

FMC810 Control cables



- PUR outer jacket
- UV-resistant
- Shielded
- Oil and bio-oil-resistant



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	-20°C to +80°C
		Flexible moving	-40°C to +80°C
		Fixed installation	-50°C to +80°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 mixture on the basis of PUR, 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

	UV-resistance	Medium
	Cold-resistant	-50°C
	Oil resistance	Oil-resistant (following IEC60811-404, tested by SGS), bio-oil-resistant (following VDMA24568, tested by SGS)
	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 UL20940, 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]
-20/-10	15	16	17
-10/+70	12.5	13.5	14.5
+70/+80	15	16	17

FMC810 Control cables

Part No.	Number of cores and conductor nominal cross-section [mm]	Outer diameter [mm]	Copper index [kg/km]	Weight [kg/km]
FMC810.05.02	(2×0.5)C	6	18	37
FMC810.05.03	(3G0.5)C	6	28	45
FMC810.05.05	(5G0.5)C	7	41	62
FMC810.05.12	(12G0.5)C	9	91	122
FMC810.05.18	(18G0.5)C	11	136	174
FMC810.05.25	(25G0.5)C	13	210	234
FMC810.07.02	(2×0.75)C	6.5	30	48
FMC810.07.03	(3G0.75)C	7	37	63
FMC810.07.04	(4G0.75)C	7.5	46	68
FMC810.07.05	(5G0.75)C	8	61	85
FMC810.07.07	(7G0.75)C	9	83	109
FMC810.07.12	(12G0.75)C	10.5	124	166
FMC810.07.18	(18G0.75)C	12	183	232
FMC810.07.25	(25G0.75)C	14.5	222	299
FMC810.10.02	(2×1.0)C	6.5	30	50
FMC810.10.03	(3G1.0)C	7	46	71
FMC810.10.04	(4G1.0)C	7.5	63	98
FMC810.10.05	(5G1.0)C	8	76	105
FMC810.10.07	(7G1.0)C	9.5	100	126
FMC810.10.12	(12G1.0)C	11.5	167	224
FMC810.10.18	(18G1.0)C	13	213	276
FMC810.10.25	(25G1.0)C	16	291	382
FMC810.15.02	(2×1.5)C	7.5	60	69
FMC810.15.03	(3G1.5)C	7.5	63	85
FMC810.15.04	(4G1.5)C	8.5	90	108
FMC810.15.05	(5G1.5)C	9	94	129
FMC810.15.07	(7G1.5)C	11	153	177
FMC810.15.12	(12G1.5)C	13	212	276
FMC810.15.25	(25G1.5)C	18.5	425	560
FMC810.25.04	(4G2.5)C	10	141	157
FMC810.25.05	(5G2.5)C	11	149	192
FMC810.25.07	(7G2.5)C	13	204	255

Note: The outer diameters are reference values.

G: With green-yellow earth core

x: Without earth core