



## CONDUIT CATALOG



**PVC CONDUIT**  
**BORE-GARD® & CAN-FUSE®**  
**MULTICELL**  
**CORRUGATED PVC**  
**SPLIT DUCT**  
**FIBERGLASS CONDUIT**  
**STEEL PIPE**  
**SPLIT STEEL**  
**INNERDUCT**  
**MAXCELL®**  
**FITTINGS & ACCESSORIES**

**800.345.8454**

**[www.vikimatic.com](http://www.vikimatic.com)**

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# TABLE OF CONTENTS

## PVC CONDUIT

Rigid Nonmetallic Conduit/Schedule 40 PVC	1
Schedule 80 PVC	2
Power & Communications Duct	3-7
Elbows	8-9
Fittings	10-11

<b>BORE-GARD®</b>	12-14
-------------------	-------

<b>CAN-FUSE®</b>	15
------------------	----

## MULTICELL

MultiCell Introduction	16
Type C or Schedule 40	17
Fiberglass	18
Steel	19
EMT	20
Boreable	21
PVC Coated	21
Custom MultiCell Configurations	22-23
Installation Instructions	24-27

## CORRUGATED PVC

Power and Communications Flex	28-29
Fittings	28-29
Technical Information & Sweeps/Elbows	30

## SPLIT DUCT

Split Duct Tongue & Groove	31-32
Split Duct Fittings	32
Split CRS Conduit & Couplings	33
Split Couplings & CRS Repair Kits	34
45° Split Duct Sweeps	35
90° Split Duct Sweeps	36
Installation Guide	37

<b>FIBERGLASS CONDUIT</b>	38-46
---------------------------	-------

## STEEL PIPE

Steel Pipe	47
Expansion Fittings	48-49
Sweeps	50
Elbows & Couplings	51

## SPLIT STEEL

Split Steel - 14 Gauge	52
Cut Steel & Split Heavy Wall	53

## INNERDUCT

Introduction	54
O.D. Controlled SDR	55
I.D. Controlled SIDR & Ribbed HDPE	56
Schedule 40 & 80 HDPE	57
HDPE Large Diameter	58
Pre-installed Pull Tape/Pull Rope	58
Specifications	59
Plenum Duct	60
Corrugated HDPE	61
Riser Duct	62
PINPOINT®	63
FuturePath®	64
Silicore	65

<b>MAXCELL®</b>	66-67
-----------------	-------

## FITTINGS & ACCESSORIES

PVC Fittings & Accessories	68
Duct Plugs	69-75
Bushing Sleeves	75-76
Aluminum Couplers	77
E-Loc® Couplings	78
E-Loc® Transition Coupling	79
E-Loc® Installation Instructions	80
Double E-Loc® Couplings	81
Double E-Loc® Transition Coupling & Fittings	82
Wunpeece Duct Spacers	83-84
Underground Spacer System	85
Pulling Lube	86
MULETAPE®	87
Bonduit	88-89

## ORDERING MATRIX

Conduit Matrix	90
HDPE Matrix	91
Conduit Bends Matrix	92
Conduit Fittings Matrix	93

## questions

### *Not sure which product to use?*

Call your local Vikimatic representative. Our sales staff and technical product managers will talk you through your project, recommending the best products for your application.

Some products presented in this catalog may not be available for world-wide sale. Please contact your local TVC representative for full details. **NOTICE:** Technical specifications are direct from manufacturers. Before utilizing any product, customers should determine the suitability of the product for its intended use.

## OUR VENDOR PARTNERS

A-D TECHNOLOGIES

ARNCC dura-line

American  
**Polywater**  
Corporation

**allied**  
TUBE & CONDUIT

**CANTEX**

**BOREFLEX**

 **Conduit Repair Systems, Inc.**  
The World Leader In Split Conduit Products

**ENDOT**

Endot Industries, Inc.

**ETCO**



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for a better tomorrow™

**LAMSON PIPE COMPANY**

**PREMIER**  
CONDUIT



**Prime Conduit**®

**Thomas & Betts**

**Tyco Electronics**

Our commitment. Your advantage.



**Wheatland Tube Company**



## ADDITIONAL VIKIMATIC SERVICE OFFERINGS

### AUTOCAD ENGINEERING

For Outside Plant and Underbridge applications, Vikimatic has AutoCad design capability. Our engineers will work with customers to create specific mechanical or topographic oriented designs to facilitate project planning and bill of materials development.

### CUSTOM KITTING

Vikimatic works with many customers to package tools, self-installation kits for cable modems, VoIP, and HDTV related products for field technicians or construction crews. Kits can be made up of any products that Vikimatic and TVC Communications provides.

### PRODUCT TRAINING

Vikimatic Sales and Product Management personnel are available for product training at customer or project site locations. In addition, Vikimatic conducts WebEx/remote training on many of our products.

### SYSTEM DESIGN AND INTEGRATION

For utility construction projects, Vikimatic can work with customers to determine the most appropriate equipment and connectivity products needed for various projects. In addition, Vikimatic can provide on-site system integration and installation support for many applications including VoIP, VOD, Cellular Backhaul and Digital Transport.

### RETROFITTING

Some customers find that their unique system requirements are not met by "off-the-shelf" versions of many products. Vikimatic has the ability to customize certain products to meet the specific needs of its customer.

### FREIGHT, PACKAGING, AND LOGISTICAL SUPPORT

Our business relies on getting products to our customers in a timely, efficiently packaged and cost effective manner. Vikimatic Freight Services continually evaluates the best methods and carriers to bring our product to our customers. In addition, customers can request packages, boxes, pallets and truckloads to be packed, sorted and shipped to destinations in a precise manner that meets specific customer needs, including environmentally friendly solutions.

## RIGID NONMETALLIC CONDUIT, FITTINGS & ACCESSORIES

Schedule 40 and Schedule 80 conduit is designed for use above ground and underground as described in the National Electrical Code.

### FEATURES

#### Ease of Installation

Nonmetallic conduit is 1/4 to 1/5 the weight of metallic systems, can be installed in less than half the time, and are easily fabricated on the job.

#### Safety

Nonmetallic conduit is non-conductive, assuring a safe system.

#### Impact Resistant

Schedule 40 and Schedule 80 nonmetallic conduit is resistant to sunlight and is listed for exposed or outdoor usage. The use of expansion fittings allows the system to expand and contract with temperature variations.

#### Corrosion Resistant

Conduits and fittings are nonmetallic and will not rust or corrode.

Nonmetallic Schedule 40 and Schedule 80 conduit and elbows are manufactured to NEMA TC-2, Federal specification WC1094A and UL 651 specifications. Fittings are manufactured to NEMA TC-3, Federal specification WC1094A and UL514B. Both conduit and fittings carry perspective UL or ETL Listings and UL or ETL labels.

## SCHEDULE 40 PVC RIGID NONMETALLIC CONDUIT

### HEAVY WALL EPC

Listed for underground applications encased in concrete or direct burial. Also for use in exposed or concealed applications above ground.

- Sunlight resistant
- Rated for use with 90°C conductors
- Superior weathering characteristics



**RUS Listed**

### SCHEDULE 40 HEAVY WALL

Nom. Size	Std. Crate Qty.		Wt. Per 100'	Dimensions		Wall
	10'	20'		O.D.	I.D.	
1/2"	6000'	12000'	17	.840	.622	.109
3/4"	4400'	8800'	23	1.050	.824	.113
1"	3600'	7200'	34	1.315	1.049	.133
1-1/4"	3300'	6600'	46	1.660	1.380	.140
1-1/2"	2250'	4500'	55	1.900	1.610	.145
2"	1400'	2800'	73	2.375	2.067	.154
2-1/2"	930'	1860'	124	2.875	2.469	.203
3"	880'	1760'	163	3.500	3.068	.216
3-1/2"	630'	1260'	196	4.000	3.548	.226
4"	570'	1140'	232	4.500	4.026	.237
5"	380'	760'	315	5.563	5.047	.258
6"	260'	520'	409	6.625	6.065	.280

Rigid nonmetallic conduit is normally supplied in standard 10' or 20' lengths, with one belled end per length. It may be produced without belled ends.

#### Notes:

1. Special fittings and conduit sizes will be quoted on request.
2. Don't Forget To Order Cement.
3. Vikimatic reserves the right to ship to the nearest unitized quantity.

Use PVC Fittings with Schedule 40 and Schedule 80 Conduit.

**Part Number Ordering Matrix Begins On Page 90**

# PVC CONDUIT

PVC CONDUIT

## SCHEDULE 80 PVC RIGID NONMETALLIC CONDUIT

### (EXTRA HEAVY WALL EPC-80)

Listed for use in above ground and below ground applications that are subject to physical damage.

- Sunlight resistant
- Rated for use with 90°C conductors
- Superior weathering characteristics
- For use in areas subject to physical damage



ETL Listed to UL 651 in compliance to the NEC



Listed E35297

RUS Listed

### SCHEDULE 80 EXTRA HEAVY WALL

Nom. Size	Std. Crate Qty.		Wt. Per 100'	Dimensions		
	10'	20'		O.D.	I.D.	Wall
1/2"	6000'	12000'	21	.840	.546	.147
3/4"	4400'	8800'	30	1.050	.742	.154
1"	3600'	7200'	44	1.315	.957	.179
1-1/4"	3300'	6600'	60	1.660	1.278	.191
1-1/2"	2250'	3600'	72	1.900	1.500	.200
2"	1400'	2800'	101	2.375	1.939	.218
2-1/2"	930'	1880'	154	2.875	2.323	.276
3"	880'	1760'	210	3.500	2.900	.300
4"	570'	1140'	308	4.500	3.826	.337
5"	380'	760'	428	5.563	4.813	.375
6"	260'	520'	588	6.625	5.761	.432

Rigid nonmetallic conduit is normally supplied in standard 10' or 20' lengths, with one belled end per length. It may be produced without belled ends.

**Notes:**

1. Special fittings and conduit sizes will be quoted on request.
2. Don't Forget To Order Cement.
3. Vikimatic reserves the right to ship to the nearest unitized quantity.

Use PVC Fittings with Schedule 40 and Schedule 80 Conduit.



**Part Number Ordering Matrix Begins On Page 90**

## POWER & COMMUNICATIONS DUCT

Power & Communications Duct and fittings are designed and formulated specifically for concrete encased and direct burial applications of power utility primaries, secondaries, street lighting and distribution systems. Power & Communications Duct complies with NEMA Standard TC-6 & 8, and ASTM F-512 for utility duct. Both EB and DB duct are rated for use with 90°C conductors. Power & Communications Duct fittings comply with NEMA TC-9 Standard.

The Telephone Duct complies with NEMA TC-10, Bellcore CAO 8546, GT8343, and other applicable telephone standards.

### ADVANTAGES:

- High impact strength
- Excellent structural strength
- Superior load bearing
- Multiple duct banks can be pre-assembled and lowered into trench
- No special cutting or tapering devices required
- Provides easy bending around obstructions minimizing the need for special angle couplings and sweeps
- Superior aging and weathering characteristics

### FEATURES:

- Heat resistant
- Fire resistant
- Conforms to NEMA Standard TC-6 & 8 and ASTM Standard F-512 for utility duct
- Duct Type EB-20 is ETL Listed
- Low coefficient of expansion
- Continuous rigid control
- Smooth inner wall and smooth transition between joints



### ENGINEERING FEATURES:

**Chemical Inertness** resists water absorption and is totally immune to galvanic or electrolytic attacks.

**Solvent Cemented Joints** provide leakproof duct runs tested at 25 psi. This type of joint eliminates the need for costly mechanical rodding procedure. Power & Communications Duct can be rodded pneumatically.

### fact

**VIKIMATIC STOCKS CONDUIT AND ANCILLARY PRODUCTS ALL OVER THE UNITED STATES.**

**Part Number Ordering Matrix Begins On Page 90**

# PVC CONDUIT

PVC CONDUIT

## POWER & COMMUNICATIONS DUCT TYPE EB

Nonmetallic Power & Communications Duct Type EB is manufactured from an exclusive high modulus C-600 compound, developed especially for power and communications applications, and is designed for use in concrete encased installations. Type EB is rated for 90°C cable.



ETL Listed to UL 651 in compliance to the NEC

### POWER & COMMUNICATIONS DUCT TYPE EB-20

Meets NEMA Standard TC-6 & 8 EB-20/ASTM F-512

Nom. Size	Std. Crate Qty.		Approx. Wt. Per 100'	O.D.	*Min Wall
	10'	20'			
2	-	2,800	36	2.375	.060
3	-	2,000	59	3.500	.061
4	570	1,140	98	4.500	.082
5	380	760	148	5.563	.103
6	260	520	212	6.625	.125

\*Min. wall thickness relates to 500,000 modulus.

Note: One belled end per piece of conduit.

### POWER & COMMUNICATION DUCT TYPE EB-35 HEAVY WALL

Meets NEMA Standard TC-6 & 8 EB-35/ASTM F-512

Nom. Size	Std. Crate Qty.		Approx. Wt. Per 100'	O.D.	*Min Wall
	10'	20'			
2	-	2,800	39	2.375	.060
3	-	2,000	72	3.500	.076
4	-	1,140	116	4.500	.100
5	380	760	177	5.563	.126
6**	-	520	251	6.625	.152

\*Min. wall thickness relates to 500,000 modulus.

\*\*Special order item.

Note: One belled end per piece of conduit.

USE DB SWEEPS WITH EB DUCT.

don't forget

### To order cement!

Cement can be order in pints, quarts or gallons. Ask your Vikimatic representative for complete details.



Part Number Ordering Matrix Begins On Page 90



## POWER & COMMUNICATIONS DUCT TYPE DB

Nonmetallic Power & Communication Duct Type DB is manufactured from an high modulus C-600 compound, developed especially for power and communications applications, and is designed for use in direct burial or concrete encased installations. Type DB is rated for 90°C cable.

RUS Listed

### TRENCHING:

Trench should be graded true and free from stones and soft spots. Backfill should also be free of stones and be firmly tamped around the sides of the conduit, to develop maximum supporting strength. Tamping on top of the conduit is not recommended.

### BACKFILL:

In rocky soil where it is impossible to have an even trench bottom, a selected backfill should be put in before laying the conduit. Selected backfill (not tamped) at least 6" over the top of the conduit is recommended. After final backfill is placed, tamping may be used to finish the grade.

The method of direct burial varies with soil condition, load conditions, and engineering preferences. A common practice is to lay one tier at a time, backfill, and repeat with the desired spacing of ducts being made as ducts are layered.

Many companies have used the heavier wall Type DB-120 in a duct-to-duct formation. Where limited loads occur, this type of installation has proven satisfactory.

### POWER & COMMUNICATION DUCT TYPE DB-60

Meets NEMA Standard TC-6 & 8 DB-60/ASTM F-512

Nom. Size	Std. Crate Qty.	Approx. Wt. Per 100'	O.D.	*Min Wall
2	2,800	38	2.375	.060
3	2,000	81	3.500	.092
3-1/2	2,000	108	4.000	.107
4	1,140	133	4.500	.121
5	760	202	5.563	.152
6	520	288	6.625	.182

\*Min. wall thickness relates to 500,000 modulus  
Note: One belled end per piece of conduit.

### POWER & COMMUNICATION DUCT TYPE DB-120 HEAVY WALL

Meets NEMA Standard TC-6 & 8 DB-120/ASTM F-512

Nom. Size	Std. Crate Qty.		Approx. Wt. Per 100'	O.D.	*Min Wall
	10'	20'			
1	–	8,000	18	1.315	.060
1-1/2	–	4,500	28	1.900	.060
2	–	2,800	47	2.375	.077
3	–	2,000	99	3.500	.118
4	–	1,140	165	4.500	.154
5	–	760	251	5.563	.191
6	260	520	356	6.625	.227

\*Min. wall thickness relates to 500,000 modulus  
Note: One belled end per piece of conduit.

**Part Number Ordering Matrix Begins On Page 90**

# PVC CONDUIT

PVC CONDUIT

## SPECIAL CALIFORNIA RIGID NONMETALLIC DB-100 POWER & COMMUNICATION DUCT & SWEEPS

DB-100 nonmetallic Power & Communication Duct Type DB is manufactured to NEMA Standard TC-6 & 8 and to specifications that exist within the State of California, and is designed for use in direct burial or concrete encased installations. Rated for use with 90°C cable.

### POWER & COMMUNICATION DUCT TYPE DB-100

Meets NEMA Standard TC-6 & 8 and ASTM F-512

Nom. Size	Std. Crate Qty.	Approx. Wt. Per 100'	O.D.	*Min Wall
4	1,140	154	4.500	.155
5	760	237	5.563	.192
6	520	337	6.625	.229

*\*Min. wall thickness relates to 500,000 modulus*

*Note: One belled end per piece of conduit.*

### POWER & COMMUNICATION DUCT TYPE DB-100 DWP APPROVED

Meets NEMA Standard TC-6 & 8 and ASTM F-512

Nom. Size	Std. Crate Qty.	Approx. Wt. Per 100'	O.D.	*Min Wall
3	2,000	95	4.500	.155
4	1,140	156	5.563	.192
5	760	237	6.625	.229

*\*Min. wall thickness relates to 500,000 modulus*



**Part Number Ordering Matrix  
Begins On Page 90**

## PHYSICAL PROPERTIES OF POWER & COMMUNICATIONS DUCT BY ASTM TEST METHODS

Property	ASTM No.	Typical Values	
		P&C Duct	Telephone Duct
Tensile strength, psi	D638	4,800	4,800
Modulus of elasticity in tension, psi	D638	500,000	500,000
Flexural strength, psi	D790	11,000	11,000
Deflection temp under load at 265 psi °C	D648	72°C	72°C
Coefficient of thermal expansion in/in/°F	D696	3.30 x 10 <sup>-5</sup>	3.30 x 10 <sup>-5</sup>
Coefficient of static friction		.20	.20

### COLLAPSE PRESSURE OF P&C DUCT MATERIALS (PSI)

2" EB-20	- 11.2	5" EB-20	- 5.9
2" EB-35	- 11.2	5" EB-35	- 10.3
2" DB-60	- 11.2	5" DB-60	- 18.9
2" DB-120	- 26.6	5" DB-120	- 38.2
3" EB-20	- 6.6	6" EB-20	- 6.1
3" EB-35	- 8.2	6" EB-35	- 11.2
3" DB-60	- 15.2	6" DB-60	- 19.6
3" DB-120	- 34.0	6" DB-120	- 38.0
4" EB-20	- 6.7		
4" EB-35	- 9.2		
4" DB-60	- 17.0		
4" DB-120	- 36.6		

### COLLAPSE PRESSURE OF TELEPHONE DUCT MATERIALS (PSI)

Type B Duct	- 9.2
Type C Duct	- 36.6
Type D Duct	- 36.6

## PERFORMANCE PROPERTIES OF P&C DUCT AS INDICATED PER NEMA STANDARD TC-6 & 8 AND ASTM F-512

Pipe Stiffness lb/in/in		Minimum Impact Resistance at 0°C (32°F) ft • lbf					
Conduit Series	Minimum Pipe Stiffness (F/Δy), all sizes	Nominal Size	EB-20	EB-35	Conduit Series		
					DB-60	DB-100	DB-120
EB-20	20	1	-	-	-	-	10
EB-35	35	1-1/2	-	-	10	-	15
DB-60	60	2	20	20	20	-	25
DB-100	100	3	20	30	40	45	50
DB-120	120	3-1/2	20	35	50	60	65
		4	25	40	60	70	80
		5	30	55	85	100	110
		6	40	75	120	135	150

## PERFORMANCE PROPERTIES OF TELEPHONE DUCT AS INDICATED PER NEMA STANDARD TC-10

Pipe Stiffness F/Δy lb/in/in					Minimum Impact Resistance at 32°C		
Nominal Size	B-Duct	HWB	C-Duct	D-Duct	B-Duct ft. lb.	C-Duct ft. lb.	D-Duct ft. lb.
All	30	40	120	120	25	50	50

**Part Number Ordering Matrix Begins On Page 90**

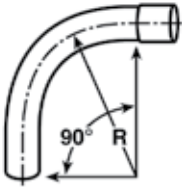
# PVC CONDUIT

PVC CONDUIT

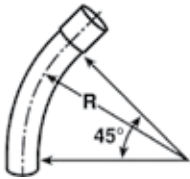
## DEEP SOCKET SCHEDULE 40 UTILITY ELBOWS WITH INTEGRAL BELLED ENDS

Non-UL Listed

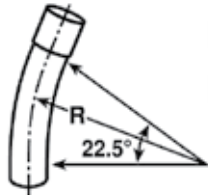
Segment	Nominal Diameter	Radius (in.)	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)
<b>90° Elbow</b>	1-1/2"	12"	20	25.00
	1-1/2"	24"	1	2.13
	1-1/2"	36"	1	3.05
	2"	12"	1	1.44
	2"	24"	1	2.82
	2"	36"	1	4.14
	2"	48"	1	5.15
	2-1/2"	24"	1	5.00
	2-1/2"	36"	1	7.15
	3"	24"	1	6.57
	3"	36"	1	9.15
	4"	24"	1	10.59
	4"	36"	1	13.64
	4"	48"	1	17.72
6"	36"	1	25.80	
6"	48"	1	32.24	



<b>45° Elbow</b>	1-1/2"	36"	1	1.74
	2"	36"	1	2.07
	2-1/2"	18"	1	2.27
	2-1/2"	36"	1	4.12
	3"	36"	1	5.00
	4"	36"	1	8.15
	4"	48"	1	9.36
	6"	48"	1	17.19
8"	60"	1	33.00	



<b>22-1/2° Elbow</b>	2-1/2"	18"	1	1.45
	2-1/2"	36"	1	2.49
	4"	36"	1	5.18
	6"	36"	1	11.82
	4"	48"	1	5.57



### DIMENSIONS IN INCHES OF UTILITY ELBOWS BELLS

Trade Size	A		B		C	
	At Entrance Max.	Min.	At Bottom Max.	Min.	Nominal Bell Max.	Min.
1-1/2"	1.926	1.916	1.900	1.888	2.750	2.500
2"	2.405	2.395	2.381	2.357	2.875	2.625
2-1/2"	2.911	2.901	2.875	2.861	3.125	2.875
3"	3.543	3.533	3.500	3.484	3.500	3.250
4"	4.549	4.539	4.500	4.482	3.750	3.500
5"	5.619	5.609	5.563	5.543	4.250	4.000
6"	6.692	6.682	6.625	6.603	5.250	5.000
8"	8.692	8.682	8.641	8.631	6.250	6.000



**Part Number Ordering Matrix Begins On Page 90**

Non-UL Listed

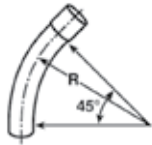
PVC CONDUIT

## ELBOWS – LONG BELLED

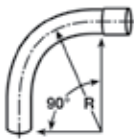
	Nominal Diameter	Radius (In.)	Std. Ctn. Wt. (lbs.)
<b>22-1/2° Elbow</b>	6"	36	9.6



<b>45° Elbow</b>	2"	18	1.3
	2"	24	1.4
	3"	24	5.0
	4"	24	5.8
	5"	24	8.5
	2"	36	2.2
	3"	36	5.2
	4"	36	7.8
	5"	36	11.1
	6"	36	9.6
	2"	48	2.8
	3"	48	6.6



<b>90° Elbow</b>	2"	18	1.3
	2"	24	1.4
	3"	24	5.0
	4"	24	5.8
	5"	24	8.5
	2"	36	2.2
	3"	36	5.2
	4"	36	7.8
	5"	36	11.1
	6"	36	9.6
	2"	48	2.8
	4"	48	9.7
5"	48	13.7	
6"	48	18.1	



## INTEGRAL BELLED END DIMENSIONS

Trade Size	A At Entrance		B At Bottom		C Nominal Bell Depth (in).
	Max.	Min.	Max.	Min.	
1" - 1-1/2"	1.924	1.912	1.900	1.888	2-3/4"
2"	2.399	2.387	2.375	2.363	3-1/4"
2" - 2-1/2"	2.897	2.883	2.875	2.861	3-1/4"
3"	3.523	3.507	3.500	3.484	4"
4"	4.524	4.506	4.500	4.482	4-3/4"
5"	5.603	5.583	5.563	5.543	5-3/4"
6"	6.669	6.647	6.625	6.603	6-1/4"

**Part Number Ordering Matrix Begins On Page 90**

# PVC CONDUIT

## COUPLINGS

(Use same type fittings for Type EB and DB)

### SLEEVE COUPLING (FOR REPAIR WORK)



No Internal Stop

Size	Std. Ctn. Qty.
2"	30
3"	25
3-1/2"	20
4"	15
5"	8
6"	5

### 5° ANGLE COUPLING BxS

(Bell x Spigot)



Size	C	Std. Ctn. Qty.
2"	2.13	15
3"	3.25	5
4"	3.50	15
4"	1.87	25
5"	4.13	10
5"	2.00	20
6"	5.13	5
6"	2.25	10

### COUPLING



Size	Std. Ctn. Qty.
1-1/2"	25
2"	30
2-1/2"	20
3"	30
4"	15
5"	20
6"	5

### 5° ANGLE COUPLING BxB

(Bell x Bell)



Size	Std. Ctn. Qty.
4"	15
5"	10
6"	5

### LONG LINE COUPLING



Size	Std. Ctn. Qty.
1-1/2"	40
2"	25
2-1/2"	15
3"	15
4"	10

### PLUG WITH PULL TAB (FLOWER POT)



Size	Std. Ctn. Qty.
2"	60
3"	30
4"	48
5"	30
6"	30

**Part Number Ordering Matrix Begins On Page 90**

## ADAPTERS

### MALE ADAPTER



Size	Std. Ctn. Qty.
1"	50
1-1/2"	25
2"	50
3"	5
4"	5
5"	5
6"	10

## END BELLS

### MOLDED END BELL



Size	Std. Ctn. Qty.
1"	15
1-1/2"	10
2"	40
3"	50
4"	30
5"	15

### FEMALE ADAPTER



Size	Std. Ctn. Qty.
1"	50
1-1/2"	25
2"	30
3"	3
4"	7
5"	8
6"	6

### FABRICATED END BELL



Size	Std. Ctn. Qty.
2" x 4"	25
3" x 6"	20
4" x 10"	15
5" x 8"	10
5" x 10"	10
6" x 5"	10
6" x 10"	6

## REDUCERS



Size	Std. Ctn. Qty.
3" x 2"	50
4" x 2"	25
4" x 3"	25
5" x 4"	20
6" x 4"	6
6" x 5"	10

**Part Number Ordering Matrix Begins On Page 90**

## PRIME CONDUIT BORE-GARD® TRENCHLESS RACEWAY

RUS Listed



BORE-GARD

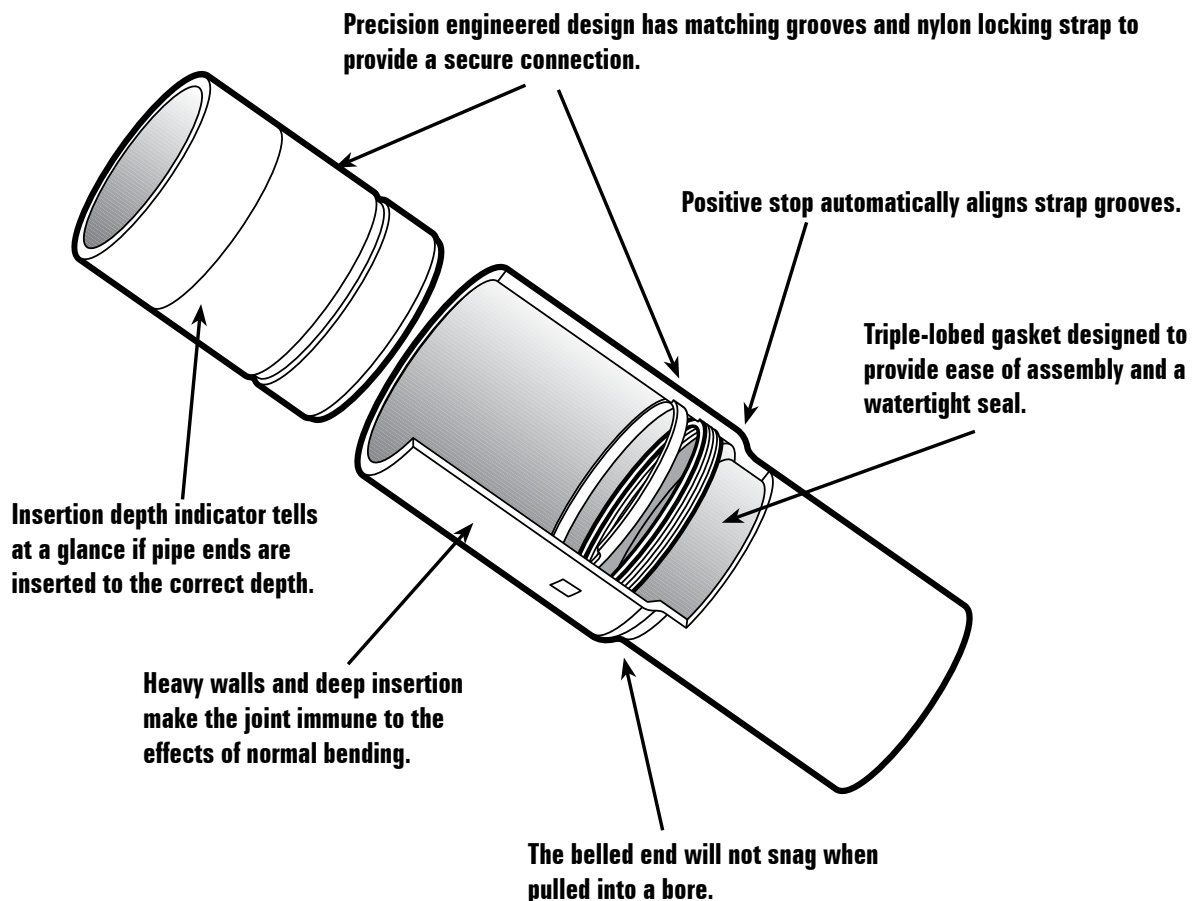
Prime Conduit PVC Bore-Gard® conduit eliminates the costly problems of HDPE pipe on a reel such as reel handling, fusion welding, uncoiling and wasted pipe, safety hazards and additional job site labor.

Bore-Gard is designed and proven to meet the rigorous requirements of horizontal directional drilling for electrical and datacom applications and is available in Heavywall Schedule 40 or Extra Heavywall Schedule 80 conduit.

The unique design incorporates a water-tight seal and locking ring that enables fast, cement-free assembly, strong enough for 1000 foot bores. Short lengths of 10 and 20 feet fit into the tightest spaces and can be easily transported to the job site. Simplify trenchless installations and lower your costs with Bore-Gard.

### Features:

- Easy to handle 10 and 20 foot lengths
- For bores up to 1000 feet
- Fast easy assembly
- Strong water-tight joints without cement
- Fits standard rigid nonmetallic conduit fittings
- All nonmetallic construction
- Superior crush and stiffness over HDPE
- Eliminates the need for chains and backing plate installation
- Type: Schedule 40 - Heavywall /Schedule 80 - Extra Heavywall
- Sizes: Schedule 40 - 3", 4", 5", & 6"/Schedule 80 - 3" & 4"





**PRIME CONDUIT BOREABLE MULTI-GARD®**

Prime Conduit PVC Boreable Multi-Gard® conduit combines a strong boreable outerduct with the convenience of a MultiCell conduit.

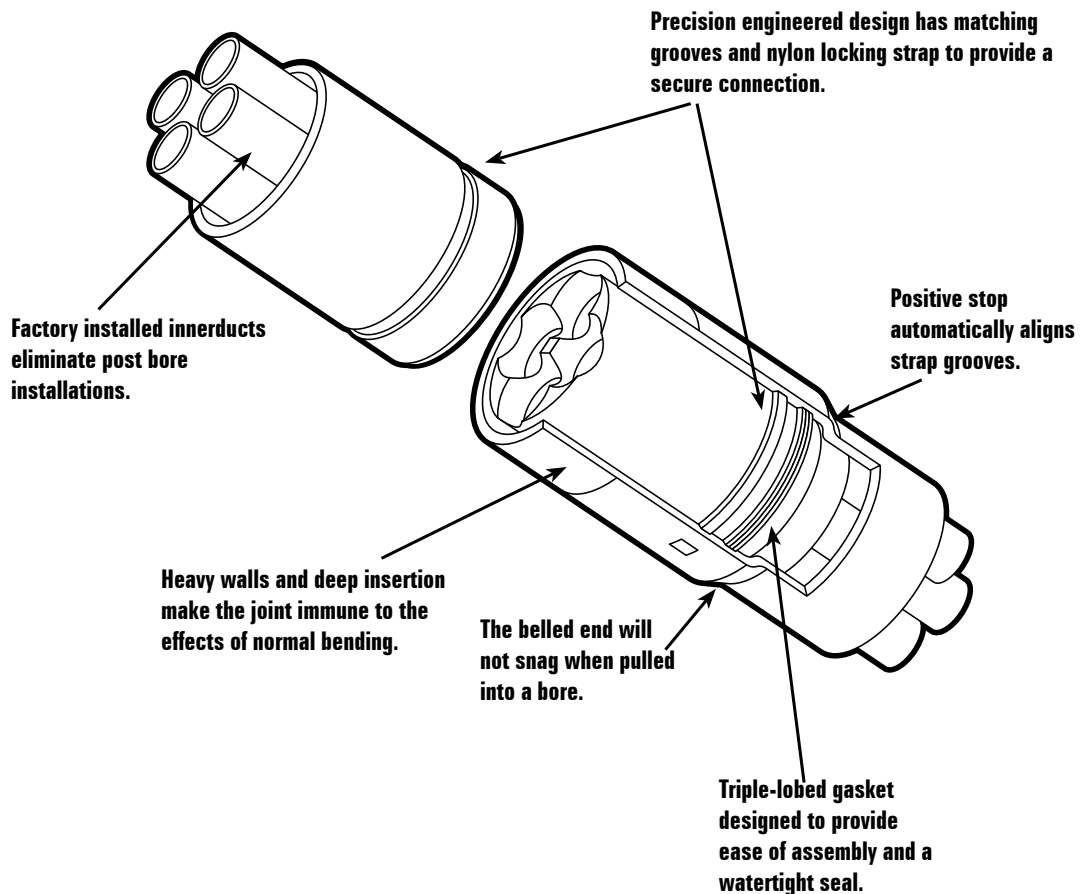
Boreable Multi-Gard utilizes leading technology from Prime Conduit PVC Bore-Gard® Trenchless Raceway, offering a field-proven design.

Bores up to 500 feet can be achieved without labor-intensive operations. Lengths of 20 feet fit into tight spaces often encountered on underground boring job sites.

Experience the strength and convenience of Boreable Multi-Gard.

**Features:**

- Withstands pulling and bending forces of directional drilling
- Fast assembly
- Eliminates labor related to gluing and screwing joints together
- For bores up to 500 feet
- Innerducts: 3-way or 4-way
- Easy to handle 20 foot lengths
- Type: Schedule 40 PVC outerduct
- Size: 4"
- Prelubricated innerducts
- Strong water-tight joints without cement
- Fits standard Schedule 40 fittings
- Compatible with Multi-Gard Schedule 40 PVC products



## BORE-GARD® SPECIFICATIONS

\*U.S. Patent 6,789,629



Except where noted by ▶



Except where noted by +

### SCHEDULE 40

- RUS Listed

Part No.	Description	Overall Length (ft.)	Lay Length	Dimensions O.D. (in.)	Dimensions I.D. (in.)	Pkg. Qty. (ft./bundle)	Bundles per Truckload	Feet per Truckload	Wt. per 100 ft. (lbs.)	Min. Bend Radius (ft.)	Insertion Force (lbs.)	Seal Pressure Rating (PSI.)	Joint Pull Rating (lbs.)	Typical Crush lbs. (@ 30% deflection)	UL Std. 651 & NEMA TC2 Min. Crush (lbs.)
BG340SP-010	3" Sch. 40 Bore-Gard	10	9'6"	3.50	3.0	350	56	19,600	164	65	20	75	7,000	1,225	1,000
BG340SP-020	3" Sch. 40 Bore-Gard	20	19'6"	3.50	3.0	700	28	19,600	164	65	20	75	7,000	1,225	1,000
BG440SP-010	4" Sch. 40 Bore-Gard	10	9'6"	4.50	4.0	260	56	14,560	234	65	40	75	8,700	1,075	900
BG440SP-020	4" Sch. 40 Bore-Gard	20	19'6"	4.50	4.0	520	28	14,560	234	65	40	75	8,700	1,075	900
BG540SP-010	5" Sch. 40 Bore-Gard	10	9'6"	5.56	5.0	230	40	9,200	317	65	60	75	11,300	950	850
BG540SP-020	5" Sch. 40 Bore-Gard	20	19'6"	5.56	5.0	460	20	9,200	317	65	60	75	11,300	950	850
BG540SP-020	6" Sch. 40 Bore-Gard	10	9'6"	6.625	6.0	200	40	8,000	418	65	80	75	14,000	950	850
BG640SP-020	6" Sch. 40 Bore-Gard	20	19'6"	6.625	6.0	400	20	8,000	418	65	80	75	14,000	950	850

### SCHEDULE 80

- RUS Listed

Part No.	Description	Overall Length (ft.)	Lay Length	Dimensions O.D. (in.)	Dimensions I.D. (in.)	Pkg. Qty. (ft./bundle)	Bundles per Truckload	Feet per Truckload	Wt. per 100 ft. (lbs.)	Min. Bend Radius (ft.)	Insertion Force (lbs.)	Seal Pressure Rating (PSI.)	Joint Pull Rating (lbs.)	Typical Crush lbs. (@ 30% deflection)	UL Std. 651 & NEMA TC2 Min. Crush (lbs.)
+BG480SP-010	4" Sch. 80 Bore-Gard	10	9'6"	4.50	3.8	260	56	14,560	308	65	40	75	12,000	2,000	2,000
+BG480SP-020	4" Sch. 80 Bore-Gard	20	19'6"	4.50	3.8	520	28	14,560	308	65	40	75	12,000	2,000	2,000
+BG380SP-010	3" Sch. 80 Bore-Gard	10	9'6"	3.50	2.8	350	56	19,600	210	65	20	75	10,000	2,000	2,000
+BG380SP-020	3" Sch. 80 Bore-Gard	20	19'6"	3.50	2.8	700	28	19,600	210	65	20	75	10,000	2,000	2,000

## ACCESSORIES

### PULLING EYES

These high-quality pulling eyes have a permanent outer sleeve and a seal on pipe O.D.

Part No.	Description	Package Dimensions (in.)	Package Weight (lbs.)	Package Type
▶BG3PE	3" Pulling Eye	10"x 4"x 4"	8	Carton
▶BG4PE	4" Pulling Eye	17"x 6"x 6"	26	Carton
▶BG5PE	5" Pulling Eye	16"x 7-3/4"x 7-3/4"	37	Crate
▶BG6PE	6" Pulling Eye	19-1/2"x 8-1/4"x 8-1/4"	63	Crate

### LOCKING STRAPS

Size	Part No.	Std. Ctn. Qty.
3"	▶GSUP3	1
4"	▶GSUP	1
5"	▶GSUP5	1
6"	▶GSUP6	1

### GASKETS

Part No.	Std. Ctn. Qty.
▶HBOR3	1
▶HBOR	1
▶HBOR5	1
▶HBOR6	1

## BOREABLE MULTI-GARD® SPECIFICATIONS

Part No.	Description	Length (ft.)	Dimensions O.D. (in.)	Innerduct Dimensions I.D. (in.)	Pkg. Qty. (ft./bundle)	Bundles per Truckload	Feet per Truckload	Wt. per 100 ft. (lbs.)	Min. Bend Radius (ft.)	Seal Pressure Rating (PSI.)	Maximum Pull Rating (lbs.)
▶MFSS3B-020	3-way Boreable Multi-Gard	20	4.50	1.50	520	28	14,560	561	65	75	5000
▶MFSS3B-020	4-way Boreable Multi-Gard	20	4.50	1.19	520	28	14,560	565	65	75	5000

Steel Mesh Grip part no. MAG4 is recommended to be used as pulling attachment for Boreable Multi-Gard®.



## FUSIBLE PVC SCHEDULE 40 ELECTRICAL CONDUIT

CANTEX and Underground Solutions have teamed up to offer you the strongest fusible PVC Schedule 40 Electrical Conduit on the market. Fusible PVC™ is used for directional drilling/boring and direct burial. Our proprietary PVC formulation, patented fusion process, certification program and installation experience ensures the success of every job.

- **Not limited to bores of 1000 feet or less**
- Available in 3", 4" and 6" Sch. 40 Conduit in 20' lengths
- No length lost during installation
- Greater pull force rating than HDPE
- Greater pull force rating than other PVC systems
- Easier to install than HDPE pipe - no reels, no wasted pipe
- Will not flatten or collapse
- No gaskets or additional parts are required for a fast, water tight installation
- Interfaces with standard Schedule 40 fittings
- Specially designed fusible bells provide a smooth, unobstructed path for wires or cables



CAN-FUSE

### THE FUSION PROCESS

Fusion is performed by CANTEX technicians and/or licensed and trained contractors. The patented fusion process consists of the following steps:

1. Pipe ends are precisely aligned.
2. The fusion machine's dual cutting head faces and squares both ends of the PVC pipe simultaneously.
3. An electronically controlled heating element (pre-heated in preparation for fusion) is positioned, the ends of the pipe are moved into place and a bead of fusible material is formed as the pipe heats.
4. After the pipe ends have been heated, the heat plate is removed, the pipe ends are brought together and held under pressure until the newly-formed joint cools.
5. A Data Logger is used to verify proper facing and fusion.
6. The fusion process creates an external and internal bead on the pipe joint.

All fusion times are comparable to other thermoplastic materials. All joints are fully restrained and testing demonstrates that the tensile strength of the fused joint equals the tensile strength of the pipe.



Pipe ends are held under pressure until newly-formed joint cools.



Can-Fuse fusion process

### SCHEDULE 40

- Conduit meets requirements of NEMA TC2
- Manufactured to UL 651 standards
- Interfaces with standard Schedule 40 fittings

Part Number	Trade Sizes	DR	Material	Joint Length (FT)	Lay Length (FT)	O.D. (in)	Min Wall (in)	I.D. (in)	Wt. (Lbs/ft)	Joint Pull Rating (Lbs)	UL 651 Crush Requirements (Lbs)	Allowable Bend Radius (Ft)	Feet per Pack	LF per Truck	Weight per Truck (Lbs)
A22DA45	3"	Sch 40	PVC	20	20	3.500	.216	3.008	1.450	15,000	1,000	65"	900	14,400	20,880
A22EA45	4"	Sch 40	PVC	20	20	4.500	.237	3.961	2.100	20,000	900	65"	800	9,600	20,160
A22GA45	6"	Sch 40	PVC	20	20	6.625	.280	5.986	3.700	30,000	850	65"	360	5,760	21,312

## VIKIMATIC MULTICELL CONDUIT SYSTEMS

These guidelines should help you install MultiCell Conduit in the simplest way possible and should be read in their entirety before attempting to install the system to have as smooth an installation as possible.

To be certain that the conduit has been properly placed, the conduit work should be inspected throughout the construction period by a trained inspector who is completely familiar with the job and construction specifications. The inspector should confirm the MultiCell run is in the correct location, proper conduit depth is maintained, the trench bottom is level, all joints are properly made, horizontal and vertical alignment is maintained and select backfill is used.

MultiCell Conduit is packaged from the factory in bundles. Each bundle contains sections of pipe that measure 20 feet. Each section of pipe is shipped with a protective wrap on both ends which prevents any foreign material from entering the MultiCell before being installed in the ground. MultiCell Steel Conduit is normally manufactured in 10 foot lengths.

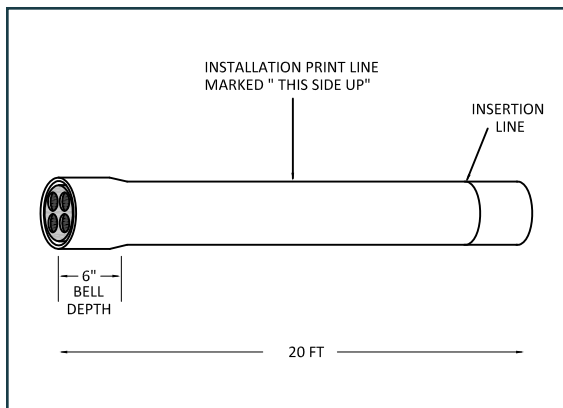


Figure 1. MultiCell Outline

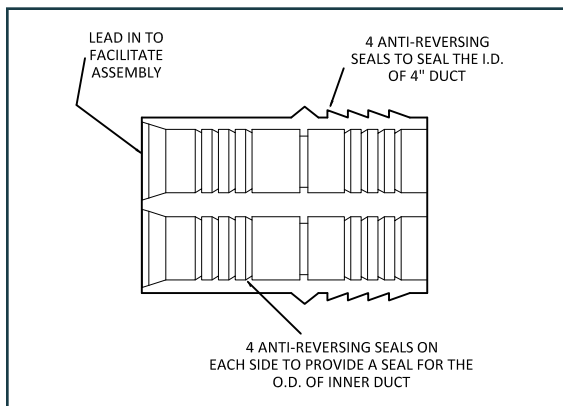


Figure 2. MultiCell Coupling Body

### STANDARD PVC DUCT

The Standard 4-way or 3-way PVC MultiCell is available in several configurations. We can provide a MultiCell assembly with an outer shell of Type C duct, Schedule 40 UL conduit or Schedule 80 duct. These are intended mainly for direct burial installation. (See Figures 1 and 2) We can also provide a boreable 4-way or 3-way MultiCell with a locking Schedule 40 outer duct is also available.

### FIBERGLASS DUCT

For aerial and underground installations.

This MultiCell system is also manufactured with a fiberglass outer duct. The outer duct is available with a .070 inch wall, .090 inch wall or .250 inch wall thickness in bullet resistant fiberglass. Fiberglass installed above ground is joined with a 2-part epoxy.

### STEEL DUCT

For underground boring or underbridge applications.

Provides extra tough protection with either three or four inner ducts inside a 4" Schedule 40 galvanized steel outer duct. Expansion joints for underbridge applications are readily available. (See Figures 3 and 4)

Vikimatic MultiCell engineers will review any specifications for a custom MultiCell proposal. Give us a challenge!

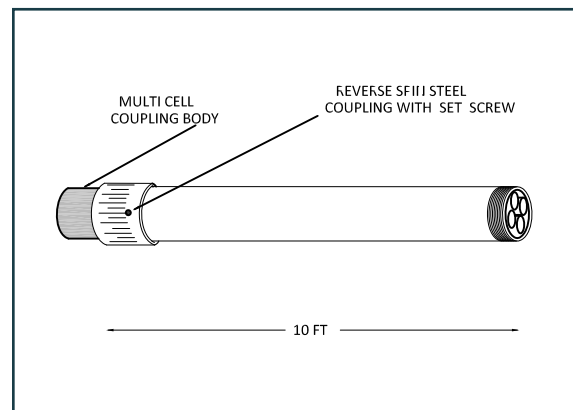


Figure 3. MultiCell Galvanized Steel

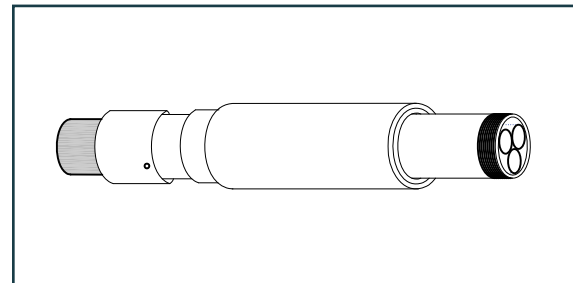
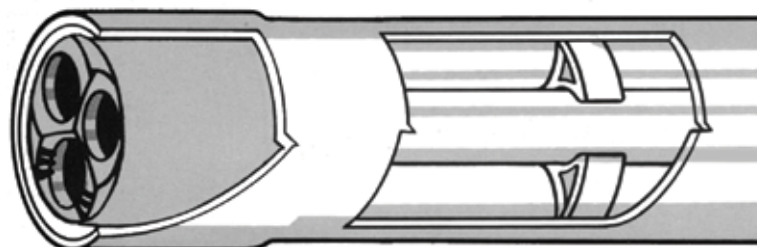


Figure 4. MultiCell Steel Expansion Joint

## VIKIMATIC MULTICELL

### TYPE C OR SCHEDULE 40

For direct burial underground installation.



MULTICELL

Part Number	No. of Inner Ducts	Description	PSI Rating (each)	Max. Inner Dimension (in)	Min. Wall Thickness (in.)
MC 43	3	MultiCell 43	200	1.507	.079
MC 44	4	MultiCell 44	200	1.194	.063

Note: Standard Length of MultiCell 43 and 44 is 20 Feet.

### ACCESSORIES

	MultiCell 43	MultiCell 44
Standard Coupling Kit	43011	44011
Slip Coupling Kit	43012	44012
Manhole Terminator	43013	44013
Spare Spacers	43014	44014
Missiles	43015	44015
Line-Blowing Adapter	43016	44016
Slit Manhole Innerduct (PVC)	43017	44017
Slit Manhole Innerduct (Polyethylene)	43018	44018

### BENDS

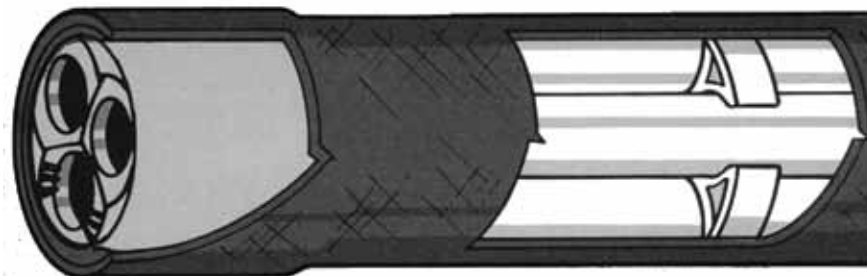
Radius	Degrees	MultiCell 43	MultiCell 44
4'	11-1/4°	43114	44114
	22-1/2°	43224	44224
	45°	43454	44454
	90°	43904	44904
6'	11-1/4°	43116	44116
	22-1/2°	43226	44226
	45°	43456	44456
	90°	43906	44906
8'	11-1/4°	43119	44119
	22-1/2°	43229	44229
	45°	43459	44459
	90°	43909	44909

**Note:** If you need 4" Schedule 40 PVC outer shell pipe, add **-40** after each Part Number. **MC44-40**.  
If you need HDPE Innerduct, add **-40PE** after each Part Number. **MC44-40PE**

## VIKIMATIC MULTICELL

### FIBERGLASS CONDUIT (STANDARD WALL)

For aerial and underground installations.  
Available in standard or bullet-resistant.



MULTICELL

Part Number	No. of Inner Ducts	Description	PSI Rating (each)	Max. Inner Dimension (in)	Min. Wall Thickness (in.)
MCF 43	3	MultiCell 43 Fiberglass	200	1.507	.079
MCF 44	4	MultiCell 44 Fiberglass	200	1.194	.063

NOTE: Standard Length of MultiCell 43 and 44 Fiberglass Conduit is 20 Feet. For "Bullet-Resistant" Fiberglass Conduit add a "BR" suffix to the part number.

#### ACCESSORIES

	MultiCell 43 Fiberglass	MultiCell 44 Fiberglass
Standard Coupling Kit	43011F	44011F
Slip Coupling Kit	43012F	44012F
Spare Spacers	43014F	44014F
Box Terminator Kit	43013F	44013F
Line Blowing Kit	43019F	44019F
Lubrication Point	43027F	44027F
Expansion Joint (4" Travel)	43028FX4	44028FX4
Epoxy Kit	FGEK	FGEK

#### BENDS

Radius	Degrees	MultiCell 43 Fiberglass	MultiCell 44 Fiberglass
4'	11-1/4°	43114F	44114F
4'	22-1/2°	43224F	44224F
4'	45°	43454F	44454F
4'	90°	43904F	44904F

#### SPECIFICATIONS

	MultiCell 43 Fiberglass	MultiCell 44 Fiberglass
MultiCell Fiberglass to PVC	43021PF	44021PF
MultiCell Fiberglass to Bullet-Resistant Fiberglass	43021FB	44021FB
MultiCell Fiberglass to Steel	43021FS	44021FS

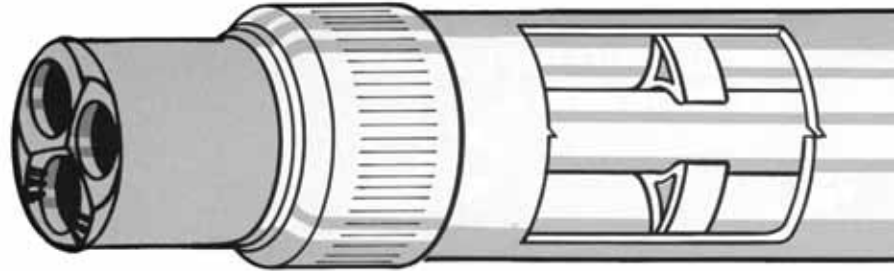
#### ACCESSORIES

Outside Conduit Diameter:	4.140"
Outside Bell Diameter:	4.350"
Longitudinal Tensile Strength:	9000 PSI Minimum Per ASTM D2105
Assembled Weight:	1.75 Lbs. Per Ft.
Stiffness:	40 lbf (in:in) Min. Per ASTM D2412 and NEMA TC-14
Impact Resistance:	50 Ft. Lbs. Min. Per ASTM D2444 and NEMA TC-14
Heat Distortion Temperature:	215 Degrees F. Min.

## VIKIMATIC MULTICELL

### STEEL CONDUIT

For underground or underbridge applications. Provides extra tough protection.



MULTICELL

Part Number	No. of Inner Ducts	Description	PSI Rating (each)	Max. Inner Dimension (in)	Min. Wall Thickness (in.)
MCS 43	3	MultiCell 43 Steel Conduit	200	1.507	.079
MCS 44	4	MultiCell 44 Steel Conduit	200	1.194	.063

NOTE: Standard Length of MultiCell 43 and 44 Steel Conduit is 10 Feet or 20 Feet.

### ACCESSORIES

	MultiCell 43 Steel	MultiCell 44 Steel
Box Terminator Kit	43013S	44013S
Spare Spacers	43014S	44014S
Missiles	43015S	44015S
Line-Blowing Kit	43016S	44016S
Slit Manhole Innerduct (PVC)	43017S	44017S
Slit Manhole Innerduct (Polyethylene)	43018S	44018S
Expansion Joint (4" Travel)	43028SX4	44028SX4

### BENDS

Radius	Degrees	MultiCell 43 Steel	MultiCell 44 Steel
4'	11-1/4°	43114S	44114S
4'	22-1/2°	43224S	44224S
4'	45°	43454S	44454S
4'	90°	43904S	44904S

### ADAPTERS

	MultiCell 43 Steel	MultiCell 44 Steel
MultiCell Steel to PVC	43021PS	44021PS
MultiCell Steel to Fiberglass (.070 Wall Fiberglass)	43021FS	44021FS
MultiCell Steel to Bullet Resistant Fiberglass	43021BS	FF021BS

### SPECIFICATIONS

Gauge:	Schedule 40
Finish:	Hot-Dipped Galvanized
Outside Diameter:	4.50"
Coupling Diameter:	5.25"
Wall Thickness:	.225"
Assembled Weight Per Foot:	10.75 Lbs.
UL Listed:	YES

## VIKIMATIC MultiCell EMT

MultiCell EMT is a MultiCell conduit system for use inside buildings in U.L. listed electrical metallic tubing (EMT) outershell with pre-installed PVC inner ducts.

### Features

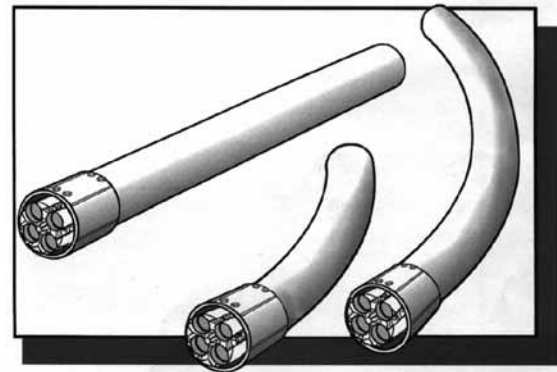
- 10' lengths with set screw couplings
- Available in 4-cell 1-1/4" I.D. or 3-cell nominal 1-1/2" nominal I.D.
- Standard sweeps and terminators
- Transition adapters available such as EMT to PVC MultiCell
- PVC inner ducts lay straight for longer pulls
- All metallic components are UL listed and conform to meet NEC 96 Article 300-22 for communication cable installation inside buildings
- Accessories such as line blowing kits and pull line available



### Assembly Instructions

The MultiCell EMT System is designed so that assembly of components is easy, as follows:

- Remove cap and loosen set screws on open end of coupling.
- Insert male end of conduit into female coupling, checking for alignment of marked innerduct into marked hole.
- Tighten set screws.



### 10' SECTIONS EMT MultiCell WITH SET SCREW COUPLING

Part No.	Description	Outer-duct Dim. O.D.	Outer-duct Dim. I.D.	Inner-duct Dim. I.D.	Inner-duct Dim. I.D.	Pkg. Qty.	Wt. Per 100(lbs.)
MC44EMT	4-cell	4.50	4.33	1.32	1.19	170'	550
MC43EMT	3-cell	4.50	4.33	1.66	1.50	170'	550

*Fixed Bends EMT MultiCell with Set Screw Coupling*

### MULTICELL FIXED BENDS USE THE SAME COUPLING DESIGN AS STRAIGHT SECTIONS.

Part No.	Description	Pkg. Qty.	Ea. Lbs.
449003EMT	4-cell 90 x 36" Radius	1	25.00
444503EMT	4-cell 45 x 36" Radius	1	15.00
439003EMT	3-cell 90 x 36" Radius	1	27.50
434503EMT	3-cell 45 x 36" Radius	1	16.50

*\*Other bend sizes are available upon request*

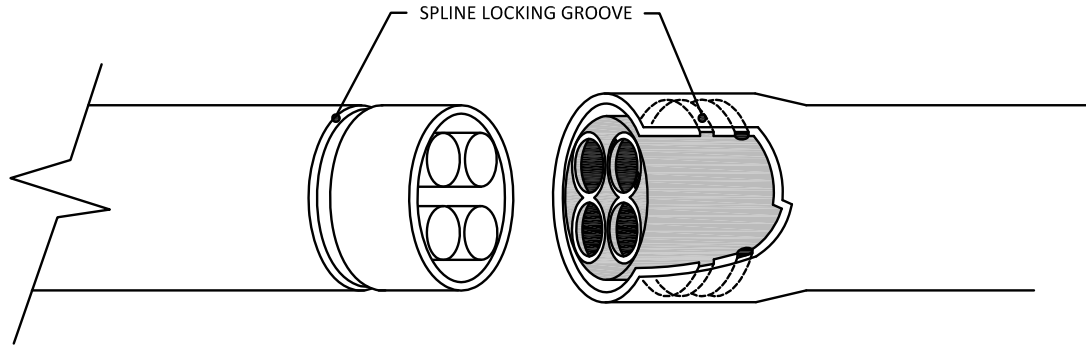
### TERMINATORS FOR MultiCell EMT

Part No.	Description	Pkg. Qty.	Ea. Lbs.
44013	4-cell Standard Terminator	1	2.5
43013	3-cell Standard Terminator	1	2.5





## VIKIMATIC MULTICELL BOREABLE

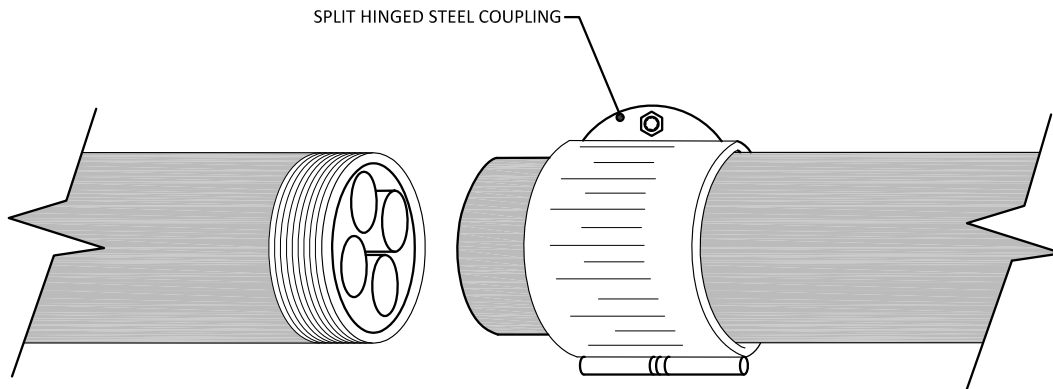


MULTICELL

Part Number	No. of Inner Ducts	Description	PSI Rating (each)	Max. Inner Dimension (in)	Min. Wall Thickness (in.)
MCB 43	3	MultiCell 43 Steel Conduit	200	1.507	.079
MCB 44	4	MultiCell 44 Steel Conduit	200	1.194	.063

## VIKIMATIC MULTICELL PVC COATED

Part Number	No. of Inner Ducts	Description	PSI Rating (each)	Max. Inner Dimension (in)	Min. Wall Thickness (in.)
MCSC 43	3	MultiCell 43 Steel Conduit	200	1.507	.079
MCSC 44	4	MultiCell 44 Steel Conduit	200	1.194	.063

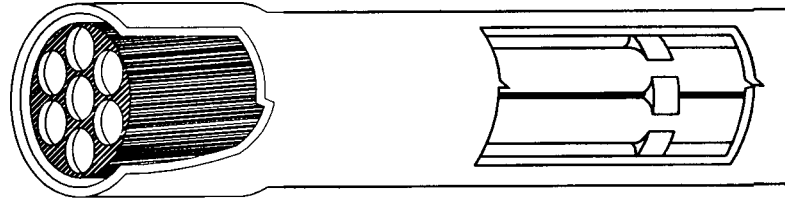


## VIKIMATIC MultiCell

This MultiCell can be made with standard wall, heavy wall, and bullet-resistant fiberglass, as well as steel and PVC.

Elbows, Expansion Joints, and other miscellaneous fittings available upon request.

MULTICELL



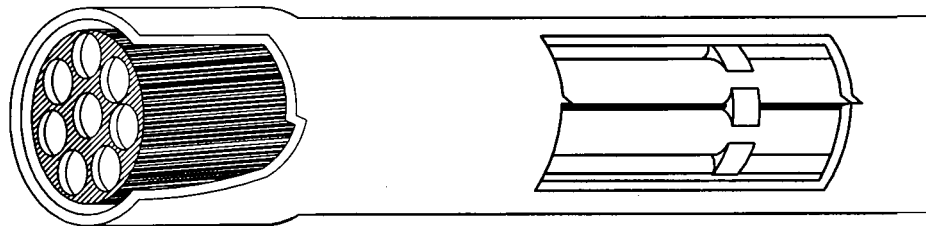
Part Number	No. of Inner Ducts	Description	Max. Inner Dimension (in.)	Min. Wall Thickness (in.)
MCF57	7	5" Fiberglass MultiCell 7-Way	1.312	.063

*Note: Standard length of MultiCell is 20'. 10' is available; please call for details.*

## VIKIMATIC MultiCell

This MultiCell can be made with standard wall, heavy wall, and bullet-resistant fiberglass, as well as steel and PVC.

Elbows, Expansion Joints, and other miscellaneous fittings available upon request.



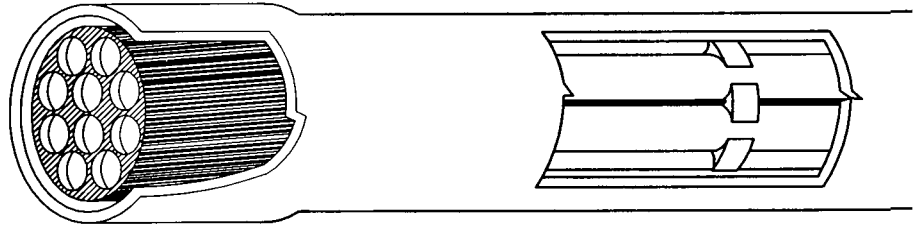
Part Number	No. of Inner Ducts	Description	Max. Inner Dimension (in.)	Min. Wall Thickness (in.)
MCF68	8	6" Fiberglass MultiCell 8-Way	1.507	.079

*Note: Standard of MultiCell is 20'. 10' is available; please call for details.*

## VIKIMATIC MULTICELL

This MultiCell can be made with standard wall, heavy wall, and bullet resistant fiberglass, as well as steel and PVC.

Elbows, Expansion Joints, and other miscellaneous fittings available upon request.



MULTICELL

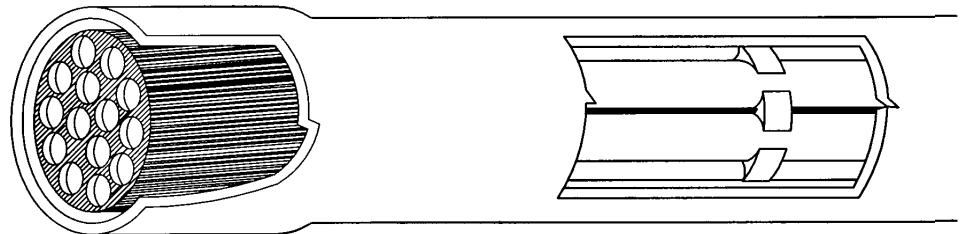
Part Number	No. of Inner Ducts	Description	Max. Inner Dimension (in.)	Min. Wall Thickness (in.)
MCF610	10	6" Fiberglass MultiCell 10-Way	1.194	.063

*Note: Standard length of MultiCell is 20'. 10' is available; please call for details.*

## VIKIMATIC MULTICELL

This MultiCell can be made with standard wall, heavy wall, and bullet resistant fiberglass, as well as steel and PVC.

Elbows, Expansion Joints, and other miscellaneous fittings available upon request.



Part Number	No. of Inner Ducts	Description	Max. Inner Dimension (in.)	Min. Wall Thickness (in.)
MCF814	14	8" Fiberglass MultiCell 14-Way	1.507	.079

*Note: Standard of MultiCell is 20'. 10' is available; please call for details.*

## VIKIMATIC MULTICELL INSTALLATION

### SAFETY

Safety headgear, eye protection, and any safety wear normally required when laying plastic underground conduit should always be worn. Individual company guidelines for safety should also be followed.

### HANDLING

When unloading MultiCell from the delivery vehicle, mechanical equipment should be used. If possible, distribute the MultiCell along the route of the trench site as it is unloaded. Where MultiCell cannot be distributed in this manner, the delivery and storage should be covered by local instructions.

MultiCell Conduit must be handled with reasonable care to avoid damage from impact or crushing. When moving or carrying MultiCell Conduit, be careful not to strike the ends against a hard surface.

### TRENCHING

For economical operation particularly where paving is involved, the trench width should be no greater than is needed to provide adequate working space. This will reduce the amount of surface to be repaved. Generally, this dimension is controlled by types of excavating equipment used. As a minimum, the trench must be four inches wider than the width of the conduit structure where the backfill will be used and three inches wider where concrete encasement will be used. Individual job specifications will dictate trench width as well.

Grade and level the trench bed. Where necessary, provide sand and/or granular backfill as bedding material so the conduit will be evenly supported over the length of each section.

## VIKIMATIC MULTICELL ASSEMBLY

### STANDARD PVC DUCT

#### In The Trench

Every 20 foot section of MultiCell is manufactured with the outer duct's letter lines marked in direct relationship with the inner duct position. This is to assure a twist free inner duct installation. Simply install every section of pipe with the letter line facing upward in the trench. (See Figure 5)

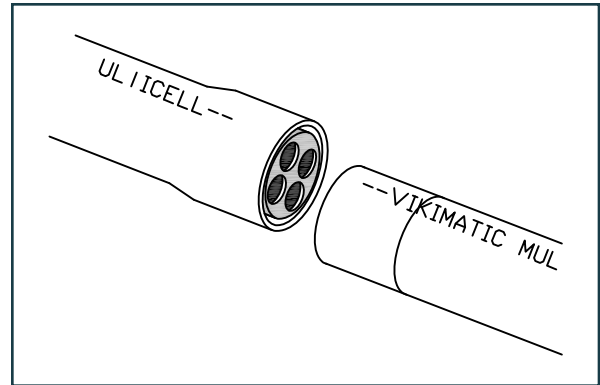


Figure 5. MultiCell's Letter Line Alignment System

**\*NOTE: To assure continuity of inner duct colors make sure all bell ends of each joint placed are facing in the same direction throughout your project.**

When connecting typical bell and spigot ends of MultiCell, make sure that the spigot end's key inner duct is aligned with the marked opening within the bell end when connecting the two ends.

At this time, the letter line of the pipe being added should be upward in the trench. If not, the added pipe's outer duct may be rotated to turn the line upward before completing the connection while the inner ducts are partially inserted into their respective sockets.

As one person keeps the two pipes in straight alignment with each other, a second person can insert the added section.

#### On Top Of The Trench

After preparing the trench as described earlier, the MultiCell can be assembled on top of the ground outside the trench. Once joined together, the MultiCell can then be laid gently into the trench. Backfill according to the job specifications.

## FIBERGLASS DUCT

Fiberglass MultiCell assembles in the same manner as PVC with one additional step. In the installation on the fiberglass type, the use of fiberglass epoxy to cement the outer shell of each joint in place is necessary.

**\*NOTE: At no time should cement be applied to the bell end, internal coupling assembly, inner ducts, or the inside of the spigot end.**

## Adapting Fiberglass To PVC

Fiberglass MultiCell is easily adaptable to PVC MultiCell by the use of a specially designed adaptor available through Vikimatic. A male end is required on both pipes to be joined. The internal coupling body that inserts inside of the fiberglass side is the same female type coupling that normally inserts into the fiberglass. The outer coupling contains a fiberglass section that slips over existing fiberglass duct and is cemented in place using fiberglass epoxy.

## STEEL DUCT

Each 10' or 20' section of Steel MultiCell is shipped with a threaded steel couplet attached and an internal duct coupling body for use in connecting each length. Insert the coupling body protruding from one end of steel pipe into the male end of the connecting section. Push the two pieces of pipe as close to the center of the coupling body as possible and join the two pieces by using the threaded coupler. While keeping the two pieces of pipe from rotating, use a pipe wrench to tighten the threaded coupler.

## Adapting Steel To PVC

Steel MultiCell is easily adaptable to PVC MultiCell by the use of specially designed adaptor available through Vikimatic. Installing it requires a male end on both pipes to be joined. The internal coupling of the adaptor is a female coupling body that inserts inside the steel conduit around the inner ducts. The outer coupling threads over the outside of the steel duct. The PVC MultiCell is then aligned with the female coupling body and inserted into the outer portion of the adaptor and cemented in place over the PVC conduit. (See Figure 6)

## DIRECTION CHANGES

In order to make optimum use of the conduit system for subsequent cable placing operations, particular care should be taken concerning direction changes. The ideal duct structure is one that is essentially straight and allows drainage grading into manholes. Directional changes should be made as gradual as possible.

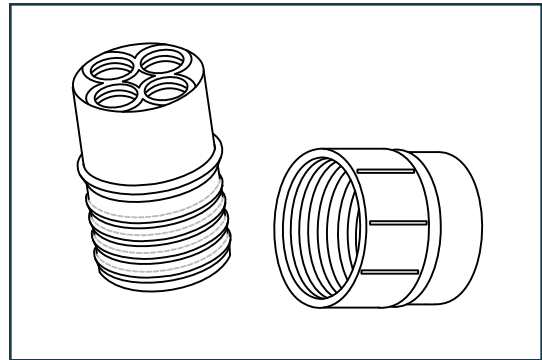


Figure 6. MultiCell/Steel to MultiCell/PVC Adaptor

## Bores

When a bore has to be made, the recommended procedure is to install the boreable MultiCell with a locking SCH40 outer duct.

In an instance where this is not possible and only a 4" existing pipe is present for a bore, the inner duct used inside of the MultiCell is available from Vikimatic in appropriate lengths for insertion through the existing bore pipe.

After installing the inner duct through the existing pipe, cut the inner duct flush to existing pipe end. Install compression duct organizers within each end of the bore to keep the ducts from moving. Any of the various threaded and/or adhesive adaptors may then be attached at the ends to allow for standard gasket MultiCell connection. MultiCell Steel may also be used in the bore. A simple Vikimatic MultiCell PVC to MultiCell Steel adaptor is used at each end.

## Bends

Vikimatic provides bends of different degrees and radii for special construction; however, these should be used only where specified on the detailed plan. Standard bends include 11 ¼°, 22 ½°, 45°, and 90° in 36", 48", 72", and 108" radius are standard. Custom sizes, flex PVC, and flex steel bends are available by contacting Vikimatic.

## FIELD CUTS

When it becomes necessary to join two sections of MultiCell that are being installed from opposite directions, the following procedure should be followed as dictated by job conditions.

### Joining A Male And A Female End With A Joint Of A Pipe

When two sections are to be joined and less than a 20' section is needed, simply measure the length of the spigot end to be cut off as you would in a typical empty conduit installation.

One simple flush cut should then be made straight through both the outer and inner ducts to create a new spigot end. If the inner ducts need supporting after the cut, install a spacer taken from the drop-off to help realignment. Remove any burrs from the cut area.

Insert the new spigot end into the bell, as you would a normal 20' length. Separate the remaining two pieces and insert the existing spigot end into the added piece's bell end to complete the connection.

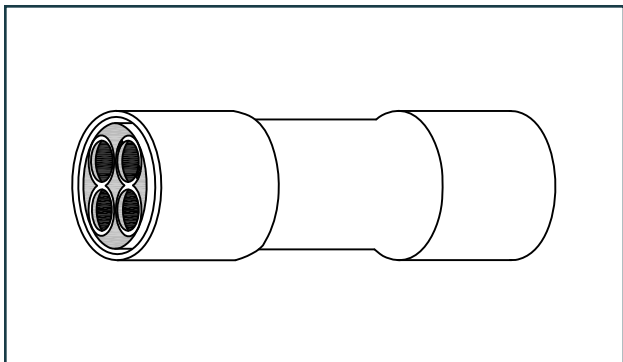


Figure 7. Bell x Bell Standard Coupling

### Joining A Male To A Male End

A "bell x bell" coupling is available when joining two sections of conduit without bells. (See Figure 7)

### Expansion Slip Coupling

Sometimes a "bell x bell" coupling will not work because you cannot flex either end of a conduit run to insert into a bell. A "bell x bell" Expansion Slip Coupling is available with 8" of travel. This allows the coupling to expand to join two sections of conduit where a standard "bell x bell" coupling cannot be used. (See Figure 8)

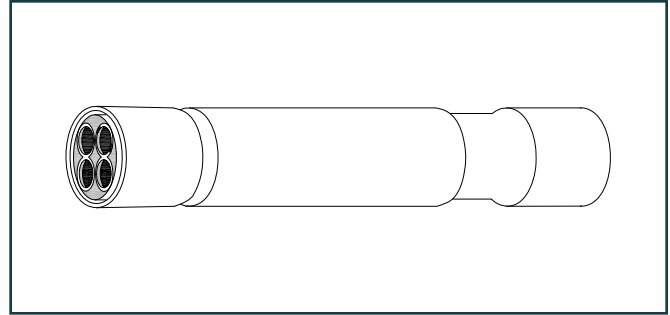


Figure 8. Bell x Bell Expansion Slip Coupling

## DUCT PROOFING

A compressor having a volume rating of 200 C.F.M. at a pressure of 100 PSI is recommended for this procedure. Remove all inner duct plugs in case there was an error made in inner duct rotation at one of the joints during installation. Any water, rocks, or other debris must be blown clear from the system before attempting to place rope or cable.

Do not attempt to blow rope or lines lighter than 3/16" into MultiCell. The probability of bunching or bird nesting of lighter lines causing blockages could lead to expensive dig ups. Successful line blowing of 1/4" rope has been made over distances of several thousand feet.

The use of specially designed gun and missiles is imperative for successful line placement within the MultiCell system. Other missiles may not fit the inner duct's inside diameter as well. This would cause either air leakage past the missile or excess friction while attempting to blow the rope.

Full air compressor volume should be applied during the entire run to make full use of the forward momentum of both the rope and air. The spinning reel of rope should be allowed to almost freewheel while applying only slight resistance to prevent backlashes as the missile gets further into a log run that could still contain some water, it may drastically slow down from the accumulation of water ahead of the missile. If the line slows and stops before the end, maintain consistent full air volume while pulling back on the line and let it snap loose until it begins to move again.

## TERMINATOR KITS

The MultiCell terminator kits are about the most important elements of the system. The easy to install gasket terminator kits are used in lieu of messy foams and expandable duct organizers. (See Figure 9)

## CABLE PULLING

Cable placing operations in MultiCell are accomplished in the same way as cable placement in conduit with reeled inner duct. Commercially available cable lubricants should be utilized as recommended by the manufacturer.

## 10' REPAIR KIT

To repair a section of 4-way or 3-way MultiCell System, Vikimatic supplies a 10' Repair Kit. Simply cut away exactly 10' of existing conduit system. Use extreme care when cutting and slitting duct with cables. (See Figure 10)

Slip the Slit/Keyed Coupling over the existing MultiCell conduit. Make sure the keyed end is facing the section being repaired. Repeat this process on the other end of existing conduit.

Next, insert the Slit Coupling Body inside the existing MultiCell conduit, fitting the cable into the slit duct passage. Repeat this process on the other end of the existing conduit.

Carefully insert the cable into the Slit Corrugated Inner duct. Push the inner duct into the Coupling Body. Install remaining smooth wall ducts into the other Coupling Body openings.

Install the provided spacers to evenly support the inner ducts.

Lay one piece of the split PVC Snap Cover under the installed inner ducts. Install the other piece on the top of the inner ducts, align the two sides and snap into place.

Solvent cement the Slit/Keyed Coupling Covers in place over the split PVC to complete the procedure. Backfill according to the job specifications.

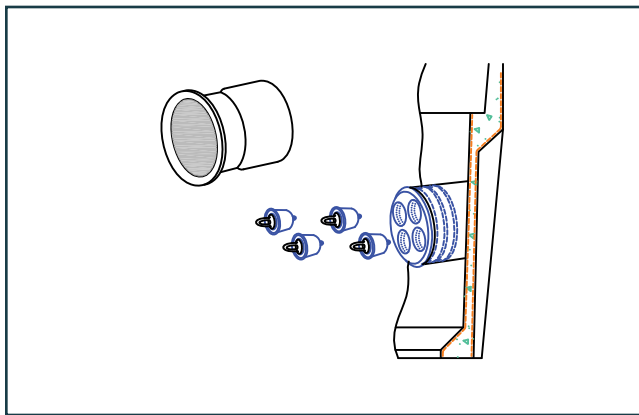


Figure 9. MultiCell Terminator Kit

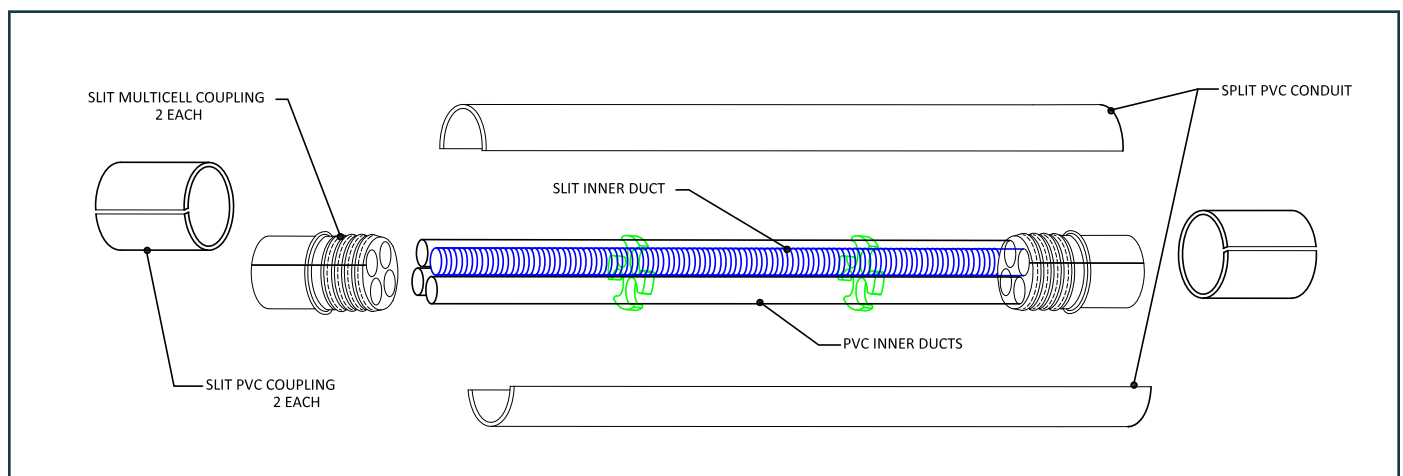


Figure 10. MultiCell 10' Repair Kit

# CORRUGATED PVC

## POWER & COMMUNICATIONS FLEX® CORRUGATED FLEXIBLE CONDUIT

Power & Communications Flex® Nonmetallic Corrugated Conduit makes power and communication installations faster and easier by providing maximum installation flexibility. Power & Communications Flex is flexible enough to be used as a raceway or flexible sweep; and, unlike rigid conduit, it has a tight bend radius and can accommodate uneven offsets.

Power & Communications Flex is manufactured to IPS dimensions and can be used with any existing IPS conduit system using standard fittings. It's UV Resistant and suitable for a variety of applications including direct burial, under bridges, service entrance/FTTx terminations, manhole terminations, pedestal/enclosure terminations and running up utility poles.

Power & Communications Flex is available in sizes 3/4" through 4", with or without detectable pull tape (1" through 4" only) and comes in lengths ranging from 250 feet up to 5200 feet, depending on the size.



CORRUGATED PVC

### Features:

- Accommodates any degree of bend or bend radius – ideal for shallow trenches, and is able to handle offsets
- Manufactured to IPS Dimensions – can be used with standard coupling/fittings
- UV Resistant
- Can be used as a raceway or flexible sweep
- Available in sizes 3/4" through 4"
- Small put-ups for short runs
- Available with detectable pull tape (1" through 4" only)
- Non-UL Listed

## POWER & COMMUNICATIONS FLEX FITTINGS

### FEMALE ADAPTERS

Size	Std. Ctn. Qty.	Std. Ctn. Wt (lbs.)
3/4"	100	4.5
1"	50	3.7
1-1/4"	30	3.3
1-1/2"	25	3
2"	30	6
2-1/2"	20	7
3"	25	12
3-1/2"	20	12
4"	7	5

### MALE ADAPTERS

Size	Std. Ctn. Qty.	Std. Ctn. Wt (lbs.)
3/4"	125	4.3
1"	50	3
1-1/4"	25	2.7
1-1/2"	25	3
2"	5	7
2-1/2"	5	1.2
3"	45	18
3-1/2"	30	14
4"	5	3

### BELL ENDS (SCHEDULE 40)

Size	Std. Ctn. Qty.	Std. Ctn. Wt (lbs.)
1"	50	2.5
1-1/4"	35	2.5
1-1/2"	30	2.4
2"	10	1.2
2-1/2"	10	1.9
3"	10	2.1
3-1/2"	40	10.2
4"	30	10.7

### PLUGS

Size	Std. Ctn. Qty.	Std. Ctn. Wt (lbs.)
1-1/2"	50	2
2"	60	3
2-1/2"	25	2
3"	30	3
4"	48	8

**Part Number Ordering Matrix Begins On Page 90**



## POWER & COMMUNICATIONS FLEX CONDUIT

Size	I.D.	O.D.	Pull Tape	Reel/Coil	Std. Ctn. Qty. (ft)	Std. Ctn. Wt. (lbs.)
3/4"	.83	1.040	Empty	Coil	350	40.00
1"	1.000	1.315	Empty	Coil	250	36.25
1"	1.000	1.315	Empty	Reel	5200	1144.00
1"	1.000	1.315	1800 lb. Detectable	Reel	5200	1144.00
1-1/4"	1.340	1.660	Empty	Reel	900	247.00
1-1/4"	1.340	1.660	Empty	Reel	4500	927.00
1-1/4"	1.340	1.660	1800 lb. Detectable	Reel	4500	927.00
1-1/2"	1.570	1.900	Empty	Reel	250	79.00
1-1/2"	1.570	1.900	Empty	Reel	4500	1084.50
1-1/2"	1.570	1.900	1800 lb. Detectable	Reel	4500	1147.50
1-1/2"	1.570	1.900	1250 lb.	Reel	2300	455.40
1-1/2"	1.570	1.900	1250 lb.	Reel	250	80.00
2"	2.045	2.375	Empty	Reel	1100	270.60
2"	2.045	2.375	Empty	Reel	250	97.00
2"	2.045	2.375	Empty	Reel	2500	1005.00
2"	2.045	2.375	Empty	Reel	700	172.20
2"	2.045	2.375	1800 lb. Detectable	Reel	2500	1005.00
2"	2.045	2.375	1250 lb	Reel	250	98.00
2-1/2"	2.469	2.875	Empty	Reel	250	176.00
2-1/2"	2.469	2.875	Empty	Reel	1300	509.60
3"	3.068	3.500	Empty	Reel	1200	1122.00
3"	3.068	3.500	Empty	Reel	250	248.00
3"	3.068	3.500	Empty	Reel	500	193.00
3"	3.068	3.500	Empty	Reel	750	723.75
3"	3.068	3.500	1800 lb. Detectable	Reel	1200	1122.00
4"	4.026	4.500	Empty	Reel	250	324.00
4"	4.026	4.500	Empty	Reel	800	811.20
4"	4.026	4.500	1800 lb. Detectable	Reel	800	1007.20

CORRUGATED PVC

## POWER & COMMUNICATIONS FLEX FITTINGS

### COUPLINGS

Size	Std. Ctn. Qty.	Std. Ctn. Wt (lbs.)
3/4"	100	5
1"	50	3.5
1-1/4"	30	3.2
1-1/2"	25	4
2"	30	5
2-1/2"	4	2
3"	5	3
3-1/2"	20	13
4"	5	4

### CEMENT

All-Weather ENT Blue "Quick-Set"  
Solvent Cement with brush

Part Number	Size	Std. Ctn. Wt (lbs.)
VC9992	Quart	12

**Part Number Ordering Matrix Begins On Page 90**

## TECHNICAL INFORMATION

Performance Properties	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"
Stiffness F/Δy at 5% deflection	500	200	200	200	130	130	90
Impact Strength (Ft./Lbs.) 72°	40	40	50	50	70	120	140
Impact Strength (Ft./Lbs.) 32°	8	8	15	25	35	60	60
Minimum Bending Radius (inches)	6	6	7	8	12	15	18
Conduit Tensile Strength	300	400	500	700	1000	1500	2000

- Storage: -4°F to 158°F
- Handling: -4°F to 104°F

## SWEEP AND ELBOW CONVERSION CHART

Radius (in.) Nom. Dia.	Segment	18" Required Length of P&C Flex (inches)	24" Required Length of P&C Flex (inches)	36" Required Length of P&C Flex (inches)	48" Required Length of P&C Flex (inches)	60" Required Length of P&C Flex (inches)
1-1/2"	90°	33	42	61	80	99
	45°	19	23	33	42	52
	30°	14	17	23	30	36
	22-1/2°	12	14	19	23	28
2"	90°	32	42	61	79	98
	45°	18	23	32	42	51
	30°	14	17	23	29	35
	22-1/2°	11	12	18	23	28
2-1/2"	90°	34	44	63	81	100
	45°	20	25	33	44	53
	30°	16	19	24	31	37
	22-1/2°	13	15	20	25	30
3"	90°	35	44	63	82	101
	45°	20	25	34	44	53
	30°	16	19	24	32	38
	22-1/2°	13	16	20	25	30
4"	90°	37	46	65	84	103
	45°	22	27	37	46	55
	30°	18	21	27	34	40
	22-1/2°	15	18	22	27	32

**For other radius sweeps use this formula:**

$$.0175 \times \text{Radius (inches)} \times \text{Angle}^\circ = \text{Required length of P\&C flex in inches}$$

**Part Number Ordering Matrix  
Begins On Page 90**

## SPLIT DUCT

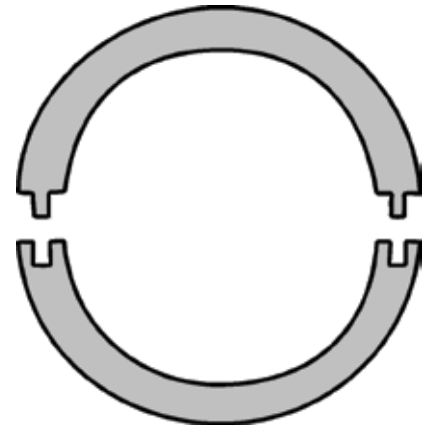
Split Duct is the fast and easy way to repair broken ductwork without the costly cutting and resplicing of your conductors.

The unique tongue-and-groove design provides a strong, rigid solution for duct repair situations.

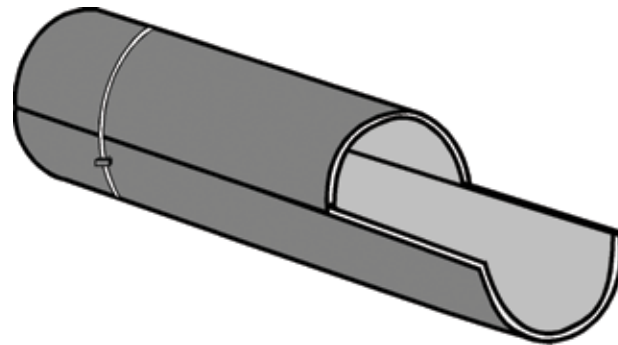
The interlocking design allows the split duct sections to be staggered and butted together. Joints may be sealed with tape and reinforced with plastic or metallic straps to produce a rigid, stable unit.

Manufactured from a compound designed specifically for power and telecommunications applications. Split Duct exhibits superior impact strength and ultraviolet resistance.

Available in 2" through 6" diameters, this product line also contains couplings and sweeps necessary to complete the system.



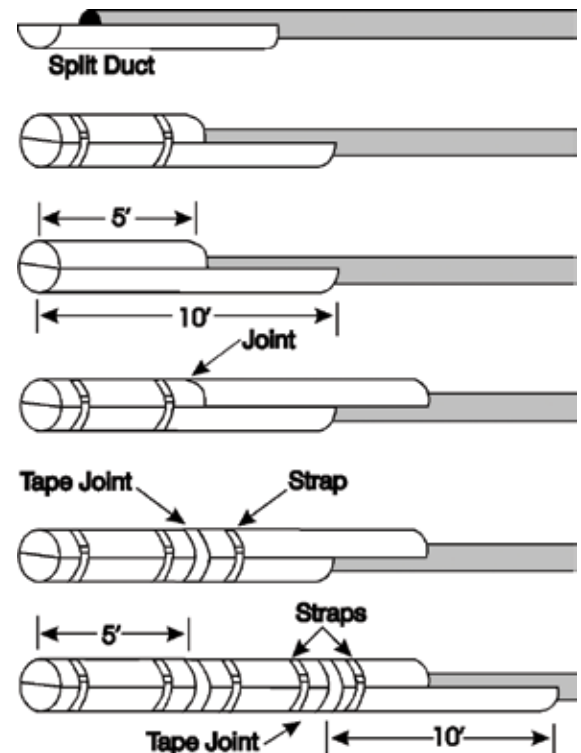
The fast and easy method of installing duct around existing cable for repair and temporary installations.



SPLIT DUCT

## RECOMMENDED INSTALLATION PROCEDURE

1. Place one 10-foot Split Duct section under cable.
2. In order to stagger joints, saw another section in half (about 5 feet long).
3. Place 5-foot section over cable and snap the two sections together.
4. Place strap about one foot from the end and another strap about a foot from the joint where the ends of the top sections will butt.
5. Place another 10-foot Split Duct section over the open half of the bottom section, butt the ends tightly together and snap the sections together.
6. Place a length of tape around both sections of the Split Duct to cover the butted joint.
7. Place a strap about one foot beyond the taped joint.
8. Lay another length of Split Duct underneath cable, butt together, tape the butted joint and strap one foot on each side of the joint.
9. Repeat procedure.



# SPLIT DUCT

## SPLIT DUCT

Description	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)	O.D.
<b>Schedule 40</b>			
2" Schedule 40 Split Duct	700	564	2.375
2-1/2" Schedule 40 Split Duct	460	572	2.875
3" Schedule 40 Split Duct	500	857	3.500
3-1/2" Schedule 40 Split Duct	290	569	4.000
4" Schedule 40 Split Duct	290	701	4.500
5" Schedule 40 Split Duct	230	751	5.563
6" Schedule 40 Split Duct	130	548	6.625
<b>Schedule 80</b>			
2" Schedule 80 Split Duct	700	749	2.375
4" Schedule 80 Split Duct	290	922	4.500
<b>C Duct</b>			
4" C Duct Split Duct	320	614	4.350

## SPLIT SLEEVE COUPLING

Size	Description	Length	Split	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)
<b>Schedule 40 &amp; 80</b>					
2"	Split Coupling	6"	1	25	9
2-1/2"	Split Coupling	7"	1	25	21
3"	Split Coupling	7"	1	25	17
3"	Split Coupling	6.5"	2	25	10
3-1/2"	Split Coupling	8"	1	25	20
4"	Split Coupling	8"	1	15	16
4"	Split Coupling	6"	2	25	17
5"	Split Coupling	8"	1	15	25
5"	Split Coupling	9"	1	8	12
6"	Split Coupling	10"	1	6	17
<b>C Duct</b>					
4"	C Duct Split Coupling	8"	1	15	19
4"	C Duct Split Coupling	6"	1	25	24

## SPLIT DUCT SWEEPS

Segment	Nom. Size	Radius (in.)	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)
45° Sweep	2"	24"	1	1.4
	2"	36"	1	2.1
	3"	36"	1	4.7
	2"	48"	1	2.7
	3"	48"	1	6.1
	2"	60"	1	3.2
	3"	60"	1	7.2
	4"	60"	1	10.2
	22-1/2° Sweep	4"	60"	1
11-1/4° Sweep	2"	60"	1	1
	3"	60"	1	3.6
	4"	60"	1	5.1

Two 45° Elbows may be segmented for 90°.

**Part Number Ordering Matrix Begins On Page 90**

## SPLIT DUCT CONDUIT

**For enclosing fiber optics and cables, installing conduit around existing cable, or repairing sections of damaged conduit.**

CRS Split Duct Conduit is an innovative and efficient product that is great for enclosing fiber optics, cables, and repairing damaged conduit.

When snapped together, the unique interlocking design of Split Duct Conduit creates a smooth tight seal protecting the cable or fiber optics from weathering. No tape, plastic, or metallic straps are needed to seal or provide extra strength to the Split Duct Conduit.

Manufactured from a compound specifically designed for power and communications applications, CRS Split Duct Conduit displays superior impact strength and ultraviolet resistance.



Patent No 5,462,312

### SPLIT DUCT CONDUIT

Part Number	Description	I.D.	O.D.	Weight Per 10 ft.	Minimum Order
P1F	1" Split-Duct Conduit	1.049	1.315	4.50 lbs.	10 ft.
P125F	1.25" Split-Duct Conduit	1.380	1.660	5.50 lbs.	10 ft.
P15F	1.5" Split-Duct Conduit	1.610	1.900	6.50 lbs.	10 ft.
P2F	2" Split-Duct Conduit	2.067	2.375	8.50 lbs.	10 ft.
P25F	2.5" Split-Duct Conduit	2.469	2.875	10.50 lbs.	10 ft.
P3F	3" Split-Duct Conduit	3.068	3.500	13.00 lbs.	10 ft.
P4F	4" Split-Duct Conduit	4.026	4.500	18.50 lbs.	10 ft.
P5F	5" Split-Duct Conduit	5.047	5.563	24.50 lbs.	10 ft.
P6F	6" Split-Duct Conduit	6.065	6.625	34.00 lbs.	10 ft.

### SCHEDULE 80 SPLIT CONDUIT

P2F80	2" Sch. 80 Split-Duct Conduit	1.939	2.375	12.00 lbs.	10 ft.
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### TYPE C SPLIT CONDUIT

PCD4F	4" Split C Duct	4.060	4.350	11.50 lbs.	10 ft.
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SPLIT DUCT

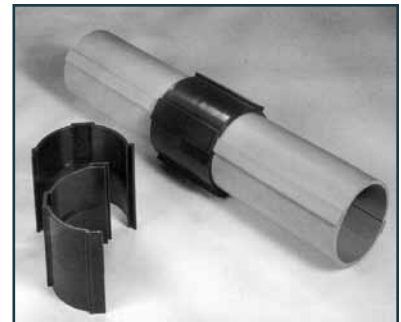
## SPLIT COUPLINGS

**For joining CRS's Split Duct Conduit to CRS's Split Duct Conduit.**

CRS Split Couplings are specifically designed to connect our Split Duct Conduit to another section of Split Duct Conduit. Use of Split Couplings makes laying lines quick and easy.

The Split Couplings are manufactured from a compound specifically designed for power and communications applications. In addition, the Split Couplings along with CRS Split Duct Conduit have superior strength and ultraviolet resistance.

The unique interlocking design gives the Split Couplings a tight seal with a smooth, clean finish on the inside of the pipe.



Patent No. 5,462,312

### SCH 40 SPLIT COUPLINGS

Part Number	Description	Minimum Order
RC1F	1" Split Couplings	6
RC125F	1.25" Split Couplings	6
RC15F	1.5" Split Couplings	6
RC2F	2" Split Couplings	6
RC25F	2.5" Split Couplings	6
RC3F	3" Split Couplings	6
RC4F	4" Split Couplings	6
RC5F	5" Split Couplings	6
RC6F	6" Split Couplings	6

### TYPE C SPLIT ADAPTER COUPLINGS

RCD4F	4" Split C Adapter Coupling	6
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# SPLIT DUCT

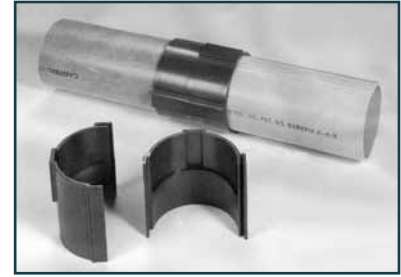
## SPLIT ADAPTER COUPLINGS

### For joining CRS's Split Duct Conduit to standard PVC conduit.

CRS Split Adapter Couplings are specifically designed to connect CRS Split Duct Conduit to standard PVC Conduit. Use of Split Adapter Couplings makes repairs quick and easy.

The Split Adapter Couplings are manufactured from a compound specifically designed for power and communications applications. In addition, the Split Adapter Couplings along with CRS Split Duct Conduit have superior strength and ultraviolet resistance.

The unique interlocking design gives the Split Adapter Couplings a tight seal with a smooth, clean finish on the inside of the pipe.



Patent No. 5,462,312

### SCH 40 SPLIT ADAPTER COUPLINGS

Part Number	Description	Minimum Order
C1F	1" Split Adapter Couplings	6
C125F	1.25" Split Adapter Couplings	6
C15F	1.5" Split Adapter Couplings	6
C2F	2" Split Adapter Couplings	6
C25F	2.5" Split Adapter Couplings	6
C3F	3" Split Adapter Couplings	6
C4F	4" Split Adapter Couplings	6
C5F	5" Split Adapter Couplings	6
C6F	6" Split Adapter Couplings	6

### TYPE C SPLIT ADAPTER COUPLINGS

CD4F	4" Split C Duct Adapter Couplings	6
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SPLIT DUCT

## CRS REPAIR KITS

### For repairing damaged conduit.

CRS Repair Kits are an excellent way to go when repairing damaged conduit. Since many customers have requested the products in a pre-packaged format, we have created the CRS Repair Kits for your use. The CRS Repair Kits is a pre-packaged kit including CRS's Split Conduit and Split Couplings. This convenient repair kit makes repairs quick, easy and efficient.

Each 10' Repair Kit Includes:

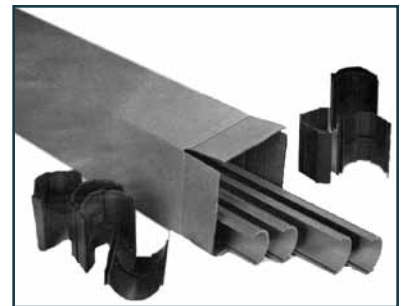
- 10 full feet of CRS's Split Conduit cut to five foot lengths
- 6 Split Adapter Couplings
- 1 Split Coupling for joining sections of Split Conduit to Split Conduit

Each 5' Repair Kit Includes:

- 5 full feet of CRS's Split Conduit cut to length
- 4 Split Adapter Couplings

Each 2' Repair Kit Includes:

- 2 full feet of CRS's Split Conduit cut to length
- 2 Split Adapter Couplings



Patent No. 5,462,312

### 10' SCH 40 CRS REPAIR KITS

Part No.	Description
K1F	1" CRS Repair Kit
K125F	1.25" CRS Repair Kit
K15F	1.5" CRS Repair Kit
K2F	2" CRS Repair Kit
K25F	2.5" CRS Repair Kit
K3F	3" CRS Repair Kit
K4F	4" CRS Repair Kit
K5F	5" CRS Repair Kit
K6F	6" CRS Repair Kit

*Additional Repair Kits are available. Call your local Vikimatic Representative for details.*

## 45° SPLIT DUCT SWEEPS

For making bends in the ground or for risers out of the ground.

CRS Split-Duct Sweeps are a by-product of our split conduit. They are great for 45 degree turns in the ground or for 45 degree risers coming up out of the ground.

Just as with the split conduit, when snapped together, the unique interlocking design of the Split Sweeps creates a smooth tight seal protecting the cable of fiber optics from weathering. No tape, plastic, or metal straps are needed to seal or provide extra strength to the split sweeps.

It is necessary to use CRS split couplings and/or split adapter couplings to connect the sweeps to CRS split conduit or to standard PVC pipe.



Patent No. 5,462,312

### SCHEDULE 40 24 INCH RADIUS 45° SPLIT DUCT SWEEPS

	1" Part #	1.25" Part #	1.5" Part #	2" Part #	2.5" Part #	3" Part #	4" Part #	5" Part #	6" Part #
Horizontal	S1F24H45	S125F24H45	S15F24H45	S2F24H45	S25F24H45	S3F24H45	S4F24H45	N/A	N/A
Vertical	S1F24V45	S125F24V45	S15F24V45	S2F24V45	S25F24V45	S3F24V45	S4F24V45	N/A	N/A

### SCHEDULE 40 36 INCH RADIUS 45° SPLIT DUCT SWEEPS

	1" Part #	1.25" Part #	1.5" Part #	2" Part #	2.5" Part #	3" Part #	4" Part #	5" Part #	6" Part #
Horizontal	S1F36H45	S125F36H45	S15F36H45	S2F36H45	S25F36H45	S3F36H45	S4F36H45	S5F36H45	S6F36H45
Vertical	S1F36V45	S125F36V45	S15F36V45	S2F36V45	S25F36V45	S3F36V45	S4F36V45	S5F36V45	S6F36V45

### SCH 80 24" RADIUS 45° SPLIT DUCT SWEEPS

	2" Part #
Horizontal	S2F8024H45
Vertical	S2F8024V45

### SCH 80 36" RADIUS 45° SPLIT DUCT SWEEPS

	2" Part #
Horizontal	S2F8036H45
Vertical	S2F8036V45

### TYPE C 24" RADIUS 45° SPLIT DUCT SWEEPS

	4" Part #	Min. Order
Horizontal	SCD4F24H45	1
Vertical	SCD4F34V45	1

### TYPE C 36" RADIUS 45° SPLIT DUCT SWEEPS

	4" Part #	Min. Order
Horizontal	SCD4F36H45	1
Vertical	SCD4F36V45	1

# SPLIT DUCT

## 90° SPLIT DUCT SWEEPS

For making bends in the ground or for risers out of the ground.

CRS Split-Duct Sweeps are a by-product of our split conduit. They are great for 90 degree turns in the ground or for 90 degree risers coming up out of the ground.

Just as with the split conduit, when snapped together, the unique interlocking design of the Split Sweeps creates a smooth tight seal protecting the cable of fiber optics from weathering. No tape, plastic, or metal straps are needed to seal or provide extra strength to the split sweeps.

It is necessary to use CRS split couplings and/or split adapter couplings to connect the sweeps to the CRS split conduit or to standard PVC pipe.



Patent No. 5,462,312

### SCHEDULE 40 24" RADIUS 90° SPLIT DUCT SWEEPS

	1" Part #	1.25" Part #	1.5" Part #	2" Part #	2.5" Part #	3" Part #	4" Part #	5" Part #	6" Part #
Horizontal	S1F24H90	S125F24H90	S15F24H90	S2F24H90	S25F24H90	S3F24H90	S4F24H90	N/A	N/A
Vertical	S1F24V90	S125F24V90	S15F24V90	S2F24V90	S25F24V90	S3F24V90	S4F24V90	N/A	N/A

### SCHEDULE 40 36" RADIUS 90° SPLIT DUCT SWEEPS

	1" Part #	1.25" Part #	1.5" Part #	2" Part #	2.5" Part #	3" Part #	4" Part #	5" Part #	6" Part #
Horizontal	S1F36H90	S125F36H90	S15F36H90	S2F36H90	S25F36H90	S3F36H90	S4F36H90	S5F36H90	S6F36H90
Vertical	S1F36V90	S125F36V90	S15F36V90	S2F36V90	S25F36V90	S3F36V90	S4F36V90	S5F36V90	S6F36V90

### SCH 80 24" RADIUS 90° SPLIT DUCT SWEEPS

#### 2" Part #

Horizontal	S2F8024H90
Vertical	S2F8024V90

### SCH 80 36" RADIUS 90° SPLIT DUCT SWEEPS

#### 2" Part #

Horizontal	S2F8036H90
Vertical	S2F8036V90

### TYPE C 24" RADIUS 90° SPLIT DUCT SWEEPS

#### 4" Part # Min. Order

Horizontal	SCD4F24H90	1
Vertical	SCD4F34V90	1

### TYPE C 36" RADIUS 90° SPLIT DUCT SWEEPS

#### 4" Part # Min. Order

Horizontal	SCD4F36H90	1
Vertical	SCD4F36V90	1





**Conduit is Damaged**



**1 – Remove Damaged Conduit**



**2 – Cut Split Duct to Length**



**3 – Snap in Place**



**4 – Attach Split Couplings**



**5 – Job Finished in Record Time**

# FIBERGLASS CONDUIT

## WHY SHOULD YOU CONSIDER USING FIBERGLASS REINFORCED EPOXY CONDUIT?

Fiberglass conduit offers many advantages over other commonly used conduit, such as steel and PVC, as listed below:

### EASE OF ASSEMBLY:

Epoxy fiberglass conduit is easy to install, partly resulting from its light weight, which facilitates handling. Fitting sections together using the push-fit spigot and bell design further facilitates assembly.

### LIGHTWEIGHT:

Epoxy fiberglass conduit weighs considerably less than PVC or steel, resulting in cost savings through reduced handling time, reduced assembly time, reduced requirements for mechanized handling, reduced freight charges, reduced system weight, and lower costs of support. By way of example, one hundred ft. of 4" FRE® conduit weighs in at 282 pounds, compared with almost 1,000 pounds for steel. The high flexural strength of FRE® Conduit combined with its light weight allows for much greater span distance between supports hence reducing overall weight and costs.

### LOW COEFFICIENT OF FRICTION:

The coefficient of friction of epoxy fiberglass is lower than that of steel, and considerably lower than that of PVC. This means that electrical cables are easier to pull through, resulting in labour savings, less stress on cables, and reduces the number of costly manholes. As FRE®'s minimum resin content is higher than industry standards, FRE®'s coefficient of friction is the lowest and product longevity is the best in the industry.

### TEMPERATURE RANGE:

FRE® Conduit can withstand a wide array of temperature ranging from -40°F to 230°F (-40°C to 110°C). Unlike PVC which is extremely brittle in cold temperature (+40°F) and malleable in heat, FRE® Conduit maintains its unique characteristics.

### NO BURN-THROUGH:

Unlike rigid PVC, epoxy fiberglass bends and elbows have a strong resistance to being cavitated or pierced as a result of rope pull.

### CABLE FUSION:

Fiberglass is an excellent insulator. Unlike fiberglass conduit, steel conduit will weld with cable, and PVC conduit may fuse or melt under electrical fault conditions.

### FLEXIBLE AND IMPACT RESISTANT:

The flexibility of epoxy fiberglass conduit allows it to conform to mildly uneven surfaces. Epoxy fiberglass conduit has tended to survive the stresses of earthquakes better than PVC or steel.

### CORROSION RESISTANT:

Epoxy fiberglass is not affected by the effects of water or most other chemicals.

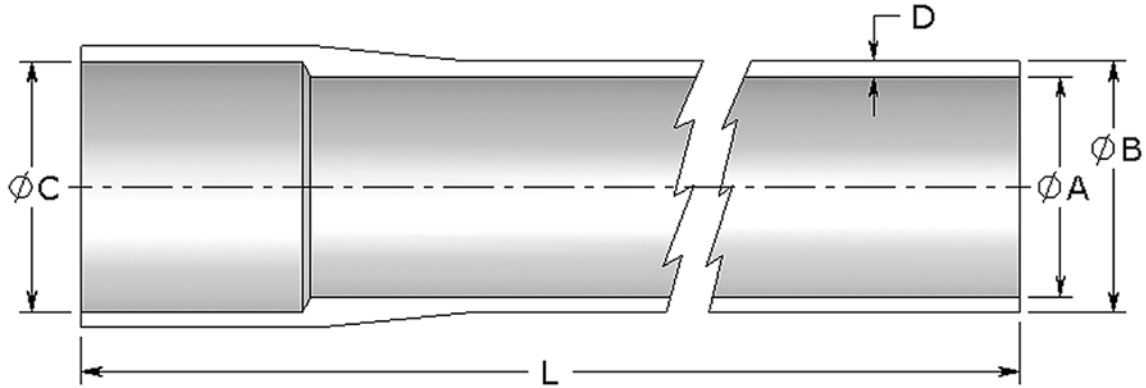
### NON-TOXIC:

Unlike PVC, epoxy fiberglass is low halogen and does not release bromine or chlorine.



Standard colors for Fiberglass are Black and Gray. Other colors are available. Ask your local Vikimatic representative for details.

## ID/IPS EXTRA HEAVY WALL (XHW) CONDUIT



	Size		ØA	ØB	ØC	D	L	ØA	ØB	ØC	D	L
	in	mm										
▶	2	51	2.000	2.500	2.540	0.250	236.25	50.8	63.5	64.5	6.4	6
▶	3	76	3.000	3.500	3.540	0.250	236.25	76.2	88.9	89.9	6.4	6
▶	4	102	4.000	4.500	4.540	0.250	236.25	101.6	114.3	115.3	6.4	6
▶	5	127	5.000	5.500	5.540	0.250	236.25	127.0	139.7	140.7	6.4	6
▶	6	152	6.000	6.500	6.540	0.250	236.25	152.4	165.1	166.1	6.4	6
+	8	203	8.393	8.893	8.933	0.250	236.25	213.2	225.9	226.9	6.4	6

▶ **All ID Telecom products are offered with a push-fit assembly requiring adhesive.**

▶ Standard length is 19.68 ft. (6m) but can also be available in 9.84 ft. section (3m), if required.

▶ Spigot end tapered for ease of installation.

+ **All IPS Telecom products are offered with a push-fit assembly requiring adhesive.**

+ Standard length is 19.68 ft. (6m) for 8" (203mm) but can also be available in 9.84 ft. section (3m), if required.

+ Spigot end tapered for ease of installation.

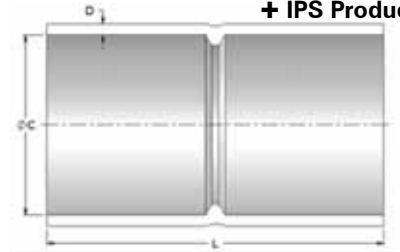
**Part Number Ordering Matrix Begins On Page 90**

# FIBERGLASS CONDUIT

## ID/IPS XHW DOUBLE BELL COUPLING

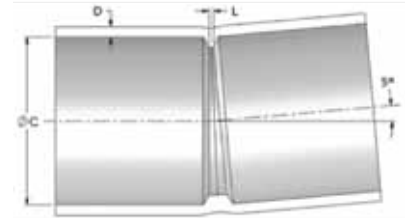
► ID Product  
+ IPS Product

	Size		ØC	D	L	ØC	D	L
	in	mm		inches		millimeters		
►	2	51	2.540	0.250	8.5	64.5	6.4	215.9
►	3	76	3.540	0.250	8.5	89.9	6.4	215.9
►	4	102	4.540	0.250	8.5	115.3	6.4	215.9
►	5	127	5.540	0.250	8.5	140.7	6.4	215.9
►	6	152	6.540	0.250	8.5	166.1	6.4	215.9
+	8	203	8.933	0.250	8.5	226.9	6.4	215.9



## ID/IPS XHW 5° DOUBLE BELL COUPLING

	Size		ØC	D	L	ØC	D	L
	in	mm		inches		millimeters		
►	2	51	2.540	0.250	0.125	64.5	6.4	3.2
►	3	76	3.540	0.250	0.125	89.9	6.4	3.2
►	4	102	4.540	0.250	0.125	115.3	6.4	3.2
►	5	127	5.540	0.250	0.125	140.7	6.4	3.2
►	6	152	6.540	0.250	0.125	166.1	6.4	3.2
+	8	203	8.933	0.250	0.125	226.9	6.4	3.2



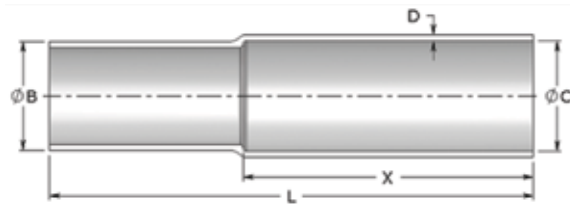
## ID/IPS XHW SLEEVE

	Size		ØC	D	L	ØC	D	L
	in	mm		inches		millimeters		
►	2	51	2.540	0.250	12	64.5	6.4	304.8
►	3	76	3.540	0.250	12	89.9	6.4	304.8
►	4	102	4.540	0.250	12	115.3	6.4	304.8
►	5	127	5.540	0.250	12	140.7	6.4	304.8
►	6	152	6.540	0.250	12	166.1	6.4	304.8
+	8	203	8.933	0.250	12	226.9	6.4	304.8



## ID/IPS XHW SINGLE EXPANSION JOINT

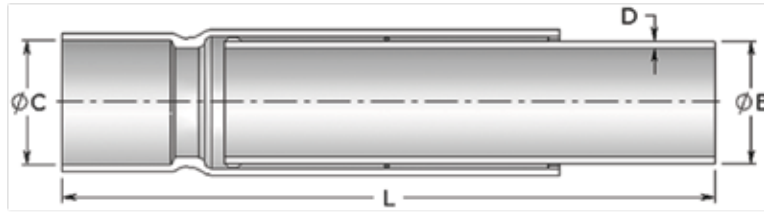
**Part Number Ordering Matrix  
Begins On Page 90**



	Size		ØB	ØC	D	L	X	ØB	ØC	D	L	X
	in	mm			inches			millimeters				
►	2	51	2.500	2.540	0.250	20	12	63.5	64.5	6.4	508.0	304.8
►	3	76	3.500	3.540	0.250	20	12	88.9	89.9	6.4	508.0	304.8
►	4	102	4.500	4.540	0.250	20	12	114.3	115.3	6.4	508.0	304.8
►	5	127	5.500	5.540	0.250	20	12	139.7	140.7	6.4	508.0	304.8
►	6	152	6.500	6.540	0.250	20	12	165.1	166.1	6.4	508.0	304.8
+	8	203	8.893	8.933	0.250	20	12	225.9	226.9	6.4	508.0	304.8

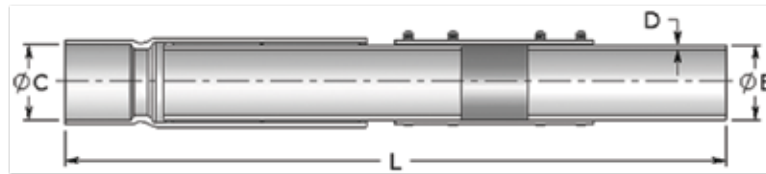
## ID/IPS XHW O-RING EXPANSION JOINT

► ID Product  
+ IPS Product



Size	ØB		ØC	D	L min	L max	ØB			L min	L max
	in	mm					inches	in	mm		
► 2	51	2.500	2.540	0.250	23	35	63.5	64.5	6.4	584.2	889.0
► 3	76	3.500	3.540	0.250	23	35	88.9	89.9	6.4	584.2	889.0
► 4	102	4.500	4.540	0.250	23	35	114.3	115.3	6.4	584.2	889.0
► 5	127	5.500	5.540	0.250	23	35	139.7	140.7	6.4	584.2	889.0
► 6	152	6.500	6.540	0.250	23	35	165.1	166.1	6.4	584.2	889.0
+ 8	203	8.893	8.933	0.250	23	35	225.9	226.9	6.4	584.2	889.0

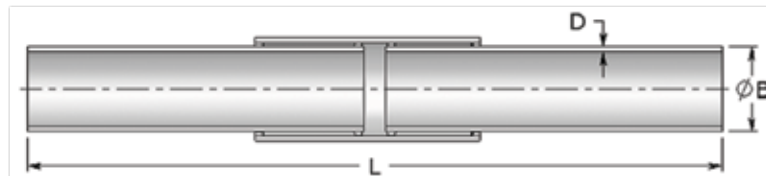
## ID/IPS XHW O-RING EXPANSION / DEFLECTION JOINT



Size	ØB		ØC	D	L min	L max	ØB			L min	L max
	in	mm					inches	in	mm		
► 2	51	2.500	2.540	0.250	39	51	63.5	64.5	6.4	990.6	1295.4
► 3	76	3.500	3.540	0.250	39	51	88.9	89.9	6.4	990.6	1295.4
► 4	102	4.500	4.540	0.250	39	51	114.3	115.3	6.4	990.6	1295.4
► 5	127	5.500	5.540	0.250	39	51	139.7	140.7	6.4	990.6	1295.4
► 6	152	6.500	6.540	0.250	39	51	165.1	166.1	6.4	990.6	1295.4
+ 8	203	8.893	8.933	0.250	39	51	225.9	226.9	6.4	990.6	1295.4

## ID/IPS XHW WOBBLE

**Part Number Ordering Matrix Begins On Page 90**

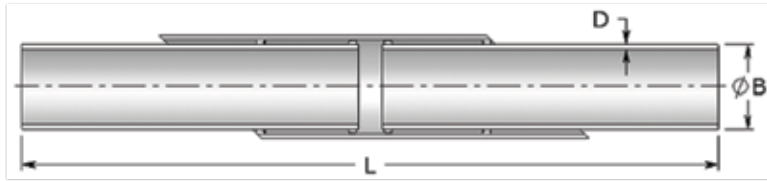


Size	ØB		D	L min	L max	ØB			L min	L max
	in	mm				inches	in	mm		
► 2	51	2.500	0.250	36	46	63.5	6.4	914.4	1168.4	
► 3	76	3.500	0.250	36	46	88.9	6.4	914.4	1168.4	
► 4	102	4.500	0.250	36	46	114.3	6.4	914.4	1168.4	
► 5	127	5.500	0.250	36	46	139.7	6.4	914.4	1168.4	
► 6	152	6.500	0.250	36	46	165.1	6.4	914.4	1168.4	
+ 8	203	8.893	0.250	36	46	225.9	6.4	914.4	1168.4	

# FIBERGLASS CONDUIT

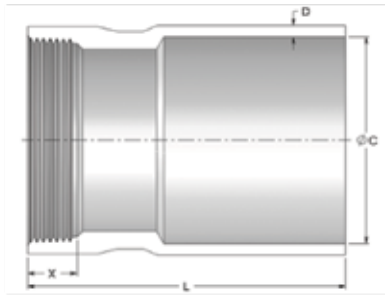
## ID/IPS XHW SKEW WOBBLE

► ID Product  
+ IPS Product



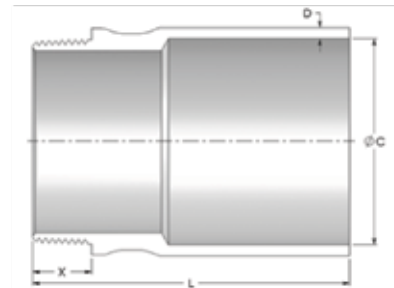
	Size	ØB	D	L min	L max	ØB	D	L min	L max	
	in	mm	inches	inches	inches	mm	millimeters	inches	inches	
►	2	51	2.500	0.250	48	56	63.5	6.4	1219.2	1422.4
►	3	76	3.500	0.250	48	56	88.9	6.4	1219.2	1422.4
►	4	102	4.500	0.250	48	56	114.3	6.4	1219.2	1422.4
►	5	127	5.500	0.250	48	56	139.7	6.4	1219.2	1422.4
►	6	152	6.500	0.250	48	56	165.1	6.4	1219.2	1422.4
+	8	203	8.933	0.250	48	56	225.9	6.4	1219.2	1422.4

## ID/IPS XHW NPT FEMALE THREADED ADAPTER



	Size	ØC	D	L	X	ØC	D	L	X	
	in	mm	inches	inches	inches	mm	millimeters	inches	inches	
►	2	51	2.540	0.250	7	0.697	64.5	6.4	177.8	17.7
►	3	76	3.540	0.250	7	1.016	89.9	6.4	177.8	25.8
►	4	102	4.540	0.250	7	1.094	115.3	6.4	177.8	27.8
►	5	127	5.540	0.250	7	1.187	140.7	6.4	177.8	30.1
►	6	152	6.540	0.250	7	1.208	166.1	6.4	177.8	30.7
+	8	203	8.933	0.250	7	1.313	226.9	6.4	177.8	33.4

## ID/IPS XHW NPT MALE THREADED ADAPTER

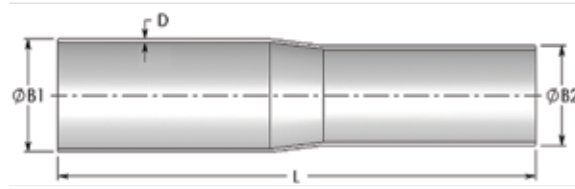


	Size	ØC	D	L	X	ØC	D	L	X	
	in	mm	inches	inches	inches	mm	millimeters	inches	inches	
►	2	51	2.540	0.250	7	0.757	64.5	6.4	177.8	19.2
►	3	76	3.540	0.250	7	1.200	89.9	6.4	177.8	30.5
►	4	102	4.540	0.250	7	1.300	115.3	6.4	177.8	33.0
►	5	127	5.540	0.250	7	1.406	140.7	6.4	177.8	35.7
►	6	152	6.540	0.250	7	1.513	166.1	6.4	177.8	38.4
+	8	203	8.933	0.250	7	1.713	226.9	6.4	177.8	43.5

**Part Number  
Ordering  
Matrix Begins  
On Page 90**

FIBERGLASS CONDUIT

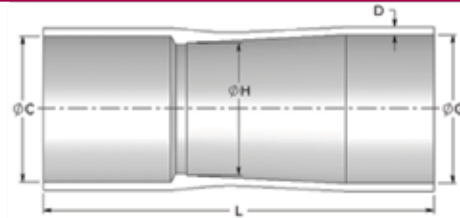
## ID XHW REDUCER



► ID Product  
+ IPS Product

	Size	ØB1	ØB2	D	L	ØB1	ØB2	D	L
	in mm		inches			millimeters	millimeters		
►	3 76	3.500	2.500	0.250	18	88.9	63.5	6.4	457.2
►	4 102	4.500	3.500	0.250	18	114.3	88.9	6.4	457.2
►	5 127	5.500	4.500	0.250	18	139.7	114.3	6.4	457.2
►	6 152	6.500	5.500	0.250	18	165.1	139.7	6.4	457.2

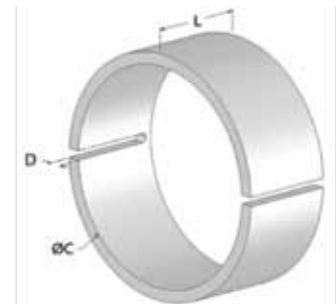
## ID XHW MULTIFIT ADAPTER



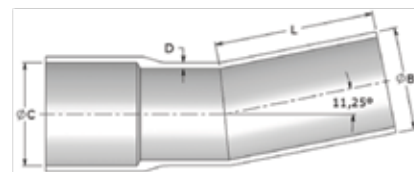
	Size	ØC	D	ØG	ØH	L	ØC	D	ØG	ØH	L
	in mm		inches	inches			millimeters		millimeters		
►	2 51	2.540	0.250	2.239	2.424	12.25	64.5	6.4	56.9	61.6	311.2
►	3 76	3.540	0.250	3.239	3.549	12.25	89.9	6.4	82.3	90.1	311.2
►	4 102	4.540	0.250	4.109	4.620	12.25	115.3	6.4	104.4	117.3	311.2
►	5 127	5.540	0.250	5.289	5.650	12.25	140.7	6.4	134.3	143.5	311.2
►	6 152	6.540	0.250	6.259	6.686	12.25	166.1	6.4	159.0	169.8	311.2

## ID/IPS XHW SPLIT STOP RING

	Size	ØC	D	L	ØC	D	L
	in mm		inches		millimeters		
►	2 51	2.540	0.250	2	64.5	6.4	50.8
►	3 76	3.540	0.250	2	89.9	6.4	50.8
►	4 102	4.540	0.250	2	115.3	6.4	50.8
►	5 127	5.540	0.250	2	140.7	6.4	50.8
►	6 152	6.540	0.250	2	166.1	6.4	50.8
+	8 203	8.933	0.250	2	226.9	6.4	50.8



## ID/IPS ID XHW 11.25° FITTING



	Size	ØB	ØC	D	L	ØB	ØC	D	L
	in mm		inches			millimeters	millimeters		
►	2 51	2.500	2.540	0.250	7	63.5	64.5	6.4	177.8
►	3 76	3.500	3.540	0.250	7	88.9	89.9	6.4	177.8
►	4 102	4.500	4.540	0.250	7	114.3	115.3	6.4	177.8
►	5 127	5.500	5.540	0.250	7	139.7	140.7	6.4	177.8
►	6 152	6.500	6.540	0.250	7	165.1	166.1	6.4	177.8
+	8 203	8.893	8.933	0.250	7	225.9	226.9	6.4	177.8

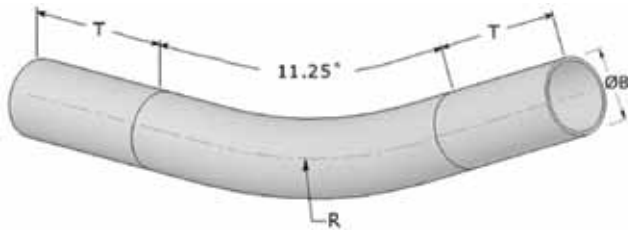
**Part Number  
Ordering  
Matrix Begins  
On Page 90**

# FIBERGLASS CONDUIT

## ID XHW 11.25° ELBOW

► ID Product

+ IPS Product



### 48" RADIUS

Size		ØB	R	T	ØB R T			
in	mm				millimeters			
►	2	51	2.500	48	6	63.5	1219.2	152.4
►	3	76	3.500	48	6	88.9	1219.2	152.4
►	4	102	4.500	48	6	114.3	1219.2	152.4
►	5	127	5.500	48	6	139.7	1219.2	152.4
►	6	152	6.500	48	6	165.1	1219.2	152.4

### 36" RADIUS

Size		ØB	R	T	ØB R T			
in	mm				millimeters			
►	2	51	2.500	36	6	63.5	914.4	152.4
►	3	76	3.500	36	6	88.9	914.4	152.4
►	4	102	4.500	36	6	114.3	914.4	152.4
►	5	127	5.500	36	6	139.7	914.4	152.4

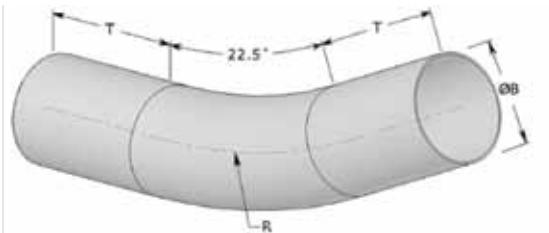
### 60" RADIUS

Size		ØB	R	T	ØB R T			
in	mm				millimeters			
►	2	51	2.500	60	6	63.5	1524.0	152.4
►	3	76	3.500	60	6	88.9	1524.0	152.4
►	4	102	4.500	60	6	114.3	1524.0	152.4
►	5	127	5.500	60	6	139.7	1524.0	152.4
►	6	152	6.500	60	6	165.1	1524.0	152.4

FIBERGLASS CONDUIT

## ID XHW 22.5° ELBOW

**Part Number  
Ordering  
Matrix Begins  
On Page 90**



### 24" RADIUS

Size		ØB	R	T	ØB R T			
in	mm				millimeters			
►	2	51	2.500	24	6	63.5	609.6	152.4
►	3	76	3.500	24	6	88.9	609.6	152.4

### 48" RADIUS

Size		ØB	R	T	ØB R T			
in	mm				millimeters			
►	2	51	2.500	48	6	63.5	1219.2	152.4
►	3	76	3.500	48	6	88.9	1219.2	152.4
►	4	102	4.500	48	6	114.3	1219.2	152.4
►	5	127	5.500	48	6	139.7	1219.2	152.4
►	6	152	6.500	48	6	165.1	1219.2	152.4

### 36" RADIUS

Size		ØB	R	T	ØB R T			
in	mm				millimeters			
►	2	51	2.500	36	6	63.5	914.4	152.4
►	3	76	3.500	36	6	88.9	914.4	152.4
►	4	102	4.500	36	6	114.3	914.4	152.4
►	5	127	5.500	36	6	139.7	914.4	152.4

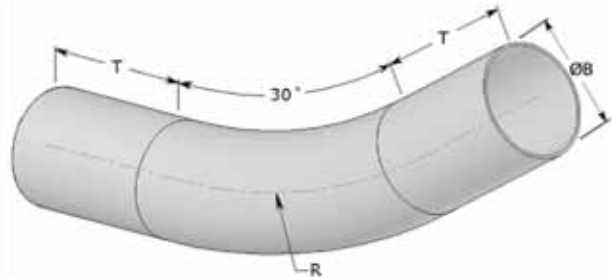
### 60" RADIUS

Size		ØB	R	T	ØB R T			
in	mm				millimeters			
►	2	51	2.500	60	6	63.5	1524.0	152.4
►	3	76	3.500	60	6	88.9	1524.0	152.4
►	4	102	4.500	60	6	114.3	1524.0	152.4
►	5	127	5.500	60	6	139.7	1524.0	152.4
►	6	152	6.500	60	6	165.1	1524.0	152.4



## ID XHW 30° ELBOW

► ID Product  
+ IPS Product



### 48" RADIUS

Size	ØB		R		T	ØB		R		T
	in	mm	inches	inches		millimeters	millimeters	inches	millimeters	
▶ 2	51	2.500	48	6	63.5	1219.2	152.4			
▶ 3	76	3.500	48	6	88.9	1219.2	152.4			
▶ 4	102	4.500	48	6	114.3	1219.2	152.4			
▶ 5	127	5.500	48	6	139.7	1219.2	152.4			
▶ 6	152	6.500	48	6	165.1	1219.2	152.4			

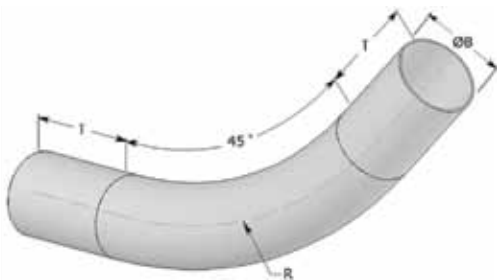
### 36" RADIUS

Size	ØB		R		T	ØB		R		T
	in	mm	inches	inches		millimeters	millimeters	inches	millimeters	
▶ 2	51	2.500	36	6	63.5	914.4	152.4			
▶ 3	76	3.500	36	6	88.9	914.4	152.4			
▶ 4	102	4.500	36	6	114.3	914.4	152.4			
▶ 5	127	5.500	36	6	139.7	914.4	152.4			

### 60" RADIUS

Size	ØB		R		T	ØB		R		T
	in	mm	inches	inches		millimeters	millimeters	inches	millimeters	
▶ 2	51	2.500	60	6	63.5	1524.0	152.4			
▶ 3	76	3.500	60	6	88.9	1524.0	152.4			
▶ 4	102	4.500	60	6	114.3	1524.0	152.4			
▶ 5	127	5.500	60	6	139.7	1524.0	152.4			
▶ 6	152	6.500	60	6	165.1	1524.0	152.4			

## ID XHW 45° ELBOW



### 48" RADIUS

Size	ØB		R		T	ØB		R		T
	in	mm	inches	inches		millimeters	millimeters	inches	millimeters	
▶ 2	51	2.500	48	6	63.5	1219.2	152.4			
▶ 3	76	3.500	48	6	88.9	1219.2	152.4			
▶ 4	102	4.500	48	6	114.3	1219.2	152.4			
▶ 5	127	5.500	48	6	139.7	1219.2	152.4			
▶ 6	152	6.500	48	6	165.1	1219.2	152.4			

### 36" RADIUS

Size	ØB		R		T	ØB		R		T
	in	mm	inches	inches		millimeters	millimeters	inches	millimeters	
▶ 2	51	2.500	36	6	63.5	914.4	152.4			
▶ 3	76	3.500	36	6	88.9	914.4	152.4			
▶ 4	102	4.500	36	6	114.3	914.4	152.4			
▶ 5	127	5.500	36	6	139.7	914.4	152.4			

### 60" RADIUS

Size	ØB		R		T	ØB		R		T
	in	mm	inches	inches		millimeters	millimeters	inches	millimeters	
▶ 2	51	2.500	60	6	63.5	1524.0	152.4			
▶ 3	76	3.500	60	6	88.9	1524.0	152.4			
▶ 4	102	4.500	60	6	114.3	1524.0	152.4			
▶ 5	127	5.500	60	6	139.7	1524.0	152.4			
▶ 6	152	6.500	60	6	165.1	1524.0	152.4			

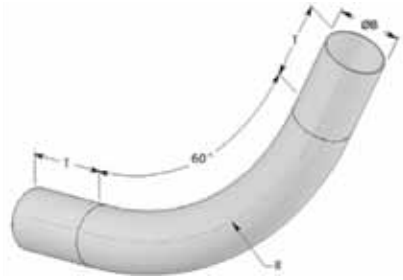
**Part Number  
Ordering  
Matrix Begins  
On Page 90**

# FIBERGLASS CONDUIT

## ID XHW 60° ELBOW

► ID Product

+ IPS Product



### 48" RADIUS

Size		ØB	R	T	ØB R T			
in	mm				millimeters			
►	2	51	2.500	48	6	63.5	1219.2	152.4
►	3	76	3.500	48	6	88.9	1219.2	152.4
►	4	102	4.500	48	6	114.3	1219.2	152.4
►	5	127	5.500	48	6	139.7	1219.2	152.4
►	6	152	6.500	48	6	165.1	1219.2	152.4

### 36" RADIUS

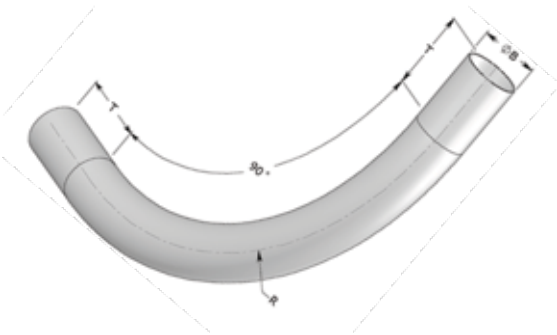
Size		ØB	R	T	ØB R T			
in	mm				millimeters			
►	2	51	2.500	36	6	63.5	914.4	152.4
►	3	76	3.500	36	6	88.9	914.4	152.4
►	4	102	4.500	36	6	114.3	914.4	152.4
►	5	127	5.500	36	6	139.7	914.4	152.4

### 60" RADIUS

Size		ØB	R	T	ØB R T			
in	mm				millimeters			
►	2	51	2.500	60	6	63.5	1524.0	152.4
►	3	76	3.500	60	6	88.9	1524.0	152.4
►	4	102	4.500	60	6	114.3	1524.0	152.4
►	5	127	5.500	60	6	139.7	1524.0	152.4
►	6	152	6.500	60	6	165.1	1524.0	152.4

FIBERGLASS CONDUIT

## ID XHW 90° ELBOW



### 48" RADIUS

Size		ØB	R	T	ØB R T			
in	mm				millimeters			
►	2	51	2.500	48	6	63.5	1219.2	152.4
►	3	76	3.500	48	6	88.9	1219.2	152.4
►	4	102	4.500	48	6	114.3	1219.2	152.4
►	5	127	5.500	48	6	139.7	1219.2	152.4
►	6	152	6.500	48	6	165.1	1219.2	152.4

### 36" RADIUS

Size		ØB	R	T	ØB R T			
in	mm				millimeters			
►	2	51	2.500	36	6	63.5	914.4	152.4
►	3	76	3.500	36	6	88.9	914.4	152.4
►	4	102	4.500	36	6	114.3	914.4	152.4

### 60" RADIUS

Size		ØB	R	T	ØB R T			
in	mm				millimeters			
►	2	51	2.500	60	6	63.5	1524.0	152.4
►	3	76	3.500	60	6	88.9	1524.0	152.4
►	4	102	4.500	60	6	114.3	1524.0	152.4
►	5	127	5.500	60	6	139.7	1524.0	152.4
►	6	152	6.500	60	6	165.1	1524.0	152.4

**Part Number  
Ordering  
Matrix Begins  
On Page 90**

## VIKIMATIC STEEL PIPE

**Part Number Ordering Matrix  
Begins On Page 90**

**B.T.C.** - Black Threaded & Coupled. **G.T.C.** - Galvanized Threaded & Coupled.

### WEIGHT TABLE OF ELECTRICAL RESISTANCE WELDED (ERW) STEEL PIPE

Nominal Size in	Outside Diameter		Wall Thickness		Nominal Weight						Weight Class	Sch. No.
	in	mm	in	mm	Plain Ends			Threads & Couplings				
					lb/ft	kg/ft	kg/m	lb/ft	kg/ft	kg/m		
1/2	0.840	21.3	0.109	2.77	0.85	0.39	1.27	0.85	0.39	1.27	STD	40
			0.147	3.73	1.09	0.49	1.62	1.09	0.49	1.62	XS	80
3/4	1.050	26.7	0.113	2.87	1.13	0.51	1.69	1.13	0.51	1.68	STD	40
			0.154	3.91	1.47	0.67	2.20	1.48	0.67	2.20	XS	80
1	1.315	33.4	0.133	3.38	1.68	0.76	2.50	1.68	0.76	2.50	STD	40
			0.179	4.55	2.17	0.98	3.24	2.18	0.99	3.24	XS	80
1-1/4	1.660	42.2	0.140	3.56	2.27	1.03	3.39	2.28	1.03	3.39	STD	40
			0.191	4.85	3.00	1.36	4.47	3.02	1.37	4.49	XS	80
1-1/2	1.900	48.3	0.145	3.68	2.72	1.23	4.05	2.73	1.24	4.06	STD	40
			0.200	5.08	3.63	1.65	5.41	3.66	1.66	5.45	XS	80
2	2.375	60.3	0.154	3.91	3.65	1.66	5.44	3.68	1.67	5.48	STD	40
			0.218	5.54	5.02	2.28	7.48	5.07	2.30	7.55	XS	80
2-1/2	2.875	73.0	0.203	5.16	5.79	2.63	8.63	5.82	2.64	8.66	STD	40
			0.276	7.01	7.66	3.47	11.41	7.73	3.51	11.50	XS	80
3	3.500	88.9	0.216	5.49	7.58	3.44	11.29	7.62	3.46	11.34	STD	40
			0.300	7.62	10.25	4.65	15.27	10.33	4.69	15.37	XS	80
3-1/2	4.000	101.6	0.226	5.74	9.11	4.13	13.57	9.20	4.17	13.69	STD	40
			0.318	8.08	12.50	5.67	18.63	12.63	5.73	18.80	XS	80
4	4.500	114.3	0.188	4.78	8.66	3.93	12.91	-	-	-	-	-
			0.237	6.02	10.79	4.89	16.07	10.98	4.94	16.21	STD	40
			0.337	8.56	14.98	6.80	22.32	15.17	6.88	22.58	XS	80
5	5.563	141.3	0.188	4.78	10.79	4.89	16.07	-	-	-	-	-
			0.258	6.55	14.62	6.63	21.77	14.81	6.72	22.04	STD	40
			0.375	9.53	20.78	9.43	30.97	21.09	9.57	31.39	XS	80
			0.500	12.70	27.04	12.27	40.20	-	-	-	-	-
6	6.625	168.3	0.188	4.78	12.92	5.86	19.27	-	-	-	-	-
			0.250	6.35	17.02	7.72	25.36	-	-	-	-	-
			0.280	7.11	18.97	8.60	28.26	19.18	8.70	28.54	STD	40
			0.432	10.97	28.57	12.96	42.56	28.89	13.10	42.99	XS	80
8	8.625	219.1	0.188	4.78	16.94	7.68	25.26	-	-	-	-	-
			0.250	6.35	22.36	10.14	33.31	-	-	-	-	20
			0.277	7.04	24.70	11.20	36.81	25.55	11.59	38.02	-	30
			0.322	8.18	28.55	12.95	42.55	29.35	13.31	43.68	STD	40
			0.406	10.31	35.64	16.17	53.08	-	-	-	-	60
			0.500	12.70	43.36	19.68	64.64	43.90	19.91	65.33	XS	80
10	10.750	273.1	0.188	4.78	21.21	9.62	31.63	-	-	-	-	-
			0.219	5.56	24.63	11.17	36.68	-	-	-	-	-
			0.250	6.35	28.04	12.72	41.77	-	-	-	-	20
			0.279	7.09	31.20	14.15	46.51	32.75	14.86	48.74	-	-
			0.365	9.27	40.48	18.36	60.31	41.85	18.98	62.28	STD	40
0.500	12.70	54.74	24.83	81.55	55.82	25.32	83.07	XS	60			
12	12.750	323.9	0.219	5.56	29.31	13.29	43.65	-	-	-	-	-
			0.250	6.35	33.38	15.14	49.73	-	-	-	-	20
			0.330	8.38	43.77	19.85	65.20	45.45	20.62	67.64	-	30
			0.375	9.53	49.56	22.48	73.88	51.15	23.20	76.12	STD	-
			0.406	10.31	53.52	24.28	79.73	-	-	-	-	40
			0.500	12.70	65.42	29.67	97.46	66.71	30.26	99.28	XS	-

*It is purchaser's responsibility to inspect all material delivered at time of delivery. The seller makes no warranty, expressed or implied, that the material is fit for any particular purpose whatsoever unless specifically written in detail.*

## STEEL PIPE EXPANSION FITTINGS

### TYPE AX

Weatherproof with internal bonding assembly. Provides 4" conduit movement.

### TYPE AX8

Weatherproof with internal bonding assembly. Provides 8" conduit movement.

### USE:

To allow for expansion and contraction in a run of rigid metal conduit. For rigid metal conduit only. For applications involving IMC a 15" min. length of rigid conduit should be used entering the expansion fitting due to the slightly smaller O.D. of the IMC. Type AX provides for a maximum of 4" conduit movement (2" in either direction). Type AX8 provides for a maximum of 8" conduit movement (4" in either direction).

### Features

- These Type AX and Type AX8 Expansion Fittings have been listed by Underwriters' Laboratories, Inc. for use without bonding jumpers in indoor locations and with external bonding jumpers in outdoor locations.
- Includes insulating bushing.
- Bonding Jumpers.

### STANDARD MATERIAL:

- Malleable Iron

### OPTIONAL MATERIAL:

- Available in Aluminum

### STANDARD FINISH:

- Hot Dip Galvanized

### STANDARD SIZES:

- 1/2" thru 5"

### THIRD PARTY CERTIFICATION:



File No. E-11853

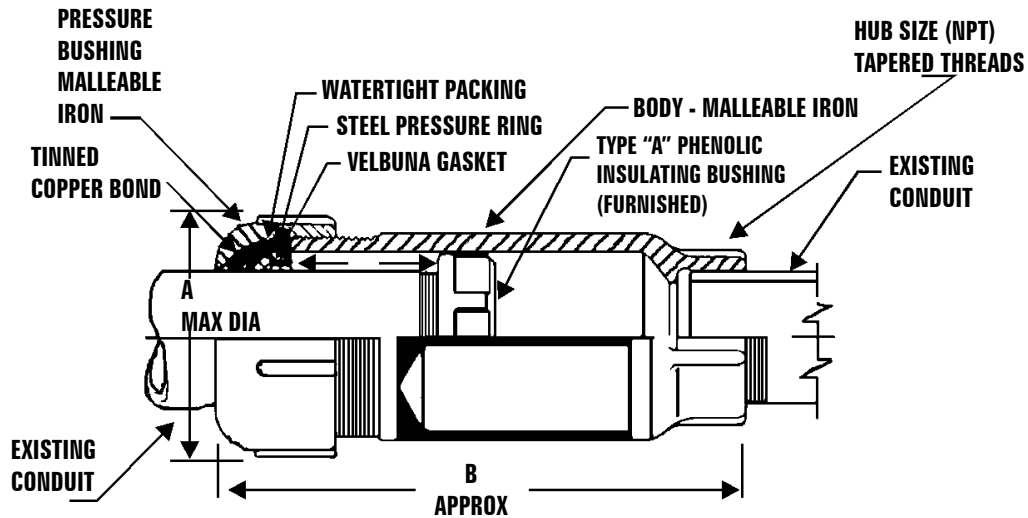


Certified File No. 11584

(when used with external Type BJ Bonding Jumper)

### TO ORDER SPECIFY:

When bonding jumpers are required for steel conduit, specify by catalog numbers in table below. Type AX and Type AX8 Expansion Fittings are available in aluminum. Add letter "A" after catalog number (Example: AX-50A).



**Type AX**  
Provides for 4" Conduit Movement

## ORDERING INFORMATION

### AX FITTING

Part Number	Trade Size Inches	Dim. in In.		Wt. Per. 100	Ctn.	Std. Pkg.
		A Max. Dia.	B Overall Length			
AX-50	1/2	2	6-1/4	170	5	25
AX-75	3/4	2	6-3/8	200	5	25
AX-100	1	2-5/8	6-5/8	280	2	10
AX-125	1-1/4	3-1/8	6-5/8	350	2	10
AX-150	1-1/2	3-1/2	6-5/8	500	2	10
AX-200	2	4	7-1/8	700	1	5
AX-250	2-1/2	4-1/2	7-1/2	800	1	5
AX-300	3	5-3/8	8-1/8	1100	-	4
AX-350	3-1/2	6	8-1/2	1450	-	4
AX-400	4	6-5/8	8-5/8	1850	-	4
AX-500	5	8	9-1/2	2550	-	2

### BONDING JUMPER - 14"

Part Number	Wt. Per 100	Ctn.	Std. Pkg.
BJ-0507-14	65	10	50
BJ-1012-14	85	10	50
BJ-1520-14	123	5	25
BJ-2530-14	175	2	10
BJ-3540-14	237	2	10
BJ-5060-14	346	-	5

### AX8 FITTING

Part Number	Trade Size Inches	Dim. in In.		Wt. Per. 100	Std. Pkg.
		A Max. Dia.	B Overall Length		
AX8-50	1/2	2	10-1/4	270	10
AX8-75	3/4	2-1/4	10-3/8	320	10
AX8-100	1	2-5/8	10-5/8	440	5
AX8-125	1-1/4	3-1/8	10-5/8	520	5
AX8-150	1-1/2	3-1/2	10-5/8	720	5
AX8-200	2	4	11-1/8	1030	2
AX8-250	2-1/2	4-1/2	11-1/2	1170	2
AX8-300	3	5-3/8	12-1/8	1550	2
AX8-350	3-1/2	6	12-1/4	1950	1
AX8-400	4	6-5/8	12-3/8	2400	1
AX8-500	5	8	13-1/2	3300	1

### BONDING JUMPER - 24"

Part Number	Wt. Per 100	Ctn.	Std. Pkg.
BJ-0507-24	68	10	50
BJ-1012-24	91	5	25
BJ-1520-24	137	5	25
BJ-2530-24	188	2	10
BJ-3540-24	259	2	10
BJ-5060-24	376	-	5

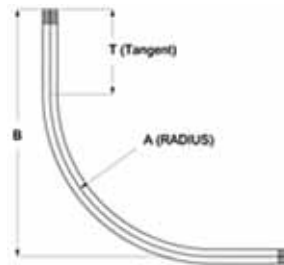
# STEEL PIPE

## GALVANIZED 90° SPECIAL RADIUS SWEEPS



File No. E226472

- Dimensional data is for reference only
- NPT thread with end-cap on each end
- Available in GRC, Aluminum, PVC Coated and Stainless Steel
- Galvanized Rigid Sweeps meet UL6 and ANSI C80.1
- Aluminum Rigid Sweeps meet UL6A and ANSI C80.5
- Stainless Steel Rigid Sweeps meet UL6A



A	12" RADIUS			15" RADIUS			18" RADIUS		
Size	B	T	Wt.	B	T	Wt.	B	T	Wt.
1/2	21	10	2.6	24	10	3.0	28	11	3.6
3/4	21	10	3.5	24	10	4.0	28	11	4.7
1	21	10	5.0	24	10	6.0	28	11	6.0
1-1/4	21	10	6.0	24	10	7.0	28	11	9.0
1-1/2	21	10	8.0	24	10	6.3	28	11	8.0
2	21	10	10.0	24	10	12.0	28	11	15.2
2-1/2	21	10	16.0	24	10	19.0	28	11	24.3
3	-	-	-	24	10	25.0	28	11	32.9
3-1/2	-	-	-	-	-	-	28	11	39.0
4	-	-	-	-	-	-	28	11	45.5

A	24" RADIUS			30" RADIUS			36" RADIUS		
Size	B	T	Wt.	B	T	Wt.	B	T	Wt.
1/2	35	11	4.1	41	11	4.9	47	11	5.5
3/4	35	11	5.5	41	11	6.5	47	11	7.3
1	35	11	8.0	41	11	9.0	47	11	10.0
1-1/4	35	11	11.0	41	11	12.0	47	11	14.0
1-1/2	35	11	7.7	41	11	9.6	47	11	11.0
2	35	11	17.5	41	11	21.0	47	11	23.3
2-1/2	35	11	28.0	41	11	33.6	47	11	37.3
3	35	11	38.0	41	11	45.6	47	11	50.7
3-1/2	35	11	45.0	41	11	54.0	47	11	60.0
4	35	11	52.5	41	11	63.0	47	11	70.0
5	-	-	-	41	11	84.0	47	11	93.3
6	-	-	-	-	-	-	48	12	123.3

A	42" RADIUS			48" RADIUS			60" RADIUS		
Size	B	T	Wt.	B	T	Wt.	B	T	Wt.
1/2	54	12	6.2	60	12	6.9	72	12	8.3
3/4	54	12	8.2	60	12	9.1	72	12	11.0
1	54	12	12.0	60	12	13.0	72	12	15.0
1-1/4	54	12	16.0	60	12	18.0	72	12	22.0
1-1/2	54	12	19.0	60	12	15.0	72	12	25.0
2	54	12	26.3	60	12	29.2	72	12	37.0
2-1/2	54	12	42.0	60	12	46.7	72	12	56.0
3	54	12	57.0	60	12	63.3	72	12	76.0
3-1/2	54	12	67.5	60	12	75.0	72	12	90.0
4	54	12	78.8	60	12	87.5	72	12	105.0
5	54	12	105.0	60	12	116.7	72	12	140.0
6	54	12	140.0	60	12	156.0	72	12	185.0

STEEL PIPE

**Part Number Ordering Matrix Begins On Page 90**

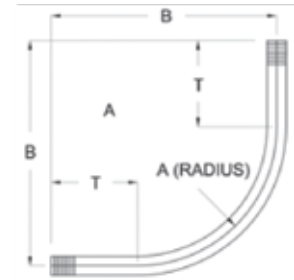
**Please Note: Custom Radius are available on request.**



File No. E226472

## GALVANIZED RIGID FACTORY ELBOWS

- Dimensional data is for reference only
- NPT thread with end-cap on each end
- Available in GRC, Aluminum, PVC Coated and Stainless Steel
- Galvanized Rigid Elbows meet UL6 and ANSI C80.1
- Aluminum Rigid Elbows meet UL6A and ANSI C80.5
- Stainless Steel Rigid Elbows meet UL6A



### 90° ELBOWS

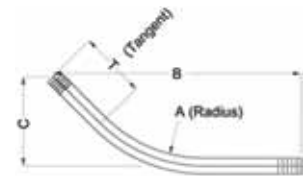
Description	Weight Each	Box Qty.	Dimensions			Cut Length
			A	B	T	
1/2" X 90°	1.0	50	4.0	6.9	2.9	12.0
3/4" X 90°	1.3	50	4.5	7.4	2.9	12.9
1" X 90°	2.1	25	5.8	8.7	3.0	15.0
1-1/4" X 90°	3.4	20	7.3	10.6	3.3	18.0
1-1/2" X 90°	4.8	15	8.3	11.9	3.6	20.3
2" X 90°	7.3	10	9.5	13.8	4.3	23.4
2-1/2" X 90°	13.9	50	10.5	15.8	5.3	27.0
3" X 90°	21.3	35	13.0	18.8	5.8	32.0
3-1/2" X 90°	27.0	35	15.0	21.8	6.8	37.0
4" X 90°	36.8	35	16.0	23.1	7.1	39.3
5" X 90°	70.0	bulk	24.0	35.2	11.2	60.0
6" X 90°	111.8	bulk	30.0	42.6	12.6	72.3

Dimensions listed in inches unless otherwise noted.

### 45° ELBOWS

Description	Weight Each	Box Qty.	Dimensions				Cut Length
			A	B	C	T	
1/2" X 45°	0.7	50	4.0	7.0	2.9	1.9	8.0
3/4" X 45°	0.9	50	4.5	7.4	3.0	2.0	9.0
1" X 45°	1.6	25	5.8	9.5	4.0	2.7	10.0
1-1/4" X 45°	2.9	20	7.3	13.1	5.4	4.3	15.5
1-1/2" X 45°	3.8	15	8.3	14.0	5.8	4.3	16.5
2" X 45°	5.4	10	9.5	16.1	6.6	5.4	18.5
2-1/2" X 45°	10.8	50	10.5	19.0	7.9	6.8	22.5
3" X 45°	14.7	35	13.0	20.5	8.5	6.7	23.5
3-1/2" X 45°	19.5	35	15.0	22.8	9.5	7.1	26.0
4" X 45°	29.3	35	16.0	29.2	12.1	10.5	33.5
5" X 45°	50.2	bulk	24.0	36.1	15.0	11.2	43.0
6" X 45°	77.6	bulk	30.0	42.9	17.8	12.8	48.0

Dimensions listed in inches unless otherwise noted.



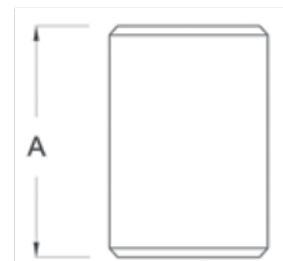
## GALVANIZED RIGID COUPLINGS

- Dimensions listed in inches unless otherwise noted
- Couplings manufactured to UL specifications



File No. E226472

Size	Weight Each	Box Qty.	A Length
1/2"	0.12	100	1.63
3/4"	0.17	50	1.64
1"	0.29	30	1.97
1-1/4"	0.38	25	2.03
1-1/2"	0.53	25	2.06
2"	0.70	20	2.13
2-1/2"	1.80	24	2.19
3"	2.26	16	3.31
3-1/2"	3.50	12	3.41
4"	3.13	10	3.52
5"	4.75	5	3.95
6"	7.65	3	4.25

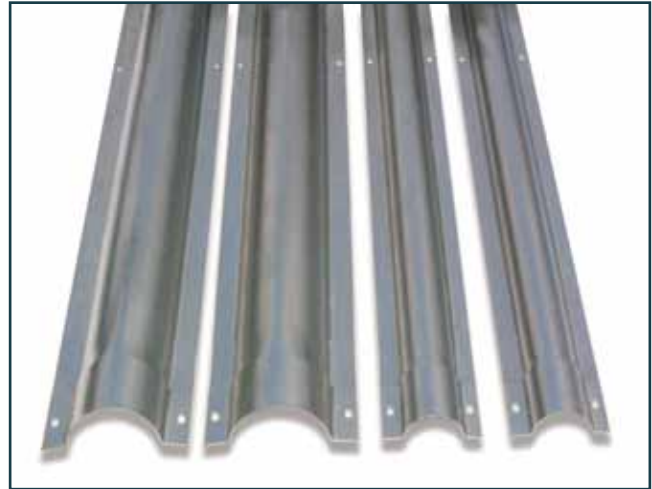


**Part Number Ordering Matrix Begins On Page 90**

# SPLIT STEEL

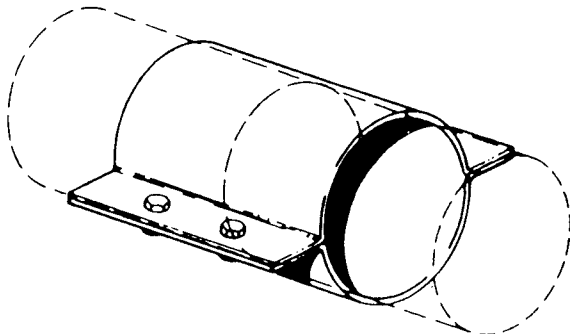
## VIKIMATIC 14 GAUGE SPLIT STEEL

Split Steel Duct is available in 14 gauge galvanized steel, 10' length. This is a two piece, flanged trough, with belled ends. Each 10' length includes 10 sets of bolts, nuts and lock washers.



Description	Nominal		Length	Lbs./100'
	I.D.	O.D.		
2-1/2" 14 Ga. Galv. Steel	2.500	2.625	10'	275
4" 14 Ga. Galv. Steel	4.000	4.125	10'	430

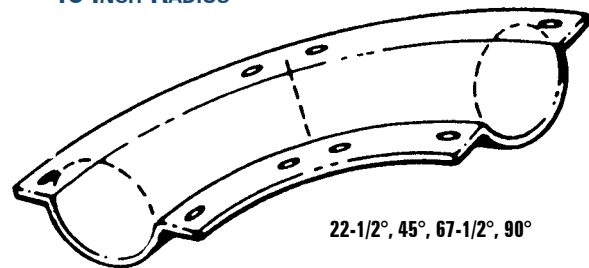
SPLIT STEEL



### 14 GAUGE SLEEVE COUPLING

Size	Description	Weight (2 pcs.)
2-1/2"	0.75 Galv. Steel	2.39
4"	0.75 Galv. Steel	3.76

### 18 INCH RADIUS



### 14 GAUGE ELBOW

Size	Description	Weight (2 pcs.)
2-1/2"	90° x 2'	8#
4"	90° x 2'	12#

**Part Number Ordering Matrix Begins On Page 90**



## VIKIMATIC CUT STEEL

Each 10' length includes 2 piece coupling set, H-Strips and 4 sets of bolts, nuts and lock washers.

- H-Strips: Sch 40. 1/4" opening. 2 pieces per strip in 10' sections.
- All Hot Galvanized Steel
- Slotted Couplings make expansion joints and contraction is allowed for in each 10' section

### CUT STEEL

Description	Nominal		Length	Lbs./100'
	I.D.	O.D.		
2-1/2" Sch. 40 Cut Steel	2.500	2.875	10'	600
4" Sch. 40 Cut Steel	4.000	4.500	10'	1,100
6" Sch. 40 Cut Steel	6.000	6.625	10'	1,900
2-1/2" Steel Coupling	2.875	3.250	5'	3.5 lbs. Ea
4" Steel Coupling	4.500	5.000	5'	5 lbs. Ea
6" Steel Coupling	6.625	7.187	5'	6 lbs. Ea

### CUT STEEL BENDS

Size	Description
2-1/2"	11-1/4° x 3'
2-1/2"	22-1/2° x 3'
2-1/2"	45° x 3'
2-1/2"	90° x 3'
4"	11-1/4° x 3'
4"	22-1/2° x 3'
4"	45° x 3'
4"	90° x 3'

Each bend includes 1 coupling.



## VIKIMATIC SPLIT HEAVY-WALL STEEL

- Available in Black Iron or Galvanized
- This is a staggered assembly, overlapping in the middle
- Each 10' length includes 23 sets of bolts, nuts, and lock washers
- Additional sizes available per customer's request
- Recommended for underground applications

Description	Nominal		Length	Lbs./100'
	I.D.	O.D.		
2-1/2" Heavy Wall	2.375	2.875	10'	741
4" Heavy Wall	3.875	4.500	10'	1572



**Part Number Ordering Matrix Begins On Page 90**

# INNERDUCT

## INNERDUCT

Innerduct is manufactured from High Density Polyethylene in accordance with the specifications of ASTM F-2160 and/or NEMA TC 7. Other dimensional requirements may be acceptable upon request.

Innerduct offers excellent characteristics that make it ideal, including:

- High strength to endure heavy external loads
- Its flexibility, toughness, light weight, and impact resistance help lower installation cost
- Resist corrosive chemicals and aggressive soils
- Long term strength for increased life and performance
- Moisture proof and watertight
- Coils provide for fewer joints and lower installation costs
- Does not support biological growth
- Color-coded for easy identification

To decrease costly shoring and hazardous working conditions the duct can be assembled above the ditch, plowed in, buried in open ditches or pulled through existing conduit.

Innerduct shall be joined by either heat fusion or mechanical fittings. Innerduct is offered in various sizes and wall thickness, some of which are covered in the charts on next pages. The duct may be ordered in continuous coils, with or without steel reels, or produced in straight lengths up to 50 feet.

Vikimatic stocks a vast supply of Innerduct to meet most applications. Special orders are also accepted with usually one of the quickest turnaround in the business. Less than truckload orders are shipped on common carriers that offer cost effective and timely service. Hot Shot services for quick delivery needs are also available.



### tidbit

Most common innerduct colors are orange and black. Other options are blue, grey, green, yellow, white, red, and striped.

## O.D. CONTROLLED (SDR) INNERDUCT DIMENSIONAL SPECIFICATIONS

The following table represents the specifications of ASTM F-2160 and NEMA TC-7 for O.D. controlled conduit. 1" - 6" sizes.

Sizes	Wall Thickness	Nominal O.D.	Nominal I.D.	Minimum Wall	Nominal Lbs/Ft	Standard Coil/Reels Lengths	Standard Truck	Steel Reel Size - FxTxD*
1"	SDR 9	1.315"	1.00"	.146"	0.23	500'	117000'	Coils
	SDR 9	1.315"	1.07"	.120"	0.20	5000'	80000'	70x38x30
	SDR 13.5	1.315"	1.12"	.097"	0.17	8000'	96000'	84x43x36
1-1/4"	SDR 9	1.660"	1.26"	.184"	0.37	500'	78000'	Coils
	SDR 11	1.660"	1.34"	.151"	0.31	2000'	32000'	70x28x30
	SDR 13.5	1.660"	1.39"	.123"	0.26	5000'	70000'	84x42x36
	SDR 15.5	1.660"	1.44"	.017"	0.23	8000'	96000'	96x43x30
1-1/2"	SDR 9	1.900"	1.45"	.211"	0.49	500'	36000'	Coils
	SDR 11	1.900"	1.53"	.173"	0.41	4000'	56000'	84x42x36
	SDR 13.5	1.900"	1.60"	.141"	0.34	6000'	72000'	96x45x36
2"	SDR 9	2.375"	1.81"	.264"	0.76	500'	24500'	Coils
	SDR 11	2.375"	1.91"	.216"	0.64		18000'	
	SDR 13.5	2.375"	2.00"	.176"	0.53	2500'	35000'	84x42x36
	SDR 15.5	2.375"	2.04"	.153"	0.47	4000'	48000'	96x45x36
	SDR 17	2.375"	2.07"	.140"	0.43			
2-1/2"	SDR 11	2.875"	2.32"	.261"	0.94	1500'	18000'	96x38x55
	SDR 13.5	2.875"	2.42"	.213"	0.78			
3"	SDR 11	3.500"	2.86"	.318"	1.39	500'	12000'	Coils
	SDR 13.5	3.500"	2.98"	.259"	1.15	1000'	12000'	96x38x55
	SDR 15.5	3.500"	3.04"	.226"	1.02	1250'	15000'	96x45x55
4"	SDR 9	4.500"	3.50"	.500"	2.77	500' 550' 750'	6000'	Coils 96x45x70 102x45x70
	SDR 11	4.500"	3.68"	.409"	2.29		6600'	
	SDR 13.5	4.500"	3.83"	.333"	1.90		9000'	
	SDR 15.5	4.500"	3.92"	.290"	1.68			
5"	SDR 11	5.563"	4.55"	.506"	3.50	500'	4000'	114x45x80
	SDR 13.5	5.563"	4.73"	.412"	2.91	500'		
6"***	SDR 11	6.625"	5.42"	.602"	4.97	450'	3600'	120x45x84
	SDR 13.5	6.625"	5.64"	.491"	4.13	450'		

\*Flange x Internal Traverse x Drum (in inches)

\*\* Coiled duct truckloads may require special state permits.

Other reel and coil sizes are available upon request.

**Part Number Ordering Matrix Begins On Page 90**

## I.D. CONTROLLED (SIDR) INNERDUCT DIMENSIONAL SPECIFICATIONS

The following table represents the dimensional specifications of ASTM D-2239, and ASTM F-2160 for I.D.

Sizes	Wall Thickness	Nominal O.D.	Nominal I.D.	Minimum Wall	Nominal Lbs/Ft	Standard Coil/Reels Lengths	Standard Truck	Steel Reel Size - FxTxD*
1"	SIDR 11.5	1.213"	1.049"	.091"	0.15	5000'	80000'	70x38x30
	SIDR 15	1.189"	1.049"	.070"	0.11	8000'	96000'	84x43x36
1-1/4"	SIDR 9	1.690"	1.380"	.153"	0.33	5000'	70000'	84x42x36
	SIDR 11.5	1.627"	1.380"	.120"	0.25	8000'	96000'	96x43x30
1-1/2"	SIDR 11.5	1.890"	1.610"	.140"	0.34	4000'	56000'	84x42x36
	SIDR 15	1.825"	1.610"	.107"	0.26	6000'	72000'	96x45x36
2"	SIDR 11.5	2.427"	2.067"	.180"	0.56	2500'	35000'	84x42x36
4"	SIDR 11.5	4.750"	4.026"	.350"	2.12	500'	6000'	96x45x70
						700'	8400'	102x45x70

\*Flange x Internal Traverse x Drum (in inches)

## RIBBED HDPE INNERDUCT SPECIFICATIONS

Manufactured to specifications of ASTM F2160. It has a lower coefficient of friction when compared to smooth duct and is available in a wide variety of colors, stripes and sizes. See table below for specifications.

Sizes	Wall Thickness	Nominal O.D.	Nominal I.D.	Minimum Wall	Nominal Lbs/Ft	Standard Coil/Reels Lengths	Standard Truck	Steel Reel Size - FxTxD*
1"	13.5	1.315"	1.11"	.097"	.17	5000'	80000'	70x38x30
1-1/4"	13.5	1.660"	1.41"	.123"	.26	5000'	70000'	84x42x36
1-1/2"	13.5	1.900"	1.61"	.141"	.34	4000'	56000'	84x42x36
2"	13.5	2.375"	2.02"	.176"	.53	2500'	35000'	84x42x36
3"	13.5	3.500"	2.97"	.259"	1.15	1000'	12000'	96x38x55
4"	13.5	4.500"	3.82"	.333"	1.90	550'	6600'	96x45x70

\*Flange x Internal Traverse x Drum (in inches)

**Part Number Ordering Matrix Begins On Page 90**

## SCHEDULE 40 AND SCHEDULE 80 O.D. CONTROLLED INNERDUCT SPECIFICATIONS

The following table represents the specifications of ASTM F-2160 for O.D. Controlled.

Sizes	Wall Thickness	Nominal O.D.	Nominal I.D.	Minimum Wall	Nominal Lbs/Ft	Standard Coil/Reels Lengths	Standard Truck	Steel Reel Size - FxTxD*
1"	SCH 40	1.315"	1.04"	.133"	0.22	5000'	80000'	70x38x30
	SCH 80	1.315"	0.95"	.179"	0.28	8000'	96000'	84x43x36
1-1/4"	SCH 40	1.660"	1.38"	.140"	0.29	5000'	70000'	84x42x36
	SCH 80	1.660"	1.27"	.191"	0.39	8000'	96000'	96x43x30
1-1/2"	SCH 40	1.900"	1.61"	.145"	0.35	4000'	56000'	84x42x36
	SCH 80	1.900"	1.50"	.200"	0.47	6000'	72000'	96x45x36
2"	SCH 40	2.375"	2.06"	.154"	0.47	2500'	35000'	84x42x36
	SCH 80	2.375"	1.93"	.218"	0.64	4000'	48000'	96x45x36
2-1/2"	SCH 40	2.875"	2.46"	.203"	0.75	1500'	18000'	96x38x55
	SCH 80	2.875"	2.32"	.276"	0.99	1500'	18000'	96x38x55
3"	SCH 40	3.500"	3.06"	.216"	0.98	1000'	12000'	96x38x55
	SCH 80	3.500"	2.90"	.300"	1.32	1250'	15000'	96x45x55
4"	SCH 40	4.500"	4.02"	.237"	1.39	20' & 40'	16240'	Sticks Only
	SCH 80	4.500"	3.82"	.337"	1.92	550'	6600'	96x45x70
5"	SCH 40	5.563"	5.04"	.258"	1.89	20' & 40'	12160'	Sticks Only
	SCH 80	5.563"	4.81"	.375"	2.69	20' & 40'	12160'	Sticks Only
6"	SCH 40	6.625"	6.03"	.280"	2.44	20' & 40'	7280'	Sticks Only
	SCH 80	6.625"	5.70"	.432"	3.67	20' & 40'	7280'	Sticks Only
8"	SCH 40	8.625"	7.94"	.322"	3.68	40' & 50'	4480'	Sticks Only
10"	SCH 40	10.75"	9.97"	.365"	5.21	40' & 50'	2880'	Sticks Only
12"	SCH 40	12.75"	11.89"	.406"	6.90	40' & 50'	2240'	Sticks Only

\*Flange x Internal Traverse x Drum (in inches)  
Other reel and coil sizes are available upon request.

**Part Number Ordering Matrix  
Begins On Page 90**

## HDPE LARGE DIAMETER CONDUIT

Available in 20', 40' and 50' lengths. Meets ASTM F 2160 Specifications.

O.D. Controlled.

Pipe Size	Nominal O.D.	Min. Wall	SDR 9 Average I.D.	Weight (lbs/ft.)	Min. Wall	SDR 11 Average I.D.	Weight (lbs/ft.)
4"	4.500	0.500	3.44	2.74	0.409	3.63	2.29
5"	5.563	0.618	4.25	4.18	0.506	4.49	3.51
6"	6.625	0.736	5.06	5.93	0.602	5.34	4.97
8"	8.625	0.958	6.59	10.05	0.784	6.96	8.43
10"	10.750	1.194	8.21	15.62	0.977	8.67	13.09
12"	12.750	1.417	9.74	21.97	1.159	10.29	18.41
14"	14.000	1.556	10.70	26.49	1.273	11.30	22.20

Pipe Size	Nominal O.D.	Min. Wall	SDR 13.5 Average I.D.	Weight (lbs/ft.)	Min. Wall	SDR 17 Average I.D.	Weight (lbs/ft.)
4"	4.500	0.333	3.79	1.91	0.265	3.93	1.54
5"	5.563	0.412	4.68	2.91	0.327	4.86	2.35
6"	6.625	0.491	5.58	4.13	0.390	5.79	3.34
8"	8.625	0.639	7.27	7.00	0.507	7.54	5.66
10"	10.750	0.796	9.06	10.88	0.632	9.40	8.79
12"	12.750	0.944	10.74	15.30	0.750	11.16	12.36
14"	14.000	1.037	11.80	18.45	0.824	12.25	14.90

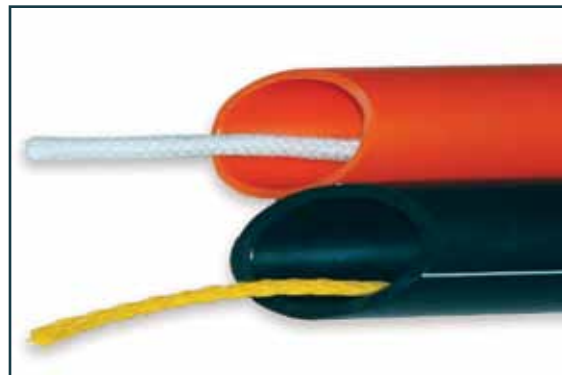
## PRE-INSTALLED PULL TAPE/PULL ROPE

HDPE Innerduct is available with pull tape or pull rope installed. The following table represents the characteristics listed by the manufacturer of the most popular applications for both rope and tape.

Product	Material	Approximate Width	Tensile Strength	Sequential Footage Markings	Pre-lubricated
Rope	Polypropylene	1/4"	1250 lbs.	No	No
Non-Sequential Tape	Polyester	1/2"	1130 lbs.	No	No
1250 lb Pull Tape	Polyester	1/2"	1250 lbs.	Yes	Yes
1800 lb Pull Tape	Polyester	5/8"	1800 lbs.	Yes	Yes
2500 lb Pull Tape	Polyester	3/4"	2500 lbs.	Yes	Yes



HDPE Conduit with Pull Tape



HDPE Conduit with Pull Rope

## PRODUCT SPECIFICATION & TECHNICAL INFORMATION INNERDUCT

The previous innerduct products are certified to be manufactured from select high density polyethylene copolymers (see typical properties below) and meet specifications set forth in ASTM D-3350, ASTM F-2160, and NEMA TC-7. The high density polyethylene copolymers are selected specifically for use in telecommunications, electrical/power or telephone ducting applications, while keeping in mind the required properties to balance stiffness, ESCR and molecular weight to provide toughness and crush strength.

Typical Properties (1)	English	SI Units	ASTM Method
Density	-	0.948 g/cc	D 4883
Melt Index <sup>2</sup>	-	0.22 g/10 min	D 1238
Tensile Strength			
@ Yield (2 in/min)	3400 psi	23.4 MPa	D 638
@ Break (2 in/min)	4500 psi	31.0 MPa	D 638
Elongation @ Break (2 in/min)	>800%	>800%	D 638
Flexural Modulus <sup>3</sup>	130,000 psi	897 MPa	D 790
Hardness (Shore D)	68	68	D 2240
Deflection Temperature @66 psi	156°F	69°C	D 648
Brittleness Temperature	<-180°F	<-118°C	D 746
OIT @ 200°C	>20 min.	>20 min.	D 3895 Modified <sup>4</sup>
Environmental Stress Crack Resistance <sup>5</sup>	>96 hrs	>96 hrs	D 1693
Environmental Stress Crack Resistance <sup>6</sup>	>192 hrs	>192 hrs	D 1693
Cell Classification	335430A	335430A	D 3350

(1) Typical properties will vary within specification limits

(2) 190°C / 2160g

(3) 2% Secant-Method 1

(4) Excludes Copper Mesh

(5) Condition B, 10% Igepal, F10

(6) Condition C, 100% Igepal, F20

**Part Number Ordering Matrix  
Begins On Page 90**

### fact

SDR or Standard Dimension Ratio relates the outside diameter (OD) of the duct to its wall thickness (t), so  $SDR = OD / t$ .

SIDR or Standard Inside Dimension Ratio relates the inside diameter (ID) of the duct to its wall thickness (t), so  $SIDR = ID / t$ .

# INNERDUCT

## PLENUM DUCT

Plenum Duct is a flexible, non-metallic, corrugated raceway used for effective cable and fiber optic management within interior raceways.

Plenum is offered in 1", 1-1/4" and 1-1/2", with pre-installed pull tape for easy cable installation. The standard color is orange and is offered in a variety of other colors. Sequential marked footage is standard. Custom options, such as multiple colors per reel and Slit Duct, are also available.

Future growth or maintenance of your interior cable system is made easy with Plenum Duct.

### PLENUM REELS

Size	Color	Nominal I. D.	Nominal O. D.	Pull Tape	Reel Size	Reel Length (ft.)
1"	Orange	1.049"	1.35"	900 lb	36-36-21	500
1"	Orange	1.049"	1.35"	900 lb	36-36-21	1000
1"	Orange	1.049"	1.35"	900 lb	44-36-21	2000
1"	Orange	1.049"	1.35"	900 lb	48-41-24	2800
1"	Orange	1.049"	1.35"	900 lb	66-41-24	5000
1"	Orange	1.049"	1.35"	900 lb	72-41-24	6000
1"	Orange	1.049"	1.35"	900 lb	82-41-24	9000
1-1/4"	Orange	1.25"	1.56"	900 lb	36-36-21	700
1-1/4"	Orange	1.25"	1.56"	900 lb	44-36-21	1500
1-1/4"	Orange	1.25"	1.56"	900 lb	48-41-24	1800
1-1/4"	Orange	1.25"	1.56"	900 lb	66-41-24	3400
1-1/4"	Orange	1.25"	1.56"	900 lb	72-41-24	4000
1-1/4"	Orange	1.25"	1.56"	900 lb	82-41-24	6000
1-1/2"	Orange	1.57"	1.80"	900 lb	36-36-21	500
1-1/2"	Orange	1.57"	1.80"	900 lb	44-36-21	700
1-1/2"	Orange	1.57"	1.80"	900 lb	48-41-24	1000
1-1/2"	Orange	1.57"	1.80"	900 lb	66-41-24	2500
1-1/2"	Orange	1.57"	1.80"	900 lb	72-41-24	3500
1-1/2"	Orange	1.57"	1.80"	900 lb	82-41-24	5000



### PLENUM COILS

Size	Color	Nominal I. D.	Nominal O. D.	Pull Tape	Coil Length (ft.)
1"	Orange	1.049"	1.35"	900 lb	Up to 500
1-1/4"	Orange	1.25"	1.56"	900 lb	Up to 500
1-1/2"	Orange	1.57"	1.80"	900 lb	Up to 350

### TEST RESULTS (USING TEST METHOD UL-2024)

Properties	Value
Smoke peak optical	0.02
Smoke average optical density	0.01
Max. flame spread distance (ft.)	1.5'
Max. flame temperature	554° F

**Part Number Ordering Matrix Begins On Page 90**



## CORRUGATED HDPE DUCT

Corrugated HDPE is manufactured from High Density Polyethylene (HDPE) and is intended to be placed inside of existing innerduct. It's ideal for pulls under 1000 ft. and is designed to reduce surface contact when pulling cable. This lightweight product offers maximum flexibility, and allows for installation in small or restricted areas. Corrugated duct is available in 1", 1-1/4" and 1-1/2". The standard color is orange but is offered in a variety of other colors. Sequential marked footage is standard. Custom options, such as multiple colors per reel and Slit Duct, are also available.

### CORRUGATED HDPE REELS

Size	Color	Nominal I. D.	Nominal O. D.	Pull Tape	Reel Size	Reel Length (ft.)
1"	Orange	1.049"	1.35"	900 lb	36-36-21	500
1"	Orange	1.049"	1.35"	900 lb	36-36-21	1000
1"	Orange	1.049"	1.35"	900 lb	44-36-21	2000
1"	Orange	1.049"	1.35"	900 lb	48-41-24	2800
1"	Orange	1.049"	1.35"	900 lb	66-41-24	5000
1"	Orange	1.049"	1.35"	900 lb	72-41-24	6000
1"	Orange	1.049"	1.35"	900 lb	82-41-24	9000
1-1/4"	Orange	1.25"	1.56"	900 lb	36-36-21	700
1-1/4"	Orange	1.25"	1.56"	900 lb	44-36-21	1500
1-1/4"	Orange	1.25"	1.56"	900 lb	48-41-24	1800
1-1/4"	Orange	1.25"	1.56"	900 lb	66-41-24	3400
1-1/4"	Orange	1.25"	1.56"	900 lb	72-41-24	4000
1-1/4"	Orange	1.25"	1.56"	900 lb	82-41-24	6000
1-1/2"	Orange	1.57"	1.80"	900 lb	36-36-21	500
1-1/2"	Orange	1.57"	1.80"	900 lb	44-36-21	700
1-1/2"	Orange	1.57"	1.80"	900 lb	48-41-24	1000
1-1/2"	Orange	1.57"	1.80"	900 lb	66-41-24	2500
1-1/2"	Orange	1.57"	1.80"	900 lb	72-41-24	3500
1-1/2"	Orange	1.57"	1.80"	900 lb	82-41-24	5000

### CORRUGATED HDPE COILS

Size	Color	Nominal I. D.	Nominal O. D.	Pull Tape	Coil Length (ft.)
1"	Orange	1.049"	1.35"	900 lb	Up to 500
1-1/4"	Orange	1.25"	1.56"	900 lb	Up to 500
1-1/2"	Orange	1.57"	1.80"	900 lb	Up to 350



**Part Number Ordering Matrix Begins On Page 90**

# INNERDUCT

## RISER DUCT

Riser Duct is a flexible, non-metallic, corrugated raceway used for effective cable and fiber optic management within interior raceways. Riser Duct meets UL-(1666) standards safety test for flame propagation height of electrical and optical fiber cables installed vertically in shafts. Meets UL-2024 standards for safety optical fiber cable raceway. Riser Duct is offered in 1", 1-1/4" and 1-1/2", with pre-installed pull tape for easy cable installation. The standard color is orange and is offered in a variety of other colors. Sequential marked footage is standard. Custom color options are available.

### RISER REELS

Size	Color	Nominal I. D.	Nominal O. D.	Pull Tape	Reel Size	Reel Length (ft.)
1"	Orange	1.049"	1.35"	900 lb	36-36-21	500
1"	Orange	1.049"	1.35"	900 lb	36-36-21	1000
1"	Orange	1.049"	1.35"	900 lb	44-36-21	2000
1"	Orange	1.049"	1.35"	900 lb	48-30-24	2800
1"	Orange	1.049"	1.35"	900 lb	66-41-24	5000
1"	Orange	1.049"	1.35"	900 lb	72-41-24	6000
1"	Orange	1.049"	1.35"	900 lb	82-41-24	9000
1-1/4"	Orange	1.25"	1.56"	900 lb	36-36-21	700
1-1/4"	Orange	1.25"	1.56"	900 lb	44-36-21	1000
1-1/4"	Orange	1.25"	1.56"	900 lb	48-41-24	1800
1-1/4"	Orange	1.25"	1.56"	900 lb	66-41-24	3400
1-1/4"	Orange	1.25"	1.56"	900 lb	72-41-24	4000
1-1/4"	Orange	1.25"	1.56"	900 lb	82-41-24	6000
1-1/2"	Orange	1.57"	1.80"	900 lb	36-36-21	500
1-1/2"	Orange	1.57"	1.80"	900 lb	44-36-21	700
1-1/2"	Orange	1.57"	1.80"	900 lb	48-30-24	1000
1-1/2"	Orange	1.57"	1.80"	900 lb	66-41-24	2500
1-1/2"	Orange	1.57"	1.80"	900 lb	72-41-24	3500
1-1/2"	Orange	1.57"	1.80"	900 lb	82-41-24	5000



### RISER COILS

Size	Color	Nominal I. D.	Nominal O. D.	Pull Tape	Coil Length (ft.)
1"	Orange	1.049"	1.35"	900 lb	Up to 500
1-1/4"	Orange	1.25"	1.56"	900 lb	Up to 500
1-1/2"	Orange	1.57"	1.80"	900 lb	Up to 350

### TEST RESULTS (USING TEST METHOD UL-2024)

Properties	Value
Smoke peak optical	0.02
Smoke average optical density	0.01
Max. flame spread distance (ft.)	1.5'
Max. flame temperature	554° F

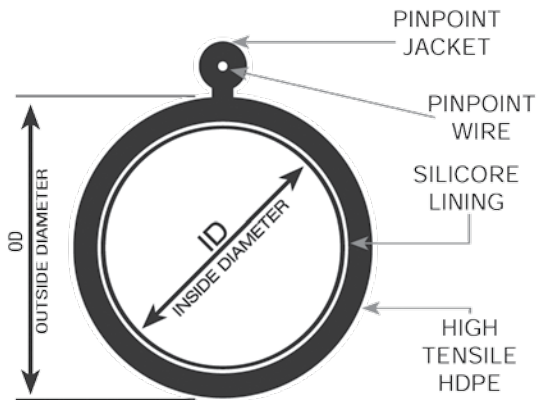
**Part Number Ordering Matrix Begins On Page 90**

## PINPOINT® LOCATE BURIED DUCT

PINPOINT® is a proven, reliable method for locating buried duct. The PINPOINT® wire is encased in HDPE providing a corrosion-resistant conductor. Ideal for plow, open trench or directional bores. It is extremely functional at a wide range of frequencies, compatible with industry standard locating equipment. No special tools are required to couple the duct and the PINPOINT® wire - current coupling methods can be utilized.

### Features & Benefits

- Wire is 18 AWG copper clad 30.041 ohm/1,000 ft 68°F
- Size ranges from 1/2" (13mm) to 2" (51mm)
- Available Smooth in/Smooth out and Smooth out/Ribbed in
- Available with Silicore permanent lining
- No special tools required
- Sequential markings in feet or meters
- Easily connected with standard couplers



PINPOINT® duct is available on steel reels or coils.

- PINPOINT® is available in DURATHANE fire retardant material
- PINPOINT® is available with a variety of ropes and tapes
- A full line of accessories is available for easier and faster duct installation, including splice kits and web slitters

**Part Number Ordering Matrix Begins On Page 90**

## FUTUREPATH® FIBER OPTIC TECHNOLOGY

FuturePath® can be customized to meet your specific project needs; be it 7-way, 5-way, 4-way, 3-way or 2-way. FuturePath® can also be packaged as MicroDucts in an oversheath configuration for aerial, conduit, or buried applications to meet your specific needs.

### Versatility

Fiber technology is constantly changing. By installing only the fibers you need today, you have the opportunity to utilize the latest in fiber technology as it becomes available in either a MicroCable or Blown Fiber configuration.

### Efficiency

By reducing wasted conduit space, MicroTechnology allows maximum utilization of all current and future telecommunications infrastructure.

### Enhanced Profitability

MicroTechnology allows maximum cost-effectiveness and greatest return on investment for existing and future right-of-way expenditures.

### Network Expansion

By placing several MicroDucts into the larger empty ducts (or a few MicroDucts into occupied ducts), the concerns of future expansion are addressed. Future build-outs will not interrupt existing services.

### Enhanced Utilization of Capital

MicroCable comes in sizes ranging from a 2 fiber to 144 fiber count cable. Micro fiber optic cable costs are generally lower. By using the lower fiber count cable, the upfront cost is dramatically less. You would only install the MicroCable as needed to satisfy a customer's present requirements for capacity. That way, you can keep your investment very closely tied to your present cash flow.

### How it can be used...

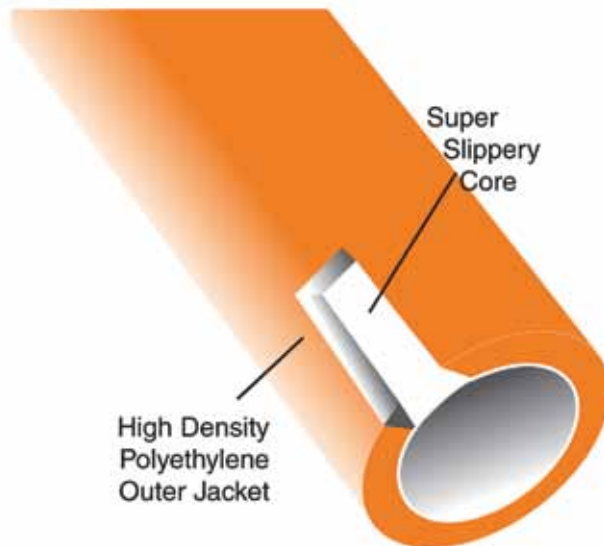
Your needs are changing and the world is changing. You have to be able to adjust with these changes and our products allow you to do that. Today's primary markets (Telecom, CATV and Power Utilities) need a future path for growth.



## SILICORE®

### SUPER SLICK PERMANENT LINING

SILICORE® is co-extruded with our tough, durable High Density Polyethylene (HDPE) jacket. SILICORE® ducts provide complete cable protection before, during and after installation. The ultra slick permanent lining remains for future repairs, replacements or upgrades.



#### Features & Benefits

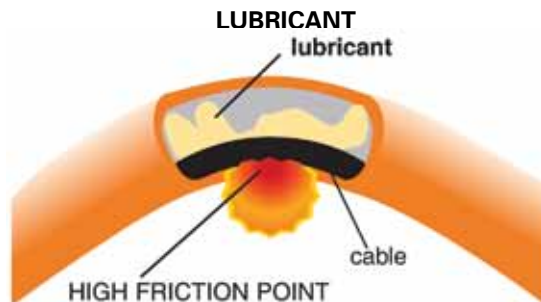
- Easier cable installation
- Reduced coefficient of friction
- Flexibility for growth
- Cost effective repairs or upgrades
- Can be extruded with most A-D Technologies product up to and including 3"

SILICORE® Smoothwall      SILICORE® Ribbed      SILICORE® Corrugated



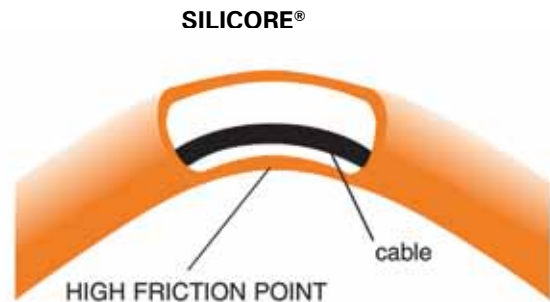
Solid Polymer  
Super Slick Permanent Lining

#### How SILICORE® WORKS



Heat builds, lubricant dissipates causing direct contact between cable and HDPE duct.

Installation friction increases causing damage where the cable contacts the duct.



Cable remains in contact with the permanent SILICORE® lining. Reduced burn through, low coefficient of friction, and easier, longer cable pulls!

## ABOUT MAXCELL®

MaxCell® is the only flexible fabric innerduct system designed specifically for the network construction industry.

The unique fabric construction allows MaxCell to conform to the shape of cables placed within, greatly reducing the wasted space associated with rigid innerduct.

Today's network owners and builders use MaxCell to increase their cable density by as much as 300%. Faced with the challenge of deploying new infrastructure while minimizing investment costs, using MaxCell will:

- Reduce the number of conduits required for new network construction
- Minimize the need for additional conduit in occupied applications
- Enable incremental deployment to match system requirements

Over 150 million feet of MaxCell innerduct, equaling over 275 million feet of channel, has been successfully installed around the globe in a variety of applications including:

- Cable TV
- Telecom
- Wireless Backhaul
- Power/Utilities
- Municipalities
- University, Corporate, and Hospital campuses
- Military and Government installations

## WHY MAXCELL?

- Save on network construction
- Eliminate new network construction
- Place 300% more cables
- Install MaxCell 2x faster
- Use 30% less manpower
- Reduce freight & storage costs

As the pioneer in fabric innerduct technology, MaxCell has the industry experience and know how to develop unique solutions for specific application issues. Whether overbuild of an existing network or the deployment of cable in a new FTTH system, MaxCell can help you provide the right product and right design to maximize the efficiency of your assets.

Independent surveys and actual field experience prove that MaxCell is a revolutionary product that reduces material and labor costs by 50% & more in most applications. Installers and network engineers can cut conduit installation time in half, and increase cable installation speed.

## PRODUCT USES AND TYPES

MaxCell comes in a variety of sizes and configurations – all tailored to maximize your network structure. And with a complete line of complementary Installation and Termination accessories, we can provide a total package to make your network installation a breeze.

MaxCell is produced in:

- **Standard MaxCell** is available in sizes from 1.1" to 4", and in 1, 2 and 3-Cell configurations – giving you the flexibility to choose the right product for your system & your application.
- **Plenum and Riser** rated products are Low Smoke Zero Halogen versions for use in premise wiring. These products provide numerous low friction pathways for installation of multiple cables in a variety of building environments – including air handling space, raised floors, cable trays and riser ducts.
- **Detectable MaxCell** is configured like our standard product, but contains an 18 gauge copper tracer wire inserted in the edge for use in underground utility location.
- **Micro MaxCell** products can be used to create additional pathways in small conduits for Intelligent Transportation Systems (ITS) and Signalization projects.



*More Space. More Productivity.*



## MAXCELL® APPLICATION GUIDE

MaxCell® product descriptions do not directly correlate to the size of conduits. 4" 3-Cell or 3" 3-Cell are not meant specifically for 4" or 3" conduits. The description only applies to the width of the product when pressed flat.

General guidelines for deciding which MaxCell to use in various applications.

### MaxCell 3" 3-Cell

Designed for use in 3" or larger conduits. Multiple combinations of large, medium, and smaller cable sizes are applicable and anticipated.

Min Conduit ID	Suggested Product	Max # of Packs	Max # of Cables	Max Cable Dia. per Cell	Rec. Pull Length	Max Pull Length
3"	MaxCell 3" 3-Cell	2	6	1.03"	1250'	2000'
4"	MaxCell 3" 3-Cell	3	9	1.03"	1500'	2500'
5"	MaxCell 3" 3-Cell	4	12	1.03"	1500'	2500'
6"	MaxCell 3" 3-Cell	5	15	1.03"	1500'	2500'

### MaxCell 4" 3-Cell

Designed for use in 4" or larger conduits. Multiple combinations of large, medium, and smaller cable sizes are applicable and anticipated. Since larger cable applications are anticipated, the number of cables and MaxCell packs that can be placed is reduced, therefore a smaller number of cables are available.

Min Conduit ID	Suggested Product	Max # of Packs	Max # of Cables	Max Cable Dia. per Cell	Rec. Pull Length	Max Pull Length
3"	MaxCell 4" 3-Cell	1	3	1.34"	1500'	2000'
4"	MaxCell 4" 3-Cell	2	6	1.34"	1500'	2500'
5"	MaxCell 4" 3-Cell	3	9	1.34"	1500'	2500'
6"	MaxCell 4" 3-Cell	4	12	1.34"	1500'	2500'

### MaxCell 2" 3-Cell

Designed for use in 2" or larger conduits where three cables are being placed.

Min Conduit ID	Suggested Product	Max # of Packs	Max # of Cables	Max Cable Dia. per Cell	Rec. Pull Length	Max Pull Length
2"	MaxCell 2" 3-Cell	1	3	.70"	800'	1500'

### MaxCell 2" 2-Cell

Designed for use in 1.75" or larger conduits where two cables are being placed.

Min Conduit ID	Suggested Product	Max # of Packs	Max # of Cables	Max Cable Dia. per Cell	Rec. Pull Length	Max Pull Length
2"	MaxCell 2" 2-Cell	1	2	.70"	800'	1500'

### MaxCell 2" 1-Cell

Designed for use in 1.5" innerduct or larger conduits. It is designed to deploy an additional cable in a small confined or occupied Innerduct or conduit.

Min Conduit ID	Suggested Product	Max # of Packs	Max # of Cables	Max Cable Dia. per Cell	Rec. Pull Length	Max Pull Length
1.5" +	MaxCell 2" 1-Cell	1	1	.70"	800'	1500'

### Micro MaxCell

This set of products was designed for use in 1.5" innerduct or large conduits. The small compact design is well suited for placing drop cables in FTTH applications.

Min Conduit ID	Suggested Product	Max # of Packs	Max # of Cables	Max Cable Dia. per Cell	Rec. Pull Length	Max Pull Length
1.25"	Micro 3-Cell	1	2	.40"	800'	1500'
1.25"	Micro 2-Cell	1	2	.40"	800'	1500'
1.0"	Micro 1-Cell	1	1	.40"	800'	1500'

### Additional Cable

In some applications, an additional cable can be pulled in on top of the MaxCell if the customer pulls in a pull tape at the same time as placing a MaxCell pack. Multiple cables may be placed in a single cell provided the overall diameter of the cables does not exceed the maximum cell diameter. Application information above is provided as general guidelines for MaxCell use and is for reference only. Always consult with MaxCell Technical Support specialists to review your project needs.

# FITTINGS & ACCESSORIES

## VIKIMATIC PVC FITTINGS & ACCESSORIES

PVC Adapters For  
Joining Dissimilar Conduits

Description

Nominal  
Size

Std.  
Pkg.



**G-Cap**

G Plastic Cap	2" x 4"	24
For transition from	3" x 4"	24
Under Ground to	4" x 4"	24
Duct riser		



**Square Bore**

Square Bore	3-1/4** x 3-1/2" IPS	9
Adapter	3-1/2** x 3-1/2" IPS	9
Available in 6" and	3-1/4** x 4"	9
18" Length solid,	3-1/2** x 4"	9
2 finger and	3-1/4** x 5"	9
4 finger	4** x 4"	9
*Size of Clay	4-1/4** x 4"	9



**Female Threaded Adapter**

Female Threaded		
Adapter Joining	3-1/2" IPS x 4" Tel.	6
Threaded End	4" IPS x 4" Tel.	6
Steel Pipe to Tel.		



**Expansion Joint**

Expansion Joint		
Total Travel 8"	4"	6
Available to 30"	5"	6
w or w/o "O" ring		



**Wye Branch**

Wye Branch Solid	4"	6
(Molded) Split	4"	6



**Fabricated End Bell**

End Bell	3-1/2"	24
Round	4"	24
(7" length)		

**Part Number Ordering Matrix  
Begins On Page 90**



## BLANK DUCT PLUGS

### Sealing Devices for Ducted Cable Networks

Blank duct plugs effectively seal conduits to reduce the cost of cable placement and maintenance in new underground construction projects and routine work. These plugs are economical because they are removable and reusable.

Manufactured from high-impact plastic components, combined with durable elastic gaskets, Blank plugs are corrosion proof and effective as long-term or temporary seals.

Both water-tight and gas-tight, Blank duct plugs prevent the flow of water and the costly sedimentation of duct banks and conduit systems while confining problems of dangerous vapors to their source.

Each Blank plug is equipped with a rope tie device to allow the securing of pull rope to the plug's back compression plate. Installers can attach the rope to the back compression plate of the plug and store excess slack rope behind the plug within the conduit system for future use.



### Features

- All plastic construction
- Corrosion proof
- Water-tight
- Easy installation and removal
- Reusable

Part Number	Size	Duct I.D. Range	
		inches	mm
07D100U	0.700	0.71 - 0.83	18.0 - 21.1
10D104U	1.000	0.96 - 1.16	24.4 - 29.5
12D148U	1.250	1.14 - 1.48	29.0 - 37.6
12D163U	1.375	1.30 - 1.63	33.0 - 41.4
15D183U	1.500	1.49 - 1.83	37.8 - 46.5
20D236U	2.000	1.83 - 2.36	46.5 - 59.9
25D296U	2.500	2.34 - 2.96	59.4 - 75.2
30D346U	3.000	2.99 - 3.46	75.9 - 87.9
35D400T	3.500	3.45 - 3.80	86.9 - 96.5
35D400U	3.500	3.45 - 3.80	86.9 - 96.5
35D400N	3.500	3.45 - 3.80	86.9 - 96.5
38D401-C	3.800	3.80 - 3.94	96.5 - 100.1
40D400T	4.000	3.94 - 4.17	100.1 - 105.9
40D402N	4.000	3.94 - 4.17	100.1 - 105.9
40D402U	4.000	3.94 - 4.17	100.1 - 105.9
40D402U-C	4.000	3.94 - 4.17	100.1 - 105.9
50D500U	5.000	4.58 - 5.02	116.3 - 127.5
50D535U	5.000	5.00 - 5.35	127.0 - 135.9
55D590U-CR	5.500	5.51 - 5.91	140.0 - 150.1
60D637U	6.000	5.82 - 6.37	147.8 - 161.8
70D750U-CR	7.000	7.09 - 7.55	180.1 - 191.8
80D816U	8.000	7.83 - 8.27	198.9 - 210.1

## FIBER OPTIC SIMPLEX PLUGS

### Sealing Plugs for Small Diameter Ducts

Fiber Optic Simplex plugs effectively seal conduits containing one cable. Originally designed for applications involving fiber optic cable placement in subduct, this product is also ideal for sealing around coax or twisted pair cable in small diameter conduits. These plugs are retrofitable, removable, and reusable.

Proper sealing around cable in conduits and subducts is important to prevent the costly flooding of buildings and sedimentation of the area around the cable. These easily removable and reusable devices facilitate the redistribution of cable slack by ensuring a clear raceway around outside plant cables.

### Features

- Water-tight and air-tight
- Simple installation around in-place cables
- Easy to retrofit
- Seals all types of innerducts
- Wide cable sealing range
- Installs and removes by hand



### Note: When selecting a Fiber Optic Simplex plug:

1. Determine the inside diameter of the duct and select the range of plugs.
2. Determine the outside diameter of the cable (or innerduct) and select the correct plug in the range.

Part Number	Size	Duct I.D. Range		Cable or Duct O.D. Range	
		inches	mm	inches	mm
06S038S	0.600	0.63 - 0.71	16.0 - 18.0	0.33 - 0.39	8.4 - 9.9
06S038SB	0.600	0.63 - 0.71	16.0 - 18.0	0.27 - 0.39	6.9 - 9.9
06035SB	0.700	0.74 - 0.80	18.8 - 20.3	0.27 - 0.35	6.9 - 8.9
07S020SB	0.750	0.78 - 0.86	19.8 - 21.8	0.08 - 0.20	2.0 - 5.1
07S035SB	0.750	0.78 - 0.86	19.8 - 21.8	0.20 - 0.35	5.1 - 8.9
07S040SB	0.750	0.78 - 0.86	19.8 - 21.8	0.33 - 0.39	8.4 - 9.9
07S050SB-043H	0.750	0.78 - 0.86	19.8 - 21.8	0.31 - 0.50	7.9 - 12.7
07S057SB	0.750	0.78 - 0.82	19.8 - 20.8	0.35 - 0.57	8.9 - 14.5
09S050SB	0.900	0.92 - 1.02	23.4 - 25.9	0.35 - 0.50	8.9 - 12.7
09S050SB-043H	0.900	0.92 - 1.02	23.4 - 25.9	0.35 - 0.50	8.9 - 12.7
09S065SB	0.900	1.00 - 1.08	25.4 - 27.4	0.55 - 0.63	14.0 - 16.0
10S020SB	1.000	1.00 - 1.14	25.4 - 29.0	0.08 - 0.20	2.0 - 5.1
10S035S	1.000	1.00 - 1.14	25.4 - 29.0	0.27 - 0.35	6.9 - 8.9
10S035SB	1.000	1.00 - 1.14	25.4 - 29.0	0.20 - 0.35	5.1 - 8.9
10S057SB	1.000	1.00 - 1.14	25.4 - 29.0	0.35 - 0.57	8.9 - 14.5
10S065S	1.000	1.00 - 1.14	25.4 - 29.0	0.55 - 0.65	14.0 - 16.5
10S070SB	1.000	1.00 - 1.14	25.4 - 29.0	0.51 - 0.71	13.0 - 18.0
11S020SB	1.100	1.12 - 1.26	28.4 - 32.0	0.08 - 0.20	2.0 - 5.1
11S035SB	1.100	1.12 - 1.26	28.4 - 32.0	0.20 - 0.35	5.1 - 8.9
11S043S	1.100	1.12 - 1.26	28.4 - 32.0	0.35 - 0.43	8.9 - 10.9
11S057SB	1.100	1.12 - 1.26	28.4 - 32.0	0.35 - 0.57	8.9 - 14.5
11S070SB	1.100	1.12 - 1.26	28.4 - 32.0	0.51 - 0.71	13.0 - 18.0
11S078S	1.100	1.12 - 1.26	28.4 - 32.0	0.71 - 0.78	18.0 - 19.8
11S078SB	1.100	1.12 - 1.26	28.4 - 32.0	0.57 - 0.78	14.5 - 19.8

## FIBER OPTIC SIMPLEX PLUGS CONTINUED

Part Number	Size	Duct I.D. Range		Cable or Duct O.D. Range	
		inches	mm	inches	mm
12S043S	1.250	1.22 - 1.36	31.0 - 34.5	0.35 - 0.43	8.9 - 10.9
12S043SB-024H	1.250	1.22 - 1.36	31.0 - 34.5	0.24 - 0.43	6.1 - 10.9
12S057SB	1.250	1.22 - 1.36	31.0 - 34.5	0.35 - 0.57	8.9 - 14.5
12S057S-FD1	1.250	1.22 - 1.36	31.0 - 34.5	Flat Drop .179 x .325 x 1	
12S057SB-043H	1.250	1.22 - 1.36	31.0 - 34.5	0.35 - 0.57	8.9 - 14.5
12S065S	1.250	1.22 - 1.36	31.0 - 34.5	0.55 - 0.65	14.0 - 16.5
12S065S-FD2	1.250	1.22 - 1.36	31.0 - 34.5	Flat Drop .179 x .325 x 2	
12S070SB	1.250	1.22 - 1.36	31.0 - 34.5	0.51 - 0.71	13.0 - 18.0
12S070SB-057H	1.250	1.22 - 1.36	31.0 - 34.5	0.51 - 0.71	13.0 - 18.0
12S078SB	1.250	1.22 - 1.36	31.0 - 34.5	0.57 - 0.78	14.5 - 19.8
12S090SB	1.250	1.24 - 1.34	31.5 - 34.0	0.71 - 0.90	18.0 - 22.9
12S090S-FD3	1.250	1.24 - 1.34	31.5 - 34.0	Flat Drop .179 x .325 x 3	
12S090SB-078H	1.250	1.24 - 1.34	31.5 - 34.0	0.71 - 0.90	18.0 - 22.9
13S043SB	1.375	1.37 - 1.50	34.8 - 38.1	0.12 - 0.43	3.0 - 10.9
13S043SB-024H	1.375	1.37 - 1.50	34.8 - 38.1	0.24 - 0.43	6.1 - 10.9
13S057SB	1.375	1.37 - 1.50	34.8 - 38.1	0.35 - 0.57	8.9 - 14.5
13S070SB	1.375	1.37 - 1.50	34.8 - 38.1	0.51 - 0.71	13.0 - 18.0
13S097SB	1.375	1.33 - 1.46	33.8 - 37.1	0.71 - 0.97	18.0 - 24.6
15S020SB	1.500	1.46 - 1.65	37.1 - 41.9	0.08 - 0.20	2.0 - 5.1
15S035SB	1.500	1.46 - 1.65	37.1 - 41.9	0.08 - 0.35	2.0 - 8.9
15S043SB	1.500	1.46 - 1.65	37.1 - 41.9	0.08 - 0.43	2.0 - 10.9
15S043SB-024H	1.500	1.46 - 1.65	37.1 - 41.9	0.24 - 0.43	6.1 - 10.9
15S057SB	1.500	1.46 - 1.65	37.1 - 41.9	0.35 - 0.57	8.9 - 14.5
15S057SB-043H	1.500	1.46 - 1.65	37.1 - 41.9	0.35 - 0.57	8.9 - 14.5
15S065SB	1.500	1.46 - 1.65	37.1 - 41.9	0.46 - 0.65	11.7 - 16.5
15S070SB	1.500	1.46 - 1.65	37.1 - 41.9	0.51 - 0.71	13.0 - 18.0
15S070SB-057H	1.500	1.46 - 1.65	37.1 - 41.9	0.51 - 0.71	13.0 - 18.0
15S090SB	1.500	1.55 - 1.65	39.4 - 41.9	0.71 - 0.90	18.0 - 22.9
15S090SB-078H	1.500	1.55 - 1.65	39.4 - 41.9	0.71 - 0.90	18.0 - 22.9
15S110SB	1.500	1.55 - 1.65	39.4 - 41.9	0.90 - 1.10	22.9 - 27.9
15S070AB	1.500	1.58 - 1.73	40.1 - 43.9	0.51 - 0.71	13.0 - 18.0
15S090AB	1.500	1.58 - 1.73	40.1 - 43.9	0.71 - 0.90	18.0 - 22.9
15S110AB	1.500	1.58 - 1.73	40.1 - 43.9	0.90 - 1.10	22.9 - 27.9
20S020SB	2.000	1.82 - 1.97	46.2 - 50.0	0.08 - 0.20	2.0 - 5.1
20S035SB	2.000	1.82 - 1.97	46.2 - 50.0	0.08 - 0.35	2.0 - 8.9
20S043SB-024H	2.000	1.82 - 1.97	46.2 - 50.0	0.24 - 0.43	6.1 - 10.9
20S043S	2.000	1.82 - 1.97	46.2 - 50.0	0.35 - 0.43	8.9 - 10.9
20S057SB	2.000	1.82 - 1.97	46.2 - 50.0	0.35 - 0.57	8.9 - 14.5
20S070SB	2.000	1.82 - 1.97	46.2 - 50.0	0.51 - 0.71	13.0 - 18.0
20S090SB	2.000	1.82 - 1.97	46.2 - 50.0	0.71 - 0.90	18.0 - 22.9
20S110SB	2.000	1.82 - 1.97	46.2 - 50.0	0.90 - 1.10	22.9 - 27.9
21S020SB	2.100	1.98 - 2.18	50.3 - 55.4	0.08 - 0.20	2.0 - 5.1
21S035SB	2.100	1.98 - 2.18	50.3 - 55.4	0.20 - 0.35	5.1 - 8.9
21S035S	2.100	1.98 - 2.18	50.3 - 55.4	0.27 - 0.35	6.9 - 8.9
21S043SB	2.100	1.98 - 2.18	50.3 - 55.4	0.35 - 0.43	8.9 - 10.9
21S050S	2.100	1.98 - 2.18	50.3 - 55.4	0.43 - 0.50	10.9 - 12.7
21S057SB	2.100	1.98 - 2.18	50.3 - 55.4	0.35 - 0.57	8.9 - 14.5
21S070SB	2.100	1.98 - 2.18	50.3 - 55.4	0.51 - 0.71	13.0 - 18.0
21S090SB	2.100	1.98 - 2.18	50.3 - 55.4	0.71 - 0.90	18.0 - 22.9
21S110SB	2.100	1.98 - 2.18	50.3 - 55.4	0.90 - 1.10	22.9 - 27.9
21S110AB	2.100	2.14 - 2.22	54.4 - 56.4	0.90 - 1.10	22.9 - 27.9

# FITTINGS & ACCESSORIES

## TRIPLEX DUCT PLUGS

### Multi-Port Sealing Devices for Duct Cable Networks

Triplex duct plugs are split plugs for sealing around, organizing, and supporting up to three subducts, pipes, or cables. The plugs are designed for use in round openings such as conduits, conduit fittings, and core-drilled wall penetrations. Effective long-term water-tight and air-tight seals, these products also prevent mud, backfill, and slurry from entering handholes, manholes, and buildings during the construction process.

The service life of cable, splices, manhole hardware, and electronics can be increased when contact with moisture is reduced. Flooded underground structures are accessed more quickly when they are isolated from the ingress of water, mud, and slurry.

### Triplex Duct Plug Features

- Split design for retrofitting without disassembly
- Anchor and organize subducts or multiple duct systems
- Eliminate duct-edge abrasion to cables
- Expandable gasket allows for expansion and contraction of cables or subducts without leakage
- Excellent for supporting cables at the tops of risers



Part Number	Size	Duct I.D. Range		Cable or Duct O.D. Range	
		inches	mm	inches	mm
21B057SG	2.00	1.97 - 2.13	50.0 - 54.1	0.43 - 0.57	10.9 - 14.5
21B057SGB	2.00	1.97 - 2.13	50.0 - 54.1	0.35 - 0.57	8.9 - 14.5
21B070SGB	2.00	1.97 - 2.13	50.0 - 54.1	0.50 - 0.70	12.7 - 17.8
25B057SG	2.50	2.40 - 2.56	61.0 - 65.0	0.43 - 0.57	10.9 - 14.5
25B057SGB	2.50	2.40 - 2.56	61.0 - 65.0	0.35 - 0.57	8.9 - 14.5
25B070SG	2.50	2.40 - 2.56	61.0 - 65.0	0.62 - 0.70	15.7 - 17.8
25B070SGB	2.50	2.40 - 2.56	61.0 - 65.0	0.50 - 0.70	12.7 - 17.8
25B090SG	2.50	2.40 - 2.56	61.0 - 65.0	0.82 - 0.90	20.8 - 22.9
30B126SG	3.00	3.03 - 3.15	77.0 - 80.0	1.10 - 1.26	27.9 - 32.0
30B136AG	3.00	3.26 - 3.37	82.8 - 85.6	1.22 - 1.36	31.0 - 34.5
35B126S	3.50	3.49 - 3.62	88.6 - 91.9	1.10 - 1.26	27.9 - 32.0
35B136S	3.50	3.49 - 3.62	88.6 - 91.9	1.22 - 1.36	31.0 - 34.5
35B136S-C	3.50	3.49 - 3.62	88.6 - 91.9	1.22 - 1.36	31.0 - 34.5
35B142S	3.50	3.49 - 3.62	88.6 - 91.9	1.30 - 1.42	33.0 - 36.1
35B155HHG	3.50	3.43 - 3.54	87.1 - 89.9	1.38 - 1.54	35.1 - 39.1
36B126SG	3.60	3.70 - 3.81	94.0 - 96.8	1.10 - 1.26	27.9 - 32.0
36B136SG	3.60	3.70 - 3.81	94.0 - 96.8	1.22 - 1.36	31.0 - 34.5
40B122S	4.00	3.94 - 4.13	100.1 - 104.9	1.07 - 1.22	27.2 - 31.0
40B122SG	4.00	3.94 - 4.13	100.1 - 104.9	1.07 - 1.22	27.2 - 31.0
40B136S	4.00	3.94 - 4.13	100.1 - 104.9	1.22 - 1.36	31.0 - 34.5
40B136SG	4.00	3.94 - 4.13	100.1 - 104.9	1.22 - 1.36	31.0 - 34.5
40B136S-C	4.00	3.94 - 4.13	100.1 - 104.9	1.22 - 1.36	31.0 - 34.5
40B142S	4.00	3.94 - 4.13	100.1 - 104.9	1.30 - 1.42	33.0 - 36.1
40B142SG	4.00	3.94 - 4.13	100.1 - 104.9	1.30 - 1.42	33.0 - 36.1
40B150SG	4.00	3.94 - 4.13	100.1 - 104.9	1.36 - 1.50	34.5 - 38.1
40B167SG	4.00	4.09 - 4.29	103.9 - 109.0	1.53 - 1.67	38.9 - 42.4
40B167S	4.00	4.09 - 4.29	103.9 - 109.0	1.53 - 1.67	38.9 - 42.4
40B136AG	4.10	4.16 - 4.29	105.7 - 109.0	1.22 - 1.36	31.0 - 34.5
40B136A	4.10	4.16 - 4.29	105.7 - 109.0	1.22 - 1.36	31.0 - 34.5
40B142AG	4.10	4.16 - 4.29	105.7 - 109.0	1.26 - 1.42	32.0 - 36.1
40B142A	4.10	4.16 - 4.29	105.7 - 109.0	1.26 - 1.42	32.0 - 36.1
40B150A	4.10	4.16 - 4.29	105.7 - 109.0	1.36 - 1.50	34.5 - 38.1
40B150AG	4.10	4.16 - 4.29	105.7 - 109.0	1.36 - 1.50	34.5 - 38.1
40B167A	4.10	4.16 - 4.29	105.7 - 109.0	1.53 - 1.67	38.9 - 42.4

\*Suffix Descriptor  
*S* - Standard PVC and PE ducts (ID)  
*A* - Oversize duct (ID)  
*H* - Undersize ducts (ID)  
*HH* - Undersize ducts and overlap gasket  
*B* - Duct Plugs with inner bushing  
*G* - Duct Plugs with coated metal compression plates  
*#* - Ports with different ID  
*H* - Hole Plug Included

## TRIPLEX DUCT PLUGS CONTINUED

Part Number	Size	Duct I.D. Range		Cable or Duct O.D. Range	
		inches	mm	inches	mm
42B136SG	4.20	4.48 - 4.72	113.8 - 119.9	1.22 - 1.36	31.0 - 34.5
46B167SG	4.60	4.76 - 4.96	121.0 - 126.0	1.53 - 1.67	38.9 - 42.4
50B136HG	4.80	4.88 - 5.10	124.0 - 129.5	1.22 - 1.36	31.0 - 34.5
50B142HG	4.80	4.88 - 5.10	124.0 - 129.5	1.30 - 1.42	33.0 - 36.1
50B150HG	4.80	4.88 - 5.10	124.0 - 129.5	1.36 - 1.50	34.5 - 38.1
50B167HG	4.80	4.88 - 5.10	124.0 - 129.5	1.53 - 1.67	38.9 - 42.4
50B177HG	4.80	4.88 - 5.10	124.0 - 129.5	1.64 - 1.77	41.7 - 45.0
50B192HG	4.80	4.88 - 5.10	124.0 - 129.5	1.77 - 1.92	45.0 - 48.8
50B136SG	5.00	5.04 - 5.35	128.0 - 135.9	1.18 - 1.36	30.0 - 34.5
50B142SG	5.00	5.04 - 5.35	128.0 - 135.9	1.26 - 1.42	32.0 - 36.1
50B150SG	5.00	5.04 - 5.35	128.0 - 135.9	1.36 - 1.50	34.5 - 38.1
50B167SG	5.00	5.04 - 5.35	128.0 - 135.9	1.50 - 1.67	38.1 - 42.4
50B177SG	5.00	5.04 - 5.35	128.0 - 135.9	1.64 - 1.77	41.7 - 45.0
50B192SG	5.00	5.04 - 5.35	128.0 - 135.9	1.73 - 1.92	43.9 - 48.8
60B136HG	5.80	5.82 - 5.98	147.8 - 151.9	1.18 - 1.36	30.0 - 34.5
60B142HG	5.80	5.82 - 5.98	147.8 - 151.9	1.30 - 1.42	33.0 - 36.1
60B150HG	5.80	5.82 - 5.98	147.8 - 151.9	1.36 - 1.50	34.5 - 38.1
60B167HG	5.80	5.82 - 5.98	147.8 - 151.9	1.54 - 1.67	39.1 - 42.4
60B177HG	5.80	5.82 - 5.98	147.8 - 151.9	1.64 - 1.77	41.7 - 45.0
60B192HG	5.80	5.82 - 5.98	147.8 - 151.9	1.81 - 1.92	46.0 - 48.8
60B196HG	5.80	5.82 - 5.98	147.8 - 151.9	1.84 - 1.96	46.7 - 49.8
60B204HG	5.80	5.82 - 5.98	147.8 - 151.9	1.92 - 2.04	48.8 - 51.8
60B220HG	5.80	5.82 - 5.98	147.8 - 151.9	2.08 - 2.20	52.8 - 55.9
60B236HG	5.80	5.82 - 5.98	147.8 - 151.9	1.96 - 2.36	49.8 - 59.9
60B236HGB	5.80	5.82 - 5.98	147.8 - 151.9	1.96 - 2.36	49.8 - 59.9
60B136SG	6.00	6.00 - 6.22	152.4 - 158.0	1.18 - 1.36	30.0 - 34.5
60B142SG	6.00	6.00 - 6.22	152.4 - 158.0	1.26 - 1.42	32.0 - 36.1
60B167SG	6.00	6.00 - 6.22	152.4 - 158.0	1.50 - 1.67	38.1 - 42.4
60B177SG	6.00	6.00 - 6.22	152.4 - 158.0	1.64 - 1.77	41.7 - 45.0
60B192SG	6.00	6.00 - 6.22	152.4 - 158.0	1.73 - 1.92	43.9 - 48.8
60B196SG	6.00	6.00 - 6.22	152.4 - 158.0	1.84 - 1.96	46.7 - 49.8
60B204SG	6.00	6.00 - 6.22	152.4 - 158.0	1.92 - 2.04	48.8 - 51.8
60B217SG	6.00	6.00 - 6.22	152.4 - 158.0	2.05 - 2.17	52.1 - 55.1
60B220SG	6.00	6.00 - 6.22	152.4 - 158.0	2.08 - 2.20	52.8 - 55.9
60B236SG	6.00	6.00 - 6.22	152.4 - 158.0	2.24 - 2.36	56.9 - 59.9
60B236SGB	6.00	6.00 - 6.22	152.4 - 158.0	1.92 - 2.32	48.8 - 58.9
60B244SG	6.00	6.00 - 6.22	152.4 - 158.0	2.33 - 2.44	59.2 - 62.0
60B252SG	6.00	6.00 - 6.22	152.4 - 158.0	2.40 - 2.52	61.0 - 64.0
60B255SG	6.00	6.00 - 6.22	152.4 - 158.0	2.45 - 2.55	62.2 - 64.8
100B346HG	10.00	8.70 - 8.90	221.0 - 226.1	3.23 - 3.39	82.0 - 86.1
100B192S	10.00	9.96 - 10.25	253.0 - 260.4	1.81 - 1.92	46.0 - 48.8
120B396HG	12.00	10.35-10.55	262.9 - 268.0	3.74 - 3.90	95.0 - 99.1

### Custom Triplex

30B090SGB-2	3.00	3.03 - 3.15	77.0 - 80.0	(2x)0.65 - 0.90 (1x)0.57 - 0.70	16.5 - 22.9 14.5 - 17.8
30B132S-1	3.00	3.03 - 3.15	77.0 - 80.0	(2x)1.18 - 1.30 (1x)0.79 - 0.87	30.0 - 33.0 20.1 - 22.1
31T126SB	3.10	3.10 - 3.30	78.7 - 83.8	1.10 - 1.26	27.9 - 32.0
35B118HG-2	3.50	3.49 - 3.62	88.6 - 91.9	(2x)1.42 - 1.55 (1x)1.02 - 1.15	36.1 - 39.4 25.9 - 29.2
35B155HG-1	3.50	3.49 - 3.62	88.6 - 91.9	(1x)1.42 - 1.55 (2x)1.02 - 1.15	36.1 - 39.4 25.9 - 29.2
38T126SGB	3.80	3.78 - 4.09	96.0 - 103.9	1.18 - 1.26	30.0 - 32.0
40T142S	4.00	3.92 - 4.05	99.6 - 102.9	1.31 - 1.42	33.3 - 36.1
40T167S	4.00	4.09 - 4.29	103.9 - 109.0	1.54 - 1.67	39.1 - 42.4
40T167SGB-H	4.00	4.09 - 4.29	103.9 - 109.0	1.54 - 1.67	39.1 - 42.4
40B179SG-1	4.00	3.94 - 4.13	100.1 - 104.9	1.57 - 1.67	40.0 - 42.4
40B190SHG-2	4.00	4.02 - 4.16	102.1 - 105.7	(2x)1.57 - 1.67 (1x)1.81 - 1.91	40.0 - 42.4 46.0 - 48.5
50B260SG-1	5.00	5.04 - 5.35	128.0 - 135.9	(1x)2.40 - 2.56 (2x)0.47 - 0.55	61.0 - 65.0 11.9 - 14.0

#### \*Suffix Descriptor

- S - Standard PVC and PE ducts (ID)
- A - Oversize duct (ID)
- H - Undersize ducts (ID)
- HH - Undersize ducts and overlap gasket
- B - Duct Plugs with inner bushing
- G - Duct Plugs with coated metal compression plates
- # - Ports with different ID
- H - Hole Plug Included

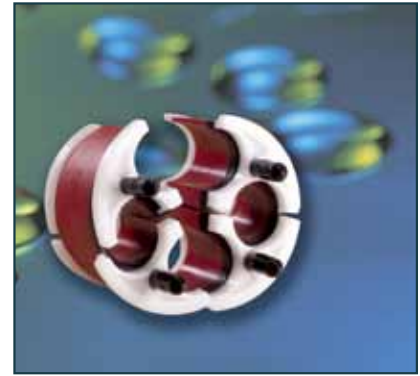
# FITTINGS & ACCESSORIES

## QUADPLEX DUCT PLUGS

### Multi-Port Sealing Ducts

Quadplex duct plugs are split plugs for sealing around, organizing, and supporting up to four subducts, pipes, or cables. The plugs are designed for use in round openings such as conduits, conduit fittings and core-drilled wall penetrations. Effective long-term water-tight and air-tight seals, these products also prevent mud, backfill, and slurry from entering handholes, manholes, and buildings during the construction process.

The service life of cable, splices, manhole hardware and electronics can be increased when contact with moisture is reduced. Flooded underground structures are accessed more quickly when they are isolated from the ingress of water, mud, and slurry.



### Quadplex Duct Plugs Features

- Split design for retrofitting without disassembly
- Anchors and organizes subducts or multiple duct systems
- Eliminates duct-edge abrasion to cables
- Expandable gasket allows for expansion and contraction of cables or subducts without leakage
- Excellent for supporting cables at the tops of risers

Part Number	Size	Duct I.D. Range		Cable or Duct O.D. Range	
		inches	mm	inches	mm
35Q118H	3.50	3.43 - 3.58	87.1 - 90.9	1.10 - 1.18	27.9 - 30.0
35Q126SG	3.50	3.50 - 3.62	88.9 - 91.9	1.14 - 1.26	29.0 - 32.0
35Q126SG-PU	3.50	3.50 - 3.62	88.9 - 91.9	1.14 - 1.26	29.0 - 32.0
36Q136HG	3.60	3.62 - 3.81	91.9 - 96.8	1.19 - 1.36	30.2 - 34.5
36Q126S	3.75	3.70 - 3.81	94.0 - 96.8	1.14 - 1.26	29.0 - 32.0
36Q126SG	3.75	3.70 - 3.81	94.0 - 96.8	1.14 - 1.26	29.0 - 32.0
36Q136SG	3.75	3.70 - 3.81	94.0 - 96.8	1.19 - 1.36	30.2 - 34.5
40Q136H	3.80	3.86 - 4.00	98.0 - 101.6	1.19 - 1.36	30.2 - 34.5
40Q136S	4.00	4.02 - 4.17	102.1 - 105.9	1.19 - 1.36	30.2 - 34.5
40Q136SG	4.00	4.02 - 4.17	102.1 - 105.9	1.19 - 1.36	30.2 - 34.5
40Q142S	4.00	4.02 - 4.17	102.1 - 105.9	1.36 - 1.42	34.5 - 36.1
40Q142SG	4.00	4.02 - 4.17	102.1 - 105.9	1.36 - 1.42	34.5 - 36.1
40Q136A	4.20	4.19 - 4.35	106.4 - 110.5	1.19 - 1.36	30.2 - 34.5
40Q136AG	4.20	4.19 - 4.35	106.4 - 110.5	1.19 - 1.36	30.2 - 34.5
40Q142AG	4.20	4.19 - 4.35	106.4 - 110.5	1.30 - 1.42	33.0 - 36.1
40Q157AG	4.20	4.19 - 4.35	106.4 - 110.5	1.42 - 1.57	36.1 - 39.8
40Q160AG	4.20	4.19 - 4.35	106.4 - 110.5	1.48 - 1.60	37.6 - 40.6
50Q142HG	4.80	4.88 - 5.00	124.0 - 127.0	1.30 - 1.42	33.0 - 36.1
50Q167HG	4.80	4.88 - 5.00	124.0 - 127.0	1.53 - 1.67	38.9 - 42.4
50Q192HG	4.80	4.88 - 5.00	124.0 - 127.0	1.77 - 1.92	45.0 - 48.8
50Q136SG	5.00	5.04 - 5.28	128.0 - 134.1	1.19 - 1.36	30.2 - 34.5
50Q142SG	5.00	5.04 - 5.28	128.0 - 134.1	1.30 - 1.42	33.0 - 36.1
50Q150SG	5.00	5.04 - 5.28	128.0 - 134.1	1.36 - 1.50	34.5 - 38.1
50Q167S	5.00	5.04 - 5.28	128.0 - 134.1	1.50 - 1.67	38.1 - 42.4
50Q177SG	5.00	5.04 - 5.28	128.0 - 134.1	1.67 - 1.77	42.4 - 45.0
50Q192S	5.00	5.04 - 5.28	128.0 - 134.1	1.77 - 1.92	45.0 - 48.8
50Q192SG	5.00	5.04 - 5.28	128.0 - 134.1	1.77 - 1.92	45.0 - 48.8
60Q142HG	5.80	5.82 - 5.98	147.8 - 151.9	1.30 - 1.42	33.0 - 36.1
60Q167HG	5.80	5.82 - 5.98	147.8 - 151.9	1.53 - 1.67	38.9 - 42.4
60Q192HG	5.80	5.82 - 5.98	147.8 - 151.9	1.81 - 1.92	46.0 - 48.8
60Q136SG	6.00	6.02 - 6.33	152.9 - 160.8	1.19 - 1.36	30.2 - 34.5
60Q142SG	6.00	6.02 - 6.33	152.9 - 160.8	1.30 - 1.42	33.0 - 36.1
60Q150SG	6.00	6.02 - 6.33	152.9 - 160.8	1.36 - 1.50	34.5 - 38.1
60Q167SG	6.00	6.02 - 6.33	152.9 - 160.8	1.50 - 1.67	38.1 - 42.4
60Q177SG	6.00	6.02 - 6.33	152.9 - 160.8	1.67 - 1.77	42.4 - 45.0
60Q192S	6.00	6.02 - 6.33	152.9 - 160.8	1.77 - 1.92	45.0 - 48.8
60Q192SG	6.00	6.02 - 6.33	152.9 - 160.8	1.77 - 1.92	45.0 - 48.8
60Q196SG	6.00	6.02 - 6.33	152.9 - 160.8	1.84 - 1.96	47.0 - 49.8
60Q216SG	6.00	6.02 - 6.33	152.9 - 160.8	1.96 - 2.16	49.8 - 54.9
60Q220S	6.00	6.02 - 6.33	152.9 - 160.8	1.96 - 2.20	49.8 - 55.8
80Q238SG	8.00	7.76 - 7.90	197.1 - 200.7	2.16 - 2.38	54.9 - 60.4

## QUADPLEX DUCT PLUGS CONTINUED

Part Number	Size	Duct I.D. Range		Cable or Duct O.D. Range	
		inches	mm	inches	mm
<b>Custom Quadplex</b>					
40Q136S-R	4.00	4.02 - 4.17	102.1 - 105.9	1.19 - 1.36	30.2 - 34.5
40F136S	4.00	3.96 - 4.13	100.6 - 104.9	1.22 - 1.36	31.0 - 34.5
40F136SG	4.00	3.96 - 4.13	100.6 - 104.9	1.22 - 1.36	31.0 - 34.5
40F142SG	4.00	3.96 - 4.13	100.6 - 104.9	1.30 - 1.42	33.0 - 36.1
40F142S	4.00	3.96 - 4.13	100.6 - 104.9	1.30 - 1.42	33.0 - 36.1
40Q160AG-1	4.15	4.19 - 4.35	106.4 - 110.5	(2x)1.48 - 1.60 (2x)1.10 - 1.26	37.6 - 40.6 27.9 - 32.0
40Q160SG-1	4.00	4.02 - 4.17	102.1 - 105.9	(2x)1.48 - 1.60 (2x)1.10 - 1.26	37.6 - 40.6 27.9 - 32.0
40Q167SG-1	4.00	4.02 - 4.17	102.1 - 105.9	(2x)1.56 - 1.67 (2x)1.24 - 1.36	39.6 - 42.4 31.5 - 34.5
40Q169SG-1	4.00	4.02 - 4.17	102.1 - 105.9	(2x)1.59 - 1.69 (2x)1.24 - 1.36	40.4 - 42.9 31.5 - 34.5
45Q160SG-1	4.50	4.61 - 4.80	117.1 - 121.9	(2x)1.48 - 1.60 (2x)1.14 - 1.26	(2x) 37.6 - 40.5 (2x) 29.0 - 32.0

## BUSHING SLEEVES

### Installation Accessories for Duct Sealing Devices

Designed to adapt Simplex, Triplex, or Quadplex plugs' hole sizes to different cable or subduct sealing ranges, Bushing Sleeves allow installers to customize our duct sealing product range to project-specific needs.

When cables of different sizes occupy the same conduit, Bushing Sleeves, rather than expensive custom plugs, solve the problem.



Part Number	Size inches (mm)	Hole Diameter inches (mm)
070-SET1	0.70 (17.8)	SET
090-SET1	0.90 (22.9)	SET
110JMB051-2	1.10 (27.9)	0.51 x 2 (13.0 x 2)
110-SET1	1.10 (27.9)	SET
126JMB038	1.26 (32.0)	0.38 (9.7)
126JMB047	1.26 (32.0)	0.47 (11.9)
126JMB055	1.26 (32.0)	0.55 (14.0)
126JMB063	1.26 (32.0)	0.63 (16.0)
126JMB075	1.26 (32.0)	0.75 (19.1)
126JMB087	1.26 (32.0)	0.87 (22.1)
126JMB094	1.26 (32.0)	0.94 (23.9)
126JMB102	1.26 (32.0)	1.02 (25.9)
126JMB110	1.26 (32.0)	1.10 (27.9)
136JMB026/7	1.36 (34.5)	0.26 X 7 (6.6 x 7)
136JMB038	1.36 (34.5)	0.38 (9.7)
136JMB0407H	1.36 (34.5)	0.40 X 7 (10.2 x 7)
136JMB043-3	1.36 (34.5)	0.43 x 3 (10.9 x 3)
136JMB047	1.36 (34.5)	0.47 (11.9)
136JMB055	1.36 (34.5)	0.55 (14.0)
136JMB063	1.36 (34.5)	0.63 (16.0)
136JMB063/2	1.36 (34.5)	0.63 x 2 (16.0 x 2)
136JMB075	1.36 (34.5)	0.75 (19.1)

# FITTINGS & ACCESSORIES

## BUSHING SLEEVES CONTINUED

Part Number	Size inches (mm)	Hole Diameter inches (mm)
136JMB087	1.36 (34.5)	0.87 (22.1)
136JMB094	1.36 (34.5)	0.94 (23.9)
136JMB102	1.36 (34.5)	1.02 (25.9)
136JMB110	1.36 (34.5)	1.10 (27.9)
136JMB118	1.36 (34.5)	1.18 (30.0)
136JMB126	1.36 (34.5)	1.26 (32.0)
142JMB038	1.42 (36.1)	0.38 (9.7)
142JMB047	1.42 (36.1)	0.47 (11.9)
142JMB055	1.42 (36.1)	0.55 (14.0)
142JMB063	1.42 (36.1)	0.63 (16.0)
142JMB075	1.42 (36.1)	0.75 (19.1)
142JMB0782H	1.42 (36.1)	0.78 x 2 (19.8 x 2)
142JMB087	1.42 (36.1)	0.87 (22.1)
142JMB094	1.42 (36.1)	0.94 (23.9)
142JMB102	1.42 (36.1)	1.02 (25.9)
142JMB110	1.42 (36.1)	1.10 (27.9)
142JMB118	1.42 (36.1)	1.18 (30.0)
142JMB126	1.42 (36.1)	1.26 (32.0)
157JMB075	1.57 (39.9)	0.75 (19.1)
157JMB126	1.57 (39.9)	1.26 (32.0)
157JMB136	1.57 (39.9)	1.36 (34.5)
157JMB142	1.57 (39.9)	1.42 (36.1)
167JMB038	1.67 (42.4)	0.38 (9.7)
167JMB047	1.67 (42.4)	0.47 (11.9)
167JMB055	1.67 (42.4)	0.55 (14.0)
167JMB063	1.67 (42.4)	0.63 (16.0)
167JMB075	1.67 (42.4)	0.75 (19.1)
167JMB087	1.67 (42.4)	0.87 (22.1)
167JMB094	1.67 (42.4)	0.94 (23.9)
167JMB102	1.67 (42.4)	1.02 (25.9)
167JMB110	1.67 (42.4)	1.10 (27.9)
167JMB114	1.67 (42.4)	1.14 (29.0)
167JMB118	1.67 (42.4)	1.18 (30.0)
167JMB126	1.67 (42.4)	1.26 (32.0)
167JMB136	1.67 (42.4)	1.36 (34.5)
167JMB142	1.67 (42.4)	1.42 (36.1)
167JMB150	1.67 (42.4)	1.50 (38.1)
192JMB038	1.92 (48.8)	0.38 (9.7)
192JMB047	1.92 (48.8)	0.47 (11.9)
192JMB055	1.92 (48.8)	0.55 (14.0)
192JMB063	1.92 (48.8)	0.63 (16.0)
192JMB075	1.92 (48.8)	0.75 (19.1)
192JMB087	1.92 (48.8)	0.87 (22.1)
192JMB094	1.92 (48.8)	0.94 (23.9)
192JMB102	1.92 (48.8)	1.02 (25.9)
192JMB110	1.92 (48.8)	1.10 (27.9)
192JMB118	1.92 (48.8)	1.18 (30.0)
192JMB126	1.92 (48.8)	1.26 (32.0)
192JMB136	1.92 (48.8)	1.36 (34.5)
192JMB142	1.92 (48.8)	1.42 (36.1)
192JMB150	1.92 (48.8)	1.50 (38.1)
192JMB157	1.92 (48.8)	1.57 (39.9)
192JMB167	1.92 (48.8)	1.67 (42.4)
192JMB173	1.92 (48.8)	1.73 (43.9)
192JMB181	1.92 (48.8)	1.81 (46.0)
<b>Flat Drop Bushings</b>		
057JMB179-FD1	0.57 (14.5)	Flat Fiber Drop x 1
065JMB179-FD2	0.65 (16.5)	Flat Fiber Drop x 2
070JMB179-FD2	0.70 (17.8)	Flat Fiber Drop x 2
090JMB179-FD3	0.90 (22.9)	Flat Fiber Drop x 3
100JMB179-FD1	1.00 (25.4)	Flat Fiber Drop x 1
100JMB179-FD1-4X	1.00 (25.4)	Combination 4 x
136JMB179-FD4	1.36 (34.5)	Flat Fiber Drop x 4



## ALUMINUM COUPLERS

### Anodized Aluminum Duct Couplers

An anodized coating that is color coded by size protects these couplers and connectors, increasing their durability in the field. Designed for all types of polyethylene ducts, these products feature a ribbed external surface that provides excellent non-slip gripping during installation. Their low profile allows the couplers to pass easily through plowchutes.

Reverse-Threaded Couplers are tapered to accommodate the wide range of sizes and diameters common in the telecom industry today. Each coupler can be used with all ducts of the same nominal size, eliminating the problem of determining specific outside diameters. The buttressed threads provide excellent mechanical hold.

Barbed Couplers feature concentric air-tight barbs instead of spiral threads for maximum pullout resistance. The barbs are more effective under high-pressure airflow during cable propulsion. Install these couplers with the use of a coupling press.

S-Threaded Couplers are reverse threaded and straight to accommodate one size only. Provides tighter seal and more thread engagement on standard size duct.



### Features

- Reverse-threaded or barbed
- Color-coded sizing
- Anodized
- Designed for all types of polyethylene ducts

Part Number	Size	Duct O.D. Range		Color
		inches	mm	
<b>Reverse-Threaded Couplers</b>				
07CP108U	0.75	0.91 - 1.08	23.1 - 27.4	Black
10CP126U	1.00	1.15 - 1.25	29.2 - 31.7	Silver-Gray
10CP142U	1.00	1.18 - 1.42	30.0 - 36.0	Aluminum
11CP157U	1.125	1.40 - 1.57	35.6 - 39.9	Green
12CP170U	1.25	1.48 - 1.70	37.6 - 43.2	Burgundy
13CP185U	1.375	1.60 - 1.85	40.6 - 47.0	Champagne
15CP200U	1.50	1.80 - 2.00	45.7 - 50.8	Navy Blue
20CP252U	2.00	2.31 - 2.51	58.7 - 63.8	Bronze
25CP307U	2.50	2.80 - 3.07	71.1 - 78.0	Brown
40CP465U	4.00	4.41 - 4.65	112.0 - 118.1	Turquoise
40CP490U	4.00	4.65 - 4.90	118.1 - 124.5	Aqua
<b>Reducers</b>				
100CP142-157U	1.0/1.25	1.40 - 1.57	35.6 - 39.9	Aluminum
		1.18 - 1.42	30.3 - 36.0	
15CP157-190U	1.25/1.50	1.40 - 1.57	35.6 - 39.9	Dark Blue
		1.70 - 1.90	43.18 - 48.26	
<b>S-Threaded Couplers</b>				
05CP084S	0.50	0.84	21.3	Purple
11CP148S	1.125	1.48	37.6	Light Green
12CP152S	1.25	1.52	38.6	Red
11CP157S	1.125	1.57	39.8	Green
12CP166S	1.25	1.66	42.2	Burgundy
15CP190S	1.50	1.90	48.2	Marine Blue
20CP238S	2.00	2.38	60.5	Bronze
25CP288S	2.50	2.87	73.0	Lt. Gold
30CP350S	3.00	3.50	88.9	Orange
<b>Barbed Couplers*</b>				
10CP132SB	1.00	1.315	33.4	Aluminum
12CP154SB	1.25	1.57	39.9	Red
12CP162SB	1.25	1.62	41.1	Fuschia
12CP166SB	1.25	1.66	42.2	Burgundy
15CP182SB	1.50	1.82	46.2	Lt. Blue
15CP190SB	1.50	1.90	48.3	Blue
15CP197SB	1.50	1.97	50.0	Dark Blue
20CP238SB	2.00	2.375	60.3	Bronze

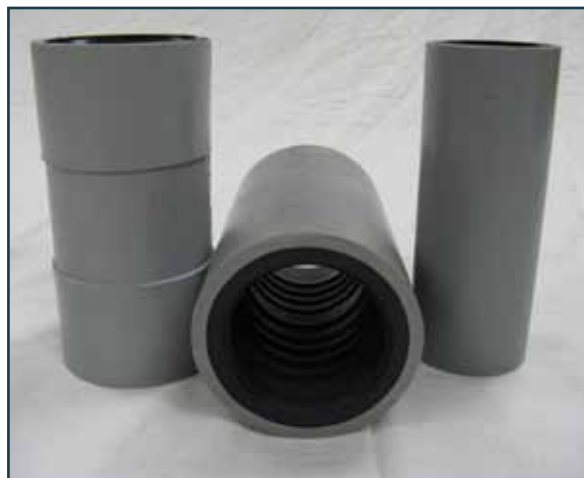
\*A coupling press is needed for installation

# FITTINGS & ACCESSORIES

## E-Loc® COUPLING

The E-Loc Coupling is a compression coupling that provides a watertight/airtight connection in buried or restrained applications. The ability to join dissimilar materials, such as, PVC, HDPE, fiberglass, or metal makes the E-Loc a versatile coupling for the telephone, electrical, and cable industries. Patented.

E-Loc Couplings are available to fit conduit sizes from 1/2" through 8", including several special diameters. Watertight to 200 psi restrained on smooth wall, ribbed, and corrugated duct. Custom lengths and transitions for different diameters are also available.



Duct Size	Part No.	Duct O.D.	Cplg. O.D.	Length
1/2"	EL084	0.840	1.400	6
1/2"	EL086	0.860	1.400	6
5/8"	EL062	0.625	1.315	6
3/4"	EL105	1.050	1.660	6
1"	EL131	1.316	2.375	6
1"	EL140	1.400	2.375	6
1"	EL142	1.420	2.375	6
1"	EL149	1.490	2.375	6
1-1/4"	EL154	1.540	2.375	6
1-1/4"	EL157	1.575	2.375	6
1-1/4"	EL160	1.600	2.375	6
1-1/4"	EL166	1.660	2.375	6
1-1/4"	EL175	1.750	2.375	6
1-1/2"	EL190	1.900	2.875	6
1-1/2"	EL183	1.832	2.875	6
2"	EL237	2.375	3.500	6
2"	EL243	2.430	3.500	6
2-1/2"	EL287	2.875	4.000	6
3"	EL350	3.500	4.500	6
4" "C DUCT"	EL435	4.350	5.563	6
4"	EL400	4.500	5.563	6
4"	EL4008	4.500	5.563	8
4"	EL40012	4.500	5.563	12
4"	EL40014	4.500	5.563	14
4"	ELR400 Repair Sleeve	4.500	5.563	6
4"	ELR4008 Repair Sleeve	4.500	5.563	8
4"	EL476	4.760	5.563	6
4"	EL47614	4.760	5.563	14
5"	E-500	5.563	6.625	6
5"	EL5008	5.563	6.625	8
6"	EL600	6.625	7.700	6
6"	EL6008	6.625	7.700	8
6"	EL60012	6.625	7.700	12
8"	EL800	8.625	9.775	6

All measurements are in inches. We also have "E-Loc" Electrical Terminal Adapters: Sizes 1/2" - 2-1/2". Call for details.

## E-Loc® TRANSITION COUPLING

The E-Loc Transition Coupling is a compression coupling used to provide a watertight/airtight connection for different diameter duct in buried or restrained applications. The E-Loc Transition Coupling has all the great features as the standard E-Loc Coupling including the ability to join dissimilar materials such as PVC, HDPE, fiberglass or metal.

The E-Loc Transition Coupling is watertight to 200 psi when restrained on smooth wall, ribbed and corrugated duct. Custom lengths and transition are also available.

Part. No.	From: Nom. Duct Size	To: Nom. Duct Size	Coupling O.D. (Inches)	Coupling Length (Inches)
ELA6656*	6" IPS	5" IPS	7.700	6
ELA6645*	6" IPS	4" IPS	7.700	6
ELA5645*	5" IPS	4" IPS	6.625	6
ELA5645R*#	5" IPS	4" IPS	6.625	6
ELA4745	4.750" O.D. DUCT	4" IPS	5.563	6
ELA4743	4.750" O.D. DUCT	4.350" "C" DUCT	5.563	6
ELA4543	4" IPS	4.350" "C" DUCT	5.563	6
ELA454318	4" IPS	4.350" "C" DUCT	5.563	18
ELA4542	4" IPS	4.215" O.D. DUCT	5.563	6
ELA4540*	4" IPS	3-1/2" IPS	5.563	6
ELA4535*	4" IPS	3" IPS	5.563	6
ELA4528*	4" IPS	2-1/2" IPS	5.563	6
ELA4523	4" IPS	2" IPS	5.563	6
ELA4335*	4.350" "C" DUCT	3" IPS	5.563	6
ELA3528	3" IPS	2-1/2" IPS	4.500	6
ELA3523	3" IPS	2" IPS	4.500	6
ELA2823	2-1/2" IPS	2" IPS	5.563	6
ELA2319	2" IPS	1-1/2" IPS	3.500	6
ELA2316	2" IPS	1-1/4" IPS	3.500	6
ELA2315	2" IPS	1.540" I.D. DUCT	3.500	6
ELA2313	2" IPS	1" IPS	3.500	6
ELA235183	2" IPS	1-1/2" I.D. DUCT	3.500	6
ELA1916	1-1/2" IPS	1-1/4" IPS	2.875	6
ELA1915R#	1-1/2" IPS	1.540" I.D. DUCT	2.875	6
ELA1913	1-1/2" IPS	1" IPS	2.875	6
ELA177154	1.770" O.D. DUCT	1.540" I.D. DUCT	2.375	6
ELA1616	1-1/4" IPS	1.580" I.D. DUCT	2.375	6
ELA1615	1-1/4" IPS	1.540" I.D. DUCT	2.375	6
ELA16140	1-1/4" IPS	1.400" O.D. DUCT	2.375	6
ELA16137	1-1/4" IPS	1.370" O.D. DUCT	2.375	6
ELA16131	1-1/4" IPS	1" IPS	2.375	6
ELA166105	1-1/4" IPS	3/4" IPS	2.375	6
ELA1514	1.540" I.D. DUCT	1.420" O.D. DUCT	2.375	6
ELA15131	1.540" I.D. DUCT	1" IPS	2.375	6
ELA13713	1" DURALINE CORR.	1" IPS	2.375	6
ELA08648	0.860" DUCT	1/2" IPS	1.540	6

\* Non Stock Made to Order.

# Repair Transition Fitting (No Stop)

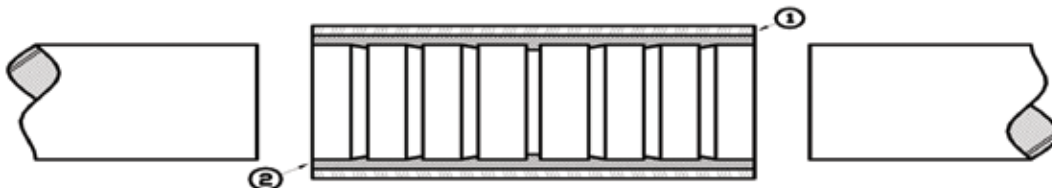
# FITTINGS & ACCESSORIES

## INSTALLATION INSTRUCTIONS FOR E-LOC® COUPLINGS / E-LOC® TRANSITION COUPLINGS

1. Check and make sure size of coupling is same as conduit being installed. E-Loc Couplings / Transition Couplings are based on standard O.D. sizes.
2. Wipe ends of conduit clean. Make sure it is clean of burrs, dirt, or foreign material.
3. To insure the coupling is fully inserted, place a reference point mark on both ends of the conduit a distance from the end equal to 1/2 the overall length of the coupling. For example, if using a 6" long coupling, place a mark 3" from each end of the conduit; on 8" long couplings, place a mark 4" from each end and so forth depending upon length of the coupling. When properly installed, the mark should be visible against each end of the coupling.
4. The ends of the conduit can be lubricated with water or water with a small amount of liquid dishwashing soap. **(Do not use motor oil or thread lubricants commonly used for metal pipe threads. This includes W-D 40® "type" lubricant.)**
5. On smaller diameter conduit, position coupling on the conduit, place a board across the end and hit with a small mallet or hammer. For easier installation of the E-Loc Transition Couplings, ETCO suggests installing the larger end of the conduit first – if possible. **(Do not hit the coupling directly with the hammer.)** On larger diameter conduit, clean and lubricate ends per steps #1 thru #4. Use a bar and a block to push the joint. If a hammer and block of wood are used, make sure wood is in contact with both sides of the coupling and hit block center. **(Do not hit the coupling directly with the hammer.)** Check to make sure conduit is all the way "home" using the reference point mark.
6. When joining conduit off a reel, install the E-Loc Coupling / Transition Coupling on conduit end coming from reel using steps #1 thru #5 above. After the coupling is on properly, push the installed coupling onto the clean second conduit end (lubricate if needed). If necessary, place a small board on the edge of coupling toward the reel and drive coupling on to second conduit. **(Do not hit coupling directly with the hammer.)**

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## UTILITY CONDUIT JOINTING SYSTEM E-LOC® COUPLINGS\*



(Cross Section)

### Material Specifications:

1. PVC sleeve stock conforms to NEMA TC2, TC6 & TC8 and ASTM F-512. The sleeve stock is rated for 90° C.
2. Polyurethane elastomer is ETCO 8706 thermosetting elastomer manufactured for sealing rings and gasket material.

### Specifications:

Color.....	Black
Hardness (ASTM-D-676) .....	68 Shore A
Tensile (ASTM-D-412).....	800 psi
Tear (ASTM-D-624 Die "C") .....	88 pli
Elongation (ASTM-D-412).....	160%
Specific Gravity (ASTM-D-792).....	1.24
Compression Modulus – 10% (ASTM-D-575).....	212-220 psi

\*U. S. Patent No. 5,180,197

## DOUBLE E-LOC® COUPLINGS

The Double E-Loc coupling was designed and developed to join both smooth and ribbed HDPE innerduct, specifically for pneumatic methods of cable placement where air and water-tight integrity of the system is imperative, and where the joint is unrestrained such as in a vault, manhole or hand hole. The standard E-Loc coupling is pressure tight to internal pressures above 200 psi when restrained or buried, but the Double E-Loc can maintain these pressures unrestrained. The Double E-Loc coupler is reusable.

### Features

- Sizes 1" thru 2" IPS
- Pressure tested in excess of 200 psi unrestrained
- Pull out tests exceeds pull requirement of conduit pull tests
- Quick - Easy to install - Reusable
- Can be used on smooth and ribbed HDPE conduit
- No metal components



Part No.	Nominal Duct Size & Type	Duct O.D. (Inches)	Cplg. Length when Tight (Inches)	Unrestrained Pressure Rating (psi)	Force (Lbs.) Required To Pull Out of Coupling
DEL131R	1" IPS Smooth Wall 1" Ribbed	1.315 1.340	6.25	200+ psi	1000+
DEL135R	1.350" Smooth Wall	1.350	6.25	200+ psi	1000+
DEL142R	1.42" Smooth Wall 1-1/8" Ribbed SIDR 9	1.420 1.460	6.25	200+ psi	1000+
DEL150R	1.50" O.D. SDR 11	1.500	6.25	200+ psi	1000+
DEL150B* (Black)	1-1/4" SDR 9 Aerial	1.500	6.25	200+ psi	1000+
DEL-154R	1-1/4" Smooth Wall, True 1.25" I.D. 1-1/4" Ribbed	1.503 1.575	6.25	200+ psi	1000+
DEL157R	40 mm Duct	1.575	6.25	200+ psi	1000+
DEL160R	1.600" O.D. Smooth	1.600	6.25	200+ psi	1000+
DEL166	1-1/4" IPS Smooth Wall	1.660	6.25	200+ psi	1100-1370
DEL166R	1-1/4" Ribbed	1.700	6.25	200+ psi	1600+**
DEL171R	1.710" O.D. Smooth	1.710	6.25	200+ psi	1100+
DEL178R	1-1/2" True SIDR 9 1.830" Ribbed	1.830	8.25	200+ psi	1800+
DEL183	1-1/2" True SIDR 9 1.830" Smooth	1.830	8.25	200+ psi	1800+
DEL190	1-1/2" IPS	1.900	8.25	200+ psi	1800+***
DEL237	2" IPS SDR 11 SDR 13.5 Aerial	2.375	8.5	200+ psi 200+ psi 200+ psi	2900-3000 2300-2500 2300

\*UV Resistant

\*\*Test was conducted after jointed assemblies were put in cold box @ 4° Fahrenheit for 20 hours. Force to pull out was 2100 lbs. on both units tested

\*\*\*Test conducted after assembly for 24 hours at -3° Fahrenheit. Force to pull out was 2560 lbs.

# FITTINGS & ACCESSORIES

## DOUBLE E-LOC® TRANSITION COUPLING

HDPE to HDPE Conduit

Part No.	From: O. D. Inches	To: O. D. Inches
DEL142131	1.420	1.315
DEL154150	1.540	1.500
DEL160150	1.600	1.495
DEL160154	1.600	1.540
DEL166131	1.660	1.315
DEL166142	1.660	1.420
DEL166154	1.660	1.540
DEL166160	1.660	1.600
DEL190166	1.900	1.660
DEL237190	2.375	1.900
DEL237166	2.375	1.660



## DOUBLE E-LOC® TRANSITION FITTINGS

- HDPE Polyethylene to Rigid PVC
- Double E-Loc to Male Pipe Thread
- Double E-Loc to Solvent Weld

Part No.	Description
DEL1661.25 MPT	Male Pipe Thread
DEL1901.50 MPT	Male Pipe Thread
DEL2372.00 MPT	Male Pipe Thread
DEL1661.25MSW	Male Solvent Weld
DEL1901.50 MSW	Male Solvent Weld
DEL2372.00 MSW	Male Solvent Weld



## E-LOC® TRANSITION FITTINGS

- Polyethylene to Rigid PVC
- E-Loc to Male Pipe Thread
- E-Loc to Solvent Weld

Part No.	Description
ELA1661.25 MPT	Male Pipe Thread
ELA1901.50 MPT	Male Pipe Thread
ELA2372.00 MPT	Male Pipe Thread
ELA1661.25MSW	Male Solvent Weld
ELA1901.50 MSW	Male Solvent Weld
ELA2372.00 MSW	Male Solvent Weld



## WUNPEECE DUCT SPACER

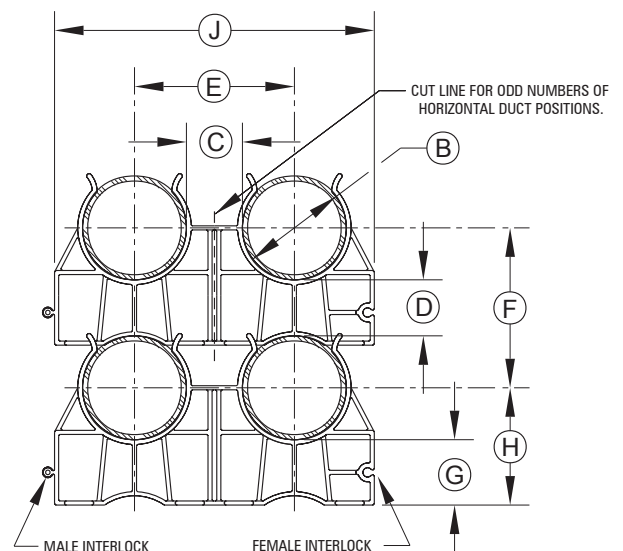
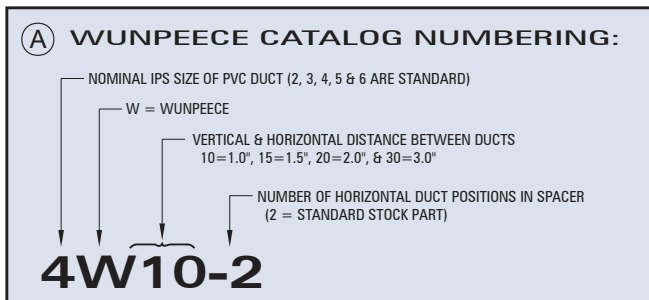
- Custom spacer units (3-way, 4-way, etc.) assembled at no extra cost
- Half as many parts to handle - molded as a two-way
- Easy snap-in design cuts your labor in half
- Random positioning along duct run eliminates vertical shear plane
- For all types of duct and almost any duct bank configuration

	(A) WUNPEECE CATALOG NO.	IPS* DUCT SIZE	(B) DUCT OD	NUMBER OF HORIZONTAL DUCT POSITIONS ***	DUCT TO DUCT SEPARATION		CENTER TO CENTER SEPARATION		(G) BOTTOM OF TRENCH TO BOTTOM OF BOTTOM DUCT	(H) BOTTOM OF TRENCH TO CENTER OF BOTTOM DUCT	(J) BASIC O.A.L.
					(C) HORIZONTAL	(D) VERTICAL	(E) HORIZONTAL	(F) VERTICAL			
STANDARD SPACERS	2W20-2	2"	2.375	2	2.000		4.375		3.000	4.188	8.750
	2W30-2	2"	2.375	2	3.000		5.375		3.500	4.688	10.750
	3W20-2	3"	3.500	2	2.000		5.500		3.000	4.750	11.000
	3W30-2	3"	3.500	2	3.000		6.500		3.500	5.250	13.000
	4W10-2	4"IPS*	4.500	2	.850	1.000	5.350	5.500	1.750	4.000	10.700
		4"TEL**	4.350	2	1.000			5.350		3.925	
	4W15-2	4"	4.500	2	1.500		6.000		3.000	5.250	12.000
	4W15-3	4"	4.500	3	1.500		6.000		3.000	5.250	18.000
	4W20-2	4"	4.500	2	2.000		6.500		3.000	5.250	13.000
	4W30-2	4"	4.500	2	3.000		7.500		3.500	5.750	15.000
	5W15-2	5"	5.563	2	1.500		7.063		3.000	5.781	14.125
	5W20-2	5"	5.563	2	2.000		7.563		3.000	5.781	15.125
	5W30-2	5"	5.563	2	3.000		8.563		3.500	6.281	17.125
	6W20-2	6"	6.625	2	2.000		8.625		3.000	6.312	17.250
	6W20-3	6"	6.625	3	2.000		8.625		3.000	6.312	25.875
	6W30-2	6"	6.625	2	3.000		9.625		3.500	6.812	19.250
	6W30-3	6"	6.625	3	3.000		9.625		3.500	6.812	28.875
	8W20-2	8"	8.625	2	2.000		10.625		3.000	7.312	21.250
SPECIALTY SPACERS	2DB08-2	2"	<b>SEE DETAIL ON NEXT PAGE</b>								
	2DB08-4	2"	<b>SEE DETAIL ON NEXT PAGE</b>								
	64W20-2	6" & 4"	<b>SEE DETAIL ON NEXT PAGE</b>								
	646W20-3	6" & 4"	<b>SEE DETAIL ON NEXT PAGE</b>								
	5W64-2b	5" & 2"	<b>SEE DETAIL ON NEXT PAGE</b>								
	5W64-2i	5" & 2"	<b>SEE DETAIL ON NEXT PAGE</b>								
	6W54-2b	6" & 2"	<b>SEE DETAIL ON NEXT PAGE</b>								
	6W54-2i	6" & 2"	<b>SEE DETAIL ON NEXT PAGE</b>								
6264W3015-3	6", 4" & 2"	<b>SEE DETAIL ON NEXT PAGE</b>									

\*IPS IS THE NOMINAL SIZE OF PVC DUCT & CONDUIT PER NEMA TC 2, TC 6 & TC 8

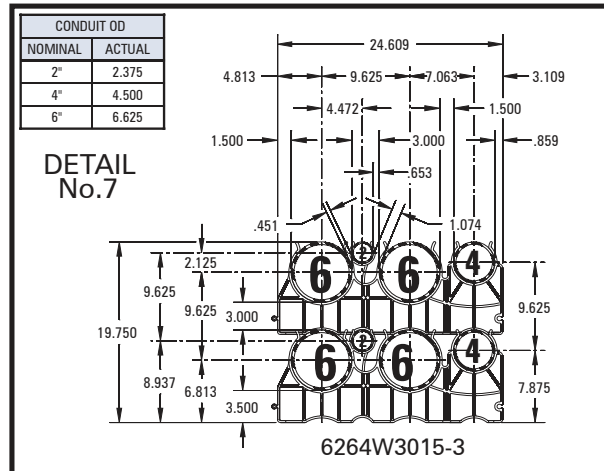
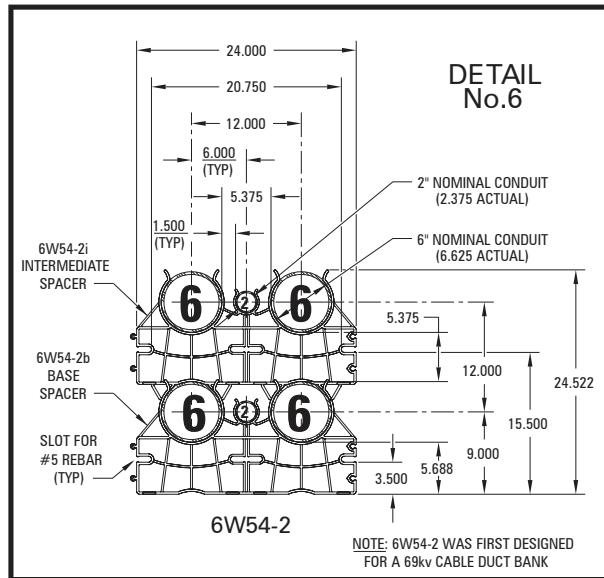
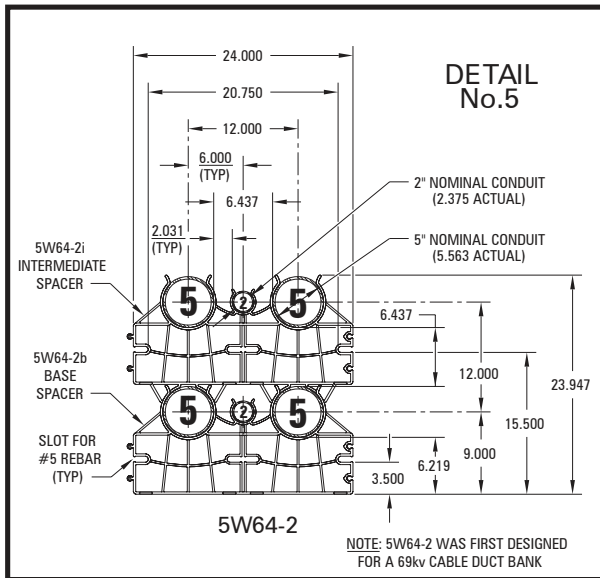
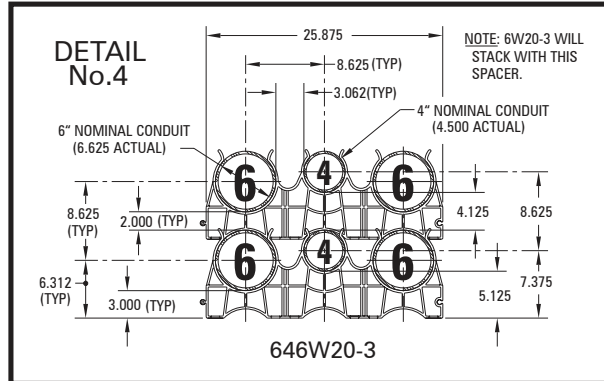
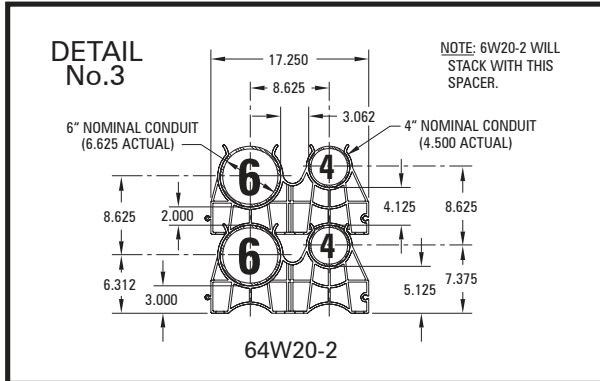
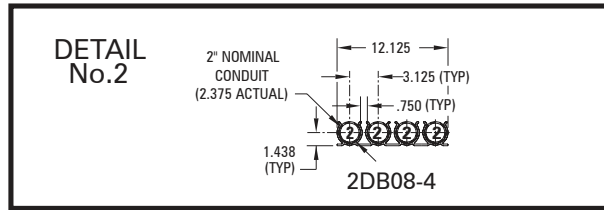
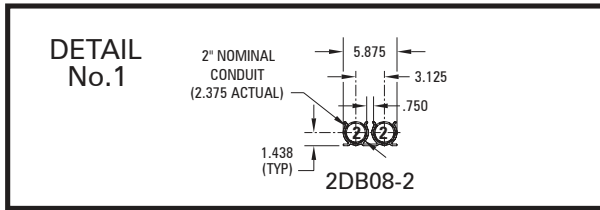
\*\*TEL IS THE NOMINAL SIZE OF PVC TYPE B TELEPHONE DUCT PER NEMA TC 10

\*\*\*USING "MOLDED-IN" INTERLOCKS, WUNPEECE SPACERS MAY BE FIELD ASSEMBLED FOR ANY NUMBER OF HORIZONTAL POSITIONS.



# FITTINGS & ACCESSORIES

## WUNPEECE DUCT SPACER



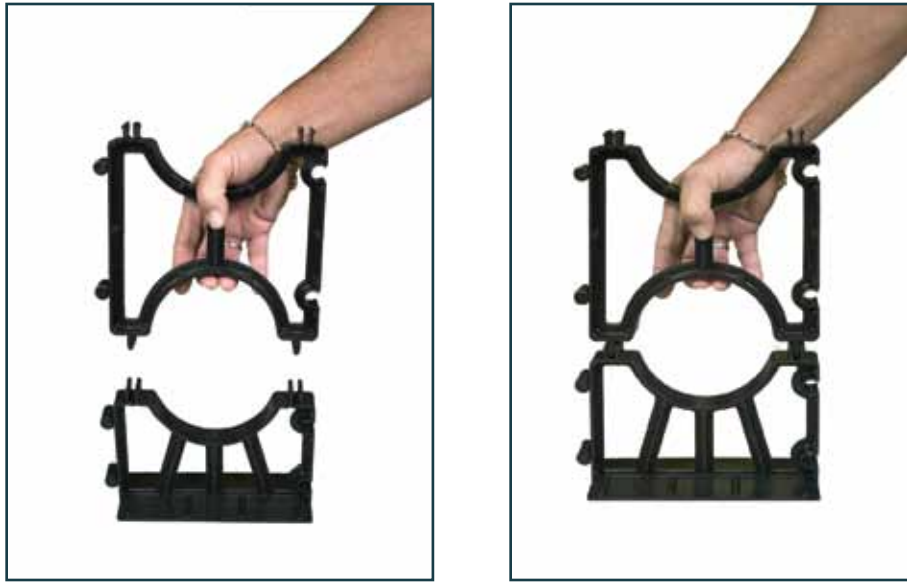


## UNDERGROUND SPACER SYSTEM

Vertical-Lok spacers stabilize duct banks, prevent distortion of bottom tiers and allow pre-assembly outside the trench. The Vertical-Lok spacer system provides positive vertical and horizontal spacing of underground ducts while providing independent support for each duct in a bank. It's the fast, easy way to build completely enclosed and locked-in banks of any size, with any number of tiers and any number of ducts side by side, in straight or curved runs.

### System uses modular elements

The spacer elements are modular and interlock at the sides and top to secure the ducts against separation during backfilling. Two modules are offered: a base spacer-flat at the bottom and an intermediate spacer. When the duct bank is capped with a spacer, the need for spacers as top caps is not necessary. The Cap-Lok is an easy and cost effective method for securing the top of the duct bank.



### ASSEMBLY IS A SNAP

Base and intermediate spacers interlock both vertically and horizontally; the interlocks plus wide base-plates provide solid support for duct bank.

Push together. As shown above, the suggested method is to snap spacers together with a vertical push.

Slide together. As shown at right, above, units will also slide together; this method is for use in unusual field conditions such as duct repair.

### INTERMEDIATE AND BASE SPACERS DIMENSIONS

Base spacers provide a 3" separation between the bottom row of ducts and the trench floor, except for the 4" x 1" size which is 1-3/4.

### DIMENSIONAL DATA

Nominal Size	1" Separation			1-1/2" Separation			2" Separation			3" Separation		
	R	A	C	R	A	C	R	A	C	R	A	C
2"	Saddle spacers only			1.2	4.0	1.5	1.2	4.5	2.0	1.2	5.5	3.0
3"	Saddle spacers only			1.8	5.1	1.5	1.8	5.6	2.0	1.8	6.6	3.0
4"	2.3	5.6	1.0	2.3	6.1	1.5	2.3	6.6	2.0	2.3	7.6	3.0
5"	Saddle spacers only			2.9	7.3	1.5	2.9	7.9	2.0	2.9	8.9	3.0
6"	--	--	--	3.3	8.2	1.5	3.4	8.7	2.0	3.4	9.8	3.0
8"	--	--	--	4.3	10.2	1.5	4.3	10.7	2.0	--	--	--

# FITTINGS & ACCESSORIES

## POLYWATER® F FIBER OPTIC CABLE LUBRICANT

Polywater® Lubricant F is a high performance, pourable liquid lubricant recommended for long, difficult, lightguide cable pulls. It is slow drying and leaves a lubricating film after its waterbase has evaporated. Polywater® Lubricant F will not stress crack low density polyethylene. It is compatible with all common types of cable jackets.

Polywater® Lubricant WF (winter grade) has the same characteristics as Polywater® Lubricant F and is specially formulated for use in temperatures as low as -20°F (-30°C).

Package Size	Lube F®	Lube WF®	Units/CS
55-gallon drum (208 l)	F-Drum	WF-Drum	1
5-gallon pail (18.9 l)	F-640	WF-640	1
2½-gallon jug (9.6 l)	F-320	WF-320	2
1-gallon jug (3.8 l)	F-128	WF-128	4
1-qt squeeze bottle (.95 l)	F-35	WF-35	12



## POLYWATER® J HIGH PERFORMANCE WIRE & CABLE PULLING LUBRICANT

Polywater® Lubricant J is a high performance, clean, slow-drying, water-based gel lubricant. Lubricant J provides maximum tension reduction in all types of cable pulling. It is especially recommended for long pulls, multiple-bend pulls and pulls in a hot environment. Lubricant J dries to form a thin lubricating film which retains its lubricity for months after use.

Polywater® Lubricant J is a specification-grade lubricant that does not promote flame propagation when used with fire-retardant cables and systems. Polywater® Lubricant WJ (winter grade) has the same characteristics as Polywater® Lubricant J and is specially formulated for use in temperatures as low as -20°F (-30°C).

Package Size	Lube J®	Lube WJ®	Units/CS
55-gal drum (208 l)	J-Drum	WJ-Drum	1
5-gal pail (18.9 l)	J-640	WJ-640	1
1-gal pail (3.8 l)	J-128	WJ-128	4
1/2-gal FEP™ in 5-gal pail (1.9 l)	J-110	WJ-110	10
1-quart FEP™ in 5-gal pail (.95 l)	J-99	WJ-99	16
1/2-gal FEP™ in carton (1.9 l)	J-55	WJ-55	6
1-quart squeeze bottle (.95 l)	J-35	WJ-35	12
1-quart FEP™ in carton (.95 l)	J-27	WJ-27	12



## POLYWATER® PRELUBE 2000™ CABLE BLOWING LUBRICANT

Polywater® Prelube 2000™ reduces frictional drag during the blowing of outside plant cable into duct. It increases the length of cable that can be blown in a single shot. Prelube 2000™ can also be used to blow in the hollow microtubes intended to hold future microcables (use Prelube 5000™ for blowing the microcables themselves). Over the last decade, Prelube 2000™ has been proven in the blowing of tens of thousands of kilometers of cable in over 20 countries on a variety of cable blowing machines.

Package Size	Regular Grade Prelube 2000™	Winter Grade Prelube 2000™	Prelube 5000™ for Microcables	Units/CS
8-fl. oz. squeeze bottle (.24 l)	--	--	PM-8	6
1-quart squeeze bottle (.95 l)	P-35	WP-35	--	12
1-gallon jug (3.8 l)	P-128	WP-128	--	4
5-gallon pail (18.9 l)	P-640	WP-640	--	1



## POLYESTER MULETAPE®

Whether you're installing cable or locating your underground network, NEPTCO MULETAPE has the power and performance you need. Available in a variety of constructions including woven polyester and aramid, versatile MULETAPE allows you to thread, measure, pull and detect with a single product, saving both time and money.

### Features & Benefits

- Lubricated for easy pulling and reduced friction
- Durably printed with sequential footage or meter markings\*
- Available in a variety of pulling strengths from 200 to 6,000 lbs. (91-2727 kg)
- Low elongation for enhanced worker safety
- Lightweight and easily blown into conduit or innerduct
- Available in splice-free lengths up to 100,000 ft. (30 km) for faster, easier installation
- Packaged on sturdy wooden or plastic reels

\* All products are also available unprinted



## POLYESTER MULETAPE®

Part No.	Strength (lbs/kg)	Typical Bowline Strength (lbs/kg)	Typical MULEKNOT Strength (lbs/kg)	Minimum Reel Lengths (ft/km)	Maximum Reel Lengths (ft/km)	Approximate Width
WP900P	900/409	480/218	770/350	3000/1	100,000/31	1/2"
WP1250P	1250/568	760/345	900/409	3000/1	70,000/21	1/2"
WP1800P	1800/818	830/377	1400/636	3000/1	50,000/15	5/8"
RP1800P	1800/818	830/377	1400/636	3000/1	3,000/1	3/8"
WP2500P	2500/1136	1300/591	1800/818	3000/1	25,000/8	3/4"

## DETECTABLE POLYESTER MULETAPE®

- 22-gage and 24-gage conductors

22-Gage Part No.	24-Gage Part No.	Strength (lbs/kg)	Typical Bowline Strength (lbs/kg)	Typical MULEKNOT Strength (lbs/kg)	Minimum Reel Lengths (ft/km)	Approximate Width
DT1250P	DP1250P	1250/568	760/345	900/409	3000/1	1/2"
DT1800P	DP1800P	1800/818	830/377	1400/636	3000/1	5/8"
DT2500P	DP2500P	2500/1136	1300/591	1800/818	3000/1	3/4"

## **BonDuit®** Conduit Adhesive

### DESCRIPTION

BonDuit® Conduit Adhesive joins polyethylene duct to PVC, fiberglass, and metal duct using standard PVC couplings. This rapid-cure, two-part resin adhesive forms a durable bond for a strong, permanent, water-tight joint.

BonDuit® Conduit Adhesive is a versatile field-friendly conduit joining solution. It works for multiple conduit types and sizes. It is easy to use and no special training is required.

### ADHESIVE SHEAR STRENGTH

Typical bond strengths were measured by joining two pieces of HDPE conduit with a PVC coupling and BonDuit® Adhesive. The force required to pull apart the joint after 24 hours at 70° F was measured.

Conduit Diameter	Pullout Force
1 Inch	724 lbs <sub>f</sub>
1-1/2 Inch	1,233 lbs <sub>f</sub>
2 Inch	2,025 lbs <sub>f</sub>
4 Inch	5,333 lbs <sub>f</sub>

Results based on 3rd-party laboratory testing.

### HYDROSTATIC (PRESSURE) TESTING

BonDuit® Conduit Adhesive forms a water-tight joint. HDPE duct was joined to PVC duct with a PVC coupling and the adhesive. The ducts were filled with water, sealed, pressurized to 60 psi, and observed over time for leakage. The joint was then subjected to a short duration, high pressure test.

Test Duration	Result
1,000 Hours	No Leaks

Continuous pressure test based on ASTM D1598, "Time to Failure of Plastic Pipe Under Constant Internal Pressure."

#### Short Duration High Pressure (Burst Test)

Maximum Pressure	Result
> 250 psi	No Leaks

Burst test based on ASTM D1599, "Resistance to Short-Time Hydraulic Pressure of Plastic Pipe, Tubing and Fittings (Burst Test)."



**BonDuit® Conduit Adhesive is supplied in a two-part cartridge and is mixed as it is applied.**

### PRODUCT BENEFITS:

- Easy to use
- Fast cure
- Durable bond
- Water-tight and air-tight seal
- High tensile strength
- Suitable for most common ducts

### END USE:

BonDuit® Conduit Adhesive bonds polyethylene to:

- PVC Couplings
- Concrete Vaults
- Transition Couplings
- Above Ground Conduits
- Steel Sweeps and Elbows
- Fiberglass and Composite Connections



## MODEL SPECIFICATION

Approved conduit joining system is BonDuit® Conduit Adhesive. The conduit adhesive shall come in a multiple-use cartridge to bond various conduit connections without special fitting or positioning jigs. The packaging shall automatically mix and meter the adhesive. The cure rate for the adhesive shall be fast, reaching 50% of final strength in one hour (@ 75° F), and 80% of final strength in two hours (@ 75° F). The peak exotherm temperature of mixed product shall not exceed 200° F (20 gram sample.) Product shall be suitable for use on various duct materials, multiple duct sizes and connection types.

Once cured, the adhesive seal shall be airtight and watertight. A one-inch, PVC coupling sealed to a polyethylene duct with the adhesive shall hold 120 psi air pressure after curing one hour at 75° F. The pull-out strength of a two-inch polyethylene duct sealed to a PVC coupling shall be at least 910 lbs force after curing one hour at 75° F and at least 1820 lbs force after curing for 24 hours. The adhesive shall have a minimum flexural strain of 2% as measured by ASTM D790.

The cured adhesive shall be resistant to water, salt water, oils, and uv degradation. The cured bond shall withstand temperature extremes from -60° F to 250° F. It shall withstand multiple freeze-thaw cycles. The cured product shall be non-conductive with a minimum dielectric strength of 450 Volts/Mil as measured by ASTM D149.

## ORDER INFORMATION

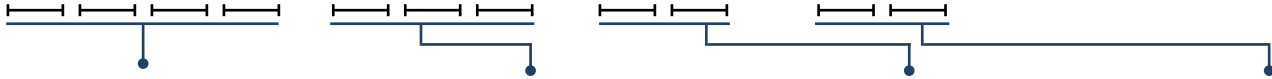
<u>Part No.</u>	<u>Package Description</u>
BT-KITG	Kit contains: 2 50-ml BonDuit® Adhesive Cartridges 8 Mixing Nozzles 1 Strip of Sanding Cloth 8 TR-1 Cleaning Wipes 1 Instruction Sheet 1 Dispensing Tool
BT-KIT	Kit contains: 2 50-ml BonDuit® Adhesive Cartridges 8 Mixing Nozzles 1 Strip of Sanding Cloth 8 TR-1 Cleaning Wipes 1 Instruction Sheet (Dispensing tool not included.)
BT-KITB6G	Bulk kit contains 6 Individual Kits, BT-KIT 1 Dispensing Tool Included
BT-KITB6	Bulk kit contains 6 Individual Kits, BT-KIT (Dispensing tool not included.)
BT-TOOL	1 Dispensing Tool
BT-10NOZZLE	10 Mixing Nozzles
BT-CART12PK	12 50-ml BonDuit® Adhesive Cartridges in a Package

*\*\*Slower curing version BonDuit® Conduit Adhesive available (BTSC). Call your local Vikimatic customer service representative for details.*

# CONDUIT MATRIX

## CONDUIT PIPE PART NUMBER MATRIX

The following Part Number Matrices can be used to build your part number to assure that you are getting exactly what is required to fulfill your project requirements. Each Matrix utilizes the most common configurations to make your ordering easier, but Vikimatic can produce custom sizes on request. Call your local Vikimatic representative for details.



	<u>Material</u>
<u>TYPB</u>	Type B
<u>TYPC</u>	Type C
<u>TYPD</u>	Type D
<u>DB60</u>	DB 60
<u>DB10</u>	DB 100
<u>DB12</u>	DB 120
<u>PV20</u>	PV 200
<u>SCH4</u>	SCH40
<u>SCH8</u>	SCH80
<u>GT42</u>	GT42
<u>SBIP</u>	Black Iron Pipe
<u>SGIP</u>	Galv Iron Pipe
<u>SBTC</u>	Black Thread & Cplg
<u>SGTC</u>	Galv Thread & Cplg
<u>SBPE</u>	Black Plain End
<u>SBBE</u>	Black Plain End (Bevld)
<u>SGPE</u>	Galv Plain End
<u>SGBE</u>	Galv Plain End (Bevld)
<u>SEMT</u>	EMT
<u>SIMC</u>	IMC
<u>SFLS</u>	Flex Steel
<u>SSFL</u>	Split Flanged Steel
<u>SSCS</u>	Split Cut Steel
<u>SS14</u>	Split 14 Guage Steel
<u>FGSW</u>	Fiberglass STD
<u>FGHW</u>	Fiberglass HW
<u>FGBR</u>	Fiberglass Bullet Resist
<u>SPC4</u>	Split Conduit SCH40
<u>SPC8</u>	Split Conduit SCH80
<u>SPCC</u>	Split Conduit Type C
<u>STG4</u>	Split T&G SCH40
<u>STG8</u>	Split T&G SCH80

	<u>Sizes</u>
<u>025</u>	1/4"
<u>050</u>	1/2"
<u>075</u>	3/4"
<u>100</u>	1"
<u>125</u>	1 1/4"
<u>138</u>	1 3/8"
<u>150</u>	1 1/2"
<u>175</u>	1 3/4"
<u>200</u>	2"
<u>250</u>	2 1/2"
<u>300</u>	3"
<u>400</u>	4"
<u>500</u>	5"
<u>600</u>	6"
<u>800</u>	8"
<u>010</u>	10"
<u>012</u>	12"

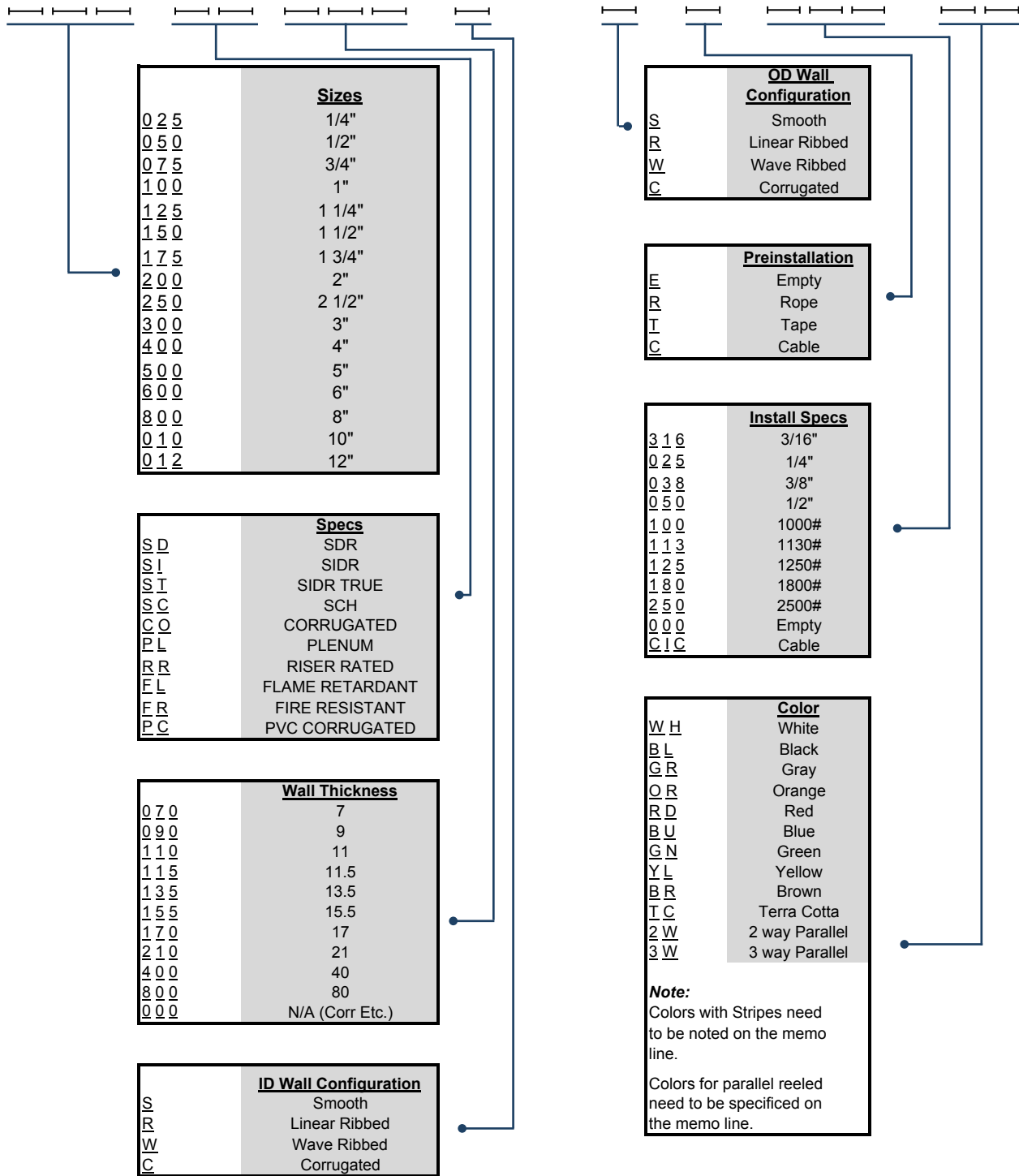
	<u>Length</u>
<u>10</u>	10'
<u>20</u>	20'
<u>40</u>	40'
<u>R1</u>	Random 10'
<u>R2</u>	Random 20'

	<u>Color</u>
<u>WH</u>	White
<u>BL</u>	Black
<u>GA</u>	Galvanized
<u>GR</u>	Gray
<u>OR</u>	Orange
<u>RD</u>	Red
<u>BU</u>	Blue
<u>GN</u>	Green
<u>YL</u>	Yellow
<u>BR</u>	Brown
<u>TC</u>	Terra Cotta

### Conduit Examples:

- **SCH440020GR** --- Conduit, 4" x 20' SCH40 Gray
- **SSFL40010GA** --- Conduit, Split Steel, 4" x 10' Galvanized

## HDPE PART NUMBER MATRIX

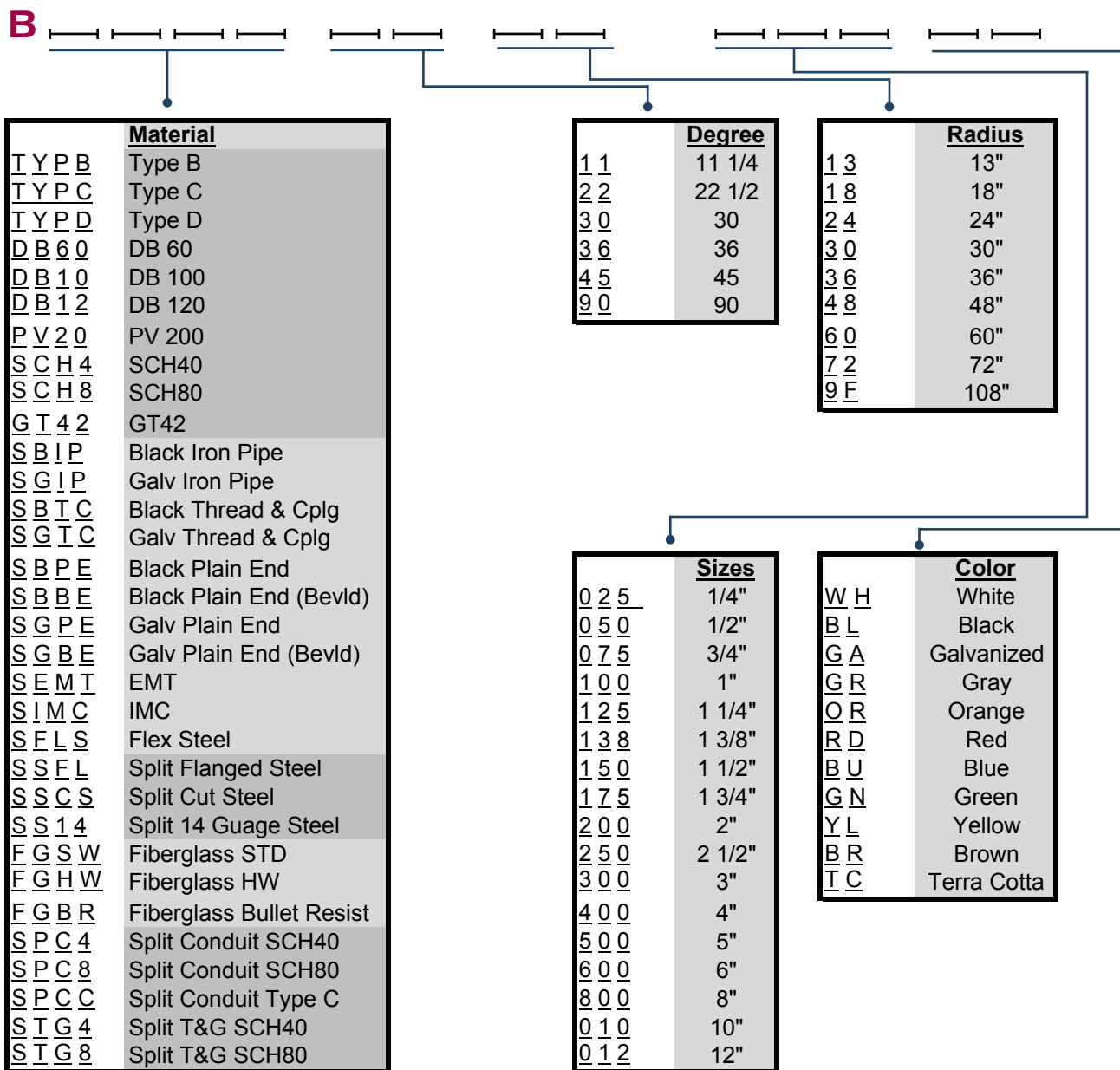


### Polyethylene Matrix:

- 100SD110SSE000OR --- Innerduct, 1" SDR11 Smooth In, Smooth Out, Empty, Orange
- 125PL000CCT090WH --- Innerduct, 1 1/4" Plenum Rated Corrugated w/ #900 Tape, White

# BENDS MATRIX

## CONDUIT BENDS PART NUMBER MATRIX



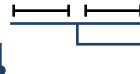
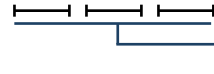
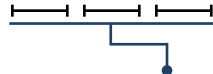
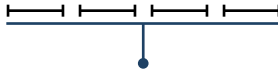
### Bends Examples:

- **BSCH49036200GR** --- Bend, PVC SCH40, 90 Degree x 36" Radius, 2" Gray
- **BSGTC4536400GA** --- Bend, Steel Threaded & Coupled, 45 Degree x 36" Radius, 4" Galvanized



## CONDUIT FITTINGS PART NUMBER MATRIX

**F**



	<u>Material</u>
<u>TYPB</u>	Type B
<u>TYPC</u>	Type C
<u>TYPD</u>	Type D
<u>DB60</u>	DB 60
<u>DB10</u>	DB 100
<u>DB12</u>	DB 120
<u>PV20</u>	PV 200
<u>SCH4</u>	SCH40
<u>SCH8</u>	SCH80
<u>GT42</u>	GT42
<u>SBIP</u>	Black Iron Pipe
<u>SGIP</u>	Galv Iron Pipe
<u>SBIC</u>	Black Thread & Cplg
<u>SGIC</u>	Galv Thread & Cplg
<u>SBPE</u>	Black Plain End
<u>SBBE</u>	Black Plain End (Bevld)
<u>SGPE</u>	Galv Plain End
<u>SGBE</u>	Galv Plain End (Bevld)
<u>SEMT</u>	EMT
<u>SIMC</u>	IMC
<u>SFLS</u>	Flex Steel
<u>SSFL</u>	Split Flanged Steel
<u>SSCS</u>	Split Cut Steel
<u>SS14</u>	Split 14 Guage Steel
<u>FGSW</u>	Fiberglass STD
<u>FGHW</u>	Fiberglass HW
<u>FGBR</u>	Fiberglass Bullet Resist
<u>SPC4</u>	Split Conduit SCH40
<u>SPC8</u>	Split Conduit SCH80
<u>SPCC</u>	Split Conduit Type C
<u>STG4</u>	Split T&G SCH40
<u>STG8</u>	Split T&G SCH80

	<u>Sizes</u>
<u>025</u>	1/4"
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<u>800</u>	8"
<u>010</u>	10"
<u>012</u>	12"

	<u>Fittings</u>
<u>STC</u>	Stop Coupling
<u>SLC</u>	Sleeve Coupling
<u>EXJ</u>	Expansion Joint
<u>FMA</u>	Female Adapter
<u>MLA</u>	Male Adapter
<u>CAP</u>	Cap
<u>ENB</u>	End Bell

	<u>Color</u>
<u>WH</u>	White
<u>BL</u>	Black
<u>GA</u>	Galvanized
<u>GR</u>	Gray
<u>OR</u>	Orange
<u>RD</u>	Red
<u>BU</u>	Blue
<u>GN</u>	Green
<u>YL</u>	Yellow
<u>BR</u>	Brown
<u>TC</u>	Terra Cotta

**Fittings Examples:**

- **FSCH4200STCGR** --- Fitting, SCH40 2" Stop Coupling, Gray
- **FGBR400EXJBL** --- Fitting, Fiberglass Bullet Resistant, 4" Expansion Joint, Black

# INDEX

<b>A</b>	
Aluminum Couplers	77
<b>B</b>	
Bends Part Number Matrix	92
Blank Duct Plugs	69
Bonduit®	88
Bore-Gard®	12
Bore-Gard® Accessories	14
Bore-Gard® Specifications	14
Bushing Sleeves	75
<b>C</b>	
Can-Fuse®	15
Cement	29
Conduit Part Number Matrix	90
Corrugated HDPE Duct	61
CRS Repair Kits	34
Cut Steel	53
Cut Steel Bends	53
<b>D</b>	
DB-100 Nonmetal P&C Duct	6
Deep Socket Sch 40 Elbows	8
Double E-Loc® Couplings	81
Double E-Loc® Transition Couplings	82
Double E-Loc® Transition Fittings	82
<b>E</b>	
Elbows - Long Belled	9
E-Loc® Coupling	78
E-Loc® Installation Instructions	80
E-Loc® Transition Coupling	79
E-Loc® Transition Fittings	82
Extra Heavy Wall EPC	2
<b>F</b>	
Fiber Optic Simplex Plugs	70
Fiberglass Conduit	39
Fiberglass Elbows	44
Fiberglass Fittings	40
Fiberglass MultiCell	18
Fittings Part Number Matrix	93
Flower Pot Plug	10
FuturePath®	64
<b>G</b>	
Galvanized 90° Special Radius Sweep	50
Galvanized Rigid Couplings	51
Galvanized Rigid Factory Elbows	51
<b>H</b>	
HDPE Innerduct with Pull Rope	58
HDPE Innerduct with Pull Tape	58
HDPE Large Diameter Conduit	58
HDPE Part Number Matrix	91
Heavy Wall EPC	1
<b>I</b>	
I.D. Controlled Innerduct	56
ID XHW 11.25° Elbow	44
ID XHW 22.5° Elbow	44
ID XHW 30° Elbow	45
ID XHW 45° Elbow	45
ID XHW 60° Elbow	46
ID XHW 90° Elbow	46
ID XHW Multifit Adapter	43

ID XHW Reducer	43
ID/IPS Extra Heavy Wall Conduit	39
ID/IPS XHW 11.25° Fitting	43
ID/IPS XHW 5° Double Bell Coupling	40
ID/IPS XHW Double Bell Coupling	40
ID/IPS XHW NPT Female Threaded Adapter	42
ID/IPS XHW NPT Male Threaded Adapter	42
ID/IPS XHW O-Ring Expansion Joint	41
ID/IPS XHW O-Ring Exp/Deflect Joint	41
ID/IPS XHW Single Expansion Joint	40
ID/IPS XHW Skew Wobble	42
ID/IPS XHW Sleeve	40
ID/IPS XHW Split Stop Ring	43
ID/IPS XHW Wobble	41
Innerduct	54
Innerduct Specifications	59
<b>M</b>	
MaxCell®	66
MaxCell® Application Guide	67
MULTETAPE®	87
MultiCell Installation Instructions	24
MultiCell 7-way	22
MultiCell 8-way	22
MultiCell 10-way	23
MultiCell 14-way	23
MultiCell Boreable	21
MultiCell EMT	20
MultiCell Introduction	16
MultiCell PVC Coated	21
Multi-Gard®	13
Multi-Gard® Specifications	14
<b>O</b>	
O.D. Controlled Innerduct	55
<b>P</b>	
P&C Bell Ends	28
P&C Cement	29
P&C Couplings	29
P&C Duct Type DB-120	5
P&C Duct Type DB-60	5
P&C Duct Type EB-20	4
P&C Duct Type EB-35	4
P&C Female Adapters	28
P&C Flex Conduit	29
P&C Flex Sweep and Elbow Information	30
P&C Flex Technical Information	30
P&C Male Adapters	28
P&C Plugs	28
P&C Specifications	7
PINPOINT®	63
Plenum Duct	60
Plug with Pull Tab	10
Polyester MULETAPE®	87
Polyethylene Part Number Matrix	91
Polywater® F Lubricant	86
Polywater® J Lubricant	86
Polywater® Prelube 2000™	86
Power & Communication Duct	3
Power & Communication Flex	28

Pulltape	87
PVC 5° Angle Coupling BxB	10
PVC 5° Angle Coupling BxS	10
PVC Cement	29
PVC Coupling	10
PVC Expansion Joint	68
PVC Fabricated End Bell	11
PVC Fabricated End Bell	68
PVC Female Adapter	11
PVC Female Threaded Adapter	68
PVC Fittings & Accessories	68
PVC G-Cap	68
PVC Long Line Coupling	10
PVC Male Adapter	11
PVC Molded End Bell	11
PVC Reducers	11
PVC Sleeve Coupling	10
PVC Square Bore	68
PVC Wye Branch	68
<b>Q</b>	
Quadplex Duct Plugs	74
<b>R</b>	
Ribbed HDPE Innerduct Specs	56
Rigid Nonmetallic Conduit	1
Riser Duct	62
<b>S</b>	
Schedule 40 & 80 HDPE Conduit Specs	57
Schedule 40 MultiCell	17
Schedule 40 PVC	1
Schedule 80 PVC	2
Silicore®	65
Split Adapter Couplings	34
Split Duct	31
Split Duct Conduit	33
Split Duct Couplings	33
Split Duct	32
Split Duct Sweeps	32
Split Duct Sweeps 45°	35
Split Duct Sweeps 90°	36
Split Heavy-Wall Steel	53
Split Sleeve Coupling	32
Split Steel 14 Gauge	52
Split Steel Coupling 14 Gauge	52
Split Steel Elbow 14 Gauge	52
Steel Pipe	47
Steel Pipe 14" Bonding Jumper	49
Steel Pipe 24" Bonding Jumper	49
Steel Pipe AX Fitting	49
Steel Pipe AX8 Fitting	49
Steel Pipe Expansion Fittings	48
<b>T</b>	
Triplex Duct Plugs	72
Type C MultiCell	17
<b>U</b>	
Underground Spacer System	85
<b>W</b>	
Wunpeece Duct Spacers	83

## ADDITIONAL TVC PRODUCT OFFERINGS

Whether you use fiber optic cable, twisted pair or coaxial cable, Vikimatic delivers the products and technical support needed to build today's communications infrastructure. Backed by close working relationships with top manufacturers and a deep understanding of the applications and technology behind the products we sell, Vikimatic has proven itself to be a valued partner to both the broadband cable and telecommunications industries.

In addition to our Conduit product selection, Vikimatic offers a full breadth of products for your every need:

- Innerduct
- MaxCell
- Innerduct Placing Tools
- Poleline Hardware
- Signage Systems
- MultiCell
- Cable Blowing Equipment
- Fiber Optic Cables & Accessories
- Coax Cables & Accessories
- Waterproofing Materials
- Underbridge
- Handholes/Pedestals/Enclosures
- Tools & Safety Equipment
- Drop Materials
- Customer Premise Equipment

Visit our web site at [www.vikimatic.com](http://www.vikimatic.com) for more information.

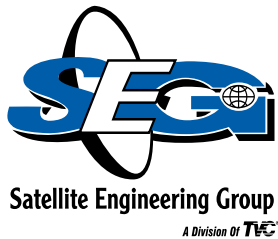
## TVC PROPRIETARY BRANDS



MaxCell®, TVC's proprietary fabric innerduct, was introduced to the marketplace in 1999. Since then it has grown to be the new standard for innerduct applications in conduit housed communication networks in every market including CATV, Telecom, Military, University and Corporate Campuses, Hospitals, Power, Municipal, Federal and Aviation.



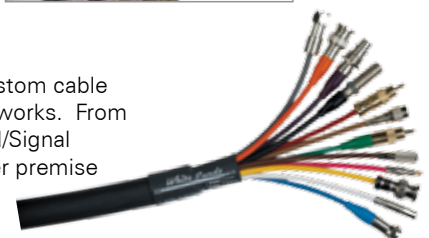
Available exclusively through TVC Communications, the MARATHON® family of products provides exceptional quality and value. Designed to the highest specifications, including SCTE requirements if applicable, the MARATHON product line includes Pole Line Hardware, Guy Hardware, Lashing Wire, Pole Banding Products, Grounding Materials, Tools & Safety Equipment and Passives.



SEG is the authorized national distributor of leading vendors for the satellite, broadcast and cable industries. Additionally, SEG provides installations, field maintenance and integration services for satellite systems and networks on a nationwide basis.



White Sands Engineering fabricates precision custom cable assemblies used throughout communication networks. From dense bundled cabling applications at a Headend/Signal Origination Office to simple jumpers for customer premise applications, White Sands can make it.





[www.vikimatic.com](http://www.vikimatic.com)