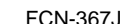



FCN360 Series

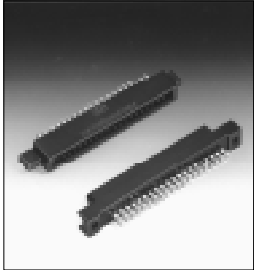


Terms in Selection Table (Example)

Model		700 series	
Appearance			
Structure	Contact pitch	2.54 × 2.54	
	Number of contacts	10, 14, 16, 20, 26, 30, 34, 40, 50, 60	
	Pin type	Solder eyelet (tail shape)	—
		Wire-wrapping (post cross section)	P □ 0.64
		J	—
		Crimping (applicable AWG No.)	—
		Straight, throughhole (PC board hole dimensions)	φ 0.8, 2.54 × 2.54
		Right-angle, throughhole (PC board hole dimensions)	P φ 0.8, 2.54 × 2.54
		J	—
	IDC (applicable AWG No.)	P	#28, Flat cable
		J	#28, Flat cable
	Plating	Gold	○
		Silver	—
		Tin	○
Specification	Operating temperature range	-55°C to +105°C	
	Current rating	DC 1 A	
	Voltage rating	AC 250 V	
	Contact resistance	20 mΩ max. (DC 6 V, 0.1 A)	
	Insulation resistance (DC 500 V)	1,000MΩ min.	
	Dielectric withstanding voltage (for 1 minute)	AC 500 V	
	Insulation material cleaning with Chlorothene	Polyester cleaning possible	
	Part number (example)	FCN-705P050-AU/M FCN-707J050-AU/B	
Remarks		EMI protection cover provided	

- Contact pitch**
Denotes a pitch between adjacent contacts or pitch between rows.
2.54 mm (0.100 in.) (pitch between adjacent contacts) x 2.54 mm (0.100 in.) (pitch between rows)
- Number of contacts**
Denotes the numbers of contacts of available connectors.
- Connection type**
Denotes the connection type of the cable or PC board connection section.
- Plating**
Denotes the contact plating specification.
- Specifications**
 - Operating temperature range**
The connector can be used within the specified temperature range.
 - Current rating**
Maximum current that can flow through one connector pin
 - Voltage rating**
Maximum voltage that can be applied to a connector
 - Contact resistance**
Resistance observed at the contact part when 0.3 A (or 0.1 A) flows at 6 VDC with the connectors mated
 - Insulation resistance**
Resistance to the leakage current flowing through the insulator (inside or surface of the insulator) when 500 VDC is applied across adjacent pins of a connector
 - Dielectric withstanding voltage**
Applying the indicated voltage across adjacent pins of a connector for one minute does not cause any abnormality (damage or cracks in insulator).
 - Insulating material, cleaning with chlorothene**
Denotes the insulating material used, and indicates whether the insulating material can be cleaned with chlorothene.
 - Part number**
Some part numbers are indicated as examples.

Rectangular Connectors

Model		360 series	
Appearance			
Structure	Contact pitch	2.54 × 2.54	
	Number of contacts	8, 16, 24, 32, 40, 48, 56, 64	
	Solder eyelet (tail shape)	P	1.8 × 0.7
		J	1.8 × 0.7
	Wire-wrapping (post cross section)	Diagonal 0.71 mm (0.028 in.)	
	Crimping (applicable AWG No.)	P	—
		J	AWG #22 to #28
	Straight, through hole (PC board hole dimensions)	P	φ1, 2.54 × 2.54
		J	φ1, 2.54 × 2.54
	Right-angle, through hole (PC board hole dimensions)	P	φ1, 2.54 × 2.54
Specification		J	φ1, 2.54 × 2.54
	IDC (applicable AWG No.)	P	—
		J	#28, Flat cable
	Plating Gold	○	
	Silver	○	
	Tin	—	
	Operating temperature range	-55°C to +85°C	
	Current rating	DC 3 A (IDC type: 1A)	
	Voltage rating	AC 250 V	
	Contact resistance	15 mΩ max. (DC 6 V, 0.3 A)	
	Insulation resistance (DC 500 V)	1,000 MΩ min.	
	Dielectric withstanding voltage (for 1 minute)	AC 500 V	
	Insulating material	Polyester PC (363J)	
	Part number (example)	FCN-361P024-AU	
Remarks		Cable cover provided	

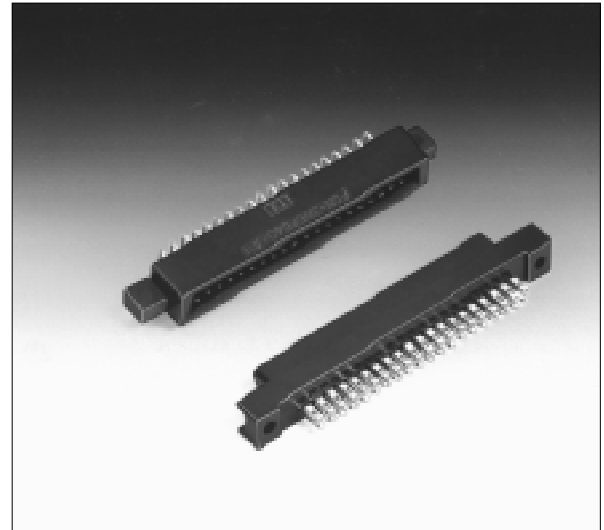
NOTES

RECTANGULAR CONNECTORS

FCN-360 SERIES

■ FEATURES

- Many applications
Various connectors are available for connection by means of soldering, wire wrapping, crimping, PC board mounting, and insulation displacement connection (IDC). The user can choose a plug and jack combination that best meet each application.
- Small size for high-density mounting
The connectors are small with a contact and terminal pitch of 2.54 mm (0.100 in.) between pins and between rows and are thus well suited for high-density mounting.
- Sturdy shell guide
Sturdy shell guides are used to prevent mismatching and to protect the pins.
- Excellent cost performance
Streamlined design and automated manufacturing, including use of partial solder plating, provide excellent cost performance.



■ SPECIFICATIONS

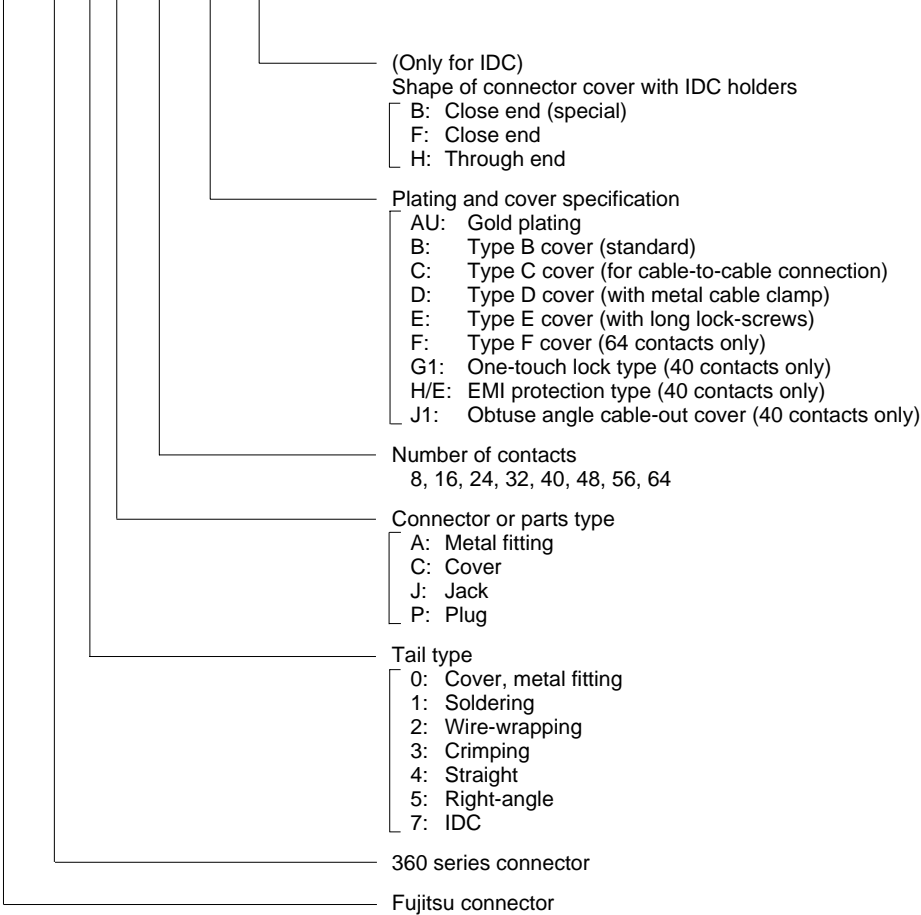
Item		Specification
Operating temperature range		−55°C to +85°C
Current Rating		DC 3 A (IDC type: 1 A)
Voltage Rating		AC 250 V
Contact resistance		15 mΩ max. (DC 6 V, 0.3 A)
Insulation resistance		1000 MΩ min. (DC 500 V)
Dielectric withstanding voltage		AC 500 V for 1 minute
Insertion force		2.5 kg max. (8 contacts), 20 kg max. (64 contacts)
Withdrawal force		0.3 kg min. (8 contacts), 2.3 kg min. (64 contacts)
Applicable wire	Soldering	φ0.60 mm (0.024 in.) max, AWG #23 or less
	Wire-wrapping	φ0.32 mm (0.013 in.) to φ0.26 mm (0.010 in.), AWG #28 to #30
	Crimping	Standard contacts φ0.51 mm (0.020 in.) to φ0.32 mm (0.013 in.), AWG #24 to #28, insulator φ1.2 mm (0.047 in.) max. Contacts for thick wires φ0.64 mm (0.025 in.) to φ0.32 mm (0.013 in.), AWG #22 to #28, insulator φ1.7 (0.067 in.) max.
	IDC	Flat cable 1.27 mm (0.050 in.) pitch, AWG #28 (stranded wire), AWG #30 (solid wire)
Applicable PC board		1.6 mm (0.063 in.) standard thick

■ MATERIALS

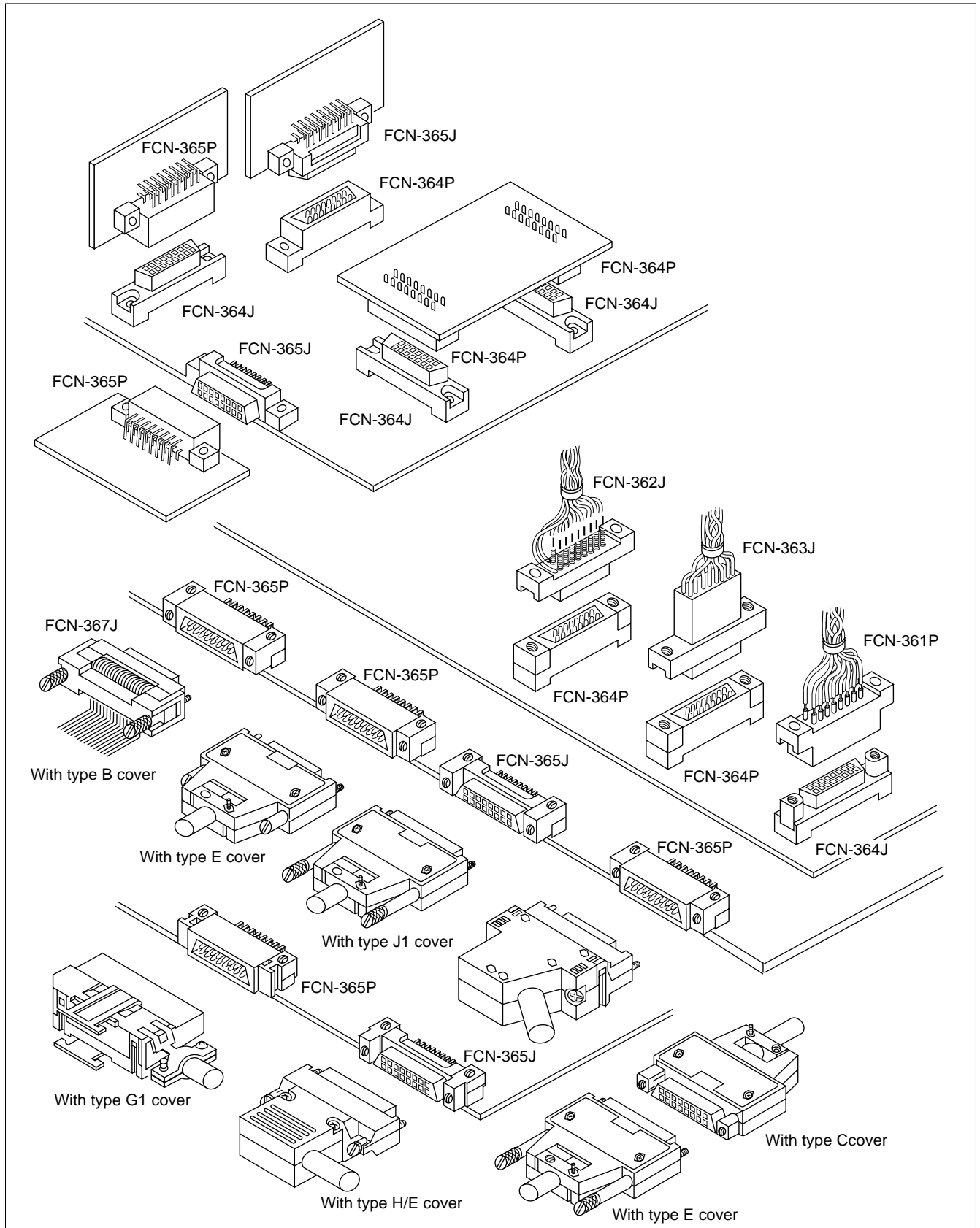
Item	Material
Insulator	Polyester (363J: PC94V-2)
Conductor	Copper alloy
Plating	Gold plating, silver plating

■ PART NUMBER

FCN-36 7 J 048-AU / H

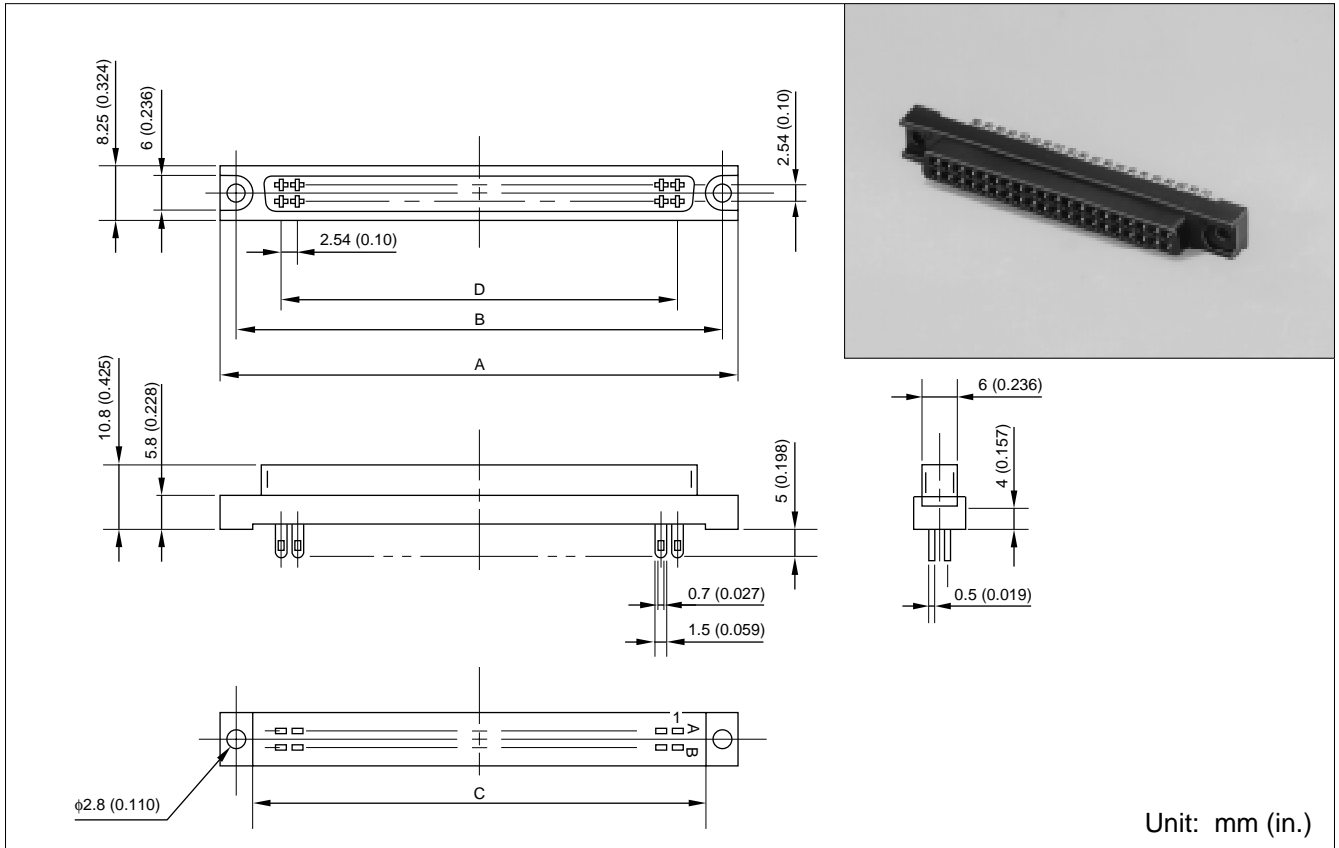


■ APPLICATION EXAMPLE

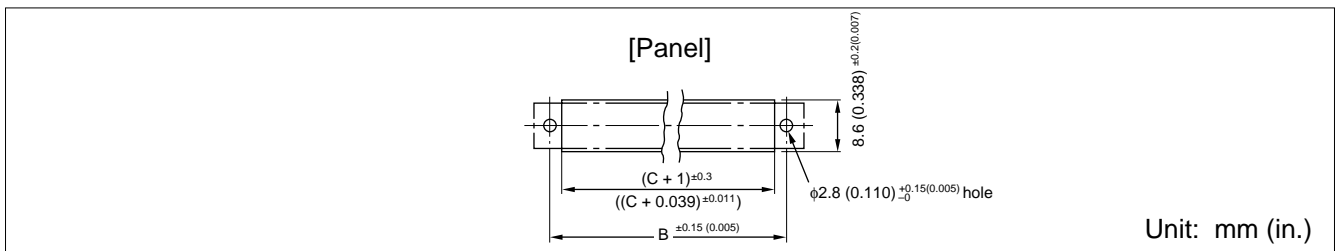


SOLDERING TYPE (JACK)

■ DIMENSIONS



■ BOARD MOUNTING HOLE LAYOUT



■ PART NUMBERS AND DIMENSIONS

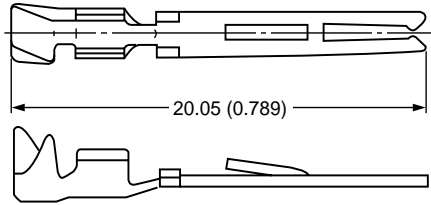
Number of contacts	Part number	Dimensions: mm (in.)			
		A	B	C	D
8	FCN-361J008-AU	28.84 (1.135)	23.34 (0.918)	17.84 (0.702)	7.62 (0.3)
16	FCN-361J016-AU	39.0 (1.535)	33.5 (1.318)	28.0 (1.102)	17.78 (0.7)
24	FCN-361J024-AU	49.16 (1.935)	43.66 (1.718)	38.16 (1.502)	27.94 (1.1)
32	FCN-361J032-AU	59.32 (2.335)	53.82 (2.118)	48.32 (1.902)	38.1 (1.5)
40	FCN-361J040-AU	69.48 (2.735)	63.98 (2.518)	58.48 (2.302)	48.26 (1.9)
48	FCN-361J048-AU	79.64 (3.135)	74.14 (2.918)	68.64 (2.702)	58.42 (2.3)
56	FCN-361J056-AU	89.8 (3.535)	84.3 (3.318)	78.8 (3.102)	68.58 (2.7)
64	FCN-361J064-AU	99.96 (3.935)	94.46 (3.718)	88.96 (3.502)	78.74 (3.1)

FCN-360 Series

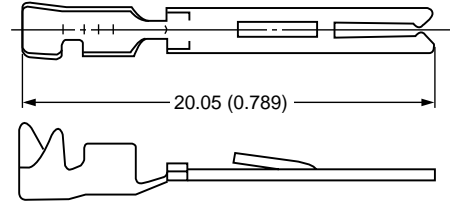
CRIMP TYPE (CONTACT)

■ DIMENSIONS

Standard contact (applicable wire: AWG #24 to #28)



Thick wire connection contact (applicable wire: AWG #22 to #26)



Unit: mm (in.)

■ PART NUMBERS

Type	Plating	Standard	Thick wire connection contact
Loose piece	Gold plating	FCN-363J-AU	FCN-363J-AU/S
Strip reeled	Gold plating	FCN-363J-AU/R	FCN-363J-AU/T

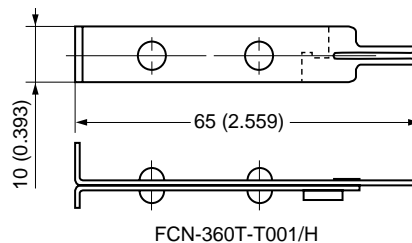
■ PART NUMBERS OF CRIMPING TOOLS

Part number	Contact type	Applicable wire	Wire cross-section area (mm ²)	Crimp height	Insulator diameter	Stripped length
FCN-363T-T005/H (Hand crimping tool)	FCN-363J-AU (Loose piece)	AWG #24	0.20 to 0.24	1.25 mm (0.049 in.) to 1.30 mm (0.051 in.)	φ1.2 mm (0.047 in.) max	3.0 mm (0.118 in.) to 4.0 mm (0.157 in.)
	FCN-363J-AU/R (Strip reeled)	AWG #26	0.13 to 0.16	1.20 mm (0.047 in.) to 1.25 mm (0.049 in.)	φ1.2 mm (0.047 in.) max	3.0 mm (0.118 in.) to 4.0 mm (0.157 in.)
		AWG #28	0.088 to 0.096	1.15 mm (0.045 in.) to 1.20 mm (0.047 in.)	φ1.2 mm (0.047 in.) max	3.0 mm (0.118 in.) to 4.0 mm (0.157 in.)
FCN-363T-T011/H (Hand crimping tool)	FCN-363J-AU/S (Loose piece)	AWG #22	0.30 to 0.40	0.85 mm (0.033 in.) to 0.95 mm (0.037 in.)	φ0.9 mm (0.035 in.) to 1.8 mm (0.071 in.)	3.0 mm (0.118 in.) to 4.0 mm (0.157 in.)
	FCN-363J-AU/T (Strip reeled)	AWG #24	0.20 to 0.24	0.75 mm (0.029 in.) to 0.85 mm (0.033 in.)	φ0.9 mm (0.035 in.) to 1.8 mm (0.071 in.)	3.0 mm (0.118 in.) to 4.0 mm (0.157 in.)
		AWG #26	0.13 to 0.16	0.73 mm (0.028 in.) to 0.81 mm (0.031 in.)	φ0.9 mm (0.035 in.) to 1.8 mm (0.071 in.)	3.0 mm (0.118 in.) to 4.0 mm (0.157 in.)

[Hand crimping tool]



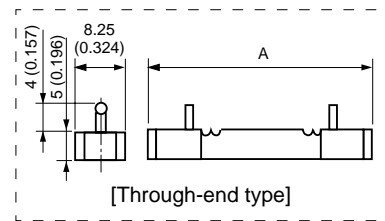
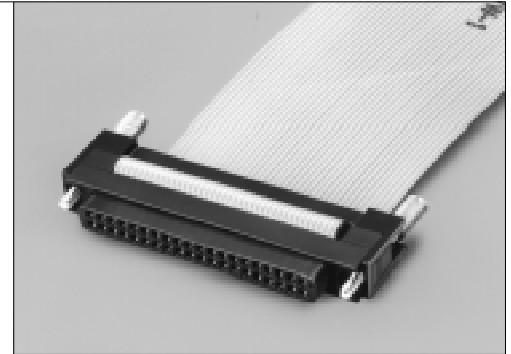
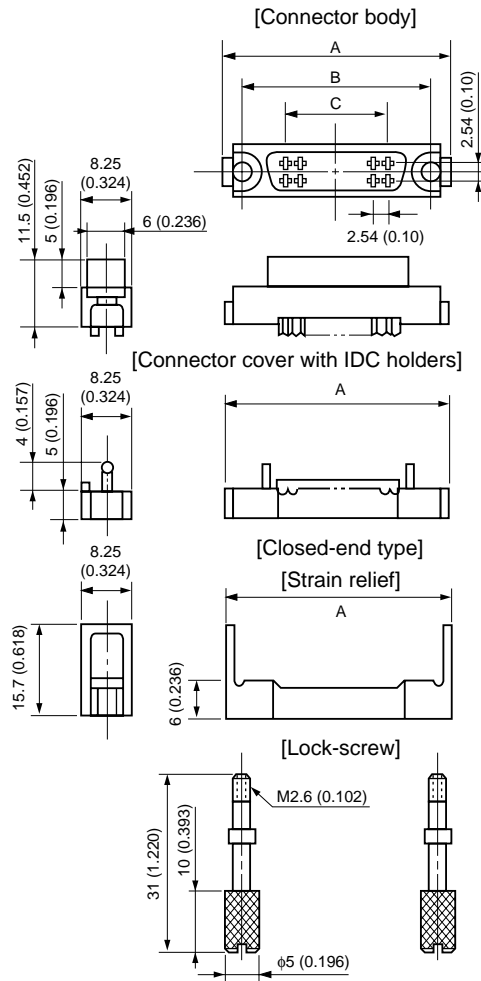
[Contact withdrawal tool]



FCN-360 Series

IDC TYPE (JACK)

DIMENSIONS



Unit: mm (in.)

PART NUMBERS AND DIMENSIONS

Number of contacts	Part number		Dimensions: mm (in.)		
	Through-end cover	Close-end cover	A	B	D
8	FCN-367J008-AU/H	FCN-367J008-AU/F	28.84 (1.135)	23.34 (0.918)	7.62 (0.3)
16	FCN-367J016-AU/H	FCN-367J016-AU/F	39.0 (1.535)	33.5 (1.318)	17.78 (0.7)
24	FCN-367J024-AU/H	FCN-367J024-AU/F	49.16 (1.935)	43.66 (1.718)	27.94 (1.1)
32	FCN-367J032-AU/H	FCN-367J032-AU/F	59.32 (2.335)	53.82 (2.118)	38.1 (1.5)
40	FCN-367J040-AU/H	FCN-367J040-AU/FW*	69.48 (2.735)	63.98 (2.518)	48.26 (1.9)
48	FCN-367J048-AU/H	FCN-367J048-AU/F	79.64 (3.135)	74.14 (2.918)	58.42 (2.3)
56	FCN-367J056-AU/H	FCN-367J056-AU/F	89.8 (3.535)	84.3 (3.318)	68.58 (2.7)
64	FCN-367J064-AU/H	FCN-367J064-AU/F	99.96 (3.935)	94.46 (3.718)	78.74 (3.1)

*: FC 6 J0 0 A /F is replaced y part num er FC 6 J0 0 A /FW, which indicates change of manufacturing location for this device.

IDC TOOLS

Special IDC tools are used to assemble FCN-360 series connectors and flat cables.

■ FEATURES

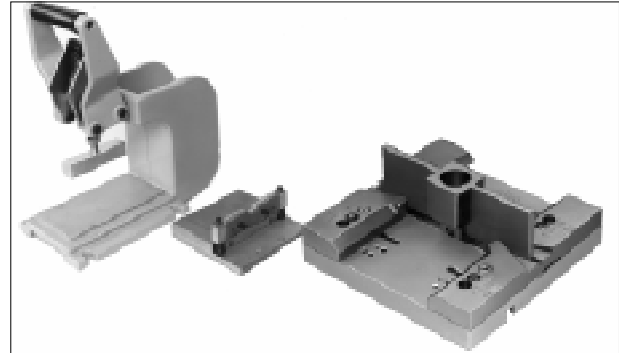
- The mechanisms are simple, so even novices can use them easily.
- Those who already have Fujitsu-manufactured IDC tools for other series connectors need only purchase the locator plate.

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.

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.



Hand press

Cable cutter

Locator plate (That for the 790 series is shown in the photograph.)

■ ORDERING CODES FOR IDC TOOLS

Tool name	Part number
Cable cutter (common)	FCN-707T-T001/H
Hand press (common)	FCN-707T-T101/H
Locator plate (for 360 series connectors)	FCN-367T-T012/H

The hand press and cable cutter can be used for other IDC connectors.

COVER

■ COMBINATIONS BETWEEN COVERS AND CONNECTORS

Connector Cover	Plug	Jack			Number of contacts							
	Soldering	Soldering	Wire-wrapping	Crimping	8	16	24	32	40	48	56	64
FCN-360C□□□-B	○	○	○	○	○	○	○	○	○	○	○	○
FCN-360C□□□-C	○	○	○	○	○	○	○	○	○	○	○	○
FCN-360C□□□-D	○	○	○	○					○	○	○	○
FCN-360C□□□-E	○	○	○	○	○	○	○	○	○	○	○	○
FCN-360C064-F	○	○	○	○								○
FCN-360C040-G1	○	○	○	○					○			
FCN-360C040-H/E	○	○							○			
FCN-360C040-J1	○	○							○			

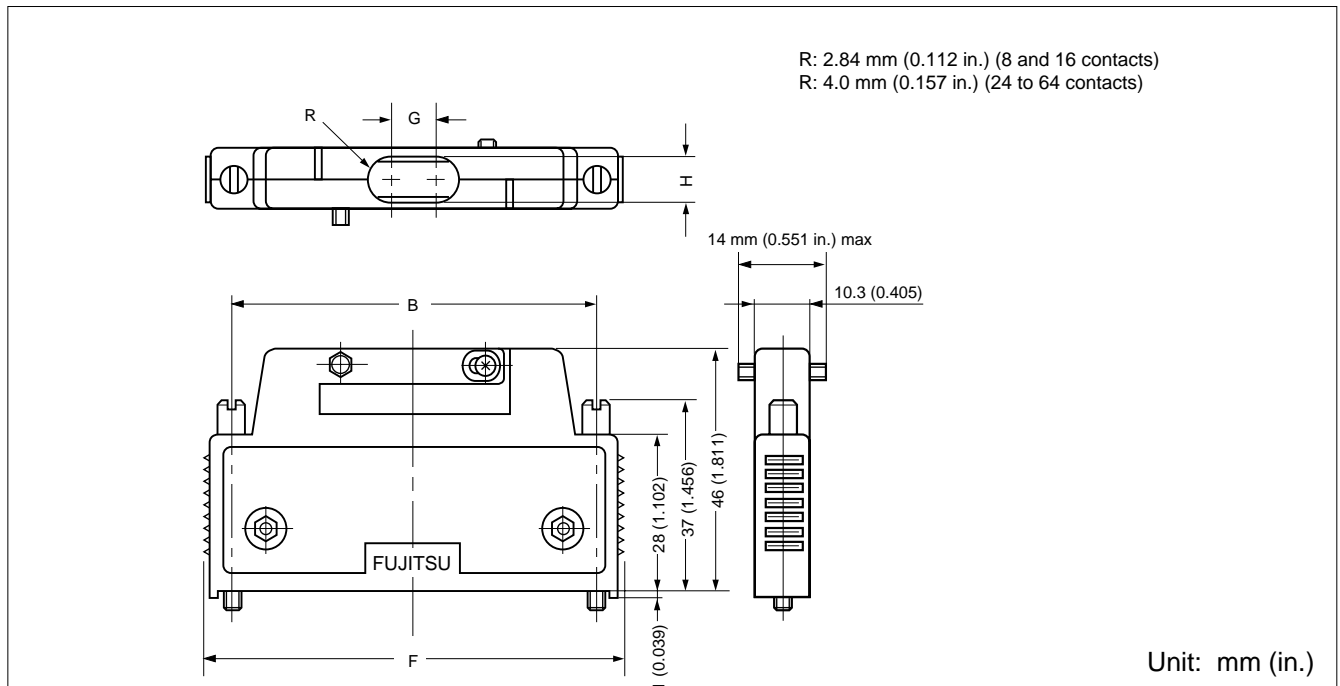
These covers cannot be used for IDC connectors.

FCN-360 Series

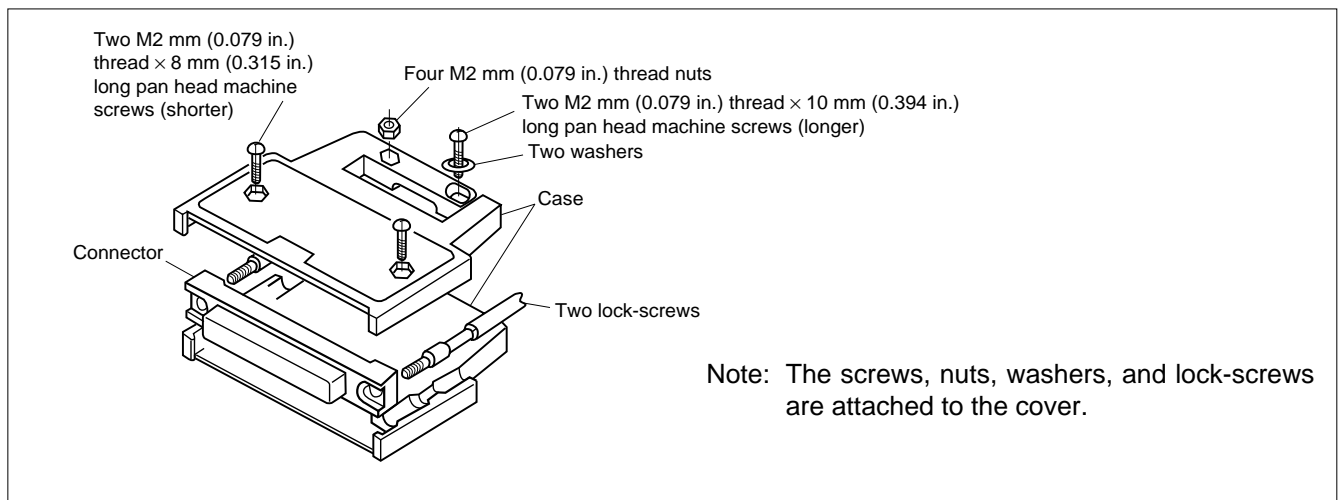
FCN-360C040-B

COVER (TYPE B)

■ DIMENSIONS



■ EXPLODED VIEW

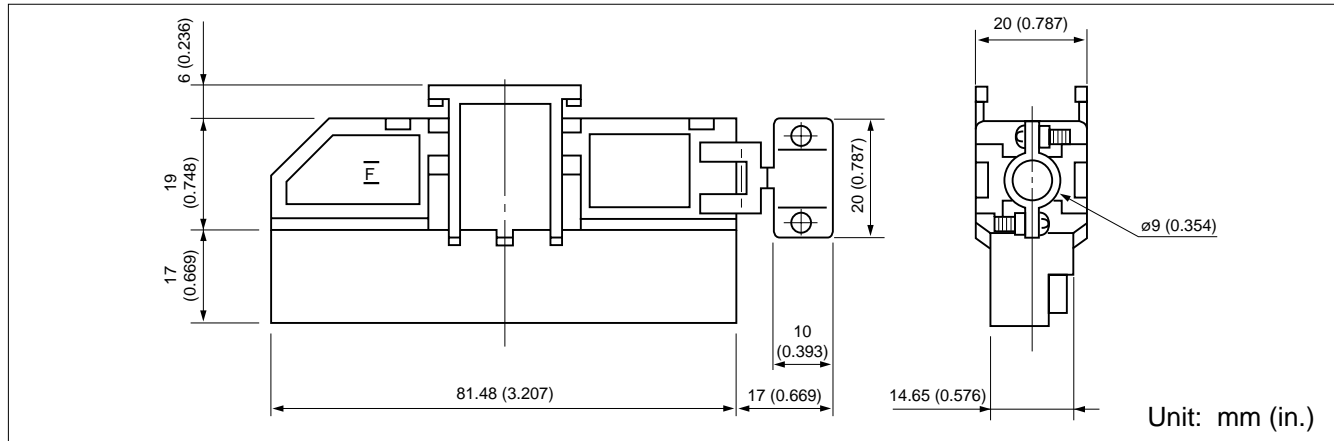


■ PART NUMBERS AND DIMENSIONS

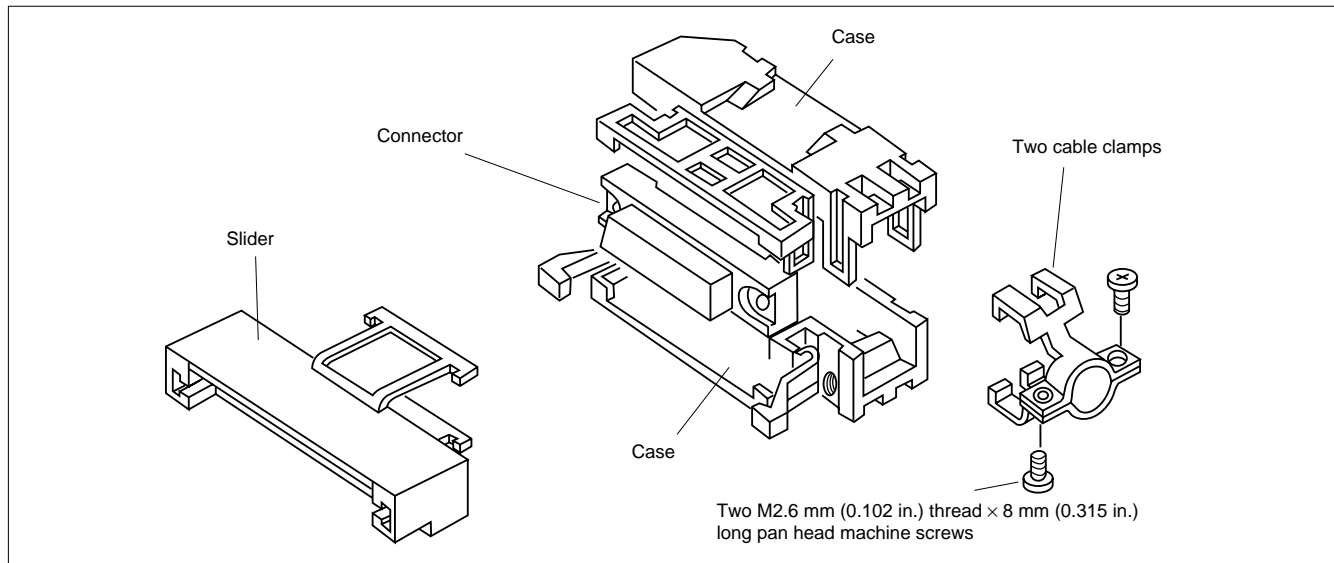
Number of contacts	Part number	Dimensions: mm (in.)			
		B	F	G	H
8	FCN-360C008-B	23.34 (0.918)	32.08 (1.262)	—	φ 5.7 (0.224)
16	FCN-360C016-B	33.50 (1.318)	42.24 (1.662)	—	φ 5.7 (0.224)
24	FCN-360C024-B	43.66 (1.718)	52.40 (2.062)	—	φ 8.0 (0.314)
32	FCN-360C032-B	53.82 (2.118)	62.56 (2.462)	2.0 (0.078)	8.0 (0.314)
40	FCN-360C040-B	63.98 (2.518)	72.72 (2.862)	6.0 (0.236)	8.0 (0.314)
48	FCN-360C048-B	74.14 (2.918)	82.88 (3.262)	10.0 (0.393)	8.0 (0.314)
56	FCN-360C056-B	84.30 (3.318)	93.04 (3.662)	14.0 (0.551)	8.0 (0.314)
64	FCN-360C064-B	94.46 (3.718)	103.20 (4.062)	18.0 (0.708)	8.0 (0.314)

COVER (RIGHT ANGLE CABLE-OUT COVER) (TYPE G1)

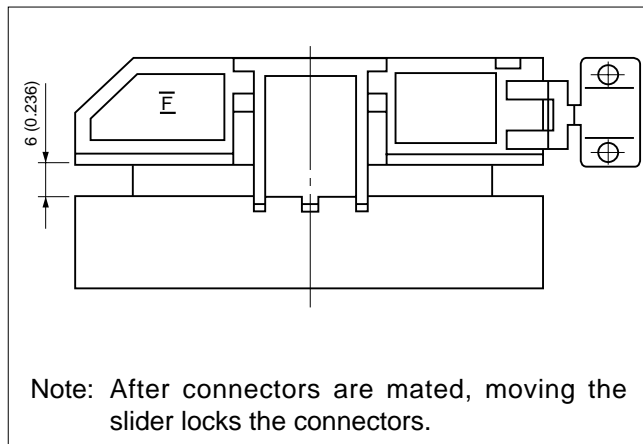
■ DIMENSIONS



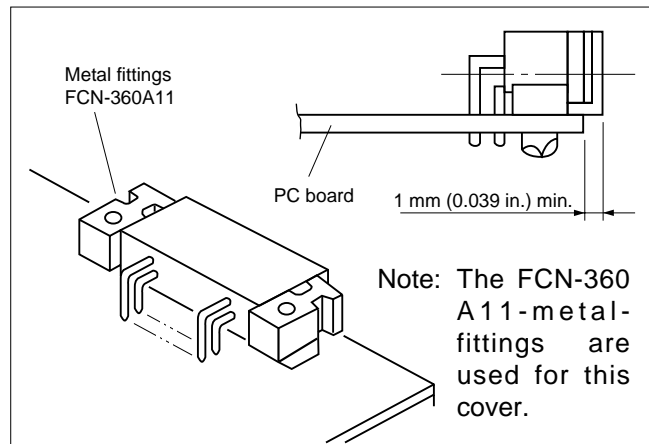
■ EXPLODED VIEW



■ LOCKED STATE



■ METAL FITTINGS



■ PART NUMBER

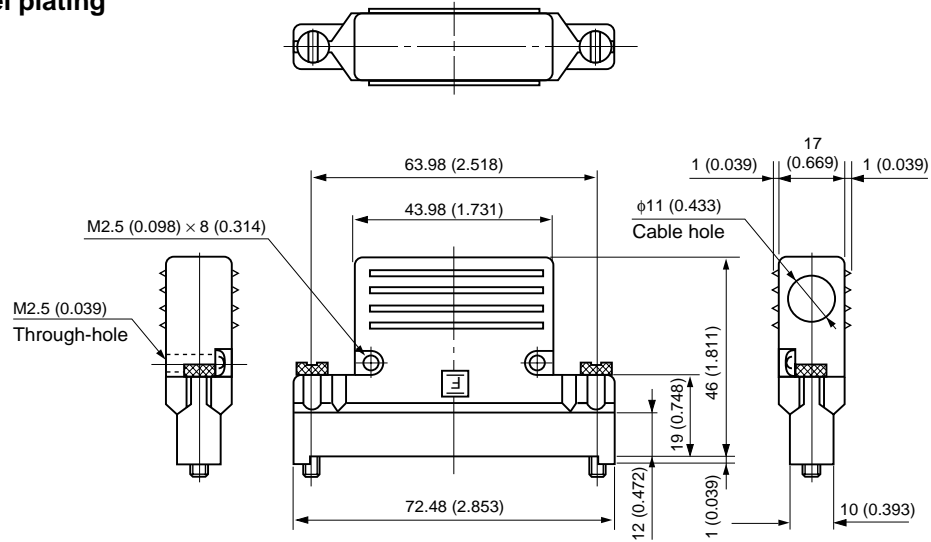
FCN-360C040-G1

COVER (RIGHT ANGLE CABLEOUT COVER) (TYPE H/E)

■ DIMENSIONS

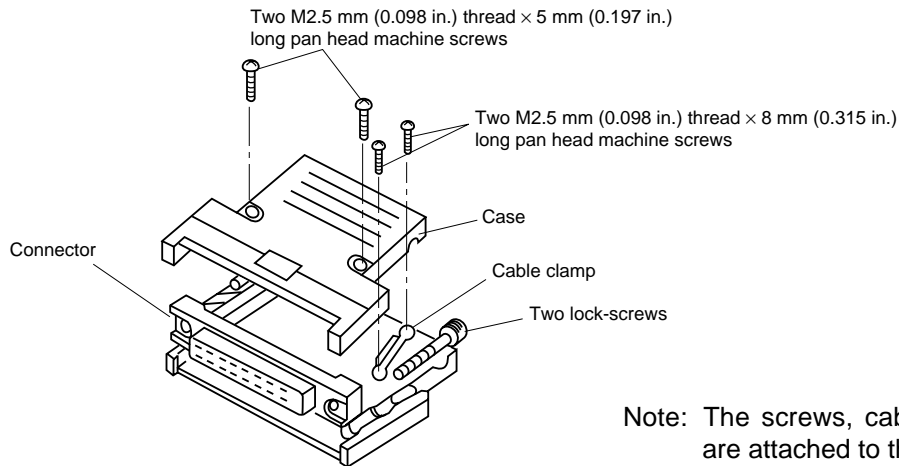
Material: Zinc die cast

Plating: Nickel plating



Unit: mm (in.)

■ EXPLODED VIEW



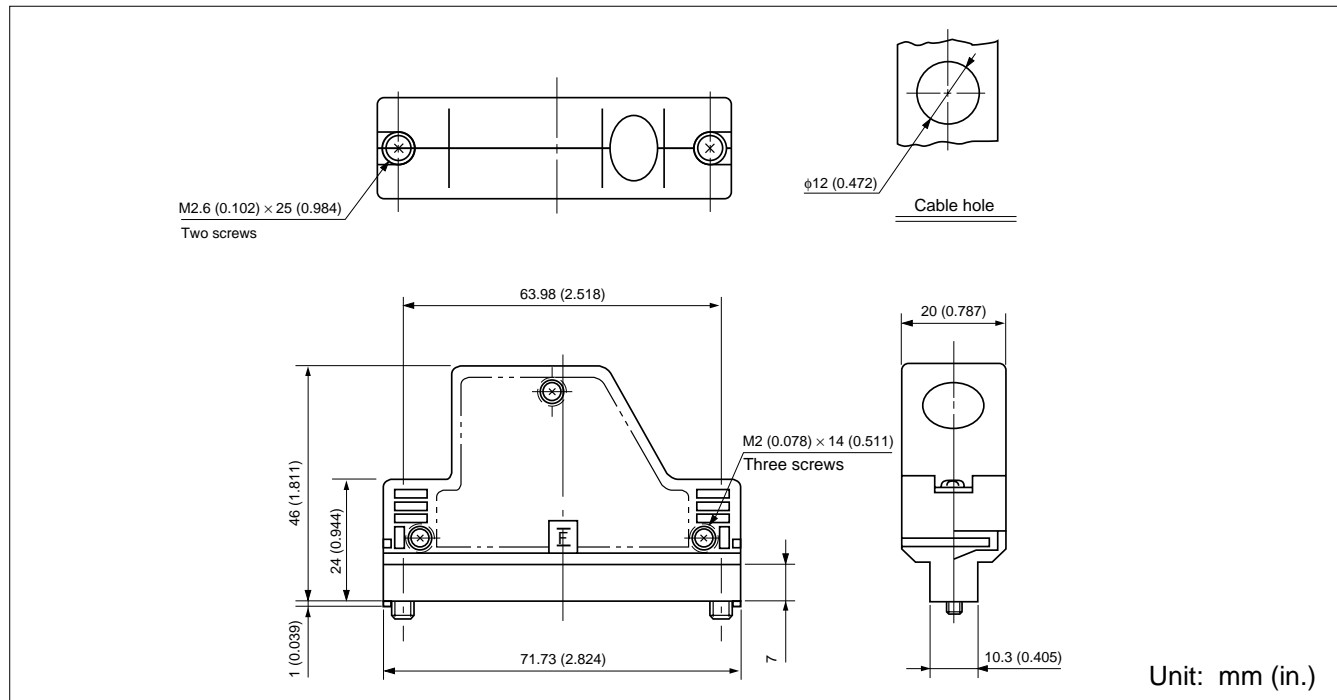
Note: The screws, cable clamp, and lock-screws are attached to the cover.

■ PART NUMBER

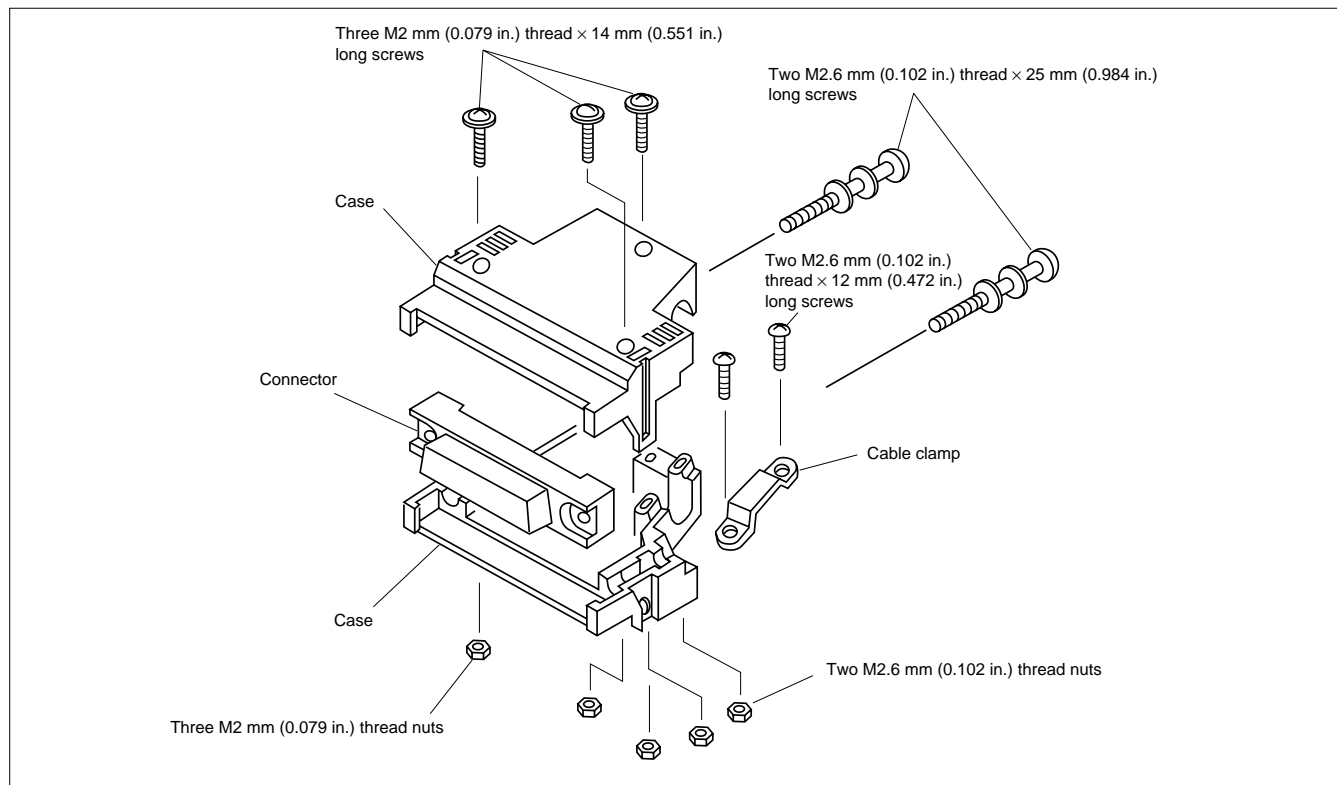
FCN-360C040-H/E

COVER (OBTUSE ANGLE CABLE-OUT COVER (40 CONTACTS ONLY)) (TYPE J1)

■ DIMENSIONS



■ EXPLODED VIEW

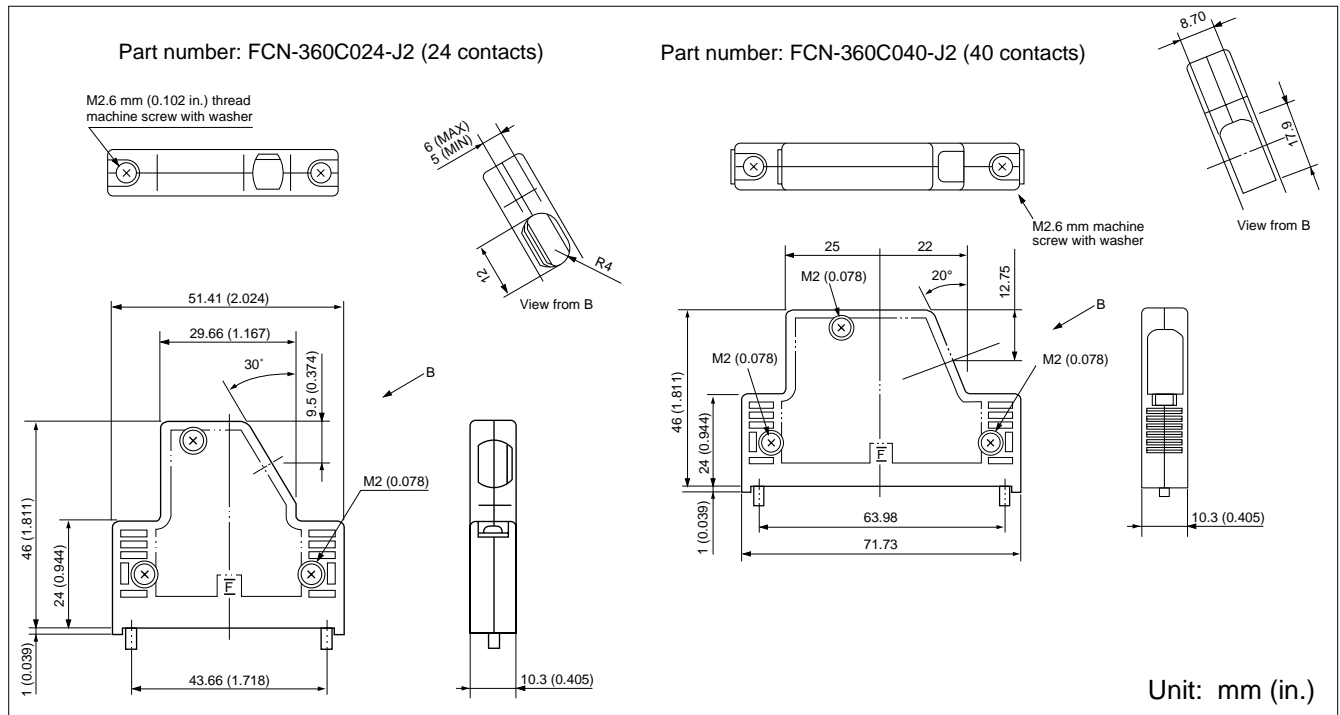


■ PART NUMBER

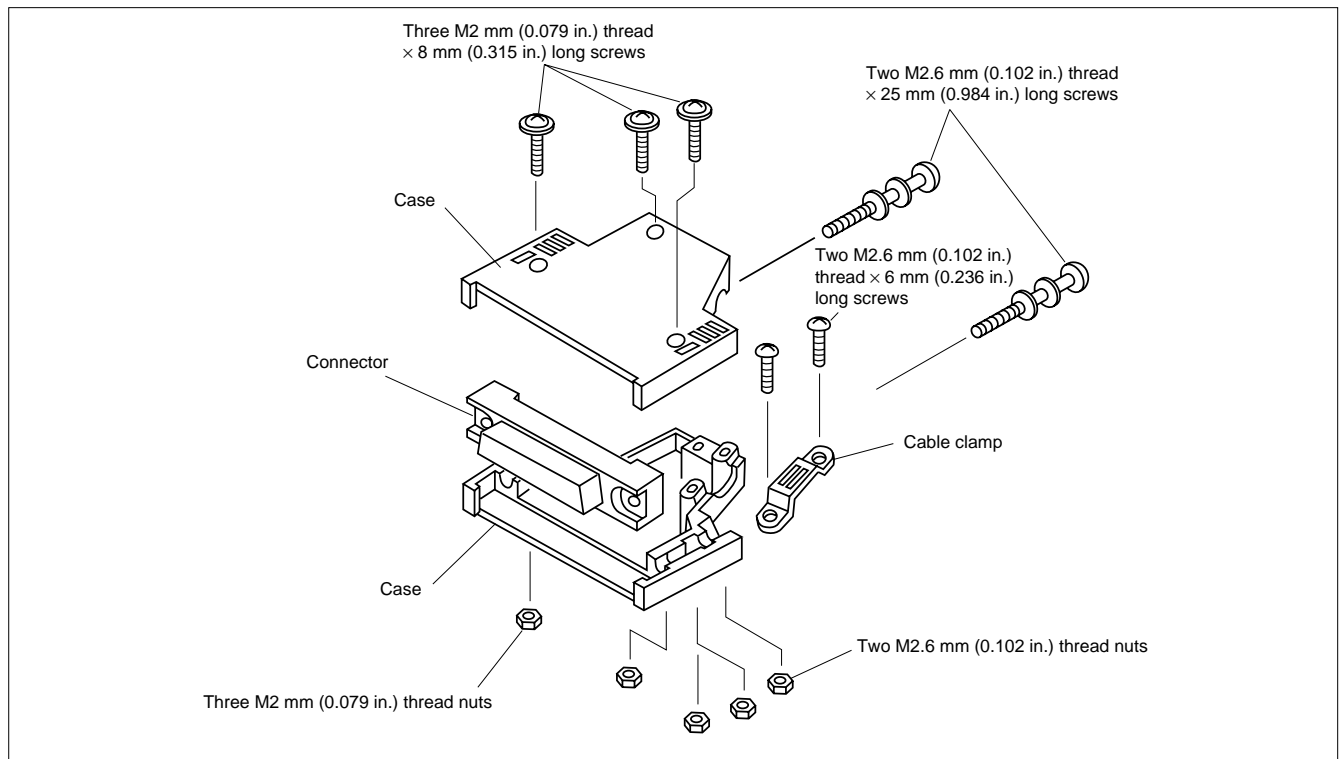
FCN-360C040-J1

LOW PROFILE COVER (OBTUSE ANGLE CABLE -OUT) (TYPE J2)

■ DIMENSION



■ EXPLODED VIEW



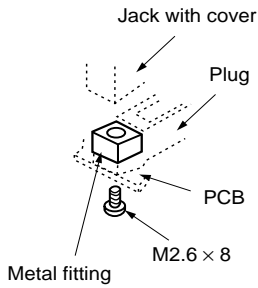
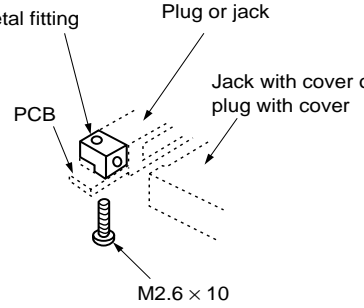
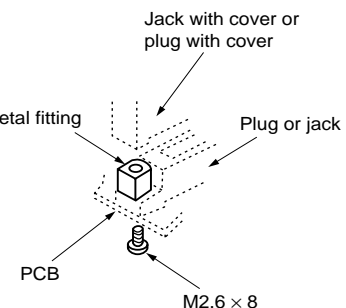
■ PART NUMBER

FCN-360C024-J2

FCN-360C040-J2

ACCESSORIES

■ MOUNTING STYLE

<p>[Straight mounting metal fitting]</p>  <p>Note: The M2.6 mm (0.102 in.) thread × 8 mm (0.315 in.) long machine screw shall be separately prepared.</p>	<p>[Right-angle mounting metal fitting]</p>  <p>Note: The M2.6 mm (0.102 in.) thread × 10 mm (0.394 in.) long machine screw shall be separately prepared.</p>	<p>[Straight mounting round metal fitting]</p>  <p>Note: The M2.6 mm (0.102 in.) thread × 8 mm (0.315 in.) long machine screw shall be separately prepared.</p>
--	--	--

■ SELECTION OF METAL FITTINGS ACCORDING TO COMBINATION OF CONNECTORS AND COVERS

Jack / Plug			Cover mounting side									
			361J		362J		363J		364J		367J	
			With cover	Without cover	With cover	Without cover	With cover	Without cover	With cover	Without cover	With cover	Without cover
Metal fitting mounting side	361P	Metal fitting part number	FCN-360A4	FCN-360A5	FCN-360A4	FCN-360A5	FCN-360A4	FCN-360A5	FCN-360A4	FCN-360A5	—	FCN-360A5
	362P		FCN-360A1	FCN-360A6	FCN-360A1	FCN-360A6	FCN-360A1	FCN-360A6	FCN-360A1	FCN-360A6	—	FCN-360A6
	364P		FCN-360A1	FCN-360A6	FCN-360A1	FCN-360A6	FCN-360A1	FCN-360A6	FCN-360A1	FCN-360A6	—	FCN-360A6
	365P		FCN-360A2	FCN-360A3	FCN-360A2	FCN-360A3	FCN-360A2	FCN-360A3	FCN-360A2	FCN-360A3	—	FCN-360A3

Jack / Plug			Cover mounting side					
			361P		361P		364P	
			With cover	Without cover	With cover	Without cover	With cover	Without cover
Metal fitting mounting side	361J	Metal fitting part number	FCN-360A4	FCN-360A5	—	FCN-360A7	—	FCN-360A7
	362J		FCN-360A4	FCN-360A5	—	FCN-360A7	—	FCN-360A7
	363J		FCN-360A4	FCN-360A5	—	FCN-360A7	—	FCN-360A7
	364J		FCN-360A4	FCN-360A5	—	FCN-360A7	—	FCN-360A7
	365J		FCN-360A10 (FCN-360A8)	FCN-360A9	—	FCN-360A9	—	FCN-360A9
	367J		FCN-360A4	FCN-360A5	—	FCN-360A7	—	FCN-360A7

Note: When the jack or plug without a cover (shaded part) is used, have M2.6 × 8 mm machine screws ready in order to tighten the connector.

■ SHAPES AND DIMENSIONS OF METAL FITTINGS

1. Straight Mounting Metal Fittings

Shape	Symbol	Part number	FCN-360A1	FCN-360A6
<p>Unit: mm (in.)</p>		A	5.3 (0.208)	6.3 (0.248)

2. Right-angle Mounting Metal Fittings

Shape	Symbol	Part number	FCN-360A2	FCN-360A3
<p>Unit: mm (in.)</p>		B	3 (0.118)	4 (0.157)
		C	9 (0.354)	10 (0.393)

Shape	Symbol	Part number	FCN-360A8	FCN-360A9
<p>Unit: mm (in.)</p>		B	5.3 (0.208)	6.3 (0.248)
		C	13.3 (0.523)	14.3 (0.526)

Symbol	Part number
	FCN-360A10
<p>Unit: mm (in.)</p>	

Symbol	Part number
	FCN-360A11
<p>Unit: mm (in.)</p>	

3. Straight Mounting Round Metal Fittings

Shape	Symbol	Part number	FCN-360A4	FCN-360A5	FCN-360A7
<p>Unit: mm (in.)</p>		D	7.1 (0.279)	9.9 (0.389)	8.1 (0.318)

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