



RUBBER CABLE (H07RN-F)

- **APPLICATION:** Rubber insulated flexible cable with poly chloroprene sheathing resistant to mechanical stress, oils, chemical corrosion and weathering. For installation in dry, damp or wet environments, in the open air, in workshop with explosive atmospheres.
- For connections liable to moderate mechanical stress, e.g. industrial or agricultural workshop apparatus, large boilers, heater plates, portable lamps, electric tools such as drills and dick saws, electric appliances, portable motors and generators on building sites or farms, also for fixed installations along floors or shelving on temporary job sites and in cabin accommodation for connecting structural elements in lifting apparatus, machinery etc.
- Suitable for applications up to 1000v for adequately protected fixed installation (inside pipes or equipment) as well as for rotor connection to lifting apparatus motors.



- **CONSTRUCTION:**
- CONDUCTOR:** Bare flexible copper, Class 5 acc. to IEC 60228, (HD383, CEI 20-29).
- INSULATION:** E14 quality rubber accordingly to CEI EN 50363 (CEI 20-11).
- INNER SHEATH:** EM3 quality rubber compound acc. to CEI EN 50363 (CEI 20-11).
- SHEATH:** EM2 quality rubber compound acc. to CEI EN 50363 (CEI 20-11).

- **COLOR CODING:**
- CORES:**
- 2-core- Brown, Blue
 - 3-core- Brown, Blue, Green / Yellow
 - 4-core- Brown, Black, Grey, Green / Yellow
 - 5-core- Brown, Black, Grey, Blue, Green / Yellow

OUTER SHEATH: Thermosetting Rubber (Type EM2) Black Color.

➤ **CHARACTERISTIC:**

IMPROVED FLEXIBILITY: The use of extra flexible class 6 flexible copper conductors in greater cables (from 185mm² onwards) allow the HO7RNF cable to have optimum flexibility.

SPECIAL WIND TORSION TEST: The HO7RNF cable pass the special 2000 cycle Torsion test required for wind generators (for single core cables).

IMPROVED WORKING TEMPERATURE: The HO7RNF can operate at work temperatures up to 90°, improving the HD 22 standard rated temperature, due to insulation with high thermal grade.

RATED VOLTAGE up to 1000V: Possible thanks to high dielectric properties of the insulation material for fixed protected installations (according to HD 516).

WEATHER RESISTANCE: The property of the thermosetting vulcanized rubber outer sheath on the HO7RNF cable allows permanent use for outdoors.

IMMERSION RESISTANCE: Exceeds the established test for type HO7RNF, suitable for functioning permanently submerged (AD8).

➤ **WORKING DATA:**

RATED VOLTAGE:	450/750V.
TEST VOLTAGE:	2.5 KV.
MAX OPERATION TEMPERATURE:	90° (Mobile Conditions).
SHORT CIRCUIT TEMPERATURE:	250° Min.
LAYING TEMPERATURE:	-25°C.

CHARACTERISTICS 



Flexible Conductor
Class 5/6



Outdoor Installation



Max Service
Temperature: 90°C



Abrasion
Resistance



Flame Non-propagation



Meter by Meter
Marking



Anti-twist Resistant



Max Short-circuit
Temperature:
250°C (Max.5 s)



Min Bending Radius
5 ~ 6 Cable Diameter



Min Service
Temperature:
-40°C(Fixed)



Heavy Mobile Use



Industrial Use



Chemical & Oil
Resistance



Robotics

INSTALLATION CONDITIONS 



Cores number	Cross section	Approx conductor diameter	Insulation medium thickness	Approx external production diameter	Approx cable weight	Electric resistance at 20°C [Ohm/km]		Current carrying capacities amb. temp. mobile service
						Tinned copper	Red copper	
[N°]	[mm²]	[mm]	[mm]	[mm]	[kg/km]			[A]
1c	1.5	1.6	0.8	5.9	50	13.7	13.3	16
1c	2.5	2	0.9	6.5	65	8.21	7.98	25
1c	4	2.6	1	7.4	89	5.09	4.95	30
1c	6	3.4	1	8.1	115	3.39	3.3	38
1c	10	4.4	1.2	10.4	190	1.95	1.91	53
1c	16	5.7	1.2	11.62	259	1.24	1.21	71
1c	25	6.9	1.4	13.74	375	0.795	0.78	94
1c	35	8.1	1.4	15.35	492	0.565	0.554	117
1c	50	9.8	1.6	17.68	675	0.393	0.386	148
1c	70	11.6	1.6	20	908	0.277	0.272	185
1c	95	13.3	1.8	22.12	1171	0.21	0.206	222
1c	120	15.1	1.8	24.54	1445	0.164	0.161	260
1c	150	16.8	2	26.87	1783	0.132	0.129	300
1c	185	18.6	2.2	28.89	2125	0.108	0.106	341
1c	240	21.4	2.4	32.62	2733	0.0817	0.0801	407
1c	300	23.9	2.6	36.46	3348	0.0654	0.0641	468
2c	1	1.3	0.8	8.4	89.5	20	19.5	10
2c	1.5	1.6	0.8	9.1	109	13.7	13.3	18
2c	2.5	2	0.9	10.8	158	8.21	7.98	27
2c	4	2.6	1	12.4	217	5.09	4.95	34
2c	6	3.4	1	13.8	282	3.39	3.3	43
2c	10	4.4	1.2	19.37	539	1.95	1.91	60
2c	16	5.7	1.2	21.76	722	1.24	1.21	79
2c	25	6.9	1.4	25.93	1043	0.795	0.78	105
3c	1	1.3	0.8	9.07	110	20	19.5	10



Cores number	Cross section	Approx conductor diameter	Insulation medium thickness	Approx external production diameter	Approx cable weight	Electric resistance at 20°C [Ohm/km]		Current carrying capacities amb. temp. mobile service
						Tinned copper	Red copper	
[N°]	[mm²]	[mm]	[mm]	[mm]	[kg/km]			[A]
3c	1.5	1.6	0.8	9.78	134	13.7	13.3	16
3c	2.5	2	0.9	11.58	196	8.21	7.98	25
3c	4	2.6	1	13.3	271	5.09	4.95	29
3c	6	3.4	1	14.78	355	3.39	3.3	36
3c	10	4.4	1.2	20.73	674	1.95	1.91	51
3c	16	5.7	1.2	23.26	913	1.24	1.21	67
3c	25	6.9	1.4	27.69	1324	0.795	0.78	89
3c	35	8.1	1.4	30.95	1754	0.565	0.554	110
3c	50	9.8	1.6	35.8	2409	0.393	0.386	138
3c	70	11.6	1.6	40.45	3211	0.277	0.272	172
3c	95	13.3	1.8	45.08	4210	0.24	0.206	204
3c	120	15.1	1.8	49.93	5205	0.164	0.161	238
3c	150	16.8	2	54.78	6389	0.132	0.129	273
3c	185	18.6	2.2	58.99	7591	0.108	0.106	309
3c	240	21.4	2.4	67.85	9944	0.0817	0.0801	365
4c	1	1.3	0.8	10	136	20	19.5	10
4c	1.5	1.6	0.8	10.76	166	13.7	13.3	16
4c	2.5	2	0.9	12.73	241	8.21	7.98	20
4c	4	2.6	1	14.63	336	5.09	4.95	30
4c	6	3.4	1	16.44	449	3.39	3.3	37
4c	10	4.4	1.2	22.57	833	1.95	1.91	52
4c	16	5.7	1.2	25.36	1138	1.24	1.21	69
4c	25	6.9	1.4	30.75	1714	0.795	0.78	92
4c	35	8.1	1.4	34.23	2204	0.565	0.554	114
4c	50	9.8	1.6	39.56	3029	0.393	0.386	143
4c	70	11.6	1.6	44.89	4121	0.277	0.272	178



Cores number	Cross section	Approx conductor diameter	Insulation medium thickness	Approx external production diameter	Approx cable weight	Electric resistance at 20°C [Ohm/km]		Current carrying capacities amb. temp. mobile service
						Tinned copper	Red copper	
[N°]	[mm²]	[mm]	[mm]	[mm]	[kg/km]			[A]
4c	95	13.3	1.8	50.36	5361	0.21	0.206	210
4c	120	15.1	1.8	55.33	6546	0.164	0.161	246
4c	150	16.8	2	60.87	8095	0.132	0.129	282
4c	185	18.6	2.2	65.7	9652	0.108	0.106	319
4c	240	21.4	2.4	75.5	12614	0.0817	0.0801	377
5c	1	1.3	0.8	11	168	20	19.5	10
5c	1.5	1.6	0.8	11.8	206	13.7	13.3	16
5c	2.5	2	0.9	13.96	297	8.21	7.98	20
5c	4	2.6	1	16.25	422	5.09	4.95	30
5c	6	3.4	1	18.07	567	3.39	3.3	38
5c	10	4.4	1.2	24.75	1010	1.95	1.91	54
5c	16	5.7	1.2	28.01	1400	1.24	1.21	71
5c	25	6.9	1.4	33.57	2096	0.795	0.78	94
7c	1.5	1.6	0.8	14.75	315	13.7	13.3	16
7c	2.5	2	0.9	17.11	445	8.21	7.98	20
7c	4 (*)	2.6	1	19.64	618	5.09	4.95	25
10c	1.5	1.6	0.8	17.15	420	13.7	13.3	16
12c	1.5	1.6	0.8	18.9	493	13.7	13.3	16
12c	2.5	2	0.9	22.02	702	8.21	8.06	20
12c	4 (*)	2.6	1	25.77	1004	5.09	4.95	25
19c	1.5	1.6	0.8	22.07	710	8.21	13.4	16
19c	2.5	2	0.9	26	1030	13.7	8.06	20
24c	1.5	1.6	0.8	25.63	898	13.7	13.5	16
24c	2.5	2	0.9	30.38	1312	8.21	8.1	20
36c	2.5 (*)	2	0.9	35	1851	8.21	8.1	20