

RoHS  
Compliant



## Application

Category 6 supports a frequency range of up to 250MHz and is designed for transmission speeds of up to 1 gigabit per second (Gigabit Ethernet).

## Characteristics

Minimum Bending Radius	: 8 × overall diameter
Core Identification	: Pair 1: Blue, White/Blue Pair 2: Orange, White/Orange Pair 3: Green, White/Green Pair 4: Brown, White/Brown
Outer Sheath Colour	: Violet

## Cable Standards

ISO / IEC 11801, TIA 568-C.2, YD/T1019

## Construction

### Conductor

Solid bare copper conductor

### Insulation

HDPE (High Density Polyethylene)

### Screen

Mylar + Aluminium foil/Mylar

### Drain Wire

Tinned copper

### Sheath

LSZH (Low Smoke Zero Halogen)

This product range is available on reels of 305m or per metre

## Dimensions

No. of Pairs (23 AWG)	Nominal Diameter of Conductor mm		Nominal Diameter Over Insulation mm	Nominal Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/305m box
	+0.005 UP	-0.005 DOWN				
4	0.565		1.12	0.55	7.4	14

## Physical Properties of Sheath

Before Aging		Aging Period C°×hrs	After Aging Period	
Tensile Strength (Mpa)	Elongation (%)		Tensile Strength (Mpa)	Elongation (%)
≥10.0	≥125	100°C×24h×7d	≥8.0	≥100

## Performance Characteristics

Frequency MHz	RL dB	Attenuation dB	NEXT dB	Delay ns	PS-NEXT dB	ELFEXT dB	PSELFEXT dB
1	20	-	74.3	570	72.3	68	65
4	23	3.78	65.3	552	63.3	56	53
8	24.5	5.32	60.8	546.73	58.7	49.9	46.9
10	25	5.95	59.3	545.38	57.3	48	45
16	25	7.55	56.2	543	54.2	43.9	40.9
20	25	8.47	54.8	542.05	52.8	42	39
25	24.3	9.51	53.3	541.2	51.3	40	37
31.25	23.6	10.67	52	540.44	49.9	38.1	35.1
62.5	21.5	15.38	47.4	538.55	45.4	32.1	29.1
100	20.1	19.8	44.3	537.6	42.3	28	25
200	18	28.98	39.8	536.54	37.8	22	19
250	17.3	32.85	38.3	536.27	36.3	20	17

## Electrical Characteristics at 20°C

Impedance (1-250MHz) Ω	Delay Shew (1-250MHz) Ω	Maximum Capacitance (Unbalanced to Ground) ns/100m	Maximum DC Resistance at 20°C Ω/100m	Maximum DC Conductor Resistance Unbalance %
100±15	≤45	330	9.5	5.0

## Part Number Table

Description	Cable Length	Part Number
Screened Network Cable, Cat 6, F/UTP, LSZH, 4 Pair, 23AWG, Violet	305m or per metre	PP002143

**Important Notice :** This data sheet and its contents (the "Information") belong to the members of the Premier Farnell group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. pro-POWER is the registered trademark of the Group. © Premier Farnell Limited 2016.