

EM-KIE/F HF

Flame retardant polyethylene insulated wires for electrical equipment

- Heat resistance ★★
 - Oil resistance ★
 - Noise resistance ★
 - Flame resistance ★★★★★
 - Flexibility ★★
 - non-migratory ★★★★★
 - Transport property ★
- ※The characteristic is an aim.

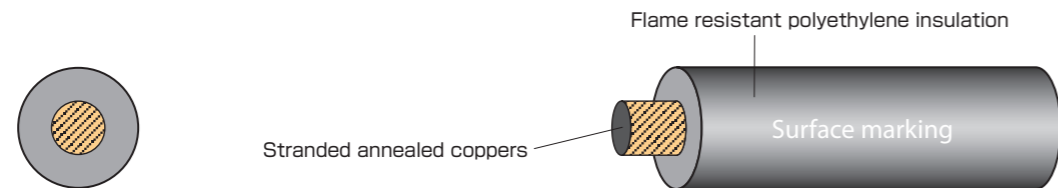
> Application

- Wiring of electrical machinery and apparatus not exceeding 600V.
- Corresponds to halogen-free requirement.
- Rated voltage:600V. Temp:75°C.

> Feature

- Flexible annealed copper stranded conductor.
- Non-halogen flame-resistant polyethylene for insulation.
- Halogen-free, low smoke evolution.
- Heat resistance 75 °C.
- Cold -50 °C.
- Reference to JIS C3612,JIS C 3316.
- 0.75mm²~5.5mm² wires conform to Electrical Appliance and Material Safety Law. (0.5mm² wires out of Electrical Appliance and Material Safety Law)

> Construction figure



> Surface marking

(1)0.5mm² wires



(2)0.75mm²~5.5mm² wires



※R15 indicates "Compliant with RoHS Directive 2011/65/EU and Directive (EU) 2015/863 (10 substances)".

> Identification

・Black, White, Red, Green, Yellow, Blue.

Certification	Electrical Appliance and Material Safety
Applicable standard	LawDepartmental order to determine a technical standard of the electrical equipment
Official symbol	EM-KIE/F
Voltage rating	600V
Temperature rating	75°C
Conductor	JIS C 3102
Flame rating	JIS C 3005-4.26.2-b)



> Construction table

No. of cores	Conductor			Flame resistant Polyethylene insulation		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)
	Size (SQ) (mm ²)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)		Conductor resistance (Ω/km20°C)	Insulation resistance (MΩ km20°C)	Electrical strength (V/1min.)	
1C	0.5	20/0.18 (20/7.1mil)	0.9 (35mil)	0.098	2.5	7 (10)	less than 36.7	more than 50	1500	10
1C	0.75	30/0.18 (30/7.1mil)	1.1 (43mil)	0.106	2.7	9 (13)	less than 24.4	more than 50	1500	14
1C	1.25	50/0.18 (50/7.1mil)	1.5 (59mil)	0.122	3.1	13 (19)	less than 14.7	more than 50	1500	20
1C	2	37/0.26 (37/10.2mil)	1.8 (71mil)	0.134	3.4	18 (27)	less than 9.50	more than 50	1500	26
1C	3.5	45/0.32 (45/12.6mil)	2.5 (98mil)	0.161	4.1	30 (44)	less than 5.09	more than 50	1500	39
1C	5.5	70/0.32 (70/12.6mil)	3.1 (122mil)	0.201	5.1	46 (69)	less than 3.27	more than 50	1500	54

> Allowable ampacity

・The allowable ampacity of this catalog is a value at one in the air construction and the ambient temperature 30°C.

・Allowable ampacity is calculated based on JCS0168.

・Please multiply the following correction coefficient by the ambient temperature.

●Adjustment factors(at ambient temperature)

Ambient temperature(°C)	30	40	50	60	70	80	90	100
Adjustment factors	1.00	0.88	0.75	0.58	0.33	—	—	—

●Adjustment factors(for multiple-line laying)

No. of conductors	2~3	4	5~6	7~15	16~40	41~60	61~
Adjustment factors	0.70	0.63	0.56	0.49	0.43	0.39	0.34

> Standard sales length

Please contact us which sizes are available.