

CABLES (CATHODIC PROTECTION)

GENERAL

Cables forms vital part of the Cathodic Protection System, cables are used sacrificial and impressed current Cathodic Protection system, variety of cables are used such as PVC/PVC, PE/PVC, EPR/CSP, XLPE/PVC, XLPE/PVC/SWA/PVC, PVDF/HMWPE etc.

Cables used for cathodic protection systems must be highly corrosion resistant and capable of withstanding aggressive environments to which they are exposed. Cables used for Cathodic Protection system can be directly buried such as anode tail cable, header cable, monitoring cable, bonding cables etc, cables are also used for submerged application such as cable used for tank internals, offshore structure etc. In saline environment and for deep-well anode application, KYNAR/HMWPE or HALAR/HMWPE cables are suitable, these cables are highly chlorine resistant cables.

The following types of cables are used for Cathodic Protection system applications

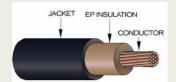
1C 0.6/1Kv XLPE/PVC

1C 0.6/1Kv HWWPE

1C 0.6/1Kv XLPE/SWA/PVC

1C 0.6/1Kv XLPE/AWA/PVC

1C 0.6/1Kv Kynar/HMWPE





GENERAL SPECIFICATIONS (TYPICAL)

| Туре | XLPE Insulated Power & Auxiliary : Single Core | | |
|---------------|---|--|--|
| Specification | BS 5467, IEC 502 | | |
| Conductor | Solid (Class-1) or Stranded (Class-2) Copper to BS 6360 | | |
| Insulation | XLPE type GP8 to BS6899 | | |
| Sheath | PVC type TM1 to BS7655 | | |
| Rate Voltage | 600 / 1000 V | | |
| Size | Various (from 4 mm sq to 120 mm sq) | | |

CABLE DESCRIPTION (TYPICAL)

| AWG | Number of Strands | Insulation Thickness | Nominal Overall Dia - Inches (std strands) | Approx. Shipping Weight (Lbs/Mft) | Nominal DC Resistance OHM/1000 ft @ 20°C |
|-----|----------------------|-------------------------|---|--------------------------------------|---|
| 14 | 7 | .110 | .29 | 38 | 2.624 |
| 12 | 7 | .110 | .31 | 48 | 1.650 |
| 10 | 7 | .110 | .34 | 62 | 1.038 |
| 8 | 7 | .110 | .37 | 87 | 0.653 |
| 6 | 7 | .110 | .40 | 122 | 0.411 |
| 4 | 7 | .110 | .45 | 175 | 0.258 |
| 2 | 7 | .110 | .51 | 260 | 0.162 |
| 1 | 19 | .125 | .58 | 330 | 0.129 |
| 1/0 | 19 | .125 | .62 | 405 | 0.102 |
| 2/0 | 19 | .125 | .67 | 511 | 0.081 |
| 3/0 | 19 | .125 | .72 | 628 | 0.064 |
| 4/0 | 19 | .125 | .78 | 771 | 0.051 |
| 250 | 37 | .140 | .83 | 880 | 0.043 |