

RUBBER FLEXIBLE CABLE- HO7RN-F

CONSTRUCTION OF THE CABLE

CONDUCTORS	It is the current carrying component of the cable.
Material	Annealed flexible stranded class 5 to IEC/BS EN 60228
INSULATION	The rated voltage level of the cable depends on the dielectric strength and thickness of the insulation
Material	Ethylene Propylene Rubber (EPR) type EI 7 to BS standard
OUTER SHEATH :	A synthetic thermosetting compound to BSEN 50363-2-1
COLOUR OF OUTERSHEATH JACKET	Black (Other colours on request)

CHARACTERISTICS

Operating temperature:	Temperature range of -25°C to +90°C. For fixed installation lowest temperature is -40°C
Short circuit temperature:	250°C
Voltage:	450/750 V & 0.6/1KV rated for fixed and protected installation

STANDARDS.

Cable standard:	BS EN 50525 - 2 - 21
Flame propagation:	IEC 60332-1-2:2004, EN 60332-1-2:2004
Outer Sheath:	BSEN 50363-2-1
Conductor:	IEC/BS EN 60228

CORE IDENTIFICATION

Core identification:	Colour coding of power conductors comply to HD 308, BSEN 50525 specification
	Two core - Blue, Brown
	Three core - Green/Yellow, Blue, Brown
	Four core - Green/Yellow, Brown, Black, Grey or Green/Yellow, Blue, Brown, Black
	Five core - Green/Yellow, Blue, Brown, Black, Grey

APPLICATION

To power electrical appliances and building, Installation with moving equipment at work site, Handling equipment and mobile power supplies. For use in cold environment / refrigerating installations, Oil resistant applications, For use in submersible pumps

	ITEM	No.	1	2	3	4
Sr #	(H07RN-F) Cable 450/750V - BS EN 50525-2-21:2011	UNIT	4 x 1	4 x 1.5	4 x 2.5	4 x 4
1	Manufacturer		DUBAI CABLE COMPANY (PVT) LTD.			
2	Country of Origin		U.A.E			
3	Type of Cable		(H07RN-F) for 90°C			
4	Standard		BS EN 50525-2-21:2011			
5	Nominal voltage rating	Volts	450/750			
6	Max. continuous current carrying capacity when laid					
	In air	Amps	18	25	32	44
7	Conductors :					
	Material		Plain Annealed Flexible Copper (Class 5)			
	No. of Cores	No.	4	4	4	4
	Nominal cross section	mm ²	1	1.5	2.5	4
8	Insulation of conductors :					
	Material		E17			
	Nominal thickness	mm	0.8	0.8	0.9	1
	Core identification		Green/Yellow, Brown, Black, Grey colours			
9	Sheath : (Black colour)					
	Material		Rubber as per BS EN 50525-2-21			
	Nominal thickness	mm	1.5	1.7	1.9	2
	Approx. outer diameter of cable.	mm	10.3	11.2	13.3	15.4
10	Maximum DC Resistance of conductor at 20°C	Ohm/km	19.5	13.3	7.98	4.95
11	Maximum AC Resistance per core at 90°C(Approx)	Ohm/km	25.2	17.2	10.3	6.4
12	AC Impedance per phase at 90°C(Approx)	Ohm/km	25.2	17.2	10.3	6.4
13	Maximum Conductor short circuit capacity for one sec :	kA	0.14	0.21	0.36	0.57
14	Max.conductor operating temperature.	°C	90			
15	Max. Conductor permissible temp under SC conditions.	°C	250			
16	Voltage drop (3 Phase system)	mv/Amp/mt	43.7	29.8	17.9	11.1
17	Max. allowable tensile strength	Kgf	24	36	60	96
18	Minimum allowable bending radius	mm	5D*	5D*	5D*	5D*
19	Approx. weight of completed cable.	kg/km	142	174	257	360
20	Conditions of installations :					
	Air temperature	°C	30			
	Note : *D = Overall diameter					

	ITEM	No.	5	7	8	9
Sr #	(H07RN-F) Cable 450/750V - BS EN 50525-2-21:2011	UNIT	4 x 6	4 x 10	4 x 16	4 x 25
1	Manufacturer		DUBAI CABLE COMPANY (PVT) LTD.			
2	Country of Origin		U.A.E			
3	Type of Cable		(H07RN-F) for 90°C			
4	Standard		BS EN 50525-2-21:2011			
5	Nominal voltage rating	Volts	450/750			
6	Max. continuous current carrying capacity when laid					
	In air	Amps	56	78	102	127
7	Conductors :					
	Material		Plain Annealed Flexible Copper (Class 5)			
	No. of Cores	No.	4	4	4	4
	Nominal cross section	mm ²	6	10	16	25
8	Insulation of conductors :					
	Material		E17			
	Nominal thickness	mm	1	1.2	1.2	1.4
	Core identification		Green/Yellow, Brown, Black, Grey colours			
9	Sheath : (Black colour)					
	Material		Rubber as per BS EN 50525-2-21			
	Nominal thickness	mm	2.3	3.4	3.6	4.1
	Approx. outer diameter of cable.	mm	17.4	22.8	25.6	30.8
10	Maximum DC Resistance of conductor at 20°C	Ohm/km	3.3	1.91	1.21	0.78
11	Maximum AC Resistance per core at 90°C(Approx)	Ohm/km	4.3	2.5	1.6	1
12	AC Impedance per phase at 90°C(Approx)	Ohm/km	4.3	2.5	1.6	1
13	Maximum Conductor short circuit capacity for one sec :	kA	0.86	1.43	2.29	3.58
14	Max.conductor operating temperature.	°C				
15	Max. Conductor permissible temp under SC conditions.	°C				
16	Voltage drop (3 Phase system)	mv/Amp/mt	7.4	4.3	2.7	1.7
17	Max. allowable tensile strength	Kgf	144	240	384	600
18	Minimum allowable bending radius	mm	5D*	5D*	5D*	5D*
19	Approx. weight of completed cable.	kg/km	485	831	1150	1724
20	Conditions of installations :					
	Air temperature	°C				
	Note : *D = Overall diameter					

	ITEM	No.	10	11	12	13
Sr #	(H07RN-F) Cable 450/750V - BS EN 50525-2-21:2011	UNIT	4 x 35	4 x 50	4 x 70	4 x 95
1	Manufacturer		DUBAI CABLE COMPANY (PVT) LTD.			
2	Country of Origin		U.A.E			
3	Type of Cable		(H07RN-F) for 90°C			
4	Standard		BS EN 50525-2-21:2011			
5	Nominal voltage rating	Volts	450/750			
6	Max. continuous current carrying capacity when laid					
	In air	Amps	158	192	246	298
7	Conductors :					
	Material		Plain Annealed Flexible Copper (Class 5)			
	No. of Cores	No.	4	4	4	4
	Nominal cross section	mm ²	35	50	70	95
8	Insulation of conductors :					
	Material		E17			
	Nominal thickness	mm	1.4	1.6	1.6	1.8
	Core identification		Green/Yellow, Brown, Black, Grey colours			
9	Sheath : (Black colour)					
	Material		Rubber as per BS EN 50525-2-21			
	Nominal thickness	mm	4.4	4.8	5.2	5.9
	Approx. outer diameter of cable.	mm	34.2	39.4	44.2	51
10	Maximum DC Resistance of conductor at 20°C	Ohm/km	0.554	0.386	0.272	0.206
11	Maximum AC Resistance per core at 90°C(Approx)	Ohm/km	0.7	0.5	0.4	0.3
12	AC Impedance per phase at 90°C(Approx)	Ohm/km	0.7	0.5	0.4	0.3
13	Maximum Conductor short circuit capacity for one sec :	kA	5.01	7.15	10.01	13.59
14	Max.conductor operating temperature.	°C	90			
15	Max. Conductor permissible temp under SC conditions.	°C	250			
16	Voltage drop (3 Phase system)	mv/Amp/mt	1.2	0.9	0.6	0.5
17	Max. allowable tensile strength	Kgf	840	1200	1680	2000
18	Minimum allowable bending radius	mm	5D*	5D*	5D*	5D*
19	Approx. weight of completed cable.	kg/km	2204	2997	4030	5410
20	Conditions of installations :					
	Air temperature	°C	30			
	Note : *D = Overall diameter					

	ITEM	No.	14	15	16	17	18
Sr #	(H07RN-F) Cable 450/750V - BS EN 50525-2-21:2011	UNIT	4 x 120	4 x 150	4 x 185	4 x 240	4 x 300
1	Manufacturer		DUBAI CABLE COMPANY (PVT) LTD.				
2	Country of Origin		U.A.E				
3	Type of Cable		(H07RN-F) for 90°C				
4	Standard		BS EN 50525-2-21:2011				
5	Nominal voltage rating	Volts	450/750				
6	Max. continuous current carrying capacity when laid						
	In air	Amps	346	399	456	538	621
7	Conductors :						
	Material		Plain Annealed Flexible Copper (Class 5)				
	No. of Cores	No.	4	4	4	4	4
	Nominal cross section	mm ²	120	150	185	240	300
8	Insulation of conductors :						
	Material		E17				
	Nominal thickness	mm	1.8	2	2.2	2.4	2.6
	Core identification		Green/Yellow, Brown, Black, Grey colours				
9	Sheath : (Black colour)						
	Material		Rubber as per BS EN 50525-2-21				
	Nominal thickness	mm	6	6.5	7	7.7	8.4
	Approx. outer diameter of cable.	mm	55	60.9	66.8	75.8	83.4
10	Maximum DC Resistance of conductor at 20°C	Ohm/km	0.161	0.129	0.106	0.0801	0.0641
11	Maximum AC Resistance per core at 90°C(Approx)	Ohm/km	0.2	0.2	0.1	0.1	0.1
12	AC Impedance per phase at 90°C(Approx)	Ohm/km	0.2	0.2	0.1	0.1	0.1
14	Maximum Conductor short circuit capacity for one sec :	kA	17.16	21.45	26.46	34.32	42.9
15	Max.conductor operating temperature.	°C	90				
16	Max. Conductor permissible temp under SC conditions.	°C	250				
17	Voltage drop (3 Phase system)	mv/Amp/mt	0.4	0.3	0.2	0.2	0.1
18	Max. allowable tensile strength	Kgf	2000	2000	2000	2000	2000
19	Minimum allowable bending radius	mm	5D*	5D*	5D*	5D*	5D*
20	Approx. weight of completed cable.	kg/km	6528	7994	9870	12881	15830
21	Conditions of installations :						
	Air temperature	°C	30				
	Note : *D = Overall diameter						