

**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	
4	

\* Only cables up to 20mm \*



**Electrical Properties**

Four Core Heavy Duty MICC Cables	Voltage Rating (V)	Test Voltage (Factory Internal D.C Test) (V)	Current Rating Bare or Served Cables Exposed to Touch		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				
4H1.5	750	3750	19	21	24	12.1	1.51	16.435
4H2.5	750	3750	25	28	14	7.41	1.29	10.496
4H4	750	3750	33	37	9.1	4.61	1.04	6.814
4H6	750	3750	43	48	6	3.08	0.887	4.782
4H10	750	3750	58.5	65	3.6	1.83	0.690	3.036
4H16	750	3750	77	86	2.3	1.15	0.533	2.026
4H25	750	3750	101	112	1.45	0.727	0.423	1.384

**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**

Four Core Heavy Duty MICC Cables	Single phase A,C or D.C - 4 Core Cable	
	Ref C * (Amps)	Ref E, F & G ** (Amps)
4H1.5	21	22
4H2.5	28	30
4H4	37	40
4H6	48	51
4H10	65	69
4H16	86	92
4H25	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
4H1.5	12.575	14.477	16.141	0.101	12.576	14.478	16.142
4H2.5	7.701	8.886	9.885	0.094	7.702	8.866	9.885
4H4	4.791	5.516	6.150	0.088	4.792	5.516	6.150
4H6	3.200	3.685	4.109	0.083	3.201	3.686	4.110
4H10	1.902	2.190	2.441	0.079	1.904	2.191	2.442
4H16	1.195	1.376	1.534	0.075	1.198	1.378	1.536
4H25	0.756	0.870	0.970	0.073	0.759	0.873	0.973

**Mechanical Properties**

Four Core Heavy Duty MICC Cables	Cable Diameter (mm)		Conductor Diameter (mm <sup>2</sup> )	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	
4H1.5	9.1	10.8	1.5	0.59	1.3	0.75	330	370	54.6
4H2.5	10.1	11.8	2.5	0.62	1.3	0.75	412	445	60.6
4H4	11.4	13.1	4	0.68	1.3	0.75	530	608	68.4
4H6	12.7	14.4	6	0.71	1.3	0.75	740	790	76.2
4H10	14.8	16.5	10	0.78	1.3	0.75	916	979	88.8
4H16	17.3	19.6	16	0.86	1.3	1.00	1292	1393	103.8
4H25	20.1	22.9	25	0.93	1.3	1.00	1813	1956	120.6

**Product Part Codes**

Four Core Heavy Duty MICC Cables	WMC Cable Part Code for Bare or CC MICC  Cable Size Followed	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							
			***	****		***	****	***	****	***	****				
4H1.5	BARE/*	LSF/**/*	4H1.5/20	4H1.5/20	4H1.5	20/**	20/**	20/**	20/**	20	20	37	43/**	382	462/**
4H2.5	BARE/*	LSF/**/*	4H2.5/20	4H2.5/25	4H2.5	20/**	!	20/**	25/**	20	25	40	47/**	422	462/**
4H4	BARE/*	LSF/**/*	4H4/25	4H4/25	4H4	!	!	25/**	25/**	25	25	43	51/**	462	542/**
4H6	BARE/*	LSF/**/*	4H6/25	4H6/32	4H6	!	!	25/**	25/**	25	32	47	54/**	502	592/**
4H10	BARE/*	LSF/**/*	4H10/25	4H10/32	4H10	!	!	25/**	32/**	25	32	54	63/**	592	702/**
4H16	BARE/*	LSF/**/*	4H16/32	4H16/40	4H16	!	!	32/**	40/**	32	40	67	75/**	702	752/**
4H25	BARE/*	LSF/**/*	4H25/40	4H25/40	4H25	!	!	40/**	40/**	40	40	79	88/**	812	932/**

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)