

KR-MTW

NFPA70/NFPA79 Compliant
Global Standard Cable

Features

- Global-standard cables designed to UL, cUL standards, <PS>E (equal to or less than 100mm²) & GOST-R
- THW for 14AWG or more
- Heat resistance (105°C)/Temperature rating as specified in [Technical Data] given below

Application

- Internal cable connection to equipment

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

	UL MTW, AWM	UL THW	cUL	Electrical Appliance and Material Safety Law<PS>E
Cable Type	MTW AWM ※	THW	AWM	HKIV
Voltage Rating	600V	600V	600V	600V
Temperature Rating	90°C DRY, 60°C WET	75°C DRY and WET	90°C	75°C
Flame Resistance	VW-1	VW-1	FT1	60° inclination
Applicable Standard	UL 1063 UL 758	UL 83	CAN/CSA-C22.2 No.210.2	Electrical Appliance and Material Safety Law
Applicable Range	All sizes	14AWG~300MCM	18~3/0AWG	0.75~100mm ² (18~4/0AWG)

※AWM Style varies with the size.

Electrical Characteristics

Conductor Size (AWG or MCM) (mm)	Conductor Resistance (20°C) Ω /km or below	Insulation Resistance (15.6°C) MΩ km or above	Test Voltage V • 1min	Allowable Current* (A)
18 (0.75)	21.8	175	AC2000	7
16 (1.25)	13.7	175		10
14 (2)	8.61	175		15
12 (3.5)	5.09	150		20
10 (5.5)	3.27	125		30
8 (8)	2.18	130		AC2500
6 (14)	1.32	135	65	
4 (22)	0.844	115	85	
2 (30)	0.549	95	115	
1 (38)	0.436	105	AC3000	
1/0 (50)	0.345	95		150
2/0 (60)	0.276	85		175
3/0 (80)	0.219	80		200
4/0 (100)	0.173	70		230
250 (125)	0.147	80		255
300 (150)	0.122	70		285

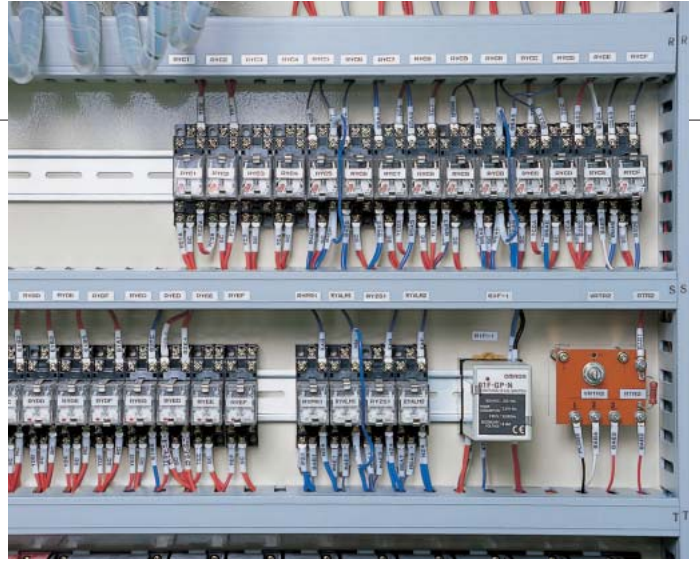
※For details, refer to the NFPA79 Electrical Standard for Industrial Machinery.

● 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)	21-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	61-70
Current Reduction Factor	1.05	1.00	0.94	0.88	0.82	0.75	0.67	0.58	0.33



Core Identification

Core identification system

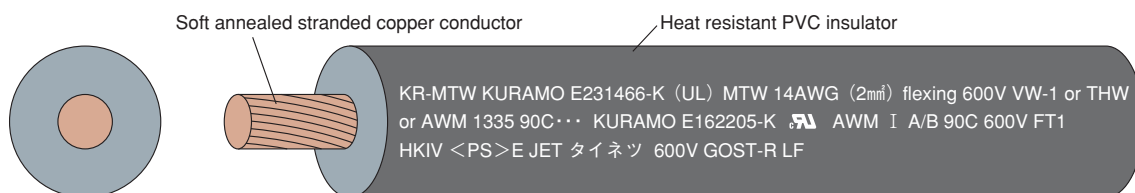
Black, white, red, brown, blue, gray, orange, green/yellow and white/blue

- Green/yellow: Yellow straight lines on green (in green/yellow color ratio of 60/40)
- White/blue: Blue straight lines on white (in white/blue color ratio of 60/40)

Construction

Item	Configuration
Configuration	Soft annealed stranded copper
Insulator	Heat resistant PVC

■ Example: 14AWG (2mm²) wire



Outside Diameter/Weight

Conductor Size AWG or MCM<mi> Conductor count/wire diameter	Outside diameter Approx. weight	Insulator color									
		Black	White	Red	Brown	Blue	Gray	Orange	Green/yellow	White/blue	
18 (35/0.18) <0.75>	2.9 16				※		※	※			
16 (55/0.18) <1.25>	3.3 23				※		※	※			
14 (41/0.26) <2.0>	3.7 32				※		※	※			
12 (68/0.26) <3.5>	4.3 48				※		※	※		※	
10 (105/0.26) <5.5>	5.1 70				※		※	※		※	
8 (69/0.40) <8>	6.4 110				※		※	※		※	
6 (7/25/0.32) <14>	8.9 190	※	※	※	※	※	※	※	※	※	
4 (7/26/0.40) <22>	10.5 285	※	※	※	※	※	※	※	※	※	
2 (7/40/0.40) <30>	12.5 420	※	※	※	※	※	※	※	※	※	
1 (7/40/0.45) <38>	14.5 550	※	※	※	※	※	※	※	※	※	
1/0 (19/18/0.45) <50>	15.5 650	※	※	※	※	※	※	※	※	※	
2/0 (19/23/0.45) <60>	17.0 810	※	※	※	※	※	※	※	※	※	
3/0 (19/29/0.45) <80>	19.0 1000	※	※	※	※	※	※	※	※	※	
4/0 (19/37/0.45) <100>	20.5 1250	※	※	※	※	※	※	※	※	※	
250 (19/44/0.45) <125>	22.5 1500	※	※	※	※	※	※	※	※	※	
300 (27/37/0.45) <150>	24.5 1800	※	※	※	※	※	※	※	※	※	

Upper: Standard outside diameter (Approx.mm)

Lower: Approximate weight (kg/km)

※ indicates specifications for custom order production.