

ICON® Fieldbus Cable

IEC 61158-2

Profibus FMS/DP



listed as PLTC acc. to UL 13

UL 13

Single Pair, Foam skin PE-Insulation, Overall Screen, PVC-Outer sheath
 FB-02YS(St+Ce)Y-fl Basic

75°C / 300 V

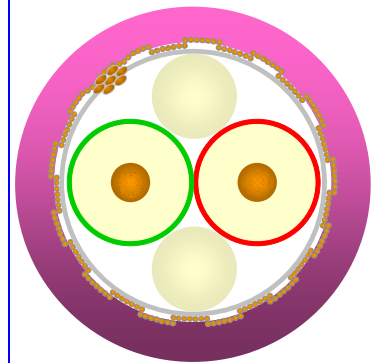
Application

Fieldbus cable, Type A, for bus-systems Profibus FMS/DP and FIP acc. to IEC 61158-2 (interface RS 485). Suitable for use in hazardous classified locations class I and class II division 2 acc. to NEC 501-4(b) and NEC 502-4(b) or zone 1 and zone 2, group II, acc. to IEC 60079-14, resp.

Recommended for indoor and outdoor installation, in dry and wet locations, on racks, on trays, in conduits.

Construction

Conductor solid plain copper, size: AWG 22/1 (Ø 0.64 mm)
Insulation foamed polyethylene with skin layer
Colour code a-core: green; b-core: red
Screen plastic coated aluminium tape, metallic surface outside in contact with tinned copper drain wire and tinned copper wire braid
Outer sheath polyvinyl chloride PVC, violet or blue for intrinsically safe systems
Marking LEONI KERPEN ICON FIELDBUS CABLE IEC 61158-2 150 Ω
 PROFIBUS FMS/DP (UL) PLTC 22/1 AWG 75°C SUN RES
 PRODUCTION LOT CODE LENGTH MARKING



Technical Data

Flame propagation: UL 13 vertical tray test
 IEC 60332-3-24 (cat. C) **Temperature range:** -40°C up to +75°C
 (during operation)
Oxygen index of outer sheath: ASTM D 2863 (min. 30%)
Oil resistance: ICEA S-73-532 - 5°C up to +50°C
 (during installation)
UV resistance: UL 1581 article 1200 **Min. bending radius:**
 5 x cable diameter
Overall diameter: max. 8.4 mm **Max. pulling tension:**
 80 N
Weight: approx. 70 kg/km
Connectors: M12, 9-pin D-Sub
Glands: M16
Part-No.: 76770301 (vio)
 76770302 (blue)

Abbreviations

FB- Fieldbus Cable
 02YS insulation of foamed PE
 with skin layer
 (St+Ce) overall screen with
 drain wire
 Y outer sheath of PVC
 -fl reduced flame
 propagation

Electrical data at 20°C

	Character	Unit	Values
Conductor resistance (loop)	max.	Ω/km	110
Screen resistance	nom.	Ω/km	12
Mutual capacitance	max.	nF/km	30
Inductance	nom.	mH/km	0.90
Capacitance unbalance to earth	max.	nF/km	1.5
Impedance ≥ 3 MHz		Ω	150±15
Attenuation at 0.25 / 0.625 / 1.25 / 3.125 / 16 MHz	nom.	dB/km	6 / 9 / 12 / 18 / 40
Test voltage U_{rms} core : core		V	1500
U_{rms} core : screen		V	1500
Operating voltage	max.	V	300