M E S C

Middle East Specialized Cables

PROCESS FIELDBUS (PROFIBUS) DP STANDARD CABLE IEC 61158-2 TYPE A RS 485 300 V 75°C



Application:

Fieldbus cable for Profibus DP and FIP according to IEC 61158 part 2, suitable for 9-pin D-Sub (IP20) and M12 (IP67) connectors. Suitable for indoor, outdoor application in cable tray, conduit for fixed installation.

CONSTRUCTION:

| Conductor | Solid plain copper ,22AWG/ Ø 0.64 mm. | | | | | |
|------------------|-------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|
| Insulation | Foamed polyethylene. | | | | | |
| Pair colour code | Green & Red. | | | | | |
| Shielding | 0.025 mm aluminium/polyester backed tape in contact with a tinned copper drain wire 22 AWG (7strand) and tinned copper braid. | | | | | |
| Inner Jacket | Extruded Violet colour PVC. | | | | | |
| Armour | A serving of round galvanized steel wires is applied with 90% minimum coverage. | | | | | |
| Outer Jacket | Extruded Violet colour PVC. | | | | | |
| Printing Legend | MESC FIELDBUS CABLE IEC 61158-2 RS 485 PROFIBUS DP 1PR 22AWG 300 V 75C SWA SUN RES OIL RES YEAR LENGTH MARKING | | | | | |

TECHNICAL DATA:

| Flame retardance | IEC60332-3-24 | | | | |
|---------------------------------------------|-----------------------------------------------------------------------|--|--|--|--|
| Halogen acid gas | ≤17% (IEC 60754-1) | | | | |
| Limiting Oxygen index (outer sheath) | ≥ 29% (ASTM D2843) | | | | |
| UV /Sunlight resistance (outer sheath) | Passes (UL 1581) | | | | |
| Temperature Range | - 5°C to 50°C (During installation) - 30°C to 75°C (During Operation) | | | | |
| Voltage Rating | 300 Volts | | | | |
| Conductor Resistance (Loop) | Max. 110 Ω/Km at 20°C | | | | |
| Shield Resistance | Nominal 12 Ω/Km at 20°C | | | | |
| Mutual Capacitance (at 1KHz) | 30nF/Km Maximum | | | | |
| Attenuation at 0.25/0.625/1.25/3.125/16 MHz | Nominal 6/9/12/18/40 dB/km | | | | |
| Impedance | 150 ±15 Ω | | | | |
| Voltage Test | 1500 V for 2 seconds | | | | |

DIMENSIONAL DETAIL:

| Size | MESC Code | Pairs | Strands x Dia. | Inner jacket thickness | Diameter Over Inner Jacket | Armour wire diameter | Diameter Over Armour | Outer Jacket Thick. | Approx. Outer Jacket O.D. | Approx. Weight |
|-----------|------------------------|-------|-------------------|------------------------------|-------------------------------------|----------------------------|----------------------------|---------------------------|------------------------------------|-------------------|
| AWG | | Nos. | No. x mm | mm | mm | mm | mm | mm | mm | kg/km |
| 2 X 22AWG | 1863-01P22AWG-W2VT8-30 | 1 | 1 X 0.64 | 0.89 | 8.1 | 0.9 | 9.9 | 1.27 | 12.5 | 310 |