



Single Core High Conductivity Copper Conductor EM-5 Rubber Compound 90°C Sheathed Welding Cable as per BS 638 Specification

Application

- ✓ Transmission of high currents from the electric welding machine to the welding tool.
- ✓ Assembly lines and conveyor systems, in machine tool and motor car manufacturing, ship building.
- ✓ Manually and automatically operated line and spot welding machines.

Features

- ✓ Flexibility under rough conditions.
- ✓ Excellent Flame Retardant.
- ✓ Highly Resistant to effects of cold, heat and fire

Product Construction

- ✓ Conductor : Tinned Annealed high conductivity class 6 copper wires complying with BS 6360
- ✓ Separator : Dry Paper, Polyester Tape
- ✓ Sheath : Rubber compound type EM5 Conforming to BS 7655:section 2.4 (Optional inner layer shall be rubber compound type EM5 or type E17 conforming to HD 22.152)
- ✓ Colour : Orange or Black

Technical Data

- ✓ Temperature Range : 90°C
- ✓ Voltage for Testing : 1000 V AC
- ✓ Bending Radius(Minimum) : 6x Overall dia.
- ✓ Specification : BS 638

ISO 9001	ISO 14001	OHSAS 18001	AS 9100	ISO 45001			
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Part Number	Nominal conductor area (mm ²)	Maximum strand dia (mm)	Thickness of insulation (mm)	Approx. overall diameter (mm)	Approx Weight of Cable (kg/km)	Maximum Conductor Resistance at 20°C (Ω/Km)	
						Plain Wires	Tinned Wires
53627XX	10	0.21	2.0	8.4	140	1.91	1.95
53628XX	16	0.21	2.0	9.5	196	1.21	1.24
53630XX	25	0.21	2.0	10.8	280	0.780	0.795
53632XX	35	0.21	2.0	12.0	370	0.554	0.565
53634XX	50	0.21	2.2	14.0	518	0.386	0.393
53637XX	70	0.21	2.4	16.1	704	0.272	0.277
53638XX	95	0.21	2.6	18.3	942	0.206	0.210
53641XX	120	0.51	2.8	20.2	1175	0.161	0.164
53642XX	150	0.51	3.0	22.3	1450	0.129	0.132
53644XX	185	0.51	3.2	24.5	1780	0.106	0.108

Derating Factors for a Conductor Temperature of 85° C & 60° C (Free Air, Ambient Temperature 25° C)

Ambient Temperature °C	Factor	
	85° C	60° C
30	0.96	0.92
35	0.91	0.84
40	0.87	0.75
45	0.82	0.65

Note : XX* : Please add last two digits in the part number as per the colour code given hereunder replacing XX while ordering.

Red - 01	Yellow - 02	Blue - 03	Black - 04	Green - 05	Yellow-Green - 06	Grey - 07	Brown - 08	White - 09	Orange - 10	Violet - 11
Chocolate - 12	Tan - 13	Charcoal - 14	LT Blue - 15	DK Grey - 16	LT Green - 17	DK Green - 18	DK Blue - 19	Purple - 20	Pink - 21	

- ✓ * Other length as per Customer order.
- ✓ Current Carrying capacity given is for the maximum conductor operating temperature of 80°C and ambient air temperature of 40°C.