

OXFORD CAVI *spa.*

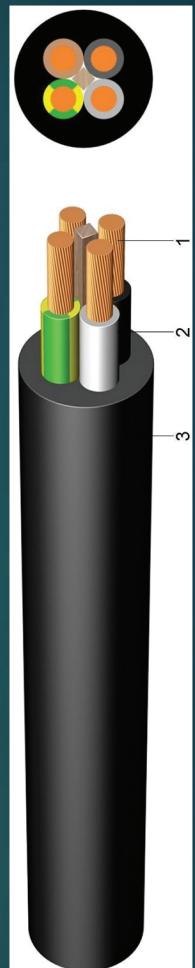
TECHNICAL DATA SHEET

H07RN F

Stabilimento Argenta Via Leanando, Da Vinei 6/z, 68977, Abrota

A) CONSTRUCTION

- **Conductor:** Bare flexible copper, Class 5 according to IEC 60228, (HD 383, CEI 20-29),
 - **Insulation:** E14 quality rubber accordingly to CEI EN 50363 (CEI 20-11),
 - **Inner Sheath:** EM3 quality rubber compound* accordingly to CEI EN 50363 (CEI 20-11).
 - **Sheath:** EM2 quality or equivalent rubber compound according to CEI EN 50363 (CEI 20-11).
 - The cable is designed in accordance with HD 22.4 (CEI 20-19/4)



B) CHARACTERISTICS

- **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 80° , improving the HD 22 standard rated temperature, due to insulation with high thermal grade.
 - **Related 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 properties of the thermosetting vulcanised 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)

	Flexible conductor, class 5/6		Minimum service temperature: -25°C		Maximum service temperature: 90°C
	Maximum short-circuit temp: 250°C (max 5 s)		Minimum bending radius: 4 x cable diameter		Meter by meter marking
	Flame non-propagation		Impact resistance: AG2. Medium impact		Outdoor installation: permanent
	Water resistance: AD8 submerged		Chemical & oil resistance: excellent		Low temperature resistance: excellent (-25°C)

C) DESIGN

- **Conductor:** Flexible electrolytic annealed copper conductor, class 4 according to IEC 60228.
 - **Insulation:** Thermosetting rubber insulation, type E14 according to HD 22. The standard identification according to HD 308 OR en 50334, is the following:

Up to 5 conductors: by colours, 6 or more conductors: black numbered + green/ yellow

- **Outer sheath:** Thermosetting rubber outer sheath, black color, type EM2 according to HD 22.

Working Data

Rated Voltage:	450/750v
Test Voltage:	2,5 kv
Max Operation temp:	80° (Mobile conditions), up on request special version with Max conductor temperature of 90°C
Short circuit temp:	250°
Min. Laying temp:	-25°C

- Application

Rubber – insulated flexible cable with polychloroprene 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, etc; 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 (i.e inside pipes or equipment) as well as for rotor connection to lifting apparatus motors.

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
[N°]	[mm²]	[mm]	[mm]	[mm]	[kg/km]	Tinned copper	Red copper	[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

**OXFORD
CAVI spa.**

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/k m]			[A]
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
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