Industrial plugs and sockets
For demanding use
Industrial plugs and sockets
A perfect choice

ABB’s industrial plugs and sockets are a part of the comprehensive ABB program of high quality low voltage products for demanding users.

The design and materials of our plugs and sockets has continuously been improve during the over 60 years that we have been in this business. The range covers products up to 125 A and 690 V, and are certified for applicable IEC standards by external certification bodies. We aim to meet customers’ requirements while taking environmental aspects into consideration.

ABB’s industrial plugs and sockets are the right choice in applications with high demand for safety, durability, reliability and cost saving for the end user.

• Safety - tested and approved by third party certification bodies
• Durability - materials chosen for high resistance to most chemicals, to UV light and to impact
• Reliability - high quality self-cleaning and calibrated contacts ensure reliability
• Cost saving - designed for easy installation and long time use

ABB is a complete supplier of industrial plugs and sockets, with worldwide availability.

Perfect for the job
Different applications and environments require different products. To make your choice easier, we have categorized our range into three groups. All groups have however one feature in common - safety.

Perfect performance
Our plugs and sockets comply with high quality standards requested when there is demand for reliability and safety. Some are made of heavy-duty plastic (PBT), others of metal. Some have advanced features while others have a straightforward functionality. Perfect for demanding customers.

Perfect productivity
The reliability of our plugs and sockets will help you maintain high up-time in operations. You will avoid unwanted interruptions, local fuses will give you short stops and you will have a high degree of flexibility.

Perfect safety
Safety is always important. By choosing ABB’s plugs and sockets you minimize the risk of short circuits. You ensure maximum personal safety for anyone being near your equipment.

ABB’s industrial plugs and sockets – a complete offer
• Approved according to IEC 60 309-1, -2, -4
• Ranging from 16 A up to 125 A
• In compliance with IP44 (splashproof) and IP67 (watertight)
• With contacts that are self-cleaning and calibrated, to maintain the accurate contact pressure, quality and performance over time
• For devices in the Critical & Safe and Tough & Safe range, all external screws are made of stainless steel
• With clear terminal markings inside and at the front of devices
• Included switched interlocked socket-outlets for vertical or horizontal mounting

The structure of our main catalog is also based on these groups. Look for the symbols to make your choice.
Critical & Safe

Switched mechanical interlocked socket outlets 16-63 A, horizontal mounting, plastic housing (PBT) Available both as IP44 and IP67

Switched mechanical interlocked socket outlets 16-125 A, vertical mounting, aluminium alloy housing, IP44.

Switched mechanical interlocked socket outlets 16-125 A, vertical mounting, plastic housing (PBT), IP67/IP69

Critical & Safe is the range for applications with high demands on safety, durability and performance. It is perfect for applications with frequent connection and disconnection, and for use in public areas. The housing is made of PBT or aluminium.

PBT is a tough plastic material that withstands heavy-duty usage and most chemicals found in industrial environments. The aluminium housings are die-casted, made of an alloy called silumin. Silumin has excellent resistance to corrosion, impact and UV light.

Features
• IP67 watertight or IP44 splashproof
• 16-125 A, 50-690 VAC
• IEC 60 309-1, -2, -4
• All external screws are made of stainless steel

Use Critical & Safe for
• Reliability
• Personal safety (interlocked to prevent access to live parts)
  - Interlocked for installation in locations where children have access
  - In public parks, arenas, fairs, hospitals, schools, etc.
• Frequent connection and disconnection of portable equipment
  - E.g fans, pumps, generators, lighting
  - In industries mines, airports, hospitals, arenas, fairs etc.
• Increased productivity
  - Local sectioning for selective tripping, limited to only one outlet
  - Local sectioning, resetable at the outlet
• Enhanced safety
  - Individual residual current devices and/or miniature circuit breakers in outlet
• Hazardous environments (not Ex classified)
  - In farms, chemical industry etc.
Tough & Safe

Plugs, 16-125 A, plastic housing (PBT)

- Type P, 16 A, IP67/IP69
- Type P, 32 A, IP67/IP69
- Type P, 63 A, IP67/IP69
- Type P, 125 A, IP67/IP69

Connectors, 16-125 A, plastic housing (PBT), IP67.

- Type C, 16 A, IP67/IP69
- Type C, 32 A, IP67/IP69
- Type C, 63 A, IP67/IP69
- Type C, 125 A, IP67/IP69

Tough & Safe
Tough & Safe is the range for applications in environments with high demands on reliability and safety. The housings have very robust design and are made of heavy-duty PBT plastic. The range Tough & Safe is available as watertight (IP67, 16-125 A) and splashproof (IP44, 63 A). The 125 A products are equipped with double connection screws on each terminal.

Features
- IP67/IP69 watertight
- 16-125 A, 50-690 VAC
- IEC 60 309-1, -2
- All external screws are made of stainless steel

Use Tough & Safe for
- Reliability
- Demanding environments
- 16 A to 125 A applications
- In reefer containers, harbors, airports, train stations, construction sites, mines, industries, workshops, fairs, arenas, on portable equipment etc.
Easy & Safe

Plugs, 16-32 A, plastic housing (PA)

Connectors, 16-32 A, plastic housing (PA)

Surface inlets for wall mounting, 16-32 A, plastic housing (PA)

Surface socket outlets for wall mounting, 16-32 A, plastic housing (PA)

Panel mounted socket outlets, 16-32 A with straight flange, plastic housing (PA),

Panel mounted socket outlets, 16-32 A with angled flange, plastic housing (PA),

Panel mounted inlets, 16-32 A with straight flange, plastic housing (PA), IP44 and IP67

Use Easy & Safe for
• General use indoor and outdoor
  - In building sites, industries, workshops, restaurants, supermarkets, train stations, sports arenas, fairs, etc.
  - At machines, lighting, heating, pumps, fans, motors, portable equipment etc.

Easy & Safe

Without compromising quality, Easy & Safe is our basic range. The plugs and connectors have a combined gland and cable clamp for easy tightening of the strain relief with the gland nut. The products have a unique design and are full of small practical features. Clear terminal markings make the installation easy and safe. When the cables are connected, the housing is easily closed by a twist. The plastic material PA is used to provide a device that meet requirements of quality and safety.

Features
• IP44 and IP67
• 16-32 A, 50-690 VAC
• IEC 60 309-1, -2
• PA6 plastic housing
Fast & Safe

Plugs, 16-32 A, plastic housing (PA)

Connectors, 16-32 A, plastic housing (PA)

Surface inlets for wall mounting, 16-32 A, plastic housing (PA)

Surface socket outlets for wall mounting, 16-32 A, plastic housing (PA)

Type QP, 16 A, IP44

Type QP...W, 32 A, IP67

Type QC, 16 A, IP44

Type EC...W, 32 A, IP67

Surface inlets for wall mounting, 16-32 A, plastic housing (PA)

Surface socket outlets for wall mounting, 16-32 A, plastic housing (PA)

Type QBS, 16 A, IP44

Type QBS...W, 32 A, IP67

Type QRS, 16 A, IP44

Type QRS...W, 32 A, IP67

Panel mounted inlets, 16-32 A with straight flange, plastic housing (PA)

Panel mounted socket outlets, 16-32 A with angled flange, plastic housing (PA)

Type QRM..., 16 A, IP44, QR...16 A, IP44

Type QBM..., 16 A, IP44, QB...16 A, IP44

Type QRA, 16 A, IP44

Type QBA...W, 32 A, IP67

Panel mounted socket outlets, 16-32 A with straight flange, plastic housing (PA)

Type QRA...W 32 A, IP67

Type QR...W 32 A, IP67

Type QRM..., 16 A, IP44, QR...16 A, IP44

Type QBM..., 16 A, IP44, QB...16 A, IP44

Type QRA, 16 A, IP44

Type QBA...W, 32 A, IP67

Fast & Safe
Fast & Safe is our latest addition. The products and applications are similar as Easy & Safe but the terminals have screwless connections. Screwless connections saves up to 60% in installation time. The smart design of the Quick & Safe terminals ensures that terminal are always closed when the housing is assembled.

Use Fast & Safe for
• General use indoor and outdoor
  - In building sites, industries, workshops, restaurants, supermarkets, train stations, sports arenas, fairs, etc.
  - At machines, lighting, heating, pumps, fans, motors, portable equipment etc.

Features
• IP44 and IP67
• 16-32 A, 50-690 VAC
• IEC 60 309-1, -2
• PA6 plastic housing
The CEE/IEC standard states that it must be impossible to connect apparatus with different numbers of poles, different voltages, frequencies or current ratings. This clock diagram shows how this is achieved. The position of the earthing sleeve relative to the keyway differs for different voltages and frequencies. The keyway of the outlet is always at the 6 o’clock position.

In addition, color coding is used to make it easier to tell the difference between devices for different voltages and frequencies. Dimensions also vary with current rating. Under the CEE/IEC system, pins and sleeves must be differently spaced in devices with different numbers of poles, and the earthing pin and earthing sleeve are larger than the other pins and sleeves.

**Explanation of type code**

Example: 416P6W: 4 = Number of poles, 16 = Ampere, P = Type, 6 = Position of earthing according to “clock”, W = Degree of protection.

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<th>Number of poles</th>
<th>Ampere</th>
<th>Type</th>
<th>Degree of protection</th>
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<td>P Plug</td>
<td>blank</td>
</tr>
<tr>
<td>2</td>
<td>32</td>
<td>C Connector</td>
<td>IP44 splashproof</td>
</tr>
<tr>
<td>2</td>
<td>63</td>
<td>RS Surface socket outlet</td>
<td>IP67 watertight</td>
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<tr>
<td>2</td>
<td>125</td>
<td>R Panel mounting socket outlet,</td>
<td>IP67 watertight, heavy-duty</td>
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For a complete list of types, see our main catalog.