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Part Name: ID-Controlled Threaded Transition Fitting

Part Number: 862-xxxx

### **ID Controlled Threaded Transition Fitting**

**Description** - The Poly-Cam ID-Controlled Threaded Transition is designed to provide a smooth, interior transition between the steel pipe and the polyethylene pipe. The connection between the steel fitting and the polyethylene pipe is accomplished with a multi-level barb system and a compression ring supporting the connection. The multi-level barb system provides the sealing connection between the steel and the polyethylene pipe. The interior of the fitting contains no sharp edges in which pipeline cleaning pigs can be caught or damaged. Reinforced with a steel compression ring.

- Sizes range from .5 to 12" NPT.
- All National Pipe Threads are made to ANSI/ASME B1.20.1 - 2013.

### **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

**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.

**Threaded Fitting:** When installing the transition fitting:

- Always use pipe joint sealant or Teflon tape.
- Always use strap wrenches.
- **Do not use a pipe wrench.**
- **Always use 2 wrenches when connecting.**
- **Over tightening may cause ovality or damage.**
- **Always pressure test for leaks before backfilling.**
- Backfill and compact carefully around transition and service line to prevent ground shifts which could damage the valve and/or transition fitting.

## Material

**Threaded Fitting:**

- Manufactured of Carbon Steel (A53 or A106 grade), Type 304 Stainless Steel (ASTM A249 or ASTM A269), Type 316 Stainless Steel (ASTM A249 or ASTM A269), C954 grade Aluminum Bronze (Lead Free material this complies with California AB1953, SB1334 and SB1935), or ERW pipe (ASTM SA-312).
- For carbon steel, the **epoxy coating** (IF 194T Red Iron Oxide) is fusion bonded to the metal. Meets NSF 61, FDA 175.300, AWWA C116-01,C213-01, UL 262 and FM 1120/1130

**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 862 ID-Controlled Threaded Transition

## SDR 11

Nominal Size (In.)	HDPE/ Steel Pipe O.D. <b>A</b>	Steel Pipe I.D. <b>B</b>	Steel Length <b>C</b>	Thread Length <b>D</b>	Compression Ring Length <b>E</b>	SDR 11 HDPE I.D. <b>F</b>	Compression Ring O.D. SDR 11 <b>H</b>
0.5	0.840	0.622	2.5	0.78	1.5	0.680	~1.03
0.75	1.050	0.824	3	0.8	2	0.850	~1.29
1	1.315	1.049	3	0.98	2	1.060	~1.62
1.25	1.660	1.380	3.5	1.01	2	1.340	~2.04
1.5	1.900	1.610	4.5	1.03	2.5	1.530	~2.34
2	2.375	2.067	4.5	1.06	3.5	1.917	~2.84
2.5	2.875	2.469	5	1.57	3.5	2.321	~3.41
3	3.5	3.068	5.5	1.63	5	2.826	~4.14
4	4.5	4.026	5.5	1.73	5.5	3.633	~5.44
6	6.625	6.065	9	1.84	8	5.349	~8.0
8	8.625	7.981	12	1.95	10	6.963	~10.3
10	10.75	10.02	12	2.15	12	8.679	~12.9
12	12.75	12	12	2.36	12	10.293	~15.3

