

# HYPERSOFT (HPF) #300SB LF

## Noise&Oil&Heat resistance and flexible code

- Heat resistance ★★
  - Oil resistance ★★★★★
  - Noise resistance ★★★★★
  - Flame resistance ★★★★★
  - Flexibility ★★★★★
  - non-migratory ★★★★★
  - Transport property ★★
- ※The characteristic is an aim.

Meeting standard



Certification	Electrical Appliance and Material Safety	CMJ registration
Applicable standard	Law/Departmental order to determine a technical standard of the electrical equipment	F mark
Official symbol	HVCTF	
Voltage rating	300V	
Temperature rating	75°C	
Conductor	JIS C 3102	
Flame rating	JIS C 3005-4.26.2-b)	

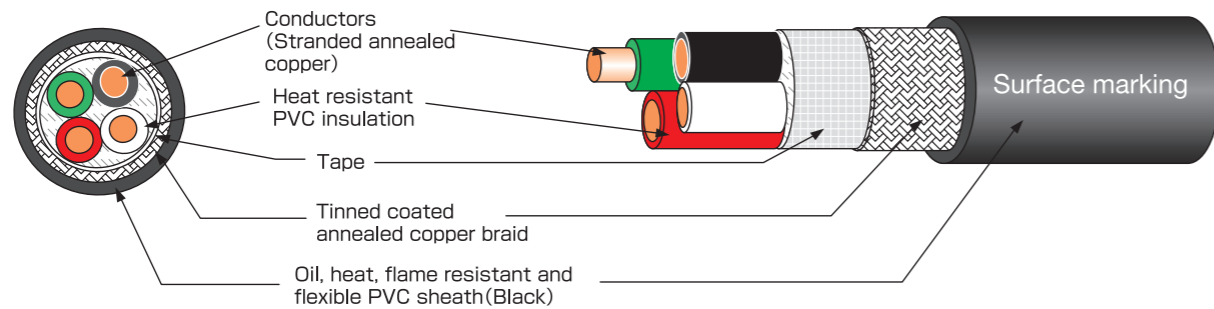
### Application

- The place which is need to oil, heat, noise resistant
- Rated voltage:300V.Temp:75°C(ability 90 °C)

### Feature

- Heat resistant PVC used for insulation.
- Oil, heat, flame resistant and soft PVC for sheath.

### Construction figure



### Surface marking

(1) 0.3~0.5mm<sup>2</sup> cables

○○mm<sup>2</sup> 《ハイパーソフト#300SB》耐油 耐熱 TEIKOKU \*\* LFV R15 -F-

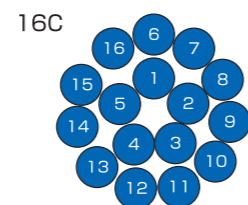
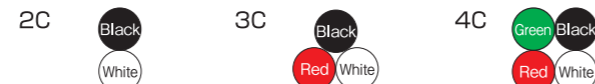
(2) 0.75~2mm<sup>2</sup> cables

○○mm<sup>2</sup> 《ハイパーソフト#300SB》耐油 耐熱 TEIKOKU <PS>E \*\* タイネツ LFV R15 -F-

<PS>E	Indication that was passed to Electrical Appliance and Material Safety Act in Japan (The mark is indicated for conductor size is 1.75 mm and over)
LFV	Abbreviated name: Lead Free Vinyl
-F-	Passing to vertical flame test from CMJ registration system

### Identification

Cores are 12 and under	Color distinction (Black, White, Red, Green, Yellow, Brown, Blue, Gray, Orange, SkyBlue, Pink, BlightGreen)
Cores are 13 and over	Numbering(1,2,3,...) on 「Blue」 insulation



Figures in ○ indicate white numbering on blue insulator.

### Standard sales length

100m or 500m  
(Sales by short length is available for large sizes. Please contact us which sizes are available.)

### Construction table

No. of cores	Conductor			PVC insulation		PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG) (mm <sup>2</sup> )	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx. (inch)	Overall diameter approx. (mm)		Conductor resistance (Ω/km20°C)	Insulation resistance (MΩkm20°C)	Electrical strength (V/1min.)	
2C						0.236	6.0	30(45)				
3C						0.244	6.2	34(50)				
4C						0.260	6.6	40(60)				4
5C						0.280	7.1	50(75)				
6C						0.295	7.5	54(80)				
7C	0.3	12/0.18 (12/7.1mil)	0.7 (28mil)	0.059	1.5	0.315	8.0	64(95)	62.9			
8C						0.331	8.4	71(105)				
10C						0.354	9.0	74(110)				3
12C						0.362	9.2	84(125)				
16C						0.402	10.2	104(155)				
20C						0.437	11.1	124(185)				2
30C						0.500	12.7	168(250)				
2C						0.268	6.8	40(60)				
3C						0.280	7.1	47(70)				6
4C						0.299	7.6	57(85)				
5C						0.319	8.1	67(100)				
6C						0.343	8.7	74(110)				
7C	0.5	20/0.18 (20/7.1mil)	0.9 (35mil)	0.075	1.9	0.366	9.3	87(130)	37.8			5
8C						0.394	10.0	97(145)				
10C						0.421	10.7	111(165)				4
12C						0.433	11.0	118(175)				
16C						0.472	12.0	148(220)				
20C						0.524	13.3	181(270)				3
30C						0.606	15.4	255(380)				
2C						0.299	7.6	50(75)				
3C						0.315	8.0	64(95)				8
4C						0.339	8.6	74(110)				
5C						0.362	9.2	87(130)				
6C						0.390	9.9	101(150)				
7C	0.75	30/0.18 (30/7.1mil)	1.1 (43mil)	0.091	2.3	0.421	10.7	114(170)	25.1	5	under water AC2000	7
8C						0.449	11.4	131(195)				6
10C						0.484	12.3	148(220)				
12C						0.500	12.7	161(240)				
16C						0.551	14.0	208(310)				5
20C						0.606	15.4	255(380)				4
2C						0.331	8.4	67(100)				
3C						0.346	8.8	81(120)				14
4C						0.374	9.5	97(145)				
5C						0.409	10.4	114(170)				11
6C						0.441	11.2	134(200)				10
7C	1.25	50/0.18 (50/7.1mil)	1.5 (59mil)	0.106	2.7	0.472	12.0	155(230)	15.1			
8C						0.512	13.0	175(260)				9
10C						0.551	14.0	198(295)				
12C						0.567	14.4	222(330)				8
16C						0.626	15.9	286(425)				7
20C						0.697	17.7	349(520)				6
2C						0.354	9.0	81(120)				
3C						0.374	9.5	101(150)				20
4C						0.406	10.3	121(180)				
5C						0.441	11.2	144(215)				14
6C	2	37/0.26 (37/10.2mil)	1.8 (71mil)	0.118	3.0	0.476	12.1	171(255)	9.79			13
7C						0.516	13.1	202(300)				12
8C						0.551	14.0	228(340)				
10C						0.598	15.2	255(380)				11
12C						0.618	15.7	296(440)				10

### Allowable ampacity

The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30°C.

Allowable ampacity is calculated based on JCS0168.

Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(°C)	30	40	50	60	70
Adjustment factors	1.00	0.88	0.75	0.58	0.33