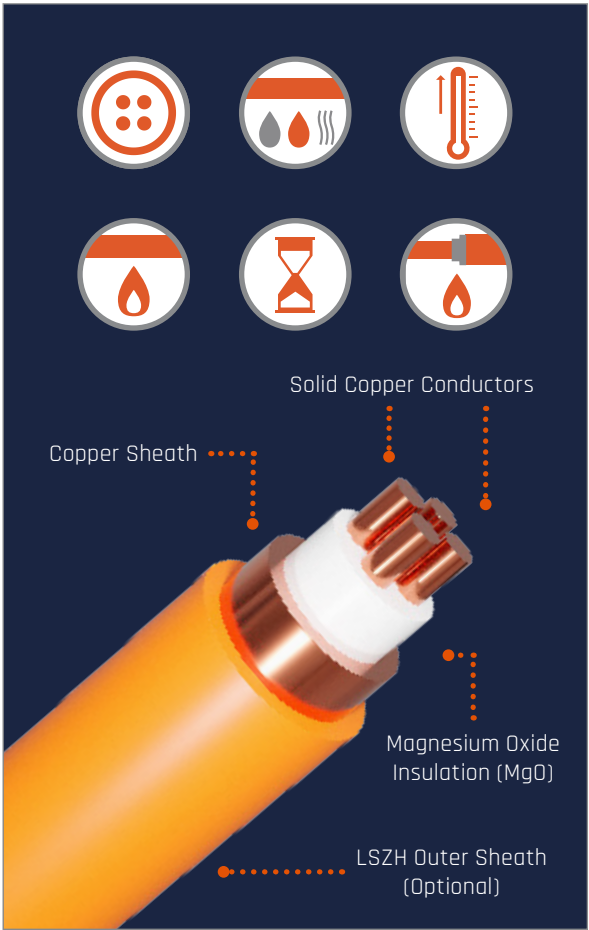


**Country of Origin, Construction, Approvals & Fire Performance**

| Manufacturer                                                                                                                                      | Place of Manufacture                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| Wrexham Cables KSA                                                                                                                                | Saudi Arabia                                |
| 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                                  |
| WMC KSA “Made in Saudi”                                                                                                                           | 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                                                                                                                                                 |                                             |

\*Under Process



**Electrical Properties**

| Four Core Light Duty MICC Cables | Voltage Rating<br>(V) | Test Voltage<br>(Factory Internal D.C Test)<br>(V) | Current Rating Bare or Served Cables Exposed to Touch<br>(Amps) |        | Voltage Drop Cables Exposed to Touch<br>(Per Amp/Per m) | Max Conductor Resistance<br>Ohms per 1000m @ 20°C | Copper Sheath Resistance @ 20°C<br>Ohms/Km | Earth Fault Loop Impedance Resistance @ 70°C (R1+R2)<br>Ohms/Km |
|----------------------------------|-----------------------|----------------------------------------------------|-----------------------------------------------------------------|--------|---------------------------------------------------------|---------------------------------------------------|--------------------------------------------|-----------------------------------------------------------------|
|                                  |                       |                                                    | Bare                                                            | Served |                                                         |                                                   |                                            |                                                                 |
| 4L1.5                            | 500                   | 3000                                               | 17                                                              | 19     | 24                                                      | 12.1                                              | 2.33                                       | 17.416                                                          |
| 4L2.5                            | 500                   | 3000                                               | 23                                                              | 26     | 14                                                      | 7.41                                              | 1.85                                       | 11.166                                                          |

Above 2.5mm<sup>2</sup> 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**

| Four Core Light Duty MICC Cables | Single Phase A.C or D.C — 4 Core Cables |                        |
|----------------------------------|-----------------------------------------|------------------------|
|                                  | Ref C * (Amps)                          | Ref E, F & G ** (Amps) |
| 4L1.5                            | 19                                      | 21                     |
| 4L2.5                            | 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   |
| 4L1.5      | 12.575              | 14.477 | 16.141 | 0.086              | 12.576             | 14.477 | 16.141 |
| 4L2.5      | 7.701               | 8.866  | 9.885  | 0.079              | 7.702              | 8.866  | 9.885  |



Mechanical Properties

| Four Core<br>Light Duty<br>MICC Cables | Cable Diameter |        | Conductor<br>Diameter | Copper<br>Sheath Mean<br>Thickness | Nominal<br>Insulation<br>Thickness<br>(MgO)<br>(mm) | Mean serving<br>thickness (LSZH<br>optional outer<br>covering)<br>(mm) | Approx Weight per<br>1000m |      | Minimum Bend<br>Radius (6 Times<br>Diameter of<br>Cable) |
|----------------------------------------|----------------|--------|-----------------------|------------------------------------|-----------------------------------------------------|------------------------------------------------------------------------|----------------------------|------|----------------------------------------------------------|
|                                        | (mm)           |        |                       |                                    |                                                     |                                                                        | (Kg)                       |      |                                                          |
|                                        | Bare           | Served |                       |                                    |                                                     |                                                                        | (mm <sup>2</sup> )         | (mm) |                                                          |
| 4L1.5                                  | 7.0            | 8.5    | 1.5                   | 0.50                               | 0.75                                                | 0.65                                                                   | 209                        | 243  | 42                                                       |
| 4L2.5                                  | 8.1            | 9.8    | 2.5                   | 0.54                               | 0.75                                                | 0.75                                                                   | 288                        | 333  | 48.6                                                     |

Product Part Codes

| Four<br>Core<br>Light<br>Duty<br>MICC<br>Cables | WMC Cable<br>Part Code for<br>Bare or CC MICC | WMC Cable<br>Part Code for<br>LSZH Served or<br>CCM MICC | IEC Ex & ATEX<br>Approved<br>Cable Gland | Seal Kits<br>WRPS Plain<br>or WRPSL E/T | Shrouds<br>(PVC) | Shrouds<br>(LSZH) | Lockwasher<br>WRLM<br>or WRLWS<br>Serrated<br>Washer<br>WRLM/<br>WRLWS | Bare Single<br>Clips<br>(P Clips)<br>1 Clip Every<br>0.4m | LSZH Single<br>Clips<br>(P Clips)<br>1 Clip Every<br>0.4m | Bare Two<br>Way Clips<br>(Saddles) 1<br>Clip Every<br>0.4m | LSZH Two<br>Way Clips<br>(Saddles) 1<br>Clip Every<br>0.4m |
|-------------------------------------------------|-----------------------------------------------|----------------------------------------------------------|------------------------------------------|-----------------------------------------|------------------|-------------------|------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------|------------------------------------------------------------|
|                                                 | Cable Size<br>Followed By                     | Cable Size<br>Followed By                                | WRGM                                     | WRPS/<br>WRPSL                          | WRHG             | WRHGMM            |                                                                        | WRC                                                       | WRCHL                                                     | WRS                                                        | WRSFL                                                      |
| 4L1.5                                           | BARE/*                                        | LSF/**/*                                                 | 4L1.5/20                                 | 4L1.5                                   | 20/**            | 20/**             | 20                                                                     | 28                                                        | 34/**                                                     | 302                                                        | 342/**                                                     |
| 4L2.5                                           | BARE/*                                        | LSF/**/*                                                 | 4L2.5/20                                 | 4L2.5                                   | 20/**            | 20/**             | 20                                                                     | 32                                                        | 37/**                                                     | 342                                                        | 422/**                                                     |

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

