

CABLE SPECIFICATION



| | |
|---------------|------------------------|
| item no. | 699004 |
| type | CAT.5e/Profinet type A |
| cross section | 2 x 2 x AWG 22 |

CONSTRUCTION

| | |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| conductor | bare copper, solid (Ø 0.64mm) |
| insulation | PE (Ø 1.5mm) |
| colour code | white, yellow, blue, orange |
| stranding | cores twisted in especially adjusted layer (star quad) with filler in center, overlapping wrapped with PP-foil |
| inner sheath | PVC (Ø 3.9mm) |
| screen | Aluminium-foil, tinned copper braiding |
| jacket | green PVC |
| legend | SAB NORTH AMERICA P/N 699004* PROFINET Type A ES CAT5e * 2x2x22AWG (SHIELDED) (UL) CMG FT4 75°C VERIFIED (UL) CAT 5E OR PLTC OR ITC SUN RES or AWM 21694 600V* "year/internal order number" "sequential marking in feet" |

DIMENSIONS

| | |
|-----------------------|-------------------------------|
| outer Ø | min. 6,3/ max. 6,7 mm |
| cable weight | approx. 66kg/km, 45 lb/1000ft |
| copper weight | 29.7kg/km, 20 lb/1000ft |
| DC resistance at 20°C | max. 54,79 Ω/km |



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TECHNICAL DATA

| | | |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------|-------------|
| peak operating voltage | DIN VDE | max. 100 V |
| | UL PLTC | 300 V |
| | UR AWM | 600 V |
| test voltage | core/core | 2000 V |
| | core/screen | 2000 V |
| temperature range | fixed laying | -40°C/+75°C |
| min. bend radius | fixed laying | 3 x O.D. |
| burning characteristics | flame retardant acc. to IEC 60332-1-2 & acc. to UL 1685 (CSA FT4) | |
| additional attributes | RoHS compliant, sunlight resistant, oil resistant | |
| data transmission | fulfils requirements for ethernet cables based on EN 50288-2-2 (Cat.5 acc. to EN 50173): characteristic impedance 100 ± 5 Ω | |

| | |
|-----------------------------|-----------------------------------|
| characeristic impedance: | 100 Ohm +/- 15 Ohm @ 1 to 100 MHz |
| surface transfer impedance: | 10 mOhm/m @ 10MHZ |
| insulation resistance: | 500 MOhm x km |
| loop resistance: | 115 Ohm/km max. |
| mutual capacitance: | 57 nF/km nom. |
| tensile load: | ≤150N |

Near-end crosstalk attenuation

| Frequency (MHz) | 1 | 4 | 10 | 16 | 20 | 31.25 | 62.5 | 100 |
|------------------------|----|----|----|----|----|-------|------|-----|
| typ. value (dB - 100m) | 80 | 75 | 70 | 65 | 63 | 60 | 55 | 50 |

Attenuation

| Frequency (MHz) | 1 | 4 | 10 | 16 | 20 | 31.25 | 62.5 | 100 |
|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| typ. value (dB/100m) | 1.6 | 3.2 | 5.2 | 6.9 | 7.8 | 10.5 | 15 | 19.5 |
| (dB/100ft) | (0.5) | (1.0) | (1.6) | (2.1) | (2.4) | (3.2) | (4.6) | (5.9) |