

# Category 5e 25/50/100x2x0.5 Multipair

## U/UTP Symmetrical Data Cable

### Construction

<b>Conductor</b>	Bare copper wire, diameter 0.52 mm (AWG24)		
<b>Insulation</b>	PE, diameter 0.95 mm		
<b>Twisting</b>	2 cores to pair, diameter 1.9 mm		
<b>Sub unit stranding</b>	5 pairs to subunit + filler, diameter 5.0 mm		
<b>Main unit stranding</b>	5 subunits to a 25" unit + filler		
<b>Identification</b>	PET foil wrapping		
	Pair 1 Blue-White	Pair 10 Grey-Red	Pair 19 Brown-Yellow
	Pair 2 Orange-White	Pair 11 Blue-Black	Pair 20 Grey-Yellow
	Pair 3 Green-White	Pair 12 Orange-Black	Pair 21 Blue-Violet
	Pair 4 Brown-White	Pair 13 Green-Black	Pair 22 Orange-Violet
	Pair 5 Grey-White	Pair 14 Brown-Black	Pair 23 Green-Violet
	Pair 6 Blue-Red	Pair 15 Grey-Black	Pair 24 Brown-Violet
	Pair 7 Orange-Red	Pair 16 Blue-Yellow	Pair 25 Grey-Violet
	Pair 8 Green-Red	Pair 17 Orange-Yellow	-
	Pair 9 Brown-Red	Pair 18 Green-Yellow	-
<b>Sheath</b>	PVC or LSZH, diameter 15.5 mm grey, RAL 7035		
<b>Outer Diameter</b>	Nom. 15.5(25pair) - 35.8(100pair PVC) mm		
<b>Weight</b>	Nom. 207(25pair) LSZH - 920(100pair PVC) kg/km		
<b>Tensile force N</b>	Nom. 500(25 pair) - 2000(100pair)		

### Mechanical Properties

<b>Minimum bending radius</b>	Without load	≥ 60 mm
	With load	≥ 120 mm
<b>Temperature</b>	During operation	- 20° C to + 60° C
	During operation	0° C to + 50° C

### Electrical Properties (Cominal) at 20°C

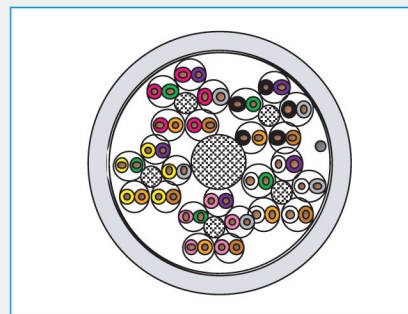
<b>Loop resistance</b>	-	≤ 190 Ω/km
<b>Resistance unbalance</b>	-	≤ 2%
<b>Test voltage</b>	core/core	1000 VDC 1 min
<b>Mutual capacitance</b>	800 Hz	Nom. 48 nF/km
<b>Capacitance unbalance</b>	pair/ground	≤ 1500 pF/km
<b>Mean characteristic impedance</b>	100 MHz	100 Ω ± 5 Ω
<b>Nominal velocity of propagation</b>	-	ca. 67%
<b>Insulation resistance</b>	500 V	≥ 2000 MΩ*km

### Nominal Transmission Characteristics at 20°C

F (MHZ)	Attenuation (dB/100m)	NEXT (dB)	PS-NEXT (dB)	ACR (dB/100m)	PS-ACR (dB/100m)	ELFEXT (dB/100m)	PS-ELFEXT (dB/100m)	Return loss (dB)
1	1.9	71	68	69.1	66.1	68	65	20
4	3.7	62	59	58.3	55.3	56	53	23
10	6.0	56	53	50.0	47.0	48	45	25
16	7.6	53	50	45.4	42.4	44	41	25
20	8.5	51	48	42.5	39.5	42	39	25
31.2	10.7	49	46	38.3	35.3	38	35	24
62.5	15.7	44	41	28.3	25.3	32	29	22
100	19.8	41	38	21.2	18.2	28	25	20
125	22.3	40	37	17.7	14.7	26	23	19

### Ordering Information

P/N	Product Description	P.U
100660014340 (1003301)	S-2YY, 25x2x0.52 Cat.5e, U/UTP Symmetrical Data Cable, Category 5e 25/50/100x2x0.5 Multipair	1000m/drum
tbd (1005651)	S-2YY, 50x2x0.52 Cat.5e, U/UTP Symmetrical Data Cable, Category 5e 25/50/100x2x0.5 Multipair	1000m/drum
tbd	S-2YY, 100x2x0.52 Cat.5e, U/UTP Symmetrical Data Cable, Category 5e 25/50/100x2x0.5 Multipair	1000m/drum
60011227 (1003318)	S-2YH, 25x2x0.52 Cat.5e LSZH, U/UTP Symmetrical Data Cable, Category 5e 25/50/100x2x0.5 Multipair	1000m/drum
60014786 (1003319)	S-2YH, 250x2x0.52 Cat.5e LSZH, U/UTP Symmetrical Data Cable, Category 5e 25/50/100x2x0.5 Multipair	1000m/drum
60025118 (1003320)	S-2YH, 100x2x0.52 Cat.5e LSZH, U/UTP Symmetrical Data Cable, Category 5e 25/50/100x2x0.5 Multipair	1000m/drum



### Application

- IEEE 802.3: 10Base-T; 100Base-T; ISDN; xDSL
- IEEE 802.5 16 MB; ISDN; TPDDI; ATM155Mbit/s

### Standards

- EN 50173, ISO/IEC 11801, IEC 56-5

### Fire Rating

- |      |   |
|------|---|
| PVC  | IEC 60332-1                             |
| LSZH | IEC 60332-1, IEC 61034-2, IEC 60754-1/2 |