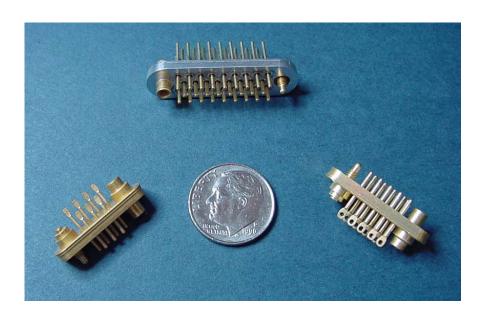
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39 Souhegan Street - P.O. Box 269, Wilton, New Hampshire 03086 TEL (603) 654-2002 FAX (603) 654-2533 email: sales@shp-seals.com - website: www.shp-seals.com

ISO 9001:2008 Certified

HERMETIC
MICRO-MINIATURE CONNECTORS

PATENTED
Canada Patent No. 1,318,371



### ALUMINUM COMPATIBLE SOLDERABLE AND WELDABLE PER MIL-DTL-28748/7 (MATES WITH MIL-DTL-28748/8)

These "aluminum compatible" connectors utilize special construction features which facilitate reliable hermetic performance in rigorous thermal cyclic environments.

The Solderable connectors utilize high expansion materials as well as unique interface design which in combination reduces solder strain by a minimum of 90%. This low strain assures a long reliable cyclic life for the solder joints.

In the weldable case the body is constructed of a material with matching CTE to the host housing essentially eliminating strain in the weld.

For solderable micro-miniature connectors, see pages 2 and 3.

For weldable micro-miniature connectors, contact SHP.

Ø.025±.002 TYP.

### SPECIAL HERMETIC PRODUCTS, INC.

Hi-Rel By Design

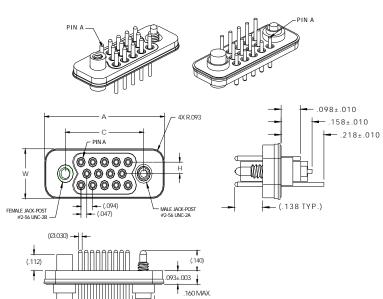
BULLETIN# 500, Rev. K PAGE# 2 of 3

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# HERMETIC MICRO-MINIATURE CONNECTORS

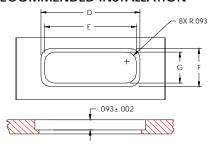
# PATENTED Canada Patent No. 1,318,371



#### **RECOMMENDED INSTALLATION**

Ø 175+003

TYP. 2 PLCS.



# ALUMINUM COMPATIBLE SOLDERABLE

Type: HMMHE per MIL-DTL-28748/7 (Mates with MIL-DTL-28748/8)

No. of Contacts: 5, 7, 9, 11, 14, 20, 26, 29, 34, 44

#### **DESCRIPTION**

This hermetic micro-miniature connector series is designed specifically for use in aluminum housings for severe military temperature environments.

Connectors in this series provide compatibility with plugs per MIL-DTL-28748/8. Unlike other connectors made of various steels, these are made of a higher-expansion material which possesses a coefficient of thermal expansion close to that of aluminum. This feature, coupled with a unique geometry which facilitates optimum solder joints and insures reliable hermeticity of the installed connector.

#### **SPECIFICATION**

Body - Brass Insulation - Glass Contacts - Steel

Plating - 50 microinches minimum GOLD per MIL-G-45204, Type III, Grade A over 200-300 microinches Electroless NICKEL per MIL-C-26074.

Contact Diameter - .030 Mounting Hardware - Stainless Steel Leak Rate - Less than 1 X 10<sup>-8</sup> cc/sec @ 1atm (He) Temperature - -65°C to +200°C Contact Rating - 3 AMPS

Voltage Breakdown - 500 VAC

#### CONNECTOR DIMENSIONS

DIMENS	IONS	5P	7P	9P	11P	14P	20P	26P	29P	34P	44P
A ±.0	02	.770	.860	.950	.860	.955	1.142	1.330	1.424	1.330	1.580
W ±.0	02	.270	.270	.270	.350	.350	.350	.350	.350	.460	.460
C Ref	f	.468	.562	.656	.532	.625	.814	1.000	1.094	1.032	1.281
H Ref	f	.081	.081	.081	.081	.081	.081	.081	.081	.090	.090
Rows		2	2	2	3	3	3	3	3	4	4
		INSTALLATION DIMENSIONS									
D ±.0	01	.774	.864	.954	.864	.959	1.146	1.334	1.428	1.334	1.584
E ±.0	02	.700	.790	.880	.790	.885	1.072	1.260	1.354	1.260	1.510
F ±.0	01	.274	.274	.274	.354	.354	.354	.354	.354	.464	.464
G ±.0	02	.220	.220	.220	.300	.300	.300	.300	.300	.410	.410

NOTE: For part number configuration, see page 3.

All dimensions are inches.

Hi-Rel By Design

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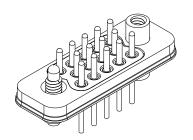
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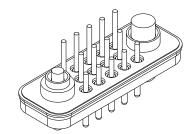
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HERMETIC
MICRO-MINIATURE CONNECTORS

## PATENTED Canada Patent No. 1,318,371

## ALUMINUM COMPATIBLE SOLDERABLE

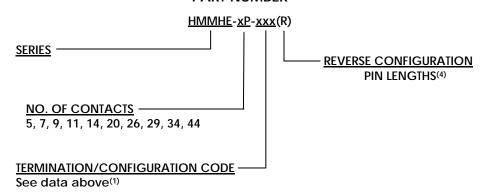




	TERMINATION/CONFIGURATION CODES									
	ι	Iniform	า	Staggered						
	2 & 3 Rows			2 Rows		3 Rows				
	STANDARD PIN LENGTHS ±.010									
	.098	.158	.218	.098, .158	.158, .218	.098, .158, .158	.098, .158, .218	.158, .218, .218		
Straight Cut	110	120	130	111	113	115	117	119		
Flattened	210	220	230	211	213	215	217	219		
Flat & Pierce	310	320	330	311	313	315	317	319		

Example Part No: HMMHE-14P-215

#### **PART NUMBER**



Notes: (1) Other lead lengths available.

- (2) See Bulletin 240 for solder preforms.
- (3) Solder sleeves available for axial wire attachment. See Bulletin 501.
- (4) Contact SHP for outline drawing.

All dimensions are inches.