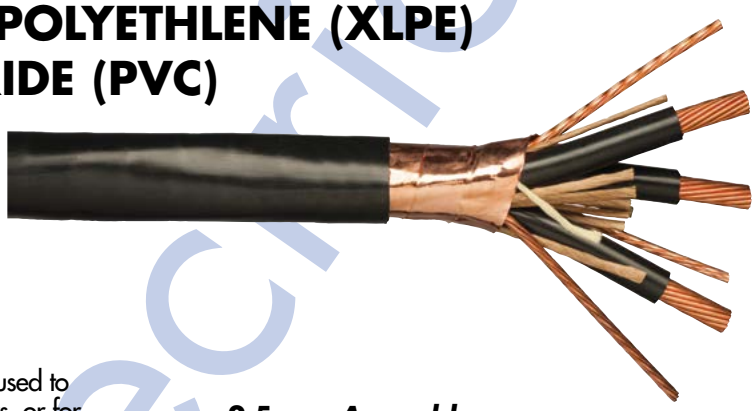
Paige pumpwire spec P7391-SP
WE SPECIALIZE IN SUBMERSIBLES
904-543-1223, 800-997-2443, Fax: 904-543-1330, www.paigeelectric.com

# TC/VFD SHIELDED POWER CABLE
# 3 CONDUCTOR 2000 VOLTS
## INSULATION: CROSS-LINKED POLYETHLENE (XLPE)
## JACKET: POLYVINYL CHLORIDE (PVC)
## SIZES: #14 – 500 MCM
90°C DRY / 90°C WET

RoHS COMPLIANT



## 1.0 APPLICATIONS:

**1.1** Type TC-VFD 2 kV power cable is used to supply power to submersible motors, or for connection to other power devices in industrial settings. Primary installations include cable trays, raceways and outdoor locations where supported by a messenger wire. Type TC-VFD is listed for direct burial or in underground ducts and for use in Class 1, Division 2 hazardous locations and Class 1 control circuits. This cable may be used in wet or dry locations at temperatures not to exceed 90°C.

## 2.0 CONSTRUCTION:

**2.1** ***Conductor:***
Class B stranded, uncoated annealed copper conforming to ASTM B-3 and B-8.

**2.2** ***Insulation:***
Each conductor is insulated with black Crosslinked Polyethylene (XLP) conforming to ICEA S-95-658/NEMA WC-70, Table 3-7 and UL Standard 44 for Type RHH/RHW-2. Three symmetrical bare copper ground conductors.

**2.3** ***Cable Core:***
Each conductor is black and printed with its conductor number in accordance with ICEA Method 4.

**2.4** ***Ground Wires:***
*Three Class B stranded, un-coated annealed copper conforming to ASTM B-3 and B-8..*

**2.5** ***Assembly:***
Individual conductors are bare annealed copper covered with a cross linked polyethylene (XLP) insulation. The conductors are cabled together with fillers and three bare ground wires, shielded with a un-coated 5 mil thick copper tape (50% Overlap) and covered with an overall flame retardant, moisture and sunlight resistant PVC jacket.

**2.6** ***Shield:***
A 5 mil un-coated copper tape is helically wrapped over the twisted assembly with a 50% (nominal) overlap. The shield shall be in contact with the ground wires.

**2.7** ***Outer Jacket:***
A black, flame retardant Polyvinyl Chloride (PVC) jacket meeting the requirements of UL Standard 1277 is applied.

## 3.0 SPECIFICATIONS:

UL 44 1277
ASTM B3 & B8
Color Code Per ICEA S-58-679 Method 4
IEEE 384 (IEEE 1202/CSA FT4) Flame Test
ICEA S-95-658(NEMA WC-70)Construction

## 4.0

| Paige Part Numbers | Power Conductor Size | No. of Conductors | No. of Strands | Ground Wires | Insulation Thickness | Jacket Thickness | Approximate O.D. | Ampacity | Ampacity | Net Weight |
|---|---|---|---|---|---|---|---|---|---|---|
| | AWG/KCMIL | | | (AWG) | mils | mils | | 75°C[1] | 90°C[1] | |
| 7391SP1 | 14 | 3 | 7 | 3 x #18 | 60 | 60 | 0.590 | 20 | 25 | 241 |
| 7391SP2 | 12 | 3 | 7 | 3 x #16 | 60 | 60 | 0.630 | 25 | 30 | 263 |
| 7391SP3 | 10 | 3 | 7 | 3 x #14 | 60 | 60 | 0.680 | 35 | 40 | 332 |
| 7391SP4 | 8 | 3 | 7 | 3 x #14 | 70 | 60 | 0.795 | 50 | 55 | 414 |
| 7391SP5 | 6 | 3 | 7 | 3 x #12 | 70 | 80 | 0.920 | 65 | 75 | 622 |
| 7391SP6 | 4 | 3 | 7 | 3 x #12 | 70 | 80 | 1.020 | 85 | 95 | 783 |
| 7391SP7 | 2 | 3 | 7 | 3 x #10 | 70 | 80 | 1.150 | 115 | 130 | 1156 |
| 7391SP8 | 1/0 | 3 | 19 | 3 x #6 | 90 | 80 | 1.415 | 150 | 170 | 1815 |
| 7391SP9 | 2/0 | 3 | 19 | 3 x #6 | 90 | 80 | 1.510 | 175 | 195 | 2587 |
| 7391SP10 | 3/0 | 3 | 19 | 3 x #5 | 90 | 80 | 1.620 | 200 | 225 | 2625 |
| 7391SP11 | 4/0 | 3 | 19 | 3 x #4 | 90 | 110 | 1.805 | 230 | 260 | 3241 |
| 7391SP12 | 250 | 3 | 37 | 3 x #2 | 105 | 110 | 1.970 | 255 | 290 | 3657 |
| 7391SP13 | 350 | 3 | 37 | 3 x #2 | 105 | 110 | 2.195 | 310 | 350 | 4958 |
| 7391SP14 | 500 | 3 | 37 | 3 x #1 | 105 | 110 | 2.475 | 380 | 430 | 6689 |

*Note: Ampacities are based upon Table 310.16 of the NEC, 2008 Edition. Ampacities are for general use with a 90° ambient temperature as specified in section 310.15 and in cable trays as specified in 392.11.*