



# / OVERVIEW

Blue Diamond Industries, a member of the Hexatronic Group of Sweden, is headquartered in Lexington, KY with manufacturing facilities in Middlesboro, Kentucky, near the Tennessee border; Aubrey, Texas, just north of Dallas; Clinton, South Carolina, Northwest of Columbia; and we will soon open an new facility in Ogden, Utah, near Salt Lake City.

Blue Diamond Industries is a valued market leader in providing HDPE (High Density Polyethylene) conduit solutions for the protection of fiber optic, data and power cables. Blue Diamond's conduit solutions are installed through horizontal directional drilling, plowing and through traditional trenching methods, supporting a wide-range of market applications from residential, power utility, Cable TV, Broadband, Commercial & Industrial, Department of Transportation and the US infrastructure investment nationwide.

Blue Diamond conduit solutions of duct, innerduct and microduct support the needs of a loyal customer base by providing optimal service and value through delivery, technology and economic benefit. Blue Diamond's highly efficient manufacturing locations provide the production agility necessary to support the demands of the rapidly growing infrastructure expansion throughout the US market. Blue Diamond Industries is an ISO 9001:2015 certified company.

# / MICRODUCT

Blue Diamond offers both single-tube and multi-tube combinations. Our multi-tube duct is offered in both regular wall and heavy wall oversheath options. Other standard features include: permanent SuperGlide® interior, ribbed inside wall, tracer wire, multiple color options oversheathed in various combinations.

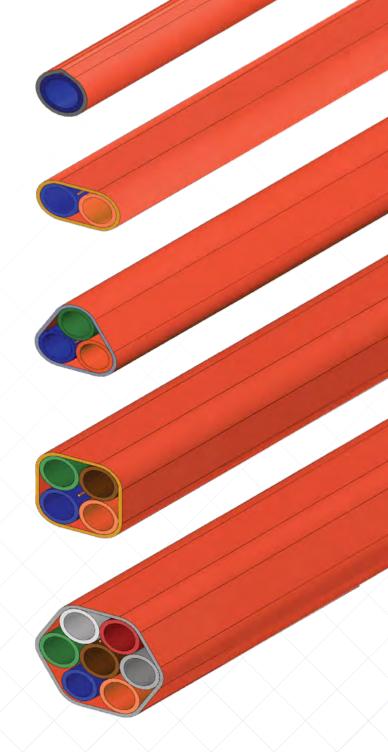
# **Options**

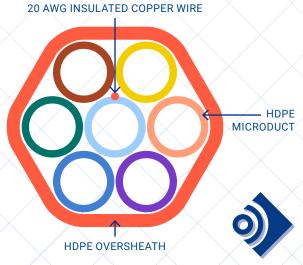
- / Sizes: 5mm 27mm
- / Multi-tube configurations are available in 2-way, 3-way, 4-way, and 7-way
- / Other configurations are available upon request
- / Ripcord options available
- / Insulated tracer wire options available
- / Thin and heavy oversheath walls available

# **Applications & Benefits**

- / Allow home-runs from node to customer
- / Allows for override in existing conduits
- / Direct bury, bore, trench or plow
- / Reduce cost with faster fiber installation
- Flat configurations for microtrenching installations

SIZE OD/ID	<b>WEIGHT</b> LBS/FT	MAX FIBER COUNT	FIBER OD RANGE MM	
27/20	0.168	432	10.0 - 16.0	
22/16	0.117	432	7.8 - 12.4	
18/14	0.065	288	6.8 - 10.9	
16/13	0.044	288	6.4 -10.2	
16/12	0.057	192	5.80 - 9.2	
14/10	0.049	144	5.0 - 7.9	
12.7/10	0.031	144	4.9 - 7.8	
10/8	0.018	96	4.0 - 6.3	
8.5/6	0.019	96	3.0 - 4.7	
7/3.5	0.010	48	2.7 - 4.3	
5/3.5	0 007	12	1.7 - 2.7	





# / COMMUNICATION & HDPE CONDUIT



### **HDPE Conduit**

Blue Diamond Industries HDPE Conduit solutions enable the essential infrastructure by providing protection of fiber, data and power cables.

### **SMOOTH WALL INNERDUCT**

Smooth wall is the standard High Density Polyethylene (HDPE) Duct. The interior of smooth wall has a slick finish which delivers the lowest coefficient of friction of all available non-lubricated innerduct. Smooth wall innerduct is a durable high quality product for direct burial and HDD (horizontal directional drilling) applications.

#### RIBBED WALL INNERDUCT

Blue Diamond's ribbed wall innerduct provides turbulent airflow when blowing fiber cable. Ribbed wall innerduct is available through 6" diameter in any SDR and SIDR rating.

#### TRACER WIRE INNERDUCT

Tracer wire innerduct provides a method of locating underground fiber optic cable. The tracer wire is a single copper wire co-extruded onto the wall of the innerduct providing a corrosion resistant conductor. An alternative method of locating buried fiber optic cable is to use traceable tape, available pre-installed in any of our duct products.

### **Colors & Identification**

#### STRIPING

/ Striping combinations are available in all colors. Three stripes located 120 degrees apart are extruded into the wall of the conduit.

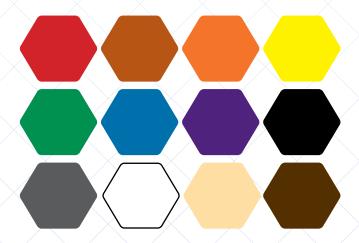
### IDENTIFICATION

- / Innerduct size, SDR, and sequential markings every 2' are in jet imprinted on every order.
- / Custom imprints such as company name, project name, or any special identification markings are also available.

### OPTIONS

- / Lubrication
- / Up to three lengths/colors of innerduct per reel available in parallel or segmented
- / Pre-installed pull tape, tracer tape, or cable
- / SuperGlide®

#### **AVAILABLE COLORS\***



\*Special colors may be available.

# / SPECIALTY HDPE CONDUIT

### 3N1™ Boreable Conduit

PATENT NO. 9,819,160

- / Pre-installation of 3 or 4 innerducts inside of a 4" case pipe
- / Blue Diamond's 3N1<sup>™</sup> can be directional drilled or plowed
- / Available lengths are 500' to 1,000' on steel reels
- / Configurations:
  - 4" SIDR 11.5 casing w/ 3-1.25" SDR 13.5 innerducts
  - 4" SDR 13.5 casing with 3-1" SDR 13.5 innerducts
  - · 4" SIDR 11.5 casing with 4-1" SDR 13.5 innerducts





# **UL Listed HDPE**

UL Listed HDPE is a coilable nonmetallic underground conduit manufactured from High Density Polyethylene (HDPE) used for underground or innerduct applications to protect cables and wires. UL Listed HDPE is compliant with NEC 2017 Article 353 and is manufactured to UL 651A specifications. UL 1990 is the standard for UL certified conduit with conductors installed at the manufacturing facility, known as CIC (Cable in Conduit), Unit Duct, and Duct Cable. Its high tensile strength-to-weight ratio, superior crush resistance and low coefficient of friction for cable installation makes it ideal for directional boring.

### **UL OPTIONS**

- / Sizes: 3/4" 6"
- / Schedule 40
- / Schedule 80
- / Sizes 1 1/2" 6" SDR 13.5
- / Multiple color and striping options
- / Sequentially marked footage
- / Coilable PE Electrical Plastic conduit



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Nominal Duct Size	Nominal OD	Nominal ID	Min Wall	Weight lbs/ft
3/4"	1.050	0.804	0.113	0.148
1"	1.315	1.029	0.133	0.218
1 1/4"	1.660	1.360	0.140	0.295
1 1/2"	1.900	1.590	0.145	0.352
2"	2.375	2.047	0.154	0.472
2 1/2"	2.875	2.445	0.203	0.744
3"	3.500	3.042	0.216	0.974
4"	4.500	3.998	0.237	1.387*
5"	5.563	5.009	0.258	1.880*
6"	6.625	6.031	0.280	2.444*

**SCH 40** 

### SCH 80

Nominal ID	Min Wall	<b>Weight</b> lbs/ft
0.722	0.154	0.189
0.936	0.179	0.278
1.255	0.191	0.384
1.476	0.200	0.465
1.913	0.218	0.644
2.290	0.276	0.983
2.482	0.300	1.316
3.786	0.337	1.924
4.768	0.375	2.671
5.711	0.432	3.674*

#### SDR 13.5

		ODIT 10.5	
	Nominal ID	Min Wall	<b>Weight</b> lbs/ft
I	_	_	_
	_	_	_
	_	_	_
	1.599	0.141	0.343
	2.002	0.176	0.531
	2.429	0.213	0.768
	2.950	0.259	1.153
	3.794	0.333	1.906
	4.689	0.412	2.912
	5.585	0.491	4.130

<sup>\*</sup>Some dimensions only available in stick form.

# / HDPE CONDUIT SIZES

	ASTM F 2160	SDR Pipe Data		SDR 9		SDR 11 SDR			SDR 13.5			
	Nominal Duct Size	Nominal OD	Nominal ID	Min Wall	<b>Weight</b> lbs/ft	Nominal ID	Min Wall	<b>Weight</b> lbs/ft	No	ominal ID	Min Wall	<b>Weight</b> lbs/ft
X	1/2"	0.840	0.633	0.093	0.099	0.667	0.076	0.085	0	.696	0.062	0.072
	3/4"	1.050	0.797	0.117	0.152	0.839	0.095	0.130	0	.874	0.078	0.110
	1"	1.315	1.003	0.146	0.235	1.051	0.120	0.200	1	.100	0.097	0.169
	1 1/4"	1.660	1.270	0.184	0.372	1.338	0.151	0.314	1	.394	0.123	0.264
	1 1/2"	1.900	1.452	0.211	0.488	1.534	0.173	0.409	1	.599	0.141	0.343
	2"	2.375	1.816	0.264	0.762	1.917	0.216	0.639	2	.002	0.176	0.531
	2 1/2"	2.875	2.198	0.319	1.117	2.321	0.261	0.936	2	.429	0.213	0.769
	3"	3.500	2.676	0.389	1.657	2.825	0.318	1.387	2	.950	0.259	1.153
	4"	4.500	3.440	0.500	2.737	3.633	0.409	2.293	3	.794	0.333	1.906
	5"	5.563	4.252	0.618	4.182*	4.490	0.506	3.505	4	.689	0.412	2.912
	6"	6.625	5.064	0.736	5.930*	5.348	0.602	4.971	5	5.585	0.491	4.130
	ASTM F 2160	SDR Pipe Data		SDR 15.5			SDR 17				SDR 40	
	Nominal Duct Size	Nominal OD	Nominal ID	Min Wall	<b>Weight</b> lbs/ft	Nominal ID	Min Wall	<b>Weight</b> lbs/ft	No	ominal ID	Min Wall	Weight lbs/ft
	1/2"	0.840	_	-	_	_	-	_		-	_	_
	3/4"	1.050	0.895	0.068	0.098	0.906	0.062	0.092	0	.804	0.113	0.148
	1"	1.315	1.127	0.084	0.151	1.140	0.077	0.139	1	.029	0.133	0.218
	1 1/4"	1.660	1.426	0.107	0.235	1.445	0.098	0.218	1	.360	0.140	0.295
	1 1/2"	1.900	1.635	0.123	0.305	1.656	0.112	0.282	1	.590	0.145	0.352
	2"	2.375	2.049	0.153	0.469	2.076	0.140	0.434*	2	047	0.154	0.472
	2 1/2"	2.875	2.482	0.185	0.685	2.516	0.169	0.629*	2	445	0.203	0.744
	3"	3.500	3.021	0.226	1.015	3.064	0.206	0.932*	3	3.042	0.216	0.974
	4"	4.500	3.885	0.290	1.678	3.939	0.265	1.540*		.998	0.237	1.387*
	5"	5.563	4.801	0.359	2.565*	4.868	0.327	2.351*		5.009	0.258	1.882*
	6"	6.625	5.719	0.427	3.633*	5.799	0.390	3.341*	6	5.031	0.280	2.445*
	ASTM F 2160	SDR Pipe Data		SIDR 9			SIDR 11.5				SIDR 15	
	Nominal Duct Size	Nominal OD	Nominal ID	Min Wall	<b>Weight</b> lbs/ft	Nominal ID	Min Wall	<b>Weight</b> lbs/ft	No	ominal ID	Min Wall	Weight lbs/ft
	1"	1.049	1.302	0.117	0.194	1.251	0.091	0.151	1	.209	0.070	0.117
	1 1/4"	1.380	1.707	0.153	0.327	1.640	0.120	0.255	1	.584	0.092	0.197*
	1 1/2"	1.610	1.989	0.179	0.444	1.910	0.140	0.343	1	.845	0.107	0.263
	2"	2.067	2.554	0.230	0.733	2.448	0.180	0.561		.363	0.138	0.426
	2 1/2"	2.469	3.051	0.274	1.044	2.924	0.215	0.800	2	818	0.165	0.613
	- "											

3.634

4.768

5.976

0.267

0.350

0.439

1.233

2.122

3.337

3.502

4.595

5.759

0.205

0.268

0.336

0.929

1.595

2.501

Please note that some sizes and dimensions may require extended lead times. Please inquire for details.

0.341

4"

5"

3.068

4.026

5.046

<sup>\*</sup>Some dimensions only available in stick form.

# / HDPE CONDUIT REEL CAPACITIES

**PIPE SIZE** 

Reel Size = Flange (outside diameter) x outer reel width x drum (inside drum diameter); Standard arbor hold diameter 3" - 3 1/2"

<u> </u>							
1/2"	48x48x30	60x48x30	72x48x30	78x48x30			
72	5,500	10,500	17,000	20,000			
3/4"	48x48x30	60x48x30	72x48x30	84x48x30	96x48x30		
	3,500	6,500	10,500	15,500	20,000		
1"	48x48x30	60x48x30	74x48x30	84x48x30	96x48x30	102x48x30	
	5,500	4,000	6,800	10,000C	13,500	15,000	
1 1/4"	60x48x30	72x48x30	84x48x30	90x48x30	96x48x30	102x48x30	
1 1/4	2,500	4,000	6,500	7,500	8,500	10,000	
1 1/2"	72x48x36	84x48x36	96x48x36	102x48x36	114x48x36		
1 1/2	3,000	4,500	6,500	7,500	9,000		
2"	72x48x42	84x48x42	90x48x42	96x48x42	102x48x42	114x48x42	
2	1,500	2,500	3,000	3,750*	4,500	5,500	
2 1/2"	84x48x48	96x48x48	102x48x48	114x48x48			
2 ./2	1,500	2,000	2,500	3,500			
3"	96x48x64	102x48x64	114x48x64	48x48x30			
3	1,200	1,500	2,000	2,500			
4"	96x48x6	50	102x48x60	11	4x48x60	120x4	48x60
4	550 SDR 5	500 SIDR 75	50 SDR 700 SI	DR 1,000 SD	R 900 SIDR	1,250 SDR	1,100 SIDE
E"	102x48x78	114x48x78	120x48x78				
5"	400	600	750				
6"	114x48x64	120x48x64			ality is a packaging wound into a coil		

<sup>\*</sup>Can go up to 4000' of 2" on SDR 13.5 or heavier wall.

conduit is wound into a coil or a reel. Larger conduit will have significant ovaility, 10%+, and may require rerounding in the field.

\*For further information refer to ASTM F2160.

# Respool Footages\*(Parallel or Segment)

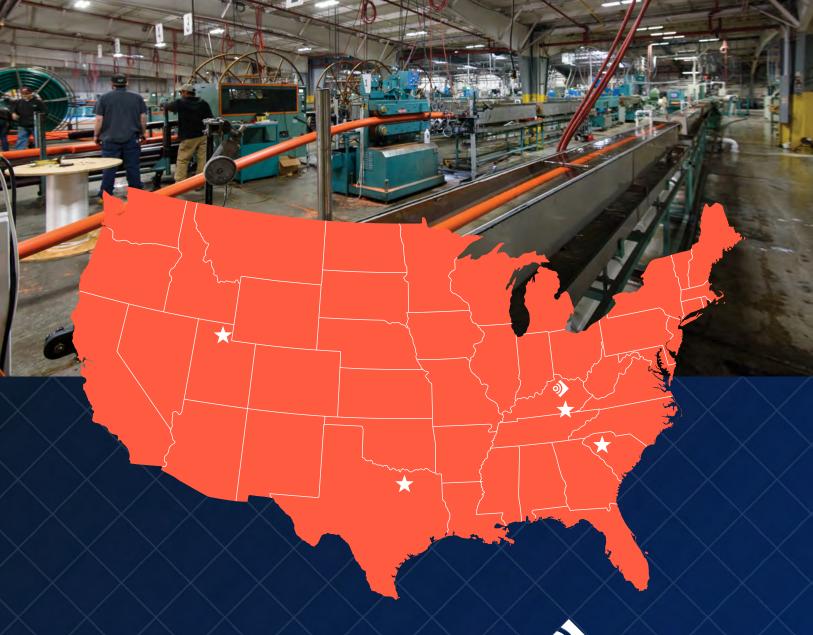
450

P	PIPE SIZE	2-WAY	3-WAY	*
				/ Respooled duct will
	1"	5,000	3,750	decrease maximum
				reel capacities.
<	1 1/4"	4,000	2,500	/ Factors board on
				/ Footage based on standard 96" reels.
	1 1/2"	2,500	1,500	
$\times$				/ Footage is based or
<	2"	1,500	1,000	equal lengths.
		$\overline{}$		/ Special put-ups
	3"	375	_	are available upon
$\times$		X	$\times$	request.

REELS PER	TRUCKLOAD
48"	24
60"	20
72"	16
84"	14
96"	12
102"	12
114"	8
120"	8



<sup>\*\*</sup>Tracer wire will decrease maximum reel capacities.



# BLUE DIAMOND

A PART OF HEXATRONIC GROUP

# **\*** MANUFACTURING LOCATIONS

917 S. Highway 377 Aubrey, TX 76227 715 N 530 W Ogden, UT 84404 877 Torrington Rd. Clinton, SC 29325

804 S. 23rd Street Middlesboro, KY 40965

# **→ HEADQUARTERS**

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