

# TOPFLEX®-EMV-UV-2YSLCYK-J UL/CSA Motorsupply

**cable 1000 V, for power supply connections to frequency converters, double screened, meter marking.**



## Technical data

- Special motor power supply cable for frequency converters to Style 2570
- **Temperature range**  
flexing -5°C bis +80°C  
fixed installation -40°C bis +80°C
- **Nominal voltage**  
UL 1000 V
- **Test voltage** 4000 V
- **Insulation resistance**  
min. 200 MOhm x km
- **Coupling resistance**  
acc. to different cross-section  
max. 250 Ohm/km
- **Minimum bending radius**  
fixed installation for outer Ø:  
up to 12 mm: 5x cable Ø  
> 12-20 mm: 7,5x cable Ø  
> 20 mm: 10x cable Ø  
free-movement for outer Ø:  
up to 12 mm: 10x cable Ø  
> 12-20 mm: 15x cable Ø  
> 20 mm: 20x cable Ø
- **Radiation resistance**  
up to 80x10<sup>6</sup> cJ/kg (up to 80 Mrad)

## Cable structure

- Bare copper-conductor, to DIN VDE 0295 cl.5, fine-wire, BS 6360 cl.5, IEC 60228 cl.5
- Core insulation of polyethylene (PE)
- Core identification BN, BK, GY
- GN-YE conductor
- Cores stranded in concentric layers
- 1. Screen with special aluminium film
- 2. Tinned copper braided screen, approx. 85% coverage
- Outer sheath of special PVC
- Sheath colour black (RAL 9005)
- with meter marking

## Properties

- Low mutual capacitance
- Meets EMC requirements acc. to EN 55011 and DIN VDE 0875 part 1
- Low coupling resistance for high electromagnetic compatibility
- UV-resistant
- Outdoor application
- This screened motor supply cable with low mutual capacitance of the single cores because of the special PE core insulation and low screen capacitance enable a low-loss transmission of the power compared to PVC-sheathed connecting cables
- Due to the optimal screening an interference-free operation of frequency converters is obtained
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

## Tests

- PVC self-extinguishing and flame retardant acc. to DIN VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)

## Note

- \*\*) The current carrying capacity for permanent operation at ambient temperature of 30°C. For deviating ambient temperatures the conversion factors should be used and for further see the indication in DIN VDE 0298 part 4.
- AWG sizes are approximate equivalent values. The actual cross-section is in mm<sup>2</sup>.

## Application

This TOPFLEX®-EMV-UV-2YSLCYK-J UL/CSA motor connection cable for the frequency converters secures the EMC in systems and buildings, equipment with devices and machineries, which can emit electromagnetic interference fields that can impact the environment in an illegal manner. It is used as a connection and connecting cable under average mechanical stress for fixed installations and sometimes for free movement in dry, moist and wet rooms and outside. It is used in the automotive industry, food processing industry, transfer streets, packaging industry, machine tools, handling equipment, in the industry it is used for pumps, fans, transport belts, etc. Used in explosion proof areas.

**EMC** = Electromagnetic compatibility

The screen must be connected at both ends and ensure large-area contact over the entire cable circumference for compliance with the functional interference requirements of EN 55011.

CE = The product is conformed with the EC Low-Voltage Directive 2006/95/EC.

Part no.	No. cores x cross-sec. mm <sup>2</sup>	Outer Ø app. mm	Mutual capacitance		Coupling resistance		Power ratings **) with 3 loaded cores in Amperes	Cop. weight kg / km	Weight app. kg / km	AWG-No.
			Core / Core app.nF / km	Core / Screen app.nF / km	at 1 MHz Ohm/km	at 30 MHz Ohm/km				
22320	4 G 1,5	10,4					0	95,0	140,0	16
22321	4 G 2,5	12,5	80	130	18	210	26	150,0	300,0	14
22322	4 G 4	14,2	90	150	11	210	34	235,0	485,0	12
22323	4 G 6	15,2	90	150	6	150	44	320,0	630,0	10
22324	4 G 10	19,5	120	200	7	180	61	533,0	860,0	8
22325	4 G 16	22,9	140	230	9	190	82	789,0	1290,0	6
22326	4 G 25	27,1	120	210	4	95	108	1236,0	1860,0	4
22327	4 G 35	29,6	150	260	3	85	135	1662,0	2610,0	2

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