EmPowr® Underground Distribution—Primary Combined Duct & Cable

Primary Cable Installed in Extruded High-Density Polyethylene Duct

Product Construction:

Complete Assembly:

EmPowr® Combined Duct & Cable consists of insulated conductor factory installed in a black high-density polyethylene conduit. The polyethylene conduit is extruded directly over any prior-made single medium-voltage cable.

Complete Cable:
All underground distribution cables in EmPowr 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:

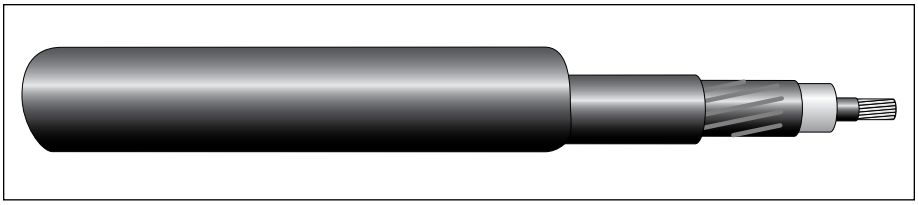
EmPowr Combined Duct & Cable offers an economical alternative to pulling cable in previously installed short lengths of duct joined with sleeve couplings. The inherent construction advantages and versatility of the EmPowr design are ideally suited for underground primary distribution systems up to 46 kV.

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 EmPowr 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 TC7
- Gray or red color
- Extruded red stripes



EMPOWR COMBINED DUCT & CABLE

NOMINAL CONDUIT SIZE (INCHES)	MINIMUM I.D. (INCHES)	O.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 plus 0.020 inches.

MAXIMUM CROSS-SECTIONAL AREA OF CONDUCTORS PER CONDUIT

NOMINAL CONDUIT SIZE (INCHES)	MINIMUM INSIDE AREA (SQ. INCHES)	MAXIMUM TOTAL CROSS-SECTIONAL AREA OF CONDUCTORS (SQ. INCHES)
		53% FILL ONE CONDUCTOR (SQ. INCHES)
1 1/4	1.557	0.825
1 1/2	2.056	1.090
2	3.246	1.720

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

MAXIMUM DIAMETER OF CONDUCTORS PER CONDUIT

NOMINAL CONDUIT SIZE (INCHES)	MINIMUM INSIDE AREA (SQ. INCHES)	MAXIMUM CONDUCTOR DIAMETER
		ONE (1) CONDUCTOR (INCHES)
1 1/4	1.408	1.025
1 1/2	1.618	1.178
2	2.033	1.480

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

Dimensions and weights not designated minimum or maximum are nominal values and subject to manufacturing tolerances. In this context, weight means mass.