

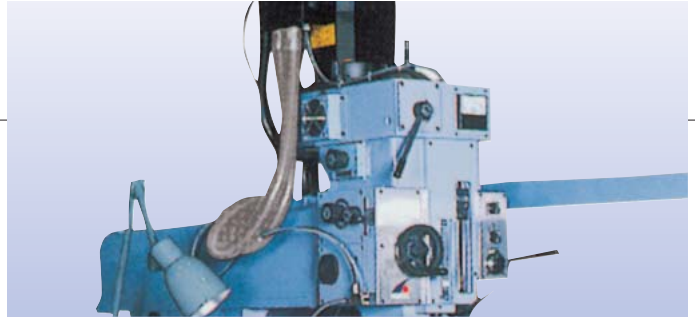
# CE-531XSB

CE H05VVC4V5-K (0.5~2.5mm<sup>2</sup>)

A05VVC4V5-K (4~25mm<sup>2</sup>)

UL AWM 2587 (0.5~6mm<sup>2</sup>)

CCC 227 IEC 74(RVVYP) (0.5~2.5mm<sup>2</sup>)



## Features

- Global-standard cables designed to CE&CCC (equal to or less than 2.5mm<sup>2</sup>) &UL · cUL (equal to or less than 6mm<sup>2</sup>) &<PS>E (0.75-4mm<sup>2</sup>) &GOST-R
- Oil resistant, heat resistant (105°C), flexible, movable
- Fine conductor
- Noise resistance (allowing effective use for cable connection requiring protection against EMC)
- Low transfer impedance (250mΩ/m or less at 30MHz)

## Application

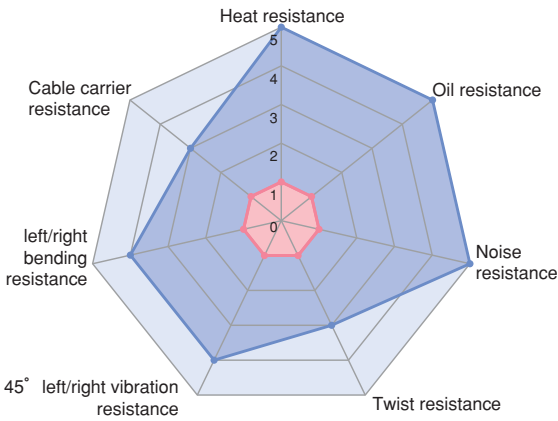
- Internal/external cable connection to electrical equipment
- Cable connection under oil environment
- Wiring of the portion requiring noise resistance

## Certification/Marking



※The cable is subject to limitation of applicable sizes for each relevant standard. For details, refer to "Applicable Range" for each standard in [Technical Data] given below.

## Characteristics Radar Chart



■ CE-531XSB ■ General VCTF

※The characteristics of the cable indicated on the radar chart are intended for use as a general guide for selecting the cable meeting your requirements.

## Technical Data

	CE	UL · cUL	CCC	Electrical Appliance and Material Safety Law <PS>E
Cable Type	0.5~2.5mm <sup>2</sup> : H05VVC4V5-K 4~25mm <sup>2</sup> : A05VVC4V5-K	AWM style 2587	227 IEC 74 (RVVYP)	VCTF
Voltage Rating	300/500V	600V	300/500V	300V
Temperature Rating	70°C	90°C	70°C	75°C
Test Voltage	AC2000V · 15min	AC3000V · 1min	AC2000V · 5min	AC2000V · 1min
Flame Resistance	IEC 60332-1	VW-1, FT1	IEC 60332-1	60° inclination
Applicable Standard	CENELEC HD 21.13 IEC 60227-7	UL 758 CAN/CSA-C22.2 No210.2	GB5023.7 IEC 60227-7	Electrical Appliance and Material Safety Law
Applicable Range	All sizes	0.5~6mm <sup>2</sup> (20~10AWG)	0.5-2.5mm <sup>2</sup> , only types designed for insulator identification by numbering	0.75~4mm <sup>2</sup>

## Electrical Characteristics

Item	Nominal Cross-Sectional Area (mm <sup>2</sup> ) (AWG)	Number of Cores	Allowable Current (A)													
			2~31	2	3	4	5	6	7	8	10	12	15	21	25	31
Conductor Resistance (20°C) Ω/km or below	0.5 (20)	39.0	10	9	8	7	7	7	7	6	6	5	5	5	4	
	0.75 (19)	26.0	13	11	10	9	9	9	8	8	7	7	6	6	5	
	1 (18)	19.5	15	13	12	11	11	10	10	9	9	8	7	7	6	
	1.5 (16)	13.3	20	17	15	14	14	13	13	12	11	10	9	9	8	
	2.5 (14)	7.98	27	23	21	20	19	18	18	16	15	14	13	12	11	
	4 (12)	4.95	36	31	28	26	25	24								
	6 (10)	3.30	47	40	36	34	32	31								
	10	1.91	67	57	51	48	45	43								
	16	1.21	89	76	68											
25	0.780	118	101	91												
Insulation Resistance (20°C) MΩ/km or above	0.5 (20) ~ 1.5 (16)	50														
	2.5 (14) ~ 4 (12)	40														
	6 (10) ~ 10	30														
	16~25	20														

- 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.
  - The Allowable current values are those calculated by JCS197, but not guaranteed. (For details on Allowable current of the cable when used in Europe, refer to the applicable standard) — IEC60364-5 (Electrical installation of building — Part 5: Selection and erection of electrical equipment — Section 523: Current-carrying capacities in wiring system).
- JCS197... Japanese Electric Wire and Cable Makers' Association's Standard "Allowable Current for Cable"

## Current Reduction Factor Table

Ambient Temperature (°C)	30	35	40	45	50	55	60	65
Current Reduction Factor	1.00	0.94	0.87	0.79	0.71	0.61	0.5	0.35

## Core Identification

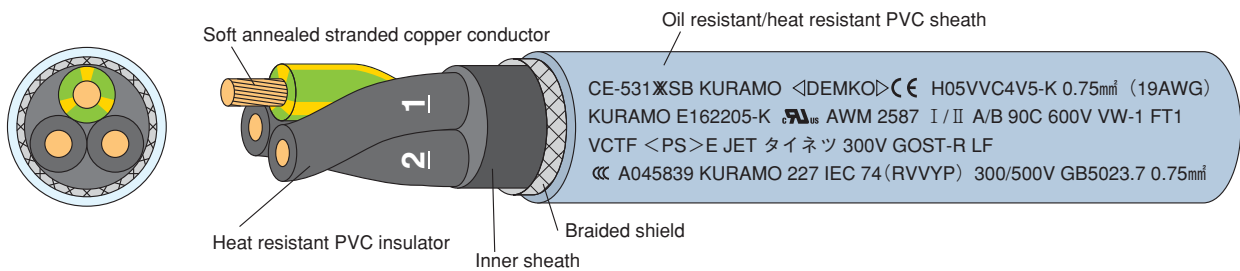
Core identification system	
Identification by Number (for Standard)	2cores— Identified by numbering in white color on black insulator surface 3cores or more — Identified by numbering in white color on black insulator surface + green/yellow
Identification by Color (for Custom Order)	2cores — Identified by brown and light blue 3cores — Identified by brown, light blue and green/yellow 4cores — Identified by brown, light blue, black and green/yellow

● Green/yellow: Yellow straight lines on green (in green/yellow color ratio of 60/40)

## 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 and size are 5 or above and 6mm <sup>2</sup> or above, respectively
Inner sheath	Oil resistant/heat resistant PVC (black)
Shield	Tin-plated soft annealed copper braid
Sheath	Oil resistant/heat resistant PVC (light gray)

### ■ Example: 3 core (0.75mm<sup>2</sup>) 19AWG cable



## Cable Outside Diameter/Weight

Nominal cross-sectional area (mm <sup>2</sup> ) <AWG> Conductor count/wire diameter	Number of cores														
	2	3	4	5	6	7	8	10	11	12	15	16	21	25	31
0.5 (48/0.12) <20>	※ 8.5 115	※ 8.8 125	※ 9.4 140	※ 10.5 160	※ 11.5 180	※ 12.0 205	※ 13.0 225	※ 14.0 265	※ 14.0 280	※ 14.5 300	※ 15.5 360	※ 16.0 400	※ 18.0 460	※ 19.5 520	※ 21.0 640
0.75 (67/0.12) <19>	8.8 120	9.2 135	10.0 155	※ 11.0 185	12.0 200	※ 12.5 230	13.5 255	※ 14.5 300	14.5 300	※ 15.5 350	※ 16.5 410	17.0 430	19.0 530	20.5 640	22.5 790
1 (90/0.12) <18>	9.2 130	9.8 150	10.5 180	※ 12.0 210	12.5 230	※ 13.5 270	14.5 300	※ 15.5 360	15.5 365	※ 16.5 390	※ 17.5 470	18.0 485	20.5 630	23.0 810	24.0 950
1.5 (135/0.12) <16>	10.5 165	11.0 200	12.0 230	※ 13.5 275	14.5 305	※ 15.5 350	16.5 395	※ 18.0 480	18.5 500	※ 19.0 510	※ 20.5 620	21.0 680	25.0 850	26.0 1050	28.0 1400
2.5 (98/0.18) <14>	12.0 225	12.5 265	14.0 325	※ 16.0 400	17.0 445	※ 18.5 520	19.5 580	※ 21.5 700	※ 21.5 750	※ 22.0 800	※ 24.0 980	※ 24.5 1100	※ 28.0 1300	※ 30.5 1550	※ 32.5 1900
4 (75/0.26) <12>	※ 14.0 315	14.5 355	15.5 460	※ 17.5 530	※ 19.0 600	20.5 690									
6 (112/0.26) <10>	※ 15.5 340	16.5 435	17.5 550	※ 19.5 640	※ 21.0 730	※ 23.5 950									
10 (7/28/0.26)	※ 19.0 560	※ 20.0 700	22.0 870	※ 24.0 1000	※ 26.5 1150	※ 29.0 1250									
16 (7/28/0.32)	※ 22.0 750	※ 23.0 860	※ 25.5 1150												
25 (7/44/0.32)	※ 27.0 1350	※ 28.5 1500	※ 31.5 1950												

Upper: Standard cable outside diameter (Approx.mm)  
Lower: Approximate weight (kg/km)  
※ indicates specifications for custom order production.

CE-531 XSB

<PS>E

UL AWM

NFPA70  
NFPA79

cUL/CSA

CE

CCC

GOST-R