

Technical Document  
**WEBNET Cat 5E 4pair U/UTP**  
**External Grade PE Black**



**Part Number:** 110405F-PE-BLK-\*\*\*-01  
**Description:** WEBNET Cat 5E U/UTP 4pair External  
 Grade PE Black



**Product Construction**

Conductor Material : Bare Copper, Solid  
 Insulation Material : High Density Polyethylene (HDPE)  
 Number of Pairs : 4  
 Pair Colours : Blue, Blue/White; Orange, Orange/White,  
 Green, Green/White; Brown, Brown/White  
 Sheath Material : Polyethylene (PE)  
 Sheath Colour : Black



**Mechanical Characteristics**

Overall Diameter : 5.0mm ± 0.20mm  
 Temperature Range : Fixed -10°C to +60°C Flexing 0°C to +50°C  
 Bend Radius : Fixed 4 x Overall Diameter Flexing 8 x Overall Diameter  
 Weight : 34 kg/km

**Electrical Characteristics**

Max. Conductor DC Resistance : ≤ 9.5 Ω/km @ 20°C  
 Max. Resistance Unbalanced : < 2.5%  
 Max. Insulation Resistance : > 5000 MΩ x m  
 Mutual Capacitance : < 5.6 nF/100m  
 Capacitance Unbalanced, Pair to Earth : ≤ 330 pF/100m  
 Impedance @ 100 MHz : 100 Ω ± 15  
 Velocity of Propagation : 65 %  
 Delay Skew : < 45 ns / 100m  
 Dielectric Strength - DC : 1kV for 1minute

Frequency (MHz)	Attenuation (dB/100m)	NEXT (dB)	PS - NEXT (dB)	ACRF (dB)	PS-ACRF (dB)	Return Loss (dB)
1	≤ 2.0	≥ 65.3	≥ 62.3	≥ 63.8	≥ 60.8	20.0
4	≤ 4.1	≥ 56.3	≥ 55.3	≥ 51.8	≥ 48.8	23.0
8	≤ 5.8	≥ 51.8	≥ 48.8	≥ 45.7	≥ 42.7	24.5
10	≤ 6.5	≥ 50.3	≥ 47.3	≥ 43.8	≥ 40.8	25.0
16	≤ 8.2	≥ 47.2	≥ 44.2	≥ 39.7	≥ 36.7	25.0
20	≤ 9.3	≥ 45.8	≥ 42.8	≥ 37.8	≥ 34.8	25.0
25	≤ 10.4	≥ 44.3	≥ 41.3	≥ 35.8	≥ 32.8	24.3
31.25	≤ 11.7	≥ 42.9	≥ 39.9	≥ 33.9	≥ 30.9	23.6
62.5	≤ 17.0	≥ 38.4	≥ 35.4	≥ 27.9	≥ 24.9	21.5
100	≤ 22.0	≥ 35.3	≥ 32.3	≥ 23.8	≥ 20.8	20.1

Performance @ 20°

**Certifications & Standards**

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



Publication Date: 30/01/2023  
 Revision Number: 2.0  
 Written by: GB  
 Authorised by: GB