

FMM917 Motor cables



- TPE outer jacket
- Shielded
- UV-resistance
- Oil-resistant
- Resistant to hydrolysis and microbes
- PVC and halogen-free



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	-35°C to +90°C
		Flexible moving	-50°C to +90°C
		Fixed installation	-55°C to +90°C
	v max.	Unsupported	10 m/s
		Gliding	6 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	TPE 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 TPE, especially abrasion-resistant and highly flexible, 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	High
	Hydrolysis-resistance	High
	Cold-resistant	-55°C
	Oil resistance	Oil-resistant (following IEC60811-404, tested by SGS), bio-oil-resistant (following VDMA24568, tested by SGS)
	Halogen-free	Following DIN EN 60754
	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 UL22188, 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]
-35/-25	10	11	12
-25/+80	7.5	8.5	9.5
+80/+90	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]
FMM917.15.04	(4G1.5)C	10	89	140
FMM917.25.04	(4G2.5)C	11.5	133	198
FMM917.40.04	(4G4.0)C	13	203	280
FMM917.60.04	(4G6.0)C	16	288	409
FMM917.100.04	(4G10)C	18.5	468	613
FMM917.160.04	(4G16)C	23	738	943
FMM917.250.04	(4G25)C	27	1153	1432

Note: The outer diameters are reference values.

G: With green-yellow earth core

x: Without earth core