Product Data Sheet Amphenol[®] **Amphe[®]-GTR** Reverse Bayonet Connectors for Power Applications

No. 190

Amphenol introduces the new Composite GT series of connectors, with full worldwide approval from a major server manufacturer, for use as the environmental server power connector. Featuring a high-performance composite plug shell, coupling nut, receptacle, and hardware, this GT meets all of the specifications for high power process control and server applications.

Additional features include the **RADSOK**[®] High Amperage Socket Contact Technology, enabling increased current ratings to 120A on individual contacts.

The RADSOK (RADial SOcKet) High Amperage, Low Insertion Force Socket Contact provides value to your purchasing, engineering, quality and manufacturing objectives. RADSOK technology is based upon a stamped and formed flat grid, uniquely twisted into a hyperbolic geometry to provide robust,



Amphe-GTR - 4 Conductor

high-density contact to the mating pin contact. Most pin and socket technologies rely upon spring (beam element) properties of the contact elements, which tend to weaken over time. Unlike most other pin and socket solutions, RADSOK also utilizes the tensile strength properties of the flat, high conductivity alloy grid. This provides the high normal forces required for conductivity while also providing large conductive surface area. Correspondingly low voltage drop and low temperature rise are also achieved while maintaining low insertion forces.

Compression (setscrew) wire termination to the 4/6AWG or 8/10AWG conductors allows easy field replacement of pin or socket contacts, or complete plug and receptacle assemblies, without requiring specialized tooling.

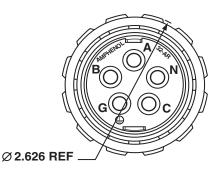
Additional benefits of the GT Reverse Bayonet product include:

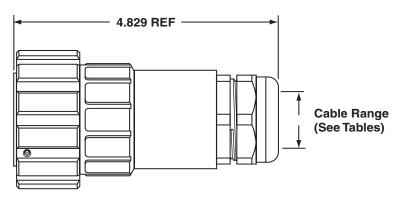
- Quick positive coupling
- Audible, tactile, & visual indication of coupling
- Waterproof (IP67)

- No lockwiring required
- High shock and vibration capabilities
- Silver plated contacts

Technical Specifications: Connectors are listed to UL/CUL 1977/1682/817 Standard, Control Number 19VP. The Amphe-GTR connectors utilize a standard PG adaptor watertight strain relief on the plug to achieve their IP67 seal rating. Size 4 RADSOK Contacts are individually rated to 120 Amperes continuous. Connector assemblies are current rated per the cross-reference table (back page). Insulation Resistance is rated at 1000 M Ω and Dielectric Withstanding Voltage is rated at 2000 V_{AC} (RMS). The Composite GT is flammability rated to UL94V-0.

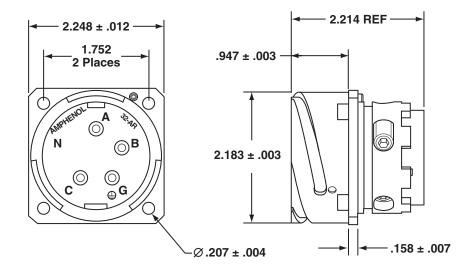
Plug





Amphenol

Receptacle



4 Conductors

AIO Part Number	Description	Wire Range	Rated Current	Cable Range
GT06PCM32-ARS-30(29R)	Plug	8-10 AWG	30 Amps (cont.)	.510582
GT06PCM32-ARS-40(29R)	Plug	8-10 AWG	40 Amps (cont.)	.715759
GT06PCM32-ARS-50(29)	Plug	4-6 AWG	50 Amps (cont.)	.809905
GT06PCM32-ARS-70(29OS)	Plug	4-6 AWG	70 Amps (cont.)	1.000 – 1.185
GT06PCM32-ARS-120(36OS)	Plug	4 AWG	120 Amps (cont.)	1.27
GT030PCM32-ARP-80	Receptacle	4-6 AWG	80 Amps (cont.)	N/A
GT030PCM32-ARP-120	Receptacle	4 AWG	120 Amps (cont.)	N/A

5 Conductors

AIO Part Number	Description	Wire Range	<u>Cable Range</u>
10-610142-001	Plug	8-10 AWG	.472787
10-610142-002	Plug	8-10 AWG	.708984
10-610142-003	Plug	4-6 AWG	.472787
10-610142-004	Plug	4-6 AWG	.708984
10-610147-001	Receptacle	8-10 AWG	N/A
10-610147-002	Receptacle	4-6 AWG	N/A
10-610222-001	FBLM Receptacle	8-10 AWG	N/A
10-610222-002	FBLM Receptacle	4-6 AWG	N/A

For additional information on the GT Reverse Bayonet series of connectors, please ask for Catalog 12-024. For additional information on the Amphe-Power® family of connectors with RADSOK Technology, please ask for Catalog SL-391.

For further information on your individual application requirements, contact: Amphenol Corporation Amphenol Industrial Operations 40-60 Delaware Avenue Sidney, NY 13838-1395 Phone: 1-607-563-5011 Fax: 1-607-563-5351 Internet: www.amphenol-industrial.com and www.radsok.com

Notice: Specifications are subject to change without notice. Contact your nearest Amphenol Corporation Sales Office for the latest specifications. All statements, information and data given herein are believed to be accurate and reliable but are presented without guarantee, warranty, or responsibility of any kind, expressed or implied. Statements or suggestions concerning possible use of our products are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe any patent. The user should assume that all safety measures are indicated or that other measures may not be required. Specifications are typical and may not apply to all connectors.

AMPHENOL is a registered trademark of Amphenol Corporation.

@2005 Amphenol Corporation