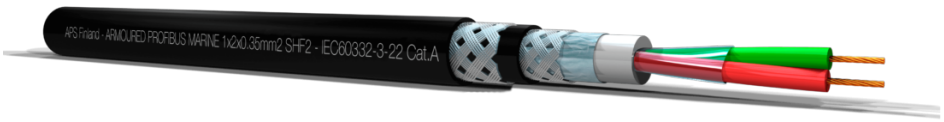

MOG Profibus DP 1&2 pairs stranded conductor 0.35mm2 Armoured SHF1

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 SHF1 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 SHF1 material, LSZH
Marking : APS Finland – ww/yy – ARMOURED PROFIBUS MARINE …x2x0.35mm2 SHF1 – IEC60332-3-22 Cat.A – 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
Ozone resistant : IEC60811-2-1, DIN VDE 0472 part 805 B
UV resistant : IEC60811-2-1, ASTM-D-2565-92A

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

Ordering and delivery information

Pair count	P/N	O.D [mm]	Weight [kg/km]	Packaging
1 pair	OPB1P035Fx1	12.0	135	500 m (+/-5%)
2 pairs	OPB2P035Fx1	12.0	150	500 m (+/-5%)

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

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