

### Series 83 GT Pure Gas Tube Assemblies

Turnkey, High-Pressure, Pure-Gas Contact and Tubing Assemblies for Mission-Critical Applications

### **SERIES 83**

# Gas Tube Assemblies

# FOR USE IN MIL-DTL-38999 AND OTHER HIGH PERFORMANCE CONNECTORS



# Proven Technology, In-Stock Availability and Outstanding Customer Service

#### **Quality-Control Performance Tested to 10,000 PSI**

Glenair Series 83 high pressure pure gas tube assemblies are designed for use in a wide variety of commercial aerospace and defense applications, including the cooling of infrared detectors, missile-seekers, and other pneumatic actuation and deployment systems such as infrared super coolers, sealed boxes, gas purge/chargers, cryogenics or any gas transfer system.

The precision gas contacts are designed for direct incorporation into MS type multi-pin cylindrical connectors, Glenair ultra-miniature conectors, as well as customer bespoke/non-standard designs. The high-pressure assemblies are suitable for use in pneumatic cooling systems—especially Joule-Thompson (JT) cryogenic systems—or other applications that require connectorized, separable components.



#### **Series 83 GT Gas Tube Pure-Gas Tubing Assemblies Manufacturing Capabilities**



**Precision CNC contact** machining centers

#### **Precision tube cutter**



Precision ultrahigh temperature silver alloy brazing equipment

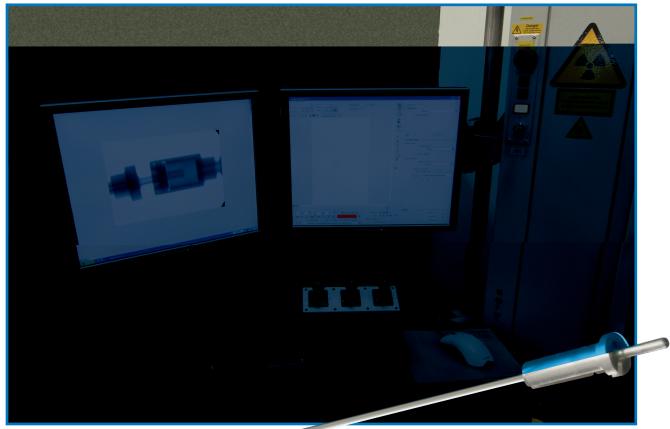


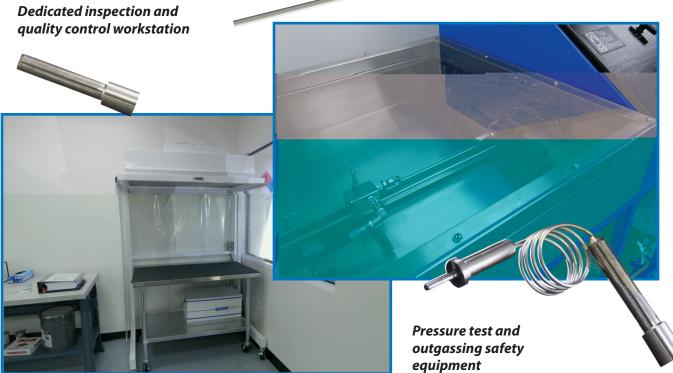
Dimensions in inches (millimeters) and are subject to change without notice. CAGE Code 06324



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# Series 83 GT Gas Tube Pure-Gas Tubing Assemblies Manufacturing Capabilities





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### 831-001 GT Gas Tube Assemblies for MIL-DTL-38999 Series I, III and IV Connectors





#### High-Pressure Assemblies for Pure Gas Pneumatic/Cryogenic Applications



831-001 #12 Assembly for MIL-DTL-38999 Series I, III, and IV Series 831 GT assemblies provide passage of nitrogen and other pure, pressurized gases through standard MIL-DTL-38999 Series I, III and IV connectors. These snap-in, rear-release assemblies feature precision stainless steel gas contacts brazed to semi-rigid stainless steel tubing. The assemblies are fabricated using a flux-free brazing process and are ultrasonically cleaned and packaged in a sealed, dust-free environment. Available in #12 AWG gas contacts, these assemblies are supplied with two different tubing sizes, and may be ordered in single ended or pin-to-pin, pin-to-socket and socket-to-socket configurations. Consult factory for available off-the-shelf lengths or use the part number to specify a made-to-order length.

#12 assembly for MIL-DTL-38999 Series I, Series III and Series IV environmental connectors. Use part number development to specify gender, assembly length and tubing type.

#### Glenair GT Gas Tube Connectors Perform to MIL-DTL-38999

#### Flow Rate

Typical Flow Rate is 5 liters per minute (lpm) @ 150 PSI.

#### Thermal Shock

After cycling the connector between -65°C +175°C, gas contacts will meet all applicable mechanical requirements.

#### Durability

No mechanical defects after 500 cycles of engagement and disengagement.

#### Physical Shock

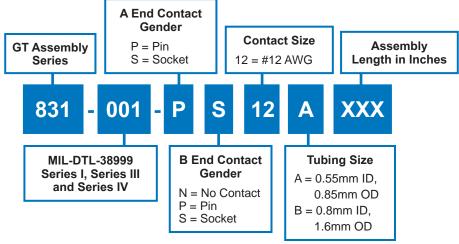
No loosening of parts, cracking or other deleterious results hindering further part operation after 300 G's in each of 3 mutually perpendicular planes.

#### High Impact Shock

Mated connectors will withstand high impact shock per MIL-S-901.

#### Vibration

No disengagement of mated contacts, backing off of the coupling mechanism, evidence of cracking, breaking or loosening of parts.



Example Part Number: 831-001-PS12A024

#### **Material and Finish**

Contact Body: Passivated Stainless Steel

Internal O-Ring (Socket): High-Pressure Rated Elastomer

Internal Washer (Socket): Temperature and Chemically Resistant Polymer

Particle Filter (Socket): Stainless Steel

Brazing Material: Silver Alloy

**Tubing: Stainless Steel** 

\* Please consult the Glenair factory for made-to-order GT gas contacts, hermetics, mixed contact AWG assemblies, point-to-point tubing assemblies with unique route and bend requirements as well as integrated cable harnesses that combine our GT tubing and gas contacts with standard electrical and/or fiber optic media.

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## 831-002 GT Gas Tube Assemblies for MIL-DTL-38999 Series II, Glenair Series 79 and Series 80







#### High-Pressure Assemblies for Pure Gas Pneumatic/Cryogenic Applications



831-002 #12 Assembly for MIL-DTL-38999 Series II, Series 79 and Series 80 Mighty Mouse

Series 831 GT assemblies provide passage of nitrogen and other pure, pressurized gases through standard MIL-DTL-38999 Series II as well as Glenair Series 79 and 80 environmental connectors. These snap-in, rear-release assemblies feature precision stainless steel gas contacts brazed to semi-rigid stainless steel tubing. The assemblies are fabricated using a flux-free brazing process, ultrasonically cleaned and packaged in a sealed, dust-free environment. Available with #12 AWG gas contacts, these assemblies are supplied with two different tubing sizes, and may be ordered in single ended or pin-to-pin, pin-to-socket and socket-to-socket configurations. Consult factory for available off-the-shelf lengths or use the part number to specify a made-to-order length.

#12 assembly for MIL-DTL-38999 Series II, Series 79 and Series 80 environmental connectors. Use part number development to specify gender, assembly length and tubing type.



### Why Order from Glenair?

Free Application Engineering

The industry's largest and most experienced engineering team is standing by to assist with non-standard designs and customizations.

Delivery

Glenair offers the fastest delivery in the business—guaranteed.

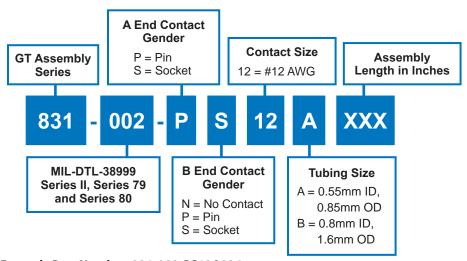
Quality Control

Every gas tube assembly is 100% inspected and tested.

Local Support

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Glenair offers comprehensive worldwide support on your schedule and at your convenience.



#### Example Part Number: 831-002-PS12A024

#### **Material and Finish**

Contact Body: Passivated Stainless Steel

Internal O-Ring (Socket): High-Pressure Rated Elastomer

Internal Washer (Socket): Temperature and Chemically Resistant Polymer

Particle Filter (Socket): Stainless Steel

Brazing Material: Silver Alloy

Tubing: Stainless Steel

\* Please consult the Glenair factory for made-to-order GT contacts, hermetics, mixed contact AWG assemblies, point-to-point tubing assemblies with unique route and bend requirements as well as integrated cable harnesses that combine our GT tubing and gas contacts with standard electrical and/or fiber optic media.

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### In a Hurry?

### Need Your Parts Now?

### Fast Turnaround is Our Specialty





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