARE COPPER	P.J. FOR CTS		
STRAIGHT COUPLINGS				
▶ C24-13-NL	1/2"	3/4"	0.7	24
▶ C24-33-NL	3/4"	3/4"	1.0	14
▶ C24-34-NL	3/4"	1"	1.0	12
▶ C24-44-NL	1"	1"	1.6	10
C24-45-NL	1"	1-1/4"	1.9	6
ELL COUPLINGS				
▶♦ L24-33-NL	3/4"	3/4"	1.1	14
▶♦ L24-44-NL	1"	1"	1.5	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.

▶ 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 Couplings

## 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 "U-AWT" to the catalog number. (Consists of components assembled watertight.)

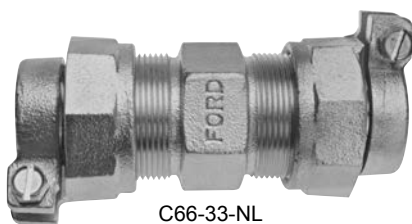
● **Ultra-Tite** is available. Add "-U" to the catalog number.

† Consists of two individual pieces assembled watertight.

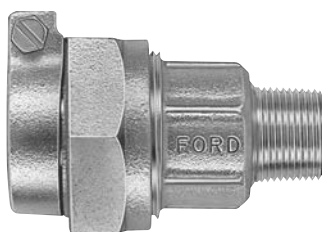
### Female Copper Thread to Pack Joint for Copper or Plastic Tubing (CTS) (replaces flare nut)

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	FEMALE COP. THREAD	P.J. FOR CTS		
STRAIGHT COUPLINGS				
C04-23-NL	5/8"	3/4"	0.7	20
◆ C04-33-NL	3/4"	3/4"	0.7	20
▶◆ C04-34-NL	3/4"	1"	0.7	18
▶◆ C04-43-NL	1"	3/4"	1.0	14
◆◆ C04-44-NL	1"	1"	1.0	12
◆ C04-45-NL	1"	1-1/4"	1.4	10
◆ C04-54-NL	1-1/4"	1"	1.1	10
◆ C04-55-NL	1-1/4"	1-1/4"	1.6	8
◆ C04-66-NL	1-1/2"	1-1/2"	2.5	4
◆ C04-77-NL	2"	2"	4.4	2
ELL COUPLINGS				
▶◆ L04-33-NL	3/4"	3/4"	0.9	15
L04-34-NL	3/4"	1"	0.9	10
▶ L04-44-NL	1"	1"	1.3	8
L04-45-NL	1"	1-1/4"	1.7	-
L04-66-NL	1-1/2"	1-1/2"	3.5	2
L04-77-NL	2"	2"	6.5	2
ELL COUPLINGS WITH SWIVEL				
▶◆ L04-33S-NL	3/4"	3/4"	1.1	12
▶◆ L04-44S-NL	1"	1"	1.4	8
◆ L04-66S-NL	1-1/2"	1-1/2"	4.2	2
◆ L04-77S-NL	2"	2"	6.2	1
EIGHTH BEND COUPLINGS				
▶ LA04-33-NL	3/4"	3/4"	0.7	18
▶ LA04-44-NL	1"	1"	1.1	10
LA04-66-NL	1-1/2"	1-1/2"	2.6	4
LA04-77-NL	2"	2"	4.3	2
EIGHTH BEND COUPLINGS WITH SWIVEL				
▶◆ LA04-33S-NL	3/4"	3/4"	0.9	15
▶ LA04-44S-NL	1"	1"	1.2	10
† LA04-66S-NL	1-1/2"	1-1/2"	4.1	2
† LA04-77S-NL	2"	2"	6.5	1

## Pack Joint for Polyethylene Pipe (PEP)



C66-33-NL



C86-33-NL

### Plastic Pipe (PEP) Both Ends

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	P.J. FOR PEP	P.J. FOR PEP		
STRAIGHT COUPLINGS				
◆◆ C66-33-NL	3/4"	3/4"	1.3	10
► C66-34-NL	3/4"	1"	1.5	6
◆◆ C66-44-NL	1"	1"	2.2	4
C66-55-NL	1-1/4"	1-1/4"	2.7	4
C66-66-IDR7-NL	1-1/2"	1-1/2"	4.6	5
C66-77-IDR7-NL	2"	2"	6.8	6
ELL COUPLINGS				
► L66-33-NL	3/4"	3/4"	1.4	8
► L66-44-NL	1"	1"	2.3	6
L66-66-IDR7-NL	1-1/2"	1-1/2"	5.0	3
L66-77-IDR7-NL	2"	2"	8.2	2

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

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	MALE IRON PIPE	P.J. FOR PEP		
STRAIGHT COUPLINGS				
♦♦ C86-33-NL	3/4"	3/4"	0.8	18
♦♦ C86-34-NL	3/4"	1"	1.3	10
♦♦ C86-44-NL	1"	1"	1.4	12
C86-54-NL	1-1/4"	1"	1.5	8
C86-55-NL	1-1/4"	1-1/4"	1.6	5
C86-65-NL	1-1/2"	1-1/4"	1.8	5
C86-66-IDR7-NL	1-1/2"	1-1/2"	2.6	3
C86-77-IDR7-NL	2"	2"	5.0	5
ELL COUPLINGS				
► L86-33-NL	3/4"	3/4"	0.9	14
► L86-44-NL	1"	1"	1.5	8
L86-77-IDR7-NL	2"	2"	4.9	2
EIGHTH BEND COUPLINGS				
LA86-44-NL	1"	1"	1.5	8

**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 Couplings

## Pack Joint for Polyethylene Pipe (PEP)

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

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	FEMALE IRON PIPE	P.J. FOR PEP		
STRAIGHT COUPLINGS				
♦♦ C16-33-NL	3/4"	3/4"	0.7	18
• C16-34-NL	3/4"	1"	1.3	10
♦♦ C16-44-NL	1"	1"	1.2	10
▶* PJA6-44-C16-54-NL	1-1/4"	1"	1.4	10
* PJA6-45-C16-55-NL	1-1/4"	1-1/4"	1.5	8
* 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	6
C16-66-IDR7-NL	1-1/2"	1-1/2"	2.7	3
C16-77-IDR7-NL	2"	2"	4.7	2
ELL COUPLINGS				
▶ L16-33-NL	3/4"	3/4"	1.0	15
▶ L16-44-NL	1"	1"	2.0	5



C16-33-NL



C26-33-NL

### Flare Copper to Pack Joint for Polyethylene Pipe

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	FLARE COPPER	P.J. FOR PE PIPE		
STRAIGHT COUPLINGS				
▶ C26-33-NL	3/4"	3/4"	1.0	12
▶ C26-34-NL	3/4"	1"	1.7	8
▶ C26-44-NL	1"	1"	1.9	6

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

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	FEMALE COP. THRD	P.J. FOR PEP		
STRAIGHT COUPLINGS				
♦♦ C06-33-NL	3/4"	3/4"	0.8	18
• C06-34-NL	3/4"	1"	1.3	10
▶ C06-43-NL	1"	3/4"	1.0	12
♦♦ C06-44-NL	1"	1"	1.4	10
C06-45-NL	1"	1-1/4"	1.8	6
C06-55-NL	1-1/4"	1-1/4"	1.8	6
C06-66-IDR7-NL	1-1/2"	1-1/2"	3.0	3
C06-77-IDR7-NL	2"	2"	5.2	2
ELL COUPLINGS				
▶ L06-33-NL	3/4"	3/4"	0.9	12
▶ L06-44-NL	1"	1"	1.3	6
EIGHTH BEND COUPLINGS				
▶ LA06-33-NL	3/4"	3/4"	0.9	15
▶ LA06-44-NL	1"	1"	1.7	5



C06-33-NL

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 Kornehorns and 274 Series Coppersettors.

## Pack Joint for Polyvinyl Chloride Pipe (PVC)

### PVC Pipe (PVC) Both Ends

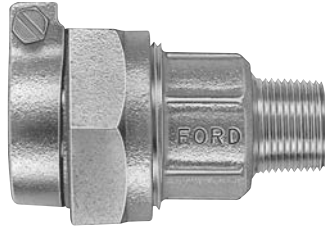
CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	P.J. FOR PVC PIPE	P.J. FOR PVC PIPE		
STRAIGHT COUPLINGS				
C77-11-NL	1/2"	1/2"	0.9	14
C77-33-NL	3/4"	3/4"	1.2	10
C77-34-NL	3/4"	1"	1.5	8
C77-44-NL	1"	1"	2.3	5
C77-55-NL	1-1/4"	1-1/4"	2.9	4
C77-66-NL	1-1/2"	1-1/2"	3.7	3
C77-77-NL	2"	2"	5.7	1
ELL COUPLINGS				
L77-11-NL	1/2"	1/2"	1.0	-
L77-33-NL	3/4"	3/4"	1.5	6
L77-44-NL	1"	1"	2.3	4
L77-66-NL	1-1/2"	1-1/2"	5.4	2
L77-77-NL	2"	2"	7.9	3



C77-33-NL

# Pack Joint Couplings

## Pack Joint for Polyvinyl Chloride Pipe (PVC)



C87-33-NL

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

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	MALE IRON PIPE	P.J. FOR PVC PIPE		
STRAIGHT COUPLINGS				
C87-11-NL	1/2"	1/2"	0.6	-
C87-31-NL	3/4"	1/2"	0.6	20
C87-33-NL	3/4"	3/4"	0.8	18
■ C87-33-4-75-NL	3/4"	3/4"	1.2	15
C87-34-NL	3/4"	1"	1.2	10
C87-43-NL	1"	3/4"	0.9	14
C87-44-NL	1"	1"	1.4	12
C87-45-NL	1"	1-1/4"	1.7	5
C87-46-NL	1"	1-1/2"	2.2	4
C87-54-NL	1-1/4"	1"	1.4	6
C87-55-NL	1-1/4"	1-1/4"	1.7	5
C87-65-NL	1-1/2"	1-1/4"	2.1	5
C87-66-NL	1-1/2"	1-1/2"	2.4	4
C87-77-NL	2"	2"	3.7	3
ELL COUPLINGS				
L87-31-NL	3/4"	1/2"	0.8	-
L87-33-NL	3/4"	3/4"	0.9	14
L87-34-NL	3/4"	1"	1.5	8
L87-44-NL	1"	1"	1.5	8
L87-77-NL	2"	2"	5.1	-

■ Extended coupling length (4-3/4")



C17-33-NL

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

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	FEMALE IRON PIPE	P.J. FOR PVC PIPE		
STRAIGHT COUPLINGS				
C17-31-NL	3/4"	1/2"	0.5	-
C17-33-NL	3/4"	3/4"	0.7	18
C17-34-NL	3/4"	1"	1.2	10
C17-36-NL	3/4"	1-1/2"	2.0	4
C17-44-NL	1"	1"	2.1	10
*PJA7-44-C17-54-NL	1-1/4"	1"	1.4	-
*PJA7-45-C17-55-NL	1-1/4"	1-1/4"	1.6	8
*PJA7-46-C17-56-NL	1-1/4"	1-1/2"	2.4	4
C17-66-NL	1-1/2"	1-1/2"	2.6	4
C17-77-NL	2"	2"	4.5	3
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	-

\* Pack Joint compression assemblies also used with KH-4-NL Kornehorns and 274 Series Coppersettters.



C27-33-NL

### Flare Copper to Pack Joint for PVC Pipe

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	FLARE COPPER	P.J. FOR PVC PIPE		
STRAIGHT COUPLINGS				
C27-31-NL	3/4"	1/2"	1.0	14
C27-33-NL	3/4"	3/4"	1.1	14
C27-34-NL	3/4"	1"	1.6	-
C27-44-NL	1"	1"	1.9	6
ELL COUPLINGS				
L27-31-NL	3/4"	1/2"	1.1	14



C07-33-NL

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

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	FEMALE COP. THRD.	P.J. FOR PVC PIPE		
STRAIGHT COUPLINGS				
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"	0.8	18
C07-34-NL	3/4"	1"	1.3	10
C07-44-NL	1"	1"	1.4	10
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	4
C07-77-NL	2"	2"	4.7	3

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

# Pack Joint Couplings

## Pack Joint for Iron Pipe

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



C55-33-NL

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	P.J. FOR IRON PIPE	P.J. FOR IRON PIPE		
STRAIGHT COUPLINGS				
C55-11-NL	1/2"	1/2"	0.8	20
C55-13-NL	1/2"	3/4"	0.8	18
C55-33-NL	3/4"	3/4"	0.9	15
C55-34-NL	3/4"	1"	1.1	10
C55-44-NL	1"	1"	1.6	6
C55-55-NL	1-1/4"	1-1/4"	2.2	4
C55-66-NL	1-1/2"	1-1/2"	2.9	4
C55-77-NL	2"	2"	4.2	2
ELL COUPLINGS				
L55-11-NL	1/2"	1/2"	0.9	-
L55-33-NL	3/4"	3/4"	1.2	9
L55-44-NL	1"	1"	1.7	4
L55-77-NL	2"	2"	6.5	-

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



C85-33-NL

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	MALE IRON PIPE	P.J. FOR IRON PIPE		
STRAIGHT COUPLINGS				
C85-11-NL	1/2"	1/2"	0.5	30
C85-31-NL	3/4"	1/2"	0.6	25
C85-33-NL	3/4"	3/4"	0.6	20
■ C85-33-4-75-NL	3/4"	3/4"	1.2	15
C85-34-NL	3/4"	1"	1.0	14
C85-43-NL	1"	3/4"	0.7	18
C85-44-NL	1"	1"	1.1	12
C85-55-NL	1-1/4"	1-1/4"	1.3	8
C85-66-NL	1-1/2"	1-1/2"	1.9	5
C85-77-NL	2"	2"	2.7	3
ELL COUPLINGS				
L85-31-NL	3/4"	1/2"	0.5	-
L85-33-NL	3/4"	3/4"	0.7	14
L85-44-NL	1"	1"	1.2	8

■ Extended coupling length (4-3/4")

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



C15-33-NL

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	FEMALE IRON PIPE	P.J. FOR IRON PIPE		
STRAIGHT COUPLINGS				
C15-11-NL	1/2"	1/2"	0.4	25
C15-31-NL	3/4"	1/2"	0.5	25
C15-33-NL	3/4"	3/4"	0.6	25
C15-34-NL	3/4"	1"	0.9	10
C15-44-NL	1"	1"	0.9	12
* PJA5-44-C15-54-NL	1-1/4"	1"	1.2	10
* PJA5-45-C15-55-NL	1-1/4"	1-1/4"	1.3	8
* PJA5-46-C15-56-NL	1-1/4"	1-1/2"	1.8	6
C15-66-NL	1-1/2"	1-1/2"	2.2	6
C15-77-NL	2"	2"	3.4	3
ELL COUPLINGS				
L15-31-NL	3/4"	1/2"	0.8	-
L15-44-NL	1"	1"	1.7	-

\* Pack Joint compression assemblies also used with KH-4-NL Kormerhorns and 274 Series Coppersettters.



# Pack Joint Couplings

## Pack Joint for Iron Pipe



C25-33-NL

### Flare Copper to Pack Joint for Iron Pipe

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	FLARE COPPER	P.J. FOR IRON PIPE		
STRAIGHT COUPLINGS				
C25-11-NL	1/2"	1/2"	0.6	-
C25-31-NL	3/4"	1/2"	0.9	16
C25-33-NL	3/4"	3/4"	0.9	14
C25-34-NL	3/4"	1"	1.3	10
C25-44-NL	1"	1"	1.6	8
C25-45-NL	1"	1-1/4"	1.8	5
ELL COUPLINGS				
L25-33-NL	3/4"	3/4"	1.0	12

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



C05-33-NL

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	FEMALE COP. THRD.	P.J. FOR IRON PIPE		
STRAIGHT COUPLINGS				
C05-33-NL	3/4"	3/4"	0.6	20
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



C46-33-NL

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

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	P.J. FOR CTS	P.J. FOR PE PIPE		
STRAIGHT COUPLINGS				
▶♦ C46-33-NL	3/4"	3/4"	1.0	12
▶ C46-34-NL	3/4"	1"	1.7	6
▶♦ C46-43-NL	1"	3/4"	1.2	10
▶ C46-44-NL	1"	1"	1.5	10
C46-65-NL	1-1/2"	1-1/4"	3.1	4
ELL COUPLINGS				
▶ L46-33-NL	3/4"	3/4"	1.2	10
▶ 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 for CTS end is available. Add "-Q" to the catalog number.

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



C47-33-NL

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	P.J. FOR CTS	P.J. FOR PVC PIPE		
STRAIGHT COUPLINGS				
C47-11-NL	1/2"	1/2"	0.8	14
C47-31-NL	3/4"	1/2"	0.9	-
▶♦ C47-33-NL	3/4"	3/4"	1.0	12
▶ C47-34-NL	3/4"	1"	1.6	8
▶ C47-43-NL	1"	3/4"	1.1	10
▶ C47-44-NL	1"	1"	1.6	10
C47-45-NL	1"	1-1/4"	2.2	8
C47-66-NL	1-1/2"	1-1/2"	3.3	4
C47-77-NL	2"	2"	5.0	4
ELL COUPLINGS				
▶ L47-33-NL	3/4"	3/4"	1.8	10
▶ L47-34-NL	3/4"	1"	1.8	-
▶ L47-44-NL	1"	1"	1.9	5

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 Couplings

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



C45-33-NL



C56-33-NL



C57-33-NL

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

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	P.J. FOR CTS	P.J. FOR IRON PIPE		
STRAIGHT COUPLINGS				
C45-11-NL	1/2"	1/2"	0.7	20
C45-13-NL	1/2"	3/4"	0.9	15
C45-31-NL	3/4"	1/2"	0.8	16
▶♦ C45-33-NL	3/4"	3/4"	0.9	15
▶ C45-34-NL	3/4"	1"	1.4	10
▶ C45-43-NL	1"	3/4"	1.0	12
▶ C45-44-NL	1"	1"	1.2	8
C45-45-NL	1"	1-1/4"	1.6	6
C45-66-NL	1-1/2"	1-1/2"	3.0	4
C45-77-NL	2"	2"	4.2	2
ELL COUPLINGS				
L45-31-NL	3/4"	1/2"	0.9	1
L45-33-NL	3/4"	3/4"	1.0	12
▶ L45-34-NL	3/4"	1"	1.5	-
▶ L45-43-NL	1"	3/4"	1.3	-
▶ L45-44-NL	1"	1"	1.5	6

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 NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	P.J. FOR IRON PIPE	P.J. FOR PE PIPE		
STRAIGHT COUPLINGS				
▶ C56-33-NL	3/4"	3/4"	1.0	12
▶ C56-34-NL	3/4"	1"	1.4	8
▶ C56-44-NL	1"	1"	1.9	6

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 NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	P.J. FOR IRON PIPE	P.J. FOR PVC PIPE		
STRAIGHT COUPLINGS				
C57-11-NL	1/2"	1/2"	0.9	-
C57-33-NL	3/4"	3/4"	1.0	12
C57-34-NL	3/4"	1"	1.4	10
C57-44-NL	1"	1"	1.9	5
C57-66-NL	1-1/2"	1-1/2"	3.4	-
C57-77-NL	2"	2"	5.2	1

**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 NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	P.J. FOR PE PIPE	P.J. FOR PVC PIPE		
STRAIGHT COUPLINGS				
▶ C67-33-NL	3/4"	3/4"	1.2	-
▶ C67-44-NL	1"	1"	2.2	8

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"



Y44-243-NL

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	SINGLE BRANCH END	MULTI-BRANCH END		
♦ Y44-233-NL	3/4" cop. or plastic tubing (CTS)	Two 3/4" cop. or plastic tubing (CTS)	1.6	6
• ♦ Y44-243-NL	1" cop. or plastic tubing (CTS)	Two 3/4" cop. or plastic tubing (CTS)	1.6	4
♦ 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	6
Y44-263-NL	1-1/2" cop. or plastic tubing (CTS)	Two 3/4" cop. or plastic tubing (CTS)	3.2	2
♦ Y44-264-NL	1-1/2" cop. or plastic tubing (CTS)	Two 1" cop. or plastic tubing (CTS)	3.6	2
♦ Y44-274-NL	2" cop. or plastic tubing (CTS)	Two 1" cop. or plastic tubing (CTS)	4.1	2
♦ Y48-234-NL	1" male iron pipe thread	Two 3/4" cop. or plastic tubing (CTS)	1.3	6
Y48-246-NL	1-1/2" male iron pipe thread	Two 1" cop. or plastic tubing (CTS)	2.4	3
Y48-347-NL	2" male iron pipe thread	Three 1" cop. or plastic tubing (CTS)	4.6	4
▶ Y66-243-NL	1" PE pipe P.J.	Two 3/4" PE pipe P.J.	3.1	2
Y68-337-NL	2" male iron pipe thread	Three 3/4" PE pipe P.J.	4.7	1

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 Couplings

## Pack Joint Tees



T444-333-NL



T441-333-NL



T884-333-NL

### Pack Joint Tees

CATALOG NUMBER	DESCRIPTION			APPROX. WT. LBS.	STD. PKG. QTY.
BOTH ENDS (RUN)		X	SIDE OUTLET		
PACK JOINT BOTH ENDS (RUN) BY PACK JOINT SIDE OUTLET					
T444-111-NL	1/2" cop. or plastic tubing (CTS)	x	1/2" cop. or plastic tubing (CTS)	1.2	-
▶♦ T444-333-NL	3/4" cop. or plastic tubing (CTS)	x	3/4" cop. or plastic tubing (CTS)	1.5	6
▶♦ T444-334-NL	3/4" cop. or plastic tubing (CTS)	x	1" cop. or plastic tubing (CTS)	1.9	4
T444-336-AWT-NL	3/4" cop. or plastic tubing (CTS)	x	1-1/2" 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	4
▶♦ T444-444-NL	1" cop. or plastic tubing (CTS)	x	1" cop. or plastic tubing (CTS)	2.0	4
T444-445-NL	1" cop. or plastic tubing (CTS)	x	1-1/4" cop. or plastic tubing (CTS)	2.5	3
T444-446-NL	1" cop. or plastic tubing (CTS)	x	1-1/2" cop. or plastic tubing (CTS)	3.0	3
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	4
T444-667-AWT-NL	1-1/2" cop. or plastic tubing (CTS)	x	2" cop. or plastic tubing (CTS)	16.5	1
T444-773-AWT-NL	2" cop. or plastic tubing (CTS)	x	3/4" cop. or plastic tubing (CTS)	5.9	4
* T444-774-AWT-NL	2" cop. or plastic tubing (CTS)	x	1" cop. or plastic tubing (CTS)	6.2	4
†♦ T444-777-NL	2" cop. or plastic tubing (CTS)	x	2" cop. or plastic tubing (CTS)	13.6	1
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	4
▶ T666-334-NL	3/4" PE pipe P.J.	x	1" PE pipe P.J.	2.5	4
▶ T666-443-NL	1" PE pipe P.J.	x	3/4" PE pipe P.J.	3.0	4
▶ T666-444-NL	1" PE pipe P.J.	x	1" PE pipe P.J.	3.7	6
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.	x	1" PVC pipe P.J.	3.8	-
T777-333-NL	3/4" PVC pipe P.J.	x	3/4" PVC pipe P.J.	2.0	4
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	5
T777-777-NL	2" PVC pipe P.J.	x	2" PVC pipe P.J.	12.2	1
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	8
▶♦ T441-334-NL	3/4" cop. or plastic tubing (CTS)	x	1" female iron pipe	1.3	6
▶♦ T441-444-NL	1" cop. or plastic tubing (CTS)	x	1" female iron pipe	1.7	4
T441-663-NL	1-1/2" cop. or plastic tubing (CTS)	x	3/4" female iron pipe	3.4	4
T441-664-NL	1-1/2" cop. or plastic tubing (CTS)	x	1" female iron pipe	3.4	4
T441-773-NL	2" cop. or plastic tubing (CTS)	x	3/4" female iron pipe	5.2	4
T441-774-NL	2" cop. or plastic tubing (CTS)	x	1" female iron pipe	5.3	4
T661-774-IDR7-AWT-NL	2" PE pipe P.J.	x	1" female iron pipe	12.3	1
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	4
T440-774-NL	2" cop. or plastic tubing (CTS)	x	1" female AWWA taper	5.3	4
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	6
T448-446-NL	1" cop. or plastic tubing (CTS)	x	1-1/2" male iron pipe	1.8	6
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	12
▶♦ T884-334-NL	3/4" male iron pipe	x	1" cop. or plastic tubing (CTS)	1.0	10
▶♦ T884-444-NL	1" male iron pipe	x	1" cop. or plastic tubing (CTS)	1.3	4
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	-
T184-774-NL	2" FIP to 2" MIP	x	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: This item is manufactured from two castings 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 Couplings

## Pack Joint Tees

### Cut-In Tees with Detachable Pack Joints

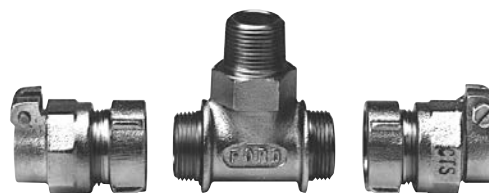
An extra customer can be served from an existing service line by removing a 2-3/4" section to accommodate the body of a tee (4" section for 1" service lines). Slip the detachable Pack Joints onto the ends of the line, screw them tight on each end of the tee. Tighten the Pack Joint nuts and stainless 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 NUMBER	DESCRIPTION			APPROX. WT. LBS.	STD. PKG. QTY.
	BOTH ENDS (RUN)	X	SIDE OUTLET		
SIDE OUTLET FOR FLARE COPPER					
♦TD442-113-NL	1/2" cop. or plastic tubing (CTS) P.J.	x	3/4" flare copper	2.1	-
TD552-113-NL	1/2" iron pipe P.J.	x	3/4" flare copper	2.0	-
♦TD442-333-NL	3/4" cop. or plastic tubing (CTS) P.J.	x	3/4" flare copper	2.1	1
TD552-333-NL	3/4" iron pipe P.J.	x	3/4" flare copper	2.1	1
TD442-443-NL	1" cop. or plastic tubing (CTS) P.J.	x	3/4" flare copper	2.5	1
TD552-443-NL	1" iron pipe P.J.	x	3/4" flare copper	3.1	-
*TD002-NL	less P.J. assemblies	x	3/4" flare copper	1.0	-
SIDE OUTLET FOR FEMALE IRON PIPE THREADS					
♦TD441-113-NL	1/2" cop. or plastic tubing (CTS) P.J.	x	3/4" female iron pipe threads	1.8	-
TD551-113-NL	1/2" iron pipe P.J.	x	3/4" female iron pipe threads	1.6	-
▶♦TD441-333-NL	3/4" cop. or plastic tubing (CTS) P.J.	x	3/4" female iron pipe threads	1.8	6
TD551-333-NL	3/4" iron pipe P.J.	x	3/4" female iron pipe threads	1.7	1
▶TD441-443-NL	1" cop. or plastic tubing (CTS) P.J.	x	3/4" female iron pipe threads	2.3	4
TD551-443-NL	1" iron pipe P.J.	x	3/4" female iron pipe threads	2.5	-
*TD001-NL	less P.J. assemblies	x	3/4" female iron pipe threads	0.7	-
SIDE OUTLET FOR MALE IRON PIPE THREADS					
♦TD448-113-NL	1/2" cop. or plastic tubing (CTS) P.J.	x	3/4" male iron pipe threads	1.8	1
TD558-113-NL	1/2" iron pipe P.J.	x	3/4" male iron pipe threads	-	-
▶♦TD448-333-NL	3/4" cop. or plastic tubing (CTS) P.J.	x	3/4" male iron pipe threads	1.8	6
TD558-333-NL	3/4" iron pipe P.J.	x	3/4" male iron pipe threads	1.7	1
▶TD448-443-NL	1" cop. or plastic tubing (CTS) P.J.	x	3/4" male iron pipe threads	2.3	1
TD558-443-NL	1" iron pipe P.J.	x	3/4" male iron pipe threads	2.8	-
*TD008-NL	less P.J. assemblies	x	3/4" male iron pipe threads	0.7	-

\* 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			APPROX. WT. LBS.	STD. PKG. QTY..
LEAD PIPE TO FEMALE IRON PIPE THREAD					
* Q11-23-Q31-13-NL	1/2" dbl. extra strong lead (XXS) or 5/8" strong lead (S)	x	3/4" female iron pipe thread	0.8	18
Q21-23-NL (C16-33-NL)	5/8" extra strong lead (XS)	x	3/4" female iron pipe thread	0.7	18
* 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	20
Q21-33-NL	3/4" extra strong lead (XS)	x	3/4" female iron pipe thread	1.0	14
Q31-33-NL	3/4" dbl. extra strong lead (XXS)	x	3/4" female iron pipe thread	1.2	10
Q21-44-NL	1" extra strong lead (XS)	x	1" female iron pipe thread	1.5	10
LEAD PIPE TO SOLDER FITTING FOR COPPER TUBING					
Q2S-13-NL	1/2" extra strong lead (XS)	x	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)	x	3/4" solder fit. copper tubing	0.9	-
Q2S-23-NL	5/8" extra strong lead (XS)	x	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)	x	3/4" solder fit. copper tubing	0.7	5
Q2S-33-NL	3/4" extra strong lead (XS)	x	3/4" solder fit. copper tubing	1.0	-
Q1S-44-AWT-NL	1" strong lead (S)	x	1" solder fit. copper tubing	1.5	-
** Q2S-44-AWT-NL	1" extra strong lead (XS)	x	1" solder fit. copper tubing	2.0	-
** Q3S-44-AWT-NL	1" dbl. extra strong lead (XXS)	x	1" solder fit. copper tubing	2.0	-
LEAD PIPE TO LEAD PIPE					
Q2Q2-11-NL (C44-33-NL)	1/2" extra strong lead (XS)	x	1/2" extra strong lead (XS)	0.9	14
* Q1Q1-22-Q3Q3-11-NL	1/2" dbl. extra strong lead (XXS) or 5/8" strong lead (S)	x	1/2" dbl. extra strong lead (XXS) or 5/8" strong lead (S)	1.1	12
Q2Q2-22-NL (C66-33-NL)	5/8" extra strong lead (XS)	x	5/8" extra strong lead (XS)	1.2	10
* Q1Q1-33-Q3Q3-22-NL	5/8" dbl. extra strong lead (XXS) or 3/4" strong lead (S)	x	5/8" dbl. extra strong lead (XXS) or 3/4" strong lead (S)	1.2	12
Q2Q2-33-NL	3/4" extra strong lead (XS)	x	3/4" extra strong lead (XS)	1.7	6
Q3Q3-33-NL	3/4" dbl. extra strong lead (XXS)	x	3/4" dbl. extra strong lead (XXS)	2.2	4
Q1Q1-44-NL	1" strong lead (S)	x	1" strong lead (S)	2.8	6
Q2Q2-44-NL	1" extra strong lead (XS)	x	1" extra strong lead (XS)	2.8	6
Q3Q3-44-NL	1" dbl. extra strong lead (XXS)	x	1" dbl. extra strong lead (XXS)	2.8	8
Q2Q2-55-NL (C66-55-NL)	1-1/4" extra strong lead (XS)	x	1-1/4" extra strong lead (XS)	3.0	4
Q2Q2-66-NL (C66-66-IDR7-NL)	1-1/2" extra strong lead (XS)	x	1-1/2" extra strong lead (XS)	4.5	5
LEAD PIPE TO PACK JOINT FOR COPPER OR PLASTIC TUBING (CTS)					
Q24-13-NL (C44-33-NL)	1/2" extra strong lead (XS)	x	3/4" cop. or plastic tubing (CTS)	0.9	14
Q14-22-NL	1/2" dbl. extra strong lead (XXS)	x	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)	x	3/4" cop. or plastic tubing (CTS)	1.1	12
Q24-23-NL (C46-33-NL)	5/8" extra strong lead (XS)	x	3/4" cop. or plastic tubing (CTS)	1.0	12
Q24-24-NL (C46-43-NL)	5/8" extra strong lead (XS)	x	1" cop. or plastic tubing (CTS)	1.2	10
Q34-24-NL	5/8" dbl. extra strong lead (XXS)	x	1" cop. or plastic tubing (CTS)	1.2	12
* Q14-33-Q34-23-NL	5/8" dbl. extra strong lead (XXS) or 3/4" strong lead (S)	x	3/4" cop. or plastic tubing (CTS)	1.1	12
Q24-33-NL	3/4" extra strong lead (XS)	x	3/4" cop. or plastic tubing (CTS)	1.3	12
Q24-34-NL	3/4" extra strong lead (XS)	x	1" cop. or plastic tubing (CTS)	1.3	10
Q34-33-NL	3/4" dbl. extra strong lead (XXS)	x	3/4" cop. or plastic tubing (CTS)	1.7	6
Q24-43-NL	1" extra strong lead (XS)	x	3/4" cop. or plastic tubing (CTS)	1.7	8
Q34-43-NL	1" dbl. extra strong lead (XXS)	x	3/4" cop. or plastic tubing (CTS)	1.7	8
Q14-44-NL	1" strong lead (S)	x	1" cop. or plastic tubing (CTS)	1.8	6
Q24-44-NL	1" extra strong lead (XS)	x	1" cop. or plastic tubing (CTS)	1.8	6
Q34-44-NL	1" dbl. extra strong lead (XXS)	x	1" cop. or plastic tubing (CTS)	1.8	6
Q24-56-C46-65-NL	1-1/4" extra strong lead (XS)	x	1-1/2" cop. or plastic tubing (CTS)	3.0	4
Q24-66-C46-66-IDR7-NL	1-1/2" extra strong lead (XS)	x	1-1/2" cop. or plastic tubing (CTS)	3.8	6
Q24-77-NL	2" extra strong lead (XS)	x	2" cop. or plastic tubing (CTS)	6.3	3
LEAD PIPE TO PACK JOINT FOR PE PIPE					
Q26-13-NL (C46-33-NL)	1/2" extra strong lead (XS)	x	3/4" PE pipe P.J.	1.0	12
Q26-23-NL (C66-33-NL)	5/8" extra strong lead (XS)	x	3/4" PE pipe P.J.	1.2	10
Q36-23-NL	5/8" dbl. extra strong lead (XXS)	x	3/4" PE pipe P.J.	1.2	12
Q36-33-NL	3/4" dbl. extra strong lead (XXS)	x	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	5

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

\*\*This item is not one piece, it is two pieces assembled watertight.

**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.



# Lead-Pack Couplings (continued)

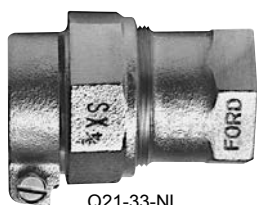
Lead-Pack Couplings for Attaching Copper, Iron, Plastic or PVC to Existing Lead Service Lines

## Lead-Pack Couplings

CATALOG NUMBER	DESCRIPTION			APPROX. WT. LBS.	STD. PKG. QTY.
LEAD PIPE TO MALE IRON PIPE THREAD					
Q28-13-NL (C84-33-NL)	1/2" extra strong lead (XS)	x	3/4" male iron pipe threads	0.6	20
* Q18-23-Q38-13-NL	1/2" dbl. extra strong lead (XXS) or 5/8" strong lead (S)	x	3/4" male iron pipe threads	0.7	18
Q28-23-NL (C86-33-NL)	5/8" extra strong lead (XS)	x	3/4" male iron pipe threads	0.8	18
* Q18-33-Q38-23-NL	5/8" dbl. extra strong lead (XXS) or 3/4" strong lead (S)	x	3/4" male iron pipe threads	0.8	18
Q28-33-NL	3/4" extra strong lead (XS)	x	3/4" male iron pipe threads	1.0	14
Q38-33-NL	3/4" dbl. extra strong lead (XXS)	x	3/4" male iron pipe threads	1.3	14
Q18-44-NL	1" strong lead (S)	x	1" male iron pipe threads	1.5	8
Q28-44-NL	1" extra strong lead (XS)	x	1" male iron pipe threads	1.5	8
Q38-44-NL	1" dbl. extra strong lead (XXS)	x	1" male iron pipe threads	1.5	8
Q28-55-NL (C86-55-NL)	1-1/4" extra strong lead (XS)	x	1-1/4" male iron pipe threads	1.7	5
Q28-66-NL (C86-66-IDR7-NL)	1-1/2" extra strong lead (XS)	x	1-1/2" male iron pipe threads	2.8	3
Q28-77-NL	2" extra strong lead (XS)	x	2" male iron pipe threads	4.7	5
LEAD PIPE TO FLARE COPPER					
Q22-13-NL (C24-33-NL)	1/2" extra strong lead (XS)	x	3/4" flare copper	0.9	14
* Q12-23-Q32-13-NL	1/2" dbl. extra strong lead (XXS) or 5/8" strong lead (S)	x	3/4" flare copper	1.1	12
Q22-23-NL (C26-33-NL)	5/8" extra strong lead (XS)	x	3/4" flare copper	1.1	12
Q22-24-NL	5/8" extra strong lead (XS)	x	1" flare copper	1.7	8
Q12-33-Q32-23-NL	5/8" dbl. extra strong lead (XXS) or 3/4" strong lead (S)	x	3/4" flare copper	1.1	12
Q22-33-NL	3/4" extra strong lead (XS)	x	3/4" flare copper	1.3	12
Q32-33-NL	3/4" dbl. extra strong lead (XXS)	x	3/4" flare copper	1.6	8
* Q12-34-Q32-24-NL	5/8" dbl. extra strong lead (XXS) or 3/4" strong lead (S)	x	1" flare copper	1.7	6
Q22-34-NL	3/4" extra strong lead (XS)	x	1" flare copper	1.7	10
Q12-44-NL	1" strong lead (S)	x	1" flare copper	1.6	5
Q22-44-NL	1" extra strong lead (XS)	x	1" flare copper	2.0	5
Q32-44-NL	1" dbl. extra strong lead (XXS)	x	1" flare copper	2.0	5

\*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.



Q21-33-NL



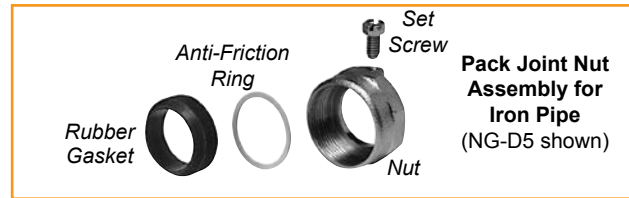
Q1Q1-33-Q3Q3-22-NL



Q28-33-NL

<b>LEAD PIPE DIMENSIONS</b>	
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 SIZE AND TYPE	NUT & GASKET ASSEMBLY COMPLETE CATALOG NUMBER	BEVELED RUBBER GASKET ONLY CATALOG NUMBER	PLASTIC ANTI-FRICTION RING CATALOG NUMBER	CLAMP / SET SCREW CATALOG NUMBER
<b>COPPER OR PLASTIC TUBING (CTS) SIZE</b>				
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-JJ4	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
<b>IRON PIPE SIZE</b>				
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
<b>PE PIPE SIZE</b>				
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-JJ6-IDR7	GT-25	FR-R	CS-B
2"	NG-KK6-IDR7	GT-27	FR-S	CS-B
<b>PVC PIPE</b>				
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
<b>LEAD PIPE</b>				
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

\* 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
<b>COPPER OR PLASTIC TUBING (CTS)</b>				
3/4"	<b>GJN4-3</b> (box qty. 72)	<b>GT-1-5</b>	<b>FG-AAT</b>	<b>GJNGR4-3</b>
1"	<b>GJN4-4</b>	<b>GT-5</b>	<b>FG-FFT</b>	<b>GJNGR4-4</b>
1" (Corp/Ballcorp)	<b>GJCN4-4</b>	<b>GT-7</b>	<b>FG-GG</b>	<b>GJNGR4-4</b>
1-1/4"	<b>GJN6-4-GJN4-5</b>	<b>GT-10</b>	<b>FG-HH</b>	<b>GJNGR6-4</b>
1-1/4" (Ballcorp)	<b>GJCN4-5</b>	<b>GT-10-5</b>	<b>FG-JJ</b>	<b>GJNGR6-4</b>
1-1/2"	<b>GJN4-6</b>	<b>GT-14</b>	<b>FG-RR</b>	<b>GJNGR4-6</b>
1-1/2" (Ballcorp)	<b>GJCN4-6</b>	<b>GT-28</b>	<b>FG-SS</b>	<b>GJNGR4-6</b>
2"	<b>GJN4-7</b>	<b>GT-17</b>	<b>FG-TT</b>	<b>GJNGR4-7</b>
2" (Ballcorp)	<b>GJCN4-7</b>	<b>GT-25</b>	<b>FG-VV</b>	<b>GJNGR4-7</b>
<b>PE PIPE</b>				
3/4"	<b>GJN6-3</b>	<b>GT-3</b>	<b>FG-FF</b>	<b>GJNGR6-3</b>
3/4" (Corp/Ballcorp)	<b>GJCN6-3</b>	<b>GT-4</b>	<b>FG-GG</b>	<b>GJNGR6-3</b>
1"	<b>GJN6-4-GJN4-5</b>	<b>GT-10</b>	<b>FG-HH</b>	<b>GJNGR6-4</b>
1" (Corp/Ballcorp)	<b>GJCN6-4</b>	<b>GT-10-5</b>	<b>FG-JJ</b>	<b>GJNGR6-4</b>



## Quick Joint Compression Nuts and Parts

QUICK JOINT NUT SIZE AND TYPE	NUT, GASKET & GRIPPER ASSEMBLY COMPLETE CATALOG NUMBER	GASKET AND GRIPPER RING ASSEMBLY CATALOG NUMBER
<b>COPPER OR PLASTIC TUBING (CTS)</b>		
1/2"	<b>QJN4-1</b>	<b>QJNGA4-1</b>
5/8"	<b>QJN4-2</b>	<b>QJNGA4-2</b>
3/4"	<b>QJN4-3</b>	<b>QJNGA4-3</b>
1"	<b>QJN4-4</b>	<b>QJNGA4-4</b>
1-1/4"	<b>QJN4-5</b>	<b>QJNGA4-5</b>
1-1/2"	<b>QJN4-6</b>	<b>QJNGA4-6</b>
2"	<b>QJN4-7</b>	<b>QJNGA4-7</b>
<b>PE PIPE</b>		
3/4"	<b>QJN6-3</b>	<b>QJNGA6-3</b>
1"	<b>QJN6-4</b>	<b>QJNGA6-4</b>

# Flared Copper Couplings

Female Iron Pipe Thread and Male Iron Pipe Thread



C21-33-NL

## Flare Copper to Female Iron Pipe Thread

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	FLARE COPPER	FEMALE IRON PIPE		
STRAIGHT COUPLINGS				
C21-11-NL	1/2"	1/2"	0.4	50
C21-23-NL	5/8"	3/4"	0.6	25
C21-31-NL	3/4"	1/2"	0.5	25
C21-33-NL	3/4"	3/4"	0.7	20
C21-34-NL	3/4"	1"	0.8	20
C21-35-NL	3/4"	1-1/4"	0.9	15
C21-43-NL	1"	3/4"	1.0	20
C21-44-NL	1"	1"	1.1	12
C21-45-NL	1"	1-1/4"	1.2	12
C21-46-NL	1"	1-1/2"	1.6	-
C21-55-NL	1-1/4"	1-1/4"	1.7	8
C21-66-NL	1-1/2"	1-1/2"	2.5	4
C21-67-NL	1-1/2"	2"	3.4	4
C21-77-NL	2"	2"	4.6	3
C21-78-NL	2"	2-1/2"	6.1	2
ELL COUPLINGS				
L21-33-NL	3/4"	3/4"	1.0	16
L21-44-NL	1"	1"	1.9	8
L21-66-NL	1-1/2"	1-1/2"	3.7	3
L21-77-NL	2"	2"	6.3	1
EIGHTH BEND COUPLINGS				
LA21-33-NL	3/4"	3/4"	0.8	18
LA21-44-NL	1"	1"	1.4	10



C28-33-NL

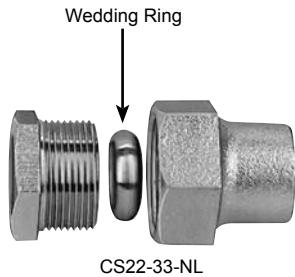
## Flare Copper to Male Iron Pipe Thread

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	FLARE COPPER	MALE IRON PIPE		
STRAIGHT COUPLINGS				
C28-11-NL	1/2"	1/2"	0.4	50
C28-13-NL	1/2"	3/4"	0.5	36
C28-21-NL	5/8"	1/2"	0.5	-
C28-23-NL	5/8"	3/4"	0.6	30
C28-31-NL	3/4"	1/2"	0.6	25
C28-33-NL	3/4"	3/4"	0.7	20
C28-34-NL	3/4"	1"	0.7	20
C28-43-NL	1"	3/4"	1.0	15
C28-44-NL	1"	1"	1.1	10
C28-54-NL	1-1/4"	1"	1.4	8
C28-55-NL	1-1/4"	1-1/4"	1.6	6
C28-65-NL	1-1/2"	1-1/4"	2.9	4
C28-66-NL	1-1/2"	1-1/2"	2.9	4
C28-77-NL	2"	2"	5.0	-
ELL COUPLINGS				
L28-11-NL	1/2"	1/2"	0.5	-
L28-33-NL	3/4"	3/4"	0.8	16
* L28-34-AWT-NL	3/4"	1"	1.0	-
L28-43-NL	1"	3/4"	1.1	12
L28-44-NL	1"	1"	1.3	8
L28-66-NL	1-1/2"	1-1/2"	2.9	3
L28-77-NL	2"	2"	5.3	1

\* This item is manufactured from two castings assembled watertight.

# Flared Copper Couplings

## Flare Copper to Flare Copper



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

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	FLARE COPPER	FLARE COPPER		
STRAIGHT COUPLINGS				
CS22-33-NL	3/4"	3/4"	0.6	25
CS22-44-NL	1"	1"	0.9	15
CS22-55-NL	1-1/4"	1-1/4"	0.9	10
CS22-66-NL	1-1/2"	1-1/2"	4.0	6
CS22-77-NL	2"	2"	6.7	3

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

CATALOG NUMBER	SIZE AND COUPLING APPLICATIONS	APPROX. WT. LBS.	STD. PKG. QTY.
WEDDING RINGS			
WR-3-NL	3/4" for CS22-33-NL	0.1	450
WR-4-NL	1" for CS22-44-NL	0.1	250
WR-5-NL	1-1/4" for CS22-55-NL	0.1	100
WR-6-NL	1-1/2" for CS22-66-NL	1.4	85
WR-7-NL	2" for CS22-77-NL	2.2	40

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

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	FLARE COPPER	FLARE COPPER		
STRAIGHT COUPLINGS				
C22-11-NL	1/2"	1/2"	0.6	30
C22-12-NL	1/2"	5/8"	0.7	-
C22-13-NL	1/2"	3/4"	0.8	20
C22-22-NL	5/8"	5/8"	0.8	20
C22-23-NL	5/8"	3/4"	1.0	15
C22-33-NL	3/4"	3/4"	1.0	14
C22-34-NL	3/4"	1"	1.3	12
C22-44-NL	1"	1"	1.9	6
C22-55-NL	1-1/4"	1-1/4"	2.7	4
C22-66-NL	1-1/2"	1-1/2"	4.5	7
C22-77-NL	2"	2"	8.4	1
ELL COUPLINGS				
L22-33-NL	3/4"	3/4"	1.0	14
L22-34-NL	3/4"	1"	1.4	10
L22-44-NL	1"	1"	1.8	8
L22-66-NL	1-1/2"	1-1/2"	4.8	2
L22-77-NL	2"	2"	8.5	2

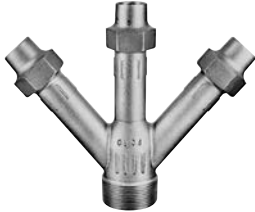


# Flared Copper Couplings

## Branch Connections and Service Tees



Y22-247-NL



Y28-347-NL



Y11-474-NL

### "Y" Branch Connections

CATALOG NUMBER	DESCRIPTION			APPROX. WT. LBS.	STD. PKG. QTY.
	MULTI-BRANCH END	X	SINGLE BRANCH END		
TWO BRANCH CONNECTIONS					
Y21-246-NL	Two 1" flare cop. conns.	x	1-1/2" female iron pipe	2.7	2
Y21-247-NL	Two 1" flare cop. conns.	x	2" female iron pipe	4.1	2
Y22-243-NL	Two 3/4" flare cop. conns.	x	1" flare copper	1.8	5
Y22-246-NL	Two 1" flare cop. conns.	x	1-1/2" flare copper	4.4	2
Y22-247-NL	Two 1" flare cop. conns.	x	2" flare copper	6.0	4
Y28-234-NL	Two 3/4" flare cop. conns.	x	1" male iron pipe	1.3	8
Y28-246-NL	Two 1" flare cop. conns.	x	1-1/2" male iron pipe	2.7	4
Y28-247-NL	Two 1" flare cop. conns.	x	2" male iron pipe	2.7	2
Y88-247-NL	Two 1" male iron pipe conns.	x	2" male iron pipe	1.7	-
THREE BRANCH CONNECTIONS					
Y21-347-NL	Three 1" flare cop. conns.	x	2" female iron pipe	5.7	5
Y22-346-NL	Three 1" flare cop. conns.	x	1-1/2" flare copper	6.8	5
Y22-347-NL	Three 1" flare cop. conns.	x	2" flare copper	8.6	5
Y28-346-NL	Three 1" flare cop. conns.	x	1-1/2" male iron pipe	5.3	4
Y28-347-NL	Three 1" flare cop. conns.	x	2" male iron pipe	5.1	5

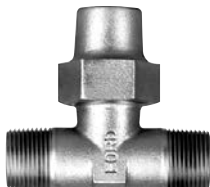
### Multi-Service "Y"

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	SINGLE INLET	MULTI-OUTLET		
Y11-474-NL	2" female iron pipe	x Four 1" female iron pipe	3.2	3

### Service Tees

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	BOTH ENDS (RUN)	OUTLET SIDE		
T111-333-NL	3/4" female iron pipe	x 3/4" female iron pipe	0.6	-
T111-444-NL	1" female iron pipe	x 1" female iron pipe	2.0	9
T181-333-NL	3/4" FIP to 3/4" MIP	x 3/4" female iron pipe	0.6	-
T181-664-NL	1-1/2" FIP to 1-1/2" MIP	x 1" female iron pipe	2.0	-
T181-774-NL	2" FIP to 2" MIP	x 1" female iron pipe	2.2	4
T222-113-NL	1/2" flare copper	x 3/4" flare copper	1.1	-
T222-333-NL	3/4" flare copper	x 3/4" flare copper	1.5	8
T222-334-NL	3/4" flare copper	x 1" flare copper	1.8	5
T222-443-NL	1" flare copper	x 3/4" flare copper	2.1	6
T222-444-NL	1" flare copper	x 1" flare copper	2.5	4
T222-445-NL	1" flare copper	x 1-1/4" flare copper	3.6	-
T222-664-NL	1-1/2" flare copper	x 1" flare copper	5.4	5
T222-666-NL	1-1/2" flare copper	x 1-1/2" flare copper	7.1	4
* T222-774-AWT-NL	2" flare copper	x 1" flare copper	14.1	2
T222-777-NL	2" flare copper	x 2" flare copper	12.6	3
T228-333-NL	3/4" flare copper	x 3/4" male iron pipe	1.2	8
T228-334-NL	3/4" flare copper	x 1" male iron pipe	1.3	8
T228-444-NL	1" flare copper	x 1" male iron pipe	2.3	5
T282-333-NL	3/4" fl. cop. to 3/4" MIP	x 3/4" flare copper	1.2	8
T282-334-NL	3/4" fl. cop. to 3/4" MIP	x 1" flare copper	1.8	-
T282-444-NL	1" fl. cop. to 1" MIP	x 1" flare copper	2.4	-
T882-333-NL	3/4" male iron pipe	x 3/4" flare copper	0.9	-
T882-334-NL	3/4" male iron pipe	x 1" flare copper	1.2	10
T882-444-NL	1" male iron pipe	x 1" flare copper	1.6	6
T888-333-NL	3/4" male iron pipe	x 3/4" male iron pipe	0.6	20
T888-334-NL	3/4" male iron pipe	x 1" male iron pipe	0.7	10
T888-444-NL	1" male iron pipe	x 1" male iron pipe	0.9	10
T888-445-NL	1" male iron pipe	x 1-1/4" male iron pipe	1.0	9
T888-777-NL	2" male iron pipe	x 2" male iron pipe	3.9	4

\* This item is manufactured from two castings assembled watertight.



T882-333-NL



T222-334-NL

### Multi-Service Tee

CATALOG NUMBER	DESCRIPTION		APPROX. WT. LBS.	STD. PKG. QTY.
	SINGLE INLET	MULTI-OUTLET		
T11-663-NL	1-1/2" female iron pipe	x Six 3/4" female iron pipe	1.6	5
T11-674-NL	2" female iron pipe	x Six 1" female iron pipe	2.9	4



T11-674-NL

# Flared Copper Couplings

## Service Tees and Adapters

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

CATALOG NUMBER	DESCRIPTION			APPROX. WT. LBS.	STD. PKG. QTY.
COPPER TUBE NUTS WITH MALE IRON PIPE THREADS ON SMALL END					
C08-33-NL	3/4" female copper thread	x	3/4" male iron pipe	0.3	40
C08-43-NL	1" female copper thread	x	3/4" male iron pipe	0.6	20
C08-44-NL	1" female copper thread	x	1" male iron pipe	0.7	20
C08-45-NL	1" female copper thread	x	1-1/4" male iron pipe	0.8	14
C08-66-NL	1-1/2" female copper thread	x	1-1/2" male iron pipe	1.5	6
C08-77-NL	2" female copper thread	x	2" male iron pipe	2.6	3
COPPER TUBE NUTS WITH FEMALE IRON PIPE THREAD CONNECTIONS					
C01-11-NL	1/2" female copper thread	x	1/2" female iron pipe	0.4	42
C01-13-NL	1/2" female copper thread	x	3/4" female iron pipe	0.4	44
C01-33-NL	3/4" female copper thread	x	3/4" female iron pipe	0.4	40
C01-34-NL	3/4" female copper thread	x	1" female iron pipe	0.7	25
C01-43-NL	1" female copper thread	x	3/4" female iron pipe	0.7	15
C01-44-NL	1" female copper thread	x	1" female iron pipe	0.8	15
C01-55-NL	1-1/4" female copper thread	x	1-1/4" female iron pipe	1.0	10
C01-65-NL	1-1/2" female copper thread	x	1-1/4" female iron pipe	1.7	6
C01-66-NL	1-1/2" female copper thread	x	1-1/2" female iron pipe	1.4	8
C01-67-NL	1-1/2" female copper thread	x	2" female iron pipe	1.5	5
C01-75-NL	2" female copper thread	x	1-1/4" female iron pipe	3.1	-
C01-77-NL	2" female copper thread	x	2" female iron pipe	2.6	3
PIGGY BACK NUTS AND INCREASERS					
C02-23-NL	5/8" female copper thread	x	3/4" flare copper	0.7	25
C02-31-NL	3/4" female copper thread	x	1/2" flare copper	0.5	30
C02-32-NL	3/4" female copper thread	x	5/8" flare copper	0.6	25
C02-33-NL	3/4" female copper thread	x	3/4" flare copper	0.7	20
C02-34-NL	3/4" female copper thread	x	1" flare copper	1.0	15
C02-43-NL	1" female copper thread	x	3/4" flare copper	1.0	15
C02-44-NL	1" female copper thread	x	1" flare copper	1.3	12
C02-45-NL	1" female copper thread	x	1-1/4" flare copper	1.7	9
C02-54-NL	1-1/4" female copper thread	x	1" flare copper	1.4	10
C02-64-NL	1-1/2" female copper thread	x	1" flare copper	1.9	5
C02-65-NL	1-1/2" female copper thread	x	1-1/4" flare copper	2.4	8
C02-74-NL	2" female copper thread	x	1" flare copper	3.0	3
C02-75-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	2
QUARTER BEND COUPLINGS					
L02-33-NL	3/4" female copper thread	x	3/4" flare copper	1.0	15
L02-44-NL	1" female copper thread	x	1" flare copper	1.6	8
L02-66-NL	1-1/2" female copper thread	x	1-1/2" flare copper	3.5	2
L02-77-NL	2" female copper thread	x	2" flare copper	7.0	1
SWIVEL QUARTER BENDS					
L02-33S-NL	3/4" fem. cop. thrd. swivel nut	x	3/4" flare copper	1.1	14
L02-44S-NL	1" fem. cop. thrd. swivel nut	x	1" flare copper	1.6	8
L02-66S-NL	1-1/2" fem. cop. thrd. swivel nut	x	1-1/2" flare copper	4.6	2
L02-77S-NL	2" fem. cop. thrd. swivel nut	x	2" flare copper	8.0	1
EIGHTH BEND COUPLINGS					
LA02-33-NL	3/4" female copper thread	x	3/4" flare copper	0.7	18
LA02-44-NL	1" female copper thread	x	1" flare copper	1.3	10
LA02-66-NL	1-1/2" female copper thread	x	1-1/2" flare copper	3.4	2
LA02-77-NL	2" female copper thread	x	2" flare copper	6.4	3
SWIVEL EIGHTH BENDS					
LA02-33S-NL	3/4" fem. cop. thrd. swivel nut	x	3/4" flare copper	1.0	18
LA02-44S-NL	1" fem. cop. thrd. swivel nut	x	1" flare copper	1.5	10
LA02-66S-NL	1-1/2" fem. cop. thrd. swivel nut	x	1-1/2" flare copper	4.3	2
LA02-77S-NL	2" fem. cop. thrd. swivel nut	x	2" flare copper	7.7	1

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.

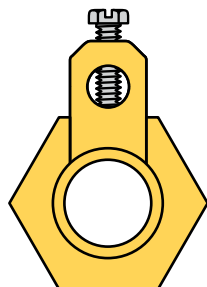
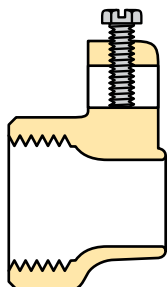


# Copper Tube Nuts, Discs and Copper Gaskets



**Copper Tube Nuts**

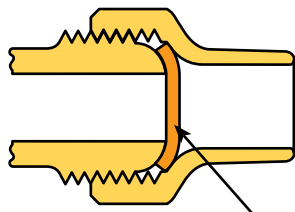
CATALOG NUMBER	DESCRIPTION CONNECTION SIZE	APPROX. WT. LBS.	STD. PKG. QTY.
CTN-1	1/2"	0.2	-
CTN-2	5/8"	0.2	-
CTN-3	3/4"	0.3	40
CTN-4	1"	0.5	16
CTN-5	1-1/4"	0.7	10
CTN-6	1-1/2"	1.2	7
CTN-7	2"	2.2	3



**Thaw Wire Copper Tube Nuts**

CATALOG NUMBER	DESCRIPTION CONNECTION SIZE	APPROX. WT. LBS.	STD. PKG. QTY.
CTN-3-THW	3/4"	0.4	35
CTN-4-THW	1"	0.7	15

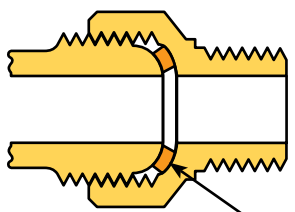
These copper tube nuts have a lug attachment for connecting an electric thawing wire.



Copper Disc

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

CATALOG NUMBER	DESCRIPTION CONNECTION SIZE	APPROX. WT. LBS.	STD. PKG. QTY.
DISC-2	5/8"	0.03	-
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 Gasket

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

CATALOG NUMBER	DESCRIPTION CONNECTION SIZE	APPROX. WT. LBS.	STD. PKG. QTY.
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	-

# Bushings, Unions, Couplings and Plugs



## Brass Bushings\*

CATALOG NUMBER	DESCRIPTION			APPROX. WT. LBS.	STD. PKG. QTY.
C18-13-NL	1/2" female iron pipe	x	3/4" male iron pipe	0.1	100
C18-14-NL	1/2" female iron pipe	x	1" male iron pipe	0.3	60
C18-31-NL	3/4" female iron pipe	x	1/2" male iron pipe	0.4	30
C18-34-NL	3/4" female iron pipe	x	1" male iron pipe	0.2	60
C18-35-NL	3/4" female iron pipe	x	1-1/4" male iron pipe	0.5	35
C18-36-NL	3/4" female iron pipe	x	1-1/2" male iron pipe	0.9	20
C18-37-NL	3/4" female iron pipe	x	2" male iron pipe	0.7	16
C18-43-NL	1" female iron pipe	x	3/4" male iron pipe	0.4	40
C18-45-NL	1" female iron pipe	x	1-1/4" male iron pipe	0.4	35
C18-46-NL	1" female iron pipe	x	1-1/2" male iron pipe	0.8	20
C18-47-NL	1" female iron pipe	x	2" male iron pipe	0.7	16
C18-54-NL	1-1/4" female iron pipe	x	1" male iron pipe	0.7	14
C18-56-NL	1-1/4" female iron pipe	x	1-1/2" male iron pipe	0.6	20
C18-57-NL	1-1/4" female iron pipe	x	2" male iron pipe	1.1	10
C18-67-NL	1-1/2" female iron pipe	x	2" male iron pipe	0.8	15
C18-76-NL	2" female iron pipe	x	1-1/2" male iron pipe	1.7	6
C18-78-NL	2" female iron pipe	x	2-1/2" male iron pipe	1.3	6

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



## Brass Unions

CATALOG NUMBER	DESCRIPTION			APPROX. WT. LBS.	STD. PKG. QTY.
UNION-3-NL	3/4" female iron pipe	x	3/4" female iron pipe	0.8	25
UNION-4-NL	1" female iron pipe	x	1" female iron pipe	1.0	8



## Couplings and Reducing Couplings

CATALOG NUMBER	DESCRIPTION			APPROX. WT. LBS.	STD. PKG. QTY.
C11-33-NL	3/4" female iron pipe	x	3/4" female iron pipe	0.4	28
C11-43-NL	1" female iron pipe	x	3/4" female iron pipe	0.4	24
C11-44-NL	1" female iron pipe	x	1" female iron pipe	0.5	1
C11-54-NL	1-1/4" female iron pipe	x	1" female iron pipe	0.6	20
C11-64-NL	1-1/2" female iron pipe	x	1" female iron pipe	0.7	15
C11-66-NL	1-1/2" female iron pipe	x	1-1/2" female iron pipe	0.8	1
C11-74-NL	2" female iron pipe	x	1" female iron pipe	1.5	8
C11-75-NL	2" female iron pipe	x	1-1/4" female iron pipe	1.5	8
C88-45-NL	1-1/4" male iron pipe	x	1" male iron pipe	0.6	-



## Elbow Couplings

CATALOG NUMBER	DESCRIPTION			APPROX. WT. LBS.	STD. PKG. QTY.
L18-33-NL	3/4" female iron pipe	x	3/4" male iron pipe	0.5	-
L18-44-NL	1" female iron pipe	x	1" male iron pipe	0.9	-
L18-76S-NL	2" female iron pipe (swivel nut)	x	1-1/2" male iron pipe	3.2	4
L18-87S-NL	2-1/2" female iron pipe (swivel nut)	x	2" male iron pipe	4.0	2
L88-33-NL	3/4" male iron pipe	x	3/4" male iron pipe	0.5	30
L88-77-NL	2" male iron pipe	x	2" male iron pipe	2.4	4



## Eighth Bend Couplings

CATALOG NUMBER	DESCRIPTION			APPROX. WT. LBS.	STD. PKG. QTY.
LA81-44-NL	1" male iron pipe	x	1" female iron pipe	0.9	15



## Brass Service Plugs

CATALOG NUMBER	DESCRIPTION			APPROX. WT. LBS.	STD. PKG. QTY.
PIPE PLUGS					
CSP-3-I-NL	3/4" male iron pipe thread	x	square wrench head	0.2	100
CSP-4-I-NL	1" male iron pipe Thread	x	square wrench head	0.4	50
COPPER SERVICE PLUGS					
CSP-3-NL	male cop. thrd. for 3/4" CTN	x	square wrench head	0.2	50
CSP-4-NL	male cop. thrd. for 1" CTN	x	square wrench head	0.4	35

# Insert Fittings for Plastic

## Straight Insert Fittings for SDR-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	DESCRIPTION			APPROX. WT. LBS.	STD. PKG. QTY.
BOTH ENDS RIBBED INSERT FOR PE PIPE					
PTP-1-NL	3/4" PE pipe	x	3/4" PE pipe	0.3	60
PTP-21-NL	3/4" PE pipe	x	1" PE pipe	0.4	40
PTP-2-NL	1" PE pipe	x	1" PE pipe	0.4	35
PTP-3-NL	1-1/4" PE pipe	x	1-1/4" PE pipe	0.5	25
PTP-32-NL	1-1/4" PE pipe	x	1" PE pipe	0.5	25
PTP-4-NL	1-1/2" PE pipe	x	1-1/2" PE pipe	0.8	12
PTP-5-NL	2" PE pipe	x	2" PE pipe	1.1	9
FEMALE COPPER THREAD TO RIBBED INSERT FOR PE PIPE					
PTC-1-NL	3/4" female cop. thrd.	x	3/4" PE pipe	0.3	25
PTC-21-NL	3/4" female cop. thrd.	x	1" PE pipe	0.4	25
PTC-2-NL	1" female cop. thrd.	x	1" PE pipe	0.7	20
PTC-4-NL	1-1/2" female cop. thrd.	x	1-1/2" PE pipe	1.4	8
PTC-5-NL	2" female cop. thrd.	x	2" PE pipe	2.5	3
MALE IRON PIPE THREAD TO RIBBED INSERT FOR PE PIPE					
PTM-1-NL	3/4" male iron pipe	x	3/4" PE pipe	0.3	45
PTM-21-NL	3/4" male iron pipe	x	1" PE pipe	0.4	36
PTM-2-NL	1" male iron pipe	x	1" PE pipe	0.5	25
PTM-3-NL	1-1/4" male iron pipe	x	1-1/4" PE pipe	0.8	18
PTM-4-NL	1-1/2" male iron pipe	x	1-1/2" PE pipe	1.0	12
PTM-5-NL	2" male iron pipe	x	2" PE pipe	1.1	8
FEMALE IRON PIPE THREAD TO RIBBED INSERT FOR PE PIPE					
PTF-1-NL	3/4" female iron pipe	x	3/4" PE pipe	0.5	30
PTF-21-NL	3/4" female iron pipe	x	1" PE pipe	0.5	25
PTF-2-NL	1" female iron pipe	x	1" PE pipe	0.6	25
SOLDER SOCKET FOR COPPER TO RIBBED INSERT FOR PE PIPE					
PTSS-1-NL	3/4" solder socket for cop.	x	3/4" PE pipe	0.3	40
PTSS-2-NL	1" solder socket for cop.	x	1" PE pipe	0.5	25
PTSS-3-NL	1-1/4" solder socket for cop.	x	1-1/4" PE pipe	0.8	-
SOLDER NOSE FOR COPPER TO RIBBED INSERT FOR PE PIPE					
PTS-1-NL	3/4" solder nose for cop.	x	3/4" PE pipe	0.2	80
PTS-2-NL	1" solder nose for cop.	x	1" PE pipe	0.3	50
PTS-3-NL	1-1/4" solder nose for cop.	x	1-1/4" PE pipe	0.8	-



# Insert Fittings for Plastic



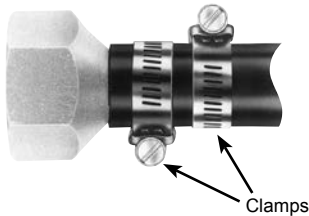
**EII Insert Fittings for SDR-7 PE Plastic Pipe**

CATALOG NUMBER	DESCRIPTION	APPROX. WT. LBS.	STD. PKG. QTY.
PTPL-4-NL	1-1/2" PE Pipe x 1-1/2" PE Pipe	1.0	6
PTPL-5-NL	2" PE Pipe x 2" PE Pipe	1.5	6



**Service Tee Insert Fitting for 1" SDR-7 PE Plastic Pipe**

CATALOG NUMBER	DESCRIPTION	APPROX. WT. LBS.	STD. PKG. QTY.
PTPT-2-NL	1" PE Pipe x 1" PE Pipe x 1" PE Pipe	0.7	16



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

CATALOG NUMBER	DESCRIPTION	APPROX. WT. LBS.	STD. PKG. QTY.
CLAMP-16	For 3/4" PE Pipe	0.05	100
CLAMP-20	For 1" PE Pipe	0.05	75
CLAMP-24	For 1-1/4" PE Pipe	0.05	70
CLAMP-32	For 1-1/2" PE Pipe	0.06	40
CLAMP-40	For 2" PE Pipe	0.07	35



**Flare Nuts for SDR-7 PE Pipe  
(replaces copper flare nut)**

CATALOG NUMBER	DESCRIPTION	APPROX. WT. LBS.	STD. PKG. QTY.
FPN-3	For 3/4" PE Pipe	0.3	35
FPN-4	For 1" PE Pipe	0.8	-



SI-C02-33-AWT-NL

**Service Insulator Couplings**

CATALOG NUMBER	DESCRIPTION			COMPONENTS
SI-C02-33-AWT-NL	3/4" female copper thread	x	3/4" flare copper	C08-33-NL/DB-34/C21-34-AWT-NL
♦ SI-C04-44-AWT-NL	1" female copper thread	x	1" pack joint (CTS)	C08-44-NL/DB-45/C14-54-AWT-NL
♦ SI-C04-66-AWT-NL	1-1/2" female copper thread	x	1-1/2" pack joint (CTS)	C08-66-NL/DB-67/C14-76-AWT-NL
♦ SI-C04-77-AWT-NL	2" female copper thread	x	2" pack joint (CTS)	C08-77-NL/DB-78/C14-87-AWT-NL
SI-C22-33-AWT-NL	3/4" flare copper	x	3/4" flare copper	C21-34-NL/DB-34/C28-33-AWT-NL
SI-C22-44-AWT-NL	1" flare copper	x	1" flare copper	C21-45-NL/DB-45/C28-44-AWT-NL
♦ SI-C44-33-AWT-NL	3/4" pack joint (CTS)	x	3/4" pack joint (CTS)	C14-43-NL/DB-34/C84-33-AWT-NL
♦ SI-C44-44-AWT-NL	1" pack joint (CTS)	x	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)	x	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)	x	1-1/2" pack joint (CTS)	C84-66-NL/DB-67/C14-76-AWT-NL
♦ SI-C44-77-AWT-NL	2" pack joint (CTS)	x	2" pack joint (CTS)	C84-77-NL/DB-78/C14-87-AWT-NL
♦ SI-C77-44-AWT-NL	1" pack joint (PVC)	x	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

PIPE SIZE	PVC/HDPE (Steel Size)	PVC/HDPE C900/C905	DUCTILE / CAST IRON			ASBESTOS-CEMENT			STEEL		COPPER
	O.D.	O.D.	Classes		O.D.	Class	Machined End O.D.	Rough Barrel O.D. Min - Max	Type	O.D.	O.D.
			Pit	Spun							
1/2"	.84								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								STD.	2.88	2.625
3"	3.50		A		3.80	100	3.74	4.00	O.D.	3.00	3.125
			B, C, D	50 - 350	3.96	150	3.84	4.10	STD.	3.50	
						200	3.84	4.29			
3-1/2"									STD.	4.00	3.625
4"	4.50	4.80	A	50 - 350	4.80	100	4.64	4.79 - 5.14	O.D.	4.00	4.125
			B, C, D		5.00	150	4.81	4.97 - 5.27	STD.	4.50	
						200	4.81	5.22 - 5.57			
4-1/2"									STD.	5.00	
5"									STD.	5.56	5.125
6"	6.63	6.90	A	50 - 350	6.90	100	6.91	7.05 - 7.40	O.D.	6.00	6.125
			B, C, D,		7.10	150	6.91	7.07 - 7.37	STD.	6.63	
			E, F		7.22	200	6.91	7.26 - 7.56			
7"									STD.	7.63	
8"	8.63	9.05	A, B,	50 - 300	9.05	100	9.11	9.22 - 9.57	O.D.	8.00	
			C, D,	350	9.30	150	9.11	9.27 - 9.57	STD.	8.63	
			E, F		9.42	200	9.11	9.39 - 9.74			
9"									STD.	9.63	
10"	10.75	11.10	A, B,	50 - 200	11.10	100	11.24	11.42 - 11.77	O.D.	10.00	
			C, D,	250 - 350	11.40	150	11.66	11.82 - 12.12	STD.	10.75	
			E, F		11.60	200	11.66	11.77 - 12.12			
12"	12.75	13.20	A, B,	50 - 200	13.20	100	13.44	13.69 - 14.04	O.D.	12.00	
			C, D,	250 - 350	13.50	150	13.92	14.08 - 14.38	STD.	12.75	
			E, F		13.76	200	13.92	14.03 - 14.38			
14"	14.00	15.30	A, B,	50 - 100	15.30	100	15.07	15.40 - 15.80	STD.	14.00	
			C, D,	150 - 300	15.65	150	16.22	16.38 - 16.73			
			E, F		15.98	200	16.22	16.48 - 16.88			
16"	16.00	17.40	A, B,	50 - 100	17.40	100	17.14	17.54 - 17.94	STD.	16.00	
			C, D,	150 - 300	17.80	150	18.46	18.62 - 18.97			
			E, F		18.16	200	18.46	18.79 - 19.19			
18"	18.00	19.50	A, B	50 - 100	19.50	100	19.90	20.44	STD.	18.00	
			C, D	150 - 250	19.92	150	20.94	21.20			
						200	22.18				
20"	20.00	21.60	A, B,	50 - 100	21.60	100	22.12	22.50	STD.	20.00	
			C, D	150 - 250	22.06	150	23.28	23.54			
						200	24.66				
22"									STD.	22.00	
24"	24.00	25.80	A, B,	50 - 100	25.80	100	26.48	27.17	STD.	24.00	
			C, D	150 - 250	26.32	150	27.96	28.22			
						200	29.62				
30"	30.00	32.00	A		31.74				STD.	30.00	
			B	50 - 350	32.00						
			C		32.40						
			D		32.74						
36"	36.00	38.30	A		37.96				STD.	36.00	
			B	50 - 350	38.30						
			C		38.70						
			D		39.16						
42"		44.50	A		44.20				STD.	42.00	
			B	50 - 350	44.50						
			C		45.10						
			D		45.58						
48"		50.80	A		50.50				STD.	48.00	
			B	50 - 350	50.80						
			C		51.40						
			D		51.98						
54"			A		56.66				STD.	54.00	
			B		57.10						
				50 - 350	57.56						
			C		57.80						
60"			D		58.40				STD.	60.00	
				50 - 350	61.61						
			A		62.80						
			B		63.40						
			C		64.20						
			D		64.82						

**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

[illegible]

# Section J

# Ford 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:**

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