



Creative  
Interconnect  
Solutions

# Micro-D Series

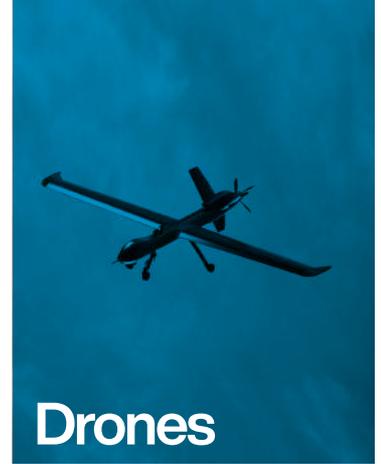


→ Miniature connectors for harsh environments meeting the **MIL-DTL-83513** testing requirements

# HARSH ENVIRONMENT APPLICATIONS

 Space & weight saving

 High reliability for severe environments



...and much more

→ Space saving

→ Weight saving

→ Spring effect contact

→ Excellent electrical continuity

→ Vibration & shock resistance

→ Customizable

The **Micro-D contact's** design integrates a bump which ensures optimal electrical performance and superior mechanical reliability for the most demanding applications. It combines durability with exceptional signal integrity.



## Technical features



1.27 MM PITCH



FROM 9 TO 130 PINS



LF CONTACTS UP TO 3A



CONTACT RESISTANCE <math>< 8\text{m}\Omega</math>  
INSULATION RESISTANCE >math>> 5\text{G}\Omega</math>



WITHSTANDING VOLTAGE 600V AT SEA LEVEL



MECHANICAL OPERATION 500 CYCLES



TEMPERATURE CYCLING -55°C / +125°C



VIBRATION 20G SHOCK 50G



METAL SHELL



PPS 30% GF INSULATOR



MEETS OR EXCEEDS MIL-DTL-83513 TESTING REQUIREMENTS

# Micro-D

The **Micro-D** connector is a standardized connector ideal for harsh environments and for critical applications, where no failure is allowed. Its 1.27mm pitch makes it a compact and weight saving connector, in line with the system miniaturization trend of the MIL/AERO/SPACE markets. The spring effect design of its contacts allows to carry up to 3A per contact by ensuring highly reliable electrical and mechanical performance.

## WIRES

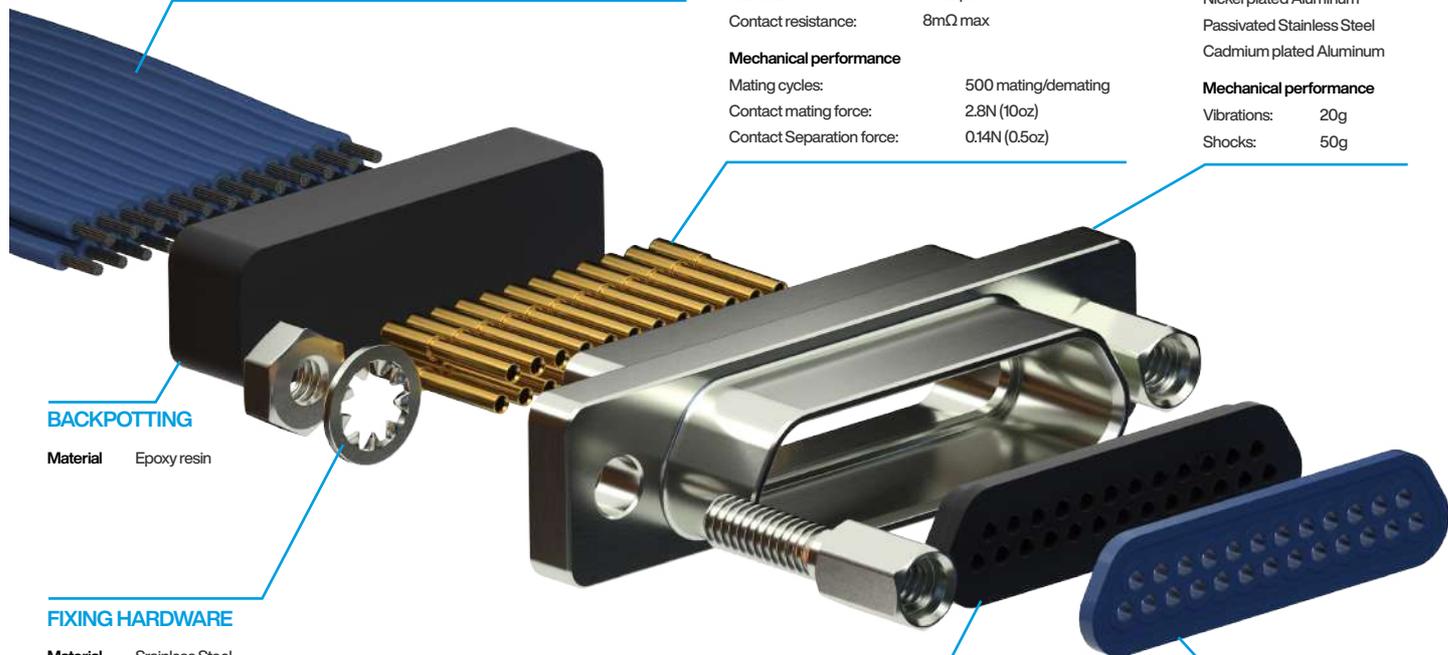
**Conductor material** Silver Plated Copper  
**Insulator material** M22759/11:PTFE  
 M22759/33: Crosslinked-ETFE  
**Gauges** AWG 26 or 28 (19 strands)  
**Color code**    
*Single color or 10 colors repeat*

## CONTACTS

**Material** Gold over nickel plated beryllium copper  
**Electrical performance**  
 Current: 3 Amps  
 Contact resistance: 8mΩ max  
**Mechanical performance**  
 Mating cycles: 500 mating/demating  
 Contact mating force: 2.8N (10oz)  
 Contact Separation force: 0.14N (0.5oz)

## SHELL

**Material options**  
 Nickel plated Aluminum  
 Passivated Stainless Steel  
 Cadmium plated Aluminum  
**Mechanical performance**  
 Vibrations: 20g  
 Shocks: 50g



## BACKPOTTING

**Material** Epoxy resin

## FIXING HARDWARE

**Material** Stainless Steel

## INSULATOR

**Material** PPS (Polyphenylene Sulfide, 30% Glass-Filled)  
**Electrical performance**  
 Withstanding Voltage: 600V AC @sea level  
 150V AC @70 000 ft  
 Insulation resistance: 5000 MΩ mini  
 @500 VDC

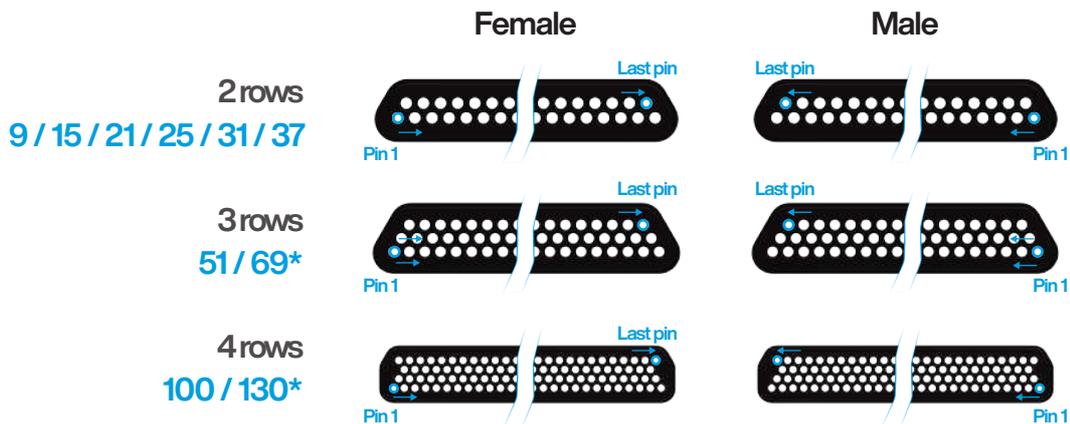
## INTERFACIAL SEAL

**Material** Fluorosilicone rubber

## Environmental performance

Operating temperature: -55 / +125 °C

# Contact arrangement



\*: the 69 and 130 ways are not part of the MIL-DTL-83513 contact arrangement but available in Nicomatic standard range.  
 → : pin counting orientation

# Micro-D Part Numbering

## Part numbering - Solder Cups

Family	Range	Insert arrangement <sup>(1)</sup>	Connector gender	Shell finish	Fixing Hardware <sup>(2)(3)</sup>
NMD Nicomatic Micro-D	SC Solder cup	nnn Contact number	P Male	N Nickel plated aluminum	S01 #2-56 S101 #4-40 Jackscrew, Low Profile Hex Drive
			S Female	S Stainless steel	S02 #2-56 S102 #4-40 Jackscrew, High Profile Hex Drive
				C Cadium plated aluminum	S11 #2-56 S111 #4-40 Jackscrew, Low Profile Slotted
					S12 #2-56 S112 #4-40 Jackscrew, High Profile Slotted
					P01 #2-56 P101 #4-40 Jackpost
					Nxx No fixing hardware

(1): 009 / 015 / 021 / 025 / 031 / 037 / 051 / 069 / 100 / 130

Example:  
NMD-SC-021S-N-Nxx  
Solder cup, 21 way female, nickel plated aluminum shell, no fixing hardware

(2): #2-56 thread for 009 to 069 (3): Other hardware available on request  
#4-40 thread for 100 to 130



Example:  
NMD-SC-021S-N-Nxx  
Solder cup, 21 way female, nickel plated aluminum shell, no fixing hardware

## Part numbering - Pre-wired

Family	Range	Insert arrangement <sup>(1)</sup>	Connector gender	Wire gauge	Wire type	Wire length	Color code <sup>(4)</sup>	Shell finish	Fixing Hardware <sup>(2)(3)</sup>
NMD Nicomatic Micro-D	PW Pre-wired	nnn Contact number	P Male	26 AWG26	P M22759/11 PTFE	xxxC Length in cm (10cm min)	0-9 1 color	N Nickel plated AL	S01 #2-56 S101 #4-40 Jackscrew, Low Profile Hex Drive
			S Female	28 AWG28	X M22759/33 XL-ETFE	xxxI Length inches (4" min)	R 10 colors	S Stainless steel	S02 #2-56 S102 #4-40 Jackscrew, High Profile Hex Drive
								C Cadmium plated AL	S11 #2-56 S111 #4-40 Jackscrew, Low Profile Slotted
									S12 #2-56 S112 #4-40 Jackscrew, High Profile Slotted
									P01 #2-56 P101 #4-40 Jackpost
									Nxx No fixing hardware

(1): 009 / 015 / 021 / 025 / 031 / 037 / 051 / 069 / 100 / 130

Example:  
NMD-PW-037P-26P050C6-N-Nxx  
Pre-wired, 37 way male, M22759/11-26-6 PTFE AWG26 blue color wires, nickel plated aluminum shell, with high profile slotted jackscrew

(4): 0: Black  
1: Brown  
2: Red  
3: Orange  
4: Yellow  
5: Green  
6: Blue  
7: Violet  
8: Gray  
9: White  
R: Rainbow Repeated

(2): #2-56 thread for 009 to 069 (3): Other hardware available on request  
#4-40 thread for 100 to 130



Example:  
NMD-PW-037P-26P050C6-N-Nxx  
Pre-wired, 37 way male, M22759/11-26-6 PTFE AWG26 blue color wires, nickel plated aluminum shell, with high profile slotted jackscrew

## Part numbering - Fixing Hardware Kit

Family	Range	Fixing Hardware <sup>(2)(3)</sup>
NMD Nicomatic Micro-D	HW Hardware	S01 #2-56 S101 #4-40 Jackscrew, Low Profile Hex Drive
		S02 #2-56 S102 #4-40 Jackscrew, High Profile Hex Drive
		S11 #2-56 S111 #4-40 Jackscrew, Low Profile Slotted
		S12 #2-56 S112 #4-40 Jackscrew, High Profile Slotted
		P01 #2-56 P101 #4-40 Jackpost
		Nxx No fixing hardware

Example:  
NMD-HW-P01  
Kit of 2 Jackpost fixing hardware

(2): #2-56 thread for 009 to 069 (3): Other hardware available on request  
#4-40 thread for 100 to 130



Example:  
NMD-HW-P01  
Kit of 2 Jackpost fixing hardware



SCAN THE CODE  
TO GET 3D FILE



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