



Heavy-duty rubber cables

H07RN-F

Heavy-Duty Flexible Rubber Cable

Harmonised 450/750 V EPR/PCP rubber power and control cable to EN 50525-2-21



EN 50525-2-21

U0/U 450/750 V

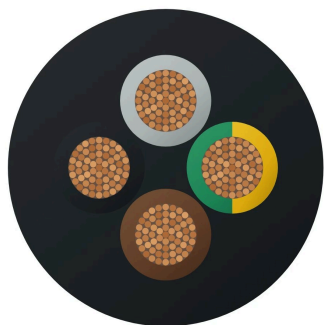
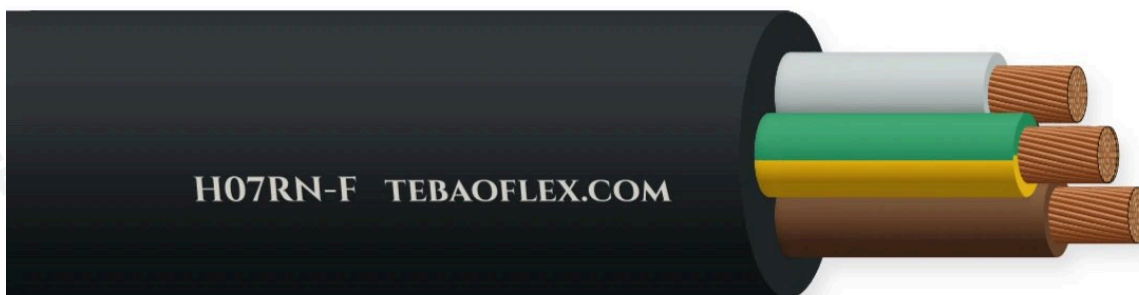
HAR · CPR Eca

Application

Fine-stranded Class 5 bare copper cable with EI4 EPR insulation and heavy-duty EM2 polychloroprene outer sheath — built for mobile plant, construction site power distribution, stage rigging, port equipment and industrial tools indoors and outdoors.

Typical uses: Construction & temporary site power, Stage, broadcast & event distribution, Industrial workshops & portable tools, Agricultural & horticultural plant, Port, dockyard & marine shore leads, Mobile generators & load banks

Construction



Cross-section, not to scale

1 Conductor

IEC 60228 / EN 60228 Class 5

2 Core insulation

3 Core stranding

4 Outer sheath

Technical data

Typical values

Rated voltage U0/U	450/750 V	Fixed protected voltage	0.6/1 kV AC (up to 750 V DC to earth)
Max. operating voltage AC	476/825 V (conductor/earth · conductor/conductor)	Max. operating voltage DC	619/1238 V (conductor/earth · conductor/conductor)
AC test voltage	2.5 kV	Temperature, flexing	-25 to +60 °C
Temperature, fixed	-30 to +60 °C (down to -40 °C protected)	Max. conductor temperature	+60 °C (+85 °C fixed protected at 1 kV)
Short-circuit temperature	+200 °C	Min. bending radius, moving	5 × OD (drums), 6 × OD (free flexing), 7.5 × OD (rollers)
Min. bending radius, fixed	4 × OD	Max. tensile load	15 N/mm ² during installation and operation
Mechanical duty	Medium to heavy mechanical stress (EN 50565-2)	Oil resistance	EN 60811-404
Flame retardance	IEC 60332-1-2 · CPR class Eca (EN 50575)	Weather & ozone	Ozone, UV, grease and weather resistant for outdoor duty
Locations	Dry, damp and wet rooms, agricultural premises and outdoors	Standards	EN 50525-2-21 / DIN VDE 0285-525-2-21 (IEC 60245-4 type 66)
Standard packing	Heat-treated timber drums with capped ends		

Sizes

82 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	Max. pull N
Single-core 18 sizes								
☐ H07RN-F 1×1.5	1 × 1.5	16	5.7	7.1	14	58	43	22
☐ H07RN-F 1×2.5	1 × 2.5	14	6.3	7.9	24	71	47	38
☐ H07RN-F 1×4	1 × 4	12	7.2	9.0	38	100	54	60
☐ H07RN-F 1×6	1 × 6	10	7.9	9.8	58	130	59	90
☐ H07RN-F 1×10	1 × 10	8	9.5	11.9	96	230	71	150
☐ H07RN-F 1×16	1 × 16	6	10.8	13.4	154	290	80	240
☐ H07RN-F 1×25	1 × 25	4	12.7	15.8	240	420	95	375
☐ H07RN-F 1×35	1 × 35	2	14.3	17.9	336	530	107	525
☐ H07RN-F 1×50	1 × 50	1	16.5	20.6	480	750	124	750
☐ H07RN-F 1×70	1 × 70	2/0	18.6	23.3	672	960	140	1,050
☐ H07RN-F 1×95	1 × 95	3/0	20.8	26.0	912	1,250	156	1,425
☐ H07RN-F 1×120	1 × 120	4/0	22.8	28.6	1,152	1,560	172	1,800
☐ H07RN-F 1×150	1 × 150	300 kcmil	25.2	31.4	1,440	1,900	188	2,250
☐ H07RN-F 1×185	1 × 185	350 kcmil	27.6	34.4	1,776	2,300	206	2,775
☐ H07RN-F 1×240	1 × 240	500 kcmil	30.6	38.3	2,304	2,950	230	3,600
☐ H07RN-F 1×300	1 × 300	600 kcmil	33.5	41.9	2,880	3,600	251	4,500
☐ H07RN-F 1×400	1 × 400	750 kcmil	37.4	46.8	3,840	4,600	281	6,000
☐ H07RN-F 1×500	1 × 500	1000 kcmil	41.3	52.0	4,800	6,000	312	7,500
2-core 8 sizes								
☐ H07RN-F 2×1	2 × 1	18	7.7	10.0	19	98	60	30
☐ H07RN-F 2×1.5	2 × 1.5	16	8.5	11.0	29	135	66	45
☐ H07RN-F 2×2.5	2 × 2.5	14	10.2	13.1	48	193	79	75
☐ H07RN-F 2×4	2 × 4	12	11.8	15.1	77	280	91	120

Order designation	Cores × mm ²	AWG ≈	Outer Ø min mm	Outer Ø max mm	Copper kg/km	Weight ≈ kg/km	Min. bend R mm	Max. pull N
☐ H07RN-F 2×6	2 × 6	10	13.1	16.8	115	330	101	180
☐ H07RN-F 2×10	2 × 10	8	17.7	22.6	192	586	136	300
☐ H07RN-F 2×16	2 × 16	6	20.2	25.7	307	810	154	480
☐ H07RN-F 2×25	2 × 25	4	24.3	30.7	480	1,160	184	750
3-core (3G) 17 sizes								
☐ H07RN-F 3G1	3 × 1	18	8.3	10.7	29	130	64	45
☐ H07RN-F 3G1.5	3 × 1.5	16	9.2	11.9	43	165	71	68
☐ H07RN-F 3G2.5	3 × 2.5	14	10.9	14.0	72	235	84	112
☐ H07RN-F 3G4	3 × 4	12	12.7	16.2	115	320	97	180
☐ H07RN-F 3G6	3 × 6	10	14.1	18.0	173	420	108	270
☐ H07RN-F 3G10	3 × 10	8	19.1	24.2	288	810	145	450
☐ H07RN-F 3G16	3 × 16	6	21.8	27.6	461	1,050	166	720
☐ H07RN-F 3G25	3 × 25	4	26.1	33.0	720	1,250	198	1,125
☐ H07RN-F 3G35	3 × 35	2	29.3	37.1	1,008	1,900	223	1,575
☐ H07RN-F 3G50	3 × 50	1	34.1	42.9	1,440	2,600	257	2,250
☐ H07RN-F 3G70	3 × 70	2/0	38.4	48.3	2,016	3,400	290	3,150
☐ H07RN-F 3G95	3 × 95	3/0	43.3	54.0	2,736	4,450	324	4,275
☐ H07RN-F 3G120	3 × 120	4/0	47.4	60.0	3,456	5,180	360	5,400
☐ H07RN-F 3G150	3 × 150	300 kcmil	52.0	66.0	4,320	6,500	396	6,750
☐ H07RN-F 3G185	3 × 185	350 kcmil	57.0	72.0	5,328	7,860	432	8,325
☐ H07RN-F 3G240	3 × 240	500 kcmil	65.0	82.0	6,912	10,224	492	10,800
☐ H07RN-F 3G300	3 × 300	600 kcmil	72.0	90.0	8,640	12,620	540	13,500
4-core (4G) 16 sizes								
☐ H07RN-F 4G1	4 × 1	18	9.2	11.9	38	150	71	60
☐ H07RN-F 4G1.5	4 × 1.5	16	10.2	13.1	58	200	79	90
☐ H07RN-F 4G2.5	4 × 2.5	14	12.1	15.5	96	290	93	150
☐ H07RN-F 4G4	4 × 4	12	14.0	17.9	154	395	107	240
☐ H07RN-F 4G6	4 × 6	10	15.7	20.0	230	540	120	360
☐ H07RN-F 4G10	4 × 10	8	20.9	26.5	384	950	159	600
☐ H07RN-F 4G16	4 × 16	6	23.8	30.1	614	1,260	181	960
☐ H07RN-F 4G25	4 × 25	4	28.9	36.6	960	1,860	220	1,500
☐ H07RN-F 4G35	4 × 35	2	32.5	41.1	1,344	2,380	247	2,100
☐ H07RN-F 4G50	4 × 50	1	37.7	47.5	1,920	3,190	285	3,000
☐ H07RN-F 4G70	4 × 70	2/0	42.7	54.0	2,688	4,260	324	4,200
☐ H07RN-F 4G95	4 × 95	3/0	48.4	61.0	3,648	5,600	366	5,700
☐ H07RN-F 4G120	4 × 120	4/0	53.0	66.0	4,608	6,830	396	7,200
☐ H07RN-F 4G150	4 × 150	300 kcmil	58.0	73.0	5,760	8,320	438	9,000
☐ H07RN-F 4G185	4 × 185	350 kcmil	64.0	80.0	7,104	9,800	480	11,100
☐ H07RN-F 4G240	4 × 240	500 kcmil	72.0	91.0	9,216	12,100	546	14,400
5-core (5G) 12 sizes								
☐ H07RN-F 5G1	5 × 1	18	10.4	13.1	48	170	79	75
☐ H07RN-F 5G1.5	5 × 1.5	16	11.2	14.4	72	240	86	112
☐ H07RN-F 5G2.5	5 × 2.5	14	13.3	17.0	120	345	102	188
☐ H07RN-F 5G4	5 × 4	12	15.6	19.9	192	485	119	300
☐ H07RN-F 5G6	5 × 6	10	17.5	22.2	288	650	133	450
☐ H07RN-F 5G10	5 × 10	8	22.9	29.1	480	1,200	175	750
☐ H07RN-F 5G16	5 × 16	6	26.4	33.3	768	1,550	200	1,200
☐ H07RN-F 5G25	5 × 25	4	32.0	40.4	1,200	2,250	242	1,875

Order designation	Cores × mm ²	AWG ≈	Outer Ø min mm	Outer Ø max mm	Copper kg/km	Weight ≈ kg/km	Min. bend R mm	Max. pull N
☐ H07RN-F 5G35	5 × 35	2	35.7	45.1	1,680	2,750	271	2,625
☐ H07RN-F 5G50	5 × 50	1	41.8	53.0	2,400	3,950	318	3,750
☐ H07RN-F 5G70	5 × 70	2/0	47.5	60.0	3,360	4,740	360	5,250
☐ H07RN-F 5G95	5 × 95	3/0	54.0	67.0	4,560	6,600	402	7,125
Multi-core control 11 sizes								
☐ H07RN-F 7G1.5	7 × 1.5	16	14.7	18.7	101	375	112	158
☐ H07RN-F 12G1.5	12 × 1.5	16	17.6	22.4	175	460	134	270
☐ H07RN-F 19G1.5	19 × 1.5	16	20.7	26.3	274	810	158	428
☐ H07RN-F 24G1.5	24 × 1.5	16	24.3	30.7	346	1,015	184	540
☐ H07RN-F 27G1.5	27 × 1.5	16	25.5	31.5	385	1,100	189	608
☐ H07RN-F 7G2.5	7 × 2.5	14	17.1	21.8	168	520	131	262
☐ H07RN-F 12G2.5	12 × 2.5	14	20.6	26.2	288	760	157	450
☐ H07RN-F 18G2.5	18 × 2.5	14	24.4	30.9	432	850	185	675
☐ H07RN-F 19G2.5	19 × 2.5	14	25.5	31.0	456	1,075	186	712
☐ H07RN-F 24G2.5	24 × 2.5	14	28.8	36.4	576	1,390	218	900
☐ H07RN-F 27G2.5	27 × 2.5	14	30.0	37.0	640	1,521	222	1,012

– Outer diameter min/max limits conform to EN 50525-2-21. Minimum bending radius shown is 6 × max OD for free flexing (4 × max OD when fixed).

Electrical & current ratings

19 sizes

Cross-section mm ²	AWG ≈	Max. DC resistance 20 °C, Ω/km	1-core trefoil 30 °C, A	2-core in air 30 °C, A	3-core in air 30 °C, A	4G / 5G in air 30 °C, A	Used in
1	18	19.5	—	16	16	13.5	2× 3G 4G 5G
1.5	16	13.3	17.5	19.5	19.5	17.5	1× 2× 3G 4G 5G 7G–27G
2.5	14	7.98	20	25	25	20	1× 2× 3G 4G 5G 7G–27G
4	12	4.95	30	34	35	30	1× 2× 3G 4G 5G
6	10	3.3	38	43	44	37	1× 2× 3G 4G 5G
10	8	1.91	53	60	62	52	1× 2× 3G 4G 5G
16	6	1.21	71	79	82	69	1× 2× 3G 4G 5G
25	4	0.78	94	105	109	92	1× 2× 3G 4G 5G
35	2	0.554	117	—	135	114	1× 3G 4G 5G
50	1	0.386	148	—	169	143	1× 3G 4G 5G
70	2/0	0.272	185	—	211	178	1× 3G 4G 5G
95	3/0	0.206	222	—	250	210	1× 3G 4G 5G
120	4/0	0.161	260	—	292	246	1× 3G 4G
150	300 kcmil	0.129	300	—	335	282	1× 3G 4G
185	350 kcmil	0.106	341	—	378	319	1× 3G 4G
240	500 kcmil	0.0801	407	—	430	377	1× 3G 4G
300	600 kcmil	0.0641	468	—	497	—	1× 3G
400	750 kcmil	0.0486	553	—	—	—	1×
500	1000 kcmil	0.0384	634	—	—	—	1×

– Current ratings at 30 °C ambient in free air (three single-core cables in trefoil, or one multicore cable). Apply EN 50565 / DIN VDE 0298-4 correction factors for elevated ambient temperatures or grouping.

Standards and approvals

- ✓ HAR (EN 50525-2-21)
- ✓ CE · CPR Eca (EN 50575)

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

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Email

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Web

tebaoflex.com/cables/h07rn-f-heavy-duty-rubber-cable



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