

INTERFACE CONNECTORS

FCN-780 SERIES

■ FEATURES

- The 780 series connectors mate with other ribbon type connectors, and protect against EMI with their metal shells.
- The 780 series connector uses material highly resistant to cleaning solvents, and can be cleaned with solvents such as chloroethene to remove flux after soldering.
- UL-recognized (94V-0) insulating material is used.
- Multiconnection with 1.27 mm pitch flat cable is applicable.
- The 780 series connectors are compatible with other Centronics and SCSI interface connectors.

■ SPECIFICATIONS

Item	Specification
Operating temperature range	-55°C to +105°C
Current rating	DC 3 A (IDC type: 1A)
Voltage rating	AC 250 V
Contact resistance	30 mΩ max. (DC 6 V, 0.3 A)
Insulation resistance	1,000 MΩ min. (DC 500 V)
Dielectric withstanding voltage	500 VAC for 1 minute
Insertion force	13.6 kg max. (for 36 contacts)
Withdrawal force	0.72 kg min. (for 36 contacts)
Applicable flat cable	1.27 mm pitch, AWG #28 (stranded wire)
	AWG #30 (solid wire)



■ MATERIALS

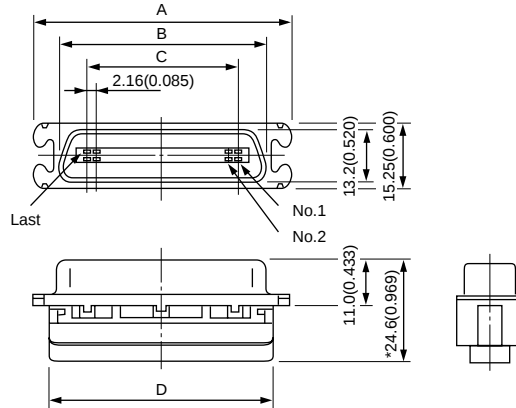
Item		Material
Insulator	Solder eyelet type	PPS (UL94V-0)
	IDC type	Polyester (UL94V-0)
Conductor		Copper alloy
Plating		Gold
Shell		Steel, nickel plating
Holder		Zinc, steel, nickel plating

FCN-780 Series

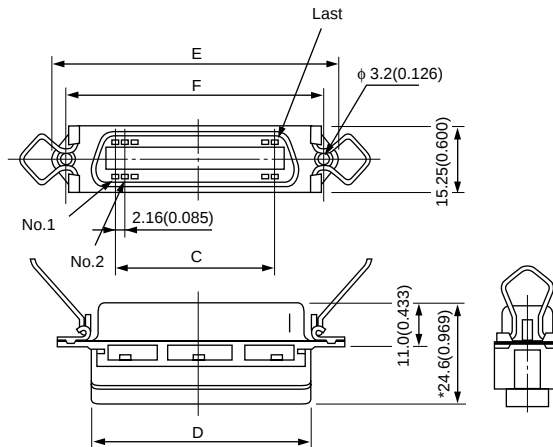
IDC TYPE

■ DIMENSIONS

[Plug]



[Socket]



*: This dimension is 20.1 mm (0.791 in.) for a plug without strain relief.

Unit: mm (in)

■ PART NUMBERS AND DIMENSIONS

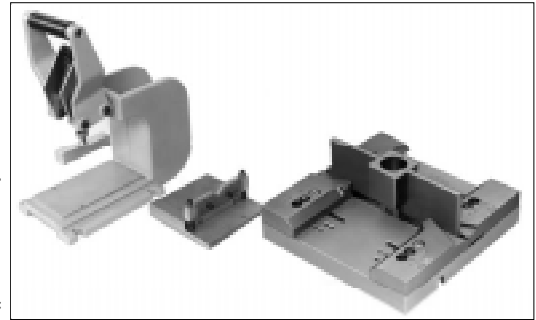
Number of contacts	Type	Part Number		Dimensions: mm (in)					
		With strain relief	Without strain relief	A	B	C	D	E	F
14	Plug	FCN-787P014-G/R	FCN-787P014-G/V	37.82 (1.489)	26.84 (1.057)	12.96 (0.510)	22.78 (0.897)	—	—
	Socket	FCN-787J014-G/Q	FCN-787J014-G/U	—	—			43.92 (1.729)	35.98 (1.417)
24	Plug	FCN-787P024-G/R	FCN-787P024-G/V	48.62 (1.914)	37.64 (1.482)	23.76 (0.935)	35.48 (1.397)	—	—
	Socket	FCN-787J024-G/Q	FCN-787J024-G/U	—	—			54.72 (2.154)	46.78 (1.842)
36	Plug	FCN-787P036-G/R	FCN-787P036-G/V	61.58 (2.424)	50.60 (1.992)	36.72 (1.446)	50.72 (1.997)	—	—
	Socket	FCN-787J036-G/Q	FCN-787J036-G/U	—	—			67.68 (2.664)	59.74 (2.351)
50	Plug	FCN-787P050-G/R	FCN-787P050-G/V	76.70 (3.020)	65.72 (2.587)	51.84 (2.041)	68.50 (2.697)	—	—
	Socket	FCN-787J050-G/Q	FCN-787J050-G/U	—	—			82.80 (3.359)	74.86 (2.947)

The spring clip of the socket locks the mate without turning, but by being bent at an angle.

IDC TOOLS

■ FEATURES

- Special IDC tools are used to assemble FCN-780 series connectors and flat cables.
- The mechanisms are simple, so even novices can use them easily.
- Those who already have Fujitsu-manufactured IDC tools for other series connectors need only purchase the locator plate. The hand press and cable cutter are designed to be used in common with all connectors.
- The assembly of cables and connectors with various numbers of contacts can be done by selective setting of the connector guides to the specified positions.
- The cable cutter has an extremely sharp cutting edge.



Hand press, cable cutter, and locator plate
(Tools for 790 series are shown)

Notes: • A detailed operation manual and instruction manual for IDC tools are available upon request.
• Should any question arise in using the IDC tools, consult our branch offices or agents in your area.

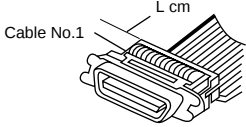
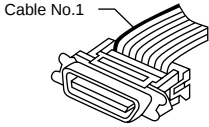
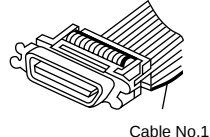
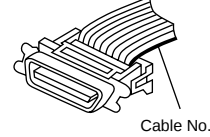
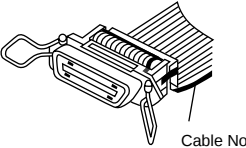
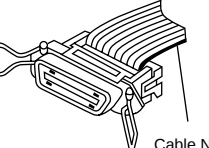
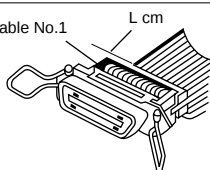
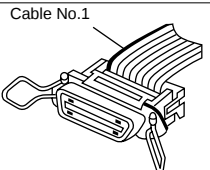
■ TYPES OF CONNECTOR-CABLE ASSEMBLY

• Assembling connectors and flat cables

There are different ways of assembling the connectors and flat cables. Select a suitable one from the following table and specify it when ordering.

• How to specify the cable length

The cable length is specified as follows in centimeters. The minimum length of cables is 3 cm. Tolerance of the length (L) is $\pm 10\%$ for $L \leq 10$ cm (the minimum ± 5 mm), ± 1 cm for $100 \text{ cm} > L > 10$ cm, $\pm (L/100 \text{ cm} + 2 \text{ cm})$ for $100 \text{ cm} \leq L \leq 1800 \text{ cm}$, and ± 20 cm for $1800 \text{ cm} < L$.

Assembly type Connector type	No. 1	No. 2	No. 3	No. 4
780 series plug				
780 series socket				

■ PART NUMBER FOR IDC TOOLS

Tool name	Part Number
Cable cutter (common)	FCN-707T-T001/H
Hand press (common)	FCN-707T-T101/H
Locator plate (for 780 series connectors)	FCN-787T-T028/H

Hand press and cable cutter are common to other series IDC connectors.