

UE/THHW LF

Electric wire for general wiring

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

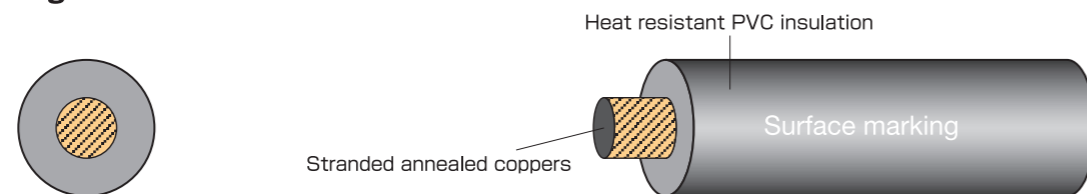
➤ Application

- Electric wire for North America and EU.
- Passed the UL vertical tray flame-retardant test, it can be used in the cable tray, Raceway. and the race way.(circuit conductor=1/0AWG or more, grand conductor=4AWG or more).
- Electric wire with UL and cUL at 600V,90℃. (Category ZKHZ, ZLGR, ZLGR7)
- CE marking (TÜV recognition product). (Certificate of TÜV No.J50005945)
- Obtaining UL Listed MTW, this wire compliants to NFPA 70 and 79.

➤ Feature

- Heat resistant PVC material is used to insulation.
- Flame resisting:UL VW-1, cUL FT1.

➤ Construction figure



➤ Surface marking

(1) 14AWG~10AWG(circuit conductor), 14AWG~10AWG(Y/G)

E242557(UL) MTW FLEXING or THHW 600V □□AWG VW-1 c(UL) TW75 600V □□AWG(○mm²) FT1 TAIYO △ CE 07V-K 450/750V LF R15

(2) 8AWG~1AWG(circuit conductor), 8AWG~6AWG(Y/G)

E242557(UL) MTW or THHW 600V □□AWG VW-1 c(UL) TW75 600V □□AWG(○mm²) FT1 TAIYO △ CE 07V-K 450/750V LF R15

(3) 1/0AWG or more(circuit conductor), 4AWG or more(Y/G)

E242557(UL) MTW or THHW 600V □□AWG CT c(UL) TW75 600V □□AWG(○mm²) FT1 TAIYO △ CE 07V-K 450/750V LF R15

Certification	UL THHW	UL MTW	cUL TW75	TÜV,CE marking
Applicable standard	UL 83	UL 1063	CSA C22.2 No.75	EN50525-2-31
Official symbol	THHW	MTW	TW75	Equivalent of H07V-K
Voltage rating	600V	600V	600V	450/750V
Temperature rating	DRY90°C WET75°C	DRY90°C WET60°C	DRY75°C WET75°C	70°C
Conductor	UL 83	UL 1063	CSA C22.2 No.75	EN60228
Flame rating	VW-1 Vertical-Tray Flame Test	VW-1	FT1	EN50264-2-1

➤➤➤ Meeting standard



➤ Identification

- 14AWG~2/0AWG wire is a black and Y/G.
 - 3/0AWG~500MCM wire is a black.
- ※Y/G indicates green core with yellow stripe(30~50%).

➤ Construction table

No. of cores	Conductor			Heat resistant PVC insulation		Approx. weight (lbs/1000ft) (kg/km)	Electrical Characteristics			Allowable ampacity (A)	
	Size (AWG)	Construction (Line/mm)	Outside diameter (mm)	Outside diameter (inch)	Outside diameter (mm)		Conductor resistance (Ω/km20°C)	Insulation resistance (MΩkm20°C)	Electrical strength (V/1min.)	Single insulated wire (a)	3 or less (b)
1C	14 (2.08mil)	84/0.18 (84/7.1mil)	1.9 (75mil)	0.142	3.6	19 (29)	less than 8.61	more than 175	2000	35	25
1C	12 (3.31mil)	65/0.254 (65/10mil)	2.4 (94mil)	0.161	4.1	29 (43)	less than 5.33	more than 150	2000	40	30
1C	10 (5.26mil)	104/0.254 (104/10mil)	3.1 (122mil)	0.189	4.8	44 (65)	less than 3.42	more than 125	2000	55	40
1C	8 (8.37mil)	7/15/0.32 (7/15/12.6mil)	4.2 (165mil)	0.264	6.7	74 (110)	less than 2.14	more than 130	2000	80	55
1C	6 (13.3mil)	7/24/0.32 (7/24/12.6mil)	5.3 (209mil)	0.343	8.7	121 (180)	less than 1.34	more than 135	2000	105	75
1C	4 (21.2mil)	7/38/0.32 (7/38/12.6mil)	6.6 (260mil)	0.394	10.0	178 (265)	less than 0.848	more than 115	2000	140	95
1C	2 (33.6mil)	7/60/0.32 (7/60/12.6mil)	8.3 (327mil)	0.461	11.7	265 (395)	less than 0.533	more than 95	2000	190	130
1C	1 (42.4mil)	19/30/0.32 (19/30/12.6mil)	9.8 (386mil)	0.567	14.4	370 (550)	less than 0.408	more than 105	2500	220	145
1C	1/0 (53.5mil)	19/18/0.45 (19/18/17.7mil)	10.7 (421mil)	0.602	15.3	430 (640)	less than 0.335	more than 95	2500	260	170
1C	2/0 (67.4mil)	19/23/0.45 (19/23/17.7mil)	12.1 (476mil)	0.657	16.7	538 (800)	less than 0.266	more than 85	2500	300	195
1C	3/0 (85.0mil)	19/30/0.45 (19/30/17.7mil)	13.8 (543mil)	0.724	18.4	685 (1020)	less than 0.206	more than 80	2500	350	225
1C	4/0 (107mil)	19/39/0.45 (19/39/17.7mil)	15.7 (618mil)	0.799	20.3	867 (1290)	less than 0.159	more than 70	2500	405	260
1C	300MCM (152mil)	19/51/0.45 (19/51/17.7mil)	18.0 (709mil)	0.921	23.4	1142 (1700)	less than 0.118	more than 70	3000	500	320
1C	400MCM (203mil)	37/35/0.45 (37/35/17.7mil)	20.7 (815mil)	1.035	26.3	1472 (2190)	less than 0.088	more than 65	3000	615	380
1C	500MCM (253mil)	37/44/0.45 (37/44/17.7mil)	23.2 (913mil)	1.134	28.8	1821 (2710)	less than 0.070	more than 55	3000	700	430

※UE/THHW might give the separator.

※The examination of 2500V/5 minute besides the withstand voltage test on above mentioned UL standard and the CSA standard is applied.

➤ Allowable ampacity

· Allowable current of this catalog NFPA70 Table 310.15 (B) rated temperature 90 °C ambient temperature 30 °C.

· For the current correction factor, please refer to the P274.

· For please confirm the NFPA70(National Electric cord) and NFPA79(Electrical Standard for Industrial Machinery) more use.

➤ Standard sales length

100m

(Sale by cutting short length is available for 8AWG-500MCM products. Please contact us which sizes are available.)