

Technical Document  
**WEBNET Cat 5E 24awg 4pair U/UTP**  
**Armoured SWA PE Black**



Part Number: 110401F-SWA-PE

Description: WEBNET Cat 5E U/UTP 24awg 4pair  
 Armoured PE Black



**Product Construction**

Conductor Material	:	Bare Copper, Solid
Conductor Size	:	24(1)awg
Insulation Material	:	High Density Polyethylene (HDPE)
Number of Pairs	:	4
Pair Colours	:	Blue, Blue/White; Orange, Orange/White, Green, Green/White; Brown, Brown/White
Inner Sheath Material	:	Polyvinyl Chloride (PVC)
Inner Sheath Colour	:	Grey
Inner Sheath Material & Colour	:	Polyethylene (PE), Black
Armour	:	Steel Wire Armour (SWA)
Outer Sheath Material & Colour	:	Polyethylene (PE), Black



**Mechanical Characteristics**

Inner Sheath Diameter	:	7.5mm ± 0.3mm
Overall Diameter	:	12.8mm ± 0.8mm
Temperature Range	:	Fixed -20°C to +70°C      Flexing 0°C to +50°C
Bend Radius	:	Fixed 4 x Overall Diameter      Flexing 8 x Overall Diameter
Weight	:	210 kg/km

**Electrical Characteristics**

Max. Conductor Resistance @ 20°C	:	≤ 9.65 Ω/km
Max. Resistance Unbalanced	:	< 2.5%
Mutual Capacitance @1KHz	:	< 60 pF/m
Pair to Earth Capacitance Unbalanced	:	<= 330 pF/100m
Impedance @ 100 MHz	:	100 Ω ± 15
Velocity of Propagation	:	65 %
Delay Skew	:	< 45 ns / 100m

Frequency (MHz)	Attenuation (dB/100m)	NEXT (dB)	PS - NEXT (dB)	ACRF (dB)	PS-ACRF (dB)	Return Loss (dB)
1	≤ 4.0	≥ 60.0	≥ 57.0	≥ 58.6	≥ 55.6	19.0
4	≤ 4.0	≥ 54.8	≥ 51.8	≥ 44.6	≥ 41.6	19.0
8	≤ 5.4	≥ 50.0	≥ 47.0	≥ 40.6	≥ 37.6	19.0
10	≤ 6.1	≥ 48.8	≥ 45.5	≥ 38.6	≥ 35.6	19.0
16	≤ 7.7	≥ 45.2	≥ 42.2	≥ 34.5	≥ 31.5	19.0
20	≤ 8.7	≥ 43.7	≥ 40.7	≥ 32.6	≥ 29.6	19.0
25	≤ 9.7	≥ 42.1	≥ 39.1	≥ 30.5	≥ 27.7	18.0
31.25	≤ 10.9	≥ 40.5	≥ 37.5	≥ 28.7	≥ 25.7	17.1
62.5	≤ 15.8	≥ 35.7	≥ 32.7	≥ 22.7	≥ 19.7	14.0
100	≤ 20.4	≥ 32.3	≥ 29.3	≥ 18.6	≥ 15.6	12.0

Performance @ 20°

**Certifications & Standards**

RoHS 3 Compliant	:	Yes	REACH Compliant	:	Yes
Manufactured in Accordance to	:	TIA/EIA 568-C.2, IEC 11801 Class E, EN 50288-6-1, ISO/IEC 61156-5, EN 50173-1			
UKCA CPR Classification	:	Fca BS EN 50575:2014+A1:2016			



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