



Where Quality and High Performance Run Deep

Standard Navy Connectors and Cable Assemblies

MIL-24231 Connectors

MIL-24217 Connectors

Glass Seal Connectors

Custom Molded Cable Assemblies

Systems / Solutions Engineering Services

More than a catalog



AEGIS™



GLASSEAL
PRODUCTS™



HERMETIC
SEAL™



AMETEK
SCP®, Inc.



SEALTRON™



We can start with raw materials and provide solutions all the way to finished products!

AMETEK EIP Product Lines

Materials

Simple
Parts

Complex
Components

Assemblies

Services

Material Science

Systems Engineering

Metal Alloy
Fabrication



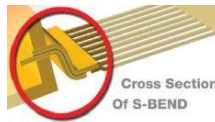
Solder and
Braze
Preforms

Lids

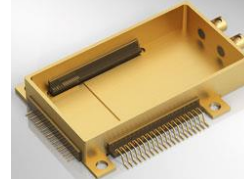


Package Enclosures

Design Engineering



RF transitions



Testing,
Analytics



Wire

Transistor
Outlines



Strip



Multi pin
headers



Connectors &
Penetrators



Foils &
Membranes



Connector Elements



Fiber
Optics



Field Repairs



We provide Systems / Solutions Engineering Services.

Let us help you optimize your connectivity.

We add more value than just selecting a part from a catalog.

Let us show you how we can provide your solution with: Weight Reductions, Cost Savings, Increased Mission Availability, Increased Mission Capability, Enhanced Maintainability In situ Repairs, and Schedule improvements.

AMETEK EIP Divisions



**AMETEK
SCP®, Inc.**

- Submarine hull penetrators
- Naval and Subsea cabling systems
- Polymer molding, High pressure testing



**GLASSEAL
PRODUCTS™**

- Hermetic end seals and headers
- Custom hermetic lids
- GTMS, High Volume Plating



**HERMETIC
SEAL™**

- Custom hermetic connectors
- Custom hermetic headers
- GTMS, GTFS, Plating, High Pressure / High temperature testing



SEALTRON™

- Mil-Spec standard hermetic connectors.
- Round hermetic connectors
- GTMS, Plating



AEGIS™

- High performance custom packages.
- High volume semiconductor packaging
- GTMS, RF, Ceramic, Plating



Providing support to Submarine fleets across the globe



AMETEK supports all of the major systems including: Propulsion, Infrastructure, Communication, Navigation, Weapons, and Intelligence

- | | | | |
|----------------|-------------------|-------------------------------|---------------------|
| 1. Torpedoes | 6. Fiber Optics | 11. Vertical Launch Systems | 16. Countermeasures |
| 2. Sonars | 7. RF / Microwave | 12. Magnetic Door Control | 17. Engine Room |
| 3. Transducers | 8. Photonics | 13. Pressure Hull Penetrators | 18. Ballast Tanks |
| 4. Hydrophones | 9. Antennas | 14. Splice Blocks | 19. LVA Sonar |
| 5. Lighting | 10. Dip Loop | 15. Towed Arrays | 20. Junction Boxes |

AMETEK specializes in customizing interconnect submarine solutions to meet customer requirements. Utilizing our engineering, operations and testing experience in providing qualified products for US and international Navies, AMETEK SCP provides cost-effective solutions to submarine interconnection requirements, including electrical, fiber-optic, and control and signal connections.

As a starting point for design consideration, the following pages describe US military standard connectors and cable assemblies that AMETEK can provide.



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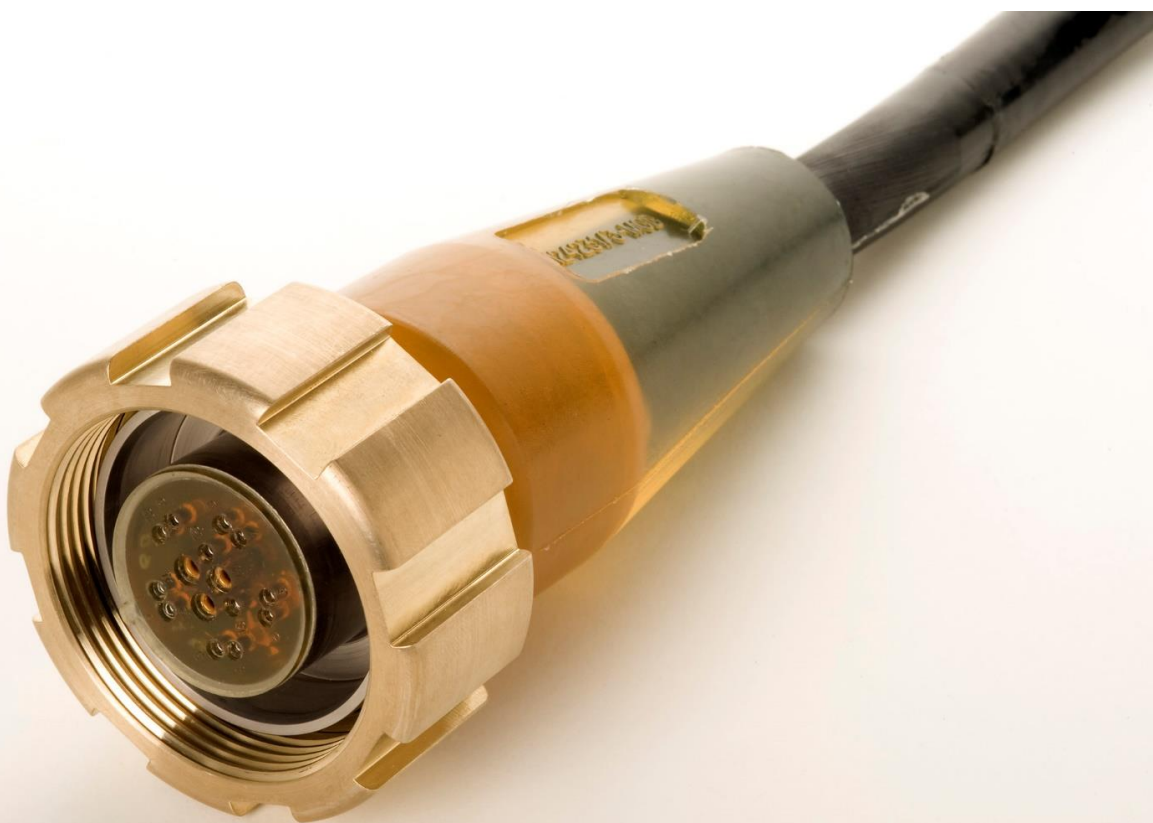


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MIL-C 24231 SERIES





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MIL-C-24231 SERIES INTRODUCTION

AMETEK M24321 series connectors are manufactured and tested in accordance with the strict requirements of MIL-C-24231 (US Navy). They are available in all standard shell sizes and contact configurations, ranging from 3 pin to 40 pin. As will all AMETEK connectors, plugs can be supplied terminated and molded into water-proof cable assemblies or supplied in kit form. AMETEK also offers a metal shell GRE overcoated version for applications where cathodic delamination is a problem. This version also offers a GRE backed polyurethane insert which eliminates water leakage through the connector when cable damage occurs. Choose one of the standard shell configurations or have one custom designed for your requirement. AMETEK design engineers are available for consultation.

Materials

<u>Item</u>	<u>Plug</u>	<u>Receptacle</u>	<u>Fittings</u>	<u>Specification</u>
Shell	Ni-Copper	Ni-Copper	Ni-Al-Copper	QQ-N-281 QQ-N-286
Coupling	Ni-Al-BRZ			ASTM B150
Insulator	Polyurethane	Epoxy		
Contact	Copper	Alloy	Copper Alloy	
Plating	Gold	Gold	Gold	MIL-G-45204

Electrical Data

Insulation Resistance: 2,000 megohms or greater when measured between any pair of contacts and between contacts and shell using 500 volts DC test. Shield to ground 100 megohms.

High Potential: As indicated by the applicable cable specification or 1,600 volts (RMS) 60 hertz, whichever is lower, applied between any two adjacent contacts or between receptacle or plug shell and any contact, for a duration of one minute.

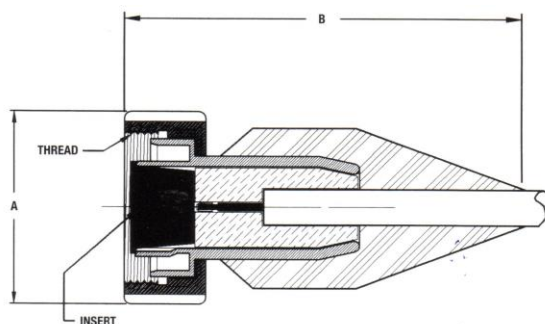
Contact Rating:

<u>Size</u>	<u>Test Current (Amps)</u>
16	13

Environmental Data

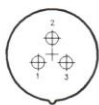
Hydrostatic pressure: 2,000 psi

CONNECTOR, PLUG, STRAIGHT - MIL-C-24231

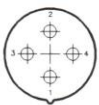


PART NUMBER	MILITARY PART NUMBER	SYMBOL NUMBER	"A" DIM	"B" DIM	THREAD UN-2B	INSERT (SOCKET)
CP1413-3	M24231/1-001	713	2.00	5.21	1.688-12	3 EA. #16
CP1413-4	M24231/1-002	713.6	2.00	5.21	1.688-12	4 EA. #16
CP1413-5	M24231/1-003	N/A	2.00	5.21	1.688-12	5 EA. #16
CP1414-7	M24231/3-001	713.1	2.50	5.21	2.000-12	7 EA. #16
CP1414-9	M24231/3-002	713.7	2.50	5.21	2.000-12	9 EA. #16
CP1415-6	N/A	N/A	3.37	6.09	2.750-12	6 EA. #16
CP1415-14	M24231/4-001	713.2	3.37	6.09	2.750-12	14 EA. #16
CP1415-24	M24231/4-002	713.3	3.37	6.09	2.750-12	24 EA. #16
CP1415-30	M24231/4-003	713.4	3.37	6.09	2.750-12	30 EA. #16
CP1415-40	M24231/4-004	713.10	3.37	6.09	2.750-12	40 EA. #16
CP1414-3	M24231/23-001	713.9	2.50	5.21	2.000-12	3 EA. #12

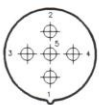
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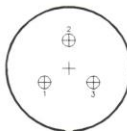
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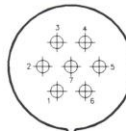
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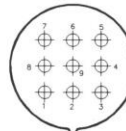
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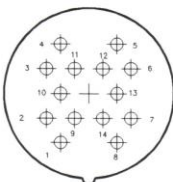
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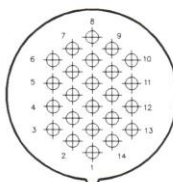
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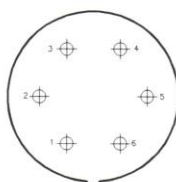
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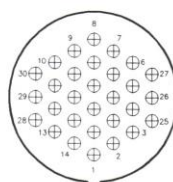
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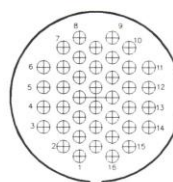
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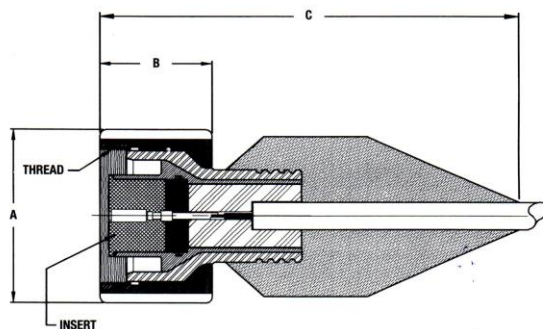


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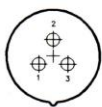
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CONNECTOR, PLUG, STRAIGHT - MIL-C-24231 GLASS REINFORCED EXPOXY OVERCOAT

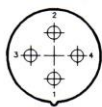


PART NUMBER	MILITARY PART NUMBER (EQUIV.)	SYMBOL NUMBER	"A" DIM	"B" DIM	"C" DIM	THREAD UN-2B	INSERT (SOCKET)
CP1310-3	M24231/1-001	713.3	2.00	1.61	5.47	1.688-12	3 EA. #16
CP1310-4	M24231/1-002	713.6	2.00	1.61	5.47	1.688-12	4 EA. #16
CP1310-5	M24231/1-003	N/A	2.00	1.61	5.47	1.688-12	5 EA. #16
CP1311-7	M24231/3-003	713.1	2.50	1.61	5.47	2.000-12	7 EA. #16
CP1311-9	M24231/3-004	713.7	2.50	1.61	5.47	2.000-12	9 EA. #16
CP1312-6	N/A	N/A	3.37	2.06	6.03	2.750-12	6 EA. #16
CP1312-14	M24231/4-006	713.2	3.37	2.06	6.03	2.750-12	14 EA. #16
CP1312-24	M24231/4-007	713.3	3.37	2.06	6.03	2.750-12	24 EA. #16
CP1312-30	M24231/4-008	713.4	3.37	2.06	6.03	2.750-12	30 EA. #16
CP1312-40	M24231/4-009	713.10	3.37	2.06	6.03	2.750-12	40 EA. #16
CP1311-3	M24231/23-001	713.9	2.50	1.61	5.47	2.000-12	3 EA. #12

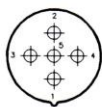
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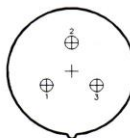
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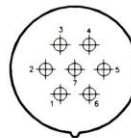
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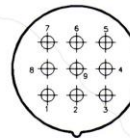
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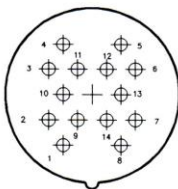
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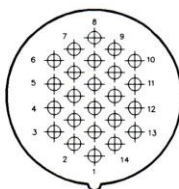
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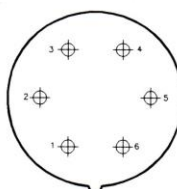
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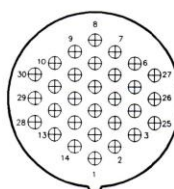
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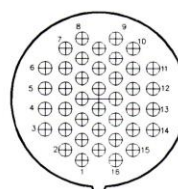
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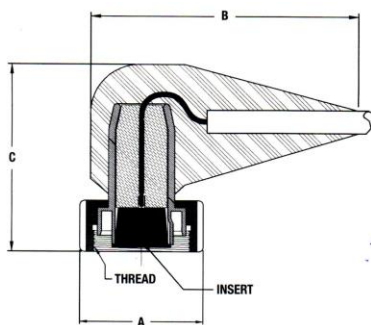


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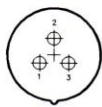
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CONNECTOR, PLUG, RIGHT ANGLE - MIL-C-24231

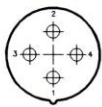


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CP1413-4-90	M24231/2-002	713.8	2.00	4.37	3.75	1.688-12	4 EA. #16
CP1413-5-90	M24231/2-003	N/A	2.00	4.37	3.75	1.688-12	5 EA. #16
CP1414-7-90	M24231/3-003	N/A	2.50	4.87	3.75	2.000-12	7 EA. #16
CP1414-9-90	M24231/3-004	N/A	2.50	4.87	3.75	2.000-12	9 EA. #16
CP1415-6-90	N/A	N/A	3.37	5.43	5.37	2.750-12	6 EA. #16
CP1415-14-90	M24231/4-006	N/A	3.37	5.43	5.37	2.750-12	14 EA. #16
CP1415-24-90	M24231/4-007	N/A	3.37	5.43	5.37	2.750-12	24 EA. #16
CP1415-30-90	M24231/4-008	N/A	3.37	5.43	5.37	2.750-12	30 EA. #16
CP1415-40-90	M24231/4-009	N/A	3.37	5.43	5.37	2.750-12	40 EA. #16
CP1414-3-90	N/A	N/A	2.50	4.87	3.75	2.000-12	3 EA. #12

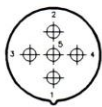
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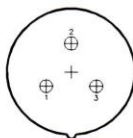
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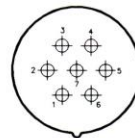
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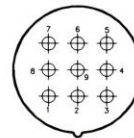
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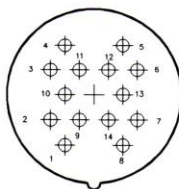
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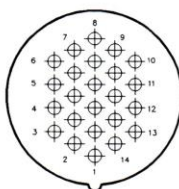
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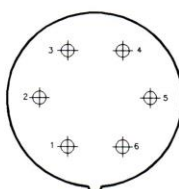
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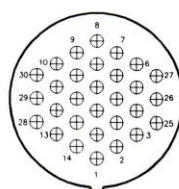
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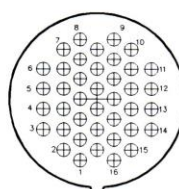
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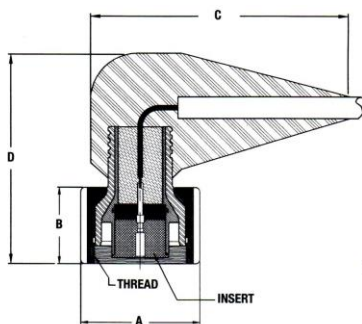


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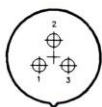
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CONNECTOR, PLUG, RIGHT ANGLE - MIL-C-24231 GLASS REINFORCED EPOXY OVERCOAT

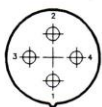


PART NUMBER	MILITARY PART NUMBER (EQUIV.)	SYMBOL NUMBER	"A" DIM	"B" DIM	"C" DIM	"D" DIM	THREAD UN-2B	INSERT (SOCKET)
CP1310-3-90	M24231/2-001	713.5	2.00	1.61	4.93	4.18	1.688-12	3 EA. #16
CP1310-4-90	M24231/2-002	713.8	2.00	1.61	4.93	4.18	1.688-12	4 EA. #16
CP1310-5-90	M24231/2-003	N/A	2.00	1.61	4.93	4.18	1.688-12	5 EA. #16
CP1311-3-90	N/A	N/A	2.50	1.61	4.93	4.18	2.000-12	3 EA. #12
CP1311-7-90	M24231/3-003	N/A	2.50	1.61	4.93	4.18	2.000-12	7 EA. #16
CP1311-9-90	M24231/3-004	N/A	2.50	1.61	4.93	4.18	2.000-12	9 EA. #16
CP1312-6-90	N/A	N/A	3.37	2.06	5.06	4.34	2.750-12	6 EA. #16
CP1312-14-90	M24231/4-006	N/A	3.37	2.06	5.18	5.03	2.750-12	14 EA. #16
CP1312-24-90	M24231/4-007	N/A	3.37	2.06	5.18	5.03	2.750-12	24 EA. #16
CP1312-30-90	M24231/4-008	N/A	3.37	2.06	5.18	5.03	2.750-12	30 EA. #16
CP1312-40-90	M24231/4-009	N/A	3.37	2.06	5.18	5.03	2.750-12	40 EA. #16

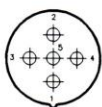
CONFIGURATIONS AVAILABLE



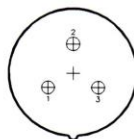
3 EACH #16



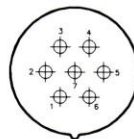
4 EACH #16



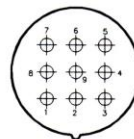
5 EACH #16



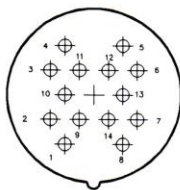
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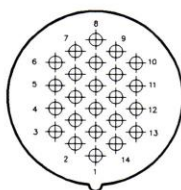
7 EACH #16



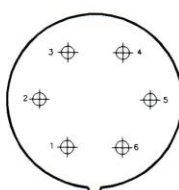
9 EACH #16



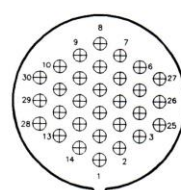
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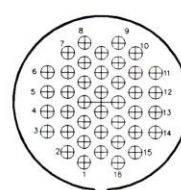
24 EACH #16



6 EACH #16

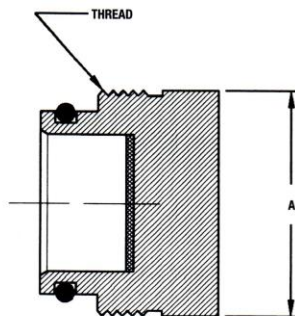


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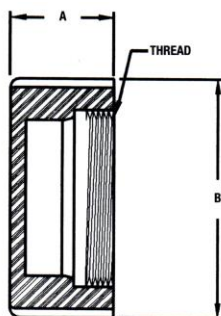
40 EACH #16

PRESSURE-PROOF SEALING PLUG - MIL-C-24231



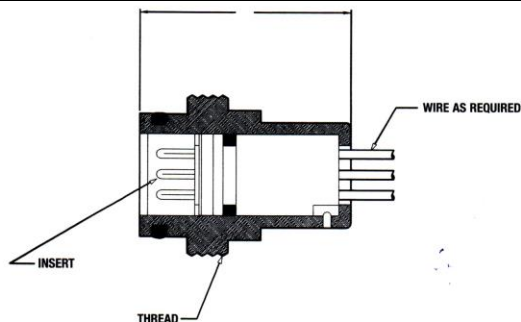
PART NUMBER	MILITARY PART NUMBER	"A" DIM	THREAD UN-2A	FOR USE WITH SEA CON®/PHOENIX CONNECTOR PLUG
SP1437-1	M24231/1-020	1.75	1.688-12	CP1310, CP1413
SP1437-2	M24231/3-020	2.00	2.000-12	CP1311, CP1414
SP1437-3	M24231/4-020	2.75	2.750-12	CP1312, CP1415

PRESSURE-PROOF SEALING CAP - MIL-C-24231



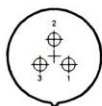
PART NUMBER	MILITARY PART NUMBER	"A" DIM	"B" DIM	THREAD UN-2B	FOR USE WITH SEA CON®/PHOENIX CONNECTOR RECEPTACLE
SC1442-1	M24231/12-011	1.06	2.00	1.688-12	CR1438
SC1442-2	M24231/13-011	1.06	2.50	2.000-12	CR1439
SC1442-3	M24231/14-011	1.31	3.37	2.750-12	CR1440

CONNECTOR, RECEPTACLE - MIL-C-24231 MULTI-PIN, WELD MOUNT

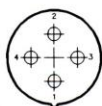


PART NUMBER	MILITARY PART NUMBER	SYMBOL NUMBER	"A" DIM	THREAD UN-2A	INSERT (PIN)
CR1438-3	M24231/12-001 M24231/12-002	737 737.4	2.34	1.688-12	3 EA. #16
CR1438-4	M24231/12-003	737.7	2.34	1.688-12	4 EA. #16
CR1438-5	M24231/12-004	N/A	2.34	1.688-12	5 EA. #16
CR1439-7	M24231/13-001 M24231/13-002 M24231/13-003	737.1 737.6 737.9	2.34	2.000-12	7 EA. #16
CR1439-9	N/A	N/A	2.34	2.000-12	9 EA. #16
CR1440-6	N/A	N/A	2.41	2.750-12	6 EA. #16
CR1440-14	M24231/14-001	737.2	2.41	2.750-12	14 EA. #16
CR1440-24	M24231/14-002	737.3	2.41	2.750-12	24 EA. #16
CR1440-30	M24231/14-003	737.5	2.41	2.750-12	30 EA. #16
CR1440-40	M24231/14-004	737.8	2.41	2.750-12	40 EA. #16
CR1439-3	N/A	N/A	2.41	2.000-12	3 EA. #12

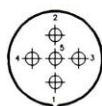
CONFIGURATIONS AVAILABLE



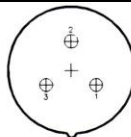
3 EACH #16



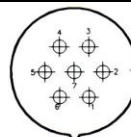
4 EACH #16



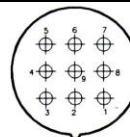
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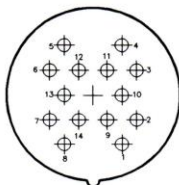
3 EACH #12



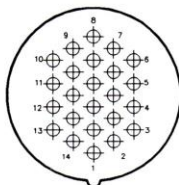
7 EACH #16



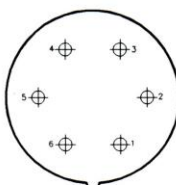
9 EACH #16



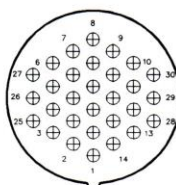
14 EACH #16



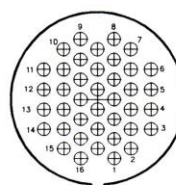
24 EACH #16



6 EACH #16



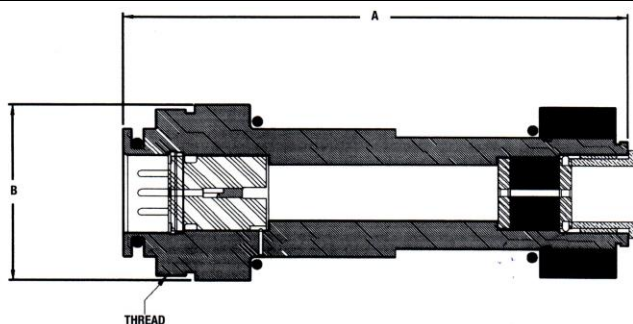
30 EACH #16



40 EACH #16



CONNECTOR, RECEPTACLE - MIL-C-24231 MULTI-PIN, BULKHEAD FEED THRU



PART NUMBER	MILITARY PART NUMBER	SYMBOL NUMBER	"A" DIM	"B" DIM	THREAD UN-2A	INSERT (PIN)
CR1452-1	M24231/5-001	517	7.71	2.75	1.688-12	3 EA. #16
CR1452-2	M24231/5-002	517.11	7.71	2.75	1.688-12	4 EA. #16
CR1452-3	M24231/5-003	N/A	7.71	2.75	1.688-12	5 EA. #16
CR1453-1	M24231/6-001	517.4	7.71	2.75	1.688-12	3 EA. #16
CR1454-1	M24231/7-001	517.1	7.71	2.75	2.000-12	7 EA. #16
CR1455-1	M24231/8-001	517.8	7.71	2.75	2.000-12	7 EA. #16
CR1455-2	M24231/8-002	517.7	7.71	2.75	2.000-12	7 EA. #16
CR1455-3	M24231/8-003	517.9	7.71	2.75	2.000-12	7 EA. #16
CR1456-1	M24231/9-001	517.5	7.71	2.75	2.000-12	7 EA. #16
CR1456-2	M24231/9-002	517.12	7.71	2.75	2.000-12	9 EA. #16
CR1456-3	M24231/9-003	N/A	7.71	2.75	2.000-12	9 EA. #16
CR1457-1	M24231/10-001	517.2	8.43	3.37	2.750-12	14 EA. #16
CR1457-2	M24231/10-002	517.3	8.43	3.37	2.750-12	24 EA. #16
CR1457-3	M24231/10-003	517.6	8.43	3.37	2.750-12	30 EA. #16
CR1457-4	M24231/10-004	N/A	8.43	3.37	2.750-12	40 EA. #16
CR1457-5	M24231/10-005	N/A	8.43	3.37	2.750-12	40 EA. #16
CR1458-1	M24231/24-001	517.13	7.71	2.75	2.000-12	3 EA. #12
CR1459-1	M24231/26-001	1270	8.43	3.37	2.750-12	14 EA. #16
CR1459-2	M24231/26-002	1270.1	8.43	3.37	2.750-12	14 EA. #16
CR1459-3	M24231/26-003	1270.2	8.43	3.37	2.750-12	24 EA. #16

CONFIGURATIONS AVAILABLE

Please refer to page 1.6 for above configuration on the Receptacle Assembly – MIL-C-24231 Multi-Pin, Bulkhead Feed Thru.



ENGINEERED INTERCONNECT
AND PACKAGING



AEGIS™



GLASSEAL
PRODUCTS™



HERMETIC
SEAL™



AMETEK
SCP, Inc.



SEALTRON™

MIL-C 24217 SERIES





MIL-C-24217 SERIES

AMETEK M24217 series of hermetic connectors are manufactured and tested to the strict requirements of MIL-C-24217 (US Navy). This series of connectors is widely used in many undersea and military applications, and is also suitable for any operation where pressure, humidity, or temperature are factors of performance. A full range of receptacle mounting styles are available and contact configurations range from single coaxial to 48 size #16 conductors. As with all AMETEK connectors, plugs can be supplied terminated and molded into water-proof cable assemblies or supplied in kit form. Choose one of the standard Shell configurations or have one custom designed for your requirement. AMETEK design engineers are available for consultation.

Materials

Item	Plug	Receptacle	Specification
Shell	316SS	316LSS	QQ-S-763
Coupling Ring	Ni-Al-BRZ		ASTM B150
Insulator	Delrin	Glass	
Contacts	Copper Alloy	Steel/Alloy 52	
Plating	Gold	Gold	Mil-G-45204 Type II, CL3

Electrical Data

Insulation Resistance: >5,000 megohms or greater when measured between any pair of contacts and between contacts and shell using 500 volts DC test.

High Potential: 1,880 volts (RMS) 60 hertz, applied between contacts or between receptacle or plug shell for a duration of one minute.

Contact Rating:

Size	Test Current (Amps)
16	13
12	23
8	46
4	80
0	150

Environmental Data

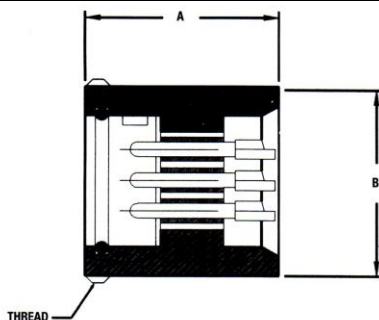
Hydrostatic Pressure: 10,000 psi open face
- 6,500 psi mated

Thermal Shock: -65F to +165F

Physical Shock: Mil-Std 202, Method 207

Vibration: 10-2,000 hertz at 10G

RECEPTACLE ASSEMBLY - MIL-C-24217/1 WELDED TYPE

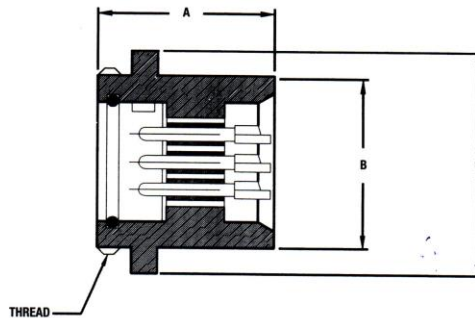


PART NUMBER	MILITARY PART NUMBER	"A" DIM	"B" DIM	THREAD 2A	NO. OF PINS
CR1443-1	M24217/1-001	1.62	1.12	1.250-12	3 EA. #16
CR1443-2	M24217/1-002	1.74	1.37	1.500-12	5 EA. #16
CR1443-3	M24217/1-003	1.87	1.58	1.750-12	9 EA. #16
CR1443-4	M24217/1-004	1.99	1.96	2.125-12	14 EA. #16
CR1443-5	M24217/1-005	2.12	2.34	2.500-12	24 EA. #16
CR1443-6	M24217/1-006	2.12	2.87	3.000-12	37 EA. #16
CR1443-7	M24217/1-007	2.41	3.75	3.750-12	48 EA. #16
CR1443-8	M24217/1-008	2.88	1.58	1.750-12	3 EA. #12
CR1443-9	M24217/1-009	2.88	2.00	2.125-12	5 EA. #12
CR1443-10	M24217/1-010	2.88	2.31	2.500-12	9 EA. #12
CR1443-11	M24217/1-011	2.88	2.00	2.125-12	3 EA. #8
CR1443-12	M24217/1-012	2.88	2.31	2.500-12	3 EA. #4
CR1443-13	M24217/1-013	2.88	2.31	2.500-12	3 EA. #12 3 EA. #8
CR1443-14	M24217/1-014	2.88	2.87	3.000-12	2 EA. #0 4 EA. #12
CR1443-15	M24217/1-015	1.62	1.12	1.250-12	5 EA. #16 (SPECIAL)

CONFIGURATIONS AVAILABLE

Please refer to page 2.16 for above configuration on the Receptacle Assembly – MIL-C-24217/1 Welded Type.

RECEPTACLE ASSEMBLY - MIL-C-24217/2 FLANGED-WELDED TYPE



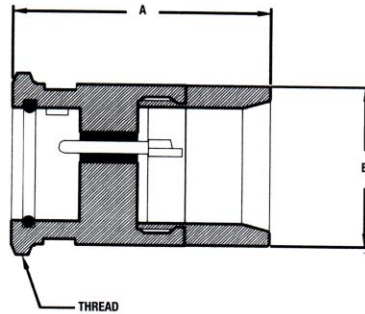
PART NUMBER	MILITARY PART NUMBER	"A" DIM	"B" DIM	"C" DIM	THREAD 2A	NO. OF PINS
CR1444-1	M24217/2-001	1.62	1.12	1.50	1.250-12	3 EA. #16
CR1444-2	M24217/2-002	1.74	1.37	1.87	1.500-12	5 EA. #16
CR1444-3	M24217/2-003	1.87	1.58	2.06	1.750-12	9 EA. #16
CR1444-4	M24217/2-004	1.99	1.96	2.50	2.125-12	14 EA. #16
CR1444-5	M24217/2-005	2.12	2.34	2.87	2.500-12	24 EA. #16
CR1444-6	M24217/2-006	2.12	2.87	3.37	3.000-12	37 EA. #16
CR1444-7	M24217/2-007	2.41	3.75	4.25	3.750-12	48 EA. #16
CR1444-8	M24217/2-008	2.88	1.58	2.06	1.750-12	3 EA. #12
CR1444-9	M24217/2-009	2.88	2.00	2.37	2.125-12	5 EA. #12
CR1444-10	M24217/2-010	2.88	2.31	2.75	2.500-12	9 EA. #12
CR1444-11	M24217/2-011	2.88	2.00	2.37	2.125-12	3 EA. #8
CR1444-12	M24217/2-012	2.88	2.31	2.75	2.500-12	3 EA. #4
CR1444-13	M24217/2-013	2.88	2.31	2.75	2.500-12	3 EA. #12 3 EA. #8
CR1444-14	M24217/2-014	2.88	2.87	3.37	3.000-12	2 EA. #0 4 EA. #12

CONFIGURATIONS AVAILABLE

Please refer to page 2.16 for above configuration on the Receptacle Assembly – MIL-C-24217/2 Flanged-Welded Type.



RECEPTACLE ASSEMBLY - MIL-C-24217/3 IN LINE TYPE

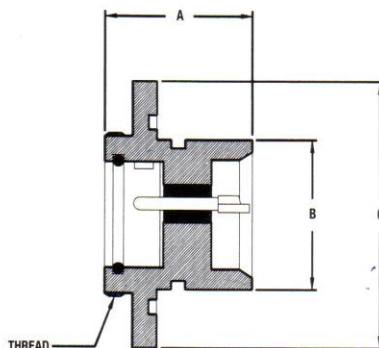


PART NUMBER	MILITARY PART NUMBER	"A" DIM	"B" DIM	THREAD 2A	NO. OF PINS
CR1445-1	M24217/3-001	2.25	1.06	1.250-12	3 EA. #16
CR1445-2	M24217/3-002	2.61	1.18	1.500-12	5 EA. #16
CR1445-3	M24217/3-003	3.04	1.50	1.750-12	9 EA. #16
CR1445-4	M24217/3-004	3.05	1.87	2.125-12	14 EA. #16
CR1445-5	M24217/3-005	3.42	2.31	2.500-12	24 EA. #16
CR1445-6	M24217/3-006	4.36	2.81	3.000-12	37 EA. #16
CR1445-7	M24217/3-007	4.33	3.62	3.750-12	48 EA. #16
CR1445-8	M24217/3-008	3.56	1.50	1.750-12	3 EA. #12
CR1445-9	M24217/3-009	3.56	1.87	2.125-12	5 EA. #12
CR1445-10	M24217/3-010	3.87	2.25	2.500-12	9 EA. #12
CR1445-11	M24217/3-011	3.56	1.87	2.125-12	3 EA. #8
CR1445-12	M24217/3-012	3.87	2.25	2.500-12	3 EA. #4
CR1445-13	M24217/3-013	3.87	2.25	2.500-12	3 EA. #12 3 EA. #8
CR1445-14	M24217/3-014	4.10	2.75	3.000-12	2 EA. #0 4 EA. #12

CONFIGURATIONS AVAILABLE

Please refer to page 2.16 for above configuration on the Receptacle Assembly – MIL-C-24217/3 In Line Type.

RECEPTACLE ASSEMBLY – MIL-C-24217/4 MID-FLANGED BOLTED TYPE



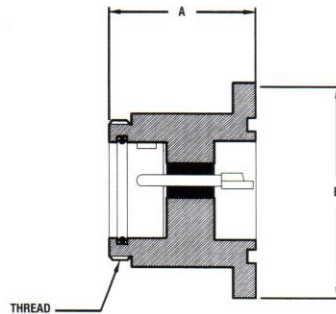
PART NUMBER	MILITARY PART NUMBER	"A" DIM	"B" DIM	"C" DIM	THREAD 2A	NO. OF PINS
CR1446-1	M24217/4-001	1.62	1.12	2.50	1.250-12	3 EA. #16
CR1446-2	M24217/4-002	1.74	1.37	2.75	1.500-12	5 EA. #16
CR1446-3	M24217/4-003	1.87	1.49	3.00	1.750-12	9 EA. #16
CR1446-4	M24217/4-004	1.99	1.87	3.37	2.125-12	14 EA. #16
CR1446-5	M24217/4-005	2.12	2.24	3.75	2.500-12	24 EA. #16
CR1446-6	M24217/4-006	2.12	2.74	4.43	3.000-12	37 EA. #16
CR1446-7	M24217/4-007	2.41	3.49	5.00	3.750-12	48 EA. #16
CR1446-8	M24217/4-008	2.88	1.49	3.00	1.750-12	3 EA. #12
CR1446-9	M24217/4-009	2.88	1.87	3.37	2.125-12	5 EA. #12
CR1446-10	M24217/4-010	2.88	2.24	3.75	2.500-12	9 EA. #12
CR1446-11	M24217/4-011	2.88	1.87	3.37	2.125-12	3 EA. #8
CR1446-12	M24217/4-012	2.88	2.24	3.75	2.500-12	3 EA. #4
CR1446-13	M24217/4-013	2.88	2.24	3.75	2.500-12	3 EA. #12 3 EA. #8
CR1446-14	M24217/4-014	2.88	2.74	4.43	3.000-12	2 EA. #0 4 EA. #12

CONFIGURATIONS AVAILABLE

Please refer to page 2.16 for above configuration on the Receptacle Assembly – MIL-C-24217/4 Mid-Flanged Bolted Type.



RECEPTACLE ASSEMBLY - MIL-C-24217/5 END-FLANGED BOLTED TYPE



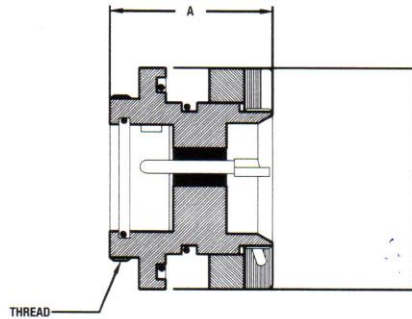
PART NUMBER	MILITARY PART NUMBER	"A" DIM	"B" DIM	THREAD 2A	NO. OF PINS
CR1447-1	M24217/5-001	1.62	2.12	1.250-12	3 EA. #16
CR1447-2	M24217/5-002	1.74	2.37	1.500-12	5 EA. #16
CR1447-3	M24217/5-003	1.87	2.62	1.750-12	9 EA. #16
CR1447-4	M24217/5-004	1.99	3.00	2.125-12	14 EA. #16
CR1447-5	M24217/5-005	2.12	3.37	2.500-12	24 EA. #16
CR1447-6	M24217/5-006	2.12	3.87	3.000-12	37 EA. #16
CR1447-7	M24217/5-007	2.41	4.62	3.750-12	48 EA. #16
CR1447-8	M24217/5-008	2.88	2.62	1.750-12	3 EA. #12
CR1447-9	M24217/5-009	2.88	3.00	2.125-12	5 EA. #12
CR1447-10	M24217/5-010	2.88	3.37	2.500-12	9 EA. #12
CR1447-11	M24217/5-011	2.88	3.00	2.125-12	3 EA. #8
CR1447-12	M24217/5-012	2.88	3.37	2.500-12	3 EA. #4
CR1447-13	M24217/5-013	2.88	3.37	2.500-12	3 EA. #12 3 EA. #8
CR1447-14	M24217/5-014	2.88	3.87	3.000-12	2 EA. #0 4 EA. #12

CONFIGURATIONS AVAILABLE

Please refer to page 2.16 for above configuration on the Receptacle Assembly – MIL-C-24217/5 End-Flanged Bolted Type.



RECEPTACLE ASSEMBLY - MIL-C-24217/6 LOCKNUT FLANGE TYPE



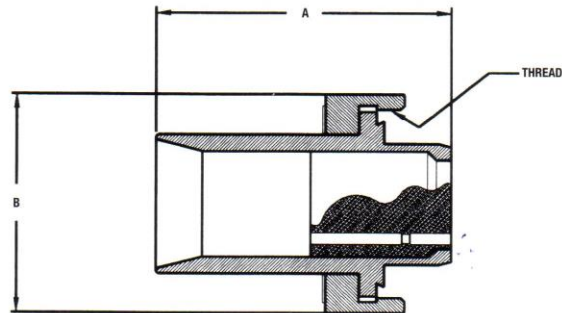
PART NUMBER	MILITARY PART NUMBER	"A" DIM	"B" DIM	THREAD 2A	NO. OF PINS
CR1448-1	M24217/6-001	1.62	1.87	1.250-12	3 EA. #16
CR1448-2	M24217/6-002	1.74	2.12	1.500-12	5 EA. #16
CR1448-3	M24217/6-003	1.87	2.25	1.750-12	9 EA. #16
CR1448-4	M24217/6-004	1.99	2.62	2.125-12	14 EA. #16
CR1448-5	M24217/6-005	2.12	3.12	2.500-12	24 EA. #16
CR1448-6	M24217/6-006	2.12	3.62	3.000-12	37 EA. #16
CR1448-7	M24217/6-007	2.41	4.37	3.750-12	48 EA. #16
CR1448-8	M24217/6-008	2.88	2.25	1.750-12	3 EA. #12
CR1448-9	M24217/6-009	2.88	2.62	2.125-12	5 EA. #12
CR1448-10	M24217/6-010	2.88	3.12	2.500-12	9 EA. #12
CR1448-11	M24217/6-011	2.88	2.62	2.125-12	3 EA. #8
CR1448-12	M24217/6-012	2.88	3.12	2.500-12	3 EA. #4
CR1448-13	M24217/6-013	2.88	3.12	2.500-12	3 EA. #12 3 EA. #8
CR1448-14	M24217/6-014	2.88	3.62	3.000-12	2 EA. #0 4 EA. #12
CR1448-15	M24217/6-015	1.59	1.87	1.375-12	8 EA. #16

CONFIGURATIONS AVAILABLE

Please refer to page 2.16 for above configuration on the Receptacle Assembly – MIL-C-24217/6 Locknut Flange Type.



PLUG ASSEMBLY - MIL-C-24217/7 STRAIGHT



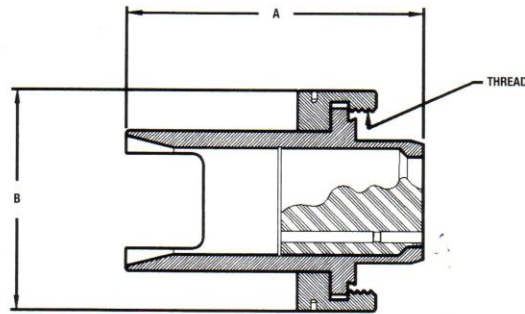
PART NUMBER	MILITARY PART NUMBER	"A" DIM	"B" DIM	THREAD 2B	NO. OF SOCKETS	CRIMP AWG
CP1462-1	M24217/7-001	2.31	1.37	1.250-12	3 EA. #16	16
CP1462-2	M24217/7-002	2.31	1.37	1.250-12	3 EA. #16	20
CP1462-3	M24217/7-003	2.51	1.75	1.500-12	5 EA. #16	16
CP1462-4	M24217/7-004	2.51	1.75	1.500-12	5 EA. #16	20
CP1462-5	M24217/7-005	2.62	2.00	1.750-12	9 EA. #16	16
CP1462-6	M24217/7-006	2.62	2.00	1.750-12	9 EA. #16	20
CP1462-7	M24217/7-007	3.01	2.37	2.125-12	14 EA. #16	16
CP1462-8	M24217/7-008	3.01	2.37	2.125-12	14 EA. #16	20
CP1462-9	M24217/7-009	3.13	2.75	2.500-12	24 EA. #16	16
CP1462-10	M24217/7-010	3.13	2.75	2.500-12	24 EA. #16	20
CP1462-11	M24217/7-011	3.38	3.50	3.000-12	37 EA. #16	16
CP1462-12	M24217/7-012	3.38	3.50	3.000-12	37 EA. #16	20
CP1462-13	M24217/7-013	3.63	4.12	3.750-12	48 EA. #16	16
CP1462-14	M24217/7-014	3.63	4.12	3.750-12	48 EA. #16	20
CP1462-15	M24217/7-015	3.08	2.00	1.750-12	3 EA. #12	N/A
CP1462-16	M24217/7-016	3.59	3.75	2.125-12	5 EA. #12	N/A
CP1462-17	M24217/7-017	3.59	2.75	2.500-12	9 EA. #12	N/A
CP1462-18	M24217/7-018	3.46	3.75	2.125-12	3 EA. #8	N/A
CP1462-19	M24217/7-019	3.59	2.75	2.500-12	3 EA. #4	N/A
CP1462-20	M24217/7-020	3.59	2.75	2.500-12	3 EA. #12 3 EA. #8	N/A
CP1462-21	M24217/7-021	3.84	3.37	3.000-12	2 EA. #0 4 EA. #12	N/A
CP1462-22	M24217/7-022	2.31	1.37	1.250-12	5 EA. #16 (SPECIAL)	16
CP1462-23	M24217/7-023	2.31	1.37	1.250-12	5 EA. #16 (SPECIAL)	20

CONFIGURATIONS AVAILABLE

Please refer to page 2.17 for above configuration on the Plug Assembly – MIL-C-24217/7 Straight.



PLUG ASSEMBLY - MIL-C-24217/8 RIGHT ANGLE



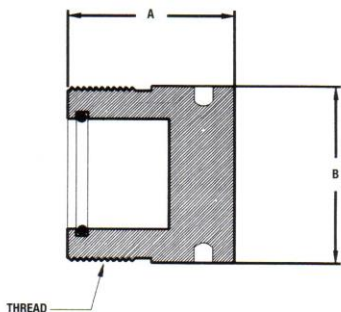
PART NUMBER	MILITARY PART NUMBER	"A" DIM	"B" DIM	THREAD 2B	NO. OF SOCKETS	CRIMP AWG
CP1466-1	M24217/8-001	2.31	1.37	1.250-12	3 EA. #16	16
CP1466-2	M24217/8-002	2.31	1.37	1.250-12	3 EA. #16	20
CP1466-3	M24217/8-003	2.51	1.75	1.500-12	5 EA. #16	16
CP1466-4	M24217/8-004	2.51	1.75	1.500-12	5 EA. #16	20
CP1466-5	M24217/8-005	2.62	2.00	1.750-12	9 EA. #16	16
CP1466-6	M24217/8-006	2.62	2.00	1.750-12	9 EA. #16	20
CP1466-7	M24217/8-007	3.01	2.37	2.125-12	14 EA. #16	16
CP1466-8	M24217/8-008	3.01	2.37	2.125-12	14 EA. #16	20
CP1466-9	M24217/8-009	3.13	2.75	2.500-12	24 EA. #16	16
CP1466-10	M24217/8-010	3.13	2.75	2.500-12	24 EA. #16	20
CP1466-11	M24217/8-011	3.38	3.50	3.000-12	37 EA. #16	16
CP1466-12	M24217/8-012	3.38	3.50	3.000-12	37 EA. #16	20
CP1466-13	M24217/8-013	3.63	4.12	3.750-12	48 EA. #16	16
CP1466-14	M24217/8-014	3.63	4.12	3.750-12	48 EA. #16	20
CP1466-15	M24217/8-015	3.08	2.00	1.750-12	3 EA. #12	N/A
CP1466-16	M24217/8-016	3.60	3.75	2.215-12	5 EA. #12	N/A
CP1466-17	M24217/8-017	3.60	2.75	2.500-12	9 EA. #12	N/A
CP1466-18	M24217/8-018	3.46	3.75	2.125-12	3 EA. #8	N/A
CP1466-19	M24217/8-019	3.60	2.75	2.500-12	3 EA. #4	N/A
CP1466-20	M24217/8-020	3.60	2.75	2.500-12	3 EA. #12, 3 EA. #8	N/A
CP1466-21	M24217/8-021	2.25	1.50	1.375-12	8 EA. #16	16
CP1466-22	M24217/8-022	3.01	2.37	2.125-12	14 EA. #16 (SPECIAL)	16
CP1466-25	M24217/8-025	5.01	3.37	3.000-12	2 EA. #0, 4 EA. #12	N/A
CP1466-26	M24217/8-026	5.12	3.63	3.250-12	3 EA. #0 (STYLE A)	N/A
CP1466-27	M24217/8-027	5.12	3.63	3.250-12	3 EA. #0 (STYLE B)	N/A
CP1466-28	M24217/8-028	5.12	3.63	3.250-12	3 EA. #0 (STYLE C)	N/A
CP1466-29	M24217/8-029	5.12	3.63	3.250-12	3 EA. #0 (STYLE D)	N/A

CONFIGURATIONS AVAILABLE

Please refer to page 2.17 for above configuration on the Receptacle Assembly – MIL-C-24217/8 Right Angle.



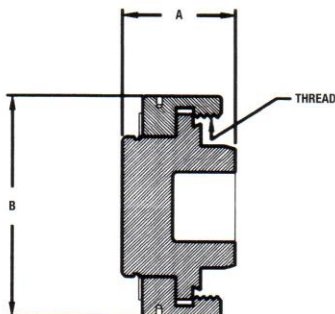
PRESSURE-PROOF PLUG CAP ASSEMBLY - MIL-C-24217/9



PART NUMBER	MILITARY PART NUMBER	"A" DIM	"B" DIM	THREAD 2A	FOR USE WITH PLUG TYPE
SP1463-1	M24217/9-001	2.00	1.25	1.250-12	3 EA. #16 & 5 EA. #16 (SPECIAL)
SP1463-2	M24217/9-002	2.00	1.50	1.500-12	5 EA. #16
SP1463-3	M24217/9-003	2.00	1.75	1.750-12	9 EA. #16 & 3 EA. #12
SP1463-4	M24217/9-004	2.00	2.12	2.125-12	14 EA. #16, 5 EA. #12 & 3 EA. #8
SP1463-5	M24217/9-005	2.00	2.50	2.500-12	24 EA. #16, 3 EA. #4, 9 EA. #12 & 3 EA. #12 With 3 EA. #8
SP1463-6	M24217/9-006	2.00	3.00	3.000-12	37 EA. #16 & 2 EA. #0 With 4 EA. #12
SP1463-7	M24217/9-007	2.00	3.75	3.750-12	48 EA. #16
SP1463-8	M24217/9-008	2.00	1.37	1.375-12	8 EA. #16
SP1463-9	M24217/9-009	2.00	3.25	3.250-12	3 EA. #0

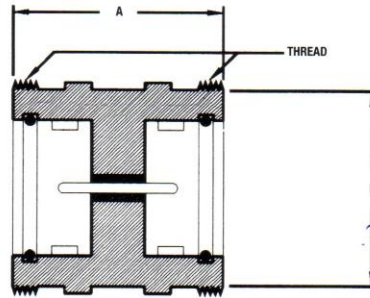


PRESSURE-PROOF RECEPTACLE CAP ASSEMBLY – MIL-C-24217/10



PART NUMBER	MILITARY PART NUMBER	"A" DIM	"B" DIM	THREAD 2B	FOR USE WITH RECEPTACLE TYPE
SC1464-1	M24217/10-001	1.13	1.27	1.250-12	3 EA. #16
SC1464-2	M24217/10-002	1.13	1.52	1.500-12	5 EA. #16
SC1464-3	M24217/10-003	1.22	1.77	1.750-12	9 EA. #16
SC1464-4	M24217/10-004	1.22	2.14	2.125-12	14 EA. #16
SC1464-5	M24217/10-005	1.22	2.52	2.500-12	24 EA. #16
SC1464-6	M24217/10-006	1.37	3.02	3.000-12	37 EA. #16
SC1464-7	M24217/10-007	1.54	3.77	3.750-12	48 EA. #16
SC1464-8	M24217/10-008	1.22	1.77	1.750-12	3 EA. #12
SC1464-9	M24217/10-009	1.22	2.14	2.125-12	5 EA. #12 & 3 EA. #8
SC1464-10	M24217/10-010	1.22	2.52	2.500-12	9 EA. #12, 3 EA. #4 & 3 EA. #12 With 3 EA. #8
SC1464-11	M24217/10-011	1.37	3.02	3.000-12	2 EA. #0 With 4 EA. #12
SC1464-12	M24217/10-012	1.13	1.39	1.375-12	8 EA. #16
SC1464-13	M24217/10-013	1.37	3.26	3.250-12	3 EA. #0

RECEPTACLE ASSEMBLY - MIL-C-24217/11 UNION TYPE



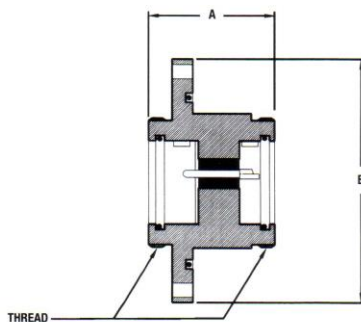
PART NUMBER	MILITARY PART NUMBER	"A" DIM	"B" DIM	THREAD 2A	NO. OF PINS
CR1465-1	M24217/11-001	1.84	1.25	1.250-12	3 EA. #16
CR1465-2	M24217/11-002	1.96	1.50	1.500-12	5 EA. #16
CR1465-3	M24217/11-003	2.09	1.75	1.750-12	9 EA. #16
CR1465-4	M24217/11-004	2.11	2.12	2.125-12	14 EA. #16
CR1465-5	M24217/11-005	2.34	2.50	2.500-12	24 EA. #16
CR1465-6	M24217/11-006	2.34	3.00	3.000-12	37 EA. #16
CR1465-7	M24217/11-007	2.34	3.75	3.750-12	48 EA. #16
CR1465-8	M24217/11-008	3.25	1.75	1.750-12	3 EA. #12
CR1465-9	M24217/11-009	3.25	2.12	2.125-12	5 EA. #12
CR1465-10	M24217/11-010	3.25	2.50	2.500-12	9 EA. #12
CR1465-11	M24217/11-011	3.25	2.12	2.125-12	3 EA. #8
CR1465-12	M24217/11-012	3.25	2.50	2.500-12	3 EA. #4
CR1465-13	M24217/11-013	3.25	2.50	2.500-12	3 EA. #12 3 EA. #8
CR1465-14	M24217/11-014	3.25	3.00	3.000-12	2 EA. #0 4 EA. #12

CONFIGURATIONS AVAILABLE

Please refer to page 2.16 for above configuration on the Receptacle Assembly – MIL-C-24217/11 Union Type.



RECEPTACLE ASSEMBLY - MIL-C-24217/12 MID-FLANGED, BOLTED, UNION TYPE



PART NUMBER	MILITARY PART NUMBER	"A" DIM	"B" DIM	THREAD 2A	NO. OF PINS
CR1467-1	M24217/12-001	2.12	3.75	1.250-12	3 EA. #16
CR1467-2	M24217/12-002	2.12	3.75	1.500-12	5 EA. #16
CR1467-3	M24217/12-003	2.12	3.75	1.750-12	9 EA. #16
CR1467-4	M24217/12-004	2.12	3.75	2.125-12	14 EA. #16

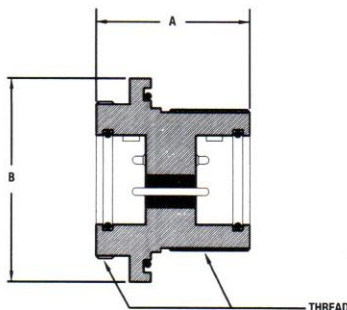
CONFIGURATIONS AVAILABLE

Please refer to page 2.16 for above configuration on the Receptacle Assembly – MIL-C-24217/12 Mid-Flanged, Bolted, Union Type.



RECEPTACLE ASSEMBLY - MIL-C-24217/13

MID-FLANGE, LOCKNUT, UNION TYPE

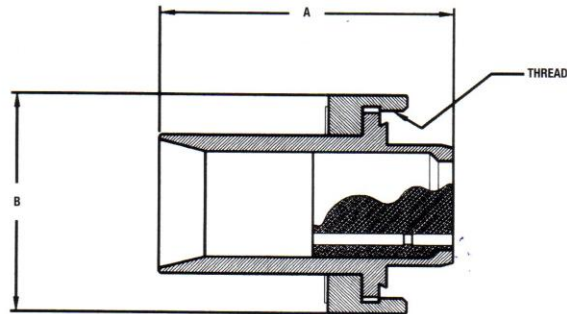


PART NUMBER	MILITARY PART NUMBER	"A" DIM	"B" DIM	THREAD 2A	NO. OF PINS
CR1468-1	M24217/13-001	1.96	2.37	1.500-12	5 EA. #16
CR1468-2	M24217/13-002	3.25	3.01	2.125-12	14 EA. #16
CR1468-3	M24217/13-003	3.12	2.37	1.750-12	3 EA. #12
CR1468-4	M24217/13-004	3.25	4.12	3.250-12	3 EA. #0 120 KEY
CR1468-5	M24217/13-005	3.25	4.12	3.250-12	3 EA. #0 150 KEY

CONFIGURATIONS AVAILABLE

Please refer to page 2.16 for above configuration on the Receptacle Assembly – MIL-C-24217/13 Mid-Flange, Locknut, Union Type.

PLUG ASSEMBLY - MIL-C-24217/14 STRAIGHT, UNION TYPE



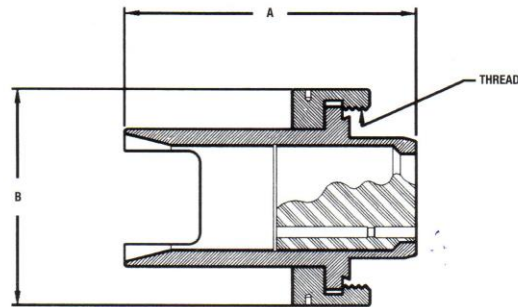
PART NUMBER	MILITARY PART NUMBER	"A" DIM	"B" DIM	THREAD 2B	NO. OF SOCKETS	CRIMP AWG
CP1469-1	M24217/14-001	2.31	1.37	1.250-12	3 EA. #16	16
CP1469-2	M24217/14-002	2.31	1.37	1.250-12	3 EA. #16	20
CP1469-3	M24217/14-003	2.51	1.75	1.500-12	5 EA. #16	16
CP1469-4	M24217/14-004	2.51	1.75	1.500-12	5 EA. #16	20
CP1469-5	M24217/14-005	2.62	2.00	1.750-12	9 EA. #16	16
CP1469-6	M24217/14-006	2.62	2.00	1.750-12	9 EA. #16	20
CP1469-7	M24217/14-007	3.01	2.37	2.125-12	14 EA. #16	16
CP1469-8	M24217/14-008	3.01	2.37	2.125-12	14 EA. #16	20
CP1469-9	M24217/14-009	3.13	2.75	2.500-12	24 EA. #16	16
CP1469-10	M24217/14-010	3.13	2.75	2.500-12	24 EA. #16	20
CP1469-11	M24217/14-011	3.38	3.50	3.000-12	37 EA. #16	16
CP1469-12	M24217/14-012	3.38	3.50	3.000-12	37 EA. #16	20
CP1469-13	M24217/14-013	3.63	4.12	3.750-12	48 EA. #16	16
CP1469-14	M24217/14-014	3.63	4.12	3.750-12	48 EA. #16	20
CP1469-15	M24217/14-015	3.08	2.00	1.750-12	3 EA. #12	N/A
CP1469-16	M24217/14-016	3.59	3.75	2.125-12	5 EA. #12	N/A
CP1469-17	M24217/14-017	3.59	2.75	2.500-12	9 EA. #12	N/A
CP1469-18	M24217/14-018	3.46	3.75	2.125-12	3 EA. #8	N/A
CP1469-19	M24217/14-019	3.59	2.75	2.500-12	3 EA. #4	N/A
CP1469-20	M24217/14-020	3.59	2.75	2.500-12	3 EA. #12 3 EA. #8	N/A
CP1469-21	M24217/14-021	3.84	3.37	3.000-12	2 EA. #0 4 EA. #12	N/A

CONFIGURATIONS AVAILABLE

Please refer to page 2.16 for above configuration on the Receptacle Assembly – MIL-C-24217/14 Straight, Union Type.



PLUG ASSEMBLY - MIL-C-24217/15 RIGHT ANGLE, UNION TYPE



PART NUMBER	MILITARY PART NUMBER	"A" DIM	"B" DIM	THREAD 2B	NO. OF SOCKETS	CRIMP AWG
CP1470-1	M24217/15-001	2.31	1.37	1.250-12	3 EA. #16	16
CP1470-2	M24217/15-002	2.31	1.37	1.250-12	3 EA. #16	20
CP1470-3	M24217/15-003	2.51	1.75	1.500-12	5 EA. #16	16
CP1470-4	M24217/15-004	2.51	1.75	1.500-12	5 EA. #16	20
CP1470-5	M24217/15-005	2.62	2.00	1.750-12	9 EA. #16	16
CP1470-6	M24217/15-006	2.62	2.00	1.750-12	9 EA. #16	20
CP1470-7	M24217/15-007	3.01	2.37	2.125-12	14 EA. #16	16
CP1470-8	M24217/15-008	3.01	2.37	2.125-12	14 EA. #16	20
CP1470-9	M24217/15-009	3.13	2.75	2.500-12	24 EA. #16	16
CP1470-10	M24217/15-010	3.13	2.75	2.500-12	24 EA. #16	20
CP1470-11	M24217/15-011	3.38	3.50	3.000-12	37 EA. #16	16
CP1470-12	M24217/15-012	3.38	3.50	3.000-12	37 EA. #16	20
CP1470-13	M24217/15-013	3.63	4.12	3.750-12	48 EA. #16	16
CP1470-14	M24217/15-014	3.63	4.12	3.750-12	48 EA. #16	20
CP1470-15	M24217/15-015	3.08	2.00	1.750-12	3 EA. #12	N/A
CP1470-16	M24217/15-016	3.60	3.75	2.125-12	5 EA. #12	N/A
CP1470-17	M24217/15-017	3.60	2.75	2.500-12	9 EA. #12	N/A
CP1470-18	M24217/15-018	3.46	3.75	2.125-12	3 EA. #8	N/A
CP1470-19	M24217/15-019	3.60	2.75	2.500-12	3 EA. #4	N/A
CP1470-20	M24217/15-020	3.60	2.75	2.500-12	3 EA. #12, 3 EA. #8	N/A
CP1470-21	M24217/15-021	3.01	2.37	2.125-12	14 EA. #16 (SPECIAL)	16
CP1470-22	M24217/15-022	3.08	1.87	1.500-12	3 EA. #12 (SPECIAL)	N/A
CP1470-25	M24217/15-025	5.01	3.37	3.000-12	2 EA. #0, 4 EA. #12	N/A
CP1470-26	M24217/15-026	5.12	3.63	3.250-12	3 EA. #0 (STYLE E)	N/A
CP1470-27	M24217/15-027	5.12	3.63	3.250-12	3 EA. #0 (STYLE F)	N/A
CP1470-28	M24217/15-028	5.12	3.63	3.250-12	3 EA. #0 (STYLE G)	N/A
CP1470-29	M24217/15-029	5.12	3.63	3.250-12	3 EA. #0 (STYLE H)	N/A

CONFIGURATIONS AVAILABLE

Please refer to page 2.16 for above configuration on the Receptacle Assembly – MIL-C-24217/15
Right Angle, Union Type.



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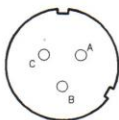


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SCP, Inc.

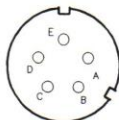


SEALTRON™

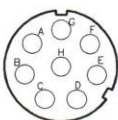
MIL-C-24217 RECEPTACLE CONFIGURATIONS



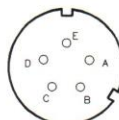
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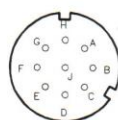
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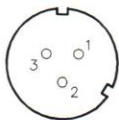
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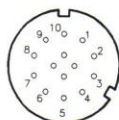
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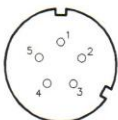
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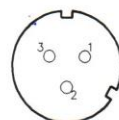
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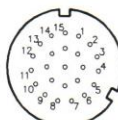
14 EACH #16



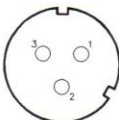
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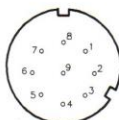
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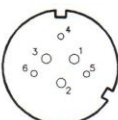
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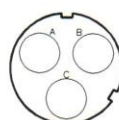
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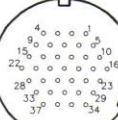
9 EACH #12



3 EACH #12
3 EACH #8



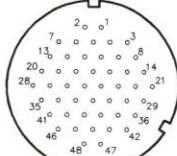
3 EACH #0



37 EACH #16



2 EACH #0
4 EACH #12



48 EACH #16



AEGIS™



GLASSEAL
PRODUCTS™



HERMETIC
SEAL™

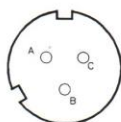


AMETEK
SCP, Inc.

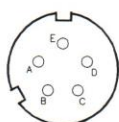


SEALTRON™

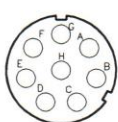
MIL-C-24217 PLUG CONFIGURATIONS



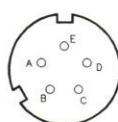
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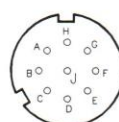
5 EACH #16
(SPECIAL)



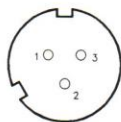
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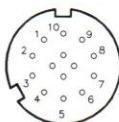
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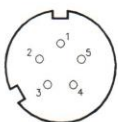
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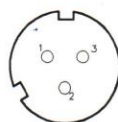
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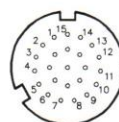
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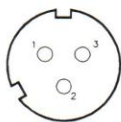
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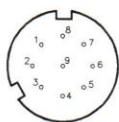
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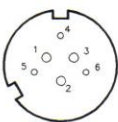
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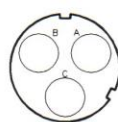
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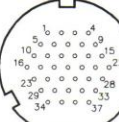
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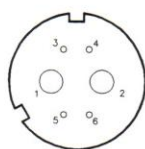
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3 EACH #8



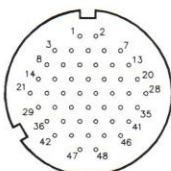
3 EACH #0



37 EACH #16



2 EACH #0
4 EACH #12



48 EACH #16



ENGINEERED INTERCONNECT
AND PACKAGING



AEGIS™



GLASSEAL
PRODUCTS™



HERMETIC
SEAL™



AMETEK
SCP, Inc.



SEALTRON™

ELECTRICAL FEED THRU CONNECTORS

SPECIALIZED HERMETIC CONNECTORS

HERMETIC BATTERY TERMINALS

SPECIALIZED MOLDED CABLE ASSEMBLIES

SINGLE AND MULTI-PIN ELECTRICAL FEED THRU CONNECTORS

AMETEK manufactures a variety of single and multi-pin feed thru connectors for use in hostile environments. These environments include underwater, down hole, geophysical exploration sites and aerospace. Our feed thrus are designed to handle high temperature, high pressure and a multitude of corrosive mediums.

All parts are electrically tested for voltage and insulation resistance parameters and helium leak checked to meet 1×10^{-9} cc/sec on a mass spectrometer helium leak detection system and, if requested, are hydrostatically tested up to 20,000 psi.

AMETEK engineers will custom design to your requirements. Please contact us with your specifications.

Materials

Stainless Steel, Inconel™, Nickel Iron (Alloy 52).

Plating

Gold, Silver, Tin, Nickel.

Pressure Rating

Units successfully tested to 1,000-20,000 PSI.

Temperature Rating

200-400° C.

High Potential

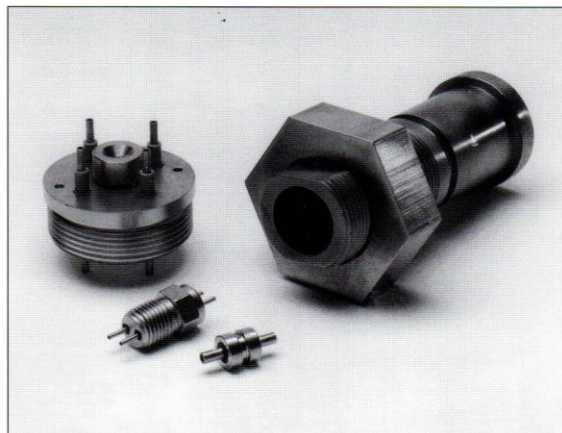
500 VAC applied between any two adjacent contacts or between shell and any contact, for a duration of one minute.

Insulation Resistance

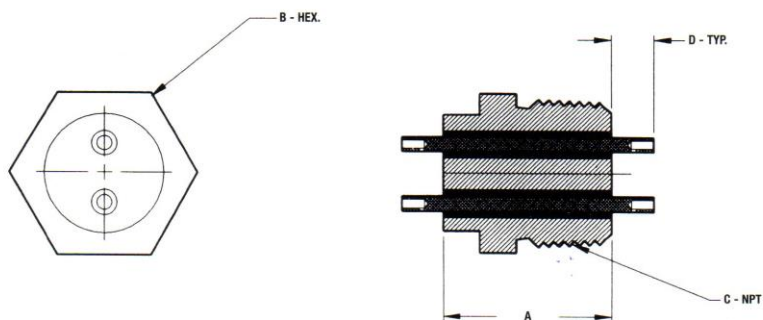
500 Megohms or greater when measured between any pair of contacts and between contacts and shell, using 500 Volts DC Test.

Wire Terminations

10 AWG-24 AWG.



PENETRATOR, THREAD MOUNTING



2 contact style shown for illustration only. Please call with your contact requirements.

PART NUMBER	"A" DIM	"B" HEX	"C" NPT	"D" DIM
PA1496-1-XX-XX	.75	$\frac{5}{16}$	$\frac{1}{16}$.25
PA1496-2-XX-XX	.75	$\frac{7}{16}$	$\frac{1}{8}$.25
PA1496-3-XX-XX	.96	$\frac{9}{16}$	$\frac{1}{4}$.25
PA1496-4-XX-XX	.99	$\frac{11}{16}$	$\frac{3}{8}$.25
PA1496-5-XX-XX	1.21	$\frac{3}{8}$	$\frac{1}{2}$.25
PA1496-6-XX-XX	1.21	$1\frac{1}{16}$	$\frac{3}{4}$.25
PA1496-7-XX-XX	1.50	$1\frac{1}{2}$	1	.25
PA1496-8-XX-XX	1.59	$1\frac{3}{4}$	$1\frac{1}{4}$.25
PA1496-9-XX-XX	1.74	$2\frac{1}{8}$	$1\frac{1}{2}$.25
PA1496-10-XX-XX	1.96	$2\frac{3}{4}$	2	.25

ORDERING DATA

PA1496 - XX - XX - XX

Basic
Size

Number
Of
Contacts

Wire
AWG

D-SUBMARINE – MIL-C-C24308/3 TYPE GLASS-SEALED VCONNECTOR WELD TYPE RECTANGULAR RACK AND PANEL

AMETEK offers hermetically sealed, miniature, rack and panel style connectors for use in harsh environments and is also suitable for any operation where reliability and performance are critical. These units have successfully been tested for shock, humidity, salt spray and thermal shock.



AMETEK engineers will custom design to your requirement. Please contact us with your specifications.

Materials

01 - Shells	S-S 304L Passivated
02 - Contacts	#20 Alloy 52-pin type per MIL-I-23011 Class 2
03 - Insulation	Compression-type glass
04 - Plating	Contact finish per MIL-C-24308

Hermeticity

Units successfully pass 1×10^{-8} cc/sec. when tested in accordance with MIL-STD 202, Method 112.

Pressure Rating/Hydro

Units successfully tested to 8,000 psi.

Operating Temperature

700° F maximum.

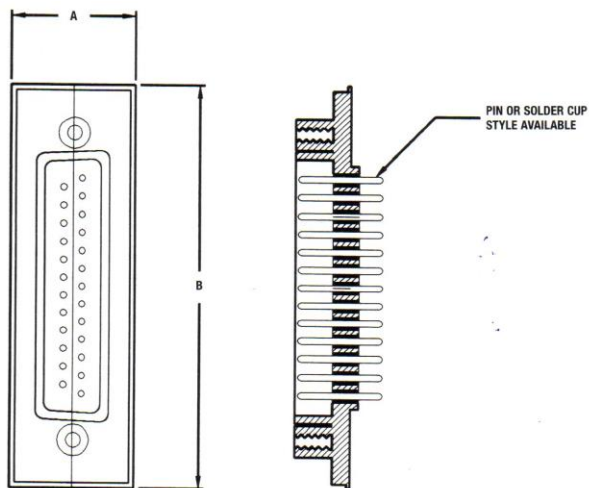
Contact Resistance

60 Millivolts maximum initially and 70 millivolts after conditioning when tested at 5 amperes.

Torque/Pull Out

Minimum torque force of 5 pound/inch without failure or degradation. Units have passed First Article inspection criteria performed by the government. This included shock, humidity, salt spray, and thermal shock in accordance with MIL-C-24308.

RECEPTACLE, RECTANGULAR, D-SUBMINIATURE



25 contact style shown for illustration only. Please call with your contact requirements.

PART NUMBER	"A" DIM	"B" DIM	NUMBER OF PINS
CR1500-1	.740	2.445	25 EA. #20
CR1500-2	.850	2.900	50 EA. #20

ORDERING DATA

CR1500 - X - X

Basic
Size

Termination:
P = Pin
S = Solder Cup



HERMETIC CONNECTORS FOR SPECIALIZED APPLICATIONS

AMETEK manufactures a wide variety of custom glass to metal seals for many diverse applications. Connectors for subsea, aerospace, rapid transit systems and the nuclear industry along with component parts such as coaxial contacts are the mainstay of our product list.

Single contact or multi-pin penetrators and connectors are all designed and manufactured to meet the strictest helium, electrical and hydrostatic test parameters.

Careful selection of materials such as stainless steel, cold roll steel, Monel™ and Inconel™, all of which are nickel and gold plated to resist corrosion and increase conductivity are then sealed using compression or matched glasses to meet the most intricate and demanding requirements.

Calibrated furnace profiles along with tightly controlled atmospheric conditions allows AMETEK to manufacture long life quality seals at reasonable prices. AMETEK engineers will custom design to your particular requirements. Please contact us with your specifications.

Materials

Body: Stainless Steel, Cold Roll Steel, Monel™, Inconel™.

Plating

Gold, Nickel.

Hermeticity

Units successfully pass 1×10^{-9} cc/sec.
Helium Leak Rate.

Pressure Rating

Units successfully tested up to 20,000 psi.

High Potential

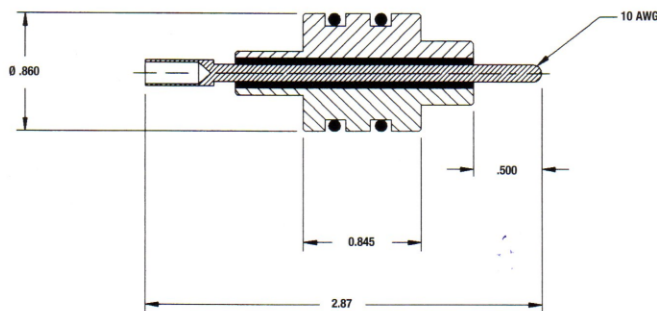
500 VAC applied between any two adjacent contacts or between shell and any contact, for a duration of one minute.

Insulation Resistance

5,000 Megohms or greater when measured between any pair of contacts and between contacts and shell using 500 VDC.



GLASS-SEAL ASSEMBLY DRAWING GSA1362



Other pin configurations available upon request.

Material:

Body: 316L SS.

Contact: Alloy 52.

Plating:

Silver Plate Pin Contact 0.00025 Minimum.

Pressure Rating:

Units successfully tested to 3,000 PSI.

Temperature Rating:

200° C.

High Potential:

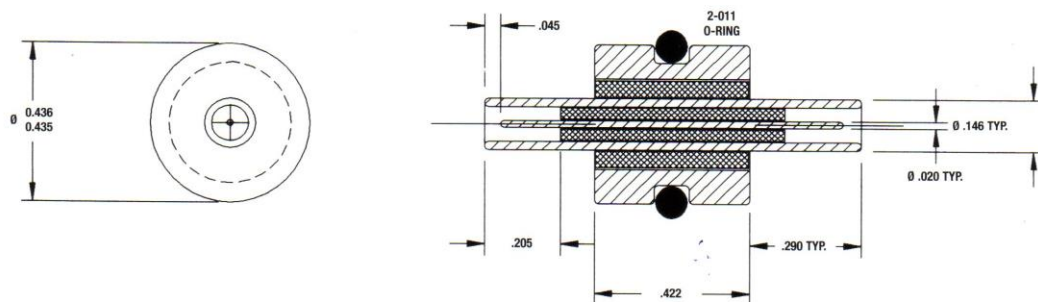
500 VAC applied between any two adjacent contacts or between shell and any contact, for a duration of one minute.

Insulation Resistance:

500 Megohms or greater when measured between any pair of contacts and between contacts and shell using 500 VDC.



GLASS-SEAL ASSEMBLY DRAWING GSA1381



Other pin configurations available upon request.

Material:

Body: 316L SS.

Contacts: Alloy 52.

Plating:

Gold Plate Pins .000050 Inch Minimum Over Nickel.

Pressure Rating:

Units successfully tested to 20,000 PSI.

Temperature Rating:

200° C.

High Potential:

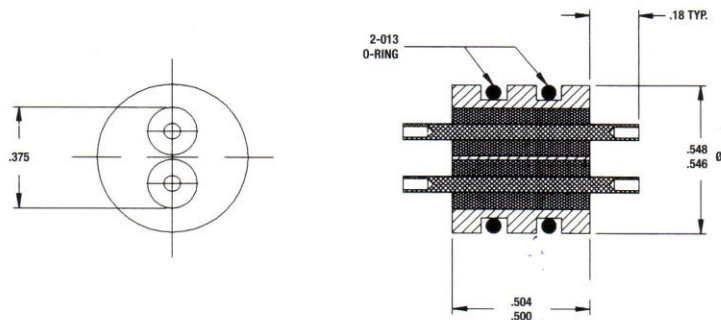
200 VDC applied between any two adjacent contacts or between shell and any contact, for a duration of one minute.

Insulation Resistance:

500 Megohm or greater when measured between any pair of contacts and between contacts and shell using 200 VDC.



GLASS-SEAL ASSEMBLY DRAWING GSA1473



Other pin configurations available upon request.

Material:

Body: 316 SS.

Contacts: Alloy 52.

Plating:

Gold Plate Pins .000050.

Pressure Rating:

Units successfully tested to 5,000 PSI.

Temperature Rating:

0° C - 80° C.

High Potential:

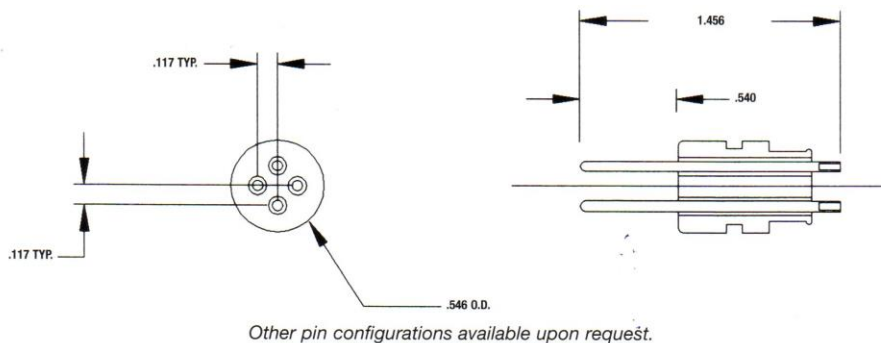
250 VAC applied between any two adjacent contacts or between shell and any contact, for a duration of one minute.

Insulation Resistance:

500 Megohm or greater when measured between any pair of contacts and between contacts and shell using 500 VDC.



GLASS-SEAL ASSEMBLY DRAWING GSA1158

**Material:**

Body: 316L SS.

Contacts: Alloy 52.

Plating:

Gold Plate Pins Per MIL-G-45204 Type II, .00020 Thick.

Pressure Rating:

Units successfully tested to 15,000 PSI.

Temperature Rating:

260° C.

High Potential:

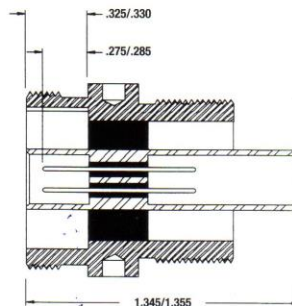
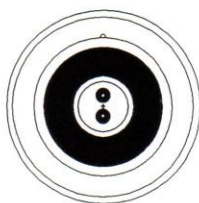
500 VAC applied between any two adjacent contacts or between shell and any contact, for a duration of one minute.

Insulation Resistance:

1,000 Megohms or greater when measured between any pair of contacts and between contacts and shell using 500 VDC.



GLASS-SEAL ASSEMBLY DRAWING GSA1163



Other pin configurations available upon request.

Material:

Body: 316L SS.

Contacts: Alloy 52.

Plating:

Gold Plate Pins and Outer Contact .000050 Minimum Over Nickel.

Pressure Rating:

Units successfully tested to 1,000 PSI.

Temperature Rating:

200° C.

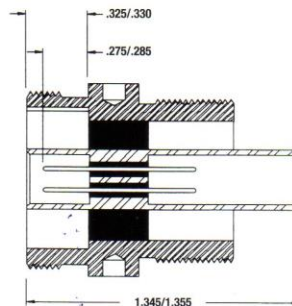
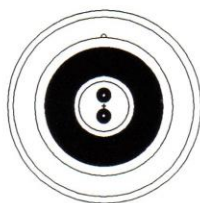
High Potential:

500 VAC applied between any two adjacent contacts or between shell and any contact, for a duration of one minute.

Insulation Resistance:

500 Megohms or greater when measured between any pair of contacts and between contacts and shell using 500 VDC.

GLASS-SEAL ASSEMBLY DRAWING GSA1163



Other pin configurations available upon request.

Material:

Body: 316L SS.

Contacts: Alloy 52.

Plating:

Gold Plate Pins and Outer Contact .000050 Minimum Over Nickel.

Pressure Rating:

Units successfully tested to 1,000 PSI.

Temperature Rating:

200° C.

High Potential:

500 VAC applied between any two adjacent contacts or between shell and any contact, for a duration of one minute.

Insulation Resistance:

500 Megohms or greater when measured between any pair of contacts and between contacts and shell using 500 VDC.

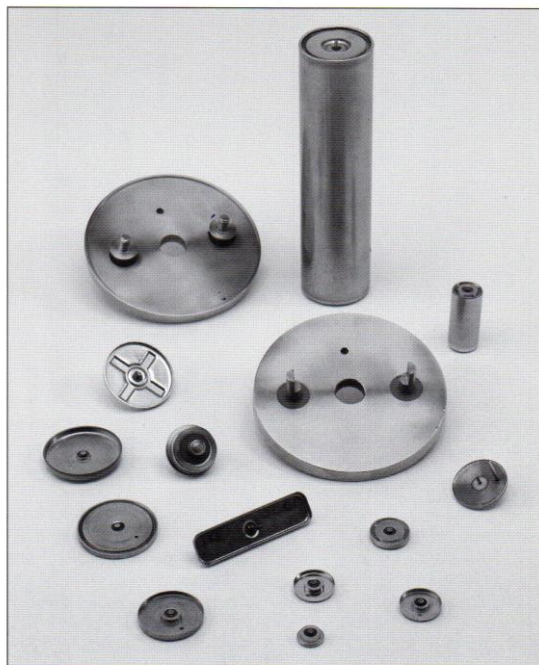
HERMETIC TERMINALS FOR BATTERY APPLICATIONS

AMETEK offers a wide range of glass to metal sealed terminals suitable for most long cell life applications especially lithium / sulfur dioxide and lithium thionyl chloride. Stainless steel and nickel plated cold roll steel are typical materials for circular or prismatic cell types. Terminal materials of Alloy 52, molybdenum or stainless steel are carefully selected depending on the battery application.

All terminals can be tested in-house for environmental conformity and helium leak inspected. The cell top assemblies have successfully passed a helium leak rate of 1×10^{-9} along with hydrostatic pressure requirements.

AMETEK can build exactly to your specifications or offer a complete design and manufacturing service. Three atmospheric furnaces and in-house fixture manufacturing capabilities allow for quick turn around times for both large and small runs. Our battery terminals and carefully selected sealing processes have proven successful for our customers whenever shock, vibration, radical temperature extremes or pressure have been a problem.

Look for our feed thrus and battery covers when your cell applications are used in ocean depths, down hole or the upper reaches of the atmosphere.



Typical Materials

Cell Top: Stainless Steel, Nickel Plated Cold Roll Steel.

Terminal: Alloy 52, Molybdenum, Stainless Steel.

Hermeticity

Units successfully pass 1×10^{-9} cc/sec. Helium Leak Rate.

RUBBER AND SPECIALIZED MOLDED CABLE ASSEMBLIES



AMETEK can offer a comprehensive solution for all your molding requirements from connector design to a complete cable assembly for most applications.

Neoprene, Hypalon and other rubber materials used in the manufacture of molded products all comply with strict testing procedures including hydrostatic, electrical and environmental, performed by our experienced quality personnel. AMETEK also molds in polyurethane and chockfast orange epoxy for specialized military requirements and other high temperature epoxies for hostile environments where reliability is critical.

Our assemblies have been used by the US Navy on both surface ships and submarines including the Deep Sea Rescue Vehicle (DSRV). Mine countermeasures and sonar systems for the military along with commercial applications such as down hole monitoring and undersea exploration all utilize AMETEK assemblies where high performance is required.

We follow strict in-house and government approved molding procedures for the manufacture of high performance molded assemblies. From large diameter shielded cable to the extremely small single conductor cable, with polyurethane, neoprene or polyethylene jackets. Please contact us with your requirements.



Where Quality and High Performance Run Deep

***Please contact AMETEK
to identify the optimum
standard or custom
interconnect solution for your requirements***

Factory Contacts



Aegis Inc.

50 Welby Road
New Bedford, MA 02745

Tel: [508-998-3141](tel:508-998-3141)

E-mail: eip.sales@ametek.com



Hermetic Seal Corporation

4232 Temple City Blvd
Rosemead, CA 91770

Tel: [\(626\)443-8931](tel:626-443-8931)

E-mail: marisa.padilla@ametek.com



Glasseal Products

485 Oberlin Avenue, South
Lakewood, NJ 08701

Tel: [732-370-9100](tel:732-370-9100)

E-mail: eip.sales@ametek.com



AMETEK SCP, Inc.

52 Airport Road
Westerly, RI 02891

Tel: [401-596-6658](tel:401-596-6658)

E-mail: scp.info@ametek.com



Sealtron Inc.

9705 Reading Road
Cincinnati, OH 45215

Tel: [\(513\)733-8400](tel:513-733-8400)

E-mail: susan.wyatt@ametek.com

