

LOCAL AREA NETWORK CABLE - LAN EIA /TIA 568-A & UL-444



MESC DATA LAN Cables are available in category 3, category 4 and category 5e performance defined as per EIA / TIA 568-A. Category 3 cables are used for data transmission rate of 16MB/S, category 4 cables upto 20 MB/S and category 5e cables upto 150 MB/S.

Construction

24 AWG solid bare copper conductor insulated with solid polyethylene. Colour coded cores twisted into pairs and cabled together. Gray outer jacket of PVC as per UL-444. UL LISTED TYPE CM.

Packing: Available in 1000 Ft. (305 Mt.) length on reels.

COLOUR CODE

Pairs	A	B
1	White/Blue Stripe	Blue
2	White/Orange Stripe	Orange
3	White/Green Stripe	Green
4	White/Brown Stripe	Brown

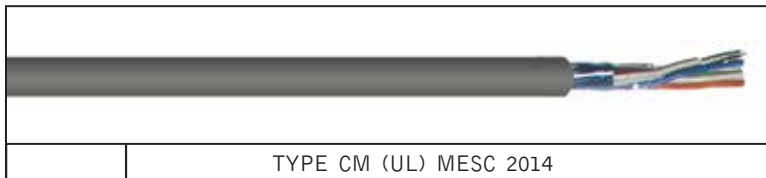
SIZE : 4 PAIR 24 AWG

Order No.	Category & MESC Code	Conductor Dia. mm	Insulation Thickness mm	Jacket Thickness mm	Nominal O.D. mm	Standard Length mm	Approx. Weight Kg
M1003	Category - 5e M662-04P24AWG-U0GYM-00	0.51	0.17	0.6	5.3	305	9.8

PERFORMANCE SPECIFICATION AS PER EIA/TIA 568-A

		Category - 5e
D.C. Resistance at 20 °C (S /Km)		93.8
Impedance (S)		100 ± 15 (1 - 16 MHz)
Nominal Capacitance (pF/m)		46
Max. Attenuation (dB/100Mtr)	1 MHz 4 MHz 10 MHz 16 MHz 20 MHz 31.5 MHz 100 MHz	2.1 4.3 6.6 8.2 9.2 11.8 22.0
Min. Crosstalk (dB/100Mtr) N.E.X.T.	1 MHz 4 MHz 10 MHz 16 MHz 20 MHz 31.5 MHz 100 MHz	65.3 56.3 50.3 47.3 45.8 42.9 35.3

COMPUTER CABLES EIA RS-232 APPLICATIONS (UL 2464)



Application : These cables are used for computer inter-connections, EIA RS-232 and CAD/CAM systems.

Construction

- **Conductor** : Stranded Tinned Copper .
- **Insulation** : Semi-rigid PVC.
- **Assembly** : Colour coded cores are twisted into pairs with staggered lay technique and cabled together. The colour code is as per Table 1. The assembly is covered with a non-hygroscopic tape.
- **Screen** : An Aluminium Polyester tape is applied with a stranded tinned copper drain wire (24 AWG) either longitudinally or helically with a suitable overlap for 100% shield coverage.
- **Jacket** : Grey coloured PVC.

Technical Data

Specification	UL 2464
Temperature Range	-20 °C to + 80 °C
Operating Voltage	300 V
Max. Cond. Resistance at 20° C (S /Km)	90.9
Nom. Mutual Capacitance (pF/m)	98
Nom. Cond. / Shield Capacitance (pF/m)	164
Nom. Impedance (S)	75

COMPUTER CABLES EIA RS-232 APPLICATIONS (UL 2464)

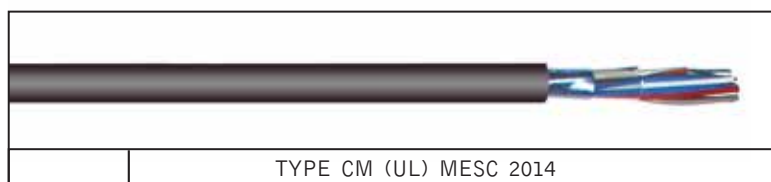
Size AWG	Order No.	MESC Code	Pairs Nos.	Strands x Dia. No. x mm	Insulation Thickness mm	Nominal Jacket Thickness mm	Approx. O. D. mm	Approx. Weight Kg/Km
24	12024	1221-01P24AWG-U0GY 8-00	1	7 x 0.2	0.25	0.81	4.4	25
	12025	1221-02P24AWG-U0GY 8-00	2	7 x 0.2	0.25	0.81	5.7	39
	12026	1221-03P24AWG-U0GY 8-00	3	7 x 0.2	0.25	0.81	5.9	46
	12027	1221-04P24AWG-U0GY 8-00	4	7 x 0.2	0.25	0.81	6.5	55
	12028	1221-05P24AWG-U0GY 8-00	5	7 x 0.2	0.25	0.89	7.2	67
	12029	1221-06P24AWG-U0GY 8-00	6	7 x 0.2	0.25	0.89	7.7	76
	12030	1221-07P24AWG-U0GY 8-00	7	7 x 0.2	0.25	0.89	8.1	85
	12031	1221-08P24AWG-U0GY 8-00	8	7 x 0.2	0.25	0.89	8.5	93
	12032	1221-09P24AWG-U0GY 8-00	9	7 x 0.2	0.25	0.94	9.0	104
	12033	1221-10P24AWG-U0GY 8-00	10	7 x 0.2	0.25	1.02	9.6	116
	12034	1221-15P24AWG-U0GY 8-00	15	7 x 0.2	0.25	1.02	11.2	157
	12035	1221-19P24AWG-U0GY 8-00	19	7 x 0.2	0.25	1.02	12.2	189
	12036	1221-25P24AWG-U0GY 8-00	25	7 x 0.2	0.25	1.14	13.9	243

COLOUR CODE

TABLE - 1

No. of pairs	a-wire	b-wire	No. of pairs	a-wire	b-wire	No. of pairs	a-wire	b-wire
1	White	Blue	11	Black	Blue	21	Purple	Blue
2	White	Orange	12	Black	Orange	22	Purple	Orange
3	White	Green	13	Black	Green	23	Purple	Green
4	White	Brown	14	Black	Brown	24	Purple	Brown
5	White	Grey	15	Black	Grey	25	Purple	Grey
6	Red	Blue	16	Yellow	Blue			
7	Red	Orange	17	Yellow	Orange			
8	Red	Green	18	Yellow	Green			
9	Red	Brown	19	Yellow	Brown			
10	Red	Grey	20	Yellow	Grey			

COMPUTER CABLES LOW CAPACITANCE, FOR EIA RS-232 APPLICATIONS (UL 2919)



Application : External Inter-connection of computer and electronic equipment where high levels of noise interference is anticipated. Also used for precision audio,pulse or R.F. signal transmission where low distortion and high speed datarates are required.

Construction

- **Conductor** : Stranded Tinned Copper.
- **Insulation** : Colour Coded Polyethylene.
- **Assembly** : Pairs twisted with staggered lay scheme are cabled and covered with a non-hygroscopic tape. The colour code is as per table 1.
- **Screen** : An Aluminium Polyester tape with a stranded tinned copper drain wire (24 AWG) is applied either longitudinally or helically with a suitable overlap for 100% shield coverage.
- **Jacket** : Grey Coloured PVC.

Technical Data

Specification	UL 2919
Operating Temperature	- 20 °C to + 80 °C
Operating Voltage	30 V (UL)
Max. Cond. Resistance at 20° C (Ω/Km)	90.9
Nom.Mutual Capacitance (pF/m)	50.8
Nom. Cond./ Shield Capacitance (pFm)	90.2
Nom. Impedance (Ω)	100
Nom. Velocity of Propagation (%)	66

NOTE : These cables comply with the requirements of Cat-3

COMPUTER CABLES LOW CAPACITANCE, FOR EIA RS-232 APPLICATIONS (UL 2919)

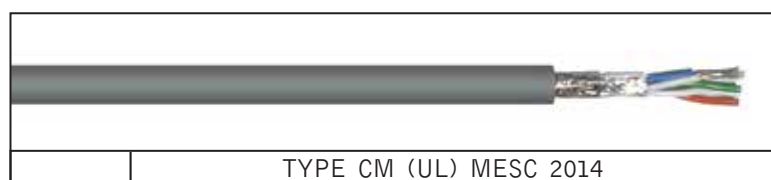
Size AWG	Order No.	MESC Code	Pairs Nos.	Strands x Dia. No. x mm	Insulation Thickness mm	Nominal Jacket Thickness mm	Approx. O. D. mm	Approx. Weight Kg/Km
24	12037	1222-03P24AWG-U0GY8-00	3	7 x 0.2	0.25	0.89	6.4	49
	12038	1222-04P24AWG-U0GY8-00	4	7 x 0.2	0.25	0.89	7.1	58
	12039	1222-06P24AWG-U0GY8-00	6	7 x 0.2	0.25	0.89	8.2	75
	12040	1222-07P24AWG-U0GY8-00	7	7 x 0.2	0.25	0.89	8.7	84
	12041	1222-09P24AWG-U0GY8-00	9	7 x 0.2	0.25	0.89	9.5	100
	12042	1222-12P24AWG-U0GY8-00	12	7 x 0.2	0.25	0.89	10.6	124
	12043	1222-18P24AWG-U0GY8-00	18	7 x 0.2	0.25	0.89	12.5	168
	12044	1222-25P24AWG-U0GY8-00	25	7 x 0.2	0.25	1.14	14.9	237

COLOUR CODE

TABLE 1

No. of pairs	a-wire	b-wire	No. of pairs	a-wire	b-wire	No. of pairs	a-wire	b-wire
1	White	Blue	11	Black	Blue	21	Purple	Blue
2	White	Orange	12	Black	Orange	22	Purple	Orange
3	White	Green	13	Black	Green	23	Purple	Green
4	White	Brown	14	Black	Brown	24	Purple	Brown
5	White	Grey	15	Black	Grey	25	Purple	Grey
6	Red	Blue	16	Yellow	Blue			
7	Red	Orange	17	Yellow	Orange			
8	Red	Green	18	Yellow	Green			
9	Red	Brown	19	Yellow	Brown			
10	Red	Grey	20	Yellow	Grey			

COMPUTER CABLES LOW CAPACITANCE, FOR EIA RS-422 APPLICATIONS (UL 2919)



Application : External Inter-connection of computer and electronic equipment where high levels of noise interference is anticipated. Also used for precision audio,pulse or R.F. signal transmission where low distortion and high speed data rates are required.

Construction

- **Conductor** : Stranded Tinned Copper.
- **Insulation** : Colour Coded Polyethylene.
- **Assembly** : Pairs twisted with staggered lay scheme are cabled and covered with a non-hygroscopic tape. The colour code as per Table 1.
- **Screen** : An Aluminium Mylar tape is applied with a stranded tinned copper drain wire in continuous contact with aluminium part. Over the aluminium tape shield an overall braid with tinned copper wires is applied with 65% coverage.
- **Jacket** : Grey Coloured PVC.

Technical Data

Specification	UL 2919
Operating Temperature	-20 °C to + 80 °C
Operating Voltage	30 V (UL)
Max. Cond. Resistance at 20° C (Ω/Km)	90.9
Nom. Mutual Capacitance (pF/m)	50.8
Nom.Cond./Shield Capacitance (pF/m)	90.2
Nom. Impedance (Ω)	100
Nom. Velocity of Propagation (%)	66

COMPUTER CABLES LOW CAPACITANCE, FOR EIA RS-422 APPLICATIONS (UL 2919)

Size AWG	Order No.	MESC Code	Pairs Nos.	Strands x Dia. No. x mm	Nominal Jacket Thickness mm	Approx. O. D. mm	Approx. Weight Kg/Km
24	15097	1522-02P24AWG-U2GY8-00	2	7 x 0.2	0.89	7.4	61
	15098	1522-03P24AWG-U2GY8-00	3	7 x 0.2	0.89	7.7	69
	15099	1522-04P24AWG-U2GY8-00	4	7 x 0.2	0.89	7.9	77
	15100	1522-05P24AWG-U2GY8-00	5	7 x 0.2	0.89	8.5	88
	15101	1522-06P24AWG-U2GY8-00	6	7 x 0.2	0.89	9.5	102
	15102	1522-07P24AWG-U2GY8-00	7	7 x 0.2	0.89	9.5	108
	15103	1522-09P24AWG-U2GY8-00	9	7 x 0.2	0.89	10.4	127
	15104	1522-10P24AWG-U2GY8-00	10	7 x 0.2	0.89	10.8	136
	15105	1522-12P24AWG-U2GY8-00	12	7 x 0.2	0.89	11.6	154
	15106	1522-18P24AWG-U2GY8-00	18	7 x 0.2	0.89	13.5	205
	15107	1522-25P24AWG-U2GY8-00	25	7 x 0.2	1.14	15.9	280

COLOUR CODE

TABLE 1

No. of pairs	a-wire	b-wire	No. of pairs	a-wire	b-wire	No. of pairs	a-wire	b-wire
1	White	Blue	11	Black	Blue	21	Purple	Blue
2	White	Orange	12	Black	Orange	22	Purple	Orange
3	White	Green	13	Black	Green	23	Purple	Green
4	White	Brown	14	Black	Brown	24	Purple	Brown
5	White	Grey	15	Black	Grey	25	Purple	Grey
6	Red	Blue	16	Yellow	Blue			
7	Red	Orange	17	Yellow	Orange			
8	Red	Green	18	Yellow	Green			
9	Red	Brown	19	Yellow	Brown			
10	Red	Grey	20	Yellow	Grey			