

# HermAx®

## New hermetic Micro-D stainless steel connector

### MAIN CHARACTERISTICS

- > high hermeticity : glass-ceramic to metal seal
- > stainless steel shell
- > high conductivity contacts

### Waterproof/hermetic Micro-D product range MIL-DTL-83513G compatible

	WATERPROOF ENCAPSULANT	HERMETIC ENCAPSULANT	GLASS TO METAL SEAL	HermAx®	MIL-DTL-83513G
HELIUM LEAK RATE (mbar.l/s) MIL-STD-883 A4	1.10 <sup>-5</sup>	1.10 <sup>-8</sup>	< 1.10 <sup>-9</sup> (1)	< 1.10 <sup>-11</sup> (1)	-
TEMPERATURE RANGE (°C)	-55/+125	-30/+125	-55/+125 (2)	-55/+150 (2)	-55/+125
CONTACT MATERIAL	COPPER ALLOY	COPPER ALLOY	IRON BASED	COPPER ALLOY	COPPER ALLOY
MAXIMUM CURRENT RATING (A)	3	3	1	3	-
SHELL MATERIAL	ALUMINUM STAINLESS STEEL TITANIUM	ALUMINUM	IRON BASED (ASTM-F15)	STAINLESS STEEL	STAINLESS STEEL
MOUNTING METHOD	O-RING	O-RING	O-RING (3) LASER WELDING (4)	O-RING (3) LASER WELDING (4)	-

(1) Tested at 10<sup>-9</sup>, 10<sup>-10</sup>, or 10<sup>-11</sup> mbar.l/s, depending on customer request

(2) MIL-DTL-83513 requires only 125°C, see critical testing below

(3) With o-ring : leak rate limited to 1.10<sup>-8</sup> mbar.l/s and temperature range limited

(4) With compatible materials

## Critical testing

	HermAx®	MIL-DTL-83513G
Vibrations	20 g	20 g
Shocks	50 g	50 g
Thermal shocks -55 +125°C	> 400 cycles	5 cycles
Thermal ageing at 220°C	2000 h	-

## Major applications of hermetic connectors

### LINK WITH THE OUTSIDE ON CLOSED ELECTRONIC PACKAGES



- ▶ Electronic components /card protection against moisture (condensation with temperature variations)
- ▶ Military, space, aero, energy...

### FEEDTHROUGHS



- ▶ Enables to work under vacuum/pressure: vacuum chambers, cryogenics, inert gas tanks...
- ▶ Marine, research centers, semiconductor industry...

## Designs available

- ▶ Straight pins (various lengths, up to 14mm)
- ▶ Wire bond flats
- ▶ Other designs (solder cup, flex tail) on demand

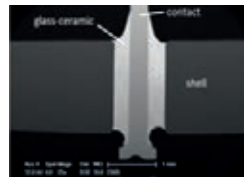


## Fully Axon' made

- ▶ Connector shell machining



- ▶ Glass-ceramic to metal sealing



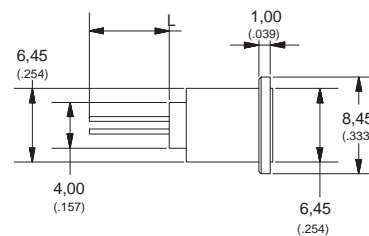
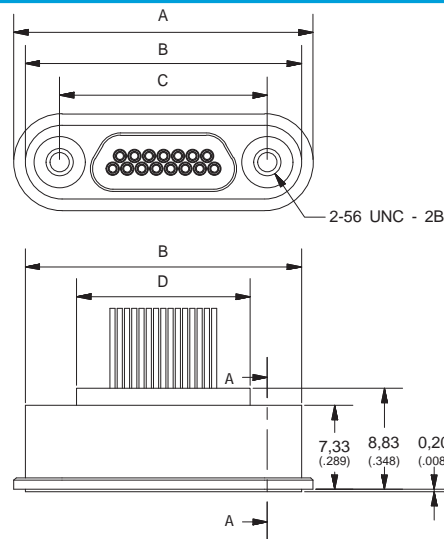
- ▶ Plating



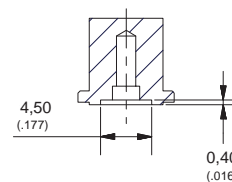
- ▶ Helium leak test (connectors 100% tested)



## Dimensions



A-A (2 : 1)



	A		B		C		D	
<b>9 WAYS</b>	22.35 mm	0.880 in	20.35 mm	0.801 in	14.35 mm	0.565 in	11.35 mm	0.447 in
<b>15 WAYS</b>	26.16 mm	1.030 in	24.16 mm	0.951 in	18.16 mm	0.715 in	15.16 mm	0.597 in
<b>21 WAYS</b>	29.97 mm	1.180 in	27.97 mm	1.101 in	21.97 mm	0.865 in	18.97 mm	0.747 in
<b>25 WAYS</b>	32.51 mm	1.280 in	30.51 mm	1.201 in	24.51 mm	0.965 in	21.51 mm	0.847 in
<b>31 WAYS</b>	36.32 mm	1.430 in	34.32 mm	1.351 in	28.32 mm	1.115 in	25.32 mm	0.997 in
<b>37 WAYS</b>	40.13 mm	1.580 in	38.13 mm	1.501 in	32.13 mm	1.265 in	29.13 mm	1.147 in