



**1101 McKinley Street
Anoka, MN 55303
Phone (763) 786-6682
Fax (763) 786-2167**

Part Name: Male thread HDPE Transition Fitting
Series 710 Carbon Steel, T304, T316, Stainless Steel

Threaded Transitions

The POLY-CAM Threaded Transition Adaptors is a multi-level mechanical transition fitting, protected under patent number 5,211,429, which is hydraulically compressed unto the polyethylene or pipe quality copolymer material.

Design

The relaxation 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 strain and tensional strain created by the compression of the multi-level barbs is greater than the stress created by relaxation and/or thermal expansion and contraction. As the internal pressure increases the joining of the polyethylene or copolymer and the coupling increases.

Sizes range from .5" to 12" NPT. All National Pipe Threads are made to ANSI/ASME B1.20-1983 R 1992.

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. Transition joint meets or exceeds the requirements of ASTM D2513 Category 3. Upon request Poly-cam can install a stainless steel insert to meet ASTM 2513 Category 1. All Fittings meet ARRA requirements. Manufactured in the United States.

Installation

HDPE pipe end: Install transition fitting so as to comply with the pipe manufacturer's recommended procedures. All field welds shall be accomplished in accordance with Plastic Pipe Institute's welding procedure for butt fusion.

Threaded Fitting: When installing the transition fitting one should always use pipe joint sealant or Teflon tape. Always use strap wrenches. **Do not use pipe wrench. Always use 2 wrenches when connecting, Over tighten 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

The POLY-CAM Threaded Transition is manufactured of Carbon Steel (A53 or A106 grade) Type 304 or Type 316 (ASTM A249 or ASTM A269) and or ERW pipe (ASTM SA-312) and incorporated with the transition manufactured of HDPE (cell class 345454c) or pipe quality Copolymer material. (pe3408, pe3608 and pe4710). All pipe meets ASTM 3035 and ASTM 714. It complies AWWA C-901, C906 and NSF 61. All certification will be submitted upon request.

The **epoxy coating** (IF 194T Red Iron Oxide) is fusion bonded to the metal. It has approvals NSF 61, FDA 175.300, AWWA C116-01,C213-01, UL 262 and FM 1120/1130
The carbon steel epoxy POLY-CAM threaded transition fitting complies with AWWA and NSF 61 material requirements.

Warranty

Warranty period is one year after date of substantial completion of installation.

Series 710 Transition with Male NPT



POLY-CAM Male Threaded Transition Adaptors (710 Series) is a multi-level mechanical transition fitting, patent number 5,211,429. The POLY-CAM Threaded Transition is manufactured to the following:

- Carbon Steel Epoxy Coated, 304 and 316 Stainless Steel
- Other steel materials can be made depending on availability.
- Sizes range from .5 to 12" NPT
- Meets ANSI/ASME B1.20-1983 R 1992
- All materials comply with AWWA and NSF 61 Meets ASTM 2513 Category 3. Upon request Poly-cam can install a stainless steel insert to meet ASTM 2513 Category 1

SDR 7	SDR 9	SDR 11	SDR 17						
NOMINAL SIZE INCHES	COUPLING O.D. "A"	PRESSED SDR11 PE PIPE I.D. "B"	EXPOSED SDR11 PE PIPE I.D. "C"	EXPOSED PE PIPE O.D. "D"	COUPLING LENGTH "E"	EXPOSED PE PIPE LENGTH "F"	OVERALL LENGTH "G"	THREAD LENGTH "H"	
0.5	1.000	~0.625	0.67	0.840	1.6	6.4	8	0.64	
0.75	1.250	~0.79	0.84	1.050	1.8	6.2	8	0.7	
1	1.315	~0.84	1.05	0.315	2	6	8	0.99	
1.25	1.660	~1.06	1.34	1.660	2.6	5.4	8	1.01	
1.5	1.900	~1.28	1.53	19.000	2.6	5.4	8	1.03	
2	2.375	~1.64	1.92	2.375	3	5	8	1.06	
2.5	2.875	~1.99	2.31	2.875	3.5	4.5	8	1.25	
3	3.500	~2.42	2.83	3.500	4	4	8	1.26	
4	4.500	~3.23	3.63	4.500	4	8	12	1.48	
5	5.563	~4.0	4.49	5.563	5	7	12	1.5	
6	6.625	~4.8	5.35	6.625	5	8	13	1.56	
8	8.625	~6.3	6.96	8.625	7	8	15	1.75	
10	10.750	~7.9	8.68	10.750	8	8	16	1.85	
12	12.750	~9.5	10.29	12.750	9	9	18	2.27	

