RUBBER INSULATED AND SHEATHED FLEXIBLE CABLES

1. Flexible tinned or bare Copper conductor, Class 5 IEC/EN 60228
2. EPR insulation type EI4
3. Outersheath of synthetic elastomer type EM2 (similar CP), Black

TYPE OF CABLE: H07RN-F

RATED VOLTAGE: 450/750 V

STANDARD SPECIFICATION: EN 50525-2-21 (HD 22.4 – VDE 0282/4 -BS 6007)

Applications:

In dry, humid or moist rooms; in open air; in workshops having an explosive atmosphere for medium mechanical stresses, In industrial and agricultural workshop appliances, heating installations, inspection lamps, electric tools such as drills, circular building sites and in agricultural workings. For fixed installations, for the wiring of constructional components in lifting appliances and machinery agricultural workings.

Cables are for heavy duty uses, they are oil resistant and flame retardant.

The H07RN-F cables are RoHS, lead-free, but not halogen-free.

Cables are not suitable for permanent use under water.

Characteristics:

Max. continuous operating conductor temperature:
+ 60°C in normal use
+ 200°C at short-circuit

Operating temperature:
-25 … +55 °C

Oil resistance:
acc. to IEC/EN 60811-404

Flame retardant:
acc. IEC/EN 60332-1

Test voltage:
Voltage test at 2500 V

Minimum bending radius acc. to HD 516

INSTALLATION TYPE	D ≤ 8 mm	8 < D ≤ 12 mm	12 < D ≤ 20 mm	D > 20 mm
Fixed installation	3xD	3xD	4xD	4xD
Flexible installation	4xD	4xD	5xD	6xD

Colours acc. to HD 308 S2

NUMBER OF CORES	WITH GREEN/YELLOW	WITHOUT GREEN/YELLOW
1	G/Y	BLACK
2	-	BLUE – BROWN
3	G/Y –BLUE –BROWN	BROWN – BLACK – GREY
4	G/Y – BROWN – BLACK – GREY	BLUE – BROWN – BLACK – GREY
5	G/Y – BLUE – BROWN – BLACK – GREY	BLUE – BROWN – BLACK – GREY – BLACK
above 5	G/Y – BLACK WITH NUMBERS	BLACK WITH NUMBERS

Norm references / Approvals:

◁VDE▷ ; MIRTEC ◁HAR▷ H07RN-F cable type approval according to EN 50525-2-21

NOMINAL CROSS-SECTION	OVERALL DIAMETER		NET WEIGHT (APPROX.)	MAXIMUM CONDUCTOR RESISTANCE AT 20°C	CONTINUOUS CURRENT RATING OPEN AIR	VOLTAGE DROP SINGLE PHASE
	NOM.	MAX.				
mm^2	mm		Kg/Km	Ω/Km	A	mV/A/m
1X1,5	6,0	7,1	50	13,3	23	23,3
1X2,5	7,0	7,9	70	7,98	32	14
1X4	8,0	9,0	90	4,95	43	8,7
1X6	9,0	9,8	120	3,3	56	5,9
1X10	10,5	11,9	190	1,91	77	3,4
1X16	12,0	13,4	250	1,21	102	2,2
1X25	13,5	15,8	360	0,78	136	1,4
1X35	15,0	17,9	480	0,554	168	1,04
1X50	17,5	20,6	660	0,386	203	0,75
1X70	19,5	23,3	880	0,272	254	0,56
1X95	22,0	26,0	1120	0,206	292	0,53
1X120	24,0	28,6	1420	0,161	363	0,36
1X150	26,0	31,4	1740	0,129	416	0,31
1X185	29,0	34,4	2090	0,106	475	0,28
1X240	32,0	38,3	2670	0,0801	559	0,23
1X300	36,0	41,9	3360	0,0641	637	0,2
1X400	41,0	46,8	4430	0,0486	715	0,19
1X500	47,0	52,0	5550	0,0384	833	0,16
2X1,0	8,5	10,0	90	19,5	18	39,4
2X1,5	10,0	11,0	105	13,3	23	27
2X2,5	11,0	13,1	160	7,98	32	19
2X4	13,0	15,1	220	4,95	43	10,1
2X6	15,0	16,8	300	3,3	56	6,7
2X10	20,0	22,6	530	1,91	77	3,8
2X16	23,0	25,7	720	1,21	102	2,5
2X25	26,0	30,7	1010	0,78	136	1,68
3X1,0	9,0	10,7	110	19,5	18	48
3X1,5	10,0	11,9	140	13,3	23	27,0
3X2,5	12,0	14,0	205	7,98	32	16,2
3X4	14,0	16,2	280	4,95	34	12
3X6	16,0	18,0	390	3,3	56	7,0
3X10	21,0	24,2	680	1,91	77	4,0
3X16	24,0	27,6	930	1,21	102	2,5
3X25	29,0	33,0	1360	0,78	136	1,7
3X35	31,0	37,1	1710	0,554	168	1,21
3X50	36,0	42,9	2370	0,386	203	0,87
3X70	42,0	48,3	3230	0,272	262	0,64
3X95	44,0	54,0	4020	0,206	320	0,5
3X120	49,0	60,0	5030	0,161	373	0,4
3X150	54,0	66,0	6170	0,129	432	0,35
3X185	59,0	72,0	7450	0,106	495	0,3
3X240	67,0	82,0	9770	0,0801	587	0,26
3X300	78,0	90,0	12440	0,0641	680	0,22

NOMINAL CROSS-SECTION	OVERALL DIAMETER		NET WEIGHT (APPROX.)	MAXIMUM CONDUCTOR RESISTANCE AT 20°C	CONTINUOUS CURRENT RATING OPEN AIR	VOLTAGE DROP SINGLE PHASE
	NOM.	MAX.				
mm^2	mm		Kg/Km	Ω/Km	A	mV/A/m
4X1,0	10,0	11,9	140	19,5	16	34,1
4X1,5	11,0	13,1	170	13,3	21	23,3
4X2,5	13,0	15,5	250	7,98	29	14,0
4X4	15,0	17,9	350	4,95	38	8,71
4X6	18,0	20,0	480	3,3	50	5,84
4X10	23,0	26,5	820	1,91	68	3,42
4X16	26,0	30,1	1140	1,21	92	2,2
4X25	32,0	36,6	1730	0,78	122	1,44
4X35	34,0	41,1	2160	0,554	150	1,04
4X50	40,0	47,5	2990	0,386	182	0,75
4X70	44,0	54,0	3950	0,272	232	0,56
4X95	52,0	61,0	5350	0,206	281	0,44
4X120	55,0	66,0	6390	0,161	325	0,36
4X150	60,0	73,0	7870	0,129	373	0,31
4X185	66,0	80,0	9510	0,106	425	0,28
4X240	75,0	91,0	12410	0,0801	500	0,23
5X1,0	11,0	13,1	170	19,5	16	34,1
5X1,5	12,0	14,4	210	13,3	21	23,6
5X2,5	14,5	17,0	310	7,98	29	14,0
5X4	17,0	19,9	430	4,95	38	8,72
5X6	20,0	22,2	590	3,3	50	5,84
5X10	25,0	29,1	980	1,91	68	3,43
5X16	29,0	33,3	1390	1,21	92	2,2
5X25	34,0	40,4	2000	0,78	122	1,44
5x35	36,5	45,0	2640	0,554	150	1,04
7X1,5	16,5	18,7	320	13,3	-	-
7X2,5	19,0	21,8	450	7,98	-	-
10x2,5	22,0	24,5	650	7,98	-	-
12X1,5	19,0	22,4	460	13,3	-	-
12X2,5	23,0	26,2	710	7,98	-	-
18X1,5	23,0	26,3	710	13,3	-	-
18X2,5	26,0	30,9	1030	7,98	-	-
19x2,5	27,0	31,9	1050	7,98	-	-
27X1,5	27,0	31,5	980	13,3	-	-
27X2,5	32,0	37,0	1440	7,98	-	-
36X1,5	30,0	35,2	1260	13,3	-	-
36X2,5	36,0	41,8	1860	7,98	-	-
37x1,5	31,0	35,0	1320	13,3	-	-

The data in above table are informative and the table may not contain all cables size .

Operating temperature at conductor +60°C, ambient temperature +30°C (Air)

Note: The above ratings are given for 30°C ambient temperature, For other ambient temperatures the correction factor is:

Temperature °C	15	20	25	35	40	45	50
Correction factor	1,22	1,15	1,07	0,93	0,82	0,71	0,58