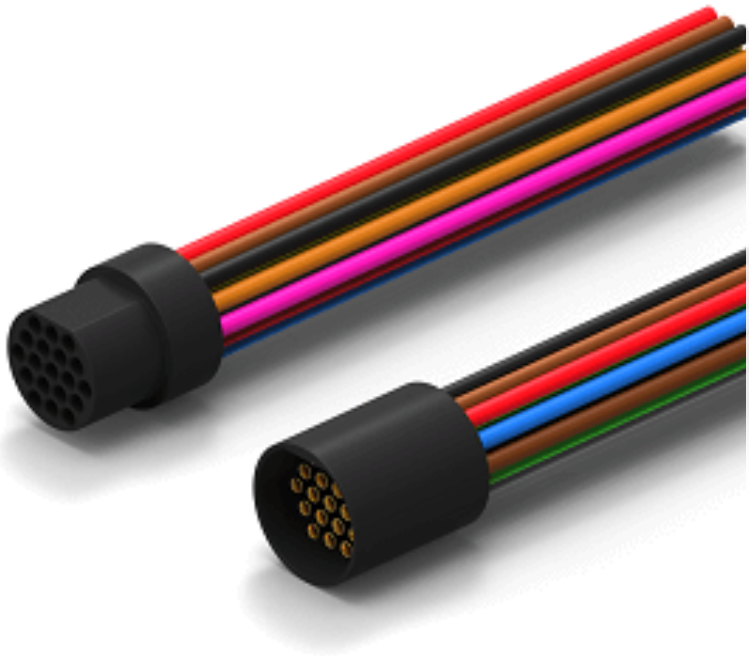


Circular Micro-D



Winchester Interconnect is a world leader in the design and manufacture of highly engineered circular connector solutions. From high power circular connectors to miniaturized circular connectors, we have a solution for your application.

Our lightweight Micro-D connectors offer rugged durability for constrained unmanned applications, such as UAVs, ground robotics, automation devices and a vast number of medical equipment applications.

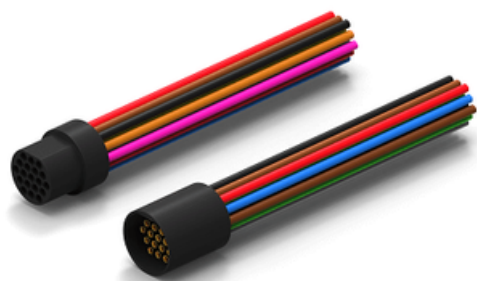
The contact center-to-center pitch for Plastic Micro Circular Connectors is .050".

Table of Contents

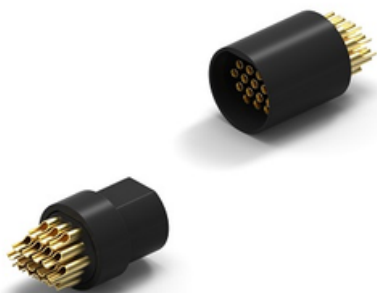
3-14.....Circular Micro-D Connectors

4....In-Line Plastic Connectors

9...Solderable Connectors



Circular Micro-D



In-Line Micro Plastic Connectors

Winchester Interconnect Micro offers In-Line Micro Plastic Connectors designed for compact, high-performance applications where reliability is critical. These polarized connectors are spaced on 50 mil (1.27mm) centerlines with a mated length under 12.44 mm and outer diameters ranging from 5.6 mm to 10 mm. Featuring shrouded male and female contacts within durable plastic insulators, they provide excellent protection during mating and disengagement. Built to endure high shock and vibration, these connectors are available in 5, 7, 9, 12, and 16 positions with pre-wired and solid straight tail versions, supporting 24 to 30 AWG wires.

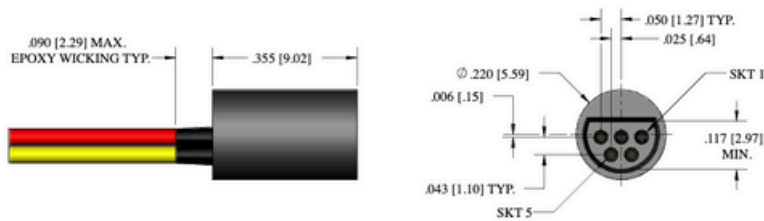


KEY FEATURES & BENEFITS

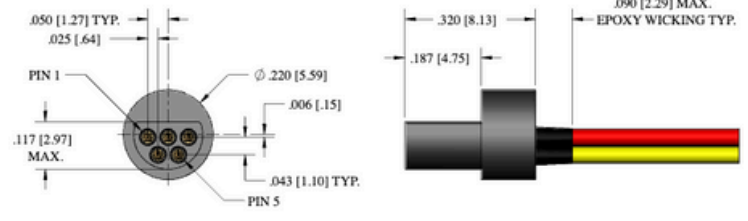
- Compact Polarized Design – 50 mil (1.27mm) spacing and less than 12.44 mm mated length for space-constrained applications.
- Durable Plastic Insulators – Shrouded male and female contacts ensure protection during mating and unmating.
- High Reliability – Gold-plated Beryllium Copper flex pins rated for over 3,000 mating cycles.
- Shock and Vibration Resistant – Engineered for dependable performance in harsh environments.
- Flexible Configurations – Available in 5, 7, 9, 12, and 16 positions with pre-wired and solid straight tail versions.
- Wire Compatibility – Accepts 24 to 30 AWG wires for versatile system integration.
- Custom Over-Mold Option – Tailored designs available upon submittal of requirements.

Micro Circular In-Line Micro Plastic

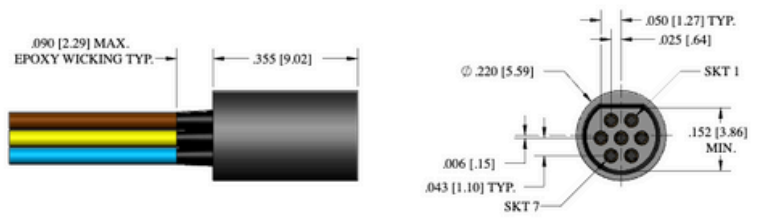
DIMENSIONAL



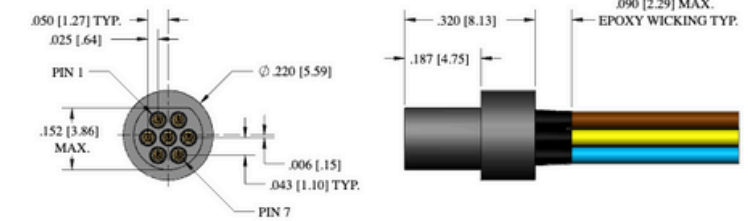
5 POSITION RECEPTACLE



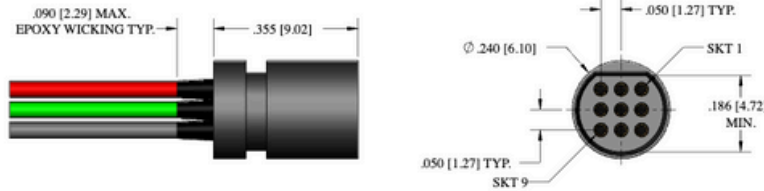
5 POSITION PLUG



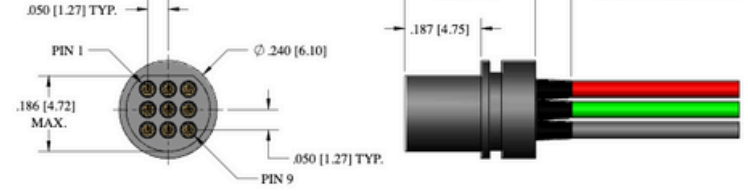
7 POSITION RECEPTACLE



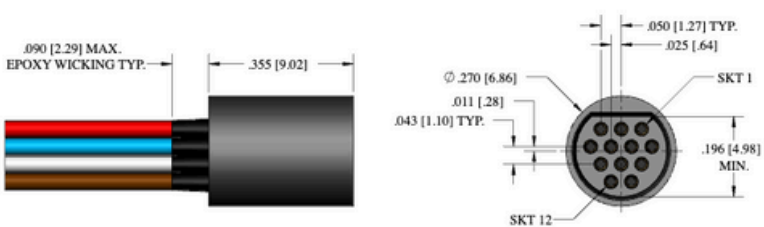
7 POSITION PLUG



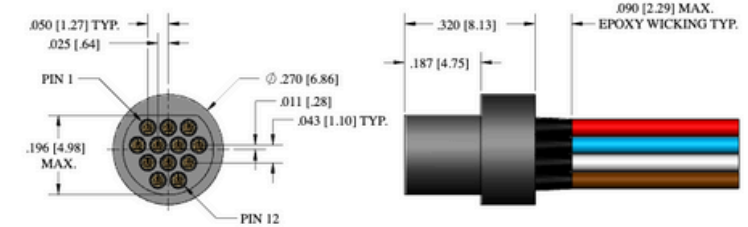
9 POSITION RECEPTACLE



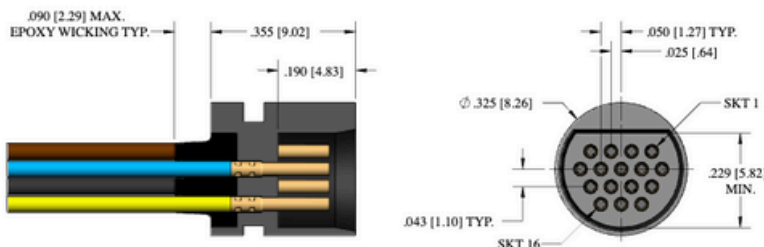
9 POSITION PLUG



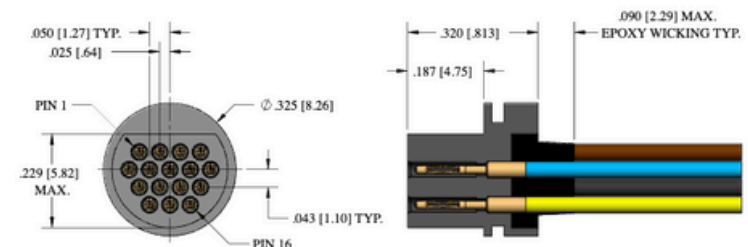
12 POSITION RECEPTACLE



12 POSITION PLUG



16 POSITION RECEPTACLE



16 POSITION PLUG

Micro Circular In-Line Micro Plastic

PERFORMANCE

Electrical	
Contact Resistance	8 milliohm max contact only and 32 milliohms max with 6" wire @ 2.5A
Current Rating	3A max.
Dielectric WithStanding Voltage	600 VAC at sea level, 150 VAC at 70,000 feet. 1mA leakage current max.
Insulation Resistance	500 VDC and 5000 Megohms min for low temp products and 500VDC and 1000 Megohms min for high temp products

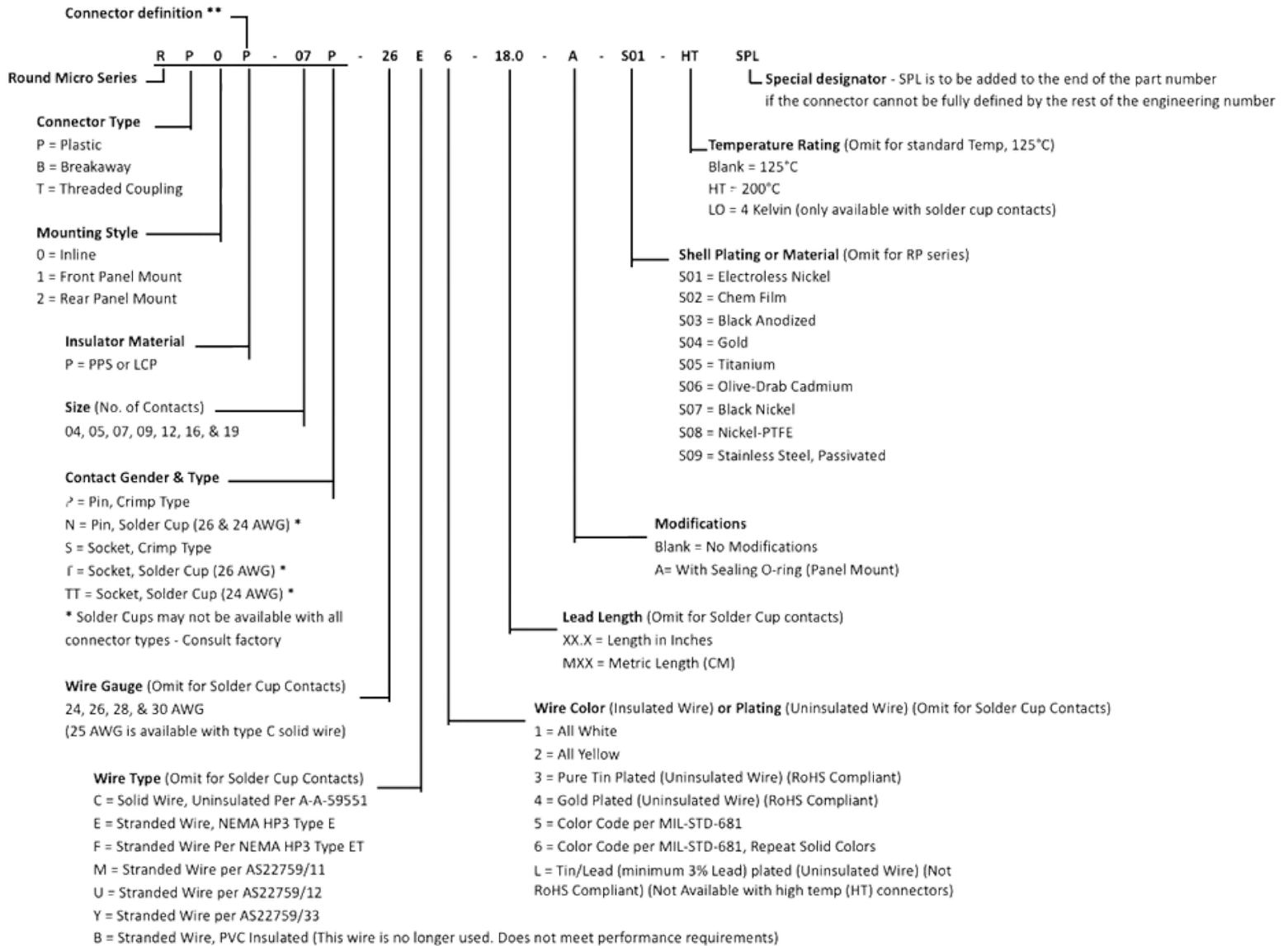
Mechanical	
Engaging Force	6 oz max. (Signal contacts only, no data for Power or Coax contacts)
Separation Force	.5 oz. min. (Signal contacts only, no data for Power or Coax contacts)
Mating/Unmating Force	10 oz x # of contacts max. (Signal contacts only, no data for Power or Coax contacts)
Vibration	EIA-364-28 Condition IV, 1 microsecond max discontinuity
Shock	EIA-364-27 Condition E, 1 microsecond max discontinuity
Durability	500 matings, passes Mating Force, CR, Eng and Sep Forces
Salt Spray	EIA 364-26 Condition B-48 hours

MATERIALS

Materials and Finishes	
Signal Pin Contacts	C17200 Beryllium Copper per ASTM B194
Signal Socket Contacts	C21000 Brass Alloy per ASTM B36
Contact Plating	Gold Plating per ASTM B488
Insulator Material	LCP(Liquid Crystal Polymer) GLCP-30F or PPS per MIL-M-24519 GST-40F

Micro Circular In-Line Micro Plastic

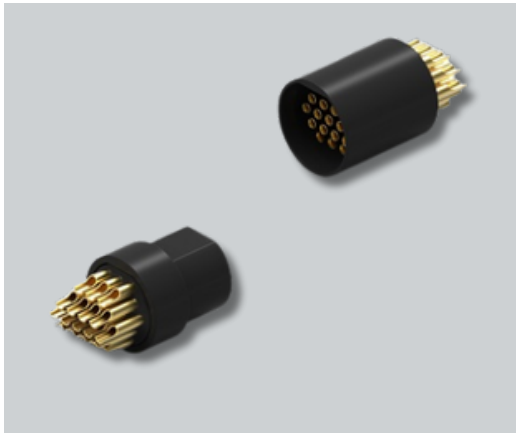
HOW TO ORDER



** For double ended assemblies, include connector definition for both ends separated by a forward slash (/)

Solderable Connectors

Winchester Interconnect Micro, formerly known as Ulti-Mate Connector, offers Micro Circular Solderable Connectors designed for high reliability in demanding environments. These inline circular plastic connectors feature soldercup contacts and perform across a wide temperature range from -55°C to 200°C , ensuring consistent performance in harsh conditions. Available in sizes 5, 7, 9, 12, and 16, these connectors deliver precision and durability across diverse applications.

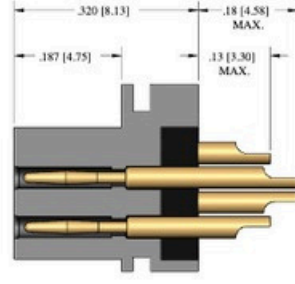
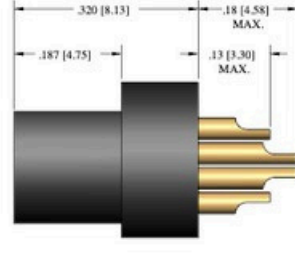
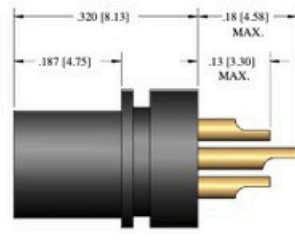
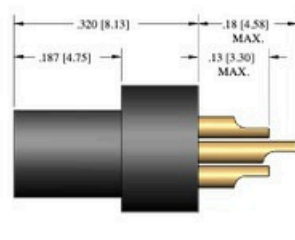
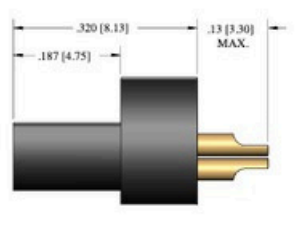
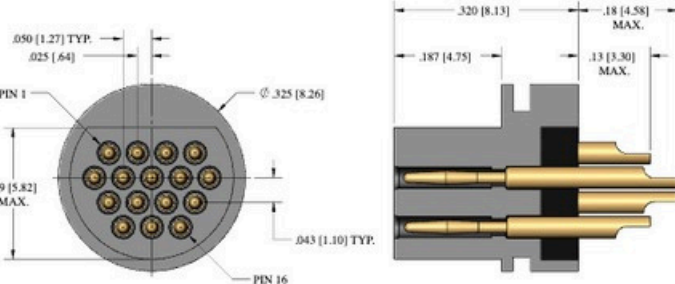
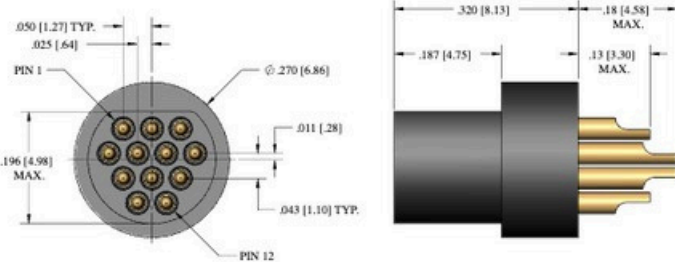
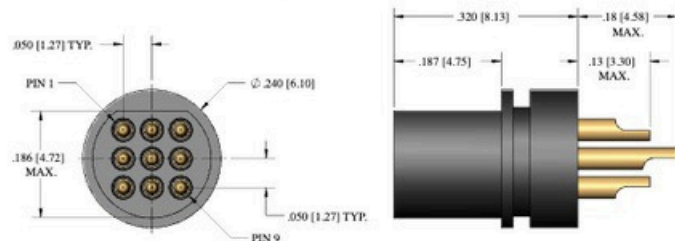
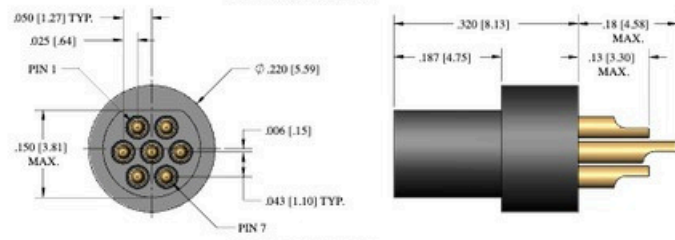
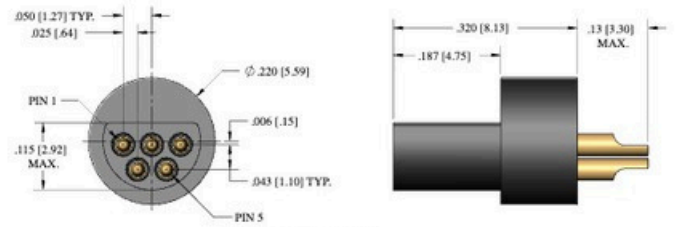
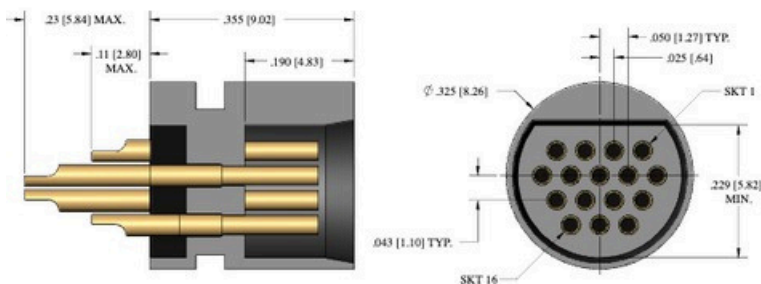
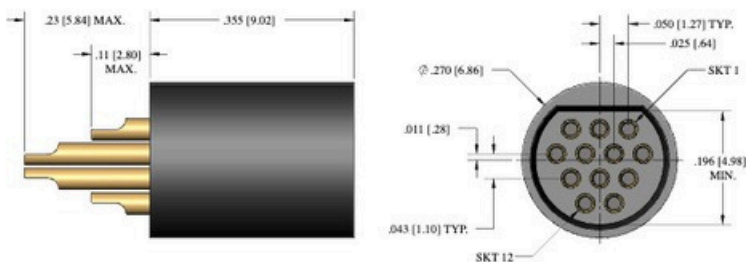
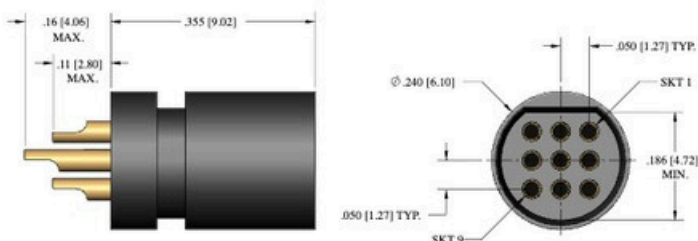
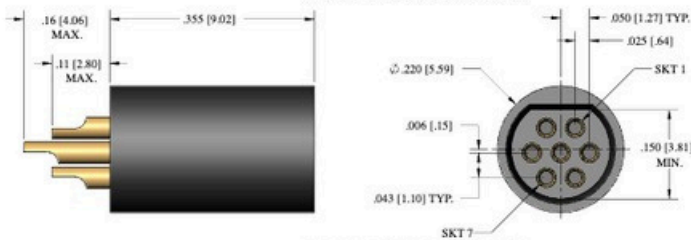
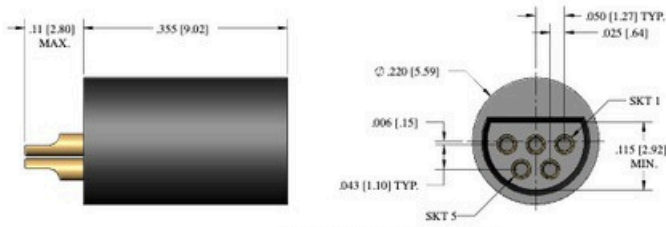


KEY FEATURES & BENEFITS

- Wide Temperature Range – Operates reliably from -55°C to 200°C for use in extreme environments.
- High-Quality Contacts – Signal Pin Contacts made from C17200 Beryllium Copper per ASTM B194 for strength and conductivity.
- Durable Socket Contacts – Signal Socket Contacts crafted from C21000 Brass Alloy per ASTM B36 for long-lasting performance.
- Gold-Plated Finish – Contact Plating per ASTM B488 ensures corrosion resistance and excellent conductivity.
- Rugged Insulator Options – Available in LCP (GLCP-30F) or PPS per MIL-M-24519 GST-40F for enhanced durability.
- Versatile Sizing – Offered in 5, 7, 9, 12, and 16 positions to suit varied design needs.

Micro Circular In-Line Micro Plastic

DIMENSIONAL



Micro Circular In-Line Micro Plastic

PERFORMANCE

Electrical	
Contact Resistance	8 milliohm max contact only and 32 milliohms max with 6" wire @ 2.5A
Current Rating	3A max.
Dielectric WithStanding Voltage	600 VAC at sea level, 150 VAC at 70,000 feet. 1mA leakage current max.
Insulation Resistance	500 VDC and 5000 Megohms min for low temp products and 500VDC and 1000 Megohms min for high temp products

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Materials and Finishes	
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Insulator Material	LCP(Liquid Crystal Polymer) GLCP-30F or PPS per MIL-M-24519 GST-40F

Micro Circular In-Line Micro Plastic

HOW TO ORDER



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About Winchester Interconnect

Winchester Interconnect is a US-based manufacturer of high-precision connectors, cable assemblies, and cable. Our products are ideal for military and aerospace, industrial, medical, and space applications where expertise and reliability are critical to your success.

Our 30,000+ connectivity solutions include standard and custom RF and microwave interconnects, hermetic connectors and packaging, micro-miniature connectors and assemblies, fiber optic connectors, industrial cable, and undersea cable

We work in the toughest industries where failure is not an option. For connectivity applications requiring high performance in harsh environments, life-saving systems, and the latest connected technologies, our industry-leading knowledge and engineering capabilities will ensure reliable, cutting-edge interconnect solutions that won't fail when it matters most.

Our Industries & Market Solutions



Industrial
Automation



Space



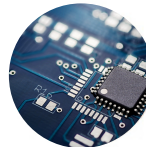
Oil & Gas



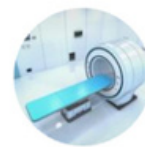
Marine
Subsea



Aerospace
& Defense



Semiconductor



Medical



Custom