



**ESP-F 5 KV -60/250°F 3 X 2/0 AWG
 3 CONDUCTOR WITH GROUNDS
 ARMORED FLAT ESP CABLE**

INSULATION: **Polypropylene**
 INSULATION JACKET: **NBR**

Armor: **Galvanized Steel Armor**

SIZES: **#8 - 750 MCM, 205°F/96°C Wet**



1.0 SCOPE:

1.1 -60/250°F Flat Electrical Submersible Pump Cable solutions for reliability and durability in difficult well conditions such as gassy and corrosive environments. Designed for low and medium bottom-hole temperatures of -60/250°F.

2.0 CONSTRUCTION:

2.1 Phase Conductors:

- 2.1.1 MATERIAL: Bare Copper
- 2.1.2 SIZE: 2/0 AWG
- 2.1.3 CROSS SECTION: 67.4 mm²
- 2.1.4 STRANDING CLASS: A
- 2.1.5 STRANDS: 7 x 3.503mm
- 2.1.6 DIAMETER: 10.47 mm²
- 2.1.7 D.C. RESISTANCE AT 20°C (Nom): 0.2660 ohm/km
- 2.1.8 RATED STRENGTH (Inf): 1492 kg

2.2 Insulation:

- 2.2.1 MATERIAL: EPDM
- 2.2.2 THICKNESS : 24.1mm
- 2.2.3 DIAMETER : 18.9mm
- 2.2.4 INSULATION AT 15.6(°C) (MIN): 774 Mohm-KM
- 2.2.5 OPERTING TEMPERATURE (°C) / VOLTAGE (V): -51/121°C (-60/250°F) 5000V
- 2.2.6 VOLTAGE WITHSTAND : 11.5kV AC 35 kV DC

2.3 Tape:

- 2.3.1 Fluoropolymer
- 2.3.2 THICKNESS (NOM) : 0.05mm
- 2.3.3 DIAMETER OVER TAPE : 19.1mm

2.4 Synthetic Braid:

19.7mm Nylon

2.5

Assembly:

DIMENSIONS (Under Armor)
 A: 19.7mm
 B: 59.0mm

2.6

Ground Conductor:

- 2.6.1 MATERIAL: Bare Copper
- 2.6.2 FORMATION/SIZE: 2 x 7 AWG (4 AWG)
- 2.6.3 TOTAL CROSS SECTION: 21mm²
- 2.6.4 STRANDING CLASS: B Stranded
- 2.6.5 STRANDS: 7 x 1.40mm
- 2.6.6 DIAMETER : 4.03mm²
- 2.6.7 D.C. RESISTANCE AT 20°C (Nom): 1.667 ohm/km
- 2.6.8 RATED STRENGTH (Inf): 234kg
- 2.6.9 WATER & GAS BLOCKING COMPOUND

2.7

Armor:

0.51mm Interlocking Galvanized Steel Tape. Identification tape under armor.

2.8

General Data:

- 2.8.1 OVERALL DIMENSIONS: A: 21.7mm, B: 61mm
- 2.8.2 COPPER WEIGHT: 1359 lbs/mft, 2024 kg/km
- 2.8.3 APPROXIAMTE TOTAL WEIGHT: 2734 lbs/mft 4070 kg/km

2.9

Reel Package:

- 2.9.1 DIAMETER: 2100
- 2.9.2 REEL REF: 21M, Gross W (kg)
- 2.9.3 GROSS W (kg) 6667
- 2.9.4 WIDTH (mm) 1152
- 2.9.4 LENGTH (m) 1524
- 2.9.5 INT. DIAM. (mm) 1050