

» **BRAZIL**

AXON' CABLE INDUSTRIA E COMÉRCIO LTDA
Ed. Corporate Lead Américas
Barra da Tijuca –Av. das Américas, 2480 –Bl. 2 – Victory
Salas 111/112 – Rio de Janeiro, RJ, CEP 22.640–101
TEL.: +55 21 3596–8002
e-mail: salesbrazil@axon-cable.com

» **CANADA**

AXON' CABLE CANADIAN OFFICE
MONTREAL, QUEBEC
TEL.: +1 514 898 2044
e-mail: sales@axoncable.com

» **CHINA**

AXON' INTERCONNECT LTD
High Tech Industrial Park, Chang Bao XI Road
Ronggui, 528306
SHUNDE, GUANGDONG
TEL.: +86 757 2838 7200 – FAX: +86 757 2838 7212
e-mail: sales@axon-interconnect.com

» **GERMANY**

AXON' KABEL GMBH
Postfach 1131 – 71201 LEONBERG
Hertichstr. 43 – 71229 LEONBERG
TEL.: +49 7152–97992–0
e-mail: sales@axon-cable.de

» **HUNGARY**

AXON' KÁBELGYÁRTÓ KFT.
Külső–Szegedi út 104.
H–6000 KECSKEMÉT
TEL.: +36 76 508 195 – FAX: +36 76 508 196
e-mail: axon@axon-cable.hu

» **INDIA**

AXON' INTERCONNECTORS & WIRES PVT LTD
Plot No.102, KIADB Hitech Defense and Aerospace Park
Unachur Village, B.Marenahalli, Jala Hobli, Budigere Post
Bangalore North Taluk, Bangalore
Urban–562 129 – Karnataka
TEL.: +91 (0) 806 816 2966 – FAX: + 91 (0) 806 816 2999
e-mail: sales@axon-cable.in

DHRUV: your offset partner

DHRUV AXON' INTERCONNECT PRIVATE LTD
Plot No.102, SW Part–A,
KIADB Hitech Defense and Aerospace Park,
Unachur Village, B.Marenahalli,
Jala Hobli, Budigere Post,
Bangalore North Taluk,
Bangalore Urban–562 129, Karnataka



VISIT OUR WEBSITE
www.axon-cable.com



» **JAPAN**

AXON' CABLE JAPAN OFFICE
2F–B Marusa Bldg, 1–3–16 Minami Chitose
Nagano–shi, Nagano, 380–0823
TEL./FAX: +81 26 217 6728
e-mail: axon-japan@axon-cable.com

» **LATVIA**

AXON' CABLE SIA
Višķu iela, 21 C
LV–5410 DAUGAVPILS
TEL.: +371 6540 78 91
e-mail: axon@axoncable.lv

» **MEXICO**

AXON' INTERCONEX, S.A. DE C.V.
Av. Peñuelas 21–A1.
Industrial San Pedrito Peñuelas
Querétaro Park
76148 Querétaro, Qro.
TEL.: +52 442 215 2713
e-mail: axon-mexico@axoncable.com.mx

» **SINGAPORE**

AXON' CONNECT PTE LTD
3 Ang Mo Kio Street 62,
#04–02 Link@AMK,
Singapore 569139
TEL.: +65 6250 3167
e-mail: sales.singapore@axon-cable.com

» **SPAIN**

AXON' CABLE SPANISH OFFICE
C/Capitán Haya, N°1, Planta 15
28020 MADRID
TEL.: +34 911 309 123
e-mail: sales@axon-cable.com

» **UNITED KINGDOM**

AXON' CABLE LTD
AXON' AGORA – Admiralty Park
ROSYTH – DUNFERMLINE
FIFE KY11 2YW
TEL.: +44 1383 421500
e-mail: sales@axon-cable.co.uk

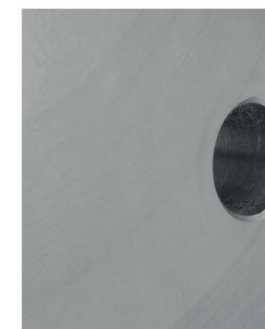
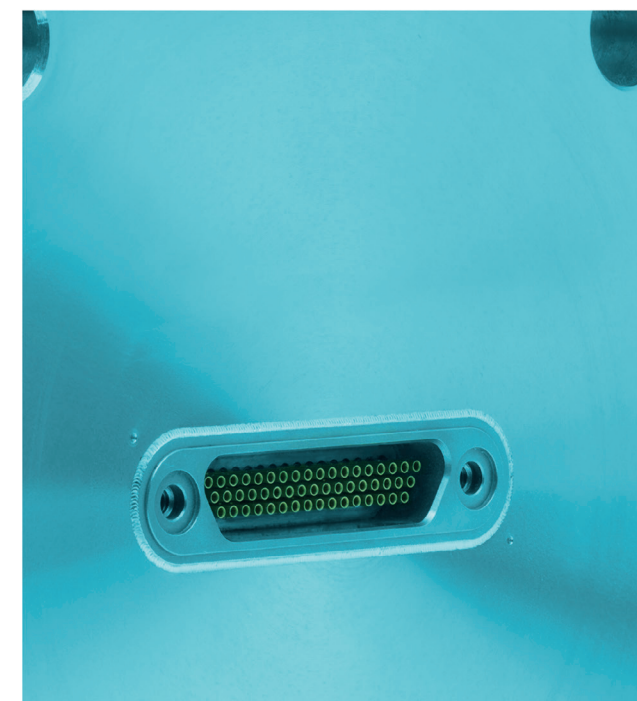
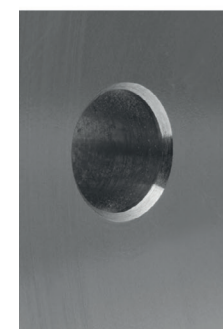
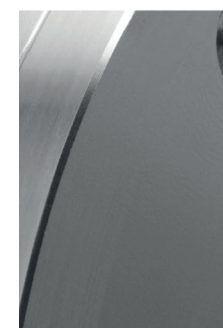
» **USA**

AXON' CABLE INC.
1316 N Plum Grove Road
SCHAUMBURG, IL. 60173
TEL.: +1 847 230 7800
e-mail: sales@axoncable.com

© 2019, AXON' CABLE – ALL RIGHTS RESERVED – RELEASED SEPTEMBER 2024/C – PHOTOS STUDIO AXON' CABLE, FRED LAURES & BASTIEN GILBERT / ALL INFORMATION CONTAINED IN THIS BROCHURE IS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE. HERMAX®: REGISTERED TRADEMARKS OF AXON' CABLE

HERMAX®

Hermetic Micro-D connectors



HERMAX[®]

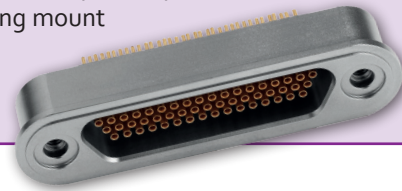
HERMETIC MICRO-D CONNECTORS



HermAx[®] is Axon's range of hermetic Micro-D connectors. These are often used as pressure or vacuum feedthrough connectors, but can also be used as barriers against moisture and contaminants even without a pressure difference.

MAIN CHARACTERISTICS

- High hermeticity: glass-ceramic to metal seal
- High conductivity contacts: up to 3A per contact
- Laser weldable or o-ring mount
- RoHS compliant



HERMETIC CONNECTORS

Hermetic connectors allow electrical connection across both sides of a panel that must otherwise be fully sealed against moisture or even gases. They are typically used where a panel separates two different environments or when an enclosure needs to be isolated from the surrounding area. The hermetic connector therefore acts as a pres-

sure or vacuum seal or as an environmental protection for sensitive equipment. HermAx[®] comes in different configurations to suit a wide range of applications.

	WATERPROOF ENCAPSULANT	HERMETIC ENCAPSULANT	HERMAX [®]	MIL-DTL- 83513
HELIUM LEAK RATE (mbar.l/s) MIL-STD-883 A4	1.10 ⁻⁵	1.10 ⁻⁸	< 1.10 ⁻¹¹ *	-
TEMPERATURE RANGE (°C)	-55 / +125	-30 / +125	-55 / +200**	-55 / +125
CONTACT MATERIAL	COPPER ALLOY	COPPER ALLOY	COPPER ALLOY	COPPER ALLOY
MAXIMUM CURRENT RATING (A)	3	3	3	3
SHIELD MATERIAL	ALUMINIUM STAINLESS STEEL TITANIUM	ALUMINIUM	STAINLESS STEEL 304L	ALUMINIUM STAINLESS STEEL
MOUNTING METHOD	O-RING	O-RING	O-RING*** LASER WELDING****	-

* Tested at 10⁻⁹, 10⁻¹⁰ or 10⁻¹¹ mbar.l/s, depending on customer request
*** With O-ring: leak rate limited to 1.10⁻⁸ mbar.l/s and temperature range limited

** The temperature range depends on the connector reference
**** With compatible materials

HERMAX[®] GLASS-CERAMIC TECHNOLOGY

HermAx[®] special glass-ceramic connectors have excellent intrinsic electrical and mechanical properties. They also provide excellent metallic interfaces. As a result, Axon's HermAx[®] stainless steel glass-ceramic connectors deliver exceptionally low leak rates for harsh environment applications.

• High conductivity contacts

HermAx[®] contacts are made from high performance copper alloy, capable of 3A per contact, per MIL-DTL-83513.

• Low leak rates

Helium leak testing is the most common method for evaluating hermetic sealing, and Axon follows MIL-STD-883K, method 1014-16, test condition A4 for single connectors. Axon's HermAx[®] connectors are 100% leak tested and are supplied with guaranteed leak rate performance. Levels as low as 10⁻¹¹ mbar.l/s are possible.

• Designed for a challenge!

HermAx[®] connector performances go far beyond military standards, notably in temperature performance, withstanding more than 400 thermal shock cycles, and capable of seeing temperatures as low as -200°C and as high as 220°C without leakage.

This type of connector can safely be used in a number of challenging environments, including space, avionics, oil & gas exploration, scientific research and medical electronics.

	Glass-ceramic to metal seal (HermAx [®])	MIL-DTL-83513
VIBRATION	20 g	20 g
SHOCK	50 g	50 g
THERMAL SHOCK (-55 / + 125°C)	> 400 cycles	5 cycles
THERMAL AGEING AT 200°C	2000 h	-

IN-HOUSE MANUFACTURING

Machining of the connector shells, glass-ceramic to metal sealing and plating are all in-house processes.



INTEGRATION: LASER WELDING OR O-RING MOUNT?

For optimum size and leak rate performance HermAx[®] connectors can be laser welded directly to a panel, port or enclosure – and this too is a service Axon can provide.

If laser welding is not possible or not required, then HermAx[®] connectors are also compatible with many standard o-rings, which Axon can also supply according to the application requirements.



Laser Welding

O-Ring

FROM STANDARD TO CUSTOM SOLUTIONS

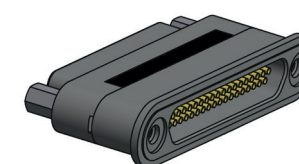
Axon's HermAx[®] connectors are available in all standard Micro-D pin counts, but can also be supplied with Axon's fast locking D-Click technology, for near instant mating and de-mating with no need for tools.

Custom versions of HermAx[®] are also possible, and can be adapted as required. Circular bodies and other materials, such as aluminium or titanium are all possible.

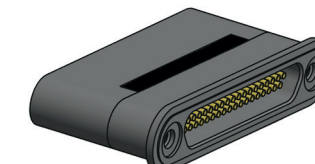
Please contact your nearest sales office for more information.



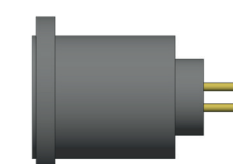
HERMAX[®] RANGE



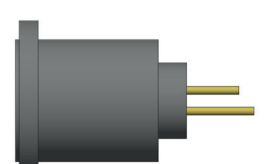
Female / male feedthrough



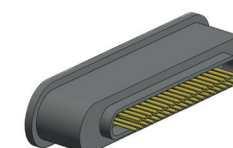
Female / female Feedthrough



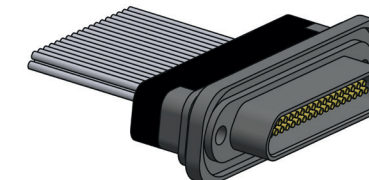
Identical contact length



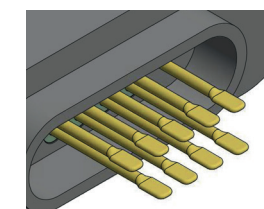
Stepped contact length



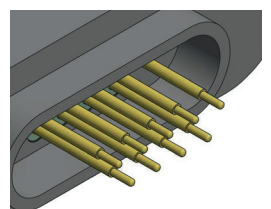
PCB connector



O-ring pigtail connector



Wirebond flat ends



Stepped ends

EXAMPLE CONNECTOR TYPES

REAR TERMINATION STYLES