

600V TURBO-FLEX/2501 LF

Portable power cable

- Heat resistance ★★★★★
 - Oil resistance ★★★★★
 - Noise resistance ★
 - Flame resistance ★★★★★
 - Torsion resistance ★★★★★
 - Flexibility resistance ★★★★★※1
 - Cable carrier ★★★★★
- ※1 More than 10 cores is 「3」
※The characteristic is an aim.

Meeting standard

Certification	UL AWM	cUL AWM	CE marking	Electrical Appliance and Material Safety Law (19-8AWG)	Electrical Appliance and Material Safety Law (6-4AWG)	CMJ registration
Applicable standard	UL 758	CSA C22.2 No.210	EN50525-2-51	LawDepartmental order to determine a technical standard of the electrical equipment	LawDepartmental order to determine a technical standard of the electrical equipment	F mark
Official symbol	UL STYLE 2501	CSA AWM II A/B	Equivalent of H05VV5-F	ASEISMATIC HVCT	HVCT	
Voltage rating	600V	600V	300/500V	600V	600V	
Temperature rating	105°C	105°C	70°C	75°C	75°C	
Conductor	UL 758	CSA C22.2 No.210	EN60228	JIS C 3102	JIS C 3102	
Flame rating	VW-1	FT1	EN50264-2-1	JIS C 3005 4.26.2 b)	JIS C 3005 4.26.2 b)	Flame test of insulated for approval use



※ 19AWG - 10AWG size indicate a F mark from CMJ registration system.

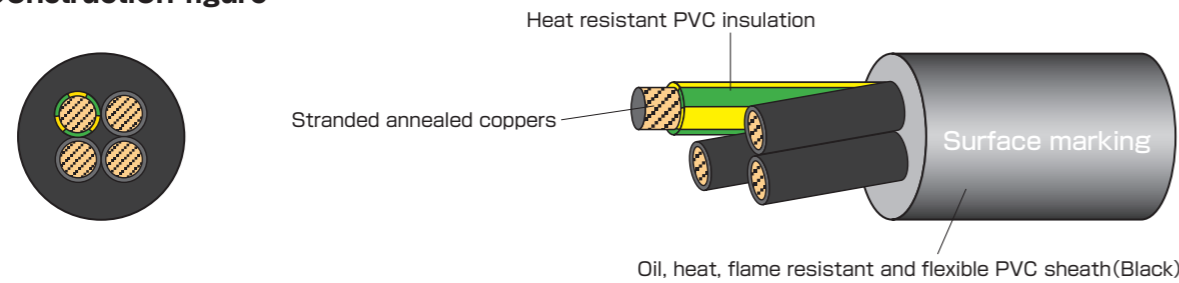
> Application

- It is possible to use it for wiring medium or low-speed operational components of machine tool.
- Cable chain test 5 million times or more. (or more ability 10 million times)
- Vibration resistant cable with UL and cUL at 600V, 105°C. (Category : AVL2, AVL8)
- CE marking.
- Fit to Electrical Appliance and Material Safety Law. (7 cores or less cable.)

> Feature

- Fine wire conductor use.
- Heat resistant PVC used for insulation.
- Oil and heat resistant PVC used for sheath.
- Flame resisting : UL VW-1, cUL FT1.

> Construction figure



※Cable with more than 10 cores : binder tape on cores.

> Surface marking

(1) 7 cores or less, 19~10AWG cables

TEIKOKU TURBO-FLEX □□AWG(○mm) LF R15 -F- E67647 AWM 2501 VW-1 II A/B 105°C 600V FT1 <PS>E ** 耐熱 耐震 耐油 CE 05VV5-F 300/500V

(2) 8 cores or more, 19~10AWG cables

TEIKOKU TURBO-FLEX □□AWG(○mm) LF R15 -F- E67647 AWM 2501 VW-1 II A/B 105°C 600V FT1 耐熱 耐震 耐油 CE 05VV5-F 300/500V

(3) 7 cores or less, 8AWG cables

TEIKOKU TURBO-FLEX □□AWG(○mm) LF R15 E67647 AWM 2501 VW-1 II A/B 105°C 600V FT1 <PS>E ** 耐熱 耐震 耐油 CE 05VV5-F 300/500V

(4) 7 cores or less, 6~4AWG cables

TEIKOKU TURBO-FLEX □□AWG(○mm) LF R15 E67647 AWM 2501 VW-1 II A/B 105°C 600V FT1 <PS>E ** 耐熱 耐震 耐油 CE 05VV5-F 300/500V

※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.

※3C or more has the Y/G earth.

> Construction table

No. of cores	Conductor			Heat-resistant PVC insulation		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 (MΩ.km20°C)	Electrical strength (V/1min.)	
2C						0.346	8.8	64(95)				12
3C						0.362	9.2	71(105)				12
4C						0.390	9.9	84(125)				11
5C						0.429	10.9	104(155)				10
6C	19	67/0.12	1.1	0.106	2.7	0.461	11.7	118(175)				9.6
7C	(0.75mm)	(67/4.2mil)	(43mil)			0.500	12.7	138(205)	25.3			9.1
8C						0.543	13.8	161(240)				8.8
10C						0.622	15.8	188(280)				7.9
12C						0.697	17.7	238(355)				7.5
20C						0.752	19.1	302(450)				6
30C						0.933	23.7	457(680)				5.2
2C						0.378	9.6	81(120)				17
3C						0.398	10.1	91(135)				17
4C						0.437	11.1	111(165)				15
5C	17	112/0.12	1.5	0.122	3.1	0.480	12.2	134(200)	15.2	50		14
6C	(1.25mm)	(112/4.2mil)	(59mil)			0.516	13.1	158(235)				13
7C						0.559	14.2	185(275)				12
8C						0.598	15.2	208(310)				11
10C						0.697	17.7	259(385)				11
2C						0.409	10.4	97(145)			under water	22
3C						0.429	10.9	114(170)			3000	22
4C						0.465	11.8	141(210)				19
5C	15	80/0.18	1.8	0.134	3.4	0.512	13.0	168(250)	9.83			17
6C	(2mm)	(80/7.1mil)	(71mil)			0.559	14.2	202(300)				16
7C						0.598	15.2	232(345)				15
8C						0.650	16.5	269(400)				15
10C						0.756	19.2	333(495)				13
12C						0.846	21.5	383(570)				12
2C						0.465	11.8	121(180)				31
3C						0.496	12.6	155(230)				31
4C	12	65/0.26	2.4	0.157	4.0	0.547	13.9	195(290)	5.6			27
5C	(3.5mm)	(65/10.2mil)	(94mil)			0.591	15.0	232(345)				24
6C						0.646	16.4	275(410)				22
7C						0.701	17.8	319(475)				21
2C						0.567	14.4	181(270)				41
3C	10	104/0.26	3.1	0.201	5.1	0.598	15.2	228(340)	3.63	40		41
4C	(5.5mm)	(104/10.2mil)	(122mil)			0.657	16.7	289(430)				36
2C						0.705	17.9	282(420)				55
3C	8	7/24/0.254	4.2	0.261	6.64	0.752	19.1	366(545)	2.4			55
4C	(8mm)	(7/24/10.0mil)	(165mil)			0.827	21.0	464(690)				47
4C	6(14mm)	7/39/0.254	5.3	0.339	8.6	1.039	26.4	732(1090)	1.4			66
		(7/39/10.0mil)	(209mil)									
4C	4(22mm)	7/61/0.254	6.6	0.390	9.9	1.177	29.9	1025(1525)	0.887			87
		(7/61/10.0mil)	(260mil)									

※Partial conductor construction is changed from production in August 2022.

For details, please contact our sales representative or the place of purchase.

※Please contact our sales staffs for stock.

> Allowable ampacity

·The allowable ampacity in this catalog is a recommended value at one in the air construction and the ambient temperature 30°C and in the case of use for Japanese equipment in the wiring.

·Allowable ampacity is calculated based on JCSO 168.

·Please multiply the following adjustment factors by the ambient temperature.

·Please select the allowable ampacity value to much of usage.

●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

> Standard sales length

100m & 500m