

FMC610 Control cables



- PVC outer jacket
- Shielded
- Flame-retardant
- Low cost

FMC610

Dynamic Information

| | | | |
|--|---------------------|---|----------------|
| | Min. bending radius | Moving in cable carriers | 12.5 x d |
| | | Flexible moving | 10 x d |
| | | Fixed installation | 7 x d |
| | Temperature | Moving in cable carriers | +5°C to +70°C |
| | | Flexible moving | -5°C to +70°C |
| | | Fixed installation | -15°C to +70°C |
| | v max. | Unsupported | 3 m/s |
| | a max. | 20 m/s ² | |
| | Travel distance | Unsupported travel distances up to 10 m | |

Cable structure

| | | |
|--|------------------------|--|
| | Conductor | Conductor consisting of bare copper wires (according to DIN EN 60228) |
| | Conductor insulation | Mechanically high-quality PVC mixture. |
| | Conductor construction | Cores wound with an optimised pitch length. |
| | Color code | Black cores with white numbers, one green-yellow core. |
| | Overall shield | Extremely bending-resistant braiding made of tinned copper wires. Optical approx. 80 % |
| | Outer jacket | Low-adhesion PVC mixture, adapted to suit the requirements in cable carriers. Color: black RAL 9005 |

Electrical Information

| | | |
|--|-----------------|---|
| | Nominal voltage | U_0/U : 300/500 V (following VDE0298-3) |
| | Test voltage | 2000 V (following EN50395) |

Properties and approvals

| | | |
|--|------------------|--|
| | Flame resistance | According to IEC 60332-1-2, VW-1, FT1 |
| | REACH | According to the regulation (EC) No. 1907/2006 (REACH) |
| | EAC | Certificate No. KG 417/043.CN.02.00249 |
| | Lead-free | Following 2015/863/EU (RoHS-II Tested by SGS) |
| | Cleanroom | Following ISO 14644-1 |
| | CE | Following 2014/35/EU |
| | UL | Following UL2570, 600V, 80°C |

Guaranteed service life

| Double strokes | 1 million times | 3 million times | 5 million times |
|---------------------------|---------------------|---------------------|---------------------|
| Temperature, from/to [°C] | R min. [factor x d] | R min. [factor x d] | R min. [factor x d] |
| +5/+15 | 15 | 16 | 17 |
| +15/+60 | 12.5 | 13.5 | 14.5 |
| +60/+70 | 15 | 16 | 17 |

FMC610 Control cables

| Part No. | Number of cores and conductor nominal cross-section [mm] | Outer diameter [mm] | Copper index [kg/km] | Weight [kg/km] |
|--------------|--|---------------------|----------------------|----------------|
| FMC610.05.03 | (3G0.5)C | 6.0 | 28.0 | 47.0 |
| FMC610.05.04 | (4G0.5)C | 6.5 | 35.0 | 54.0 |
| FMC610.05.05 | (5G0.5)C | 7.0 | 41.0 | 65.0 |
| FMC610.05.07 | (7G0.5)C | 8.0 | 59.0 | 75.0 |
| FMC610.05.12 | (12G0.5)C | 9.0 | 91.0 | 125.0 |
| FMC610.05.18 | (18G0.5)C | 11.0 | 136.0 | 177.0 |
| FMC610.05.25 | (25G0.5)C | 13.0 | 210.0 | 243.0 |
| FMC610.07.02 | (2×0.75)C | 6.5 | 30.0 | 50.0 |
| FMC610.07.03 | (3G0.75)C | 7.0 | 37.0 | 66.0 |
| FMC610.07.04 | (4G0.75)C | 7.5 | 46.0 | 72.0 |
| FMC610.07.05 | (5G0.75)C | 8.0 | 61.0 | 87.0 |
| FMC610.07.07 | (7G0.75)C | 9.0 | 83.0 | 112.0 |
| FMC610.07.12 | (12G0.75)C | 10.5 | 124.0 | 170.0 |
| FMC610.07.18 | (18G0.75)C | 12.0 | 183.0 | 238.0 |
| FMC610.07.25 | (25G0.75)C | 14.5 | 222.0 | 309.0 |
| FMC610.10.02 | (2×1.0)C | 6.5 | 30.0 | 52.0 |
| FMC610.10.03 | (3G1.0)C | 7.0 | 46.0 | 73.0 |
| FMC610.10.04 | (4G1.0)C | 7.5 | 63.0 | 102.0 |
| FMC610.10.05 | (5G1.0)C | 8.0 | 76.0 | 110.0 |
| FMC610.10.07 | (7G1.0)C | 9.5 | 100.0 | 130.0 |
| FMC610.10.12 | (12G1.0)C | 11.5 | 167.0 | 229.0 |
| FMC610.10.18 | (18G1.0)C | 13.0 | 213.0 | 281.0 |
| FMC610.10.25 | (25G1.0)C | 16.0 | 291.0 | 390.0 |
| FMC610.15.02 | (2×1.5)C | 7.5 | 60.0 | 71.0 |
| FMC610.15.03 | (3G1.5)C | 7.5 | 63.0 | 87.0 |
| FMC610.15.04 | (4G1.5)C | 8.5 | 90.0 | 111.0 |
| FMC610.15.05 | (5G1.5)C | 9.0 | 94.0 | 131.0 |
| FMC610.15.07 | (7G1.5)C | 11.0 | 153.0 | 183.0 |
| FMC610.15.12 | (12G1.5)C | 13.0 | 212.0 | 282.0 |
| FMC610.15.18 | (18G1.5)C | 15.0 | 399.0 | 458.0 |
| FMC610.15.25 | (25G1.5)C | 18.5 | 425.0 | 573.0 |
| FMC610.25.03 | (3G2.5)C | 10.0 | 114.0 | 171.0 |
| FMC610.25.04 | (4G2.5)C | 10.0 | 141.0 | 163.0 |
| FMC610.25.05 | (5G2.5)C | 11.0 | 149.0 | 195.0 |
| FMC610.25.07 | (7G2.5)C | 13.0 | 204.0 | 262.0 |
| FMC610.25.12 | (12G2.5)C | 16.0 | 342.0 | 428.0 |

Note: The outer diameters are reference values.

G: With green-yellow earth core

x: Without earth core