

Amphenol® Reverse Bayonet Interconnects for Rugged Environments

SL-394



Amphenol

Amphenol



About Us

Amphenol Industrial is an organization that recognizes customer requirements as our top priority. We are committed to consistently meet and exceed our customers expectations.

With the Amphenol Reverse Bayonet product offering, we have used this philosophy to design, manufacture, and support the Industrial Market with a dependable, ruggedized electrical connector family. With focus in the rail/mass transit process control market, our Interconnect solutions have been engineered to perform in the harshest environments.

Our goal . . .alleviate our customers interconnect burdens and allow them to focus on their present core technologies.

ACA-B



Reverse Bayonet Connectors

GT

GT Connectors

Designed originally for use by the military, the Heavy Duty GT Connector has become the connector of choice for the Rail/Mass Transit Industry.



Part Number System							
GT	C	00	A	36-5	P	W	(014)
	1	2	3	4	5	6	7

1. Contact Style and Insert Material

- C = Crimp
- CN = Crimp with stainless steel
- S = Solder
- SN = Solder with stainless steel
- CY = Crimp with Viton
- SY = Solder with Viton
- CL = Crimp with low smoke/flare retardants inserts
- SL = Solder with low smoke/flare retardants inserts

No designation required for Neoprene components

2. Shell Styles

- 00 - Wall mount receptacle
- 01 - Inline receptacle
- 02 - Box mount receptacle
- 020 - Box mount receptacle with accessory threads
- 030 - Square flange receptacle - rear panel mount
- 05 - Dummy receptacle
- 06 - Straight plug
- 062 - Straight plug with deep serrated coupling nut
- 064 - Panel mounted plug with heavy coupling nut
- 065 - Straight plug with long heavy duty coupling nut
- 07 - Jam nut receptacle - rear panel mount
- 070 - Jam nut with accessory threads
- 08 - 90° angle plug
- TB - Thru-bulkhead

3. Connector Class

See catalog 12-024.

4. Shell Size and Arrangements

See catalog 12-024.

Shell sizes available: 10SL, 14S, 16S, 16, 18, 20, 22, 24, 28, 32, 36, 40

5. Contact Style

- P designates pin contacts
- S designates socket contacts

MATEABILITY WITH IDENTICAL CONTACT ARRANGEMENTS

Connector Style	Mateable with Style
GT00	GT06/ 062/ 064/ 065/ 08
GT01	GT06/ 062/ 064/ 065/ 08
GT02	GT06/ 062/ 064/ 065/ 08
GT030	GT06/ 062/ 064/ 065/ 08
GT06/ 062/ 064/ 065	GT00/ 01/ 02/ 020/ 03/ 030/ 05/ 070/ TB
GT07/ 070	GT06/ 062/ 064/ 065/ 08
GT08	GT00/ 01/ 02/ 020/ 03/ 030/ 05/ 070/ TB
GTTB	GT06/ 062/ 064/ 065/ 08

6. Alternate Position

W, X, Y and Z - See catalog 12-024.
No suffix required for normal position.

7. Connector Modification

Omit for standard olive drab with silver plated contacts
i.e. : (014) Olive drab cadmium plate, nickel base
(A24) Gold/nickel plated contacts
(025) Black zinc cobalt
(027) Conductive black zinc cobalt
(024) Green zinc cobalt

Consult factory for other modifications.

RAIL TRANSIT



The GT Interconnect Family is used in door controllers, HVAC systems, cab controls, event recorders, propulsion systems, and other rail applications that demand reliable electrical interconnects.

Features and Benefits

- Variety of Shell Styles
- Quick Positive Coupling
- Water Proof
- High Shock, High Vibration
- Solder, Crimp, or PC Tail Contacts
- Broad Operating Temperature Range
- Alternate Materials, Including Fire Retardant Elastomers
- Variety of Finishes Including Nickel, OD Cad, Cad-free Black Zinc Cobalt, and Green Zinc
- Rugged Construction
- More than 275 Layout Patterns Available
- Numerous Back-end Fittings
- Modifications to Meet Your Unique Application Requirements

REVERSE BAYONET

Performance and Design Characteristics

The Amphenol ACA-B and GT Product Families were designed around the electrical parameters of MIL-C-5015. However the unique reverse bayonet quick-disconnect coupling exceeds the environmental requirements of the military specification.

- Operating Temperature** _____ -55°C to +125°C
- Electrical Rating** _____ 5 Amps to 500 Amps
- Service Rating** _____ Up to 4200V (DC)
- Mating Cycles** _____ 500 (ACA-B), 2000+ (GT)

General Specifications



SHELL	Material: Aluminum Alloy, Stainless Steel also available Finish: Cadmium-Olive Drab, Nickel, non CAD Green Zinc and Black Zinc Cobalt
INSERT	Material: Neoprene, alternates include Silicone, Fluorocarbon, and Flame Retardant Rubber
CONTACTS	Material: Copper Alloy or Brass Finish: Silver and Gold

ACA-B Connectors

The ACA-B Connector Family was developed especially for Industrial Usage and performs in the most Rugged Environments.



Part Number System								
ACA	3106	E	18	1	S	X	B	***
1	2	3	4	5	6	7	8	9

1. Series

ACA Circular Connector Family

2. Shell Styles

- 3100 - Wall mount receptacle
- 3101 - Cable connecting plug
- 3102 - Front box mount receptacle
- 3103 - Rear box mount receptacle
- 3105 - Dummy receptacle
- 3106 - Plug straight
- 3108 - Plug 90°

3. Class

- E - Environmental with resilient insulators and endbell with clamp and bushing
- F - Environmental with resilient insulator and endbell with rear accessory threads
- R - Environmental with resilient insulator and shortened light-weight endbell without cable clamp

4. Shell Size

10SL, 12S, 14S, 16S, 16, 18, 20, 22, 24, 28, 32, and 36

5. Contact Arrangement

See catalog 12-027

6. Contact Type

- P - Pin
- S - Socket

7. Alternate Position

W, X, Y and Z
No suffix required for normal position.

MATEABILITY WITH IDENTICAL CONTACT ARRANGEMENTS

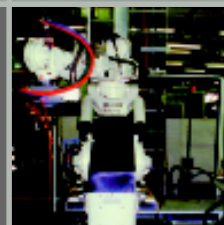
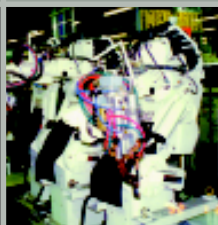
Connector Style	Mateable with Style
ACA 3100	ACA3106/ ACA3108
ACA 3101	ACA3106/ ACA3108
ACA 3102	ACA3106/ ACA3108
ACA 3103	ACA3106/ ACA3108
ACA 3105	ACA3106/ ACA3108
ACA 3106	ACA3101/ ACA3102/ ACA3103, ACA3105
ACA 3108	ACA3101/ ACA3102/ ACA3103, ACA3105

8. Reverse Bayonet Coupling

9. Connector Modification

- F80 - Crimp contacts
- A232 - Black zinc cobalt
- A176 - Solid plated contacts
- Consult factory for other modifications

PROCESS CONTROLS



The ACA-B Family of Connectors offers a dependable interconnect for applications in process control, industrial machinery, test and measurement equipment, robotic assembly, and other industrial applications.