

AMC Series

Description

Based on the insert arrangement of ZE series, AMC series connector is smaller size and lighter weight than ZE series. The contact density is equivalent to MIL-C-26482 series I.

- Bayonet quick coupling, firm locking, vibration and shock resistance
- 5 keyways polarization for blind mating and anti-mismatching
- 5 key orientation to avoid mis-mating
- Hyperboloid wire spring socket, smooth mating and low contact resistance
- Soldering termination
- Plug and receptacle loaded with pins or sockets



- Standard: 21E/103.026.000JT

Main technical characteristics

[Mechanical]

—Shell: high strength aluminum alloy

Shielding plating: olive-green, zinc plating, passive, electroless nickel plating

Non-shielding plating: black anodized

—Insulator: thermosetting

—Grommet and sealing ring: silicone rubber

—Contact material: copper alloy with gold plating

—Vibration: frequency 10~2000Hz, acceleration: 196 m/s²

—Shock: acceleration 980 m/s²

—Constant acceleration: 980 m/s²

—Endurance: 1000 cycles

[Electrical]

—Contact resistance and current rating

Contact size (mm)	Contact resistance (mΩ)	Current rating (A)	I.D. of barrel (mm)
φ1.0	5	5	φ1.3
φ1.5	2.5	10	φ1.8
φ2.0	1.25	20	φ2.5
φ3.0	0.75	40	φ3.4

—Rated voltage, withstanding voltage and Insulation resistance:

Operation environment	Rated voltage (V)	Withstanding voltage (V)	Insulation resistance (MΩ)
normal temp.	500	1500	≥5000
Damp heat	500	1125	≥100
Altitude (1kPa)	250	300	—

—Continuity between shells

Aluminum alloy shell ≤2.5mΩ

[Environmental]

—Operation temperature: -55°C~+200°C

—RH: 95% at 40°C

—Salt spray: 96h for electroless nickel plating
1000h for stainless steel passive

—Altitude: 30000m

Humidity resistance, corrosion resistance, fungus resistance, rain resistance and dust proof



Ordering information

1. Un-sealed plug and receptacle

Basic series	AMC	14	T	4	K1	P1	(W)
Shell size	12-14-18-22-24-27-30-33-36—39						
Type	T plug F square flange receptacle (ZEGB for PCB square flange receptacle) Y circular receptacle						
Number of contact	1~ 62 (See the insert arrangement)						
Contact type	Z1 pin, gold plating K1 socket, gold plating						
Shell plating	Shielding plating: P1 thread termination, with accessory, electroless nickel plating P2 thread termination, with accessory, olive-green cadmium plating, passive P3 thread termination, with accessory, olive-green zinc plating, passive P40 thread termination, with accessory, stainless steel, passive Non-shielding plating: E thread termination, with accessory, black anodized (The following are only applicable to square flange receptacle and PCB square flange receptacle) Shielding plating: D1 non-thread termination, electroless nickel plating D2 non-thread termination, olive-green cadmium plating, passive D3 non-thread termination, olive-green zinc plating, passive D40 non-thread termination, stainless steel, passive Non-shielding plating: : (blank) non-thread termination, black anodized						
Polarization	blank-N, (W)-W, (X)-X, (Y)-Y, (Z)-Z						

Note: For more detail, see ZE and its variation electrical connector accessory

[Part number identification example]

(1) AMC14T4Z1P1

AMC series, 14# shell, plug with 4 gold plated pins, shielding, electroless nickel plating, N polarization

(2)AMC14F4K1P1

AMC series, 14# shell, square flange receptacle with 4 gold plated sockets (thread termination), shielding, electroless nickel plating, N polarization



Ordering information

[Thru-bulkhead sealed adaptor]

Basic series	AMC	14	S	4	M1	D1
Shell size	12-14-18-22-24-27-30-33-36—39					
Type	S jam nut thru-bulkhead sealed adaptor, socket outside panel, pin inside panel S(0) jam nut thru-bulkhead sealed adaptor, pin outside panel, socket inside panel S(1) square flange thru-bulkhead sealed adaptor, socket outside panel, pin inside panel S(2) square flange thru-bulkhead sealed adaptor, pin outside panel, socket inside panel					
Number of contact	1~62 (See the insert arrangement)					
Contact type	M1 potting and sealing, gold plating contact					
Shell plating	Shielding plating: D1 electroless nickel plating D3 olive-green zinc plating, passive D40 stainless steel, passive Non-shielding plating: (blank) black anodized					
Polarization	blank-N, (W)-W, (X)-X, (Y)-Y, (Z)-Z					

[P/N identification example]

AMC14S4M1D1(W)

AMC series, 14# shell size, jam nut thru-bulkhead sealed adaptor, socket outside panel, pin inside panel, 4 contacts with gold plating, electroless nickel plating, W polarization

[Glass sintered square flange sealed receptacle]

Basic series	AMC	14	F	4	M	-07
Shell size	12-14-18-22-24-27-30-33-36					
Type	F square flange sealed receptacle					
Number of contact	1~62 (See the insert arrangement)					
Contact type	M glass sintered sealed, nickel electroplating shell, nickel plating contact M1 glass sintered sealed, nickel electroplating shell, gold plating contact					
Polarization	blank-N, (W)-W, (X)-X, (Y)-Y, (Z)-Z					
Alternative	-07—stainless steel shell (the mounting dimension is different from that of the normal glass sintered receptacle, see recommended cut-out dimension on XCE-F-M-07)					

[P/N identification example]

AMC14F4M(W)

AMC series, 14# shell size, square flange sealed receptacle, glass sintered sealing, nickel electroplating shell, 4 contacts with nickel plating, W polarization



Outline

dimensions AMC

	shell size	D1	D2
	12	19	12
	14	21	14
	18	28	18
	22	32	22
	24	34	24
	27	37	27
	30	40	30
	33	43	33
	36	46	36
	39	49	39

AMC square flange receptacle (thread termination)

	shell size	D1	D2	B	E
	12	13.7	12	23	17
	14	15.7	14	25	19
	18	19.7	18	27.5	21.5
	22	23.7	22	30	24
	24	25.7	24	32	26
	27	28.7	27	34.5	28
	30	31.7	30	36.5	30
	33	34.7	33	39.5	32.5
	36	37.7	36	41	34
	39	40.7	39	43	36

AMC square flange receptacle (non-thread termination)

	shell size	D1	D2	B	E
	12	13.7	12	23	17
	14	15.7	14	25	19
	18	19.7	18	27.5	21.5
	22	23.7	22	30	24
	24	25.7	24	32	26
	27	28.7	27	34.5	28
	30	31.7	30	36.5	30
	33	34.7	33	39.5	32.5
	36	37.7	36	41	34
	39	40.7	39	43	36

AMC circular receptacle

	shell size	D1	D2
	12	15	12
	14	17	14
	18	21	18
	22	25	22
	24	27	24
	27	30	27
	30	33	30
	33	36	33
	36	39	36
	39	42	39



AMCB Receptacle

	shell size	D1	D2	B	E
	12	13.7	12	23	17
	14	15.7	14	25	19
	18	19.7	18	27.5	21.5
	22	23.7	22	30	24
	24	25.7	24	32	26
	27	28.7	27	34.5	28
	30	31.7	30	36.5	30
	33	34.7	33	39.5	32.5
	36	37.7	36	44	34

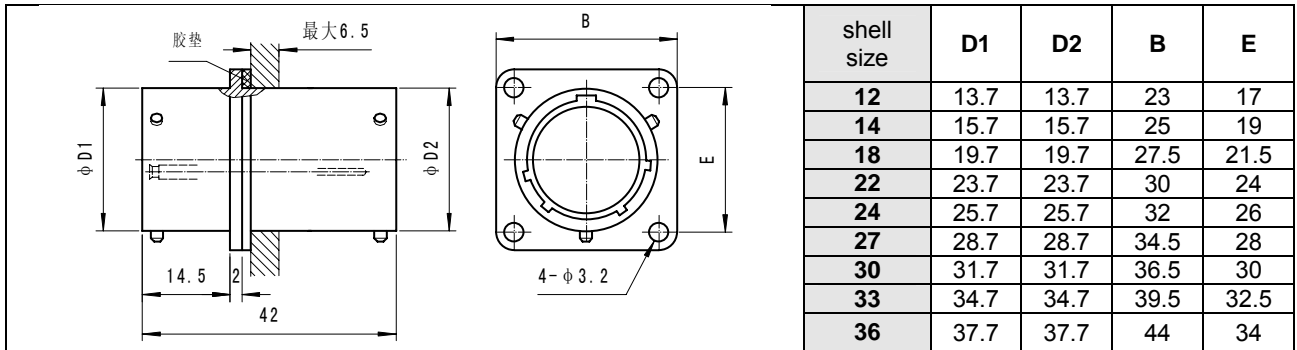
AMC-S-M jam nut thru-bulkhead sealed adaptor (socket outside panel, pin inside panel)

	shell size	D1	D2
	12	27	16
	14	27	18
	18	31	22
	22	36	27
	24	36	27
	27	39	30
	30	42	33
	33	45	36
	36	48	39

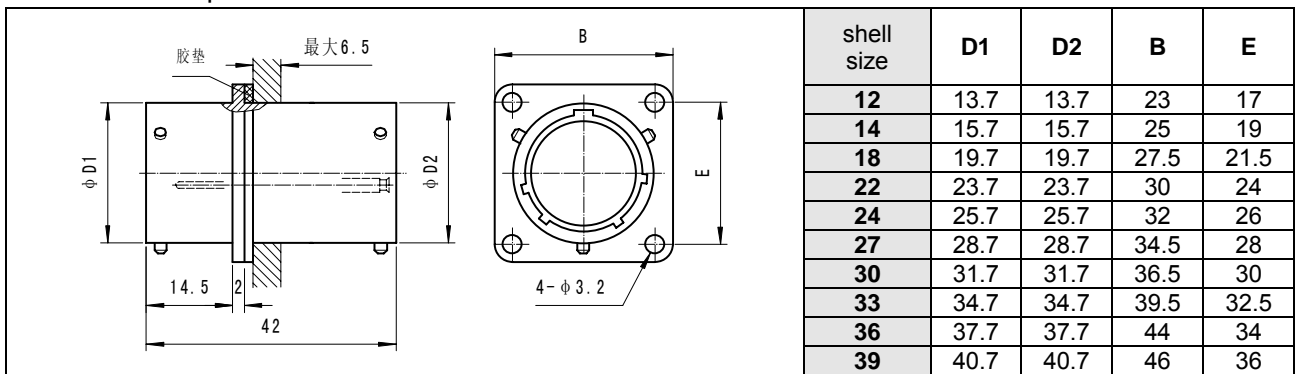
AMC-S (0) -M jam nut thru-bulkhead sealed adaptor (pin outside panel, socket outside panel)

	shell size	D1	D2
	12	27	16
	14	27	18
	18	31	22
	22	36	27
	24	36	27
	27	39	30
	30	42	33
	33	45	36
	36	48	39

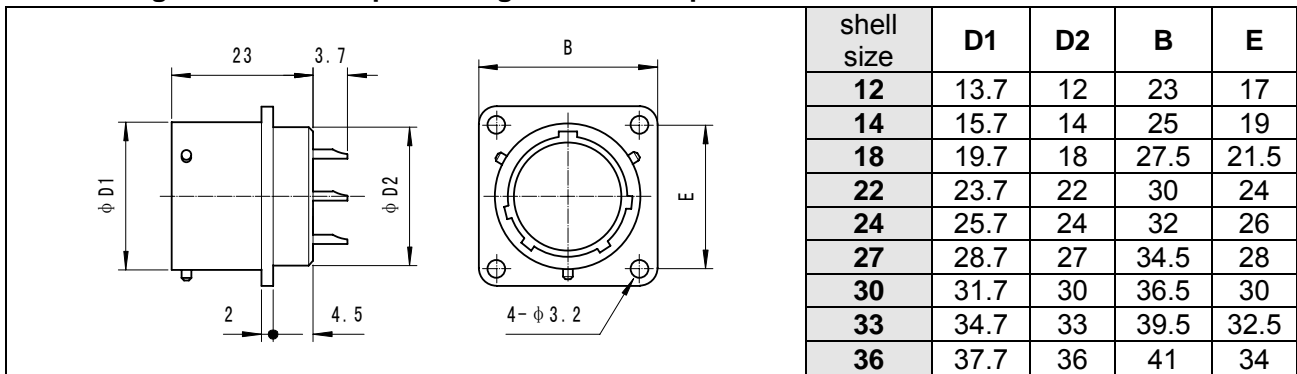
AMC-S(1)-M square flange thru-bulkhead sealed adaptor (socket outside panel, pin inside panel)



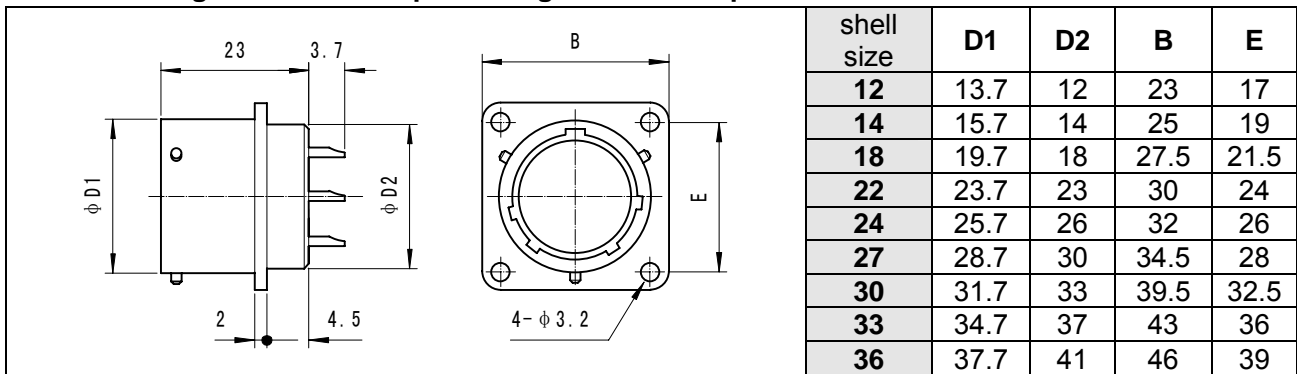
AMC-S(2)-M square flange thru-bulkhead sealed adaptor (pin outside panel, socket outside panel)



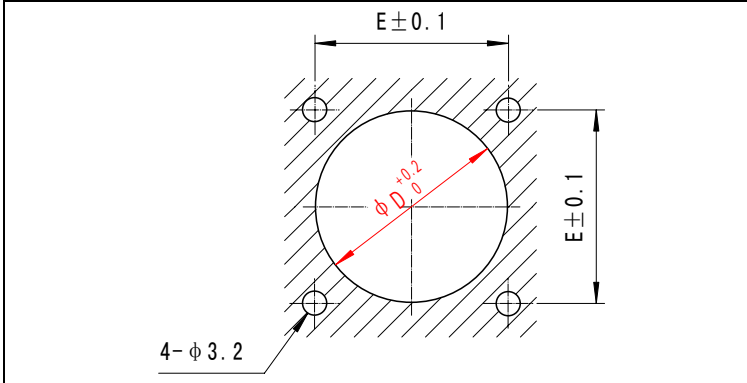
AMC-F-M glass sintered square flange sealed receptacle



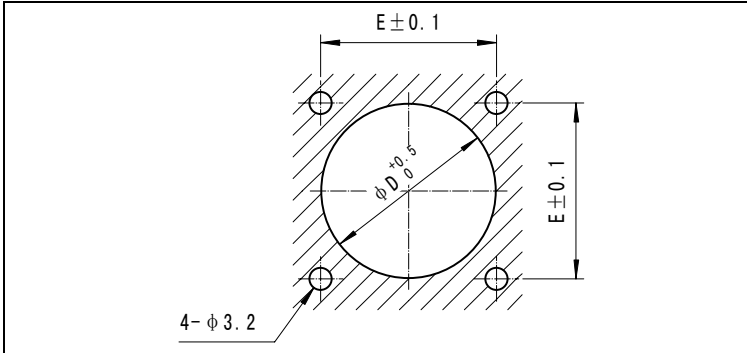
AMC-F-M-07 glass sintered square flange sealed receptacle



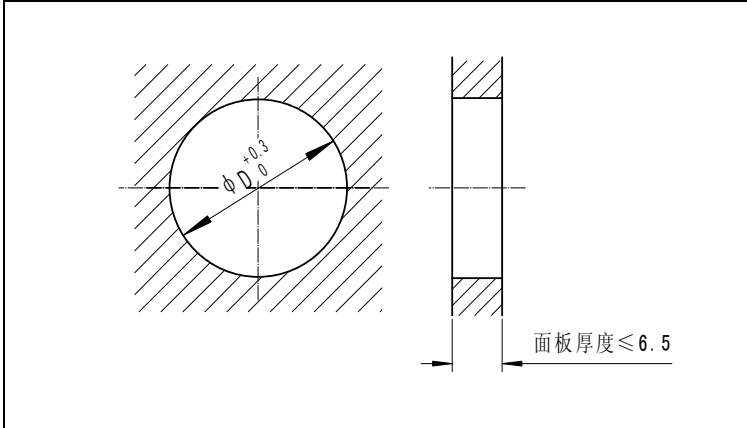
AMC, AMCB, AMC-F-M receptacle recommended panel cut-out dimension

	shell size	D	E
	12	12.3	17
	14	14.3	19
	18	18.3	21.5
	22	22.3	24
	24	24.3	26
	27	27.3	28
	30	30.3	30
	33	33.3	32.5
	36	36.3	34
39	39.3	36	

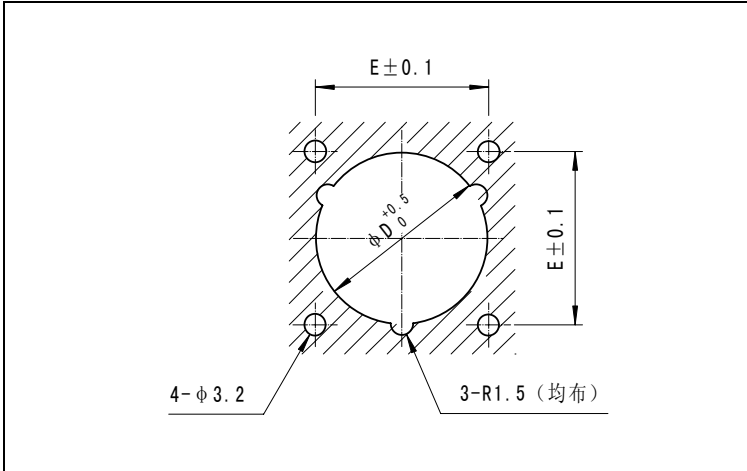
AMC-F-M-07 receptacle recommended panel cut-out dimension

	shell size	D	E
	12	12.5	17
	14	14.5	19
	18	18.5	21.5
	22	23.5	24
	24	26.5	26
	27	30.5	28
	30	33.5	32.5
	33	37.5	36
	36	41.5	39

AMC-S-M, AMC-S (0) -M receptacle recommended panel cut-out dimension

	shell size	D
	12	16.5
	14	18.5
	18	22.5
	22	27.5
	24	28.2
	27	31.2
	30	34.2
	33	37.2
	36	40.2

AMC-S(1)-M, AMC-S(2)-M receptacle recommended panel cut-out dimension

	shell size	D	E
	12	14	17
	14	16	19
	18	20	21.5
	22	24	24
	24	26	26
	27	29	28
	30	32	30
	33	35	32.5
	36	38	34
39	41	36	

AMC Series Insert Arrangement (front face of pin insert)

壳体号 12	2		3					
14	3		4		7	4-01*		
18	10		11		4			
22	3		4		5			
				12		14		
				19				
24	14		19		26			
27	12		15		19		22	
							30	
30	22		27		35		41	
33	40		41		55			
36	16		35		36		37	
36	47		48		51		62	
39	85							

○ $\phi 1.0$ 接触件 ◐ $\phi 1.5$ 接触件 ◑ $\phi 2.0$ 接触件 ◒ $\phi 3.0$ 接触件

Note:-01 in 4-01 insert arrangement should be marked on the end, for example XCG18T4ZP-01

AMCB PCB Wiring Recommended Dimensions (Printing face of pin insert)

