





Section J

Ford Couplings for Pipe and Tubing



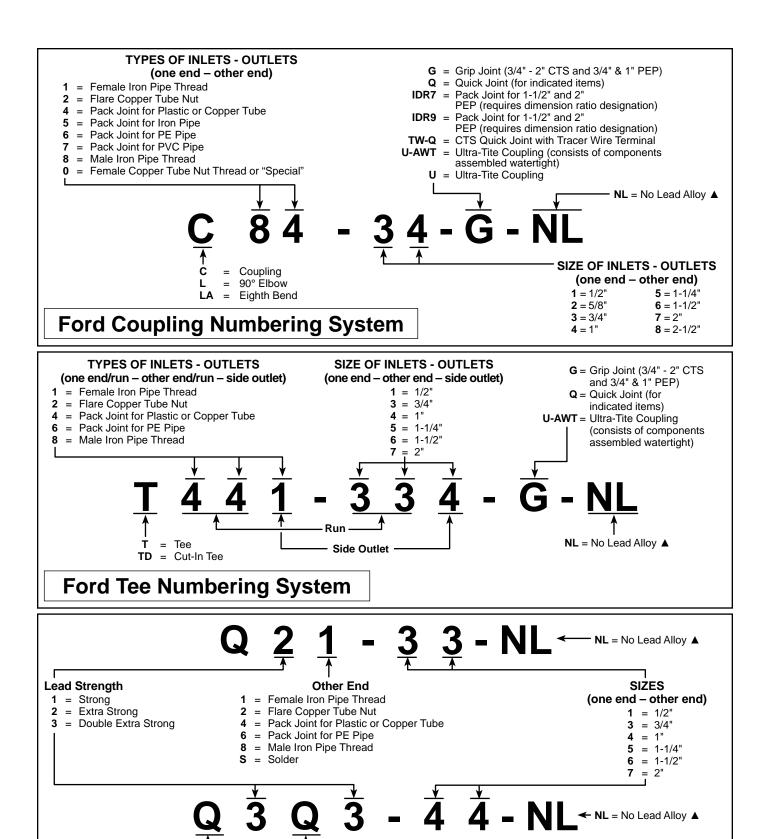
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Ford offers many products that are classified to ANSI/NSF Standard 61. To verify if a product is classified to ANSI/NSF Standard 61, contact the Ford Meter Box Customer Service Department at 260-563-3171 or visit fordmeterbox.com.

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

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▲ 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.

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 Lead-Pack Numbering System

Lead on Both Ends

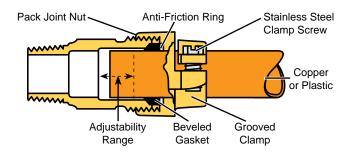
*Ford Pack Joint Couplings

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 the nut has a split clamp locking device, which is drawn down securely on the tubing or pipe by tightening a stainless steel screw. (For iron pipe, the nut has a stainless steel set screw to bite in and lock on the pipe.)
- **3.** 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.

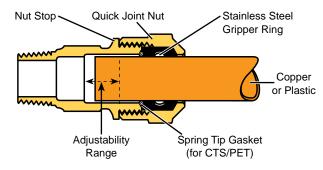
*Ford Quick Joint Couplings

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.

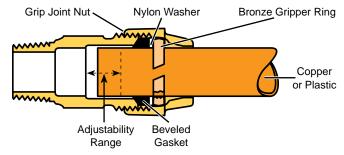
*Ford Grip Joint Couplings

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 dimension comparison table on page 6 for recommended PE pipe and tubing.

Ford Ultra-Tite Couplings*

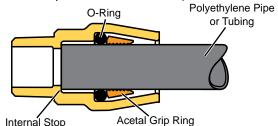
The Ford Ultra-Tite Compression Coupling provides an immediate lock onto polyethylene pipe (PEP/IPS) or polyethylene tubing (PET/CTS) when inserted to the internal stop.

STAB COUPLING FOR 3/4" AND 1" PEP AND PET

(No insert required or recommended.)

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 dimension comparison 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. Follow federal, state, and local regulations and AWWA best practices (AWWA C810) to reduce exposure to lead in potable water.

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.

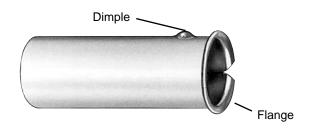
Ford Pack Joints for PVC are recommended for use only with Schedule 40 and Schedule 80 PVC.

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).

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	CDD	Courne			0.	D.					1.1	D.		
TY	'PE	POI	SDR	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	_	1	-	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
FEI	PE4710	250	SDK9	OD	0.625	0.675	1.123	1.375	1.625	2.125	_	0.001	0.675	1.009	1.203	1.055
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	2.007	_	0.024	1.049	1.360	1.010	2.007
IPS PE	_	-	-	OD	0.840	1.050	1.315	1.660	1.900	2.375	-	_	_	_	_	_
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 it be checked to see if it is properly round. Compression connections 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 and a reliable gasket seal.



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. See the specific compatibility information below.



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

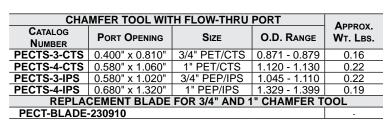


PEP/IPS Ultra-Tite (contains white gripper ring)

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	APPROX.				
CATALOG NUMBER	CATALOG NUMBER SIZE O.D. RANGE				
PECT-4-CTS	1" PET/CTS	1.120 - 1.130	0.22		
PECT-4-IPS	1" PEP/IPS	1.329 - 1.399	0.19		





Chamfer Tool / Flow-Thru Port



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				

^{*1&}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					
CTS polyethylene (PF) per ASTM D2737 - SDR-9					

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.

			0 ,	
NOMINAL SIZE OF	MATERIAL	TUBING OR PIPE	TUBING OR PIPE WALL	TUBING OR PIPE
CONNECTION	IVIATERIAL	O.D. RANGE (IN.)	THICKNESS RANGE (IN.)	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 PF	Polyethylene (PF)	1 329 - 1 399	0 150 - 0 170	1 029 - 1 059

The Ford Ultra-Tite is specifically recommended for applications on Polyethylene Pipe (PEP) or tubing (PET) and PEX tubing meeting ASTM F876 and AWWA C904. The pipe and tubing must meet the dimension ranges provided in the table above.

The use of a tubing insert is not required or recommended, except the PEX tubing identified above must be installed with an insert.

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	DESCR	APPROX.						
Number	P.J. FOR CTS		WT. LBS.					
	TRAIGHT COUP		******					
+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					
■+C44-33-4-75-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					
■+C44-44-4-75-NL	1"	1"	2.0					
◆C44-45-NL	1"	1-1/4"	1.4					
◆C44-46-NL	1"	1-1/2"	2.2					
◆C44-55-NL	1-1/4"	1-1/4"	2.1					
C44-56-NL	1-1/4"	1-1/2"	2.8					
◆C44-66-NL	1-1/2"	1-1/2"	3.0					
C44-67-NL	1-1/2"	2"	3.5					
◆C44-77-NL	2"	2"	4.5					
C44-88-NL	2-1/2"	2-1/2"	7.1					
	ELL COUPLIN							
▶ + L44-33-NL	3/4"	3/4"	1.0					
▶ + L44-34-NL	3/4"	1"	1.1					
▶ ♦ L44-44-NL	1"	1"	1.4					
L44-55-NL	1-1/4"	1-1/4"	2.1					
<u>+L44-66-NL</u>	1-1/2"	1-1/2"	3.5					
<u>+</u> L44-77-NL	2"	2"	9.5					
	EIGHTH BEND COUPLINGS							
+LA44-33-NL	3/4"	3/4"	0.9					
◆LA44-44-NL	1"	1"	1.3					

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

or Plastic Tubility (CTS)								
CATALOG		RIPTION	APPROX.					
Number	MALE IRON PIPE	P.J. FOR CTS	Wt. Lbs.					
STRAIGHT COUPLINGS								
♦ 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"	3/4"	0.6					
■◆ C84-33-4-75-NL	3/4"	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					
●◆ C84-44-NL	1"	1"	0.9					
■◆ C84-44-4-75-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"	1-1/4"	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 COUPLIN							
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					
►	1"	1"	1.1					
<u> </u>	1-1/2"	1-1/2"	2.5					
◆ L84-77-NL	2"	2"	3.9					
	HTH BEND COL		1					
◆ LA84-33-NL	3/4"	3/4"	0.6					
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")

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	WT. LBS.	
			WI. LBS.	
	STRAIGHT COUPLING			
+ 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"		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)

riaro coppor to rack contrior coppor or riactic rabing (ore)				
CATALOG	DESCRIPTION		APPROX.	
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.

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			
→	C04-43-NL	1"	3/4"	1.0			
•+	C04-44-NL	1"	1"	1.0			
*	C04-45-NL	1"	1-1/4"	1.4			
*	C04-54-NL	1-1/4"	1"	1.1			
*	C04-55-NL	1-1/4"	1-1/4"	1.6			
*	C04-66-NL	1-1/2"	1-1/2"	2.5			
*	C04-77-NL	2"	2"	4.4			
		ELL COUPLING					
> +		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 WIT					
▶ ♦	L04-33S-NL	3/4"	3/4"	1.0			
> +	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			
<u> </u>	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			
	EIGHTH BEND COUPLINGS WITH SWIVEL						
> +	LA04-33S-NL	3/4"	3/4"	0.9			
<u> </u>	LA04-44S-NL	1"	1"	1.2			
	LA04-66S-NL	1-1/2"	1-1/2"	4.1			
	LA04-77S-NL	2"	2"	6.5			

Pack Joint for Polyethylene Pipe (PEP)





C86-33-NL

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 (SIDR7 PEP) Both Ends

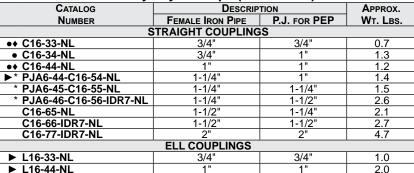
		,,	(/ /	
	CATALOG	DESCRIP	APPROX.	
	Number	P.J. FOR PEP	P.J. FOR PEP	Wt. Lbs.
		STRAIGHT COUPI	LINGS	
•+	C66-33-NL	3/4"	3/4"	1.3
	C66-34-NL	3/4"	1"	1.5
•+	C66-44-NL	1"	1"	2.2
	C66-55-NL	1-1/4"	1-1/4"	2.7
	C66-66-IDR7-NL	1-1/2"	1-1/2"	4.6
	C66-77-IDR7-NL	2"	2"	6.8
		ELL COUPLING	GS	
▶ ♦	L66-33-NL	3/4"	3/4"	1.4
	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

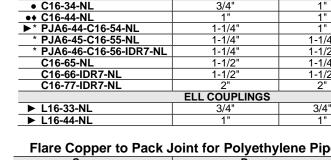
Male Iron Pipe Thread to Pack Joint for Polyethylene Pipe (SIDR7 PEP)

· · · · · · · · · · · · · · · · · · ·			
CATALOG	DESCRIP	TION	APPROX.
Number	MALE IRON PIPE	P.J. FOR PEP	Wt. Lbs.
	STRAIGHT COUPI	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	
L86-33-NL	3/4"	3/4"	0.9
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
	Number C86-33-NL C86-34-NL C86-44-NL C86-55-NL C86-55-NL C86-65-NL C86-66-IDR7-NL C86-77-IDR7-NL L86-33-NL L86-44-NL L86-77-IDR7-NL	Number Male Iron Pipe STRAIGHT COUPI C86-33-NL 3/4" C86-34-NL 3/4" C86-44-NL 1" C86-55-NL 1-1/4" C86-55-NL 1-1/2" C86-65-NL 1-1/2" C86-66-IDR7-NL 2" ELL COUPLING L86-33-NL 3/4" L86-44-NL 1" L86-77-IDR7-NL 2" EIGHTH BEND COU	Number Male Iron Pipe P.J. For PEP STRAIGHT COUPLINGS

Pack Joint for Polyethylene Pipe (PEP)

Female Iron Pipe Thread to Pack Joint for Polyethylene Pipe (SIDR7 PEP)







CATALOG	DESCRIPTION		APPROX.	
Number	FLARE COPPER	P.J. FOR PEP	Wt. Lbs.	
S	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	

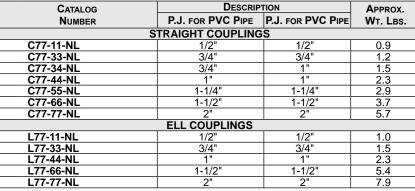


CATALOG	DESCRIPTION		APPROX.
Number	FEMALE COP. THRD	P.J. FOR PEP	Wt. Lbs.
S	TRAIGHT COUPLING	S	
●◆ C06-33-NL	3/4"	3/4"	0.8
• C06-34-NL	3/4"	1"	1.3
► C06-43-NL	1"	3/4"	1.0
●◆ C06-44-NL	1"	1"	1.4
C06-45-NL	1"	1-1/4"	1.8
C06-55-NL	1-1/4"	1-1/4"	1.8
C06-66-IDR7-NL	1-1/2"	1-1/2"	3.0
C06-77-IDR7-NL	2"	2"	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.





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









Pack Joint for Polyvinyl Chloride Pipe (PVC)/IPS PE



C87-33-NL







Male Iron Pipe Thread to Pack Joint for PVC/IPS PE Pipe

CATALOG	DESCRIPTION		APPROX.	
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"	0.8	
■ 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	

[■] Extended coupling length (4-3/4")

Female Iron Pipe Thread to Pack Joint for PVC/IPS PE Pipe

Temale from the fireda to fact contition from one inpe			
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

^{*} Pack Joint compression assemblies also used with KH-4-NL Kornerhorns and 274 Series Coppersetters.

Flare Copper to Pack Joint for PVC/IPS PE 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/IPS PE 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)



rack 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	S	
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

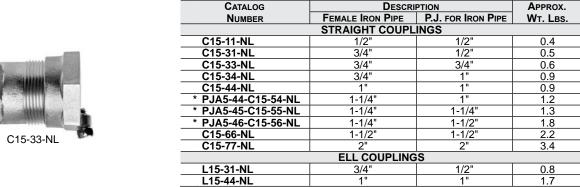
Male Iron Pipe Thread to Pack Joint for Iron Pipe



CATALOG	Descri	PTION	APPROX.	
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	
- Extended equaling length (4.3/4")				

Extended coupling length (4-3/4")

Female Iron Pipe Thread to Pack Joint for Iron Pipe



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	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 COUPLINGS				
L25-33-NL	3/4"	3/4"	1.0		

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

(i opiaces nais nais)						
CATALOG	DESCRI	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 Polyethylene Pipe (SIDR7 PEP)

			<u> </u>	
	CATALOG	Descri	PTION	APPROX.
	Number	P.J. FOR CTS	P.J. FOR PEP	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 COUP	LINGS	
•	L46-33-NL	3/4"	3/4"	1.2
	L46-44-NL	1"	1"	1.9
Gr	in laint for C	TC or DED (2/4" and 1"	' only) is available /	dd " C" to

 $\mbox{\bf Grip Joint}$ 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/IPS PE Pipe (PVC)

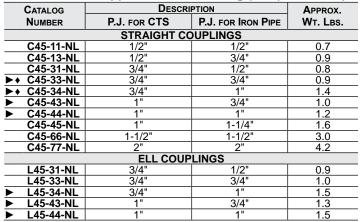
	to PVC/IPS PE PIPE (PVC)						
	CATALOG	Descri	PTION	APPROX.			
	NUMBER	IBER P.J. FOR CTS P.J. FOR PVC PIPE					
	STRAIGHT COUPLINGS						
	C47-11-NL	1/2"	1/2"	0.8			
	C47-31-NL	3/4"	1/2"	0.9			
▶+	C47-33-NL	3/4"	3/4"	1.0			
▶+	C47-34-NL	3/4"	1"	1.6			
	C47-43-NL	1"	3/4"	1.1			
	C47-44-NL	1"	1"	1.6			
	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			

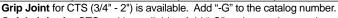
- Grip Joint for CTS is available. Add "-G" to the catalog number.

 ◆ 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"

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





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



CATALOG		DESCRIPTION		APPROX.		
	Number	P.J. FOR IRON PIPE	P.J. FOR PEP	WT. LBS.		
	STRAIGHT COUPLINGS					
▶	C56-33-NL	3/4"	3/4"	1.0		
	C56-34-NL	3/4"	1"	1.4		
▶	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/IPS PE Pipe (PVC)

CATALOG	Descri	APPROX.				
Number	P.J. FOR IRON PIPE	P.J. FOR PVC PIPE	Wt. Lbs.			
	STRAIGHT COUPLINGS					
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.

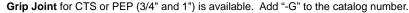
Pack Joint for Polyethylene Pipe (SIDR7 PEP) to PVC/IPS PE Pipe (PVC)

	F - (-)					
CATALOG	Descri	DESCRIPTION				
Number	P.J. FOR PE PIPE	P.J. FOR PE PIPE P.J. FOR PVC PIPE				
	STRAIGHT COUPLINGS					
► C67-33-NI	► C67-33-NL 3/4" 3/4"					
► C67-44-NI	_ 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	DESCRIPTION			
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" polyethylene pipe P.J. (SIDR7 PEP)	Two 3/4" polyethylene pipe P.J. (SIDR7 PEP)	3.1	
Y68-337-NL	2" male iron pipe thread	Three 3/4" polyethylene pipe P.J. (SIDR7 PEP)	4.7	



- 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

	Pack Joint 16			
CATALOG		CRIPTI		APPROX.
Number	BOTH ENDS (RUN)	X	SIDE OUTLET	WT. LBS.
	ACK JOINT BOTH ENDS (RUN) BY P			
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
► + T444-334-NL	3/4" cop. or plastic tubing (CTS)	X	1" cop. or plastic tubing (CTS)	1.9
* 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
►+ T444-444-NL	1" cop. or plastic tubing (CTS)	X	1" 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
T444-446-NL	1" 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	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)	16.5
* ♦ 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)	Х	1" cop. or plastic tubing (CTS)	6.2
♦ T444-777-NL	2" cop. or plastic tubing (CTS)	Х	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	1-1/4" 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	1/2" 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
* T777-433-AWT-NL	1" PVC pipe P.J. x 3/4" PVC pipe P.J.	Х	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
> - T444 000 NII	PACK JOINT BOTH ENDS (RUN)			
► + 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
T441-664-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	12.3
	BOTH ENDS (RUN) BY SIDE OUTLET			3.4
T440-663-NL T440-664-NL	1-1/2" cop. or plastic tubing (CTS) 1-1/2" cop. or plastic tubing (CTS)	X	3/4" female AWWA taper 1" female AWWA taper	3.4
	2" cop. or plastic tubing (CTS)			5.3
T440-773-NL T440-774-NL	2" cop. or plastic tubing (CTS)	X	3/4" female AWWA taper 1" female AWWA taper	5.3
1440-774-INL	PACK JOINT BOTH ENDS (RUN) I			ე.ა
♦ T448-333-NL	3/4" cop. or plastic tubing (CTS)		3/4" male iron pipe	1.1
► ↑ T448-333-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
	ON PIPE THREADS BOTH ENDS (RU			1.0
► T884-333-NL	3/4" male iron pipe		3/4" cop. or plastic tubing (CTS)	0.9
► ↑ T884-333-NL	3/4 male fron pipe 3/4" male iron pipe	X	1" cop. or plastic tubing (CTS)	1.0
▶ ↑ T884-444-NL	1" male iron pipe	<u>X</u>	1" cop. or plastic tubing (CTS)	1.3
	N PIPE TO MALE IRON PIPE THREAD		N) BY DACK IOINT SIDE OF IT	1.0
T184-664-NL	1-1/2" FIP to 1-1/2" MIP		1" cop. or plastic tubing (CTS)	2.3
T184-774-NL	2" FIP to 2" MIP	X		2.6
1 104-//4-NL	Z FIP IO Z IVIIP	X	1" cop. or plastic tubing (CTS)	2.0

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.
- ▶ 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 of pipe to accommodate the body of a 3/4" cut-in tee (4" section for 1" service lines). Slip the detachable Pack Joints onto the ends of the sectioned 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	Desc	RIPTIO	ON .	APPROX.			
Number	BOTH ENDS (RUN)	X	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				
<u>◆TD448-113-NL</u>	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			

^{*} 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		SCRIP		APPROX. Wt. Lbs.
	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)	х	3/4" female iron pipe thread	0.8
Q21-23-NL (C16-33-NL)	5/8" extra strong lead (XS)	Х	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)	х	3/4" female iron pipe thread	0.7
Q21-33-NL	3/4" extra strong lead (XS)	х	3/4" female iron pipe thread	1.0
Q31-33-NL	3/4" dbl. extra strong lead (XXS)	X	3/4" female iron pipe thread	1.2
Q21-44-NL	1" extra strong lead (XS)	Х	1" female iron pipe thread	1.5
LE	EAD PIPE TO SOLDER FITTING FO	R C	OPPER TUBING	
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)	X	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)	Х	1" solder fit. copper tubing	2.0
	LEAD PIPE TO LEAD	PIPE		
Q2Q2-11-NL (C44-33-NL)	1/2" extra strong lead (XS)	Χ	1/2" extra strong lead (XS)	0.9
* Q1Q1-22-Q3Q3-11-NL	1/2" dbl. extra strong lead (XXS) or 5/8" strong lead (S)	х	1/2" dbl. extra strong lead (XXS) 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)	Х	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
	or 3/4" strong lead (S)			
♦ Q24-33-NL	3/4" extra strong lead (XS)	Х	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) 1" extra strong lead (XS)	X	3/4" cop. or plastic tubing (CTS)	1.7
Q24-43-NL Q34-43-NL	1" dbl. extra strong lead (XXS)	X	3/4" cop. or plastic tubing (CTS) 3/4" cop. or plastic tubing (CTS)	1.7 1.7
Q14-44-NL	1" strong lead (XXS)	X	1" cop. or plastic tubing (CTS)	1.8
Q24-44-NL	1" extra strong lead (XS)	X	1" cop. or plastic tubing (CTS)	1.8
Q34-44-NL	1" dbl. extra strong lead (XXS)	×	1" cop. or plastic tubing (CTS)	1.8
Q24-56-C46-65-NL	1-1/4" extra strong lead (XS)	X	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)	Х	2" cop. or plastic tubing (CTS)	6.3
	LEAD PIPE TO PACK JOINT	FOR	PE PIPE	
Q26-13-NL (C46-33-NL)	1/2" extra strong lead (XS)	Х	3/4" PE pipe P.J.	1.0
Q26-23-NL (C66-33-NL)	5/8" extra strong lead (XS)	Х	3/4" PE pipe P.J.	1.2
Q36-23-NL	5/8" dbl. extra strong lead (XXS)	Х	3/4" PE pipe P.J.	1.2
Q36-33-NL	3/4" dbl. extra strong lead (XXS)	Х	3/4" PE pipe P.J.	1.5
Q36-34-NL	3/4" dbl. extra strong lead (XXS)	Х	1" PE pipe P.J.	2.2
Q26-66-NL (C66-66-IDR7-NL)	1-1/2" extra strong lead (XS)	Х	1-1/2" PE pipe P.J.	4.5

^{*}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.

Follow federal, state, and local regulations and AWWA best practices (AWWA C810) to reduce exposure to lead in potable water.

^{**}This item is not one piece, it is two pieces assembled watertight.

[◆] 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				
	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	0.8	
*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)	Х	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)	Х	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)	Х	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)	Χ	1" flare copper	2.0	
Q32-44-NL	1" dbl. extra strong lead (XXS)	Х	1" flare copper	2.0	

^{*}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

U.S. Patent No. 10,371,296

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

^{*}These items fit two types/sizes of lead pipe as shown in the description.

Lead Pipe Dimensions







Q24-44-NC

Follow federal, state, and local regulations and AWWA best practices (AWWA C810) to reduce exposure to lead in potable water.

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			
This table represents some of the most common load nine				

This table represents some of the most common lead pipe sizes. Additional connection sizes might be available to accommodate lead sizes not listed above.

Compression Nuts and Parts





Pack Joint Compression Nuts and Parts

		t Compression Nuts at		
PACK JOINT	NUT & GASKET ASSEMBLY	BEVELED RUBBER GASKET ONLY		CLAMP / SET SCREW
NUT SIZE AND TYPE	COMPLETE CATALOG NUMBER	CATALOG NUMBER ER OR PLASTIC TUBING (CTS)	CATALOG NUMBER	CATALOG NUMBER
1/0"				CC A
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
	NG-DDDX	GT-10	FR-F	CS-A
3/4" XXS		GT-12	FR-G	CS-A
	NG-FX			
1" S	NG-FX NG-FFX	GT-12	FR-G	CS-A
1" S 1"XS		GT-12	FR-G FR-G	CS-A CS-A
1" S 1"XS 1" XXS 1-1/4"S	NG-FFX	GT-12 GT-13	FR-G	
1" S 1"XS 1" XXS 1-1/4"S	NG-FFX NG-FFFX	GT-12 GT-13 GT-15	FR-G FR-H	CS-A
3/4" XXS 1" S 1"XS 1"XXS 1" XXS 1-1/4"S 1-1/4" XS 1-1/2" XS	NG-FFX NG-FFFX NG-H7	GT-12 GT-13	FR-G	CS-A CS-A

^{*} 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
	СО	PPER OR PLASTIC TUBING (CT	rs)	·
3/4"	GJN4-3 (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

December 19 1111 Cad					
CATALOG	Descri	PTION	APPROX.		
Number	FLARE COPPER	FEMALE IRON PIPE	WT. LBS.		
	STRAIGHT COU	PLINGS			
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"	0.8		
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"	8.0		
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

^{*} 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	NUMBER FLARE COPPER FL		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

CATALOG Number	SIZE AND COUPLING APPLICATIONS	APPROX. Wt. Lbs.
	WEDDING RINGS	
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



Flare Copper to Flare Copper (3 part) Coupling

CATALOG	DESCRI	APPROX.	
Number	FLARE COPPER	FLARE COPPER	Wt. Lbs.
	STRAIGHT C	OUPLINGS	
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





Y28-347-NL

"Y" Branch Connections

CATALOG	DESCRIPTION			APPROX.
Number	Multi-Branch End	Х	SINGLE BRANCH END	WT. LBS.
	TWO BRANCH CO	NNC	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	INO:	NECTIONS	
Y21-347-NL	Three 1" flare cop. conns.	Х	2" female iron pipe	5.7
Y22-346-NL	Three 1" flare cop. conns.	Χ	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.	Х	2" male iron pipe	5.1



Y11-474-NL

Multi-Service "Y"

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

Service Tees



T882-333-NL



T222-334-NL

OCIVICE ICCS					
CATALOG	DE	SCRIPTI	ON	APPROX.	
Number	Both Ends (Run)		OUTLET SIDE	Wt. Lbs.	
T111-333-NL	3/4" female iron pipe	Х	3/4" female iron pipe	0.6	
T111-444-NL	1" female iron pipe	Х	1" female iron pipe	2.0	
T181-333-NL	3/4" FIP to 3/4" MIP	Х	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	
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	
T222-334-NL	3/4" flare copper	Х	1" flare copper	1.8	
T222-443-NL	1" flare copper	X	3/4" flare copper	2.1	
T222-444-NL	1" flare copper	X	1" flare copper	2.5	
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	
T222-666-NL	1-1/2" flare copper	Х	1-1/2" flare copper	7.1	
* T222-774-AWT-NL	2" flare copper	Х	1" flare copper	14.1	
T222-777-NL	2" flare copper	Х	2" flare copper	12.6	
T228-333-NL	3/4" flare copper	Х	3/4" male iron pipe	1.2	
T228-334-NL	3/4" flare copper	Х	1" male iron pipe	1.3	
T228-444-NL	1" flare copper	Х	1" male iron pipe	2.3	
T282-333-NL	3/4" fl. cop. to 3/4" MIP	Х	3/4" flare copper	1.2	
T282-334-NL	3/4" fl. cop. to 3/4" MIP	Х	1" flare copper	1.8	
T282-444-NL	1" fl. cop. to 1" MIP	Х	1" flare copper	2.4	
T882-333-NL	3/4" male iron pipe	Х	3/4" flare copper	0.9	
T882-334-NL	3/4" male iron pipe	Х	1" flare copper	1.2	
T882-444-NL	1" male iron pipe	Х	1" flare copper	1.6	
T888-333-NL	3/4" male iron pipe	Х	3/4" male iron pipe	0.6	
T888-334-NL	3/4" male iron pipe	X	1" male iron pipe	0.7	
T888-444-NL	1" male iron pipe	Х	1" male iron pipe	0.9	
T888-445-NL	1" male iron pipe	Х	1-1/4" male iron pipe	1.0	
T888-777-NL	2" male iron pipe	Х	2" male iron pipe	3.9	

^{*} This item is manufactured from two castings assembled watertight.



Multi-Service Tee

CATALOG	DE	APPROX.		
Number	SINGLE INLET	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	Desc	RIPTI	ON	APPROX. Wt. Lbs.
COI	PPER TUBE NUTS WITH MALE	RON	PIPE THREADS ON SMALL	END
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	Х	1-1/2" male iron pipe	1.5
C08-77-NL	2" female copper thread	Х	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	X	3/4" female iron pipe	0.4
C01-33-NL	3/4" female copper thread	X	3/4" female iron pipe	0.4
C01-34-NL	3/4" female copper thread	X	1" female iron pipe	0.7
C01-43-NL	1" female copper thread		3/4" female iron pipe	0.7
	1" female copper thread	X		
C01-44-NL	1" female copper thread	X	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	Χ	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	Х	2" female iron pipe	2.6
	PIGGY BACK NUT	S AN		
C02-23-NL	5/8" female copper thread	Х	3/4" flare copper	0.7
C02-31-NL	3/4" female copper thread	Х	1/2" flare copper	0.5
C02-32-NL	3/4" female copper thread	Х	5/8" flare copper	0.6
C02-33-NL	3/4" female copper thread	Х	3/4" flare copper	0.7
C02-34-NL	3/4" female copper thread	Х	1" flare copper	1.0
C02-43-NL	1" female copper thread	Х	3/4" flare copper	1.0
C02-44-NL	1" female copper thread	Х	1" flare copper	1.3
C02-45-NL	1" female copper thread	Х	1-1/4" flare copper	1.7
C02-54-NL	1-1/4" female copper thread	X	1" flare copper	1.4
C02-64-NL	1-1/2" female copper thread	X	1" flare copper	1.9
C02-65-NL	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
			1-1/4" flare copper	
C02-75-NL	2" female copper thread	X		3.9
C02-76-NL	2" female copper thread	Х	1-1/2" flare copper	4.2
	QUARTER BE	ND (
L02-33-NL	3/4" female copper thread	Х	3/4" flare copper	1.0
L02-44-NL	1" female copper thread	Х	1" flare copper	1.6
L02-66-NL	1-1/2" female copper thread	Х	1-1/2" flare copper	3.5
L02-77-NL	2" female copper thread	Х	2" flare copper	7.0
	SWIVEL QUA	ARTE	ER BENDS	
L02-33S-NL	3/4" fem. cop. thrd. swivel nut	Х	3/4" flare copper	1.1
L02-335-NL L02-44S-NL	1" fem. cop. thrd. swivel nut	X	1" flare copper	1.6
	1-1/2" fem. cop. thrd. swivel nut		1-1/2" flare copper	
L02-66S-NL	2" fem. cop. thrd. swivel nut	X	2" flare copper	4.6 8.0
L02-77S-NL		X		0.0
	EIGHTH BEN	ID C		
LA02-33-NL	3/4" female copper thread	Х	3/4" flare copper	0.7
LA02-44-NL	1" female copper thread	Х	1" flare copper	1.3
LA02-66-NL	1-1/2" female copper thread	Х	1-1/2" flare copper	3.4
LA02-77-NL	2" female copper thread	Х	2" flare copper	6.4
	SWIVEL EI	GHTI	H BENDS	
LA02-33S-NL	3/4" fem. cop. thrd. swivel nut	X	3/4" flare copper	1.0
	1			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.

1" flare copper

1-1/2" flare copper

2" flare copper

LA02-44S-NL 1" fem. cop. thrd. swivel nut
LA02-66S-NL 1-1/2" fem. cop. thrd. swivel nut

LA02-77S-NL 2" fem. cop. thrd. swivel nut

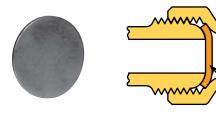
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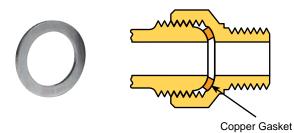
Copper Tube Nuts, Discs, Copper Gaskets and Brass End Caps

Copper Disc









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	DESCRIPTION	APPROX.			
Number	CONNECTION SIZE	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

j j					
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 and 1-1/2" and 2" PEP Corp	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) Coupling	2.5



Bushings, Unions, Couplings and Plugs

Brass Bushings*





CATALOG Number		DESCRIPTION	N	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
* ^			-1	

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











Brass Coupling – Size-on-Size with Tracer Wire Terminal

CATALOG Number	DESCRIPTION			APPROX. Wt. Lbs.
C18-33-TW-NL	3/4" female iron pipe	Х	3/4" female iron pipe	0.5
C18-44-TW-NL	1" female iron pipe	Х	1" female iron pipe	0.6

Brass Unions

CATALOG Number	DESCRIPTION			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	DESCRIPTION						
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	x	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

CATALOG Number	DESCRIPTION							
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		DESCRIPTION		APPROX. Wt. Lbs.
LA81-44-NL	1" male iron pipe	Х	1" female iron pipe	0.9

Brass Service Plugs

CATALOG Number	DESCRIPTION						
	PIPE	PLUGS					
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	square wrench head	0.4				
COPPER SERVICE PLUGS							
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	DESCRIPTION							
	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				
	FEMALE COPPER THREAD TO R	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	ISERT FOR PE PIPE					
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	0.8				
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	Х	1" PE pipe	0.5				
PTF-2-NL	1" female iron pipe	Х	1" PE pipe	0.6				
	OLDER SOCKET FOR COPPER TO	RIBBE		IPE				
PTSS-1-NL	3/4" solder socket for cop.	Х	3/4" PE pipe	0.3				
PTSS-2-NL	1" solder socket for cop.	Х	1" PE pipe	0.5				
PTSS-3-NL	1-1/4" solder socket for cop.	Х	1-1/4" PE pipe	0.8				
	SOLDER NOSE FOR COPPER TO	RIBBED						
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



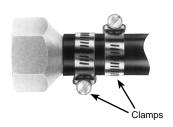


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Service Tee Insert Fitting for 1" SIDR-7 PE Plastic Pipe

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

Oct vice insulator couplings									
Catalog Number	Description			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	Х	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.1</u>	<u>J. Gl</u>										
PIPE	PVC/HDPE			ILE / CAST	IRON		ASBESTOS-CI		STE	EL	COPPER
SIZE	(Steel Size) O.D.	C900 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	Spun			U.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	3.96	150	3.84	4.00 4.10	O.D.	3.00	3.125
3	3.30		D, C, D	30 - 330	3.90	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	6.91	7.05 - 7.40	STD.	5.56	5.125
6"	6.63	6.90	B, C, D,	50 - 350	6.90 7.10	150	6.91	7.05 - 7.40	O.D.	6.00	6.125
	0.03	0.90	E, F		7.10	200	6.91	7.26 - 7.56	STD.	6.63	0.123
7"			, .		7.22		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	
400			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	
	14.00	10.00	E, F	100 000	15.98	200	16.22	16.48 - 16.88	OID.	14.00	
			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	
- 20"						200	24.66		CTD	22.00	
22"			A, B,	50 - 100	25.80	100	26.48	27.17	STD.	22.00	
24"	24.00	25.80	C, D	150 - 100	26.32	150	27.96	28.22	STD.	24.00	
24	24.00	25.00	C, D	130 - 230	20.32	200	29.62	20.22	SID.	24.00	
			Α		31.74	200	29.02				
			В	50 - 350	32.00						
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				OID.	30.00	
			D		39.16						
			A	50 050	44.20						
42"		44.50	В	50 - 350	44.50	-			STD.	42.00	
			C D		45.10 45.58	-					
			A		50.50						
			В	50 - 350	50.80	-					
48"		50.80	C	00 000	51.40				STD.	48.00	
			D		51.98						
			A		56.66						
			В		57.10						
54"				50 - 350	57.56				STD.	54.00	
			С		57.80						
			D		58.40						
				50 - 350	61.61						
			A		62.80					00.55	
60"			В		63.40	-			STD.	60.00	
			C D		64.20						
			_		64.82		cifications dimons				

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 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.

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