

EXT-01G-SB/2501 600V LF

Electronic equipment robot cable

- Heat resistance ★★★★★
 - Oil resistance ★★★★★
 - Noise resistance ★★★
 - Flame resistance ★★★★★
 - Torsion resistance ★★★★★
 - Flexibility resistance ★★★★★
 - Drag chain ★★★★★★
- ※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 2501	CSA AWM II A/B
Voltage rating	600V	600V
Temperature rating	105°C	105°C
Conductor	UL 758	CSA C22.2 No.210
Flame rating	VW-1	FT1



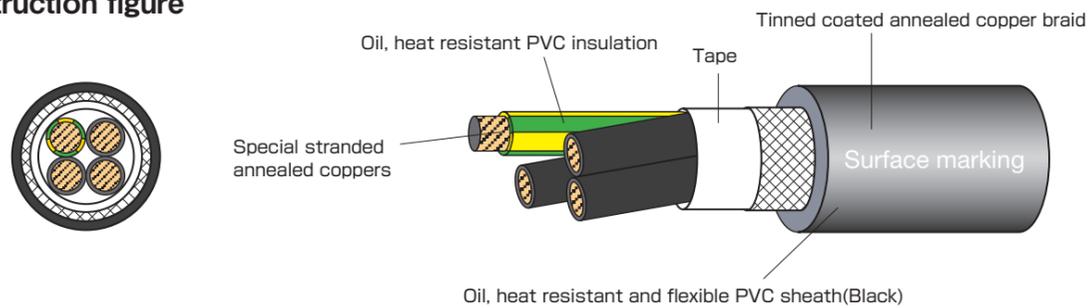
> Application

- Appropriate for drag chain wiring for high-speed moving.
- Drag chain test 20 million times or more.
- Shielded Robot cable with UL and cUL at 600V 105°C. (Category : AVL2, AVL8)

> 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



Figures in ○ indicate white numbering on black 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						0.390	9.9	84(125)				14
3C	18	168/0.08	1.31	0.115	2.91	0.409	10.4	97(145)	less than 21.8	more than 50	2000	14
4C	(0.823mm)	(168/3.2mil)	(52mil)			0.441	11.2	118(175)				12
6C+1C						0.563	14.3	192(285)				10
2C						0.417	10.6	97(145)				18
3C	16	266/0.08	1.64	0.128	3.24	0.441	11.2	121(180)	less than 13.7	more than 50	2000	18
4C	(1.30mm)	(266/3.2mil)	(65mil)			0.472	12.0	141(210)				16
6C+1C						0.598	15.2	232(345)				12
2C						0.453	11.5	124(185)				24
3C	14	420/0.08	2.07	0.144	3.67	0.476	12.1	148(220)	less than 8.62	more than 50	2000	24
4C	(2.08mm)	(420/3.2mil)	(81mil)			0.516	13.1	175(260)				21
7C						0.646	16.4	282(420)				16

※Core number mark "+1C" has the [Y/G] ground core of 14AWG size.

※3C or 4C and 14AWG or more size has the [Y/G] ground core 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	U-shaped turn-back	90° bending	Twist		*2
Rotary bending	A	S	A	Straight	Bending	Move 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 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.