

TOPFLEX®-EMV-UV-2YSLCYK-J

double screened, EMC-preferred type



TECHNICAL DATA

Motor connection cable for frequency converters in alignment with DIN VDE 0250

Temperature range	flexible -5°C to +70°C fixed -40°C to +70°C
Nominal voltage	AC U ₀ /U 600/1000 V
Max. permissible operating voltage	alternating current (AC) conductor/earth 700 V three-phase alternating current (AC) conductor/conductor 1200 V direct current (DC) conductor/earth 900 V direct current (DC) conductor/conductor 1800 V
Test voltage core/core	4000 V
Mutual capacitance	see table
Coupling resistance	see table
Minimum bending radius	flexible < 12 mm: 10x Outer-ø flexible > 12 mm: 15x Outer-ø fixed 4x Outer-ø

CABLE STRUCTURE

- Copper wire bare, finely stranded acc. to DIN VDE 0295 Class 5 / IEC 60228 Class 5
- Core insulation: PE
- Core identification: brown, black, grey, green-yellow
- G = with protective conductor GN-YE
- Cores stranded with optimal lay lengths
- 1. Screen: plastic-coated aluminium foil (St)
- 2. Screen: braided screen of tinned copper wires, approx. coverage 85%
- Outer sheath: Special-PVC
- Sheath colour: black (RAL 9005)
- Length marking: in metres

PROPERTIES

- resistant to: UV radiation, weathering effects
- for outdoor use
- the materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers
- optimal screening enables interference-free operation of frequency converters
- low coupling resistance ensures good electromagnetic compatibility
- low mutual capacitance of the individual cores due to PE core insulation and low screen capacity, enable low-loss power transmission

TESTS

- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2
- UV-resistant acc. to DIN EN ISO 4892-2
- weather-resistant acc. to DIN EN ISO 4892-2
- electromagnetic compatibility acc. to DIN VDE 0875-11 / DIN EN 55011
- certifications and approvals: EAC

APPLICATION

Used as a connecting cable for medium mechanical stress with fixed installation and occasional free movement in dry, damp or wet rooms, as well as outdoors; direct burial installation is possible beginning with 4G16 mm². Used in automotive, food, packaging and chemical industries, as well as in the environmental technology sector. EMC= Electromagnetic Compatibility; in order to optimise EMC properties, we recommend a double-sided and all-round large contact area of the copper braiding.

NOTES

- the conductor is metrically (mm²) constructed, AWG numbers are approximated, and are for reference only

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Mutual capacitance core/core in pF/m approx.	Mutual capacitance core/screen in pF/m approx.	Coupling resistance at 30 MHz in Ohm/km	Current carrying capacity*	Cu factor per km	Weight kg/km, approx.
22234	4 G 1.5	16	10.1	70	110		18	95.0	166.0
22235	4 G 2.5	14	11.9	80	130	210	26	150.0	243.0
22236	4 G 4	12	13.6	90	150	210	34	235.0	362.0
22237	4 G 6	10	15.3	90	150	150	44	320.0	457.0
22238	4 G 10	8	19.4	120	200	180	61	533.0	732.0
22239	4 G 16	6	22.4	120	210	190	82	789.0	1116.0
22240	4 G 25	4	26.7	140	230	95	108	1236.0	1597.0
22241	4 G 35	2	29.3	150	260	85	135	1662.0	2019.0
22242	4 G 50	1	34.1	190	320	40	168	2345.0	2898.0
22243	4 G 70	2/0	39.0	190	320	45	207	3196.0	3839.0
22244	4 G 95	3/0	44.0	250	410	50	250	4316.0	5023.0
22245	4 G 120	4/0	48.7	270	430		292	5435.0	6096.0

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22246	4 G 150	300 kcmil	54.2	280	450		335	6394.0	7483.0
22247	4 G 185	350 kcmil	60.6	290	470		382	7639.0	9561.0

*) Current carrying capacity with 3 loaded cores in amperes for permanent operation up to 30°C ambient temperature. For deviating ambient temperatures, the conversion factors and specifications from DIN VDE 0298-4 apply.