

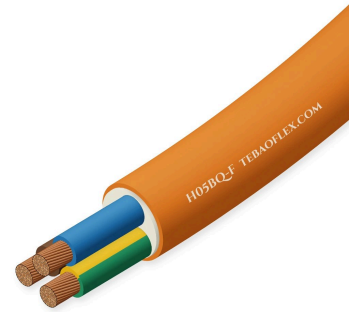


General rubber flexible cables

H05BQ-F

PUR Sheathed Flexible Cable

Harmonised 300/500 V EI7 EPR-insulated and TMPU polyurethane-sheathed cord



EN 50525-2-21

U0/U 300/500 V

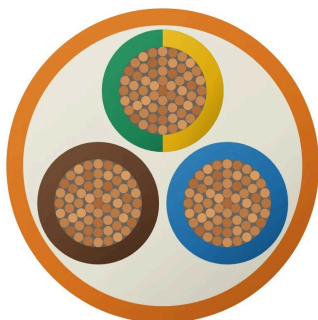
EI7 EPR · TMPU PUR

Application

High-visibility 300/500 V flexible cable combining +90 °C cross-linked EI7 EPR rubber core insulation with a cut-, notch-, oil- and microbe-resistant TMPU polyurethane outer sheath per EN 50525-2-21 for harsh workshop, construction and cold-climate tools.

Typical uses: Construction & civil engineering tools, Machine shops & swarf-heavy floors, Cold storage & alpine outdoor sites, Agricultural & municipal equipment, Mobile sensors & control units

Construction



Cross-section, not to scale

1	Flexible copper conductor	EN 60228 Class 5
2	Heat-resistant EPR insulation	EN 50363-1 EI7
3	Polyurethane outer sheath	

Technical data

Typical values

Rated voltage U0/U	300/500 V AC	Max. operating voltage	330/550 V AC
AC test voltage	2000 V AC (50 Hz, 15 min)	Conductor stranding	IEC 60228 Class 5 fine-stranded bare copper
Current rating basis	DIN VDE 0298-4 (+90 °C EPR conductor rating)	Max. conductor temperature	+90 °C continuous operation
Short-circuit temperature	+250 °C max. (up to 5 s)	Temperature, flexing	−40 °C to +80 °C
Temperature, fixed	−50 °C to +90 °C	Min. bending radius, fixed	4 × overall diameter
Min. bending radius, moving	5 × overall diameter (free flexing)	Max. tensile load	15 N/mm² dynamic (50 N/mm² static)
Abrasion & notch resistance	High tear, cut and abrasion resistance (TMPU per EN 50363-10-2)	Oil & coolant resistance	EN 60811-404 mineral oils, greases and cutting emulsions
Halogen-free	IEC 60754-1 / EN 60754-1 halogen-free compounds	Weather, UV & microbes	Resistant to UV sunlight, ozone, hydrolysis and microbes
Water exposure	AD6/AD7 splashing and temporary water immersion	Standards	EN 50525-2-21 (HD 22.10 S2 / DIN VDE 0285-525-2-21)
Standard packing	Heat-treated ISPM-15 timber drums with sealed cable ends		

Sizes

10 standard constructions

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

Order designation	Cores × mm²	AWG ≈	Outer Ø min mm	Outer Ø max mm	Copper kg/km	Weight ≈ kg/km	Min. bend R mm
Harmonised H05BQ-F sizes (0.75–1.0 mm² per EN 50525-2-21 Table B.4) 8 sizes							
☐ H05BQ-F 2×0.75	2×0.75	18	5.5	6.0	14	48	24
☐ H05BQ-F 3G0.75	3G0.75	18	6.0	6.5	22	59	26
☐ H05BQ-F 4G0.75	4G0.75	18	6.5	7.1	29	72	28
☐ H05BQ-F 5G0.75	5G0.75	18	7.3	7.9	36	88	32
☐ H05BQ-F 2×1.0	2×1.0	17	5.9	6.4	19	57	26
☐ H05BQ-F 3G1.0	3G1.0	17	6.3	6.9	29	71	28
☐ H05BQ-F 4G1.0	4G1.0	17	7.0	7.6	38	88	30
☐ H05BQ-F 5G1.0	5G1.0	17	7.7	8.4	48	106	34
Multicore 05BQ-F control configurations (7-core) 2 sizes							
☐ 05BQ-F 7G0.75	7G0.75	18	8.6	9.4	50	125	38
☐ 05BQ-F 7G1.0	7G1.0	17	9.2	10.0	67	152	40

– Dimensions and weights are typical values per EN 50525-2-21 (HD 22.10). Minimum fixed bending radius shown is 4 × OD.

Electrical & current ratings

2 sizes

Cross-section mm²	AWG ≈	Max. DC resistance 20 °C, Ω/km	1-core in air 30 °C, A	3–4 core in air 30 °C, A
0.75	18	26	12	10
1	17	19.5	15	13

– Current ratings at 30 °C ambient in free air per DIN VDE 0298-4 / EN 50565-1. Apply derating factors for elevated ambient temperature or reeling layer grouping.

Standards and approvals

- ✓ EN 50525-2-21 (HD 22.10)
- ✓ CE · RoHS 2 (2011/65/EU) · REACH

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/h05bq-f-pur-sheathed-flexible-cable



Typical values for this cable type, based on EN 50525-2-21 (HD 22.10). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.