

# Power & data cable **Type 4480K**



#### **Construction characteristics**

Ethernet element	2 x 0.13 mm² (26 AWG) bare copper conductor insulated with polyolefin 2 cores twisted together (4 each) Colour white/orange, white/green, white/blue, white/brown 4 pairs stranded together with a central cross separator and with filler (textile or extruded) Inner jacket of special LSZH flame retardant and no corrosive compound Overall Polyester/Alu tape and tinned copper braid, coverage ≥80% (1 each)
Conductor	1 mm <sup>2</sup> bare copper conductor insulated with special polymer Nominal diameter 2.70 mm (4 each). Colour black numbered 1-4
Filler	Water blocked compound
Inner tape	No hygrosic tape
Inner shield	Tinned copper braid, coverage ≥ 85%
Inner jacket	Polyurethane, nominal thickness 1.2 mm, nominal OD 12.9 mm. Colour blue
Strength member	Aramidic yarn braid, nominal thickness approx 0.4 mm
Outer jacket	Polyurethane, nominal thickness 1.2 mm. Colour blue

#### **Mechanical characteristics**

Diameter	16.10 mm ±0.5 mm
Weight in air	270 kg/km
Weight in seawater	57 kg/km
Min. bending radius	161 mm
Min. breaking strength	20 kN
Depth rating	3,000 m (deeper on request)
Operating temperature range	-20°C - +80°C

### **Electrical and physical characteristics**

Operating voltage	1,000 V for 1 mm <sup>2</sup> conductor
Test voltage	4.000 Vac x 10 min for 1 mm² conductor 1,5 kVac x 1 min for 4 x 2 AWG 26 (cond - cond) 1,5 kVac x 1 min for 4 x 2 AWG 26 (cond - shield)



Conductor resistance	19.5 Ω/km max for 1 mm <sup>2</sup> conductor 145 Ω/km max for 4 x 2 AWG 26
Insulation resistance	$\ge 5 \text{ G}\Omega \text{xkm}$ for 1 mm <sup>2</sup> conductor + 4 x 2 AWG26

#### 4 x 2 x 26 AWG

Capacitance Nominal impedance Propagation velocity	52 pF/m (cond - cond) 100 ±15Ω (1-100 MHz) 67% approx.
Max attenuation	<ul> <li>≤3.2 dB/100 m at 1.0 MHz</li> <li>≤5.7 dB/100 m at 4.0 MHz</li> <li>≤8.9 dB/100 m at 10.0 MHz</li> <li>≤11.3 dB/100 m at 16.0 MHz</li> <li>≤12.6 dB/100 m at 20.0 MHz</li> <li>≤15.8 dB/100 m at 31.25 MHz</li> <li>≤22.5 dB/100 m at 62.5 MHz</li> <li>≤28.7 dB/100 m at 100.0 MHz</li> </ul>
Date rate	1 Gbit/s (up to 90 m)

## Other characteristics

Silicone free

RoHS-II/Reach Compliance