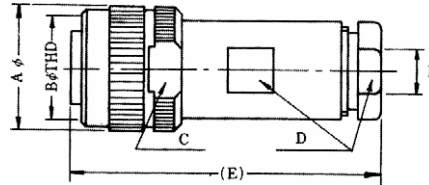


Water Proof Circular Connectors



TC1108 Series

Plugs (12A: Standard Type, 15A: Long Shell Type)

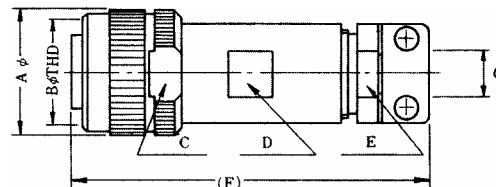


1108-12A10-7M(10)

Insert Size	Number of Contacts	Part Number Pin Contact	Dimensions Millimetres					I.D.	Part Number Socket Contact
			A	B	C	D	E		
10	2	1108-12A10-2AM ()	21.0	M18 (P=1)	19.0	15.0	52.0 (62.0)	5.0	1108-12A10-2AF ()
	3	1108-12A10-3AM ()						6.3	1108-12A10-3AF ()
	4	1108-12A10-4M ()						7.0	1108-12A10-4F ()
	5	1108-12A10-5M ()						8.0	1108-12A10-5F ()
	7	1108-12A10-7M ()						8.6	1108-12A10-7F ()
16	8	1108-12A16-8AM ()	27.0	M24 (P=1)	25.0	19.0 *21.0	55.5 (65.5)	9.3	1108-12A16-8AF ()
	14	1108-12A16-14M ()						10.0	1108-12A16-14F ()
20	12	1108-12A20S-12M ()	34.0	M30 (P=1)	32.0	23.0	61.0 (76.0)	10.5	1108-12A20S-12F ()
	19	1108-12A20S-19M ()						11.1	1108-12A20S-19F ()
26	21	1108-12A26S-21M16.3	40.0	36.0 (P=1)	38.0	27.0	65.0 (80.0)	11.8	1108-12A26S-21F16.3
	37	1108-12A26S-37M16.3						13.5	1108-12A26S-37F16.3

Note: () = Select the most suitable size from the table of inner diameter(I.D.) of clamping nut for applicable size cable. Mark * In Insert Size when I.D. of clamping nut *, across flat "D" is *21.0. Structural dimensions "E" of long shell type are identical in parentheses, when ordered, 12A from part-number above is replaced with 15A.

Plugs (With Cable Clamp)



1108-12B10-7M8.3

Insert Size	Number of Contacts	Part Number Pin Contact	Dimensions Millimetres					I.D.	Part Number Socket Contact	
			A	B	C	D	E			
10	2	1108-12B10-2AM ()	21.0	M18 (P=1)	19.0	15.0	16.0	60.0	8.3	1108-12B10-2AF ()
	3	1108-12B10-3AM ()							9.5	1108-12B10-3AF ()
	4	1108-12B10-4M ()								1108-12B10-4F ()
	5	1108-12B10-5M ()								1108-12B10-5F ()
	7	1108-12B10-7M ()								1108-12B10-7F ()
16	8	1108-12B16-8AM ()	27.0	M24 (P=1)	25.0	19.0 *21.0	19.0 *21.0	63.0	11.8	1108-12B16-8AF ()
	14	1108-12B16-14M ()							13.5	1108-12B16-14F ()
20	12	1108-12B20S-12M14.3	34.0	M30 (P=1)	32.0	23.0	26.0	64.0	14.3	1108-12B20S-12F14.3
	19	1108-12B20S-19M14.3								1108-12B20S-19F14.3
26	21	1108-12B26S-21M16.3	40.0	36.0 (P=1)	38.0	27.0	27.0	74.5	16.3	1108-12B26S-21F16.3
	37	1108-12B26S-37M16.3								1108-12B26S-37F16.3

Note: () = Select the most suitable size from the table of inner diameter(I.D.) of clamping nut for applicable size cable. Mark * In Insert Size when I.D. of clamping nut *, across flat "D" is *21.0.

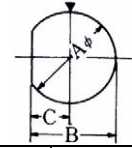
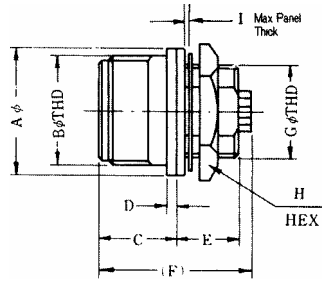
Water Proof Circular Connectors



TC1108 Series

■ Bulkhead Receptacles

Mounting Hole Dimension



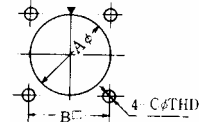
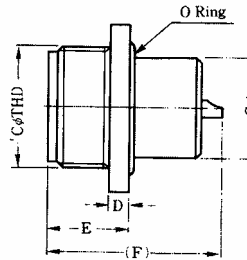
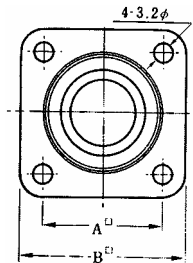
Insert Size	A	B	C
10	15.2	14.2	6.6
16	21.2	20.2	9.6
20	26.2	25.2	12.1
26	32.2	31.2	15.1

1108-23A10-7F

Insert Size	Number of Contacts	Part Number Socket Contact	Dimensions Millimetres									Part Number Pin Contact
			A	B	C	D	E	F	G	H	I	
10	2	1108-23A10-2AF	21.0	M18 (P=1)	12.5	1.5	10.0	26.0	M15 (P=1)	19.0	4.0	1108-23A10-2AM
	3	1108-23A10-3AF										1108-23A10-3AM
	4	1108-23A10-4AF										1108-23A10-4M
	5	1108-23A10-5AF										1108-23A10-5M
	7	1108-23A10-7AF										1108-23A10-7M
16	8	1108-23A16-8AF	27.0	M24 (P=1)	12.5	1.5	10.0	26.0	21.0 (P=1)	26.0	4.0	1108-23A16-8AM
	14	1108-23A16-14AF										1108-23A16-14M
20	12	1108-23A20S-12F	33.0	M30 (P=1)	13.5	2	11.0	26.0	26.0 (P=1)	32.0	3.5	1108-23A20S-12M
	19	1108-23A20S-19F										1108-23A20S-19M
26	21	1108-23A26S-21F	39.0	36.0 (P=1)	13.5	2.5	11.0	26.0	32.0 (P=1)	38.0	3.5	1108-23A26S-21M
	37	1108-23A26S-37F										1108-23A26S-37M

■ Flange Mount Receptacles

Mounting Hole Dimension



Insert Size	A	B	C
10	15.2	18.0	M3
16	21.2	23.0	M3
20	26.2	31.0	M3
26	32.2	35.0	M3

1108-21B10-7F

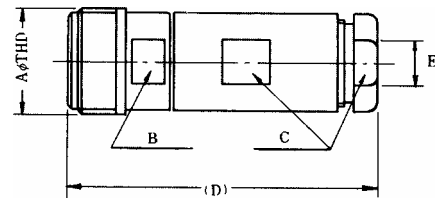
Insert Size	Number of Contacts	Part Number Socket Contact	Dimensions Millimetres							Part Number Pin Contact
			A	B	C	D	E	F	G	
10	2	1108-21B10-2AF	18.0	25.0	M18 (P=1)	3.0	12.5	26.0	15	1108-21B10-2AM
	3	1108-21B10-3AF								1108-21B10-3AM
	4	1108-21B10-4AF								1108-21B10-4M
	5	1108-21B10-5AF								1108-21B10-5M
	7	1108-21B10-7AF								1108-21B10-7M
16	8	1108-21B16-8AF	23.0	30.0	M24 (P=1)	3.0	12.5	26.0	21.0	1108-21B16-8AM
	14	1108-21B16-14AF								1108-21B16-14M
20	12	1108-21B20S-12F	31.0	38.0	M30 (P=1)	3.0	12.5	26.0	26.0	1108-21B20S-12M
	19	1108-21B20S-19F								1108-21B20S-19M
26	21	1108-21B26S-21F	35.0	43.0	36.0 (P=1)	3.0	12.5	26.0	32.0	1108-21B26S-21M
	37	1108-31B26S-37F								1108-21B26S-37M

Water Proof Circular Connectors



TC1108 Series

■ Jacks (32A: Standard Type, 35A: Long Shell Type)



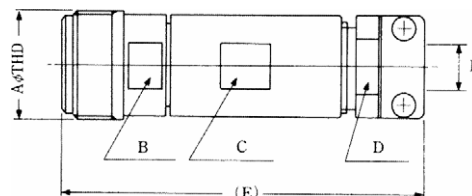
108-32A10-7F(10)

Insert Size	Number of Contacts	Part Number Pin Contact	Dimensions Millimetres				I.D.	Part Number Socket Contact	
			A	B	C	D			
10	2	1108-32A10-2AF ()	M18 (P=1)	15.0	15.0	52.0 (62.0)	5.0	1108-32A10-2AM ()	
	3	1108-32A10-3AF ()					6.3		1108-32A10-3AM ()
	4	1108-32A10-4F ()					7.0		1108-32A10-4M ()
	5	1108-32A10-5F ()					8.0		1108-32A10-5M ()
	7	1108-32A10-7F ()					8.6		1108-32A10-7M ()
16	8	1108-32A16-8AF ()	M24 (P=1)	21.0	19.0 *21.0	56.0 (66.0)	9.3	1108-32A16-8AM ()	
	14	1108-32A16-14F ()					10.0	1108-32A16-14M ()	
20	12	1108-32A20S-12F ()	M30 (P=1)	27.0	23.0	61.0 (76.5)	11.1	1108-32A20S-12M ()	
	19	1108-32A20S-19F ()					11.8	1108-32A20S-19M ()	
26	21	1108-32A26S-21F16.3	36.0 (P=1)	33.0	27.0	65.5 (80.0)	13.5	1108-32A26S-21M16.3	
	37	1108-32A26S-37F16.3					15.8	1108-32A26S-37M16.3	

Note: () = Select the most suitable size from the table of inner diameter(I.D.) of clamping nut for applicable size cable.
Mark * In Insert Size 16, when I.D. of clamping nut *13.5, across flat "C" is *21.0.

Structural dimensions "D" of long shell type are identical in parentheses, when ordered, 32A from part-number above is replaced with 35A.

■ Jacks (With Cable Clamp)



1108-32B10-7F8.3

Insert Size	Number of Contacts	Part Number Pin Contact	Dimensions Millimetres					I.D.	Part Number Socket Contact
			A	B	C	D	E		
10	2	1108-32B10-2AF ()	M18 (P=1)	15.0	15.0	16.0	60.0	8.3 9.5	1108-32B10-2AM ()
	3	1108-32B10-3AF ()							1108-32B10-3AM ()
	4	1108-32B10-4F ()							1108-32B10-4M ()
	5	1108-32B10-5F ()							1108-32B10-5M ()
	7	1108-32B10-7F ()							1108-32B10-7M ()
16	8	1108-32B16-8AF ()	M24 (P=1)	21.0	19.0 *21.0	19.0 *21.0	63.8	11.8 *13.5	1108-32B16-8AM ()
	14	1108-32B16-14F ()							1108-32B16-14M ()
20	12	1108-32B20S-12F14.3	M30 (P=1)	27.0	23.0	26.0	71.0	14.3	1108-32B20S-12M14.3
	19	1108-32B20S-19F14.3							1108-32B20S-19M14.3
26	21	1108-32B26S-21F16.3	36.0 (P=1)	3.0	27.0	27.0	75.0	16.3	1108-32B26S-21M16.3
	37	1108-31B26S-37F16.3							1108-32B26S-37M16.3

Note: () = Select the most suitable size from the table of inner diameter(I.D.) of clamping nut for applicable size cable.
Mark * In Insert Size 16, when I.D. of clamping nut *13.5, across flat "C" and "D" is *21.0.

Water Proof Circular Connectors



TC1108 Series

■ Hermetically Sealed Receptacle (Glass-to-metal seals)

Glass-to-Metal seal creates a bond with high sealing integrity. This maintains rated electrical characteristics during continuous exposure to thermal and mechanical shock. Applications of these receptacles are for vacuum pumps, inert gas tanks and oil pressured pumps. These receptacles can be mated with other TC1108 series connectors.

■ Specifications

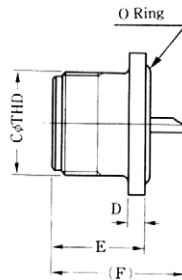
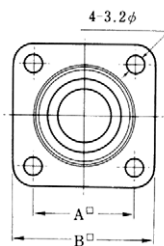
Hermetic Seal : Helium leak rate 1×10^{-9} atm cc/sec
 Sealing : High pressure of 25kg/cm² (atg) with air
 Insulation Resistance : DC500V 1,000MΩ min.
 Contact Resistance : DC1A 25mΩ max.
 Temperature Range :-30°C ~ +100°C

● Materials

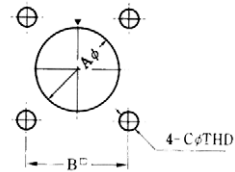
Principal Part	Materials	Plating
Shell	Brass	Nickel
Contact	Ferro-Nickel	Nickel
Insulation	Soda-Line Glass	-----

Current Rating, Voltage Rating & Withstanding Voltage

Number of Contacts	Insert No.	Voltage Rating (AC Vrms)	Current Rating	Withstanding Voltage (AC Vrms)	Hole size (for Contact)
2	10-2	600	10A	1800	1.8
3	10-3	350	10A	1000	1.8
4	10-4	400	5A	1200	1.2
5	10-5	350	5A	A1000	1.2
7	10-7	300	5A	900	1.2
8	16-8	400	10A	1200	1.8
14	16-14	350	5A	1000	1.2



Mounting Hole Dimension



Insert Size	A	B	C
10	14.8	18.0	M3
16	21.8	25.0	M3

Insert Size	Number of Contacts	Part Number	Dimensions Millimetres						Applicable Plug
			A	B	C	D	E	F	
10	2	1108-71B10-2AM	18.0	25.0	M18 (P=1)	3.0	16.4	23.5	1108-12()10-2AF()
	3	1108-71B10-3AM							1108-12()10-3AF()
	4	1108-71B10-4M							1108-12()10-4F()
	5	1108-71B10-5M							1108-12()10-5F()
	7	1108-71B10-7M							1108-12()10-7F()
16	8	1108-71B16-8AM	25.0	32.0	M24 (P=1)	3.0	16.4	23.5	1108-12()16-8AF()
	14	1108-71B16-14m							1108-12()16-14F()

The used material on the standard "O" ring is Nitrile-Rubber, product with "O" ring used Fluoro-Rubber, which is superior in it's permeability is supplied adding "-2" at the end of part-number. Example=1108-71B10-2AM-2.

Water Proof Circular Connectors

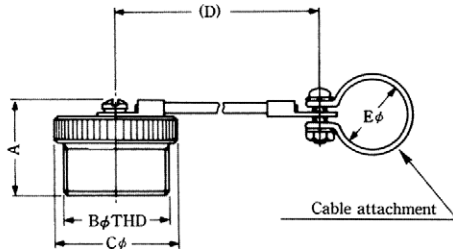


TC1108 Series

■ Caps for Receptacles



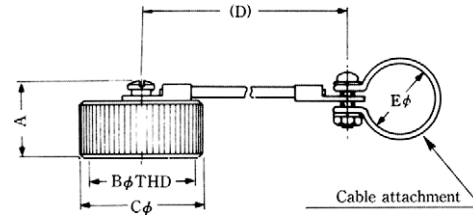
1108-10RC



■ Caps for Plugs



1108-10PC1



Insert Size	Part Number	Dimensions Millimetres				
		A	B	C	D	E
10	1108-10RC	13.3	M18 (P=1)	21.0	120	*3.6
	1108-10RC1					8.0
	1108-10RC9					10.5
16	1108-16RC	13.3	M24 (P=1)	27.0	120	*3.6
	1108-16RC1					11.5
	1108-16RC2					13.0
20	1108-20RC	13.3	M30 (P=1)	34.0	140	*3.6
	1108-20RC1					14
	1108-20RC2					11.5
26	1108-26RC	13.3	36.0 (P=1)	40.0	140	*3.6
	1108-26RC1					16.0

*indication is not installed with cable attachment

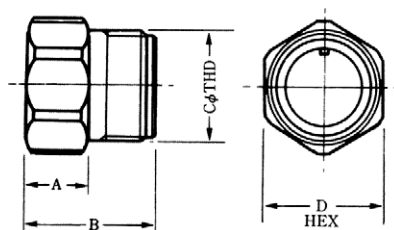
Insert Size	Part Number	Dimensions Millimetres				
		A	B	C	D	E
10	1108-10PC	16.3	M18 (P=1)	21.0	120	*3.6
	1108-10PC1					8.0
	1108-10PC6					10.5
16	1108-16PC	17.8	M24 (P=1)	27.0	120	*3.6
	1108-16PC1					11.5
	1108-16PC2					13.0
20	1108-20PC	19.3	M30 (P=1)	34.0	140	*3.6
	1108-20PC1					14
	1108-20PC2					11.5
26	1108-26PC	20.8	36.0 (P=1)	40.0	140	*3.6
	1108-26PC1					16.0

*indication is not installed with cable attachment

■ Assembly Dummy-Receptacles



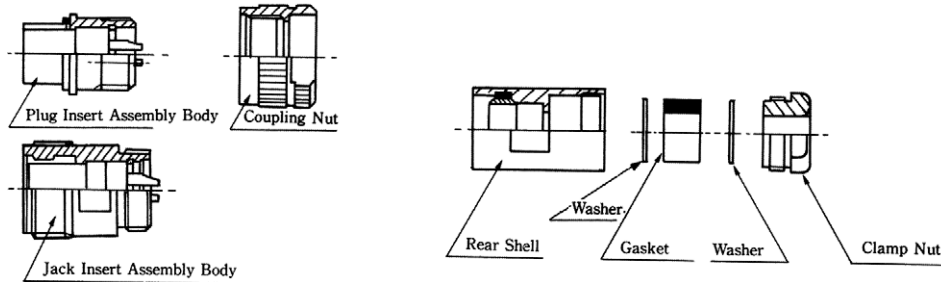
1108-10RC



Insert Size	Part Number	Dimensions Millimetres			
		A	B	C	D
10	T90-2-1	10.0	21.0	M18 (P=1)	20.0
16	T90-2-2	12.0	23.0	M24 (P=1)	26.0
20	T90-2-3	14.0	25.0	M30 (P=1)	32.0
26	T90-2-4	16.0	27.0	36.0 (P=1)	38.0

TC1108 Series

TC1108 Series, Cable Assembly Instructions



	<p>Cut off the jacket and insulation of the end of cable. Dimension of cutting cable (A and B mm) is in accordance with the table below.</p>
	<p>Slide clamp-nut, washer, gasket, washer, rear shell and coupling ring (unnecessary in case of jack) in this sequence at an optional position on cable</p>
	<p>Solder center conductor to contact Note 1. Keep clean by removing any paste and dust on insulation surface after soldering. Note 2. Protect soldered portion with insulation tube.</p>
	<p>Place insert-assembly body (Plug, Jack) to dummy receptacle. Tighten torque of rear shell (C kgf-cm) is in accordance with the table below. Note: use device T90-2) as assembly dummy receptacle.</p>
	<p>After tighten rear shell, slide washer, gasket and washer in this sequence into its inside. Tighten torque of clamp nut (D kgf-cm) is in accordance with the table below.</p>

Dimension of cutting cable and Reference Tighten Torque

Insert Size	A mm	B mm		C kgf-cm	D kgf-cm
		1.0mm Contact	1.6mm Contact		
10	6.0	10.0	1.5	30-60	40-80
16	9.0	13.0	14.5	30-90	
20	11.0	15.0	16.5	40-100	60-100
26	15.0	19.0	20.5		

Note: Tighten torque shown on the table is only reference value. Before practice, confirm it's tighten torque and effect water proof with cable to be used