



Caledonian

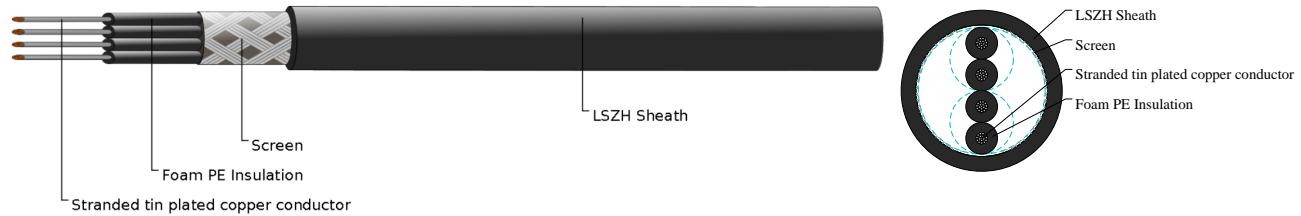
Rolling Stock Cables

www.caledonian-cables.com

marketing@caledonian-cables.com

RS 485 Databus Cables

FRL-MVB-02Y(ST)CH-IO5-xPyS



APPLICATIONS

120 Ohm data transmission cables

VOLTAGE RATING

300/500 V

CABLE CONSTRUCTION

Multipair Databus RS 485 Double Screened Cable

Conductor: Stranded tin plated copper conductor according to IEC 60228 class 5(0.22mm²-1mm²).

Insulation: Cross linked foam PE or foam skin PE

Cable Element: Twisted pair

Pair Screen: Individual Aluminium tape

Overall Screen: Copper wire braid

Outer Sheath: Cross linked EVA rubber type EM 104 or equivalent, in accordance with EN 50264-1

MECHANICAL PROPERTIES

Impedance: 120 Ω +/- 15 %

Capacitance@1KHz: 41 nF/km

Min. Insulation Resistance: 5000 MΩ

CHEMICAL AND ENVIRONMENTAL PROPERTIES

| | |
|------------------------|---|
| EN 60684-2 | No fluorine |
| EN 50305; EN 60811-2-1 | Resistance to mineral oil & fuel oil, acid & alkali |
| EN 50305 | Resistance to ozone |

FIRE PERFORMANCE FOR ROLLING STOCK APPLICATION

| | |
|-------------|--|
| EN 50306-2 | Hazard levels HL1, HL2, HL3 |
| DIN 5510-2 | Protection level 1/2/3/4 |
| BS 6853 | Interior use 1a, 1b, II; Exterior use 1a, 1b, II |
| NF F 16-101 | F0 |



Caledonian

Rolling Stock Cables

www.caledonian-cables.com

marketing@caledonian-cables.com

| | |
|-----------|--|
| EN45545-2 | R15 Interior/ R16 Exterior HL1, HL2, HL3 |
|-----------|--|

FIRE PERFORMANCE IN GENERAL

| | |
|---|---|
| EN 50265-2-1; IEC 60332-1-2; NF C 32-070 2.1 (C2) | Vertical flame propagation for a single insulated wire or cable |
| EN 50266-2-4 + EN 50305; IEC 60332-3-24;NF C 32-070 2.2 (C1); VDE 0472 Teil 804 | Vertical flame spread of vertically mounted bunched wires or cables |
| EN 50268-2; IEC 61034-2; NF C 32-073 ;NF C 20-902; NF F 16 101; VDE 0472 Teil 816 | Low Smoke Emission |
| EN 50267-2-1; IEC 60754-1; NF C 32-074;NF C 20-454; VDE 0472 Teil 815 | Halogen Free |
| EN 50267-2-2/3; IEC 60754-2; NF C 32-074;NF C 20-453; VDE 0472 Teil 813 | Low Corrosivity (Acidity & Conductivity) |
| EN 50305; NF X 70-100; NF F 63 808; TM1-04; BS6853 | Low Toxicity |
| NF F 63 808; BS6853; NF F 16 101 | Smoke Index |
| EN45545-2 | Requirement for fire behavior of materials & components R15/R16 |

DIMENSION AND PARAMETERS

| No. of Pairs | Nominal Cross-sectional Area | No./Nominal Diameter of Strands | Approx. Overall Diameter | Nominal Copper Weight |
|--------------|------------------------------|---------------------------------|--------------------------|-----------------------|
| | mm ² | no./mm | mm | kg/km |
| 2 | 0.5 | 16/0.2 | 9.0 | 105 |



Caledonian

Rolling Stock Cables

www.caledonian-cables.com

marketing@caledonian-cables.com



Abrasion Retardant



Acid & Alkaline Resistant



Cold Resistant



Corona Resistant



Fire Retardant
NF C32-070-2,2(C1)
IEC60332-3-24/EN50266-2-4



Flame Retardant
NF C32-070-2,1(C2)
IEC60332-1-2/EN50265-2-1



Highly Flexible



IRM 902
Mineral Oil Resistant



IRM 903
Fuel Oil Resistant



Low Corrosivity
IEC60754-2/EN50267-2-2/3
NF C32-074/NF C20-453



Low Smoke Emission
IEC 61034-2 / EN 50268-2
NF C32-073/NF C 20-902



Low Toxicity
EN 50305; NF X70-100/NF
F63 808/TM1-04/BS 6853



Ozone Resistant



Resistance To Soldering Heat



UV Resistant



Zero Halogen
IEC 60754-1/EN 50267-2-1
NF C20-454