

EXT-01G-SB/20276 LF

Electronic equipment robot cable

Heat resistance

Oil resistance

Noise resistance

Flame resistance

Torsion resistance

Flexibility resistance

Cable carrier

★★★★

★★★★★

★★★★★

★★★★★

★★★★★

★★★★★

★★★★★

※The characteristic is an aim.

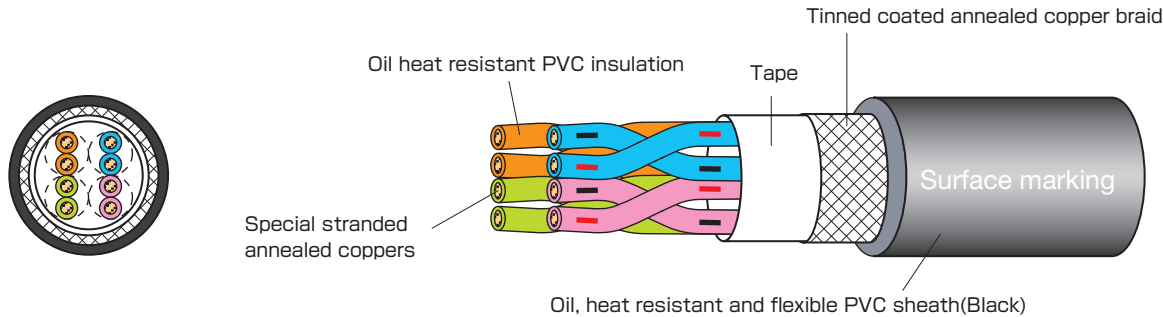
➤ Application

- Appropriate for drag chain wiring for high-speed moving.
- Cable Bear test 20 million times or more.
- Shielded Robot cable with UL and cUL at 30V 80°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



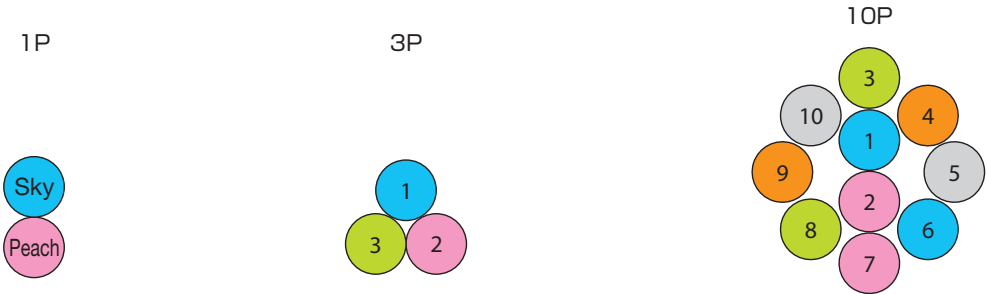
※R15 indicates "Compliant with RoHS Directive 2011/65/EU and Directive (EU) 2015/863 (10 substances)".

➤➤➤ Meeting standard

Certification	UL AWM	cUL AWM
Applicable standard	UL 758	CSA C22.2 No.210
Official symbol	UL STYLE 20276	CSA AWM IIA/B
Voltage rating	30V	30V
Temperature rating	80°C	80°C
Conductor	UL 758	CSA C22.2 No.210
Flame rating	VW-1	FT1



➤ Identification



※ 1P : Sky×Peach(No dot)

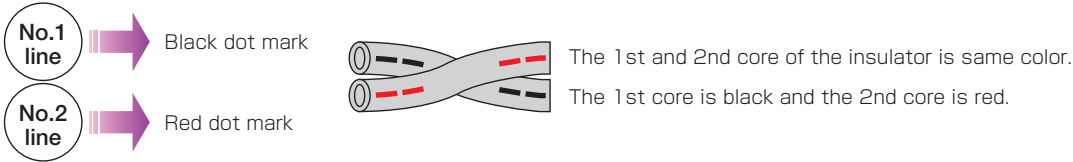
Figures ○ indicate pair number in the identification table.

● Identification table

Pair number	Color of insulation	Dot mark	Pair number	Color of insulation	Dot mark
1	Sky	—	16	Sky	— (Continuation)
2	Peach	—	17	Peach	— (Continuation)
3	Grass	—	18	Grass	— (Continuation)
4	Orange	—	19	Orange	— (Continuation)
5	Gray	—	20	Gray	— (Continuation)
6	Sky	—	21	Sky	— (Continuation)
7	Peach	—	22	Peach	— (Continuation)
8	Grass	—	23	Grass	— (Continuation)
9	Orange	—	24	Orange	— (Continuation)
10	Gray	—	25	Gray	— (Continuation)
11	Sky	—	26	Sky	—
12	Peach	—	27	Peach	—
13	Grass	—	28	Grass	—
14	Orange	—	29	Orange	—
15	Gray	—	30	Gray	—

※A short point is 1mm, the length point is 2mm, the interval is 1mm, and the pitch is about 12mm.

● Example of pare





Electronic equipment robot cable

> Construction table

No. of pairs	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 (MΩ.km20°C)	Electrical strength (V/1min.)	
1P						0.181	4.6	19(28)				2.8
2P						0.220	5.6	29(43)				2.2
3P						0.244	6.2	34(50)				1.9
4P						0.260	6.6	37(55)				1.7
5P						0.280	7.1	44(65)				1.6
6P						0.299	7.6	50(75)				1.5
7P	26	30/0.08	0.63	0.041	1.03	0.319	8.1	57(85)	less than 146	more than 10	500	1.4
8P	(0.128mil)	(30/3.2mil)	(25mil)			0.339	8.6	64(95)				1.4
10P						0.343	8.7	71(105)				1.2
12P						0.382	9.7	84(125)				1.2
15P						0.417	10.6	97(145)				1.1
20P						0.457	11.6	121(180)				1.0
25P						0.520	13.2	155(230)				0.97
1P						0.189	4.8	22(32)				4.4
2P						0.236	6.0	34(50)				3.5
3P						0.264	6.7	40(60)				3.0
4P						0.283	7.2	47(70)				2.7
5P						0.303	7.7	54(80)				2.5
6P						0.327	8.3	64(95)				2.4
7P	24	44/0.08	0.67	0.046	1.17	0.350	8.9	71(105)	less than 105	more than 10	500	2.2
8P	(0.204mil)	(44/3.2mil)	(26mil)			0.378	9.6	84(125)				2.2
10P						0.378	9.6	91(135)				2.0
12P						0.417	10.6	104(155)				1.9
15P						0.461	11.7	124(185)				1.7
20P						0.508	12.9	158(235)				1.6
25P						0.614	15.6	218(325)				1.5
1P						0.205	5.2	26(38)				6.1
2P						0.256	6.5	40(60)				4.9
3P						0.283	7.2	50(75)				4.2
4P						0.307	7.8	60(90)				3.8
5P						0.331	8.4	71(105)				3.5
6P	22	68/0.08	0.83	0.052	1.33	0.358	9.1	77(115)	less than 57.5	more than 10	500	3.3
7P	(0.324mil)	(68/3.2mil)	(33mil)			0.390	9.9	94(140)				3.2
8P						0.413	10.5	104(155)				3.1
10P						0.417	10.6	118(175)				2.8
12P						0.461	11.7	134(200)				2.6
15P						0.512	13.0	165(245)				2.5
20P						0.563	14.3	205(305)				2.2
25P						0.677	17.2	282(420)				2.1
1P						0.220	5.6	32(48)				8.1
2P						0.283	7.2	54(80)				6.4
3P						0.319	8.1	67(100)				5.6
4P						0.346	8.8	81(120)				5.0
5P						0.378	9.6	97(145)				4.7
6P	20	112/0.08	1.07	0.062	1.57	0.409	10.4	114(170)	less than 36.2	more than 10	500	4.4
8P	(0.518mil)	(112/3.2mil)	(42mil)			0.472	12.0	148(220)				4.1
10P						0.476	12.1	158(235)				3.7
15P						0.626	15.9	249(370)				3.3
20P						0.685	17.4	312(465)				3.0
25P						0.772	19.6	383(570)				2.8

※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.

·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	0.89	0.77	0.63	0.45	—	—	—

> Movement characteristic

*) 1 Rotary bending	Bending	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 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.