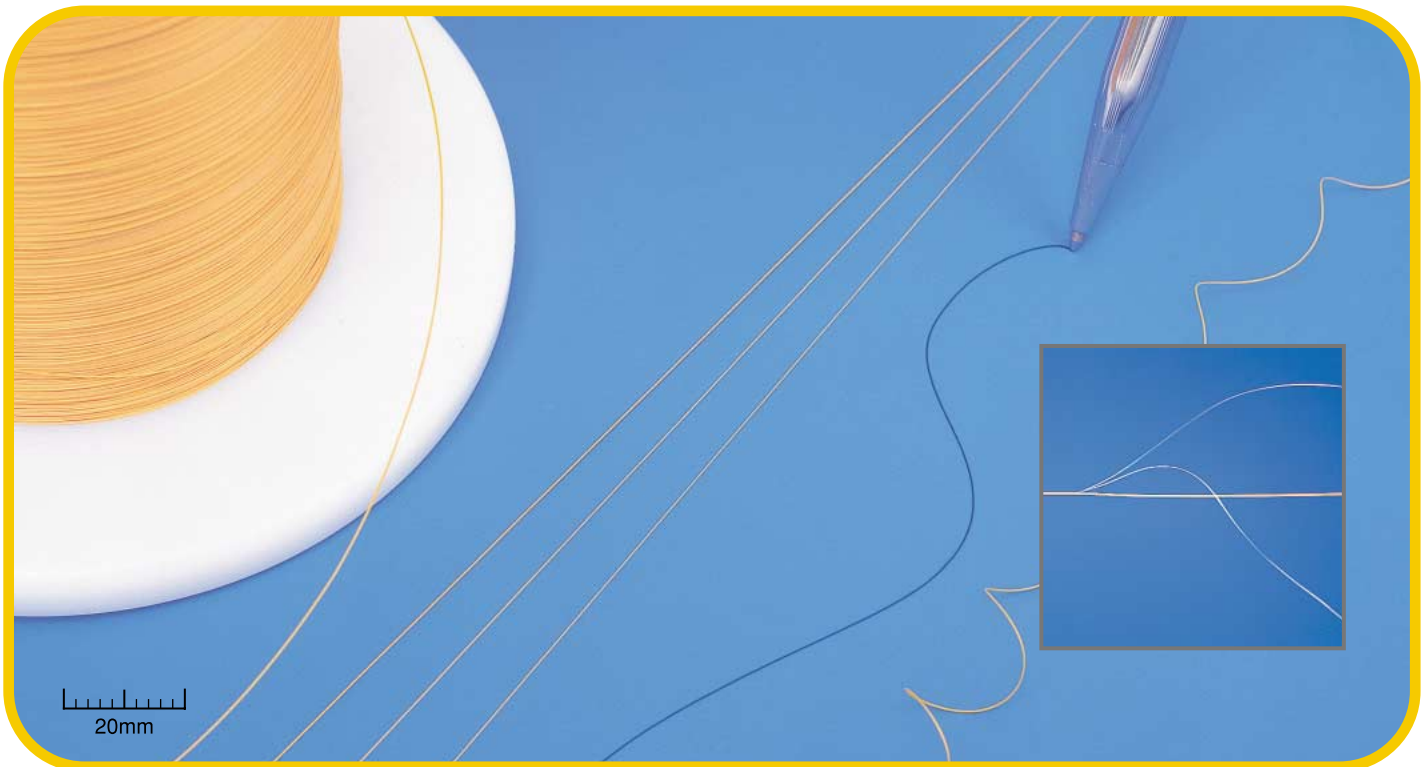


SUPPLEMENTARY INSULATION WINDING WIRE

**We can.**

# FWX-E

**FWX-E Wire (Fine Winding Wire) offers supplementary insulation and is designed for TNV\* circuit devices.**



## ©Heritage Performance Plus©

Authorities of certification	Appointed specifications	Certificate (file) No.
UL	OBJT2 UL1950-3e UL60950	E206440
CSA	IEC60950-3e IEC60065-6e	185274
VDE	IEC60950-3e IEC60065-6e	Nr.139405
NEMKO	IEC60950-3e IEC60065-6e	P01102314

<http://www.TEX-E.com>

**FURUKAWA ELECTRIC**

SUPPLEMENTARY INSULATION WINDING WIRE

# FWX-E

Modified Polyester

Polyamide

UEW (Polyurethane enamelled copper wire)

**Features:**

- Conforming to supplementary insulation according to IEC and UL,
- Thermal index Class E (120°C),
- Rated at 354V peak or dc for maximum working voltage,
- Solderable without stripping surface coating,
- As fine as 0.11-0.19mm of conductor diameter.

Note:UL requires an insulation system specified by UL1446, for a design of operation exceeding the temperature in Class A

**FWX-E vs. UEW (Example)**

Items		FWX-E	UEW	
Dimension	Overall diameter (mm)	0.280	0.175	
	Conductor diameter (mm)	0.150	0.150	
	Insulation thickness (mm)	UEW	0.005	0.013
		PET	0.030	-
Nylon		0.030	-	
Break down voltage (kV <sub>rms</sub> )	Twisted pair	15.2	7.5	
Withstand voltage	1500V <sub>rms</sub> for 1 min.	Pass	-	
Solderability	420°C	< 2s	1s	
Continuity	1500V <sub>rms</sub>	0,0,0	12,5,9	
Adherence	(mm)	< 0.5	0.5	
Resistance to Solvent	Xylene	5H	3H	
	Pencil method Styrene	5H	3H	
IEC60950 Annex U	U2.1 Electric strength	3000V <sub>rms</sub> for 1 min. Twisted pair	Pass	-
	U2.2 Adherence and Flexibility	1500V <sub>rms</sub> for 1 min. Mandrel	Pass	-
	U2.3 Heat shock	215°C for 30 min. 1500V <sub>rms</sub> for 1 min. Mandrel	Pass	-
	U2.4 Retention of electric strength after bending	1500V <sub>rms</sub> for 1 min. Mandrel	Pass	-

**Dimensions (Typical values)**

Nominal Conductor diameter (mm)	Typical O.D. (mm)	Max. O.D. (mm)	Max. conductor resistance (Ω/km at 20°C)	Weight (kg/km)
0.11	0.238	0.276	2071	0.1274
0.12	0.250	0.288	1724	0.1470
0.13	0.260	0.298	1457	0.1670
0.14	0.270	0.308	1248	0.1884
0.15	0.280	0.318	1081	0.2112
0.16	0.292	0.330	944.5	0.2365
0.17	0.302	0.340	832.9	0.2621
0.18	0.312	0.350	739.9	0.2892
0.19	0.322	0.360	661.6	0.3176

**Typical Applications**



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Note: The data listed here fall within the normal range of properties, but they should not be used to establish specification limits nor used alone as the basis of design. The details of this pamphlet are subject to change without notice.