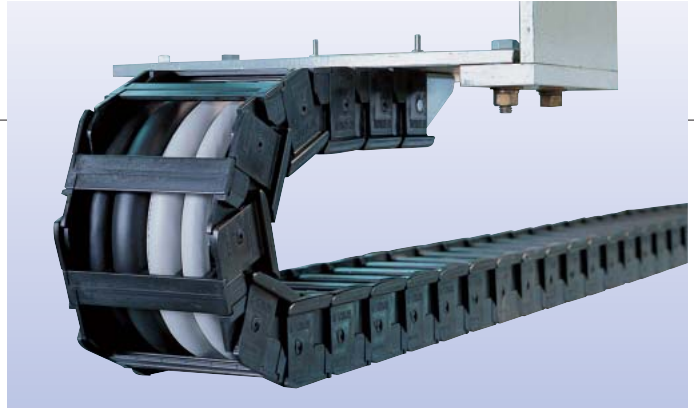
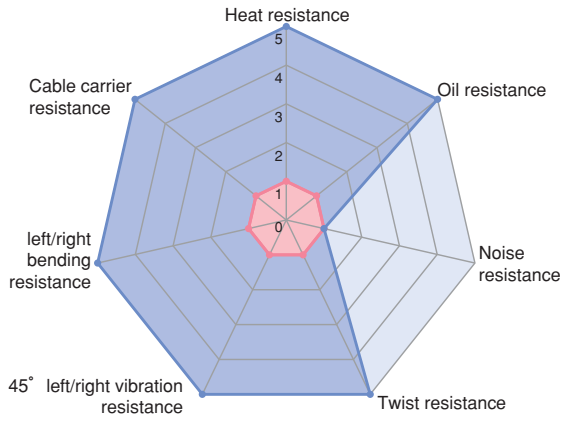
CE-531NZ

CE 05VV5-F
UL AWM 2587



Characteristics Radar Chart



※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.

Features

- Global-standard cables designed to CE, UL, cUL, <PS>E and GOST-R
- Oil resistance/Heat resistance (105℃)/Flexibility/Bending resistance, allowing use in mobile cable connection
- Conductor diameter 0.08㎜/Flexible stranded conductor (containing reinforcement cord at its center)

Application

- Cable carrier/robot wiring
- Cable connection under oil environment

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.

Technical Data

	CE	UL・cUL	Electrical Appliance and Material Safety Law<PS>E
Cable Type	05VV5-F	AWM style 2587	VCTF
Voltage Rating	300/500V	600V	300V
Temperature Rating	70℃	90℃	75℃
Test Voltage	AC2000V・15min	AC3000V・1min	AC2000V・1min
Flame Resistance	IEC 60332-1	VW-1, FT1	60° inclination
Applicable Standard	CENELEC HD 21.13 IEC 60227-7 (Not applicable to cable outside diameter)	UL 758 CAN/CSA-C22.2 No210.2	Electrical Appliance and Material Safety Law
Applicable Range	All sizes	All sizes	0.75～2.5㎟

Electrical Characteristics

Item	Nominal Cross-Sectional Area(㎟) (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℃) Ω/km or below	0.5 (20)	39.0	10	9	8	7	7	7	7	6	6	5	5	5	4
	0.75 (18)	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
Insulation Resistance (20℃) MΩ·km or above	0.5 (20) ～1.5 (16)	50													
	2.5 (14)	40													

- Allowable Current (A) for the cable is based on calculation under aerial one-cable installation at ambient temperature of 30℃, not representing a guaranteed value.
  Allowable current for the cable at ambient temperature above 30℃ 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 Cabtyre Cable"

Current Reduction Factor Table

Ambient Temperature (℃)	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

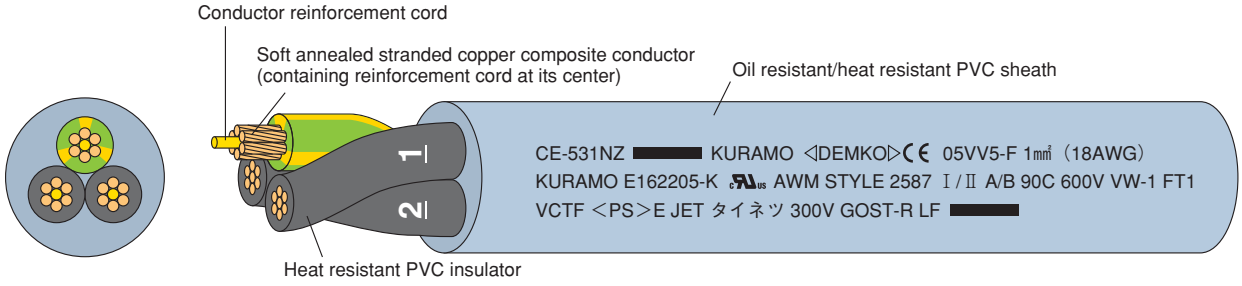
Core identification system	
Identification by Number (for Standard)	2cores – Identified by numbering in white color on black insulator surface 3cores or more – Identified by numbering in white color on black insulator surface + green/yellow
Identification by Color (for Custom Order)	2cores – Identified 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 composite (containing reinforcement cord at its center)
Insulato	Heat resistant PVC
Conductor stranding	Circular
Core wrapping tape	Tape wrap around cores if their number is 5 or above
Sheath	Oil resistant/heat resistant PVC (light gray)

■Example: 3 core (1㎟) 18AWG cable



Cable Outside Diameter/Weight

Nominal cross-sectional area (㎟) <AWG> Conductor count/wire diameter	Number of cores												
	2	3	4	5	6	7	8	10	12	15	21	25	31
0.5 (6/18/0.08) <20>	9.0 100	9.4 110	10.5 130	※ 11.5 145	12.5 165	※ 13.0 185	14.0 215	※ 16.0 260	15.5 265	※ 16.5 320	19.5 430	※ 22.0 550	24.0 650
0.75 (6/28/0.08) <18>	9.9 120	10.5 140	11.5 165	※ 12.5 180	13.5 210	※ 14.5 240	15.5 270	18.5 345	17.5 345	19.0 420	23.5 630	24.5 710	27.0 850
1 (6/35/0.08) <18>	10.5 135	11.0 150	12.0 180	※ 13.0 205	14.0 235	※ 15.0 265	16.5 300	※ 18.0 370	18.0 390	※ 19.5 470	24.5 690	※ 25.5 790	28.5 960
1.5 (6/52/0.08) <16>	11.0 160	12.0 190	13.0 225	※ 14.0 245	15.5 290	※ 16.5 330	18.0 410	※ 20.5 465	19.5 500	※ 23.0 660	26.5 890	※ 28.5 1020	31.5 1240
2.5 (6/86/0.08) <14>	12.0 200	13.0 240	14.0 290	※ 15.5 325	17.0 380	※ 18.5 440	19.5 490	※ 23.5 675	23.0 720	※ 25.0 870	29.5 1190	※ 31.5 1390	34.0 1660

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