PowrServ[®] **Underground Distribution—Secondary Combined Duct & Cable** Secondary Cable Installed in Extruded High-Density Polyethylene Duct



Product Construction:

Complete Assembly:

PowrServ[®] Combined Duct & Cable consists of insulated conductor(s) factory installed in a black High-Density Polyethylene (HDPE) conduit. The HDPE conduit is extruded directly over any prior-made single or plexed 600 volt cable assembly.

Complete Cable:

All underground distribution cables in PowrServ are manufactured and tested in accordance with applicable industry standards and/or individual customer specifications. See the appropriate catalog section for a complete cable description.

Conduit:

The high-density polyethylene EPEC-A conduit is manufactured and tested in accordance with NEMA Standard TC7, "Smooth-wall Coilable Electrical Polyethylene Conduit."

Applications:

PowrServ Combined Duct & Cable offers an economical alternative to pulling cable in previously installed short lengths of duct joined with sleeve couplings. The inherent construction advantages and versatility of the PowrServ design are ideally suited for underground secondary distribution systems.

Features and Benefits:

In addition to the initial labor savings achieved from installation of cable and conduit in a single operation, cable replacement costs and ground disruption are significantly less for the PowrServ cable system. Tough, yet light and flexible, high-density polyethylene conduit provides ease of installation and high impact resistance for cable protection.

Options:

- EPEC-B, EPEC-40 or EPEC-80 Smooth-Wall Coilable Electrical Polyethylene Conduit to NEMA TC7
- · Gray or red color
- Extruded red stripes



POWERSERV COMBINED DUCT & CABLE								
NOMINAL Conduit Size (Inches)	MINIMUM I.D. (INCHES)	0.D. (± 0.012") (INCHES)	MINIMUM INSIDE AREA (SQ. INCHES)	APPROX. WEIGHT (LB/1000 FT)	MINIMUM* WALL THICKNESS (INCHES)	MINIMUM BEND RADIUS (INCHES)		
1 1/4	1.408	1.660	1.557	240	0.100	18		
1 1/2	1.618	1.900	2.056	310	0.115	21		
2	2.033	2.375	3.246	475	0.145	26		

*The maximum wall thickness is the minimum given above + 0.020 inches

MAXIMUM CROSS-SECTIONAL AREA OF CONDUCTORS PER CONDUIT							
		MAXIMUM TOTAL CROSS-SECTIONAL AREA OF CONDUCTORS (SQUARE INCHES)					
NOMINAL CONDUIT SIZE (INCHES)	MINIMUM INSIDE AREA (SQ. INCHES)	53% FILL One Conductor	31% FILL TWO Conductors	40% FILL Three Conductors	40% FILL Four Conductors		
1 1/4	1.557	0.825	0.483	0.623	0.623		
1 1/2	2.056	1.090	0.637	0.822	0.822		
2	3.246	1.720	1.006	1.298	1.298		

Note: The maximum percent fill used above is based on 1999 National Electrica Code recommendations. Larger fill areas can be furnished when required by the user.

MAXIMUM DIAMETER OF CONDUCTORS PER CONDUIT							
ΝΟΜΙΝΑΙ		MAXIMUM DIAMETER OF EACH CONDUCTOR (INCHES)					
CONDUIT SIZE (INCHES)	MINIMUM I.D. (INCHES)	ONE Conductor	TWO Conductors	THREE Conductors	FOUR Conductors		
1 1/4	1.408	1.025	0.555	0.514	0.445		
1 1/2	1.618	1.178	0.637	0.591	0.512		
2	2.033	1.480	0.800	0.742	0.643		

The maximum diameter of each conductor above is based on National Electrical Code recommendations. Larger conductor diameters can be furnished when required by the user. All conductors in the conduit are the same size.

Other conduit sizes may be furnished on request.

