

ME S C

Middle East Specialized Cable Co. TELEPHONE CABLE, UN-ARMOURED, FILLED

Specification: Gen. to SAES-T-920 & REA-PE-39



CONSTRUCTION:

Conductor	Solid annealed plain copper to ASTM B3.
Insulation	Foam polyethylene to ASTM D1248, Type 3, Category 4 or 5, grade E8 or E9.
Conductor Identification	Insulated conductors shall be fully colour coded as attached chart
Core Filling	The water resistant filling compound shall be applied to the air space within the cable core.
Core Wrapping	A non-hygroscopic and dielectric tape shall be applied longitudinally or helically with an overlap with identification tape.
Moisture Barrier/Shield	An Aluminium tape (0.2mm) coated on both sides with a copolymer (0.050) shall be applied longitudinally over the water blocking tape with an overlap of 6 mm or 10% of the core circumference whichever is greater.
Outer Sheath	The sheath shall be an extruded Black low density polyethylene or medium density polyethylene to ASTM D1248, Type 1 or 2, Class C, Category 4 or 5, grade J3

DIMENSION DETAILS

Specification: **BASED ON IEC 60708**

MESC CODE	Size (Pair x mm)	Approx. O.D (mm)	Approx. Gross Weight (kg/km)
3163-04J00050-UMBK8-00	5PR X 0.5mm	8.6	80
3163-05J00050-UMBK8-00	5PR X 0.5mm	9.1	88
3163-06J00050-UMBK8-00	5PR X 0.5mm	9.5	99
3163-10J00050-UMBK8-00	10PR X 0.5mm	10.8	133
3163-12J00050-UMBK8-00	12PR X 0.5mm	11.4	148
3163-15J00050-UMBK8-00	15PR X 0.5mm	12.2	177
3163-20J00050-UMBK8-00	20PR X 0.5mm	14.0	215
3163-25J00050-UMBK8-00	25PR X 0.5mm	14.9	249
3163-30J00050-UMBK8-00	30PR X 0.5mm	15.8	284
3163-50J00050-UMBK8-00	50PR X 0.5mm	18.9	420
3163-75J00050-UMBK8-00	75PR X 0.5mm	21.9	590
3163-100J00050-UMBK8-00	100PR X 0.5mm	24.4	749
3163-125J00050-UMBK8-00	125PR X 0.5mm	26.5	897
3163-150J00050-UMBK8-00	150PR X 0.5mm	28.5	1051
3163-200J00050-UMBK8-00	200PR X 0.5mm	32.1	1353

MESC CODE	Size (Pair x mm)	Approx. O.D (mm)	Approx. Gross Weight (kg/km)
3163-02J00065-UMBK8-00	2PR X 0.65mm	8.4	77
3163-03J00065-UMBK8-00	3PR X 0.65mm	9.2	92
3163-04J00065-UMBK8-00	4PR X 0.65mm	9.8	110
3163-05J00065-UMBK8-00	5PR X 0.65mm	10.4	122
3163-06J00065-UMBK8-00	6PR X 0.65mm	11.0	140
3163-10J00065-UMBK8-00	10PR X 0.65mm	14.2	210
3163-12J00065-UMBK8-00	12PR X 0.65mm	13.5	220
3163-15J00065-UMBK8-00	15PR X 0.65mm	14.6	255
3163-20J00065-UMBK8-00	20PR X 0.65mm	16.6	315
3163-25J00065-UMBK8-00	25PR X 0.65mm	18.3	382
3163-30J00065-UMBK8-00	30PR X 0.65mm	19.5	440
3163-50J00065-UMBK8-00	50PR X 0.65mm	23.1	655
3163-70J00065-UMBK8-00	70PR X 0.65mm	26.4	837
3163-100J00065-UMBK8-00	100PR X 0.65mm	30.0	1205
3163-200J00065-UMBK8-00	200PR X 0.65mm	40.7	2270

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TRANSMISSION CHARACTERISTICS



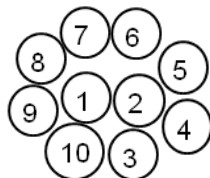
Conductor Size	mm	0.5	0.9	0.4	0.65
Max. Conductor Resistance (20°C) Ohms/Km	Max.	93.8	28.2	150	54.1
Max. Resistance Unbalance Ohms	Max.	2.0	2.0	2.0	2.0
Min. Insulation Resistance (20°C) MOhm-Km		2500			
Mutual Capacitance (1000+/-200Hz) nF/Km	Average Ind.	44 +/- 2 55			
Capacitance unbalance k1 at 800Hz nF/km	Avg. Ind.	500 2500			
Attenuation of side circuits at 800Hz	dB/km	0.8			
Dielectric Strength (Volts D.C. for 3 Sec. mini.)		2400 5000	3600 10000	2400 5000	3000 10000
Attenuation (Max) Frequency 1KHZ 1 MHZ	dB/km	1.45 21	0.8 13.6	1.81 25.7	1.1 16.3
Min. Near end Cross Talk (99% pair combination)	Frequency 1KHZ 12KHZ 80KHZ 1000KHZ	dB/km.	85 80 67 48		
Min. NEXT & ELEFEXT Ind. Power Sums	Frequency 1KHZ 12KHZ 80KHZ 1000KHZ	dB/km.	NEXT 70 67 55 37	ELEFEXT 74 71 58 36	

ANNEXURE " CEF" 50 PR

PAIRING

PAIR NO'S	A WIRE	B WIRE	LAY LENGTH	LAY DIRECTION
			mm	
1	WHITE	BLUE	45	LEFT HAND
2	WHITE	ORANGE	55	LEFT HAND
3	WHITE	GREEN	63	LEFT HAND
4	WHITE	BROWN	80	LEFT HAND
5	WHITE	GREY	100	LEFT HAND
6	RED	BLUE	65	LEFT HAND
7	RED	ORANGE	85	LEFT HAND
8	RED	GREEN	95	LEFT HAND
9	RED	BROWN	75	LEFT HAND
10	RED	GREY	115	LEFT HAND

10 PAIR LAY UP SCHEME



COLOR CODE FOR "10 PAIR SUBUNIT" BINDER

LAY LENGTH FOR 10 PR SUBUNIT=400 mm

LAY DIRECTION FOR 10 PAIR SUBUNIT-L. H.

BINDER MATL NOT SPECIFIED ; MAY BE POLYETHYLENE/POLYESTER/POLYPROPYLENE.

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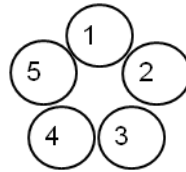
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SUBUNIT #	BINDER COLOR	BINDER WIDTH	BINDER LAY DIRECTION	BINDER LAY LENGTH
1	BLUE	5 mm	RIGHT HAND	~ 75 mm
2	ORANGE	5 mm	RIGHT HAND	~ 75 mm
3	GREEN	5 mm	RIGHT HAND	~ 75 mm
4	BROWN	5 mm	RIGHT HAND	~ 75 mm
5	GREY	5 mm	RIGHT HAND	~ 75 mm

LAY UP SCHEME OF 50 PR

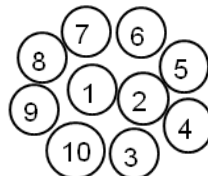


A WHITE BINDER (5mm width) MAY BE APPLIED OVER ASSEMBLY WITH 200mm L.H. DIRECTION

ANNEXURE " CEF" 100 PR PAIRING

PAIR NO'S	A WIRE	B WIRE	LAY LENGTH	LAY DIRECTION
			mm	
1	WHITE	BLUE	45	LEFT HAND
2	WHITE	ORANGE	55	LEFT HAND
3	WHITE	GREEN	63	LEFT HAND
4	WHITE	BROWN	80	LEFT HAND
5	WHITE	GREY	100	LEFT HAND
6	RED	BLUE	65	LEFT HAND
7	RED	ORANGE	85	LEFT HAND
8	RED	GREEN	95	LEFT HAND
9	RED	BROWN	75	LEFT HAND
10	RED	GREY	115	LEFT HAND

10 PAIR SUBUNIT L/UP SCHEME



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COLOR CODE FOR "10 PAIR SUBUNIT" BINDER

LAY LENGTH FOR 10 PR SUBUNIT=400 mm

LAY DIRECTION FOR 10 PAIR SUBUNIT-L. H.

BINDER MATL NOT SPECIFIED; MAY BE POLYETHYLENE/POLYESTER/POLYPROPYLENE.

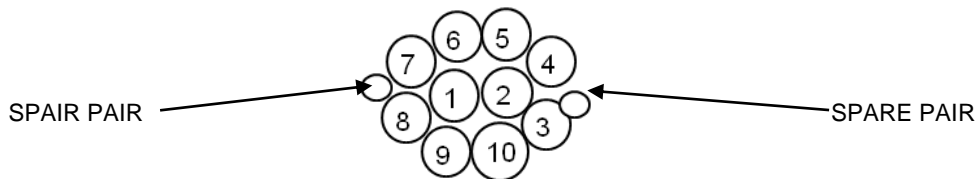
SUBUNIT #	BINDER COLOR	BINDER WIDTH	BINDER LAY DIRECTION	BINDER LAY LENGTH
1	BLUE	5 mm	RIGHT HAND	~ 75 mm
2	ORANGE	5 mm	RIGHT HAND	~ 75 mm
3	GREEN	5 mm	RIGHT HAND	~ 75 mm
4	BROWN	5 mm	RIGHT HAND	~ 75 mm
5	GREY	5 mm	RIGHT HAND	~ 75 mm
6	BLUE/ RED	5 mm	RIGHT HAND	~ 75 mm
7	ORANGE/ RED	5 mm	RIGHT HAND	~ 75 mm
8	GREEN/ RED	5 mm	RIGHT HAND	~ 75 mm
9	BROWN/ RED	5 mm	RIGHT HAND	~ 75 mm
10	GREY/ RED	5 mm	RIGHT HAND	~ 75 mm

SPARE PAIRS SHALL BE PLACED IN THE INTERSTICE OF THE OUTER LAYER

SPARE PAIRS COLOR CODE

PAIR	A WIRE	B WIRE	LAY LENGTH	LAY DIRECTION
			mm	
1	BLACK	BLUE	45	LEFT HAND
2	BLACK	ORANGE	55	LEFT HAND

100 PAIR LAY/UP SCHEME WITH SPARE PAIRS



A WHITE BINDE (5mm width)MAY BE APPLIED OVER ASSEMBLY WITH 200mm L.H LAT DIRECTION