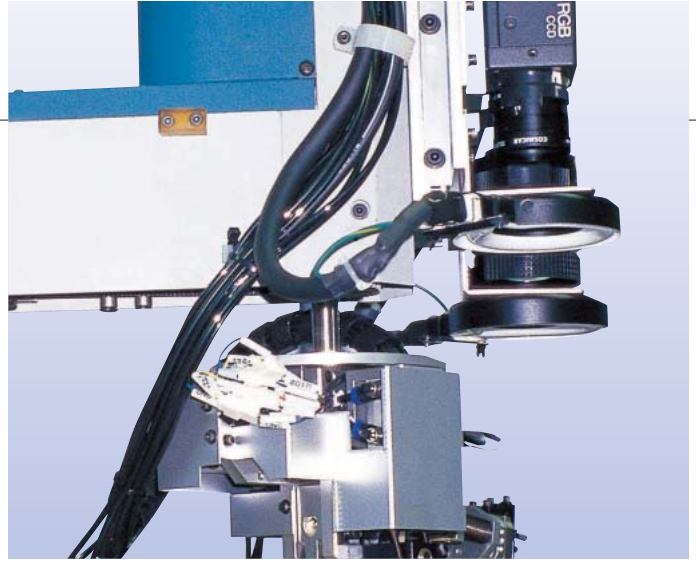


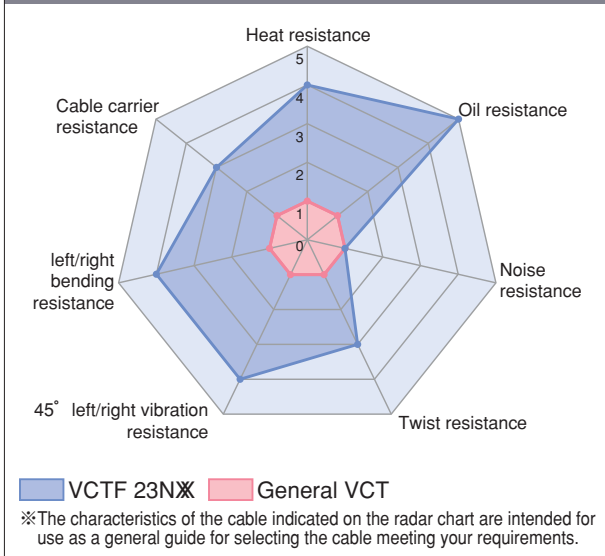
# VCTF 23N~~X~~

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
- 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.

### 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 0.75 mm<sup>2</sup> or more.

## Electrical Characteristics

Item	Nominal Cross-Sectional Area (mm <sup>2</sup> ) (AWG)	Number of Cores	Allowable Current (A)																			
			2~40	2	3	4	5	6	7	8	10	12	14	15	16	20	24	25	26	30	40	70
Conductor Resistance (20°C) Ω/km or below	0.3 (23)	62.5	4	4	4	4	4	3	3	3	3	3	2	2	2	2	2	2	2	2		
	0.5 (20)	36.8	6	6	6	5	5	5	4	4	4	4	3	3	3	3	3	3	3	3	2	
	0.75 (19)	25.1	8	8	8	7	7	6	6	6	5	5	5	5	4	4	4	4	4	4	3	2
	1.25 (17)	15.1	14	14	14	11	10	9	9	8	8	7	7	7	6	6	6	5	5	5	5	
	2.0 (15)	9.79	20	20	20	14	13	12	11	11	10	9	9	9	8	7	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

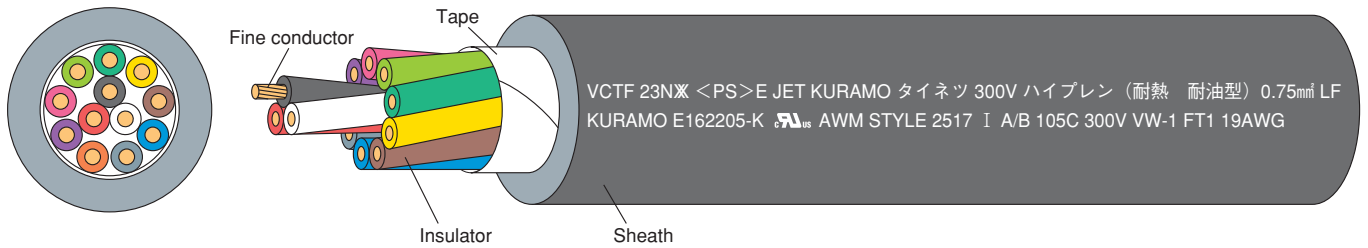
Item	Configuration
Conductor	Soft annealed stranded copper
Insulator	Heat resistant PVC
Conductor stranding	Circular
Core wrapping tape	Tape wrap around cores if their number is 12 or above
Sheath	Heat resistant PVC (black)

## 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 )

VCTF 23N<sup>※</sup>

### 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	70
0.3 (60/0.08) <23>	5.4 40	5.7 45	6.1 50	6.6 60	7.1 70	7.6 80	8.1 90	9.2 115	9.2 110	9.6 <sup>※</sup> 125	9.8 <sup>※</sup> 130	10.0 140	11.0 170	12.5 <sup>※</sup> 205	12.5 <sup>※</sup> 210	13.0 <sup>※</sup> 220	13.0 235	15.0 310	
0.5 (48/0.12) <20>	5.8 45	6.1 55	6.6 65	7.1 75	7.7 90	8.3 105	8.9 120	10.5 155	10.0 145	10.5 <sup>※</sup> 165	11.0 <sup>※</sup> 175	11.0 185	12.5 225	14.0 <sup>※</sup> 275	14.0 <sup>※</sup> 285	14.5 <sup>※</sup> 300	14.5 325	17.0 430	
0.75 (67/0.12) <19>	6.6 60	7.0 70	7.6 85	8.2 105	8.9 120	9.6 140	10.5 160	12.5 215	12.0 195	12.5 <sup>※</sup> 225	12.5 <sup>※</sup> 240	13.0 255	14.5 320	17.0 <sup>※</sup> 390	17.0 <sup>※</sup> 400	17.5 <sup>※</sup> 420	17.5 455	20.0 600	26.0 1050
1.25 (112/0.12) <17>	7.4 80	7.8 95	8.5 115	9.3 140	10.0 165	11.0 195	12.0 225	14.0 305	13.5 280	14.5 <sup>※</sup> 325	14.5 <sup>※</sup> 350	15.0 370	17.0 455	19.5 <sup>※</sup> 560	19.5 <sup>※</sup> 575	20.0 <sup>※</sup> 600	20.0 655	23.5 <sup>※</sup> 900	
2.0 (79/0.18) <15>	8.0 100	8.5 125	9.2 155	10.0 190	11.0 225	12.0 260	13.0 300	15.5 400	15.0 385	15.5 <sup>※</sup> 445	16.0 <sup>※</sup> 475	16.5 515	18.5 625	22.0 <sup>※</sup> 805	22.0 <sup>※</sup> 830	23.0 <sup>※</sup> 865	23.0 950	26.0 <sup>※</sup> 1250	

⚠ VCTF23N<sup>※</sup> 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.

<PS>E

UL AWM

NFPA70  
NFPA79

cUL/CSA

CE

CCC

GOST-R