



SERIES 20

SuperTwin™

Lightweight Composite Modular Connectors

Drop-in replacements for legacy modular rectangular connectors save weight, space, and assembly time

Today's high-performance commercial aircraft are looking for revolutionary materials and product designs that can reduce weight and improve reliability and performance. The Glenair Series 20 Super-Twin™ lightweight modular connector is a drop-in replacement for legacy cable and panel connectors that no longer meet these performance specifications—especially for ease of assembly, electromagnetic compatibility and size, weight and power optimization.

The Glenair Series 20 Super-Twin™ can accommodate a broad range of contact sizes and types from #23 to #8 signal, Quadrax, El Ochito®, power, and fiber. Modular inserts offer fast and flexible assembly and repair. Peripheral and grommet seals provide outstanding environmental protection. Keyed inserts and shells provide versatile polarization and protection against mis-mating. The innovative clamshell and banding porch design brings modern, state-of-the-art connector capabilities to modular cable and panel applications.

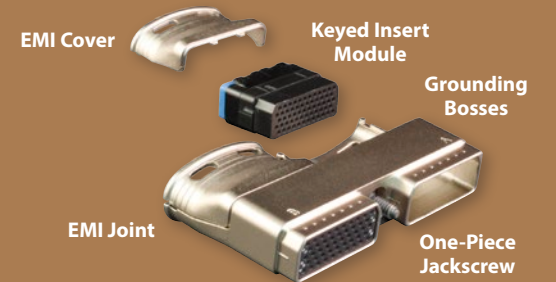


- For reduced size and weight cable and panel applications
- Lightweight composite shell with integral strain relief/banding porch
- Modular inserts support a wide range of contact sizes and types up to #8
- Polarization – both shell and inserts
- Center jackscrew with self-locking hardware



For more information contact Glenair at **818-247-6000** or visit our website at **www.glenair.com**
U.S. CAGE code 06324

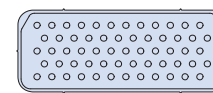
SERIES 20 Super-Twin™ Lightweight Composite Modular Connectors



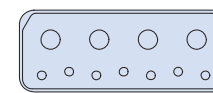
SUPER-TWIN™ SHELLS AND INSERTS ARE ORDERED SEPARATELY

How To Order - Shells						
Sample Part Number	200-013	P	2	-XM	31	K
Series 20 Modular Connector	200-013 Plug Shell 200-014 Receptacle Shell					
Plug/Receptacle	P = Plug Shell, R = Receptacle Shell					
Size	Size 2					
Finish	XM = Electroless Nickel XB = No plating, black					
Polarization Code	2 digits: First digit 1 – 4 (factory installed) Second digit 1 – 4 (factory installed) Blank = keys supplied as kit					
MicroBand Option	K = MicroBand supplied. Blank = no MicroBand					

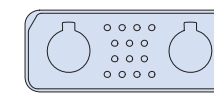
How To Order - Inserts					
Sample Part Number	200-005	P	2	-60	A
Series 20 Modular Connector	200-005 Pin Insert 200-006 Socket Insert				
Pin/Socket Insert	P = Pin Insert, S = Socket Insert				
Size	Size 2				
Insert Pattern	60 = 60X #23 contacts				
Polarization	A, B, C, D, E, F, G, H (must match with shell polarization)				



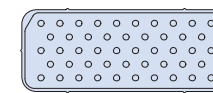
PATTERN 60
60 X Size 23 Contacts
DWV= 750 VAC



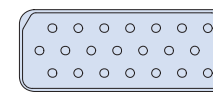
PATTERN 7W4
4 X Size 12 Contacts
7 X Size 20 Contacts
DWV= 1500 VAC



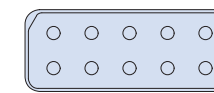
PATTERN 14Q2
2 X Size 8 Contacts
14 X Size 23 Contacts
DWV= 750 VAC



PATTERN 48
48 X Size 23 Contacts
DWV= 1300 VAC
DWV@50 000 ft = 800 VAC



PATTERN 21
21 X Size 20 Contacts
DWV= 1500 VAC



PATTERN 10
10x Size 16 Contacts
DWV= 1500 VAC



Modular inserts easily removed with available tool

Keyed, snap-in-place insert modules are currently available in six tooled layouts, accommodating size #23, #20, #16, #12 and keyed size #8 contacts (for use with Quadrax or El Ochito™ contacts).



Weight Study, Typical Regional Jet Airframe

Series 20 SuperTwin™
Mated Pair: 67g
Weight/Plane: 7,661g

Legacy rectangular: aluminum
Mated Pair: 192g
Weight/Plane: 22,103g

Legacy rectangular: composite
Mated Pair: 141g
Weight/Plane: 16,123g

Summary:
Using Series 20 composite instead of legacy aluminum connector saves **14,442 grams** (31.8 lbs) per plane.

Using Series 20 composite instead of legacy composite connector saves **8,482 grams** (18.6 lbs) per plane

Series 20 Super-Twin™ Performance

DWV	1500 Vac; 750 VAC (#23 contacts)
Shell-to-Shell	2.5 mΩ
Temp Range	-65°C / +125 °C
Shock*	50 g, half sine, 18x
Vibration*	Random, 8 hrs/axis, Type VI, cond. G (27.8 g)
Altitude Immersion*	12.1 kPa (15000 m / 49000 ft)
Lightning Indirect Effects	3 kA min

*Test by similarity, Series 79 Micro-Crimp