



# Cables & Harnesses

FOR SPACE APPLICATIONS



# ACCESSORIES

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CONNECTOR BACKSHELLS

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D-SUB OR MICRO-D  
HALORINGS

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SHIELD BAND TERMINATION  
AXOCLAMP®

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# Accessories

*They have been qualified on the Ariane 5, Automatic Transfer Vehicle programmes and several satellites (Spacebus 4000, Eurostar3000...).*

## Connector backshells

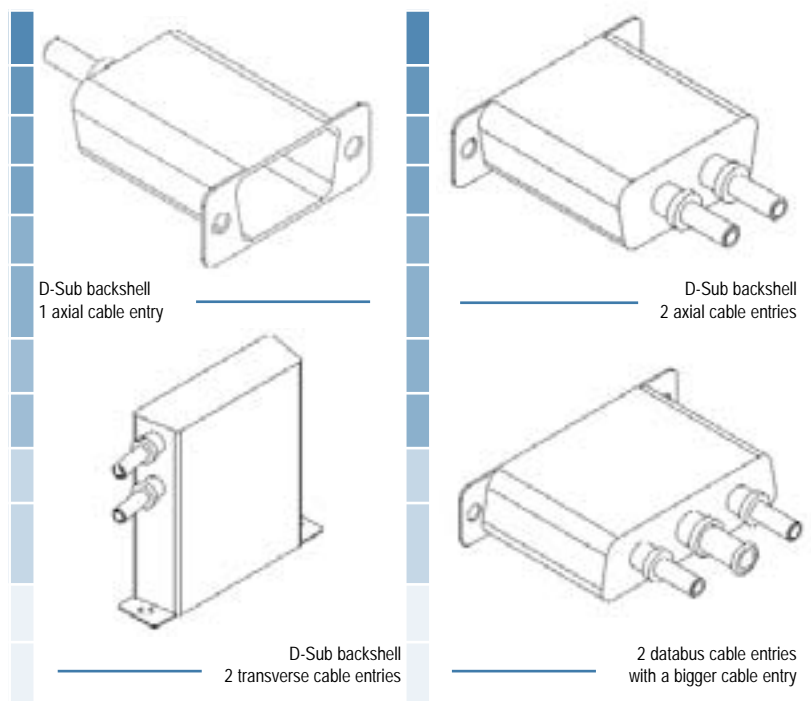
Backshells are used to protect the EMI performance of the assembly which could decrease with a poor quality EMI link. They also bring mechanical protection to the terminations. AXON' backshells can be placed behind circular connectors including MIL-C-38999 connectors or behind rectangular connectors including D-Sub connectors.

AXON' designs backshells not only for its own cables but also for your specific requirements. Some of our D-Sub backshells, specially adapted to databus cables entry, have been designed to be mounted inside MIL-STD-1553 networks. Different shell sizes are available : from 9 ways (size E) to 50 ways (size D) with one or two cable entries or with a more complex construction if required. The tunnel allows different shield terminations including hexagonal crimping or AXOCLAMP® band. The use of backshells is strongly recommended to have good shield coverage as requested by the MIL-STD-1553 standard.

For your specific requirements, AXON' can adapt, for example, the size of the tunnel, the orientation of the tunnel and the cabling room length. The cable entry can be axial or have a transverse angle of 90° or 45°. The diameter of the cable entry can be adapted to the cable to be used.



rheology laboratory

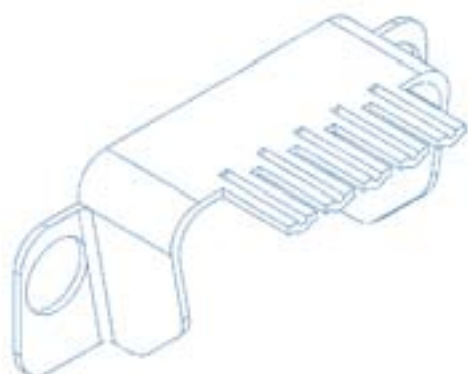


AXON' light weight backshells are made with solid fully machined aluminum alloy with gold plating over nickel in compliance with MIL-G-45204 or other relevant plating requirements. They are non magnetic. Some Micro-D backshells have also been designed by our engineers. Axon' has a complete range of Micro-D connectors with standard or custom designed versions. Please, ask for our brochure.

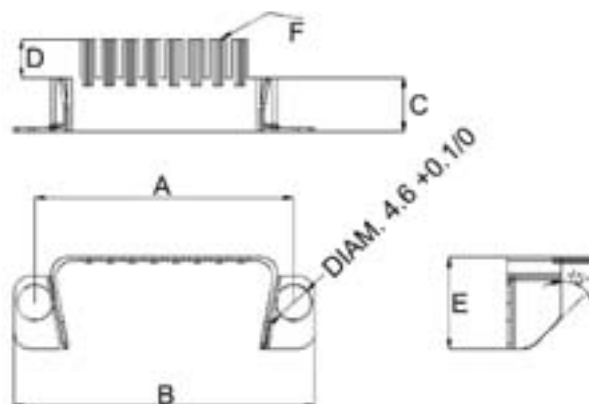
## D-Sub or Micro-D Halorings

In order to facilitate the shield grounding of a cable made with several shielded wires, pairs or wires, axon' recommends the use of halorings. These accessories are directly connected between the D-Sub connector and the backshell. The braid of the shielded wires is soldered on the silver comb (F). This technology gives a very good electrical contact and saves time.

The halorings are made of copper alloy (Brass) with silver plating.



**Haloring  
for D-Sub connector**

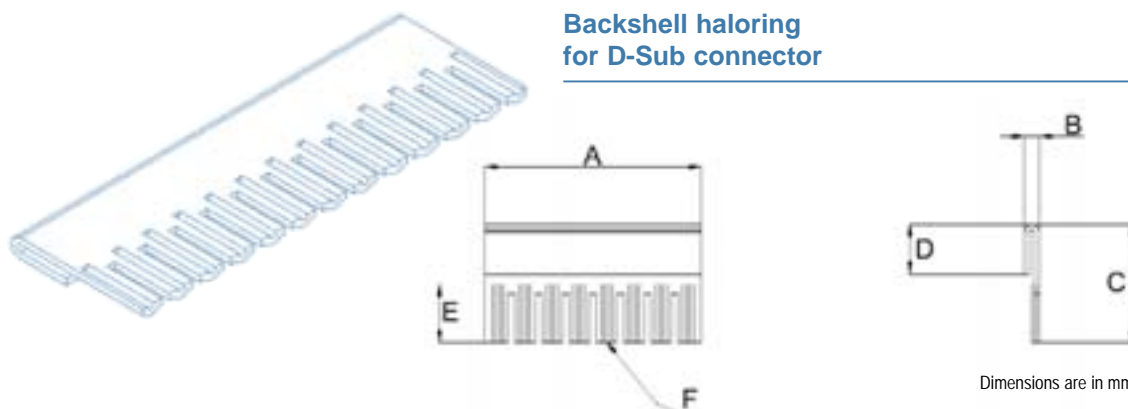


Dimensions are in mm

SIZE OF CONNECTOR	SINGLE HALORING PART NUMBER	DIMENSIONS					
		A	B	C	D	E	F (*)
E	040475	25.1	31.26	7	5	11.91	5
A	040476	33.4	39.55	7	5	11.91	8
B	040477	47.1	53.51	7	5	11.91	13
C	040478	63.5	69.7	7	5	11.91	17
D	040479	61	67.31	7	5	14.45	17
F	040630	63.5	69.71	7	5	14.45	17

(\*) number of dies that corresponds to the number of braids that can be soldered

### Backshell haloring for D-Sub connector

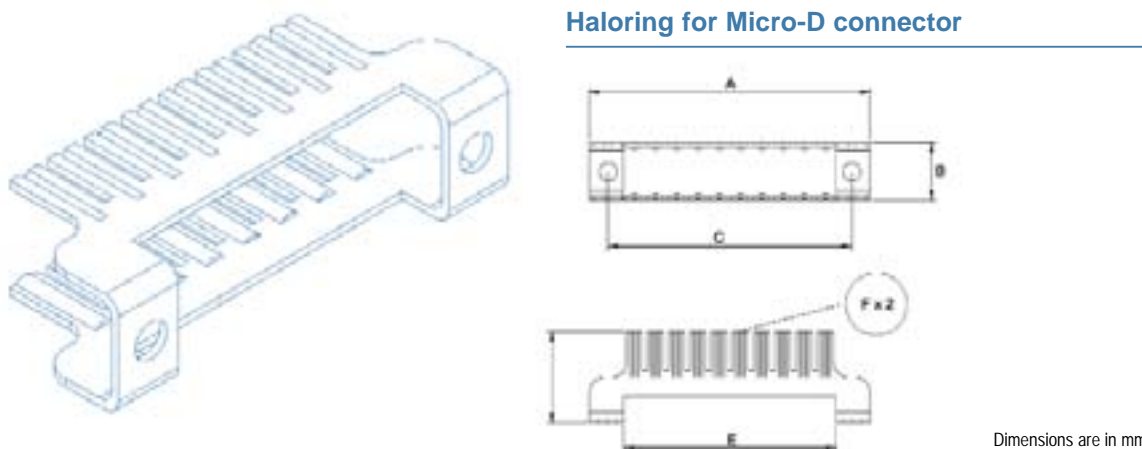


Dimensions are in mm

SIZE OF CONNECTOR	SINGLE HALORING PART NUMBER	DIMENSIONS					
		A	B	C	D	E	F (*)
E	040486	14.64	1.6	12	5	6	5
A	040487	22.26	1.6	12	5	6	8
B	040488	34.96	1.6	12	5	6	13
C	040489	47.46	1.6	12	5	6	17
D	040489	47.46	1.6	12	5	6	17

(\*) number of dies that corresponds to the number of braids that can be soldered

### Haloring for Micro-D connector



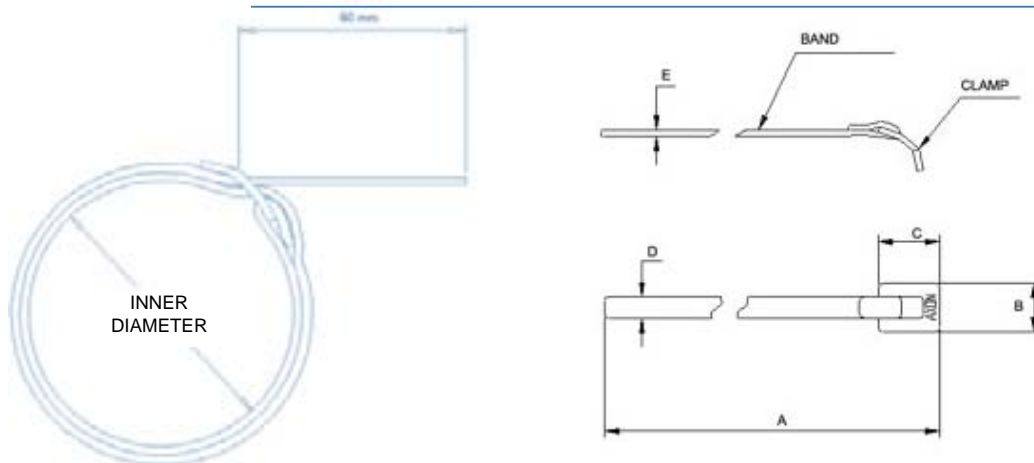
Dimensions are in mm

SIZE OF CONNECTOR	SINGLE HALORING PART NUMBER	DIMENSIONS					
		A	B	C	D	E	F (*)
9	040773	19.22	7.5	14.35	12	10.22	4
15	040774	23.03	7.5	18.16	12	14.03	5
21	040771	26.84	7.5	21.97	12	17.84	6
25	040775	29.38	7.5	24.51	12	20.38	8
31	040776	33.19	7.5	28.32	12	24.19	10
37	040633	37	7.5	32.13	12	28	10
51	040777	35.8	8.5	30.86	12	27	10

(\*) number of dies that corresponds to the number of braids that can be soldered

## AXOCLAMP® SHIELD TERMINATION BAND : TYPE FT AX CL

Material : STAINLESS STEEL AISI 316



### Reference system

AX CL	01
AXOCLAMP®	BAND TYPES 01 : standard 02 : microband 03 : microband 04 : microband

### Minimum quantity

100 pieces per reference

### Programmes

Skynet, Gaia, Stentor, Eurostar 3000 skynet, Eurostar 3000 H B8, etc.

SPECIFICATIONS	AXOCLAMP® STANDARD	AXOCLAMP® MICROBAND	AXOCLAMP® MICROBAND	AXOCLAMP® MICROBAND
REFERENCE	AX CL 01	AX CL 02	AX CL 03	AX CL 04
Dimension A	375 mm	375 mm	200 mm	200 mm
Dimension B	9 mm	5.9 mm	5.2 mm	5.2 mm
Dimension C	10 mm	8.5 mm	5.5 mm	5.5 mm
Dimension D	5.9 mm	3.5 mm	3 mm	3 mm
Dimension E	0.5 mm	0.5 mm	0.35 mm	0.35 mm
Minimum diameter*	10	5	5	5
Maximum diameter*	40	15	15	15

\* Minimum and maximum diameter of the backshell tunnel in which the AXOCLAMPa can be mounted.  
For manual or pneumatic tooling, please consult us for the exact part number.



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