



High-temperature wire

H07G-U

Solid-Conductor EVA Heat-Resistant Wire

450/750 V Class 1 solid tinned copper wire with +110 °C cross-linked EVA EI3 insulation



EN 50525-2-42

450/750 V

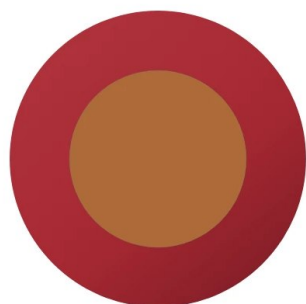
+110 °C EVA EI3

Application

Harmonised H07G-U solid-conductor heat-resistant single-core wire to EN 50525-2-42, combining a Class 1 tinned copper core with halogen-free cross-linked EVA (EI3) insulation for fixed internal wiring up to +110 °C.

Typical uses: Industrial Ovens & Dryers, High-Intensity Luminaires, Switchgear & Control Panels, Commercial Heating Appliances, Foundry & Glasswork Auxiliaries

Construction



Cross-section, not to scale

- 1 Solid tinned copper conductor
- 2 Primary EVA dielectric
- 3 Integral halogen-free outer skin

Technical data

Typical values

Rated voltage U0/U	450/750 V AC	Protected switchgear voltage	Up to 600/1000 V AC in protected ducts
AC test voltage	2500 V AC (50 Hz, 5 min)	Insulation resistance (20 °C)	≥ 200 MΩ·km (≥ 0.011 MΩ·km at +110 °C)
Current rating basis	DIN VDE 0298-4 for +110 °C heat-resistant wire	Continuous conductor temp.	-40 °C to +110 °C
Short-term peak temperature	+120 °C (up to 1000 h cumulative)	Max. short-circuit temperature	+250 °C (max. 5 s duration)
Min. installation temperature	-25 °C during handling and bending	Conductor stranding class	IEC 60228 Class 1 (solid single wire)
Min. bending radius (≤ 8 mm OD)	4 × overall diameter (fixed installation)	Min. bending radius (> 8 mm OD)	5 × overall diameter (fixed installation)
Max. pulling tension	50 N/mm ² of copper cross-section (static)	Flame retardance	IEC 60332-1-2 / EN 60332-1-2 vertical flame
Halogen-free & acid gas	IEC 60754-1 / EN 60754-2 (pH ≥ 4.3)	Smoke density	Low smoke emission per IEC 61034-2
Thermal ageing & ozone	Cross-linked EI3 resists ozone & UV	Standards	EN 50525-2-42 / DIN VDE 0285-525-2-42

Sizes

9 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Cross-section / size	Conductor build	Wall ≈ mm	Outer Ø ≈ mm	Metal kg/km	Weight ≈ kg/km	Min. bend R fixed mm
Standard H07G-U configurations 9 sizes							
☐ H07G-U 1×0.5	0.5	1×0.80 mm solid	0.60	2.00	4.8	8.6	8
☐ H07G-U 1×0.75	0.75	1×0.98 mm solid	0.60	2.20	7.2	11.6	9
☐ H07G-U 1×1	1	1×1.13 mm solid	0.60	2.40	9.6	14.7	10
☐ H07G-U 1×1.5	1.5	1×1.38 mm solid	0.80	3.00	14.4	22.4	12
☐ H07G-U 1×2.5	2.5	1×1.78 mm solid	0.90	3.60	24.0	35.0	14
☐ H07G-U 1×4	4	1×2.26 mm solid	1.00	4.30	38.4	53.4	17
☐ H07G-U 1×6	6	1×2.76 mm solid	1.00	4.80	57.6	74.8	19
☐ H07G-U 1×10	10	1×3.57 mm solid	1.20	6.00	96.0	121.9	24
☐ H07G-U 1×16	16	1×4.51 mm solid	1.20	7.00	153.6	185.3	28

– Outer diameters and weights are nominal engineering values for H07G-U subject to standard manufacturing tolerances per EN 50525-2-42 / DIN VDE 0285-525-2-42.

Electrical & rating data

9 sizes

Configuration	Max. DC R @ 20 °C Ω/km	Primary rating (A or kV)	Derated / AC rating	Dielectric test V AC rms
1×0.5 mm ²	36.70	12.0	9.0	2,500
1×0.75 mm ²	24.80	16.0	12.0	2,500
1×1 mm ²	18.20	20.0	15.0	2,500
1×1.5 mm ²	12.20	26.0	20.0	2,500
1×2.5 mm ²	7.56	36.0	28.0	2,500
1×4 mm ²	4.70	49.0	37.0	2,500
1×6 mm ²	3.11	63.0	48.0	2,500
1×10 mm ²	1.84	86.0	66.0	2,500
1×16 mm ²	1.16	115.0	88.0	2,500

– Electrical resistance at +20 °C and dielectric withstand voltages verified per EN 50525-2-42 / DIN VDE 0285-525-2-42.

Standards and approvals

- ✓ EN 50525-2-42 / DIN VDE 0285-525-2-42
- ✓ CE (2014/35/EU) & RoHS 3 (2015/863/EU) Compliant
- ✓ REACH SVHC & Halogen/Asbestos Compliance Verified

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/h07g-u-solid-conductor-eva-heat-resistant-wire



Typical values for this cable type, based on EN 50525-2-42 / DIN VDE 0285-525-2-42. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.