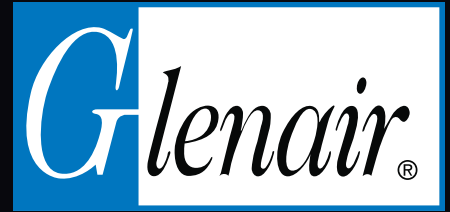


MISSION-CRITICAL
INTERCONNECT
SOLUTIONS



Glenair
SIGNATURE SERIES

Super ITS - 921 Advanced Power Connector

Reduced Form-Factor • High-Power • High-Temperature •
Precision-Machined • IAW MIL-DTL-5015

921TM
SERIES

SUPER ITS



HIGH AMPACITY Super ITS - 921



Ultra high-performance reverse-bayonet power connectors

Reverse-bayonet derivatives of M5015 / VG95234 threaded connectors have long been preferred for their rapid mating and rugged resistance to vibration and shock in harsh-environment applications such as military vehicles and missile batteries. Now Glenair introduces an ultra high-performance version of the reverse-bayonet M5015 / VG95234 power connector called the Super ITS - 921. This series is designed for high-ampacity applications where low insertion force LouverBand type contacts, mechanical contact retention, broad temperature tolerance, reduced size, and superior connector and wire sealing is required.

Super ITS - 921 is an extremely durable and environmentally-sealed connector, designed with its own set of high-density contact insert arrangements. Unlike conventional 5015-type connectors designed for industrial and rail applications, the Super ITS - 921 offers uncompromised electrical, mechanical, and environmental performance features such as precision-machined aluminum alloy or stainless steel shells with 2000 mating cycle lifespan, rigid thermoplastic two-piece insulators, and machined, highly conductive copper alloy LouverBand contacts. Designed for extreme harsh environments such as are found in military defense applications, the Super ITS - 921 delivers contact and wire support from #16 to 2/0 and 1 mmq – 70 mmq respectively. With ampacity up to 350 amps, and a max working voltage of 2450 VCC / 1750 VCA, the Super ITS - 921 represents the ultimate in mission-critical power interconnection. This power distribution connector is fully tooled and available for immediate application.

- **Super ITS-921 is a high-density reverse-bayonet connector with reduced size compared to standard M5015**
- **Low insertion force, high-ampacity front-release LouverBand contacts**
- **Rigid thermoplastic insulator with internal contact retention clips**
- **Precision-machined aluminum, stainless steel or marine bronze shells with polarization keys**
- **Interfacial and individual wire sealing for IP67 performance**
- **Broad operating temperature range: -65° to +180°C**
- **2000-cycle reduced insertion-force mating**

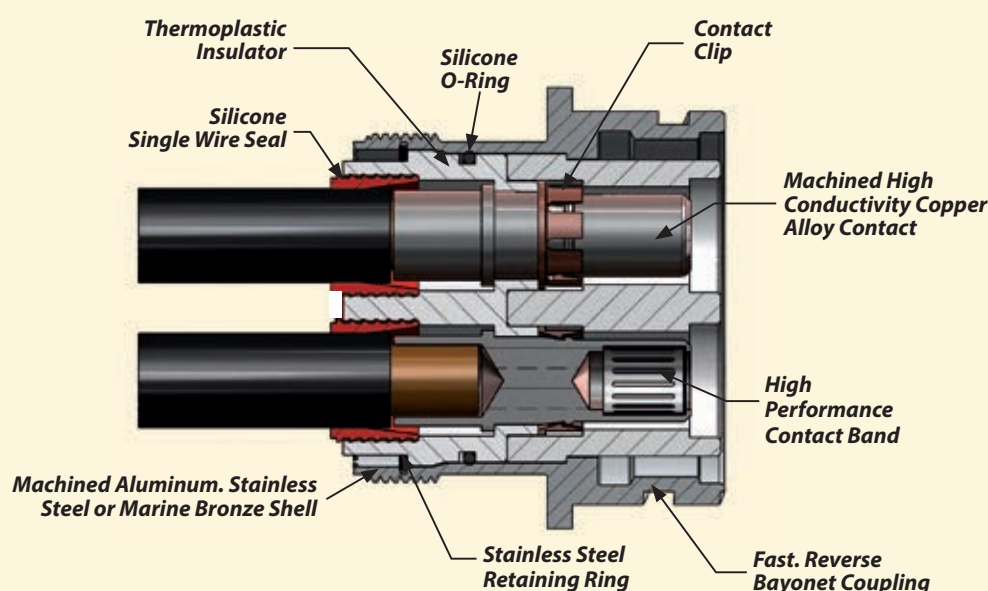
ADVANCED PERFORMANCE Super ITS-921 Reverse-Bayonet Rigid Insert, High-Ampacity Connectors



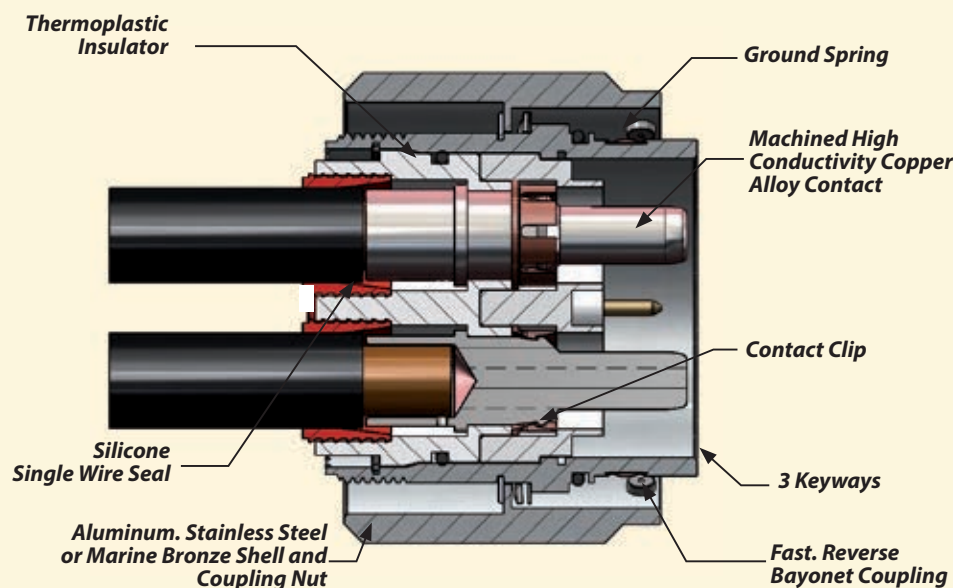
Features and Benefits

The Super ITS - 921 Connector Series is a high ampacity, harsh environment connector capable of meeting the demanding requirements of power applications utilizing the latest generation of high-temperature power cables. Compared to legacy 5015 solutions, Super ITS - 921 offers better durability, better wire and connector interface sealing, integrated crimp contact retention clips, thermoplastic insulators, precision-machined shells, and more.

RECEPTACLE



PLUG



- Fast, easy connector mating with reverse-bayonet coupling
- 3 polarizing keys
- Higher-density insert arrangements for reduced size and weight
- LouverBand Size 0, 4 and 8 socket contacts for high ampacity and longer life
- Crimp. front-release high-conductivity copper contacts
- Individual wire seals
- -65° C to +180° C operating temperature range
- Size 8, 4 and 1/0 power contact sizes
- Size 16 and 12 signal contact size
- Precision-machined plug bodies and receptacle shells

ADVANCED PERFORMANCE

Super ITS-921 Reverse-Bayonet Rigid Insert, High-Ampacity Connectors

Available Options and Performance Ratings

Contact Arrangements Table								
Contact Arrangement	Qty	Service Rating	Contact Size and Q.ty					
			#16	#12	#8	#4	#1/0	#2/0
24-GL2	2	B			2			
24-22	4	E			4			
28-GL5	5	E			5			
28-GL2	2	B				2		
28-GL3	6	E	3		3			
32-2	5	B	2			3		
32-GL2	2	B					2	
32-GL12	1	B						1
32-17	4	B				4		
40-A4	6	E		2			4	
40-GL3	3	B					3	
40-GL31	4	E				1	3	
40-GL22	2	B						2
40-GL7	2	E		2		5		
40-GL33	6	E			3		3	

Materials and Finishes		
Components	Material	Finish
Contact. Size #1/0, #4 and #8	Pin contact and socket contact body: high conductive copper alloy Socket contact spring: beryllium copper	Silver - (flash Ni + (3÷6) µm Ag + passivation)
Contact. Size #12, #16	Pin contact and socket contact body: copper alloy Socket contact spring: stainless steel	Code 1: silver - (flash Cu + (3÷6) µm Ag + passivation) Code 2: gold - (2 µm Ni + (0.4÷0.6) µm Au)
Aluminum Shells, Coupling Nuts	Aluminum alloy	See Ordering Information
Stainless Steel Shells, Coupling Nuts	Stainless steel	Passivated
Insulator	Polytetrafluoroethylene	None
Single Wire Seals	Silicone rubber	None
EMI Spring	Beryllium copper	Silver-plated
Clinch Nut	Stainless steel	Passivated

Rated Insulation Voltage Vac or Vdc (according to EN 50124-1)		
OV1-PD1 (*)	OV2-PD1 (*)	OV3-PD1 (*)
1200V<V<1600V	<1200V	<900V
OV: Overvoltage Category PD: Pollution Degree		

Wire Insulation Diameters				
Contact Size	Wire Size (AWG)	Max. Contact Resistance (mOhm)	Overall Cable Diameter Dimensions	
			Ø min.	Ø max.
16	16	12	0.039 (1)	0.157 (4)
	20	6		
12	12	3	0.079 (2)	0.197 (5)
8	8	1	0.157 (4)	0.315 (8)
4	4	0.5	0.276 (7)	0.500 (12.7)
1/0	1/0	0.3	0.394 (10)	0.622 (15.8)
	2/0	0.3	0.472 (12)	0.701 (17.8)

Service Rating (according to MIL-DTL-5015)			
Class	Operating voltage Vdc	Operating voltage Vac RMS	Test voltage Vac RMS
E	1750 V	1250 V	3500 V
B	2450 V	1750 V	4500 V

Current Rating			
Contact Size	Wire Size	Rated current at +20°C (Amperes)	Rated current at +80°C (Amperes)
16	16	25	15
	20	10	9
12	12	50	28
	14	40	20
8	8	90	70
	10	70	55
4	4	160	130
	6	120	105
1/0	1/0	300	250
2/0	2/0	330	280



Wall Mount Receptacle



Straight Plug



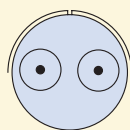
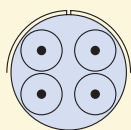
Jam Nut Receptacle



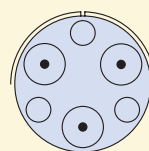
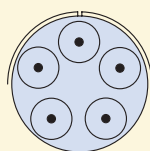
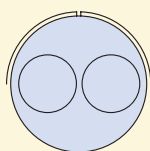
In-Line Receptacle

Super ITS-921 Reverse-Bayonet Rigid Insert, High-Ampacity Connectors

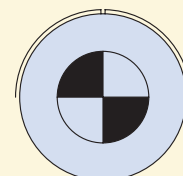
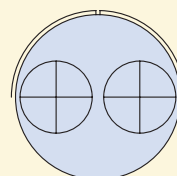
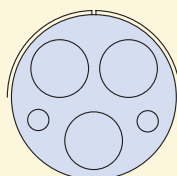
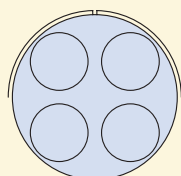
High-Density Contact Arrangements, Front View



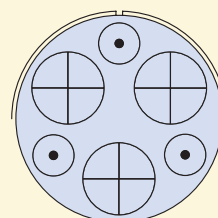
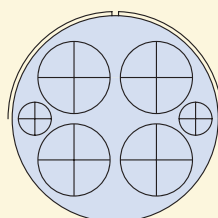
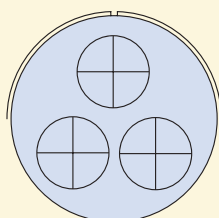
Arrangements	24-22	24-GL2
Contact Size	4 #8	2 #8
Service rating	E	B



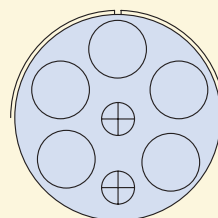
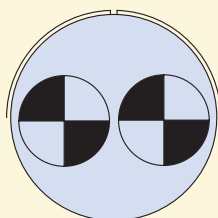
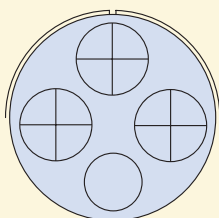
Arrangements	28-GL2	28-GL5	28-GL3
Contact Size	2 #4	5 #8	3 #8, 3 #16
Service rating	B	E	E



Arrangements	32-17	32-2	32-GL2	32-GL12
Contact Size	4 #4	3 #4, 2 #16	2 #1/0	1 #2/0
Service rating	B	B	B	B



Arrangements	40-GL3	40-A4	40-GL33
Contact Size	3 #1/0	4 #1/0, 2 #12	3 #1/0, 3 #8
Service rating	B	E	E



Arrangements	40-GL31	40-GL22	40-GL7
Contact Size	3 #1/0, 1 #4	2 #2/0	5 #4, 2 #12
Service rating	E	B	E



MISSION-CRITICAL INTERCONNECT SOLUTIONS

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