

# EXT-01G-SB/2517 300V LF

## Electronic equipment robot cable

- Heat resistance ★★★★★
  - Oil resistance ★★★★★
  - Noise resistance ★★★
  - Flame resistance ★★★★★
  - Torsion resistance ★★★★★
  - Flexibility resistance ★★★★★
  - Cable carrier ★★★★★
- ※The characteristic is an aim.

>>> Meeting standard



Certification	UL AWM	cUL AWM
Applicable standard	UL 758	CSA C22.2 No.210
Official symbol	UL STYLE 2517	CSA AWM II A/B
Voltage rating	300V	300V
Temperature rating	105°C	105°C
Conductor	UL 758	CSA C22.2 No.210
Flame rating	VW-1	FT1

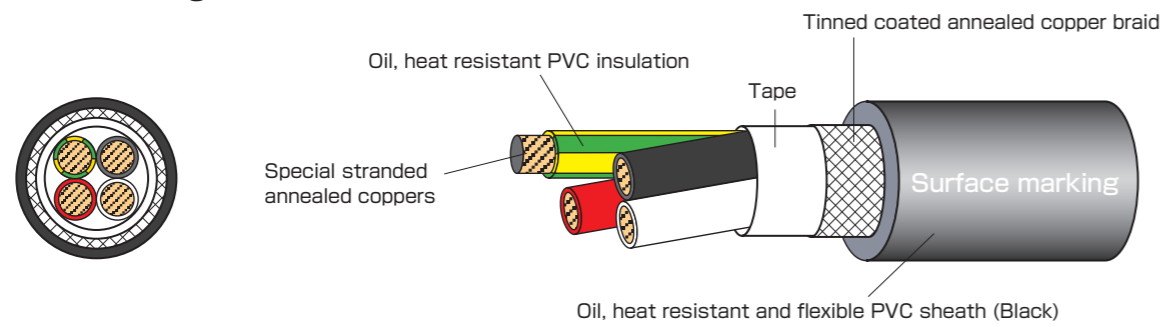
### > Application

- Appropriate for cable chain wiring for high-speed moving.
- Cable chain test 20 million times or more.
- Shielded Robot cable with UL and cUL at 300V 105°C. (Category : AVLV2, AVLV8)

### > Feature

- Extremely fine conductor use.
- Oil and heat resistant PVC used for insulation.
- Oil and heat resistant PVC used for sheath.
- Flame resisting : UL VW-1, cUL FT1.

### > Construction figure

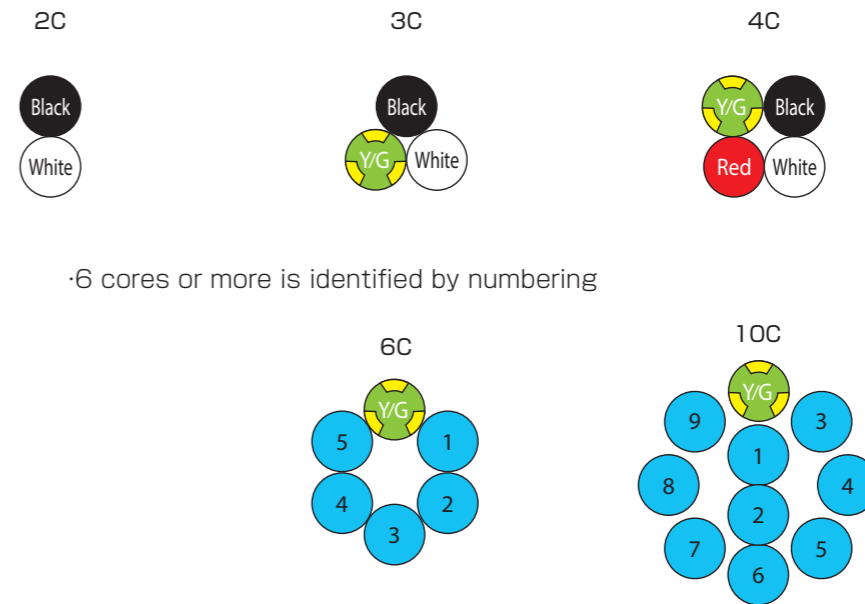


### > Surface marking



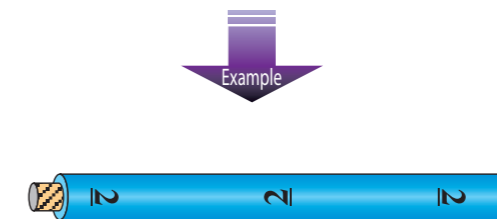
※R15 indicates "Compliant with RoHS Directive 2011/65/EU and Directive (EU) 2015/863 (10 substances)".

### > Identification



·6 cores or more is identified by numbering

Figures in ○ indicate black numbering on light blue insulator.  
 ※Y/G indicates green core with yellow stripe (30~50%).



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### > Construction table

No. of cores	Conductor			Oil,heat resistant PVC insulation		Oil, heat resistant flexible PVC sheath		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (AWG)	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						0.252	6.4	40(60)				10
3C						0.264	6.7	44(65)				10
4C						0.287	7.3	50(75)				8.9
6C						0.331	8.4	71(105)				7.4
8C	20	112/0.08	1.07	0.078	1.97	0.382	9.7	94(140)	less than 34.6	more than 10	2000	6.7
10C	(0.518mm)	(112/3.2mil)	(42mil)			0.413	10.5	111(165)				6.1
12C						0.425	10.8	121(180)				5.6
16C						0.469	11.9	151(225)				5.1
20C						0.520	13.2	188(280)				4.7
30C						0.677	17.2	299(445)				4.2
2C						0.272	6.9	47(70)				13
3C						0.287	7.3	57(85)				13
4C						0.307	7.8	67(100)				11
6C						0.358	9.1	87(130)				9.7
8C	18	168/0.08	1.31	0.087	2.21	0.417	10.6	118(175)	less than 21.8	more than 10	2000	8.8
10C	(0.823mm)	(168/3.2mil)	(52mil)			0.449	11.4	138(205)				8.0
12C						0.465	11.8	155(230)				7.4
16C						0.516	13.1	202(300)				6.6
20C						0.567	14.4	242(360)				6.2
30C						0.744	18.9	383(570)				5.5
2C						0.299	7.6	60(90)				16
3C						0.315	8.0	71(105)				16
4C	16	266/0.08	1.64	0.100	2.54	0.339	8.6	87(130)	less than 15.5	more than 10	2000	14
6C	(1.30mm)	(266/3.2mil)	(65mil)			0.402	10.2	124(185)				12
8C						0.465	11.8	158(235)				10
10C						0.508	12.9	188(280)				10

\*3C or more has the [Y/G] earth cable of an equal size.  
 \*The test of 2000V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.

\*Please contact us which sizes are available.

### > 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.

Allowable ampacity is calculated excluding grounding conductor.

Please multiply the following adjustment factors by the ambient temperature.

● Adjustment factors(at ambient temperature)

Ambient temperature(°C)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.93	0.86	0.77	0.68	0.58	0.45	0.26

### > Movement characteristic

*) 1 Bending	Bend	U-shaped turn-back	90° bending	Twist		*) 2 Move bending
				Straight	Bending	
A	A	S	A	A	A	C

Examination's time:  
 S= More than 20 million times  
 A= More than 10 million times  
 B= More than 5 million times  
 C= More than 3 million times  
 D= More than 1 million times  
 E= More than 0.5 million times

\*) 1 It is C when overall diameter of the cable is 20mm or more, and D when overall diameter of the cable is 30mm or more.

\*) 2 When overall diameter of the cable is 20mm or less.

\*The longevity of the cable inside a cable bearing is dependent on the travel distance. Please consult our Sales Department when wiring a travel distance of 5m or greater.

### > Oil resistance

Insulating oil	Lubricating oil	Cutting oil I	Cutting oil II	Hydraulic oil	Grease
A	A	B	B	B	B

\*A~C in the table indicate the characteristics below.

A:There is no problem on practical use at all.

B:Deterioration slightly no problem almost on practical use.

C:It is sometimes deteriorated to some degree, and not possible to use it.