

600V EXT-II-SB/2501 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

> Construction table

No. of cores	Conductor			Heat-resistant PVC insulation		Low friction, oil, heat, flame 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						0.402	10.2	84(125)	less than 24.0	more than 50	2000	13
3C	18	168/0.08	1.31	0.118	3.0	0.421	10.7	97(145)				13
4C	(0.823mm)	(168/3.2mil)	(52mil)			0.457	11.6	118(175)				12
6C+1C						0.579	14.7	195(290)				9.6
2C						0.429	10.9	97(145)	less than 15.5	more than 50	2000	17
3C	16	266/0.08	1.64	0.130	3.3	0.453	11.5	121(180)				17
4C	(1.30mm)	(266/3.2mil)	(65mil)			0.488	12.4	144(215)				15
6C+1C						0.614	15.6	228(340)				12
2C						0.465	11.8	121(180)	less than 9.75	more than 50	2000	23
3C	14	420/0.08	2.07	0.150	3.8	0.488	12.4	148(220)				23
4C	(2.08mm)	(420/3.2mil)	(81mil)			0.528	13.4	175(260)				20
7C						0.665	16.9	282(420)				16

● Ground core

Size (AWG)	Conductor		Heat-resistant PVC insulation	
	Construction (Line/mm)	Outside diameter (mm)	Thickness (mm)	Outside diameter (mm)
14	420/0.08	2.07	0.85	3.8

※Core number mark "+1C" has the [Y/G] ground core of 14AWG size.
 ※3 or 4 and 14AWG 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.

> 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	SS	A	A	A	C

Examination's time:
 SS= More than 50 million times B= More than 5 million times
 S= More than 20 million times C= More than 3 million times
 A= More than 10 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.

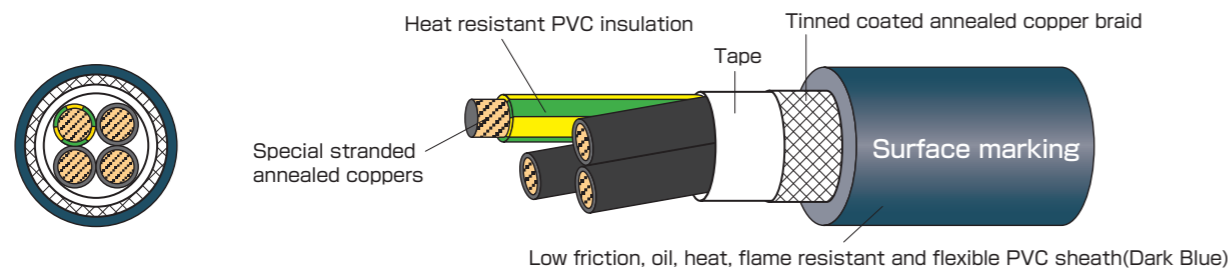
> Application

- 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 600V 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

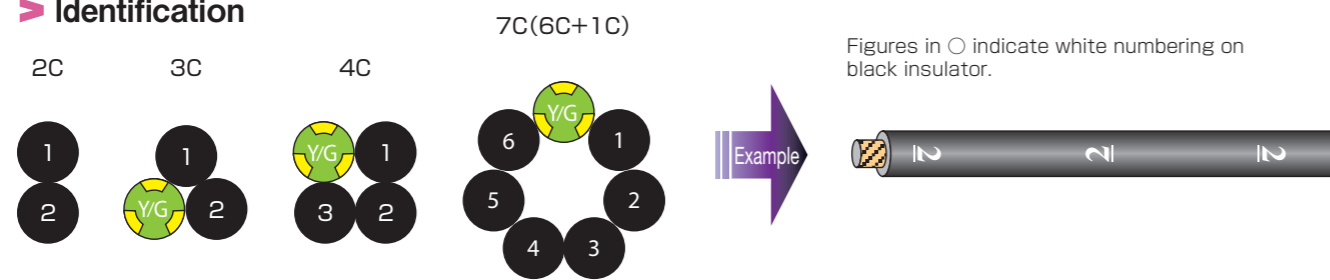


> Surface marking



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

> Identification



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

> Standard sales length

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