

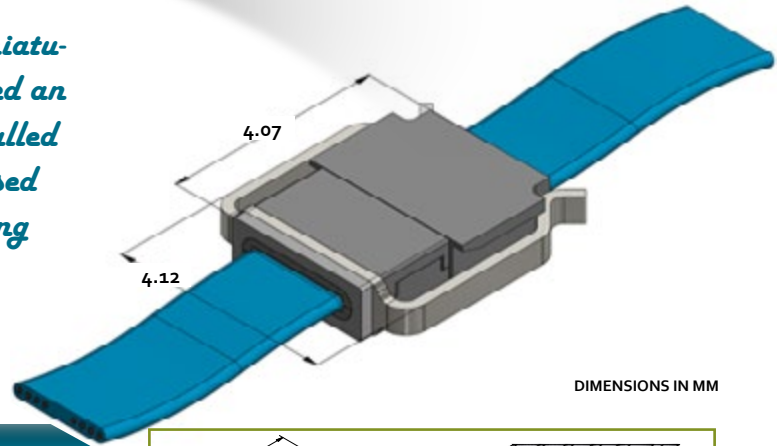
axoCLUE

INTERNAL INFORMATION

N°48 November 2020



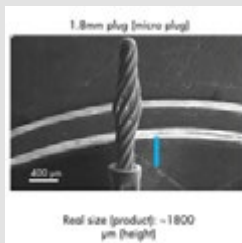
Following the trend for miniaturisation, Axon' has developed an ultra-miniature connector called Pico-D (0.15 mm pitch) based on the additive manufacturing technology. Pico-D is much smaller than Nano-D (0.635 mm).



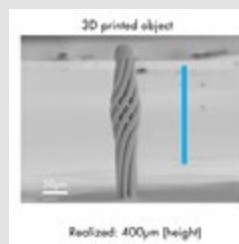
DIMENSIONS IN MM

ADVANTAGES

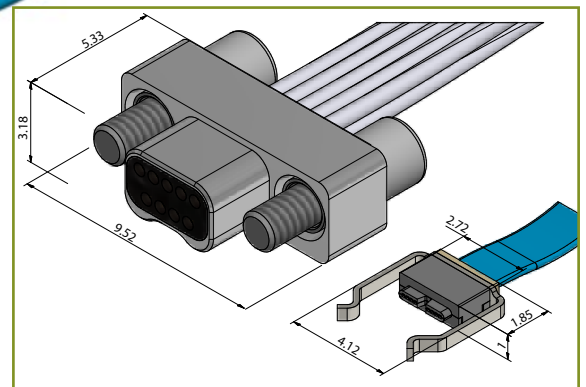
- Space saving : depending on the number of contacts, the volume is 3 to 10 times lower than nano-D.
- Twist Pin : reliable technology.
- Can be adapted to customer's requirements.
- Is equipped with a locking system for an easy insertion (up to 5).
- Can be implantable (depending on materials and constraints).
- ITAR-free.
- Axon' Nanotec expertise (integrated solution).
- No competition.



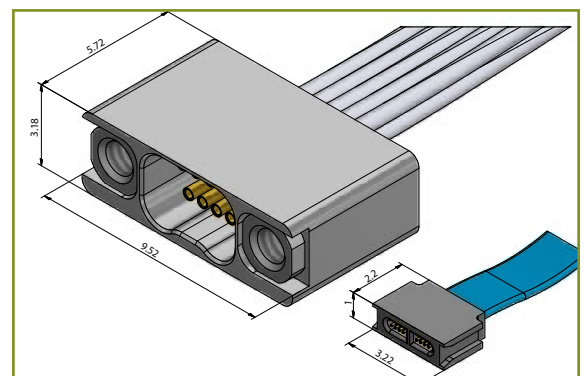
Picture 1
Size comparison between a nano Twist Pin and a pico twist pin (represented in blue)



Picture 2 :
Pico-D Twist Pin



MALE NANO-D VERSUS MALE PICO-D WITH LOCKING SYSTEM



FEMALE NANO-D VERSUS FEMALE PICO-D CONNECTOR

TECHNICAL CHARACTERISTICS

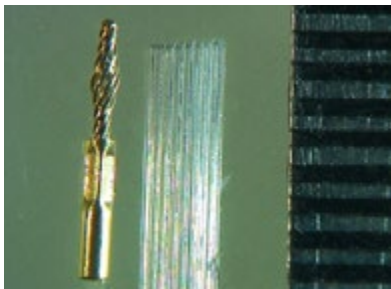
This complete connector solution (male and female) is composed of :

- High performance Copper twist pin male contacts (between 2 to 20 contacts)
- Tube shaped copper Female contacts
- Insulating plastic insert
- Optional metallic shell (stainless steel or titanium)
- Locking and positioning system in titanium
- Flat assembly of $\varnothing 0.15\text{mm}$ single wires made of AWG4001 single strand with a FEP insulation: the pitch is then 0.15 mm

Range of temperature up to now : -20°C / $+120^{\circ}\text{C}$

Vibration: 10 G

0.1 A at room temperature



Flat assembly of $\varnothing 0.15\text{ mm}$ wires next to a micro-D contact and a metallic ruler (mm)



x 100

APPLICATIONS

Medical

Research centers

Defense (micro-drones)

For applications where nano-D is too big

MORE CLUES

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Pico-D
CONNECTORS:
SMALLER THAN
NANO-D