



General rubber flexible cables

H05BB-F

Flexible Rubber Cable

Harmonised 300/500 V –40 to +90 °C EI6/EM6 all-EPR flexible rubber cord



EN 50525-2-21

U0/U 300/500 V

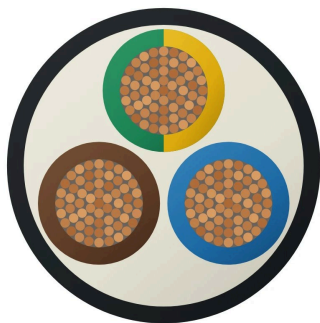
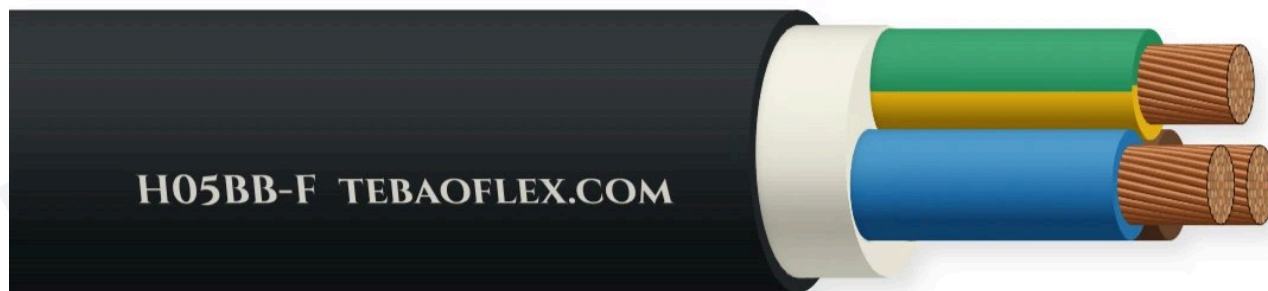
EI6/EM6 EPR · –40...+90 °C

Application

Harmonised 300/500 V flexible rubber cable to EN 50525-2-21 featuring Class 5 copper conductors, +90 °C EI6 ethylene-propylene rubber insulation and an EM6 EPR elastomer outer sheath engineered for sub-zero flexing down to –40 °C and +90 °C thermal duty.

Typical uses: Cold storage & blast-freezer equipment, Nordic & alpine outdoor appliances, Commercial heating & drying units, Horticultural & greenhouse lighting, Halogen-free indoor/outdoor tools

Construction



Cross-section, not to scale

- 1 Flexible copper conductor
- 2 Cold/heat EPR insulation
- 3 EPR elastomer outer sheath

EN 60228 Class 5

EN 50363-1 EI6

Technical data

Typical values

Rated voltage U ₀ /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 conductor rating)	Max. conductor temperature	+90 °C continuous operation
Short-circuit temperature	+250 °C max. (up to 5 s)	Temperature, flexing	−40 °C to +90 °C
Temperature, fixed	−50 °C to +90 °C	Min. bending radius, fixed	4 × overall diameter (OD ≤ 12 mm: 3 × OD)
Min. bending radius, moving	6 × overall diameter (free movement)	Max. tensile load	15 N/mm ² dynamic (50 N/mm ² static)
Sub-zero flexibility	EI6/EM6 EPR remains supple at −40 °C without cracking	Ozone, UV & weather	EN 60811-403 ozone-immune EPR outer sheath
Halogen-free	IEC 60754-1 halogen-free EI6/EM6 EPR elastomer system	Oil contact note	EM6 EPR sheath is for oil-free zones (use H05BN4-F or H05BQ-F for oil)
Water & moisture	Resistant to condensation, frost, snow and damp outdoor air	Standards	EN 50525-2-21 (HD 22.12 S2 / DIN VDE 0285-525-2-21)
Standard packing	Heat-treated ISPM-15 timber drums with sealed cable ends		

Sizes

12 standard constructions

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

Order designation	Cores × mm ²	AWG ≈	Outer Ø min mm	Outer Ø max mm	Copper kg/km	Weight ≈ kg/km	Min. bend R mm
Harmonised H05BB-F sizes (0.75–1.0 mm ² per EN 50525-2-21 Table B.2) 8 sizes							
☐ H05BB-F 2×0.75	2×0.75	18	5.7	6.2	14	50	25
☐ H05BB-F 3G0.75	3G0.75	18	6.2	6.7	22	62	27
☐ H05BB-F 4G0.75	4G0.75	18	6.7	7.3	29	75	29
☐ H05BB-F 5G0.75	5G0.75	18	7.5	8.1	36	91	32
☐ H05BB-F 2×1.0	2×1.0	17	6.1	6.6	19	59	26
☐ H05BB-F 3G1.0	3G1.0	17	6.5	7.1	29	73	28
☐ H05BB-F 4G1.0	4G1.0	17	7.2	7.8	38	90	31
☐ H05BB-F 5G1.0	5G1.0	17	7.9	8.6	48	109	34
Extended 05BB-F sizes (1.5–2.5 mm ²) 4 sizes							
☐ 05BB-F 3G1.5	3G1.5	16	8.2	8.9	43	114	36
☐ 05BB-F 4G1.5	4G1.5	16	9.1	9.9	58	142	40
☐ 05BB-F 5G1.5	5G1.5	16	10.0	10.9	72	174	44
☐ 05BB-F 3G2.5	3G2.5	14	9.8	10.6	72	166	42

– Dimensions and weights are typical values per EN 50525-2-21 (HD 22.12). Minimum fixed bending radius shown is 4 × OD.

Electrical & current ratings

4 sizes

Cross-section mm ²	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
1.5	16	13.3	23	18
2.5	14	7.98	30	25

– 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 22.12)
- ✓ 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/h05bb-f-flexible-rubber-cable



Typical values for this cable type, based on EN 50525-2-21 (HD 22.12). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.