

APPLICATIONS

Pipeline Plastics HDPE Conduit/Duct is manufactured from tough polyethylene material with post-industrial recycle (PIR) PE material to provide an environmentally sustainable conduit. PLP HDPE Conduit is a cost-effective solution for providing a stable permanent path for the installation and operation of electrical conductors or communications cable such as fiber optic or CATV.

Can be manufactured to meet the requirements of :
NEMA TC-7, ASTM F2160 or UL-651A

FEATURES AND BENEFITS OF PLP HDPE CONDUIT

- Non-metallic / Non-conducting
- Immune to corrosion
- Outstanding abrasion resistance
- Low Coefficient of friction
- Heat fused leak-free joints keep out water, dirt or root intrusion
- Flexibility and small bend radius allows for installation with fewer fittings
- Excellent for direct bury or trenchless installation such as HDD or plow
- Carbon Black for more than 10 years UV protection
- Available with or without color coded stripes



JOINING

PLP Conduit can be joined by heat fusion using the industry accepted ASTM F2620 procedure for butt-fusion. Electro-fusion as well as many types of mechanical couplings designed for use on HDPE conduit can also be used. Always follow the fitting manufacturer installation procedure.

DESIGN, INSTALLATION AND LEAK TESTING

Pipeline Plastics recommends following the Plastics Pipe Institute (PPI) Handbook of Polyethylene Pipe, second edition available on the PPI website, www.plasticpipe.org.

Corporate Headquarters

1301 Solana Blvd., Bldg. 1 Suite 1440, Westlake, TX 76262
O: 817-693-4100 F: 817-693-4101

Sizes

IPS Size	DR	9			11			13.5			15.5		
	NECA TC-7	N/A			EPEC-11			EPEC-13.5			EPEC-15.5		
	Specified OD (in)	Min Wall	ID (avg)	Wt/Ft	Min Wall	ID (avg)	Wt/Ft	Min Wall	ID (avg)	Wt/Ft	Min Wall	ID (avg)	Wt/Ft
1"	1.315	0.146	1.005	0.235	0.120	1.056	0.197	0.097	1.100	0.163	0.085	1.125	0.144
1-1/4"	1.660	0.184	1.269	0.375	0.151	1.338	0.314	0.123	1.394	0.260	0.107	1.426	0.230
1-1/2"	1.900	0.211	1.452	0.491	0.173	1.534	0.411	0.141	1.599	0.341	0.123	1.635	0.301
2"	2.375	0.264	1.816	0.767	0.216	1.917	0.643	0.176	2.002	0.532	0.153	2.049	0.469
2 1/2"	2.875	0.319	2.198	1.124	0.261	2.321	0.941	0.213	2.424	0.783	0.185	2.482	0.690
3"	3.500	0.389	2.676	1.663	0.318	2.825	1.394	0.259	2.950	1.160	0.226	3.021	1.019
4"	4.500	0.500	3.440	2.751	0.409	3.633	2.307	0.333	3.793	1.914	0.290	3.885	1.688
5"	5.563	0.618	4.253	4.203	0.506	4.491	3.523	0.412	4.689	2.929	0.359	4.802	2.575
6"	6.625	0.736	5.064	5.961	0.602	5.348	4.994	0.491	5.585	4.151	0.427	5.719	3.656
8"	8.625	0.958	6.593	10.108	0.784	6.963	8.468	0.639	7.271	7.035	0.556	7.445	6.198
10"	10.750	1.194	8.218	15.699	0.977	8.678	13.158	0.796	9.062	10.931	0.694	9.280	9.624
12"	12.750	1.417	9.747	22.089	1.159	10.293	18.513	0.944	10.748	15.377	0.823	11.006	13.542

IPS Size	DR	17			Sch. 40			Sch. 80		
	NECA TC-7	EPEC-17			EPEC-40			EPEC-80		
	Specified OD (in)	Min Wall	ID (avg)	Wt/Ft	Min Wall	ID (avg)	Wt/Ft	Min Wall	ID (avg)	Wt/Ft
1"	1.315	0.077	1.140	0.132	0.133	1.029	0.216	0.179	0.936	0.279
1-1/4"	1.660	0.098	1.445	0.212	0.140	1.363	0.293	0.191	1.255	0.385
1-1/2"	1.900	0.112	1.656	0.275	0.145	1.593	0.352	0.200	1.476	0.468
2"	2.375	0.140	2.076	0.431	0.154	2.049	0.471	0.218	1.913	0.648
2 1/2"	2.875	0.169	2.517	0.631	0.203	2.445	0.748	0.276	2.290	0.989
3"	3.500	0.206	3.068	0.935	0.216	3.042	0.979	0.300	2.864	1.323
4"	4.500	0.265	3.951	1.550	0.237	3.998	1.394	0.337	3.786	1.934
5"	5.563	0.327	4.889	2.366	0.258	5.016	1.888	0.375	4.768	2.688
6"	6.625	0.390	5.826	3.354	0.280	6.031	2.457	0.432	5.709	3.693
8"	8.625	0.507	7.590	5.689	0.332	7.921	3.808	N/A	N/A	N/A
10"	10.750	0.632	9.465	8.830						
12"	12.750	0.750	11.230	12.427						

TEMPERATURE

PLP Conduit can be installed at temperatures down to -30°F without becoming brittle. Maximum use temperatures up to 180°F.

COMFORMANCE

- Standard IPS OD Dimensions and Diameter Ratio (DR)
- NEMA TC-7; ASTM F2160 or UL-651A
- Color & UV Stabilizer: Carbon black to protect for more than 10 years outdoor storage
- Heat Fusion Joining as per ASTM F2620 and PPI TR-33/TR-41
- Installation as per Plastic Pipe Institute PE Handbook, 2nd edition

Physical Properties	Nominal Value*	Test Methods	Physical Properties	Nominal Value*	Test Methods
Density (Natural)	>0.941 g/cm ³	ASTM D1505	Vicat Softening Temperature	248°F	ASTM D1525
Melt Index (MI) 190°C/2.16kg	<0.40 g/10 min	ASTM D1238	Flexural Modulus	80,000 PSI	ASTM D790
Tensile Stress @ Yield	3000 psi	ASTM D368	Hardness	62 Shore D	ASTM D2240
ESCR/SCG	>96 hours	ASTM D1693	Thermal Expansion	1.0 x 10 ⁻⁴ in/in/°F	ASTM D696
Brittleness Temperature	<-130°	ASTM D746			

*Nominal values are typical results and are not guaranteed or intended to be used as a product specification.