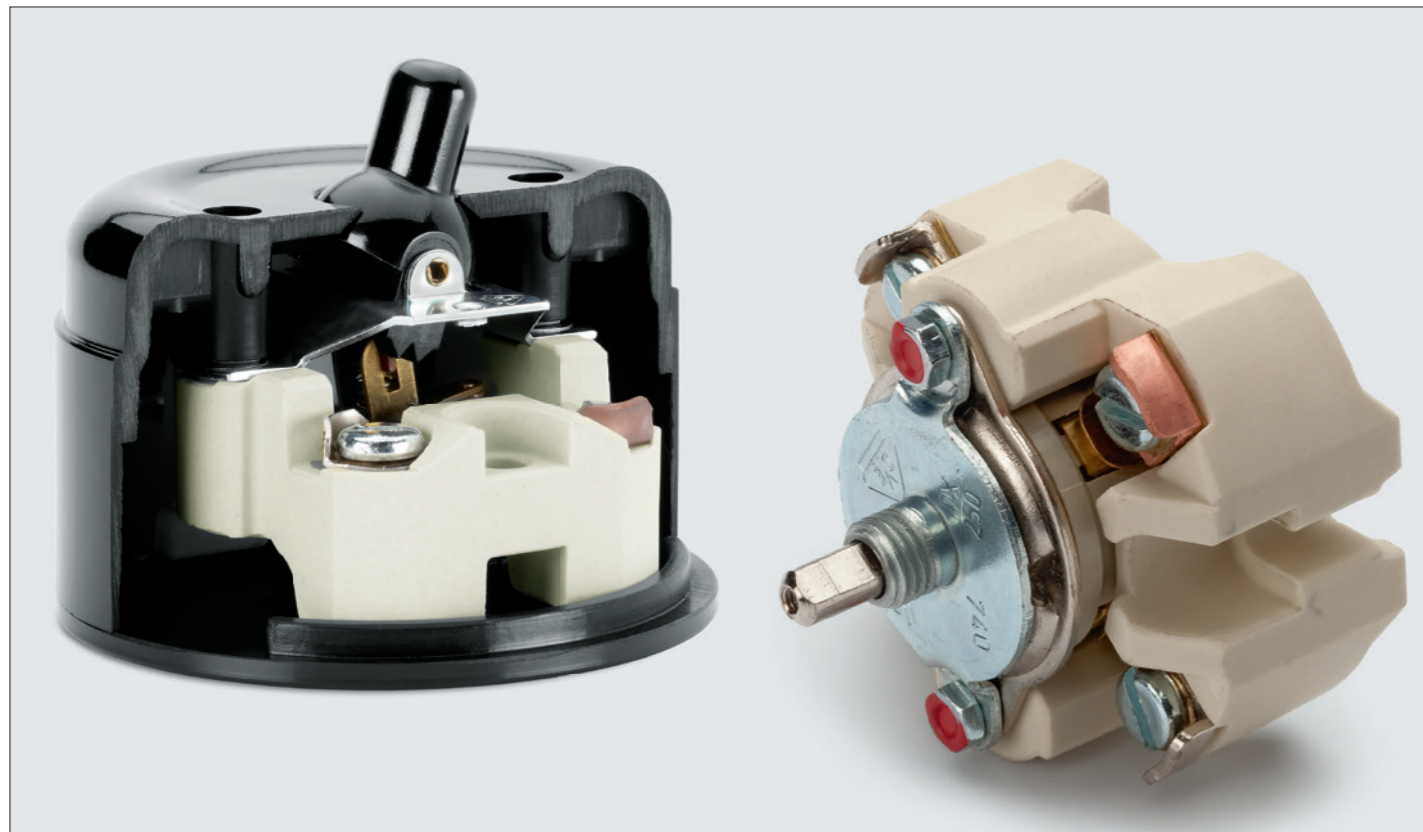




Switches made of porcelain,
Bakelite® and glass.






Quality inside and out. A cut above the rest. Our light switching systems.


Our switching systems made of porcelain and Bakelite® have been developed by our in-house specialists. They are produced in Thuringia (porcelain covers and central inserts), in Westphalia (Bakelite® covers, central inserts and switching mechanisms) and in Bavaria (glass covers). These materials even have experts taking a second look: At trade fairs we regularly see architects tapping and feeling the material to see whether it really is genuine. Which it is, of course, and not only superficially, but through and through – for covers made of Bakelite® the material walls are at least 2.5 mm thick, glass covers 4 mm and the porcelain covers are 13 mm thick. The inner workings are made to match: The main units for the rotary, rocker and toggle switches are made of ceramic material. And: Our rotary switches are still true rotary switches in which the contacts are opened and closed through rotation. These days, that is not always the case, many other rotary switches are really rocker switches which are operated via a turning knob. The difference can be both felt and heard.

The following pages contain detailed information about the systems and components which we supply. If you require further information or cannot find the part which you need, please do not hesitate to contact us. We shall be glad to advise you, your architects, planners and fitters on any queries you might have.

The internal structure: Ceramic switches. Influenced by nautical electric engineering.

In some sectors, these types of rotary switches have survived until today – this is generally the case where dependability and durability are a top priority and where relying on the robust mechanical operation of switches is critical despite frequent use of co-current electricity: this is the case in shipbuilding and industrial applications. Our switches' mechanisms are produced by CAW (Casp. Arn. Winkhaus) in Halver near Lüdenscheid; they have been making electrotechnical installation products since 1910, and we have developed our switch series in close cooperation with them. The over-centre device of the ceramic switch which consists of 42 parts is the result of great mechanical precision: it keeps consistent switch contact regardless of the speed of the turning motion and is closed with a loud clicking noise – it not only sounds great, but it also protects the material, since it prevents the harmful arc effect, which can also arise with alternating currents, and damage switch contacts in the long-term. The over-centre device is also galvanised to ensure safe operation.

 All products of this catalogue have the VDE test mark if testing applies.

 The CE mark is applied to the packaging label and any products subject to the CE directive.



Covers and combination options. Single, double and multiple combinations.

Switches and power outlets are delivered without outside faceplates. For the inserts of the white porcelain series faceplates are available as single and double covers as well as system faceplates. Thanks to these system faceplates, various combinations of different elements (for example, a power outlet and a switch) or identical elements (for example three power outlets) can be combined and mounted. All porcelain switches and power outlets can be combined with one another. The only exception are data and telephone jacks, antennae outlets and speaker wall sockets which cannot be mounted in the porcelain double cover.

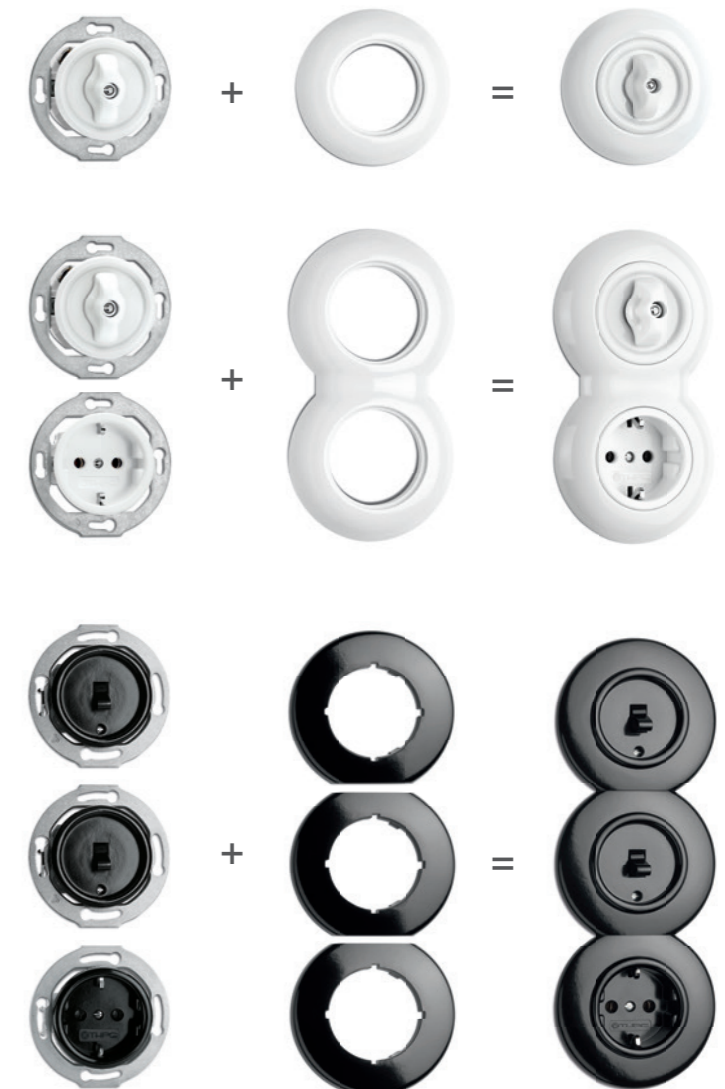
For the inserts of the black and white Bakelite® series are single round and square faceplates available, round system faceplates as well as square double, triple and quadruple faceplates.

For the black and white Bakelite® inserts for the glass series are round single and system faceplates available.

The white »Bakelite®«

Bakelite® is a registered trademark of Momentive Specialty Chemicals Inc. The white Bakelite® series is formed from the same material as the black one. However, the white material is produced by a different manufacturer. Strictly speaking, it should therefore not be called by the brand name Bakelite®, but by the generic name duroplast. To make it easier to distinguish items, we use the designation Bakelite® for items from black series, and duroplast for white ones.

Installation note: The distances of the inserts in all multiple and system coverings are consistent with the standard spacing of 71 mm and can be easily used with existing installations. The switch systems fit in all standard concealed outlets.



From nuisance to pleasure: The porcelain switch system

From the beginning of the electrical age and several decades to follow, the porcelain and ceramics industry was the most important provider of electrical technology: Casings, switch pieces and housings were made from this attractive material that, apart from its aesthetic qualities, has tangible technical benefits: it insulates and is extremely tough.

It is hard to understand why today's porcelain material for electrical switch systems can generally only be found in industrial use. This fact can only be explained by the dominant business mentality "more, faster, cheaper".

The producers of technical porcelain – based primarily in the Bavarian Forest and in Thuringia – are desperately searching for new fields in which to apply their highly-developed skills. We have brought together a producer of electro-technical switches from Westphalia and a producer of electro-technical porcelain from Thuringia. The result is this porcelain switch system what is shortly for twenty years established on the market. It is both functional and pleasant in three ways: to the eye, to the touch and to the ear (thanks to the enjoyable "klack" sound of the rotary switch).

The faceplate and the pushbutton: electro-technical porcelain...

All porcelain parts originate from Schierschnitz in Thuringia, where electro-technical porcelain has been produced since 1913. The porcelain is moulded under a pressure of 35–40 MPa into metal mouldings, then glazed and sintered at a temperature of 1320–1330°C. (The porcelain used, type C 110, also meets standards for material characteristics defined in DIN VDE 0335 part 3.)

... and duroplast.

For safety reasons, the insert of the porcelain power outlet is thermoformed in a matching colour duroplast.

Recommended:

The porcelain switch system was rated "recommendable" by consumer rights organisation Öko-Test. For background information, see to the magazine Öko-Haus (4/2000).



All switches and power outlets meet the safety regulations of the VDE Association for Electrical, Electronic & Information Technologies.



Porcelain switch system at a glance

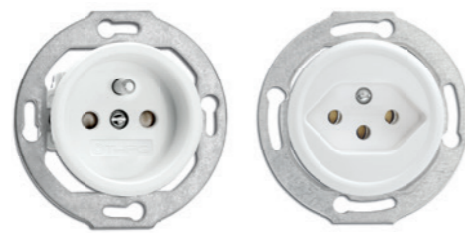


**OUTLET WITH SAFETY CONTACT PORCELAIN**16 A, AC 250V
Duroplast central insert. With spring clips.

Order no. 173067

With shutter

Order no. 173068

**OUTLET WITH MIDDLE-SAFETY CONTACT PORCELAIN**16 A, AC 250V.
Duroplast central insert. With spring clips. French version.
With shutter

Order no. 175835

OUTLET SWISS VERSION PORCELAIN16 A, AC 250V
Duroplast central insert. With spring clips.
For installation in DIN 49073-certified installation units.
Order no. 100873**ROTARY SWITCH PORCELAIN**10 A, 10 AX, AC 250V
Porcelain central insert and locking bolt. With spring clips.**Alternation switch**

Order no. 186880

Crossbar switch

Order no. 186881

Multi-circuit switch

Order no. 186879

Blind switch

Order no. 186894

**TOGGLE SWITCH PORCELAIN**10 A, 10 AX, AC 250V
Porcelain central insert. Duroplast compensator.**Alternation switch**

Order no. 173073

Crossbar switch

Order no. 173074

Control switch

Order no. 173075

**ROCKER BUTTON WITHOUT SYMBOL PORCELAIN**10 A, AC 250V
Porcelain central insert. Duroplast compensator.

Order no. 173076

With illuminated compensator*

Order no. 100977

Rocker button without symbol also available as an opener.

**ROCKER BUTTON LIGHT PORCELAIN**10 A, AC 250V
Porcelain central insert. Duroplast compensator
with light symbol.

Order no. 173077

With illuminated compensator*

Order no. 100978

Glow lamp for buttons and control switchThe lower screw is replaced by the glow lamp.
Order no. 173066**ROCKER BUTTON BELL PORCELAIN**10 A, AC 250V
Porcelain central insert. Duroplast compensator
with bell symbol.

Order no. 173078

With illuminated compensator*

Order no. 100979

**ROCKER BUTTON DOOR OPENER PORCELAIN**10 A, AC 250V
Porcelain central insert. Duroplast compensator
with key symbol.

Order no. 173079

With illuminated compensator*

Order no. 100980

**DIMMER PORCELAIN**AC 230V, 50Hz
Porcelain central insert and dimming knob.For 60–600 W light bulbs
Pressure alternation

Order no. 173080

For low voltage halogen lamps with electronic transformer
and 20–315 W light bulbs.

Pressure alternation

Order no. 173082

For low voltage halogen lamps with magnetic transformer
20–500 VA and 20–500 W light bulbs.

Pressure alternation

Order no. 173084

For LED lamps 3–50 W
AC 230 V (+/-10%), 50 Hz,
Pressure alternation

Order no. 173097

For LED lamps 5–85 W
AC 230 V (+/-10%), 50 Hz,
Pressure alternation

Order no. 173096

For LED lamps 5–150 W
AC 230 V (+/-10%), 50 Hz,
Pressure alternation

Order no. 173098

For LED lamps electronic 3–35 W
AC 230 V (+/-10%), 50 Hz,
Pressure alternation

Order no. 173099

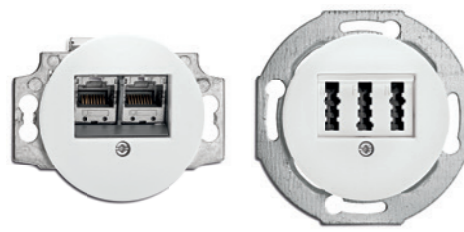
For LED lamps 7–110 W
Pressure alternation

Order no. 100270

Electronic potentiometer
AC 230 V (+/-10%), 50 Hz

Order no. 173100

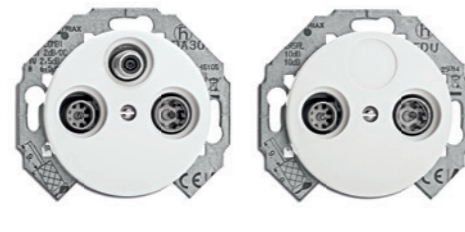
Other dimmers are available upon request.

**DATA JACK PORCELAIN**Duroplast central insert.
For 2 network adapters RJ45 (real.Cat.6a).

Order no. 181978

Note: We recommend concealed sockets with increased
socket volume for easy data socket installation.**TELEPHONE JACK PORCELAIN**Duroplast central insert.
TAE 3x6 NFN
For 1 telephone and 2 additional devices or data terminals.
3 x 6 pole, 6 screwed contacts.

Order no. 150117

**ANTENNAE OUTLET PORCELAIN**Duroplast central insert.
HF-resistant metal housing. BZT-authorisation.Radio and television adapter for systems with amplifiers or
cable. Passage and terminal box.

Order no. 150121

Radio and television adapter for systems with ampli-
fiers according DIN 45330 with additional satellite outlet
(F-adapter). Terminal box, digitally compatible.

Order no. 154911

**SINGLE COVERING PORCELAIN**82 mm Ø. For assembly of all components with central
insert excluding data and telephone jack, antennae outlets
and speaker wall sockets.

Order no. 173085

For assembly of data and telephone jack, antennae outlets
and speaker wall sockets.

Order no. 173086

**DOUBLE COVERING PORCELAIN**External dimension 153 x 82 mm. For vertical and horizon-
tal assembly of all components with central insert exclud-
ing data and telephone jack, antennae outlets and speaker
wall sockets.

Order no. 173090

**EXTERNAL SYSTEM COVERING PORCELAIN**82 mm Ø. For vertical and horizontal assembly of all com-
ponents with central insert excluding data and telephone
jack, antennae outlets and speaker wall sockets.

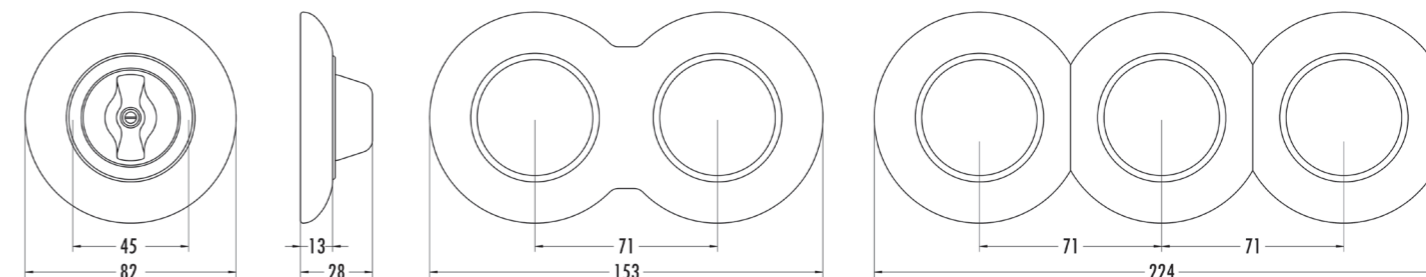
Order no. 173088

For vertical and horizontal assembly of data and telephone
jack, antennae outlets and speaker wall sockets.

Order no. 173089

SYSTEM COVERING WAIST PORCELAIN82 mm Ø. For vertical and horizontal assembly of all com-
ponents with central insert excluding data and telephone
jack, antennae outlets and speaker wall sockets.

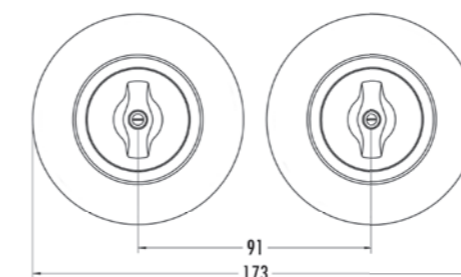
Order no. 173087

Dimensioning in mm

Rotary switch with single cover porcelain

Double covering porcelain

Triple system covering porcelain

Installation note: The distances of the inserts in all multiple and system coverings are consistent with the standard spacing of 71 mm and can be easily used with existing installations. The porcelain switch system fits in all standard concealed outlets.For the vertical and horizontal installation of several devi-
ces into individual covers, we recommend a pitch of 91 mm
for optical reasons.

The black Bakelite® switch system

The second switch system: black and Bakelite®.

Porcelain and Bakelite® coexisted harmoniously for many years, and both switch colours, white porcelain and black Bakelite®, were equally popular. The synthetic resin Bakelite® was found to be an ideal material for electro-technical applications: its stability was unmatched and its temperature resistance and insulation were tremendous.

The material remained common in light switches and power outlets into the 1960's, but then Bakelite® was replaced by cheaper synthetic materials. With the spread of thermoplastic as the new switch material, Bakelite® virtually disappeared from the scene. However, there is no comparison between Bakelite® and thermoplastic: Bakelite® is much heavier and more pleasant to the eye and to the touch. This is due to its production. Instead of being produced using the injection-moulding procedure, Bakelite® is moulded directly from its raw form using the "matrix method". With the successful development of the porcelain switch system, we have set out to restore this harmonious coexistence. In close cooperation with the company CAW, we have brought the lost moulds and tools back into production and have found material manufacturers who are masters at processing Bakelite® – a skill which can no longer be taken for granted. The result is the Bakelite® switch system: just like its porcelain counterpart, it is both functionally and aesthetically superior to other synthetic mouldings.

Information about Bakelite®.

When Leo H. Baekeland registered the patent for the production of the first completely synthetic material in 1908, he was aware of the hardships faced by the electronic industry, which was in dire need of a substitute material for the expensive material shellac. His Bakelite, the first-ever thermosetting synthetic material, made it possible to manufacture items for daily use at relatively low cost using pressing moulds. The new material was quickly adopted for the production of many household products: starting with knobs and switches, then moving to radios, telephones and even typewriters.



All switches and power outlets meet the safety regulations of the VDE Association for Electrical, Electronic & Information Technologies.



Bakelite® switch system with round coverings at a glance



Bakelite® switch system with square coverings at a glance





OUTLET WITH SAFETY CONTACT BAKELITE®

16 A, AC 250 V
Bakelite® central insert. With spring clips.

Order no. 173038

With shutter

Order no. 174527



OUTLET WITH MIDDLE-SAFETY CONTACT BAKELITE®

10 A, AC 250 V.
Bakelite® central insert. With spring clips. French version.

With shutter Order no. 175833

OUTLET SWISS VERSION BAKELITE®

10 A, AC 250 V. Bakelite® central insert. With spring clips.
For installation in DIN 49073-certified installation units.

Order no. 100940



ROTARY SWITCH BAKELITE®

10 A, 10 AX, AC 250 V
Bakelite® central insert and locking bolt. With spring clips.

Alternation switch

Order no. 186883

Crossbar switch

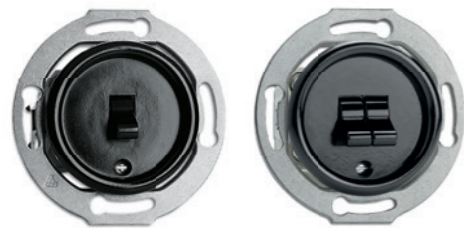
Order no. 186884

Multi-circuit switch

Order no. 186882

Blind switch

Order no. 186895



TOGGLE SWITCH BAKELITE®

10 A, 10 AX, AC 250 V
Bakelite® central insert and toggle.

Alternation switch Order no. 173043

Crossbar switch Order no. 173044

DOUBLE TOGGLE SWITCH BAKELITE®

10 A, 10 AX, AC 250 V
Bakelite® central insert and two toggle.

Multi-circuit switch Order no. 100571



CONTROL SWITCH BAKELITE®

10 A, 10 AX, AC 250 V
Bakelite® central insert and compensator.

Order no. 173047

ROCKER BUTTON WITHOUT SYMBOL BAKELITE®

10 A, AC 250 V
Bakelite® central insert and compensator.

Order no. 173054

With illuminated compensator* Order no. 100973

Rocker without symbol also available as an opener.



ROCKER BUTTON LIGHT BAKELITE®

10 A, AC 250 V
Bakelite® central insert and compensator
with lamp symbol.

Order no. 173055

With illuminated compensator* Order no. 100974

Glow lamp for buttons and control switch.

The lower screw is replaced by the glow lamp.

Order no. 173066



ROCKER BUTTON BELL BAKELITE®

10 A, AC 250 V
Bakelite® central insert and compensator
with bell symbol

Order no. 173056

With illuminated compensator* Order no. 100975



ROCKER BUTTON DOOR OPENER BAKELITE®

10 A, AC 250 V
Bakelite® central insert and compensator
with key symbol.

Order no. 173057

With illuminated compensator* Order no. 100976



DIMMER BAKELITE®

AC 230 V, 50 Hz
Bakelite® central insert and dimming knob.

For 60–600 W light bulbs
Pressure alternation Order no. 173058

For low voltage halogen lamps with electronic transformer
and 20–315 W light bulbs.

Pressure alternation Order no. 173060

For low voltage halogen lamps with magnetic transformer
20–500 VA and 20–500 W light bulbs.

Pressure alternation Order no. 173062

For LED lamps 3–50 W
AC 230 V (+/-10%), 50 Hz,

Pressure alternation Order no. 173102

For LED lamps 5–85 W
AC 230 V (+/-10%), 50 Hz,

Pressure alternation Order no. 173101

For LED lamps 5–150 W
AC 230 V (+/-10%), 50 Hz,

Pressure alternation Order no. 173103

For LED lamps electronic 3–35 W
AC 230 V (+/-10%), 50 Hz,

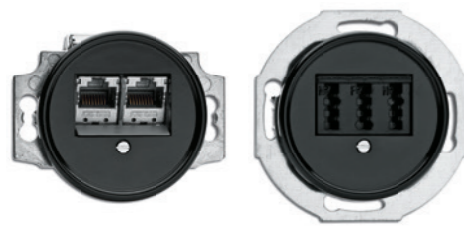
Pressure alternation Order no. 173104

For LED lamps 7-110 W
Pressure alternation Order no. 100274

Electronic potentiometer
AC 230 V (+/-10%), 50 Hz

Order no. 173105

Other dimmers are available upon request.



DATA JACK BAKELITE®

Bakelite central insert.
For 2 network adapters RJ45 (real.Cat.6a).

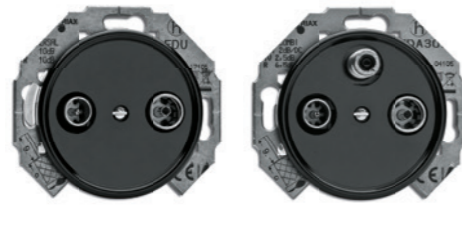
Order no. 100722

Note: We recommend concealed sockets with increased
socket volume for easy data socket installation.

TELEPHONE JACK BAKELITE®

Bakelite central insert.
TAE 3x6 NFN

For 1 telephone and 2 additional devices or data terminals.
3 x 6 pole, 6 screwed contacts. Order no. 100721



ANTENNAE OUTLET BAKELITE®

Bakelite® central insert.
HF-resistant metal housing. BZT-authorisation.

Radio and television adapter for systems with amplifiers or
cable. Passage and terminal box. Order no. 100723

Radio and television adapter for systems with amplifiers
according DIN 45330 with additional satellite outlet
(F-adapter). Terminal box, digitally compatible.

Order no. 100724

Order no. 100725



SINGLE COVERING BAKELITE®

82 mm Ø. For assembly of all components with central
insert excluding dimmer, data and telephone jack, anten-
nae outlets and speaker wall sockets. Order no. 173063

For assembly of dimmer, data and telephone jack, anten-
nae outlets and speaker wall sockets. Order no. 174940



SINGLE COVERING SQUARE BAKELITE®

82 x 82 mm. For assembly of all components with central
insert excluding dimmer, data and telephone jack, anten-
nae outlets and speaker wall sockets. Order no. 119328

For assembly of dimmer, data and telephone jack, anten-
nae outlets and speaker wall sockets. Order no. 119327



EXTERNAL SYSTEM COVERING BAKELITE®

82 mm Ø. For vertical and horizontal assembly of all com-
ponents with central insert excluding dimmer, data and
telephone jack, antennae outlets and speaker wall sockets.

Order no. 173092

EXTERNAL SYSTEM COVERING FOR DIMMER

BAKELITE®
82 mm Ø. For vertical and horizontal assembly of dimmer,
data and telephone jack, antennae outlets and speaker wall
sockets.

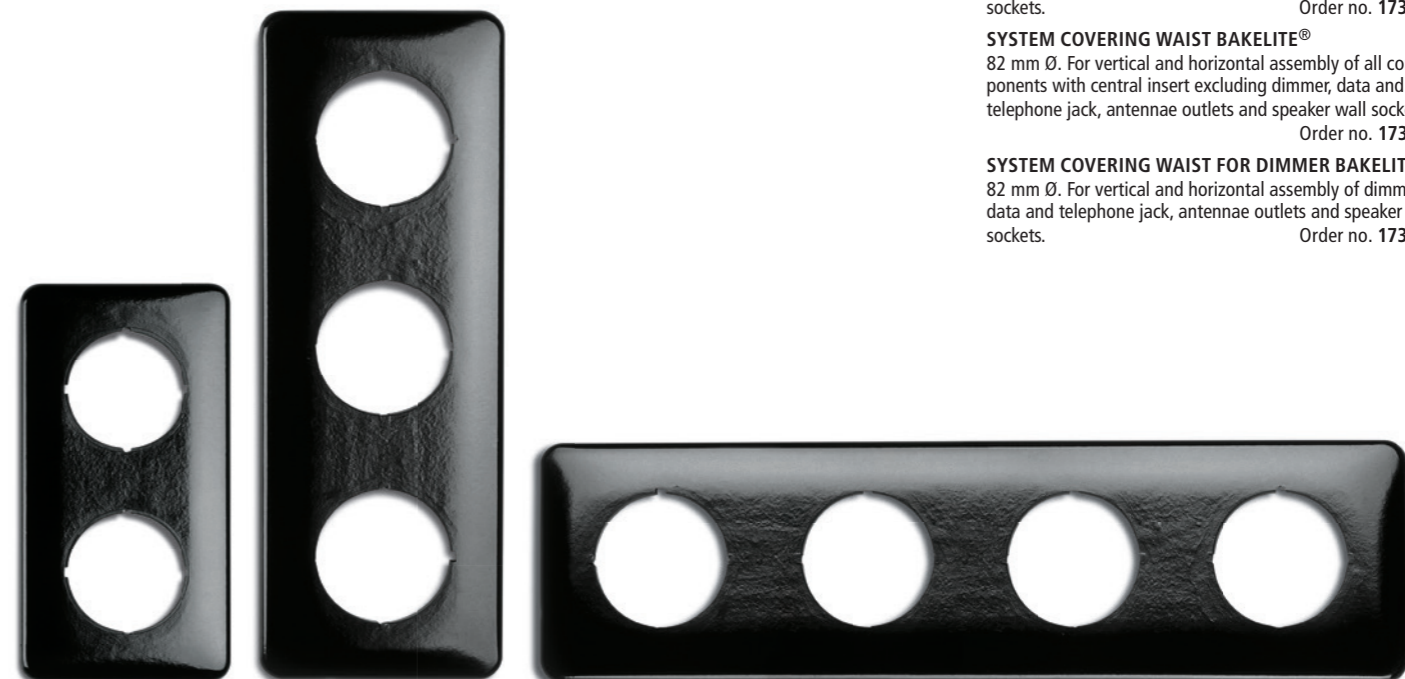
Order no. 173094

SYSTEM COVERING WAIST BAKELITE®
82 mm Ø. For vertical and horizontal assembly of all com-
ponents with central insert excluding dimmer, data and
telephone jack, antennae outlets and speaker wall sockets.

Order no. 173093

SYSTEM COVERING WAIST FOR DIMMER BAKELITE®
82 mm Ø. For vertical and horizontal assembly of dimmer,
data and telephone jack, antennae outlets and speaker wall
sockets.

Order no. 173095



DOUBLE COVERING BAKELITE®

External size 157 x 82 mm. For vertical and horizontal
assembly of all components with central insert including
dimmer, data and telephone jack, antennae outlets and
speaker wall sockets. Order no. 173064

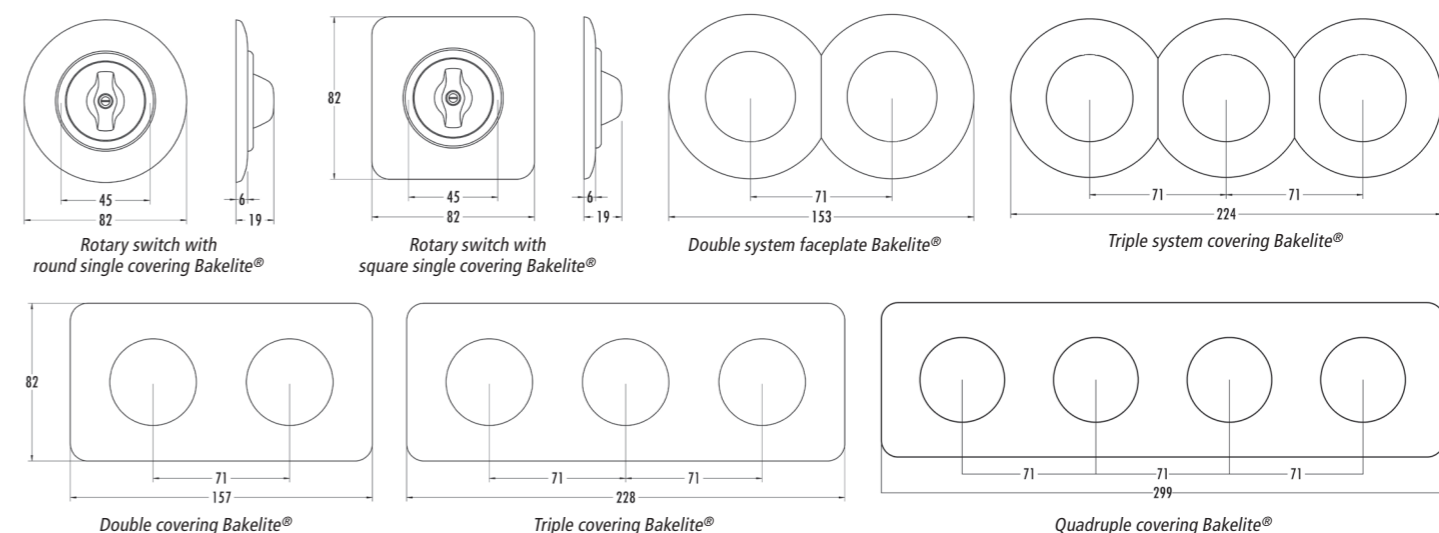
TRIPLE COVERING BAKELITE®

External size 228 x 82 mm. For vertical and horizontal
assembly of all components with central insert including
dimmer, data and telephone jack, antennae outlets and
speaker wall sockets. Order no. 173065

QUADRUPLE COVERING BAKELITE®

External size 299 x 82 mm. For vertical and horizontal
assembly of all components with central insert including
dimmer, data and telephone jack, antennae outlets and
speaker wall sockets. Order no. 173091

Dimensioning in mm



Installation note: The distances of the inserts in all multiple and system coverings are consistent with the standard spacing of 71 mm and can be easily used with existing installati-
ons. The Bakelite® switch systems fit in all standard concealed outlets.

For the vertical and horizontal installation of several devices into individual covers, we recommend a pitch of 91 mm for optical reasons.

The white Bakelite® switch system – duroplast

The white duroplast series corresponds technically to the black Bakelite series. All cover plates, switch buttons and outlet elements in the series are made of lightfast white duroplast.

Like in all other series, the insides of these switches originate from CAW. As early as in 1910, CAW was granted a patent for an electric rotary switch with a movable contact bridge on an annular track



Of course, all of our products have the VDE test mark if testing applies.



Letters patent from 1910.



Duroplast switch system with round coverings at a glance



Duroplast switch system with square coverings at a glance

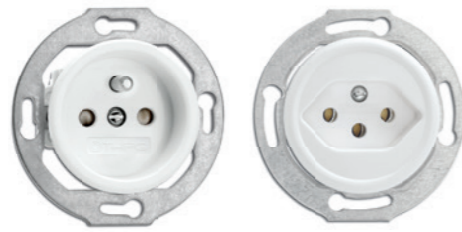


**OUTLET WITH SAFETY CONTACT DUROPLAST**16 A, AC 250 V
Duroplast central insert. With spring clips.

Order no. 176400

With shutter

Order no. 180810

**OUTLET WITH MIDDLE-SAFETY CONTACT DUROPLAST**10 A, AC 250 V.
Duroplast central insert. With spring clips. French version.

Order no. 184728

With shutter

Order no. 184728

OUTLET SWISS VERSION DUROPLAST10 A, AC 250 V. Duroplast central insert. With spring clips.
For installation in DIN 49073-certified installation units.

Order no. 100996

**ROTARY SWITCH DUROPLAST**10 A, 10 AX, AC 250 V
Duroplast central insert and locking bolt. With spring clips.

Order no. 186886

Alternation switch

Order no. 186887

Crossbar switch

Order no. 186885

Multi-circuit switch

Order no. 186896

Blind switch

Order no. 186896

**TOGGLE SWITCH DUROPLAST**10 A, 10 AX, AC 250 V
Duroplast central insert and toggle.

Order no. 176405

Alternation switch

Order no. 176406

Crossbar switch**DOUBLE TOGGLE SWITCH DUROPLAST**10 A, 10 AX, AC 250 V
Duroplast central insert and two toggle.

Order no. 100572

Multi-circuit switch**CONTROL SWITCH DUROPLAST**10 A, 10 AX, AC 250 V
Duroplast central insert and compensator.

Order no. 176407

ROCKER BUTTON WITHOUT SYMBOL DUROPLAST10 A, AC 250 V
Duroplast central insert and compensator.

Order no. 176408

With illuminated compensator*

Order no. 100981

Rocker button without symbol also available as an opener.

**ROCKER BUTTON LIGHT DUROPLAST**10 A, AC 250 V
Duroplast central insert and compensator with light symbol.

Order no. 176409

With illuminated compensator*

Order no. 100982

Glow lamp for buttons and control switch.

The lower screw is replaced by the glow lamp.

Order no. 173066

**ROCKER BUTTON BELL DUROPLAST**10 A, AC 250 V
Duroplast central insert and compensator with bell symbol.

Order no. 176410

With illuminated compensator*

Order no. 100983

**ROCKER BUTTON DOOR OPENER DUROPLAST**10 A, AC 250 V
Duroplast central insert and compensator with key symbol.

Order no. 176411

With illuminated compensator*

Order no. 100984

**DIMMER DUROPLAST**AC 230 V, 50 Hz
Duroplast central insert and dimming knob.For 60–600 W light bulbs
Pressure alternation

Order no. 176413

For low voltage halogen lamps with electronic transformer

and 20–315 W light bulbs
Pressure alternation

Order no. 176415

For low voltage halogen lamps with magnetic transformer

20–500 VA and 20–500 W light bulbs
Pressure alternation

Order no. 176417

For LED lamps 3–50 W

AC 230 V (+/-10%), 50 Hz,
Pressure alternation

Order no. 173107

For LED lamps 5–85 W

AC 230 V (+/-10%), 50 Hz,
Pressure alternation

Order no. 173106

For LED lamps 5–150 W

AC 230 V (+/-10%), 50 Hz,
Pressure alternation

Order no. 173108

For LED lamps electronic 3–35 W

AC 230 V (+/-10%), 50 Hz,
Pressure alternation

Order no. 173109

For LED lamps 7–110 W

Pressure alternation

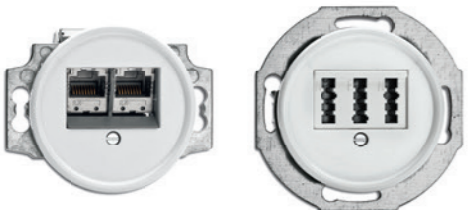
Order no. 100308

Electronic potentiometer

AC 230 V (+/-10%), 50 Hz

Order no. 173111

Other dimmers are available upon request.

**DATA JACK DUROPLAST**Duroplast central insert.
For 2 network adapters RJ45 (real.Cat.6a).

Order no. 100726

Note: We recommend concealed sockets with increased socket volume for easy data socket installation.**TELEPHONE JACK DUROPLAST**Duroplast central insert.
TAE 3x6 NFN
For 1 telephone and 2 additional devices or data terminals.

Order no. 100725

3 x 6 pole, 6 screwed contacts.

**ANTENNAE OUTLET DUROPLAST**Duroplast central insert.
HF-resistant metal housing. BZT-authorisation.

Order no. 100727

Radio and television adapter for systems with amplifiers or cable. Passage and terminal box.

Order no. 100728

Radio and television adapter for systems with amplifiers according DIN 45330 with additional satellite outlet (F-adapter). Terminal box, digitally compatible.

Order no. 100728

**SINGLE COVERING DUROPLAST**

82 mm Ø. For assembly of all components with central insert excluding dimmer, data and telephone jack, antennae outlets and speaker wall sockets.

Order no. 176421

For assembly of dimmer, data and telephone jack, antennae outlets and speaker wall sockets.

Order no. 181997

**SINGLE COVERING SQUARE DUROPLAST**

82 x 82 mm. For assembly of all components with central insert excluding dimmer, data and telephone jack, antennae outlets and speaker wall sockets.

Order no. 119330

For assembly of dimmer, data and telephone jack, antennae outlets and speaker wall sockets.

Order no. 119329

**EXTERNAL SYSTEM COVERING DUROPLAST**

82 mm Ø. For vertical and horizontal assembly of all components with central insert excluding dimmer, data and telephone jack, antennae outlets and speaker wall sockets.

Order no. 176425

For vertical and horizontal assembly of dimmer, data and telephone jack, antennae outlets and speaker wall sockets.

Order no. 176427

SYSTEM COVERING WAIST DUROPLAST

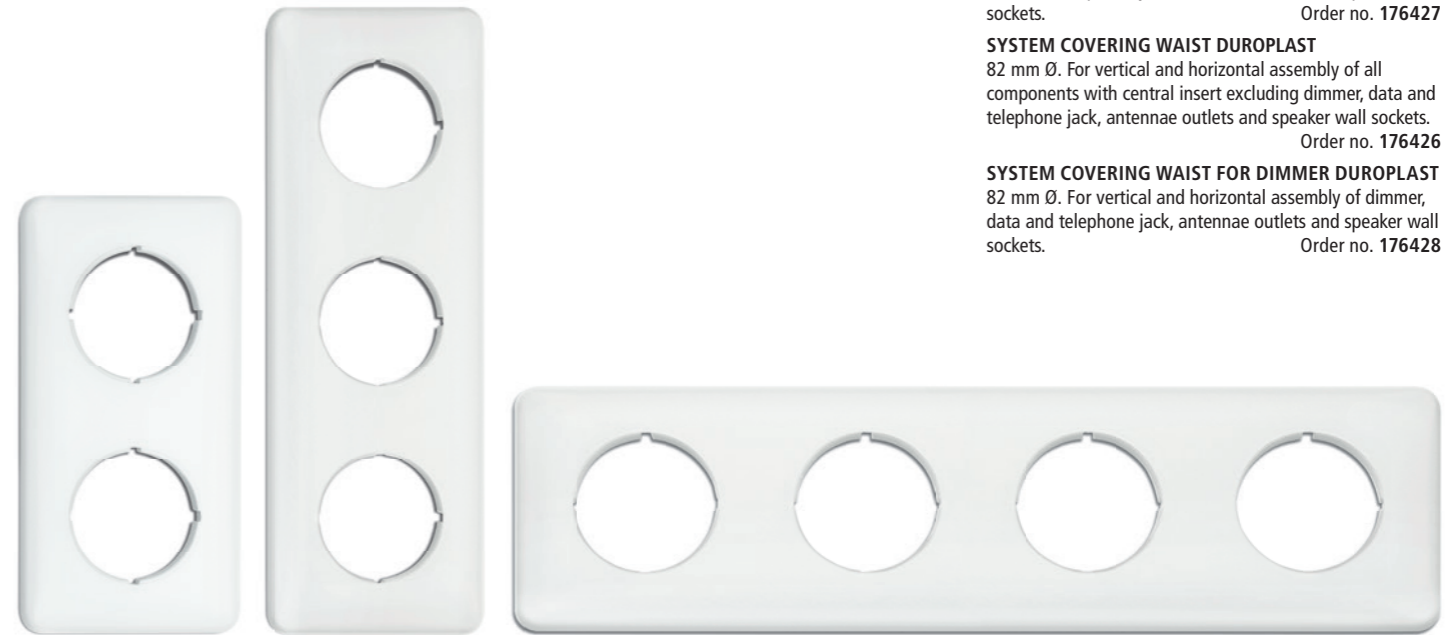
82 mm Ø. For vertical and horizontal assembly of all components with central insert excluding dimmer, data and telephone jack, antennae outlets and speaker wall sockets.

Order no. 176426

SYSTEM COVERING WAIST FOR DIMMER DUROPLAST

82 mm Ø. For vertical and horizontal assembly of dimmer, data and telephone jack, antennae outlets and speaker wall sockets.

Order no. 176428

**DOUBLE COVERING DUROPLAST**

External size 157 x 82 mm. For vertical and horizontal assembly of all components with central insert including dimmer, data and telephone jack, antennae outlets and speaker wall sockets.

Order no. 176422

TRIPLE COVERING DUROPLAST

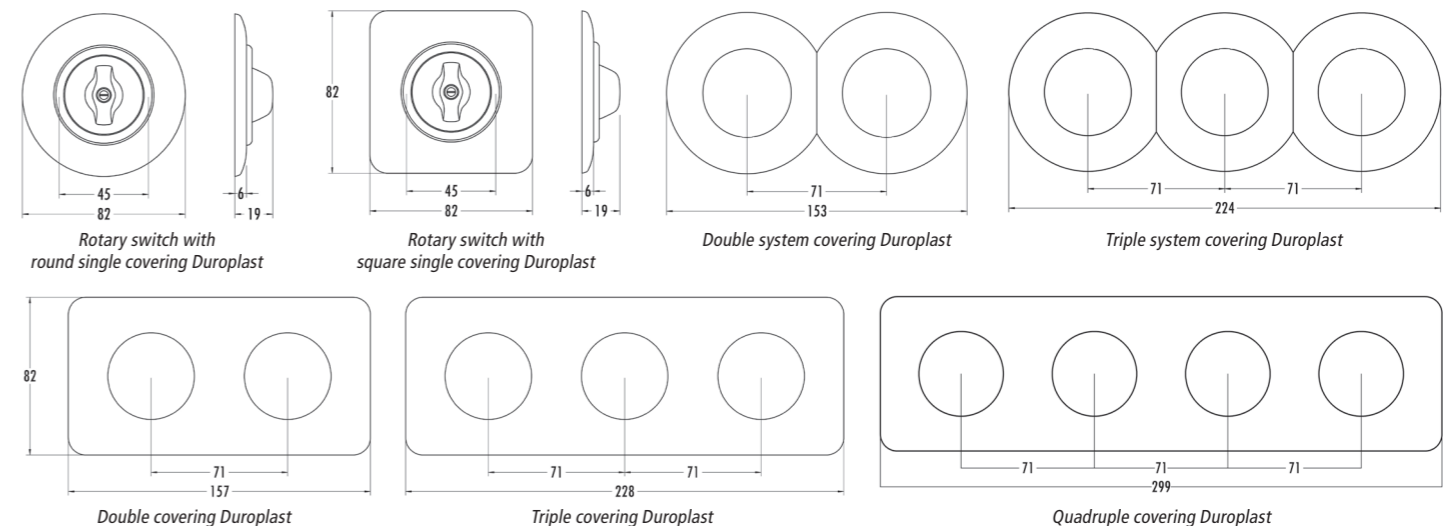
External size 228 x 82 mm. For vertical and horizontal assembly of all components with central insert including dimmer, data and telephone jack, antennae outlets and speaker wall sockets.

Order no. 176423

QUADRUPLE COVERING DUROPLAST

External size 299 x 82 mm. For vertical and horizontal assembly of all components with central insert including dimmer, data and telephone jack, antennae outlets and speaker wall sockets.

Order no. 176424

Dimensioning in mm**Installation note:** The distances of the inserts in all multiple and system coverings are consistent with the standard spacing of 71 mm and can be easily used with existing installations. The Duroplast switch systems fit in all standard concealed outlets.

For the vertical and horizontal installation of several devices into individual covers, we recommend a pitch of 91 mm for optical reasons.



The glass switch series: cut glass and Bakelite®.

Light switches with glass covers – as used in our other series – have already existed before, in the 1930s. With our glass covers, manufactured from a special, highly transparent glass, switches are rendered almost invisible. In addition, pretreatment makes the glass resistant to any splintering at the edges. It is beveled at a 45° angle and lavishly polished to ensure the perfect optical finish. The switch can even be easily papered over. It does require some extra attention during installation, but the outstandingly subtle look certainly compensates the extra effort. Our covers are available in six variations and can be used with all rotary switches and central inserts from our black and white Bakelite® series. There are particular models that have been tailored to work with the glass covers.

A specialist company from Bavaria manufactures the glass components. The four-millimeter thick glass plates are thermally hardened. The Optiwhite glass used sets them apart from comparable covers through its superior transparency. You will hardly see these covers.



As with all of our series, the electrical components are produced in the Sauerland region and have the VDE test mark if testing applies.

Installation note: The mounting of our switches to glass covers requires a different installation sequence than the usual one: The electrician installs the internal components and the acrylic glass ring that was included in delivery. After that, the completely connected switch is wallpapered over and then the covers are attached. The wallpaper may have a maximum thickness of 0.5 mm to observe all regulations and standards of the German Association for Electrical, Electronic & Information Technologies (VDE). For this reason, the hollow wall sockets must be mounted cleanly so that the 1mm-thick acrylic glass plate is flush with the wall. In addition, white cardboard form plates have been included with the glass covers. These form plates fit precisely directly beneath the glass cover. The cardboard covers can be wallpapered over or painted in the desired wall colour. After a possible disassembly of the switches (e.g., for technical inspection), these covers guarantee that the original, uniform appearance of the wall is retained.

If several individual covers are to be mounted next to each other, this circumstance must be taken into consideration when the sockets are placed; for this purpose, spacer fittings with 20 mm are required. When mounting system covers, observe a precise mean size of 71 mm.



Glass switch system with Bakelite® inserts at a glance



Glass switch system with Duroplast inserts at a glance





OUTLET WITH SAFETY CONTACT FOR GLASS COVERING
16 A, AC 250 V. Bakelite® or Duroplast central insert.
With spring clips.

Bakelite® Order no. 173038
Duroplast Order no. 176400
With shutter
Bakelite® Order no. 174527
Duroplast Order no. 180810



OUTLET WITH MIDDLE-SAFETY CONTACT FOR GLASS COVERING
10 A, AC 250 V. Bakelite® or Duroplast central insert.
With spring clips. French version.

With shutter
Bakelite® Order no. 175833
Duroplast Order no. 184728

OUTLET SWISS VERSION FOR GLASS COVERING
10 A, AC 250 V. Bakelite® or Duroplast central insert.
With spring clips.

For installation in DIN 49073-certified installation units.
Bakelite® Order no. 100940
Duroplast Order no. 100969



ROTARY SWITCH FOR GLASS COVERING
10 A, 10 AX, AC 250 V. Bakelite® or Duroplast locking bolt. With spring clips.

Alternation switch
Bakelite® Order no. 186883
Duroplast Order no. 186886

Crossbar switch
Bakelite® Order no. 186884
Duroplast Order no. 186887

Multi-circuit switch
Bakelite® Order no. 186882
Duroplast Order no. 186885

Blind switch
Bakelite® Order no. 186895
Duroplast Order no. 186896



DIMMER FOR GLASS COVERING
AC 230 V, 50 Hz. Bakelite® or Duroplast central insert and dimming knob.

For 60–600 W light bulbs. Pressure alternation
Bakelite® Order no. 173058
Duroplast Order no. 176413

For low voltage halogen lamps with electric transformer and 20–315 W light bulbs. Pressure alternation
Bakelite® Order no. 173060
Duroplast Order no. 176415

For low voltage halogen lamps with magnetic transformer 20–500 VA and 20–500 W light bulbs. Pressure alternation
Bakelite® Order no. 173062
Duroplast Order no. 176417

For LED lamps 7–110 W. Pressure alternation
Bakelite® Order no. 100274
Duroplast Order no. 100308

For LED lamps 3–50 W
AC 230 V (+/-10%), 50 Hz, Pressure alternation
Bakelite® Order no. 173102
Duroplast Order no. 173107

For LED lamps 5–85 W
AC 230 V (+/-10%), 50 Hz, Pressure alternation
Bakelite® Order no. 173101
Duroplast Order no. 173106

For LED lamps 5–150 W
AC 230 V (+/-10%), 50 Hz, Pressure alternation
Bakelite® Order no. 173103
Duroplast Order no. 173108

For LED lamps electronic 3–35 W
AC 230 V (+/-10%), 50 Hz, Pressure alternation
Bakelite® Order no. 173104
Duroplast Order no. 173109

For LED lamps 7–110 W. Pressure alternation
Bakelite® Order no. 100274
Duroplast Order no. 100308

Electronic potentiometer. AC 230 V (+/-10%), 50 Hz
Bakelite® Order no. 173105
Duroplast Order no. 173111

Other dimmers are available upon request.

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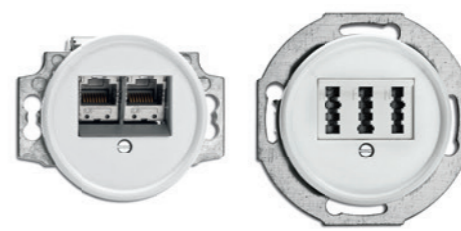
Other dimmers are available upon request.

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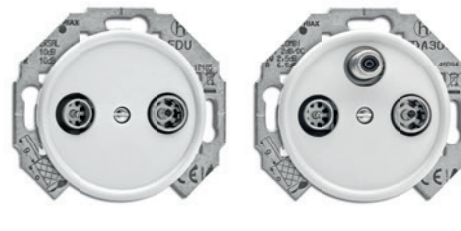
DATA JACK FOR GLASS COVERING
Bakelite® or Duroplast central insert.
For 2 network adaptors RJ45 (real.Cat.6a).

Bakelite® Order no. 100722
Duroplast Order no. 100726

Note: We recommend concealed sockets with increased socket volume for easy data socket installation.

TELEPHONE JACK FOR GLASS COVERING
Bakelite® or Duroplast central insert.
TAE 3x6 NFN. For 1 telephone and 2 additional devices or data terminals. 3 x 6 pole, 6 screwed contacts.

Bakelite® Order no. 100721
Duroplast Order no. 100725



ANTENNAE OUTLET FOR GLASS COVERING
Bakelite® or Duroplast central insert. HF-resistant Metal-housing. BZT-authorisation.

Radio- and television adaptor for systems with amplifiers or cable. Passage and terminal box.
Bakelite® Order no. 100723
Duroplast Order no. 100727

Radio- and television adaptor for systems with amplifiers according DIN 45330 with additional satellite outlet. (F-adaptor).

Terminal box, digitally compatible.
Bakelite® Order no. 100724
Duroplast Order no. 100728



ROTARY SWITCH WITH CENTRAL INSERT FOR GLASS COVERING
10 A, 10 AX, AC 250 V. Bakelite® or Duroplast central insert and locking bolt. With spring clips.

Alternation switch
Bakelite® Order no. 186883
Duroplast Order no. 186886

Crossbar switch
Bakelite® Order no. 186884
Duroplast Order no. 186887

Multi-circuit switch
Bakelite® Order no. 186882
Duroplast Order no. 186885

Blind switch
Bakelite® Order no. 186895
Duroplast Order no. 186896



TOGGLE SWITCH FOR GLASS COVERING
10 A, 10 AX, AC 250 V. Bakelite® or Duroplast central insert and toggle. With spring clips.

Alternation switch
Bakelite® Order no. 173043
Duroplast Order no. 176405

Crossbar switch
Bakelite® Order no. 173044
Duroplast Order no. 176406

DOUBLE TOGGLE SWITCH FOR GLASS COVERING
10 A, 10 AX, AC 250 V. Bakelite® or Duroplast central insert and two toggle. With spring clips.

Multi-circuit switch
Bakelite® Order no. 100571
Duroplast Order no. 100572



CONTROL SWITCH FOR GLASS COVERING
10 A, 10 AX, AC 250 V. Bakelite® or Duroplast central insert and compensator.

Bakelite® Order no. 173047
Duroplast Order no. 176407

ROCKER BUTTON WITHOUT SYMBOL FOR GLASS COVERING
10 A, AC 250 V. Bakelite® or Duroplast central insert and compensator.

Bakelite® Order no. 173054
Duroplast Order no. 176408

With illuminated compensator*
Bakelite® Order no. 100973
Duroplast Order no. 100981

Rocker button without symbol also available as an opener.

Other dimmers are available upon request.

Other dimmers are available upon request.

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SYSTEM COVERING WAIST GLASS
82 mm Ø. For vertical and horizontal assembly of all components with central insert.

Bakelite® Order no. 100611
Duroplast Order no. 100612

For vertical and horizontal assembly of rotary switch without central insert.
Bakelite® Order no. 100609
Duroplast Order no. 100608

For assembly of rotary switch without central insert.
Bakelite® Order no. 100609
Duroplast Order no. 100608



EXTERNAL SYSTEM COVERING GLASS
82 mm Ø. For vertical and horizontal assembly of all components with central insert.

Bakelite® Order no. 100613
Duroplast Order no. 100614

For vertical and horizontal assembly of rotary switch without central insert.
Bakelite® Order no. 100613
Duroplast Order no. 100614

For vertical and horizontal assembly of rotary switch without central insert.
Bakelite® Order no. 100613
Duroplast Order no. 100614



ROCKER BUTTON LIGHT FOR GLASS COVERING
10 A, AC 250 V. Bakelite® or Duroplast central insert and compensator with light symbol.

Bakelite® Order no. 173055
Duroplast Order no. 176409

With illuminated compensator*
Bakelite® Order no. 100974
Duroplast Order no. 100982

Glow lamp for buttons and control switch.
The lower screw is replaced by the glow lamp.
Order no. 173066



ROCKER BUTTON LIGHT FOR GLASS COVERING
10 A, AC 250 V. Bakelite® or Duroplast central insert and compensator with bell symbol.

Bakelite® Order no. 173056
Duroplast Order no. 176410

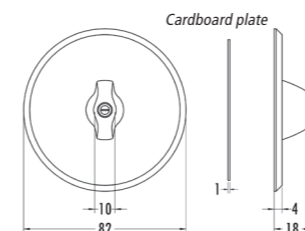
With illuminated compensator*
Bakelite® Order no. 100975
Duroplast Order no. 100983



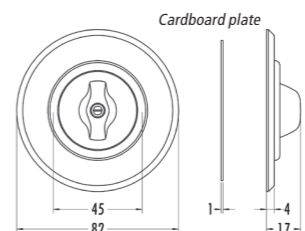
ROCKER BUTTON DOOR OPENER FOR GLASS COVERING
10 A, AC 250 V. Bakelite® or Duroplast central insert and compensator with key symbol.

Bakelite® Order no. 173057
Duroplast Order no. 176411

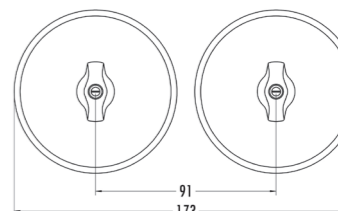
With illuminated compensator*
Bakelite® Order no. 100976
Duroplast Order no. 100984



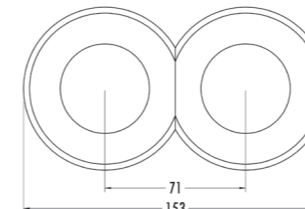
Single covering glass with rotary switch



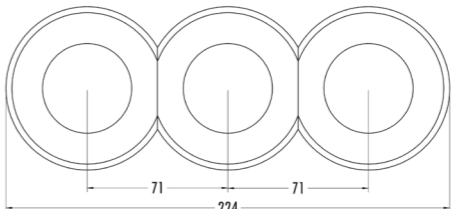
Single covering glass with rotary switch with central insert



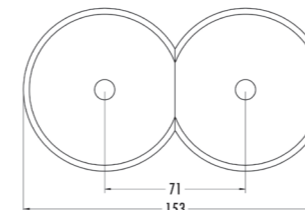
For the vertical and horizontal installation of several devices into individual covers, we recommend a pitch of 91 mm for optical reasons.



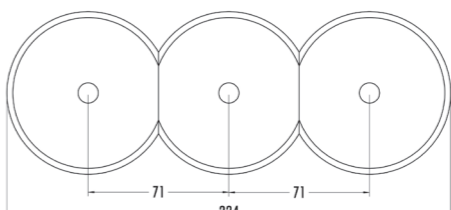
Double system covering glass for components with central insert



Triple system covering glass for components with central insert

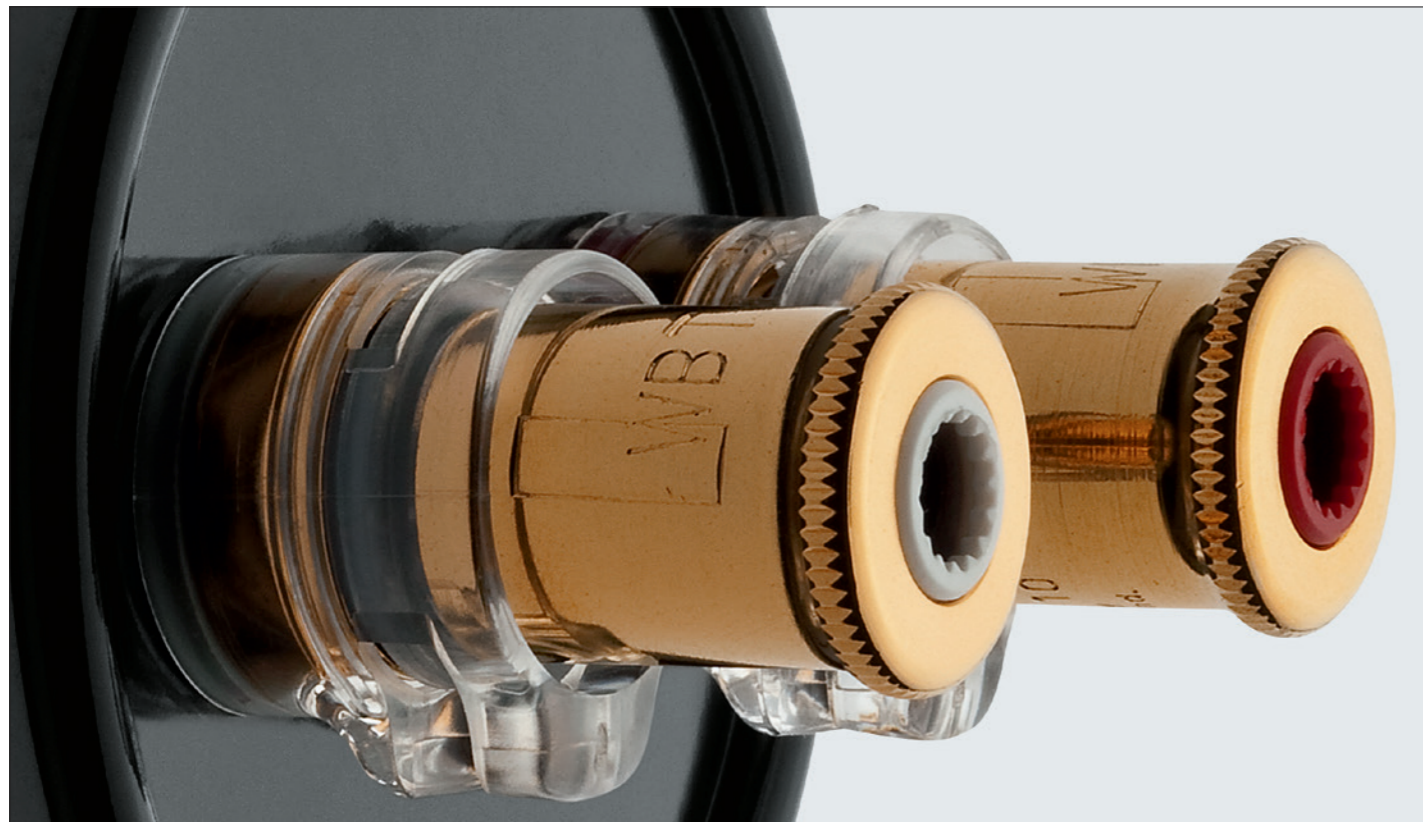


Glass double system covering for rotary switch without central insert



Glass triple system covering for rotary switch without central insert

Installation note: The distances of the inserts in all system coverings are consistent with the standard spacing of 71 mm and can be easily used with existing installations. The Glass switch system fits in all standard concealed outlets.



Bakelite® surface mounted. IP20

To complement our tried and tested switch systems of porcelain and Bakelite® we have developed switches and sockets for surface mounting. Optically, their design is reminiscent of historical predecessors – whereby they do, of course, comply with all current standards and safety regulations. The robust 2,5 mm thick casings of Bakelite® and Duroplast are moulded in one piece and provide sufficient impact protection for the electrical contacts underneath. To allow cables to be laid to or through the units, the casing has lateral sections which can be broken out along predetermined lines. The casing is open at the back, so that the cabling can also be laid below the surface. The mechanical components fulfil the same standards in respect of durability and service life as the other switch series which have already proved themselves in manufacturing and shipbuilding. Installation: The inner components are mounted on the underlying surface and then connected with the cabling, after which the casing is put in place and screwed tight. Where the underlying surface is flammable, it should first be covered using a suitable layer of material, e.g. Pertinax. As part of the surface mounting product series we supply matching base plates made of Bakelite® and Duroplast.

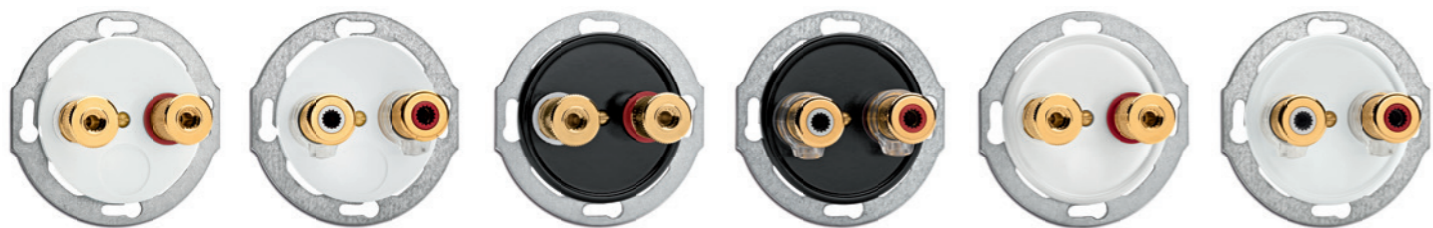
Of course, these switches and sockets also have the VDE test mark.



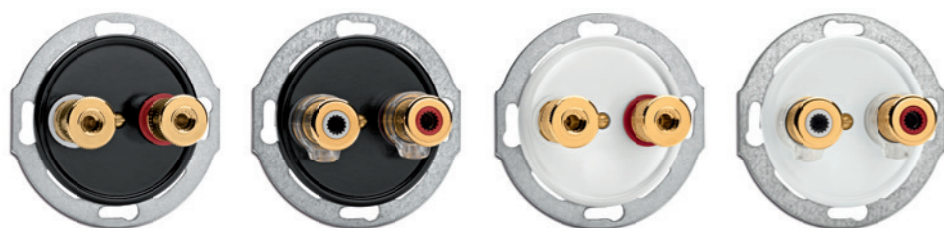
Free flowing music. Our audio wall sockets with WBT jacks.

High-end audiophilism has long left the ranks of unfounded theories – the differences are both measurable and perceptible. Often the weakest link is that, which has the most influence over the overall result. Up until a few years ago, this had usually been the plug connection that would rob the system and its expensive cables of its crisp sound. However, all this changed when the German company WBT redesigned its plugs and jacks according to audiophile principles. In the end, it is all about designing an interface between the cables and components that eliminates the possibility of physical phenomena that could disrupt or minimise performance. Since high purity and therefore softer metals are used for this purpose,

re-designing the basic structure of the supporting frame was also necessary. The transmitting systems have a minimalistic design. Direct comparisons demonstrated the crisp, powerful and crystal clear sound playback with this construction. That's why we wasted no time in installing them in the wall sockets of our switch series. This means that great sound is possible without having metres of cable running through the room. They can be concealed and create alternative locations for speakers or even junctions into neighbouring rooms. Our wall sockets can also be used as connection terminals for most speakers. For optimal results, these components should only be used in combination with WBT plugs and high-quality cables.



SPEAKER WALL SOCKET FOR PORCELAIN COVERING WBT WBT NEXTGEN™	Order no. 100741 Order no. 100742	SPEAKER WALL SOCKET WBT BAKELITE® WBT NEXTGEN™ BAKELITE®	Order no. 100737 Order no. 100738	SPEAKER WALL SOCKET WBT DUROPLAST WBT NEXTGEN™ DUROPLAST	Order no. 100739 Order no. 100740
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SPEAKER WALL SOCKET FOR GLASS COVERING WBT BAKELITE® WBT NEXTGEN™ BAKELITE®	Order no. 100737 Order no. 199738	SPEAKER WALL SOCKET FOR GLASS COVERING WBT DUROPLAST WBT NEXTGEN™ DUROPLAST	Order no. 100739 Order no. 100740
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Please note: The inserts are delivered without outside faceplates. Matching porcelain coverings can be found on page 7, Bakelite coverings on page 13, coverings for duroplast inserts on page 19 and matching glass coverings on page 25. Speaker wall sockets can be combined with multiple coverings excluding the porcelain double covering, and with special system faceplates.

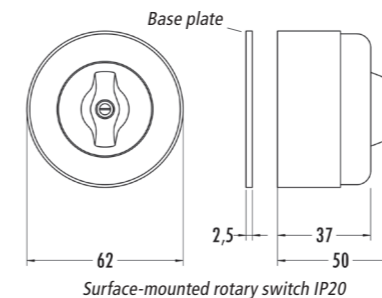


SURFACE-MOUNTED ROTARY SWITCH DUROPLAST 10 A, 10 AX, AC 250 V, IP20 62 mm Ø, height above surface incl. locking bolt 53 mm. Duroplast housing and locking bolt. With spring clip.	SURFACE-MOUNTED TOGGLE SWITCH DUROPLAST 10 A, 10 AX, AC 250 V, IP20 62 mm Ø, height above surface incl. toggle 49 mm. Duroplast housing and toggle.	SURFACE-MOUNTED OUTLET DUROPLAST 16 A, AC 250 V, IP20 62 mm Ø, height above surface 49 mm. Duroplast housing with shutter. With spring clips.
Alternation switch Crossbar switch Multi-circuit switch	Order no. 186889 Order no. 186890 Order no. 186888	Order no. 184197 Order no. 184206
	OUTLET WITH MIDDLE-SAFETY CONTACT DUROPLAST With shutter (French version).	Order no. 100062
	BASE PLATE DUROPLAST 62 mm Ø	Order no. 184642



SURFACE-MOUNTED ROTARY SWITCH BAKELITE® 10 A, 10 AX, AC 250 V, IP20 62 mm Ø, height above surface incl. locking bolt 53 mm. Bakelite® housing and locking bolt. With spring clip	SURFACE-MOUNTED TOGGLE SWITCH BAKELITE® 10 A, 10 AX, 250 V, IP20 62 mm Ø, height above surface incl. toggle 49 mm. Bakelite® housing and toggle	SURFACE-MOUNTED OUTLET BAKELITE® 16 A, AC 250 V, IP20 62 mm Ø, height above surface 49 mm. Bakelite® housing with shutter. With spring clips.
Alternation switch Crossbar switch Multi-circuit switch	Order no. 186892 Order no. 186893 Order no. 186891	Order no. 184198 Order no. 184207
	OUTLET WITH MIDDLE-SAFETY CONTACT BAKELITE® With shutter (French version).	Order no. 100063
	BASE PLATE BAKELITE® 62 mm Ø	Order no. 184619

Dimensioning in mm



IP20: Protected against foreign bodies > 12.5 mm. Not waterproof.

IP44 Bakelite® wall-mounted humidity-proof switch

They're a little piece of electrical industry history. Between the late 19th century and the mid-20th century, these switches featured in industrial complexes and also turned up in cellars and basements of ordinary homes. They had famous names – Siemens-Schuckert and Dr. Deisting – and their solid appearance made them electrical fittings which inspired absolute trust in their safety and stability. In Germany, people quipped that they were "thick-skinned", but there's no denying that the respect they earned was well-placed: even today, electrical specialists are regularly amazed by the reliability of even the oldest installations. This

is just one more reason why we've decided to produce our switches and outlets in the same designs as their hard-working predecessors. With Bakelite® walls 2.5 mm thick, these switches' authenticity is also underscored by their deeply satisfying acoustic qualities - no modern switch makes a click like these ones.

 Of course, all of our products have the VDE test mark if testing applies

Note: Each outlet comes with an additional rubber ring. If applied to an IP44 plug as an additional seal, the outlet attains safety rating IP44.



IP44 WALL-MOUNTED OUTLET BAKELITE®
16 A, AC 250 V, IP44. Length 8.5 cm, width 9.7 cm, height above surface 7 cm. Weight 160 g. Two-part case and lid made of Bakelite® with a single lateral input. Outlet with shutter. With spring clips. Cable mounted on wall surface. Safety rating IP44 with sealed lid, rating IP20 when plug inserted. Order no. **100828**

IP44 WALL-MOUNTED THROUGH OUTLET HORIZONTAL BAKELITE®
16 A, AC 250 V, IP44. Length 8.5 cm, width 9.7 cm, height above surface 7 cm. Weight 190 g. For horizontal layouts with two outlets, e.g. for two or more outlets at different locations in a single room. Two-part case and lid made of Bakelite® with adjacent in- and outputs. Outlet with shutter. With spring clips. Cable mounted on wall surface. Safety rating IP44 with sealed lid, rating IP20 when plug inserted. Order no. **100830**

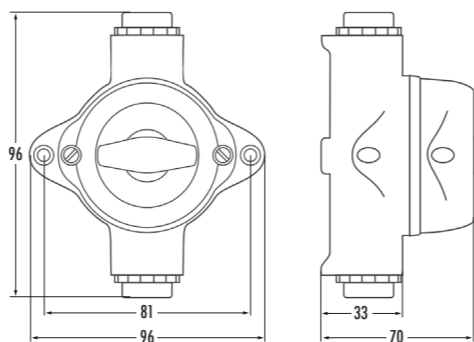
IP44 WALL-MOUNTED THROUGH OUTLET VERTICAL BAKELITE®
16 A, AC 250 V, IP44. Length 11 cm, width 9.7 cm, height above surface 7 cm. Weight 190 g. For vertical layouts with two outlets. Two-part case and lid made of Bakelite® with non-adjacent in- and outputs. Outlet with shutter. With spring clips. Cable mounted on wall surface. Safety rating IP44 with sealed lid, rating IP20 when plug inserted. Order no. **100829**



IP44 WALL-MOUNTED ROTARY ALTERNATING SWITCH BAKELITE®
10 A, 10 AX, AC 250 V, IP44. Length 8.5 cm, width 9.7 cm, height above surface 6.5 cm. Weight 190 g. Two-part case and locking bolt made of Bakelite® with a single lateral input. With spring clips. Cable mounted on wall surface. Order no. **100831**

IP44 WALL-MOUNTED THROUGH ROTARY ALTERNATING SWITCH, VERTICAL BAKELITE®
10 A, 10 AX, AC 250 V, IP44. Length 11 cm, width 9.7 cm, height above surface 6.5 cm. Weight 220 g. For vertical layouts with outlet and rotary switch. Two-part case and locking bolt made of Bakelite® with a single lateral input. With spring clips. Cable mounted on wall surface. Order no. **100832**

Dimensioning in mm



Surface-mounted rotary switch IP44

IP 44: Protected against foreign bodies > 1 mm. Protected against spray water on all sides.



Goodbye cable channel, hello cloth-covered cable. Standards-compliant, of course.

Running cables along a wall isn't just the most cost-effective way of wiring up a room – it can also have a distinct aesthetic appeal, for example when workspaces and cellars are converted into residential spaces. However, this solution has one obvious disadvantage: today's wall-mounted cables are just so ugly. Though these cables meet regulatory standards, there's no way to prettify them - attempting to hide them in plastic cable covers just makes them even more of an eyesore. However, we have come up with a solution to this dilemma.

An innovation: black cloth-covered cables for wall-mounting.

We hired experts to sheath a standard-compliant NHXMH-cable (5 x 1.5 mm²) in a tube of fabric, and the resulting product adds the perfect touch to interiors, even ones with high humidity levels, as well as being flame-retardant.

TEXTILE CABLE
NHXMH-cable (5 x 1.5 mm²) in a tube of fabric. Suitable for interiors, even ones with high humidity levels. Flame-retardant. 10 m.
5 x 1,5 mm² Order no. **100834**
5 x 2,5 mm² Order no. **100294**

And the cable clamps...

Matching cable clamps made of black plastic are also available and come in pairs. They can be used to attach cables to walls and route wires; screws for securing the clamps are included.

CABLE CLAMPS
Black plastic. For cables from 10 – 17 mm diameter. Length 3.5 cm, width 1.5 cm, height 2.4 cm, weight 10 g. Smallest pack size: 5 items. Order no. **100825**

Bakelite® junction box

Fortunately, we were able to find the tool for this model, which must surely be more than 60 years old. After undergoing restoration and appropriate VDE testing, this junction box now fills a gap in our surfacemounted range and rounds it out in the most attractive and also functional design. Bakelite® housing in black or white with six knockout entries featuring rubber gaskets for various installation options.

JUNCTION BOX
AC 400 V. For cables up to 4 x 2.5 mm. Breadth 9.5 cm, length 9.5 cm, height 4.5 cm. Weight: 140 g. IP 44.

Bakelite® Order no. **100922**
Duroplast Order no. **100923**



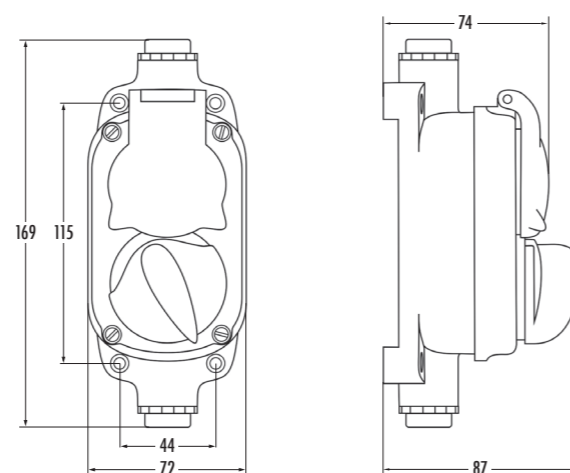


Surface-mounted garage outlet

Switchable outlet via rotary switch lock. Electricity supply is only possible when outlet is locked (rotary switch in position I); the plug can only be pulled out in position 0. This outlet was originally designed for use in rooms such as garages and cellars, and on building sites, in order to avoid the danger of explosions related to possible flying sparks when a plug is pulled out. The casing is surface-mounted and is secured via four screw fittings on the sides. Cable inlet on surface.

**SURFACE-MOUNTED GARAGE OUTLET IP20
BAKELITE®**
2-pole, 16 A, AC 250 V, IP 20.
External size 72 x 151 mm, height above surface 87 mm.
Bakelit® housing. With spring clips. Order no. 100295

Dimensioning in mm



Surface-mounted garage outlet





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