EXT-Type Ⅱ Series

300V EXT-Ⅱ-SB/2517 LF

Electronic equipment robot cable

Heat resistance ★★★★★
Oil resistance ★★★★★
Noise resistance ★★★
Flame resistance ★★★★
Torsion resistance★★★★★
Flexibility resistance★★★★★
Drag chain ★★★★★★★
※The characteristic is an aim.

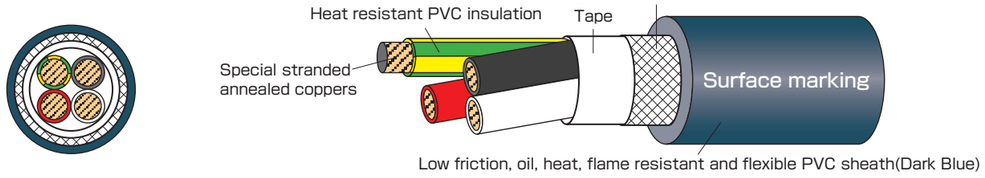
Application

- Appropriate for drag chain wiring for high-speed moving.
- Drag chain test 50 million times or more. (or more ability 100 million times)
- Shielded Robot cable with UL and cUL at 300V 105℃.(Category : AVLV2, AVLV8)

Feature

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

Construction figure



Surface marking

—300V EXT-Ⅱ TAIYO □□AWG LF R15 E67647 AWM 2517 105℃ VW-1 AWM ⅡA/B 105℃ 300V FT1—

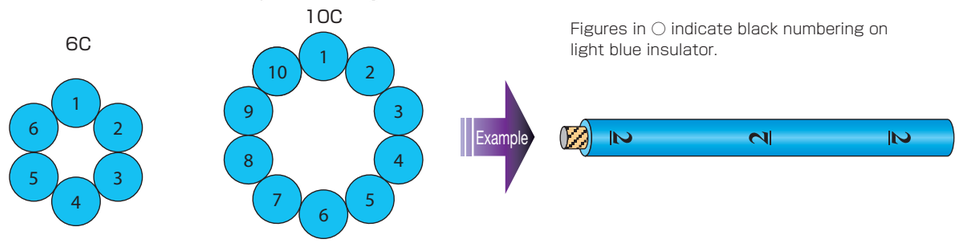
※R15 indicates "Compliant with RoHS Directive 2011/65/EU and Directive (EU) 2015/863 (10 substances)".

Identification

·2C, 3C, 4C

※Y/G indicates green core with yellow stripe (30~50%).

·6 cores or more is identified by numbering



Figures in ○ indicate black numbering on light blue insulator.

Standard sales length

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

Meeting standard

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

Construction table

No. of cores	Conductor Size (AWG)	Conductor Construction (Line/mm)	Conductor Outside diameter (mm)	Heat-resistant PVC insulation Outside diameter (inch)	Heat-resistant PVC insulation Outside diameter (mm)	Low friction, oil, heat, flame resistant flexible PVC sheath Overall diameter approx.(inch)	Low friction, oil, heat, flame resistant flexible PVC sheath Overall diameter approx.(mm)	Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics Conductor resistance (Ω/km20℃)	Electrical Characteristics Insulation resistance (MΩkm20℃)	Electrical Characteristics Electrical strength (V/1min.)	Allowable ampacity (A)
2C	20 (0.518㎟)	119/0.08 (119/3.2mil)	1.1	0.079	2.0	0.264	6.7	40(60)	less than 39.1	more than 10	2000	9.7
3C						0.283	7.2	50(75)				9.7
4C						0.303	7.7	60(90)				8.4
6C						0.350	8.9	77(115)				6.5
8C						0.409	10.4	104(155)				6.0
10C						0.469	11.9	131(195)				5.6
12C						0.461	11.7	134(200)				5.2
16C						0.504	12.8	168(250)				4.7
20C						0.563	14.3	212(315)				4.4
30C						0.693	17.6	316(470)				3.9
2C	18 (0.823㎟)	168/0.08 (168/3.2mil)	1.31	0.087	2.21	0.287	7.3	50(75)	less than 24.0	more than 10	2000	12
3C						0.303	7.7	60(90)				12
4C						0.323	8.2	71(105)				11
6C						0.382	9.7	97(145)				8.6
8C						0.441	11.2	128(190)				7.9
10C						0.504	12.8	161(240)				7.4
12C						0.496	12.6	171(255)				6.8
16C						0.555	14.1	222(330)				6.2
20C						0.606	15.4	265(395)				5.7
30C						0.760	19.3	403(600)				5.1
2C	16 (1.30㎟)	266/0.08 (266/3.2mil)	1.64	0.100	2.54	0.315	8.0	60(90)	less than 15.5	more than 10	2000	16
3C						0.331	8.4	74(110)				16
4C						0.354	9.0	91(135)				14
6C						0.425	10.8	131(195)				11
8C						0.496	12.6	175(260)				10
10C						0.571	14.5	218(325)				9.7

※The test of 2000V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.

Allowable ampacity

·The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30℃.
·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(℃)	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 Straight	Twist Bending	＊)2 Move bending
A	A	SS	A	A	A	C

Examination's time:
SS= More than 50 million times
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

＊)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 drag chain 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.

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