

Circular Micro-D connectors

Number of ways: 5, 7, 12, 15, 19, 37 ways
In-line male & female plugs

Panel mount jam nut & square flange receptacles, rear or front mount for pigtail & PCB versions.

METRIC THREAD



THREE LUG BAYONET



TRIPLE START THREAD



BREAKAWAY

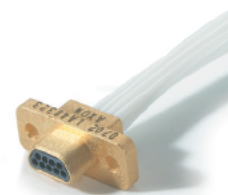


PLASTIC SHELL



Expertise in space

MICRO-D



- > Pigtail, PCB connectors, solder cup assemblies
- > Approved to ESCC3401/029 EPPL2

NANO-D



- > Pigtail, EMI range, PCB connectors (BS, CBR, SMV)
- > Approved to ESCC3401/086 EPPL2

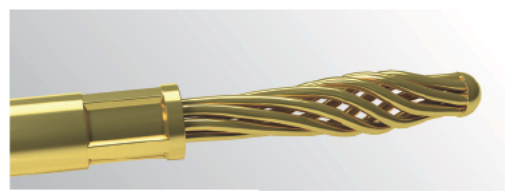
120-WAY MICRO-D



- > Plug or socket connector for cable or assembly
- > Plug board straight PCB connector
- > Socket surface mount PCB connector
- > Connector saver

Twist Pin connectors

Twist pin contact:
the heart of the AXON' Micro-D and Nano-D connectors
The Twist Pin contact by its design and performance enables the system to meet the most severe requirements – often significantly more so than stipulated in the MIL-DTL-83513 and MIL-DTL-32139 standards.



BUMP AREA WILL BE COMPRESSED INSIDE THE SOCKET DURING INSERTION

INSERTION AND RETENTION PERFORMANCE OF THE TWIST-PIN AND SOCKET MATED PAIR



BOTH SOCKET CONTACT CHAMFER AND TWIST-PIN HEMISPHERICAL RADIUS CONTRIBUTE TO ENSURE ADEQUATE INSERTION EVEN IN CASE OF MISALIGNMENT

CHARACTERISTICS	AXON' TWIST PIN	MIL REQUIREMENT
NUMBER OF CONTACT POINTS WITH FEMALE CONTACT	7	No requirement
CONTACT RESISTANCE (FOLLOWING TEST 83.5.6)	Max 3 mΩ (under 3 A)	8 mΩ (under 2.5 A)
VIBRATION (NO DISCONTINUITY > 1 μs)	200 g*	20 g*
SHOCK (NO DISCONTINUITY > 1 μs)	500 g*	50 g*
CRIMPING	22 to 36 AWG	24 to 26 AWG

(* VIBRATION & SHOCK VALUES DEPENDING ON TEST PROFILES (FOR MICRO-D))

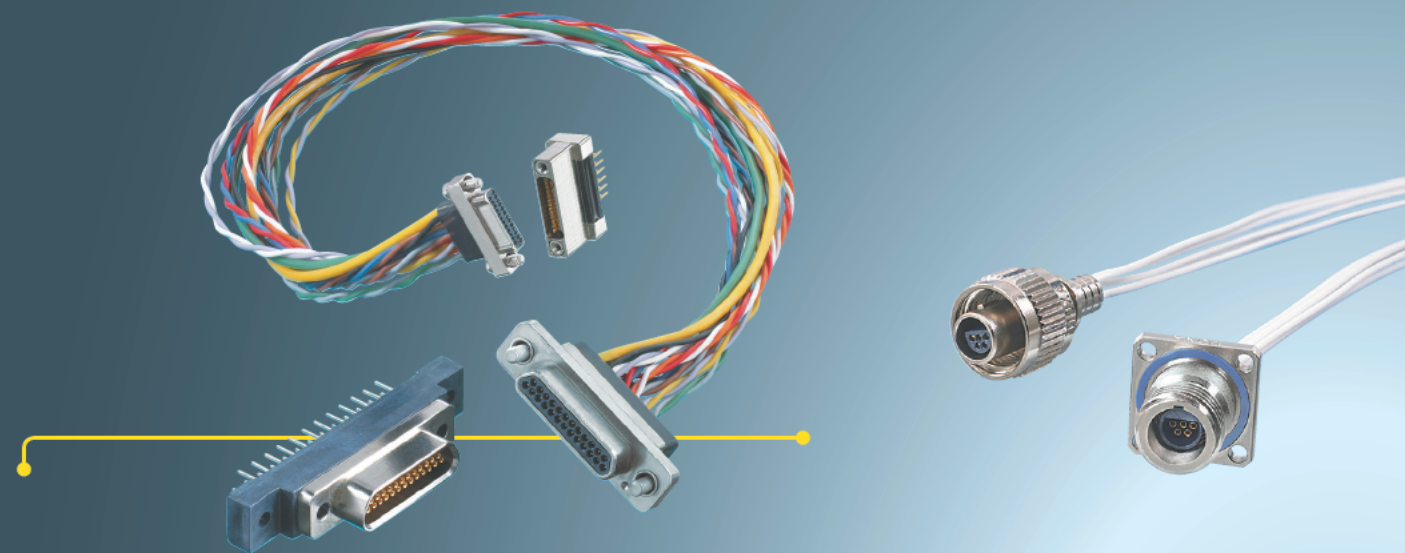
AXON' carry out 100% automatic vision inspection of the shape and dimensions of every twist-pin produced.



AXON's 100 % VISION INSPECTED TWIST PIN CONTACT

Miniature high performance twist pin connectors

Micro-D & Nano-D, Rectangular & Circular



www.axon-cable.com

axon'
cable & interconnect

>> BRAZIL
AXON' CABLE INDUSTRIA E COMERCIO LTDA
AV. AFONSO ARINOS DE MELO FRANCO
222 SALA 276 BLOCO 2B
BARRA DA TIJUCA - CEP.: 22631-455
RIO DE JANEIRO-RJ
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
FAX: +49 7152-97992-7
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 AND WIRES PVT LTD
#117, NEIL RAO TOWERS, SUITE NO. 1W,
ROAD NO. 3 EPIP, WHITEFIELD
BANGALORE - 560 066
TEL.: +91 80 40918186
FAX: +91 80 40918185
e-mail: sales@axon-cable.in

>> JAPAN
AXON' CABLE JAPAN OFFICE
TEL./FAX: +81 26 244 2261
e-mail: axon-japan@axon-cable.com

>> LATVIA
AXON' CABLE SIA
VIŠKŪ IELA, 21 C
LV-5410 DAUGAVPILS
TEL.: +371 6540 78 91
FAX: +371 6540 78 93
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
FAX: +52 442 220 6464
e-mail: axon-mexico@axoncable.com

>> SINGAPORE
AXON' CABLE
REPRESENTATIVE OFFICE (RO)
REGISTERED IN SINGAPORE
541 ORCHARD ROAD
#09-014 LIAT TOWERS
SINGAPORE 238881
TEL.: +65 81 25 61 19
e-mail: AxonSingapour@axon-cable.com

>> SPAIN
AXON' CABLE SPANISH OFFICE
C/CAPITÁN HAYA, N°1, PLANTA 15
28020 MADRID
TEL.: +34 91 418 43 46
FAX: +34 91 556 28 80
e-mail: sales@axon-cable.com

>> UNITED KINGDOM
AXON' CABLE LTD
AXON' AGORA
ADMIRALTY PARK - ROSYTH
DUNFERMLINE
FIFE KY11 2YW
TEL.: +44 1383 421500
FAX: +44 8715 282789
e-mail: sales@axon-cable.co.uk

>> USA
AXON' CABLE INC.
1314 N PLUM GROVE ROAD
SCHAUMBURG, IL. 60173
TEL.: +1 847 230 7800
FAX: +1 847 230 7849
e-mail: sales@axoncable.com

>> USA
AXON' CABLE INC.
1314 N PLUM GROVE ROAD
SCHAUMBURG, IL. 60173
TEL.: +1 847 230 7800
FAX: +1 847 230 7849
e-mail: sales@axoncable.com

>> SINGAPORE
AXON' CABLE
REPRESENTATIVE OFFICE (RO)
REGISTERED IN SINGAPORE
541 ORCHARD ROAD
#09-014 LIAT TOWERS
SINGAPORE 238881
TEL.: +65 81 25 61 19
e-mail: AxonSingapour@axon-cable.com

VISIT OUR WEBSITE
www.axon-cable.com



FOLLOW US
in f

HEADQUARTERS
France

axon'
cable & interconnect

>> AXON' CABLE S.A.S.
2 ROUTE DE CHALONS EN CHAMPAGNE - 51210 MONTMIRAIL
TEL.: +33 3 26 81 70 00 - FAX: +33 3 26 81 28 83
e-mail : sales@axon-cable.com - www.axon-cable.com

RECTANGULAR & CIRCULAR

As a specialist in advanced interconnect solutions, Axon' Cable has extensive experience in micro-miniature solutions based on the highly reliable **Twist Pin contact** technology.

By its very design, the **Micro-D** connector system meets all the requirements of robustness, durability, low contact resistance, high current, dielectric strength, shock and vibration.

With 1.27 mm (0.050") contact spacing, Micro-D connectors, half the size of D-sub connectors, represent an excellent solution for saving both space and weight. In addition to a complete range of QPL qualified Micro-D connectors to MIL-DTL-83513, Axon' also offers Micro-D PCB connectors and cable assemblies in both metal and plastic bodied versions.

In addition to circular and rectangular Micro-D connectors and assemblies, Axon' Cable offers Nano-D connectors and jumpers compliant to the MIL-DTL-32139 specification.

Rectangular Micro-D connectors

- 0.050" (1.27 mm) contact spacing
- Operating temperature: 150°C or 200°C
- Metal shell: 9 to 100 contacts
- Low profile metal shell: 9 to 51 contacts
- Plastic shell: 9 to 51 contacts

PIGTAIL



- > Metal shell
- > Low profile metal shell and plastic shell

SOLDER CUP



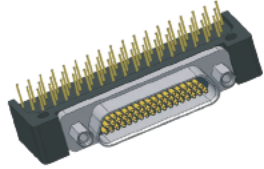
- > Metal shell
- > Low profile metal shell and plastic shell

SAVER



- > One-piece design or back to back assembly
- > Metal or plastic shell
- > Low profile metal shell

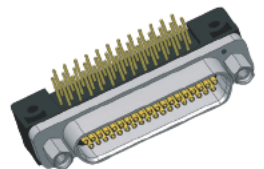
PCB



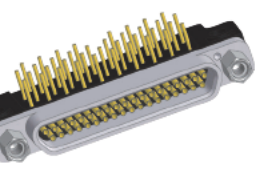
- > 0.100" pitch
- > Right Angle Mount (BR)
- > Metal shell



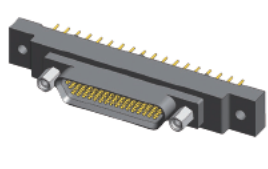
- > 0.100" pitch
- > Condensed Right Angle Mount (CBR)
- > Metal and plastic shell



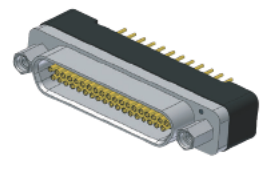
- > 0.075" pitch
- > Condensed Right Angle Mount (CBR)
- > Metal shell



- > 0.100" pitch
- > Condensed Right Angle Mount low profile (CBP)
- > Metal low profile shell and plastic shell

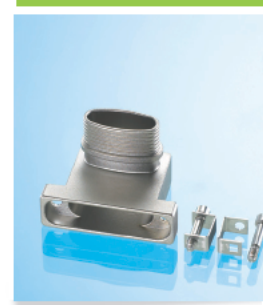


- > 0.100" pitch
- > Vertical Mount (BS)
- > Metal and plastic shell



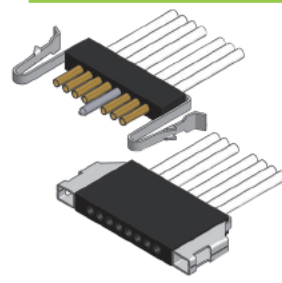
- > 0.075" pitch
- > Vertical Mount (BS)
- > Metal and plastic shell

ACCESSORIES



- > Backshells: Micro-D EMI backshell Axoclamp® EMI band termination
- > Hardware
- Removable jackscrews & jackposts
- Rear panel mount jackposts for pigtail connectors
- Removable jackposts for PCB connectors
- Rear panel mount jackposts for PCB connectors
- Non-removable hardware
- Float mount inserts
- U-clip mounting jackscrews
- > Micro-D & Nano-D assembly kit

MICROSTRIP



- > 0.050" pitch pigtail & solder cup assemblies
- > 0.050" pitch PCB connector
- > Single row plastic connector : 2 to 40 contacts

NON MAGNETIC



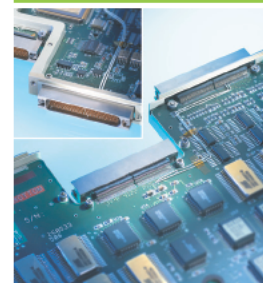
- > For strong magnetic field environment
- > Minimal magnetic disturbance
- > Plastic and metal shell
- > PCB connectors : 0.100" pitch Condensed Right Angle Mount (CBR), 0.100" Condensed Right Angle Mount low profile (CBP), 0.075" pitch Vertical Mount (BS), 0.075" pitch Condensed Right Angle Mount (CBR)

HERMETIC



- > For applications where an enclosure needs to be isolated from the outside environment. Panel feed-through is the main application for this type of application
- > Operating temperatures: up to +125°C for gasket versions
- > Metal shell
- > 2 versions: hermetic encapsulant with silicone or FKM gasket. Glass-to-metal seal version on request

120 WAY MICRO-D



- > For any applications where severe environmental conditions and high density cabling are critical.
- > Plug or socket connector for cable or assembly
- > Plug board straight PCB connector
- > Socket Surface Mount PCB connector
- > Connector saver

Nano-D connectors

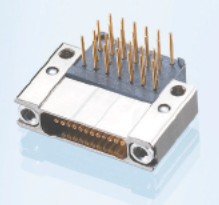
- 0.025" (0.635 mm) contact spacing
- Operating temperature: 150°C or 200°C
- Metal shell: 09,15,21,25,31,37,51 contacts
- Single and dual row

RECTANGULAR FOR CABLES



- > For micro-miniature operating systems

PCB RECTANGULAR



- > 0.050" pitch receptacles & plugs – Board Straight type (BS) & Condensed Board Right angle (CBR)
- > 0.025" pitch receptacles & plugs – Surface Mount Vertical (SMV) & Surface Mount Horizontal (SMH)

HIGH DENSITY



- > Nano-D contacts spacing inside a standard Micro-D shell size.
- > Compatible with all the hardware types available for Micro-D pigtails and BS and CBR (0.050" pitch). 28, 52, 86 contacts

MIL connectors

MIL-DTL-83513 MICRO-D



- > M83513/01 & /02 & /06 & /07 Solder cup connector- Metal shell- Plastic shell
- > M83513/03 & /04 & /08 & /09 Pigtail connector – Metal shell- Plastic shell
- > M83513/05 Hardware
- > M83513/10 to /21 PCB connector- Right angle 0.100" pitch – Metal shell
- > M83513/22 to 33 PCB connector- straight- 0.075" or 0.100" pitch- Metal shell

MIL-DTL-32139 NANO-D



- > 0.025" (0.635 mm) contact spacing
- > M32139/03 & /04 Pigtail connector Metal shell: 09, 15, 21, 25, 31, 37, 51 contacts
- > Dual row

Custom Micro-D & Nano-D connectors

Connectors presented hereafter are just a few examples of what Axon' is able to design

FILTERED MICRO-D



- > Protect the electronic equipment from electromagnetic interference
- > Available in pigtail and PCB versions
- > Electrical lines can be partially filtered (selective filtering)

EMI SOLUTIONS



- > Long experience in the fields of RF and EMI protection
- > EMI customization of Micro-D connectors which include EMI gaskets or o-rings, special backshells, special connector shell designs, optimized shield termination to the backshell

HIGH DATA RATE



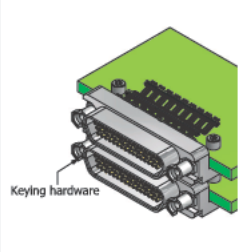
- > Rugged cable assemblies terminated with Micro-D connectors integrating high data rate standards including Ethernet, IEEE1394, SpaceWire, etc. They are able to resist high levels of shocks & vibration

HARNESSING CAPABILITIES



- > Expertise in assembling complex multi-branched harnesses with Micro-D connectors or any type of connectors available.

PCB SURFACE MOUNT



- > Designed to save space between electronic Printed Circuit Boards, surface mount connectors are available in 3 versions: - SMV (Surface Mount Vertical) - SMT (Surface Mount Transversal-on the edge of the card) - SMH (Surface Mount Horizontal)

MINI SYSTEMS



- > Expertise in integrating mechanical parts and electronic components in one system to perform specific functions

CIRCULAR COMBO



- > Designed to route power and RF signals through circular connectors.

NANO CIRCULAR

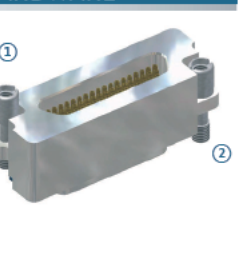


- > 0.025" (0.635mm) contact spacing

CUSTOM DESIGNED SHELLS & HARDWARE



- > Micro-D with special integrated backshell for flat cable



- > Custom Micro-D design 51 way saver with custom retractable screws.

- ① HIGH POSITION TO FACILITATE THE MATING
- ② LOW POSITION TO LOCK THE CONNECTOR