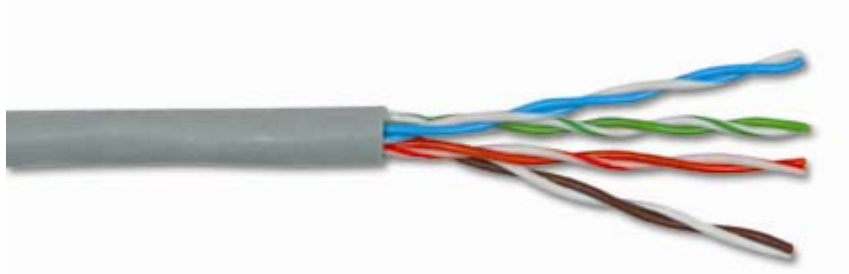




## DATA/LAN CABLES



### **CABLE TYPE SPECIFICATION**

**: CATEGORY 5 e UTP 4x2x24 AWG**

*ANSI/ TIA/EIA-568- B.2 and IEC –61156-5 (for ISO /IEC-11801 2 nd press)  
Category 5e , According to CENELEC EN 50288-3 And ICEA S-90-  
661:1997 , 100Mhz*

### **APPLICATION**

*: Used in data communication networks in transmission of analog or  
digital signals, has a maximum working transmission speed of 100 Mbit/sn*

### **CONSTRUCTION**

*: Ø 0,51 mm electrolytic copper conductor.  
Polyolefin insulation.  
Cores twisted in pairs  
Pairs stranded together.  
Grey PVC outer sheath (RAL 7032)  
Cable outer diameter 5.0 mm  
Cable weight 31.0 kg/km  
Standard Packing : 100m coil , 305 m box , 1000m drum*

### **TECHNICAL DATA**

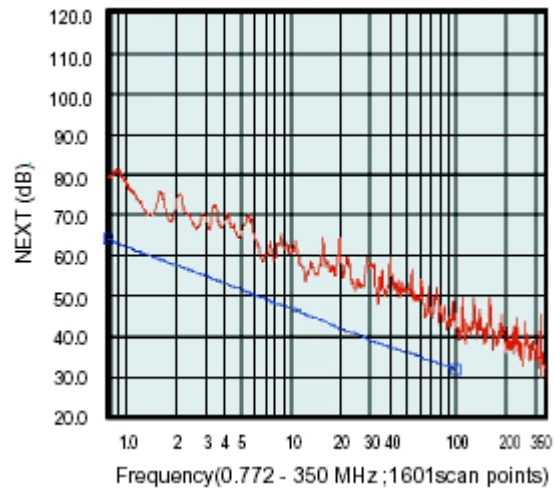
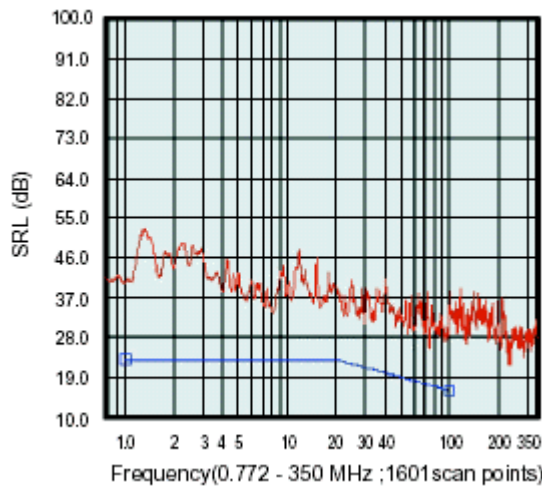
**:**

- |                                 |                                       |
|---------------------------------|---------------------------------------|
| <b>1. Impedance</b>             | 100 $\Omega$ $\pm$ % 6 Ohm 1-100 MHz  |
| <b>2. Mutual Capacitance</b>    | Max. 56 nf/km                         |
| <b>3. Conductor resistance</b>  | Max. 94 $\Omega$ /km                  |
| <b>4. Resistance Unbalance</b>  | Max. %2                               |
| <b>5. Insulation Resistance</b> | 5000 $\Omega$ W km (500 VDC)          |
| <b>6. Test Voltage</b>          | Max. 1200 V                           |
| <b>7. Working Voltage</b>       | Max. 250 V                            |
| <b>8. Working Temperature</b>   | -20 $^{\circ}$ C ...+ 60 $^{\circ}$ C |
| <b>9. Min. Bending Radius</b>   | 8xD (Kablo Yarıçapı) (Cable Radius)   |
| <b>10. Tensile Strength</b>     | Max. 50 N/mm <sup>2</sup>             |

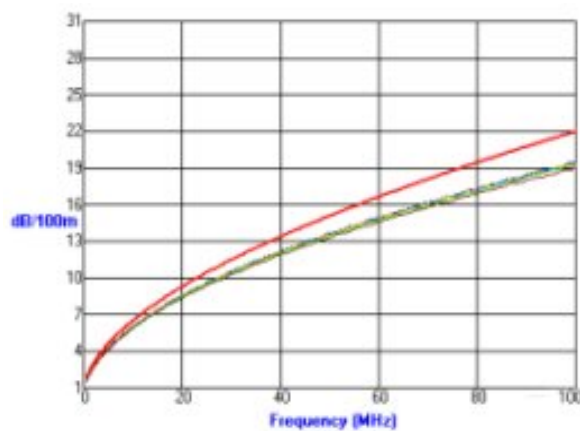
# DATA/LAN CABLES – CATEGORY 5 e UTP 4x2x24 AWG

## Electrical Properties

Frequency (MHz)	Insertion Loss Max. (dB/100 m)	Near-End Crosstalk (NEXT) Loss Min. (dB)	PSNear-End Crosstalk (PS NEXT) Loss Min. (dB)	Equal Level Far-End Crosstalk (ELFEXT) Min. (dB/100 m)	PS Equal Level Far-End Crosstalk (PSELFEX) Min. (dB/100 m)	Structural Return Loss (SRL) Min. (dB)
0,772	1,8	67,0	64	66,0	63,8	---
1,0	2,0	65,3	62,3	63,8	60,8	23,0
4,0	4,1	56,3	53,3	51,8	48,8	23,0
8,0	5,8	51,8	48,8	45,7	42,7	23,0
10,0	6,5	50,3	47,3	43,8	40,8	23,0
16,0	8,2	47,2	44,2	39,7	36,7	23,0
20,0	9,3	45,8	42,8	37,8	34,8	23,0
25,0	10,4	44,3	41,3	35,8	32,8	22,0
31,25	11,7	42,9	39,9	33,9	30,9	21,0
62,5	17,0	38,4	35,4	27,9	24,9	18,0
100	22,0	35,3	32,3	23,8	20,8	16,0



## Insertion Loos



## DATA LAN CABLES



**CABLE TYPE** : **CATEGORY 5 e FTP 4x2x24 AWG**

**SPECIFICATION** : *ANSI/TIA/EIA-568-B.2 and IEC – 61156 – 5 (for ISO/IEC –118012 nd press) category 5 e , According to CENELEC EN 5050288-3 and 50288 – 3 and IEC S – 90-661:1997 ,100 Mhz*

**APPLICATION** : *Used in data communication networks in transmission of analog or digital signals, has a maximum working transmission speed of 100 Mbit/sn*

**CONSTRUCTION** : *Ø 0,51 mm electrolytic copper conductor.  
Polyolefin insulation.  
Cores twisted in pairs  
Pairs stranded together.  
Polyester tape that does not contain moisture and have dielectric property  
Ø 0,51 mm electrolytic tinned copper earth wire  
AL- PES foil screen  
Grey PVC outhar sheath (RAL 7032)  
Cable outer diameter 6.0 mm  
Cable weight 43.0 kg/km  
Standard Packing : 100m coil , 305 m box , 1000m drum*

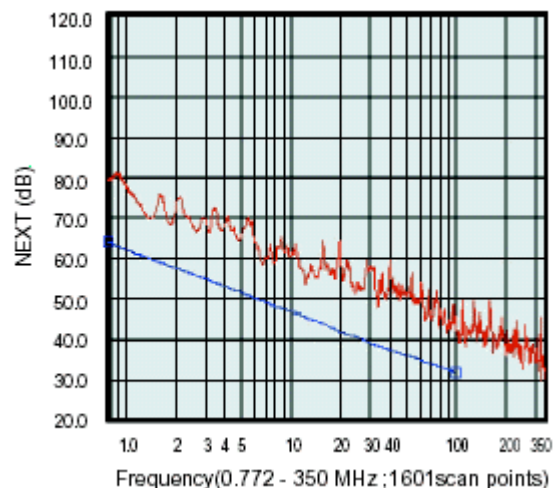
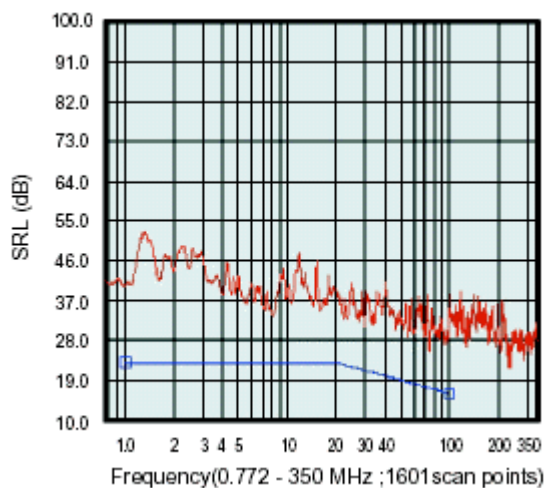
**TECHNICAL DATA** :

<b>1. Impedance</b>	100 $\Omega$ $\pm$ % 6 Ohm 1-100 MHz
<b>2. Mutual Capacitance</b>	Max. 56 nf/km
<b>3. Conductor resistance</b>	Max. 94 $\Omega$ /km
<b>4. Resistance Unbalance</b>	Max. %2
<b>5. Insulation Resistance</b>	5000 M $\Omega$ km (500 VDC)
<b>6. Test Voltage</b>	Max. 1200 V
<b>7. Working Voltage</b>	Max. 250 V
<b>8. Working Temperature</b>	-20 $^{\circ}$ C ...+ 60 $^{\circ}$ C
<b>9. Min. Bending Radius</b>	8xD (Kablo Yarıçapı) (Cable Radius)
<b>10. Tensile Strength</b>	Max. 50 N/mm <sup>2</sup>

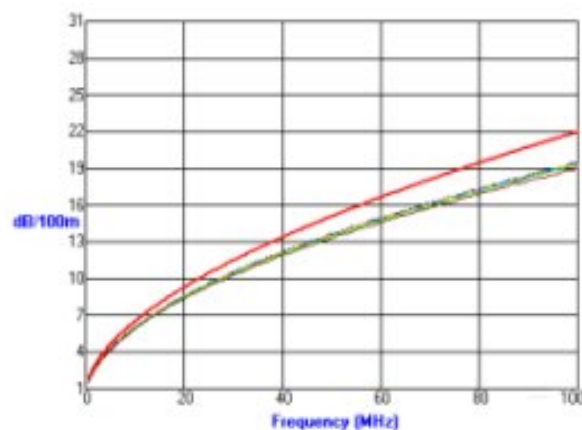
# DATA/LAN CABLES – CATEGORY 5 FTP 4x2x24 AWG

## Electrical Properties

Frequency (MHz)	Insertion Loss Max. (dB/100 m)	Near-End Crosstalk (NEXT) Loss Min. (dB)	PSNear-End Crosstalk (PS NEXT) Loss Min. (dB)	Equal Level Far-End Crosstalk (ELFEXT) Min. (dB/100 m)	PS Equal Level Far-End Crosstalk (PSELFEXT) Min. (dB/100 m)	Structural Return Loss (SRL) Min. (dB)
0,772	1,8	67,0	64	66,0	63,8	---
1,0	2,0	65,3	62,3	63,8	60,8	23,0
4,0	4,1	56,3	53,3	51,8	48,8	23,0
8,0	5,8	51,8	48,8	45,7	42,7	23,0
10,0	6,5	50,3	47,3	43,8	40,8	23,0
16,0	8,2	47,2	44,2	39,7	36,7	23,0
20,0	9,3	45,8	42,8	37,8	34,8	23,0
25,0	10,4	44,3	41,3	35,8	32,8	22,0
31,25	11,7	42,9	39,9	33,9	30,9	21,0
62,5	17,0	38,4	35,4	27,9	24,9	18,0
100	22,0	35,3	32,3	23,8	20,8	16,0



## Insertion Loos



## DATA/LAN CABLES



**CABLE TYPE** : **CATEGORY 5e - STP 4x2x24 AWG**

**SPECIFICATION** : *ANSI/TIA/EIA-568-B.2 and IEC – 61156 – 5 (for ISO/IEC – 118012 nd press category 5 e , According to CENELEC EN 5050288-3 and 50288 – 3 and IEC S – 90-661:1997 ,100 Mhz*

**APPLICATION** : *Used in data communication networks in transmission of analog or digital signals, has a maximum working transmission speed of 100 Mbit/sn. By AL PES screen ,the pairs are pairs are protected against electromagnetic effects*

**CONSTRUCTION** : *Ø 0,51 mm electrolytic copper conductor.  
Polyolefin insulation.  
Cores twisted in pairs  
Pairs stranded together.  
Pairs covered with AL-PES foil screen individually.  
Four Screened pairs stranded together.  
Grey PVC outer diameter 6.4 mm  
Cable weight 58.0 kg/km  
Standard Packing : 100m coil , 305 m box , 1000m drum*

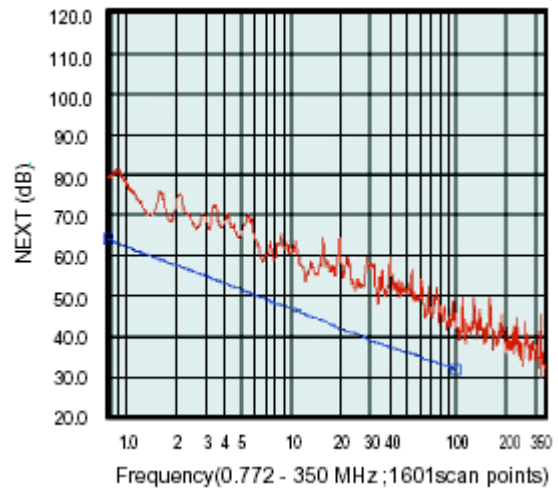
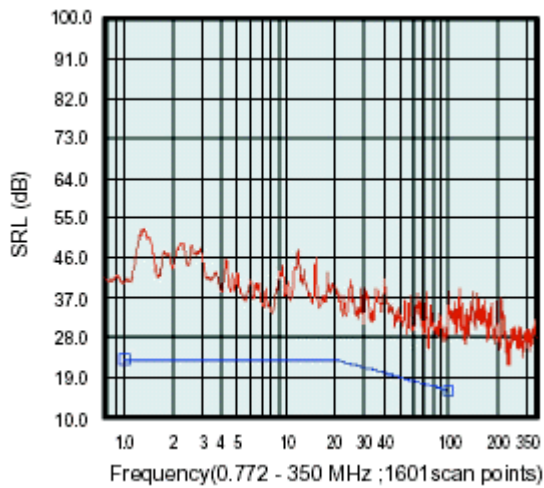
**TECHNICAL DATA** :

1. Impedance	100 $\Omega$ $\pm$ % 6 Ohm 1-100 MHz
2. Mutual Capacitance	Max. 56 nf/km
3. Conductor resistance	Max. 94 $\Omega$ /km
4. Resistance Unbalance	Max. %2
5. Insulation Resistance	5000 M $\Omega$ km (500 VDC)
6. Test Voltage	Max. 1200 V
7. Working Voltage	Max. 250 V
8. Working Temperature	-20 <sup>0</sup> C ...+ 60 <sup>0</sup> C
9. Min. Bending Radius	8xD (Kablo Yarıçapı) (Cable Radius)
10. Tensile Strength	Max. 50 N/mm <sup>2</sup>

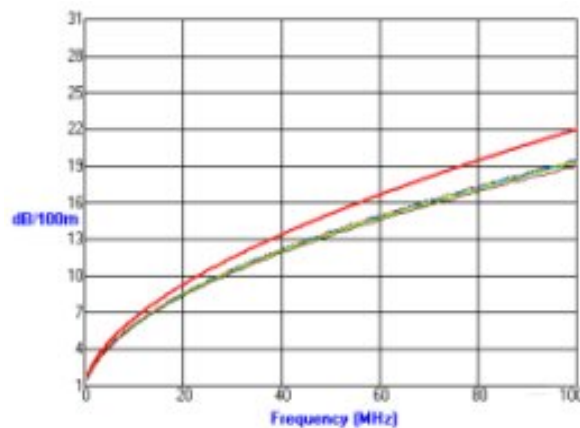
# DATA/LAN CABLES- CATEGORY 5 e STP 4x2x24 AWG

## Electrical Properties

Frequency (MHz)	Insertion Loss Max. (dB/100 m)	Near-End Crosstalk (NEXT) Loss Min. (dB)	PSNear-End Crosstalk (PS NEXT) Loss Min. (dB)	Equal Level Far-End Crosstalk (ELFEXT) Min. (dB/100 m)	PS Equal Level Far-End Crosstalk (PSELFEXT) Min. (dB/100 m)	Structural Return Loss (SRL) Min. (dB)
0,772	1,8	67,0	64	66,0	63,8	---
1,0	2,0	65,3	62,3	63,8	60,8	23,0
4,0	4,1	56,3	53,3	51,8	48,8	23,0
8,0	5,8	51,8	48,8	45,7	42,7	23,0
10,0	6,5	50,3	47,3	43,8	40,8	23,0
16,0	8,2	47,2	44,2	39,7	36,7	23,0
20,0	9,3	45,8	42,8	37,8	34,8	23,0
25,0	10,4	44,3	41,3	35,8	32,8	22,0
31,25	11,7	42,9	39,9	33,9	30,9	21,0
62,5	17,0	38,4	35,4	27,9	24,9	18,0
100	22,0	35,3	32,3	23,8	20,8	16,0



## Insertion Loos



## DATA/LAN CABLES



**CABLE TYPE** : **CATEGORY 5e S/ STP 4x2x24 AWG**

**SPECIFICATION** : *ANSI/ TIA/EIA-568-B.2 and IEC – 61156 – 5 (for ISO/IEC –118012 nd press category 5 e , According to CENELEC EN 5050288-3 and 50288 – 3 and IEC S – 90-661:1997 ,100 Mhz*

**APPLICATION** : *Used in data communication networks in transmission of analog or digital signals, has a maximum working transmission speed of 100 Mbit/sn. By AL PES screen ,the pairs are pairs are protected against electromagnetic Effects*

**CONSTRUCTION** : *Ø 0,51 mm electrolytic copper conductor.  
Polyolefin insulation.  
Cores twisted in pairs  
Pairs covered with AL-PES foil screen individually.  
Four Screened pairs stranded together.  
Ø 0,51 mm electrolytic tinned copper earth wire  
85 % braiding of tinned copper wire screen  
Grey PVC outer diameter 6.6 mm  
Cable weight 66.0 kg/km  
Standard Packing : 100m coil , 305 m box , 1000 m drum*

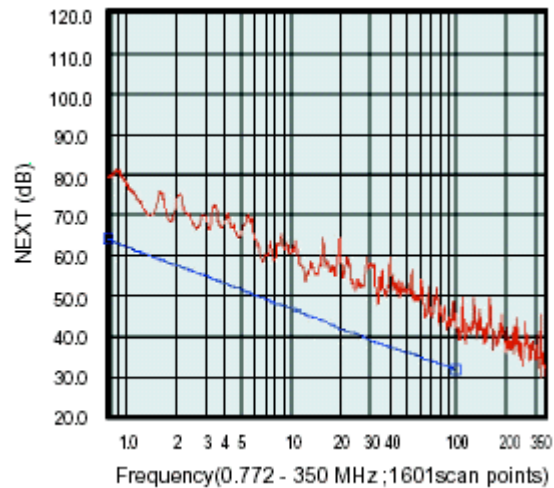
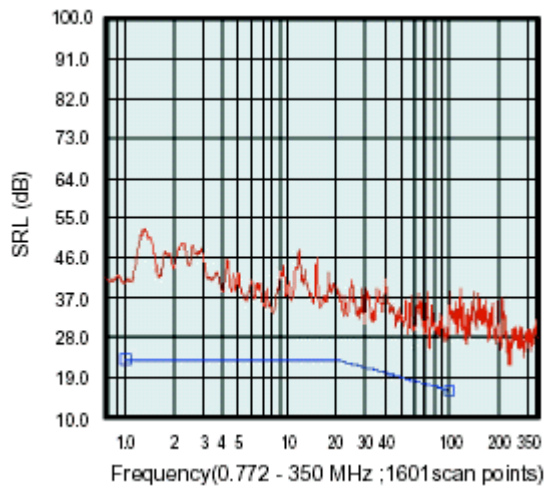
**TECHNICAL DATA** :

<b>1. Impedance</b>	100 $\Omega \pm \% 6$ Ohm 1-100 MHz
<b>2. Mutual Capacitance</b>	Max. 56 nf/km
<b>3. Conductor resistance</b>	Max. 94 $\Omega$ /km
<b>4. Resistance Unbalance</b>	Max. %2
<b>5. Insulation Resistance</b>	5000 M $\Omega$ km (500 VDC)
<b>6. Test Voltage</b>	Max. 1200 V
<b>7. Working Voltage</b>	Max. 250 V
<b>8. Working Temperature</b>	-20 $^{\circ}$ C ...+ 60 $^{\circ}$ C
<b>9. Min. Bending Radius</b>	8xD (Kablo Yarıçapı) (Cable Radius)
<b>10. Tensile Strength</b>	Max. 50 N/mm <sup>2</sup>

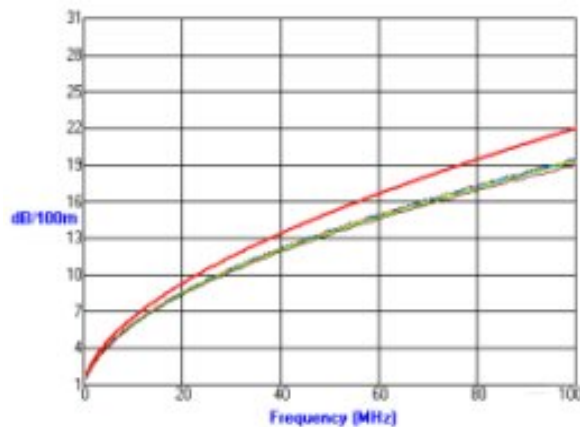
# DATA/LAN CABLES- CATEGORY 5 e S/ STP 4x2x24 AWG

## Electrical Properties

Frequency (MHz)	Insertion Loss Max. (dB/100 m)	Near-End Crosstalk (NEXT) Loss Min. (dB)	PSNear-End Crosstalk (PS NEXT) Loss Min. (dB)	Equal Level Far-End Crosstalk (ELFEXT) Min. (dB/100 m)	PS Equal Level Far-End Crosstalk (PSELFEX) Min. (dB/100 m)	Structural Return Loss (SRL) Min. (dB)
0,772	1,8	67,0	64	66,0	63,8	---
1,0	2,0	65,3	62,3	63,8	60,8	23,0
4,0	4,1	56,3	53,3	51,8	48,8	23,0
8,0	5,8	51,8	48,8	45,7	42,7	23,0
10,0	6,5	50,3	47,3	43,8	40,8	23,0
16,0	8,2	47,2	44,2	39,7	36,7	23,0
20,0	9,3	45,8	42,8	37,8	34,8	23,0
25,0	10,4	44,3	41,3	35,8	32,8	22,0
31,25	11,7	42,9	39,9	33,9	30,9	21,0
62,5	17,0	38,4	35,4	27,9	24,9	18,0
100	22,0	35,3	32,3	23,8	20,8	16,0



Insertion Loos



## DATA/LAN CABLES



**CABLE TYPE** : **CATEGORY 6 UTP 4x2x23 AWG**

**SPECIFICATION** : *ANSI/TIA/EIA-568-B.2 and IEC – 61156 – 5 (for ISO/IEC – 118012 nd press) Category 6 e , According to CENELEC EN 5050288-3 and 50288 – 5 ,250 Mhz*

**APPLICATION** : *Used in data communication networks in transmission of analog or digital signals, has a maximum working transmission speed of 300 Mbit/sn.*

**CONSTRUCTION** : *Ø 0,57 mm electrolytic copper conductor.  
Polyolefin insulation.  
Cores twisted in pairs  
Pairs stranded together. with star shaped separator  
Grey PVC outer sheath (RAL 7032)  
Cable outer diameter 6.0 mm  
Cable weight 44.0 kg/km  
Standard Packing : 100m coil , 305 m box , 1000m drum*

**TECHNICAL DATA** :

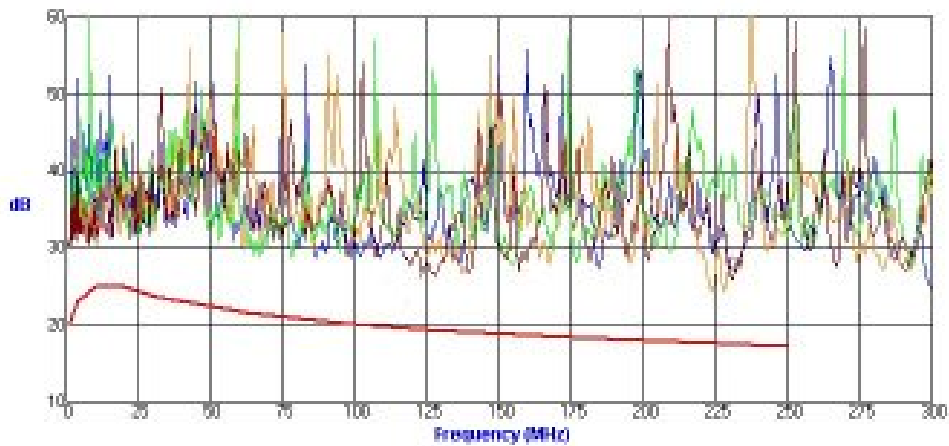
<b>1. Impedance</b>	1-100 MHz 100 $\Omega \pm \% 6$ Ohm 101 – 250 MHz 100 $\Omega \pm \% 20$ Ohm
<b>2. Mutual Capacitance</b>	Max. 56 nf/km
<b>3. Conductor resistance</b>	Max. 72 $\Omega$ /km
<b>4. Resistance Unbalance</b>	Max. %2
<b>5. Insulation Resistance</b>	5000 M $\Omega$ km (500 VDC)
<b>6. Test Voltage</b>	Max. 1200 V
<b>7. Working Voltage</b>	Max. 250 V
<b>8. Working Temperature</b>	-20 $^{\circ}$ C ...+ 60 $^{\circ}$ C
<b>9. Min. Bending Radius</b>	8xD (Kablo Yarıçapı) (Cable Radius)
<b>10. Tensile Strength</b>	Max. 50 N/mm <sup>2</sup>

# DATA/LAN CABLES- CATEGORY 6 UTP 4x2x23 AWG

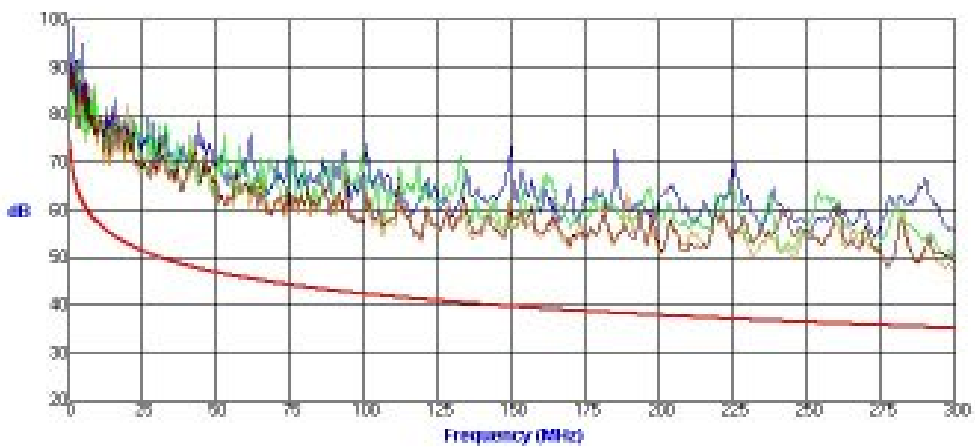
## Electrical Properties

Frequency (MHz)	Insertion Loss Max. (dB/100 m)	Near-End Crosstalk (NEXT) Loss Min. (dB)	PSNear-End Crosstalk (PS NEXT) Loss Min. (dB)	Equal Level Far-End Crosstalk (ELFEXT) Min. (dB/100 m)	PS Equal Level Far-End Crosstalk (PSELFEXT) Min. (dB/100 m)	Return Loss (RL) Min. (dB)
0,772	1,8	76,0	74,0	70,0	67,0	---
1,0	2,0	74,3	72,3	67,8	64,8	20,0
4,0	3,8	65,3	63,3	55,8	52,8	23,0
8,0	5,3	60,8	58,8	49,7	46,7	24,5
10,0	6,0	59,3	57,3	47,8	44,8	25,0
16	7,6	56,2	54,2	43,7	40,7	25,0
20,0	8,5	54,8	52,8	41,8	38,8	24,3
25,0	9,5	53,3	51,3	39,8	36,8	23,6
31,25	10,7	51,9	49,9	37,9	34,9	21,5
62,5	15,4	47,4	45,4	31,9	28,9	20,1
100	19,8	44,3	42,3	27,8	24,8	18,0
200	29,0	39,8	37,8	21,8	18,8	17,3
250	32,8	38,3	36,3	19,8	16,8	16,8

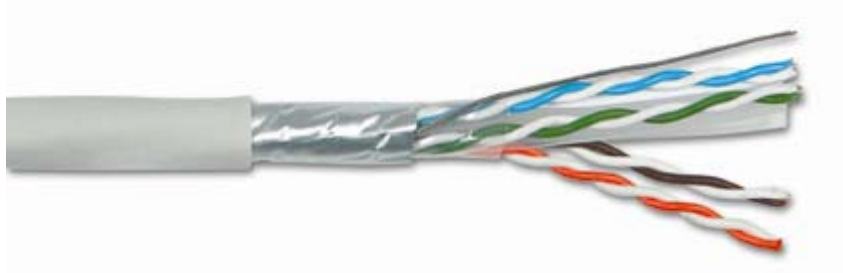
### Return Loss



### PowerSum NEXT



## DATA/LAN CABLES



**CABLE TYPE** : **CATEGORY 6 FTP 4x2x23 AWG**

**SPECIFICATION** : *ANSI/ TIA/EIA-568-B.2 and IEC – 61156 – 5 (for ISO/IEC –118012 nd press) Category 6 e , According to CENELEC EN 5050288-3 and 50288 – 5 ,250 Mhz*

**APPLICATION** : *Used in data communication networks in transmission of analog or digital signals, has a maximum working transmission speed of 300 Mbit/sn.*

**CONSTRUCTION** : *Ø 0,57 mm electrolytic copper conductor.  
Polyolefin insulation.  
Cores twisted in pairs  
Pairs stranded together. with star shaped separator  
Polyester tape that does not contain moisture and have dielectric property.  
Ø 0,51 mm electrolytic tinned copper earth wire  
AL – PES foil screen  
Grey PVC outer sheath (RAL 7032)  
Cable outer diameter 6.3 mm  
Cable weight 49.0 kg/km  
Standard Packing : 100m coil , 305 m box , 1000m drum*

**TECHNICAL DATA** :

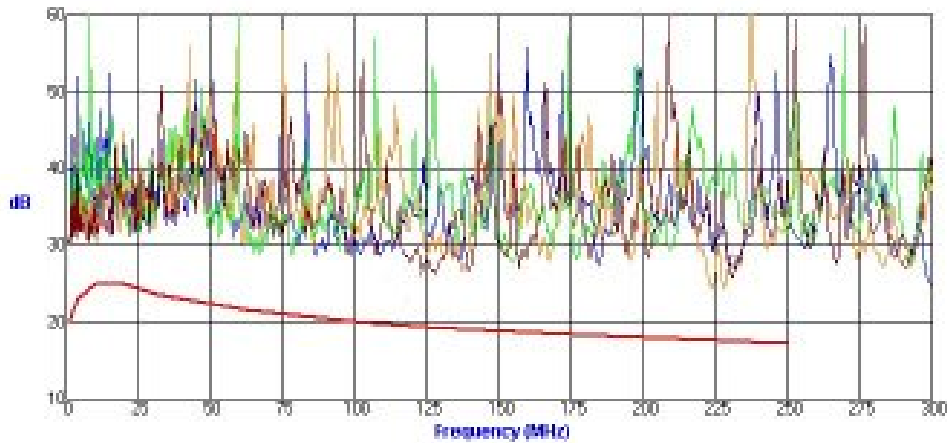
<b>1. Impedance</b>	1-100 MHz 100 $\Omega$ $\pm$ % 6 Ohm 101 – 250 MHz 100 $\Omega$ $\pm$ % 20 Ohm
<b>2. Mutual Capacitance</b>	Max. 56 nf/km
<b>3. Conductor resistance</b>	Max. 72 $\Omega$ /km
<b>4. Resistance Unbalance</b>	Max. %2
<b>5. Insulation Resistance</b>	5000 M $\Omega$ km (500 VDC)
<b>6. Test Voltage</b>	Max. 1200 V
<b>7. Working Voltage</b>	Max. 250 V
<b>8. Working Temperature</b>	-20 $^{\circ}$ C ...+ 60 $^{\circ}$ C
<b>9. Min. Bending Radius</b>	8xD (Kablo Yarıçapı) (Cable Radius)
<b>10. Tensile Strength</b>	Max. 50 N/mm <sup>2</sup>

# DATA/LAN CABLES- CATEGORY 6 FTP 4x2x23 AWG

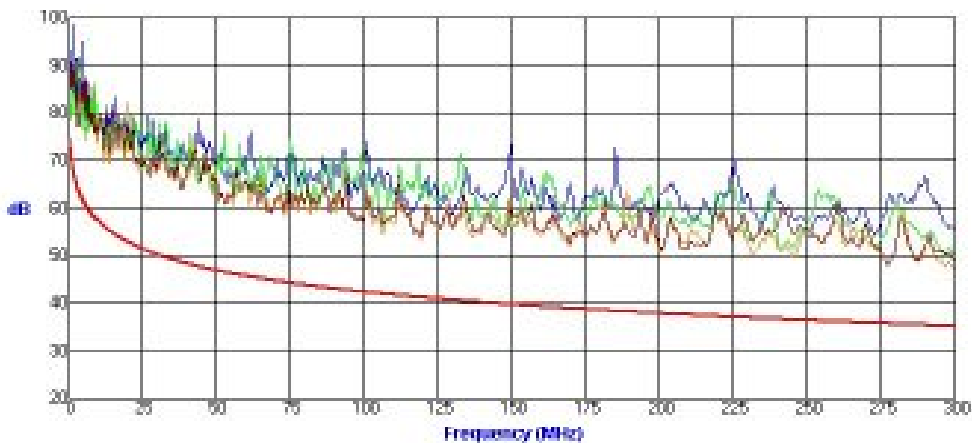
## Electrical Properties

Frequency (MHz)	Insertion Loss Max. (dB/100 m)	Near-End Crosstalk (NEXT) Loss Min. (dB)	PSNear- End Crosstalk (PS NEXT) Loss Min. (dB)	Equal Level Far- End Crosstalk (ELFEXT) Min. (dB/100 m)	PS Equal Level Far- End Crosstalk (PSELFEX) Min. (dB/100 m)	Return Loss (RL) Min. (dB)
0,772	1,8	76,0	74,0	70,0	67,0	---
1,0	2,0	74,3	72,3	67,8	64,8	20,0
4,0	3,8	65,3	63,3	55,8	52,8	23,0
8,0	5,3	60,8	58,8	49,7	46,7	24,5
10,0	6,0	59,3	57,3	47,8	44,8	25,0
16	7,6	56,2	54,2	43,7	40,7	25
20,0	8,5	54,8	52,8	41,8	38,8	24,3
25,0	9,5	53,3	51,3	39,8	36,8	23,6
31,25	10,7	51,9	49,9	37,9	34,9	21,5
62,5	15,4	47,4	45,4	31,9	28,9	20,1
100	19,8	44,3	42,3	27,8	24,8	18,0
200	29,0	39,8	37,8	21,8	18,8	17,3
250	32,8	38,3	36,3	19,8	16,8	16,8

### Return Loss



### PowerSum NEXT



## DATA/LAN CABLES



**CABLE TYPE** : **CATEGORY 6 S - FTP 4x2x23 AWG**

**SPECIFICATION** : *ANSI/ TIA/EIA-568-B.2 and IEC – 61156 – 5 (for ISO/IEC –118012 nd press) Category 6 e , According to CENELEC EN 5050288-3 and 50288 – 5 ,250 Mhz*

**APPLICATION** : *Used in data communication networks in transmission of analog or digital signals, has a maximum working transmission speed of 300 Mbit/sn.*

**CONSTRUCTION** : *Ø 0,57mm electrolytic copper conductor.  
Polyolefin insulation.  
Cores twisted in pairs  
Four pairs stranded together. with star shaped separator  
Polyester tape that does not contain moisture and have dielectric property.  
Ø 0,51 mm electrolytic tinned copper earth wire  
AL – PES foil screen  
% 85 braiding of tinned copper earth wire  
Grey PVC outer sheath (RAL 7032)  
Cable outer diameter 6,5 mm  
Cable weight 57.0 kg/km  
Standard Packing : 100m coil , 305 m box , 1000m drum*

**TECHNICAL DATA** :

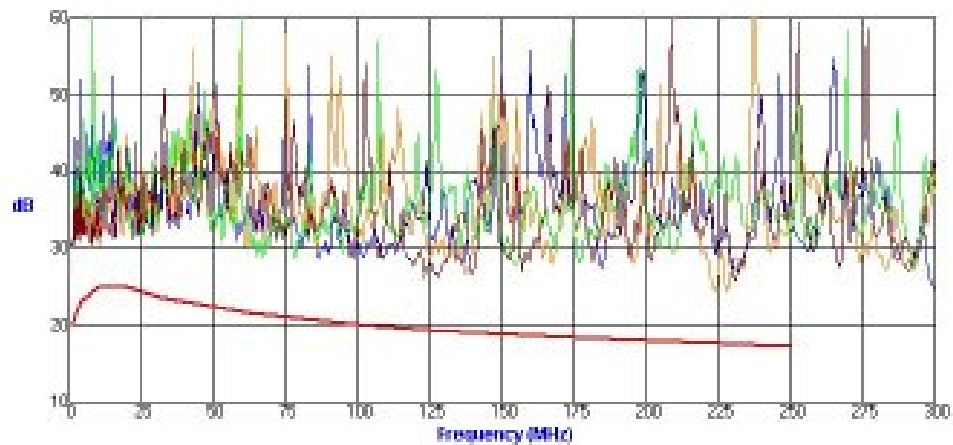
- |                                 |   |
|---------------------------------|---|
| <b>1. Impedance</b>             | 1-100 MHz 100 $\Omega$ $\pm$ % 6 Ohm<br>101 – 250 MHz 100 $\Omega$ $\pm$ % 20 Ohm |
| <b>2. Mutual Capacitance</b>    | Max. 56 nf/km   |
| <b>3. Conductor resistance</b>  | Max. 72 $\Omega$ /km  |
| <b>4. Resistance Unbalance</b>  | Max. %2   |
| <b>5. Insulation Resistance</b> | 5000 M $\Omega$ km (500 VDC)  |
| <b>6. Test Voltage</b>          | Max. 1200 V   |
| <b>7. Working Voltage</b>       | Max. 250 V  |
| <b>8. Working Temperature</b>   | -20 $^{\circ}$ C ...+ 60 $^{\circ}$ C   |
| <b>9. Min. Bending Radius</b>   | 8xD (Kablo Yarıçapı) (Cable Radius)   |
| <b>10. Tensile Strength</b>     | Max. 50 N/mm <sup>2</sup>   |

## DATA/LAN CABLES- CATEGORY 6 S - FTP 4x2x23 AWG

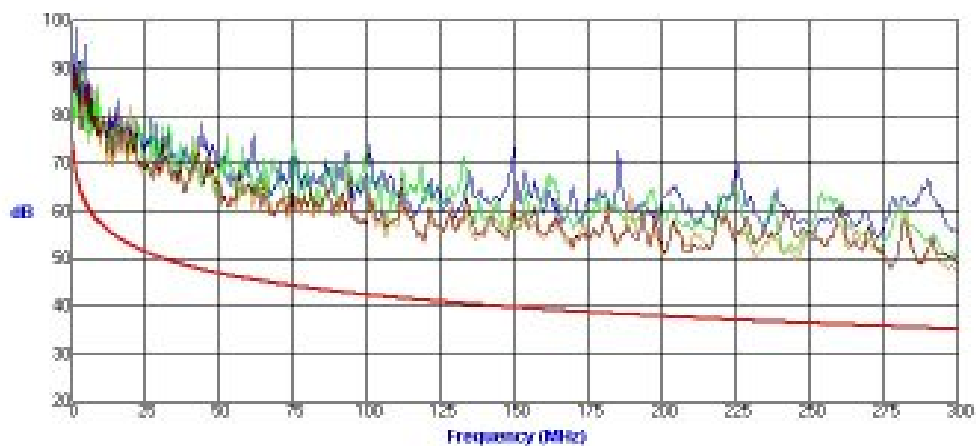
### Electrical Properties

Frequency (MHz)	Insertion Loss Max. (dB/100 m)	Near-End Crosstalk (NEXT) Loss Min. (dB)	PSNear-End Crosstalk (PS NEXT) Loss Min. (dB)	Equal Level Far-End Crosstalk (ELFEXT) Min. (dB/100 m)	PS Equal Level Far-End Crosstalk (PSELFEXT) Min. (Db/100 m)	Return Loss (RL) Min. (dB)
0,772	1,8	76,0	74,0	70,0	67,0	---
1,0	2,0	74,3	72,3	67,8	64,8	20,0
4,0	3,8	65,3	63,3	55,8	52,8	23,0
8,0	5,3	60,8	58,8	49,7	46,7	24,5
10,0	6,0	59,3	57,3	47,8	44,8	25,0
16	7,6	56,2	54,2	43,7	40,7	25
20,0	8,5	54,8	52,8	41,8	38,8	24,3
25,0	9,5	53,3	51,3	39,8	36,8	23,6
31,25	10,7	51,9	49,9	37,9	34,9	21,5
62,5	15,4	47,4	45,4	31,9	28,9	20,1
100	19,8	44,3	42,3	27,8	24,8	18,0
200	29,0	39,8	37,8	21,8	18,8	17,3
250	32,8	38,3	36,3	19,8	16,8	16,8

### Return Loss



### PowerSum NEXT



## **DATA/LAN CABLES (PATCH CABLES)**



**CABLE TYPE** : **CATEGORY 5 UTP 4x2x24 AWG**

**SPECIFICATION** : *ANSI/ICEA S-80-576-ANSI/TIA/EIA 568-A*

**APPLICATION** : *Used in data communication networks in transmission of analog or digital signals, has a maximum working transmission speed of 100 Mbit/sn*

**CONSTRUCTION** : *7x Ø 0,20 mm stranded electrolytic copper conductor.  
Polyolefin insulation.  
Cores twisted in pairs  
Pairs stranded together.  
Grey PVC outer sheath.  
Cable Outer diameter 5.0 mm.  
Cable weight 30 kg/km.  
Standard Packing : 100 m coil, 305 m box, 1000 m drum*

**TECHNICAL DATA** :

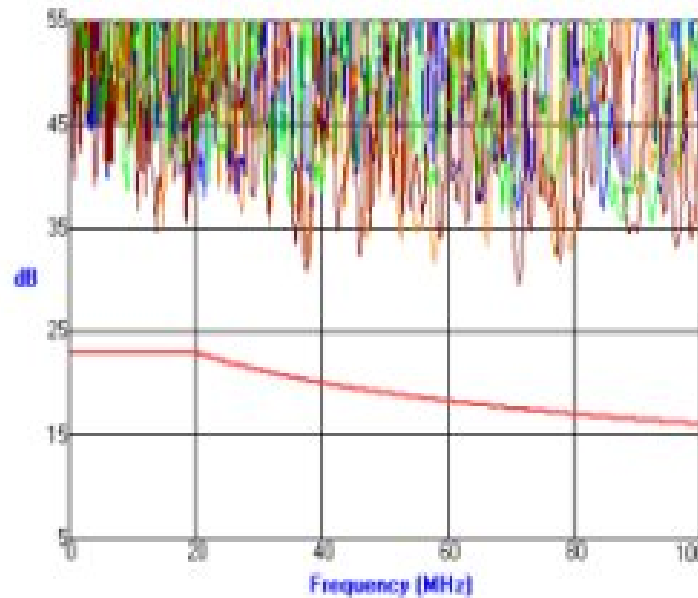
<b>1. Impedance</b>	100 $\Omega$ $\pm$ % 15 Ohm 1-100 MHz
<b>2. Mutual Capacitance</b>	Max. 56 nf/km
<b>3. Conductor resistance</b>	Max. 88 $\Omega$ /km
<b>4. Resistance Unbalance</b>	Max. %3
<b>5. Insulation Resistance</b>	5000 M $\Omega$ km (500 VDe)
<b>6. Test Voltage</b>	Max. 500 V
<b>7. Working Voltage</b>	Max. 250 V
<b>8. Working Temperature</b>	-20 $^{\circ}$ C ...+ 60 $^{\circ}$ C
<b>9. Min. Bending Radius</b>	10xD (Kablo Yarıçapı) (Cable Radius)
<b>10. Tensile Strength</b>	Max. 50 N/mm <sup>2</sup>

# DATA/LAN CABLES- CATEGORY 5 UTP 4x2x24 AWG PATCH CABLE

## Electrical Properties

Frequency (MHz)	Structural Return Loss SRL (dB)	Attenuation Max. ( dB/100 m)	NEXT (Near and crosstalk) Min. (dB)
0,772	23,0	1,8	64
1,0	23,0	2,2	62
4,0	23,0	5,2	53
8,0	23,0	6,8	48
10,0	23,0	8,6	47
16,0	23,0	9,2	44
20,0	23,0	11,2	42
25,0	22,0	12,5	41
31,25	21,06	15,8	39
62,5	18,5	22,4	35
100	16,0	26,0	32

## Structural Return Loss SRL (dB)



## DATA/LAN CABLES (PATCH CABLES)



**CABLE TYPE** : **CATEGORY 5 FTP 4x2x24 AWG**

**SPECIFICATION** : *ANSI/ICEA S-80-576-ANSI/TIA/EIA 568-A*

**APPLICATION** : *Used in data communication networks in transmission of analog or digital signals, has a maximum working transmission speed of 100 Mbit/sn*

**CONSTRUCTION** : *7x Ø 0,20 mm stranded electrolytic copper conductor.  
Polyolefin insulation.  
Cores twisted in pairs  
Pairs stranded together.  
Polyester tape that does not contain moisture and have dielectric property.  
7x Ø 0,20 mm electrolytic tinned copper earth wire.  
AL-PES foil screen.  
Grey PVC outer sheath.  
Cable Outer diameter 5.6 mm.  
Cable weight 43,0 kg/km.  
Standard Packing : 100 m coil, 305 m box, 1000 m drum*

**TECHNICAL DATA** :

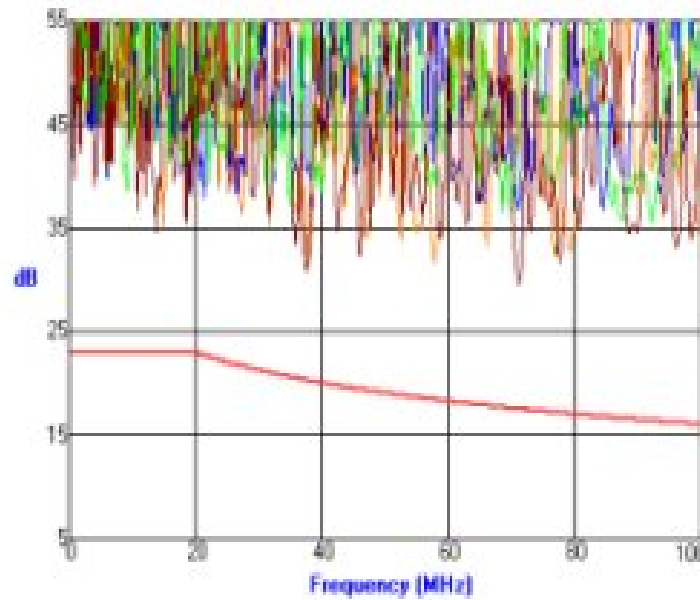
1. Impedance	100 $\Omega$ $\pm$ % 15 Ohm 1-100 MHz
2. Mutual Capacitance	Max. 56 nf/km
3. Conductor resistance	Max. 88 $\Omega$ /km
4. Resistance Unbalance	Max. %3
5. Insulation Resistance	5000 M $\Omega$ km (500 VDC)
6. Test Voltage	Max. 500 V
7. Working Voltage	Max. 250 V
8. Working Temperature	-20 $^{\circ}$ C ...+ 60 $^{\circ}$ C
9. Min. Bending Radius	10xD (Kablo Yarıçapı) (Cable Radius)
10. Tensile Strength	Max. 50 N/mm <sup>2</sup>

**DATA/LAN CABLES- CATEGORY 5 FTP 4x2x24 AWG PATCH CABLE**

**Electrical Properties**

Frequency (MHz)	Structural Return Loss SRL (dB)	Attenuation Max. ( dB/100 m)	NEXT (Near and crosstalk) Min. (dB)
0,772	23,0	1,8	64
1,0	23,0	2,2	62
4,0	23,0	4,8	53
8,0	23,0	6,4	48
10,0	23,0	7,5	47
16,0	23,0	8,7	44
20,0	23,0	10,2	42
25,0	22,0	12,0	41
31,25	21,06	13,9	39
62,5	18,5	19,7	35
100	16,0	24,0	32

**Structural Return Loss SRL (dB)**



## DATA/LAN CABLES (PATCH CABLES)



**CABLE TYPE** : **CATEGORY 5 S/FTP 4x2x24 AWG**

**SPECIFICATION** : **ANSI/ICEA S-80-576-ANSI/TIA/EIA 568-A**

**APPLICATION** : *Used in data communication networks in transmission of analog or digital signals, has a maximum working transmission speed of 100 Mbit/sn. By the braiding on cable core, the cable is protected against electromagnetic effects from outside.*

**CONSTRUCTION** : *7x Ø 0,20 mm stranded electrolytic copper conductor.  
Polyolefin insulation.  
Cores twisted in pairs  
Pairs stranded together.  
Polyester tape that does not contain moisture and have dielectric property.  
85 % braiding of tinned copper wire screen  
AL-PES foil screen.  
Grey PVC outer sheath.  
Cable Outer diameter 5.9 mm.  
Cable weight 55,0 kg/km.  
Standard Packing : 100 m coil, 305 m box, 1000 m drum*

**TECHNICAL DATA** :

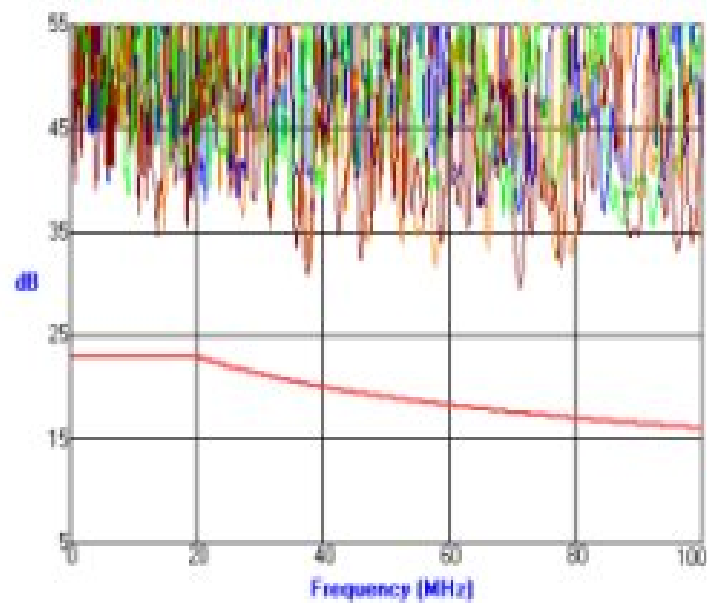
<b>1. Impedance</b>	100 Ω ± % 15 Ohm 1-100 MHz
<b>2. Mutual Capacitance</b>	Max. 56 nf/km
<b>3. Conductor resistance</b>	Max. 88 Ω/km
<b>4. Resistance Unbalance</b>	Max. %3
<b>5. Insulation Resistance</b>	5000 M Ω km (500 VDC)
<b>6. Test Voltage</b>	Max. 500 V
<b>7. Working Voltage</b>	Max. 250 V
<b>8. Working Temperature</b>	-20 °C ...+ 60 °C
<b>9. Min. Bending Radius</b>	10xD (Kablo Yarıçapı) (Cable Radius)
<b>10. Tensile Strength</b>	Max. 50 N/mm <sup>2</sup>

## DATA/LAN CABLES- CATEGORY 5 S/FTP 4x2x24 AWG (PATCH CABLES)

### Electrical Properties

Frequency (MHz)	Structural Return Loss SRL (dB)	Attenuation Max. ( dB/100 m)	NEXT (Near and crosstalk) Min. (dB)
0,772	23,0	1,8	64
1,0	23,0	2,2	62
4,0	23,0	4,8	53
8,0	23,0	6,4	48
10,0	23,0	7,5	47
16,0	23,0	8,7	44
20,0	23,0	10,2	42
25,0	22,0	12,0	41
31,25	21,06	13,9	39
62,5	18,5	19,7	35
100	16,0	24,0	32

### Structural Return Loss SRL (dB)



## **DATA TRANSMISSION CABLES**



**CABLE TYPE** : **RS 232**

**SPECIFICATION** : **EIA**

**APPLICATION** : *Used as connection cable between computer & printer and between computers.  
Can also be used in voice frequency transmission in electronic systems.*

**CONSTRUCTION** : *Multiwire stranded tinned electrolytic copper conductor.  
Polyvinylchloride insulation at different colours (DIN 47100)  
Cores twisted in pairs.  
Pairs stranded in layers.  
Polyester tape that does not contain moisture and have dielectric property.  
Multiwire stranded tinned electrolytic copper earth wire.  
100 % AL-PES coverage screen.  
65 % braiding of tinned copper wire screen.  
Grey PVC outer sheath (RAL 7032).*

**TECHNICAL DATA** :

- |                          |  |
|--------------------------|--|
| 1. Working Temperature   | - 20 <sup>0</sup> C.....+70 <sup>0</sup> C |
| 2. Min. Bending Radius   | 10x D                                      |
| 3. Test Voltage          | 1200 V                                     |
| 4. Working Voltage       | 250 V                                      |
| 5. Insulation Resistance | 50 M Ω km                                  |
| 6. Mutual Capacitance    | 100 nf/m                                   |

## **DATA TRANSMISSION CABLES- RS 232**

### **RS 232 24 AWG 0,22 mm<sup>2</sup>**

<b>Number of cores And cross-section (mm<sup>2</sup>)</b>	<b>Overall Diameter (mm)</b>	<b>Approx. Weight (kg/km)</b>	<b>Standard Length (m)</b>
2x2x0,22	6,2	60,0	100/1000
3x2x0,22	7,7	69,0	100/1000
4x2x0,22	7,8	86,5	100/1000
5x2x0,22	9,6	99,0	100/500
6x2x0,22	9,9	110,0	100/500
7x2x0,22	10,1	117,0	100/500
8x2x0,22	10,3	130,0	100/500
10x2x0,22	11,7	153,0	100/500
12x2x0,22	12,3	174,0	100/500

### **RS 232 22 AWG 0,34 mm<sup>2</sup>**

<b>Number of cores And cross-section (mm<sup>2</sup>)</b>	<b>Overall Diameter (mm)</b>	<b>Approx. Weight (kg/km)</b>	<b>Standard Length (m)</b>
2x2x0,34	8,7	88,0	100/1000
3x2x0,34	9,0	100,0	100/1000
4x2x0,34	9,7	115,0	100/1000
5x2x0,34	11,0	143,0	100/500
6x2x0,34	11,6	154,0	100/500
7x2x0,34	11,8	164,5	100/500
8x2x0,34	12,6	183,7	100/500
10x2x0,34	14,5	233,0	100/500
12x2x0,34	15,4	272,2	100/500

### **RS 232 20 AWG 0,5 mm<sup>2</sup>**

<b>Number of cores And cross-section (mm<sup>2</sup>)</b>	<b>Overall Diameter (mm)</b>	<b>Approx. Weight (kg/km)</b>	<b>Standard Length (m)</b>
2x2x0,50	9,7	104,0	100/1000
3x2x0,50	10,1	125,0	100/1000
4x2x0,50	10,9	145,0	100/1000
5x2x0,50	11,8	155,0	100/500
6x2x0,50	12,1	177,0	100/500
7x2x0,50	12,3	190,0	100/500
8x2x0,50	13,0	208,0	100/500
10x2x0,50	14,7	268,0	100/500
12x2x0,50	16,5	323,0	100/500

## DATA TRANSMISSION CABLES



**CABLE TYPE** : **RS 422**

**SPECIFICATION** : **EIA**

**APPLICATION** : *Used as connection cable between computer & printer and between computers  
Can also be used in voice frequency transmission in electronic systems.*

**CONSTRUCTION** : *Multiwire stranded tinned electrolytic copper conductor.  
SOLID PE insulation at different colours (DIN 47100)  
Cores twisted in pairs.  
Pairs stranded in layers.  
Multiwire stranded tinned electrolytic copper earth wire.  
100 % AL-PES coverage screen.  
85 % braiding of tinned copper wire screen.  
Grey PVC outer sheath (RAL 7032).*

**TECHNICAL DATA** :

1. **Working Temperature** - 30<sup>0</sup> C.....+80<sup>0</sup> C
2. **Min. Bending Radius** 15 x D
3. **Test Voltage** 1200 V
4. **Working Voltage** 250 V
5. **Insulation Resistance** 50 M  $\Omega$  km
6. **Mutual Capacitance** 45 nf/m
7. **Conduct DC Resistance** max. 88  $\Omega$ / km

**DATA TRANSMISSION CABLES- RS 422****RS 422 24 AWG 0,22 mm<sup>2</sup>**

<b>Number of cores And cross-section (mm<sup>2</sup>)</b>	<b>Overall Diameter (mm)</b>	<b>Approx. Weight (kg/km)</b>	<b>Standard Length (m)</b>
2x2x0,22	6,4	60	1000/100
3x2x0,22	7,9	79	1000/100
4x2x0,22	8,0	89	1000/100
5x2x0,22	8,9	105	1000/100
6x2x0,22	9,6	121	1000/100
7x2x0,22	9,6	128	1000/100
8x2x0,22	10,2	141	1000/100
9x2x0,22	10,7	156	1000/100
10x2x0,22	11,2	166	500/100
12x2x0,22	11,9	184	500/100

**RS 422 20 AWG 0,5 mm<sup>2</sup>**

<b>Number of cores And cross-section (mm<sup>2</sup>)</b>	<b>Overall Diameter (mm)</b>	<b>Approx. Weight (kg/km)</b>	<b>Standard Length (m)</b>
2x2x0,50	10,0	108	1000/100
3x2x0,50	10,4	130	1000/100
4x2x0,50	11,3	150	1000/100
5x2x0,50	12,3	165	1000/100
6x2x0,50	12,7	173	1000/100
7x2x0,50	12,7	195	1000/100
8x2x0,50	13,4	218	500/100
9x2x0,50	14,0	255	500/100
10x2x0,50	15,2	280	500/100
12x2x0,50	16,9	334	500/100