OPTIMIZED
FOR USE WITH
MIL-STAR™
HIGH-PERFORMANCE HOOKUP WIRE AND CABLE

ITS-NG: Nuclear industry standard reverse-bayonet power and signal connectors for existing Gen II plant refurbishment

Glenair ITS-NG series connectors can be configured to meet Gen II LOCA requirements and are suitable for equipment retrofit and refurbishment applications to legacy plant containment area requirements. These industry-standard legacy reverse bayonet-lock connectors offer fast and reliable mating and unmating. Shells are available in stainless steel or aluminum in various finishes and platings, offering insert and O-ring material choices such as EPDM, silicone, PEEK, Epiall, and others.

Discrete connectors or turnkey cable assemblies

The Nuclear-Grade ITS series connector is a Glenair MIL-DTL-5015 reverse-bayonet connector, dimensionally and electrically compliant to MIL-DTL-5015 specifications, offering the full array of contact plating and size options, as well as power and signal insert arrangements.

These connectors are available as commercial grade or manufactured under our 10CFR50 Appendix B nuclear quality program.

- **Fast connect / disconnect reverse-bayonet coupling**
- **Stainless steel or aluminum shells with various plating and finish options**
- **Chemical / radiation tolerant and moisture resistant inserts and O-rings**
- **Performance tested for advanced temperature, radiation, and seismic**
- **Ideally suited for I&C applications, valve control devices, sensors, and other electronic equipment in nuclear rest-of-plant and safety-related applications**

QUICK-CONNECT / DISCONNECT ACTION

ITS-NG Reverse-Bayonet (5015 type) Nuclear-Grade Interconnects

For rest-of-plant and legacy containment area applications

GLENAIR SERIES ITS-NG APPLICATION NOTES

- Series ITS-NG connectors are based on the legacy MIL-DTL-5015 standard, with the same insert arrangements, shell dimensions, supported contacts, and electrical performance ratings—but with an improved reverse-bayonet coupling technology in place of the threaded interface used on standard MIL-DTL-5015.
- The ITS-NG family of connectors features improved O-ring sealing and other design enhancements for use in Gen II plant safety-related applications, as well as for use in rest-of-plant applications. For new interconnect applications in modern-day Gen III power plants, Glenair recommends the SuperNG or Mighty Mouse NG series.
- ITS-NG is an industry-standard legacy connector design, intermateable and intermountable with all other 5015-based reverse-bayonet connector series. ITS-NG is appropriate for retrofit and refurbishment applications, as the 3-point bayonet coupling mechanism reduces mating/unmating time, an important consideration in time-sensitive outage servicing. Positive locking of the three stainless steel pins provides audible, visual, and tactile confirmation of full mating engagement for double-gloved technicians, as well as resistance to vibration and shock, preventing connector de-coupling in harsh device-mount applications such as steam-pipe mounting.
- Both plug and receptacle connector configurations are available with client-specified insert and O-ring materials, such as EPDM, silicone, Epiall, or PEEK.
- ITS-NG connectors may be supplied with backshells and accessories for IP-rated environmental sealing for high humidity and submersion applications.
- Glenair ITS-NG connectors are particularly well-suited for use in applications where electromagnetic compatibility is a requirement, as a complete range of EMI shield termination accessories is available for overall and individual wire shields.

CONTACT SPECIFICATIONS-COPPER ALLOY WITH GOLD PLATING (STANDARD)

CONTACT SIZE	RATED CURRENT AT 20 C	RATED CURRENT AT 80 C	MAX. CONTACT RESIST.	WIRE SIZE
20	7.5 A	7.5 A	12.0 mΩ	20-26 AWG
18	10A	7.5 A	12.0 mΩ	18-26 AWG
16	22 A	13 A	6.0 mΩ	16-22 AWG
12	41 A	23 A	3.0 mΩ	12-14 AWG
8	73 A	46 A	1.0 mΩ	8-10 AWG
4	135 A	80 A	0.5 mΩ	4-6 AWG
0	245 A	150 A	0.3 mΩ	0-2 AWG
4/0	350 A	225 A	0.2 mΩ	4/0 AWG

SERVICE RATING (MINIMUM INSULATING RESISTANCE: ≥ 5 X 103 MΩ)

CLASS	OPERATING VOLTAGE VDC	OPERATING VOLTAGE VAC RMS	TEST VOLTAGE VAC RMS
INST.	250 V	200 V	1000 V
A	700 V	500 V	2000 V
D	1250 V	900 V	2800 V
E	1750 V	1250 V	3500 V
B	2450 V	1750 V	4500 V
C	4200 V	3000 V	7000 V

MATERIALS AND FINISHES	
Shells, Coupling Nuts	316 Stainless Steel, Passivated Aluminum—various platings and finishes available
Contacts	Copper alloy, Gold Plated or Silver Plated for larger contacts in higher-amperage applications
Hoods (Socket contacts)	Copper Alloy, Nickel-Plated
Pencil Clip (Socket contacts)	Stainless Steel
Wave Spring	Stainless Steel
Grounding Finger	Beryllium Copper

I J K L M N O P Q R S T U V W X Y Z