



MOG Profibus DP 1&2 pairs stranded conductor 0.35mm², Armoured, MUD-Resistant NEK606



Store at: -40 to +90 °C

Install at: -40 to +50 °C, Bend minimum: 20 times O.D.

Operate at: -40 to +90 °C, Bend minimum: 10 times O.D.

Pull maximum: 100N

Design

Conductor : Stranded bare copper 7×0.25 (0.35mm²)

Insulation : Polyolefin Ø2.75mm

Pair : 2 insulated conductors stranded together into a pair

Colour code : 1.Green/red 2.Blue/brown

Assembling : No 1 pair with fillers or no 2 pairs stranded together into a compact core

Screen : Aluminium/polyester tape (100%) with tinned copper braid (coverage ≥60%)

Inner jacket : Black or purple Fire Retardant and UV Resistant SHF2 material, LSZH (Ø 8.6mm)

Armour : galvanized steel wires, tinned copper or bronze wires braid (nominal coverage 85%)

Outer jacket : Black or purple Fire Retardant and UV Resistant SHF2 material, LSZH, MUD Resistant

Marking : APS Finland – ww/yy – ARMoured PROFIBUS MARINE ...x2x0.35mm² SHF2 MUD-Resistant NEK606- IEC60332-3-22 Cat.A – lot + m

Environmental properties and Fire Performances

Degree of acidity of gases : IEC 60754-1, IEC 60754-2 (pH value $\geq 4,3$ and Conductivity $\leq 10\mu\text{S/mm}$)
Halogen acid gas : IEC 60754-1, IEC 60754-2 (Halogen acid gas emission $\leq 0.5\%$)

Smoke Emission : IEC 61034-2, EN 50268-2 (Transmittance) $\geq 60\%$

Toxicity of evolved gas : EN50305 9.2

Flame retardant : IEC 60332-1-2

Fire retardant : IEC 60332-3-22 Cat.A

Fire resistant : available upon request

Ozone resistant : IEC60811-2-1, DIN VDE 0472 part 805 B LSZH SHF2 : IEC 60092-360

Oil resistant : IEC60811

MUD resistant : NEK606:2009, IEC60092-360

Water absorption : IEC60811-1-3

Water penetration : NO

UV resistant : IEC60811-2-1, ASTM-D-2565-92A

Cold bend & impact : CSA C22.2

Electrical characteristics (IEC60092-350, IEC61784, IEC61158)

Operation voltage : 100V

Test voltage : 1500V a.c. for 1 minute

Resistance of the conductor @ 20°C : $\leq 55.0 \Omega/\text{km}$

Insulation resistance @ 20°C : $\geq 1\text{G}\Omega\text{xkm}$

Nominal Capacitance @ 800Hz : 30 pF/m

Ordering and delivery information

Pair count	P/N	O.D [mm]	Weight [kg/km]	Packaging
1 pair	OPB1P035FxU	12.0	165	500 m (+/-5%)
2 pairs	OPB2P035FxU	12.0	180	500 m (+/-5%)

x = "A" for Galvanized Steel wire braid, "T" for Tinned Copper wire braid, "B" for Bronze wire braid.

Nominal attenuation :	45 dB/km	@ 16MHz
	22 dB/km	@ 4MHz
	5 dB/km	@ 38,4 KHz
	3 dB/km	@ 9,6 KHz
Baudrate :	9.6 kBits/s	@ Max. 1200m
	19.2 kBits /	@ Max. 1200m
	93.75 kBits/s	@ Max. 1200m
	187.5 kBits /s	@ Max. 1000m
	500 kBits /s	@ Max. 400m
	1.5 MBits /s	@ Max. 200m
	12 MBits /s	@ Max. 100m

Other standards of reference

IEC 60092-370	Electrical installations in ships: Guidance on the selection of cables for telecommunication and data.
IEC 60092-360	Electrical installations in ships: Insulating and sheathing materials for shipboard and offshore units.
DNV TAP 827.50/2	Type Approval Program
ABS SVR	Rules for building and classing. Steel Vessels.
ABS SMR	Rules for building and classing. Steel vessels under 90 meters.
IEC 60811	Insulating and sheathing materials of electric cables - Test method

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