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## **Installation materials**

Flexible and easy-to-install products



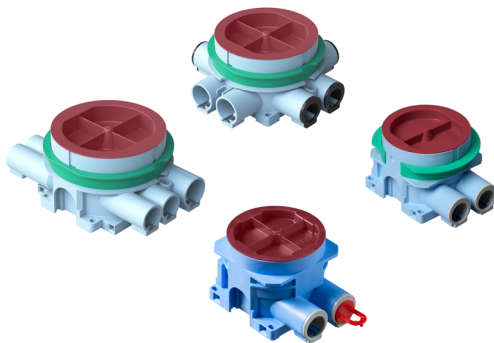
# Installation materials from ABB

ABB's installation materials are designed for all the installation situations you face every day. Every kind of installation work can be done using just a few types of boxes and accessories. The boxes are very versatile and can be used for a variety of installations and construction materials. All installation boxes are made of halogen free material (IEC/61249-2-21).

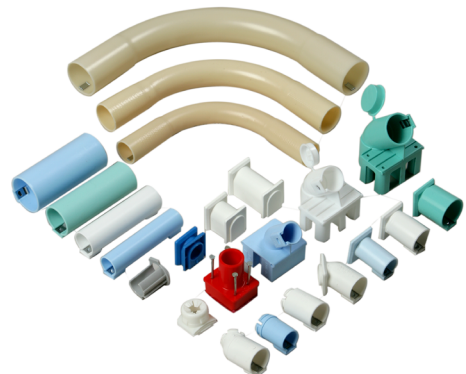
ABB's installation materials include:

- Flush mounting boxes
- Flush mounting junction box
- Flush mounting ceiling box
- Surface mounting junction boxes
- Conduit bends, conduit extensions and bushing insulators
- Earthing products

ABB's range of installation materials offers reliable solutions for every installation need.

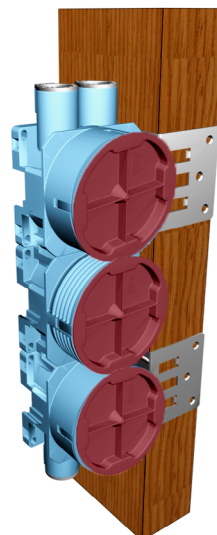
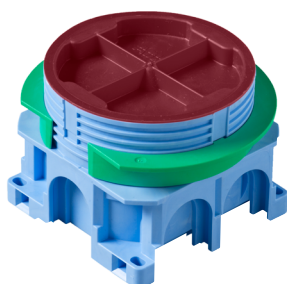


Flush mounting installation boxes, junction boxes and ceiling boxes



Piping materials and accessories for mounting and junction boxes


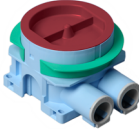
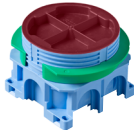
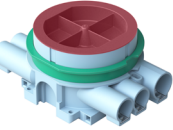
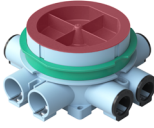
The AU60.5 combibox connects easily to other boxes in the Ideal series. AU60.5 has no inlets, providing easy connection of boxes – just use a PMR474 interconnector.



# System Ideal series

The System Ideal series includes a wide range of products that covers even the most demanding installation needs. System Ideal was developed with a focus on details that streamline the work and produce good, cost-effective results. The available accessories make it a comprehensive

system. System Ideal meets the IEC/EN 60670:2005 standard and is approved for mounting in EI30 and EI60 firewalls. All Ideal boxes are made of halogen free material (IEC/61249-2-21). System ideal is widely used in both hollow wall and concrete structures.


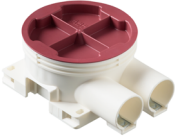




Mounting boxes			
	EAN	Type	Description
	<b>Mounting box AU5.6</b>		
	The mounting box includes a rotating, steplessly adjustable extension ring enabling installation on boards with a thickness of 13-27 mm. Installation depth is 55 mm and overall height 58-72 mm. The extension ring can be tilted 0-4° and the box has 2 opened branch inlets for 16/20 mm conduits. In addition, there are four knock-out inlets on the side, two 16 mm and one 20 mm inlet in the bottom. Made of halogen free material (IEC/61249-2-21) and fulfills the requirements of the glow wire test according to the standard IEC/EN60670: 2005 (850 °C).		
	<b>Mounting box AU60.1 (EI60)</b>		
	The mounting box has a rotating ring for adjusting the screw holes for device installation in optimal angle and screw distance is c/c 60mm. The green adapter ring, delivered with the box, is used in single-board walls (12-13 mm). The ring is removed when the wall thickness is two boards (24-26 mm). The box has two fixed inlets, one of them is open and both inlets are equipped with a locking device in metal for reliable connection between the conduits and the box. Both flexipipe and stiff conduits can be connected to the inlets and the inlets have 16/20 mm piping adapters. In addition, there are four knock outs on the sides and two in bottom for different inlets. The box is also tested in firewalls EI60 (mounting instruction separately). Manufactured from halogen free material (IEC/61249-2-21), the box complies with the IEC/EN60670:2005 glow wire test (850 °C).		
	<b>Mounting box AU60.5 (EI60)</b>		
	The mounting box has a total of six knock-out inlets, two of which are on the same side. The bottom of the box provides access for two rear inlets. The green adapter ring, delivered with the box, is used in single-board walls (12-13 mm). The ring is removed when the wall thickness is two boards (24-26 mm). The boxes can be connected to each other with the PMR474 interconnector. Made of halogen free material (IEC/61249-2-21) and fulfills the requirements of the glow wire test according to the standard IEC/EN60670: 2005 (850 °C).		
	6438199005027	AU5.6	Mounting box, board thickness 13-27 mm
	6418677334788	AU60.1	Mounting box for 12-13/24-26 mm board
	6438199003405	AU60.5	Mounting box for 12-13/24-26 mm board
Junction boxes for flush mounting			
	EAN	Type	Description
	<b>Mounting box AU67 (EI60)</b>		
	The mounting box has a rotating ring for adjusting the screw holes for device installation in optimal angle and screw distance is c/c 67mm. The green adapter ring, delivered with the box, is used in single-board walls (12-13 mm). The ring is removed when the wall thickness is two boards (24-26 mm). There are five fixed inlets for 16 mm conduits, three are open, and two fixed inlets for 20 mm conduits. All inlets are equipped with a locking device in metal for reliable connection between the conduits (flexi or stiff pipe) and the box. In addition, there are two knock outs on the sides and two in the bottom for different inlets. Manufactured from halogen free material (IEC/61249-2-21), the box complies with the IEC/EN60670:2005 glow wire test (850 °C).		
	<b>Ceiling junction box AU70</b>		
	The ceiling junction box has two screw pillars for M4 screws, e.g. for attaching lamp connectors or roof lids and screw distance is c/c 70 mm. The green adapter ring, delivered with the box, is used when board thickness is 12-13 mm. The ring is removed when the board thickness is 24-26 mm e.g. double plaster board. There are 8 fixed inlets for 20 mm conduits, and 6 have an adapter for 16 mm conduit. All inlets are equipped with a locking device in metal for reliable connection between the conduits (flexi or stiff pipe) and the box. In addition, there are two knock outs in the bottom for different inlets. Manufactured from halogen free material (IEC/61249-2-21), the box complies with the IEC/EN60670:2005 glow wire test (850 °C).		
	6418677332340	AU67	Mounting box
	6418677332357	AU70	Ceiling junction box



# System ABB series


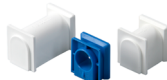


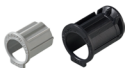





The System ABB series includes flush-mounted mounting boxes with or without inlets, as well as boxes in several heights for a range of applications. System ABB also includes products for post-mounting in board walls as well as outlet

boxes with or without inlets. The products are made of halogen-free material (IEC/61249-2-21) and fulfill the requirements of the glow wire test in accordance with the IEC/EN 60670:2005 standard (850 °C).

Mounting boxes			
	EAN	Type	Description
	<b>Mounting box</b>		
	The mounting box is designed for installation in all new buildings and in prefabricated building elements, and can be used with cast materials. It has a total of five knock-out inlets, two of which are on the same side. The bottom of the box provides access for two rear inlets. The boxes can be connected to each other with the PMR474 interconnector. Made of halogen free material (IEC/61249-2-21) and fulfills the requirements of the glow wire test according to the standard IEC/EN60670: 2005 (850 °C) and is approved for mounting in EI60 firewalls.		
	6410011523643	AU3.2	Mounting box
	<b>Low mounting box</b>		
	The box has 2 branch inlets with locking devices for Ø 20 conduits. A separate inlet can be attached to the side opposite the fixed inlets. The bottom of the box has two inlets. Inlets cannot be attached to the sides of the box, but the sides can be used to connect boxes with each other using a PMR474 interconnector cut level with the bottom of the box. The height of the box is 38 mm. Made of halogen free material (IEC/61249-2-21) and fulfills the requirements of the glow wire test according to the standard IEC/EN60670: 2005 (850 °C).		
	6410011523155	AU6.2	Low mounting box
	<b>Mounting box, branched 2-way</b>		
	The characteristics of this box are the same as the AU3.2; the difference is in the inlets. The box has 2 branch inlets for Ø 20 conduits. There are also 3 knock-out on the side, and 2 on the bottom. Made of halogen free material (IEC/61249-2-21) and fulfills the requirements of the glow wire test according to the standard IEC/EN60670: 2005 (850 °C) and is approved for mounting in EI60 firewalls.		
	6410011523032	AU5.2	Mounting box, branched 2-way
	<b>High mounting box</b>		
	The AU5.32 mounting box is 73 mm high. The box has 2 branch inlets for Ø 20 conduit. There are also 3 knock-out inlets altogether at the side, and 2 at the bottom. Made of halogen free material (IEC/61249-2-21) and fulfills the requirements of the glow wire test according to the standard IEC/EN60670: 2005 (850 °C).		
	6418677335068	AU5.32	High mounting box
	<b>Double mounting box</b>		
	The box AU17.2 has knock-outs for 11 inlets on the side, and 6 on the bottom. It can accommodate a device with a triple inlet. If necessary, the box may be divided in two by using partition plate PMR345. Made of halogen free material (IEC/61249-2-21) and fulfills the requirements of the glow wire test according to the standard IEC/EN60670: 2005 (850 °C).		
	6410011523896	AU17.2	Double mounting box
	6410011523940	PMR345	Partition plate



## Accessories for mounting boxes

	EAN	Type	Description
	<b>Extension rings</b>		
	6418677301087	ATI16	Extension ring 2 mm
	6410011523902	PMR94	Extension ring 13 mm
	6410011523964	PMR410	Extension ring 28 mm
	6410011523919	AK17	Extension ring for AU17.2
	<b>Interconnectors</b>		
	Mounting boxes are connected together with interconnectors. The boxes are attached side by side with PMR474, with c/c distance 71 mm. The PMR490 and PMR502 are used, when a larger distance between the boxes are desired, e.g. to separate antenna/data outlets and socket outlets and use own coverplates. Made of halogen free material (IEC/61249-2-21).		
	6410011527740	PMR474	Interconnector
	6410011527887	PMR490	Interconnector 85 mm
	6410011527924	PMR502	Interconnector 100 mm
	<b>Inlets</b>		
	6410011527542	AN16	16 mm
	6410011527573	AN20	20 mm
	6410011527252	AN25	25 mm
	<b>Angle inlet</b>		
	6410011527221	ANK20	20 mm
	<b>Back inlets</b>		
	6410011527146	ANP16	16 mm
	6410011527184	ANP 20	20 mm
	6410011527214	ANP20.1	20 mm, angled
	<b>Reducer</b>		
	6410011527306	AN20.16	Reducer Ø 20 mm / Ø 16 mm
	6438199005119	AN25.20	Reducer Ø 25 mm / Ø 20 mm
	<b>Mounting fixtures to wooden or steel frames for System Ideal</b>		
	The System Ideal boxes (AU5.6, AU60.1 and AU60.5) can be mounted in hollow walls with mounting fixtures, which are nailed to wooden frames or screwed to steel frames.		
	6418677335907	AS26.12	Truss fixture 12 mm
	6418677335914	AS26.24	Truss fixture 24 mm
	<b>Mounting box support</b>		
	Mounting box supports are used to fit the System Ideal boxes (AU5.6, AU60.1 and AU60.5) between two boards in hollow walls. Made of halogen free material (IEC/61249-2-21).		
	6418677329890	AS27	Support 25 mm, white
	6418677332425	AS27.12	Support 12 mm, blue
	<b>Conduit extensions</b>		
	Conduit extensions are used to join both rigid and flexible plastic conduits together. It is suitable to both hollow walls and concrete casting. Each extension has a locking device, which can be opened by twisting and pulling out at the same time. Made of halogen free material (IEC/61249-2-21).		
	6410011301166	AJ16	Conduit extension Ø 16 mm
	6410011301203	AJ20	Conduit extension Ø 20 mm
	6410011301258	AJ25	Conduit extension Ø 25 mm
	6410011301326	AJ32	Conduit extension Ø 32 mm
	6410011301401	AJ40	Conduit extension Ø 40 mm
	6410011301500	AJ50	Conduit extension Ø 50 mm
	<b>Conduit end pieces</b>		
	The conduit end pieces are primarily used for the termination of plastic conduits in concrete casting. The plug protects the conduit from dirt, concrete and foreign particles. Made of halogen free material (IEC/61249-2-21).		
	6410011301661	AJ5.16	Ø 16 mm, blue
	6410011301708	AJ5.20	Ø 20 mm, white
	6438199008103	AJ5.20M	Ø 20 mm, black
	6438199008110	AJ5.25	Ø 25 mm, green
	6438199008127	AJ5.25M	Ø 25 mm, black
	<b>Flexible conduit end piece</b>		
	The flexible conduit end piece is primarily used for termination of plastic conduits in concrete casting, but it can also be used in many other applications, for example, as a flexible conduit extension. Made of halogen free material (IEC/61249-2-21).		
	6438199008134	AJF5.20	Ø 20 mm, flexible

# System ABB

## Accessories for mounting boxes



### Conduit adaptor

The AJ16.20 conduit adaptor is used when changing the plastic conduit size from Ø 16 mm to Ø 20 mm. Made of halogen free material (IEC/61249-2-21).

6410011305164 AJ16.20 Conduit adaptor Ø 16/20



### Conduit adaptor for inlet

The AJF16.20 conduit adaptor is used when connecting Ø 20 mm plastic conduit to Ø 16 mm inlet. Made of halogen free material (IEC/61249-2-21).

6418677300073 AJF16.20 Conduit adaptor

### Flexible conduit extension

6410011301838 AJP20 Flexible conduit extension 20 mm

## Conduit bends



### Curved 90° conduit bends

The conduit bends are equipped with locking glue and are used to improve working efficiency and safety in conduit installations. The most common bend is 90°, but the range also includes other angles.

6410011110164 JMKL16 Conduit extension VPS16

6410011110201 JMKL20 Conduit extension VPS20

6410011110256 JMKL25 Conduit extension VPS25

6410011110324 JMKL32 Conduit extension VPS32

6410011110409 JMKL40 Conduit extension VPS40

6410011110508 JMKL50 Conduit extension VPS50



### Pre-bent curve conduit extensions 45°

6418677300219 JMKL16.1 Conduit extension IBVS16

6418677300226 JMKL20.1 Conduit extension IBVS20

6418677300233 JMKL25.1 Conduit extension IBVS25

6418677300240 JMKL32.1 Conduit extension IBVS32



### Pre-bent 90° conduit bends with sleeve in short end

Curve conduit extensions are equipped with a sleeve for continuing the conduit from the product's short end.

6418677300349 JMKL16.2 Conduit extension IBVT16

6418677300363 JMKL16.3 Conduit extension IBVG16

6418677300356 JMKL20.2 Conduit extension IBVT20



### Pre-bent 90° conduit bends with sleeve in long end

Pre-bent curve conduit extensions with a 90° angle and small radius are used alongside the conduit end pieces AJ5.20, JMKL25.11 and JMKL32.11, the bushing insulators AJ5.20, AJI13, AJI14 and AJI15 and the mounting and junction boxes in concrete casting. Curve conduit extensions are equipped with a sleeve for continuing the conduit from the product's long end.

6418677300370 JMKL16.4 Conduit extension IBVH16

6418677300387 JMKL16.5 Conduit extension IBVHL16

6418677300394 JMKL16.6 Conduit extension IBVK16

6418677300417 JMKL16.7 Conduit extension IBVL16

6418677300431 JMKL16.8 Conduit extension IBV16

6418677300400 JMKL20.3 Conduit extension IBVH20

6418677300424 JMKL20.4 Conduit extension IBVL20

6418677300448 JMKL20.5 Conduit extension IBV20

6418677300455 JMKL25.2 Conduit extension IBV25

6418677300462 JMKL32.2 Conduit extension IBV32

6418677300462 JMKL40.1 Conduit extension IBV40

6418677300486 JMKL50.1 Conduit extension IBV50

## Conduit bends



### Bushing insulators

This conduit end piece is used for the termination of plastic conduits in concrete casting. The end piece is cut to the desired length after casting. The trunking is continued with a conduit of the same size. The plug prevents the casting from entering the conduit. It is easy to extend trunking from the end pieces with the pre-bent curve conduit extensions.

6418677300493	JMKL16.11	IBVV16
6418677300509	JMKL20.11	IBVV20
6418677300516	JMKL25.11	IBVV25
6418677300523	JMKL32.11	IBVV32
6418677300547	JMKL16.12	IBVM16
6418677300554	JMKL20.12	IBVM20
6418677300561	JMKL25.12	IBVM25
6418677300578	JMKL16.13	IBVVML16
6418677300585	JMKL20.13	IBVVML20

## Conduit extensions



EAN	Type	Description
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### Bushing insulators

Bushing insulators are designed for feedthrough situations of electrical conduits in concrete structures. They are also used for connecting conduits in concrete slabs (floors) to conduits in hollow walls. The bushings have a protective foil that prevents the casting from entering the conduit. Made of halogen free material (IEC/61249-2-21).

6418677300110	AJI6	I116, for 1 Ø 16 mm
6418677300127	AJI7	I216, for 2 Ø 16 mm
6418677300141	AJI9	I416, for 4 Ø 16 mm
6418677300158	AJI10	I120, for 1 Ø 20 mm
6418677300165	AJI11	I220, for 2 Ø 20 mm
6418677300172	AJI12	I125, for 1 Ø 25 mm
6418677300189	AJI13	I132, for 1 Ø 32 mm
6418677300196	AJI14	I140, for 1 Ø 40 mm
6418677300202	AJI15	I150, for 1 Ø 50 mm



### Bushing insulators 45 degrees

Bushing insulators are designed for feedthrough situations of electrical conduits in concrete structures. They are also used for connecting conduits in concrete slabs (floors) to conduits in hollow walls. Made of halogen free material (IEC/61249-2-21).

6418677300301	AJI52	IS116, Ø 16 mm
6418677300318	AJI53	IS120, Ø 20 mm
6418677300325	AJI54	IS125, Ø 25 mm
6418677300332	AJI55	IS132, Ø 32 mm







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