

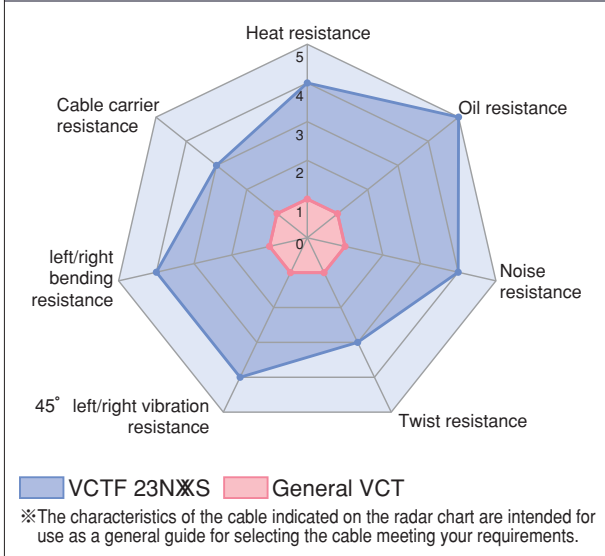
# VCTF 23NXS

High-prene

## UL AWM 2517



Characteristics Radar Chart



### Features

- VCTF cords designed to Electrical Appliance and Material Safety Law (equal to or more than 0.75mm<sup>2</sup>) & UL • cUL standards
- Noise resistance
- Oil resistant, heat resistant (105°C), movable
- Fine conductor
- Mat sheath

### Application

- Internal/external cable connection to electrical equipment
- Wiring for moving portions, such as a machine tool.
- Wiring of the portion requiring noise resistance

### Certification

UL<sub>us</sub>, <PS>E (applicable to 0.75mm<sup>2</sup> or more)

## Technical Data

	Japan	UL • cUL
Voltage Rating	300V	300V
Temperature Rating	75°C	105°C
Flame Resistance	60° inclination / 60° Angle	VW-1, FT1
Applicable Standard	Electrical Appliance and Material Safety Law <sup>#</sup>	UL AWM STYLE 2517 CAN/CSA-C22.2 No210.2

<sup>#</sup>The Electrical Appliance and Material Safety Law applies to 0.75mm<sup>2</sup> or more.

## Electrical Characteristics

Item	Nominal Cross-Sectional Area (mm <sup>2</sup> ) (AWG)	Number of Cores	Allowable Current (A)																
			2	3	4	5	6	7	8	10	12	14	15	16	20	24	25	26	30
Conductor Resistance (20°C) Ω/km or below	0.3 (23)	2~40	4	4	4	4	4	3	3	3	3	2	2	2	2	2	2	2	2
	0.5 (20)	62.5	6	6	6	5	5	5	4	4	4	3	3	3	3	3	3	3	2
	0.75 (19)	36.8	8	8	8	7	7	6	6	6	5	5	5	4	4	4	4	4	3
	1.25 (17)	25.1	14	14	14	11	10	9	9	8	8	7	7	6	6	6	5	5	5
	2.0 (15)	15.1	20	20	20	14	13	12	11	11	10	9	9	8	7	7	7	7	6
Insulation Resistance (20°C) MΩ/km or above	0.3(23)~2.0(15)	5																	
Test Voltage	V • min	AC 2000V																	

● Allowable Current (A) for the cable is based on calculation under aerial one-cable installation at ambient temperature of 30°C, not representing a guaranteed value. Allowable current for the cable at ambient temperature above 30°C is to be determined by multiplying the current value by the appropriate current reduction factor specified in the following table for the ambient temperature

### Current Reduction Factor Table

Ambient Temperature (°C)	30	35	40	45	50	55	60	65	70
Current Reduction Factor	1.00	0.94	0.88	0.82	0.75	0.67	0.58	0.47	0.33

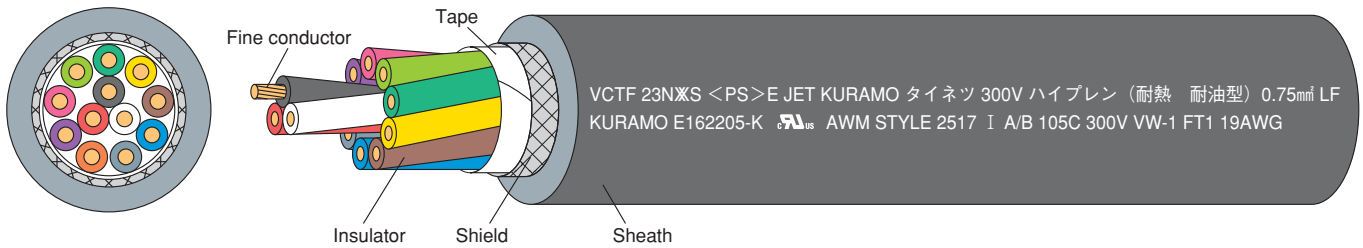
### Cable Construction

Item	Configuration
Conductor	Soft annealed stranded copper
Insulator	Heat resistant PVC
Conductor stranding	Circular
Core wrapping tape	Tape wrap around cores if their number is 5 or above
Core shield	Tin plated soft annealed copper braid
Sheath	Heat resistant PVC (black)

### Core Identification

No. of cores	Core identification
12 or less	Identification by color ( in order of black, white, red, green, yellow, brown, blue, gray, orange, purple, pink and light green )
13 or more	Identification by number ( marked on white insulator surface in order of 1, 2, 3, 4 and so on )

#### ■ Example: 12 core (0.75mm<sup>2</sup>) cable



### Cable Outside Diameter/Weight

Nominal cross-sectional area (mm <sup>2</sup> ) Conductor count/wire diameter <AWG>	Number of cores																	
	2	3	4	5	6	7	8	10	12	14	15	16	20	24	25	26	30	40
0.3 (60/0.08) <23>	6.1 50	6.4 60	6.8 65	7.2 70	7.7 85	8.2 95	8.7 105	9.8 135	9.7 130	10.0 145	10.5 150	10.5 160	11.5 195	13.0 230	13.0 240	14.0 255	14.0 270	15.5 345
0.5 (48/0.12) <20>	6.5 60	6.8 70	7.2 80	7.7 90	8.3 105	8.9 120	9.5 135	11.0 175	10.5 165	11.0 185	11.5 200	11.5 210	13.0 250	14.5 310	14.5 315	15.0 330	15.0 355	17.5 465
0.75 (67/0.12) <19>	7.3 75	7.7 90	8.3 105	8.8 115	9.5 135	10.5 155	11.0 180	13.0 235	12.5 220	13.0 255	13.0 270	13.5 290	15.0 350	17.5 425	17.5 440	18.0 460	18.0 490	20.5 655
1.25 (112/0.12) <17>	8.1 100	8.5 115	9.2 140	9.9 155	11.0 180	11.5 210	12.5 240	15.0 325	14.0 310	15.0 355	15.0 380	15.5 405	17.5 495	20.0 610	20.0 630	21.5 690	21.5 745	24.0 960
2.0 (79/0.18) <15>	8.7 120	9.2 150	9.9 180	11.0 200	11.5 235	12.5 275	13.5 320	16.0 425	15.5 420	16.5 485	16.5 520	17.0 555	19.0 685	22.5 865	22.5 890	23.5 925	23.5 1010	26.5 1320

⚠ VCTF23NXS 0.3/0.5mm<sup>2</sup> cable, which is exempt from the application of the Electrical Appliance and Material Safety Law, can be used for cable connection to signal and communication circuits and other weak current electrical circuits in Japan.

● If any conventional products of this series are in stock, there may be a period required for transition to their UL/cUL compliant counterparts.

Upper: Standard cable outside diameter (Approx.mm)

Lower: Approximate weight (kg/km)

※ indicates specifications for custom order production.

VCTF 23NXS

<PS>E  
 UL AWM  
 NFP A70  
 NFP A79  
 cUL/CSA  
 CE  
 CCC  
 GOST-R