



General rubber flexible cables

H05RN-F

Flexible Rubber Cable

Harmonised 300/500 V EI4 EPR-insulated and EM2 polychloroprene-sheathed flexible cord



EN 50525-2-21

U0/U 300/500 V

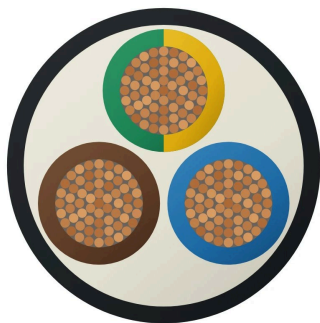
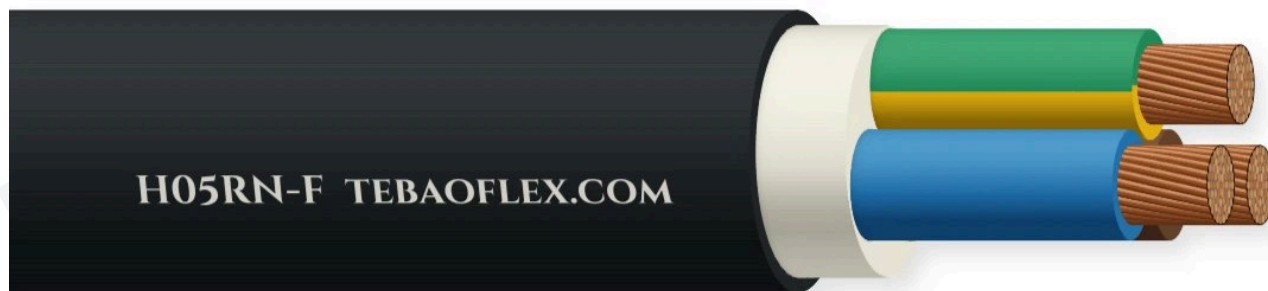
EI4 EPR · EM2 PCP

Application

Fine-stranded Class 5 copper flexible rubber cable with cross-linked EI4 EPR core insulation and oil-, weather- and flame-resistant EM2 polychloroprene outer sheath to EN 50525-2-21 for light workshop tools, appliances and damp indoor or outdoor service.

Typical uses: Workshop hand tools & appliances, Commercial kitchen & catering gear, Portable lighting & horticultural units, Light agricultural & garden equipment, Indoor & outdoor damp installations

Construction



Cross-section, not to scale

1	Flexible copper conductor	EN 60228 Class 5
2	Elastomeric core insulation	EN 50363-1 EI4 (+60 °C)
3	Outer rubber sheath	EN 50363-2-1 EM2 · oil & weather resistant

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 class	IEC 60228 / EN 60228 Class 5 flexible copper
Current rating basis	DIN VDE 0298-4 / EN 50565-1 (30 °C ambient)	Max. conductor temperature	+60 °C continuous operation
Short-circuit temperature	+200 °C max. (up to 5 s)	Temperature, flexing	-25 °C to +60 °C
Temperature, fixed	-30 °C to +60 °C	Min. bending radius, fixed	4 × overall diameter (OD ≤ 12 mm: 3 × OD)
Min. bending radius, moving	6 × overall diameter (free flexing)	Max. tensile load	15 N/mm ² dynamic (50 N/mm ² static)
Mechanical duty class	Light mechanical stress (EN 50565-2)	Oil resistance	EN 60811-404 (EM2 polychloroprene sheath)
Flame retardance	IEC 60332-1-2 / EN 60332-1-2 single vertical flame	UV, weather & ozone	EN 60811-403 ozone-resistant outdoor sheath
Water exposure	Damp, wet & outdoor splashing (AD4/AD5)	Standards	EN 50525-2-21 (HD 22.4 S4 / 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 H05RN-F sizes (0.75–1.0 mm ² per EN 50525-2-21 Table B.1) 6 sizes							
☐ H05RN-F 2×0.75	2×0.75	18	5.7	6.2	14	52	25
☐ H05RN-F 3G0.75	3G0.75	18	6.2	6.7	22	64	27
☐ H05RN-F 4G0.75	4G0.75	18	6.7	7.3	29	78	29
☐ H05RN-F 2×1.0	2×1.0	17	6.1	6.6	19	61	26
☐ H05RN-F 3G1.0	3G1.0	17	6.5	7.1	29	76	28
☐ H05RN-F 4G1.0	4G1.0	17	7.2	7.8	38	94	31
Extended 05RN-F industrial sizes (1.5–2.5 mm ²) 6 sizes							
☐ 05RN-F 2×1.5	2×1.5	16	7.5	8.2	29	95	33
☐ 05RN-F 3G1.5	3G1.5	16	8.2	8.9	43	118	36
☐ 05RN-F 4G1.5	4G1.5	16	9.1	9.9	58	148	40
☐ 05RN-F 5G1.5	5G1.5	16	10.0	10.9	72	182	44
☐ 05RN-F 3G2.5	3G2.5	14	9.8	10.6	72	172	42
☐ 05RN-F 4G2.5	4G2.5	14	10.7	11.6	96	212	46

– Dimensions and weights are typical values per EN 50525-2-21 / IEC 60245-4. 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 / IEC 60245-4
- ✓ 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/h05rn-f-flexible-rubber-cable



Typical values for this cable type, based on EN 50525-2-21 / IEC 60245-4. Values for your order are confirmed in the quotation. Subject to change without notice.
Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.