Wiring ducts
the widest choice for greater
convenience and speed at work

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# No application is beyond its reach

All the space cables need. Less complicated work brings installers and panel builders faster solutions. Prompt solutions to any end-user requirement. ABB wiring ducts solve every electrical switchboard and distribution switchboard wiring problem in one stroke. Updated and expanded with new models and solutions for special fields of application, the ABB range is more complete than ever.

The first on the market to be awarded the EN 50085 (parts 1, 2 and 3) conformity certificate, ABB SACE thermoplastic wiring ducts with vertical slots are designed and manufactured to guarantee an appropriate level of mechanical and electrical protection to the wires, cables and other devices housed inside them. They also guarantee resistance to the different kinds of stress to which they are subjected during transport, installation and use, both at minimum storage and maximum utilization temperatures. Choosing from the

numerous different versions available, those requiring considerable space for cables will find their needs met by ABB wiring ducts, now also available in the 100 mm height and in a choice of six different base sizes (25, 40, 60, 80, 100 and 150 mm). These new wiring ducts join the established designs in our catalogue (with heights between 17 and 80 mm), bringing to 28 the total size combinations offered, all available with 8-12 mm and 4-6 mm slots. The best solution for hinged panels and doors, on the other hand, are our new flexible thermoplastic wiring ducts (available in seven sizes), which are ideal for every situation in which wiring is subject to flexion or torsion. A new design of wiring ducts with circular knockouts in the sides to facilitate branch connections using rigid and corrugated conduits has also been introduced for environments in which cables require greater protection against external agents (lift rooms are a typical example). The range is completed by the new Fix-O-Rapid accessory that snaps onto DIN rails and mounting plates, which, together with plastic rivets, cable retainers, wiring duct bases and label tags. form a renewed offer of installation accessories

and tools.

Less complicated work brings installers All the space cables need with the new and panel builders faster solutions thanks wiring ducts available in the 100 mm to the new top profile of the ribs. height and six different base sizes. The new flexible thermoplastic wiring ducts solve every electrical switchboard and distribution switchboard wiring problem. The range of accessories is completed by the new shears.





ABB wiring ducts: made by people who know electricity inside out

ABB wiring ducts stand head and shoulders above the crowd. They are manufactured by the leading electrical distribution specialist. That's a difference you may not be able to see, but that you'll certainly notice. Because it isn't enough just to be an electrical wiring expert. One needs to have a perfect knowledge of switchboards and understand exactly where the wiring duct needs to go, what cables it's going to hold and which switchgear is going to be connected.

One needs to have an in-depth knowledge of standards and also be able to anticipate them, offer technological know-how that extends across all markets worldwide and be able to dedicate considerable resources to research and development.

In other words, one needs the longstanding expertise and added value that only a large group such as ABB can guarantee.

Overlooking details can be a big mistake.

Which is why you're better off trusting ABB from start to finish.

# Thermoplastic wiring ducts with vertical slots



A faithful friend you can always rely on...

The top profile of the ribs of these wiring ducts has been redesigned to make it easier to open and close the cover and to ensure even more secure engagement. All in one movement: thanks to the controlled splaying of the sides, gentle pressure is all it takes to fix the cover on the duct, forming a perfect seal in all

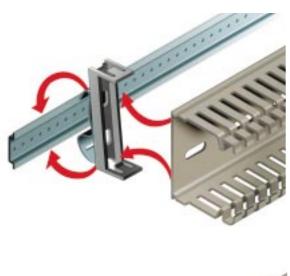
conditions, even in environments that reach high temperatures. To release it, simply press the ribs inwards with one hand. The cover can't slide in vertical sections, nor is the bottom rib affected by the weight of the cables in horizontal sections.

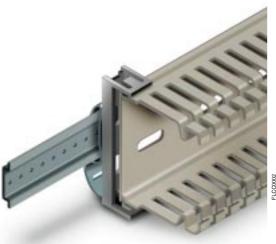
The exceptional care with which ABB wiring ducts are manufactured also ensures a clean internal finish. Because there aren't any plastic

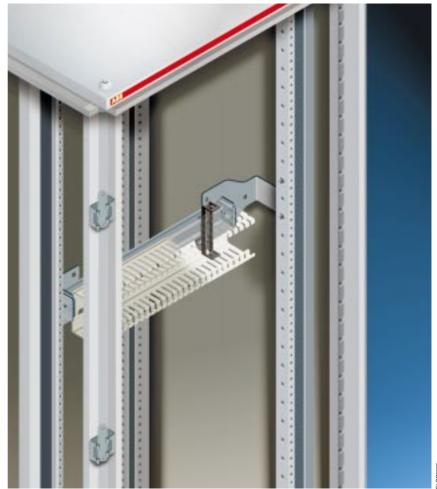
burrs you can work hour after hour without your hands suffering the consequences.

...that knows when to bend and where to break...

The dimensions and resilience of the ribs on ABB wiring ducts ensure they can be moved apart many times during the wiring phase. But when you need to remove the rib to create openings for letting







cables in or out, the special knockouts allow you to make an instant clean break. The base of the wall also features knockouts that make it possible to cut the edge when you want to make level branch connections.

The 80 and 100 mm high versions feature cable holder mouldings in the middle of the straight sections of the ribs.

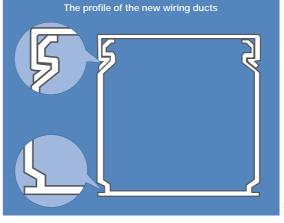
Fix-O-Rapid: an accessory but...one you can't do without

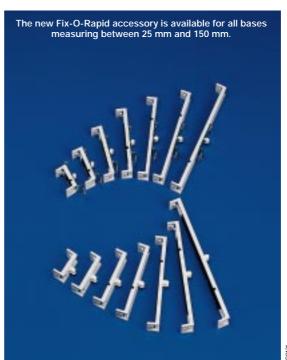
Thanks to its special lower section, ABB SACE wiring ducts can be fitted with the new Fix-O-Rapid accessory, that can be rapidly snapped onto DIN rails and mounting plates. Fixing Fix-O-Rapids to wiring ducts does not restrict their lay-out to coincide with the holes on the base.

to the DIN rail or the mounting plate at definable and modifiable distances, depending on requirements. Compared with traditional attachment methods using screws or rivets, the new accessory also guarantees a better seal, making it possible to reduce the number of parts and holes needed. Not only is it easy to install but it is equally simple to remove the wiring ducts, replacing them at any stage of the wiring operation just by pressing on the fixing

tooth of each individual Fix-O-Rapid with a screwdriver. The fast and practical way in which these accessories can be used in no way reduces their high quality standards. On the contrary, using Fix-O-Rapid instead of screws guarantees the highest safety level obtainable in compliance with Standard CEI EN 50085-2-3, in which the use of insulated fixing elements or elements made in an insulating material is prescribed.

Consequently, wiring ducts can also be fitted





The ABB range of wiring ducts is designed for applications with rated voltages up to 1000 V DC and 1500 V AC. It offers 28 different combinations with bases of 15 - 25 - 40 - 60 - 80 -100 - 120 - 150 mm and heights of 17 - 30 - 40 -60 - 80 -100 mm. all available with 8-12 mm and 4-6 mm slots. The Fix-O-Rapid accessory that snaps onto DIN rails and mounting plates is available for all bases measuring between 25 mm and 150 mm. The ribbed ducts are made of selfextinguishing thermoplastic that complies with UL standard 94 V0 and is resistant to abnormal heat and fire up to 960°C (glow-wire test) in accordance with IEC standard 695-2-1. Dimensional stability is guaranteed between -20°C and + 60°C. The standard length of the ducts is 2 m, and the colour is RAL 7030 grey. The whole range is IMQ marked and UL, CSA





and RINA approved.





# Flexible thermoplastic wiring ducts



Hugging a bend when you need it

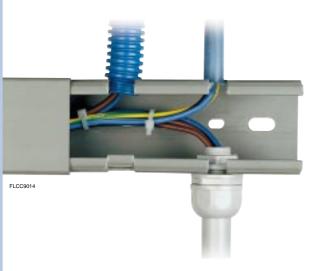
How do you connect the switchgears installed on switchboard doors? With the highly flexible ABB wiring ducts, the ideal solution for installers and panel builders alike. Our new flexible wiring ducts can be bent or twisted without breaking and allow you to solve all manner of connection problems where hinged moving parts are concerned. They are quick and easy to use: the offset position of the ribs and the way they are angled slightly downwards makes it easier to insert and extract the cables. These new ducts save time and energy compared to traditional spirals. When you need to add new cables, change and inspect them or carry out

maintenance, the operations required are simple and take next to no time at all. Simply pull out the cables or feed in new ones without having to unwind or rewind the coils. The flexible wiring ducts are supplied as standard with readyfitted double-sided adhesive tape offering high adhesion on steel. And you can, of course, naturally fit them using screws and rivets as well. They engage in special slots on the bottom that are orientated in two axes to enable the position of the ducts to be adjusted.

The ABB flexible wiring ducts are designed for applications with rated voltages up to 1000 V DC and 1500 V AC, have a square section and are available in seven different sizes with sides of 12.5 - 16-20 - 25 - 30 - 40 and 50 mm. They are made of thermoplastic that is resistant to permanent temperatures of 80°C and peaks of up to 110°C in accordance with IEC standard 216. They are selfextinguishing in accordance with UL standard 94 V2. The standard length is 500 mm and their colour is RAL 7040 grey.



# Thermoplastic wiring ducts with lateral knockouts



### Keeping the dust away if necessary

Thinking of all those cases in which it's advantageous to protect cables from dust (IP 40) while retaining maximum installation flexibility, we designed these new wiring ducts with circular knockouts in the sides for branch connections with rigid or corrugated conduits (with or without tube clamps) or directly with cables.

They are ideal for lift applications and all those cases in which you need to have clean cabling without using boxes (e.g.: machine lead-ins).

The neck of the hole also forms part of the lead-ing it.

The neck of the hole also forms part of the knockout, making it easier to install the cables and branch connections in any work phase and conditions.

with lateral knockouts are suitable for applications with rated voltages up to 1000 V DC and 1500 V AC, have a square section and standard dimensions of 50 x 50 mm and 100 x 60 mm. The knockout holes have internal diameters of 18 and 23 mm (for 16 mm and 20 mm conduits). The ducts are made of a rigid self-extinguishing thermoplastic that complies with UL standard 94 V0.

The ABB wiring ducts

Dimensional stability is guaranteed between  $-20^{\circ}$ C and  $+60^{\circ}$ C. The standard length of the ducts is 2 m and the colour is RAL 7030 grey.

They are resistant to abnormal heat and fire up to 960°C (glow-wire



## Ordering informations

#### Wiring ducts

Item	Dimensions (mm) WxH - Colour	Metres per package
8-12 mm slot	45 47 0 17000 [910]	
05 019	15 x 17 - Ral 7030 grey [IMQ]	92
05 033	25 x 30 - Ral 7030 grey [IMQ]	116
05 035	40 x 30 - Ral 7030 grey [IMQ]	80
05 037	60 x 30 - Ral 7030 grey [IMQ]	52
05 043	25 x 40 - Ral 7030 grey [IMQ]	96
05 045	40 x 40 - Ral 7030 grey [IMQ]	60
05 047	60 x 40 - Ral 7030 grey [IMQ]	40
05 049	80 x 40 - Ral 7030 grey [IMQ]	32
05 051	100 x 40 - Ral 7030 grey [IMQ]	24
05 053	120 x 40 - Ral 7030 grey [IMQ]	20
05 063	25 x 60 - Ral 7030 grey [IMQ]	68
05 065	40 x 60 - Ral 7030 grey [IMQ]	44
05 067	60 x 60 - Ral 7030 grey [IMQ]	32
05 069	80 x 60 - Ral 7030 grey [IMQ]	24
05 071	100 x 60 - Ral 7030 grey [IMQ]	20
05 073	120 x 60 - Ral 7030 grey [IMQ]	14
05 083	25 x 80 - Ral 7030 grey [IMQ]	56
05 085	40 x 80 - Ral 7030 grey [IMQ]	36
05 087	60 x 80 - Ral 7030 grey [IMQ]	24
05 089		16
	80 x 80 - Ral 7030 grey [IMQ]	
05 091	100 x 80 - Ral 7030 grey [IMQ]	16
05 093	120 x 80 - Ral 7030 grey [IMQ]	12
05 094	25x100 - Ral 7030 grey [IMQ]	40
05 095	40x100 - Ral 7030 grey [IMQ]	28
05 096	60x100 - Ral 7030 grey [IMQ]	20
05 097	80x100 - Ral 7030 grey [IMQ]	14
05 098	100x100 - Ral 7030 grey [IMQ]	8
05 099ª	150x100 - Ral 7030 grey [IMQ]	8
<b>4-6 mm slot</b> 05 119	15 x 17 - Ral 7030 grey [IMQ]	92
05 133	25 x 30 - Ral 7030 grey [IMQ]	116
05 135	40 x 30 - Ral 7030 grey [IMQ]	80
05 137	60 x 30 - Ral 7030 grey [IMQ]	52
05 143	25 x 40 - Ral 7030 grey [IMQ]	96
05 145	40 x 40 - Ral 7030 grey [IMQ]	60
05 147	60 x 40 - Ral 7030 grey [IMQ]	40
05 149	80 x 40 - Rai 7030 grey [IMQ]	32
05 151	100 x 40 - Rai 7030 grey [IMQ]	24
05 153	120 x 40 - Rai 7030 grey [IMQ]	20
05 163	25 x 60 - Ral 7030 grey [IMQ]	68
05 165	0 , 1	44
	40 x 60 - Ral 7030 grey [IMQ]	
05 167 05 140	60 x 60 - Ral 7030 grey [IMQ]	32
05 169 05 171	80 x 60 - Ral 7030 grey [IMQ]	24
05 171	100 x 60 - Ral 7030 grey [IMQ]	20
05 173	120 x 60 - Ral 7030 grey [IMQ]	14
05 183	25 x 80 - Ral 7030 grey [IMQ]	56
05 185	40 x 80 - Ral 7030 grey [IMQ]	36
05 187	60 x 80 - Ral 7030 grey [IMQ]	24
05 189 05 101	80 x 80 - Ral 7030 grey [IMQ]	16
05 191	100 x 80 - Ral 7030 grey [IMQ]	16
05 193	120 x 80 - Ral 7030 grey [IMQ]	12
05 194	25x100 - Ral 7030 grey [IMQ]	40
05 195	40x100 - Ral 7030 grey [IMQ]	28
05 196	60x100 - Ral 7030 grey [IMQ]	20
05 197	80x100 - Ral 7030 grey [IMQ]	14
05 198	100x100 - Ral 7030 grey [IMQ]	8
05 199	150x100 - Ral 7030 grey [IMQ]	8

#### Spare parts - Covers

Item	Description	Metres per package
05 300	for 15 mm base ducts - Ral 7030 grey [IMQ]	2/200
05 302	for 25 mm base ducts - Ral 7030 grey [IMQ]	2/60
05 304	for 40 mm base ducts - Ral 7030 grey [IMQ]	2/40
05 306	for 60 mm base ducts - Ral 7030 grey [IMQ]	2/24
05 308	for 80 mm base ducts - Ral 7030 grey [IMQ]	2/16
05 310	for 100 mm base ducts - Ral 7030 grey [IMQ]	2/48
05 312	for 120 mm base ducts - Ral 7030 grey [IMQ]	2/36
05 314	for 150 mm base ducts - Ral 7030 grey [IMQ]	2/28

#### Fix-O-Rapid (snap-on fixing accessory)

Item	Description	Pieces per package
05 250	for DIN rail - 25 mm base 🚺	20/600
05 252	for DIN rail - 40 mm base 🚺	20/600
05 254	for DIN rail - 60 mm base 🔟	20/600
05 256	for DIN rail - 80 mm base 🚺	20/240
05 258	for DIN rail - 100 mm base 🚺	20/240
05 260	for DIN rail - 120 mm base 🔟	20/240
05 262	for DIN rail - 150 mm base 🚺	20/240
05 270	for base plate - 25 mm base 🔟	20/600
05 272	for base plate - 40 mm base 🔟	20/600
05 274	for base plate - 60 mm base 🔼	20/600
05 276	for base plate - 80 mm base 🔟	20/240
05 278	for base plate - 100 mm base 🔟	20/240
05 280	for base plate - 120 mm base 🚺	20/240
05 282	for base plate - 150 mm base 🔃	20/240

#### Accessories

Item	Description	Pieces per package
05 210	plastic base [IMQ]	100/200
05 214	rivet Ø 4 mm [IMQ]	100/6000
05 216	rivet Ø 6 mm [IMQ]	100/6000
05 224	plastic wire stops for 40 mm bases [IMQ]	100/3000
05 226	plastic wire stops for 60 mm bases [IMQ]	100/3000
05 228	plastic wire stops for 80 mm bases [IMQ]	100/1200
05 230	plastic wire stops for 100 mm bases [IMQ]	100/1200
05 240	plastic label [IMQ]	100/1200
05 265	trunking shears	1/10
05 266	rivet gun	1/12

#### Wiring ducts with $\emptyset$ 18 and 23 mm knockouts

Item	Dimensions (mm) WxH - Colour	Metres per package
05 330	50 x 50 - Ral 7030 grey	36
05 331	100 x 60 - Ral 7030 grey	18

#### Flexible wiring ducts (500 mm length)

Item	Dimensions (mm) WxH - Colour	Pieces per package
05 400	12.5 x 12.5 - Ral 7040 grey	112
05 402	16 x 16 - Ral 7040 grey	84
05 405	20 x 20 - Ral 7040 grey	112
05 410	25 x 25 - Ral 7040 grey	70
05 415	30 x 30 - Ral 7040 grey	50
05 420	40 x 40 - Ral 7040 grey	50
05 425	50 x 50 - Ral 7040 grey	32







In consideration of modifications to Standards and materials, the characteristics and overall dimensions indicated in this catalogue may be considered binding only following confirmation by ABB SACE

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