

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 8519 & BS 8491 CAT C, 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	

* Only cables up to 20mm *



Electrical Properties

Three Core Heavy Duty MICC Cables	Voltage Rating	Test Voltage (Factory Internal D.C Test)	Current Rating Bare or Served Cables Exposed to Touch		Voltage Drop Cables Exposed to Touch	Max Conductor Resistance	Copper Sheath Resistance @ 20°C	Earth Fault Loop Impedance Resistance @ 70°C (R1+R2)
	(V)	(V)	Bare	Served	(Per Amp/Per m)	Ohms per 1000m @ 20°C	Ohms/Km	Ohms/Km
3H1.5	750	3750	19	21	24	12.1	1.75	16.722
3H2.5	750	3750	25	28	14	7.41	1.47	10.711
3H4	750	3750	33	37	9.1	4.61	1.23	7.041
3H6	750	3750	43	48	6	3.08	1.03	4.953
3H10	750	3750	58.5	65	3.6	1.83	0.783	3.147
3H16	750	3750	77	86	2.3	1.15	0.622	2.133
3H25	750	3750	101	112	1.45	0.727	0.500	1.476

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 Heavy Duty MICC Cables	single phase A,C or D.C - 3 Core Cable.	
	Ref C * (Amps)	Ref E, F & G ** (Amps)
3H1.5	21	22
3H2.5	28	30
3H4	37	40
3H6	48	51
3H10	65	69
3H16	86	92
3H25	112	120

* 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
3H1.5	12.575	14.477	16.141	0.101	12.576	14.478	16.142
3H2.5	7.701	8.886	9.885	0.094	7.702	8.866	9.885
3H4	4.791	5.516	6.150	0.088	4.792	5.516	6.150
3H6	3.200	3.685	4.109	0.083	3.201	3.686	4.110
3H10	1.902	2.190	2.441	0.079	1.904	2.191	2.442
3H16	1.195	1.376	1.534	0.075	1.198	1.378	1.536
3H25	0.756	0.870	0.970	0.073	0.759	0.873	0.973

Mechanical Properties

Three Core Heavy Duty MICC Cables	Cable Diameter (mm)		Conductor Diameter (mm ²)	Copper Sheath Mean Thickness (mm)	Nominal Insulation Thickness (MgO) (mm)	Mean Serving Thickness (LSZH Optional Outer Covering) (mm)	Approx Weight per 1000m (Kg)		Minimum Bend Radius (6 Times Diameter of Cable) (mm)
	Bare	Served					Bare	Served	
3H1.5	8.3	10.0	1.5	0.56	1.3	0.75	265	310	49.8
3H2.5	9.3	11.0	2.5	0.59	1.3	0.75	345	390	55.8
3H4	10.4	12.1	4	0.63	1.3	0.75	452	495	62.4
3H6	11.5	13.2	6	0.68	1.3	0.75	562	602	69
3H10	13.6	15.3	10	0.75	1.3	0.75	758	817	81.6
3H16	15.6	17.9	16	0.82	1.3	1.00	1039	1130	93.6
3H25	18.2	20.5	25	0.87	1.3	1.00	1451	1557	109.2

Product Part Codes

Three Core Heavy Duty MICC Cables	WMC Cable Part Code for Bare or CC MICC Cable Size Followed By	WMC Cable Part Code for LSZH Served or CCM MICC Cable Size Followed By	IEC Ex & ATEX Approved Cable Gland		Seal Kits WRPS Plain or WRPSL E/T WRPS/WRPSL	Shrouds (PVC)		Shrouds (LSZH)		Lockwasher WRLM or WRLWS Serrated Washer WRLM/WRLWS		Bare Single Clips (P Clips) 1 Clip every 0.4m WRC	LSZH Single Clips (P Clips) 1 Clip every 0.4m WRCHL	Bare Two Way Clips (Saddles) 1 Clip every 0.4m WRS	LSZH Two Way Clips (Saddles) 1 Clip every 0.4m WRSFL
			WRGM			WRHG		WRHGMM		***	****				
			***	****		***	****	***	****						
3H1.5	BARE/*	LSF/**/*	3H1.5/20	3H1.5/20	3H1.5	20/**	20/**	20/**	20/**	20	20	32	37/**	342	422/**
3H2.5	BARE/*	LSF/**/*	3H2.5/20	3H2.5/25	3H2.5	20/**	!	20/**	25/**	20	25	37	43/**	382	462/**
3H4	BARE/*	LSF/**/*	3H4/20	3H4/25	3H4	20/**	!	20/**	25/**	20	25	40	47/**	422	502/**
3H6	BARE/*	LSF/**/*	3H6/25	3H6/25	3H6	!	!	25/**	25/**	25	25	43	51/**	462	542/**
3H10	BARE/*	LSF/**/*	3H10/25	3H10/32	3H10	!	!	25/**	32/**	25	32	54	59/**	542	632/**
3H16	BARE/*	LSF/**/*	3H16/25	3H16/40	3H16	!	!	25/**	40/**	25	40	59	71/**	632	752/**
3H25	BARE/*	LSF/**/*	3H25/40	3H25/40	3H25	!	!	40/**	40/**	40	40	71	79/**	752	812/**

D or C depending on drum or coil | ** Cable colour e.g. RD = RED, OE = ORANGE, BK = BLACK, WE = WHITE
 Seal choice: *** Represents Standard seal (WRPS) requirements **** Represents E/T seal (WRPSL) requirements (Only available up to 50mm2)