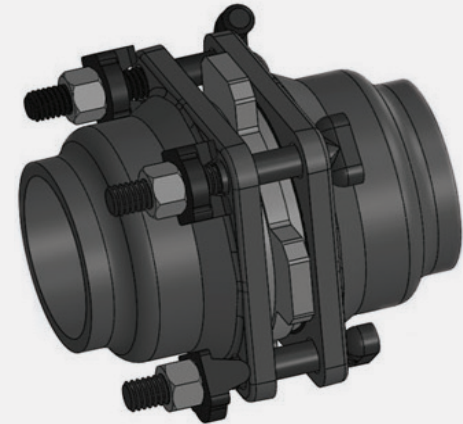
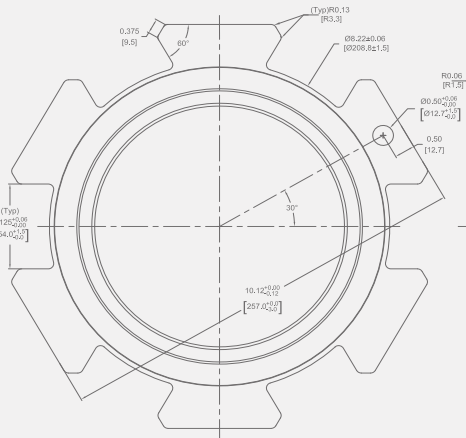


# SIGMA MJ CONNECTOR

REDUCED TO SIGMA'S DETRIMENT. THIS DRAWING IS LOANED SUBJECT TO RETURN ON DEMAND.



## PRODUCT SPECIFICATIONS

- SIZE RANGE:** • 4" through 12"
- MATERIAL:** • MJ x MJ Connector and Spacers manufactured from high strength ductile iron in accordance with ASTM A536 Grade 65-45-12.
- PRESSURE RATING:** • 350 PSI Water Working Pressure 4"- 12"
- TESTING:** • Manufactured in accordance with ANSI/AWWA C153/A21.53 and ANSI/AWWA C110/A21.10  
 • All fittings are hydrostatically tested in accordance with SIGMA Quality Management Standards  
 • All fittings are heat coded to ensure traceability and verification of metallurgical properties in accordance with the prevailing standards and SIGMA Quality Management Standards.
- CEMENT LINING:** • Double cement lined in accordance with ANSI/AWWA C104 / A21.4
- COATING:** • Interior of fitting is e-coated  
 • Exterior of fitting is e-coated
- GASKETS:** • SBR in accordance with ANSI/AWWA C111/A21.11
- T-BOLTS:** • Low Alloy corrosion resistant high strength steel in accordance with ANSI/AWWA C111/A21.11
- EYE-BOLTS:** • Low Alloy corrosion resistant high strength steel in accordance with ANSI/AWWA C111/A21.11
- STANDARDS:** • Certified to NSF61 Standard including Annex G  
 • ANSI/AWWA C153/A21.53 Ductile Iron Compact Fittings
- INSTALLATION:** • Per ANSI/AWWA C600 Standard Installation of Ductile-Iron Mains and Their Appurtenances

# SIGMA MJ CONNECTOR

## Features & Advantages:

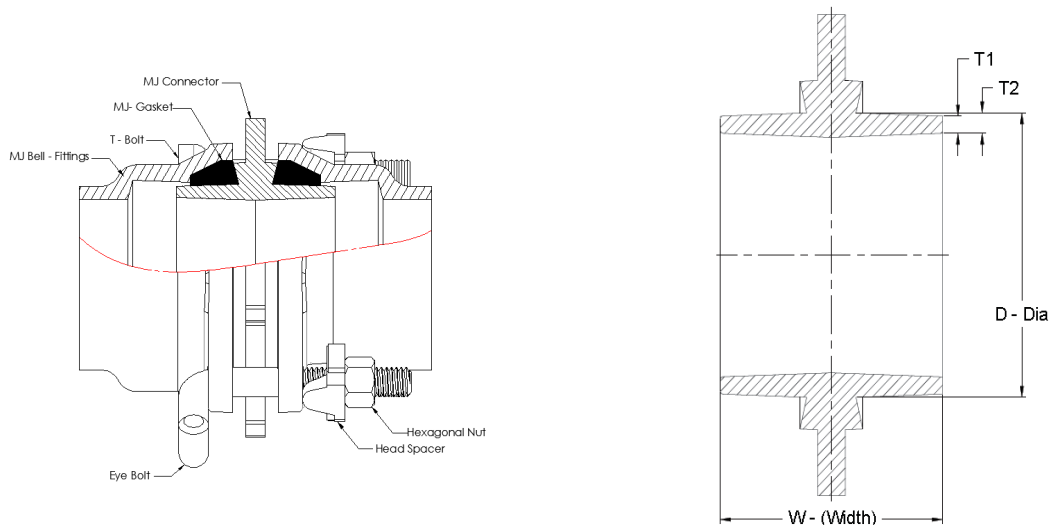
### Sizes 4-12"

- The SIGMA MJ Connector is a simple, light weight product that provides restraint between MJ Valves and MJ Fittings.
- Its Compact design provides a bolt through restraint option between two MJ Bells when space is limited
- No Pipe to saw or Pipe damage since no pipe connection is required
- Comes complete with all necessary accessories
- Close-coupled connections allow you to pre-assemble before transporting to the job site
- Two MJ's are connected using one accessory kit, instead of the standard two, allowing less chance for leakage

## Sample Specification:

The MJ x MJ Connector will incorporate a bolt-through restraint mechanism design that allows for connection of MJ x MJ bells of valves and fittings with T-head bolts and Eye bolts. The MJ x MJ Connector and spacers shall be manufactured from high strength ductile iron in accordance with ASTM A536, Grade 65-45-12 and supplied with standard NSF-61 Approved asphaltic seal coat that conforms to ANSI/AWWA C104/A21.4. The MJ x MJ Connector kit shall come complete with one MJ x MJ connector, two standard SBR (Styrene Butadiene Rubber) mechanical joint gaskets, and all required T-head bolts and Eye bolts.

The SIGMA MJ Connector meets the working pressure specifications of ANSI/AWWA C153/ A21.53 Ductile-Iron Compact Fittings and ANSI/AWWA C110/A21.10 Ductile-Iron and Gray-Iron Fittings. The MJ x MJ Connector shall have a maximum water working pressure of 350 PSI for sizes 4"-12" and shall be used with standard Mechanical Joint fittings and valves.



## Dimensions in Inches, Weights in Pounds

MJ Connector											
Size	Item #	MJ Gasket	T-Head Bolt (Qty)	Eye Bolt (Qty)	Head Spacer	Width (Inch)	Diameter (OD-Inch)	T -1 (Inch)	T - 2 (Inch)	Casting Weight (lbs)	Weight (lbs) w/accessories
4	DMCP04	2	4	N/A	4	4.00	4.80	0.29	0.34	8.3	14.82
6	DMCP06	2	4	2	6	4.00	6.90	0.31	0.36	15.44	24.98
8	DMCP08	2	4	2	6	4.00	9.05	0.33	0.38	18.15	28.17
10	DMCP10	2	4	4	8	4.00	11.10	0.35	0.40	30.37	43.59
12	DMCP12	2	4	4	8	4.50	13.20	0.36	0.42	31.23	45.35

Note: Accessories include MJ Gasket, T-Head Bolt, Eye-Bolt and Head Spacer

# SIGMA MJ CONNECTOR

## INSTALLATION INSTRUCTION FOR MJ VALVE AND FITTING RESTRAINT

**BEFORE YOU BEGIN: Match the Accessory Pak to the fittings being installed.**

- 1) For typical C153 compact fittings and valves STANDARD Accessory Pak
- 2) LONG-BOLT Accessory Pak - for full-body C110 fittings and certain butterfly valves with thick bolt flanges

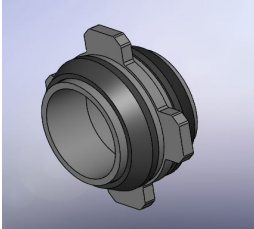
### HYDRANT AND OTHER CONNECTIONS

- When connecting both the “branch” and “run” of 3 thru 14 inch compact tees or crosses, or 6 and 8 inch 90s the standard accessory bolts may interfere with each other. Substituting shorter bolts should solve this. Conduct a trial connection prior to assembly in the field. Special accessory paks with shorter bolts are available. Contact SIGMA for more info.
- We highly recommend that when hydrants are being connected a trial connection is made prior to field assembly due to the large variety of hydrant designs available. Connector can be assembled on many hydrant shoes that have adequate space for bolt clearance.

### WRENCH SIZES

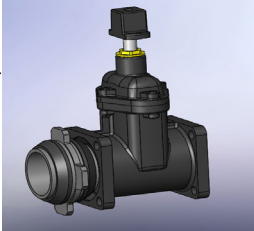
A combination wrench may be required to install the Connector on some valves. Wrench size required:

- 3-inch (75mm): 1 1/16-inch wrench
- 4 to 12-in (100-300mm): 1 1/8-inch wrench
- 14 to 24-inch (350-600mm): 1 1/4-inch wrench
- 30 to 36-inch (750-900mm): 1 5/8-inch wrench

**1** 

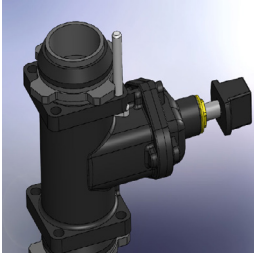
a) Be sure to lubricate both the INSIDE and OUTSIDE of gaskets.

b) Fully seat gasket on each side of the MJ Connector.

**2** 

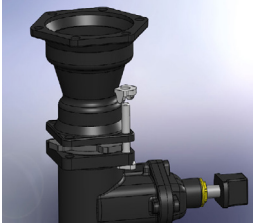
a) If possible, place valve or fitting on its end and push MJ Connector into it.

b) Install EVENLY.

**3** 

a) Install T-bolts first. This provides easier eyebolt installation. Put bolts in hard-to-reach holes BEFORE placing the fitting into position.

b) EVENLY seat fitting on the MJ Connector and install the remaining bolts.

**4** 

a) Place T-head spacers on bolts with the rounded side against the flange of the fitting or valve so the nut is against the flat side.

**5** Diameter, inches      Diameter, mm      NUMBER OF EYEBOLTS

3, 4	75, 100	none
6, 8	150, 200	1 eye-bolt on each side of valve
10, 12	250, 300	2 eye-bolts on each side of valve
14-36	350-900	none

**6** Tighten the nuts in an alternating pattern as follows:

3-inch (75mm)	45-60 ft-lbs (61-81 N•m)
4-24-inch (100-600mm)	75-90 ft-lbs (102-122 N•m)
30-36-inch (750-900mm)	100-120 ft-lbs (135-163 N•m)

**WHY USE THE SPACERS:**

A T-bolt head normally goes in this place, so the fitting interferes with tightening the nut. The T-head spacer raises the nut to keep it from contacting the fitting when you tighten the nut.

**WHY USE THE EYEBOLTS:**

The shape of the eyebolt makes it easier to bolt the MJ Connector to certain sizes of wide-bodied valves. When using to connect two fittings, place the eyebolts in any convenient bolt hole location. The eyes do not have to be rodded.

## LOCATIONS

### Northeast Region

#### Cream Ridge, New Jersey (HQ)

700 Goldman Drive  
 Cream Ridge, NJ 08514  
 Phone (800) 999-2550  
 Fax (609) 758-1158  
 crmcsr@sigmaco.com

### REPCO

970 DE LA Bastican  
 Victoriaville, Quebec G6T 1Y2  
 Phone (888) 744-6262  
 Fax (819) 758-1153  
 jboucher@repco.ca

### Concord Supply

2353 Bowman Street  
 Innisfil, Ontario L9S 3V6  
 Phone (877) 436-3800  
 Fax (705) 436-6338  
 tanya@concordsupply.ca

### Midwest Region

#### Sauk Village, Illinois

21699 Torrence Avenue  
 Sauk Village, IL 60411  
 Phone (888) 999-0420  
 Fax (708) 758-6790  
 chicsr@sigmaco.com

### Southeast Region

#### Alexander City, Alabama

1500 Highway 22 W  
 Alexander City, AL 35010  
 Phone (800) 824-4513  
 Fax (256) 234-4956  
 alxcsr@sigmaco.com

### Southwest Region

#### Houston, Texas

5000 Askins Lane  
 Houston, TX 77093  
 Phone (800) 999-0109  
 Fax (281) 987-0200  
 htncsr@sigmaco.com

### Western Region

#### Ontario, California

4652 E. Guasti Road  
 Ontario, CA 91761  
 Phone (800) 688-6230  
 Fax (909) 391-2033  
 ontcsr@sigmaco.com

### Auburn, Washington (Branch)

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 Phone (800) 688-6230  
 Fax (909) 391-2033  
 ontcsr@sigmaco.com

[www.sigmaco.com](http://www.sigmaco.com)

Terms and Conditions of Sales available at our website.

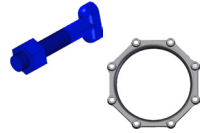
## AWWA Ductile Iron Fittings



- 2-64" C153 Ductile Iron Mechanical Joint Fittings
- 2-48" C110 Ductile Iron Mechanical Joint Fittings
- 2-64" C110 Ductile Iron Flanged Fittings
- 3-24" C153 Ductile Iron Push-On Fittings
- 4-24" C110 Ductile Iron Push-On Fittings
- 4-12" Ductile Iron Mechanical Joint Connector
- C116 Fusion Bonded Epoxy Lining Available
- PROTECTO 401® Ceramic Epoxy Lining Available

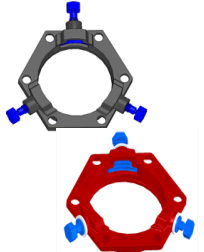
Visit our website for available special coatings. <http://www.sigmaco.com/fittings-coatings-linings/>

## Mechanical Joint Accessories



- Prepackaged and Loose Mechanical Joint Accessories
- SIGMASEAL™ Improved Mechanical Joint Gasket
- Snap-On Multi-Purpose Gasket for Ductile Iron or PVC Pressure Pipes
- OMNI-SLEEVE™ Improved Wall Penetration Sleeve
- Specialty Bolts and Nuts for Mechanical Joint Assemblies

## ONE-LOK™ Wedge Action Restraints

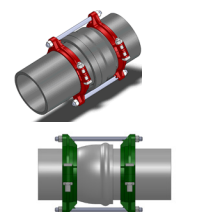


- 3-48" ONE-LOK D-SLDE Domestic Wedge Restraint for Ductile Iron Pipe
- 3-64" ONE-LOK SLDE Wedge Restraint for Ductile Iron Pipe (Import)
- 4-48" ONE-LOK T-SLDE Tandem Wedge Restraint for High Pressure Ductile Iron Pipe
- 3-36" ONE-LOK D-SLCE Domestic Wedge Restraint for PVC Pipe
- 3-36" ONE-LOK SLCE Wedge Restraint for PVC Pipe (Import)
- 3-36" ONE-LOK SLDEH Wedge Harness Restraint for Ductile Iron Pipe
- 4-12" / 20" ONE-LOK SLDM Wedge Restraint for Oversized Cast Iron Pipe
- 4-36" ONE-LOK SSLD Split Wedge Restraint for Installed Ductile Iron Pipe & Fitting
- 4-36" ONE-LOK SSLDH Split Wedge Harness Restraint for Installed Ductile Iron Pipe
- 4-12" ONE-LOK SLCEH Wedge Harness Restraint for AWWA C900 PVC Pipe

Visit our website for available special coatings.

<http://www.sigmaco.com/pipe-restraint-product-coatings-linings/>

## PV-LOK™ Serration Lock Restraints



- 4-48" PV-LOK PWM Serrated Restraint for Ductile Iron Fitting & AWWA C900/905 PVC Pipe
- 4-48" PV-LOK PWP Serrated Bell Joint Restraint for AWWA C900/905 PVC Pipe
- 4-12" PV-LOK D-PWP Domestic Serrated Bell Joint Restraint for AWWA C900 PVC Pipe
- 4-48" PV-LOK PVPF Restraint for AWWA C900/905 PVC Pipe & PVC Fitting
- 4-12" PV-LOK PWH Serrated Harness Restraint for AWWA C900 PVC Pipe
- 2-12" PV-LOK PVM Serrated Restraint for Ductile Iron & IPS OD PVC pipe
- 2-12" PV-LOK PVP Serrated Bell Joint Restraint for IPS OD PVC Pipe
- 4-8" PV-LOK PVPF Serrated Restraint for IPS OD PVC Pipe & PVC Fitting
- 4-12" PV-LOK PWP Serrated Bell Joint Restraint for Ductile Iron Pipe

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<http://www.sigmaco.com/pipe-restraint-product-coatings-linings/>

## Flange Adapters



- 3-36" SIGMAFLANGE Flange Adapter Sleeve for PVC and Ductile Iron Pipe
- 2-48" ZIP FLANGE Set Screw Style Flange Adapter

## Municipal Construction Castings



- Manhole Rings and Covers
- Curb and Meter Boxes
- Frames and Grates
- Storm Inlets
- Valve Boxes, Risers, and Extensions

## Products for the Ductile Iron Fabricator



- 3-64" High Hub Threaded Flanges
- 3-48" Tapped High Hub Threaded Flanges
- 3-36" Extra Heavy 250lb Drilled Threaded Flanges
- 3-48" Threaded MJ Bell Adapters
- 3-48" MJ x PE Bell adapter
- 3-48" Anchor Flanges
- 3-16" Filler Flanges

## Extended Range Products



- Flange-Pak™ Prepackaged Flange Accessory Sets
- Polyethylene Encasement for Ductile Iron Pipe
- Copper Tubing Products
- Tracer Wire & Detectable/Non-Detectable Marking Tape
- Pipe Joint Lubricant & Hydraulic Cement
- Socket Clamps and Tie Rod Accessories
- BoxLok Valve Box Alignment Device
- Cast Iron Companion Flanges