MOG Profibus DP 1&2 pairs stranded conductor 0.35mm2, SHF2 MUD NEK606

Store at: -40 to +70 °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 material, LSZH (Ø 8.6mm)
Outer jacket : Black or purple Fire Retardant and UV Resistant, SHF2 and MUD Resistant material, LSZH (Ø 10.6mm)

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

Environmental properties and Fire Performances

Degree of acidity of gases : IEC 60754-1, IEC 60754-2 (pH value ≥ 4,3 and Conductivity ≤10µS/mm)
Halogen acid gas : IEC 60754-1, IEC 60754-2 (Halogen acid gas emission ≤ 0.5%)
Smoke Emission : IEC 61034-2, EN 50268-2 (Transmittance) ≥ 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, IRM 903
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

Ordering and delivery information

Pair count	P/N	O.D [mm]	Weight [kg/km]	Packaging
1 pair	OPB1P035FU	10.6	145	500 m (+/-5%)
2 pairs	OPB2P035FU	10.6	160	500 m (+/-5%)

Electrical characteristics (IEC60092-350, IEC61784, IEC61158)

Operation voltage : 100V
Test voltage : 1500V a.c. for 1 minute
Resistance of the conductor @ 20°C : ≤ 55.0 Ω/km
Insulation resistance @ 20°C : ≥ 1GΩxkm
Nominal Capacitance @ 800Hz : 30 pF/m Characteristic impedance : 150 Ω ± 15 @ 1MHz

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 sheating 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