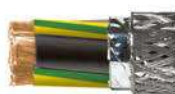
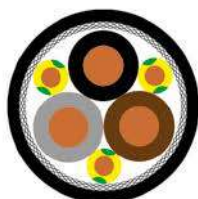


# TOPFLEX®-EMV-UV-3-PLUS-2YSLCYK-J



**CORPELIMA S.A.C.**  
Importadores y Líderes en Soluciones Eléctricas

Cable screened, EMC-preferred type



HELUKABEL® TOPFLEX®-EMV-UV-3-PLUS-2YSLCYK-J 3x50 + 3G10 QMM / 22681 0,6/1 kV CE

## TECHNICAL DATA

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

|                                    |                                                                                                                                                                                                                  |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Temperature range                  | flexible -5°C to +70°C<br>fixed -40°C to +70°C                                                                                                                                                                   |
| Nominal voltage                    | AC U <sub>0</sub> /U 600/1000 V                                                                                                                                                                                  |
| Max. permissible operating voltage | alternating current (AC) conductor/earth 700 V<br>three-phase alternating current (AC) conductor/conductor 1200 V<br>direct current (DC) conductor/earth 900 V<br>direct current (DC) conductor/conductor 1800 V |
| Test voltage core/core             | 4000 V                                                                                                                                                                                                           |
| Coupling resistance                | see table                                                                                                                                                                                                        |
| Minimum bending radius             | flexible < 12 mm: 10x Outer-ø<br>flexible > 12 mm: 15x Outer-ø<br>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 (divided into thirds)
- Protective conductor: GN-YE divided into thirds (3+3-core structure)
- 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
- symmetrical 3-PLUS-composition (protective conductor divided into thirds and stranded uniformly in the interstices) with improved EMC properties in comparison to 4-core-composition
- 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
- minimum cross-section of 0.75 mm<sup>2</sup> meets requirements acc. to DIN EN 60204-1
- 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 3x16+3G2.5 mm<sup>2</sup>. 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 (mm<sup>2</sup>) constructed, AWG numbers are approximated, and are for reference only

| Part no. | No. cores x cross-sec. mm <sup>2</sup> | AWG, approx. | Outer Ø mm, approx. | Coupling resistance at 30 MHz in Ohm/km | Current carrying capacity* | Cu factor per km | Weight kg/km, approx. |
|----------|----------------------------------------|--------------|---------------------|-----------------------------------------|----------------------------|------------------|-----------------------|
| 22673    | 3 x 1.5 + 3 G 0.25                     | 16           | 9.2                 |                                         | 18                         | 86.0             | 135.0                 |
| 22674    | 3 x 2.5 + 3 G 0.5                      | 14           | 10.8                | 210                                     | 26                         | 144.0            | 198.0                 |
| 22675    | 3 x 4 + 3 G 0.75                       | 12           | 12.3                | 210                                     | 34                         | 224.0            | 323.0                 |
| 22676    | 3 x 6 + 3 G 1                          | 10           | 14.0                | 150                                     | 44                         | 298.0            | 430.0                 |
| 22677    | 3 x 10 + 3 G 1.5                       | 8            | 17.6                | 180                                     | 61                         | 491.0            | 615.0                 |
| 22678    | 3 x 16 + 3 G 2.5                       | 6            | 21.2                | 190                                     | 82                         | 723.0            | 956.0                 |
| 22679    | 3 x 25 + 3 G 4                         | 4            | 24.5                | 95                                      | 108                        | 1138.0           | 1381.0                |
| 22680    | 3 x 35 + 3 G 6                         | 2            | 26.9                | 85                                      | 135                        | 1535.0           | 1759.0                |
| 22681    | 3 x 50 + 3 G 10                        | 1            | 32.5                | 40                                      | 168                        | 2208.0           | 2526.0                |
| 22682    | 3 x 70 + 3 G 10                        | 2/0          | 35.5                | 45                                      | 207                        | 2871.0           | 3457.0                |
| 22683    | 3 x 95 + 3 G 16                        | 3/0          | 40.1                | 50                                      | 250                        | 3953.0           | 4188.0                |



# TOPFLEX®-EMV-UV-3-PLUS-2YSLCYK-J

double screened, EMC-preferred type

| Part no. | No. cores x cross-sec. mm² | AWG, approx. | Outer Ø mm, approx. | Coupling resistance at 30 MHz in Ohm/km | Current carrying capacity* | Cu factor per km | Weight kg/km, approx. |
|----------|----------------------------|--------------|---------------------|-----------------------------------------|----------------------------|------------------|-----------------------|
| 22684    | 3 x 120 + 3 G 16           | 4/0          | 44.4                |                                         | 292                        | 4836.0           | 5051.0                |
| 22685    | 3 x 150 + 3 G 25           | 300 kcmil    | 49.3                |                                         | 335                        | 5412.0           | 6582.0                |
| 22686    | 3 x 185 + 3 G 35           | 350 kcmil    | 55.1                |                                         | 382                        | 6969.0           | 8165.0                |
| 22687    | 3 x 240 + 3 G 42.5         | 500 kcmil    | 60.0                |                                         | 453                        | 8540.0           | 10317.0               |

\*) 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.

