



MILITARY & DEFENSE EDITION

HM Series
MIL-DTL-26482 Series 1
MILITARY STYLE CONNECTORS

- IP67 Rated Waterproof Connectors
- Covers, Gaskets, Mounting Plates
- Hermetic Receptacles, Tooling

About Us

MILNEC INTERCONNECT SYSTEMS is a leader in the design, manufacture, and supply of high-performance cylindrical interconnect systems. From research stations in the Antarctic to spacecraft on the plains of Mars, our high-reliability connector systems conquer the most demanding environments. Milnec is a supplier to leading companies in 24 countries in the following industries:

- Military & Defense
- Aerospace & Space
- Railway & Mass Transit
- Industrial & Heavy Equipment
- Alternative Energy, Nuclear, Oil & Gas



Logistics Solutions for Global Applications

Global logistics and support means we deliver products on time every time to any destination. To support your immediate requirements, we have extensive inventories, making most systems readily available for today's compressed design and production schedules. On average, custom connector solutions made to your exact configuration ship within seven days from the time of order placement.

- Worldwide shipping (restricted to NATO countries only)
- Web access to inventory, prices, & delivery information
- A large stock of popular parts for greater availability
- Competitive pricing and short lead times
- Impeccable customer service & technical support

Milnec Interconnect Systems

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U.S. Military Cage Code: 6STX5

NAICS Code: 423690

High Reliability—Simplified

Just because your interconnect problem is complicated does not mean acquiring the solution has to be. Milnec connector systems and our "all-in-one" kits provide engineers the most complete and professional connector solutions with ease and technical clarity.

- Complete, high-reliability solutions
- Simple to understand technical data & configurations
- Online part builder tools, drawings, & documentation
- Field installable & serviceable



Performance With Environmental Responsibility

RoHS compliant products are available to support environmental responsibility and legislative conformity. Through simple modification codes, Milnec provides a wide variety of material options to easily provide customers with fully compliant and eco-friendly connector components.

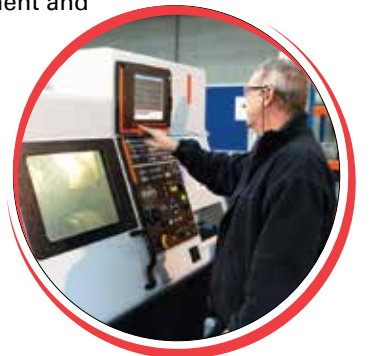
- RoHS compliant materials & finishes
- Simple material modification codes
- Lead-free solder contacts



Highest Manufacturing Quality

We invest in the finest equipment and modern production processes to ensure that our connectors will exceed your quality and performance expectations. Our production processes include advanced computer numerical control machining, cosmetic and metal finishing, heat treatment, and stainless steel passivation.

- Traceability on 100% of the parts
- Quick production lead times
- Quantity support from R&D to production
- "Just-in-time" delivery, kitting, & special packaging
- Rapid tooling & prototyping for custom designs



Features & Benefits

HM Series • MIL-DTL-26482 Series 1 Type Connectors

MIL-DTL-26482 Series 1 Compliant Connectors

The HM Series of connectors is based on MIL-DTL-26482 Series 1 standards and is fully compatible with all military and commercial derivatives. These connectors feature bayonet coupling, high-density inserts with gold plated solder contacts, and an integrated environmental resistant backshell. In addition, the HM Series provides many modern options that are unavailable in the mil-spec, including thru-bulkhead and hermetic receptacles, a large selection of insert arrangements, and a variety of protective accessories.



100% Mil-Spec Compatibility
HM Series connectors are fully compatible with all MIL-DTL-26482 Series I standard connectors and commercial derivatives.

Complete IP67 Rated Waterproof Connector Kits

HM Series connectors can be easily configured as complete kits that include everything you need for a reliable, IP67 rated environmental interconnect solution. Simply select the desired kit option on the part builder and your connector will come with all the matching sealing accessories you need for complete protection, right out of the box!

- Integrated environmental backshells
- Protective covers
- Sealing gaskets
- Mounting brackets with locking nuts
- Sealing screws



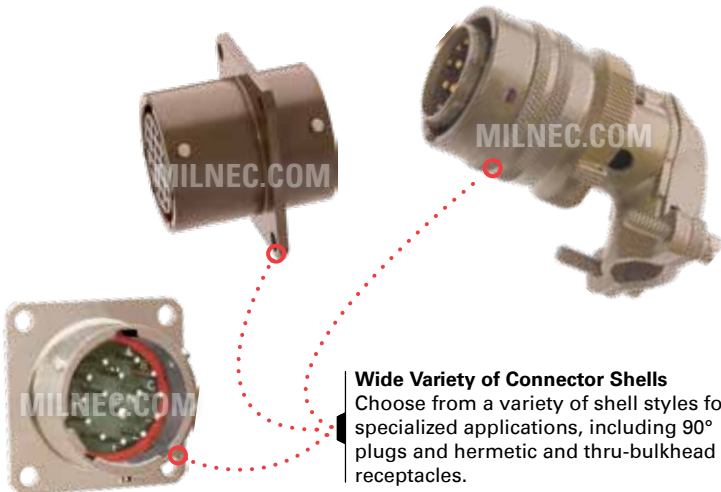
Table of Contents

About Us	H-1
Features & Benefits	H-2
Component Overview	H-3
Series Specifications	H-4
Materials & Finishes	H-6
Part Builder	H-8
Insert Arrangements & Rotations	H-9
Insert Arrangement Drawings	H-10
Contact Specifications	H-11
(HM06) Straight Plug	H-12
(HM08) 90° Plug	H-13
(HM00) Wall Mount Receptacle	H-14
(HM02) Box Mount Receptacle	H-15
(HM07) Jam Nut Receptacle	H-16
(HM01) Cable Mount Receptacle	H-17
(HM22) Thru-Bulkhead Receptacle	H-18
(HM12) Box Mount Receptacle (Hermetic)	H-19
(HM13) Jam Nut Receptacle (Hermetic)	H-20
(HM19) Solder Mount Receptacle (Hermetic)	H-21
(HMC P) Protective Covers	H-22
(HMCD) Stowage Receptacle	H-23
(HMGE) Mounting Gasket	H-24
(HMMB) Mounting Bracket & Screws	H-25
Soldering Station	H-26

More Options for Complete Design Flexibility

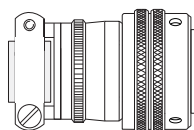
With today's advanced electronic designs, engineers demand more options. HM Series connectors provide you with the most complete offering of shell options, materials, finishes, and accessories unavailable in the military specification.

- More shell options, including thru-bulkheads
- Alternate material & RoHS compliant platings
- Specialized hermetic receptacles
- Complete set of sealing accessories

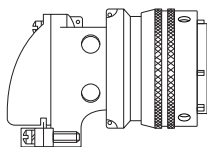


Wide Variety of Connector Shells
Choose from a variety of shell styles for specialized applications, including 90° plugs and hermetic and thru-bulkhead receptacles.

Plugs

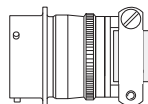


Straight Plug
p. H-12



90° Plug
p. H-13

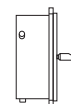
Receptacles



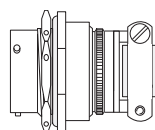
Wall Mount
p. H-14



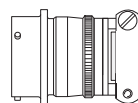
Box Mount
p. H-15



Box Mount (Hermetic)
p. H-19



Jam Nut
p. H-16



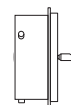
Cable Mount
p. H-17



Jam Nut (Hermetic)
p. H-20

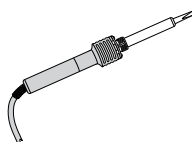


Thru-Bulkhead
p. H-18



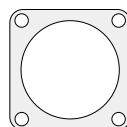
Solder Mount (Hermetic)
p. H-21

Tools

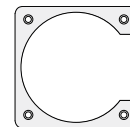


Soldering Station
p. H-26

Mounting

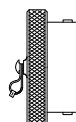


Mounting Gasket
p. H-24

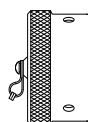


Mounting Bracket & Screws
p. H-25

Covers



Plug Cover
p. H-22



Receptacle Cover
p. H-22



Stowage Receptacle
p. H-23

Series Specifications

HM Series • MIL-DTL-26482 Series 1 Type Connectors

Performance Specifications

Built to meet or exceed MIL-DTL-26482 specifications and is guaranteed fully compatible and interchangeable with respect to physical and performance characteristics with all existing MIL-DTL-26482 Series I military and commercial derivatives

Environmental Characteristics

Temperature Range

-67° to +257°F (-55° to +125°C)

Service life varies with the maximum internal hot spot temperature resulting from any combination of electrical load or ambient temperature:

77°F (25°C): Continuous

221°F (105°C): 1,000 hours

257°F (125°C): 250 hours

Water Pressure

IP67 rating (environmental sealing)

Fully submersible to 3.3 ft (1m) for minimum of 30 min

Air Leakage Rate

Environmental

Air leakage not to exceed 1 inch³/hr (4.55 x10⁻³ cm³/sec) at 30 psi (2.11 kg/cm²) pressure differential

Hermetic

Helium leakage not to exceed 0.1 micron per ft³/hr (1.0 x10⁻⁶ cc³/sec) at 15 psi (1.1 kg/cm²)

Salt Spray Rating

See Materials & Finishes, p. H-6

Humidity

Mated connectors shall maintain an insulation resistance of 100 megohms or greater at 77°F (25°C) with 95% humidity for duration of 20 days

Chemical Resistance to Fluids

20 hour full immersion (unmated) in hydraulic fluid and lubricating oil without damage or material degradation

Physical Characteristics

Coupling

Three-point bayonet, stainless steel bayonet pins spaced at 120° on receptacle shells, corresponding ramps on plug coupling ring with locking detent 1/3 turn to couple and uncouple

Coupling Torque

Engagement & Disengagement Force (max / min)

Shell Size 8: .67 ft-lb_f (.904 N-m) / .08 ft-lb_f (.113 N-m)

Shell Size 10: 1.00 ft-lb_f (1.36 N-m) / .08 ft-lb_f (.113 N-m)

Shell Size 12: 1.33 ft-lb_f (1.81 N-m) / .17 ft-lb_f (.226 N-m)

Shell Size 14: 1.67 ft-lb_f (2.26 N-m) / .33 ft-lb_f (.452 N-m)

Shell Size 16: 2.00 ft-lb_f (2.71 N-m) / .33 ft-lb_f (.452 N-m)

Shell Size 18: 2.33 ft-lb_f (3.16 N-m) / .33 ft-lb_f (.452 N-m)

Shell Size 20: 2.66 ft-lb_f (3.61 N-m) / .50 ft-lb_f (.678 N-m)

Shell Size 22: 3.00 ft-lb_f (4.07 N-m) / .58 ft-lb_f (.791 N-m)

Shell Size 24: 3.67 ft-lb_f (4.97 N-m) / .58 ft-lb_f (.791 N-m)

Polarization

Single master key and keyway on top position of shell

Four minor keys and keyways on shell

Insert Arrangements

30 standard, custom inserts available

Insert Rotations

Normal polarization (N), plus 4 alternate insert rotational polarizations (W, X, Y, Z)

Endurance Characteristics

Coupling Cycles

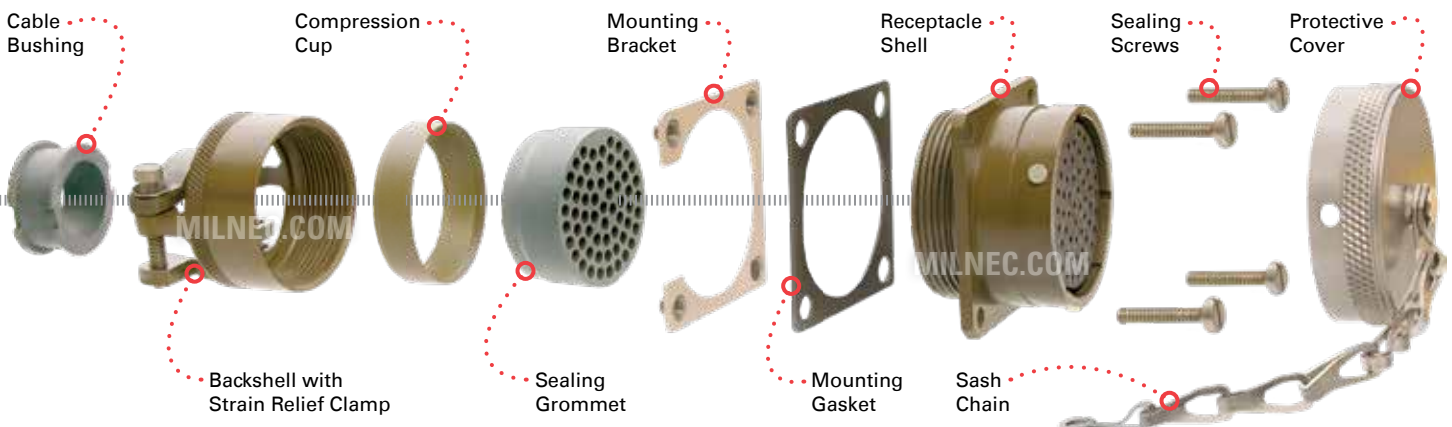
500 coupling cycles (minimum)

Shock

50g's, 11ms duration, three major axes, 10 microseconds maximum discontinuity

Vibration

Random vibration at 10 to 2,000Hz (15g's), 10 microseconds maximum discontinuity



Rev. 2203

Material Characteristics

Shell

Environmental

Aluminum, solid, one piece, seamless construction

Hermetic

Carbon steel or stainless steel (special order)

Shell Plating

Environmental

Standard (F) finish is electrically conductive cadmium plate finish with an olive drab chromate after-treat for additional corrosion resistance
(See p. H-6 for all available finishes)

Hermetic

Tin plate over nickel (H) finish, suitable for soldering

Shell Conductivity

Maximum shell-to-shell conductivity potential drop shall not exceed 200 millivolts across assembly

Jam Nut

Aluminum

Bayonet Pins

Passivated stainless steel

Insert

Resilient polychlorophrene (neoprene)

Non-removable and mechanically bonded to shell

Hermetic Insert

Vitreous (glass compression)

Non-removable and mechanically bonded to shell

Protective Cover Chain

Passivated stainless steel, sash chain able to withstand a 25 lb (11.3 kg) tensile force without damage

Sealing Grommet

Neoprene

O-Ring Seal

Neoprene or silicone

Mounting Gasket

Neoprene or silicone

Contact Characteristics

Contact Design

Solder style, permanently bonded to insert

Solder cups are not pre-tinned

Contact Sizes

#16, #20

Contacts

Copper alloy

Contact Plating

Environmental

Gold plate, 50 μinches (1.27 μm) minimum

Hermetic

Tin plate, 50 μinches (1.27 μm) minimum

Gold plated contacts (special order)

Max Number of Contacts

2 to 61 standard, custom inserts available

Max Contact Resistance

9 milliohm maximum resistance

Max Voltage Drop

<55 millivolt maximum voltage drop (initial)

Contact Retention

Pin and socket contacts are designed to resist severe vibration and repeated connection and disconnection

Electrical Characteristics

Current Rating

13 amps (test current) at 68°F (20°C)

Max Operating Voltage

1,000 VAC (RMS) at sea level

Insulation Resistance

>5,000 megohms at 77°F (25°C)

Wire Size

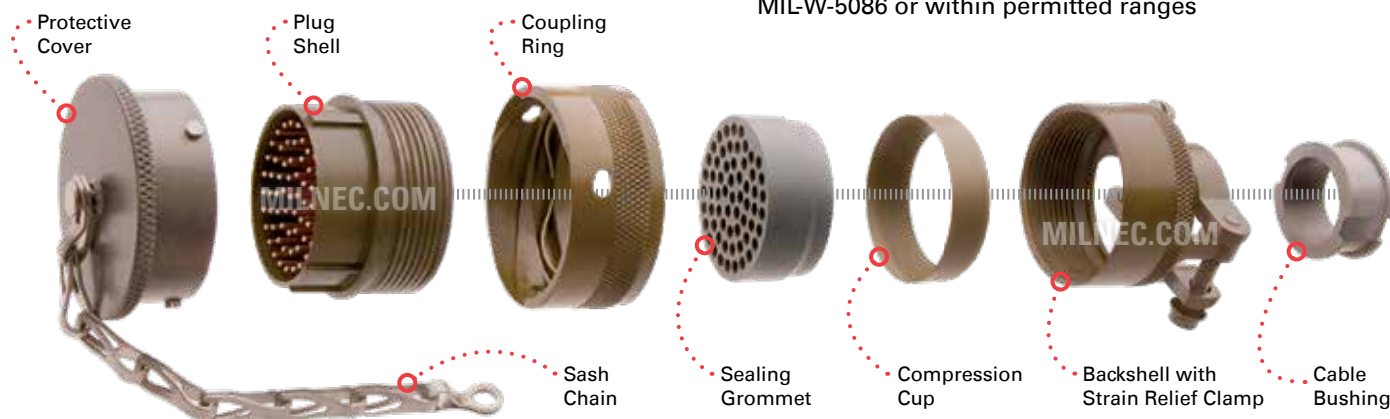
16 to 24 (AWG)

Wire Sealing Range

Designed for individual wire sealing

Sealing is only guaranteed if wires meet

MIL-W-5086 or within permitted ranges



Rev. 2203

Materials & Finishes

HM Series • MIL-DTL-26482 Series 1 Type Connectors

HM Series Finishes

A connector's finish does more than simply provide good looks. The finish is the first line of defense for a connector. It provides enhanced corrosion resistance and can be made conductive to provide electrical continuity across connector shells for EMI/RFI shielding applications. Olive drab cadmium is the standard finish for the HM Series.

Olive drab cadmium offers excellent corrosion resistance and will match the aesthetic design of most industrial and military applications. In addition to the standard finish, a number of specialty finishes are available for the HM Series, including RoHS finishes for legislative compliance and environmental responsibility. ■

Standard HM Series Materials & Finishes

Finish Code	Finish	Hermetic Only	Electrically Conductive	Pre-Tinned Solder Cups	RoHS Compliant	Appearance	Shell Material	Salt Spray Rating	Recommended Operating Temperature Range
F	Olive Drab Cadmium		✓	✓		Drab Olive Green	Aluminum	500 hrs	-67° to +257°F (-55° to +125°C)
H	Tin Over Nickel	✓		✓		Bright Metal	Carbon Steel	48 hrs	-67° to +392°F (-55° to +200°C)

Special HM Series Materials & Finishes*

Finish Code	Finish	Hermetic Only	Electrically Conductive	Pre-Tinned Solder Cups	RoHS Compliant	Appearance	Shell Material	Salt Spray Rating	Recommended Operating Temperature Range
B	Hardcoat Anodize			✓		Grey to Black	Aluminum	336 hrs	-67° to +257°F (-55° to +125°C)
BA					✓				
N	Electroless Nickel		✓	✓		Bright Metal	Aluminum	48 hrs	-67° to +257°F (-55° to +125°C)
NA					✓				
C	Zinc Cobalt			✓		Black	Aluminum	125 hrs	-67° to +257°F (-55° to +125°C)
CA					✓				
CB			✓	✓					
CC					✓				
T	Hard Anodic			✓		Grey	Aluminum	500 hrs	-67° to +257°F (-55° to +125°C)
TA					✓				
HA	Passivated	✓	✓		✓	Matte Metal	SST Steel	1,000 hrs	-67° to +392°F (-55° to +200°C)
P	Olive Drab Cadmium With Potting Boot		✓	✓		Drab Olive Green	Aluminum	500 hrs	-67° to +257°F (-55° to +125°C)

* Please consult an authorized distributor for lead time information and minimum quantity requirements for special order finishes.

Olive Drab Cadmium—Durable & Economical

Olive drab cadmium (F) plating is the standard finish for HM Series connectors due to its high corrosion resistance. This finish is conductive, making it suitable for shielding or grounding applications, and is resistive to galling. Its olive drab appearance matches most equipment. Olive drab cadmium is suitable for all general duty, industrial, military, and marine applications.

- Finish Specification: SAE-AMS-QQ-P-416 II Class 2
- Appearance: Military Olive Drab Green
- Sheen: Flat, Low Gloss
- Max Temp. Rating: 347°F (175°C)
- Salt Spray Rating: 500 hours
- Lubricity: Good
- Galling Resistance: High
- Conductive: Yes
- RoHS Compliant: No

RoHS Compliant Parts

Milnec provides a full offering of RoHS compliant finishes in conductive and non-conductive versions to best suit your application requirements.



Please consult the latest European Union general and regional regulations to ensure materials are appropriate for your application and compliance requirements.

CONNECTOR SELECTION IS CRITICAL MAKE THE RIGHT CALL



Connectors For Military Applications

We specialize in providing engineers with ruggedized cylindrical connectors built to meet military specifications. In addition, we offer a wide selection of protective accessories, backshells, and mounting hardware for even greater battlefield reliability. When specifying connectors for your next application, make the right call — Milnec.



Part Builder

HM Series • MIL-DTL-26482 Series 1 Type Connectors

How to Build Your HM Connector Part Number

A part number is comprised of a string of characters that represent the different elements of a connector. High-performance connectors are built to order from component form using a unique part number as a blueprint to specify particular characteristics. Each modifier of the part number represents a particular configuration.

Below is an example part number for an HM Series connector that designates, 1) Milnec HM Series wall mount receptacle, 2) olive drab cadmium finish over aluminum, 3) 14-18 insert arrangement, 4) socket contacts, 5) normal rotation, and 6) integrated kit including cover and mounting gasket. ■

HM00 F 14-18 S N - 02

1 2 3 4 5 6

1 Series Shell Style

Standard Environmental Shells

HM06 Straight plug w/ backshell, p. H-12

HM08 90° plug w/ backshell, p. H-13

.....

HM00 Wall mount recept. w/ backshell, p. H-14

HM01 Cable mount recept. w/ backshell, p. H-17

HM02 Box mount receptacle, p. H-15

HM07 Jam nut receptacle w/ backshell, p. H-16

Hermetic Receptacle Shells

HM12 Box mount receptacle, p. H-19

HM13 Jam nut receptacle, p. H-20

HM19 Solder mount receptacle, p. H-21

For non-standard shell styles, including thru-bulkhead receptacles, please see specific datasheet for part numbering and kitting options.

2 Material & Finish

F Olive drab cadmium (aluminum)
500 hr. dynamic salt spray rating

H Tin over nickel (carbon steel)
(Hermetic receptacles only)
48 hr. dynamic salt spray rating

For complete materials and finishes options, including RoHS, see p. H-6.

3 Shell Size & Insert Arrangement

See Insert Arrangement Selection table, p. H-9

4 Contact Style

Standard Solder Contacts

P Pin

S Socket

Hermetic Receptacle Solder Contacts

P Pin only, tin plated (standard)

G* Pin only, gold plated

* Please consult an authorized distributor for lead time and minimum quantity requirements.

5 Insert Rotation

Normal Rotation

N Normal rotation

Alternate Rotations

W, X, Y, Z Alternate rotations

See Insert Arrangement Selection table on p. H-9.

(Not all rotations are available for every arrangement.)

6 Optional Accessory Kit (Omit for None)

01 For Plugs:

Protective cover, p. H-22

02 For Receptacles:

Protective cover, p. H-22 +
Mounting gasket, p. H-24

03 For Receptacles:

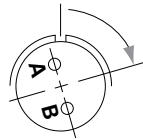
Protective cover, p. H-22 +
Mounting gasket, p. H-24 +
Mounting bracket, p. H-25
with (4x) sealing screws

Rev. 2203

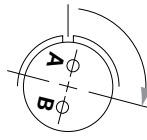
Selecting Your Insert Arrangement & Rotation

Below is a chart that represents every available shell and insert arrangement within the series. To choose the proper insert arrangement, you must first distinguish your application requirements for contact size and amount.

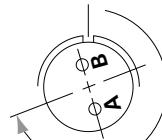
Rotations are designated at the time of ordering using rotation labels N (normal), W, X, Y, and Z. Some insert arrangements have limited or no alternate rotation options. Refer to the chart below for possible rotations for specific arrangements. ■



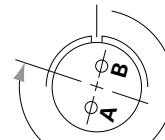
Position W



Position X



Position Y



Position Z

Looking into front face of pin insert or rear of socket insert.

Insert Arrangement Selection

Insert Arrangement	Total Contacts	Contact Size		Service Rating	Alternate Insert Rotation			
		#20	#16		W	X	Y	Z
8-2	2	2		I	58°	122°		
8-3	3	3		I	60°	210°		
8-4	4	4		I	45°	97°	184°	
10-6	6	6		I	90°			
10-98	6	6		I	90°	180°	240°	270°
12-3	3		3	II			180°	
12-8	8	8		I	90°	112°	203°	292°
12-10	10	10		I	60°	155°	270°	295°
14-5	5		5	II	40°	92°	184°	273°
14-12	12	8	4	I	43°	90°		
14-15	15	14	1	I	17°	110°	155°	234°
14-18	18	18		I	15°	90°	180°	270°
14-19	19	19		I	30°	165°	315°	
16-8	8		8	II	54°	152°	180°	331°
16-23	23	22	1	I	158°	270°		
16-26	26	26		I	60°		275°	338°
16-99	23	21	2	I	66°	156°	223°	340°
18-11	11		11	II	62°	119°	241°	340°
18-30	30	29	1	I	180°	193°	285°	350°
18-32	32	32		I	85°	138°	222°	265°
20-16	16		16	II	238°	318°	333°	347°
20-24	24	24		I	70°	145°	215°	290°
20-27	27	27		I	72°	144°	216°	288°
20-39	39	37	2	I	63°	144°	252°	333°
20-41	41	41		I	45°	126°	225°	
22-21	21		21	II	16°	135°	175°	349°
22-32	32	32		I	72°	145°	215°	288°
22-41	41	27	14	I	39°	135°	264°	
22-55	55	55		I	30°	142°	226°	314°
24-61	61	61		I	90°	180°	270°	324°

* Option is unavailable if left blank.

Insert Arrangement Drawings

HM Series • MIL-DTL-26482 Series 1 Type Connectors

Arrangement

Service Rating

Number of Contacts



8-2

I

2 x #20



8-3

I

3 x #20



8-4

I

4 x #20



10-6

I

6 x #20



10-98

I

6 x #20



12-3

II

3 x #16



12-8

I

8 x #20



12-10

I

10 x #20



14-5

II

5 x #16



14-12

I

8 x #20
4 x #16



14-15

I

14 x #20
1 x #16



14-18

I

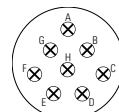
18 x #20



14-19

I

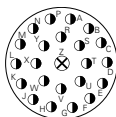
19 x #20



16-8

II

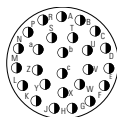
8 x #16



16-23

I

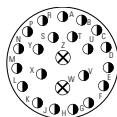
22 x #20
1 x #16



16-26

I

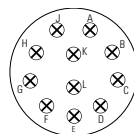
26 x #20



16-99

I

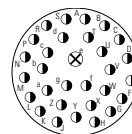
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2 x #16



18-11

II

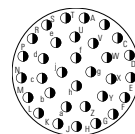
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18-30

I

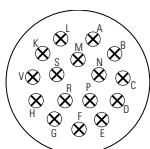
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18-32

I

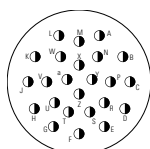
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20-16

II

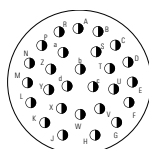
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20-24

I

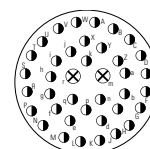
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20-27

I

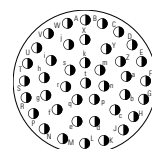
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20-39

I

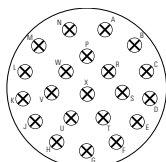
37 x #20
2 x #16



20-41

I

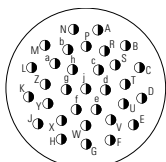
41 x #20



22-21

II

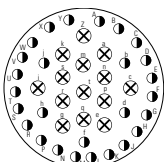
21 x #16



22-32

I

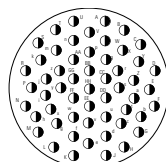
32 x #20



22-41

I

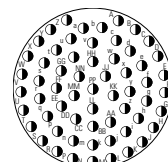
27 x #20
14 x #16



22-55

I

55 x #20



24-61

I

61 x #20

Contact Legend #16 ⊗ #20 ●

Rev. 2203

Wire & Solder Dimensions

Contact Size	Wire Range		Potential Drop (Millivolts)	Max Contact Resistance (Milliohm)	Solder Well Depth	Solder Well Inside Diameter	Solder Well Outside Diameter	Contact Retention Min Axial Load Pounds (Newtons)
	AWG	Dia						
#20	20, 22, 24	.020-.032 (.51-.81)	<55	9	.125 (3.2)	.046 (1.2)	.063 (1.6)	15 (66.7)
#16	16, 18, 20	.032-.050 (.81-1.29)	<50	6	.188 (4.8)	.078 (2.0)	.100 (2.5)	25 (111.2)

Dimensions are in inches (mm) unless otherwise noted.

Current Rating By Contact Size & Wire Size

Wire Size (AWG)	Contact Size	
	#20	#16
24	3A	
20	7.5A	7.5A
16		13A

Test ratings only. A connector cannot withstand maximum current through all contacts continuously. Please note that the establishment of electrical safety factors is left entirely in the designer's hands, since he or she is in the best position to know what peak voltage, switching surges, transients, etc. can be expected in a particular circuit.

Contact Derating Specifications

Service Rating	Max Operating Voltage Sea Level		Test Voltage			
	AC (RMS)	DC	Sea Level AC (RMS)	50,000 ft AC (RMS)	70,000 ft AC (RMS)	110,000 ft AC (RMS)
I	600	850	1,500	500	375	200
II	1,000	1,275	2,300	750	500	200

Test ratings only. A connector cannot withstand maximum current through all contacts continuously. Please note that the establishment of electrical safety factors is left entirely in the designer's hands, since he or she is in the best position to know what peak voltage, switching surges, transients, etc. can be expected in a particular circuit.

Coupling Torque

Shell Size	Maximum Engagement & Disengagement	Minimum Disengagement
8	8 (.9)	
10	12 (1.4)	1 (.1)
12	16 (1.8)	2 (.3)
14	20 (2.3)	
16	24 (2.7)	4 (.5)
18	28 (3.2)	
20	32 (3.6)	6 (.7)
22	36 (4.1)	
24	44 (5.0)	7 (.8)

Units are in inch pounds (Newton meters).

Torque Values For Cable Clamp Screws

Screw Size	Recommended Torque	
	Min	Max
#2-56	1.5 (.2)	2.5 (.3)
#4-40	3.5 (.4)	4.5 (.5)
#6-32	5 (.6)	7 (.8)
#8-32	7 (.8)	9 (1.0)
#10-32	9 (1.0)	11 (1.2)
#250-20	11 (1.2)	13 (1.5)

Units are in inch pounds (Newton meters).

Rev. 2203

Wire Sealing Range

Contact Size	Wire Size (AWG)	Insulation Outside Diameter Range	
		Min	Max
#20	20, 22, & 24	.060 (1.52)	.083 (2.11)
#16	16, 18, & 20	.066 (1.68)	.109 (2.77)

Dimensions are in inches (mm) unless otherwise noted.

Recommended Insulation Strip Length

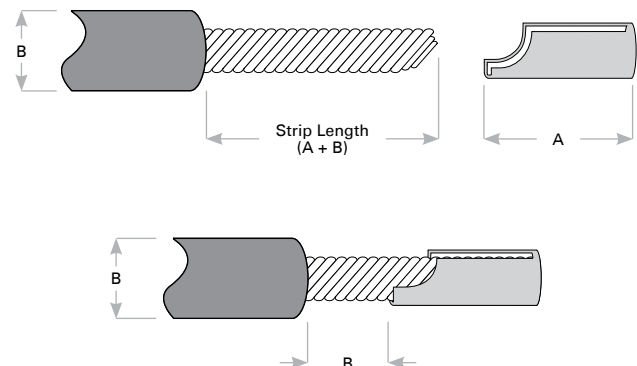
The recommended insulation strip length found in the table below can be used for standard insulated wire. For heavy jacketed wire, insulation strip length can be quickly and easily calculated by adding the contact solder well depth (A) to the wire's outside insulation diameter (B). The conductor should be exposed to a length that will bring the insulation clearance above the solder cup equal to the outside diameter of the insulation (B) when the wire is inserted in the solder cup to its full depth.

When removing the insulation from conductors always use a thermal precision cutter or jacket stripping device. Care must be exercised to prevent damage to the individual wire strands or conductor when cutting the jacket insulation.

Strip Length

Contact Size	(A) Well Depth	Recommended Strip Length
#20	.165 (4.2)	.250 (6.6)
#16	.245 (6.2)	.350 (8.9)

Dimensions are in inches (mm).



MS3116 Connector Type Datasheet

HM Series • MIL-DTL-26482 Series 1 Type Connectors



HM06 F 14-19 P N - 01

- 1 **BASIC PART NUMBER**
HM06 Straight plug w/ integrated backshell
- 2 **MATERIAL & FINISH**
F Aluminum, olive drab cadmium
- 3 **SHELL SIZE & INSERT ARRANGEMENT**
See Insert Arrangement Selection table, p. H-9
- 4 **CONTACT STYLE**
P Pin
S Socket
- 5 **INSERT ROTATION**
N Normal or W, X, Y, Z, see p. H-9 for availability
- 6 **OPTIONAL ACCESSORY KIT (OMIT FOR NONE)**
01 Protective cover

HM06 Cross Reference & Compatibility

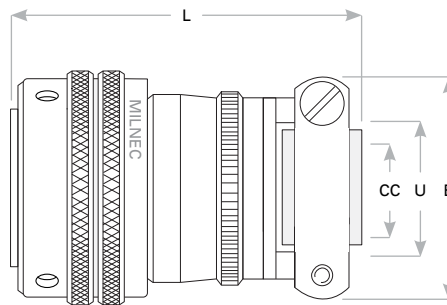
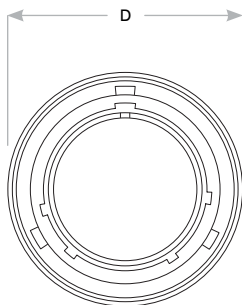
Compatible Brands	Equivalents	Mates
MIL-DTL-26482 Series 1	MS3116	MS3110, MS3111, MS3112, MS3114
Amphenol	PT06	PT00, PT01, PT02, PT07
Array	PW06	PW00, PW01, PW02, PW07
ITT Cannon	KPT06	KPT00, KPT01, KPT02, KPT07
Souriau	85106	85100, 85101, 85102, 85107

Note: See part builder (p. H-8) for additional kit options.

Plug Dimensions

Shell Size	D	L	B	U	CC Cable Clearance
8	.750 (19.1)	1.906 (48.4)	.812 (20.6)	.240 (6.1)	.125 (3.2)
10	.859 (21.8)	1.906 (48.4)	.875 (22.2)	.302 (7.7)	.188 (4.8)
12	1.013 (25.7)	1.906 (48.4)	1.000 (25.4)	.428 (10.9)	.312 (7.9)
14	1.156 (29.4)	1.906 (48.4)	1.125 (28.6)	.552 (14.0)	.375 (9.5)
16	1.281 (32.5)	2.047 (52.0)	1.188 (30.2)	.615 (15.6)	.500 (12.7)
18	1.319 (33.5)	2.078 (52.8)	1.438 (36.5)	.740 (18.8)	.625 (15.9)
20	1.531 (38.9)	2.250 (57.2)	1.438 (36.5)	.740 (18.8)	.625 (15.9)
22	1.656 (42.1)	2.250 (57.2)	1.625 (41.3)	.928 (23.6)	.750 (19.1)
24	1.776 (45.1)	2.312 (58.7)	1.750 (44.5)	.990 (25.1)	.800 (20.3)

Dimensions are in inches (mm).



Rev. 2203

90° MIL-5015 Plug Datasheet

HM Series • MIL-DTL-26482 Series 1 Type Connectors

HM08 F 14-19 P N - 01



1 2 3 4 5 6

- 1 **BASIC PART NUMBER**
HM08 90° plug w/ integrated backshell
- 2 **MATERIAL & FINISH**
F Aluminum, olive drab cadmium
- 3 **SHELL SIZE & INSERT ARRANGEMENT**
See Insert Arrangement Selection table, p. H-9
- 4 **CONTACT STYLE**
P Pin
S Socket
- 5 **INSERT ROTATION**
N Normal or W, X, Y, Z, see p. H-9 for availability
- 6 **OPTIONAL ACCESSORY KIT (OMIT FOR NONE)**
01 Protective cover

Note: See part builder (p. H-8) for additional kit options.

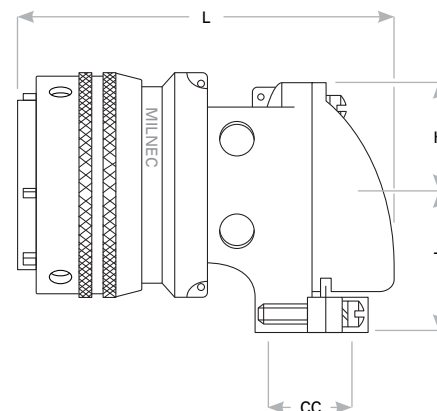
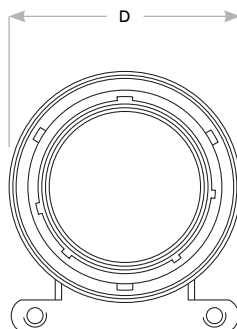
HM08 Cross Reference & Compatibility

Compatible Brands	Equivalent	Mates
MIL-DTL-26482 Series 1	—	MS3110, MS3111, MS3112, MS3114
Amphenol	PT08	PT00, PT01, PT02, PT07
Array	PW08	PW00, PW01, PW02, PW07
ITT Cannon	KPT08	KPT00, KPT01, KPT02, KPT07
Souriau	85108	85100, 85101, 85102, 85107

Plug Dimensions

Shell Size	D	L	K	T	CC Cable Clearance
8	.796 (20.2)	1.786 (45.4)	.339 (8.6)	.655 (16.6)	.169 (4.3)
10	.921 (23.4)	1.880 (47.8)	.393 (10.0)	.749 (19.0)	.170 (4.3)
12	1.046 (26.6)	1.965 (49.9)	.450 (11.4)	.812 (20.6)	.264 (6.7)
14	1.171 (29.7)	2.113 (53.7)	.519 (13.2)	.905 (23.0)	.310 (7.9)
16	1.297 (32.9)	2.315 (58.8)	.583 (14.8)	1.030 (26.2)	.330 (8.4)
18	1.422 (36.1)	2.423 (61.5)	.621 (15.8)	1.015 (25.8)	.444 (11.3)
20	1.562 (39.7)	2.695 (68.4)	.683 (17.3)	1.077 (27.4)	.510 (13.0)
22	1.672 (42.5)	2.742 (69.6)	.739 (18.8)	1.139 (28.9)	.515 (13.1)
24	1.797 (45.6)	2.980 (75.7)	.797 (20.2)	1.265 (32.1)	.656 (16.7)

Dimensions are in inches (mm).



Rev. 2203

MS3110 Connector Type Datasheet

HM Series • MIL-DTL-26482 Series 1 Type Connectors

HM00 F 14-18 S N - 03

- 1 **BASIC PART NUMBER**
HM00 Wall mount receptacle w/ integrated backshell
- 2 **MATERIAL & FINISH**
F Aluminum, olive drab cadmium
- 3 **SHELL SIZE & INSERT ARRANGEMENT**
See Insert Arrangement Selection table, p. H-9
- 4 **CONTACT STYLE**
P Pin
S Socket
- 5 **INSERT ROTATION**
N Normal or W, X, Y, Z, see p. H-9 for availability
- 6 **OPTIONAL ACCESSORY KIT (OMIT FOR NONE)**
02 Protective cover + mounting gasket
03 02 kit + mounting bracket + sealing screws

HM00 Cross Reference & Compatibility

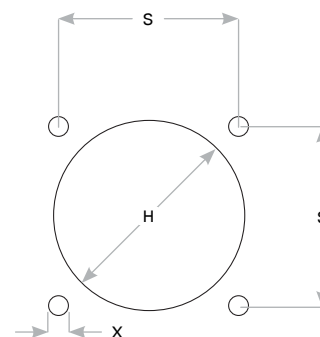
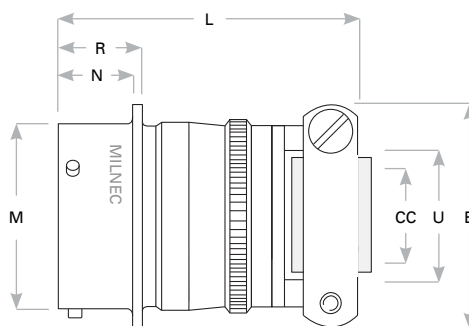
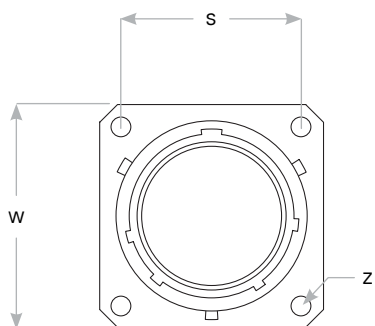
Compatible Brands	Equivalent	Mates
MIL-DTL-26482 Series 1	MS3110	MS3116
Amphenol	PT00	PT06, PT08
Array	PW00	PW06, PW08
ITT Cannon	KPT00	KPT06, KPT08
Souriau	85100	85106, 85108

Note: See part builder (p. H-8) for additional kit options.

Receptacle Dimensions

Shell Size	W	Z	L	R	N	M	B	U	CC Cable Clearance	S	X	H
8	.812 (20.6)	.120 (3.0)	1.922 (48.8)	.493 (12.5)	.431 (10.9)	.473 (12.0)	.812 (20.6)	.240 (6.1)	.125 (3.2)	.594 (15.1)	.120 (3.1)	.449 (11.4)
10	.938 (23.8)	.120 (3.0)	1.922 (48.8)	.493 (12.5)	.431 (10.9)	.590 (15.0)	.875 (22.2)	.302 (7.7)	.188 (4.8)	.719 (18.3)	.120 (3.1)	.573 (14.6)
12	1.031 (26.2)	.120 (3.0)	1.922 (48.8)	.493 (12.5)	.431 (10.9)	.750 (19.1)	1.000 (25.4)	.428 (10.9)	.312 (7.9)	.812 (20.6)	.120 (3.1)	.699 (17.8)
14	1.125 (28.6)	.120 (3.0)	1.922 (48.8)	.493 (12.5)	.431 (10.9)	.875 (22.2)	1.125 (28.6)	.552 (14.0)	.375 (9.5)	.906 (23.0)	.120 (3.1)	.823 (20.9)
16	1.219 (31.0)	.120 (3.0)	2.047 (52.0)	.493 (12.5)	.431 (10.9)	1.000 (25.4)	1.188 (30.2)	.615 (15.6)	.500 (12.7)	.969 (24.6)	.120 (3.1)	.949 (24.1)
18	1.312 (33.3)	.120 (3.0)	2.078 (52.8)	.493 (12.5)	.431 (10.9)	1.125 (28.6)	1.438 (36.5)	.740 (18.8)	.625 (15.9)	1.062 (27.0)	.120 (3.1)	1.073 (27.3)
20	1.438 (36.5)	.120 (3.0)	2.344 (59.5)	.650 (16.5)	.556 (14.1)	1.250 (31.8)	1.438 (36.5)	.740 (18.8)	.625 (15.9)	1.156 (29.4)	.120 (3.1)	1.199 (30.5)
22	1.562 (39.7)	.120 (3.0)	2.344 (59.5)	.650 (16.5)	.556 (14.1)	1.375 (34.9)	1.625 (41.3)	.928 (23.6)	.750 (19.1)	1.250 (31.8)	.120 (3.1)	1.323 (33.6)
24	1.688 (42.9)	.147 (3.7)	2.406 (61.1)	.683 (17.3)	.589 (15.0)	1.500 (38.1)	1.719 (43.7)	.990 (25.1)	.800 (20.3)	1.375 (34.9)	.147 (3.7)	1.449 (36.8)

Dimensions are in inches (mm). Not recommended for rear panel installations.



Front Mount
Panel Cutout

Rev. 2203

MS3112 Connector Type Datasheet

HM Series • MIL-DTL-26482 Series 1 Type Connectors

HM02 F 14-19 S W - 03

- 1 **BASIC PART NUMBER**
HM02 Box mount receptacle
- 2 **MATERIAL & FINISH**
F Aluminum, olive drab cadmium
- 3 **SHELL SIZE & INSERT ARRANGEMENT**
See Insert Arrangement Selection table, p. H-9
- 4 **CONTACT STYLE**
P Pin
S Socket
- 5 **INSERT ROTATION**
N Normal or W, X, Y, Z, see p. H-9 for availability
- 6 **OPTIONAL ACCESSORY KIT (OMIT FOR NONE)**
02 Protective cover + mounting gasket
03 02 kit + mounting bracket + sealing screws

Note: See part builder (p. H-8) for additional kit options.



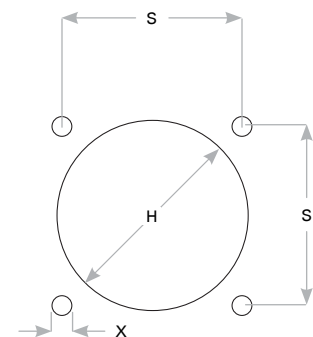
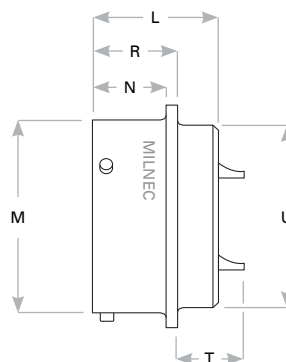
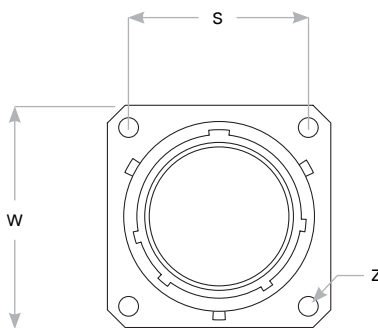
HM02 Cross Reference & Compatibility

Compatible Brands	Equivalent	Mates
MIL-DTL-26482 Series 1	MS3112	MS3116
Amphenol	PT02	PT06, PT08
Array	PW02	PW06, PW08
ITT Cannon	KPT02	KPT06, KPT08
Souriau	85102	85106, 85108

Receptacle Dimensions

Shell Size	W	Z	L	R	N	M	T	U	S	X	H
8	.812 (20.6)	.120 (3.0)	.825 (21.0)	.493 (12.5)	.431 (10.9)	.473 (12.0)	.465 (11.8)	.449 (11.4)	.594 (15.1)	.120 (3.1)	.449 (11.4)
10	.938 (23.8)	.120 (3.0)	.825 (21.0)	.493 (12.5)	.431 (10.9)	.590 (15.0)	.465 (11.8)	.573 (14.6)	.719 (18.3)	.120 (3.1)	.573 (14.6)
12	1.031 (26.2)	.120 (3.0)	.825 (21.0)	.493 (12.5)	.431 (10.9)	.750 (19.1)	.465 (11.8)	.699 (17.8)	.812 (20.6)	.120 (3.1)	.699 (17.8)
14	1.125 (28.6)	.120 (3.0)	.825 (21.0)	.493 (12.5)	.431 (10.9)	.875 (22.2)	.465 (11.8)	.823 (20.9)	.906 (23.0)	.120 (3.1)	.823 (20.9)
16	1.219 (31.0)	.120 (3.0)	.825 (21.0)	.493 (12.5)	.431 (10.9)	1.000 (25.4)	.465 (11.8)	.949 (24.1)	.969 (24.6)	.120 (3.1)	.949 (24.1)
18	1.312 (33.3)	.120 (3.0)	.825 (21.0)	.493 (12.5)	.431 (10.9)	1.125 (28.6)	.465 (11.8)	1.073 (27.3)	1.062 (27.0)	.120 (3.1)	1.073 (27.3)
20	1.438 (36.5)	.120 (3.0)	1.076 (27.3)	.650 (16.5)	.556 (14.1)	1.250 (31.8)	.526 (13.4)	1.199 (30.5)	1.156 (29.4)	.120 (3.1)	1.199 (30.5)
22	1.562 (39.7)	.120 (3.0)	1.076 (27.3)	.650 (16.5)	.556 (14.1)	1.375 (34.9)	.526 (13.4)	1.323 (33.6)	1.250 (31.8)	.120 (3.1)	1.323 (33.6)
24	1.688 (42.9)	.147 (3.7)	1.109 (28.2)	.683 (17.3)	.589 (15.0)	1.500 (38.1)	.493 (12.5)	1.449 (36.8)	1.375 (34.9)	.147 (3.7)	1.449 (36.8)

Dimensions are in inches (mm). Not recommended for rear panel installations.



**Front Mount
Panel Cutout**

Rev. 2203

MS3114 Connector Type Datasheet

HM Series • MIL-DTL-26482 Series 1 Type Connectors



HM07 F 14-18 S N - 02

- 1 **BASIC PART NUMBER**
HM07 Jam nut recept. w/ integrated backshell
- 2 **MATERIAL & FINISH**
F Aluminum, olive drab cadmium
- 3 **SHELL SIZE & INSERT ARRANGEMENT**
See Insert Arrangement Selection table, p. H-9
- 4 **CONTACT STYLE**
P Pin
S Socket
- 5 **INSERT ROTATION**
N Normal or W, X, Y, Z, see p. H-9 for availability
- 6 **OPTIONAL ACCESSORY KIT (OMIT FOR NONE)**
02 Protective cover

HM07 Cross Reference & Compatibility

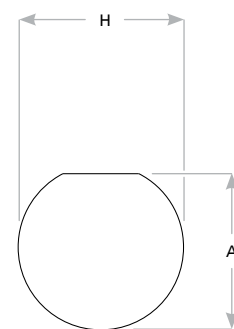
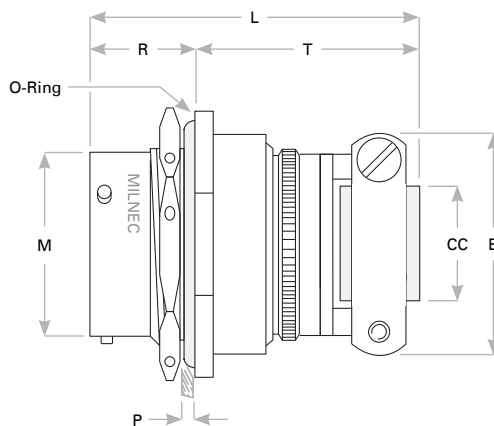
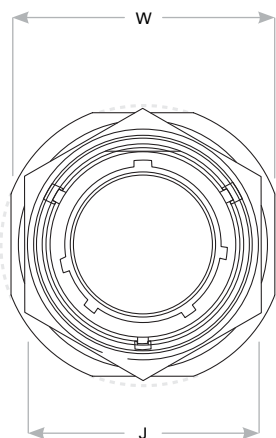
Compatible Brands	Equivalent	Mates
MIL-DTL-26482 Series 1	MS3114	MS3116
Amphenol	PT07	PT06, PT08
Array	PW07	PW06, PW08
ITT Cannon	KPT07	KPT06, KPT08
Souriau	85107	85106, 85108

Note: See part builder (p. H-8) for additional kit options.

Receptacle Dimensions

Shell Size	W	J	L	R	M	T	B	CC Cable Clearance	P Max Rear Panel†	H	A
8	.938 (23.8)	.750 (19.1)	1.758 (44.7)	.696 (17.7)	.473 (11.9)	1.062 (27.0)	0.781 (19.8)	0.250 (6.4)	.125 (3.2)	.572 (14.5)	.542 (13.8)
10	1.062 (27.0)	.875 (22.2)	1.758 (44.7)	.696 (17.7)	.590 (15.0)	1.062 (27.0)	0.844 (21.4)	0.312 (7.9)	.125 (3.2)	.697 (17.7)	.669 (17.0)
12	1.250 (31.8)	1.062 (27.0)	1.758 (44.7)	.696 (17.7)	.750 (19.1)	1.062 (27.0)	0.969 (24.6)	0.438 (11.1)	.125 (3.2)	.884 (22.5)	.830 (21.1)
14	1.375 (34.9)	1.188 (30.2)	1.758 (44.7)	.696 (17.7)	.875 (22.2)	1.062 (27.0)	1.094 (27.8)	0.562 (14.3)	.125 (3.2)	1.007 (25.6)	.955 (24.3)
16	1.500 (38.1)	1.312 (33.3)	1.884 (47.9)	.696 (17.7)	1.000 (25.4)	1.188 (30.2)	1.156 (29.4)	0.625 (15.9)	.125 (3.2)	1.134 (28.8)	1.084 (27.5)
18	1.625 (41.3)	1.438 (36.5)	1.884 (47.9)	.696 (17.7)	1.125 (28.6)	1.188 (30.2)	1.406 (35.7)	0.750 (19.1)	.125 (3.2)	1.259 (32.0)	1.208 (30.7)
20	1.812 (46.0)	1.562 (39.7)	2.134 (54.2)	.884 (22.4)	1.250 (31.8)	1.250 (31.8)	1.406 (35.7)	0.750 (19.1)	.250 (6.4)	1.384 (35.2)	1.333 (33.9)
22	1.938 (49.2)	1.688 (42.9)	2.134 (54.2)	.884 (22.4)	1.375 (35.0)	1.250 (31.8)	1.594 (40.5)	0.938 (23.8)	.250 (6.4)	1.507 (38.3)	1.459 (37.1)
24	2.062 (52.4)	1.816 (46.1)	2.167 (55.1)	.917 (23.3)	1.500 (38.1)	1.250 (31.8)	1.594 (40.5)	1.000 (25.4)	.250 (6.4)	1.634 (41.5)	1.575 (40.0)

Dimensions are in inches (mm). † Max panel thickness applies only to rear mount applications to ensure proper coupling clearance.



Panel Cutout

Rev. 2203

MS3111 Connector Type Datasheet

HM Series • MIL-DTL-26482 Series 1 Type Connectors

HM01 F 14-18 S N - 02

- 1 **BASIC PART NUMBER**
HM01 Cable mount recept. w/ integrated backshell
- 2 **MATERIAL & FINISH**
F Aluminum, olive drab cadmium
- 3 **SHELL SIZE & INSERT ARRANGEMENT**
See Insert Arrangement Selection table, p. H-9
- 4 **CONTACT STYLE**
P Pin
S Socket
- 5 **INSERT ROTATION**
N Normal or W, X, Y, Z, see p. H-9 for availability
- 6 **OPTIONAL ACCESSORY KIT (OMIT FOR NONE)**
02 Protective cover



HM01 Cross Reference & Compatibility

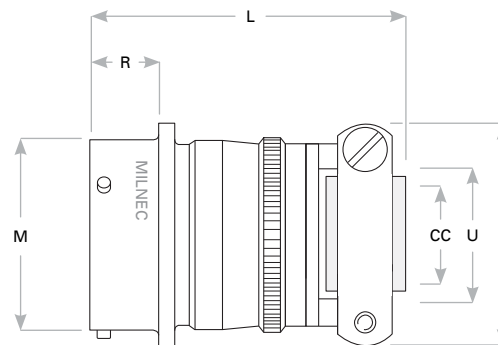
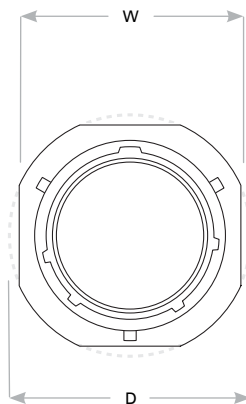
Compatible Brands	Equivalent	Mates
MIL-DTL-26482 Series 1	MS3111	MS3116
Amphenol	PT01	PT06, PT08
Array	PW01	PW06, PW08
ITT Cannon	KPT01	KPT06, KPT08
Souriau	85101	85106, 85108

Note: See part builder (p. H-8) for additional kit options.

Receptacle Dimensions

Shell Size	W	D	L	R	M	B	U	CC Cable Clearance
8	.812 (20.6)	.938 (23.8)	1.922 (48.8)	.400 (10.2)	.473 (12.0)	.812 (20.6)	.240 (6.1)	.125 (3.2)
10	.938 (23.8)	1.062 (27.0)	1.922 (48.8)	.400 (10.2)	.590 (15.0)	.875 (22.2)	.302 (7.7)	.188 (4.8)
12	1.031 (26.2)	1.156 (29.4)	1.922 (48.8)	.400 (10.2)	.750 (19.1)	1.000 (25.4)	.428 (10.9)	.312 (7.9)
14	1.125 (28.6)	1.250 (31.8)	1.922 (48.8)	.400 (10.2)	.875 (22.2)	1.125 (28.6)	.552 (14.0)	.375 (9.5)
16	1.219 (31.0)	1.344 (34.1)	2.047 (52.0)	.400 (10.2)	1.000 (25.4)	1.188 (30.2)	.615 (15.6)	.500 (12.7)
18	1.312 (33.3)	1.438 (36.5)	2.078 (52.8)	.400 (10.2)	1.125 (28.6)	1.438 (36.5)	.740 (18.8)	.625 (15.9)
20	1.438 (36.5)	1.562 (39.7)	2.344 (59.5)	.535 (13.6)	1.250 (31.8)	1.438 (36.5)	.740 (18.8)	.625 (15.9)
22	1.562 (39.7)	1.688 (42.9)	2.344 (59.5)	.535 (13.6)	1.375 (34.9)	1.625 (41.3)	.928 (23.6)	.750 (19.1)
24	1.688 (42.9)	1.812 (46.0)	2.406 (61.1)	.568 (14.4)	1.500 (38.1)	1.719 (43.7)	.990 (25.1)	.800 (20.3)

Dimensions are in inches (mm).



Rev. 2203

Thru-Bulkhead Receptacle

HM Series • MIL-DTL-26482 Series 1 Type Connectors



HM22 F 14-18 PS N - 02

- 1 **BASIC PART NUMBER**
HM22 Thru-bulkhead receptacle
- 2 **MATERIAL & FINISH**
F Aluminum, olive drab cadmium
- 3 **SHELL SIZE & INSERT ARRANGEMENT**
See Insert Arrangement Selection table, p. H-9
- 4 **CONTACT STYLE**
PS Pin / socket (non-configurable)
- 5 **INSERT ROTATION**
N Normal or W, X, Y, Z, see p. H-9 for availability
- 6 **OPTIONAL ACCESSORY KIT (OMIT FOR NONE)**
02 Protective covers (2x) + mounting gasket
03 02 kit + mounting bracket + sealing screws

HM22 Compatibility

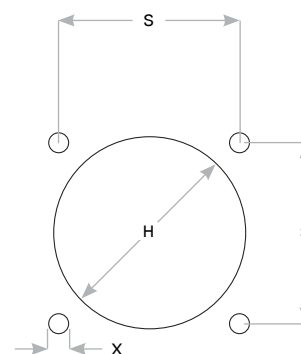
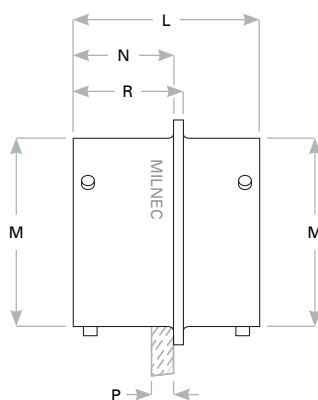
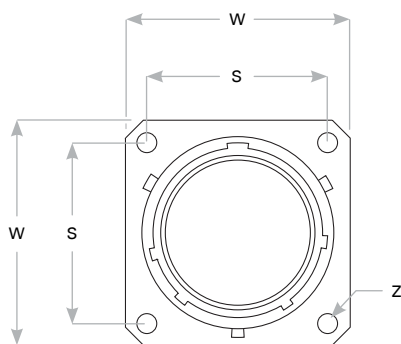
Compatible Brands	Mates
MIL-DTL-26482 Series 1	MS3116
Amphenol	PT06, PT08
Array	PW06, PW08
ITT Cannon	KPT06, KPT08
Souriau	85106, 85108

Note: See part builder (p. H-8) for additional kit options.

Receptacle Dimensions

Shell Size	W	Z	L	R	N	M	P Max Rear Panel [†]	S	X	H
8	.812 (20.6)	.120 (3.0)	1.050 (26.7)	.625 (15.9)	.562 (14.3)	.473 (12.0)	.215 (5.4)	.594 (15.1)	.120 (3.1)	.533 (13.5)
10	.938 (23.8)	.120 (3.0)	1.050 (26.7)	.625 (15.9)	.562 (14.3)	.590 (15.0)	.215 (5.4)	.719 (18.3)	.120 (3.1)	.650 (16.5)
12	1.031 (26.2)	.120 (3.0)	1.050 (26.7)	.625 (15.9)	.562 (14.3)	.750 (19.1)	.215 (5.4)	.812 (20.6)	.120 (3.1)	.810 (20.6)
14	1.125 (28.6)	.120 (3.0)	1.050 (26.7)	.625 (15.9)	.562 (14.3)	.875 (22.2)	.215 (5.4)	.906 (23.0)	.120 (3.1)	.935 (23.8)
16	1.219 (31.0)	.120 (3.0)	1.050 (26.7)	.625 (15.9)	.562 (14.3)	1.000 (25.4)	.215 (5.4)	.969 (24.6)	.120 (3.1)	1.060 (26.9)
18	1.312 (33.3)	.120 (3.0)	1.050 (26.7)	.625 (15.9)	.562 (14.3)	1.125 (28.6)	.215 (5.4)	1.062 (27.0)	.120 (3.1)	1.185 (30.1)
20	1.438 (36.5)	.120 (3.0)	1.330 (33.8)	.781 (19.8)	.688 (17.5)	1.250 (31.8)	.340 (8.6)	1.156 (29.4)	.120 (3.1)	1.310 (33.3)
22	1.562 (39.7)	.120 (3.0)	1.330 (33.8)	.781 (19.8)	.688 (17.5)	1.375 (34.9)	.340 (8.6)	1.250 (31.8)	.120 (3.1)	1.435 (36.5)
24	1.688 (42.9)	.147 (3.7)	1.330 (33.8)	.781 (19.8)	.688 (17.5)	1.500 (38.1)	.310 (7.8)	1.375 (34.9)	.147 (3.7)	1.560 (39.6)

Dimensions are in inches (mm). [†] Max panel thickness applies only to rear mount applications to ensure proper coupling clearance.



Panel Cutout

Rev. 2203

Box Mount Receptacle (Hermetic)

HM Series • MIL-DTL-26482 Series 1 Type Connectors

HM12 H 14-15 P N - 02

1 2 3 4 5 6

1 BASIC PART NUMBER

HM12 Hermetic box mount receptacle
Helium leakage < 1.0 x10⁻⁷ cc³/sec at 15 psi

2 MATERIAL & FINISH

H Carbon steel, tin plating over nickel

3 SHELL SIZE & INSERT ARRANGEMENT

See Insert Arrangement Selection table, p. H-9

4 CONTACT STYLE

P Pin, tin plated, solder cup termination
G* Pin, gold plated, solder cup termination
S* Socket, tin plated, solder cup termination
H* Socket, gold plated, solder cup termination

5 INSERT ROTATION

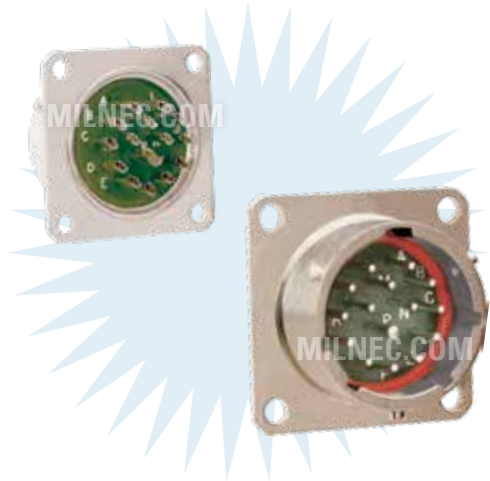
N Normal or W, X, Y, Z, see p. H-9 for availability

6 OPTIONAL ACCESSORY KIT (OMIT FOR NONE)

02 Protective cover + mounting gasket
03 02 kit + mounting bracket + sealing screws

* Please consult an authorized distributor for lead time and minimum quantity requirements.

Note: See part builder (p. H-8) for additional kit options.



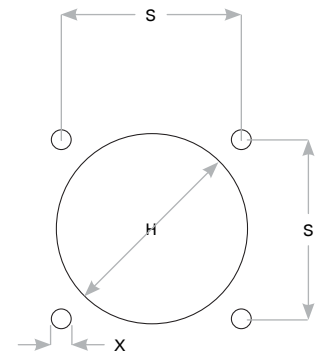
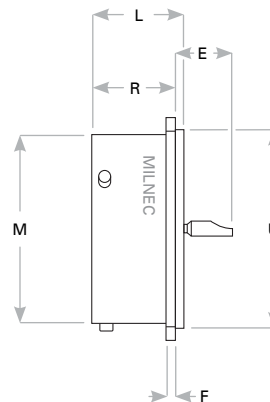
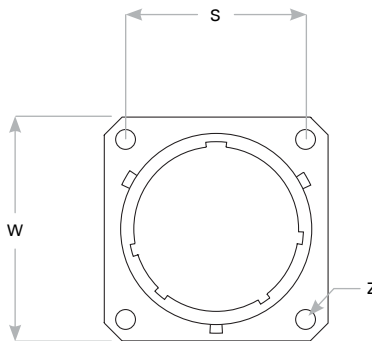
HM12 Compatibility

Compatible Brands	Mates
MIL-DTL-26482 Series 1	MS3116
Amphenol	PT06, PT08
Array	PW06, PW08
ITT Cannon	KPT06, KPT08
Souriau	85106, 85108

Receptacle Dimensions

Shell Size	W	Z	L	R	M	F	E	U	S	X	H
8	.812 (20.6)	.120 (3.1)	.541 (13.8)	.494 (12.6)	.473 (12.0)	.062 (1.6)	.344 (8.7)	.562 (14.3)	.594 (15.1)	.120 (3.1)	.449 (11.4)
10	.938 (23.8)	.120 (3.1)	.541 (13.8)	.494 (12.6)	.590 (15.0)	.062 (1.6)	.344 (8.7)	.672 (17.1)	.719 (18.3)	.120 (3.1)	.573 (14.6)
12	1.031 (26.2)	.120 (3.1)	.541 (13.8)	.494 (12.6)	.750 (19.1)	.062 (1.6)	.344 (8.7)	.781 (19.8)	.812 (20.6)	.120 (3.1)	.699 (17.8)
14	1.125 (28.6)	.120 (3.1)	.541 (13.8)	.494 (12.6)	.875 (22.2)	.062 (1.6)	.344 (8.7)	.906 (23.0)	.906 (23.0)	.120 (3.1)	.823 (20.9)
16	1.219 (31.0)	.120 (3.1)	.541 (13.8)	.494 (12.6)	1.000 (25.4)	.062 (1.6)	.344 (8.7)	1.031 (26.2)	.969 (24.6)	.120 (3.1)	.949 (24.1)
18	1.312 (33.3)	.120 (3.1)	.541 (13.8)	.494 (12.6)	1.125 (28.6)	.062 (1.6)	.344 (8.7)	1.156 (29.4)	1.062 (27.0)	.120 (3.1)	1.073 (27.3)
20	1.438 (36.5)	.120 (3.1)	.603 (15.3)	.556 (14.1)	1.250 (31.8)	.062 (1.6)	.344 (8.7)	1.250 (31.8)	1.156 (29.4)	.120 (3.1)	1.199 (30.5)
22	1.562 (39.7)	.120 (3.1)	.635 (16.1)	.556 (14.1)	1.375 (34.9)	.062 (1.6)	.377 (9.6)	1.375 (34.9)	1.250 (31.8)	.120 (3.1)	1.323 (33.6)
24	1.688 (42.9)	.147 (3.7)	.667 (16.9)	.588 (14.9)	1.500 (38.1)	.062 (1.6)	.377 (9.6)	1.500 (38.1)	1.375 (34.9)	.147 (3.7)	1.449 (36.8)

Dimensions are in inches (mm). Not recommended for rear panel installations.



**Front Mount
Panel Cutout**

Rev. 2203

Jam Nut Receptacle (Hermetic)

HM Series • MIL-DTL-26482 Series 1 Type Connectors



HM13 Compatibility

Compatible Brands	Mates
MIL-DTL-26482 Series 1	MS3116
Amphenol	PT06, PT08
Array	PW06, PW08
ITT Cannon	KPT06, KPT08
Souriau	85106, 85108

HM13 H 12-3 P N - 02

- 1 **BASIC PART NUMBER**
HM13 Hermetic jam nut receptacle
Helium leakage < 1.0 x10⁻⁷ cc³/sec at 15 psi
- 2 **MATERIAL & FINISH**
H Carbon steel, tin plating over nickel
- 3 **SHELL SIZE & INSERT ARRANGEMENT**
See Insert Arrangement Selection table, p. H-9
- 4 **CONTACT STYLE**
P Pin, tin plated, solder cup termination
G* Pin, gold plated, solder cup termination
S* Socket, tin plated, solder cup termination
H* Socket, gold plated, solder cup termination
- 5 **INSERT ROTATION**
N Normal or W, X, Y, Z, see p. H-9 for availability
- 6 **OPTIONAL ACCESSORY KIT (OMIT FOR NONE)**
02 Protective cover

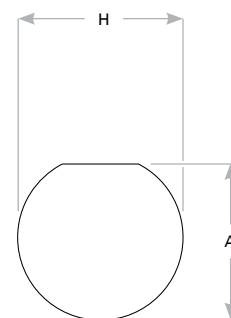
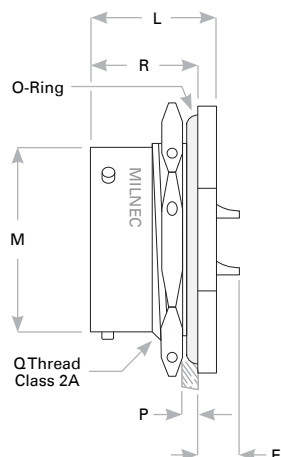
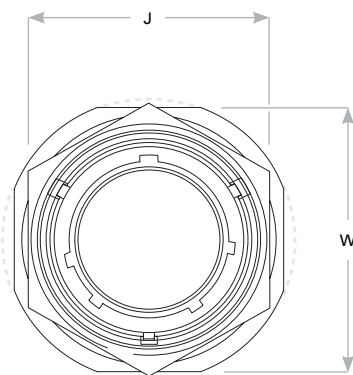
* Please consult an authorized distributor for lead time and minimum quantity requirements.

Note: See part builder (p. H-8) for additional kit options.

Receptacle Dimensions

Shell Size	W	J	L	R	M	Q Thread Class 2A	E	P Max Rear Panel†	H	A
8	.938 (23.8)	.750 (19.1)	.790 (20.1)	.696 (17.7)	.473 (12.0)	.5625-24 NEF	.206 (5.2)	.125 (3.2)	.572 (14.5)	.542 (13.8)
10	1.062 (27.0)	.875 (22.2)	.790 (20.1)	.696 (17.7)	.590 (15.0)	.6875-24 NEF	.206 (5.2)	.125 (3.2)	.697 (17.7)	.669 (17.0)
12	1.250 (31.8)	1.062 (27.0)	.790 (20.1)	.696 (17.7)	.750 (19.1)	.8750-20 UNEF	.206 (5.2)	.125 (3.2)	.884 (22.5)	.830 (21.1)
14	1.375 (34.9)	1.188 (30.2)	.790 (20.1)	.696 (17.7)	.875 (22.2)	1.0000 20 UNEF	.206 (5.2)	.125 (3.2)	1.007 (25.6)	.955 (24.3)
16	1.500 (38.1)	1.312 (33.3)	.790 (20.1)	.696 (17.7)	1.000 (25.4)	1.1250-18 NEF	.206 (5.2)	.125 (3.2)	1.134 (28.8)	1.084 (27.5)
18	1.625 (41.3)	1.438 (36.5)	.790 (20.1)	.696 (17.7)	1.125 (28.6)	1.2500-18 NEF	.206 (5.2)	.125 (3.2)	1.259 (32.0)	1.208 (30.7)
20	1.812 (46.0)	1.562 (39.7)	1.009 (25.7)	.884 (22.5)	1.250 (31.8)	1.3750-18 NEF	.081 (2.1)	.250 (6.4)	1.384 (35.2)	1.333 (33.9)
22	1.938 (49.2)	1.688 (42.9)	1.009 (25.7)	.884 (22.5)	1.375 (34.9)	1.5000-18 NEF	.081 (2.1)	.250 (6.4)	1.507 (38.3)	1.459 (37.1)
24	2.062 (52.4)	1.812 (46.0)	1.042 (26.5)	.917 (23.3)	1.500 (38.1)	1.6250-18 NEF	.048 (1.2)	.250 (6.4)	1.634 (41.5)	1.575 (40.0)

Dimensions are in inches (mm). † Max panel thickness applies only to rear mount applications to ensure proper coupling clearance.



Panel Cutout

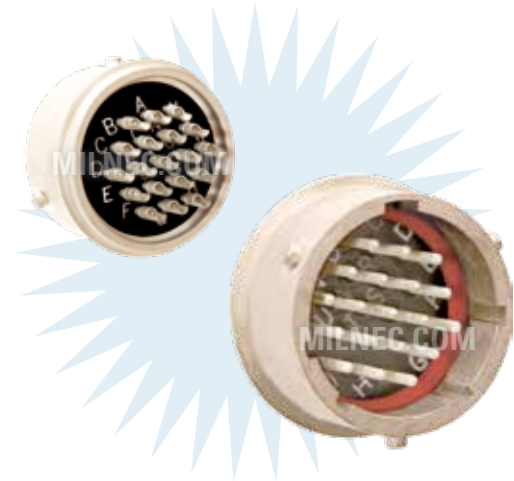
Solder Mount Receptacle (Hermetic)

HM Series • MIL-DTL-26482 Series 1 Type Connectors

HM19 H 14-19 P N - 02

- 1 **BASIC PART NUMBER**
HM19 Hermetic solder mount receptacle
Helium leakage < 1.0 x10⁻⁷ cc³/sec at 15 psi
- 2 **MATERIAL & FINISH**
H Carbon steel, tin plating over nickel
- 3 **SHELL SIZE & INSERT ARRANGEMENT**
See Insert Arrangement Selection table, p. H-9
- 4 **CONTACT STYLE**
P Pin, tin plated, solder cup termination
G* Pin, gold plated, solder cup termination
S* Socket, tin plated, solder cup termination
H* Socket, gold plated, solder cup termination
- 5 **INSERT ROTATION**
N Normal or W, X, Y, Z, see p. H-9 for availability
- 6 **OPTIONAL ACCESSORY KIT (OMIT FOR NONE)**
02 Protective cover

* Please consult an authorized distributor for lead time and minimum quantity requirements.



HM19 Compatibility

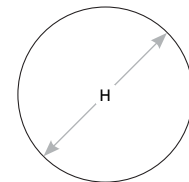
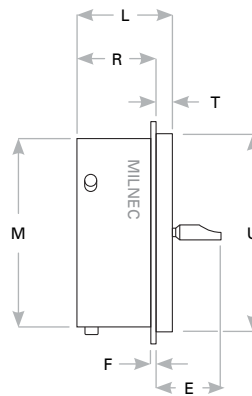
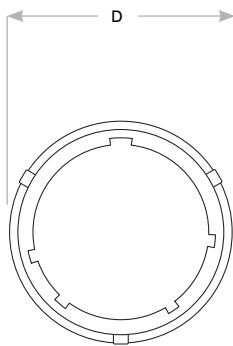
Compatible Brands	Mates
MIL-DTL-26482 Series 1	MS3116
Amphenol	PT06, PT08
Array	PW06, PW08
ITT Cannon	KPT06, KPT08
Souriau	85106, 85108

Note: See part builder (p. H-8) for additional kit options.

Receptacle Dimensions

Shell Size	D	L	R	M	F	T	E	U	H Front Mount
8	.636 (16.2)	.541 (13.8)	.447 (11.4)	.473 (12.0)	.031 (0.8)	.094 (2.4)	.386 (9.8)	.562 (14.3)	.582 (14.8)
10	.761 (19.3)	.541 (13.8)	.447 (11.4)	.590 (15.0)	.031 (0.8)	.094 (2.4)	.386 (9.8)	.672 (17.1)	.692 (17.6)
12	.855 (21.7)	.541 (13.8)	.447 (11.4)	.750 (19.1)	.031 (0.8)	.094 (2.4)	.386 (9.8)	.781 (19.8)	.801 (20.4)
14	.980 (24.9)	.541 (13.8)	.447 (11.4)	.875 (22.2)	.031 (0.8)	.094 (2.4)	.386 (9.8)	.906 (23.0)	.926 (23.5)
16	1.105 (28.1)	.541 (13.8)	.447 (11.4)	1.000 (25.4)	.031 (0.8)	.094 (2.4)	.386 (9.8)	1.031 (26.2)	1.051 (26.7)
18	1.229 (31.2)	.541 (13.8)	.447 (11.4)	1.125 (28.6)	.031 (0.8)	.094 (2.4)	.386 (9.8)	1.156 (29.4)	1.176 (29.9)
20	1.323 (33.6)	.603 (15.3)	.509 (12.9)	1.250 (31.8)	.031 (0.8)	.094 (2.4)	.386 (9.8)	1.250 (31.8)	1.395 (35.4)
22	1.449 (36.8)	.634 (16.1)	.509 (12.9)	1.375 (34.9)	.031 (0.8)	.125 (3.2)	.418 (10.6)	1.375 (34.9)	1.375 (34.9)
24	1.574 (40.0)	.667 (17.0)	.542 (13.8)	1.500 (38.1)	.031 (0.8)	.125 (3.2)	.418 (10.6)	1.500 (38.1)	1.520 (38.6)

Dimensions are in inches (mm).



Panel Cutout

Protective Covers

HM Series • MIL-DTL-26482 Series 1 Type Connectors



HMCP - 14 B E

- 1 **BASIC PART NUMBER**
 - HMCP Plug cover w/ sash chain
 - HMCR Receptacle cover w/ sash chain
- 2 **SHELL SIZE**
 - See Protective Cover Dimensions table below
- 3 **MATERIAL & FINISH**
 - B Aluminum, anodize hardcoat
- 4 **ATTACHMENT TYPE**
 - E Eyelet attachment on sash chain
 - J Jam nut ring attachment on sash chain (for use with HM07 & HM13 jam nut receptacles)

HMCP & HMCR Compatibility

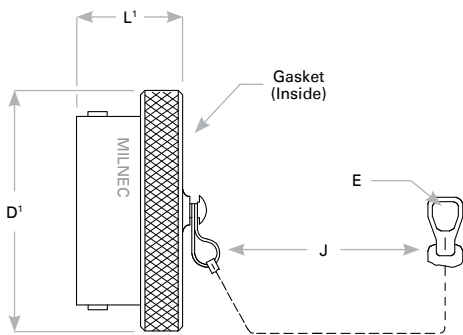
Compatible Brands	Plugs	Receptacles
MIL-DTL-26482 Series 1	MS3116	MS3110, MS3111, MS3112, MS3114
Amphenol	PT06, PT08	PT00, PT01, PT02, PT07
Array	PW06, PW08	PW00, PW01, PW02, PW07
ITT Cannon	KPT06, KPT08	KPT00, KPT01, KPT02, KPT07
Souriau	85106, 85108	85100, 85101, 85102, 85107

Note: See part builder (p. H-8) for additional kit options.

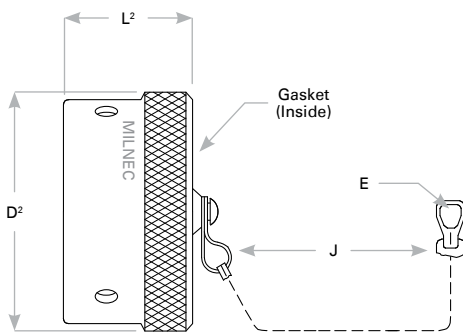
Protective Cover Dimensions

Shell Size	L ¹	D ¹	E	J Chain Length	L ²	D ²	H
8	.562 (14.3)	.719 (18.3)	.167 (4.2)	3.00 (76.2)	.562 (14.3)	.734 (18.6)	.578 (14.7)
10	.562 (14.3)	.844 (21.4)	.167 (4.2)	3.00 (76.2)	.562 (14.3)	.859 (21.8)	.703 (17.9)
12	.562 (14.3)	1.000 (25.4)	.167 (4.2)	3.50 (88.9)	.562 (14.3)	1.000 (25.4)	.891 (22.6)
14	.562 (14.3)	1.125 (28.6)	.167 (4.2)	3.50 (88.9)	.562 (14.3)	1.125 (28.6)	1.016 (25.8)
16	.562 (14.3)	1.250 (31.8)	.167 (4.2)	3.50 (88.9)	.562 (14.3)	1.250 (31.8)	1.141 (29.0)
18	.562 (14.3)	1.375 (34.9)	.167 (4.2)	3.50 (88.9)	.562 (14.3)	1.375 (34.9)	1.266 (32.2)
20	.625 (15.9)	1.500 (38.1)	.167 (4.2)	4.00 (101.6)	.562 (14.3)	1.500 (38.1)	1.391 (35.3)
22	.625 (15.9)	1.625 (41.3)	.167 (4.2)	4.00 (101.6)	.562 (14.3)	1.625 (41.3)	1.516 (38.5)
24	.658 (16.7)	1.750 (44.5)	.167 (4.2)	4.00 (101.6)	.602 (15.3)	1.750 (44.5)	1.641 (41.7)

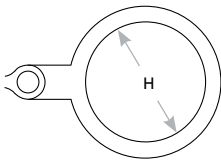
Dimensions are in inches (mm).



Plug Cover



Receptacle Cover



Jam Nut Ring Attachment

Rev. 2203

HMCD - 14 F - 03

- 1 **BASIC PART NUMBER**
HMCD Stowage receptacle
- 2 **SHELL SIZE**
See Stowage Receptacle Dimensions table below
- 3 **MATERIAL & FINISH**
F Aluminum, olive drab cadmium
- 4 **OPTIONAL ACCESSORY KIT (OMIT FOR NONE)**
02 Protective cover + mounting gasket
03 02 kit + mounting bracket + sealing screws

Note: See part builder (p. H-8) for additional kit options.



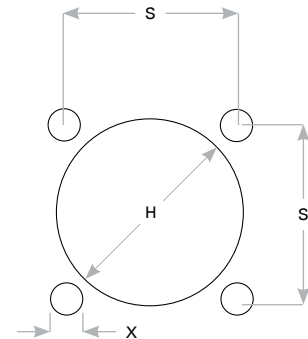
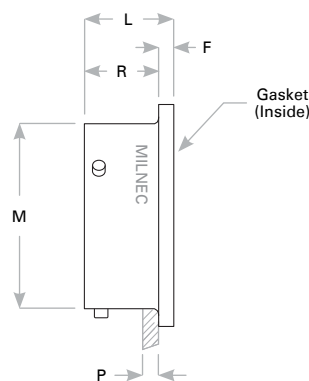
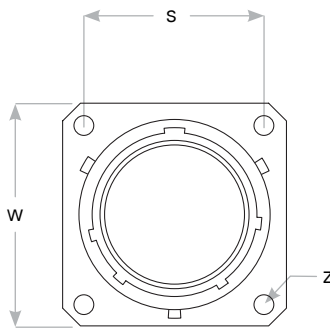
HMCD Compatibility

Compatible Brands	Plugs
MIL-DTL-26482 Series 1	MS3116
Amphenol	PT06, PT08
Array	PW06, PW08
ITT Cannon	KPT06, KPT08
Souriau	85106, 85108

Stowage Receptacle Dimensions

Shell Size	W	Z	L	R	M	F	P Max Rear Panel†	S	X	H
8	.828 (21.0)	.120 (3.0)	.540 (13.8)	.478 (12.2)	.471 (12.0)	.062 (1.6)	.125 (3.2)	.594 (15.1)	.120 (3.1)	.449 (11.4)
10	.954 (24.2)	.120 (3.0)	.540 (13.8)	.478 (12.2)	.588 (14.9)	.062 (1.6)	.125 (3.2)	.719 (18.3)	.120 (3.1)	.573 (14.6)
12	1.047 (26.6)	.120 (3.0)	.540 (13.8)	.478 (12.2)	.748 (19.0)	.062 (1.6)	.125 (3.2)	.812 (20.6)	.120 (3.1)	.699 (17.8)
14	1.141 (29.0)	.120 (3.0)	.540 (13.8)	.478 (12.2)	.873 (22.2)	.062 (1.6)	.125 (3.2)	.906 (23.0)	.120 (3.1)	.823 (20.9)
16	1.234 (31.3)	.120 (3.0)	.540 (13.8)	.478 (12.2)	.998 (25.3)	.062 (1.6)	.125 (3.2)	.969 (24.6)	.120 (3.1)	.949 (24.1)
18	1.328 (33.7)	.120 (3.0)	.540 (13.8)	.478 (12.2)	1.123 (28.5)	.062 (1.6)	.125 (3.2)	1.062 (27.0)	.120 (3.1)	1.073 (27.3)
20	1.453 (36.9)	.120 (3.0)	.666 (16.9)	.572 (14.5)	1.248 (31.7)	.094 (2.4)	.250 (6.4)	1.156 (29.4)	.120 (3.1)	1.199 (30.5)
22	1.578 (40.1)	.120 (3.0)	.666 (16.9)	.572 (14.5)	1.373 (34.9)	.094 (2.4)	.250 (6.4)	1.250 (31.8)	.120 (3.1)	1.323 (33.6)
24	1.703 (43.3)	.147 (3.7)	.699 (17.8)	.605 (15.4)	1.498 (38.0)	.094 (2.4)	.250 (6.4)	1.375 (34.9)	.147 (3.7)	1.449 (36.8)

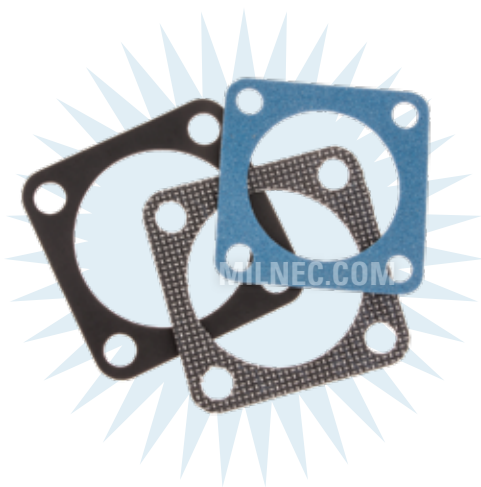
Dimensions are in inches (mm). † Max panel thickness applies only to rear mount applications to ensure proper coupling clearance.



Panel Cutout

Mounting Gasket

HM Series • MIL-DTL-26482 Series 1 Type Connectors



HMGE - 14

- 1
- 2

BASIC PART NUMBER

- HMGE** Neoprene environmental (weather resistant)
Temp. range -40°F to +230°F (-40°C to +110°C)
- HMGL** Fluorosilicone (jet fuel & oil resistant)
Temp. range -70°F to +392°F (-56°C to +200°C)
Per MIL-DTL-25988, Class 1, Grade 6
- HMGD** Conductive EMI-RFI fluorosilicone, Al-Ag filled
Temp. range -70°F to +392°F (-56°C to +200°C)
Shielding effectiveness at 90 dB @ 10 GHz
Per MIL-DTL-83528, Type D

SHELL SIZE

See Gasket Dimensions table below

HMGE Compatibility

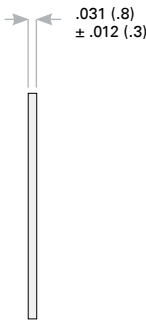
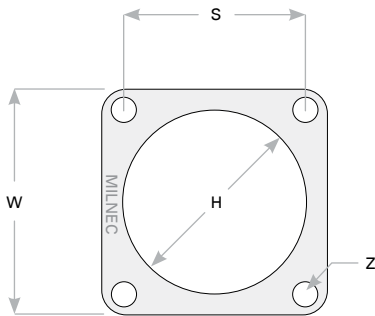
Compatible Brands	Receptacles
MIL-DTL-26482 Series 1	MS3110, MS3112
Amphenol	PT00, PT02
Array	PW00, PW02
ITT Cannon	KPT00, KPT02
Souriau	85100, 85102

Note: See part builder (p. H-8) for additional kit options.

Gasket Dimensions

Shell Size	W	S	Z	H
8	.812 (20.6)	.594 (15.1)	.130 (3.3)	.500 (12.7)
10	.938 (23.8)	.719 (18.3)	.130 (3.3)	.625 (15.9)
12	1.031 (26.2)	.813 (20.7)	.130 (3.3)	.750 (19.1)
14	1.125 (28.6)	.906 (23.0)	.130 (3.3)	.875 (22.2)
16	1.219 (31.0)	.969 (24.6)	.130 (3.3)	1.000 (25.4)
18	1.312 (33.3)	1.063 (27.0)	.130 (3.3)	1.125 (28.6)
20	1.438 (36.5)	1.156 (29.4)	.130 (3.3)	1.250 (31.8)
22	1.563 (39.7)	1.250 (31.8)	.130 (3.3)	1.375 (34.9)
24	1.688 (42.9)	1.375 (34.9)	.130 (3.3)	1.500 (38.1)

Dimensions are in inches (mm).



Rev. 2203

HMMB - 14 - A

1 2 3

1 BASIC PART NUMBER

HMMB Mounting bracket, aluminum alloy
with SST locking nuts

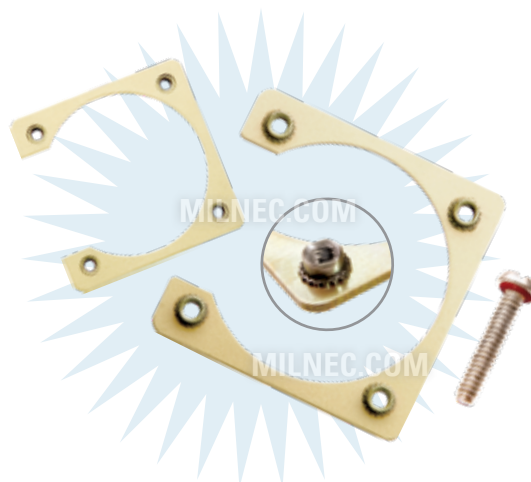
2 SHELL SIZE

See Bracket Dimensions table below

3 OPTIONAL FASTENER KIT (OMIT FOR NONE)

- A** Self-sealing SST fillister head screws (4x)
- B** A kit + environmental gasket
- D** A kit + fluorosilicone EMI/RFI gasket

Note: See part builder (p. H-8) for additional kit options.



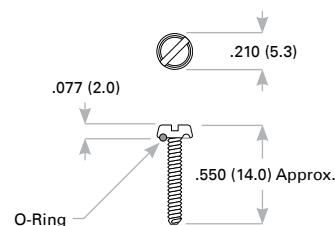
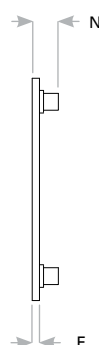
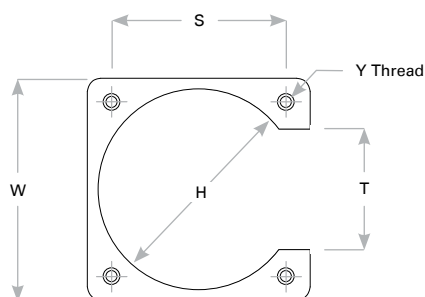
HMMB Compatibility

Compatible Brands	Receptacles
MIL-DTL-26482 Series 1	MS3110, MS3112
Amphenol	PT00, PT02
Array	PW00, PW02
ITT Cannon	KPT00, KPT02
Souriau	85100, 85102

Bracket Dimensions

Shell Size	W	S	T	H	N	F	Screw Size	Y Thread
8	.880 (22.4)	.594 (15.1)	.308 (7.8)	.570 (14.5)	.136 (3.5)	.040 (1.0)	4	4-40 UNJC-3B
10	1.019 (25.9)	.719 (18.3)	.433 (11.0)	.720 (18.3)	.136 (3.5)	.040 (1.0)	4	4-40 UNJC-3B
12	1.104 (28.0)	.812 (20.6)	.530 (13.5)	.855 (21.7)	.136 (3.5)	.040 (1.0)	4	4-40 UNJC-3B
14	1.198 (30.4)	.906 (23.0)	.624 (15.8)	.984 (25.0)	.136 (3.5)	.040 (1.0)	4	4-40 UNJC-3B
16	1.280 (32.5)	.969 (24.6)	.687 (17.4)	1.094 (27.8)	.136 (3.5)	.040 (1.0)	4	4-40 UNJC-3B
18	1.406 (35.7)	1.062 (27.0)	.780 (19.8)	1.220 (31.0)	.136 (3.5)	.040 (1.0)	4	4-40 UNJC-3B
20	1.535 (39.0)	1.156 (29.4)	.874 (22.2)	1.345 (34.2)	.136 (3.5)	.040 (1.0)	4	4-40 UNJC-3B
22	1.665 (42.3)	1.250 (31.8)	.968 (24.6)	1.478 (37.5)	.136 (3.5)	.040 (1.0)	4	4-40 UNJC-3B
24	1.738 (44.1)	1.375 (34.9)	.907 (23.0)	1.483 (37.7)	.153 (3.9)	.040 (1.0)	6	6-32 UNJC-3B

Dimensions are in inches (mm).



Soldering Station

HM Series • MIL-DTL-26482 Series 1 Type Connectors

HM



H900 Soldering Station Kit

Our soldering station kit provides a complete solution for professionally terminating solder contacts to stranded or solid core wire.

Features & Benefits




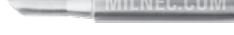

- Temperature range 392° to 896°F (200° to 480°C)
- Adjustable temperature control dial with lock/set screw
- Idle temperature stability of $\pm 1.8^{\circ}\text{F}$ (1.0°C)
- Ceramic heating element and sensor ensure rapid heat-up temperature (30 seconds) and fast thermal recovery
- Celsius or Fahrenheit temperature setting
- Slender iron handles are insulated and ergonomically designed for ease and comfort
- ESD-safe design suitable for controlled environments
- 5 interchangeable tips suitable for connector solder contacts ranging from #0 to #22D

Note: The above lists standard options readily available in stock. Please consult an authorized distributor for full range of solder stations, re-work stations, specialty tips, and accessories.

Soldering Station Kit

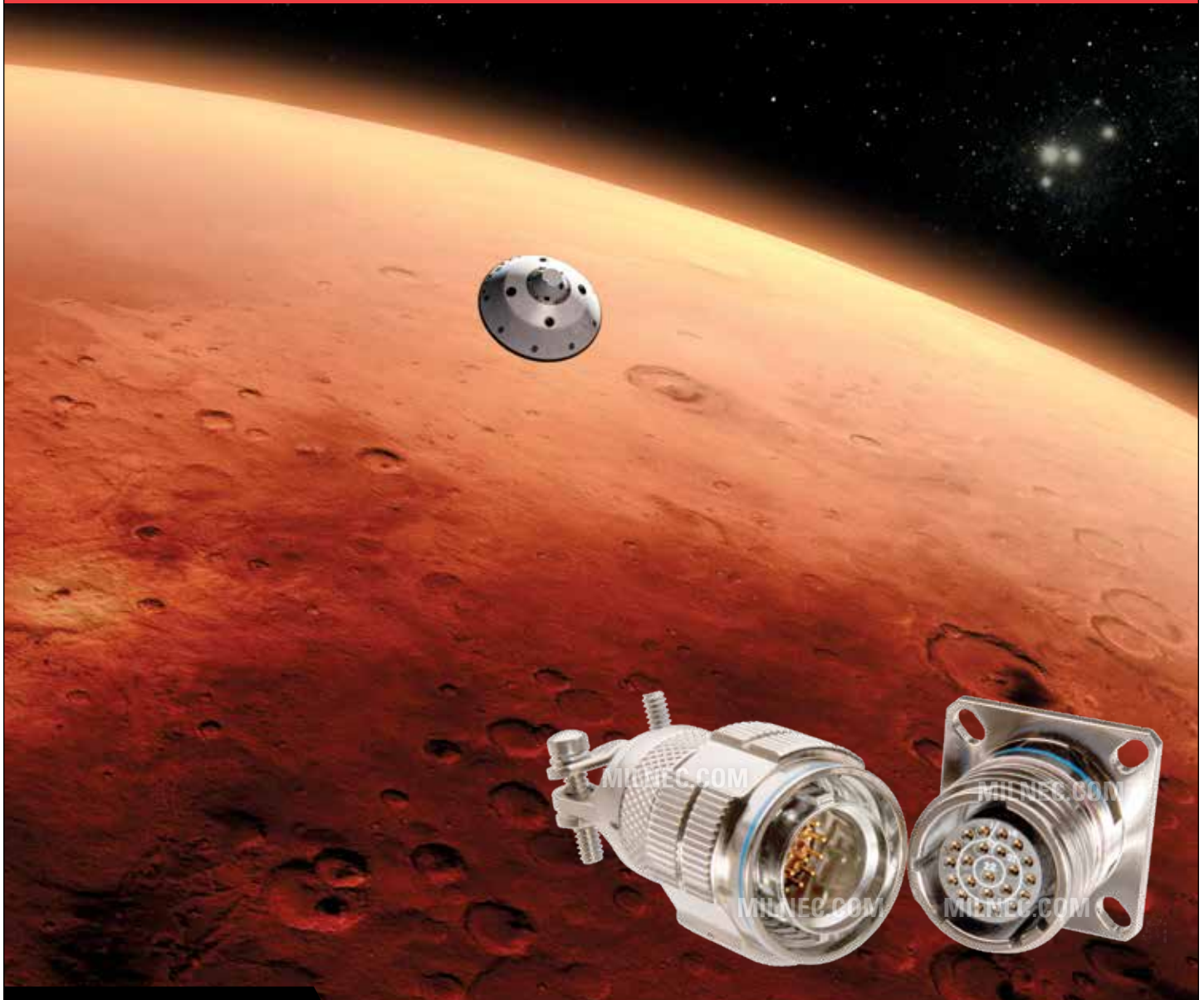
Part Number	Kit Includes The Following Items
H900	120V / 60W soldering station, iron holder, cleaning sponge, 5 interchangeable tips, rosin-core lead solder, instructions

Replacement Tips

Part Number	For Contact Size	Description	Image
H900-6D	#16, #20, #22D	Chisel (1.6mm Tip)	
H900-B	#16, #20	Conical (0.5mm Tip)	
H900-2C	#16	45° Beveled (2mm Tip)	
H900-4C	#8, #12	45° Beveled (4mm Tip)	
H900-S3	#0, #4	Chisel (5.2mm Tip)	

Rev. 2203

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