



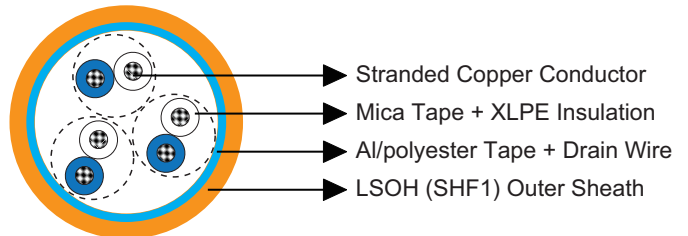
## MRE-M2X(St)H 150/250V Mica Tape + XLPE Insulated, LSOH (SHF1) Sheathed, Overall Screened Fire Resistant Instrumentation & Control Cables (Multipair/Multitriple)

### Application

These cables are used on board of ships in all locations for fixed installations not subject to mechanical risk complying with IEC standards 60092-352 in safety circuit, where fire resistance is required. These cables are fire resistant, flame retardant, low smoke & halogen free, suitable for installations on passenger ships, as on other commercial vessels.

### Standards

- IEC 60092-350/351/376/359
- IEC 60331-21
- IEC 60332-1
- IEC 60332-3-22
- IEC 60754-1/2
- IEC 61034



### Construction

- Conductors: Class 2 stranded copper conductor.
- Insulation: Mica tape + XLPE.
- Cabling Element: Pair/Triple.
- Overall Screen: Al/polyester tape.
- Drain Wire: Tinned copper wire.
- Outer Sheath: LSOH (SHF1). SHF2 can be offered upon request.

### Core Identification

Pair: White/blue with printed pair number and core number.

Triple: White/blue/red with printed triple number.





### Mechanical and Thermal Properties

Bending Radius for Fixed Installations:  $6 \times OD$  ( $OD > 25\text{mm}$ );  $4 \times OD$  ( $OD \leq 25\text{mm}$ )

Temperature Range:  $-30^\circ\text{C} \sim +80^\circ\text{C}$

### Dimensions and Weight

| Part No.             | Construction<br>No. of elements $\times$ No. of<br>cores in element $\times$ Cross<br>section ( $\text{mm}^2$ ) | Nominal<br>Insulation<br>Thickness<br>mm | Nominal Sheath<br>Thickness<br>mm | Nominal Overall<br>Diameter<br>mm | Nominal Weight<br>kg/km |
|----------------------|---|--|-----------------------------------|-----------------------------------|-------------------------|
| MRE-M2X(St)H-1P0.75  | 1 $\times$ 2 $\times$ 0.75  | 0.5                                      | 1.0                               | 8.1                               | 70                      |
| MRE-M2X(St)H-2P0.75  | 2 $\times$ 2 $\times$ 0.75*   | 0.5                                      | 1.1                               | 9.5                               | 110                     |
| MRE-M2X(St)H-3P0.75  | 3 $\times$ 2 $\times$ 0.75  | 0.5                                      | 1.2                               | 13.3                              | 170                     |
| MRE-M2X(St)H-4P0.75  | 4 $\times$ 2 $\times$ 0.75  | 0.5                                      | 1.3                               | 14.3                              | 210                     |
| MRE-M2X(St)H-7P0.75  | 7 $\times$ 2 $\times$ 0.75  | 0.5                                      | 1.4                               | 17.3                              | 320                     |
| MRE-M2X(St)H-8P0.75  | 8 $\times$ 2 $\times$ 0.75  | 0.5                                      | 1.4                               | 18.4                              | 360                     |
| MRE-M2X(St)H-10P0.75 | 10 $\times$ 2 $\times$ 0.75   | 0.5                                      | 1.5                               | 20.9                              | 430                     |
| MRE-M2X(St)H-12P0.75 | 12 $\times$ 2 $\times$ 0.75   | 0.5                                      | 1.5                               | 21.7                              | 490                     |
| MRE-M2X(St)H-14P0.75 | 14 $\times$ 2 $\times$ 0.75   | 0.5                                      | 1.6                               | 22.7                              | 560                     |
| MRE-M2X(St)H-16P0.75 | 16 $\times$ 2 $\times$ 0.75   | 0.5                                      | 1.6                               | 24.4                              | 630                     |
| MRE-M2X(St)H-19P0.75 | 19 $\times$ 2 $\times$ 0.75   | 0.5                                      | 1.7                               | 25.7                              | 730                     |
| MRE-M2X(St)H-24P0.75 | 24 $\times$ 2 $\times$ 0.75   | 0.5                                      | 1.8                               | 29.3                              | 910                     |
| MRE-M2X(St)H-30P0.75 | 30 $\times$ 2 $\times$ 0.75   | 0.5                                      | 2.0                               | 33.1                              | 1140                    |
| MRE-M2X(St)H-32P0.75 | 32 $\times$ 2 $\times$ 0.75   | 0.5                                      | 2.0                               | 33.6                              | 1190                    |
| MRE-M2X(St)H-37P0.75 | 37 $\times$ 2 $\times$ 0.75   | 0.5                                      | 2.0                               | 35.3                              | 1340                    |
| MRE-M2X(St)H-1P1.0   | 1 $\times$ 2 $\times$ 1.0   | 0.5                                      | 1.1                               | 8.7                               | 90                      |
| MRE-M2X(St)H-2P1.0   | 2 $\times$ 2 $\times$ 1.0*  | 0.5                                      | 1.1                               | 9.9                               | 130                     |
| MRE-M2X(St)H-3P1.0   | 3 $\times$ 2 $\times$ 1.0   | 0.5                                      | 1.3                               | 14.2                              | 200                     |
| MRE-M2X(St)H-4P1.0   | 4 $\times$ 2 $\times$ 1.0   | 0.5                                      | 1.3                               | 15.1                              | 240                     |
| MRE-M2X(St)H-7P1.0   | 7 $\times$ 2 $\times$ 1.0   | 0.5                                      | 1.4                               | 18.3                              | 370                     |
| MRE-M2X(St)H-8P1.0   | 8 $\times$ 2 $\times$ 1.0   | 0.5                                      | 1.5                               | 19.7                              | 430                     |
| MRE-M2X(St)H-10P1.0  | 10 $\times$ 2 $\times$ 1.0  | 0.5                                      | 1.6                               | 22.3                              | 520                     |
| MRE-M2X(St)H-12P1.0  | 12 $\times$ 2 $\times$ 1.0  | 0.5                                      | 1.6                               | 23.2                              | 590                     |
| MRE-M2X(St)H-14P1.0  | 14 $\times$ 2 $\times$ 1.0  | 0.5                                      | 1.6                               | 24.1                              | 660                     |
| MRE-M2X(St)H-16P1.0  | 16 $\times$ 2 $\times$ 1.0  | 0.5                                      | 1.7                               | 26.1                              | 760                     |
| MRE-M2X(St)H-19P1.0  | 19 $\times$ 2 $\times$ 1.0  | 0.5                                      | 1.7                               | 27.3                              | 860                     |
| MRE-M2X(St)H-24P1.0  | 24 $\times$ 2 $\times$ 1.0  | 0.5                                      | 1.9                               | 31.3                              | 1100                    |
| MRE-M2X(St)H-30P1.0  | 30 $\times$ 2 $\times$ 1.0  | 0.5                                      | 2.0                               | 35.1                              | 1350                    |



| Part No.             | Construction<br>No. of elements×No. of<br>cores in element×Cross<br>section(mm <sup>2</sup> ) | Nominal<br>Insulation<br>Thickness<br>mm | Nominal Sheath<br>Thickness<br>mm | Nominal Overall<br>Diameter<br>mm | Nominal Weight<br>kg/km |
|----------------------|---|--|-----------------------------------|-----------------------------------|-------------------------|
| MRE-M2X(St)H-32P1.0  | 32×2×1.0  | 0.5                                      | 2.1                               | 35.9                              | 1440                    |
| MRE-M2X(St)H-37P1.0  | 37×2×1.0  | 0.5                                      | 2.1                               | 37.7                              | 1620                    |
| MRE-M2X(St)H-1P1.5   | 1×2×1.5   | 0.6                                      | 1.1                               | 9.5                               | 100                     |
| MRE-M2X(St)H-2P1.5   | 2×2×1.5*  | 0.6                                      | 1.1                               | 10.9                              | 160                     |
| MRE-M2X(St)H-3P1.5   | 3×2×1.5   | 0.6                                      | 1.3                               | 15.7                              | 250                     |
| MRE-M2X(St)H-4P1.5   | 4×2×1.5   | 0.6                                      | 1.4                               | 16.9                              | 310                     |
| MRE-M2X(St)H-7P1.5   | 7×2×1.5   | 0.6                                      | 1.5                               | 20.5                              | 490                     |
| MRE-M2X(St)H-8P1.5   | 8×2×1.5   | 0.6                                      | 1.5                               | 21.9                              | 550                     |
| MRE-M2X(St)H-10P1.5  | 10×2×1.5  | 0.6                                      | 1.7                               | 25.0                              | 670                     |
| MRE-M2X(St)H-12P1.5  | 12×2×1.5  | 0.6                                      | 1.7                               | 26.0                              | 770                     |
| MRE-M2X(St)H-14P1.5  | 14×2×1.5  | 0.6                                      | 1.7                               | 27.0                              | 870                     |
| MRE-M2X(St)H-16P1.5  | 16×2×1.5  | 0.6                                      | 1.8                               | 29.3                              | 990                     |
| MRE-M2X(St)H-19P1.5  | 19×2×1.5  | 0.6                                      | 1.9                               | 30.8                              | 1150                    |
| MRE-M2X(St)H-24P1.5  | 24×2×1.5  | 0.6                                      | 2.0                               | 35.1                              | 1440                    |
| MRE-M2X(St)H-30P1.5  | 30×2×1.5  | 0.6                                      | 2.2                               | 39.6                              | 1790                    |
| MRE-M2X(St)H-32P1.5  | 32×2×1.5  | 0.6                                      | 2.2                               | 40.3                              | 1890                    |
| MRE-M2X(St)H-37P1.5  | 37×2×1.5  | 0.6                                      | 2.3                               | 42.5                              | 2160                    |
| MRE-M2X(St)H-1T0.75  | 1×3×0.75  | 0.5                                      | 1.1                               | 8.7                               | 90                      |
| MRE-M2X(St)H-2T0.75  | 2×3×0.75  | 0.5                                      | 1.2                               | 13.5                              | 180                     |
| MRE-M2X(St)H-3T0.75  | 3×3×0.75  | 0.5                                      | 1.3                               | 14.5                              | 230                     |
| MRE-M2X(St)H-4T0.75  | 4×3×0.75  | 0.5                                      | 1.3                               | 15.9                              | 280                     |
| MRE-M2X(St)H-7T0.75  | 7×3×0.75  | 0.5                                      | 1.5                               | 20.2                              | 460                     |
| MRE-M2X(St)H-8T0.75  | 8×3×0.75  | 0.5                                      | 1.5                               | 21.6                              | 510                     |
| MRE-M2X(St)H-10T0.75 | 10×3×0.75   | 0.5                                      | 1.6                               | 24.6                              | 620                     |
| MRE-M2X(St)H-12T0.75 | 12×3×0.75   | 0.5                                      | 1.7                               | 26.2                              | 720                     |
| MRE-M2X(St)H-14T0.75 | 14×3×0.75   | 0.5                                      | 1.7                               | 27.3                              | 810                     |
| MRE-M2X(St)H-16T0.75 | 16×3×0.75   | 0.5                                      | 1.8                               | 29.2                              | 920                     |
| MRE-M2X(St)H-19T0.75 | 19×3×0.75   | 0.5                                      | 1.9                               | 31.6                              | 1080                    |
| MRE-M2X(St)H-24T0.75 | 24×3×0.75   | 0.5                                      | 2.0                               | 35.1                              | 1340                    |
| MRE-M2X(St)H-30T0.75 | 30×3×0.75   | 0.5                                      | 2.2                               | 39.1                              | 1660                    |
| MRE-M2X(St)H-32T0.75 | 32×3×0.75   | 0.5                                      | 2.2                               | 40.5                              | 1760                    |
| MRE-M2X(St)H-37T0.75 | 37×3×0.75   | 0.5                                      | 2.3                               | 42.7                              | 2000                    |
| MRE-M2X(St)H-1T1.0   | 1×3×1.0   | 0.5                                      | 1.1                               | 9.2                               | 110                     |
| MRE-M2X(St)H-2T1.0   | 2×3×1.0   | 0.5                                      | 1.3                               | 14.6                              | 210                     |
| MRE-M2X(St)H-3T1.0   | 3×3×1.0   | 0.5                                      | 1.3                               | 15.5                              | 270                     |
| MRE-M2X(St)H-4T1.0   | 4×3×1.0   | 0.5                                      | 1.4                               | 17.2                              | 340                     |





# IEC Standard Caledonian Offshore & Marine Cables

## MariSig Fire Resistant Instrumentation & Control Cables

[www.caledonian-cables.co.uk](http://www.caledonian-cables.co.uk)

| Part No.            | Construction<br>No. of elements×No. of<br>cores in element×Cross<br>section(mm <sup>2</sup> ) | Nominal<br>Insulation<br>Thickness<br>mm | Nominal Sheath<br>Thickness<br>mm | Nominal Overall<br>Diameter<br>mm | Nominal Weight<br>kg/km |
|---------------------|---|--|-----------------------------------|-----------------------------------|-------------------------|
| MRE-M2X(St)H-7T1.0  | 7×3×1.0   | 0.5                                      | 1.5                               | 21.6                              | 540                     |
| MRE-M2X(St)H-8T1.0  | 8×3×1.0   | 0.5                                      | 1.6                               | 23.3                              | 620                     |
| MRE-M2X(St)H-10T1.0 | 10×3×1.0  | 0.5                                      | 1.7                               | 26.5                              | 740                     |
| MRE-M2X(St)H-12T1.0 | 12×3×1.0  | 0.5                                      | 1.8                               | 28.2                              | 870                     |
| MRE-M2X(St)H-14T1.0 | 14×3×1.0  | 0.5                                      | 1.8                               | 29.4                              | 980                     |
| MRE-M2X(St)H-16T1.0 | 16×3×1.0  | 0.5                                      | 1.9                               | 31.4                              | 1110                    |
| MRE-M2X(St)H-19T1.0 | 19×3×1.0  | 0.5                                      | 2.0                               | 34.1                              | 1310                    |
| MRE-M2X(St)H-24T1.0 | 24×3×1.0  | 0.5                                      | 2.1                               | 37.9                              | 1620                    |
| MRE-M2X(St)H-30T1.0 | 30×3×1.0  | 0.5                                      | 2.3                               | 42.2                              | 2010                    |
| MRE-M2X(St)H-32T1.0 | 32×3×1.0  | 0.5                                      | 2.4                               | 43.9                              | 2150                    |
| MRE-M2X(St)H-37T1.0 | 37×3×1.0  | 0.5                                      | 2.4                               | 46.0                              | 2430                    |
| MRE-M2X(St)H-1T1.5  | 1×3×1.5   | 0.6                                      | 1.1                               | 10.0                              | 130                     |
| MRE-M2X(St)H-2T1.5  | 2×3×1.5   | 0.6                                      | 1.3                               | 16.0                              | 260                     |
| MRE-M2X(St)H-3T1.5  | 3×3×1.5   | 0.6                                      | 1.4                               | 17.2                              | 340                     |
| MRE-M2X(St)H-4T1.5  | 4×3×1.5   | 0.6                                      | 1.4                               | 18.9                              | 430                     |
| MRE-M2X(St)H-7T1.5  | 7×3×1.5   | 0.6                                      | 1.6                               | 24.0                              | 700                     |
| MRE-M2X(St)H-8T1.5  | 8×3×1.5   | 0.6                                      | 1.7                               | 25.9                              | 800                     |
| MRE-M2X(St)H-10T1.5 | 10×3×1.5  | 0.6                                      | 1.8                               | 29.5                              | 970                     |
| MRE-M2X(St)H-12T1.5 | 12×3×1.5  | 0.6                                      | 1.9                               | 31.4                              | 1130                    |
| MRE-M2X(St)H-14T1.5 | 14×3×1.5  | 0.6                                      | 2.0                               | 33.0                              | 1300                    |
| MRE-M2X(St)H-16T1.5 | 16×3×1.5  | 0.6                                      | 2.0                               | 35.0                              | 1460                    |
| MRE-M2X(St)H-19T1.5 | 19×3×1.5  | 0.6                                      | 2.1                               | 37.9                              | 1710                    |
| MRE-M2X(St)H-24T1.5 | 24×3×1.5  | 0.6                                      | 2.3                               | 42.4                              | 2140                    |
| MRE-M2X(St)H-30T1.5 | 30×3×1.5  | 0.6                                      | 2.5                               | 47.2                              | 2660                    |
| MRE-M2X(St)H-32T1.5 | 32×3×1.5  | 0.6                                      | 2.5                               | 48.9                              | 2820                    |
| MRE-M2X(St)H-37T1.5 | 37×3×1.5  | 0.6                                      | 2.6                               | 51.4                              | 3210                    |

\*: 2 pairs are assembled as a quad.