

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, 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:

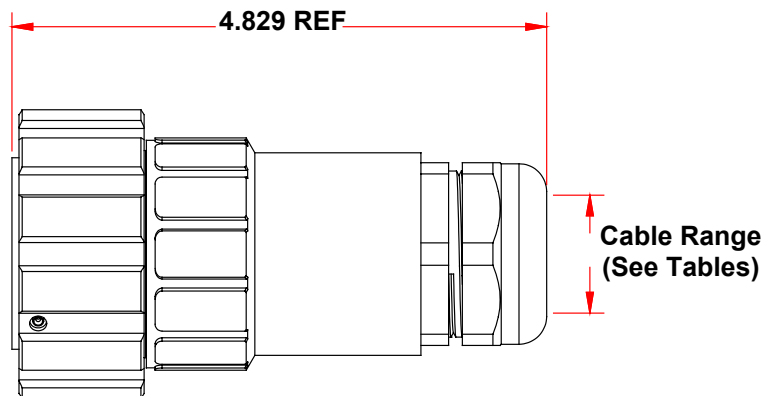
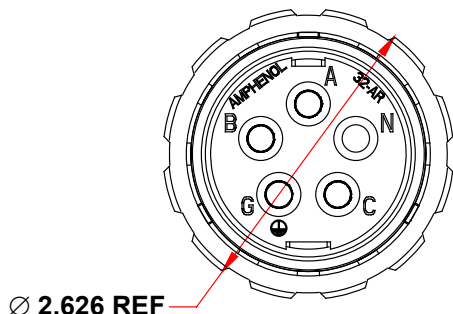
- Quick positive coupling
- Audible, tactile, & visual indication of coupling
- Waterproof (IP67)
- No lockwiring required
- High shock and vibration capabilities
- Silver plated contacts

Technical Specifications: Connectors are listed to UL/CUL 2238 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 above. Insulation Resistance is rated at 1000 MΩ and Dielectric Withstanding Voltage is rated at 2000 V_{AC} (RMS). The Composite GT is flammability rated to UL94V-0.

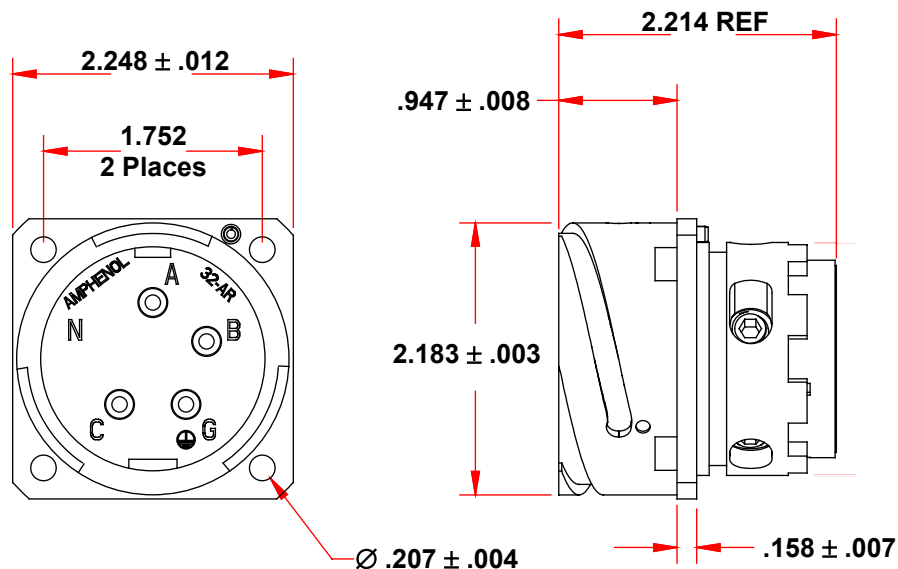


Amphe-GTR – 4 Conductor

Plug



Receptacle



4 Conductors

| <u>AIO Part Number</u> | <u>Description</u> | <u>Wire Range</u> | <u>Rated Current</u> | <u>Cable Range</u> |
|------------------------|--------------------|-------------------|----------------------|--------------------|
| GT06PCM32-ARS-30(29R) | Plug | 8-10 AWG | 30 Amps (cont.) | .510 - .582 |
| GT06PCM32-ARS-40(29R) | Plug | 8-10 AWG | 40 Amps (cont.) | .715 - .759 |
| GT06PCM32-ARS-50(29) | Plug | 4-6 AWG | 50 Amps (cont.) | .809 - .905 |
| GT06PCM32-ARS-70(29OS) | Plug | 4-6 AWG | 70 Amps (cont.) | 1.000 - 1.185 |
| GT030PCM32-ARP-80 | Receptacle | 4-6 AWG | 80 Amps (cont.) | N/A |

5 Conductors

| <u>AIO Part Number</u> | <u>Description</u> | <u>Wire Range</u> | <u>Cable Range</u> |
|------------------------|--------------------|-------------------|--------------------|
| 10-610142-001 | Plug | 8-10 AWG | .472 - .787 |
| 10-610142-002 | Plug | 8-10 AWG | .708 - .984 |
| 10-610142-003 | Plug | 4-6 AWG | .472 - .787 |
| 10-610142-004 | Plug | 4-6 AWG | .708 - .984 |
| 10-610147-001 | Receptacle | 8-10 AWG | N/A |
| 10-610147-002 | 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:

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