

Amphenol®



Amphe-PRB Series

www.amphenol-industrial.com

Company Profile



Endicott, NY

Amphenol Industrial Operations

Amphenol Industrial Operations, headquartered in a 30,000 square foot facility in Endicott, N.Y., provides a full range of high reliability power/signal connectors and interconnection systems specifically for the industrial markets including rail/mass transit, process control, automotive manufacturing, heavy equipment, wireless base stations and petrochemical/power generation.

Products include ruggedized-for-industry cylindrical, rectangular, fiber optic, signal and power, RADSOK power and power-to-board solutions, cable and harness assemblies, as well as industrialized versions of Amphenol's MIL-DTL-5015 cylindrical, MIL-DTL-26482 miniature cylindrical and GT reverse bayonet cylindrical connectors. Amphenol Industrial Operations employs more than 1,400 people globally and is ISO9001, TS96949 and MIL-STD-790 certified.



Amphenol Technology (Zhuhai) Co., Ltd

Established in 2007, Amphenol Technology (Zhuhai) Co., Ltd. is a manufacturing facility for Amphenol Industrial Operations, which serves a number of industrial markets. Included but not limited to Factory Automation, Transportation, Heavy Equipment, Alternative Energy, Energy Storage. Server/Data Comm and Power Distribution.

Amphenol Technology (Zhuhai) Co., Ltd. covers an area of 276,000 ft² and is equipped with CNC, plating, injection molding and assembly workshops. This plant specializes in the design and manufacturing of industrial connectors featuring high power, high density, medium to high voltage electrical properties, and harsh environment applications.

With industry leading engineering, design and manufacturing expertise, Amphenol Technology(Zhuhai) Co., Ltd. has earned more than 60 utility patents on its innovative interconnects. Many of the products produced have been certified by independent standards including UL, IEC/TUV, ATEX, IECEx and MA. The facility is also certified to ISO 9001, ISO 14001 and IATF 16949.

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Features and Benefits

The Amphe-PRB is a reverse light weight bayonet plastic connector with a perfect fit for use in harsh environment/heavy equipment, solar, alternative energy, electric vehicles, digital communications, energy storage, and industrial automation applications due to its tough rugged design and low-cost single/multiphase options.

The reverse bayonet feature makes this connector perfect for quick disconnect requirements and due to today's high safety standards, the connector comes with finger touch protection as part of a unique design.

Features

| |
|-------------------------------------|
| Quick Positive Coupling |
| High Shock And Vibration Resistance |
| Quick Field Installation |
| Ingress Protection Rating : IP67 |
| Touch-Proof |
| UV Rated |
| TUV/UL Certification |
| Low Cost |

Targeted Applications

| |
|------------------------------------|
| Inverter/Converter |
| Outdoor Lighting |
| Data/Telecom |
| Factory Automation/Process Control |

Specifications

| Electrical Characteristics | | |
|--|--------------|-----|
| Rated Current | Contact Size | #8 |
| | Amperes | 46A |
| RADSOK Current | Amperes | 60A |
| Rated Voltage | 600VAC | |
| Dielectric Withstanding Voltage | 2000VAC | |
| Insulation Resistance | 5000MΩ | |

| Material and Mechanical | |
|----------------------------|--|
| Components | Material and Coating |
| Shell | PA66 |
| Coupling Nut | PC |
| Contact | Copper alloy with silver or Sn plating |
| Durability | 500 cycles |
| Contact Termination | Crimp |

| Environmental | |
|------------------------------|-----------------|
| Waterproof Rating | IP67 |
| Operating Temperature | -40°C to +100°C |
| Vibration | 15g |

| Certification | |
|---------------------|--|
| UL Certified | |

Amphe-PRB Connectors

In response to the dynamic and ever-evolving global market landscape characterized by the proliferation of alternative energy sources, the rise of electric vehicles, the growth of digital communications, the increasing importance of energy storage, and the rapid advancements in industrial automation, there has emerged a pressing need for a reliable, cost-effective, and rugged connector solution designed to meet the complex demands of today's industries.

Amphenol Industrial, a pioneering force in the field of industrial connectivity, has proactively addressed this burgeoning demand by introducing the Amphe-PRB (Plastic Reverse-Bayonet) series. This innovative connector series represents a culmination of our unwavering commitment to technological excellence and our determination to provide solutions that seamlessly blend durability, affordability, and adaptability.

The Amphe-PRB series serves as a testament to our dedication to advancing the state-of-the-art in connector technology. Crafted with precision and engineered with meticulous attention to detail, these connectors have been designed to excel in the harshest of operational environments, ensuring unwavering connectivity performance across diverse sectors.

Amphenol Industrial Products Group invites you to explore the Amphe-PRB series in our product catalog. By choosing this exceptional connector solution, the product that not only aligns with the current demands of the global market but also positions for success in a future where reliability, efficiency, and cost-effectiveness are paramount.

Features and Benefits

| |
|-------------------------------------|
| Quick Positive Coupling |
| High Shock And Vibration Resistance |
| Quick Field Installation |
| Ingress Protection Rating : IP67 |
| Touch-Proof |
| UV Rated |
| TUV/UL Certification |
| Low Cost |

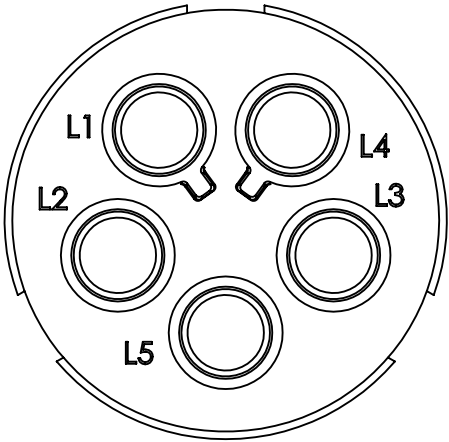


RoHS
COMPLIANT

Applications

| |
|---------------------------------------|
| 1. Inverter/Converter |
| 2. Outdoor Lighting |
| 3. Data/Telecom |
| 4. Factory Automation/Process Control |

Insert Availability and Identification



| | |
|--------------------|-------|
| Insert Arrangement | 24-BL |
| Contact Number | 5 |
| Contact Size | 8 |

| Shell Size / Arrangement | Voltage Rating | Dielectric Withstanding Voltage | Total Contacts | Contact Size |
|--------------------------|----------------|---------------------------------|----------------|--------------|
| 24-BL | 500VAC | 2000VAC | 5 | 8 |

How to Order

Part Number System

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-----|----|---|----|-----|---|------|-----|
| PRB | 06 | E | 24 | -BL | S | (LC) | (c) |

1. Series

Series and Contact Style

5. Insert Arrangement

-BL

2. Shell Style

06 Straight Cable Plug

07 Jam Nut Receptacle

6. Contact Style

P Designates Pin Contacts

S Designates Socket Contacts

3. Service Class

E Environmental Proof (Cable Gland Adapter for 06 Plugs only)

R No Rear Accessory (for Receptacle only)

7. Contact

LC Less Contact's Option, See Page 8 for Contact Selection

4. Shell Size

24

8. Cable Sealing Range

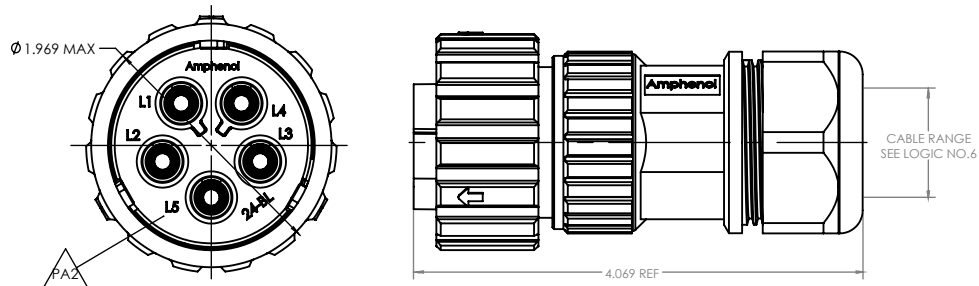
a 10 ~ 14 mm

b 14 ~ 18 mm

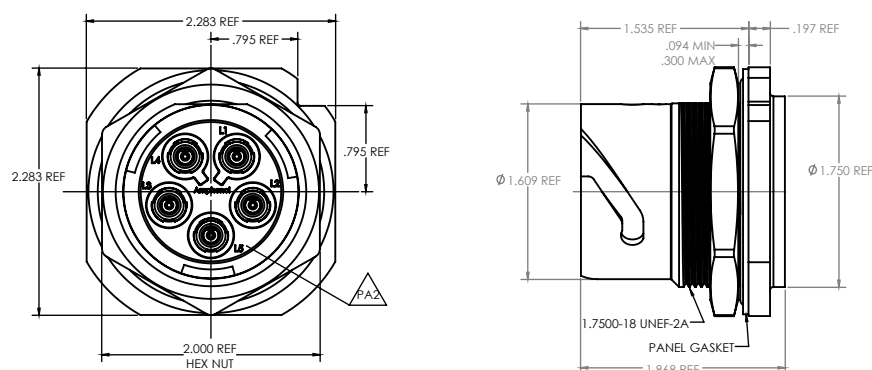
c 18 ~ 25 mm

Shell Style

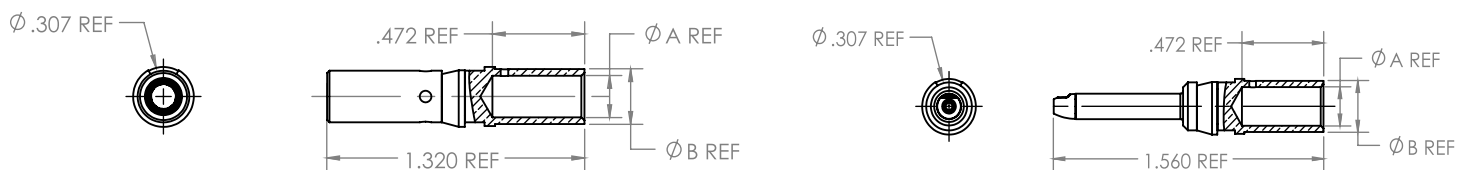
PRB06 Straight Plug



PRB07 Jam Nut Receptacle



Power Contacts



How to Order

| 1 | | 2 | | 3 | | 4 | | 5 | | 6 | |
|--------------|-------|--------------|-------|--------------|-------|----------------|---------------|-----------|-------------------|---------|-----------|
| PRB | | -C | | -8 | | -P | | -8 | | -1 | |
| Contact Type | | Contact Type | | Contact Size | | Contact Gender | | Wire Size | | Plating | |
| PRB | Crimp | C | Crimp | 8 | 8 AWG | P | Male Pin | 8 | 8mm ² | -1 | Silver |
| | | | | | | S | Female Socket | 10 | 10mm ² | -D | Gold 30u" |
| | | | | | | | | 16 | 16mm ² | | |

Unit: Inches



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