

# Cables for marine technology

## Hybrid cable

with special polymer insulation and overall aramid screen as strain relief



**OPERATING DEPTH**  
up to **300 metres**

### Construction:

<b>Conductor:</b>	bare copper strands, fine wires
<b>Insulation:</b>	special polymer
<b>Colour code:</b>	AWG 26: blue-white/blue, orange-white/orange, green-white/green, brown-white/brown 1,0 mm <sup>2</sup> : black cores with consecutive numbers 1-4, Ø 2,3 mm
<b>Stranding:</b>	cores AWG 26: pairwise and pairs together optimized twisted, PP foils with overlap wrapping
<b>Screen:</b>	(4x2xAWG 26): alu foil and tinned copper braiding, optical coverage ≥ 85 %
<b>Stranding:</b>	all elements twisted together optimized, swelling yarn in the fillers, non-woven tape with overlap wrapping
<b>Screen:</b>	tinned copper braiding, optical coverage ≥ 85 %
<b>Inner sheath:</b>	PUR, ultramarine blue (RAL 5002)
<b>Strain relief element:</b>	aramid braiding
<b>Sheath material:</b>	PUR
<b>Sheath colour:</b>	ultramarine blue (RAL 5002)
<b>Marking:</b>	acc. to customers requirements

Abmessung mm <sup>2</sup>	outer-ø approx. mm	copper figure kg/km	cable weight in salt water ≈ kg/km	cable weight in air ≈ kg/km	ohmic resistance at 20 °C max. Ω/km
(4x2xAWG26) Cat.6 + 4x1,0	16,0	129,1	70	261	<b>AWG26:</b> 121,9 1,0 mm <sup>2</sup> : 19,5

### Technical data:

Other dimensions and colours are possible on request.

Peak operating voltage	Nominal voltage	Testing voltage	Temperature range	Min. bending radius	Halogen-free	Insulation resistance
max. 90 V	Uo/U 0,6/1kV	core/core: 1000V, 1 min core/screen: 1000V, 1 min core/core: 4000V, 10 min core/screen: 4000V, 10 min	fixed laying: -20°C/+80°C flexible application: -20°C/+80°C	fixed laying: 5 x d flexible application: 10 x d	acc. to IEC 60754-1 + VDE 0482-754-1	≥ 5 GΩ x km

#### Chemical resistance

good against acids, alkalines, solvents, hydraulic liquids etc.

#### Strain relief element

Min. tensile strength: 20 kN\*  
\*Size can't be controlled by the manufacturer.  
Testing is the responsibility of the user

#### Data transmission

Element (4x2xAWG 26)Cat.6:  
Characteristic impedance 100 Ω ± 10 Ω, fulfils the electrical and transmission requirements with high frequency with reference to EN 50288-5-2  
Operating capacity is tested after first production  
Attenuation values are tested after first production

- + high tensile strength
- + high tear strength
- + high abrasion resistance
- + high notch resistance
- + high shear strength
- + good seawater resistance
- + good UV resistance
- + good oil resistance

