

FMM610 Motor cables



- PVC outer jacket
- Shielded
- Flame resistance
- UV-resistance
- Oil-resistant

FMM610

Dynamic Information

	Min. bending radius	Moving in cable carriers	7.5 x d
		Flexible moving	6 x d
		Fixed installation	4 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	10 m/s
		Gliding	5 m/s
	a max.	80 m/s ²	
	Travel distance	Unsupported travels and up to 400 m for gliding applications	

Cable structure

	Conductor	Cross-sectional < 10 mm ² : Stranded conductor in especially bending-resistant version consisting of bare copper wires (according to DIN EN 60228). Cross-sectional ≥ 10 mm ² : Conductor cable consisting of pre-leads (according to DIN EN 60228).
	Conductor insulation	Mechanically high-quality, especially low-capacitance XLPE mixture.
	Conductor construction	Cores wound with a short pitch length around a high tensile strength centre element.
	Color code	Black cores with white numbers, one green-yellow core. Core1: U/L1/C/L+ Core2: V/L2 Core3: W/L3/D/L- Core4: 4/N
	Inner jacket	PVC mixture adapted to suit the requirements in cable carriers.
	Overall shield	Bending-resistant braiding made of tinned copper wires. Coverage linear approx. 70%, optical approx. 90%
	Outer jacket	Low adhesion mixture on the basis of PVC, adapted to suit the requirements in cable carriers. Color: black RAL 9005

Electrical Information

	Nominal voltage	U ₀ /U: 600/1000 V (following VDE0298-3)
	Test voltage	4000 V (following EN50395)

Properties and approvals

	UV-resistance	Medium
	Oil resistance	Oil-resistant (following IEC60811-404, tested by SGS), bio-oil-resistant (following VDMA24568, tested by SGS)
	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, 1000V, 80°C

Guaranteed service life

Double strokes	5 million times	7.5 million times	10 million times
Temperature, from/to [°C]	R min. [factor x d]	R min. [factor x d]	R min. [factor x d]
+5/+15	10	11	12
+15/+60	7.5	8.5	9.5
+60/+70	10	11	12

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Part No.	Number of cores and conductor nominal cross-section [mm]	Outer diameter [mm]	Copper index [kg/km]	Weight [kg/km]
FMM610.15.04	(4G1.5)C	10	89	157
FMM610.25.04	(4G2.5)C	11.5	133	221
FMM610.25.05	(5G2.5)C	13	163	271
FMM610.40.04	(4G4.0)C	13	203	300
FMM610.40.05	(5G4.0)C	14.5	258	354
FMM610.60.04	(4G6.0)C	16	288	455
FMM610.60.05	(5G6.0)C	17	356	532
FMM610.100.04	(4G10)C	18.5	468	670
FMM610.100.05	(5G10)C	21.5	609	857
FMM610.160.04	(4G16)C	23	738	1035
FMM610.250.04	(4G25)C	27.5	1153	1586
FMM610.350.04	(4G35)C	31	1592	2104
FMM610.500.04	(4G50)C	36.5	2224	2902
FMM610.700.04	(4G70)C	43	3203	4173

Note: The outer diameters are reference values.

G: With green-yellow earth core

x: Without earth core