

SY 5E-FGUEUA



Design:

| | |
|---|-----------------------------------|
| Inner conductor: copper-clad aluminium wire | ø 3.6 mm (0.142) in |
| Insulation of foamed Polyethylene (PE) with skin | ø 9.5mm (0.378) in |
| Outer conductor: copper-tape, longitudinal welded Spiral corrugation | ø (12 ±0.15) mm (0.472 ±0.006) in |

Jacket:

| | |
|---|---|
| Thermoplastic copolymer (FRNC) (LS0H) BK | |
| Wall thickness about 0.5 mm (0.02 in) | ø (13.2 +0.2/-0.1) mm (0.519 +0.008/ -0.004) in |
| Printing: Amphenol FY-50-1/2" S LS0H XXXXXm | 801 LOT xx(Y)xx(M)xx(D) |

Electrical data at 20°C:

| | |
|--|---------------------------------|
| Insulation resistance | ≥ 10 GOhm*km (32.8 GOhm*1000ft) |
| Capacitance (1 kHz) | 82 nF/km (25 nF/1000ft) |
| Characteristic Impedance | (50 ± 1) Ohm |
| Relative velocity of propagation | 82 % |
| Test voltage (wire/screen rms 50Hz 1min) | 2500 V |
| HF-operating voltage (peak) | ≤ 1000 V |
| Return loss (typical) | |
| 0-3GHz | ≤-23dB (VSWR 1.15) |
| Screening attenuation | ≥ 120 dB |
| Passive intermodulation | ≥ 160 dBc |
| Inductance | 0.195 µH/m (0.059 µH/ft) |
| Max. operating frequency | 10.2 GHz |
| Cut-off frequency | 13 GHz |
| Max. power range | 40 Kw |

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Specification

Attenuations table

| Frequency (MHz) | 100 | 450 | 800 | 900 | 1000 | 1800 | 2000 | 2200 | 2400 | 3000 |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|
| Attenuation typ. (dB/100m)(dB/100ft) | 3. 3 (1.01) | 7.29 (2.22) | 9.92 (3.02) | 10.6 (3.22) | 11.2 (3.41) | 15.5 (4.72) | 16.4 (5.01) | 17.3 (5.28) | 18.2 (5.55) | 20.7 (6.3) |
| Mean. Power (kW)at 40°C (104 °F) | 2.59 | 1.18 | 0.87 | 0.81 | 0.77 | 0.56 | 0.53 | 0.49 | 0.47 | 0.42 |
| Value of typical gradient 10%. | | | | | | | | | | |

Mechanical and thermal characteristics:

Screen material acc. to DIN EN 13602 Cu-ETP-R

Jacket material acc. to DIN EN 50290-2-27 (HD 624.7)

Flame retardant acc. to EN50575: B2ca class

Other characteristics:

Corrosivity of fire gases acc. to IEC 60754-2

Permissible temperature, installation range

-40 °C (-40 °F) up to +60 °C (+140 °F)

Permissible temperature range, operation

-55°C (-67°F) up to +85°C (+185°F)

Min. bending radius allowed

repeated 35mm, single 25mm

Number of bends. minimum (typical)

20 (50)

Tensile strength

350N

Weight about

173 Kg/km (116.3 lb/1000ft)

Application/Special feature:

Mobile network and telecommunication equipment

Designation of order:

3.6/9.5 - 50 FRNC

500 ± 25 m (1640 ± 82 ft) on reel

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