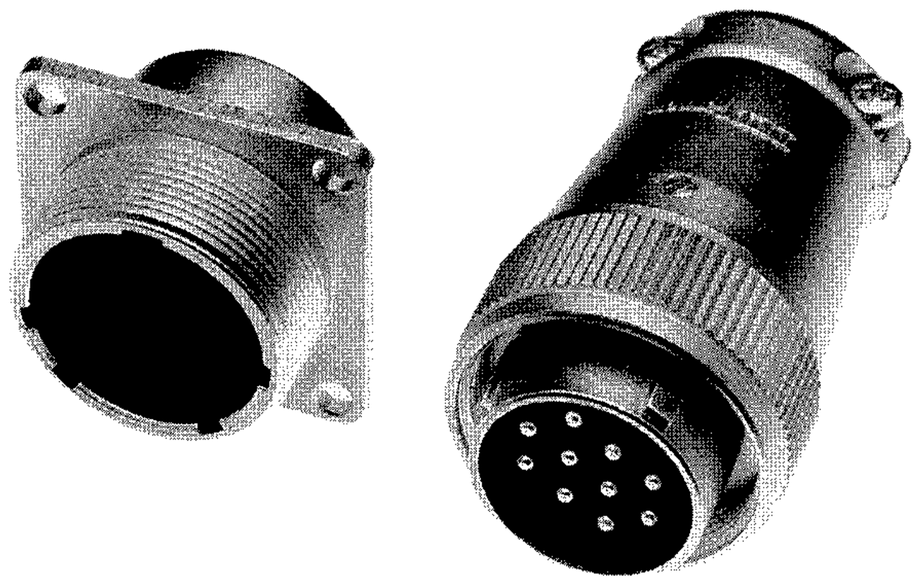
JC Series

Rugged, Light-weight, General Purpose Circular Connector
Designed in accordance with JIS-C-5432 standard

ITT Cannon



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JC Series Connector

* Product Characteristics:

JC series connectors are rugged, light-weight, low-cost, general purpose, circular connectors designed for use in various industrial applications.
Small and compact with an aluminum alloy shell protected by gray nickel finish. JC connectors feature five key polarization and closed-entry socket insulators for positive contact alignment and mating.
The JC series is available in three shell style and eight contact arrangements accommodating up to twenty-four size 20 contacts. Plug and Receptacle shell styles will accommodate either pin or socket insulators.
A threaded coupling design permits full engagement of the contacts even when the coupling nut is dis-engaged. This feature is useful for bench testing application.

* Applications:

*** Broadcasting Equipment, * Measurement and Testing equipment, * Medical equipment**

*** Multi-pin Power Connections, * Industrial Machinery, * Automatic Vending Machines,**

* Features:

Proven Design
Well established commercial metal shell circular connectors designed in accordance with JIS-C-5432 standard specification.

Rugged, small, light-weight with metal shell protection
An aluminum alloy shell ensures rugged protection of the connection.

Smooth mating and stable function.
Closed-entry socket insulators guide pin-contacts to sockets contacts which ensure smooth mating of pins to socket contacts.
Socket contacts are located deep within the insulators ensuring safety with finger test.

Five Key Polarization
Five key and key groove on the metal shell ensure polarization and contact alignment on mating.

Product Specifications:

Materials and Finishes:

Components	Materials	Finish
Shell, Barrel, Coupling nut, Cable clamp	Aluminum alloy	Nickel plating
Insulator	Thermosetting resin	UL94V-O Color; blue
Contacts	Copper alloy	Silver plating

Electrical Data:

Current Rating : #20 contact : 5 amps / #16 contact : 10 amps
Maximum operating voltage : 250 Vr.m.s. AC
Voltage endurance : AC 1,000 Vr.m.s. 1-min.
Insulating resistance : more than 1,000 M ohms at 500 V DC
Contact resistance : less than 5 m ohms
Contact Termination : Solder type

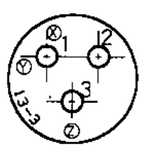
Mechanical Features:

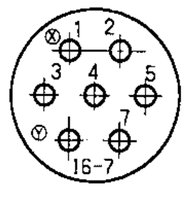
Shell style : 1A Cable Mounting Coupling Receptacle
2A Box Mounting Receptacle
6A Cable Connecting Plug
Shell Size : 13, 16, 21 and 25 Coupling : Threaded-JC
Polarization : Five Key and Key Ways
Mating Cycle : 500 times
Over-all Mating & Extraction Force :

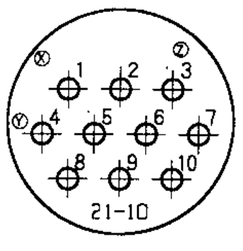
Shell size	Pin Counts	Spec.	Shell size	Pin Counts	Spec.
13	5	less than 1.5Kgr.	13	3	less than 1.4Kgr.
16	10	less than 3.4Kgr.	16	7	less than 3.2Kgr.
21	16	less than 5.5Kgr.	21	10	less than 4.5Kgr.
25	24	less than 8.2Kgr.	25	16	less than 7.2Kgr.

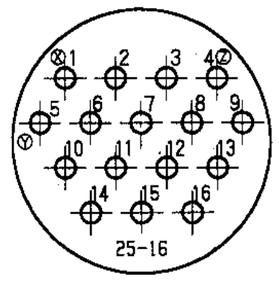
Contact Arrangements

Face view of Pin Insert shown (Socket view is opposite).

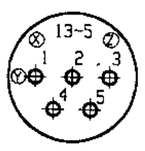


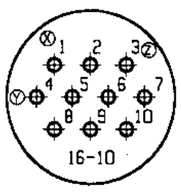


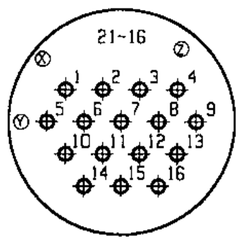


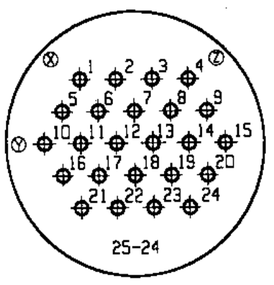


Shell Size	13-3	16-7	21-10	25-16
Number of Contacts	3 #16	7 #16	10 #16	16 #16
Service rating	10-amp, #16AWG	10-amp, #16AWG	10-amp, #16AWG	10-amp, #16AWG









Shell Size	13-5	16-10	21-16	25-24
Number of Contacts	5 #20	10 #20	16 #20	24 #20
Service rating	5-amp, #20AWG	5-amp, #20AWG	5-amp, #20AWG	5-amp, #20AWG

JC Series Connector

Part Number Configuration

JC 6 A 21 - 10 P

Series Initial

Shell Style
- 6 : Cable connecting Plug
- 2 : Box Mounting Receptacle
- 1 : Cable Mounting Coupling Receptacle

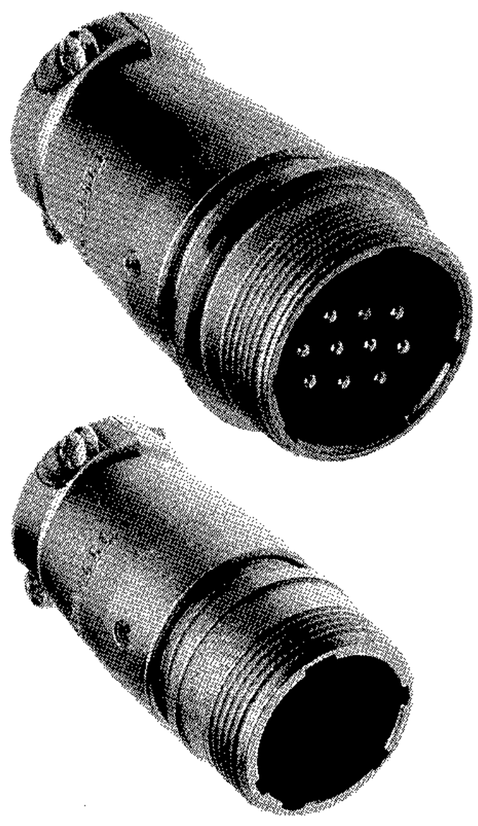
Class
- A : Normal environmental condition

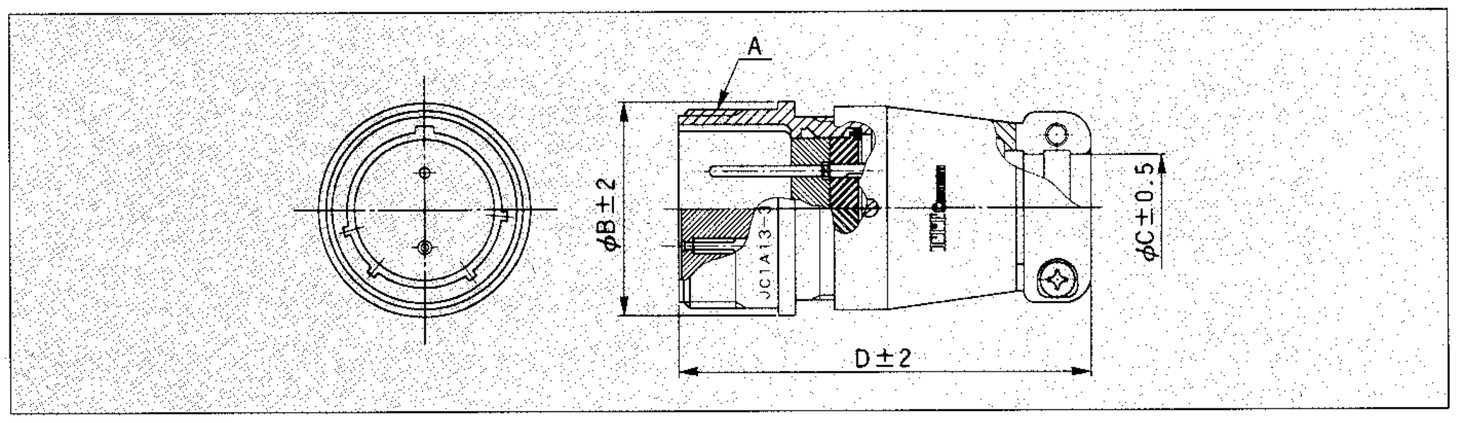
Shell Size
- 13, 16, 21, 25 (outer diameter of Shell)

Contact Arrangement
- 3, 5, 7, 10(2-type), 16(2-type), 24

Contact Type
- P : Pin
- S : Socket

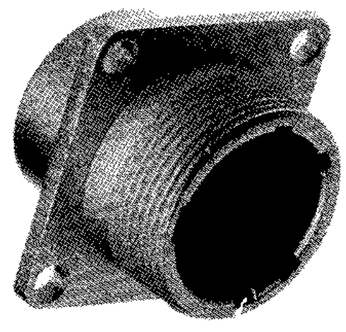
JC 1A

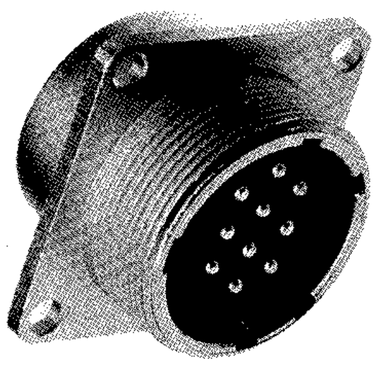


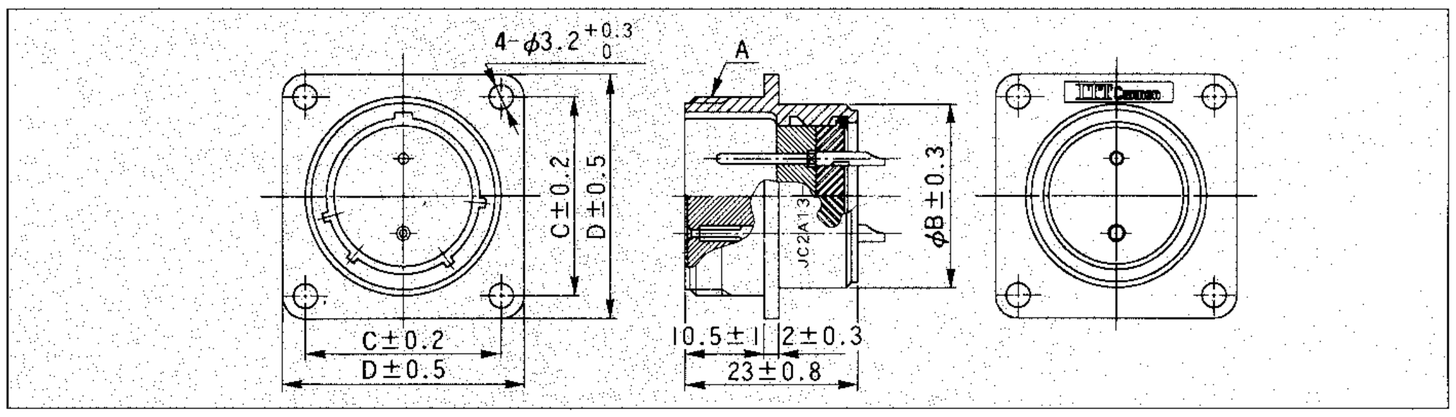


Shell Size	Number of Contacts	Description	Parts Number	A	øB	øC	D
13	3	JC1A13-3P	127039-0033	M18×1	21	8	44.5
		JC1A13-3S	127039-0034				
	5	JC1A13-5P	127039-0035				
		JC1A13-5S	127039-0036				
16	7	JC1A16-7P	127039-0037	M22×1	25	12	47.5
		JC1A16-7S	127039-0038				
	10	JC1A16-10P	127039-0039				
		JC1A16-10S	127039-0040				
21	10	JC1A21-10P	127039-0041	M26×1	29	14	51.5
		JC1A21-10S	127039-0042				
	16	JC1A21-16P	127039-0043				
		JC1A21-16S	127039-0044				
25	16	JC1A25-16P	127039-0045	M30×1	33	18	54.5
		JC1A25-16S	127039-0046				
	24	JC1A25-24P	127039-0047				
		JC1A25-24S	127039-0048				

JC 2A

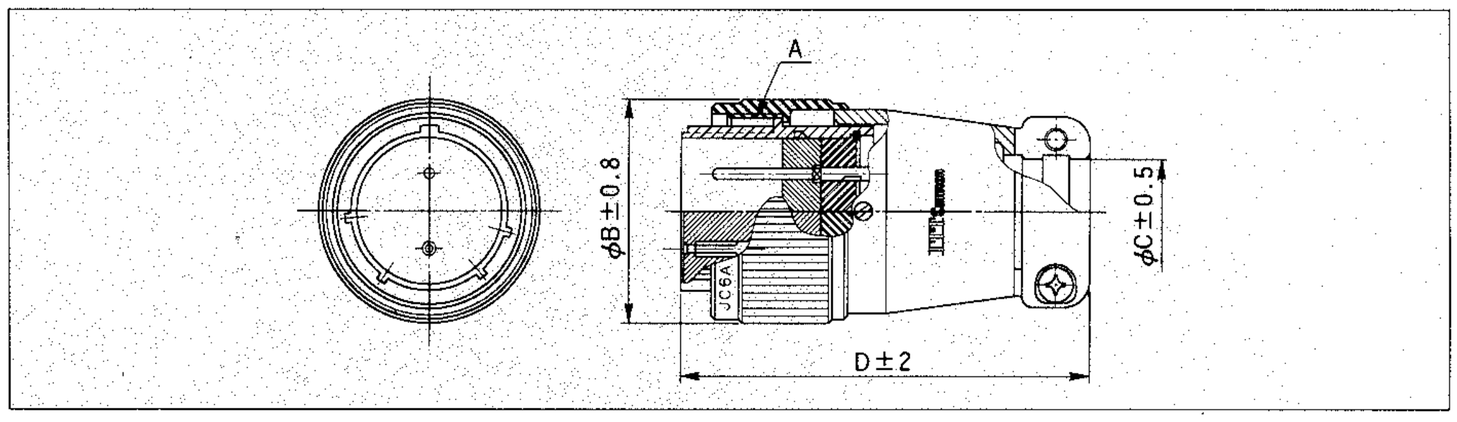






Shell Size	Number of Contacts	Description	Parts Number	A	øB	øC	D
13	3	JC2A13-3P	127039-0017	M18×1	16	20	26
		JC2A13-3S	127039-0018				
	5	JC2A13-5P	127039-0019				
		JC2A13-5S	127039-0020				
16	7	JC2A16-7P	127039-0021	M22×1	20	23	29
		JC2A16-7S	127039-0022				
	10	JC2A16-10P	127039-0023				
		JC2A16-10S	127039-0024				
21	10	JC2A21-10P	127039-0025	M26×1	24	26	32
		JC2A21-10S	127039-0026				
	16	JC2A21-16P	127039-0027				
		JC2A21-16S	127039-0028				
25	16	JC2A25-16P	127039-0029	M30×1	28	29	35
		JC2A25-16S	127039-0030				
	24	JC2A25-24P	127039-0031				
		JC2A25-24S	127039-0032				

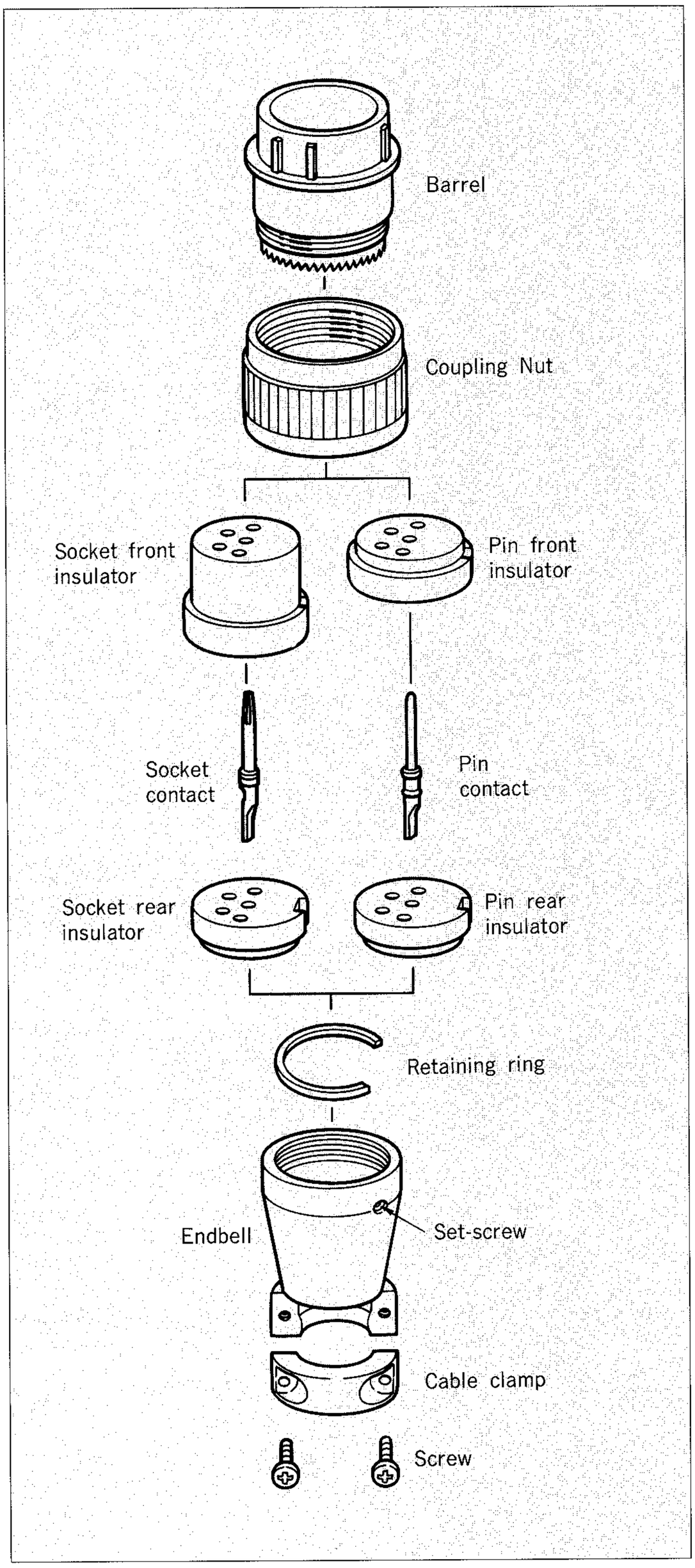
JC 6A



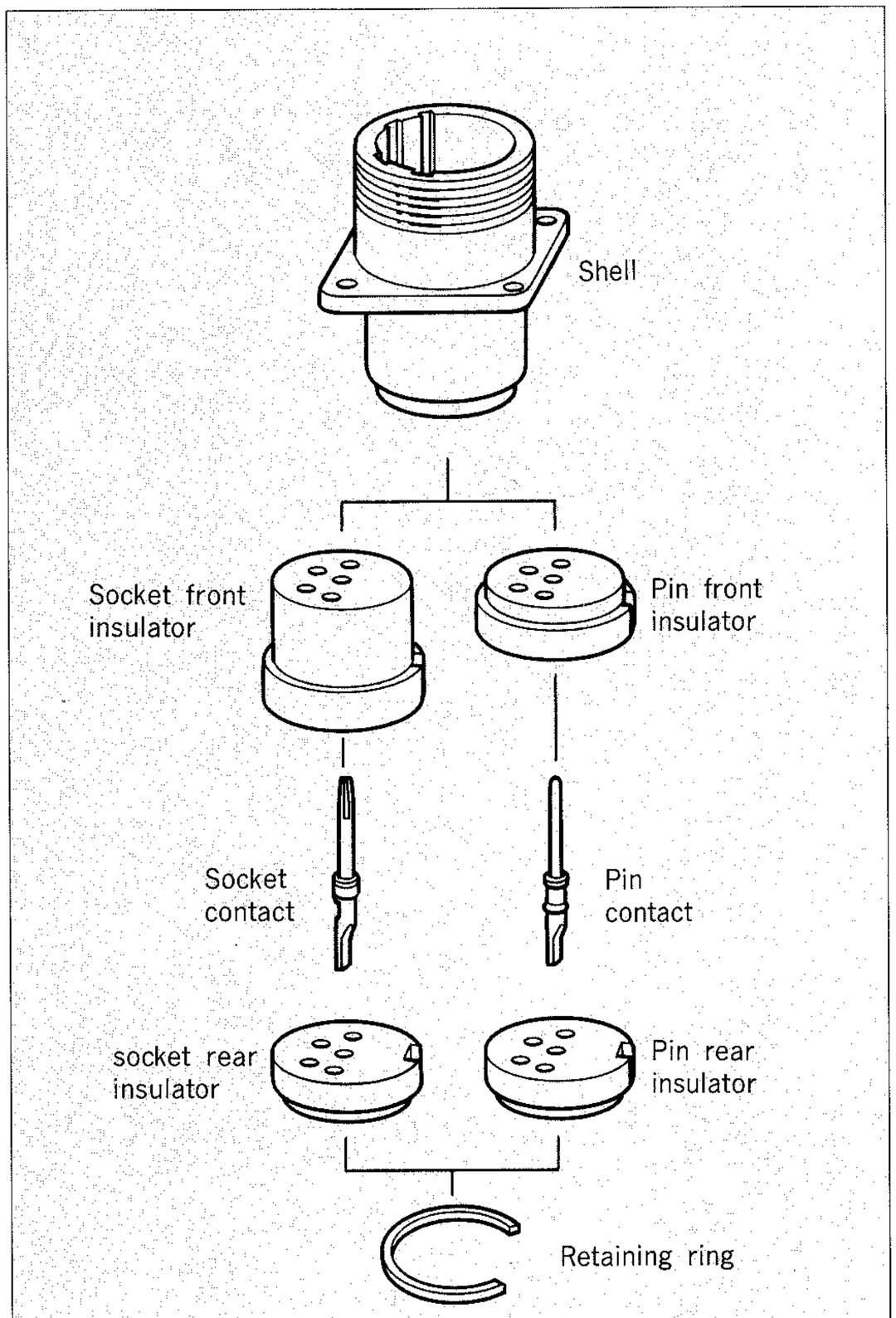
Shell Size	Number of Contacts	Description	Parts Number	A	øB	øC	D
13	3	JC6A13-3P	127039-0001	M18×1	21.2	8	46
		JC6A13-3S	127039-0002				
	5	JC6A13-5P	127039-0003				
		JC6A13-5S	127039-0004				
16	7	JC6A16-7P	127039-0005	M22×1	25.5	12	49
		JC6A16-7S	127039-0006				
	10	JC6A16-10P	127039-0007				
		JC6A16-10S	127039-0008				
21	10	JC6A21-10P	127039-0009	M26×1	29.7	14	53
		JC6A21-10S	127039-0010				
	16	JC6A21-16P	127039-0011				
		JC6A21-16S	127039-0012				
25	16	JC6A25-16P	127039-0013	M30×1	33.8	18	56
		JC6A25-16S	127039-0014				
	24	JC6A25-24P	127039-0015				
		JC6A25-24S	127039-0016				

JC Series Connector Exploded View

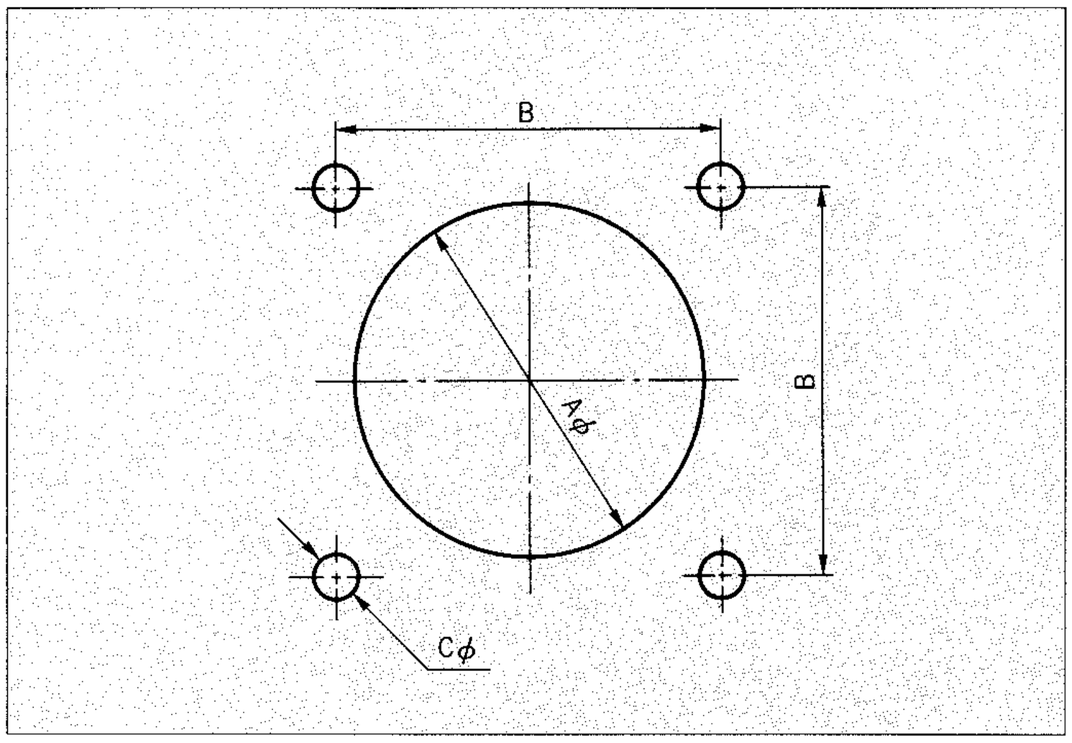
Plug



Receptacle



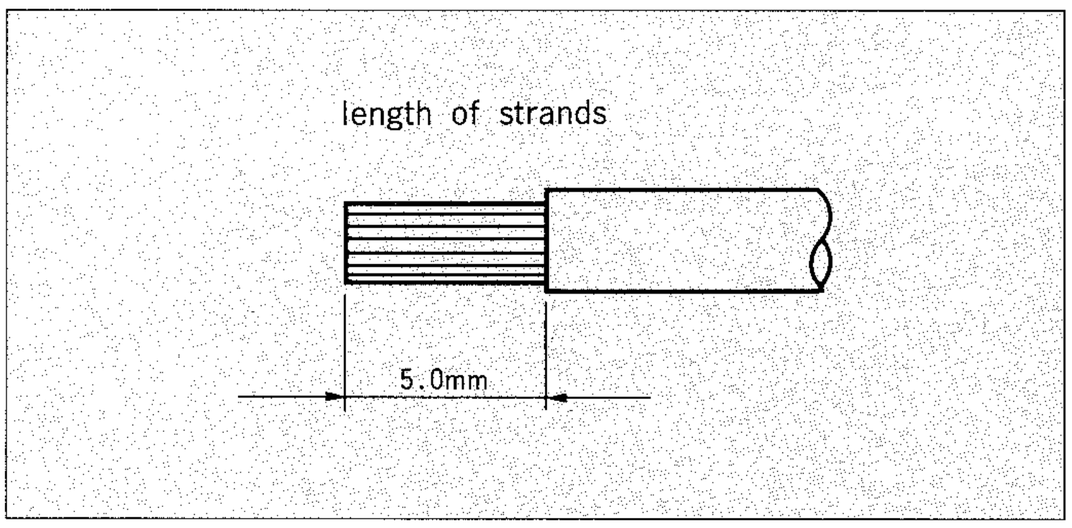
* Panel cut-out dimension (page-6)



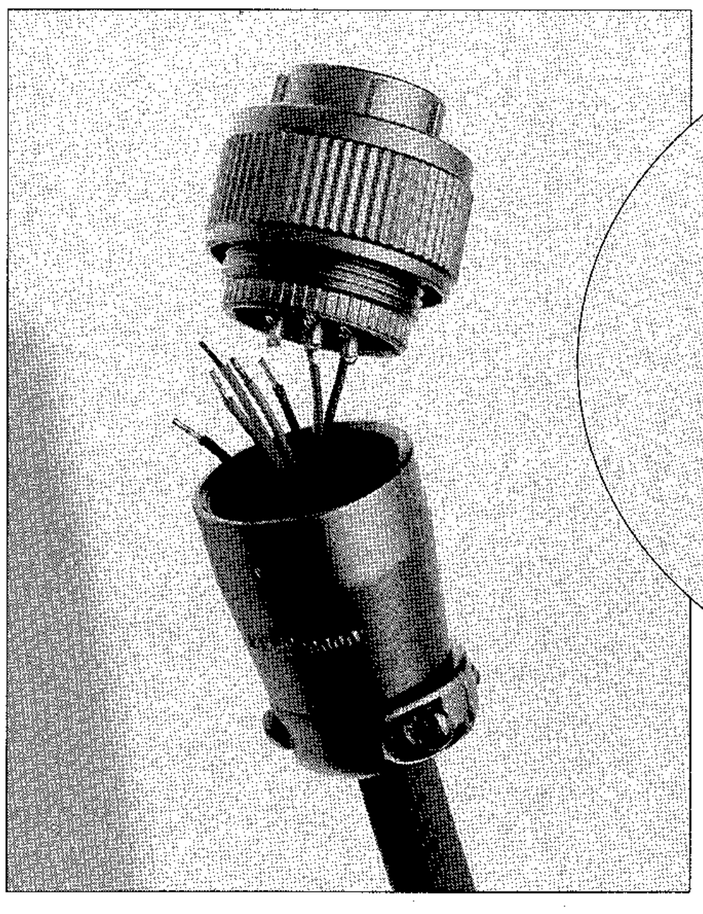
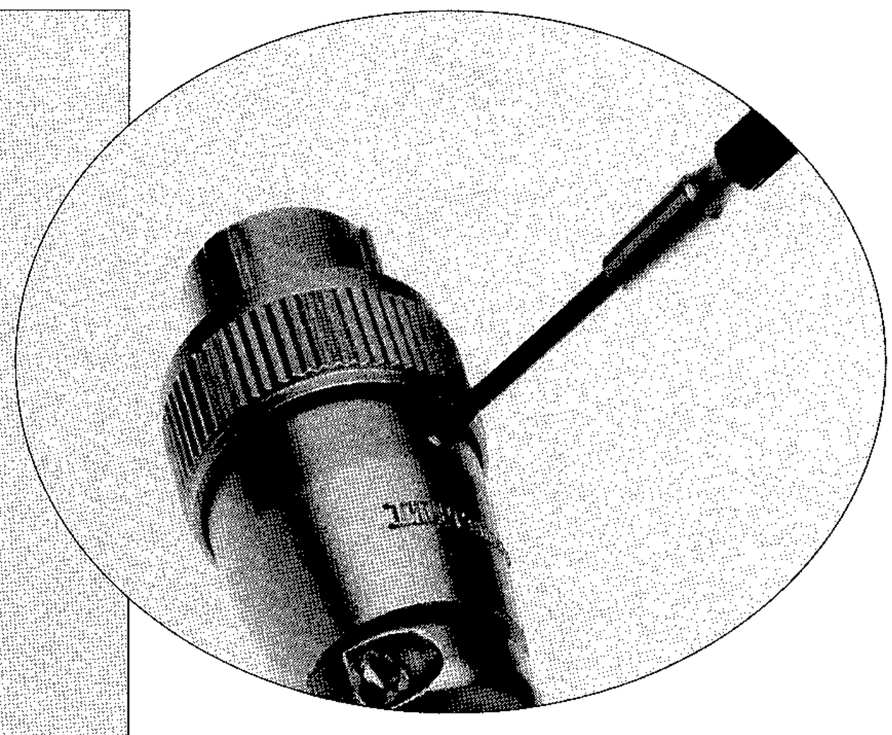
Shell Size	Aø ±0.5	B ±0.2	Cø −0.3 −0
13	20	20	3.2
16	24	23	3.2
21	28	26	3.2
25	32	29	3.2

(note) In case of rear mounting, panel thickness should be less than 4.00 mm

* Applicable Cable Size



Contact size	Cable AWG	Diameter of conductor
20	#20 or thinner	0.5mm^2 or smaller
16	#16 or thinner	1.25mm^2 or smaller

* Terminating Instruction

Cable must come through Endbell in-advance to termination.
Release the set-screw and remove Endbell from Barrel of connector then cable to be come through the Endbell.
After completion of soldering termination, re-assemble Endbell to Barrel then tighten up set-screw.