

U-TKVV(BS) AWG24 ~ AWG16

Applications/Features

- For signal lines of control devices, machine tools, etc.
- Excellent heat resistance, oil resistance and flexibility.
- We have many choices of wire size(AWG24-16), cores, and optional braided shields.
- Reduce crosstalk noise. – The twisted pair types have different pitch for adjacent pairs.
- Better workability. – Shielded types have a drain wire of the same size as the conductor.
- Easy identification. – The conductor size and the number of cores (pairs) are printed on the cable surface.
- Easy core identification. – All cores have different color patterns. (common in our instrumentation cables).
- Multi-standard cable. – Complies with UL listing(UL PLCC), UL recognized and cUL(CSA AWM)
- Compliant with NFPA79.
- Compliant with RoHS2.

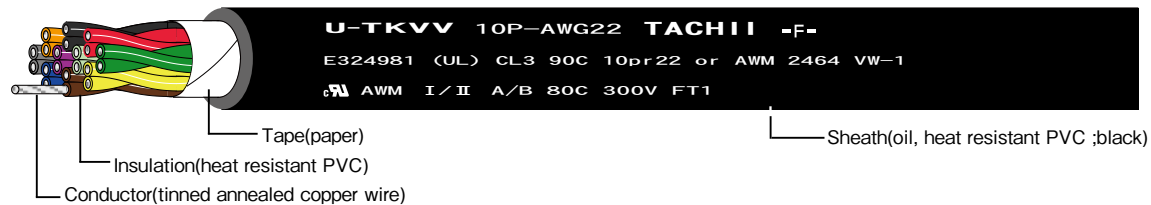
Standard

- Standard

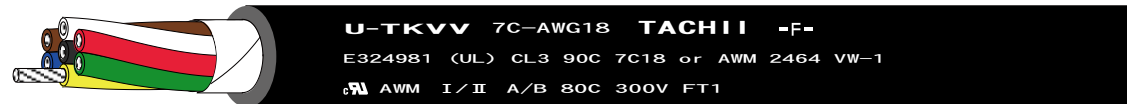
	UL PLCC	UL AWM	cUL AWM
Standard	UL 13	UL758	CSA22.2 No.210
Style/Type	CL3	Style 2464	I / II / A/B
Rated Volage	(300V)	300V	300V
Rated Temp.	90°C	80°C	80°C
Flame Retardance	Vertical Tray	VW-1	FT1

Construction/Properties

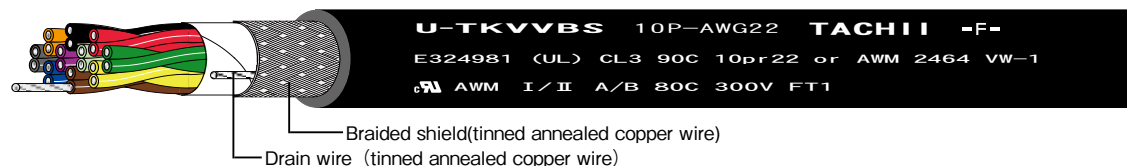
[Unshielded/Pair type] U-TKVV AWG24,22,20



[Unshielded/Core type] U-TKVV AWG24,22,20,18,16



[Shielded/Pair type] U-TKVVBS AWG24,22,20



[Shielded/Core type] U-TKVVBS AWG18,16



(The actual printing is one line.)

[Unshielded/Pair type] U-TKVV AWG24,22,20

Model	Conductor			Insulation		Sheath		Weight kg/km	Conductor resistance (20°C) Ω /km	Insulation resistance (20°C) M.Ω /km	Test Voltage V·1min	Allowable Current (30°C) A	Length m
	Size	Const- ruction	OD	Thick- ness	OD	Thick- ness	OD						
	AWG	No./mm	mm	mm	mm	mm	mm						
1P-AWG24	24 (0.22mm ²)	11/0.16	0.61	0.30	1.2	0.80	4.0	20	88.3 or under	50 or more	AC2000	4.6	100 (B)
2P-AWG24						0.90	5.7	33				3.6	
3P-AWG24						1.00	6.1	43				3.0	
4P-AWG24						1.00	6.6	52				2.7	
5P-AWG24						1.00	7.4	63				2.4	
6P-AWG24						1.00	8.0	72				2.3	
7P-AWG24						1.00	8.0	78				2.2	
8P-AWG24						1.10	8.8	91				2.1	
10P-AWG24						1.10	10.2	111				1.9	
12P-AWG24						1.20	10.7	130				1.8	
15P-AWG24						1.20	11.8	157				1.5	
18P-AWG24						1.20	12.4	180				1.5	
20P-AWG24						1.30	12.9	203				1.4	
25P-AWG24						1.40	14.6	256				1.3	
32P-AWG24						1.40	16.1	307				1.1	
1P-AWG22	22 (0.34mm ²)	17/0.16	0.76	0.32	1.4	0.80	4.4	27	57.2 or under	50 or more	AC2000	6.2	100 (B)
2P-AWG22						1.00	6.5	44				4.9	
3P-AWG22						0.90	6.6	52				4.1	
4P-AWG22						1.00	7.4	67				3.6	
5P-AWG22						1.00	8.0	81				3.3	
6P-AWG22						1.10	8.9	99				3.1	
7P-AWG22						1.10	8.9	106				2.9	
8P-AWG22						1.10	9.9	121				2.8	
10P-AWG22						1.20	11.7	152				2.5	
12P-AWG22						1.20	12.1	174				2.4	
15P-AWG22						1.30	13.5	217				2.1	
18P-AWG22						1.30	14.2	251				2.0	
20P-AWG22						1.40	15.1	282				1.8	
25P-AWG22						1.50	17.3	358				1.7	
1P-AWG20						20 (0.54mm ²)	27/0.16	0.96				0.32	
2P-AWG20	1.00	7.1	55	6.6									
3P-AWG20	1.00	7.5	71	5.5									
4P-AWG20	1.10	8.7	93	4.9									
5P-AWG20	1.10	9.4	112	4.4									
6P-AWG20	1.10	10.2	131	4.1									
7P-AWG20	1.10	10.2	142	3.9									
8P-AWG20	1.20	11.2	167	3.7									
10P-AWG20	1.30	13.2	209	3.4									
12P-AWG20	1.30	13.6	239	3.2									
15P-AWG20	1.40	15.3	297	2.8									

- Refer to "Pattern ⑦" on P.43 and P.44 for core configuration.
- "B" in Length part means "Bundle", "D" in Length part means "Drum".

[Unshielded/Core type] U-TKVV AWG24,22,20,18,16

Model	Conductor			Insulation		Sheath		Weight kg/km	Conductor resistance (20°C) Ω /km	Insulation resistance (20°C) M.Ω /km	Test Voltage V·1min	Allowable Current (30°C) A	Length m									
	Size	Const- ruction	OD	Thick- ness	OD	Thick- ness	OD															
	AWG	No./mm	mm	mm	mm	mm	mm															
3C-AWG24	24 (0.22mm ²)	11/0.16	0.61	0.30	1.2	0.80	4.2	25	87.5 or under	50 or more	AC2000	4.1	100 (B)									
5C-AWG24						0.90	5.2	34				3.3										
3C-AWG22	22 (0.34mm ²)	17/0.16	0.76	0.32	1.4	0.80	4.6	31	56.6 or under	50 or more	AC2000	5.4	100 (B)									
5C-AWG22						0.90	5.7	44				4.4										
3C-AWG20	20 (0.54mm ²)	27/0.16	0.96	0.32	1.6	0.90	5.3	43	35.6 or under	50 or more	AC2000	7.4	100 (B)									
5C-AWG20						1.00	6.4	59				5.9										
2C-AWG18	18 (0.87mm ²)	34/0.18	1.21	0.35	1.9	0.85	5.6	48	23.6 or under	50 or more	AC2000	11.2	100 (B)									
3C-AWG18						0.90	6.0	70				9.8										
3C-AWG18(E)						0.90	6.0	70				11.2										
4C-AWG18						0.90	6.5	66				8.9										
4C-AWG18(E)						0.90	6.5	66				9.8										
5C-AWG18						0.90	7.0	78				7.9										
5C-AWG18(E)						0.90	7.0	78				8.9										
6C-AWG18						0.90	7.6	92				7.4										
6C-AWG18(E)						0.90	7.6	92				7.9										
7C-AWG18						0.90	7.6	100				6.9										
7C-AWG18(E)						0.90	7.6	100				7.4										
8C-AWG18						0.95	8.3	116				6.5										
8C-AWG18(E)						0.95	8.3	116				6.5										
10C-AWG18						1.10	9.9	148				6.0										
2C-AWG16						16 (1.37mm ²)	54/0.18	1.53				0.34		2.2	0.90	6.3	64	14.9 or under	50 or more	AC2000	15.2	100 (B)
3C-AWG16															0.90	6.7	80				13.3	
3C-AWG16(E)	0.90	6.7	80	15.2																		
4C-AWG16	0.90	7.2	88	12.0																		
4C-AWG16(E)	0.90	7.2	88	13.3																		
5C-AWG16	1.00	8.1	111	10.7																		
5C-AWG16(E)	1.00	8.1	111	12.0																		
6C-AWG16	1.00	8.7	130	10.0																		
6C-AWG16(E)	1.00	8.7	130	10.7																		
7C-AWG16	1.00	8.7	143	9.4																		
7C-AWG16(E)	1.00	8.7	143	10.0																		
8C-AWG16	1.00	9.4	163	8.8																		
8C-AWG16(E)	1.00	9.4	163	9.4																		

- Refer to "Pattern ②" on P.41 and "Pattern ③" on P.41 and "Pattern ⑤" on P.41 for core configuration.
- (E) : Ground wire(green/yellow)

【Shielded/Pair type】 U-TKVVBS AWG24,22,20

Instrumentation/FA Cables

Model	Conductor			Insulation		Sheath		Weight kg/km	Conductor resistance (20℃) Ω /km	Insulation resistance (20℃) M.Ω /km	Test Voltage V·1min	Allowable Current (30℃) A	Length m									
	Size	Const- ruction	OD	Thick- ness	OD	Thick- ness	OD															
	AWG	No./mm	mm	mm	mm	mm	mm															
1P-AWG24	24 (0.22mm ²)	11/0.16	0.61	0.30	1.2	0.90	4.8	34	88.3 or under	50 or more	AC2000	4.6	100 (B)									
2P-AWG24						1.00	6.4	54				3.6										
3P-AWG24						1.00	6.6	63				3.0										
4P-AWG24						1.00	7.1	73				2.7										
5P-AWG24						1.00	7.7	85				2.4										
6P-AWG24						1.10	8.4	100				2.3										
7P-AWG24						1.10	8.4	105				2.2										
8P-AWG24						1.10	9.0	117				2.1										
10P-AWG24						1.20	10.5	146				1.9										
12P-AWG24						1.20	10.8	162				1.8										
15P-AWG24						1.30	12.0	198				1.5										
18P-AWG24						1.40	12.8	229				1.5										
20P-AWG24						1.40	13.4	249				1.4										
25P-AWG24						1.40	14.6	292				1.3										
32P-AWG24						1.60	16.4	369				1.1		100(D)								
1P-AWG22						22 (0.34mm ²)	17/0.16	0.76				0.32		1.4	0.90	5.2	41	57.2 or under	50 or more	AC2000	6.2	100 (B)
2P-AWG22	1.00	7.0	66	4.9																		
3P-AWG22	1.00	7.3	78	4.1																		
4P-AWG22	1.00	7.9	93	3.6																		
5P-AWG22	1.10	8.7	112	3.3																		
6P-AWG22	1.20	9.6	134	3.1																		
7P-AWG22	1.20	9.6	140	2.9																		
8P-AWG22	1.20	10.2	156	2.8																		
10P-AWG22	1.30	11.9	193	2.5																		
12P-AWG22	1.30	12.3	217	2.4																		
15P-AWG22	1.40	13.7	264	2.1																		
18P-AWG22	1.40	14.3	301	2.0																		
20P-AWG22	1.40	15.0	328	1.8	100(D)																	
25P-AWG22	1.60	16.9	405	1.7																		
1P-AWG20	20 (0.54mm ²)	27/0.16	0.96	0.32	1.6				1.00	5.8	52		36.0 or under		50 or more	AC2000	8.3				100 (B)	
2P-AWG20									1.00	8.0	83						6.6					
3P-AWG20						1.00	8.6	102	5.5													
4P-AWG20						1.10	9.2	125	4.9													
5P-AWG20						1.20	9.7	146	4.4													
6P-AWG20						1.20	10.5	168	4.1													
7P-AWG20						1.20	10.5	180	3.9													
8P-AWG20						1.20	11.2	203	3.7													
10P-AWG20						1.40	13.4	257	3.4													
12P-AWG20						1.40	13.8	290	3.2													
15P-AWG20						1.40	15.1	345	2.8													

- Refer to "Pattern ⑦" on P.43 and P.44 for core configuration.
- "B" in Length part means "Bundle", "D" in Length part means "Drum".

【Shielded/Core type】 U-TKVVBS AWG18,16

Model	Conductor			Insulation		Sheath		Weight kg/km	Conductor resistance (20°C) Ω /km	Insulation resistance (20°C) M Ω /km	Test Voltage V 1min	Allowable Current (30°C) A	Length m
	Size	Const- ruction	OD	Thick- ness	OD	Thick- ness	OD						
	AWG	No./mm	mm	mm	mm	mm	mm						
2C-AWG18	18 (0.87mm ²)	34/0.18	1.21	0.35	1.9	0.90	6.4	65	23.6 or under	50 or more	AC2000	11.2	100 (B)
3C-AWG18						0.90	6.7	77				9.8	
4C-AWG18						0.90	7.1	92				8.9	
5C-AWG18						0.90	7.5	106				7.9	
6C-AWG18						0.90	8.1	122				7.4	
7C-AWG18						0.90	8.1	131				6.9	
8C-AWG18						0.95	8.8	149				6.5	
2C-AWG16						16 (1.37mm ²)	54/0.18	1.53				0.34	
3C-AWG16	0.90	7.2	102	13.3									
4C-AWG16	0.90	7.7	122	12.0									
5C-AWG16	1.00	8.6	147	10.7									
6C-AWG16	1.10	9.4	174	10.0									
7C-AWG16	1.10	9.4	187	9.4									
8C-AWG16	1.10	10.1	209	8.8									

• Refer to "Pattern ④" on P.41 for core configuration.