



Opti-Com Manufacturing Network, LLC

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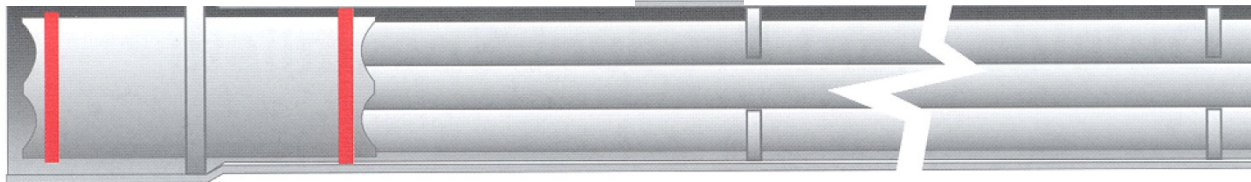
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The leading choice for fiber optic conduit systems

The Opti-Com® multi-duct conduit system gets your new fiber optic cable on-line quicker and more economically than conventional 4" duct and pulled-in reeled inner duct. The Opti-Com® factory-installed inner ducts remain straight, eliminating the additional surface contact created in the twisting of reeled inner ducts. This reduces the number of manholes required for cable pulling set up points by increasing the spacing distance resulting in lower installation costs. Opti-Com® is available with 3 inner ducts each with inside diameters of 1.50" or 4 inner ducts each with inside diameters of 1.25", an option not available in conventional installation



Industry standard outer ducts provide maximum protection

Opti-Com® utilizes the same outer duct conduit that the telecommunication industry already uses: 4" Type C PVC that conforms to industry standards 8546, 8343 and TC-10. Not only is this pipe completely familiar to telcom installers, but the Opti-Com® Type C PVC is manufactured using higher than required levels of PVC resin and very little filler. Additionally, this finished product is much lighter and stronger than most Type C and will not become as brittle in colder weather. It is also exactly the right size to fit into standard duct spacers, manhole terminators and under-bridge hangers and supports.

Alternative outer ducts include schedule 40 PVC, and fiberglass conduit in standard .070" wall, heavy .096" wall and bullet resistant in .250" wall for the ultimate protection in a lightweight conduit. Opti-Com® is also available in S-80 PVC & Schedule 40 galvanized steel conduit for maximum protection in high risk areas.



Opti-Com® U.L. Listed Schedule 40 PVC

Extra long integral bell flange significantly improves joint strength



The Opti-Com® PVC outer duct is extruded in one piece with a six-inch long bell flange at one end. The extra length of the coupling portion, along with one piece construction, ensures a snug fit and a consistently strong, secure joint. Opti-Com® can easily be assembled above ground and placed by hand into the trench, fed by a trencher or plowed directly into the ground. The low profile integral bell also installs easily in under-road bores. Flush end design simplifies installation and improves production.

Flush-end design simplifies installation and improves production

Rather than recess the outer pipe so that the inner duct ends are exposed for alignment during installation, Opti-Com® inner and outer pipes are designed for a flush-cut fit into the female end. So instead of having to make two careful cuts every time a shorter or curved section is needed (one cut for proper length and the other to expose the inner ducts), only one square cut is required. That not only saves more than half the time, it also eliminates the danger of nicking (and weakening) an inner duct while cutting back the outer jacket.

Equally important, flush-end conduits eliminate exposed inner duct ends during shipping and loading into the ditch - situations where damage often occurs.

Uniquely designed inner coupling assures foolproof inner duct alignment

Instead of a molded rubber coupling that's susceptible to tearing and leakage, the innovative Opti-Com® coupling is rigid plastic with a separate one piece diaphragm gasket.





To simplify accurate inner duct alignment, the face of the Opti-Com® inner coupling utilizes overlapping conical-shaped target areas that easily guide the inner ducts into their respective chambers. The installer merely has to push the two sections together until the inner ducts slide into the tapered holes of the receiving duct. With this arrangement, it is literally impossible to misalign the inner ducts. Now contrast this simple procedure with the hassle of first having to align the inner ducts to each other - a necessary step with other conduit systems.

Variety of inner ducts for every job situation

The Opti-Com® PVC inner ducts come in either a smoothwall or linear ribbed configuration, which offer an economical choice for standard installations.

Opti-Com® is also available in our proprietary linear ribbed or smoothwall polyethylene inner ducts giving the ultimate combination of lubricity and burn resistance during cable pulling.

Our polyethylene inner ducts are manufactured with specially blended resins that act as heat absorbers and allow for permanent lubrication throughout the entire wall.

The Opti-Com® polyethylene inner ducts have been independently tested for resisting burn-through, and results revealed that these inner ducts resist burn-through greater than 55 times that of other standard or pre-lubricated polyethylene inner ducts and 400 times greater than that of PVC.

Innovative slip coupling kit also makes field splicing hassle free



For standard field splicing as well as repair, the Opti-Com® system utilizes an innovative field splicing kit that is highly efficient and easy to use. The kit includes an external slip coupling and an inner coupling assembly that is gasketed at both ends and can be fully inserted into either conduit. Attached to this coupling are lanyards which are used to center the coupling across the joint. After alignment, the external slip coupling (previously installed over either conduit section) is slid into place and cemented over the spliced joint. This internally bridged splice, together with the protective outer sleeve, is actually stronger than an unspliced end section of conduit.



New exclusive Redlock® gasketing system enhances overall reliability



To ensure the integrity of the easily assembled connection, the Opti-Com® system uses special Redlock® gaskets that seal against the inside wall of the outer duct and outside wall of the inner ducts. This Redlock® technology not only provides a tighter fit but also acts as a one-way anti-reversing seal to help prevent pullout.

The Redlock® gasket technology withstands inner duct line blowing pressures exceeding 125 psi while maintaining external resistance to a 30-foot head of water.

Furthermore, in those instances where a cemented connection is desired on the outer duct, it can be easily accomplished without exposing the gasket or inner-ducts to the glue.

System design also simplifies splicing into manholes

Opti-Com® terminates easily into manholes and handholes. Instead of using elaborate cuts, messy glue and adapters to ensure a snug fit, a simple flush cut and pressure fitted coupling are all that is needed to terminate or adapt to the flexible duct within.

Closely placed manholes can be passed completely through with our innovative Type F terminator to stretch out line and cable placement distances.

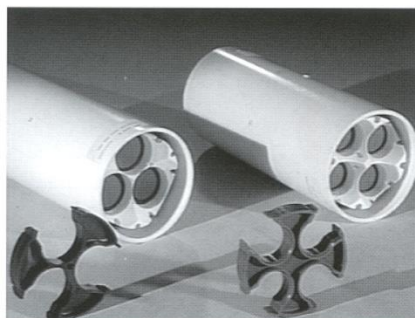
Opti-Com® the best connection yet for a total system solution

In addition to our innovative product differences and standard size outer duct, we have all the system capabilities you will need. Opti-Com® is also available in pre-formed factory bends in numerous angles and lengths. We further supply couplings, repair kits for occupied ducts, adapters to the various outer ducts, line-blowing accessories and bridge hangers to complete any installation. Before you install your next fiber optic conduit project, take a look at all the advantages the Opti-Com® system has to offer. If you want proven quality, trouble free installation, simplicity and long-term reliability, then choose Opti-Com®. We believe you will like what you see.



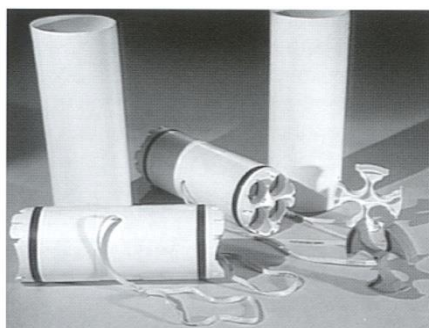
GENERAL DESCRIPTION

Standard Coupling Kits



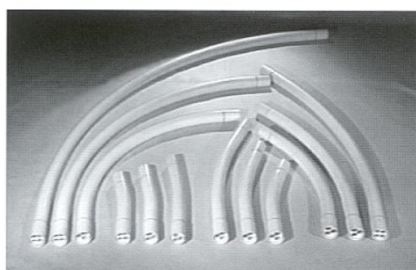
This one-piece, center stop style coupling is designed to join 2 spigot ends of Opti-Com®. This coupling is used the same way a PVC, center stop coupling would be used. Both inner and outer duct connections are gasketed. The kit also comes with an inner duct spacer to assist in aligning the inner ducts on the cut section of the Opti-Com®.

Slip Coupling Kits



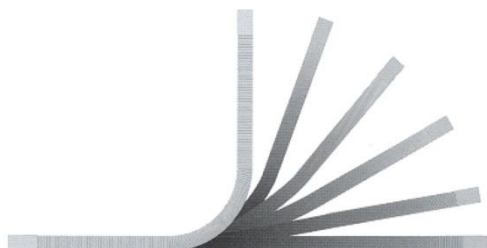
This two- piece slip coupling is designed to join 2 spigot ends of Opti-Com® in tight working conditions that prohibit the use of the Standard Coupling. This coupling is used in the same situation as a PVC slip coupling would be used. To be joined, the outer duct coupling slips over one of the sections. The gasketed inner duct coupling slides completely inside one of the sections and aligns with the other section. It is pulled and centered across the two sections being joined together. The outer sleeve is then cemented in place halfway across each of the 2 sections. This kit also comes with an inner duct spacer to assist in aligning the inner ducts on the cut section of the Opti-Com®.

Bends & Sweeps



All Opti-Com® bends and sweeps are manufactured with the standard 6" integral bell, an Opti-Com® coupling on the female end, and inner & outer duct spigots on the opposite end. Standard sweeps include 11.25°, 22.5°, 45°, and 90°. Standard Radius sweeps are 3', 4', 6' and 9'.

Flexible Lengths



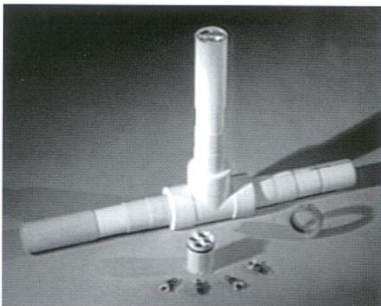
Opti-Com® flexible lengths come standard in 10' or 20' lengths for unexpected obstacles encountered during the construction process. The outer duct is corrugated high density polyethylene. The inner ducts utilize specially blended burn resistant polyethylene. Each flexible length is equipped with the standard Opti-Com® bell and spigot ends for each type of adjoining outer ducts. Made per order. Custom lengths are also available.



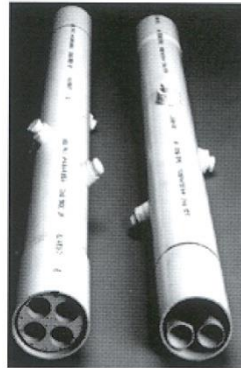
GENERAL DESCRIPTION

Lubrication Fittings

Type T

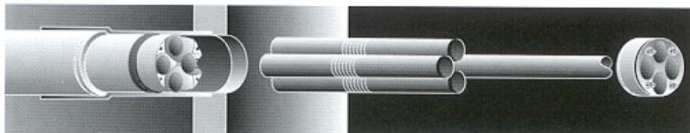


Type X



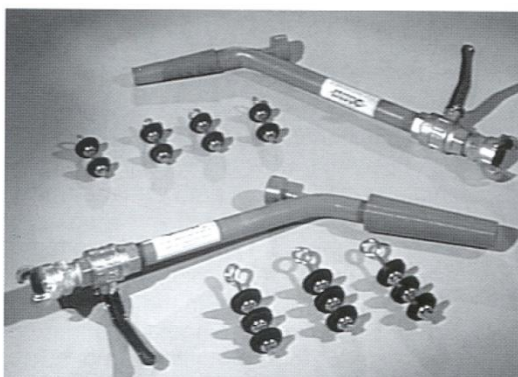
These fittings are designed to be used in Opti-Com® runs where additional cable lubricant would be required between pull points. They allow the user to introduce additional lubricant mid-point in longer runs or immediately ahead of anticipated problem areas such as severe bends. The modular design includes a standard Opti-Com® bell on one end and a standard Opti-Com® spigot on the other. This allows the fitting to be “plugged-in” between any two points of Opti-Com® anywhere in the run. The type “T” fitting allows for direct burial between pull points and has a standard Opti-Com® bell end at the top. The spigot end of a length of Opti-Com® can be inserted into the bell and cut off at the desired level below grade or right at the grade level. The provided terminator is then inserted into the cut end to seal the system but allows access to apply lubrication later. The type “X” fitting is for “under bridge” use or for use within underground enclosures.

Cable Blowing Adapter Kit



These Opti-Com® adapter kits are designed to meet the high air volume pressure requirements demanded by the various cable blowing systems on the market today.

Line Blowing Adapter Kit

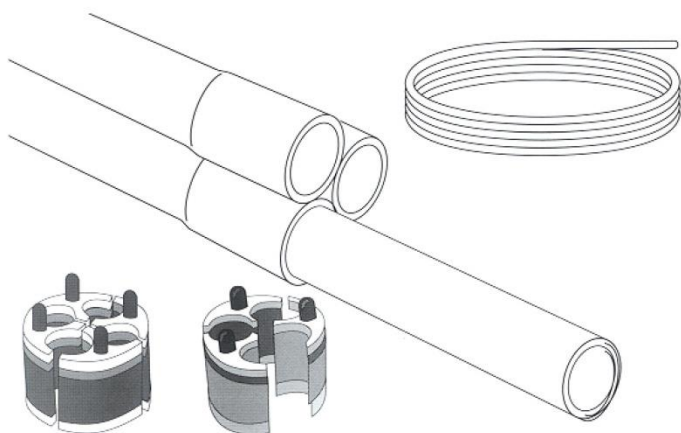


This kit includes a line blowing gun with a standard compressor fitting and adjustable air flow valve. Rubber cup projectiles are also included in each kit and these projectiles are guaranteed for life; should one ever become unusable – return it for a free replacement.



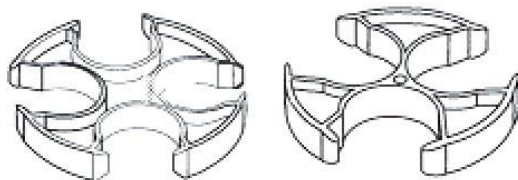
GENERAL DESCRIPTION

Inner Duct and Organizers



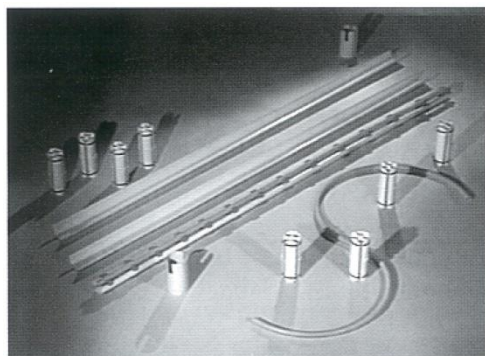
This is the same inner duct used in the assembly of Opti-Com®. This inner duct is used to place inside of existing 4" conduit, such as previously installed bores. In this manner, a conduit run of Opti-Com® can continue to remain Opti-Com® even through 4" steel or PVC that had been placed prior to the job beginning. When attaching Standard Opti-Com® to a 4" Type C PVC in a bore, one end uses the standard Opti-Com® bell for connecting. The other end uses a standard coupling kit for connecting. If the Opti-Com® will attach to anything other than 4" Type C, order the appropriate adapters for the proper connection. Compression duct organizers must be used on each end inside of the existing 4" to secure the newly placed inner ducts.

Spare Inner Duct Spacers



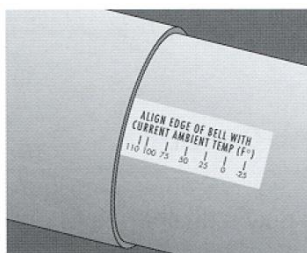
These spacers are used to assist in realigning the inner ducts after a field cut has been made in a joint of Opti-Com®.

Repair Kit 10' Section



This kit is designed to repair Opti-Com® that becomes damaged in the ground with a working cable already installed. This kit is provided with 10' sections of replacement inner ducts for the vacant inner ducts, and 10' sections of slit inner duct to install around the fiber cable. The kit also provides couplings for the inner and outer ducts - slit for the existing cable and solid for the vacant ducts. The 4" outer duct provided is split for joining around the existing cable.

Expansion Joints



All Opti-Com® expansion joints are supplied with the standard 6" bell and the Opti-Com® gasketed coupling on the female end, and inner and outer duct spigots on the opposite end. Standard expansion and contraction movement is 4" on all types of Opti-Com® expansion joints. Joints with movement greater than 4" are available on special order. Each expansion joint is provided with appropriate split stop rings and ambient temperature label to assure installation at the proper engagement depth.



PVC

Inner Duct Specifications

Product	Number of Inner Ducts	Duct Descriptions	Inside Diameter	Minimum Wall Thickness (each)
Opti-Com 43	3	Smoothwall PVC	1.507"	.079"
Opti-Com 44	4	Smoothwall PVC	1.275"	.075"
Opti-Com 43	3	Ribbed Polyethylene	1.476"	.080"
Opti-Com 44	4	Ribbed Polyethylene	1.263"	.075"

Outer Duct Specifications

Product	Minimum Wall	Pipe Outside Diameter	Bell Outside Diameter	Total Weight	Bundle Quantity	Truckload Quantity
Standard Type C	.150"	4.350"	4.70"	2.4 lbs/ft	1600'	19,200'
*S-40 PVC	.237"	4.500"	5.00"	3.1 lbs/ft	1360'	13,600'
S-80 PVC	.337"	4.750"	5.50"	4.3 lbs/ft	860'	10,320'

*UL listed

PVC Opti-Com® conduit comes in 20' lengths. Each 20' length is manufactured with a 6" integral bell on one end and matching inner and outer duct spigots on the other. Standard PVC outer duct color is white for Type C and gray for S-40 and S-80. Custom print line and/or custom outer and inner duct colors are available upon request.

PVC Opti-Com® Conduit

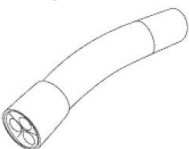
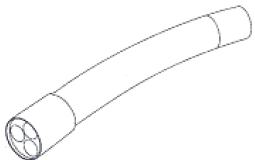
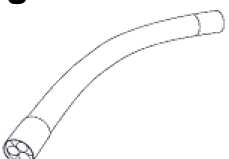
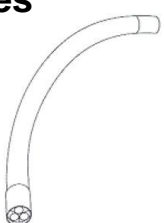
Part Numbers OC43

Part Numbers OC44

Inner Duct Description	C-Duct	S-40	S-80	C-Duct	S-40	S-80
Smoothwall PVC	503102110	503122110	503162110	506102110	506122110	506162100
Linear Ribbed Polyethylene	503102460	503122460	503162460	506102450	506122450	506162450



PVC BENDS

	(R) Radius	(L) Total Length	Part Number	
			OC43	OC44
11 ¼ Degrees 	3'	30.00"	513**3020	516**3020
	4'	33.50"	513**4020	516**4020
	6'	35.00"	513**5020	516**5020
	9'	40.25"	513**6020	516**6020
22 ½ Degrees 	3'	32.50"	513**3030	516**3030
	4'	38.00"	513**4030	516**4030
	6'	50.00"	513**5030	516**5030
	9'	61.50"	513**6030	516**6030
45 Degrees 	3'	46.00"	513**3050	516**3050
	4'	59.50"	513**4050	516**4050
	6'	78.00"	513**5050	516**5050
	9'	105.00"	513**6050	516**6050
90 Degrees 	3'	76.00"	513**3060	516**3060
	4'	96.00"	513**4060	516**4060
	6'	130.00"	513**5060	516**5060
	9'	188.00"	513**6060	516**6060

BENDS

Description

- (A) Angle of Curvature
- (B) Bell Socket – 6" in all cases
- (C) Spigot Length – 6" in all cases
- (R) Radius of Curvature, (feet) – see table
- (L) Total Length (inches) – see table

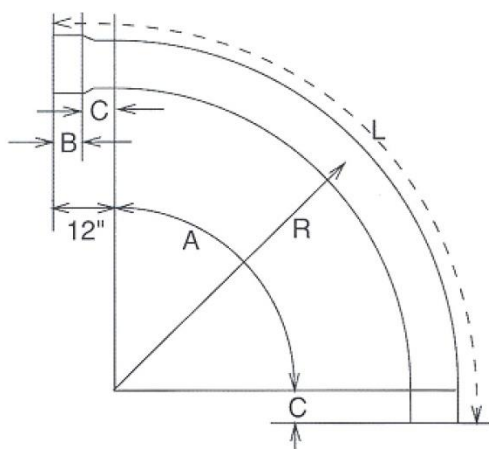
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12 = C Duct w/ Ribbed Inner Ducts

71 = S80 w/ Ribbed Inner Ducts

94 = S40 UL w/ Ribbed Inner Ducts

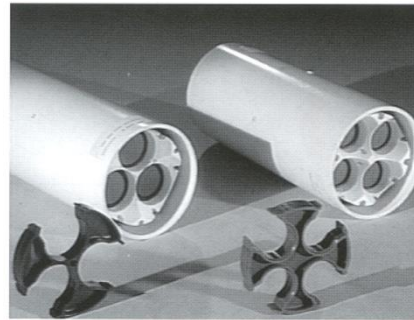
Note: All Opti-Com® bends and sweeps are manufactured with the standard 6" integral bell and Opti-Com coupling on the female end and inner and outer duct spigots on the opposite end. Special size bends can be manufactured upon request.





PVC ACCESSORIES

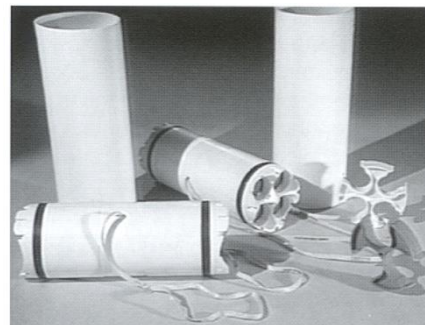
STANDARD COUPLING



One-piece, center stop style coupling is designed to join 2 spigot ends of Opti-Com®. This coupling is used the same way a PVC, center stop coupling would be used. Both inner and outer duct connections are gasketed. The kit also comes with an inner duct spacer to assist in aligning the inner ducts on the cut section of the Opti-Com®.

	PVC Part Numbers		Fiberglass Part Numbers (Black outer duct only)		
	3-Way	4-Way		3-Way	4-Way
C-Duct	523111000	526111000	Standard Wall	523112000	526112000
S40 PVC	523111400	526111400	Heavy Wall	523113000	526113000
S80 PVC	523111700	526111700	Bullet Resistant	523114000	526114000

SLIP COUPLING



This two-piece slip coupling is designed to join 2 spigot ends of Opti-Com® in tight working conditions that prohibit the use of the *Standard Coupling*. This coupling is used in the same situation as a PVC slip coupling would be used. To be joined, the outer duct coupling slips over one of the sections. The gasketed inner duct coupling slides completely inside one of the sections and aligns with the other section. It is pulled and centered across the two sections being joined together. The outer sleeve is then cemented in place halfway across each of the 2 sections. This kit also comes with an inner duct spacer to assist in aligning the inner ducts on the cut section of the Opti-Com®.

	PVC Part Numbers		Fiberglass Part Numbers (Black outer duct only)		
	3-Way	4-Way		3-Way	4-Way
C-Duct	523221000	526221000	Standard Wall	523222000	526222000
S40 PVC	523221400	526221400	Heavy Wall	523223000	526223000
S80 PVC	523221700	526221700	Bullet Resistant	523224000	526224000



PVC ACCESSORIES

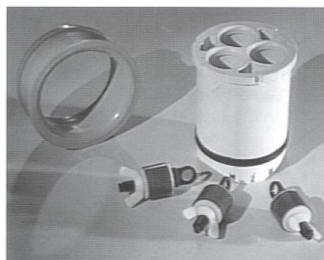
TERMINATION KITS

Gasketed fitting that is required each time the conduit is terminated in any other place than in another joint of Opti-Com® such as manholes, handholes, or ground covered ends for future extensions. This fitting is installed inside of the Opti-Com® outer duct and seals the system by preventing any foreign material from entering the space between the inner walls of the outer duct and the outer walls of the inner ducts. The kit also includes expandable inner duct plugs.

Type A Kit is used when Opti-Com® will terminate inside of a terminator pre-cast into the manhole or handhole wall for Type C PVC or S-40 PVC conduit.



	Part Number
3-Way	523440000
4-Way	526440000



Type B Kit is used when manholes or handholes do not have a pre-cast terminator and Opti-Com® will protrude through or be grouted into the wall of the hole. This kit is supplied with a protective end bell that is cemented on the Opti-Com® to retain the terminator.

PVC Part Numbers

	3-Way	4-Way
C-Duct	523221000	526221000
S-40	523221400	526221400
S-80	523221700	526221700

Fiberglass Part Numbers

	3-Way	4-Way
Standard Wall	523222000	526222000
Heavy Wall	523223000	526223000
Bullet Resistant	523224000	526224000

Rigid Galvanized

3-Way
4-Way

Part Number

523445000
526445000

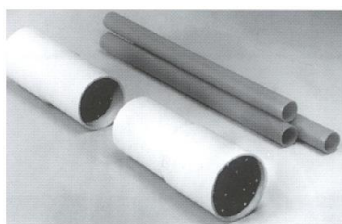
Type C Kit is used when Opti-Com® will terminate inside of a terminator that is pre-cast into the manhole or handhole wall for 4.5" O.D., such as Schedule 40 or GT-80 PVC conduit. This kit comes with a shim to cement onto the outside of the Opti-Com® before being inserted.

	Part Number
3-Way	523661000
4-Way	526661000



The Type D Kit "Universal" terminator includes the components (bell, shim and plugs) necessary to accommodate all applications covered by the Type A, B and C terminators. This terminator may be ordered for projects where the requirements vary, thus reducing the confusion of jobsite inventorying of three different types of terminators.

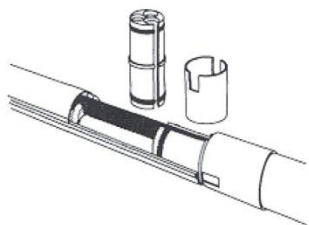
	Part Number
3-Way	523700000
4-Way	526700000



The Type F Kit is designed to provide continuous inner ducts through manholes or handholes in conduit runs where access to the cable is not needed at the present time. The kit provides two fittings that are female on both sides for the Opti-Com® inner ducts. The outer sleeve provided is the standard Opti-Com® female fitting on one side and an Opti-Com® spigot fitting on the other side. The spigot end plugs into the cast-in terminator in the manhole or handhole wall, while the female fitting allows any joint of Opti-Com® to be joined to it from the trench. 20' lengths of inner duct provided can then be cut to fit the particular application and installed between the two fittings to allow the projectile and cable to "pass thru" the manhole or handhole. Part number available upon request.



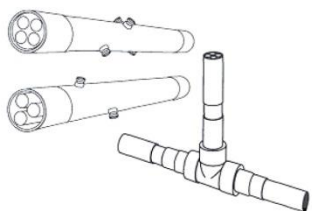
PVC ACCESSORIES



	Part Numbers C-Duct		Part Numbers S-40		Part Numbers S-80	
	OC43	OC44	OC43	OC44	OC43	OC44
10' Repair Kit	533103090	536103090	533123090	536123090	533173090	536173090

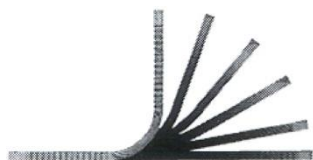
Furnished with every variation of slit and solid inner ducts and coupling bodies in both OC43 and OC44 to repair any combination of occupied and unoccupied ducts.

Lubrication Fittings



	Part Numbers C-Duct		Part Numbers S-40		Part Numbers S-80	
	OC43	OC44	OC43	OC44	OC43	OC44
T Type	533102100	536102100	533122100	536122100	533172100	536172100
X Type	533102000	536102000	533122000	536122000	533172000	536172000

Part Numbers



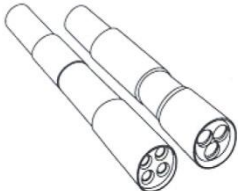
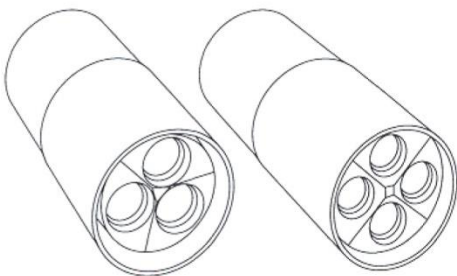
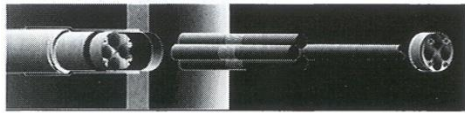
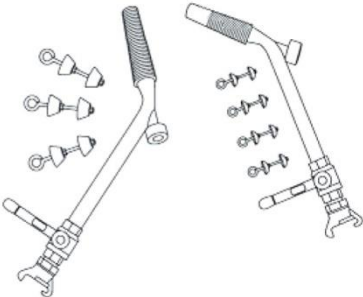


	OC43	OC44
Flexible Lengths – 10'	513856599	516856599
Flexible Lengths – 20'	513859299	516859299



Spare Inner Duct Spacers	533005000	536005000
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PVC ACCESSORIES

Description	Part Numbers C-Duct		Part Numbers S-40		Part Numbers S-80	
	OC43	OC44	OC43	OC44	OC43	OC44
 4" Travel PE Inner Ducts	533104040	536104140	533124140	536124140	533174140	536174140
	Adapters		OC43		OC44	
	Type C to Sch.-40		523331012		526331012	
	Type C to SW Fiberglass		523331020		526331020	
	Type C to HW Fiberglass		523331030		526331030	
	Type C to BR Fiberglass		523331040		526331040	
	Type C to Steel Threaded		523331050		526331050	
	Type C to Steel Epoxy		523331060		526331060	
	Sch. 40 to SW Fiberglass		523331220		526331220	
	Sch. 40 to HW Fiberglass		523331230		526331230	
	Sch. 40 to BR Fiberglass		523331240		526331240	
	Sch. 40 to Steel Threaded		523331250		526331250	
	Sch. 40 to Steel Epoxy		523331260		526331260	
	Sch. 40 to Sch.-80		523331216		526331216	
	Cable Blowing Adapter Kit		OC43		OC44	
			523710000		526710000	
	Line Blower Adapter Kit		OC43		OC44	
	Gun with Projectiles					
	for Smooth Inner Ducts		533901200		536901200	
	for Ribbed Inner Ducts		533921200		536921200	
	Spare Projectiles					
	PE Coiled Inner Duct					
	Blue		503060441		506060441	
	Green		503060442		506060442	
	Orange		503060444		506060444	
	Brown		-----		506060445	
	Compression Duct Organizer		P3H00001		P4H00002	



OMNI-BORE® MULTIDUCT

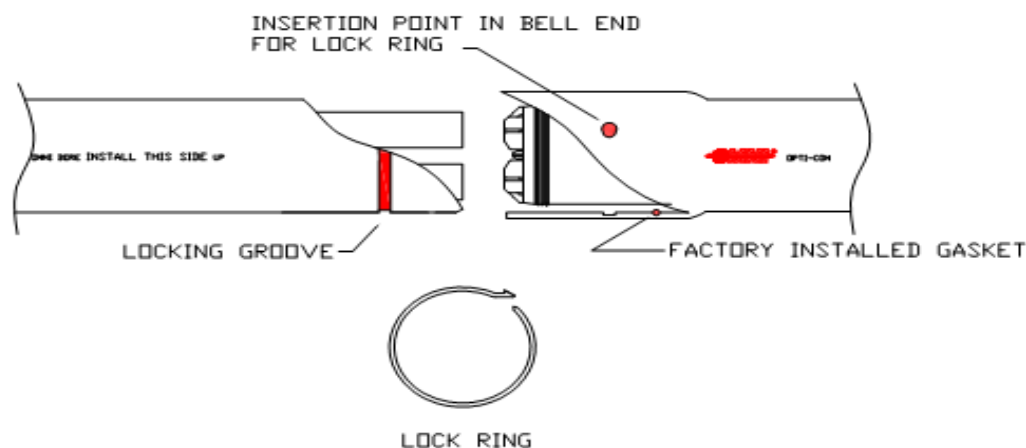
Inner Duct Specifications

Product	Duct Description	Inside Diameter	Minimum Wall
Opti-Com 43	Ribbed Polyethylene	1.476"	0.080"
Opti-Com 44	Ribbed Polyethylene	1.263"	0.075"

Outer Duct Specifications

Product	Minimum Wall	Outside Diameter	Bell Outside Diameter	Weight	Bundle Qty	Truckload Qty
S-40	0.237"	4.50"	5.00"	3.1 lbs/ft	1360'	13,600'
S-80	0.337"	4.75"	5.50"	4.3 lbs/ft	860'	10,320'

The OMNI-Bore® Opti-Com® multi-duct is manufactured in 20-foot lengths with a 6-inch integral bell on one end and spigot on the opposite end. Standard PVC outer duct color is gray. Specific inner duct colors are available upon request.

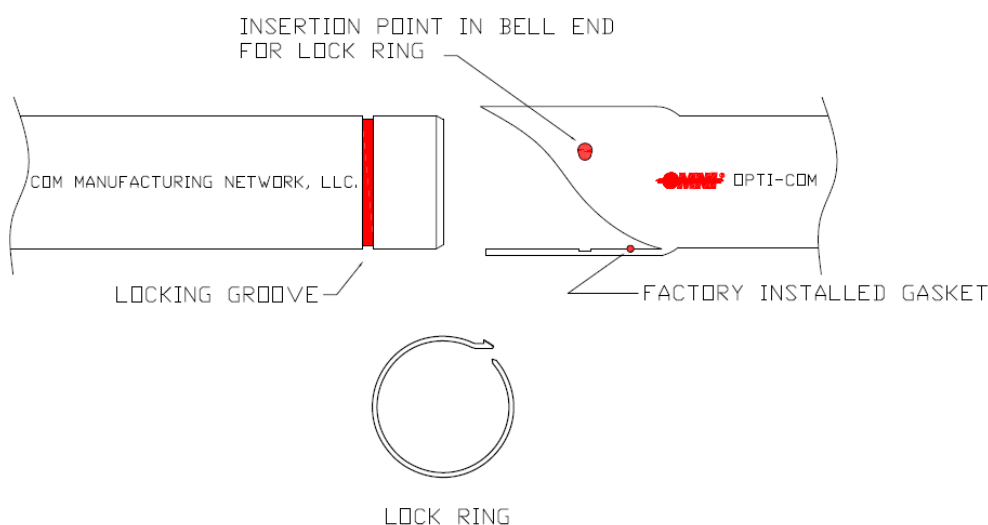


- Viewing port on the bell is for visual verification of the locking mechanism's engagement
- All parts are factory installed – the same as within standard Opti-Com®
- Fast and simple field assembly
- No backing plate required for installation
- Watertight joints without the use of PVC cement
- Integral 6" bell length for stronger connection
- Standard Opti-Com® fittings can be used after installation – no special adapters required



OMNI-BORE® SCHEDULE 40 & 80

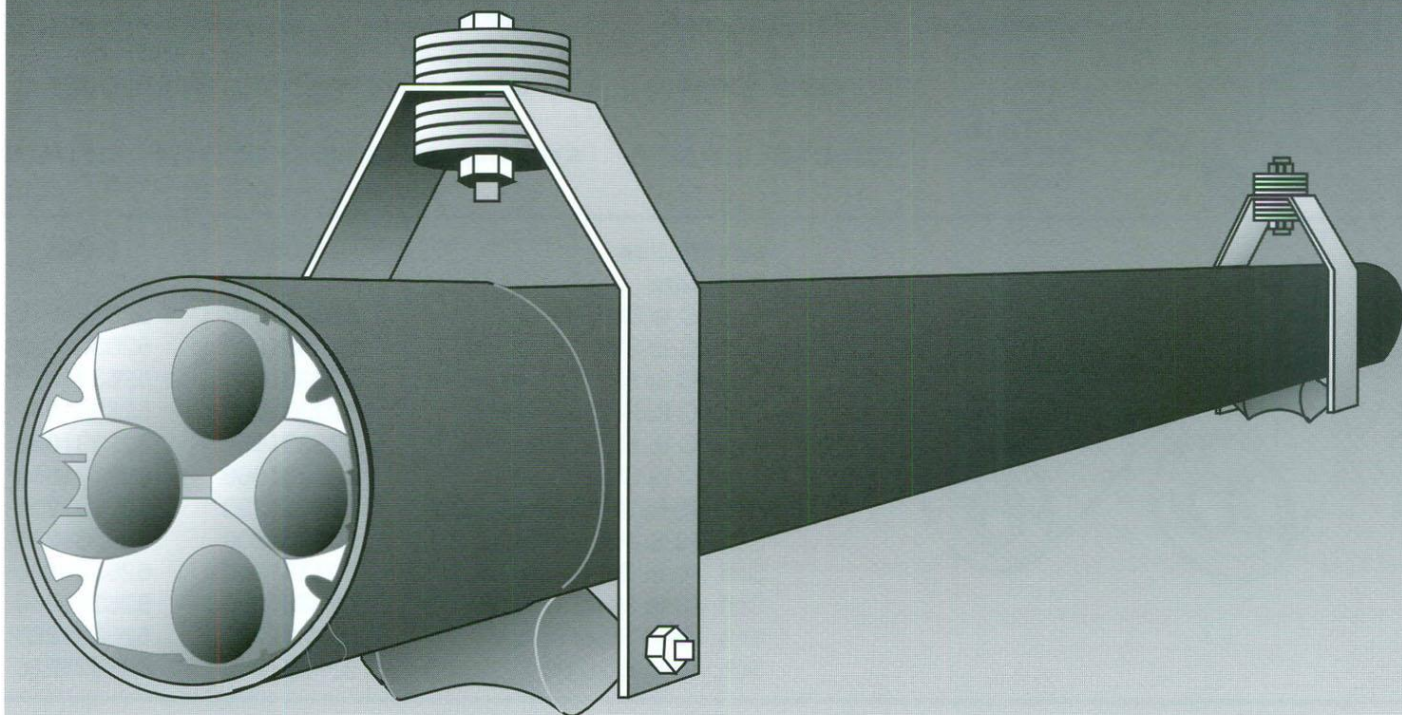
Product	Schedule	Size	O.D.	I.D.	Min. Wall	Approx Wt/Ft lbs	Feet/Bundle	Truck Quantity
*243402010	40	4"	4.500"	4.026"	0.237	2.1	1520	18,240 ft.
*246402010	80	4"	4.750"	4.076"	0.337	3.3	860	10,320 ft.



Product Features and Advantages

- Factory installed internal locking mechanism
- No additional installation of parts required after joining together
- Viewing port on bell for visual verification of locking mechanism engagement
- Water tight seal
- Lengths are easily joined together, no glue required
- 20 ft. lengths are easily transported to job site
- Long bell length for stronger joint
- Smaller staging area needed when compared to reeled HDPE duct
- Superior crush and stiffness values when compared to HDPE
- No electrical power sources needed to join lengths together as with HDPE products
- No pre assembly of conduit before bore; sections can be joined during trenchless operation

**FOR A LONG-LASTING AND ECONOMICAL
INSTALLATION, THERE'S NOTHING ELSE
QUITE LIKE IT.**



OMNI® Fiberglass Opti-Com® conduit system

Versatile

- Comes in three wall thicknesses, (.070", .096", and .250")
- Bullet resistant (.250" wall), withstands most types of ammunition
- Cost efficient replacement for steel in many high risk applications

Rugged

- Highest strength-to-weight ratio of any conduit material available
- High impact resistant construction easily withstands rough handling in the field
- UV resistant

Lightweight

- Workers can easily lift and carry sections, making it easy to handle
- Reduces worker fatigue

Economical to install

- Lighter weight and high strength simplify installation, eliminate the need for expensive lifting equipment and reduce the quantity of support hardware, such as bridge hangers, by as much as 50%
- Also reduces bridge permitting costs when the permits are based on weight

Easy to install

- To join sections, a simple push and twist motion is all that's required
- Innerduct alignment is simple and secure, due to the same anti-reversing, gasketed coupling system used in PVC Opti-Com®

Non-corrosive

- Highly resistant to corrosive road chemicals, salt, bacteria, weather conditions, and ultra-violet decomposition

Long service life

- Adhesive-bondable male and female ends assure a permanent, water-tight seal

- Fiberglass material is essentially inert; it will not corrode, deteriorate or decompose

Wide service-temperature range

- Remains stable and rigid from -40° to +230° F
- Will not become brittle in extreme cold or deform in heat generated by short-term electrical overloads
- Expansion and contraction forces are minimal

Non-conductive

- Due to the non-metallic material properties of fiberglass, damaging electrolysis will not occur
- Non-conductivity also eliminated the need for expensive, insulated bridge hangers

Full system configuration

- Available with a complete line of factory bends, expansion joints and bridge hangers to accommodate virtually any installation requirement



FIBERGLASS

Inner Duct Specifications

Product	Number of Inner Ducts	Duct Descriptions	Inside Diameter	Minimum Wall Thickness (each)
Opti-Com 43	3	Smoothwall PVC	1.507"	.079"
Opti-Com 44	4	Smoothwall PVC	1.275"	.075"
Opti-Com 43	3	Ribbed Polyethylene	1.476"	.080"
Opti-Com 44	4	Ribbed Polyethylene	1.263"	.075"

Outer Duct Specifications

Product	Minimum Wall	Pipe Outside Diameter	Total Weight	Bundle Quality	Truckload Quality
Standard Wall FG70	.070"	4.140"	1.7 lbs/ft	1520'	18,240'
Heavy Wall FG96*	.0956"	4.192"	1.9 lbs/ft	1520'	18,240'
Bullet Resistant FG(BRFG)	.250"	4.500"	3.7 lbs/ft	1520'	12,160'

*Please note the change in Heavy Wall thickness, from .090" to .096".

Fiberglass Opti-Com® comes in 20' overall lengths with a 6" Integral bell on one end and matching inner and outer duct spigots on the other. Standard fiberglass outer duct color is black. Fiberglass outer ducts can be manufactured in other colors, such as orange, to identify fiber optic cables.





Opti-Com® Fiberglass

Inner Duct Description	Part Numbers Std Wall FG70		Part Numbers Heavy Wall FG96		Part Numbers BRFG	
	OC43	OC44	OC43	OC44	OC43	OC44
Smoothwall PVC	503202117	506202117	503302117	506302117	503402117	506402117
Linear Ribbed PE	503202467	506202457	503302467	506302457	503402467	506402457



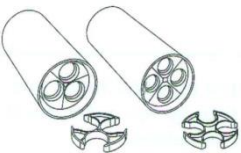

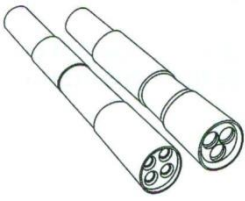
FIBERGLASS ACCESSORIES

Part Numbers

		OC43	OC44
11 ¼ Degrees		513**4020	516**4020
22 ½ Degrees		513**4030	516**4030
45 Degrees		513**4050	516**4050
90 Degrees		513**4060	516**4060

(**) 23 = FG70 w/ Ribbed Inner Ducts
 31 = FG96 w/ Ribbed Inner Ducts
 41 = BRFG w/ Ribbed Inner Ducts

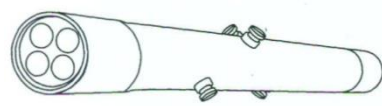
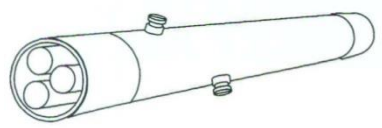
Note: All fiberglass Opti-Com® bends and sweeps come with a standard four foot radius and are manufactured with the standard 6" Integral bell and Opti-Com® coupling on the female end and inner and outer duct spigots on the opposite end. Non-standard bends can be manufactured upon request.

	Description	Std. Wall FG70	Heavy Wall FG96	BRFG
		OC43 OC44	OC43 OC44	OC43 OC44
	Standard Coupling Kit	523112000 526112000	523113000 526113000	523114000 526114000
	Slip Coupling Kit	523222000 526222000	523223000 526223000	523224000 526224000
	4" Travel Expansion Joints	53320**40 53620**40	53320**40 53620**40	53340**40 53640**40

(**) 23 = FG70 w/ Ribbed Inner Ducts
 31 = FG96 w/ Ribbed Inner Ducts
 41 = BRFG w/ Ribbed Inner Ducts

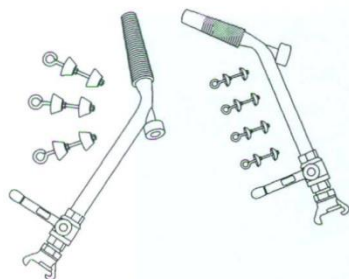


FIBERGLASS ACCESSORIES

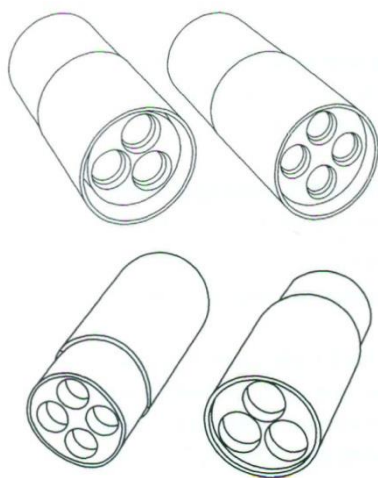
	Description	Std. Wall FG70	Heavy Wall FG96	BRFG
	Lubrication Fittings	OC43 OC44	OC43 OC44	OC43 OC44
	Type-X	533202000	533302000	533402000
		536202000	536302000	536402000



Termination Kit	Std. Wall FG70	Heavy Wall FG96	BRFG
	OC43 OC44	OC43 OC44	OC43 OC44
Type-B	523552000	523553000	523554000
	526552000	526553000	526554000

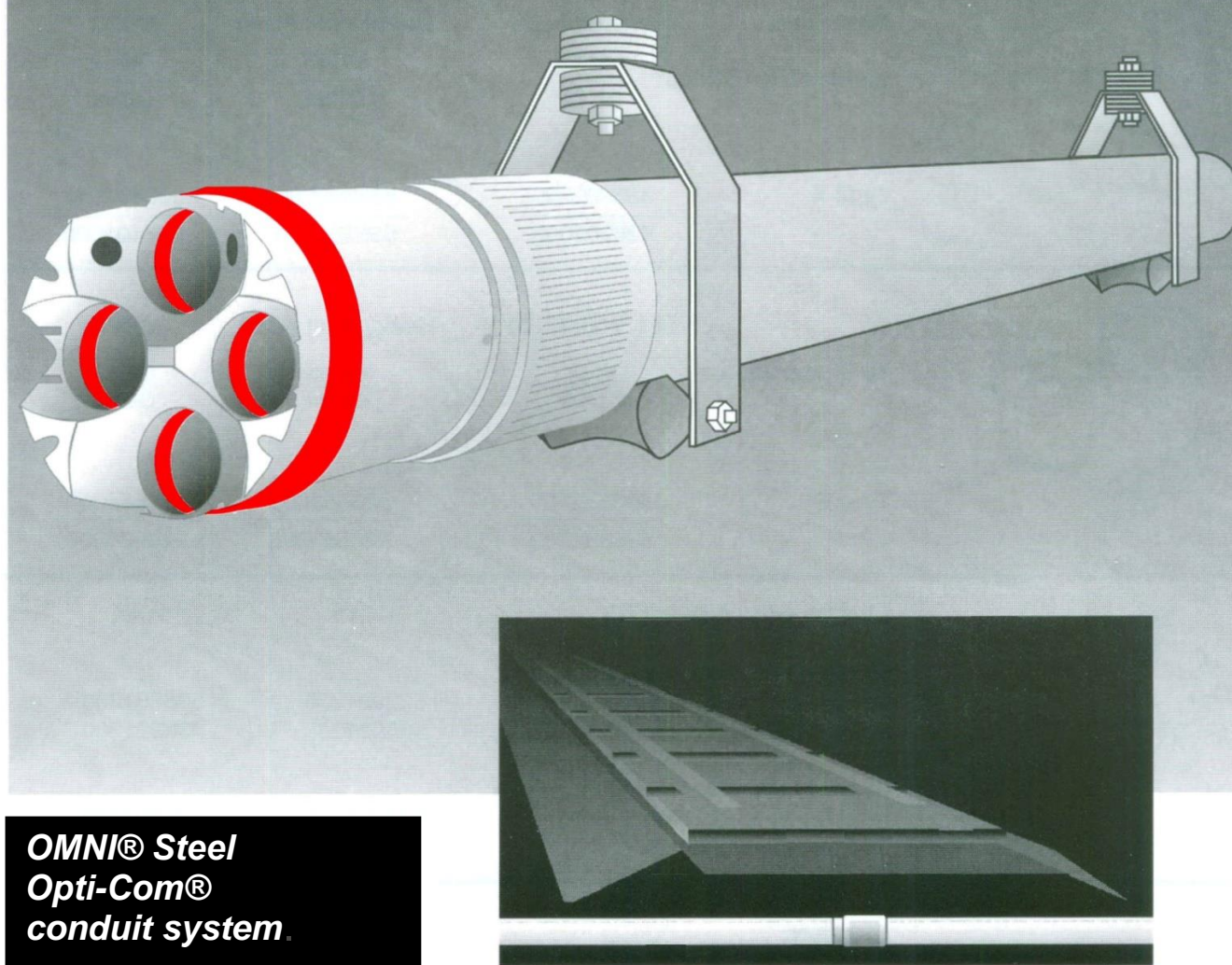


Line Blowing Adapter Kit	OC43	OC44
Gun with Projectiles for Smooth Inner Ducts for Ribbed Inner Ducts	533901200	536901200
	533921200	536921200
Spare Projectiles for Smooth Inner Ducts for Ribbed Inner Ducts	533901400	536901400
	533921400	536921400



Adapters	OC43	OC44
Std Wall to Type C	523331020	526331020
Std Wall to Sch. 40	523331220	526331220
Std Wall to FG96	523332030	526332030
Std Wall to BRFG	523332040	526332040
Std Wall to Steel Threaded	523332050	526332050
Std Wall to Steel Epoxy	523332060	526332060
Heavy Wall to Type C	523331030	526331030
Heavy Wall to Sch. 40	523331230	526331230
Heavy Wall to BRFG	523333040	526333040
Heavy Wall to Steel Threaded	523333050	526333050
Heavy Wall to Steel Epoxy	523333060	526333060
BRFG to Type C	523331040	526331040
BRFG to Sch. 40	523331240	526331240
BRFG to Steel Threaded	523334050	526334050
BRFG to Steel Epoxy	523334060	526334060

MAXIMUM PROTECTION AND FAST, EASY INSTALLATION



OMNI® Steel Opti-Com® conduit system

For very high-risk applications, such as exposed bridge crossings, bridge risers and creek crossings, no other material provides more protection from damage than OMNI's steel Opti-Com® conduit. The steel Opti-Com® can also be used in underground applications.

Rugged, industry-standard construction

- The steel Opti-Com® system is manufactured using 4-inch rigid galvanized steel and is available with either three or four factory installed inner ducts.

Easy to install

- Each section is threaded and coupled for easy joining.
- Inner duct alignment is simple and secure, due to the same gasketed coupling system used in other Opti-Com® systems.

Faster installation

- No transition boxes or handholes are required when transitioning from steel to PVC or fiberglass Opti-Com®. Instead an adapter is all that's needed, significantly reducing installation labor.

Long service life

- Steel is galvanized for additional protection from corrosion.

Full system configuration

- Available with a full line of factory bends, expansion joints and conduit support to accommodate virtually any installation requirement.

Opti-Com® multi duct conduit systems are also available with bullet-resistant fiberglass, standard-wall fiberglass and PVC outer jackets.



STEEL

Inner Duct Specifications

Product	Number of Inner Ducts	Duct Description	Inside Diameter	Minimum Wall Thickness (each)
Opti-Com 43	3	Smoothwall PVC	1.507"	.079"
Opti-Com 44	4	Smoothwall PVC	1.275"	.075"
Opti-Com 43	3	Ribbed Polyethylene	1.476"	.080"
Opti-Com 44	4	Ribbed Polyethylene	1.263"	.075"

Outer Duct Specifications

Product	Nominal Wall	Outside Diameter	Weight	Bundle Quantity	Truckload Quantity
Galvanized Rigid Conduit	.225"	4.50"	11 lbs/ft	200'	4000'

Steel Opti-Com® comes in 10' layable lengths with threaded and coupled ends. Each 10' length is also provided with a gasketed Opti-Com® coupling for the inner ducts.

Opti-Com® Schedule 40 Steel

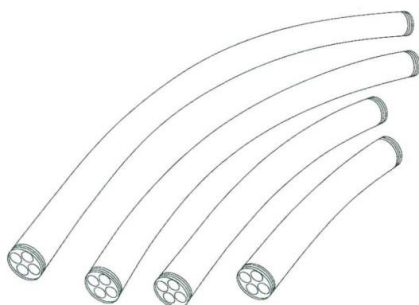
Inner Duct Description

Part Numbers

	OC43	OC44
Smoothwall PVC	503551116	506551116
Linear Ribbed PE	503551466	506551456



STEEL BENDS




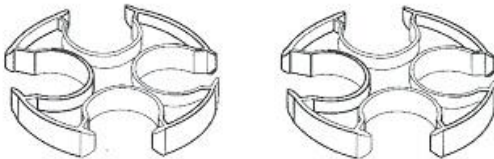
Angle	Radius	OC43	OC44
11 1/4°	4'	513514020	516514020
22 1/2°	4'	513514030	516514030
45°	4'	513514050	516514050
90°	4'	513514060	516514060

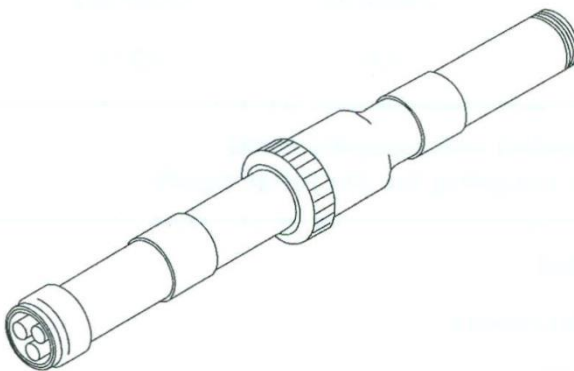
All rigid galvanized steel Opti-Com® bends come in standard 4' radius. Non-standard bends can be manufactured upon request.




STEEL ACCESSORIES

Description	Part Number	
Termination Kit includes bushing, locking ring and inner duct plugs	OC43	OC44
	523445000	526445000
		

Description	Part Number	
Spare Duct Spacers	OC43	OC44
	523005000	536005000
		

	OC43	OC44
4" Travel Expansion Joint	533504140	536504140
		

Adapters	OC43	OC44
Steel to Type C	523331050	526331050
Steel to Sch. 40	523331250	526331250
Steel to Sch. 80	523331650	526331650
Steel to FG70	523332050	526332050
Steel to FG96	523333050	526333050
Threaded Steel to BRFG	523334050	526334050
Epoxy Steel to BRFG	523334060	526334060
		



PVC COATED STEEL

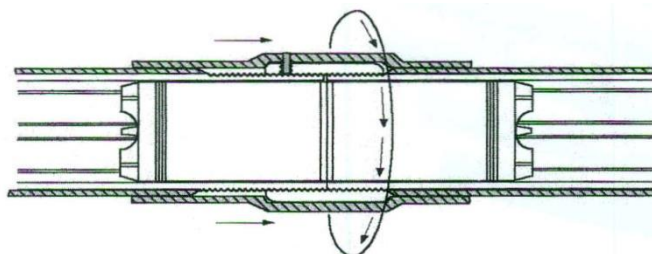
Inner Duct Specifications

Product	Number of Inner Ducts	Duct Description	Inside Diameter	Minimum Wall
Opti-Com 43	3	Ribbed Polyethylene	1.476" (37.49mm)	.080" (2.03mm)
Opti-Com 44	4	Ribbed Polyethylene	1.263" (32.08mm)	.075" (1.90mm)

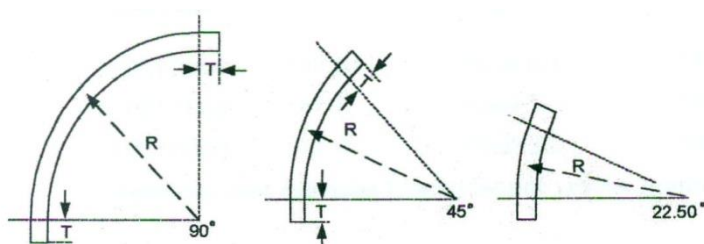
Outer Duct Specifications

Size	Outside Diameter Steel Only	Outside Diameter With PVC	Nominal Wall Thickness Steel Only	Nominal Wall Thickness With PVC	Minimum Wt. Per Ft
4" 103mm	4.500" 114.3mm	4.580" 116.3mm	0.225" 5.71mm	0.265" 6.73mm	10.50 476kg

PVC-Coated Steel Opti-Com® is manufactured in 10 ft. layable lengths with threaded and coupled ends. Each 10 ft. length is provided with a locking external coupling and a gasketed Opti-Com® internal coupling for inner ducts.



Bends and Expansion Joint



Degree	Radius
11.25°	4ft.
22.50°	4ft.
45°	4ft.
90°	4ft.



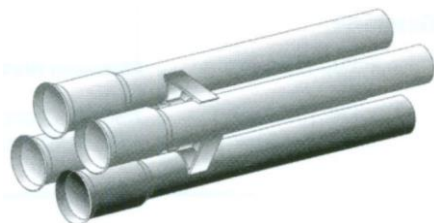
4" Travel Expansion Joint

All Opti-Com® PVC coated steel fittings are supplied with threaded and coupled ends. Each fitting is provided with a gasketed Opti-Com coupling used to join inner ducts. Fittings are available for OC43 three-way or OC44 four-way inner duct configuration.



PVC MULTI-DUCT SYSTEMS

QuadDuct®

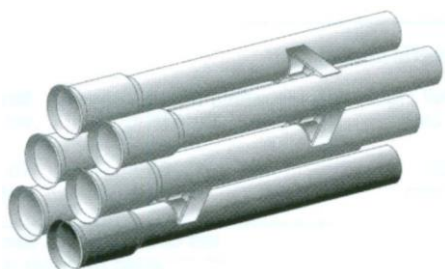


Our Multi-Duct conduit systems having 4, 6, or 8 Industry Standard Nominal 1¼" Schedule 40 PVC ducts factory assembled together by means of an extra long integral bell and spigot design utilizing PVC cement for a permanent connection.

Standard color configurations:

QuadDuct colors	1 gray	3 white
HexaDuct colors	1 gray	5 white
OctoDuct colors	1 gray	7 white

HexaDuct



Other colors available upon request.

OctoDuct



Duct Specifications

	Duct Size	Outside Diameter	Inside Diameter	Assembled Weight	Wall Thickness	Part Number
QuadDuct	1¼" Sched. 40	1.66"	1.38"	1.8 lbs/ft	0.14"	606012011
HexaDuct	1¼" Sched. 40	1.66"	1.38"	2.7 lbs/ft	0.14"	607012011
OctoDuct	1¼" Sched. 40	1.66"	1.38"	3.6 lbs/ft	0.14"	608012011

These items are supplied in standard 23' lengths, shorter length available.
Fittings, plugs, couplings and adapters are also available.

Bend Specifications

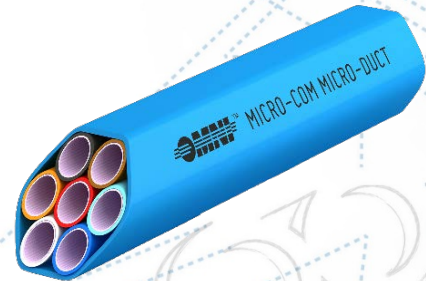
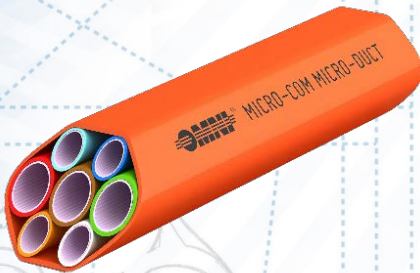
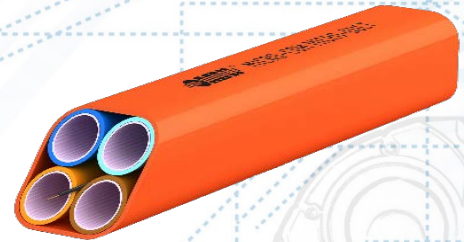
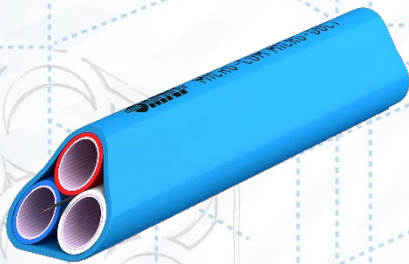
Duct Bends	QuadDuct Part #	HexaDuct Part #	OctoDuct Part #
11¼° x 3' R	606036121	607036121	608036121
2 ½° x 3' R	606036231	607036231	608036231
45° x 3' R	606036461	607036461	608036461
90° x 3' R	606036911	607036911	608036911

Other sizes available. Call for more information.



"MADE IN THE USA"

MICRO-COM® MICRO-DUCT



OPTI-COM MANUFACTURING NETWORK, LLC

259 Plache Street, New Orleans, LA 70123

PO Box 23802, New Orleans, LA 70183-0802

P 504.736.0331 – F 504.733.9046

www.omni-opti.com

sales@omni-opti.com



Direct Bury Micro-Com® Microduct Bundles

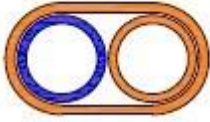
Tight and protected, Micro-Com® microducts are a great option for the installation of fiber. Microduct diameters range from 4mm to 27mm. The bundled microduct can be fitted with multiple configurations in terms of size and quantity of the microduct tubes. For example, the slot cut has become a popular construction method and flat bundled microducts are an excellent configuration for this type of construction.

Micro-Com® microducts are manufactured using virgin HDPE resin and are contained within a protective outer sheath, which is also manufactured from prime virgin resin. The bundled microduct is created primarily for direct bury applications. Bundled microduct can also be ordered with copper tracer wire. The OMNI standard colors are shown below on the following page. However, custom color combinations are available.

All Micro-Com® microducts can be fitted with a lubricated lining, which reduces the coefficient of friction, and are available with either a smooth or ribbed interior.

*Please contact our sales representatives to inquire about custom-designed microduct bundles.

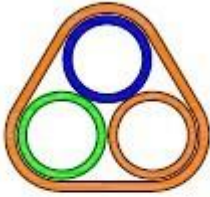
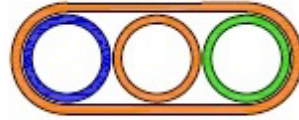
sales@omni-opti.com or 504-736-0331



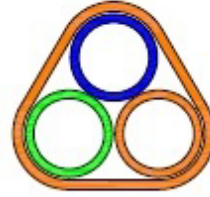
2 way



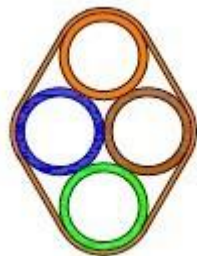
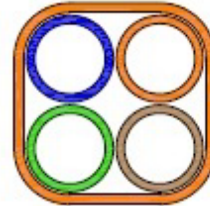
3 way – flat



3 way – triangle



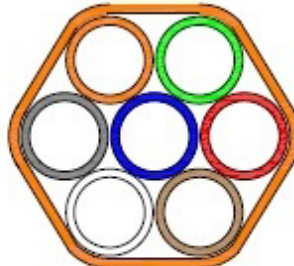
4 way – square



4 way – diamond



7 way





DIMENSIONS AND TOLERANCES

Microduct

HDPE Microduct is manufactured to the following dimensions.

Size OD/ID (mm)	OD (mm)	WALL THICKNESS (mm)	ID MINIMUM (mm)	MIN BEND RADIUS (in)	TENSILE STRENGTH (lbs)	SAFE WORKING LOAD (lbs.)
4/2.8	4 ± 0.10	0.60 ± 0.0/0.10	2.7	3	22	18
5/3.5	5 ± 0.10	0.75 ± 0.0/0.10	3.2	4	45	36
7/4	7 ± 0.10	1.50 ± 0.0/0.10	3.9	5	76	60
7/5.5	7 ± 0.10	0.75 ± 0.0/0.10	5.2	5	66	59
8.5/6	8.5 ± 0.10	1.25 ± 0.0/0.10	5.7	5	126	113
10/8	10 ± 0.10	1.00 ± 0.0/0.10	7.7	5	125	112
11/9	11 ± 0.10	1.00 ± 0.0/0.10	8.7	5	140	123
12/10	12 ± 0.10	9.39 ± 0.0/0.10	9.8	5	146	131
12.7/10	12.7 ± 0.10	1.29 ± 0.0/0.10	9.8	5	207	186
14/10	14 ± 0.10	1.50 ± 0.0/0.10	9.7	6	336	300
14/11	14 ± 0.10	1.50 ± 0.0/0.10	10.7	6	263	172
14/12	14 ± 0.10	1.50 ± 0.0/0.10	11.7	6	182	162
16/11	16 ± 0.10	2.50 ± 0.0/0.13	10.7	6	473	424
16/11.7	16 ± 0.10	2.16 ± 0.0/0.13	11.3	6	419	377
16/13	16 ± 0.10	1.50 ± 0.0/0.10	12.7	6	305	274
16.8/13	16.8 ± 0.10	1.90 ± 0.0/0.10	12.7	6	397	361
18/15	18 ± 0.10	1.37 ± 0.0/0.13	14.9	8	320	288
18/14	18 ± 0.10	2.16 ± 0.0/0.13	13.3	7	480	432
19.7/16	19.7 ± 0.10	1.85 ± 0.0/0.13	15.7	9	464	428
20/17	20 ± 0.10	1.50 ± 0.0/0.13	16.7	9	390	359
22/16	22 ± 0.10	3.00 ± 0.0/0.13	15.7	12	801	720
24/19	20 ± 0.10	2.50 ± 0.0/0.13	18.7	12	755	679
27/20	20 ± 0.10	3.50 ± 0.0/0.13	19.7	12	1157	1041

Bundled Microducts

Microduct can be manufactured in bundles as listed below. The (f) listed within column “Number of microducts” denotes a flat bundle.

MICRO DUCT SIZE (mm)	NUMBER OF MICRO DUCTS	OUTER SHEATH THICKNESS (in)	NOMINAL OUTSIDE DIAMETER (in)	SAFE WORKING LOAD (lbs.)
27/20	4	0.070	2.64	3650
24/19	4	0.070	2.25	3262
22/16	4	0.070	2.13	2850
18/15	2 (f)	0.070	1.56	1281
18/15	3	0.070	1.46	1699
18/15	3 (f)	0.070	2.27	1829
18/15	4	0.070	1.56	2116
18/14	2 (f)	0.070	1.56	1700
18/14	3	0.070	1.46	2132
18/14	3 (f)	0.070	2.27	2261



DIMENSIONS AND TOLERANCES

Bundled Microducts (cont)

MICRO DUCT SIZE (mm)	NUMBER OF MICRO DUCTS	OUTER SHEATH THICKNESS (in)	NOMINAL OUTSIDE DIAMETER (in)	SAFE WORKING LOAD (lbs.)
18/14	4	0.070	1.56	2694
16/13	4	0.070	1.40	1960
16/13	7	0.070	2.03	3014
14/10	7	0.070	1.79	2370
14/12	7	0.070	1.79	1534
12.7/10	2 (f)	0.070	1.14	881
12.7/10	3	0.070	1.07	1157
12.7/10	3 (f)	0.070	1.64	1249
12.7/10	4	0.070	1.14	1435
12.7/10	7	0.070	1.64	2173
12/10	2 (f)	0.070	1.09	746
12/10	3	0.070	1.09	963
12/10	3 (f)	0.070	1.56	1049
12/10	4	0.070	1.09	1180
12/10	7	0.070	1.56	1745
10/8	2 (f)	0.070	0.93	636
10/8	3	0.070	0.93	821
10/8	3 (f)	0.070	1.32	911
10/8	4	0.070	0.93	1006
10/8	7	0.070	1.32	1489
8.5/6	2 (f)	0.060	0.81	526
8.5/6	3	0.060	0.81	692
8.5/6	3 (f)	0.060	1.14	744
8.5/6	4	0.060	0.81	858
8.5/6	7	0.060	1.14	1304
7/5.5	2 (f)	0.040	0.70	278
7/5.5	3	0.040	0.97	366
7/5.5	3 (f)	0.040	0.97	395
7/5.5	4	0.040	0.70	453
7/5.5	7	0.040	0.97	686
5/3.5	2(f)	0.040	0.47	198
5/3.5	3	0.040	0.45	258
5/3.5	3(f)	0.040	0.67	279
5/3.5	4	0.040	0.47	318
5/3.5	7	0.040	0.67	478
4/2.8	2 (f)	0.040	0.40	198
4/2.8	3	0.040	0.40	258
4/2.8	3 (f)	0.040	0.56	279
4/2.8	4	0.040	0.40	318
4/2.8	7	0.040	0.56	478



MICRODUCT ACCESSORIES



PRODUCT DESCRIPTION:

Details of the common push-fit straight connector, end cap and size-change connector. In sizes to match the microduct diameters, the fittings are pushed onto a clean-cut microduct end and make a seal with internal O-rings. If the microduct is pulled away from the connector, internal teeth and a tapered body cause the microduct to be gripped tighter. Removal of the microduct is achieved by pressing the collet inwards.

MATERIALS (typical): BODY: acetal copolymer, impact resistant; some are transparent.
COLLET: acetal copolymer, stainless steel teeth
O-RINGS: nitrile rubber

CONNECTORS/COUPLINGS

Straight connectors are used to join microducts having the same OD.

Outside Diameter (mm)	Item Number
5	1210005000020
7	1210007000020
8.5	1210085000020
10	1210010000020
12	1210012000020

Outside Diameter (mm)	Item Number
12.7	1210127000020
14	1210014000020
16	1210016000020
18	1210018000020

Other sizes available upon request

REDUCERS

These connectors join micro-ducts of different size. Check the micro-duct OD and ID.

Call for sizes and dimensions.

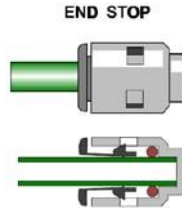


MICRODUCT ACCESSORIES

END CAPS

End caps seal open tubes to prevent contamination from dirt or water.

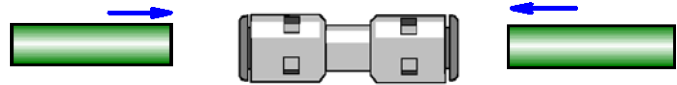
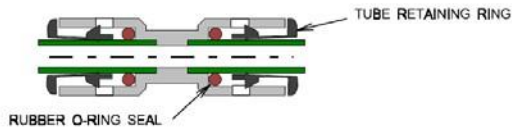
Outside Diameter (mm)	Item Number
5	1280005000020
7	1280007000020
8.5	1280085000020
10	1280010000020
12	1280012000020



Outside Diameter (mm)	Item Number
12.7	1280127000020
14	1280014000020
16	1280016000020
18	1280018000020

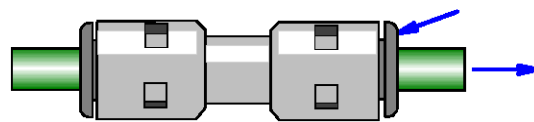
Other sizes available upon request

The different purpose connectors listed above that are used with the microduct system are all push fit pneumatic style connectors which seal around the outer diameter of the micro duct.



It is very important to fit connectors correctly to avoid any air pressure loss when the system is pressurized. Microduct must be pushed firmly into the connector until duct goes beyond sealing ring and presses against the internal stop.

Press ring to remove micro duct














To remove microduct from a connector, press the collet ring against the connector body while pulling the microduct.

General Performance Notes:

1. Blowing Pressure: Between temperatures of 14°F and 104°F connector sizes can be used for blowing operations at pressures up to 16bar. Between 104°F and 149°F for 10mm and larger sizes, pressure should not exceed 10bar.
2. Pull out tensile equals: 25N minimum (3mm), 55N minimum (5mm), 125N minimum (8mm), 125N minimum (10mm)

The product information/specification is intended as a guide only and information is believed to be correct. OMNI can take no responsibility for actions taken based on the information contained in this document. Nothing contained herein is to be construed as a warranty or guarantee. OMNI Terms of Sale apply to all products listed.

		MICRODUCT ACCESSORIES	
		Description 8.5 mm clear coupler	Quantity Per Package 10
		Description 10 mm clear coupler	Quantity Per Package 10
		Description 12 mm clear coupler	Quantity Per Package 10
		Description 12.7 mm clear coupler	Quantity Per Package 10
		Description 16 mm clear coupler	Quantity Per Package 10
		Description 18 mm clear coupler	Quantity Per Package 10
		Description Quick Release Tube	
		Description Kabifix Microduct Slitter	Quantity Per Package 10
		Description 8.5 mm to 10 mm transition coupler	Quantity Per Package 10
		Description 16 mm to 12.7 mm transition coupler	Quantity Per Package 10

		MICRODUCT ACCESSORIES	
		Description	Quantity Per Package
		8.5 mm end cap	10
		Description	Quantity Per Package
		10 mm end cap	10
		Description	Quantity Per Package
		12 mm end cap	10
		Description	Quantity Per Package
		12.7 mm end cap	10
		Description	Quantity Per Package
		16 mm end cap	10
		Description	Quantity Per Package
		18 mm end cap	10
		Description	
		Plastic Tube Cutter	
		Description	Quantity Per Package
		8.5 mm to 8 mm transition coupler	10
		Description	Quantity Per Package
		12 mm to 12.7 mm transition coupler	10
		Description	Quantity Per Package
		18 mm to 16 mm transition coupler	10

HDPE

SMALL & LARGE DIAMETER



For easy identification in multiple duct runs, HDPE Innerduct comes in a variety of colors including black, white, green, yellow, red, blue and orange. Footage marks are printed on the outer wall every two feet for run length verification. Innerduct is also available with interior or exterior ribs, or both. All ribs are longitudinal for less friction when pulling into conduit system or when installing cable. Available with ropes or tapes pre-inserted. Contact your OMNI representative for further information.

Note: Dimensions do not include internal or external rib heights where applicable. Other sizes and wall thickness are available upon request.

OMNI uses a high density polyethylene compound that is designed specifically for manufacturing telecommunications HDPE duct. The physical properties and attributes are listed within the following table

PROPERTY	ASTM TEST METHOD	TYPICAL VALUE
Density	ASTM D 1505	0.946 - 0.955 g/cc
Melt Index	ASTM 1238	0.06 - 0.25 g/10 min
Tensile Strength @ yield	D 638	3100 psi
Tensile Strength @ break	D 638	4600 psi
Ultimate Elongation, %	D 638	> 690%
Flexural Modulus, psi	D 790	120,000 - 185,000 psi
Brittleness Temperature	D 746 procedure A	< -76° C
ESCR, F0, Hours	D 1693 Condition C	> 1500

HDPE

SMALL DIAMETER

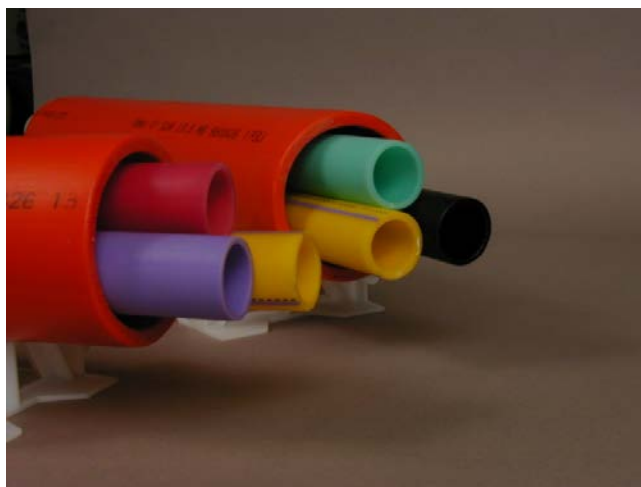


Nominal Duct Size	SDR	Outside Diameter	Nominal Inside	Minimum Wall
1"	13.5	1.315"	1.121"	.097"
1"	11	1.315"	1.077"	.119"
1"	9	1.315"	1.023"	.146"
1"	Sch 40	1.315"	1.049"	.133"
1"	Sch 80	1.315"	0.957"	.179"
1.25"	13.5	1.660"	1.414"	.123"
1.25"	11	1.660"	1.358"	.151"
1.25"	9	1.660"	1.292"	.184"
1.25"	Sch 40	1.660"	1.380"	.140"
1.25"	Sch 80	1.660"	1.278"	.191"
1.50"	13.5	1.900"	1.618"	.141"
1.50"	11	1.900"	1.554"	.173"
1.50"	9	1.900"	1.478"	.211"
1.50"	Sch 40	1.900"	1.380"	.145"
1.50"	Sch 80	1.900"	1.278"	.200"
2"	13.5	2.375"	2.023"	.176"
2"	11	2.375"	1.943"	.216"
2"	9	2.375"	1.847"	.264"
2"	Sch 40	2.375"	2.067"	.154"
2"	Sch 80	2.375"	1.939"	.218"

NOTE: SDR SIZES ARE ALSO AVAILABLE

HDPE

LARGE DIAMETER



Nominal Duct Size	SDR	Outside Diameter	Nominal Inside	Minimum Wall
3"	13.5	3.500"	2.982"	.259"
3"	11	3.500"	2.864"	.318"
3"	9	3.500"	2.722"	.389"
3"	Sch 40	3.500"	3.068"	.216"
3"	Sch 80	3.500"	2.900"	.300"
4"	13.5	4.500"	3.834"	.333"
4"	11	4.500"	3.682"	.409"
4"	9	4.500"	3.500"	.500"
4"	Sch 40	4.500"	4.026"	.237"
4"	Sch 80	4.500"	3.826"	.337"
5"	13.5	5.563"	4.739"	.412"
5"	11	5.563"	4.551"	.506"
5"	9	5.563"	4.327"	.618"
5"	Sch 40	5.563"	5.047"	.258"
5"	Sch 80	5.563"	4.813"	.375"
6"	13.5	6.625"	5.643"	.491"
6"	11	6.625"	5.421"	.602"
6"	9	6.625"	5.153"	.736"
6"	Sch 40	6.625"	6.065"	.280"
6"	Sch 80	6.625"	5.761"	.432"
8"	13.5	8.625"	7.347"	.639"
8"	11	8.625"	7.057"	.784"
8"	9	8.625"	6.709"	.958"
10"	13.5	10.750"	9.158"	.796"
10"	11	10.750"	8.796"	.977"
10"	9	10.750"	8.362"	1.194"
12"	13.5	12.750"	10.862"	.944"
12"	11	12.750"	10.432"	1.159"
12"	9	12.750"	9.916"	1.417"

NOTE: SDR SIZES ARE ALSO AVAILABLE

HDPE

TONEABLE CONDUIT



FEATURES

- Locate buried conduit using conventional toning equipment
- Copper conductor is easily separated from conduit wall to enable joining conduit and copper conductor
- Standard continuous lengths of products are available
- Color selection of conduit is available

GENERAL AND TECHNICAL INFORMATION

This product is utilized for locating empty underground HDPE conduit and underground HDPE conduit containing dielectric optical fiber cables using industry standard locating equipment.

OMNI toneable conduit is manufactured per ASTM F 2160, utilizing HDPE resin per ASTM D 3350. Conduit represents nominal dimensions as specified by ASTM D 2447, NEMA TC 7 and UL 651 B. The locatable wire is 18 AWG solid copper conductor per ASTM B3, not exceeding 10 OHMS/1,000 ft. and is co-extruded onto the outside diameter of the conduit within a high density polyethylene protective encasement.

OMNI toneable conduit is available in a variety of sizes and colors which can be manufactured with or without pre-installed pull tape. Conduit has a continuous legible print line listing manufacturing date, production code and sequential footage marks. Additional wording may be added within the standard OMNI print line data.

Installation may require splice points either in the trench, in an underground pull box or in an above ground enclosure. When joining conduit, all types of mechanical couplers can be used. When joining toneable wire, all splices below grade must be environmentally sealed against the elements.



HDPE

TONEABLE CONDUIT

QUICK REFERENCE TONEABLE CONDUIT SIZE TABLE

Nominal Duct Size	Schedule/SDR	Outside Diameter	Nominal Inside	Minimum Wall
1"	11	1.315"	1.077"	0.119"
1"	Sch 40	1.315"	1.049"	0.133"
1"	Sch 80	1.315"	0.957"	0.179"
1.25"	11	1.660"	1.358"	0.151"
1.25"	Sch 40	1.660"	1.380"	0.140"
1.25"	Sch 80	1.660"	1.278"	0.191"
1.50"	11	1.900"	1.554"	0.173"
1.50"	Sch 40	1.900"	1.380"	0.145"
1.50"	Sch 80	1.900"	1.278"	0.200"
2"	11	2.375"	1.943"	0.216"
2"	Sch 40	2.375"	2.067"	0.154"
2"	Sch 80	2.375"	1.939"	0.218"

NOTE: OTHER SIZES AVAILABLE

OMNI® uses a high density polyethylene compound that is designed specifically for manufacturing Toneable OMNI® HDPE Innerduct.

The physical properties and attributes are listed within the following table:

PROPERTY	ASTM TEST METHOD	TYPICAL VALUE
Density	ASTM D 1505	0.946 - 0.955 g/cc
Melt Index	ASTM 1238	0.06 - 0.25 g/10 min
Tensile Strength @ yield	D 638	3100 psi
Tensile Strength @ break	D 638	4600 psi
Ultimate Elongation, %	D 638	> 690%
Flexural Modulus, psi	D 790	120,000 - 185,000 psi
Brittleness Temperature	D 746 procedure A	< -76° C
ESCR, F0, Hours	D 1693 Condition C	> 1500

HDPE

U.L. LISTED CONDUIT



Nominal Duct Size	Schedule/ EPEC-B	Outside Diameter	Nominal Inside	Minimum Wall
2"	EPEC-B	2.375"	2.023"	0.176"
2"	SCH 40	2.375"	2.067"	0.154"
2"	SCH 80	2.375"	1.939"	0.218"
3"	EPEC-B	3.500"	2.982"	0.259"
3"	SCH 40	3.500"	3.068"	0.216"
3"	SCH 80	3.500"	2.900"	0.300"
4"	EPEC-B	4.500"	3.834"	0.333"
4"	SCH 40	4.500"	4.026"	0.237"
4"	SCH 80	4.500"	3.826"	0.337"
5"	SCH 40	5.563"	5.047"	0.258"
5"	SCH 80	5.563"	4.813"	0.375"
6"	SCH 80	6.625"	5.761"	0.432"

CONDUIT MANUFACTURED IN THE COLOR OF GRAY, OTHER COLORS AVAILABLE BY SPECIAL ORDER.
 HDPE Schedule 40, Schedule 80, EPEC B, when directly buried or encased in concrete in trenches outside of buildings,
 may be used with wire rated 90°C or less.



Listed

INNERDUCT ACCESSORIES

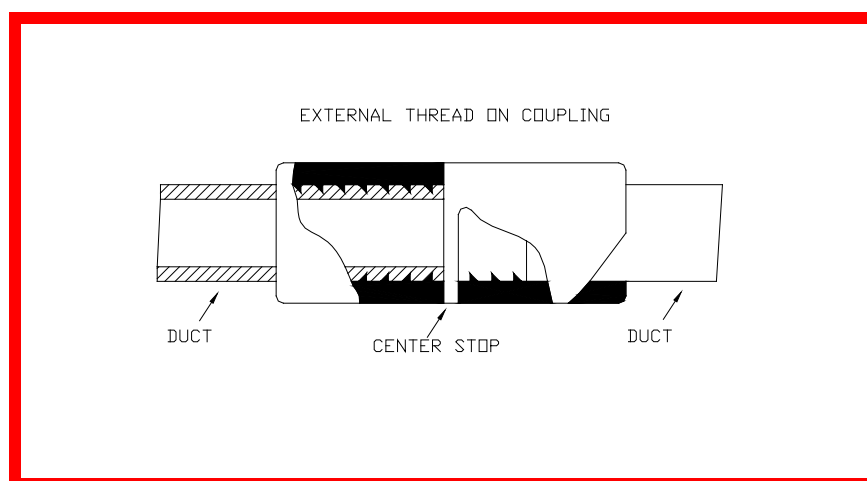
COUPLINGS

Aluminum Thread On


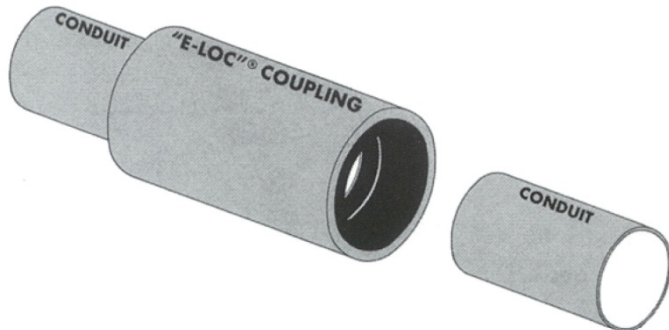
Part Number	Duct Size (in)	Conduit O.D. (in)
792102800	1.00	1.315
792204700	1.25	1.660
792306100	1.50	1.900
792407100	2.00	2.375
792478100	3.00	3.500
792469500	4.00	4.500

Polymer Thread On

Part Number	Duct Size (in)	Conduit O.D. (in)
793102807	1.00	1.315
793204707	1.25	1.660
793306107	1.50	1.900
793407107	2.00	2.375



The right hand/left hand reverse thread couplings are economical and versatile for use with polyethylene innerduct. Thread on couplings can be installed by hand or with a hydraulic powered coupling press. The sharp buttress type threads withstand high pulling loads that meet or exceed the BellCore tensile standard of 1,000 lbs. These couplings are machined with a taper and have a long chamfered lead-in for straight, easy starting. The pitch thread angle reduces the number of revolutions necessary to install the coupling. For water tight and air tight installations, use Polymer thread on couplings.

INNERDUCT ACCESSORIES	COUPLINGS			
<p>Threaded Plastic for Internal Use</p>  <p>These couplings are tapered on both ends to insure a tight fit inside corrugated innerduct while providing a smooth transition between adjoining innerduct.</p>	<p>Part Number</p> <p>791100000</p> <p>791201100</p> <p>791251100</p> <p>791301100</p>	<p>Duct Size (in)</p> <p>1</p> <p>1¼</p> <p>1⅜</p> <p>1½</p>		
<p>“E-LOC” COUPLINGS</p> 	<p>Part Number</p> <p>793102880</p> <p>793204780</p> <p>793306180</p> <p>793407180</p> <p>793469580</p>	<p>Size</p> <p>1”</p> <p>1.25”</p> <p>1.50”</p> <p>2”</p> <p>4”</p>	<p>O.D.</p> <p>1.315”</p> <p>1.660”</p> <p>1.900”</p> <p>2.375”</p> <p>4.50”</p>	<p>Length</p> <p>6”</p> <p>6”</p> <p>6”</p> <p>6”</p> <p>6”</p>

Please note that OMNI will manufacture couplings to your exact specifications in the event standard sizes are unsuitable for your requirements.

INNERDUCT ACCESSORIES

COUPLINGS



Reverse Threaded Plastic Couplers

Description	Duct OD	Quantity Per Package
1.00" Smoothwall HDPE True Sized	1.17	10
1.00" Smoothwall HDPE SDR11 or 13.5	1.315	10
1.25" Smoothwall HDPE SIDR 11.5	1.48	10
1.25" Smoothwall HDPE SIDR 9	1.54	10
1.25" Smoothwall HDPE True Sized	1.58	10
1.25" Smoothwall HDPE SDR11 or 13.5	1.66	10
1.50" Smoothwall HDPE SIDR 11.5	1.89	10
1.50" Smoothwall HDPE SDR11 or 13.5	1.9	10
2.00" Smoothwall HDPE SIDR 11.5	2.348	10
2.00" Smoothwall HDPE SDR11 or 13.5	2.375	10
Transition Coupler from 1.315" to 1.54"	Trans coupler	10
Transition Coupler from 1.58" to 1.66"	Trans coupler	10
Transition Coupler from 1.48" to 1.66"	Trans coupler	10
Transition Coupler from 1.54" to 1.83"	Trans coupler	10

INNERDUCT ACCESSORIES

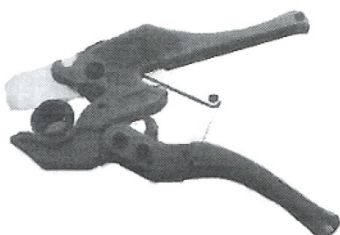


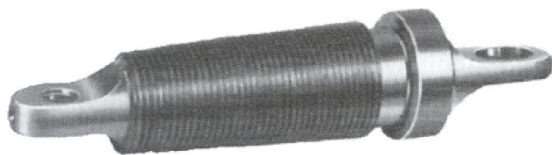
PUSH2CONNECT™ COUPLER



PUSH2CONNECT™ Coupler

Description	Duct OD	Quantity Per Package
1.25" Smoothwall HDPE	1.66"	10
1.25" Smoothwall HDPE True Sized	1.58"	10
2" Smoothwall HDPE	2.375"	10
Transition Coupler 1.25" to 1.25"	1.58" to 1.66"	10

- Do not unscrew; push on only
- Air tight
- Water tight
- Tested to greater than 1500 #
- Pull-out greater than 450 (PSI) air pass-through

INNERDUCT ACCESSORIES	ADAPTERS & INSTALLATION TOOLS		
<div>PVC & Polyethylene Cutter</div> <div></div>	<div>Part Number</div> <div>955010015 955010024</div>	<div>Description</div> <div>For diameters up to 1 1/2" For diameters up to 2 3/8"</div>	
<div>Multiple Pulling Harness</div> <div></div> <div>Allows staggered attachment to cable or innerduct when pulling through conduit systems</div> <div></div> <div>Note: Working load determined with a safety factor of 3.</div>	<div>Part Number</div> <div>796029020 796029120 796049120 796049220 796999111</div>	<div>Description</div> <div>2 Way 1/8" Harness Cable 3 Way 1/8" Harness Cable 3 Way 1/4" Harness Cable 4 Way 1/4" Harness Cable 3 Way Link Chain</div>	<div>Wkg. Load (lbs)</div> <div>550 550 2000 2000 4100</div>
INNERDUCT ACCESSORIES	PULLING EYES		
<div>Threaded Innerduct Pulling Eye</div> <div></div>	<div>Part Number</div> <div>795920910 795943010 795953610 795964510</div>	<div>Size</div> <div>1" 1 1/4" 1 3/8" 1 1/2"</div>	<div>Taper (in.)</div> <div>.937 – 1.062 1.187 – 1.343 1.343 – 1.50 1.50 – 1.625</div>

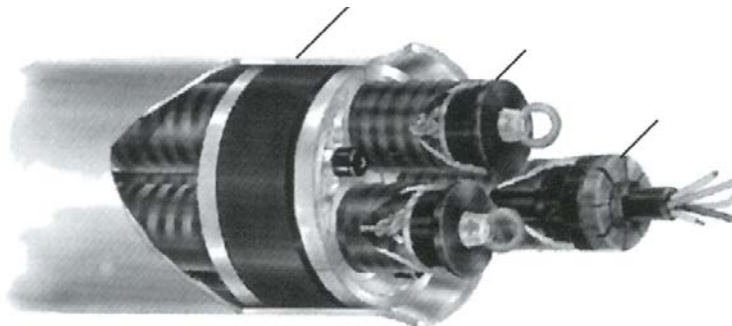
INNERDUCT ACCESSORIES

DUCT PLUGS

F.O. Triplex/ Quadplex

F.O. Blank

F.O. Simplex

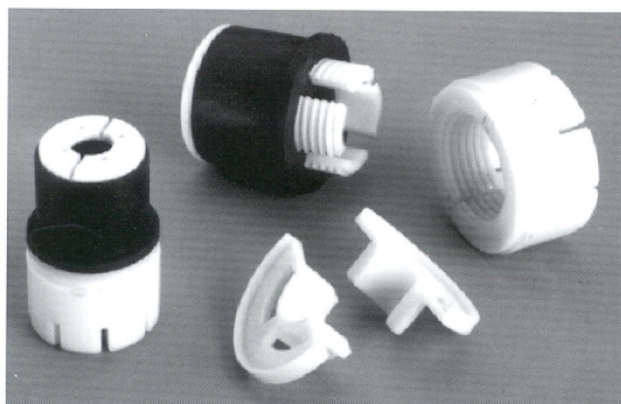


Blank Expansion Duct Plugs For Conduit Sealing



Part Number	Size	Conduit I.D. (in.)
260330240	1"	.96- 1.16
260730270	1 1/4"	1.14 -1.48
261230380	1 1/2"	1.49 - 1.83
261530560	2"	1.83 -2.36

Fiber Optic Simplex Plugs



Part Number	Size	Conduit I.D. (in.)	Cable Range O.D. (in.)
251030615	1"	0.92 – 1.00	0.35 – 0.50
251090615	1"	1.00 – 1.10	0.35 – 0.57
251090915	1"	1.00 – 1.10	0.57 – 0.70
251150615	1 1/4"	1.22 – 1.38	0.35 – 0.57
251150915	1 1/4"	1.22 – 1.38	0.57 – 0.70
251230615	1 3/8"	1.39 – 1.49	0.35 – 0.57
251230915	1 3/8"	1.39 – 1.49	0.57 – 0.70
251350615	1 1/2"	1.39 – 1.50	0.35 – 0.57
251350915	1 1/2"	1.39 – 1.50	0.57 – 0.70
251400615	2"	1.86 – 1.98	0.35 – 0.57
251400915	2"	1.86 – 1.97	0.57 – 0.70
251450615	2"	1.98 – 2.15	0.35 – 0.57
251450915	2"	1.98 – 2.15	0.57 – 0.78

INNERDUCT ACCESSORIES

DUCT PLUGS

Triplex Expansion Plugs

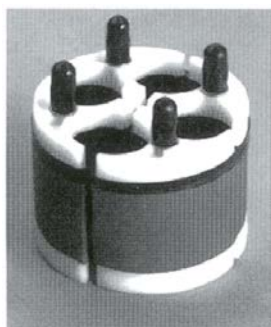
For 3 phase cable/innerduct installations.



Part Number	Size	Cable Range O.D. (in.)	Conduit I.D. (in.)	Conduit type
253612315	4"	1.07 – 1.22	3.920 – 4.050	Sch-40 & C-Duct
253613015	4"	1.19 – 1.36	3.920 – 4.050	Sch-40 & C-Duct
253613915	4"	1.31 – 1.42	3.920 – 4.050	Sch-40 & C-Duct
253614915	4"	1.54 – 1.67	3.920 – 4.050	Sch-40 & C-Duct

Quadplex Expansion Plugs

For 4 phase cable/innerduct installations.



Part Number	Size	Cable Range O.D. (in.)	Conduit I.D. (in.)	Conduit type
254613815	4"	1.31 – 1.36	3.920 – 4.050	Sch-40 & C-Duct

Etco "T" CONE®



Conduit Barrel



Plastic Conduit Socket

ALL PLUGS HAVE ROPE TIES

Part Number	Size (in.)	Conduit I.D. (in.)
260320260	1	1.050
260520300	1 $\frac{1}{8}$	1.125
260720320	1 $\frac{1}{4}$	1.250
260720360	1 $\frac{1}{4}$	1.380
260720400	1 $\frac{1}{4}$	1.540
261220520	1 $\frac{1}{2}$	1.610
261220550	1 $\frac{1}{2}$	1.780
261520570	2	1.939
261520580	2	2.067
261520600	2	2.195
261520610	2	2.255



PVC Conduit & Fittings

PVC CONDUIT & FITTINGS

TELEPHONE DUCT

Manufactured in white 20' layable lengths with standard integral bell. Extra long 6" bell is available upon request. These ducts meet applicable telephone standards 8546 and TC-10.

TYPE B – Designed for use in concrete encased applications only.

TYPE C – Designed for use in direct buried or concrete encasement applications.

TYPE D – Designed for use in exposed applications; provides additional ultraviolet protection and heat resistance.

Part Number	Type	O.D.	I.D.	Minimum Wall	Approx. WT/FT	Feet/Bundle	Truck Qty.
200407110	B	4.35"	4.15"	.098"	.84 lbs	1,680'	20,160'
201407110	C	4.35"	4.05"	.150"	1.4 lbs	1,680'	20,160'
202407110	D	4.35"	4.05"	.150"	1.4 lbs	1,680'	20,160'

Other colors available in Type B & C upon request

PVC CONDUIT & FITTINGS

DB60 &120

Manufactured in white 20' layable lengths in accordance with TC-6 and ASTM F 512.

DB 60 with Integral Bell

Part Number	Size	O.D.	I.D.	Min. Wall	Approx Wt/Ft	Feet/ Bundle	Truck Qty.
207207110	2"	2.375"	2.255"	.065"	.33 lbs	5180	62,160'
207307110	3"	3.500"	3.316"	.100"	.74 lbs	2500	30,000'
207307110	4"	4.500"	4.258"	.131"	1.2 lbs	1520	18,240'
207507110	5"	5.563"	5.259"	.164"	1.8 lbs	900	10,800'
207607110	6"	6.625"	6.261"	.196"	2.6 lbs	660	7,920'

DB 120 with Integral Bell

207209110	2"	2.375"	2.221"	.083"	.43 lbs	5180	62,160'
207309110	3"	3.500"	3.264"	.127"	.91 lbs	2500	30,000'
207409110	4"	4.500"	4.192"	.166"	1.5 lbs	1520	18,240'
207509110	5"	5.563"	5.181"	.205"	2.3 lbs	900	10,800'
207609110	6"	6.625"	6.171"	.244"	3.3 lbs	660	7,920'

PVC Conduit & Fittings



PVC CONDUIT & FITTINGS

SCHEDULE 40 & 80

Heavy walled, white or grey conduit manufactured in accordance with TC-2.
Other colors and lengths available upon request.

	Part Number	Size	O.D.	I.D.	Min. Wall	Approx Wt/Ft	Feet/ Bundle	Truck Qty
Schedule 40								
	20305***0	½	0.84"	0.62"	0.109"	0.16 lbs	9100'	254,800'
	20307***0	¾	1.050"	0.82"	0.113"	0.21 lbs	9140'	219,360'
	20310***0	1	1.315"	1.049"	0.133"	0.32 lbs	7380'	132,840'
	20312***0	1 ¼	1.660"	1.380"	0.140"	0.43 lbs	4780'	95,600'
	20315***0	1 ½	1.900"	1.610"	0.145"	0.52 lbs	3920'	78,400'
	20320***0	2	2.375"	2.067"	0.154"	0.70 lbs	2800'	56,000'
	20325***0	2 ½	2.875"	2.469"	0.203"	1.1 lbs	3720'	44,640'
	20330***0	3	3.500"	3.068"	0.216"	1.4 lbs	2300'	27,600'
	20340***0	4	4.500"	4.026"	0.237"	2.1 lbs	1520'	18,240'
	20350***0	5	5.563"	5.047"	0.258"	2.8 lbs	900'	10,800'
	20360***0	6	6.625"	6.065"	0.280"	3.6 lbs	660'	7,920'
Schedule 80								
	20420***0	2	2.375"	1.939"	0.218"	0.96 lbs	2600'	46,800'
	20440***0	4	4.500"	3.826"	0.337"	2.9 lbs	760'	15,200'

***Insert numbers for product required.

White

511 – 10' w/ standard bell
711 – 20' w/ standard bell
581 – 10' w/ plain end
781 – 10' w/ plain end

Grey

512 – 10' w/ standard bell
712 – 20' w/ standard bell
582 – 10' w/ plain end
782 – 20' w/ plain end

Schedule 40 with 6" Long Integral Bell – 20' Layable Length

	Part Number	Size	O.D.	I.D.	Min. Wall	Approx Wt/Ft	Feet/ Bundle	Truck Qty
	2031272*0	1 ¼	1.660"	1.380"	0.140"	0.43 lbs	4780'	95,600'
	2032072*0	2	2.375"	2.067"	0.154"	0.70 lbs	2800'	56,000'
	2034072*0	4	4.500"	4.026"	0.237"	2.1 lbs	1520'	18,240'

* Insert number for product required.

1 – White 2 – Grey



PVC Conduit & Fittings

RIGID NON-METALLIC CONDUIT

SCHEDULE 40 U.L. LISTED

Rigid non-metallic conduit for underground applications encased in concrete or direct burial. Also for use in exposed or concealed applications above ground. Meets specifications U.L. 651.

Part Number	Size	O.D.	I.D.	Min. Wall	Approx Wt/Ft	Feet/ Bundle	Truck Qty
203055160	½	0.840"	0.62"	0.109"	0.163 lbs	10,300'	247,200'
203075160	¾	1.050"	0.82"	0.113"	0.217 lbs	9,140'	182,800'
203105160	1	1.315"	1.049"	0.133"	0.322 lbs	7,380'	132,840'
203125160	1 ¼	1.660"	1.380"	0.140"	0.436 lbs	4,780'	95,600'
203155160	1 ½	1.900"	1.610"	0.145"	0.522 lbs	4,080'	81,600'
203205160	2	2.375"	2.067"	0.154"	0.702 lbs	2,800'	56,000'
203255160	2 ½	2.875"	2.469"	0.203"	1.113 lbs	3,720'	37,200'
203305160	3	3.500"	3.068"	0.216"	1.456 lbs	2,300'	27,600'
203355160	3 ½	4.000"	3.548"	0.226"	1.750 lbs	1,680'	23,520'
203405160	4	4.500"	4.026"	0.237"	2.073 lbs	1,520'	18,240'
203505160	5	5.563"	5.047"	0.258"	2.809 lbs	900'	10,800'
203605160	6	6.625"	6.625"	0.280"	3.669 lbs	660'	7,920'

RIGID NON-METALLIC CONDUIT

SCHEDULE 80 U.L. LISTED

Part Number	Size	O.D.	I.D.	Min. Wall	Approx Wt/Ft	Feet/ Bundle	Truck Qty
204055160	½	0.840"	0.546"	0.147"	0.209 lbs	10,300'	206,000'
204075160	¾	1.050"	0.742"	0.154"	0.283 lbs	9,140'	146,240'
204105160	1	1.315"	1.957"	0.179"	0.417 lbs	7,380'	103,320'
204125160	1 ¼	1.660"	1.278"	0.191"	0.575 lbs	4,780'	76,480'
204155160	1 ½	1.900"	1.500"	0.200"	0.697 lbs	4,080'	57,120'
204205160	2	2.375"	1.939"	0.218"	0.965 lbs	2,460'	39,360'
204255160	2 ½	2.875"	2.323"	0.276"	1.472 lbs	3,720'	29,760'
204305160	3	3.500"	2.900"	0.300"	1.975 lbs	1,760'	21,120'
204405160	4	4.500"	3.826"	0.337"	2.879 lbs	760'	15,200'
204505160	5	5.563"	4.813"	0.375"	3.993 lbs	900'	10,800'
204605160	6	6.625"	6.065"	0.432"	5.525 lbs	660'	7,920'

Conduit is supplied in 20' lengths, with one belled end per length. For specific requirements, it may be produced in shorter or longer lengths, with or without belled ends.

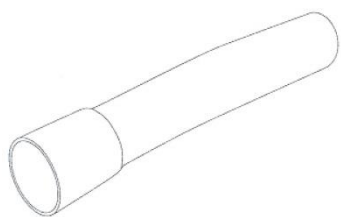
Note: Content of this sheet is subject to change without notice.



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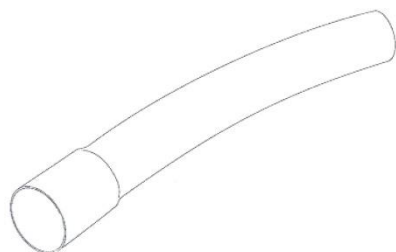
PVC CONDUIT & FITTINGS

C DUCT SWEEPS & BENDS



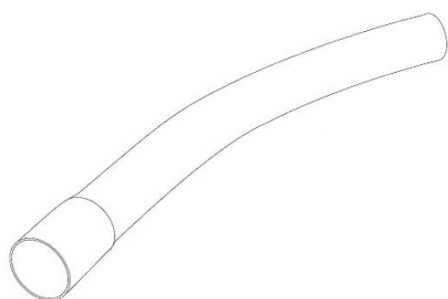
11 1/4 Degrees

Part Number	Radius (R)	Segment Length (L)
211530201	2'	4.75"
211540201	3'	7.00"
211550201	4'	9.50"
211560201	6'	14.00"
211570201	9'	21.25"
211580201	12'	28.25"



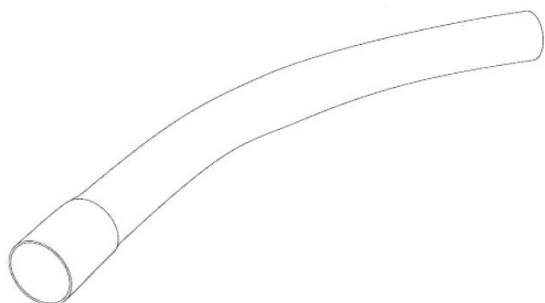
22 1/2 Degrees

Part Number	Radius (R)	Segment Length (L)
211530301	2'	9.50"
211540301	3'	14.00"
211550301	4'	19.00"
211560301	6'	26.00"
211570301	9'	42.50"
211580301	12'	56.50"



30 Degrees

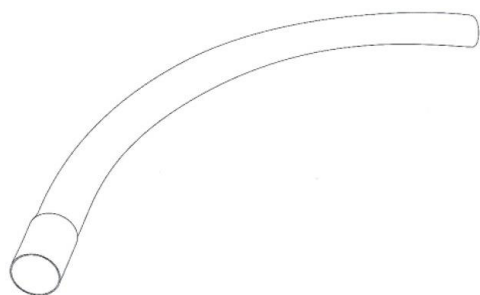
Part Number	Radius (R)	Segment Length (L)
211530401	2'	12.50"
211540401	3'	19.00"
211550401	4'	25.12"
211560401	6'	38.00"
211570401	9'	57.00"
211580401	12'	74.00"



45 Degrees

Part Number	Radius (R)	Segment Length (L)
211530501	2'	19.00"
211540501	3'	28.00"
211550501	4'	37.75"
211560501	6'	56.00"
211570501	9'	85.00"
211580501	12'	113.00"

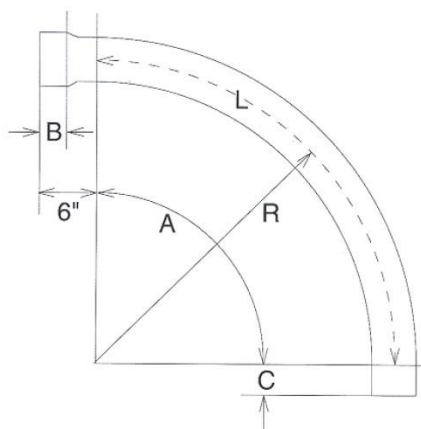
PVC CONDUIT & FITTINGS



(A) 90 Degrees

C DUCT SWEEPS & BENDS

Part Number	Radius (R)	Segment Length (L)
211530601	2'	38.00"
211540601	3'	54.00"
211550601	4'	75.50"
211560601	6'	113.00"
211570601	9'	170.00"
211580601	12'	(2 pcs. 45"x12' – 226.9")



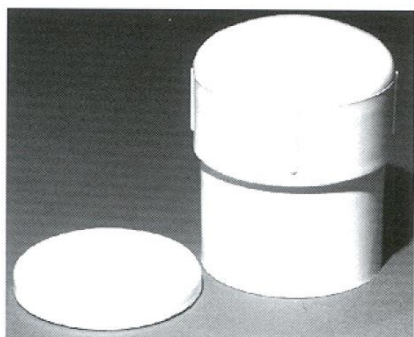
Bends

Ordering Information for Bends

- (A) Angle of Curvature
- (B) Bell Socket – 3" in all cases
- (C) Spigot Length – 3" in all cases
- (R) Radius of curvature (feet)
- (L) Length of Arc (inches)

Special radius bends are available on request. Contact your OMNI representative for any special needs you may have.

PVC CONDUIT & FITTINGS



PVC CAPS

Part Number	Description
264004000	4" flat cap (B,C,D Duct)
264006000	4" dome cap (B,C,D Duct)
264006003	4" dome cap (S-40, S-80)

PVC CONDUIT & FITTINGS

U.L. S40/80 SWEEPS & BENDS



22 ½ Degrees

Part Number	Radius Length (R)
21# @ 22300	18"
21# @ 32300	24"
21# @ 42300	36"
21# @ 52300	48"
21# @ 57300	60"



30 Degrees

Part Number	Radius Length (R)
21# @ 22300	18"
21# @ 32300	24"
21# @ 42300	36"
21# @ 52300	48"
21# @ 57300	60"



45 Degrees

Part Number	Radius Length (R)
21# @ 22300	18"
21# @ 32300	24"
21# @ 42300	36"
21# @ 52300	48"
21# @ 57300	60"



90 Degrees

Part Number	Radius Length (R)
21# @ 22300	18"
21# @ 32300	24"
21# @ 42300	36"
21# @ 52300	48"
21# @ 57300	60"

= Type

- S40 = 3
- S80 = 4

@ = Size



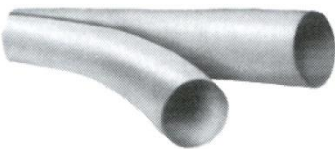

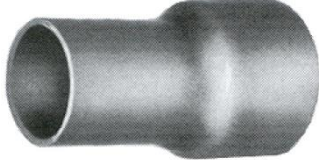
- 2" = 1
- 3" = 3
- 4" = 5

** = 18" Radius not available on 4"


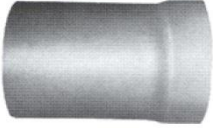
Note: 16" Radius is available.

(When ordering 16" Radius, substitute the 5th digit with a 1 and the 6th digit with a 9).

Example – 4"S40 22 ½" x 16" = 213519300

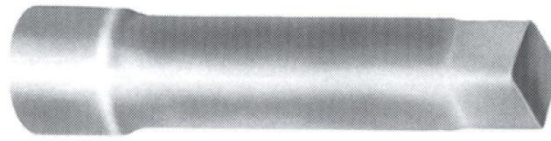
PVC CONDUIT & FITTINGS		ADAPTERS	
End Bell with Socket		Part Number	Size
		234099100	4"
End Bell with Flange		Part Number	Size
		234099102	4"
Wye Branch Spigot ends; fabricated of PVC plastic		Made to Order Call OMNI for specific information	
Wye Branch Belled ends; fabricated of ABS plastic		Part Number	Size
		234090100	4"
Cast Iron to 4" Telephone		Part Number	Size
		234048100	4" to 4" Tel.

Note: All of the adapters listed above can be custom ordered split or keyed or both.
Contact your OMNI Representative with your specific needs.

Threaded Steel Pipe Adapter		Part Number	Description
		232021550	2" male to 2" Sch-40
		232021650	2" female to 2" Sch-40
		234044550	4" male to 4" Tel.
		234044650	4" female to 4" Tel.
		234244550	4" male to 4" Sch-40
		234244650	4" female to 4" Sch-40
Fiberglass Adapter		Part Number	Description
		232022100	2.14" OD to 2" Sch-40
		233029100	3.14" OD to 3" Sch-40
		234046100	4.14" OD to 4" Tel.
		234246100	4.14" OD to 4" Sch-40
		234242100	4.5" OD to 4" Sch-40

PVC CONDUIT & FITTINGS

CLAY TILE ADAPTERS



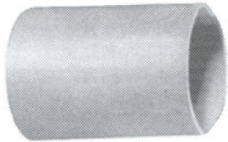

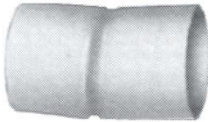

PVC adapters for joining square clay tile to telephone duct. Furnished in various lengths so that the bell ends may be staggered in the duct banks.

	Part Number	Description
18" Long w/ Bell	234033107	3 ¼" sq. to 4" Tel.
	233533107	3 ¼" sq. to 3 ½" IPS
	234036107	3 ½" sq. to 4 Tel.
	233536107	3 ½" sq. to 3 ½" IPS
	234041107	4" sq. to 4" Tel.
	Part Number	Description
9" Long w/ Bell	234033104	3 ¼" sq. to 4" Tel.
	233533104	3 ¼" sq. to 3 ½" IPS
	234036104	3 ½" sq. to 4 Tel.
	233536104	3 ½" sq. to 3 ½" IPS
	234041104	4" sq. to 4" Tel.
	Part Number	Description
6" Long w/ Bell	234033102	3 ¼" sq. to 4" Tel.
	233533102	3 ¼" sq. to 3 ½" IPS
	234036102	3 ½" sq. to 4 Tel.
	233536102	3 ½" sq. to 3 ½" IPS
	234041102	4" sq. to 4" Tel.



Note: All of the adapters listed above can be custom ordered split or keyed or both.
Contact your OMNI Representative with your specific needs.



PVC Conduit & Fittings

PVC CONDUIT & FITTINGS		COUPLINGS	
Sleeve Coupling 		Part Number	Description
		223202010	2" Sch-40/80
		223302010	3" Sch-40/80
		223352010	3 ½" Sch-40/80
		221402010	4" Telephone
		223402060	4" Sch-40/80
Center Stop Coupling 		Part Number	Description
		223211010	2" Sch-40/80
		223301010	3" Sch-40/80
		223351010	3 ½" Sch-40/80
		221401010	4" Telephone
		223401010	4" Sch-40/80
5° Angle Coupling 		Part Number	Description
		221405350	4"Telephone Bell X Bell
Internal Coupling 		Part Number	Description
		227350010	3 ½" I.D. duct
		227400010	4" I.D. Duct

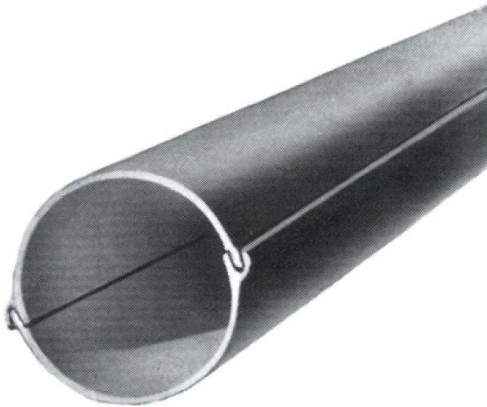
Note: All of the adapters listed above can be custom ordered split or keyed or both. Contact your OMNI Representative with your specific needs.

PVC CONDUIT & FITTINGS		CEMENT & PRIMER	
PVC Solvent Cement w/ Dauber Top 		Part Number	Volume
		270102030	1 pint
		270102040	1 quart
		270102060	1 gallon
Primer for Solvent Cement 		Part Number	Volume
		270300040	1 quart

PVC CONDUIT & FITTINGS

SPLIT DUCT & ACCESSORIES

Snap Duct

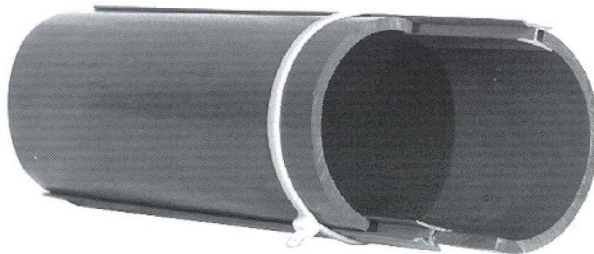


Part Number	Size
-------------	------

201355912	3 1/2"
201405912	4"
201505912	5"

Used for extra protection around direct buried cable or to repair existing duct that becomes damaged. Snap Duct comes in 10' lengths and is manufactured in standard wall thickness. Split bends are also available upon request. Contact your OMNI representative for details.

Heavy Wall Split Duct



Part Number	Size
-------------	------

203205923	2"
203405923	4"

Manufactured using Sch-40 conduit and joined together with the use of H-Strip and tie wraps.

H-Strip






Part Number	Description
-------------	-------------

201405919	C & D Duct, .200" wall
203405923	Sch-40; .250" wall



PVC Conduit & Fittings

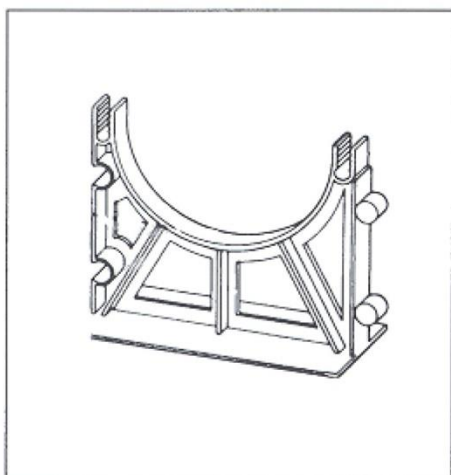
PVC CONDUIT & FITTINGS		SPLIT DUCT & ACCESSORIES	
Plastic Tie Strap 		Part Number	Description
		941206100	15" Length
		941207500	20" Length
Tie Strap Tightening/ Cutting Pliers 		Part Number	Description
		941180100	Strap Tightening Tool
Joint Sealing Tape To cover butted SPLIT DUCT joints. Prevents grout from entering duct. 		Part Number	Description
		948709003	2" x 60 yd. Roll

PVC CONDUIT & FITTINGS

SNAP-LOC SPACERS

Intermediate & Base Spacers

- *SNAP TOGETHER
- *VERTICAL INTERLOCKING
- *HORIZONTAL INTERLOCKING

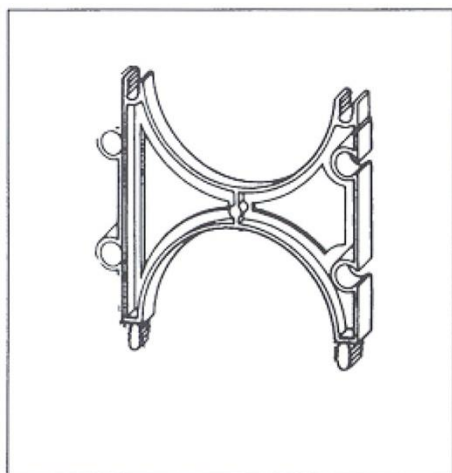


Base

Part Number	Conduit Size	Separation
282011020	2"	1 ½"
282011030	2"	2"
283011020	3"	1 ½"
283011030	3"	2"
284011010	4"	1"
284011020	4"	1 ½"
284011030	4"	2"
285011020	5"	1 ½"
285011030	5"	2"
286011020	6"	1 ½"
286011030	6"	2"

Intermediate

Part Number	Conduit Size	Separation
282022020	2"	1 ½"
282022030	2"	2"
283022020	3"	1 ½"
283022030	3"	2"
284022010	4"	1"
284022020	4"	1 ½"
284022030	4"	2"
285022020	5"	1 ½"
285022030	5"	2"
286022020	6"	1 ½"
286022030	6"	2"



4"X1" PROVIDES 1 ¾" clearance between trench floor & bottom row of ducts, all other sizes provides 3" clearance.



PVC CONDUIT & FITTINGS

EXPANSION / CONTRACTION

TYPE B, C, & D CONDUIT

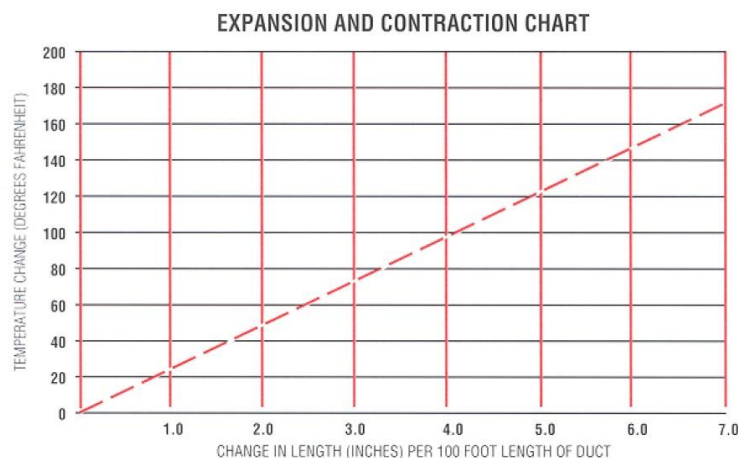
When duct temperature variations are anticipated during the installation of telephone duct, allow extra duct footage at each tie-in for contraction.

Terminated duct runs should be covered with backfill from tie-in point toward the end of the duct run. If the trench must be left open, don't terminate the run.

All plastic ducts may expand or contract as concrete is poured and cured.

When placing concrete encasement, always encase from one end of the duct section toward the other end of the section, to allow the free end to move. Never encase from each end of the section toward the center.

The coefficient of thermal expansion of telephone duct is 3.30×10^{-5} in/in/ °F. The following chart indicates what expansion or contraction can be expected at various temperature changes.



BRIDGE CROSSINGS AND EXPOSED APPLICATIONS

Type D telephone duct is designated specifically for use in bridge crossings and exposed applications. Using the expansion/contraction chart, calculate the number of expansion joints required. Expansion joints provide a 6" allowance for expansion/contraction. Utilize one expansion joint for each 100 feet of exposed length for most installations. The duct should be free to move during expansion/contraction; the barrel should be securely clamped and the piston should be aligned properly with the barrel for easy movement.

PVC CONDUIT - SCHEDULE 40 & 80

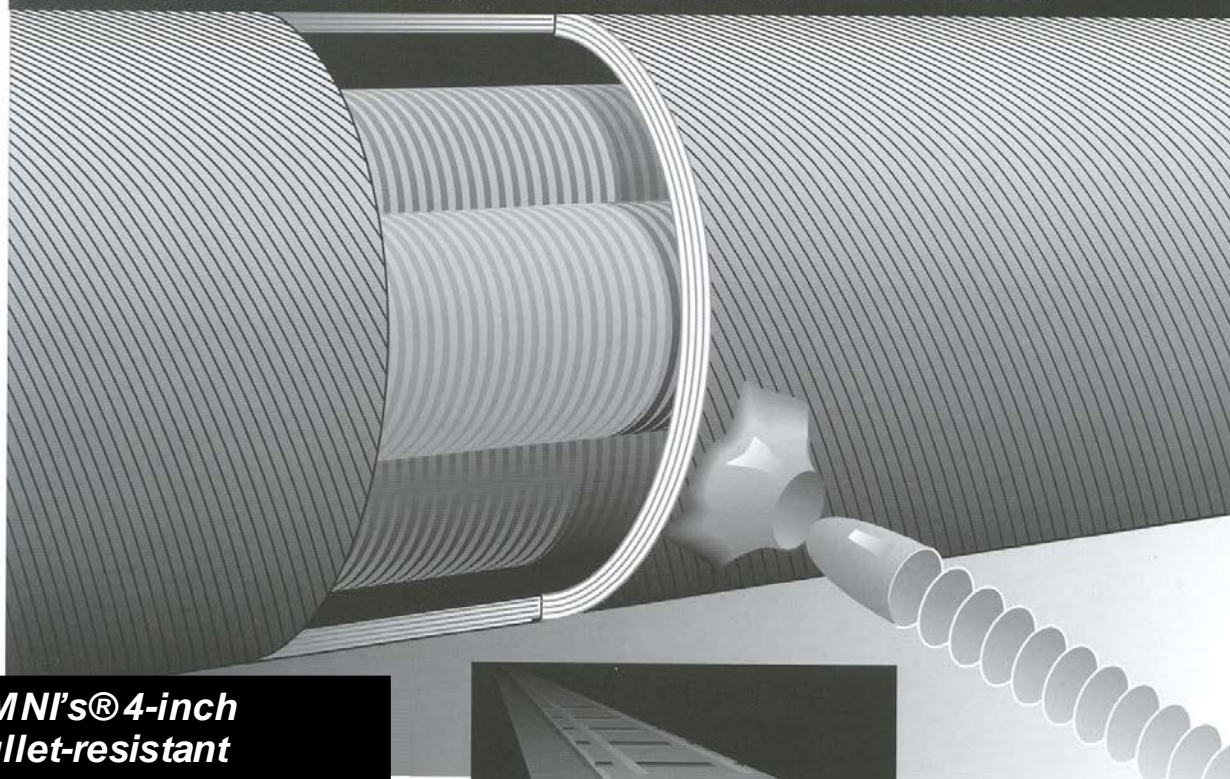
Expansion Characteristics of PVC Rigid Nonmetallic Conduit
Coefficient of Thermal Expansion = 3.38×10^{-5} in/in/ °F

Like all construction materials, PVC will expand or contract with variations in temperatures. The coefficient of linear expansion in PVC conduit is 0.000033 in/in/°F as compared to 0.000012 for aluminum conduit. Installations where the expected temperature variation exceeds 14°C (25°F) should use expansion joints. Conduits installed in sunshine will have a greater temperature change than the change in air temperature because of the radiant heat of the sun.

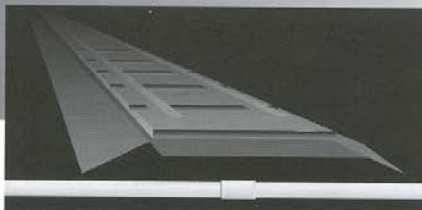
An expansion joint consists of two sections of conduit, one telescoping inside another. When installing expansion joints, alignment of piston and barrel is important. Be sure to mount expansion joint level for best performance.

Temp Change in Degrees F	Length Change in inches per 100 ft. of PVC Conduit	Temp Change in Degree F	Length Change in inches per 100 fl. of PVC Conduit	Temp Change Degrees F	Length Change In inches per 100 fl. of PVC Conduit	Temp Change Degrees F	Length Change in inches per 100 ft. of PVC Conduit
5	0.2	55	2.2	105	4.2	155	6.3
10	0.4	60	2.4	110	4.5	160	6.5
15	0.6	65	2.6	115	4.7	165	6.7
20	0.8	70	2.8	120	4.9	170	6.9
25	1.0	75	3.0	125	5.1	175	7.1
30	1.2	80	3.2	130	5.3	180	7.3
35	1.4	85	3.4	135	5.5	185	7.5
40	1.6	90	3.6	140	5.7	190	7.7
45	1.8	95	3.8	145	5.9	195	7.9
50	2.0	100	4.1	150	6.1	200	8.1

**COMPARE IT TO STEEL FOR STRENGTH, WEIGHT
AND A LOWER OVERALL INSTALLED COST.**



**OMNI's® 4-inch
bullet-resistant
fiberglass conduit**



Bullet-Resistant

- Heavier wall than SW, HW wall fiberglass: hardened surface is resistant to numerous types of ammunition
- Cost-efficient replacement for steel in many high risk areas

Lightweight

- 70% lighter than steel (3 lb./ft. vs 11 lb./ft.)
- Workers can easily lift and carry sections, eliminating the need for expensive handling equipment
- Reduces worker fatigue

Lower Installed Cost

- Due to lighter weight, it's available in longer 20 ft. sections. That means fewer joints and therefore, less installation labor
- Lighter weight also reduces bridge permitting costs, when permits are based on weight

- High strength reduces the quantity of support hardware, such as conduit supports, by as much as 50%
- Non-conductive material eliminates the need for expensive insulated bridge hangers.

Non-corrosive

- Highly resistant to corrosive road chemicals, salt, bacteria, weather conditions and ultra-violet decomposition.

Long service life

- Adhesive-bonded male and female ends assure a permanent, water-tight seal
- Fiberglass material is essentially inert; it will not corrode, deteriorate or decompose

Wide service-temperature range

- Remains stable and rigid over a temperature range from -40° to +230° F
- Will not become brittle in extreme cold or deform from heat generated by short term electrical overloads
- Expansion and contraction forces are minimal.

Non-conductive

- Due the non-metallic material properties of fiberglass, damaging electrolysis will not occur.

Full system configuration

- Available with a complete line of factory bends/elbows, expansion joints and bridge hangers to accommodate virtually any installation requirement.

FIBERGLASS CONDUIT & FITTINGS

CONDUIT DIMENSIONS IRON PIPE (IPS) & TUBULAR (ID)

TYPE SW (Standard Wall) Inches

SIZE	IPS MINIMUM O.D.	TUBULAR MINIMUM O.D.	MINIMUM DIAMETER TOLERANCE	IPS MINIMUM I.D.	TUBULAR MINIMUM I.D.	NOMINAL WALL THICKNESS	WEIGHT LBS/FT	
							(IPS)	(TUB)
2	*2.375	*2.140	+0.025 -0.010	2.235	2.000	0.070 IPS 0.070 TUB	.44	.40
3	*3.500	*3.140	+0.022 -0.010	3.360	3.000	0.070 IPS 0.070 TUB	.65	.63
4	*4.500	*4.140	+0.020 -0.010	4.320	4.000	0.070 IPS 0.070 TUB	.84	.78
5	5.563	5.140	+0.037 -0.010	5.380	5.000	0.095 IPS 0.095 TUB	1.05	.97
6	6.625	6.140	+0.010 -0.010	6.380	6.000	0.110 IPS 0.095 TUB	1.24	1.17
8	8.623	N/A	+0.035 -0.010	8.400	N/A	0.115 IPS N/A TUB	2.20	N/A

TYPE HW (Heavy Wall) Inches

SIZE	IPS MINIMUM O.D.	TUBULAR MINIMUM O.D.	MINIMUM DIAMETER TOLERANCE	IPS MINIMUM I.D.	TUBULAR MINIMUM I.D.	NOMINAL WALL THICKNESS	WEIGHT LBS/FT	
							(IPS)	(TUB)
4	*4.512	*4.190	+0.028 -0.018	4.360	4.000	0.096	1.04	.97
5	*5.600	*5.230	+0.034 -0.028	5.373	5.000	0.110	1.59	1.48
6	*6.600	*6.230	+0.034 -0.028	6.405	6.000	0.110	1.88	1.77
8	8.650	N/A	+0.034 -0.028	8.400	N/A	0.125	2.90	N/A

** Actual Wall Thickness is required to meet the performance requirements of this specification. Other wall thicknesses are available upon request.

The standard color of OMNI's fiberglass conduit is black. Other colors can be specially ordered and this is useful to color-code a conduit such as orange for telephone or fiber optic cables. OMNI can also provide smaller diameter conduit in sizes from 3/4" to 1 - 1/2" in various walls.

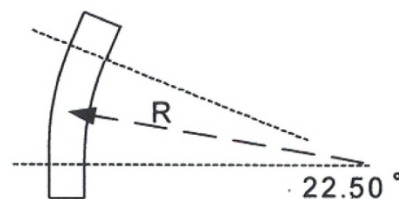
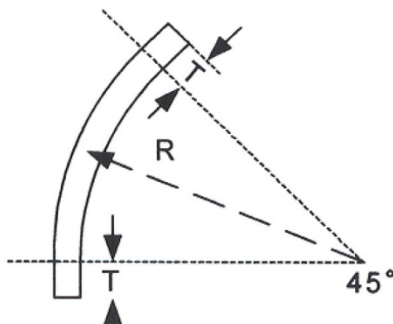
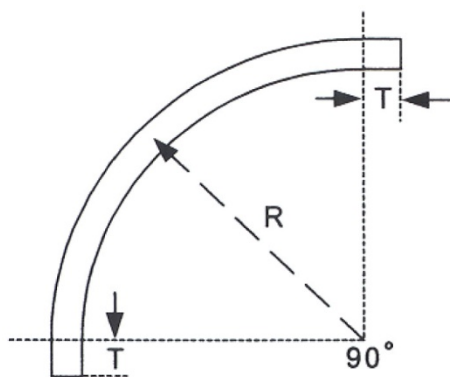
*  Listed

FIBERGLASS CONDUIT & FITTINGS

BRFG CONDUIT SIZES

BULLET RESISTANT CONDUIT MANUFACTURED FOR EXTRA HIGH IMPACT

SIZE	OUTSIDE AVERAGE	DIAMETER TOLERANC E	MINIMUM I.D.	NOMINAL WALL	WEIGHT LBS/FT
2	2.500	+0.030 -0.010	2.00	0.250	1.49
3	3.500	+0.030 -0.010	3.00	0.250	2.16
4	4.500	+0.030 -0.010	4.00	0.250	2.82
5	5.500	+0.030 -0.010	5.00	0.250	3.48
6	6.500	+0.030 -0.010	6.00	0.250	4.14
8	8.500	+0.030 -0.010	8.00	0.250	5.73
10	10.50	+0.056 -0.036	10.00	0.250	5.74
12	12.50	+0.056 -0.036	12.00	0.250	6.86



IN ADDITION TO BENDS/ELBOWS MANUFACTURED FOR BRFG CONDUIT, A FULL COMPLIMENT OF CONDUIT FITTINGS NEEDED FOR THE INSTALLATION OF A BRFG CONDUIT SYSTEM IS AVAILABLE.

The standard color of the OMNI® BRFG fiberglass conduit is black. Other colors can be specially ordered and this is useful to color-code a conduit such as orange for telephone or fiber optic cables.

FIBERGLASS CONDUIT & FITTINGS

JOINING SYSTEMS

OMNI offers three joining systems.

OMNI Interference Joint & OMNI Tight Lock Joint

The standard OMNI joint has a grooved and tapered bell and spigot. The OMNI Interference Joint has excellent gripping strength when pushed together. The OMNI Tight Lock Joint is an adhesive joint using our epoxy adhesive with the OMNI Interference Joint. The result is a watertight joint that is as strong as the conduit itself.

OMNI Gasket Joint

This OMNI Gasket Joint has a special seal to hold the conduit in place and create a water resistant seal. This joint affords the best possible fit while allowing for movement and vibrations that might occur.

FIBERGLASS CONDUIT & FITTINGS

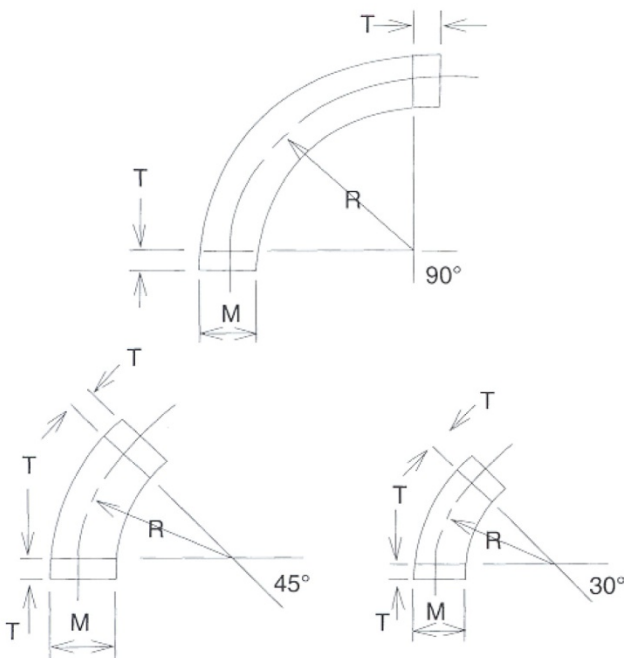
ELBOWS- NON-TAPERED

NEMA TC-14A (IPS)

Nominal Size (in.) & Type	Part Number	Radius (R) (Min.)
2SW	3152###*0	24
3SW	3153###*0	30
4SW	3154###*0	36
4HW	3164###*0	36
5SW	3155###*0	48
5HW	3165###*0	48
6SW	3156###*0	60
6HW	3166###*0	60

NEMA TC-148 (I.D.)

Nominal Size (in.) & Type	Part Number	Radius (R) (Min.)
2SW	3112###*0	24
2BR	3192###*0	36
3SW	3113###*0	30
3 1/2SW	3110###*0	36
4SW	3114###*0	36
4HW	3124###*0	36
4BR	3194###*0	48
5SW	3115###*0	48
5HW	3125###*0	48
6SW	3116###*0	60
6HW	3126###*0	60



Custom Designed Elbows available on request.
Tangent (T) is 6" in all cases.

To complete catalog numbers above, insert the corresponding numbers for the radius and degree of the bend required. Keep in mind the minimum radius listed above for each conduit size:

= Bend Radius

24 = 24"
30 = 30"
36 = 36"
48 = 48"
60 = 60"

** = Bend Degree

11 = 11 1/4°
22 = 22 1/2°
30 = 30°
45 = 45°
90 = 90°

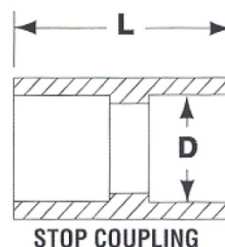
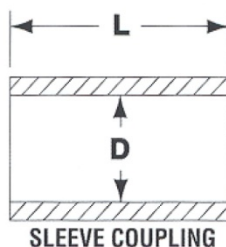
Example: 4" Tubular Size 3' x 45° would be # 311436450

FIBERGLASS CONDUIT & FITTINGS

COUPLINGS

SLEEVE COUPLING

SIZE	PART NUMBER
2"	33*201000
3"	33*301000
3 1/2"	33*351000
4"	33*401000
5"	33*501000
6"	33*601000



STOP COUPLING

SIZE	PART NUMBER
2"	33*201500
3"	33*301000
3 1/2"	33*301500
4"	33*401500
5"	33*501500
6"	33*601500

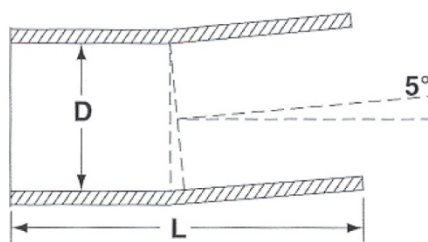
NEMA TC-14A (IPS)		
Nominal Size (in.) & Type	D	L
2SW	2.36	6
3SW	3.50	6
4SW	4.50	6
4HW	4.52	6
5SW	5.59	6
5HW	5.62	6
6SW	6.60	6
6HW	6.62	6

NEMA TC-148 (10)		
Nominal Size (in.) & Type	D	L
2SW	2.16	6
2BR	2.51	6
3SW	3.16	6
3 1/2SW	3.66	6
4SW	4.16	6
4HW	4.20	6
4BR	4.51	6
5SW	5.16	6.5
5HW	5.24	6.5
6SW	6.16	6.5
6HW	6.24	6.5

5° COUPLING

NEMA TC-14A (IPS)

SIZE	PART NUMBER
2"	33*202400
3"	33*302400
4"	33*402400
5"	33*502400
6"	33*602400



5° COUPLING

NEMA TC-148 (10)

SIZE	PART NUMBER
2"	33*202400
3"	33*302400
3 1/2"	33*302400
4"	33*402400
5"	33*502400
6"	33*602400

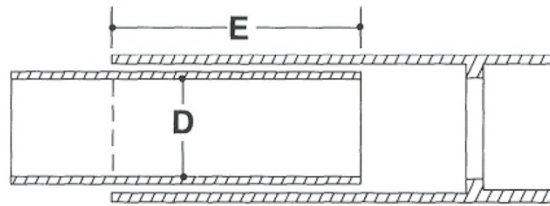
NEMA TC-14A (IPS)		
Nominal Size (in.) & Type	D	L
2SW	2.36	6
3SW	3.50	6
4SW	4.50	6
4HW	4.52	6
5SW	5.59	6
5HW	5.62	6
6SW	6.60	6
6HW	6.62	6

NEMA TC-148 (10)		
Nominal Size (in.) & Type	D	L
2SW	2.16	6
2BR	2.51	6
3SW	3.16	6
3 1/2SW	3.66	6
4SW	4.16	6
4HW	4.20	6
4BR	4.51	6
5SW	5.16	6.5
5HW	5.24	6.5
6SW	6.16	6.5
6HW	6.24	6.5

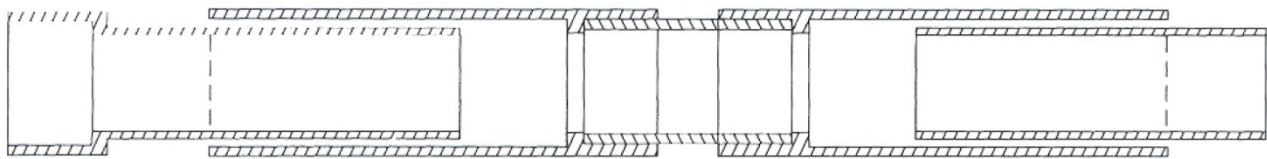
*To complete the catalog numbers above, insert the following corresponding number for the type of conduit requiring a coupling:
 1 = SW Tubular Size (ID) NEMA TC-14B
 2 = HW Tubular Size (ID) NEMA TC-14B
 5 = SW Iron Pipe Size (IPS) NEMA TC-14A
 6 = HW Iron Pipe Size (IPS) NEMA TC-14A

FIBERGLASS CONDUIT & FITTINGS

EXPANSION JOINTS



GASKET / O-RING, SOCKET X SPIGOT



DOUBLE EXPANSION JOINT

NEMA TC-14A (IPS) (in.)				NEMA TC-148 (ID) (in.)			
Nominal Size(in.) & Type	Part Number	D (Min.)	E Engagement (Min.)	Nominal Size(in.) & Type	Part Number	D (Min.)	E Engagement (Min.)
2SW	335206*40	2.51	3.000	2SW	331206*40	2.35	3.000
3SW	335306*40	3.65	3.000	2BR	339206*40	2.51	3.000
4SW	335406*40	4.65	3.000	3SW	331306*40	3.31	3.000
4HW	336406*40	4.71	3.000	3½SW	331356*40	3.81	3.000
5SW	335506*40	5.74	3.000	4SW	331406*40	4.31	3.000
5HW	336506*40	5.82	3.000	4HW	332406*40	4.35	3.000
6SW	335606*40	6.75	3.000	4BR	339406*40	4.51	3.000
6HW	336606*40	6.83	3.000	5SW	331506*40	5.31	3.000
				5HW	332506*40	5.39	3.000
				6SW	331606*40	6.31	3.000
				6HW	332606*40	6.39	3.000

All Expansion Joints have a temperature label on the nipple for proper installation at various temperatures. If a special design is required, contact OMNI for information.

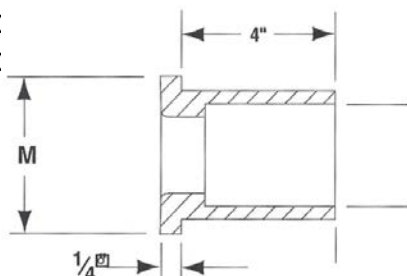
* To complete catalog numbers above, insert the corresponding numbers for the type of expansion joint required.

4 = Gasket O-Ring Socket x Spigot
6 = Double Expansion Joint

FIBERGLASS CONDUIT & FITTINGS

Size Part Number

2"	33*208500
3"	33*308500
4"	33*408500
5"	33*508500
6"	33*608500



*To complete the catalog numbers above, insert the following corresponding numbers for the type of conduit requiring an end bell:

- 1= SW Tubular Size (10) Nema TC-14B
- 2 = HW Tubular Size (10) Nema TC-14B
- 5 = SW Iron Pipe Size (IPS) Nema TC-14A
- 6 = HW Iron Pipe Size (IPS) Nema TC-14A
- 9 = BR Bullet Resistant Size

END BELLS – SOCKET TYPE

NEMA TC-14A (IPS)

Nominal Size(in.) & Type	M Minimum (in.)
2 SW	3.7
3 SW	4.8
4 SW/HW	6.3
5 W/HW	7.4
6 SW/HW	8.4

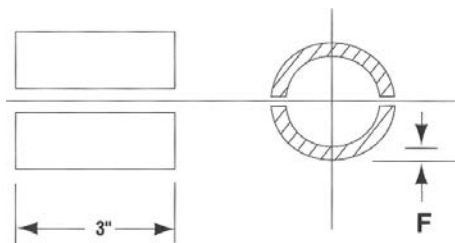
NEMA TC-14B (1.0.)

Nominal Size (in.) & Type	M Minimum (in.)
2 SW/BR	3.5
3 SW	4.5
3 ½ SW	5.5
4 SW/HW/BR	6.0
5 SW/HW	7.0
6 SW/HW	8.0

FIBERGLASS CONDUIT & FITTINGS

Size Part Number

2"	33*207000
3"	33*307000
4"	33*407000
5"	33*507000
6"	



*To complete the catalog numbers above, insert the following corresponding numbers for the type of conduit requiring split anchor rings:

- 1= SW Tubular Size (10) Nema TC-14B
- 2 = HW Tubular Size (10) Nema TC-14B
- 5 = SW Iron Pipe Size (IPS) Nema TC-14A
- 6 = HW Iron Pipe Size (IPS) Nema TC-14A
- 9 = BR Bullet Resistant Size

SPLIT ANCHOR RINGS

NEMA TC-14A (IPS)

Nominal Size(in.) & Type	M Minimum (in.)
2 SW	.180
3 SW	.180
4 SW/HW	.180
5 W/HW	.200
6 SW/HW	.240

NEMA TC-14B (1.0.)

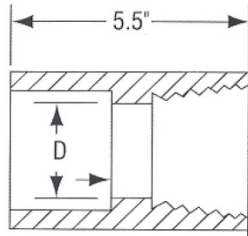
Nominal Size (in.) & Type	M Minimum (in.)
2 SW/BR	.165
3 SW	.165
3 ½ SW	.165
4 SW/HW/BR	.165
5 SW/HW	.260
6 SW/HW	.260

FIBERGLASS CONDUIT & FITTINGS

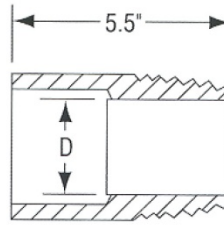
TERMINAL ADAPTERS

Size Part Number

2"	33*203000
3"	33*303000
3 1/2"	33*353000
4"	33*403000
5"	33*503000
6"	33*603000



SOCKET X FEMALE NPT



SOCKET X MALE NPT

Size Part Number

2"	33*203500
3"	33*303500
3 1/2"	33*353500
4"	33*403500
5"	33*503500
6"	33*603500

NEMA TC-14A (IPS) (in.)

Nominal Size(in.) & Type

D (Min.)

2 SW	2.36
3 SW	3.50
4 SW/HW	4.50/4.52
5 SW/HW	5.59/5.62
6 SW/HW	6.60/6.62

NEMA TC-148 (ID) (in.)

Nominal Size(in.) & Type

D (Min.)

2 SW	2.16
2 BR	2.51
3 1/2 SW	3.16
4 SW	3.66
4 HW	4.16
4 BR	4.20
5 SW	4.51
5 HW	5.16
6 SW	6.16
6 HW	6.24

***To complete catalog numbers above,
insert the corresponding numbers for the type of conduit requiring a terminal adapter.**

- 1 = SW Tubular Size (10) Nema TC-14B
- 2 = HW Tubular Size (10) Nema TC-14B
- 5 = SW Iron Pipe Size (IPS) Nema TC-14A
- 6 = HW Iron Pipe Size (IPS) Nema TC-14A
- 9 = BR Bullet Resistant Size (ID)

FIBERGLASS CONDUIT & FITTINGS

ADHESIVE KIT

**Adhesive
Gun**



**Epoxy
Cartridge &
Mixing Tip**



**Assembled
Unit**



Part Number

Part Number

Part Number

Dispensing Gun	270020500	Epoxy Cartridge - 70°
		Epoxy Cartridge - 40°

270410501	Mixing Tip
270510501	

270021500



Fiberglass Conduit & Fittings

FIBERGLASS CONDUIT & FITTINGS

PERFORMANCE SPECIFICATIONS

1. GENERAL

- 1.1 Conduit shall be reinforced thermosetting resin conduit (RTRC) as manufactured by Opti-Com Manufacturing Network, LLC ("OMNI"), using the filament winding process.
- 1.2 Conduit, elbows and fittings shall be manufactured from the same resin/hardener/glass systems manufactured by the same filament wound system.
- 1.3 Conduit shall be integral bell and spigot.
- 1.4 Conduit, elbows and fittings are specified for use throughout a temperature range of -40°F to 230°F.
- 1.5 Standard color for conduit, elbows and fittings is black. Special colors can be supplied upon request.

2. DIMENSIONS

- 2.1 Conduit shall be manufactured in about twenty-foot lengths with conduit, bends/elbows and fittings conforming to the dimensions specified in NEMA-TC 14 A, Iron Pipe Size Dimensions, (IPS).
- 2.2 Conduit shall be manufactured in about twenty-foot lengths with conduit, bends/elbows and fittings conforming to the dimensions specified in NEMA-TC 14 B, Tubular Dimensions, (ID).

3. PHYSICAL AND MECHANICAL PROPERTIES

		TEST METHODS
3.1	Conduit shall meet ASTM D 2996, D 2310, and D 2517.	
3.2	Tensile Strength (Axial)	ASTM D 638
	Ultimate Stress	7,000 psi
3.3	Coefficient of Thermal Expansion	ASTM D 696
3.4	Thermal Conductivity	ASTM D 335
3.5	Specific Gravity	ASTM D 792
3.6	Glass Content	API SPEC 15 LR
3.7	Water Absorption	ASTM D 570
3.8	Barcol Hardness	ASTM D 2583

4. ELECTRICAL PROPERTIES

		TEST METHODS
4.1	Volume Resistivity	ASTM D 150
4.2	Surface Resistivity	ASTM D 257
4.3	Dielectric Constant	ASTM D 150
4.4	Dissipation Factor	ASTM D 150
4.5	Dielectric Strength	ASTM D 149

5. FLAMMABILITY

Article 5.10

U.L. 2515

6. HEAT DISTORTION

The minimum heat distortion temperature shall be 312°F when tested at 264 psi in accordance with ASTM D 648.

7. COEFFICIENT OF FRICTION

The following data for coefficient of friction are for dry conduit and non-lubricated cable and at a temperature of 72°F.

"VULKENE" – CROSS LINKED POLYETHYLENE CABLE		POLYETHYLENE JACKETED TELEPHONE CABLE	
OMNI Fiberglass Conduit	.233 ± .02	OMNI Fiberglass Conduit	.249 ± .06
Bituminous Fibre	.406 ± .05	Bituminous Fibre	.362 ± .04
Asbestos Cement	.560 ± .05	Asbestos Cement	-----
Filled PVC (Rigid)	.347 ± .04	Filled PVC (Rigid)	.314 ± .04

FIBERGLASS CONDUIT & FITTINGS		PERFORMANCE SPECIFICATIONS	
"FLAMENOL" – PVC JACKETED CABLE		"GEOPRENE" – NEOPRENE JACKETED CABLE	
OMNI Fiberglass Conduit	.385 ± .06	OMNI Fiberglass Conduit	.531 ± .04
Bituminous Fibre	.681 ± .06	Bituminous Fibre	.681 ± .04
Asbestos Cement	.561 ± .05	Asbestos Cement	.675 ± .04
Filled PVC (Rigid)	.516 ± .04	Filled PVC (Rigid)	.525 ± .04

8. JOINT PULLOUT

A 12-inch length shall be cut from both the belled end and spigot end of a length of conduit. The two parts shall be assembled in accordance with the OMNI® instructions. The assembly shall be tested in accordance with ASTM D 2105 and shall meet the requirements of the table below.

JOINT PULLOUT RESISTANCE

Nominal Size	Minimum Force (Pounds)		
	Interference Joint	Gasket Joint	Tight Lock Joints (Adhesive)
All	3,000	1,000	11,000

9. WATERTIGHTNESS

There should be no evidence of water leakage through the joint when tested in accordance to U. L. Subject 543. In order to achieve water tightness, use:

- Sealant CFI-31231 for Interference Joint
- Lubricant CFG-920 for Gasketed Joint
- Adhesive 270304010 for Tight Lock Joint

10. IMPACT RESISTANCE

The minimum impact resistance values for the conduit shall be as shown in the table below when tested in accordance with ASTM D 2444.

MINIMUM IMPACT RESISTANCE

Nominal Size (in.)	at 73.4°F		at 32°F	
	Type SW	Type HW	Type SW	Type HW
2	40	40	40	40
3	70	70	70	70
3½	80	80	80	80
4	80	120	80	120
5	110	160	110	160
6	130	200	130	200

11. STIFFNESS

The minimum conduit stiffness at five percent deflection for all sizes of conduit shall not be less than the values given in table below when tested in accordance with ASTM D 2412.

Nominal Size (in.)	Type SW	Type HW	Type BR
	lbf/(in. • in.)	lbf/(in. • in.)	lbf/(in. • in.)
2	320	320	2,000
3	140	14	---
3½	95	95	---
4	55	110	750
5	40	90	---
6	30	60	---



Fiberglass Conduit & Fittings

FIBERGLASS CONDUIT & FITTINGS

PACKAGING INFORMATION

BUNDLE QUANTITIES

NOMINAL SIZE (in.)	NEMA TC-14A IPS	NEMA TC-14 B TUBULAR	BULLET RESISTANT
2	1,299 ft.	1,456 ft.	1,299 ft.
3	1,594 ft.	1,968 ft.	-----
3½	-----	1,456 ft.	-----
4	846 ft.	1,122 ft.	846 ft.
5	590 ft.	748 ft.	-----
6	394 ft.	512 ft.	394 ft.

TRUCKLOAD QUANTITIES 8 Bundles Per Truckload

NOMINAL SIZE (in.)	NEMA TC-14A IPS	NEMA TC-14 B TUBULAR	BULLET RESISTANT
2	51,955 ft.	58,253 ft.	51,995ft.
3	25,505 ft.	31,488 ft.	-----
3½	-----	23,301 ft.	-----
4	13,540 ft.	17,948 ft.	13,540 ft.
5	9,446 ft.	11,965 ft.	-----
6	6,298 ft.	8,187 ft.	6,298 ft.

FIBERGLASS CONDUIT & FITTINGS

CUSTOM FITTINGS & SERVICES

CUSTOM FITTINGS

OMNI® provides custom made fittings to meet your requirements. Please contact OMNI® for further information.

SPECIAL SERVICES

OMNI® will provide, on request, engineering and design assistance, such as bridge crossing systems, corrosion data, physical properties, etc.

OMNI® will provide, on request, installation assistance and supervision.

SPLIT DUCT

OMNI® can provide regular duct split on one side or two sides. H-strip and plastic closing straps are also available. Some fittings are also available as split one or two sides for repair. See your local OMNI® representative for details.

LIMITED WARRANTY

1. This warranty covers any OMNI fiberglass reinforced epoxy conduit products ("Product").
 2. Subject to the terms and conditions of this warranty, OMNI warrants that the Product is free from defects in workmanship and materials for a period of one (1) year from the date of purchase. During the applicable terms of this warranty, and subject to the terms and conditions thereof, in the event that the Product is proven to be defective and the defect is not caused by any misuse or damage to the Product while in the possession of the user, OMNI will remedy the failure or defect without charge to the user except for labor. The remedy will consist of repair or replacement of the Product or/and defective part, at OMNI's option. Repair will be made, at OMNI's option, either at user's location or at a facility designated by OMNI. Any replacement part provided under this warranty assumed as its warranty period only the unexpired term of this warranty, which is fixed when such part replaces a defective part. This warranty does not cover defects, failure or damages caused by normal wear and tear, act of God, accident, misuse or unreasonable use of the Product, lack of proper maintenance, fire, flood, or any circumstances or events beyond OMNI's control.
 3. OMNI'S SOLE OBLIGATION UNDER THIS WARRANTY IS TO REPAIR OR REPLACE THE PRODUCT, AS PROVIDED HEREIN. OMNI SHALL HAVE NO LIABILITY FOR ANY DIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES RESULTING FROM BREACH OF THIS OR ANY OTHER WARRANTY (NO WARRANTY BEING IMPLIED FROM THIS REFERENCE) ON THE PRODUCT. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY, INCLUDING WITHOUT LIMITATION, OR MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURCHASE WITH RESPECT TO THE PRODUCT, IS LIMITED IN DURATION TO THE TERM OF THIS WARRANTY. THIS WARRANTY IS IN LIEU OF ANY OTHER EXPRESS WARRANTIES AND OF ANY OTHER OBLIGATION ON THE PART OF OMNI. ANY OTHER EXPRESS WARRANTIES ARE EXPRESSLY EXCLUDED AND DISCLAIMED, NO OMNI REPRESENTATIVE IS AUTHORIZED TO GIVE ANY WARRANTY (OTHER THAN THIS WARRANTY) WITH RESPECT TO THE PRODUCT, AND ANY SUCH WARRANTY GIVEN BY AN OMNI REPRESENTATIVE SHALL NOT CONSTITUTE AN OMNI WARRANTY OR BE BINDING IN ANY RESPECT UPON OMNI.
- NOTE: SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.
4. To obtain performance of any obligation of OMNI under this warranty, the user must provide proof of the date or purchase; notify OMNI of any warranty claim at the following address:



259 PLAUCHE STREET
HARAHAN, LOUISIANA 70123
P.O. BOX 23802
HARAHAN, LOUISIANA 70183-0802
Attention: Warranty Claims
Telephone: (504) 736-0331

Notify an authorized OMNI representative for inspection of the Product. For the name of the nearest authorized representative, write to the address above or call the phone number.

5. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

STEEL CONDUIT & FITTINGS

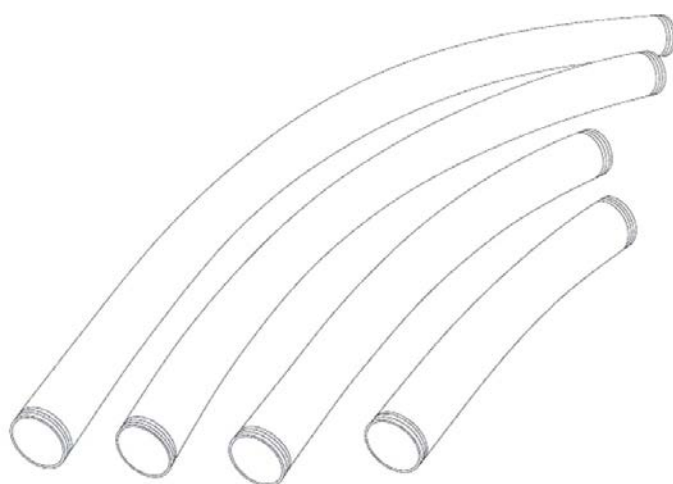
BLACK IRON - GALVANIZED IRON

BIP & GIP



Part Number	Size	Description
403205021	2"	BIP S-40 10' PE
403205022	2"	BIP S-40 10' T&C
403205041	2"	BIP S-40 21' PE
403205042	2"	BIP S-40 21' T&C
401205022	2"	GIP S-40 10' T&C
401205042	2"	GIP S-40 21' T&C
403405021	4"	BIP S-40 10' PE
403405022	4"	BIP S-40 10' T&C
403405041	4"	BIP S-40 21' PE
403405042	4"	BIP S-40 21' T&C
403401821	4"	BIP .188 10' PE
403401841	4"	BIP .188 21' PE
401405022	4"	GIP S-40 10' T&C
401405042	4"	GIP S-40 21' T&C
403602521	6"	BIP .250 wall 10' PE
403702521	8"	BIP .250 wall 10' PE
403802521	10"	BIP .250 wall 10' PE
403902521	12"	BIP .250 wall 10' PE

STEEL BENDS



Part Number	Description
413207092	11 1/4° 2" BIP S-40
411207092	2" GIP S-40
413407162	4" BIP S-40
411407162	4" GIP S-40
413207093	22° 2" BIP S-40
411207093	2" GIP S-40
413407163	4" BIP S-40
411407163	4" GIP S-40
413207096	2" BIP S-40
411207096	2" GIP S-40
413407166	4" BIP S-40
411407166	4" GIP S-40
413207099	45° 2" BIP S-40
411207099	2" GIP S-40
413407169	4" BIP S-40
411407169	4" GIP S-40

2" bends have a standard radius of 9 1/2", 4" bends have a standard radius of 16"; other radii available are 12", 15", 18", 24", 30", 36", 42", and 48".

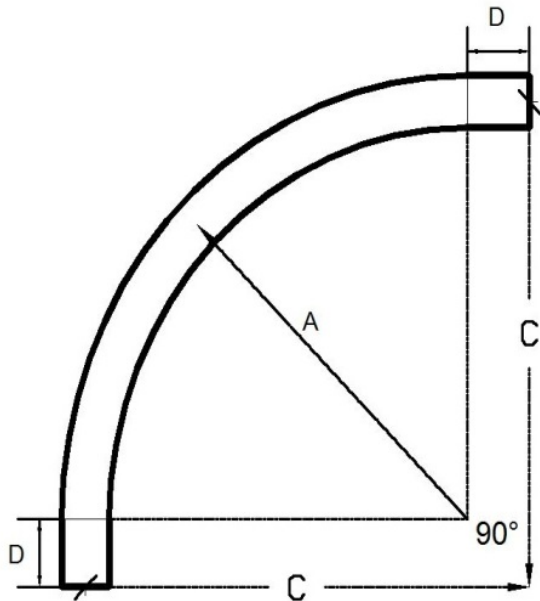
STEEL CONDUIT & FITTINGS

GALVANIZED STEEL RIGID METAL



Part Number	Trade Size	Nominal O.D.	Nominal Wall Thickness
401059022	1/2"	0.840"	0.104"
401079022	3/4"	1.050"	0.107"
401109022	1"	1.315"	0.126"
401129022	1 1/4"	1.660"	0.133"
401159022	1 1/2"	1.900"	0.138"
401209022	2"	2.375"	0.146"
401259022	2 1/2"	2.875"	0.193"
401309022	3"	3.500"	0.205"
401359022	3 1/2"	4.000"	0.215"
401409022	4"	4.500"	0.225"
401509022	5"	5.563"	0.245"
401609022	6"	6.625"	0.266"

GALVANIZED STEEL RIGID METAL BENDS



Part Number	Degree	Size
411205xx2	11 1/4°	2"
411305xx2		3"
411405xx2		4"
411605xx2		6"
411205xx3	22°	2"
411305xx3		3"
411405xx3		4"
411605xx3		6"
411205xx6	45°	2"
411305xx6		3"
411405xx6		4"
411605xx6		6"
411205xx9	90°	2"
411305xx9		3"
411405xx9		4"
411605xx9		6"

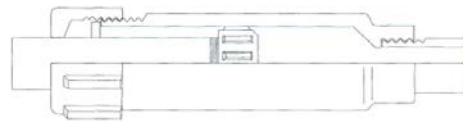
Bends have standard radius of: 1" = 5 3/4", 2" = 9 1/2", 3" = 13", 4" = 16"; 5" = 24", 6" = 30" other radii available are as listed below:

Trade Size	1" - 2.5"	1" - 3"	1" - 4"	1" - 4"	1" - 5"	1" - 6"	1" - 6"	1" - 6"
When Radius A is	12"	15"	18"	24"	30"	36"	42"	48"
Offset C is	1' 9"	2' 0"	2' 4"	2' 11"	3' 5"	3' 11"	4' 6"	5' 0"
Straight End D is	9"	9"	10"	11"	11"	11"	12"	12"
Length Unbent is	3' 0"	3' 6"	4' 0"	4' 11"	5' 9"	6' 6"	7' 6"	8' 4"

STEEL CONDUIT & FITTINGS

EXPANSION JOINTS

Type AX – Weatherproof with internal bonding assembly.
Provides 4" conduit movement



Bonding Jumper – 14"

AX FITTING

Part Number	Trade Size	A Max. Diam.	B Overall Length	Wt.
451024110	1/2"	2"	6 1/4"	1.70 lbs
451074110	3/4"	2"	6 3/8"	2.00 lbs
451104110	1"	3 3/8"	6 5/8"	2.00 lbs
451124110	1 1/4"	3 1/8"	6 5/8"	3.50 lbs
451154110	1 1/2"	3 1/2"	6 5/8"	5.00 lbs
451204110	2"	4"	7 1/8"	7.00 lbs
451254110	2 1/2"	4 1/2"	7 1/2"	8.00 lbs
451304110	3"	5 3/8"	8 1/8"	11.00 lbs
451154110	3 1/2"	6"	8 1/2"	14.50 lbs
451404110	4"	6 5/8"	8 5/8"	18.50 lbs
451504110	5"	8"	9 1/2"	25.50 lbs

Part Number	Wt.
451024130	.65 lbs
451074130	.65 lbs
451104130	.85 lbs
451124130	.85 lbs
451154130	1.23 lbs
451204130	1.23 lbs
451254130	1.75 lbs
451304130	1.75 lbs
451354130	2.37 lbs
451404130	2.37 lbs
451504130	3.46 lbs

Type AX8 – Weatherproof with internal bonding assembly. Provides 8" conduit movement.

AX8 FITTING

Part Number	Trade Size	A Max. Diam.	B Overall Length	Wt.
451024210	1/2"	2"	10 1/4"	2.70 lbs
451074210	3/4"	2"	10 3/8"	3.20 lbs
451104210	1"	3 3/8"	10 5/8"	4.40 lbs
451124210	1 1/4"	3 1/8"	10 5/8"	5.20 lbs
451154210	1 1/2"	3 1/2"	10 5/8"	7.20 lbs
451204210	2"	4"	11 1/8"	10.30 lbs
451254210	2 1/2"	4 1/2"	11 1/2"	11.70 lbs
451304210	3"	5 3/8"	12 1/8"	15.50 lbs
451154210	3 1/2"	6"	12 1/2"	19.50 lbs
451404210	4"	6 5/8"	12 5/8"	24.00 lbs
451504210	5"	8"	13 1/2"	33.00 lbs

Bonding Jumper – 24"

Part Number	Wt.
451024230	.68 lbs
451074230	.68 lbs
451104230	.91 lbs
451124230	.91 lbs
451154230	1.37 lbs
451204230	1.37 lbs
451254230	1.88 lbs
451304230	1.88 lbs
451354230	2.59 lbs
451404230	2.59 lbs
451504230	3.76 lbs

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.

Standard Material:

Malleable Iron

Optional Material:

Available in Aluminum

Standard Finish:

Hot Dip Galvanized

Standard Sizes:

1/2" thru 5"

To Order Specify:

When bonding jumpers are required for steel conduit, specify by part numbers in the table above.

Type AX and Type AX8 Expansion Fittings are available in Aluminum.

Third Party Certification:

UL File No. #11853

SA Certified File No. 11584

(When used with external Type BJ Bonding Jumper)

STEEL CONDUIT & FITTINGS

SPLIT STEEL DUCT

OMNI's Split Steel is manufactured in 2" and 4" sizes and is designed to give maximum protection to existing or newly placed cable. The 10 foot lengths are split long ways with integral flanges and pre-punched bolt holes for easy assembly. The lightweight 14 gauge conduit is belled on one end to join easily to the spigot end of the next section. The heavier wall schedule 40 is joined together by overlapping ten foot lengths and using a five foot length on each end. Some of the many uses for split steel are:

- pre-hung on bridges or a direct buried cable application to eliminate figure-eighting of the cable pass through solid conduit
- extra protection for direct buried cable when making stream or creek crossings
- protection for cables when temporarily exposed above ground
- extra protection for direct buried cable when crossing other utility lines.

OMNI also offers other sizes and wall thicknesses of split steel pipe joined using H-strips and stainless steel tie-wraps. Call OMNI for the size and type needed for your application.

14 Gauge



Sch. 40

SPLIT STEEL

14 GAUGE

Part Number	Size	Description
401251424	2 1/2"	Hot Dip Galvanized
403251424	2 1/2"	Black Iron
401401424	4"	Hot Dip Galvanized
403401424	4"	Black Iron

SCHEDULE 40

Part Number	Size	Description
401255024	2 1/2"	Hot Dip Galvanized
403255024	2 1/2"	Black Iron
401405024	4"	Hot Dip Galvanized
403405024	4"	Black Iron

STEEL

TABLES

Steel Conduit Expansion Table Expansion of Pipe per 100 Feet

The table below is used to determine the expansion of pipe from one temperature to a higher one.

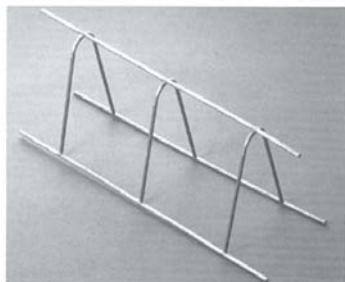
Expansion (in/100')	
Temp, F	Steel
0	0
20	0.149
40	0.299
60	0.449
80	0.601
100	0.755
120	0.909
140	1.066
160	1.224
180	1.384
200	1.545

Weight Table of E.R.W. Steel Pipe ASTMS A-120, A53, A589, API5L, 5LX

Nominal Size (in)	Outside Diameter (in)	Wall Thickness (in)	Nominal Wt. Plain ends lbs/ft	Thread Couplings lbs/ft	Sch. No.
2	2.375	0.154	3.65	3.68	40
		0.218	5.02	5.07	80
3	3.500	0.216	7.58	7.62	40
		0.300	10.25	10.33	80
4	4.500	0.188	8.86		
		0.237	10.79	10.89	40
		0.337	14.98	15.17	80
5	5.56	0.188	10.79		
		0.258	14.62	14.81	40
		0.375	20.78	21.09	80
		0.500	27.04		
6	6.625	0.188	12.92		
		0.250	17.02		
		0.280	18.97	19.18	40
		0.432	28.57	28.89	80
8	8.625	0.188	16.94		
		0.250	22.36		20
		0.277	24.70	25.55	30
		0.322	28.55	29.35	40
		0.406	35.64		60
		0.500	43.39	43.90	80
10	10.750	0.188	21.21		
		0.219	24.63		
		0.250	28.04		20
		0.279	31.20	32.75	
		0.365	40.48	41.85	40
		0.500	54.74	55.82	60
12	12.750	0.219	29.31		
		0.250	33.38		20
		0.330	43.77	45.45	30
		0.375	49.56	51.15	
		0.406	53.52		40
		0.500	65.42	66.71	

STEEL

WIRE HIGH CHAIR



Part Number

280040152

Description

6" high chair, 15" long
(Other sizes available upon request)

This inexpensive wire high chair is just the thing for supporting a duct bank for encased burial.

UNDERBRIDGE GENERAL INFORMATION



OMNI® is the name to remember when conduit placement involves bridge crossings. Our full line of services starts with aiding you in the initial decision of which type of conduit best suits the crossing to be made. After that, our staff can take the job from start to finish, from assisting in the development of the best route and method of attachment to the bridge, to obtaining all necessary permits and approval. We can also custom fabricate the hangers/conduit supports, manufacture the conduit, and, if you wish, arrange for the actual installation and inspection of the job. From the simplest single conduit crossing to the most elaborate custom supports, OMNI® is your one source supplier for all of your bridge crossing needs.

The materials we recommend are carefully selected with attention to weight considerations, strength, and protection of the exposed conduit. We have found that for many jobs, our Fiberglass Reinforced Epoxy Conduit, especially in the bullet-resistant wall thickness, is the optimum conduit material. It provides maximum protection while being much lighter than steel, non-conductive and highly resistant to corrosion. Our fiberglass conduit is available with a complete complement of sweeps and fittings including expansion joints. Our various conduit supports are constructed of a combination of fiberglass and galvanized or stainless steel to be strong, lightweight, and long lasting. Every job is considered individually to assure the best solution to each specific situation.

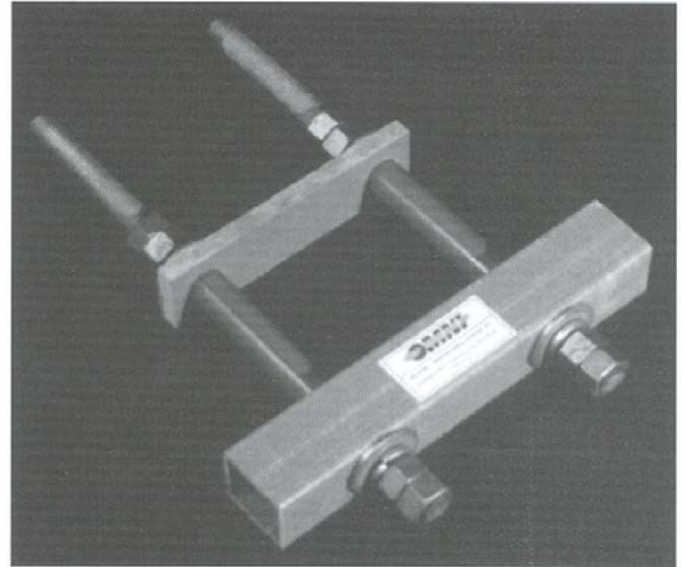
Call OMNI® for your materials, assistance in engineering a design or simply for information the next time you are faced with placing conduit across a bridge. From a simple crossing of a few hundred feet to the most complex job, we have the experience and expertise to make even the most difficult challenges seem easy.

CONDUIT SUPPORTS

DUCT HANGERS

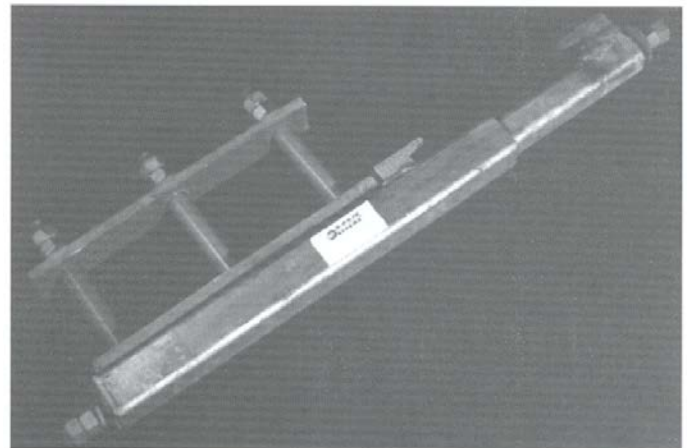
Intermediate Support Hanger

The standard hanger assembly can be supplied in any configuration from our in-stock components to your specifications. This hanger is assembled with a combination of flat bars and square tubing. Support rods extending 8" are provided on every other rod for hangers that exceed 3 windows wide. These brackets may be attached directly to the bridge structure or to custom angle brackets. OMNI conduit supports are constructed using any combination of fiberglass reinforced epoxy, galvanized steel, stainless steel, cadmium plated steel, or aluminum for strength and durability.



Adjustable Parallel I-Beam Support

This unique labor saving bracket comes completely assembled and is ready for attachment to a variety of beam widths and thicknesses. The self-clamping design allows for field attachment that takes only seconds to install, which means less time required for personnel to be in precarious places under bridges. Conduits can be run parallel to, and above or below the bottom of the structural beams as individual jobs dictate. Standard windows are constructed of fiberglass reinforced epoxy. PVC, steel and aluminum windows are available upon request. If desired, the window openings can be ordered to allow bell clearance for installation of preassembled conduit runs. Hanger bodies are of hot-dipped galvanized construction; windows are constructed of materials as required for individual project needs.

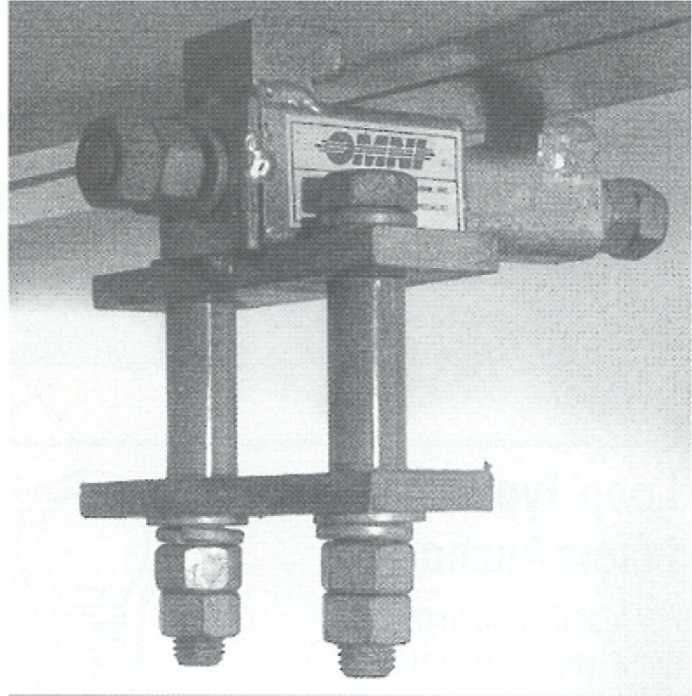


CONDUIT SUPPORTS

DUCT HANGERS

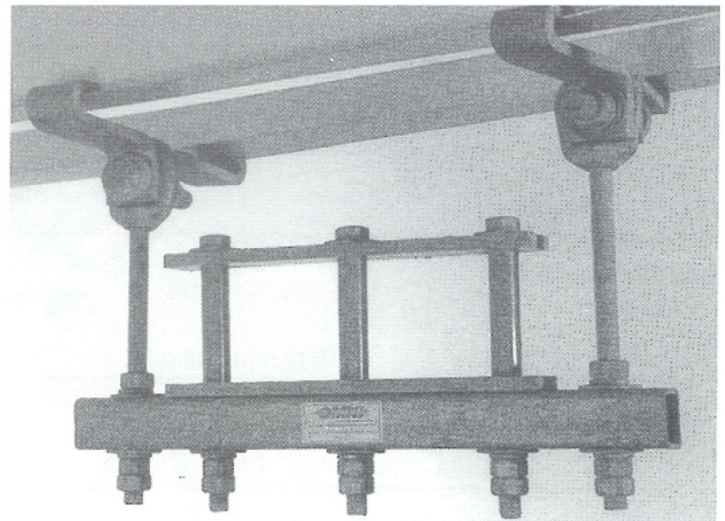
Adjustable Perpendicular I-Beam Support Hanger

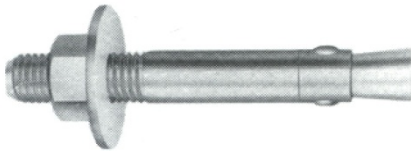
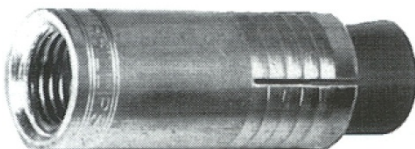
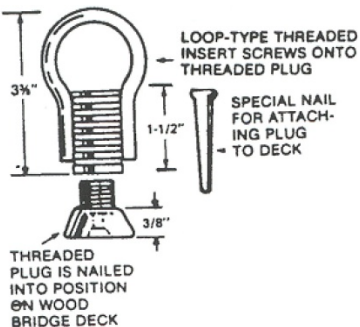
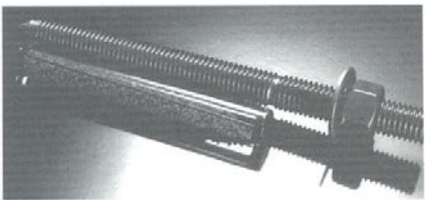


This unique labor saving bracket comes completely assembled and is ready for attachment to a variety of beam widths and thicknesses. The self-clamping design allows for field attachment that takes only seconds to install, which means less time required for personnel to be in precarious places under bridges. Conduits can be run perpendicular to, and above or below the bottom of the structural beams as individual jobs dictate. Standard windows are constructed of fiberglass reinforced epoxy. PVC, steel and aluminum windows are available upon request. If desired, the window openings can be ordered to allow bell clearance for installation of pre-assembled conduit runs. Hanger bodies are of hot-dipped galvanized construction; windows are constructed of materials as required for individual project needs.

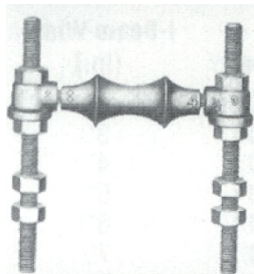
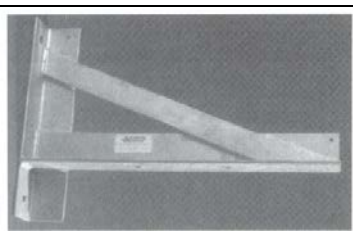
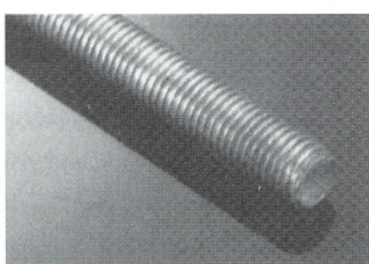
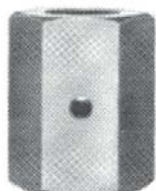



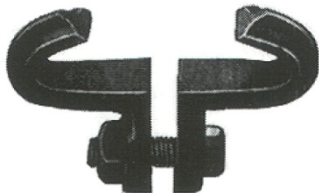


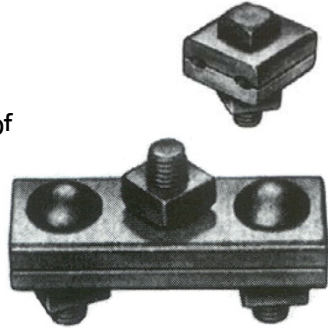

Perpendicular I-Beam Support Hanger

This hanger assembly allows for placement of conduit runs requiring installation perpendicular to structural beams. The bracket comes completely assembled and ready for fast on-job installation. Beam clamps and rods are of hot-dipped galvanized steel construction. Standard windows are constructed of fiberglass reinforced epoxy. PVC, steel and aluminum windows are available upon request. If desired, the window openings can be ordered to allow bell clearance for installation of preassembled conduit runs.



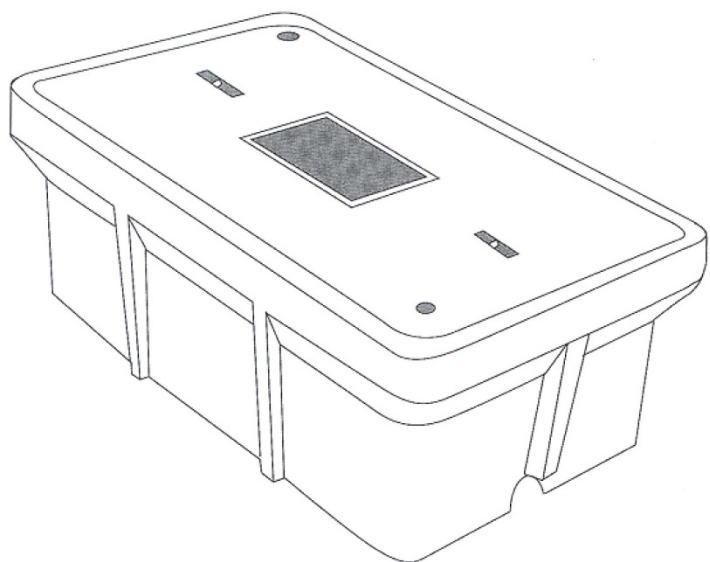
CONDUIT SUPPORTS		HANGER ACCESSORIES			
Stud Anchor 	Part Number	Size (in.)	Specify Finish		
	39350025 *	1/4	1 = Galvanized		
	39350038 *	3/8	3 = 316SS		
	39350050 *	1/2	4 = Plated		
	39350058 *	5/8	5 = 303SS		
	39350075 *	3/4			
Female Anchor 	Part Number	Description	Specify Finish		
	39351025 *	1/4" 20NC Threads	4 = Plated		
	39351038 *	3/8" 16NC Threads	5 = 303SS		
	39351050*	1/2" 13NC Threads			
	39351058*	5/8" 11NC Threads			
	39351075*	3/4" 10NC Threads			
Loop Type Concrete Insert Anchor  <p>For installation in bridge deck prior to pouring concrete. These inserts include a threaded insert with loop and threaded plug.</p>	Part Number	Description	Specify Finish		
	39210038*	3/8" Loop Type	0 = Plain		
	39210050*	1/2" Loop Type	2 = 304SS		
	39210058*	5/8" Loop Type	3 = 316SS		
	39210075*	3/4" Loop Type	4 = Plated		
			5 = 303SS		
	392110800	3/8" Setting Plug			
	392110500	1/2" Setting Plug			
	392110580	5/8" Setting Plug			
	392110750	3/4" Setting Plug			
	Epoxy Chemical Anchors  <p>Two part epoxy contained in glass vial. Beveled anchor rod attached to hammer drill breaks vial and mixes epoxy.</p> <p>Other Systems Available. Call For More Information.</p>	Part Number	Description	Size (in.)	Specify Finish
		393100380	Chemical Anchor	3/8	0 = Plain
393100500		Chemical Anchor	1/2	1 = Galvanized	
393100580		Chemical Anchor	5/8	2 = 304SS	
393100750		Chemical Anchor	3/4	3 = 316SS	
39340038*		Rod	3/8	4 = Plated	
39340050*		Rod	1/2	5 = 303SS	
39340058 *		Rod	5/8		
39340075*		Rod	3/4		
Adjustable Ring Support 		Part Number	Conduit Description	Specify Finish	
	39375200*	2"	2 = 304SS		
	39375210*	3"	3 = 316SS		
	39375220*	4"	4 = Plated		
	39375230*	5"			
	39375240*	6"			
Adjustable Clevis Support 	Part Number	Conduit Description	Specify Finish		
	39381200*	2"	0 = Plain		
	39381210*	3"	1 = Galvanized		
	39381220*	4"	2 = 304SS		
	39381230*	5"	3 = 316SS		
	39381240 *	6"			

CONDUIT SUPPORTS		HANGER ACCESSORIES			
Adjustable Roll Support 	Part Number	Conduit Description	Rod Height	Specify Finish*	
	39501200*	2"	7.25"	0 = Plain	
	39501210*	3"	8"	1 = Galvanized	
	39501220*	4"	8.5"		
	39501230*	5"	9"		
	39501240*	6"	9"		
Angle Braces 	Angle braces custom manufactured to your job specifications.				
All Thread Rod  Cut to Lengths up to 12'-0" long	Part Number	Description	Specify Finish*		
	39401050*	1/2"	0 = Plain		
	39401058*	5/8"	1 = Galvanized		
	39401075*	3/4"	2 = 304SS		
			3 = 316SS		
			4 = Plated		
			5 = 303SS		
Rod Coupling 	Part Number	Description	Specify Finish*		
	39405050*	1/2"	0 = Plain		
	39405058*	5/8"	1 = Galvanized		
	39405075*	3/4"	4 = Plated		
Roller Hanger  Roller hanger suspended from a single rod. Hot-dipped galvanized construction. To complete catalog #, insert the corresponding * for the type roller needed. 1=Cast Iron 2=Hot-Dipped Galvanized 3=Insulated	Part Number	Conduit Description	Specify Bracket Finish**		
	0121*100**	2"	0 = Plain		
	0125*100**	3"	1 = Galvanized		
	0131*100**	4"			
	0135*100**	5"			
	0141*100**	6"			
	Hanger With Insulating Bushing				
	0121*200**	2"			
	0125*200**	3"			
	0131*200**	4"			
	0135*200**	5"			
	0141*200**	6"			

CONDUIT SUPPORTS		HANGER ACCESSORIES																						
<div>I-Beam Support Clamp</div> <div>Galvanized steel clamp to firmly attach support hangers to I-Beams without the need for welding or drilling into the bridge structure.</div> <div></div>		<table><tr><th>Part Number</th><th>I-Beam Width (in.)</th></tr><tr><td>391012001</td><td>2"</td></tr><tr><td>391012101</td><td>3"</td></tr><tr><td>391012201</td><td>4"</td></tr><tr><td>391012301</td><td>5"</td></tr><tr><td>391012401</td><td>6"</td></tr><tr><td>391012501</td><td>7"</td></tr><tr><td>391012601</td><td>8"</td></tr><tr><td>391012701</td><td>9"</td></tr><tr><td>391012801</td><td>10"</td></tr></table>			Part Number	I-Beam Width (in.)	391012001	2"	391012101	3"	391012201	4"	391012301	5"	391012401	6"	391012501	7"	391012601	8"	391012701	9"	391012801	10"
Part Number	I-Beam Width (in.)																							
391012001	2"																							
391012101	3"																							
391012201	4"																							
391012301	5"																							
391012401	6"																							
391012501	7"																							
391012601	8"																							
391012701	9"																							
391012801	10"																							
<div>Eye Nut for I-Beam Support Clamp</div> <div></div>		<table><tr><th>Part Number</th><th>Description</th><th>Specify Finish*</th></tr><tr><td>39102050*</td><td>1/2" 13NC Threads</td><td>0 = Plain</td></tr><tr><td>39102058*</td><td>5/8" 11NC Threads</td><td>1 = Galvanized</td></tr><tr><td>39102075*</td><td>3/4" 10NC Threads</td><td></td></tr></table>			Part Number	Description	Specify Finish*	39102050*	1/2" 13NC Threads	0 = Plain	39102058*	5/8" 11NC Threads	1 = Galvanized	39102075*	3/4" 10NC Threads									
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39102075*	3/4" 10NC Threads																							
<div>C- Clamp</div> <div>Galvanized clamp allows the attachment of duct support hangers to L-Beams or I-Beams without welding or drilling to the bridge structure.</div> <div></div>		<table><tr><th>Part Number</th><th>Description</th><th>Specify Finish*</th></tr><tr><td>39120050*</td><td>1/2" 13NC Threads</td><td>0 = Plain</td></tr><tr><td>39120058*</td><td>5/8" 11NC Threads</td><td>4 = Plated</td></tr><tr><td>39120075*</td><td>3/4" 10NC Threads</td><td></td></tr></table>			Part Number	Description	Specify Finish*	39120050*	1/2" 13NC Threads	0 = Plain	39120058*	5/8" 11NC Threads	4 = Plated	39120075*	3/4" 10NC Threads									
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39120058*	5/8" 11NC Threads	4 = Plated																						
39120075*	3/4" 10NC Threads																							
<div>Guy Clamp</div> <div>Bolts onto square tube of conduit supports and holds guy wire secure when spanning throughout the hanger run.</div> <div></div>		<table><tr><th>Part Number</th><th>Description</th></tr><tr><td>391309991</td><td>1 Bolt Clamp $\frac{3}{32}$ - $\frac{1}{8}$ Cable</td></tr><tr><td>391319991</td><td>1 Bolt Clamp $\frac{1}{16}$ - $\frac{3}{8}$ Cable</td></tr><tr><td>391329991</td><td>3 Bolt Clamp $\frac{1}{16}$ - $\frac{3}{8}$ Cable</td></tr></table>			Part Number	Description	391309991	1 Bolt Clamp $\frac{3}{32}$ - $\frac{1}{8}$ Cable	391319991	1 Bolt Clamp $\frac{1}{16}$ - $\frac{3}{8}$ Cable	391329991	3 Bolt Clamp $\frac{1}{16}$ - $\frac{3}{8}$ Cable												
Part Number	Description																							
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391319991	1 Bolt Clamp $\frac{1}{16}$ - $\frac{3}{8}$ Cable																							
391329991	3 Bolt Clamp $\frac{1}{16}$ - $\frac{3}{8}$ Cable																							
<div>Adjustable Beam Clamp</div> <div>Adjustable clamps will f beams from 2 3/8" to 7" in all flange thicknesses u to .60"</div> <div></div>		<table><tr><th>Part Number</th><th>Rod Size (in.)</th><th>Specify Finish*</th></tr><tr><td>39103050*</td><td>1/2"</td><td>0 = Plain</td></tr><tr><td>39103058*</td><td>5/8"</td><td>1 = Galvanized</td></tr><tr><td>39103075*</td><td>3/4"</td><td></td></tr></table>			Part Number	Rod Size (in.)	Specify Finish*	39103050*	1/2"	0 = Plain	39103058*	5/8"	1 = Galvanized	39103075*	3/4"									
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ENCLOSURES

SERVICE BOXES



OMNI® offers a complete selection of underground enclosures for use as splice boxes, pull boxes, or equipment enclosures. We have a wide variety of stackable box sizes, with open or closed bases, with or without mouseholes, standard locking, or steel covers, with or without logos and/or electronic marker, and box extensions. Your choice of enclosure is available in polymer concrete or fiberglass construction, both offering high strength and light weight. These boxes are ideal for use in areas with light vehicular traffic; they are designed to handle a load of 5,000 lbs. over a 10" x 10" area.

Polymer Concrete Boxes

Standard Cover Logos

Tel phone	Signal
T.V.	C.A.T.V.
Traffic Signal	Controls
High Voltage	Gas
Railway Signals	Fiber Optics
Electric	Traffic Control
Water	Light Signal
Street Lighting	Illumination
Fire Alarm	Park Lighting
Traffic	Utility
Ground	Communication

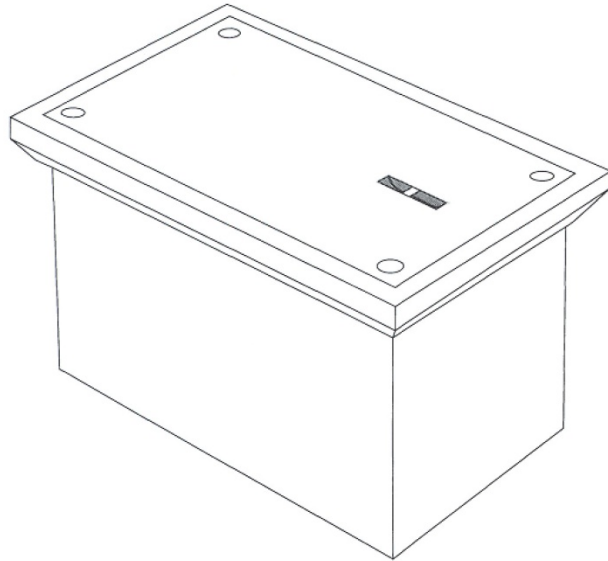
Part Number	L x W x D (in.)	Base Description
882351861	24x36x18	Open W/ Mouseholes
882351871	24x36x18	Open No Mouseholes
882351881	24x36x18	Solid No Mouseholes
882401861	30x48x18	Open W/Mouseholes
882401871	30x48x18	Open No Mouseholes
882401881	30x48x18	Solid W/ Mouseholes
882401891	30x48x18	Solid No Mouseholes

Polymer Concrete Covers

Part Number	L x W x D (in.)	Base Description
885350021	24x36	Locking Cover
885350031	24x36	Non Locking Cover
885350041	24x36	H-20 Steel Cover
885400021	30x48	Locking Cover
885400031	30x48	Non Locking Cover
885400041	30x48	H-20 Steel Cover

ENCLOSURES

SERVICE BOXES



Standard Cover Logos

Telephone	Signal
T.V.	C.A.T.V.
Traffic Signal	Controls
High Voltage	Gas
Railway Signals	Fiber Optics
Electric	Traffic Control
Water	Light Signal
Street Lighting	Illumination
Fire Alarm	Park Lighting
Traffic	Utility
Ground	Communication

Polymer Concrete Boxes

Part Number	L x W x D (in.)	Base Description
881151261	12x12x12	Open W/ Mouseholes
881151271	12x12x12	Open No Mouseholes
881151281	12x12x12	Solid W/ Mouseholes
881151291	12x12x12	Solid No Mouseholes
881101261	11x18x12	Open W/ Mouseholes
881101271	11x18x12	Open No Mouseholes
881101281	11x18x12	Solid W/ Mouseholes
881101291	11x18x12	Solid No Mouseholes
881101861	11x18x18	Open W/ Mouseholes
881101871	11x18x18	Open No Mouseholes
881101881	11x18x18	Solid W/ Mouseholes
881101891	11x18x18	Solid No Mouseholes
881201261	13x24x12	Open W/ Mouseholes
881201271	13x24x12	Open No Mouseholes
881202281	13x24x12	Solid W/ Mouseholes
881201291	13x24x12	Solid No Mouseholes
881301261	17x30x12	Open W/ Mouseholes
881301271	17x30x12	Open No Mouseholes
881301281	17x30x12	Solid W/ Mouseholes
881301291	17x30x12	Solid No Mouseholes

Polymer Concrete Extensions

Part Number	L x W x D (in.)	Base Description
882200871	13x24x28	Open No Mouseholes
882200891	13x24x28	Solid No Mouseholes
882300871	17x30x28	Open No Mouseholes
882300891	17x30x28	Solid No Mouseholes

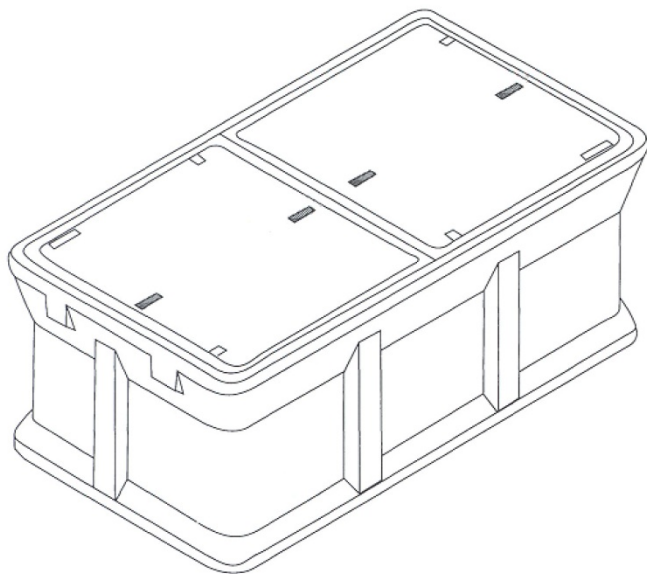
Polymer Concrete Covers

Part Number	L x W x D (in.)	Base Description
884150021	12x12x12	Locking Cover
884150031	12x12x12	Non Locking Cover
884150041	12x12x12	H-20 Steel Cover
884100021	11x18x18	Locking Cover
884100031	11x18x18	Non Locking Cover
884100041	11x18x18	H-20 Steel Cover
881201221	13x24x12	Locking Cover
881201231	13x24x12	Non Locking Cover
881201241	13x24x12	H-20 Steel Cover
884300021	17x30x12	Locking Cover
884300031	17x30x12	Non Locking Cover
884300041	17x30x12	H-20 Steel Cover

ENCLOSURES

BOXES

Polymer Concrete Boxes



Part Number	L x W x D (in.)	Base Description
883452461	30x59x24	Open W/ Mouseholes
883452471	30x59x24	Open No Mouseholes
883452481	30x59x24	Solid W/Mouseholes
883452491	30x59x24	Solid No Mouseholes
883502161	30x60x21	Open W/ Mouseholes
883502171	30x60x21	Open No Mouseholes
883502181	30x60x21	Solid W/Mouseholes
883502191	30x60x21	Solid No Mouseholes
883601961	36x60x19.5	Open W/ Mouseholes
883601971	36x60x19.5	Open No Mouseholes
883601981	36x60x19.5	Solid W/Mouseholes
883601991	36x60x19.5	Solid No Mouseholes

Standard Cover Logos

Telephone	Signal
T.V.	C.A.T.V.
Traffic Signal	Controls
High Voltage	Gas
Railway Signals	Fiber Optics
Electric	Traffic Control
Water	Light Signal
Street Lighting	Illumination
Fire Alarm	Park Lighting
Traffic	Utility
Ground	Communication

Polymer Concrete Covers

Part Number	L x W x D (in.)	Base Description
886450021	30x59	Locking Cover
886450031	30x59	Non Locking Cover
886500021	30x60	Locking Cover
886500031	30x60	Non Locking Cover
886500041	30x60	H-20 Steel Cover
886600021	36x60	Locking Cover
886600031	36x60	Non Locking Cover

ENCLOSURES

ROUND ENCLOSURES

39" Opening Round Box

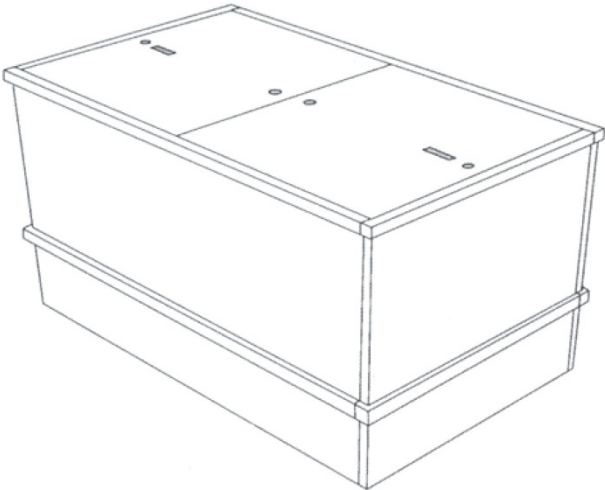


Part Number		Description
Polymer Concrete	RTM Fiberglass	
887703911	987703911	Box
887703921	987703921	Cover

ENCLOSURES

PANEL VAULTS

AVAILABLE IN THE FOLLOWING SIZES (Lx W(in.))



<u>30" Depth</u> 36" X 36"	<u>36" Depth</u> 36" X 36" 36" X 60" 48" X 48" 48" X 72" 48" X 96"	<u>42" Depth</u> 36" X 60" 48" X 72"
<u>48" Depth</u> 36" X 36" 36" X 60" 48" X 48" 48" X 72" 48" X 96"	<u>60" Depth</u> 36" X 60" 48" X 96"	<u>72" Depth</u> 36" X 60" 48" X 72"

ACCESSORIES

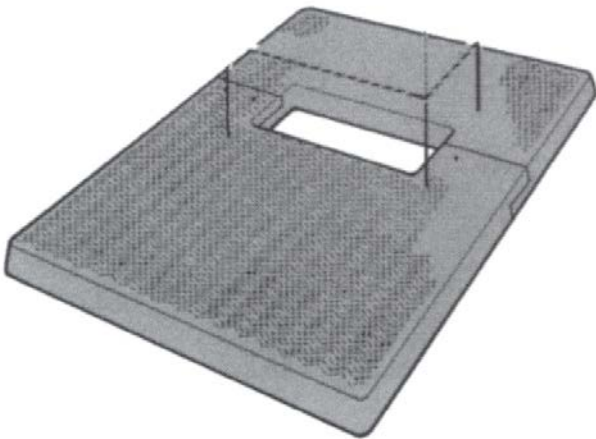
EQUIPMENT PADS

TELEPHONE EQUIPMENT PADS

For placement under Telephone Equipment Cabinets to add stability and prevent corrosion of metal cabinets. The pads are lightweight and easy to handle for a lower installed cost.

Split pads are also available to use as a spacer to raise the existing cabinet due to a change in grade level. They may also be used to replace existing pads or to install under cabinets where there is no existing pad. There is no need to disconnect service when installing one of these pads.

Telephone pads are available in various sizes to fit most types of telephone cabinets. Some of the most common sizes are listed below. This is NOT a complete list of what is available. Please call OMNI® with the specific type of cabinet and pad size required.



Pad Size L x W (in.)
42x42
48x46
54x48
60x72

MANHOLE HARDWARE

Cable Racks

Designed to support cable runs in manholes and vaults.

Made of $1\frac{1}{2}$ " x $\frac{9}{16}$ " x $\frac{3}{16}$ " hot

rolled steel channel and hot dip galvanized. T-slots for attaching hooks are spaced at

$1\frac{1}{2}$ " intervals. The 8, 14 and 18 hole racks have $\frac{3}{4}$ " and $\frac{19}{32}$ "

mounting slots at each end that interlock so two or more racks may be combined into one unit. Longer racks are mounted through the T-slots.



Cable Rack Hooks

Designed to fit snugly into the rack slots.

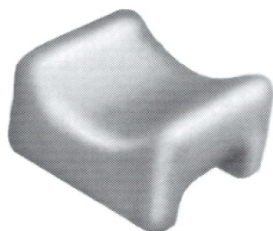
Turned up ends prevent cable or rack insulators from slipping off. Manufactured from $\frac{3}{16}$ " steel and hot dip galvanized with

smooth surfaces to prevent cable damage.



Cable Rack Insulator

Made of glazed porcelain, the insulators rest on the cable rack hooks providing additional protection for the cable.



Cable Rack Support

To extend the racks away from the wall and avoid obstructions or water seepage.

Each rack requires two supports. Hot dip galvanized.



Corner Rack Support

Bolts the racks at manhole corners. Mounting bolt holes are for $\frac{1}{2}$ " bolts.

Formed of $1\frac{1}{2}$ " X $\frac{1}{4}$ " steel and hot dip galvanized.



CABLE SUPPORT




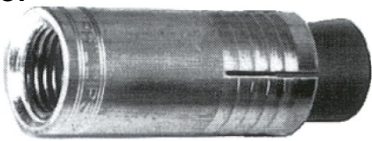
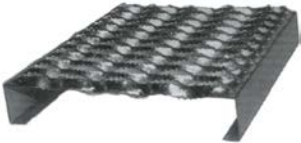
Part Number	Support Holes	Length (in.)	Bolt Hole Spacing (in.)
821200150	8	15	13 $\frac{1}{2}$
821200240	14	24	22 $\frac{1}{2}$
821200300	18	30	28 $\frac{1}{2}$
821200550	37	55 $\frac{1}{2}$	
821200640	43	64 $\frac{1}{2}$	
821200700	47	70 $\frac{1}{2}$	
821200810	54	81	

Part Number	Ext. (in.)
821210040	4
821210075	7 $\frac{1}{2}$
821210100	10
821210140	14
821210180	18

Part Number	Groove Radius (in.)	Groove Width (in.)
821220015	1 $\frac{1}{2}$	2 $\frac{3}{4}$

Part Number	Steel Size (in.)	Ext. from the wall (in.)
821230035	.5 X 1.00	3 $\frac{1}{2}$
821230065	.5 X 1.00	3 $\frac{1}{2}$
821240065	.5 X 1.25	6 $\frac{1}{2}$

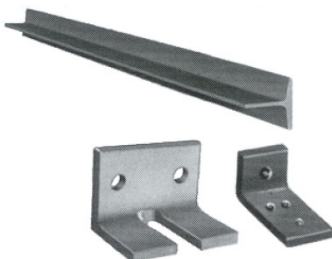
Part Number	Description
821250120	12" x 12" legs
821250090	9" x 12" legs
821250180	18" x 18" legs

MANHOLE HARDWARE		CABLE SUPPORT	
Manhole Steps Manufactured from any material in the dimensions or configurations needed to meet OSHA or other specifications.		Part Number	Description
		824500000	Plain
		824510000	Smooth Drop Front
		824520000	Non-slip Drop Front
		824530000	Bolt-on for supporting ladders
Pulling-In Irons Set into the walls of the concrete manholes opposite all duct entrances to provide strong, convenient attachment for pulling-in blocks when installing or removing cables. Manufactured with 7/8" diameter steel and dip galvanized.		Part Number	Description
		822500090	9" w/retaining plate
		822510090	9" w/cross bar & retaining plate
		822520090	9" w/opposing bends
		822500120	12" w/retaining plate
		822510120	12" w/cross bar & retaining plate
822520120	12" w/opposing bends		
MANHOLE HARDWARE		CAST-IN-PLACE	
Steel Concrete Insert 	Part Number		Bolt Size (in.)
	823030005		1/2
	823030006		5/8
	823030007		3/4
Expansion Anchor  For use in pre-drilled holes. Red Head expands anchor for solid hold in concrete. Duct support hanger threads into the anchor.	Part Number	Description	Specify Finish*
	39351025*	1/4" 20NC Threads	4 = Plated
	39351038*	3/8" 16NC Threads	5 = 303SS
	39351050*	1/2" 13NC Threads	
	39351058*	5/8" 11NC Threads	
	39351075*	3/4" 10NC Threads	
MANHOLE HARDWARE		ACCESSORIES	
Manhole Safety Floor  For use with platform hardware. Helps prevent slipping on wet or slick floor of vault or manhole. Made of perforated, galvanized steel; easily set in place. All platforms are 2" thick, 12" wide and can be ordered in lengths up to 12 feet. Specify length when ordering.	Part Number		Description
	82351 ****		14 gauge steel
	82350****		12 gauge steel
		**** Rest of part number to be assigned when a specific length is ordered.	

MANHOLE HARDWARE

Platform Hardware

To build loading platforms in man holes and vaults. Construction requires 6 Tee Iron Supports, 3 Tee Irons and 12 Floor Bracket Planking and bolts are ordered separately.



Manhole Ladder

Side rails are 1 1/2" steel while the rungs are non-slip steel on 12 inch centers. Ladder is hot dip galvanized and meets OSHA specifications for portable ladders.



Manhole Cover Lifting Hooks



Cable Identification Tag

Cable ID Tags can also be custom ordered to your specifications.



Wrap-Around Cable Marker



ACCESSORIES

Part Number

Description

825000040

Tee Iron Supports

(48" long; 3" x 3" x 3/8") galvanized angle

825010700

Tee Irons (70" long; 7.65 lb.)

galvan-structural tee

825020000

Floor Brackets

Hook-Over

Heavy Duty Hook-Over

Part Number

Length (ft.)

Part Number

Length (ft.)

822000780

6 1/2

822001560

13

822000840

7

822001680

14

822000960

8

822001800

15

822001080

9

822001920

16

822001200

10

822002160

18

822001320

11

822002400

20

822001440

12

822002640

22

Part Number

Length (in.)

824040180

18

824040265

26 1/2

Part Number

Size (in.)

7211001**

3/4 x 1 1/2

7211101**

2 1/4 x 1 1/2

7211201**

3 1/2 x 1 3/4

7211301**

6 x 4

** Part number is determined by message.

Please specify color when ordering.

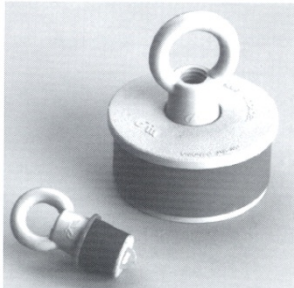
Made of flexible plastic, this identification can be private labeled to your specifications. The marker is ideal for wrapping around racking duct with fiber optic cable.

Call to custom order this marker with your company name and message.

DUCT PLUGS

BLANK EXPANDABLE

Blank Expansion Duct Plugs For Conduit Sealing

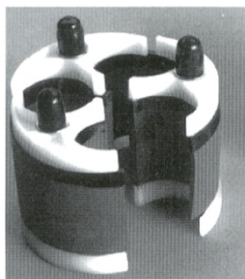


All blank duct plugs are furnished with rope ties. Duct plugs may be manufactured to meet customer's specs.

Part Number	Size (in.)	Conduit I.D. (in.)
260330240	1	0.96 - 1.16
260730270	1 ¼	1.14 - 1.48
261230380	1 ½	1.49 - 1.83
261530560	2	1.83 - 2.36
263030630	3	2.99 - 3.46
263530680	3 ½	3.42 - 4.00
264030730	4	3.94 - 4.33
265030810	5	5.00 - 5.35
266030860	6	5.82 - 6.37

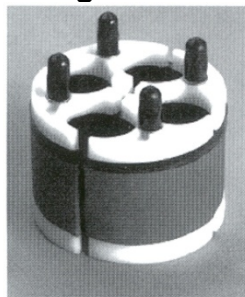
Triplex Expansion Plugs

For 3 phase cable/innerduct installations.



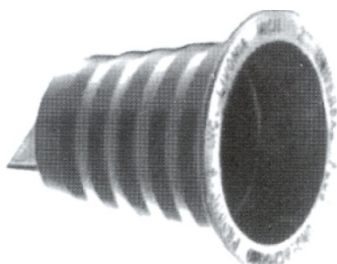
Part Number	Size (in.)	Cable Range O.D. (in.)	Conduit I.D. (in.)	Conduit type/ Innerduct
253612315	4	1.07 - 1.22	3.920 - 4.050	Sch-40 & C-Duct
253613015	4	1.19 - 1.36	3.920 - 4.050	Sch-40 & C-Duct
253613915	4	1.31 - 1.42	3.920 - 4.050	Sch-40 & C-Duct
253614915	4	1.54 - 1.67	3.920 - 4.050	Sch-40 & C-Duct

Quadplex Expansion Plugs



Part Number	Size (in.)	Cable Range O.D. (in.)	Conduit I.D. (in.)	Conduit type/ Innerduct
254613815	4	1.31 - 1.36	3.920 - 4.050	Sch-40 & C-Duct

Universal Plug

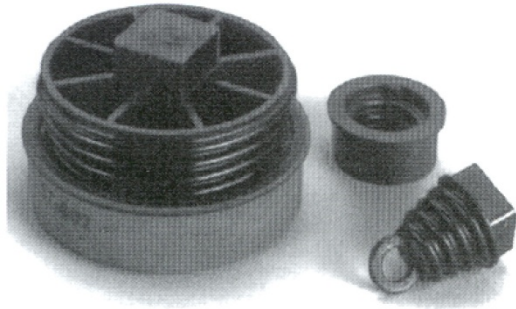


Part Number	Size (in.)
261510000	2
263010000	3
264010000	4
265010000	5
266010000	6

DUCT PLUGS

BLANK EXPANDABLE

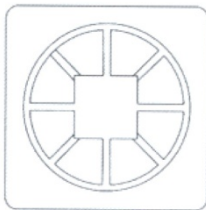
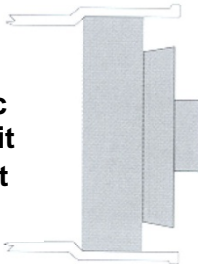
"T" CONE®
Expandable Duct Plugs



**Conduit
Barrel**



**Plastic
Conduit
Socket**



ALL PLUGS HAVE ROPE TIES

Part Number	Nominal Size (in.)	Conduit Type	Conduit I.D. (in.)
260320260	1	SCH 40	1.050
260320290	1	DB-120	1.195
260320340	1	SCH 40 SOCKET	1.315
260520300	1 $\frac{1}{8}$	STARBURST	1.125
260720320	1 $\frac{1}{4}$	STARBURST	1.250
260720360	1 $\frac{1}{4}$	SCH 40	1.380
260720400	1 $\frac{1}{4}$	DB-60/EB-20	1.540
261220520	1 $\frac{1}{2}$	SCH 40	1.610
261220550	1 $\frac{1}{2}$	DB-60/EB-20	1.780
261520570	2	SCH 80	1.939
261520580	2	SCH 40	2.067
261520600	2	GTE (0.09" T)	2.195
2 1520610	2	DB-60/EB-20	2.255
263020640	3	SCH 40	3.066
263020670	3	EB-20	3.378
263020660	3	DB060	3.316
263520690	3 $\frac{1}{2}$	TEL DUCT	3.500
264020740	4	SCH 40 & T DUCT	4.026
264020780	4	EB-20	4.336
264020770	4	DB-60/GT80-DB	4.258
265020800	5	SCH 40	5.047
265020830	5	EB-20	5.357
265020820	5	DB-60	5.260
266020850	6	HDPE SMOOTH-COR	5.915
266020870	6	SCH 40	6.065
266020900	6	EB-20	6.357
266020890	6	DB-60	6.261
262212620	2 $\frac{1}{2}$	SQUARE DUCT	2.500
263212650	3 $\frac{1}{4}$	SQUARE DUCT	3.250
263512690	3 $\frac{1}{2}$	SQUARE DUCT	3.500
264012710	4	SQUARE DUCT	3.700
264212770	4 $\frac{1}{4}$	SQUARE DUCT	4.250

Watertight Expandable Plug



Part Number	Duct Size (in.)
264040000	4
265040000	5
266040000	6

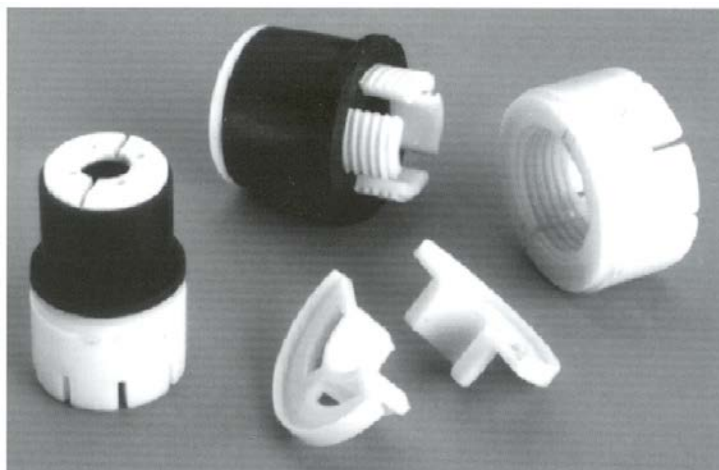
Three piece with hex nut and corrosion-resistant hardware.

DUCT PLUGS

CABLE SEAL OFF

Fiber Optic Simplex Plugs

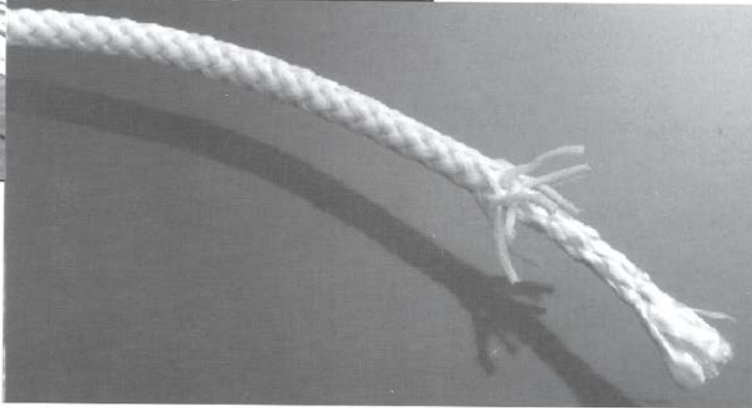
For single phase cable installations.



Part Number	Size (in.)	Conduit I.D. (in.)	Cable Range O.D. (in.)
251030615	1"	0.92 - 1.00	0.35 - 0.50
251090615	1"	1.00 - 1.10	0.35 - 0.57
251090915	1"	1.00 - 1.10	0.57 - 0.70
251150615	1 1/4"	1.22 - 1.38	0.35 - 0.57
251150915	1 1/4"	1.22 - 1.38	0.57 - 0.70
251 230615	1 3/8"	1.38 - 1.49	0.35 - 0.57
251230915	1 3/8"	1.38 - 1.49	0.57 - 0.70
251300615	1 1/2"	1.39 - 1.50	0.35 - 0.57
251301315	1 1/2"	1.39 - 1.50	0.57 - 0.70
251400615	2"	1.86 - 1.98	0.35 - 0.57
251400915	2"	1.86 - 1.97	0.57 - 0.70
251450615	2"	1.98 - 2.15	0.35 - 0.57
251450915	2"	1.98 - 2.15	0.57 - 0.78
251524315	3"	1.39 - 1.57	3.030 - 3.150
251613115	4"	1.19 - 1.57	3.920 - 4.050
251615415	4"	1.58 - 1.77	3.920 - 4.050
251616415	4"	1.78 - 1.96	3.920 - 4.050
251616815	4"	1.97 - 2.16	3.920 - 4.050
251617315	4"	2.17 - 2.36	3.920 - 4.050
251617915	4"	2.37 - 2.56	3.920 - 4.050
251618315	4"	2.57 - 2.77	3.920 - 4.050
251618715	4"	2.78 - 2.91	3.920 - 4.050
251619415	4"	3.10 - 3.27	3.920 - 4.050
251673115	4"	1.19 - 1.57	4.190 - 4.330
251675415	4"	1.58 - 1.77	4.190 - 4.330
251676415	4"	1.78 - 1.96	4.190 - 4.330
251676815	4"	1.97 - 2.16	4.190 - 4.330
251677315	4"	2.17 - 2.36	4.190 - 4.330
251677915	4"	2.37 - 2.56	4.190 - 4.330
251678315	4"	2.57 - 2.76	4.190 - 4.330
251678715	4"	2.78 - 2.91	4.190 - 4.330
25167921 5	4"	3.04 - 3.15	4.190 - 4.330

FISHING & MEASURING

TAPE & ROPE



Part Number	Diam. (in.)	Length (ft.)
758115575	$\frac{3}{16}$	5,000
758213875	$\frac{1}{4}$	3,000
758215575	$\frac{1}{4}$	5,000
758217575	$\frac{1}{4}$	7,500
758218875	$\frac{1}{4}$	10,000

Other lengths available upon request.

OMNI-Glide is the pull rope recommended for use with the Opti-Com™ System. Specifically manufactured for fiber optic cable placement, OMNI-Glide's two-piece construction consists of a polyester core and a diamond braid polyethylene jacket. The core gives it a tensile strength of 900 lbs. or 1700 lbs., while the slick outer jacket gives less resistance than conventional pull lines. The low stretch factor of 4% at 600 lbs. makes it ideal for reusing several times, and the $\frac{3}{16}$ " or $\frac{1}{4}$ " diameter makes it ideal for pneumatically placing into the conduit or innerduct system.

FISHING & MEASURING

ROPE

Twisted Polypropylene Rope

Other lengths available upon request.



Part Number	Diameter (in.)	Test Strength (lbs.)	Length (ft.)
754116035	$\frac{3}{16}$	800	6000
754213535	$\frac{1}{4}$	1250	2500
754215535	$\frac{1}{4}$	1250	5000
754315535	$\frac{5}{16}$	1900	5000
754411535	$\frac{3}{8}$	2700	1200
754414535	$\frac{3}{8}$	2700	3600
754511035	$\frac{1}{2}$	4200	600
754611035	$\frac{5}{8}$	6200	600

Hollow Braid Polypropylene Rope

Other lengths available upon request.



Part Number	Diameter (in.)	Test Strength (lbs.)	Length (ft.)
754116065	$\frac{3}{16}$	650	6000
754215565	$\frac{1}{4}$	1200	5000
754315565	$\frac{5}{16}$	1650	5000
754414565	$\frac{3}{8}$	2200	3600
754511065	$\frac{1}{2}$	3500	600

FISHING & MEASURING

Conduit Measuring & Pulling Tape

Used to determine exact wall to wall measurements in underground duct runs. Also used for pulling fiber optic cable through inner duct. Tapes are also available in custom lengths. Contact OMNI for details.



TAPE

Jacketed Tape

Part Number	Diameter (in.)	Test Strength (lbs.)	Length (ft.)
766335012	1/4	800	5000
766405013	3/8	1250	5000
766445014	1/2	1500	5000
766555016	5/8	2000	5000
766705018	7/8	3500	5000

Woven Tape

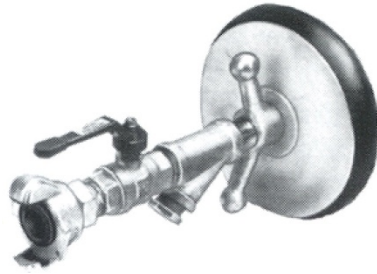
Part Number	Diameter (in.)	Test Strength (lbs.)	Length (ft.)
763335013	1/4	1250	5000
763405015	3/8	1800	5000
766445017	1/2	2500	5000

Woven Pre-Lubricated

Part Number	Diameter (in.)	Test Strength (lbs.)	Length (ft.)
763335023	1/4	1250	5000
763405025	3/8	1800	5000
763445027	1/2	2500	5000

FISHING & MEASURING

Conduit Seal-Off

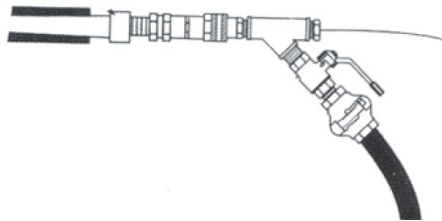


Part Number

Duct Size (in.)

664200990	2
664300990	3
664350990	3 ½
664400990	4
664500990	5
664600990	6

Innerduct Seal-Off



Part Number

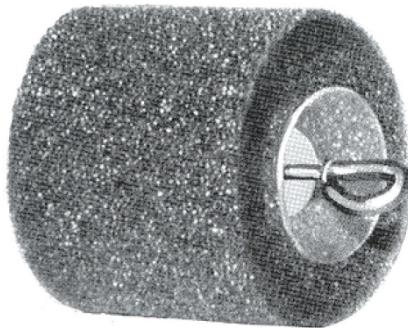
Duct Size (in.)

663100990	1
663120990	1 ¼
663150990	1 ½
663200990	2

FISHING & MEASURING

Foam Carrier

Lightweight carrier easily blows through duct.

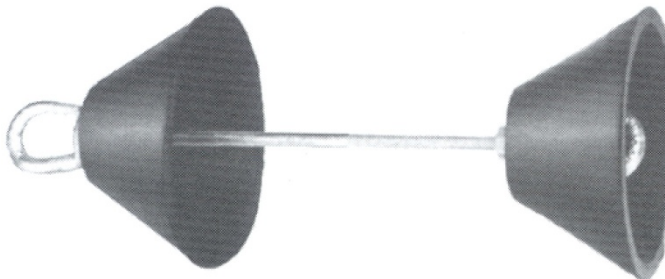


Part Number

Duct Size (in.)

665053990	½
665073990	¾
665103990	1
665123990	1 ¼
665153990	1 ½
665203990	2
665253990	2 ½
665303990	3
665353990	3 ½
665403990	4



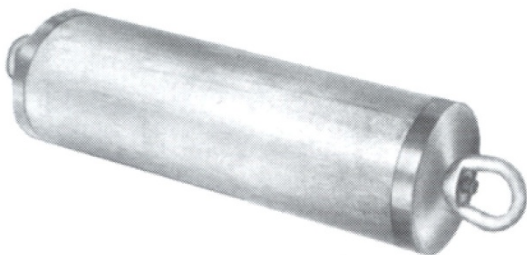
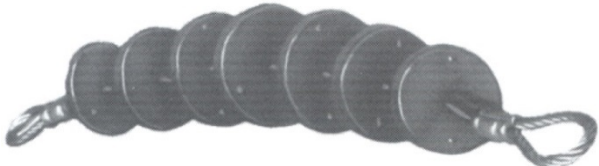

Rubber Cone Projectile

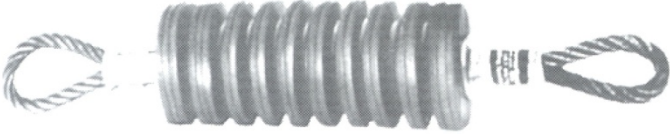
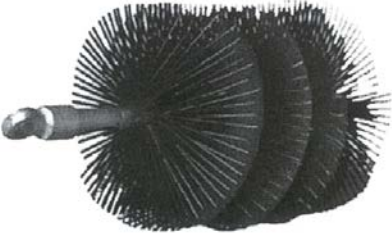
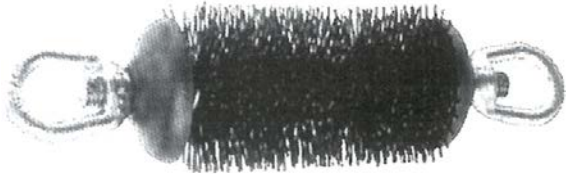


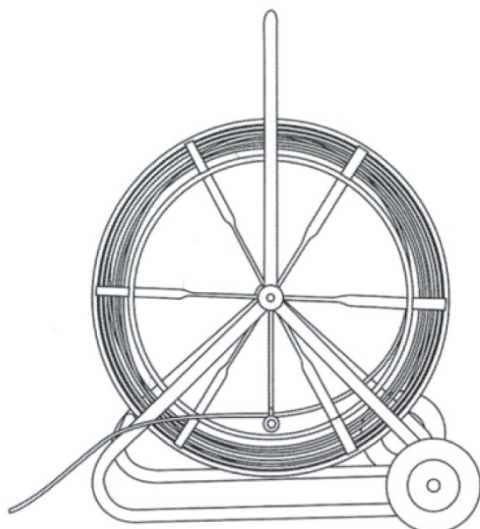
Part Number

Duct Size (in.)

665121990	1 ¼
665141990	1 ¾
665151990	1 ½
665171990	1 ⅝
665201990	2
665251990	2 ½
665301990	3
665351990	3 ½
665401990	4
665421990	4 ¼
665501990	5
665601990	6
665801990	8

FISHING & MEASURING	MISSILES																				
Plastic Cone Missile 	<table> <tr> <th>Part Number</th><th>Duct Size (in.)</th></tr> <tr> <td>665306990</td><td>3</td></tr> <tr> <td>665356990</td><td>3 ½</td></tr> <tr> <td>665406990</td><td>4</td></tr> <tr> <td>665506990</td><td>5</td></tr> </table>	Part Number	Duct Size (in.)	665306990	3	665356990	3 ½	665406990	4	665506990	5										
Part Number	Duct Size (in.)																				
665306990	3																				
665356990	3 ½																				
665406990	4																				
665506990	5																				
Inflatable Missile 	<table> <tr> <th>Part Number</th><th>Duct Size (in.)</th></tr> <tr> <td>665078990</td><td>¾ - 1 ¼</td></tr> <tr> <td>665158990</td><td>1 ½ - 2 ½</td></tr> <tr> <td>665308990</td><td>3 - 4</td></tr> <tr> <td>665408990</td><td>4 - 6</td></tr> </table>	Part Number	Duct Size (in.)	665078990	¾ - 1 ¼	665158990	1 ½ - 2 ½	665308990	3 - 4	665408990	4 - 6										
Part Number	Duct Size (in.)																				
665078990	¾ - 1 ¼																				
665158990	1 ½ - 2 ½																				
665308990	3 - 4																				
665408990	4 - 6																				
FISHING & MEASURING	MANDRELS																				
Wood Test Mandrel 	<table> <tr> <th>Part Number</th><th>Description</th></tr> <tr> <td>667300100</td><td>Round – 3" Duct</td></tr> <tr> <td>667350100</td><td>Round – 3 ½" Duct</td></tr> <tr> <td>667400100</td><td>Round – 4" Duct</td></tr> <tr> <td>667500100</td><td>Round – 5" Duct</td></tr> <tr> <td>667600100</td><td>Round – 6" Duct</td></tr> <tr> <td>667350110</td><td>Square – 3 ½" Duct</td></tr> <tr> <td>667400110</td><td>Square – 4" Duct</td></tr> </table>	Part Number	Description	667300100	Round – 3" Duct	667350100	Round – 3 ½" Duct	667400100	Round – 4" Duct	667500100	Round – 5" Duct	667600100	Round – 6" Duct	667350110	Square – 3 ½" Duct	667400110	Square – 4" Duct				
Part Number	Description																				
667300100	Round – 3" Duct																				
667350100	Round – 3 ½" Duct																				
667400100	Round – 4" Duct																				
667500100	Round – 5" Duct																				
667600100	Round – 6" Duct																				
667350110	Square – 3 ½" Duct																				
667400110	Square – 4" Duct																				
Leather Washer Duct Cleaner 	<table> <tr> <th>Part Number</th><th>Duct Size (in.)</th></tr> <tr> <td>667300300</td><td>3</td></tr> <tr> <td>667350300</td><td>3 ½</td></tr> <tr> <td>667400300</td><td>4</td></tr> </table>	Part Number	Duct Size (in.)	667300300	3	667350300	3 ½	667400300	4												
Part Number	Duct Size (in.)																				
667300300	3																				
667350300	3 ½																				
667400300	4																				
Flexible Steel Mandrel 	<table> <tr> <th>Part Number</th><th>Duct Size (in.)</th></tr> <tr> <td>667200500</td><td>2</td></tr> <tr> <td>667250500</td><td>2 ½</td></tr> <tr> <td>667300500</td><td>3</td></tr> <tr> <td>667350500</td><td>3 ½</td></tr> <tr> <td>667400500</td><td>4</td></tr> <tr> <td>667450500</td><td>4 ¼</td></tr> <tr> <td>667500500</td><td>5</td></tr> <tr> <td>667600500</td><td>6</td></tr> <tr> <td>667800500</td><td>8</td></tr> </table>	Part Number	Duct Size (in.)	667200500	2	667250500	2 ½	667300500	3	667350500	3 ½	667400500	4	667450500	4 ¼	667500500	5	667600500	6	667800500	8
Part Number	Duct Size (in.)																				
667200500	2																				
667250500	2 ½																				
667300500	3																				
667350500	3 ½																				
667400500	4																				
667450500	4 ¼																				
667500500	5																				
667600500	6																				
667800500	8																				

FISHING & MEASURING		MANDRELS	
Rubber Duct Swab 	Part Number	Description	
	667300200	3	
	667350200	3 ½	
	667400200	4	
	667500200	5	
	667600200	6	
	667800200	8	
Wire Brush Mandrel 	Part Number	Duct Size (in.)	
	667200400	2	
	667250400	2 ½	
	667300400	3	
	667350400	3 ½	
	667400400	4	
	667500400	5	
Heavy Duty Brush Mandrel 	Part Number	Duct Size (in.)	
	667250410	2 ½	
	667300410	3	
	667350410	3 ½	
	667400410	4	
	667500410	5	
FISHING & MEASURING		DUCT RODDERS	



Part Number	Rod Size (in.)	Reel Size (in.)	Rod Length (ft.)
813419001	$\frac{3}{8}$	32	150
813419010	$\frac{3}{8}$	32	200
813419021	$\frac{3}{8}$	32	250
813419032	$\frac{3}{8}$	39	300
813419052	$\frac{3}{8}$	39	350
813419062	$\frac{3}{8}$	39	400
813419073	$\frac{7}{16}$	44	500
813419083	$\frac{7}{16}$	44	650
813419093	$\frac{7}{16}$	44	800
813419103	$\frac{7}{16}$	44	1000

PULLING ACCESSORIES

POLYWATER® LUBRICANT

Polywater® Lubricant F



Part Number	Description
771235600	1 Gallon Jug
771236700	5 Gallon Pail

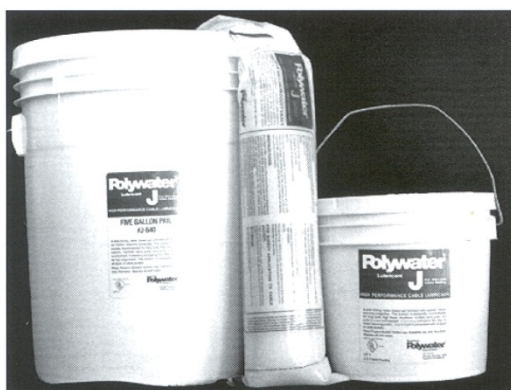
Winter Grade

771245600	1 Gallon Jug
771246700	5 Gallon Pail

Other sizes available upon request

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 types of cable jackets.

Polywater® Lubricant J



Part Number	Description
771344500	1 Qt. Front End Pack
771344600	1 Gallon Pail
771345700	5 Gallon Pail

Winter Grade

771354500	1 Qt. Front End Pack
771355600	1 Gallon Pail
771356700	5 Gallon Pail

Other sizes available upon request

POLYWATER® Lubricant J is a clean, white, slow-drying, water based gel lubricant especially compounded to provide maximum tension reduction in high stress electrical and communication cable pulling operations. It dries to form a thin slippery film which retains its slip for months after use. It is compatible with all cable jacket materials and exceptionally easy and pleasant to work with.

Front End Pack Cable Lubricating System


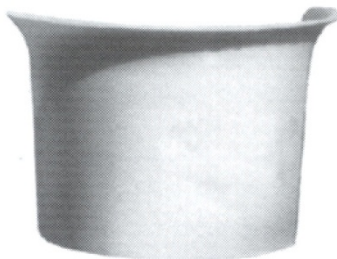
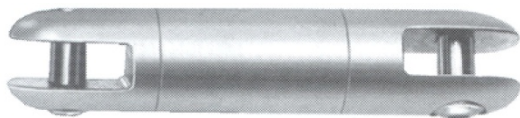

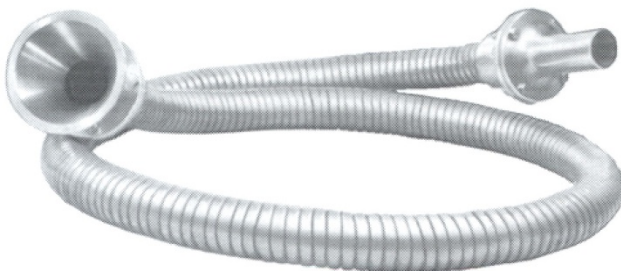




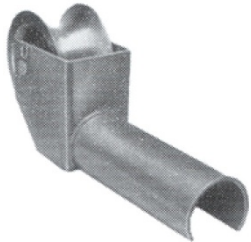
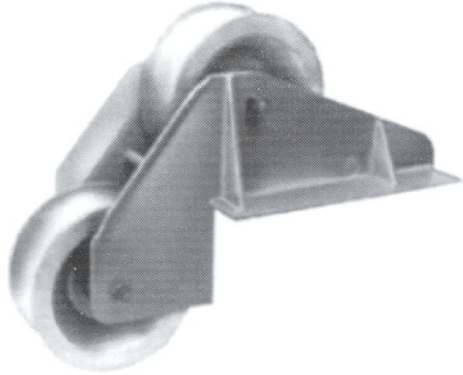
Part Number	Description	Packaging
771304500	1 Qt. Polywater® G	12/case
771344500	1 Qt. Polywater® J	12/case
771354500	1 Qt. Polywater® J	12/case

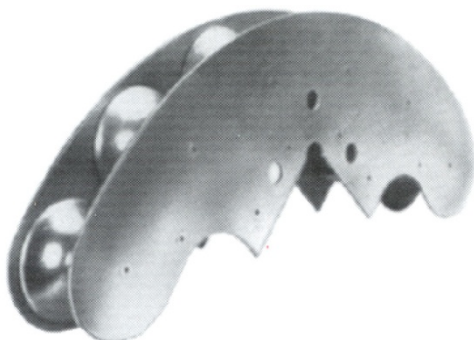

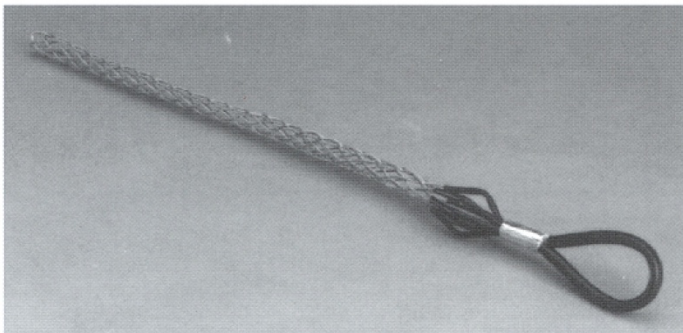
The POLYWATER® Lubricant Front End Pack is a conduit sized bag of cable pulling lubricant. The Front End Pack travels through a conduit on the winch line and deposits lubricant in front of the cable being pulled. This method of lubrication offers some unique advantages.

Pulling Accessories



PULLING ACCESSORIES		CABLE INSTALLATION ACCESSORIES		
Cable Bending Shoe Protects cable as its being pulled into or out of conduit.		Part Number 811100900 811120000	Description Plastic Bending Shoe Metal Bending Shoe	
Nylon Cable Protector		Part Number 811151000 811150300	Description 1"- 2 ½" Duct 3"- 6" Duct Inserts in duct to protect cable from damage during installation.	
5/8" Break-Away Swivel		Swivel Part Number 808130040 808130060	Replacement Pin Part Number 809130040 809130060	Break Load (lbs) 600 1000
Threaded Innerduct Pulling Eye		Part Number 795920910 795943010 795953610 795964510	Thread Taper (in.) 0.937 - 1.062 1.187 - 1.343 1.343 - 1.50 1.50 - 1.625	
PULLING ACCESSORIES		CABLE GUIDES		
Flexible Cable Guide		Part Number 812102090 812102120 812104090 812104120 812105090 812105120 812106090 812106120	Size 2" x 9' 2" x 12' 4" x 9' 4" x 12' 5" x 9' 5" x 12' 6" x 9' 6" x 12'	

PULLING ACCESSORIES	CABLE GUIDES																				
<p>Split Cable Guides</p> 	<table> <tr> <th>Part Number</th><th>Description</th></tr> <tr> <td>812114070</td><td>4"x 7 1/2' Guides w/Steel Duct Adapter & Aluminum Bell</td></tr> <tr> <td>812114030</td><td>4" x 3 1/2' Extension</td></tr> </table>	Part Number	Description	812114070	4"x 7 1/2' Guides w/Steel Duct Adapter & Aluminum Bell	812114030	4" x 3 1/2' Extension														
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812114070	4"x 7 1/2' Guides w/Steel Duct Adapter & Aluminum Bell																				
812114030	4" x 3 1/2' Extension																				
<p>Hooked Hanger Sheaves</p> 	<table> <tr> <th>Part Number</th><th>Description</th></tr> <tr> <td>813103110</td><td>3" Hanger & 11" Sheave</td></tr> <tr> <td>813103200</td><td>3" Hanger & 20" Sheave</td></tr> <tr> <td>813104110</td><td>4" Hanger & 11" Sheave</td></tr> <tr> <td>813104200</td><td>4" Hanger & 20" Sheave</td></tr> <tr> <td>813105110</td><td>5" Hanger & 11" Sheave</td></tr> <tr> <td>813105200</td><td>5" Hanger & 20" Sheave</td></tr> <tr> <td>813105260</td><td>5" Hanger & 26 1/2" Sheave</td></tr> <tr> <td>813118000</td><td>8" Chain w/ Hook & Eye (alloy)</td></tr> <tr> <td>813120100</td><td>Alignment arm</td></tr> </table>	Part Number	Description	813103110	3" Hanger & 11" Sheave	813103200	3" Hanger & 20" Sheave	813104110	4" Hanger & 11" Sheave	813104200	4" Hanger & 20" Sheave	813105110	5" Hanger & 11" Sheave	813105200	5" Hanger & 20" Sheave	813105260	5" Hanger & 26 1/2" Sheave	813118000	8" Chain w/ Hook & Eye (alloy)	813120100	Alignment arm
Part Number	Description																				
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813118000	8" Chain w/ Hook & Eye (alloy)																				
813120100	Alignment arm																				
<p>Cable Feeding Sheaves</p> <p>Plugs into 4" conduit through manhole wall.</p> 	<table> <tr> <th>Part Number</th><th>Description</th></tr> <tr> <td>813154000</td><td>For 4" I.D. Conduit</td></tr> </table>	Part Number	Description	813154000	For 4" I.D. Conduit																
Part Number	Description																				
813154000	For 4" I.D. Conduit																				
<p>Corner Cable Guides</p> <p>Equipped with aluminum sheaves for pulling cable around corners.</p> 	<table> <tr> <th>Part Number</th><th>Description</th></tr> <tr> <td>813203000</td><td>3" Corner Guide</td></tr> <tr> <td>813204000</td><td>4" Corner Guide</td></tr> <tr> <td>813205000</td><td>5" Corner Guide</td></tr> <tr> <td>813201300</td><td>3" Replacement Sheave</td></tr> <tr> <td>813201400</td><td>4" Replacement Sheave</td></tr> <tr> <td>813201500</td><td>5" Replacement Sheave</td></tr> </table>	Part Number	Description	813203000	3" Corner Guide	813204000	4" Corner Guide	813205000	5" Corner Guide	813201300	3" Replacement Sheave	813201400	4" Replacement Sheave	813201500	5" Replacement Sheave						
Part Number	Description																				
813203000	3" Corner Guide																				
813204000	4" Corner Guide																				
813205000	5" Corner Guide																				
813201300	3" Replacement Sheave																				
813201400	4" Replacement Sheave																				
813201500	5" Replacement Sheave																				

PULLING ACCESSORIES	CABLE GUIDES		
<div>Heavy Duty Quadrant Block</div> <div></div>	Part Number	Description	
	813253000	3"	
	813254000	4"	
	813255000	5"	
	Series of 6 cast aluminum rollers allow cable to make a gradual 90° turn for easy pulling through a manhole opening.		
<div>Heavy Duty Quadrant Block</div> <div></div>	Part Number		
	813300900	Protects fiber optic cable during installation. Pulling radius of 26 inches. Used as a cable guide at street level.	
<div>Non-Conductive Pulling Grips</div> <div></div>	Part Number	Cable Diameter (in.)	Mesh Length (in.)
	Junior Duty		
	800990220	.25 - .36	5
	800990320	.37 - .49	7
	800990420	.50 - .61	8
	800990520	.62 - .74	10
	800990620	.75 - .99	10
	Light Duty		
	801990420	.50 - .61	12
	801990520	.62 - .74	12
	801990620	.75 - .99	13
	Medium Duty		
	802990320	.37 - .49	12
	802990520	.50 - .74	14
	802990620	.75 - .99	18

LubeMaster™, LongShot™, & Flexlite™, are trademarks of American Polywater Corporation. Polywater® is a registered trademark of American Polywater Corporation.

IDENTIFICATION SYSTEMS

WARNING TAPE

WARNING TAPE

OMNI offers a complete line of warning tapes with standard or custom imprints to identify and protect a duct run or jobsite against intrusion by unauthorized persons. Our above-ground barrier tape is an inexpensive way to mark a jobsite and warn the public of dangers associated with open trenches and manholes. OMNI's Buried Warning Tapes are placed in the back fill when a trench is filled in. By placing the tape below ground level, yet well above the conduit, someone will be alerted to the presence of a duct before digging into the cable. The tape comes in 2", 3" and 6" widths and in a variety of thicknesses and materials to suit your requirements. An optional 2 mil clear lamination further protects the printing on the tape from degradation due to the soil environment. Both standard legends and custom messages are available. The tapes come in different colors to indicate different types of utility lines. Customary color designations are: orange-telephone and CATV; red-electric; yellow-gas, oil, steam and hazardous materials; blue-water; and green-sewer systems.

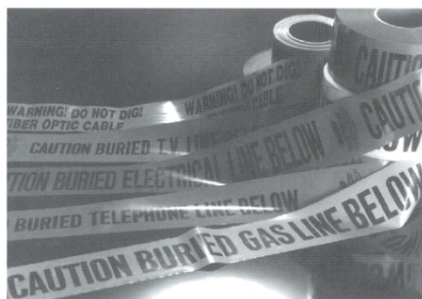
Listed below are our tapes we keep in stock, available for immediate shipment. For special messages, colors, or thicknesses, call OMNI for minimum order amounts and available information.



6 mil Super Stretch with Standard Legend



Custom Legends and Color



Detectable Warning Tape

Specifications are based on 3" x 1000' rolls. The data listed represents average values and are believed to be reliable. They are given for information purposes only, and no guarantee of their accuracy is made. Purchaser should evaluate the characteristics of the product and determine its suitability to his particular requirements.

MD -Machine Direction (Lengthwise)
TD- Transverse Direction

Reels in Stock

Number	Description	Legend
682481153	2" x 1000', Detectable	Fiber Optic Cable
683813103	3" x 1000', 6 mil Super Stretch	Telephone Cable
683813153	3" x 1000', 6 mil Super Stretch	Fiber Optic Cable
683817103	3" x 1000', 6 mil Super Stretch with lamination	Telephone Cable
683817153	3" x 1000', 6 mil Super Stretch with lamination	Fiber Optic Cable
686813103	6" x 1000', 6 mil Super Stretch	Telephone Cable
686813153	6" x 1000', 6 mil Super Stretch	Fiber Optic Cable
686817103	3" x 1000', 6 mil Super Stretch with lamination	Telephone Cable
686817153	3" x 1000', 6 mil Super Stretch with lamination	Fiber Optic Cable

Thickness	MD Tensile Strength	TD Tensile Strength	Elongated % MD	Elongated % TD	Weight Per 1000' Roll
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Specifications for OMNI Super Stretch Warning Tape

2 mils	3000	2900	300	760	2.4 lbs.
3 mils	3500	3400	570	870	3.61 lbs.
4 mils	4100	4000	650	1050	4.81 lbs.
6 mils	4580	4210	1100	950	7.2 lbs.

Specifications for OMNI Super Stretch Blended Warning Tape

2 mils	4850	3100	400	850	2.44 lbs.
3 mils	4925	3400	880	1210	3.66 lbs.
4 mils	5120	3600	1080	1630	4.88 lbs.
6 mils	5410	3790	1250	1850	7.321 lbs.

Specifications for OMNI Super Stretch Laminated Warning Tape

8 mils	4740	4360	1070	897	8.91 lbs.
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Specifications for OMNI Polyethylene Barrier Tape

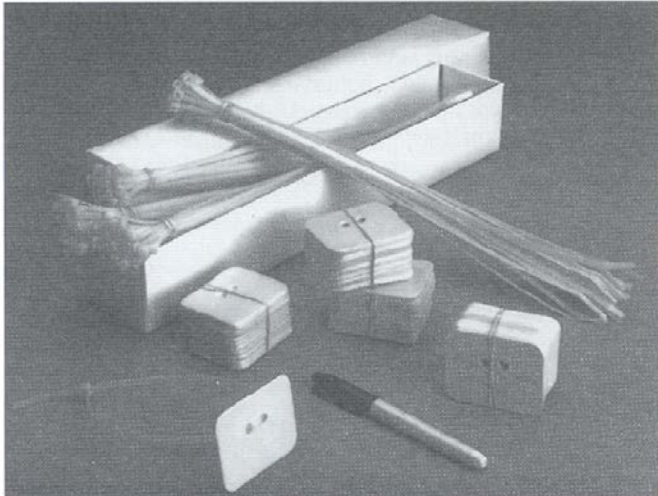
2 mils	4850	3100	500	800	3 lbs.
3 mils	1350	2950	1100	950	3.61 lbs.
4 mils	3900	3750	450	1050	4.8 lbs.
6 mils	4100	4000	650	1050	7.21 lbs.

Specifications for OMNI Metal Detectable Tape

3.25 mils	15500	15500	21	70	3.9 lbs.
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IDENTIFICATION SYSTEMS

CABLE ID KIT



Part Number

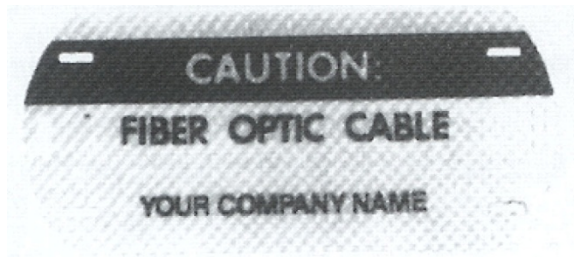
728300100

Description

Cable ID Kit contains 100 blank yellow plastic tags, 100 cable ties to attach tags to cable, and a waterproof marking pen.

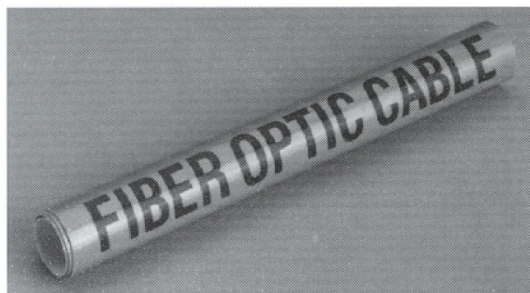
IDENTIFICATION SYSTEMS

CABLE ID TAGS



Custom made to your specifications

IDENTIFICATION SYSTEMS

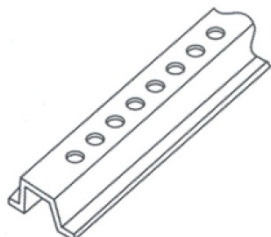


WRAP AROUND CABLE MARKER

Custom made to your specifications

IDENTIFICATION SYSTEMS

U-Channel



SIGN POSTS

Part Number	Length	Finish
693004000	6'	Baked Enamel
692004000	6'	Galvanized
693005000	8'	Baked Enamel
692005000	8'	Galvanized

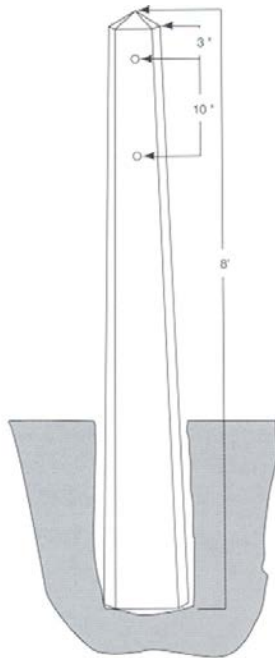
PVC



This post, made of UV resistant plastic, makes an ideal inexpensive marker post for cable runs. The post has a folding anchor rod attached to resist turning and pull-out and requires only a 6" diameter hole for installation. OMNI can supply decals and/or signs to be attached or can be ordered separate.

Custom made to your specifications

IDENTIFICATION SYSTEMS



CONCRETE MARKER POST

Reinforced concrete marker post, available in different sizes, with threaded inserts to match the signs you need.

Specifications:

- 4500 P.S.I. Concrete
- 2 Rebars
- Crowned Top
- Chamfered Corners
- $\frac{3}{8}$ " x NC16 Anchor Inserts
- Weight 160 lbs.

Dimensions:

- Length 8'
- Top Thickness 4"
- Bottom Thickness 5"

Other sizes are available

IDENTIFICATION SYSTEMS

Embossed Pole Markers

Embossed metal 'nail-on figures' for wood poles.

POLE NUMBERS



Embossed metal "nail-on figures" for wood poles.

IDENTIFICATION SYSTEMS



WARNING SIGNS

Warning Signs can be custom manufactured to your specification: colors, sizes, messages, and telephone numbers according to your needs.

IDENTIFICATION SYSTEMS

WARNING SIGNS

Warning Signs can be custom ordered with your required message, colors, logo, and size. Call OMNI for assistance.

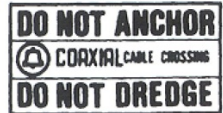
Cable Signs & Markers



BC-A
10 x 7



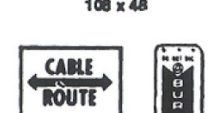
LL-60
96 x 48



LL-61
96 x 48



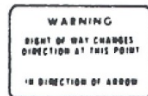
LL-62
108 x 48



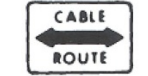
BC-PH
3-1/2 x 7-1/4



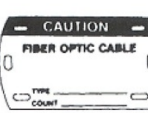
BC-14
3-1/2 x 16



BC-J
4 x 2-1/2



BC-DS
4 x 2-1/2



BC-1
3-1/2 x 2



BC-1B
12 x 18



BC-25
10 x 14



BC-33
3 x 3



BC-16
3-3/4 x 11



BC-17
3-3/4 x 11



BC-18
3-3/4 x 11



BC-19
3-3/4 x 11



BC-20
3-3/4 x 11



BC-21
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BC-114
3-3/4 x 11

BC-115
3-3/4 x 11

BC-116
3-3/4 x 11

IDENTIFICATION SYSTEMS

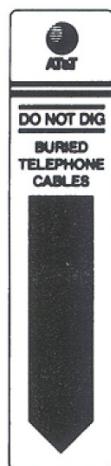
AT&T SIGNS



AT&T-1 20"x14"
711890402



AT&T-2 20"x14"
711900402



AT&T-6
3-5/8" x 16"
711940402



AT&T-7
3-5/8" x 16"
711950402



AT&T-4 3-5/8"x2-1/2"
boxes are bare aluminum
711920402



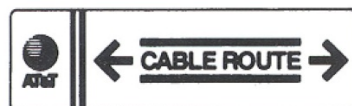
AT&T-8 3-5/8"x2-1/2"
711960402



AT&T-3
3-5/8" x 11"
711910402



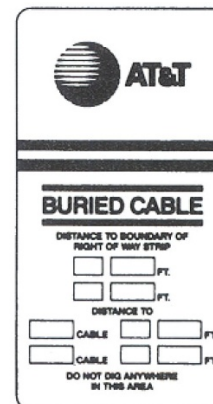
AT&T-5 3-5/8" x 2-1/2"
boxes are bare aluminum
711930402




AT&T-10 12"x3-5/8"
711980402

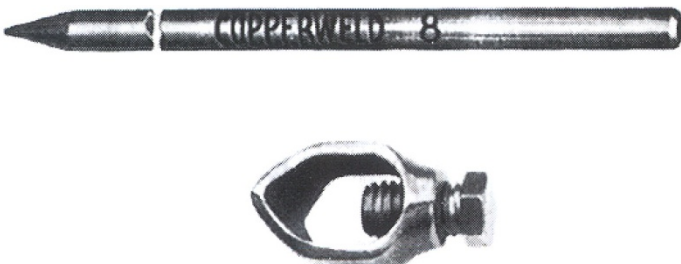


AT&T-11 15"x3-5/8"
711990102



AT&T-9 3-5/8"x7"
boxes are bare aluminum
711970402

POLE LINE	ANCHORS																										
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OPTI-COM MANUFACTURING NETWORK, LLC (“OMNI”) LIMITED WARRANTY

1. **COVERAGE.** Subject to the terms, conditions, limitations and exclusions of this warranty, OMNI warrants that the product is free from defects in workmanship and materials for a period of one (1) year from the date of shipment. If during the duration of this Limited Warranty, OMNI determines that the product is defective in workmanship or materials, OMNI shall, at OMNI's sole discretion, repair or replace the product. Should OMNI choose to replace the product, OMNI shall pay for the delivery of the new product to the location where the product was determined to be defective. Should OMNI choose to repair the product, this shall take place at customer's location or at a facility designated by OMNI. For any replacement or repair of product under this warranty, the only warranty remaining in effect after the repair or replacement shall be the balance of the one (1) year period from the shipment of the original product.
2. **EXCLUSIONS FROM COVERAGE.** This Limited Warranty does not cover defects, failures, damages or injuries of any type attributable directly or indirectly to any of the following:
 - a. Normal wear and tear.
 - b. Misuse or unreasonable use of the product.
 - c. Alterations to the product.
 - d. Lack of proper maintenance.
 - e. Extended periods of outdoor storage time.
 - f. Products sold by, but not manufactured by, OMNI.
 - g. Products incorporated in or utilized by Buyer in connection with the product.
 - h. Natural disasters, including, but not limited to, cyclones, tornadoes, hurricanes, lightning, earthquakes, flood, hail or fire.
 - i. Falling objects, civil insurrection, war, riot, vandalism, or accident.
 - j. Any circumstances or events beyond OMNI'S control.
3. **NOTICE OF CLAIMS.** To obtain performance of any obligation under this warranty, the user must notify OMNI within ten (10) days of when the claim of a defect arises. Notice of any warranty claim shall be made at the following address:

OMNI
259 PLAUCHE STREET
NEW ORLEANS, LOUISIANA 70123
OR
P.O. BOX 23802
HARAHAN, LOUISIANA 70183-0802
ATTENTION: WARRANTY CLAIMS
TELEPHONE: (504) 736-0331
OR

E-MAIL: SALES@OMNI-OPTI.COM SUBJECT: WARRANTY CLAIM

4. **NON-TRANSFER.** This limited warranty may not be transferred. To be entitled to the benefits of this warranty, you must be the original purchaser of the product and provide proof of purchase.
5. **EXCLUSIVE WARRANTY AND LIMITATION OF REMEDIES.** THIS DOCUMENT CONSTITUTES THE EXCLUSIVE WARRANTY AND SOLE REMEDIES PROVIDED BY OMNI. THE WARRANTY AND REMEDIES CONTAINED IN THIS DOCUMENT ARE EXPRESSLY IN LIEU OF ANY AND ALL OTHER OBLIGATIONS, GUARANTEES, WARRANTIES, AND REPRESENTATIONS, WHETHER WRITTEN, ORAL, IMPLIED BY STATUTE, AT LAW OR IN EQUITY, INCLUDING WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR USE AND FITNESS FOR A PARTICULAR PURPOSE. SOME STATES OR JURISDICTIONS MAY NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU. OMNI'S OBLIGATIONS, RESPONSIBILITIES AND LIABILITY SHALL BE LIMITED TO REPAIRING OR REPLACING THE DEFECTIVE PRODUCT AS SET FORTH IN THIS LIMITED WARRANTY. IN NO EVENT SHALL OMNI BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY KIND, INCLUDING ANY DAMAGE TO PROPERTY OR FOR INJURY TO ANY PERSONS THAT MAY OCCUR AS A RESULT OF THE USE OF OMNI'S PRODUCTS OR AS A RESULT OF THE BREACH OF THIS WARRANTY. IF YOUR STATE OR JURISDICTION DOES NOT ALLOW EXCLUSIONS OR LIMITATIONS OF SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU. IN NO EVENT SHALL OMNI'S TOTAL LIABILITY ARISING OUT OF OR RELATED TO PRODUCT OR THIS WARRANTY EXCEED THE COST PAID BY THE OWNER TO OMNI FOR THE PRODUCT. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY HAVE OTHER RIGHTS THAT MAY VARY BY STATE OR JURISDICTION.

This Limited Warranty may NOT be modified, altered or expanded by anyone, including OMNI representatives.