resistance.



6.1

Shaded area indicates change Rev. 4-14

MUELLER CO. offers a variety of proven service connections to fit most pipe and tubing used in today's service lines. These connections include the MUELLER 110® Compression Connection,

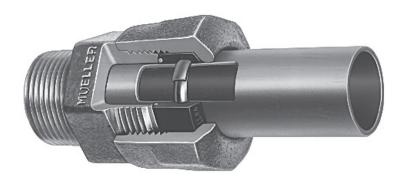
MUELLER Pack Joint Connection, MUELLER INSTA-TITE® Connection, MUELLER GRIP Connection, copper flare

connection and several types of threaded connections.

The MUELLER 110 Compression Connection offers high resistance to pull-out, fast installation, and a visual means to check for proper tightness. This connection is available on most MUELLER valves and stops in sizes from 3/4" to 2", and for CTS tubing or IPS pipe.

All service brass will comply with AWWA C-800. Components in contact with potable water will also comply with latest requirements of the Federal Safe Drinking Water Act.

## **MUELLER 110<sup>®</sup> Compression Connection Features**



NUT - corrosion resistant cast bronze ASTM B62 (85- 5-5-5).		ENTIRE GASKET - is enclosed to resist cold flow and creep.
NUT - bottoms out on shoulder of coupling to give quick visual indication of proper tightening.		NUT - bottoms out on shoulder of coupling to give quick visual indication of proper tightening.
TWO DESIGNS conductive compression connection fits type "K" copper tubing and CTS O.D. PE plastic tubing. A separate design fits IPS PE plastic pipe.		FLUOROCARBON COATING - on inside surface of nut reduces tightening effort and avoids gasket damage.
Recommended stainless steel liners for plastic tubing and pipe available.		PRESSURE RATING The pressure holding capability of the MUELLER 110 Compression Connection is
CONDUCTOR SPRING - provides metal-to-metal contact between copper tubing and fitting for electrical conductivity.		designed to be greater than that of the valve or fitting on which it is used (only in potable water distribution applications complying with AWWA standards).
GASKET - compresses concave gripper band and seals against fitting body, pipe and nut. Uniform pressure is applied around the concave gripper, forcing each outer edge to grip the pipe for pull-out		GRIPPER BAND - is stainless steel and overlaps itself so no gasket material can get underneath.



Rev. 3-15 Shaded area indicates changes

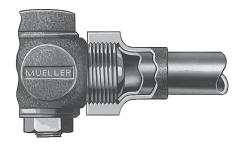
### MUELLER® INSTA-TITE® Connection



- BODY is cast from corrosion resistant Low Lead bronze in compliance with AWWA C-800.
- LARGE WRENCH FLATS provide generous gripping area for tightening connections to valve bodies.
- TWO DESIGNS are available to fit either CTS O.D. PE plastic tubing or IPS PE plastic pipe.
- SIMPLE DESIGN eliminates flaring, heating, threading, cementing, and nut tightening. Liners (inserts) are not required.

- PRESSURE RATING The pressure holding capability of the MUELLER INSTA-TITE Connection is designed to be greater than that of the valve or fitting on which it is used (only in potable water distribution applications complying with AWWA standards).
- O-RING between the connection housing and the tubing or pipe creates a positive seal. Any increase in pressure, up to the maximum rating of the PE tubing or pipe, increases the sealing force.
- MUELLER INSTA-TITE CONNECTION is used on polyethylene (PE) pipe or tubing only.
- GRIP RING is made from a high strength plastic and is designed to allow easy installation of the pipe or tubing while providing high resistance to pullout.
- COLOR CODED grip ring, RED for CTS O.D. and WHITE for IPS, aids in proper selection and use.

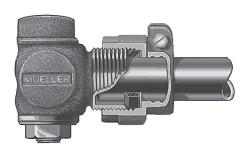
## **Copper Flare Connection**



- CONNECTION MEETS all applicable parts of AWWA C800 standard.
- MUELLER CO. was instrumental in introducing the copper flare connection to the water industry as an alternative to the old lead connections.

- PRESSURE RATING The pressure holding capability of the MUELLER Copper Flare Connection is designed to be greater than that of the valve or fitting on which it is used (only in potable water distribution applications complying with AWWA standards).
- □ MUELLER® COPPER FLARE CONNECTION is for use on type "K" copper tubing.
- CONVEX SURFACE in nut opposes convex surface on body to provide a line contact, assuring greater pullout resistance and a dependable seal.
- EXTRA LONG SKIRT on copper flare nut provides added support to tubing and reduces possibility of leaks.

#### **Pack Joint Connection**



- □ NUT corrosion resistant cast bronze ASTM B62 (85-5-5-5).
- GASKET compressed against the fitting and pipe outer surface by tightening of nut. Not interchangeable with the Mueller 110 Compression Connection gasket.

- MUELLER PACK JOINT CONNECTION available in three styles: for type "K" copper and PE tubing (CTS), for IPS PE (PEP) and PVC pipe.
- □ 3/4" & 1" CTS NUT/GASKET ASSEMBLY ARE INTERCHANGEABLE with comparable size of Mueller 110® Compression Connections nut/gasket assembly CTS only. (Note that 1-1/2" and 2" CTS components and all sizes of IPS components are NOT interchangeable.)
- PRESSURE RATING The pressure holding capability of the MUELLER Pack Joint Connection is designed to be greater than that of the valve or fitting on which it is used (only in potable water distribution applications complying with AWWA standards).

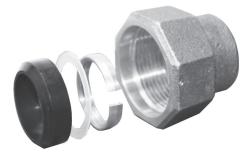
Shaded area indicates change Rev. 4-16

## **MUELLER®** Grip Compression Connection

The MUELLER® Grip Compression Connection is a stab connection with large wrench flats. It is available in CTS and IPS. Products can be ordered by adding a "G" in front of an existing compression connection Part Number (EX: B25008N to G25008N).



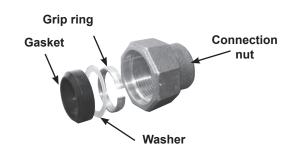
- PRESSURE RATING -The pressure holding capability of the MUELLER Grip Compression Connection is designed to be greater than that of the valve or fitting on which it is used (only in potable water distribution applications complying with AWWA standards).
- GASKET compressed against the fitting and pipe outer surface by tightening of nut.



- MUELLER GRIP COMPRESSION CONNECTION available for type "K" copper and PE tubing (CTS) and IPS PE pipe.
- INTERCHANGEABLE with 110<sup>®</sup> CTS Compression Connection in 3/4" 1" or CTS Pack Joint in 3/4" 2". IPS with 3/4" and 1" PEP Pack Joint.
- NUT corrosion resistant cast bronze.

#### **Grip Joint kits**

Size	Kit	Grip ring	Washer	Gasket	Connection nut
3/4" CTS	682861	312919	311692	537881	537838
1" CTS	682862	312920	311695	537882	537839
1-1/2" CTS	682863	312921	538107	537883	537840
2" CTS	682864	312922	538108	538109	537841
3/4" IPS	683023	313094	313695	311869	538320
1" IPS	683024	313095	312122	313098	538321



## **MUELLER KITEC® Compression Connection**

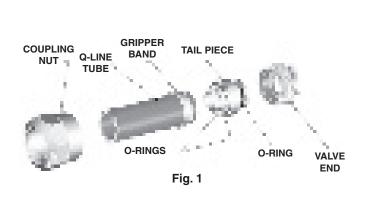




Fig. 2

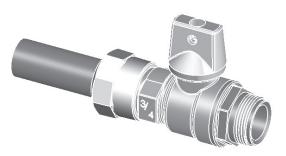


Fig. 3



Rev. 4-14 Shaded area indicates changes





## Two Part Union

Copper flare nut x female copper flare thread



**Eighth bend coupling** Copper flare nut x F.I.P.

## H-15405N

3/4"	1"	1-1/2"	2"



3/4" 1" ‡



Straight three part union Copper flare nut-both ends

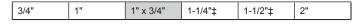


**Quarter bend coupling** Copper flare nut x F.I.P.

## H-15400N

1/2"	5/8"	5/8" x 1/2"	5/8" x 3/4"	3/4"	3/4" x 1/2"
3/4" x 1"	1"	1-1/4"	1-1/4' x 1"	1-1/2"	2"

## H-15460N





**Eighth bend three part union** Copper flare nut-both ends



**Straight coupling**Copper flare nut x M.I.P.

## H-15522N

3/4"	1"
------	----

## H-15425N

1/2"‡	1/2" x	3/4"	5/8" x 3/4"	3/4"	5/8" x 1/2"	3/4" x 1/2"
3/4" x 1"	1"	1" x 3/4"	1" x 1-1/4"‡	1-1/4"	1-1/2"	2"



Quarter bend three part union Copper flare nut-both ends

# MUSEER

**Quarter bend coupling** Copper flare nut x M.I.P.

## H-15525N

3/4"	3/4" x 1"	1"	1-1/2"	2"

## H-15530N

1.	/2"‡	3/4"	3/4" x 1"	1"	1" x 3/4"	1-1/2"‡	2"
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**Straight coupling**Copper flare nut x F.I.P.

**Eighth bend coupling** M.I.P x copper flare nut

## H-15450N

1/2"	1/2" x 3/4"‡	5/8" x 3/4"	3/4"	3/4" x 1/2"	1"
1" x 3/4"	1-1/4"	1-1/2"	2"		

## H-15539N

3/4
-----

NOTE: Sizes shown above represent normal size of fitting. When two sizes are given, the first is size of copper flare nut and second is size of threaded end. ‡Requires minimum ordering quantity. Contact MUELLER Customer Service Center for minimum ordering requirements and availability.



6.5

Shaded area indicates change Rev. 8-15



### Eighth bend coupling

Swivel nut with female copper flare thread x copper flare nut



## **Eighth bend coupling**

Swivel nut with female MUELLER® Coupling thread x copper flare nut

## H-15064N

3/4"	1"	1-1/2"	2"
------	----	--------	----



3/4" 1"



## Quarter bend coupling

Swivel nut with female copper flare thread x copper flare nut



## Quarter bend coupling

Swivel nut with female MUELLER Coupling thread x copper flare nut

## H-15069N

3/4"	1"	3/4" x 1"	1-1/2"	2"
1 *	1 -			_

## H-15491N

1/2" x 3/4"	5/8" x 3/4"	3/4"	3/4" x 1"	1"
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## Eighth bend coupling

Swivel nut with female increasing I.P. thread (this thread is one size larger than nominal size of fitting) x copper flare nut



## Straight coupling

Female copper flare thread x copper flare nut

## H-15471N

3//"	1" +
1 3/ <del>4</del>	

ш	1		n	6	7	N
П	-1	I DI	Ш	O	Z	IN

	3/4"x1"	1"x3/4"	1"x1-1/4"
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#### Quarter bend coupling

Swivel nut with female increasing I.P. thread (this thread is one size larger than nominal size of fitting) x copper flare nut



#### Eighth bend coupling

Female copper flare thread x copper flare nut

## H-15476N

- · · · ·		
3//"	1"	
J/ <del>T</del>	'	

## H-15063N

3/4"	1"	1-1/2"	2"

Note: Sizes shown above represent nominal size of fitting. When two sizes are listed, the first is the size of threaded end and the second is size of copper flare nut. ‡Requires minimum ordering quantity. Contact MUELLER Customer Center for minimum order requirements and availability.



Rev. 4-14 Shaded area indicates changes



Quarter bend coupling
Female copper flare thread x
copper flare nut



H-15480N

Straight coupling Female
MUELLER® Coupling thread x
copper flare nut

## H-15068N

3/4" 1" 1"x3/4"	1-1/4" ‡	1-1/2"	2"
-----------------	----------	--------	----



1" x 3/4"

1"x3/4"

3/4" x 1"



H-15465N

## Straight coupling

Female increasing I.P.thread (this thread is one size larger than nominal size of fitting) x copper flare nut



**Eighth bend coupling**Female MUELLER Coupling thread x copper flare nut

## H-15485N

3/4"	1-1/2"‡	1/2"x3/4"	5/8"x3/4"	5/8" x 1"	3/4"	3/4"x1"



#### Eighth bend coupling

Female increasing I.P. thread (this thread is one size larger than nominal size of fitting) x copper flare nut



Quarter bend coupling Female MUELLER Coupling thread x copper flare nut

## H-15470N

3/4"	1"	1-1/4"	1-1/2"	2"



1/2"x3/4" 5/8"x3/4"	3/4"	1"	1"x3/4"
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### Quarter bend coupling

Female increasing I.P. thread (this thread is one size larger than nominal size of fitting) x copper flare nut



## Quarter bend coupling Internal swivel connection for 110 compression or pack joint CTS x copper flare nut

## H-15475N

3/4" 1"	1-1/2"	2"
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## H-15551N

3/4"	1"	
0/ 1	•	



#### Straight coupling

Female copper flare thread x M.I.P. thread



## Straight coupling

Female copper flare thread x F.I.P. thread

## H-15098N

3/4"	1"

## H-15082N

				1
[:	3/4"	1"	1-1/2"	2"

NOTE: Sizes shown above represent nominal size of fitting. When two sizes are listed, the first is the size of the threaded end and the second is size of copper flare nut. ‡Requires minimum ordering quantity. Contact MUELLER Customer Service Center for minimum order requirements and availability.



6.7

Shaded area indicates change Rev. 3-16



#### Straight union

Extra strong (XS) lead flange coupling x copper flare nut



## Eighth bend coupling

Swivel nut with female extra strong (XS) lead flange thread x copper flare nut

## H-15506N

1/2" 1/2" x 3/4"	5/8" x 3/4"	3/4"	3/4" x 5/8"
------------------	-------------	------	-------------

H-1	551	6N
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5/8"x3/4" | 3/4" | 1"



### Straight coupling

Female extra strong (XS) lead flange thread x copper flare nut



## Straight coupling

Female double extra strong (XXS) lead flange thread x copper flare nut

## H-15505N

1/2"	1/2"	x 3/4"	5/8"	5/8" x 3/4"	3/4"
3/4" x 1"	1"	1" x 3/4"	1-1/4" x 1"	1-1/2"	2"

## H-15510N

5/8" x 3/4"	3/4"	2"
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#### Eighth bend coupling

Female extra strong (XS) lead flange thread x copper flare nut



## Quarter bend coupling

Female extra strong (XS) lead flange thread x copper flare nut

## H-15515N

5/8" x 3/4"	3/4"	1"	
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1/2"x3/4"	5/8"x3/4"	3/4"	1"±	1"x3/4"



## Quarter bend coupling

Female extra strong (XS) lead flange thread x copper flare nut (pre-1920)



## **Eighth bend coupling**

Female double extra strong (XXS) lead flange thread x copper flare nut

## H-15513-03N

1"x3/4"

H-15521N

1/2" x 3/4" 3/4"

NOTE: Sizes shown above represent nominal size of fitting. When two sizes are given, first is size of lead flange end and second is size of copper flare nut. ‡Requires minimum ordering quantity. Contact MUELLER Customer Service Center for minimum ordering requirements and availability.



## COPPER FLARE TOOLS AND MISCELLANEOUS EQUIPMENT

Rev. 4-14 Shaded area indicates changes

## Copper flare connection optional equipment

### Copper flare nut



CATALOG NUMBER: H-15430

1/2" 3/4" 1"	1-1/4"	1-1/2"	2"
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#### Solid copper disc

Used with regular copper flare nut to shut off line.



CATALOG NUMBER: H-15535

	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
--	------	------	----	--------	--------	----

#### **Brass cap**

Used with regular copper flare nut to shut off line. Fits on copper flare spud to cap off line.



CATALOG NUMBER: H-15540N

3/4"	1"	1-1/2"	2"
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### Flaring tool

Used to make 45° flare on type "K" copper tubing.



CATALOG NUMBER: H-18000

	1/2"	5/8"	3/4"	1"	1-1/4"	1-1/2"	2"
--	------	------	------	----	--------	--------	----

#### **Drilled flaring tool**

Used to make 45° flare on type "K" copper tubing without shutting off water drilled to exhaust water at right angle to tubing.



CATALOG NUMBER: H-18005

3/4"	1"
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#### Reamer

Used to ream the inside of type "K" copper tubing to remove burrs prior to flaring.



CATALOG NUMBER: N/A

1/2"	3/4"	1"

#### **Brass Hammer**

Solid brass head with 10" wooden handle. Weight 2-3/4 lb. CATALOG NUMBER: **H-18025** 



Note: When using any striking tool, safety eye protection must be worn. Inspect hammer and tools for any damage after each use and repair or replace if mushrooming or chipping is evident.

### **Copper Gasket**

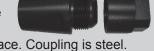


Replacement gasket to be used inside Female Copper Service Thread when assembling Fitting onto a Corporation Valve/Stop. Gasket is intended for single use only and must be replaced if Fitting is disassembled or reused.

Size	Part Number
3/4"	053271
1"	052914
1-1/4"	036262
1-1/2"	053323
2"	053322

## Pulling coupling - 3/4" & 1"

For replacing iron pipe with copper service pipe. Copper and iron pipes are joined,



iron is pulled through, leaving copper in place. Coupling is steel. One end has Inside I.P. Thread, other end has Copper Service Pipe Connection. Spud and nut have flat surfaces to provide firm grip for wrench.

CATALOG NUMBER: H-18030

## SERVICE FITTINGS WITH MUELLER 110® COMPRESSION CONNECTION

5/8"



Shaded area indicates change Rev. 10-14



H-15403N

1/2"x3/4"

1-1/4"

5/8"x3/4"

1-1/4"x1"

1/2"

3/4"

1"

1"x3/4"

## Straight three part union MUELLER 110<sup>®</sup> Conductive

Compression Connection for CTS O.D.\* tubing-both ends



H-15451N

### Straight coupling

**MUELLER 110 Conductive** Compression Connection for CTS O.D.\* tubing x F.I.P. thread

1/2"	1/2" x 3/4"	5/8" x 3/4"	3/4"	3/4" x 1/2"	3/4" x 1"
1"	1" x 3/4"	1" x 1-1/4"	1-1/4"	1-1/4" x 1"	1-1/2"
1-1/2" x 1"		2"	2" x 1-1	/2"	



H-15428N

## Straight coupling

3/4"

1-1/2"

**MUELLER 110 Conductive** Compression Connection for CTS O.D.\* tubing x M.I.P. thread

1-1/2"x1"

2"

	1/2"‡	1/2" x 3/4"	5/8" x 3/4"	3/4"	3/4" x 1/2"	3/4" x 1"
	1"	1" x 3/4"	1-1/4"	1-1/4" x 1"		1-1/2"
ſ	1-1/2" x 1"		1-1/2" x 2"	1" x 2"	2"	2" x 1-1/2"



## H-15429N

Straight coupling **MUELLER 110 Compression** Connection for IPS PE\* pipe x M.I.P. thread

3/4"	1"	1"x3/4"



H-15404N

## Straight three part union

MUELLER 110<sup>®</sup> Compression Connection for IPS PE\* pipe-both ends

1"x3/4"



## H-15409N

Straight coupling three part union

MUELLER 110 Conductive Compression Connection for CTS O.D.\* tubing x 110 Compression Connection for IPS PE\* pipe

3/4"	3/4"x1"	1"	1"x3/4"
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## E-15409N

#### Straight coupling

**MUELLER 110 Conductive** Compression Connection for CTS O.D. tubing x Pack Joint Connection for IPS PE pipe \*\*Note: 3/4" size only may also be used on PVC

Straight Female coupling

**MUELLER Coupling Thread** 

Swivel x 110 CTS Conductive

Compression Connection for



#### Straight coupling

MUELLER 110 Compression Connection for IPS PE\* pipe x F.I.P. thread



	3/4"**	3/4"x1"	1"	1"x3/4"
ı	0/ 1	0/1/1	'	1 70/1

3/4"	1"	1"x3/4"

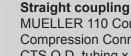


## H-15413N

CTS O.D.



H-15079N



## **MUELLER 110 Conductive** Compression Connection for CTS O.D. tubing x copper

flare nut

3/4" 1"

<sup>\*</sup>See chart on page 6.11 for tubing and pipe that may be used with these connections. ‡Requires minimum ordering quantity. Contact MUELLER Customer Service Center for minimum ordering requirements and availability. NOTE: Sizes shown above represent nominal size of fitting. When two sizes are given, first is size of MUELLER 110 Compression Connection and second is size of threaded end.



## SERVICE FITTINGS WITH MUELLER 110<sup>®</sup> COMPRESSION CONNECTION

Rev. 1-15 Shaded area indicates changes



Quarter bend coupling
MUELLER 110 Conductive
Compression Connection for
CTS O.D.\* tubing x F.I.P. thread

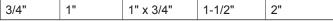


Quarter bend union
MUELLER 110 Conductive
Compression Connection for
CTS O.D.\* tubing - both ends

H-15533N

3/4" 3/4	4" x 1"   1"	1" x 3/4"	1-1/2"	2"
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Eight bend coupling MUELLER 110® Conductive Compression Connection for CTS O.D.\* tubing - both ends

Eight bend union
MUELLER 110 Conductive
Compression Connection for
CTS O.D.\* tubing x F.I.P. thread

H-15528N

H-15534N

3/4" 1"



Quarter bend coupling
MUELLER 110 Conductive
Compression Connection for
CTS O.D.\* tubing x M.I.P.
thread



Eight bend coupling
MUELLER 110 Conductive
Compression Connection for
CTS O.D. \* tubing x M.I.P.
thread

H-15431N

0/4"	0/411 411	411	4 4 (0)	0"
3/4"	3/4" x 1"	1"	1-1/2"	2"

H-15529N

	1	3/4"	1"
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H-15550N

#### Quarter bend union

Internal swivel connection for 110 compression or pack joint CTS x MUELLER 110 Conductive Compression Connection for CTS O.D.\* tubing

3/4"	1"
------	----



H-15480N

## Straight coupling

Female MUELLER Coupling thread x MUELLER 110 Conductive Compression Connection for CTS O.D.\* tubing

1/2"x3/4"	5/8"x3/4"	3/4"	1"

<sup>\*</sup>See chart on page 6.11 for tubing and pipe that may be used with these connections.

## SERVICE FITTINGS WITH MUELLER 110® **COMPRESSION CONNECTION**



Shaded area indicates change Rev. 8-19



H-15487N

## Eight bend coupling

MUELLER 110® Conductive Compression Connection Type K x swivel nut with female MUELLER coupling thread



H-15512N

#### Straight coupling

**MUELLER 110 Conductive** Compression Connection for CTS O.D.\* tubing x Double Extra Strong (XXS) lead flange thread





H-15067N

## Quarter bend coupling

MUELLER 110® Conductive Compression Connection for CTS O.D.\* tubing x female copper flare thread



H-15072N

Straight coupling

MUELLER 110 Compression Connection for IPS PE\* pipe x female copper flare thread

1" 3/4" 3/4"



H-15076N

Quarter bend coupling

**MUELLER 110 Conductive** Compression Connection for CTS O.D. \* tubing x swivel nut with female copper thread



H-15509N

Straight coupling

Extra strong (XS) lead flange thread x MUELLER 110 Conductive Compression Connection for

CTS O.D.\* tubing

3/4" 1"x3/4" 1"	1/2" x 3/4"	5/8" x 3/4"**	3/4"	1" x 3/4"	1"
-----------------	-------------	---------------	------	-----------	----



H-15492N

Quarter bend coupling

**MUELLER 110 Conductive** Compression Connection for CTS O.D. \* tubing x swivel nut with female MUELLER coupling thread



Straight coupling

**MUELLER 110 Conductive** Compression Connection for CTS O.D.\* tubing x female IPS PE Connection

H-15077N

3/4" 1" 1"



Eighth bend coupling

**MUELLER 110 Conductive** Compression Connection for CTS O.D. \* tubing x swivel nut with female copper thread



Straight coupling

**MUELLER 110 Conductive** Compression Connection for CTS O.D.\* tubing x female copper flare thread

## H-15075N

3/4"	1"	1-1/2"	2"

## H-15071N

1/2"	3/4"	3/4" x 5/8"	3/4" x 1"	1"	1" x 3/4"
1" x 1-1/4"		1-1/4"		2"	

\*See chart on page 6.11 for tubing and pipe that may be used with these connections.

\*\* When two sizes are given, first is size of lead flange thread and second is size of MUELLER 110 Compression Connection.

NOTE: Sizes shown above represent nominal size of fitting. When two sizes are given, first is size of MUELLER 110 Compression Connection and second is size of threaded end.



## MUELLER 110<sup>®</sup> COMPRESSION CONNECTION INFORMATION

Rev. 4-14 Shaded area indicates changes

## Tubing, pipe and liners used with MUELLER 110 Compression Connection

Nominal size of connection	Material*	Tubing or pipe O.D. range - inches	Tubing or pipe wall thickness range - inches	Tubing or pipe I.D. range - inches	Liner part number
1/2" CTS	Type "K" copper	0.622 - 0.628	0.045 - 0.053	-	-
2/4" CTC	Type "K" copper	0.872 - 0.878	0.061 - 0.069	-	-
3/4" CTS	Polyethylene	0.871 - 0.879	0.097 - 0.107	0.657 - 0.685	504281
411.070	Type "K" copper	1.121 - 1.129	0.061 - 0.069	-	-
1" CTS	Polyethylene	1.120 - 1.130	0.125 - 0.137	0.846 - 0.880	504385
1-1/4" CTS	Type "K" copper	1.371 - 1.379	0.060 - 0.070	-	-
	Polyethylene	1.370 - 1.380	0.153 - 0.168	1.034 - 1.074	505142
1-1/2" CTS	Type "K" copper	1.621 - 1.630	0.067 - 0.077	-	-
1-1/2 C15	Polyethylene	1.619 - 1.631	0.181 - 0.199	1.221 - 1.269	506139
OII OTO	Type "K" copper	2.120 - 2.130	0.076 - 0.090	-	-
2" CTS	Polyethylene	2.119 - 2.131	0.236 - 0.260	1.599 - 1.659	506141
3/4" IPS	Polyethylene	1.045 - 1.110	0.118 - 0.138	0.809 - 0.834	505141
1" IPS	Polyethylene	1.329 - 1.399	0.150 - 0.170	1.029 - 1.059	505142

<sup>\*</sup>Type "K" soft copper tubing per ASTM B88; CTS polyethylene (PE) per ASTM D-2737 - SDR-9; IPS polyethylene (PE) per ASTM D-2239 - PE SIDR-7; IPS polyvinylchloride (PVC) per ASTM D1785



#### **Mueller 110 Compression Connection Replacement Parts**

Size	Gakset part number†	Connection nut
1/2" CTS	681516	147542
3/4" CTS	581949	507831
1" CTS	581951	507835
1-1/4" CTS	581953	507843
1-1/2" CTS	581955	507847
2" CTS	581957	507851
3/4" IPS	89599	508826
1" IPS PE	89788	508827





Gasket assembly

Nut

†Gasket and gripper band assembly

#### Adapter Nut for pre-1976 style Mueller 110 Compression Connection for CTS tubing

Kit includes one standard Gasket (same used with current style 110 connections) and a special Nut that adapts to the older style connection threads on the fittings. It is installed in the same way as the current style connection (Gasket conductor spring should be toward fitting body).

Size	Connection kit
3/4" CTS	682552
1" CTS	682551



#### **Copper Gasket**

Replacement gasket to be used inside Female Copper Service Thread when assembling Fitting onto a Corporation Valve/Stop. Gasket is intended for single use only and must be replaced if Fitting is disassembled or reused.



0:	Part Number
Size	Part Number
3/4"	053271
1"	052914
1-1/4"	036262
1-1/2"	053323
2"	053322

## **SERVICE FITTINGS WITH** MUELLER® PACK JOINT CONNECTION



6.13

Shaded area indicates change Rev. 3-16



Straight three part union **MUELLER Pack Joint** Connection for CTS O.D.\* tubing- both ends



Quarter bend coupling **MUELLER Pack Joint** Connection for CTS O.D.\* tubing x F.I.P. thread

## P-15403N

3/4"	1"	1" x 3/4"	1-1/4"	1-1/2"	1-1/2 x 1"	2"
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3/4"	1"	1" x 3/4"	1-1/2"	2"	
------	----	-----------	--------	----	--



Eighth bend union **MUELLER Pack Joint** Connection for CTS O.D.\* tubing - both ends

Straight coupling **MUELLER Pack Joint** Connection for CTS O.D.\* tubing x M.I.P. thread

P-15528N

3/4"	1"
------	----

## P-15428N

1/2"	3/4"	3/4" x 1/2"	5/8" x 3/4"	3/4" x 1"
1"	1-1/4"	1" x 3/4"	1-1/4" x 1"	1-1/2"
1-1/2" x 1"	1-1/2" x 2"	2"	2" x 1-1/2"	



Quarter bend union MUELLER Pack Joint Connection for CTS O.D.\* tubing - both ends

Quarter bend coupling **MUELLER Pack Joint** Connection for CTS O.D.\* tubing x M.I.P. thread

P-15526N

3/4"	1"	1" x 3/4"	1-1/2"	2"

P-1	<b>553</b>	1	N	
-----	------------	---	---	--

3/4" 3/4" x 1" 1" 1" x 3/4" 1-1/2" 2"
---------------------------------------



Straight coupling **MUELLER Pack Joint** Connection for CTS O.D.\* tubing x F.I.P. thread



Quarter bend coupling Female MUELLER Coupling thread x PJ for CTS O.D.\* tubing

P-15451N

3/4" 3/4" x 1" 1" 1" x 3/4" 1-1/2" 2" 2" x 1-1/2"	3/4"	3/4" x 1"	1"	1" x 3/4"	1-1/2"	2"	2" x 1-1/2"
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P-15490N





Connection for CTS O.D. \* tubing x F.I.P. thread



Eighth bend coupling Female MUELLER Coupling thread x PJ for CTS O.D.\* tubing

#### P-15534N P-15485N

Eighth bend coupling

**MUELLER Pack Joint** 

1" 1" x 1-1/4"

\*See chart on page 6.15 for tubing and pipe that may be used with these connections.

NOTE: Sizes shown above represent nominal size of fitting. When two sizes are given, first is size of MUELLER Pack Joint Connection and second is size of threaded end.



## **SERVICE FITTINGS WITH** MUELLER® PACK JOINT CONNECTION

Rev. 1-16 Shaded area indicates changes



Straight coupling

Female MUELLER Coupling thread x PJ for CTS O.D.\* tubing

## P-15481N

1/2"x3/4"	5/8"x3/4"	3/4"	1"	



V-15445N

Straight coupling

**MUELLER Pack Joint** Connection for IPS PVC pipe x MUELLER 110® Conductive Compression Connection for CTS O.D.\* tubing. 2 pc. const. Assembled wrench tite.

2"



Straight coupling

**MUELLER Pack Joint** Connection for IPS PE pipe both ends

\*\*Note: 3/4" size only may also be used on PVC

Straight coupling **MUELLER Pack Joint** 

Connection for IPS PVC pipe

- both ends

\*\*Note: 3/4" size only may also be used with PVC

## E-15404N

3	3/4"**	1"	1"x3/4"	1-1/4"	1-1/2"	2"

<b>V-1</b>	54	0	1	N
------------	----	---	---	---

1"	1" x 3/4"**	1-1/2"	2"



Straight coupling

**MUELLER Pack Joint** Connection for IPS PE pipe x Pack Joint Connection for CTS O.D. tubing

\*\*Note: 3/4" size only may also be used on



Straight coupling

**MUELLER Pack Joint** Connection for IPS PVC pipe x Pack Joint Connection for CTS O.D.

## E-15443N

3/4"**	3/4"**x1"	1"

<b>V-1</b>	544	11	N
------------	-----	----	---

1" 1"x	3/4" 1-1/2"	1-1/2"x3/4"	2"
--------	-------------	-------------	----



Straight coupling

**MUELLER Pack Joint** Connection for IPS PE\* x F.I.P. thread

\*\*Note: 3/4" size only may also be used on PVC



V-15442N

Straight coupling

**MUELLER Pack Joint** Connection for IPS PVC\* pipe x F.I.P. thread

## E-15454N

d						
	3/4"**	1"	1"x3/4"**	1-1/4"	1-1/2"	2"

1"	1"x3/4"	1-1/2"	1-1/2"x3/4"	1-1/2"x1"	2"



#### Straight coupling

**MUELLER Pack Joint** Connection for IPS PE\* x M.I.P. thread

\*\*Note: 3/4" size only may also be used



Straight coupling

**MUELLER Pack Joint** Connection for IPS PVC\* pipe x M.I.P. thread

## E-15429N

ı							
	3/4"**	3/4"**x1"	1"	1"x3/4"	1-1/4"	1-1/2"	2"

## V-15440N

1"	1"x3/4"	1-1/2"	1-1/2"x3/4"	1-1/2"x1"	2"

<sup>\*</sup>See chart on page 6.15 for tubing and pipe that may be used with these connections. \*\*Note: 3/4" size only may also be used on PVC

NOTE: Sizes shown above represent nominal size of fitting. When two sizes are given, first is size of MUELLER Pack Joint Connection and second is size of threaded end.

## SERVICE FITTINGS WITH MUELLER® PACK JOINT CONNECTION



6.15

Shaded area indicates change Rev. 7-16



Straight coupling **MUELLER Pack Joint** Connection for CTS O.D.\* tubing x female copper flare thread



Quarter bend coupling **MUELLER Pack Joint** Connection for CTS O.D.\* tubing x swifel nut with female copper thread

## P-15071N

3/4" 1"	1" x 3/4"	3/4" x 1"	1-1/2"	2"	]
---------	-----------	-----------	--------	----	---



3/4"	1"	1" x 3/4"
------	----	-----------



P-15075N

Eighth bend coupling **MUELLER Pack Joint** Connection for CTS O.D.\* tubing x swivel nut with female copper thread



P-15409N

Straight three part union MUELLER Pack Joint Connection for CTS O.D.\* tubing x 110 Compression Connection for IPS PE\* pipe

1" 3/4"

1" 3/4"



Quarter bend coupling **MUELLER Pack Joint** Connection for CTS O.D.\* tubing x female copper flare thread



Straight coupling MUELLER Pack Joint Connection for CTS O.D.\* tubing x steel pipe Pack Joint

P-15067N

1" x 3/4"\*\* 3/4"



Connection IPS PE pipe - both ends \*\*Note: 3/4" size only may also be

**MUELLER Pack Joint** 

Quarter bend coupling

used with PVC

P-15421N

3/4"x1"

3/4"

1" 1"x3/4"

Quarter bend coupling



**MUELLER Pack Joint** Connection IPS PVC pipe - both ends

E-15547N

3/4"

V-15111N

1" 2" 1-1/2"

<sup>\*</sup>See chart on page 6.15 for tubing and pipe that may be used with these connections.

<sup>\*\*</sup>Note: 3/4" size only may also be used on PVC

NOTE: Sizes shown above represent nominal size of fitting. When two sizes are given, first is size of MUELLER Pack Joint Connection and second is size of threaded end.



# MUELLER® PACK JOINT CONNECTION INFORMATION

Rev. 2-15 Shaded area indicates changes

### **Tubing, pipe and liners used with MUELLER Pack Joint Connection**

Nominal size of connection	Material*	Tubing or pipe O.D. range - inches	Tubing or pipe wall thickness range - inches	Tubing or pipe I.D. range - inches	Liner part number
3/4" CTS	Type "K" copper	0.872 - 0.878	0.061 - 0.069	-	-
3/4 015	Polyethylene	0.871 - 0.879	0.097 - 0.107	0.657 - 0.685	528704
1" CTS	Type "K" copper	1.121 - 1.129	0.061 - 0.069	-	-
1 015	Polyethylene	1.120 - 1.130	0.125 - 0.137	0.846 - 0.880	528705
1-1/2" CTS	Type "K" copper	1.621 - 1.630	0.067 - 0.077	-	-
1-1/2 015	Polyethylene	1.619 - 1.631	0.181 - 0.199	1.221 - 1.269	528706
2" CTS	Type "K" copper	2.120 - 2.130	0.076 - 0.090	-	-
2 015	Polyethylene	2.119 - 2.131	0.236 - 0.260	1.599 - 1.659	528707
	Polyethylene	1.045 - 1.110	0.118 - 0.138	0.809 - 0.834	505141
3/4" IPS	3/4" Sch. 40 PVC	1.046 - 1.054	0.113 - 0.133	0.780 - 0.828	509759
	3/4" Sch. 80 PVC	1.046 - 1.054	0.154 - 0.174	0.698 - 0.746	509760
	Polyethylene	1.329 - 1.399	0.150 - 0.170	1.029 - 1.059	505142
1" IPS	1" Sch. 40 PVC	1.310 - 1.320	0.133 - 0.153	-	-
	1" Sch. 80 PVC	1.310 - 1.320	0.179 - 0.200	-	-
1-1/4" IPS	Polyethylene	1.754 - 1.832	0.197 - 0.221	1.360 - 1.390	312787
	Polyethylene	2.05 - 2.141	0.230 - 0.258	1.590 - 1.625	529116
1-1/2" IPS	1-1/2" Sch. 40 PVC	1.894 - 1.906	0.145 - 0.165	-	-
	1-1/2" Sch. 80 PVC	1.894 - 1.906	0.200 - 0.224	-	-
	Polyethylene	2.637 - 2.742	0.295 - 0.330	2.047 - 2.082	529117
2" IPS	2" Sch. 40 PVC	2.369 - 2.381	0.154 - 0.174	-	-
	2" Sch. 80 PVC	2.369 - 2.381	0.218 - 0.244	-	-

<sup>\*</sup>Type "K" soft copper tubing per ASTM B88; CTS polyethylene (PE) per ASTM D-2737 - SDR-9; IPS polyethylene (PE) per ASTM D-2239 - PE SIDR-7; IPS polyvinylchloride (PVC) per ASTM D1785



Liner

#### Liners used with MUELLER PVC Pack Joint Connection for OD Controlled PE Pipe

Nominal size of connection	Material	Tubing or pipe O.D. range - inches	Tubing or pipe I.D. range - inches	Length - inches	Liner part number
3/4" IPS	IPS PE OD controlled DR-9	1.046 - 1.054	0.772 - 0.820	2.00	313073
3/4 173	IPS PE OD controlled DR-11	1.046 - 1.054	0.816 - 0.864	2.00	313074
1" IPS	IPS PE OD controlled DR-9	1.310 - 1.320	.0978 - 1.028	2.125	313084
I IFS	IPS PE OD controlled DR-11	1.310 - 1.320	1.030 - 1.080	1.84	505142
1-1/2" IPS	IPS PE OD controlled DR-9	1.894 - 1.906	1.412 - 1.484	3.00	538266
1-1/2 173	IPS PE OD controlled DR-11	2.369 - 2.381	2.082 - 2.047	3.20	538267
2" IPS	IPS PE OD controlled DR-9	1.894 - 1.906	1.496 - 1.560	3.00	538269
2 153	IPS PE OD controlled DR-11	2.369 - 2.381	1.885 - 1.949	3.20	538270

#### **MUELLER Pack Joint Connection Kit**

Size	Connection Kit
3/4" CTS	681921
1" CTS	681922
1-1/2" CTS	681923
2" CTS	681924
3/4" IPS PE	682377
1" IPS PE	682556
1-1/4" CTS	682556
1-1/2 IPS PE	682557
2" IPS PE	682558
3/4" IPS PVC	682377
1" IPS PVC	682553
1-1/2" IPS PVC	682554
2" IPS PVC	682555



Connection Kit (includes Pack Joint, Gasket and washer)

#### **Copper Gasket**

Replacement gasket to be used inside Female Copper Service Thread when assembling Fitting onto a Corporation Valve/Stop. Gasket is intended for single use only and must be replaced if Fitting is disassembled or reused.



Size	Part Number
3/4"	053271
1"	052914
1-1/4"	036262
1-1/2"	053323
2"	053322

# SERVICE FITTINGS WITH MUELLER® INSTA-TITE® CONNECTION



6.17

Shaded area indicates change Rev. 3-16



Straight union
MUELLER INSTA-TITE
Connection for CTS O.D.\* PE
tubing-both ends



Straight union MUELLER INSTA-TITE Connection for IPS\* PE pipe- both ends

H-15406N

3/4" 1"

H-15408N

3/4" 1"



Straight coupling
MUELLER INSTA-TITE
Connection for CTS O.D.\*
PE tubing x M.I.P. thread



Straight coupling
MUELLER INSTA-TITE
Connection for IPS\* PE pipe
x M.I.P. thread

H-15424N

3/4" 1"

H-15426N

3/4" 1" 1"



Straight coupling
MUELLER INSTA-TITE
Connection for CTS O.D.\* PE
tubing x F.I.P. thread



Straight coupling
MUELLER INSTA-TITE
Connection for IPS\* PE pipe
x F.I.P. thread

H-15457N

3/4" 1"

H-15456N

3/4" 1"



Staight coupling
MUELLER INSTA-TITE
Connection for CTS O.D.\* PE
tubing x female copper flare
thread



Straight coupling
MUELLER INSTA-TITE
Connection for IPS\* PE pipe
x female copper flare thread

H-15074N

3/4" 1"

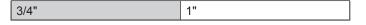
H-15073N

3/4" 3/4"x1" 1"



Quarter bend coupling MUELLER INSTA-TITE Connection for IPS\* PE pipe- both ends

H-15464N





Quarter bend union MUELLER INSTA-TITE Connection for CTS O.D.\* PE tubing x F.I.P.

H-15468N

3/4" 1"

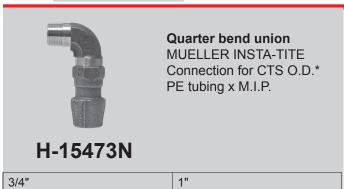
<sup>\*</sup> See chart on page 6.17 for tubing and pipe that can be used with these connections.

NOTE: Sizes shown above represent nominal size of fitting. When two sizes are given, first is size of threaded end and second is size of MUELLER INSTA-TITE Connection.



# SERVICE FITTINGS WITH MUELLER® INSTA-TITE® CONNECTION

Rev. 3-16 Shaded area indicates changes





Shaded area indicates change Rev. 4-14

## Polyethylene PE Tubing and pipe used with Mueller INSTA-TITE Connections

Nominal size of connection	Material	Tubing or pipe O.D. range (in.)	Tubing or pipe wall thick- ness 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

CTS polyethylene (PE) per ASTM D-2737 - SDR-9 IPS polyethylene (PE) per ASTM D-2239 - SIDR-7

### **Mueller INSTA-TITE Connection replacement parts**

Size	Gripper ring part number	O-ring part number
3/4" CTS PE (red gripper)	506325	606324
1" CTS PE (red gripper)	506327	506326
3/4" IPS PE (white gripper)	505885	505883
1" IPS PE (white gripper	505886	505884



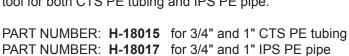


O-ring

## Optional tools for use with MUELLER INSTA-TITE Connections

#### Pipe beveling tool

To assure proper installation, the end of the pipe or tubing must be properly beveled before it is inserted into the MUELLER INSTA-TITE Connection.
MUELLER CO. offers a special beveling tool for both CTS PE tubing and IPS PE pipe.



#### Pipe removal tool

Pipe or tubing may be removed from the MUELLER INSTA-TITE Connection using special removal tools. Use one tool for 3/4" size connection and two tools for 1" size.



PART NUMBER: 506336

## Copper Gasket

Replacement gasket to be used inside Female Copper Service Thread when assembling Fitting onto a Corporation Valve/Stop. Gasket is intended for single use only and must be replaced if Fitting is disassembled or reused.



Size	Part Number
3/4"	053271
1"	052914
1-1/4"	036262
1-1/2"	053323
2"	053322



## SERVICE FITTINGS WITH THREADED CONNECTIONS

Rev. 9-15 Shaded area indicates changes



### Straight coupling

Swivel nut with female increasing I.P. thread (this thread is one size larger than the nominal size of the fitting) x M.I.P. thread.



## **Eighth bend coupling**Swivel nut with female

MUELLER® Coupling thread x M.I.P. thread

## H-10094N

3/4"
------



5/8" 3/4" 1"



## II 4000CN

Quarter bend coupling Swivel nut with female increasing I.P. thread (this thread is one size larger than the nominal size of the fitting) x M.I.P. thread.



### **Quarter bend coupling** Swivel nut with female

Swivel nut with female MUELLER Coupling thread x M.I.P. thread

## H-10096N

3/4" 1"	1-1/4" ‡	1-1/2"	2"	
---------	----------	--------	----	--

11-100231	H-10023N
-----------	----------

5/8" 3/4" 1"



## Eighth bend coupling

Swivel nut with female MUELLER® Coupling I/S I.P. thread x M.I.P outlet



## Straight coupling

Compression connection with set screw for use on steel pipe x M.I.P. thread

## H-10095N

1-1/2"	2"



3/4" 1" *‡* 



#### Straight coupling

Compression connection with set screw (drilled for wire seal) for use on steel pipe x E.I.P. thread



## Straight coupling

Compression connection for use on steel pipe x F.I.P. thread



3/4"	1" ‡	



3/4" # \*



#### Straight coupling

Compression connection with set screw for use on steel pipe x F.I.P. thread



### **Quarter bend coupling**

MUELLER Coupling thread M.I.P. thread - **both ends** 



3/4"	1" ‡

Н	-1	5	5	3	8	N	

3/4"	1"	1-1/2"	2"
------	----	--------	----

<sup>\*</sup> Both ends of coupling are 3/4" size.

<sup>‡</sup> Requires minimum ordering quantity. Contact MUELLER Customer Service Center for minimum order requirements and availability. NOTE: Sizes shown above represent nominal size of fitting.

## **SERVICE FITTINGS WITH** THREADED CONNECTIONS



Shaded area indicates change Rev. 4-16



Eighth bend coupling

H-10076N

3/4"

F.I.P. thread x both ends



**Quarter bend coupling** F.I.P. thread x F.I.P. thread 90 degree elbow

H-15541N

3/4"	1"	1-1/2"	2"
- · ·			

**Quarter bend coupling** F.I.P. thread x M.I.P. thread 90 degree elbow H-15542N 3/4" 1-1/2"

1"

<sup>\*</sup> Both ends of coupling are 3/4" size.

<sup>‡</sup> Requires minimum ordering quantity. Contact MUELLER Customer Service Center for minimum order requirements and availability. NOTE: Sizes shown above represent nominal size of fitting.

3/4"



## SERVICE FITTINGS WITH HOSE CLAMP RIBBED INSERT TYPE CONNECTION

Rev. 4-14 Shaded area indicates changes



## H-12200N

## Straight coupling

Ribbed insert connection for IPS PE pipe (includes 2 stainless steel hose clamps) x female copper flare thread



## Straight coupling

Ribbed insert connection for IPS PE pipe (includes 2 stainless steel hose clamps) x F.I.P. thread

3/4" 1"



## Straight coupling

Ribbed insert connection for IPS PE pipe (hose clamps NOT included) x female copper flare thread



## Straight coupling

Ribbed insert connection for IPS PE pipe (hose clamps NOT included) x F.I.P. thread



3/4" 1"

1"



1"



Straight coupling

Ribbed insert connection for IPS PE pipe (includes 2 stainless steel hose clamps) x M.I.P. thread



### Stainless steel hose clamp for 3/4" pipe-

PART NUMBER: 504030



## H-12210N

1" 3/4" 3/4" x 1"

504030 - 3/4" 504031 - 1"

Stainless steel hose clamp for 1" pipe-

PART NUMBER: 504031



#### Straight coupling

Ribbed insert connection for IPS PE pipe (hose clamps NOT included) x M.I.P. thread

## H-12213N

3/4" 1"

#### Copper Gasket

Replacement gasket to be used inside Female Copper Service Thread when assembling Fitting onto a Corporation Valve/Stop. Gasket is intended for single use only and must be replaced if Fitting is disassembled or reused.



Size	Part Number
3/4"	053271
1"	052914
1-1/4"	036262
1-1/2"	053323
2"	053322

NOTE: Sizes shown above represent nominal size of fitting.

## SERVICE FITTINGS WITH I.P. THREADED COPPER FLARE CONNECTION



6.23

Shaded area indicates change Rev. 4-14



Straight three part union I.P. threaded copper flare nut -both ends



H-15452N

Straight coupling
I.P. threaded copper flare nut
x F.I.P. thread

H-15402N

3/4"



1" ‡



**Straight coupling** I.P. threaded copper flare nut x M.I.P. thread

Copper flare nut I.P. threaded



H-15467N

Straight coupling

I.P. threaded copper flare nut x female increasing I.P. thread (this thread is one size larger than nominal size of fitting)

H-15427N

.....

3/4"

3/4"



H-15432N

3/4" 1"

FOR OTHER FLARE CONNECTION OPTIONAL EQUIPMENT, SEE PAGE 6.7

‡ Requires minimum ordering quantity. Contact MUELLER Customer Service Center for minimum ordering requirements and availability. NOTE: Sizes shown above represent nominal size of fitting.



## SERVICE FITTINGS WITH LEAD FLANGE CONNECTION

Rev. 10-16 Shaded area indicates changes



## **Straight coupling**Extra strong (XS) lead flange coupling x F.I.P. thread



**Straight coupling**Extra strong (XS) lead flange coupling x M.I.P. thread

H-10050N

1/2"x3/4"‡ 5/8"x3/4" 5/8" x 1/2" 3/4" 1" 1-1/2"

H-10051N

5/8"x3/4" 3/4"



**Straight coupling**Extra strong (XS) lead flange coupling -both ends



**Straight coupling**Double extra strong (XXS)
lead flange coupling x F.I.P.
thread

H-10054N

3/4" ‡

H-10052N

1/2" 5/8" 3/4"

‡ Requires minimum ordering quantity. Contact MUELLER Customer Service Center for minimum ordering requirements and availability.

NOTE: Sizes shown above represent nominal size of fitting. When two sizes are given, first is size of lead flange coupling and second is size of threaded connecion.



Shaded area indicates change Rev. 1-15



H-15381N

3/4" x 3/4" x 1"

1-1/2" x 1-1/2" x 3/4"

2" x 2" x 3/4"

3/4"

3/4"

#### Service tee

MUELLER 110 Conductive Compression Connection for CTS O.D.\* tubing-all ends

1" x 1" x 3/4"

2" x 2" x 2"

1-1/2" x 1-1/2" x 1-1/2"



P-15381N

#### Service tee

MUELLER Pack Joint Compression Connection for CTS O.D.\* tubing-all ends

3/4"	3/4" x 3/4" x 1"	1"	1" x 1" x 3/4"	1-1/2"	2"
1-1/2" x 1-1/2" x 1"		2" x 2'	' x 3/4"	2" x 2" x 1	1"



#### Service tee

1" x 3/4" x 3/4"

1-1/2" x 1-1/2" x 1"

2" x 2" x 1"

MUELLER 110 Conductive Compression Connection for IPS\* PE tubing-all ends



E-15444N

#### Service tee

MUELLER Pack Joint Connection for IPS PE\* tubing-all ends

H-15444N

3/4"



#### Service tee

M.I.P. thread x M.I.P. thread x MUELLER 110 Conductive Compression Connection for CTS O.D.\* tubing



#### Service tee

M.I.P. thread x M.I.P. thread x MUELLER Pack Joint Connection for CTS O.D.\* tub

H-15385N

3/4"	1"	1"x1"x3/4"
------	----	------------

P <sub>-</sub> 1	53	25	N

3/4"	3/4"x3/4"x1"	1"
------	--------------	----



#### Service tee

F.I.P. thread x F.I.P. thread x MUELLER 110 Conductive



#### Service tee

F.I.P. thread x F.I.P. thread x MUELLER Pack Joint Connection for CTS O.D.\*tubing

H-15392N

3/4"	1"

۲	=	J	5	9	5	7	V

3/4"	1" ±



Service tee sizing - sizes of ends are listed in the order shown above - when all three end sizes are the same, only one size is listed.

‡Requires minimum ordering quantity. Contact MUELLER Customer Service Center for minimum ordering requirements and availability.

\* See page 6.29 for tubing that can be used with this connection.



Rev. 3-16 Shaded area indicates changes



H-15391N

#### Service tee

**MUELLER 110 Conductive** Compression Connection for CTS O.D.\* tubing x 110 Conductive Compression Connection for CTS O.D.\* tubing x F.I.P. thread

2"x2"x1"

	<b>1</b>	

H-15393N

Service tee

**MUELLER 110 Conductive** Compression Connection for CTS O.D.\* tubing x 110 Conductive Compression Connection for CTS O.D.\* tubing x Inside CC thread

2"x2"x3/4"	2"x2"x1"
2 X2 X3/4	



#### Service tee

Copper flare nut x M.I.P. thread x copper flare nut



#### Service tee

M.I.P. thread x M.I.P. thread x copper flare

## H-15382N

3/4" #

3/4"

3/4" #



#### Service tee

Copper flare nut - all ends



H-15384N

### Service tee

Copper flare nut x copper flare nut x M.I.P. thread

<b>H-1</b>	538	30N
------------	-----	-----

1/2"‡	3/4"	3/4" x 3/4" x 1"	1"	1" x 3/4" x 3/4"	1" x 1" x 3/4"	1-1/4"‡
1-1	/4" x 1-1/4	" x 3/4"‡	1-1/4"	x 1-1/4" x 1"‡	1-1/2"	1-1/2" x 1-1/2" x 3/4"‡
1-1/2" x 1	-1/2" x 1"	2"	2":	x 2" x 3/4"‡	2"	x 2" x 1"



H-15386N

3/4"	3/4"x3/4"x1"	1"



H-10097N

#### Service tee

F.I.P. thread - all ends



LI 15207N

Service tee

MUELLER 110 Conductive Compression Connection for CTS O.D.\* tubing x 110 Conductive Compression Connection for CTS O.D.\* tubing x MI.P. thread

	1-	J	J	O	Π,	V

3/4"	3/4"x3/4"x1"	1"



1"

## Service tee

CTS Insta-Tite - all ends

## H-15399N

3/4" 1"



Service tee sizing - sizes of ends are listed in the order shown above - when all three end sizes are the same, only one size is listed.

- ‡Requires minimum ordering quantity. Contact MUELLER Customer Service Center for minimum ordering requirements and availability.
- \* See page 6.29 for tubing that can be used with this connection.

Shaded area indicates change Rev. 4-14



Inlet: MUELLER® 110® Conductive Compression Connection for CTS O.D.\* tubing

**Outlets: MUELLER 110** Conductive Compression Connection for CTS O.D.\* tubing straight line



Inlet: MUELLER Pack Joint Connection for CTS

O.D.\* tubing

**Outlets: MUELLER Pack** Joint Connection for CTS O.D.\* tubing straight line

H-15373N

3/4"x3/4"x7-1/2"	1"x3/4"x7-1/2"	1"x3/4"x5-1/4"
1-1/2"x3/4"x7-1/2"‡		



|--|



Inlet: MUELLER 110 Conductive Compression Connection for CTS O.D.\*

Outlets: M.I.P. thread straight

line



Inlet: MUELLER® Pack Joint

Connection for CTS

O.D.\* tubing

Outlets: M.I.P. thread

straight line

H-15363N

3/4"x3/4"x7-1/2"	1"x3/4"x6-1/2"	1"x3/4"x7-1/2"
1"x3/4"x13-1/2"	1"x1"x7-1/2"	1-1/2"x3/4"x7-1/2"
1-1/2"x1"x7-1/2"		



3/4"x3/4"x7-1/2"	1"x3/4"x6-1/2"	1"x3/4"x7-1/2"
1"x3/4"x13-1/2"	1"x1"x7-1/2"	1"x1"x13-1/2"
1-1/2"x3/4"x7-1/2"	1-1/2"x1"x7-1/2"	



H-15369N

Inlet: MUELLER 110 Conductive Compression Connection for CTS

O.D.\* tubing

Outlets: M.I.P. threads

right angle



H-15360N

3/4"x3/4"x5-1/2"

1"x3/4"x10"

Inlet: Copper flare nut
Outlets: Copper flare nut
straight line

3/4"x3/4"x10" 1"x3/4"x5-1/4"



1"x3/4"x7"±



Inlet: Copper flare nut Outlets: M.I.P. thread straight

line



H-15368N

Inlet: Copper flare nut
Outlets: M.I.P. thread righ

3/4"x3/4"x7" ‡	1"x3/4"x7" <i>‡</i>

angle

H-15362N

3/4"x3/4"x7"	3/4"x3/4"x7-1/2"	3/4"x3/4"x13-1/2"
1"x3/4"x6-1/2"	1"x3/4"x7"	1"x3/4"x7-1/2"
1"x3/4"x13-1/2"	•	

NOTE: Inline or Angle valves with fip threads can be added to any U Branch with MIP Ends

‡Requires minimum ordering quantity. Contact MUELLER Customer Service Center for minimum ordering requirements and availability.

\* See page 6.29 for tubing that can be used with this connection.

NOTE: Sizes shown above represent nominal size of end connections. First is size of inlet, second is size of outlets, and third is center-to-center dimension between outlets.



## "U" BRANCH CONNECTIONS

Rev. 3-16 Shaded area indicates changes



Inlet: M.I.P. thread

Outlets: M.I.P. thread straight

## H-15364N

3/4"x3/4"x13-1/2"‡	3/4"x1"x5-1/4"	1"x3/4"x5-1/4"
1"x3/4"x6-1/2" ‡	1"x3/4"x7-1/2"	1"x3/4"x8"
1"x3/4"x13-1/2"	1"x1"x7-1/2"	1"x1"x13-1/2"



Inlet: F.I.P. thread

Outlets: M.I.P. thread straight

## H-15365N

3/4"x3/4"x7-1/2"	1"x3/4"x6-1/2"	1"x3/4"x7-1/2"	
1"x3/4"x13-1/2"	1"x3/4"x13-1/2" 1"x3/4"x14"		
1"x1"x7-1/2"	1-1/4"x3/4"x13-1/2"	1 X3/4 X14	



Inlet: F.I.P. thread

Outlets: F.I.P. thread straight

V-15361N

Inlet: Pack Joint Connection

for PVC tubing

Outlet: M.I.P. thread straight

line with 7-1/2" Center

Two piece factory assembled

H-15367N

1"x3/4"x7-1/2"

1"x3/4"x7-1/2"

1"x1"x5"

1-1/2"x3/4"x7-1/2"

Inlet: M.I.P. thread

Outlet: Male meter thread



H-15375N

Inlet: Meter swivel nut Outlets: Male meter thread



H-15376N

1"x1"x5"

1"



P-25250N

Inlet: Meter nut

Outlets: CTS PJ outlets



B-25251N

Inlet: Meter nut

Outlet: M.I.P. thread straight

line with F.I.P. outlets

NOTE: Inline or Angle valves with fip threads can be added to any U Branch with MIP Ends

‡Requires minimum ordering quantity. Contact MUELLER Customer Service Center for minimum ordering requirements and availability.
\* See page 6.29 for tubing that can be used with this connection.

NOTE: Sizes shown above represent nominal size of end connections. First is size of inlet, second is size of outlets, and third is center-to-center dimension between outlets.

## SPECIAL "U" BRANCH CONNECTIONS ASSEMBLY WORKSHEET



6.29

Shaded area indicates change Rev. 4-14

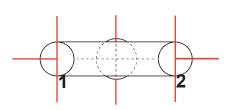
Mueller Co. has the capability to supply "U" Branches with virtually any combination of end connections, including styles with any standard Mueller valve or fitting attached to one or more of the connections. Use the illustrations below to sketch what is needed. Label each of the three positions with the type/size of connection (eg: MUELLER 110 Connection, M.I.P., etc.), and type/size valve/fitting to be attached if applicable. Best availability will result by selecting a standard "U" Branch from the preceding page, however special configurations may be available.

Enter catalog number of standard "U" branch, otherwise mark the appropriate illustration below to show
mportant dimensions of the special "U" branch you require, such as distance between outlets.
Position #1 Type/size connection:
□ Check this box if nothing is to be attached at position #1, otherwise provide the following information.  Valve/fitting catalog number:  Valve options (eg: handles):
Position #2 Type/size connection:
□ Check this box if nothing is to be attached at position #2, otherwise provide the following information.  Valve/fitting catalog number:  Valve options (eg: handles):
Position #3 Type/size connection:
□ Check this box if nothing is to be attached at position #3, otherwise provide the following information.  Valve/fitting catalog number:  Valve options (eg: handles):

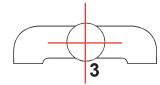
If angle valves are needed: Draw an arrow head on the end of the red line at each of the appropriate positions to show the direction the angle valve outlet should point. If ordering inline valves: Draw an arrow head to show the direction the valve head (cap) or access cover should point.

Note: Although the arrow lines are shown in the 12, 3, 6 and 9 o'clock positions, which are most common and preferred, other angles can be ordered. If some other angle is required, draw in your own arrow line and mark the angle in degrees referenced to the centerline of the "U" branch body.

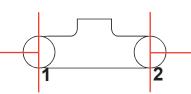
Straight line "U" branch viewed from outlet end



Right angle "U" branch - top right illustration: viewed from inlet end; bottom right illustration: viewed from outlet end



There are three possible locations where a special fitting can be attached: at outlets 1 and 2, or inlet 3.



FAX this page to Mueller Customer Service (217) 425-7537. A representative will contact you to discuss availability submitting this page does not constitute placing an order.

3/4"x1"

3/4"x1"



Rev. 4-14 Shaded area indicates changes



H-15343N

1"

### Two branch-short body

\*Inlets: MUELLER 110® Conductive Compression Connection for CTS O.D.\*\* tubing

\*Outlet: MUELLER 110 Conductive Compression Connection for CTS O.D.\*\* tubing

1"x1-1/2"



Two branch-short body

\*Inlets: MUELLER® Pack Joint Connection for CTS

O.D.\*\* tubing

\*Outlet: MUELLER Pack Joint Connection for CTS O.D.\*\*

tubing

P-15343N

3/4"x1"	1"	1"x1-1/2"	1"x2"
---------	----	-----------	-------



## H-15347N

1"

Two branch-short body

\*Inlets: MUELLER 110® **Conductive Compression** Connection for CTS O.D.\*\*

1"x2"

1"x2"

1"x2"

tubina

\*Outlet: M.I.P. thread



## Two branch-short body

\*Inlets: MUELLER® Pack Joint Connection for CTS

O.D.\*\* tubing

\*Outlet: M.I.P. thread

## P-15347N

3/4"x1"	1"	1"x1-1/2"	1"x2"
---------	----	-----------	-------



H-15341N

3/4"x1-1/2"± 3/4"x1-1/4"±

Two branch

1"x1-1/2"

\*Inlets: Copper flare nut \*Outlet: M.I.P. thread

1"x1-1/2"



Two branch

\*Inlets: Copper flare nut \*Outlet: Copper flare nut

## H-15340N



H-15346N

Three branch

1"x1-1/4"‡

\*Inlets: Copper flare nut \*Outlet: M.I.P. thread



H-15350N

3/4"x2" ±

## Four branch

1"x2"

\*Inlets: Copper flare nut \*Outlet: Copper flare nut



3/4"x1-1/2 ‡	1"x1-1/2"	1"x2"



### Four branch

\*Inlets: Copper flare \*Outlet: M.I.P. thread



## \*Inlets: Copper flare nut \*Outlet: Copper flare nut

## H-15351N

3/4"x2" ‡	1"x2"
-----------	-------

## H-15345N

3/4"x1-1/2
------------

NOTE: Minimum length of copper tubing "gooseneck" is: 3/4" size-30", 1" size-40".

‡Requires minimum ordering quantity. Contact MUELLER Customer Service Center for minimum ordering requirements and availability.

\*Inlets and outlet can be reversed.

<sup>\*\*</sup>See page 6.29-6.30 for tubing that can be used with this connection.

## "Y" BRANCH CONNECTIONS



6.31

Shaded area indicates change Rev. 2-15



Two branch

\*Inlets: Copper flare nut \*Outlet: F.I.P. thread



Two branch-short body

\*Inlets: M.I.P. thread \*Outlet: M.I.P. thread

H-15342N

1"x2"

3/4"x1"



H-15344N

Two branch - Short body \*Inlets: Solder joint \*Outlet: MUELLER 110<sup>®</sup> Conductive Compression Connection for CTS O.D.\*\* tubing



Two branch

\*Inlets: MUELLER INSTA-TITE Connection for IPS\* PE pipe \*Outlet: MUELLER INSTA-TITE Connection for IPS\* PE pipe

3/4"x1"

1"x1-1/2"

1"x2"



Two branch

\*Inlets: MUELLER 110®
Conductive Compression
Connection for IPS PE pipe
\*Outlet: MUELLER 110
Conductive Compression
Connection for IPS PE pipe

H-15354N

3/4"x1"

NOTE: Minimum length of copper tubing "gooseneck" is: 3/4" size-30", 1" size-40".

‡Requires minimum ordering quantity. Contact MUELLER Customer Service Center for minimum ordering requirements and availability. \*Inlets and outlet can be reversed.

<sup>\*\*</sup>See page 6.29 for tubing that can be used with this connection.



# MUELLER 110<sup>®</sup> COMPRESSION CONNECTION INFORMATION

Rev. 4-14 Shaded area indicates changes

## Tubing, pipe and liners used with MUELLER 110 Compression Connection

Nominal size of connection	Material*	Tubing or pipe O.D. range - inches	Tubing or pipe wall thickness range - inches	Tubing or pipe I.D. range - inches	Liner part number
1/2" CTS	Type "K" copper	0.622 - 0.628	0.045 - 0.053	-	-
2/4" CTC	Type "K" copper	0.872 - 0.878	0.061 - 0.069	-	-
3/4" CTS	Polyethylene	0.871 - 0.879	0.097 - 0.107	0.657 - 0.685	504281
4" CTC	Type "K" copper	1.121 - 1.129	0.061 - 0.069	-	-
1" CTS	Polyethylene	1.120 - 1.130	0.125 - 0.137	0.846 - 0.880	504385
4 4/4" OTC	Type "K" copper	1.371 - 1.379	0.060 - 0.070	-	-
1-1/4" CTS	Polyethylene	1.370 - 1.380	0.153 - 0.168	1.034 - 1.074	505142
1-1/2" CTS	Type "K" copper	1.621 - 1.630	0.067 - 0.077	-	-
1-1/2 013	Polyethylene	1.619 - 1.631	0.181 - 0.199	1.221 - 1.269	506139
OII OTO	Type "K" copper	2.120 - 2.130	0.076 - 0.090	-	-
2" CTS	Polyethylene	2.119 - 2.131	0.236 - 0.260	1.599 - 1.659	506141
	Polyethylene	1.045 - 1.110	0.118 - 0.138	0.809 - 0.834	505141
3/4" IPS	3/4" Sch. 40 PVC	1.046 - 1.054	0.113 - 0.133	0.780 - 0.828	509759
	3/4" Sch. 80 PVC	1.046 - 1.054	0.154 - 0.174	0.698 - 0.746	509760
	Polyethylene	1.329 - 1.399	0.150 - 0.170	1.029 - 1.059	505142
1" IPS	1" Sch. 40 PVC	1.310-1.320	0.133-0.153	-	-
	1" Sch. 80 PVC	1.310-1.320	0179-0.200	-	-

<sup>\*</sup>Type "K" soft copper tubing per ASTM B88; CTS polyethylene (PE) per ASTM D-2737 - SDR-9; IPS polyethylene (PE) per ASTM D-2239 - PE SIDR-7; IPS polyvinylchloride (PVC) per ASTM D1785



#### **Mueller 110 Compression Connection replacement parts**

-	•
681516	147542
581949	507831
581951	507835
581953	507843
581955	507847
581957	507851
89599	508826
89788	508827
	581949 581951 581953 581955 581957 89599



assembly



†Gasket and gripper band assembly

## Adapter Nut for pre-1976 style Mueller 110 Compression Connection for CTS tubing

Kit includes one standard Gasket (same used with current style 110 connections) and a special Nut that adapts to the older style connection threads on the fittings. It is installed in the same way as the current style connection (Gasket conductor spring should be toward fitting body).

Size	Connection kit
3/4" CTS	682552
1" CTS	682551





Shaded area indicates change Rev. 2-15

## Tubing, pipe and liners used with MUELLER® Pack Joint Conections

Nominal size of connection	Material*	Tubing or pipe O.D. range - inches	Tubing or pipe wall thickness range - inches	Tubing or pipe I.D. range - inches	Liner part number
	Type "K" copper	0.872 - 0.878	0.061 - 0.069	-	-
3/4" CTS	Polyethylene	0.871 - 0.879	0.097 - 0.107	0.657 - 0.685	528704
4" 0.00	Type "K" copper	1.121 - 1.129	0.061 - 0.069	-	-
1" CTS	Polyethylene	1.120 - 1.130	0.125 - 0.137	0.846 - 0.880	528705
	Type "K" copper	1.621 - 1.630	0.067 - 0.077	-	-
1-1/2" CTS	Polyethylene	1.619 - 1.631	0.181 - 0.199	1.221 - 1.269	528706
2" CTS	Type "K" copper	2.120 - 2.130	0.076 - 0.090	-	-
2 013	Polyethylene	2.119 - 2.131	0.236 - 0.260	1.599 - 1.659	528707
	Polyethylene	1.045 - 1.110	0.118 - 0.138	0.809 - 0.834	505141
3/4" IPS	3/4" Sch. 40 PVC	1.046 - 1.054	0.113 - 0.133	0.780 - 0.828	509759
	3/4" Sch. 80 PVC	1.046 - 1.054	0.154 - 0.174	0.698 - 0.746	509760
	Polyethylene	1.329 - 1.399	0.150 - 0.170	1.029 - 1.059	505142
1" IPS	1" Sch. 40 PVC	1.310 - 1.320	0.133 - 0.153	-	-
	1" Sch. 80 PVC	1.310 - 1.320	0.179 - 0.200	-	-
1-1/4" IPS	Polyethylene	1.754 - 1.832	0.197 - 0.221	1.360 - 1.390	312787
1-1/2" IPS	Polyethylene	2.05 - 2.141	0.230 - 0.258	1.590 - 1.625	529116
	1-1/2" Sch. 40 PVC	1.894 - 1.906	0.145 - 0.165	-	-
	1-1/2" Sch. 80 PVC	1.894 - 1.906	0.200 - 0.224	-	-
	Polyethylene	2.637 - 2.742	0.295 - 0.330	2.047 - 2.082	529117
2" IPS	2" Sch. 40 PVC	2.369 - 2.381	0.154 - 0.174	-	-
	2" Sch. 80 PVC	2.369 - 2.381	0.218 - 0.244	-	-

<sup>\*</sup>Type "K" soft copper tubing per ASTM B88; CTS polyethylene (PE) per ASTM D-2737 - SDR-9; IPS polyethylene (PE) per ASTM D-2239 - PE SIDR-7; IPS polyvinylchloride (PVC) per ASTM D1785



#### Liner

## Liners used with MUELLER PVC Pack Joint Connection for OD Controlled PE Pipe

Nominal size of connection	Material	Tubing or pipe O.D. range - inches	Tubing or pipe I.D. range - inches	Length - inches	Liner part number
3/4" IPS	IPS PE OD controlled DR-9	1.046 - 1.054	0.772 - 0.820	2.00	313073
3/4 123	IPS PE OD controlled DR-11	1.046 - 1.054	0.816 - 0.864	2.00	313074
1" IPS	IPS PE OD controlled DR-9	1.310 - 1.320	.0978 - 1.028	2.125	313084
	IPS PE OD controlled DR-11	1.310 - 1.320	1.030 - 1.080	1.84	505142
1-1/2" IPS	IPS PE OD controlled DR-9	1.894 - 1.906	1.412 - 1.484	3.00	538266
1-1/2 153	IPS PE OD controlled DR-11	2.369 - 2.381	2.082 - 2.047	3.20	538267
2" IPS	IPS PE OD controlled DR-9	1.894 - 1.906	1.496 - 1.560	3.00	538269
2 123	IPS PE OD controlled DR-11	2.369 - 2.381	1.885 - 1.949	3.20	538270

## **MUELLER Pack Joint Connection Kit**

Size	Connection Kit
3/4" CTS	681921
1" CTS	681922
1-1/2" CTS	681923
2" CTS	681924
3/4" IPS PE	682377
1" IPS PE	682556
1-1/2 IPS PE	682557
2" IPS PE	682558
3/4" IPS PVC	682377
1" IPS PVC	682553
1-1/2" IPS PVC	682554
2" IPS PVC	682555



Connection Kit (includes Pack Joint,)



# MUELLER® GRIP COMPRESSION CONNECTION INFORMATION

Rev. 4-16 Shaded area indicates changes

## Tubing, pipe and liners used with MUELLER Grip Compression Connection

Nominal size of connection	Material*	Tubing or pipe O.D. range - inches	Tubing or pipe wall thickness range - inches	Tubing or pipe I.D. range - inches	Liner part number
0/4# 070	Type "K" copper	0.872 - 0.878	0.061 - 0.069	-	-
3/4" CTS	Polyethylene	0.871 - 0.879	0.097 - 0.107	0.657 - 0.685	528704
411.070	Type "K" copper	1.121 - 1.129	0.061 - 0.069	-	-
1" CTS	Polyethylene	1.120 - 1.130	0.125 - 0.137	0.846 - 0.880	528705
	Type "K" copper	1.621 - 1.630	0.067 - 0.077	-	-
1-1/2" CTS	Polyethylene	1.619 - 1.631	0.181 - 0.199	1.221 - 1.269	528706
au aza	Type "K" copper	2.120 - 2.130	0.076 - 0.090	-	-
2" CTS	Polyethylene	2.119 - 2.131	0.236 - 0.260	1.599 - 1.659	528707
3/4" IPS	Polyethylene	1.045 - 1.110	0.118 - 0.138	0.809 - 0.834	505141
1" IPS	Polyethylene	1.329 - 1.399	0.150 - 0.170	1.029 - 1.059	505142

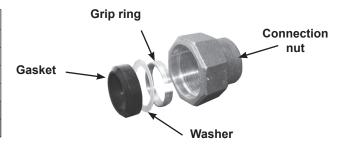
<sup>\*</sup>Type "K" soft copper tubing per ASTM B88; CTS polyethylene (PE) per ASTM D-2737 - SDR-9 IPS polyethylene (PE) per ASTM D-2239 - PE SIDR-7



Liner

## **Grip Joint kits**

Size	Kit	Grip ring	Washer	Gasket	Connection nut
3/4" CTS	682861	312919	311692	537881	537838
1" CTS	682862	312920	311695	537882	537839
1-1/2" CTS	682863	312921	538107	537883	537840
2" CTS	682864	312922	538108	538109	537841
3/4" IPS	683023	313094	313695	311869	538320
1" IPS	683024	313095	312122	313098	538321



## PIPE PLUGS AND BUSHING



Shaded area indicates change Rev. 3-16



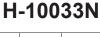
Brass plug -Machine inserted\* AWWA taper (MUELLER "CC") thread



Brass plug\*\* -Square head with AWWA taper (MUELLER "CC") thread

## H-10034N

1/2"‡ 5/8" 3/4" 1"	1-1/4" ‡	1-1/2"	2"
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1/2" 5/8" 3/4" 1" 1-1/4" 1-1/2" 2"	1/2
------------------------------------	-----



Brass plug -Machine inserted\* I.P. thead



Brass plug -Square head with I.P. thread

## H-10037N

3/4" ‡	1" ‡	1-1/4" ‡	1-1/2" ‡	2" ‡	2-1/2" ‡

2"x2/4"

H-10035N

1/2" ‡ 3/-	/4" 1"	1-1/4" ‡	1-1/2" ‡	2"‡
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H-10036N

1-1/2"x1"

## **Brass bushing**

2"X1"

Male AWWA taper (MUELLER "CC") thread x female AWWA taper (MUELLER "CC") thread



#### **Brass Bushings**

	J
47162N	1-1/4" MIP x 1" FIP
47163N	2" MIP x 3/4" FIP
47164N	2" MIP x 1" FIP
47165N	1" MIP x 3/4" FIP
47168N	1-1/2" MIP x 3/4" FIP
47169N	1-1/2" MIP x 1" FIP
47172N	2" MIP x 1-1/2" FIP

**Adapter with Slip Coupling** 

F.I.P. x PVC slip coupling



1"x3/4"

H-700065E

Adapter with Slip Coupling F.I.P. x PVC slip coupling

2"X2-1/2"



H-700066E

1"x1-1/2"

3/4"x1-1/2"

\*Nominal size.

‡Requires minimum ordering quantity. Contact MUELLER Customer Service Center for minimum ordering requirements and availability.



Rev. 3-16 Shaded area indicates changes



## Reliable Connections

www.muellercompany.com moreinfo@muellercompany.com