

# EM-TXT HF

## Flame resistant flexible cross-linked polyethylene insulated wire for electrical equipment

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

Meeting standard



Certification	Electrical Appliance and Material Safety
Applicable standard	Law/Departmental 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)

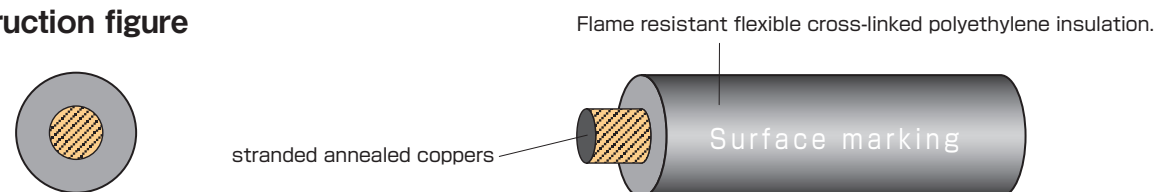
### > Application

- 600V electrical equipment wiring.
- Flame resistant cross-linked polyethylene. (Halogen-free.)
- Rated voltage:600V. Heat resistance:125°C.※<sup>1</sup> (1500V type can be products. Please contact us for details.)
- ※<sup>1</sup> 125°C(Temperature in CMJ registered materials.)

### > Feature

- Flexible annealed copper stranded conductor.
- Non-halogen flame resistant flexible cross-linked polyethylene for insulation.
- Low smoke evolution.
- Minimum bending radius is 2D (Only when used for fixing)
- Heat resistance 125 °C.※<sup>1</sup> ※<sup>2</sup> ※<sup>3</sup>
- Cold -40 °C.
- 5.5mm<sup>2</sup>~80mm<sup>2</sup> wires conform to Electrical Appliance and Material Safety Law. (100mm<sup>2</sup> wires out of Electrical Appliance and Material Safety Law.)
- UL VW-1(Equivalent material). (8mm<sup>2</sup>~)

### > Construction figure



### > Surface marking

(1) 5.5~80mm<sup>2</sup> wires



(2) 100mm<sup>2</sup> wires



### > Identification

·Black

### > Construction table

No. of cores	Conductor			Flame resistant flexible cross-linked polyethylene insulation		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A) ※ <sup>2</sup>	Allowable ampacity (A) ※ <sup>3</sup>
	Size (SQ) (mm <sup>2</sup> )	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	5.5	70/0.32 (70/12.6mil)	3.1 (122mil)	0.201	5.1	55(37)	less than 3.27	more than 50	1500	86	69
1C	8	98/0.32 (98/12.6mil)	3.7 (146mil)	0.225	5.7	95(64)	less than 2.32	more than 50	1500	108	86
1C	14	172/0.32 (172/12.6mil)	4.9 (193mil)	0.272	6.9	155(104)	less than 1.32	more than 40	2000	156	124
1C	22	7/39/0.32 (7/39/12.6mil)	6.7 (264mil)	0.359	9.1	250(167)	less than 0.844	more than 40	2000	204	162
1C	38	7/67/0.32 (7/67/12.6mil)	8.8 (346mil)	0.441	11.2	410(274)	less than 0.496	more than 40	2500	288	228
1C	60	19/39/0.32 (19/39/12.6mil)	11.2 (441mil)	0.559	14.2	650(434)	less than 0.311	more than 30	2500	386	306
1C	80	19/52/0.32 (19/52/12.6mil)	13.1 (516mil)	0.634	16.1	850(567)	less than 0.230	more than 30	2500	480	380
1C	100	19/67/0.32 (19/67/12.6mil)	14.7 (579mil)	0.737	18.7	1120(747)	less than 0.183	more than 30	2500	530	420

### > Allowable ampacity

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

※<sup>2</sup> Allowable current for inside equipment use.(Permissible conductor temperature is 125°C.)

※<sup>3</sup> All current for power-supply use.(Conductor allowable temperature is 90°C.)

·Please multiply the following correction coefficient by the ambient temperature and the cable-laying conditions, etc.

●Adjustment factors(Temperature during use in equipment.)

Ambient temperature(°C)	30	40	50	60	70	80	90	100	110	120
Adjustment factors	1.00	0.95	0.89	0.83	0.76	0.69	0.61	0.51	0.40	0.23

●Adjustment factors(Cases used for power supply, etc.)(Use temperature upper limit 90°C.)

Ambient temperature(°C)	30	40	50	60	70	80
Adjustment factors	1.00	0.91	0.82	0.71	0.58	0.41

●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
No. of conductors in the same tube	~3	4	5 or 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.