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Part Name: MJ Adaptor Transition Fitting  
Part Number: 901-xxxx

## MJ Adaptor Transitions

The Poly-Cam MJ Adaptor Transition is a double restraint multi-level mechanical transition fitting. The polyethylene or pipe-quality copolymer material are hydraulically compressed into the transition fitting.

## Design

Relaxation of the pipe creates a seal to prevent leakage. Under pressure, the internal pressure within the pipe increases the sealing surface area on the barb. Under zero internal pressure, the compression and tensional strain created by the compression of the multi-level barbs are greater than the stress created by relaxation and/or thermal expansion and contraction. As the internal pressure increases, the connection between the pipe material and transition fitting increases.

A MEGALUG® or FIELD LOK® Gasket is required to be used with this product. Standard glands will not completely restrain the expansion/contraction of the HDPE. This design allows installer to use standard length bolts instead of the more costly longer bolts. The double-restraint design also eliminates the need for wait-time in order to backfill.

- Sizes range from 3" to 24" in both iron and ductile pipe

## System Performance

The transition fitting is designed to handle the pressure rating of the HDPE pipe with a 2:1 safety factor at 73.40 degrees Fahrenheit with a minimum 50-year design life.

## **Quality Assurance**

The transition fitting shall be manufactured by Poly-Cam, Inc. Poly-Cam, Inc. shall provide quality assurance with regards to proper installation, compatibility, performance, and acceptance. The transition joint meets or exceeds the requirements of:

- ASTM 1598 and ASTM 1599
- Meets ANSI/AWWA standard C-906

## **Installation**

**HDPE pipe end:** Install transition fitting to comply with the pipe manufacturer's recommended procedures. All field welds shall be completed per Plastic Pipe Institute's welding procedure for butt fusion.

**Ductile Fitting:** The entrance of the coupling is tapered at the beginning. The polyethylene or copolymer material is cold pressed into the coupling. This allows the material to relax into the multi-level barb system.

## **Material**

### **Ductile Fitting:**

- Manufactured of American-made cast ductile iron
- The inserts are manufactured out of 304 stainless steel tubing (ASTM A249 or ASTM A269) and or ERW pipe (ASTM SA-312).

### **High-Density Polyethylene: HDPE pipe**

- Meets ASTM D-3350 with minimum cell classification values of 345464C (PE 3408), PE445574C (PE 4710)
- Meets ASTM F714.
- Density shall be no less than 0.955 g/cm as referenced in ASTM D1505
- Melt index no greater than 0.15 g/10 minutes when tested per ASTM D 1238
- Tensile Strength at Yield -tensile shall be 3,200 psi to less than 3,500 psi as referenced in ASTM D638
- ESCR-Environmental Stress Crack Resistance shall be over 5,000 hours with zero failures when tested per ASTM D 1693-Condition C
- All pipe meets ASTM 3035.
- All certifications will be submitted upon request.

## **Warranty**

The warranty period is one year after the date of substantial completion of installation.

# Series 901 The MJ Adaptor DI

Nominal Size (In.)	Exposed DIPS Pipe O.D. <b>A</b>	Exposed IPS PE Pipe O.D. <b>A</b>	Exposed DR11 DIPS Pipe I.D. <b>B</b>	Exposed DR11 IPS Pipe I.D. <b>B</b>	Pressed DR11 DIPS Pipe I.D. <b>C</b>	Pressed DR11 IPS Pipe I.D. <b>C</b>	Coupling O.D. <b>D</b>	Exposed PE Pipe Length <b>E</b>	Coupling Length <b>F</b>	Overall Length <b>G</b>
4	4.8	4.5	3.876	3.633	~3.29	~3.33	4.8	8	7	15
6	6.9	6.625	5.571	5.349	~4.96	~4.99	6.9	9	7	16
8	9.05	8.625	7.305	6.963	~6.4	~6.5	9.05	11	7	18
10	11.1	10.75	8.961	8.679	~8.1	~8.1	11.04	13	7	20
12	13.2	12.75	10.656	10.293	~9.7	~9.8	13.133	15	7	22
14	15.3	14	12.351	11.301	~11.3	~11.6	15.24	8	12	20
16	17.4	16	14.046	12.915	~13.0	~13.3	17.4	6	16	22
18	19.5	18	15.741	14.532	~14.7	~15.0	19.44	12	18	30
20	21.6	20	17.436	16.146	~16.4	~16.7	21.6	22	14	36
24	25.8	24	20.829	19.374	~20.7	~20.1	25.8	26	14	40

