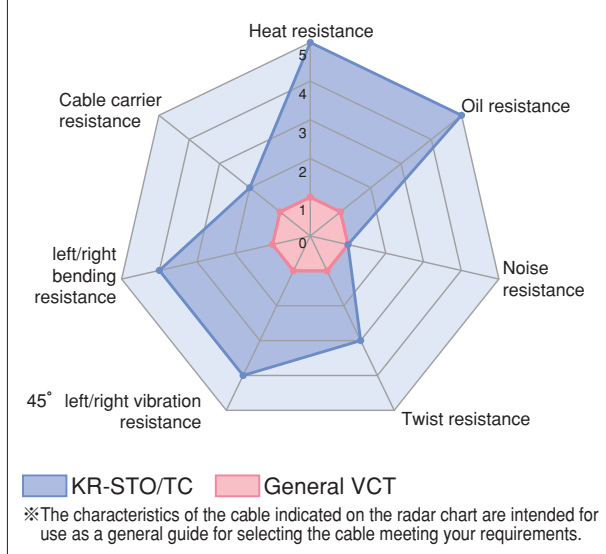


KR-STO/TC

NFPA70/NFPA79 Compliant
Global Standard Cable



Characteristics Radar Chart



Features

- Global-standard cables designed to UL, cUL standard and <PS>E (equal to or less than 100mm) and GOST-R
- TYPE TC (tray cable)/MTW
- Oil resistance/Heat resistance (105°C)/Flexibility/Flame resistance
For the temperature rating of the cable, refer to [Technical Data] given below.

Application

- Power cable connection to electrical equipment
- Cable connection under oil environment
- Cable connection in cable trays

Certification/Marking



Technical Data

	UL Flexible cord	cUL Flexible cord	UL MTW	UL TYPE TC	Electrical Appliance and Material Safety Law <PS>E
Cable Type	STO	STO	MTW	TC	VCT
Voltage Rating	600V	600V	600V	600V	600V
Test Voltage	AC3000V · 1min				
Temperature Rating	105°C	105°C	90°C DRY, 60°C WET	75°C DRY and WET	75°C
Flame Resistance	VW-1	FT2	VW-1	Vertical-Tray Flame Test	60° inclination
Applicable Standard	UL 62	CAN/CSA-C22.2 No.49	UL 1063	UL 1277	Electrical Appliance and Material Safety Law

Electrical Characteristics

Item	Conductor Size (AWG) (mm ²)	Number of Cores	Allowable Current (A) ※	
			ta	tb
Conductor Resistance (20°C) Ω/km or below	18 (0.75)	22.2	7	10
	16 (1.25)	13.7	10	13
	14 (2)	8.83	15	18
	12 (3.5)	5.21	20	25
Insulation Resistance (15.6°C) MΩ/km or above	18 (0.75) ~ 14 (2)	175		
	12 (3.5)	150		

※For details, refer to the NFPA70, which specifies the Allowable current for cable according to its “ta” or “tb” condition as specified below:

ta: Applicable to 3-core cord or multi-core cord connected to equipment so that the current flows only in its three cores

tb: Applicable to 2-core cord or multi-core cord connected to equipment so that the current flows only in its two cores

● 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

Core Identification

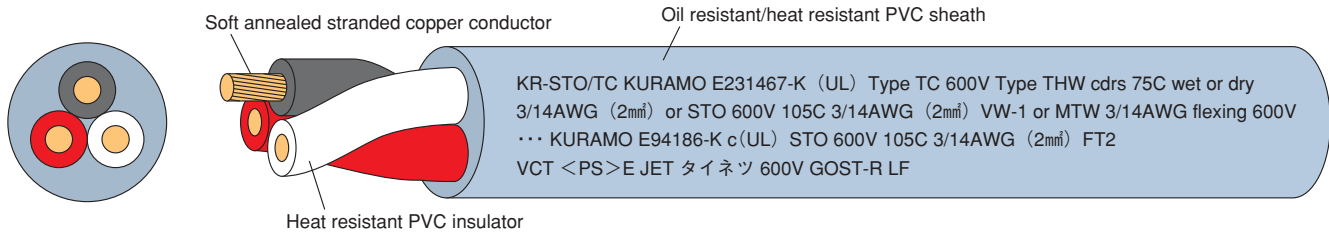
Core identification system	
Identification by Color (for Standard)	2cores — Identified by black and white 3cores — Identified by black, white and red 4cores — Identified by black, red, blue and green/yellow

● 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
Sheath	Oil resistant/heat resistant PVC (light gray)

■ Example: 3 core (2mm²) 14AWG cable



Cable Outside Diameter/Weight

Conductor Size (AWG) (mm ²) Conductor count/wire diameter	Number of Cores		
	2	3	4
18 (35/0.18) <0.75>	9.1 115	9.5 130	10.5 155
16 (55/0.18) <1.25>	9.9 140	10.5 165	11.5 195
14 (41/0.26) <2.0>	13.5 245	14.0 280	15.5 330
12 (68/0.26) <3.5>	15.5 ※ 340	16.5 ※ 390	17.5 465

Upper: Standard cable outside diameter (Approx.mm)

Lower: Approximate weight (kg/km)

※ indicates specifications for custom order production.