# HELUCHAIN® SINGLE 602-HF-CY-J PVC UL/CSA / HELUCHAIN® SINGLE 602-HF-CY-O PVC UL/CSA





HELUCHAIN® SINGLE 602-HF-CY-J PVC 1G16 QMM / 6 AWG E170315 74 AWM STYLE 10107 90°C 600V VW-1 74 AWM I/II A/B 90°C 600V FT1 CE



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## **TECHNICAL DATA**

PVC sheathed single core cable acc. to UL-Std. 758 (AWM) Style 10107, CSA-Std. C22.2 No. 210 - AWM I/II A/B, in alignment with DIN VDE 0285-525-2-31 / DIN EN 50525-2-31

**Temperature range** flexible -5°C to +90°C

fixed -40°C to +90°C

Permissible operating temperature of the conductor

+90°C

Nominal voltage VDE AC U<sub>0</sub>/U 600/1000 V

UL (AWM) AC 600 V

**Test voltage** 4000 ∨ **Breakdown voltage** 8000 ∨

**Coupling resistance** at 30 MHz, approx. 250 Ohm/

km

**Minimum bending radius** flexible 7.5x Outer-Ø

fixed 3x Outer-Ø

## CABLE STRUCTURE

- Copper wire bare, extra finely stranded acc. to DIN VDE 0295 Class 6 / IEC 60228 Class 6
- Core insulation: Special-PVC acc. to UL-Std. 1581
- Core identification: see table
- G = with protective conductor GN-YE,
  x = without protective conductor
- Screen: braided screen of tinned copper wires, approx. coverage  $85\,\%$
- Outer sheath: PVC acc. to DIN VDE 0207-5 (compound type YM5), UL-Std. 1581
- Sheath colour: orange (RAL 2003), acc. to. DESINA
- · Length marking: in metres

#### PROPERTIES

- · resistant to: UV radiation, weathering effects
- · largely resistant to: oil
- for outdoor use
- suitable for use in drag chains
- the materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers

## TESTS

- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2, UL VW-1, CSA FT1
- UV-resistant acc. to DIN EN ISO 4892-2
- · weather-resistant acc. to DIN EN ISO 4892-2
- certifications and approvals:

## APPLICATION

Highly flexible drag chain single core cable for use in dry and damp rooms as well as outdoors; for applications involving free movement, no tensile stress and no forced movement guidance. Suitable for frequent lifting and bending stresses in machine and tool construction and on permanently moving machine parts. 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
- for use in energy supply systems:
  - 1) the assembly instructions must be observed
  - $2) \ \mbox{for further application parameters, please refer to the selection tables}$
  - 3) for special applications, we recommend contacting us and using our data entry form for energy supply systems

#### Core identification: green-yellow

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
69631	1 G 10	8	9.7	125.0	230.0
69633	1 G 16	6	10.8	187.0	300.0
69635	1 G 25	4	12.1	277.0	420.0
69637	1 G 35	2	14.8	387.0	615.0
69639	1 G 50	1	16.3	536.0	825.0
69641	1 G 70	2/0	18.3	739.0	1090.0
69643	1 G 95	3/0	20.4	1004.0	1395.0
69645	1 G 120	4/0	23.8	1259.0	1770.0
69647	1 G 150	250 kcmil	26.2	1597.0	1930.0
69649	1 G 185	350 kcmil	29.0	1945.0	2635.0
69651	1 G 240	450 kcmil	32.0	2496.0	3380.0
69653	1 G 300	550 kcmil	37.5	3106.0	4120.0

## Core identification: black

Part no.	No. cores x cross-sec. mm <sup>2</sup>	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.				
69632	1 x 10	8	9.7	125.0	230.0				
69634	1 x 16	6	10.8	187.0	300.0				
69636	1 x 25	4	12.1	277.0	420.0				
69638	1 x 35	2	14.8	387.0	615.0				
69640	1 x 50	1	16.3	536.0	825.0				
69642	1 x 70	2/0	18.3	739.0	1090.0				
69644	1 x 95	3/0	20.4	1004.0	1395.0				
69646	1 x 120	4/0	23.8	1259.0	1770.0				
69648	1 x 150	250 kcmil	26.2	1597.0	1930.0				
69650	1 x 185	350 kcmil	29.0	1945.0	2635.0				
69652	1 x 240	450 kcmil	32.0	2496.0	3380.0				
69654	1 x 300	550 kcmil	37.5	3106.0	4120.0				

