

Industrial Circular Connectors

Features & Benefits

WATER PROOF

IP68/69K Dynamic Mated & Unmated

Ideal for outdoor and indoor dynamic applications requiring continuous underwater immersion, routine pressure washing and dust protection.

UV RESISTANT

No Degradation & Long Outdoor Life

No mechanical deterioration or significant color variation after 5 years of exposure in natural environment (equivalent exposure and moisture as per ISO4892 and F1 rated per UL 746C).

QUICK MATING

Push-Pull Latch with Audible "Click" or 1/3 Bayonet Coupling

Quick and blind mating coupling systems with audible "click" and tactile feel to confirm proper mating achieved.

Eliminates connection uncertainty and reduces time and labor during installation.

COST SAVING

Mixed Power & Signal Layouts

Power supply and signal transmission can be combined in a unique interconnect solution to reduce system complexity and minimize component and installation costs.

SIGNAL INTEGRITY

EMI Shielding: 65 dB at 100 Mhz

Qualified and compatible for electromagnetic radiation areas with proper signal integrity and transmission.

CORROSION RESISTANT

Salt Spray & Fluid Resistance

Designed to maintain mechanical/electrical functionality and withstand climate ingress, exposure to salt spray, corrosive atmospheres or industrial-type fluids and oils.

UL/IEC COMPLIANT

Qualified & Certified

In accordance with UL/IEC electrical, flammability and other safety standards.

Typical applications



 Machinery & Robotics



 Building Automation & Control



 Energy & Power



 Off-Road, Mining & Railway



 Instrumentation & Measurement



 Telecom & Datacom



 Stage & Lighting



 Medical

Industrial Circular Connectors Description



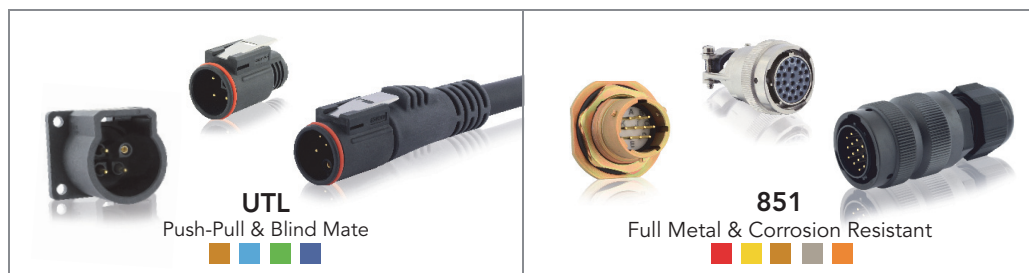
Shell type	Plastic	Plastic + metal coupling	Metal
Coupling type	1/3-turn bayonet & audible click	1/3-turn bayonet & audible click	1/3-turn bayonet & audible click
Waterproof / IP rating <small>*with solder or O'ring contacts</small>	IP68/69K mated/unmated*	IP65	IP68/69K mated
Salt spray	≥ 500 hours	48 hours	48 hours - Nickel 96 hours - Black anodized
Special attributes	UV resistant & UL/IEC	Lightweight plastic, robust metal coupling & UL/IEC	EMI shielding (98 dB at 1 MHz) & UL/IEC
Plating type	No plating	Nickel	Black anodized or Nickel
Temperature range	-40° C +105° C	-55° C +125° C	-40° C +105° C
Mating cycles	250	500	500
Number of shell sizes	5 sizes (8, 10, 12, 14, 18)	8 sizes (10, 12, 14, 16, 18, 20, 22, 24)	8 sizes (10, 12, 14, 16, 18, 20, 22, 24)
Number of layouts	36 layouts	17 layouts	27 layouts
Wire gauge	8 - 30 AWG	8 - 30 AWG	8 - 30 AWG
Contact size range	#8, #12, #16, #20	#8, #12, #16, #20	#8, #12, #16, #20
Receptacle configurations	Square flange jam nut & in-line threaded receptacle	Square flange & in-line	Square flange, jam nut & in-line
Contact current rating	Up to 44 AMPS	Up to 44 AMPS	Up to 44 AMPS
Contact termination types	Solder, crimp, PCB straight, screw, coax	Solder, crimp, PCB straight, coax	Solder, crimp, PCB straight, coax
Contact types	Stamped & formed, machined, coaxial & fiber optic	Stamped & formed, machined, coaxial & fiber optic	Stamped & formed, machined, coaxial & fiber optic
Mixed power & signal layouts	Yes	Yes	Yes
Flammability rating	UL94 V0 <small>(UL94 HB for sealed unmated version)</small>	UL94 V0	UL94 V0
Ethernet compatible <small>**certain layouts</small>	Yes**	Yes**	Yes**
Environmental			



Example of equivalent products available on the market (non limitative list)

Inter-mateable (1)	SOURIAU® UTG-UTO-UTP Series	SOURIAU® UTS-UTO-UTP Series ITT Cannon TR & TN Series	SOURIAU® UTS-UTG-UTP Series ITT Cannon TNM Series
AMPHENOL® Series Cross-reference	C016 Series = IP65/67 mated <small>(less layouts vs SOURIAU)</small>	None	RT360 (only IP67) RT-Series = #16 contacts RTOW-Series = #20 contacts <small>(less layouts vs SOURIAU)</small>
ITT Cannon Series Cross-reference (1)	None	Trident Ringlock TR-Series = IP65 <small>(less layouts vs SOURIAU)</small> Trident Neptune TN-Series = IP67 w/ sealing grommet	Trident Neptune Metal TNM-Series = IP67 <small>(less layouts vs SOURIAU)</small>

(1): Product series are conditionally inter-mateable with same shell size/layout pattern but IP, Electrical and Mechanical performances may be affected. SOURIAU cannot guarantee or warranty product performance levels when mated or used in conjunction with non-SOURIAU product. Panel cut-out dimensions and inter-changeability between ITT Cannon & SOURIAU Series not currently validated. Consult with factory.

Industrial Circular Connectors Description



Shell type	Plastic + metal latch	Metal
Coupling type	Push-Pull & audible click	1/3-turn bayonet & audible click
Waterproof / IP rating <small>*with solder or O'ring contacts</small>	IP68/69K mated/unmated*	IP67 mated (with appropriate backshells)
Salt spray	> 1,000 hours	> 500 hours
Special attributes	Key shape blind mate, UV resistant & UL/IEC, current breaking capacity	High density layout (2 to 61 contacts) Robust and corrosion resistant
Plating type	No plating (latch stainless steel)	Black Zinc Nickel or Nickel
Temperature range	-40° C +105° C	-55°C +125°C
Mating cycles	1,000	500
Number of shell sizes	3 sizes (10, 12, 14)	9 sizes (8, 10, 12, 14, 16, 18, 20, 22, 24)
Number of layouts	4 layouts	38 layouts
Wire gauge	14 - 30 AWG	14 AWG and smaller
Contact size range	#16, #20	#16, #20
Receptacle configurations	Square flange, jam nut & in-line	Square flange, jam nut & in-line
Contact current rating	Up to 16 AMPS	Up to 13 AMPS
Contact termination types	Crimp, screw, coax	Solder, crimp, PCB straight
Contact types	Stamped & formed, machined, coaxial & fiber optic	Machined
Mixed power & signal layouts	Yes	Yes
Flammability rating	UL94 5VA	UL 94 HB
Ethernet compatible <small>**certain layouts</small>	Yes + DMX/DALI/RDM	Yes**
Environmental		

Example of equivalent products available on the market (non limitative list)

Inter-mateable (1)	None	MIL-DTL-26482 connectors
AMPHENOL® Series Cross-reference	None	PT/PTSE/ 62GB / 62IN
ITT Cannon Series Cross-reference (1)	None	KPT/KPSE

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