

SIENOPYR-FR-PROFIBUS M-02Y(St)CHX 100V

Profibus cable for ships and offshore units



Standards applied

Germany	DIN 19245-3
Europe	EN 50170-Vol.2 PROFIBUS

Application

As a bus cable for fixed installation on board ships and offshore units in all locations and on open decks. The cable is not suitable for continuous use in water.

Fire Rating Standards

Halogen Free	IEC 60754-2
Low smoke	IEC 61031
Ozone resistance	IEC 61031
Fire retardant	IEC 60332-3-24 (cat. C)

Construction

Conductor	Stranded bare copper wire 0.35 mm ² (AWG22/7)
Insulation	Foam-skin Polyethylene (Foam-PE)
Core identification	a – core: red, b – core: green
Cable lay up	Laying of the cores with two dummies
Overall sheath	PET-foil
Overall screen	Laminated aluminium-foil under a copper braid, tinned
Inner sheath	FRNC, Ø 8.0 mm
Outer sheath	FRNC, black Ø 10.8 mm
Sheath marking	year – SIENOPYR-FR-PROFIBUS M-02Y(St)CHX 1x2x0,35 mm ² 100V, 150Ω

Technical Data

Prod.number Draka Comteq	Designation	No. of cores and cond.area (mm ²)	Outer diameter (mm)	Weight of cable approx. (kg/km)	Copper content (kg/km)	Tensile force (N)
CD7677650	SIENOPYR-FR-PROFIBUS	1x2x0.35	10.8			70

Mechanical Properties

Bending radius	≥ 100 mm without load ≥ 200 mm with load
Temperature range, during operation	-40°C upto + 80°C
during installation	-10°C upto + 50°C
Resistance to chemicals (test to VG 95218 part 2)	Diesel fuel to DIN VDE 51601 ASTM oil No. 2 to DIN 53521 Oils, NATO code 0-178, BW-TL 9150-0031/2 to VG 95214 part 4 Hydraulic fluids, NATO code H-515, BW-TL 9150-0020 to VG 95214 part 4 Solvent cleansing agents, BW-TL 6850-0017 to VG 95214 part 4 De-ionized water to VG 95214 part 4 De-ionized water with 3,5% NaCl.

Electrical Properties (at 20°C \pm 5°C)

DC loop resistance	$\leq 110 \Omega$ /km
Mutual capacitance (at 800 Hz)	≤ 30 nF/km
Characteristic impedance (at 9.6 kHz)	(250 \pm 25) Ω
(at 38.4 kHz)	(185 \pm 18.5) Ω
(3-20 MHz)	(150 \pm 15) Ω
Insultion resistance	> 16 G Ω .km
Nominal voltage	110 V _{eff}

Nominal transmission characteristics (at 20 °C)

f	Attenuation
(MHz)	(dB/100m)
0.0096	0.3
0.0384	0.5
4.0	2.2
16.0	4.5