16

300V EXT-II/2517 LF

Electronic equipment robot cable

**** Oil resistance Torsion resistance ★★★★ Flexibility resistance *** Cable carrier ***** *The characteristic is an aim.

Application

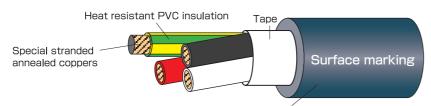
- Appropriate for cable bare wiring for high-speed moving.
- Cable Bear test 50 million times or more. (or more ability 100 million times)
- Robot cable with UL and cUL at 300V 105°C. (Category: AVLV2, AVLV8)

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





Low, friction, oil, heat, flame resistant and flexible PVC sheath(Dark Blue)

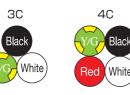
Surface marking

-300V EXT-II TAIYO □□AWG LF R15 E67647 N AWM 2517 105°C VW-1 2N AWM IIA/B 105°C 300V FT1-

Identification



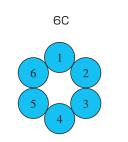


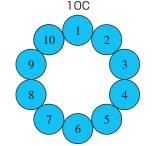


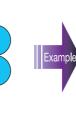
*Y/G indicates green core with yellow stripe $(30\sim50\%).$

Figures in \bigcirc indicate black numbering on

·6 cores or more is identified by numbering





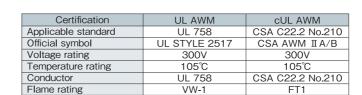




light blue insulator.

Standard sales length

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







Construction table

	Conductor			Heat-resistant PVC insulation		Low friction, oil, heat, flame resistant flexible PVC sheath		Approx. weight	Electrical Characteristics			Allowable
No. of cores	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)	Overall diameter approx.(inch)	Overall diameter approx. (mm)	(lbs/1000ft) (kg/km)	Conductor resistance (Ω/km20°C)	Insulation resistance (MΩkm20°C)	Electrical strength (V/1min.)	ampacity (A)
2C						0.240	6.1	30(45)				9.6
3C						0.252	6.4	37(55)				9.8
4C						0.272	6.9	44(65)				8.3
6C	20	119/0.08	4.4			0.327	8.3	60(90)				6.4
8C		(119/3,2mil)	1.1 (43mil)	0.079	2.0	0.382	9.7	84(125)	less than 39.1	more than 10	2000	5.9
10C	(0.5181111)	(119/3.21111)	(431111)			0.433	11.0	104(155)				5.6
12C						0.425	10.8	111(165)				5.1
16C						0.476	12.1	141(210)				4.6
20C						0.524	13.3	171(255)				4.3
30C						0.661	16.8	272(405)				3.8
2C						0.256	6.5	37(55)				12
3C						0.272	6.9	44(65)				12
4C						0.299	7.6	57(85)				11
6C						0.350	8.9	77(115)				8.4
8C	18	168/0.08	1.31	0.087	2.21	0.413	10.5	104(155)	loop than 24.0	more than 10	2000	7.8
10C	(0.823mm)	(168/3,2mil)	(52mil)	0.067	2.21	0.476	12.1	131(195)	less than 24.0	more trianito	2000	7.4
12C						0.469	11.9	144(215)				6.7
16C						0.516	13.1	181(270)				6.1
20C						0.575	14.6	225(335)				5.7
30C						0.728	18.5	353(525)				5.1
2C						0.291	7.4	47(70)				16
3C						0.307	7.8	60(90)				16
4C	16	266/0.08	1.64	0.100	2.54	0.331	8.4	77(115)	less than 15.5	more than10	2000	14
6C	(1.30mm)	(266/3.2mil)	(65mil)	0.100	2.54	0.398	10.1	108(160)				11
8C		, , , , , , , , , , , , , , , , , ,				0.469	11.9	148(220)				10
10C						0.531	13.5	178(265)				9.6
2C	14	420/0.08	2.07			0.323	8.2	64(95)				22
3C	(2.08mm)	(420/3,2mil)	(81mil)	0.117	2.97	0.343	8.7	84(125)	less than 9.75	more than 10	2000	22
4C	(2.0011111)	(420/ 3.21111)	(0111111)			0.382	9.7	104(155)				19

^{*}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 (°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	Bend U-shaped		90° Twist		*)2	Examination's time: SS= More than 50 million times B= More than 5 million t		
Bending	Denu	turn-back	bending	Straight	Bending	Move bending		C= More than 3 million times
Α	Α	SS	Α	Α	Α	С		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 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
Α	Α	В	В	В	В

*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:lt is sometimes deteriorated to some degree, and not possible to use it.