

## F/UTP CAT6 4PR PVC+ARMOUR+PE

### STANDARDS

IEC 61156-5  
EN 50288-5-1  
ISO/IEC 11801  
EN 50173

### APPLICATIONS

10BASE-T (IEEE 802.3)  
4/16 Mbps TOKEN RING (IEEE 802.5)  
100BASE-VG-AnyLAN  
100 Mbps TP-PMD (ANSI X3T9.5)  
100BASE-T (IEEE 802.3)  
55/155 Mbps ATM  
1000BASE-T (Gigabit Ethernet)

### COLOUR CODES

Pairs Colours Combinations

1 Light Blue / Blue  
2 White / Orange  
3 Light Green / Green  
4 Light Brown / Brown

Outer sheath colour: Black

### PART NUMBER / PACKAGING

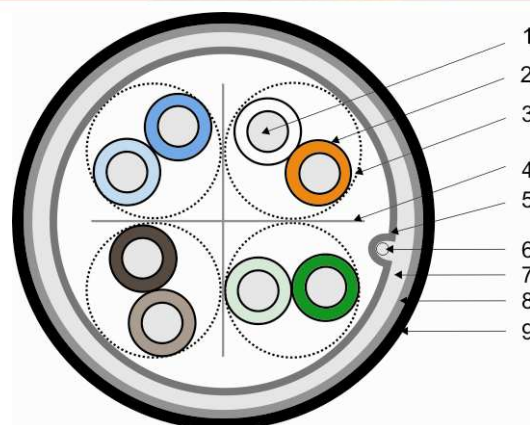
54114A8NGPQ / Spools 500m  
54114A9NGP / Spools 1000m

### OTHER CHARACTERISTICS

Storage Temperature -20°C to 70°C  
Operating Temperature -20°C to 70°C

Laying Temperature -5°C to +50°C  
(recommendation: between -5°C and +5°C,  
prior storage 24h at 20°C.)

Edition: October 2013



### CONSTRUCTION

- 1 – Conductor: 23 AWG, Solid Bare Annealed Copper.
- 2 – Insulation: Polyolefin.
- 3 – Varying short pair lay-length (4 pairs).
- 4 – Cross Filler
- 5 – Aluminium/Polyester foil.
- 6 – Tinned copper drain wire.
- 7 – Inner Sheath: PVC material.
- 8 – Armour: Corrugated Aluminium TApe (CATA).
- 9 – Outer Sheath: PE material.

### ELECTRICAL AND DIMENSIONAL CHARACTERISTICS

Max. dc Resistance ( $\Omega$ /km) @20°C: 95.0  
Nom. Mutual Capacity (nF/km)@1kHz: 56  
NVP (% of light speed): 72  
Mean input Impedance ( $\Omega$ ): 100  $\pm$  5 @ 100MHz  
Propagation delay (ns@10MHz): max. 518  
Delay Skew (ns/100m): max. 40  
Coupling Att dB (min.): @30-100MHz 85  
@100-1000MHz 85-20log(f/100)

Approx. outer diameter (mm): 13.0  
Approx. weight (kg/km): 165.0  
Min. bending radius (mm): 195.0

### TRANSMISSION CHARACTERISTICS

Freq	ATTN	NEXT	PS-NEXT	ELFEXT	PS-ELFEXT	ACR	PS-ACR	RL
MHz	dB/100m (max.)	dB (min.)	dB (min.)	dB/100m (min.)	dB/100m (min.)	dB/100m (min.)	dB/100m (min.)	dB/100m (min.)
1*	2.1	75.3	72.3	68.0	65.0	73.2	70.2	20.0
4	3.8	66.3	63.3	58.0	55.0	62.5	59.5	23.0
8	5.2	61.8	58.8	51.9	48.9	56.5	53.5	24.5
10	5.9	60.3	57.3	50.0	47.0	54.4	51.4	25.0
16	7.4	57.2	54.2	45.9	42.9	49.9	46.9	25.0
25	9.2	54.3	51.3	42.0	39.0	45.0	42.0	24.3
31.25	10.3	52.9	49.9	40.1	37.1	42.6	39.6	23.6
62.5	14.5	48.4	45.4	34.1	31.1	33.8	30.8	21.5
100	18.4	45.3	42.3	30.0	27.0	26.9	23.9	20.1
155	22.9	42.4	39.4	26.2	23.2	19.5	16.5	18.8
200	26.1	40.8	37.8	24.0	21.0	14.7	11.7	18.0
250	29.2	39.3	36.3	22.0	19.0	10.1	7.1	17.3
300*	32.0	38.1	35.1	20.5	17.5	6.1	3.1	17.3
350*	34.7	37.1	34.1	19.1	16.1	2.5	1.0	17.3

\* For information only.

Note: DATA cables are not suitable for low impedance applications as: heating, lighting, etc...

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