

# TOPFLEX®-EMV-UV-2YSLC11Y-J UL/CSA



double screened, EMC-preferred type



HELUKABEL® TOPFLEX®-EMV-UV-2YSLC11Y-J UL/CSA 4G50 QMM  
E170315 AWM STYLE 20234 80°C 1000V FT1 CE

## TECHNICAL DATA

Motor connection cable for frequency converters acc. to UL-Std. 758 (AWM) Style 20234, in alignment with DIN VDE 0250

<b>Temperature range</b>	flexible -5°C to +80°C fixed -40°C to +80°C
<b>Nominal voltage</b>	UL (AWM) AC 1000 V
<b>Test voltage core/core</b>	4000 V
<b>Mutual capacitance</b>	see table
<b>Coupling resistance</b>	see table
<b>Minimum bending radius</b>	flexible < 12 mm: 10x Outer-ø 12-20 mm: 15x Outer-ø > 20 mm: 20x Outer-ø fixed < 12 mm: 5x Outer-ø 12-20 mm: 7,5x Outer-ø > 20 mm: 10x Outer-ø

- highly abrasion-resistant, notch-resistant, tear-resistant, cut-resistant, wear-resistant, low adhesion
- for outdoor use
- halogen-free
- 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, CSA FT1
- electromagnetic compatibility acc. to DIN VDE 0875-11 / DIN EN 55011

## APPLICATION

Motor connection cable for frequency converters; secures EMC in systems and buildings with devices and machineries, which can emit electromagnetic interference fields that can impact the environment in an illegal manner. To be used as a connection cable involving medium mechanical stress for fixed installations and applications with occasional free movement in dry, moist and wet rooms and outside. For use in the automotive, food processing and packaging industry, in machine tools, handling equipment, pumps, fans, and transport belts. 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 (mm<sup>2</sup>) constructed, AWG numbers are approximated, and are for reference only

## 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: PUR
- Sheath colour: black (RAL 9005)
- Length marking: in metres

## PROPERTIES

- resistant to: oil, UV radiation, ozone, oxygen, weathering effects, hydrolysis, microbes, coolants, hydraulic fluids, acids, alkalis, greases, seawater and wastewater

Part no.	No. cores x cross-sec. mm <sup>2</sup>	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-weight kg/km	Weight kg/km, approx.
22389	4 G 1.5	16	10.3	70	110		18	95.0	230.0
22390	4 G 2.5	14	12.3	80	130	210	26	150.0	300.0
22391	4 G 4	12	13.9	90	150	210	34	235.0	485.0
22392	4 G 6	10	15.3	90	150	150	44	320.0	630.0
22393	4 G 10	8	19.5	120	200	180	61	533.0	860.0
22394	4 G 16	6	23.3	120	210	190	82	789.0	1290.0
22395	4 G 25	4	27.4	140	230	95	108	1180.0	1800.0
22396	4 G 35	2	30.3	150	260	85	135	1662.0	2610.0
22397	4 G 50	1	35.5	190	320	40	168	2345.0	2950.0
22398	4 G 70	2/0	40.2	190	320	45	207	3196.0	3950.0
22399	4 G 95	3/0	44.5	250	410	50	250	4316.0	5300.0
22566	4 G 120	4/0	50.3	270	430		292	5435.0	6600.0

Continued on next page

# TOPFLEX®-EMV-UV-2YSLC11Y-J UL/CSA



double screened, EMC-preferred type

Part no.	No. cores x cross-sec. mm <sup>2</sup>	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-weight kg/km	Weight kg/km, approx.
22567	4 G 150	300 kcmil	56.1	280	450		335	6394.0	7040.0
22568	4 G 185	350 kcmil	58.0	290	470		382	7639.0	8380.0

\*) 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.