

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”
BSEN 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	
3	



Electrical Properties

Three 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				
3L1.5	500	3000	17	19	24	12.1	2.67	17.823
3L2.5	500	3000	23.5	26	14	7.41	2.23	11.621

Above 2.5mm² conductor size would need to consider 500V 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

Three Core Light Duty MICC Cables	Single Phase A.C or D.C – 3 Core Cables	
	Ref C * (Amps)	Ref E, F & G ** (Amps)
3L1.5	19	21
3L2.5	26	28

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

MICC Resistance, Reactance & Impedance

Cable Type	Resistance R (Ω/Km)			Reactance X (Ω/Km)	Impedance Z (Ω/Km)		
	30c	70c	105c		30c	70c	105c
3L1.5	12.575	14.477	16.141	0.085	12.575	14.477	16.141
3L2.5	7.701	8.866	9.885	0.079	7.702	8.866	9.885

Mechanical Properties

Three 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)
	(mm)						(mm ²)	(mm)	
	Bare	Served	(mm)	(mm)					
3L1.5	6.4	7.9	1.5	0.48	0.75	0.65	172	199	38.4
3L2.5	23	26	2.5	0.50	0.75	0.75	234	270	43.8

Product Part Codes

Three 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	
3L1.5	BARE/*	LSF/**/*	3L1.5/20	3L1.5	20/**	20/**	20	24	30/**	272	342/**
3L2.5	BARE/*	LSF/**/*	3L2.5/20	3L2.5	20/**	20/**	20	28	34/**	302	342/**

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