

4pair/0.57mm Unshielded Twisted Pair (UTP) Enhanced Category 5 – Indoor/Outdoor

(For horizontal distribution and vertical backbone cabling)

Cable description:

Plain annealed copper conductors, solid polyethylene insulated, twisted pair, water blocked interstices and flame retardant PVC overall sheathed. 100Ω balanced cable suitable for Local Area Network (LAN) for horizontal distribution and backbone network cabling (125 MHz). Suitable for 16 Mbps Token Ring/155 Mbps ATM PMD/100 Base – VG, T4, X, 1000 Base T (Gigabit Ethernet), etc. Cable is suitable for indoor and outdoor underground (Ducted and Direct buried) applications

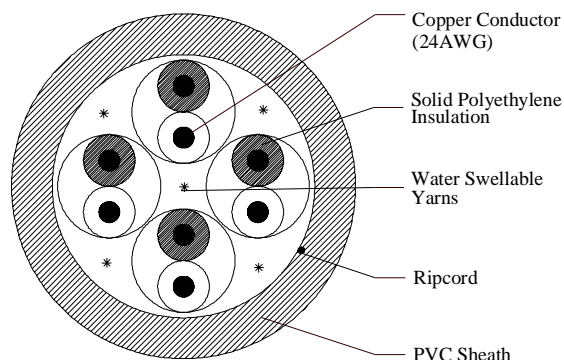
Construction details:

Conductor : Plain annealed copper - 23 AWG
 Insulation : Polyethylene
 Core Identification: Pair 1 White-Blue stripes/Blue
 Pair 2 White-Orange stripes/Orange
 Pair 3 White-Green stripes /Green
 Pair 4 White-Brown stripes /Brown
 Water blocking : Water swellable yarns (Interstices)
 Outer sheath: Flame retardant PVC (UV stabilized) - Black

Dimensions and mass:

Overall cable diameter (nominal): 7.3 mm
 Mass (nominal) : 57 kg/km

Cross sectional drawing:



Specifications: EIA/TIA 568B, ISO/IEC 11801 2nd Edition, AS/NZS 3080 and AS/ACIF S008

Mechanical characteristics:

Minimum bending radius [mm]: 50
 Maximum pulling tension [N] : 190
 Operating temperature range [°C] : - 10 to + 70

Water infiltration characteristics:

Cable meets IEC60794-1-2-F5B Specification: "Water penetration test" as specified in AS/ACIF S008

Fire resistance characteristics:

Cable meets IEC60332, part 1 Specification: "Test on a single vertical insulated wire or cable"

Electrical characteristics:

DC resistance [Ω/100m] : 9.38 Max.
 Resistance unbalance [%] : 3.0 Max.
 Characteristic impedance [Ω] : 100 ± 15 @ 1-100 MHz
 Mutual capacitance [nF/100m] : 5.5 Max.
 Capacitance unbalance [pF/100m]: 340 Max. (pair to earth)

Note: All electrical characteristics are given at 20°C

Freq. [MHz]	Insertion Loss Max [dB/100m]	Pr - Pr NEXT Min [dB/100m]	Power Sum NEXT Min [dB/100m]	Pr - Pr ACR Min [dB]	Power Sum ACR Min [dB]	Pr - Pr ELFEXT Min [dB/100m]	Power Sum ELFEXT Min [dB/100m]	Return Loss Min [dB/100m]
1	2.1	65.3	62.3	63.2	60.2	63.8	60.8	-
4	4.0	56.3	53.3	52.3	49.3	51.8	48.8	23.0
10	6.3	50.3	47.3	44.0	41.0	43.8	40.8	25.0
16	8.0	47.2	44.2	39.2	36.2	39.7	36.7	25.0
20	9.0	45.8	42.8	36.8	33.8	37.8	34.8	25.0
31.25	11.4	42.9	39.9	31.5	28.5	33.9	30.9	23.6
62.5	16.5	38.4	35.4	21.8	18.8	27.9	24.9	21.5
100	21.3	35.3	32.3	14.0	11.0	23.8	20.8	20.1
125	24.9	32.2	31.0	7.3	4.3	20.0	19.0	19.4

Prysmian's **Outdoor Cat 5E** cable features a heavy duty UV stabilized PVC outer sheath. The cable core is surrounded by high absorption performance water swellable yarns to make it suitable for outdoor applications. The use of water-blocking glands and water blocked enclosures is recommended. Where cable is expected to be permanently immersed in water¹ Prysmian recommends the addition of a metallic moisture barrier.

Note 1): Cable can be soaked by water in intermittent basis provided appropriate drainage is in place to allow cable dries-off any water that may come in contact with conductors that can impair cable's transmission performance.

Major advantages can be summarized as follows:

- Dry core cable incorporating innovative waterblocking technology without the use of flooding compound thus providing fast and friendly cable preparation
- A heavy duty UV stabilized PVC outer sheath gives the cable superior flexibility over normal Polyethylene sheathed outdoor cables, which simplifies and speeds up installation. A PVC outer sheath also means that for outdoors to indoor runs, there is no need to terminate before coming into a building. Once inside the cable can be treated as an indoor cable within the building as per any normal Cat 5E UTP internal cable. This offers material cost reduction and installation cost savings
- The PVC outer sheath offers easier stripping. This is enhanced by the addition of a ripcord
- The cable is packed in Prysmian's EASYPULL [M@XIMUM](#) STRENGTH BOX, which offers great benefits over standard reel or drum packaging. Easy to use, to dispose of and better for the environment

Part number: L4P5EO

01st September, 2006

The information contained in this data sheet is subject to normal manufacturing tolerances. Specifications are subject to change without notice

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