

Country of Origin, Construction, Approvals & Fire Performance

Manufacturer	Place of Manufacture
Wrexham Mineral Cables	United Kingdom
Cables Manufactured to	Cable Type – Known as “Fire Survival Cable”
BS EN 60702-1:2002+A1:2015	Fire Resistant exceeding 3 hours @ 950°C
Continuous Operating Temperature	LPCB Product Approval Number
-40°C up to 250°C	333a/01
Applicable Standards	
BS5839-1:2017 Enhanced to Clause 26.2, BS EN 50200:2015, BS 8434-2:2003 + A2:2009, BS6387:2013 C,W & Z, BS 60331	
LPCB Approved Marking on Cables	Insulation
WMIC, WMC “Made in the UK”	Highly compressed magnesium oxide (MgO)
Hazardous area cable system ATEX / IEC Ex APPROVED UNDER SIRA LICENCE 1305X & IEC Ex SIR 19.0051X	
Apparatus (type of protection ‘d’) Zones 1 & 2, Groups IIA, IIB and IIC. Zones 20, 21 & 22, groups IIIA, IIIB & IIIC. In compliance with EN 60079	
Copper Conductor Plain Annealed to IEC 60228 Type 1 Solid	Seamed Copper Sheath Construction
Cu - ETP or Cu - FRHC	C12200 grade, Cu - DHP
Number of Cores	
2	



Electrical Properties

Two Core Light Duty MICC Cables	Voltage Rating (V)	Test Voltage (Factory Internal D.C Test) (V)	Current Rating Bare or Served Cables Exposed to Touch (Amps)		Voltage Drop Cables Exposed to Touch (Per Amp/Per m)	Max Conductor Resistance Ohms per 1000m @ 20°C	Copper Sheath Resistance @ 20°C Ohms/km	Earth Fault Loop Impedance Resistance @ 70°C (R1+R2) Ohms/km
			Bare	Served				
2L1.5	500	3000	20.5	23	28	12.1	3.35	18.627
2L2.5	500	3000	28	31	17	7.41	2.53	11.980
2L4	500	3000	36	40	10	4.61	1.96	7.915

Above 4mm² conductor size would need to consider 750V Heavy Duty cables

NOTES:

Ambient Temp 30°C Sheath operating temperature 70°C For bare cables exposed to touch, the tabulated values should be multiplied by 0.9

Current Carrying Capacity LSZH or Bare and Exposed to Touch

Two Core Light Duty MICC Cables	Single Phase A.C or D.C — 2 Core Cables	
	Ref C * (Amps)	Ref E, F & G ** (Amps)
2L1.5	23	25
2L2.5	31	33
2L4	40	44

* Clipped direct | ** In free air, perforated cable tray horizontal or vertical

MICC Resistance, Reactance & Impedance

Cable Types	Resistance R (Ω/Km)			Reactance X (Ω/Km)	Impedance Z (Ω/Km)		
	30c	70c	105c		30c	70c	105c
2L1.5	12.575	14.477	16.141	0.083	12.576	140.477	16.141
2L2.5	7.701	8.866	9.885	0.079	7.702	8.866	9.885
2L4	4.479	5.157	5.749	0.075	4.480	5.157	5.749

Mechanical Properties

Two Core Light Duty MICC Cables	Cable Diameter		Conductor Diameter	Copper Sheath Mean Thickness	Nominal Insulation Thickness (MgO)	Mean serving thickness (LSZH optional outer covering)	Approx Weight per 1000m (Kg)		Minimum Bend Radius (6 Times Diameter of Cable)
	Bare	Served	(mm ²)	(mm)	(mm)	(mm)	Bare	Served	(mm)
2L1.5	5.7	7.2	1.5	0.43	0.65	0.65	132	156	34.2
2L2.5	6.6	8.1	2.5	0.49	0.65	0.65	184	207	39.6
2L4	7.7	9.4	4	0.54	0.65	0.75	253	290	46.2

Product Part Codes

Two Core Light Duty MICC Cables	WMC Cable Part Code for Bare or CC MICC	WMC Cable Part Code for LSZH Served or CCM MICC	IEC Ex & ATEX Approved Cable Gland	Seal Kits WRPS Plain or WRPSL E/T	Shrouds (PVC)	Shrouds (LSZH)	Lockwasher WRLM or WRLWS Serrated Washer WRLM/ WRLWS	Bare Single Clips (P Clips) 1 Clip Every 0.4m	LSZH Single Clips (P Clips) 1 Clip Every 0.4m	Bare Two Way Clips (Saddles) 1 Clip Every 0.4m	LSZH Two Way Clips (Saddles) 1 Clip Every 0.4m
	Cable Size Followed By	Cable Size Followed By	WRGM	WRPS/ WRPSL	WRHG	WRHGMM		WRC	WRCHL	WRS	WRSFL
2L1.5	BARE/*	LSF/**/*	2L1.5/20	2L1.5	20/**	20/**	20	22	28/**	222	302/**
2L2.5	BARE/*	LSF/**/*	2L2.5/20	2L2.5	20/**	20/**	20	26	32/**	272	342/**
2L4	BARE/*	LSF/**/*	2L4/20	2L4	20/**	20/**	20	30	37/**	302	382/**

* D or C depending on drum or coil | ** Cable colour e.g. RD = RED, OE = ORANGE, BK = BLACK, WE = WHITE