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Part Name: Poly-Cam Male
Part Number: 631-xxxx

Quick Disconnect Transitions

The Poly-Cam quick disconnect transition is a multi-level mechanical transition fitting. The polyethylene or pipe-quality copolymer material are hydraulically compressed into the Bauer 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.

- Sizes range from 2" to 12".

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
- All Fittings meet ARRA requirements.

Installation

Bauer Fitting: Insert the male Bauer coupling into the female Bauer coupling. The gasket inside of the female Bauer coupling will create a seal with the male Bauer end. The lever ring snaps the fitting together providing a quick and durable connection.

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.

Material

Galvanized Steel Fitting:

- The Poly-Cam coupling is manufactured of Carbon Steel (A53 or A106 grade), hot-dipped galvanized (in accordance to ASTM A123) and welded to the Type B Bauer fittings.

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 631 Poly-Cam Male

Nominal Size (In.)	Coupling O.D. A	Pressed PE Pipe I.D. B	Exposed PE Pipe I.D. C	Exposed PE Pipe O.D. D	Coupling Length E	Exposed PE Pipe Length F	Total Length G
3	4.71	~2.45	2.826	3.5	7.55	4	11.55
4	5.7	~3.23	3.633	4.5	8.15	4	12.15
6	7.06	~4.92	5.349	6.625	10	6	16
8	9.04	~6.16	6.963	8.625	11.15	8	19.15
10	11.85	~7.69	8.679	10.75	14.75	10	24.75
12	14.38	~9.74	10.293	12.75	17	12	29

