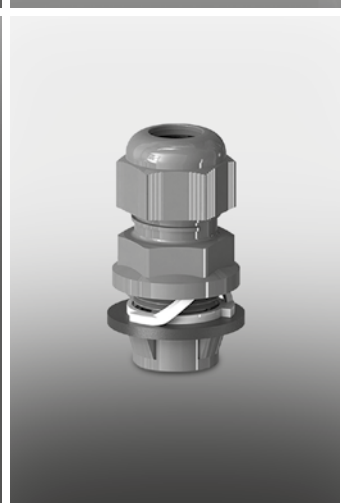
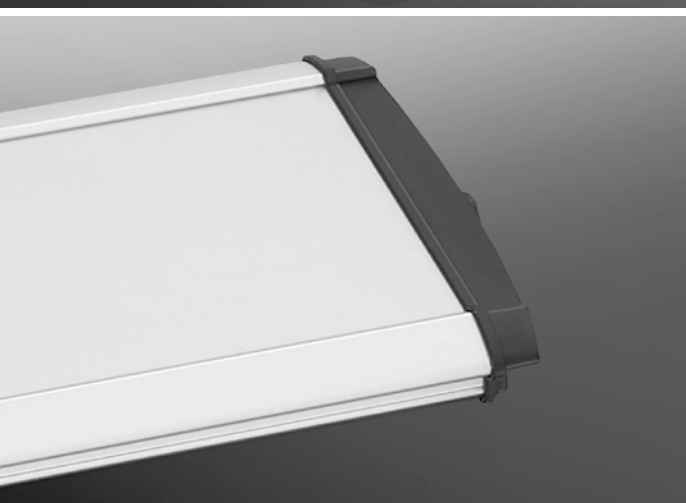




**BOPLA**

A Phoenix Mecano Company



# NEW PRODUCTS

2018 / 2019

**BOPLA**  
enclosures ■ content matters

# SERVICE

## CONSULTANCY



- Specification
- Preliminary costing

## CONSTRUCTION



- Prototype manufacture
- Modification of standard enclosures
- Individual enclosures
- Consultation

## PRODUCTION



- Milling
- Drilling
- Countersinking
- Punching
- Sawing

## VALUE-ADDED SERVICES



- Printing
- Lacquering
- Engraving
- Laser marking
- EMC screening

## ASSEMBLY



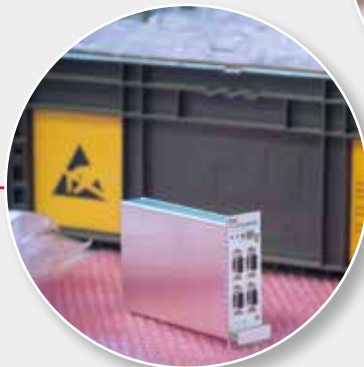
- Integration of membrane keypads / HMI
- Mounting
- Wiring
- Cable assembly

## TEST



- IP test
- IK impact test
- Climatic test
- EMC test

## PACKAGING



- ESD-compliant packaging
- Individual packaging
- Panel packaging
- Logistics concept

# CONTENT

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<b>BoLink</b>	Page 6
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# BoPad

- 5 basic sizes
- 2 colours
- Flat or inclined variants
- Battery compartment variants up to BOP 900
- Design seal optional
- Impact protection optional
- Optimised for the integration of touch screens or displays (BOP 7.0 / 10.1)
- Direct VESA fitting possible (BOP 7.0 / 10.1)

**Colour:** Black, similar to RAL 9005;  
White, similar to RAL 9016; Special colours on request

**Protection Class:** IP40; with seal: IP 65 DIN EN 60529

**Material:** Enclosures: ABS  
Seal / impact protection: TPE



Optimised for the integration of touch screens and Li-Ion rechargeable battery system 18650 (BOP 7.0 or BOP 10.1 resp.)



Ergonomic grip recess on the enclosure and also on the impact protection (BOP 7.0 or BOP 10.1 resp.)



Integrated VESA fixing (75 x 75 mm) which is also used for mounting the optional wall fitting (BOP 7.0, BOP 10.1)





**Hand-held enclosure**

IP40 (IP65)

Model	Dimensions
BOP 500	130 x 75 x 26 mm
BOP 520	130 x 75 x 17.5 mm
BOP 700	165 x 90 x 34 mm
BOP 900	200 x 105 x 34 mm

**Hand-held enclosure with battery compartment**

IP40 (IP65)

Model	Dimensions
BOP 500 BE4MC	130 x 75 x 26 mm
BOP 700 BE4MN	165 x 90 x 34 mm
BOP 900 BE4MN	200 x 105 x 34 mm

**Desktop enclosure**

IP40 (IP65)

Model	Dimensions
BOP 700 PH	165 x 90 x 34 mm
BOP 900 PH	200 x 105 x 34 mm



**Touch/operating enclosure**

IP40 (IP65)

Model	Dimensions
BOP 7.0	215 x 150 x 46 mm
BOP 10.1	285 x 198 x 46 mm

**Touch/operating desktop enclosure horizontal**

IP40 (IP65)

Model	Dimensions
BOP 7.0 PQ	215 x 150 x 35 mm
BOP 10. PQ	285 x 198 x 61.2 mm



Design seals IP65

Impact protection



# BoLink

- 1 basic size
- 3 heights
- 2 colours
- 3 variants  
(without wall brackets, with wall brackets, with wall brackets and lid fixing on top)
- Design seal optional
- PC material is suitable for outdoor use due to its f1-listing according to UL 746C

**Colour:** Black, similar to RAL 9005;  
White, similar to RAL 9003; Special colours on request

**Protection Class:** IP40; with seal: IP 65 DIN EN 60529

**Material:** Enclosures: PC UL 94 V0  
Seal: TPE



Ingress protection IP65 by means of design seal; available in various colours. This increases the electronics mounting height by approx. 1.7 mm.



A 1.6 mm thick PCB can be clamped directly between the enclosure parts and optionally hot-caulked via two pins.



Pressure compensation by mounting the DAE-D11 pressure compensation membrane. For this purpose, drill (or punch) a hole in the moulded contour from the inside and glue the membrane in position.



**Enclosure**  
IP40 (IP65)

Model	Dimensions
BL 704015	70 x 42.4 x 15,5 mm
BL 704020	70 x 42.9 x 22 mm
BL 704025	71 x 43.2 x 26 mm



**Enclosure with wall brackets**  
IP40 (IP65)

Model	Dimensions
BL 704015 WL2	70 x 42.4 x 15,5 mm
BL 704020 WL2	70 x 42.9 x 22 mm
BL 704025 WL2	71 x 43.2 x 26 mm



**Enclosure with wall brackets and lid fixing from the top**  
IP40 (IP65)

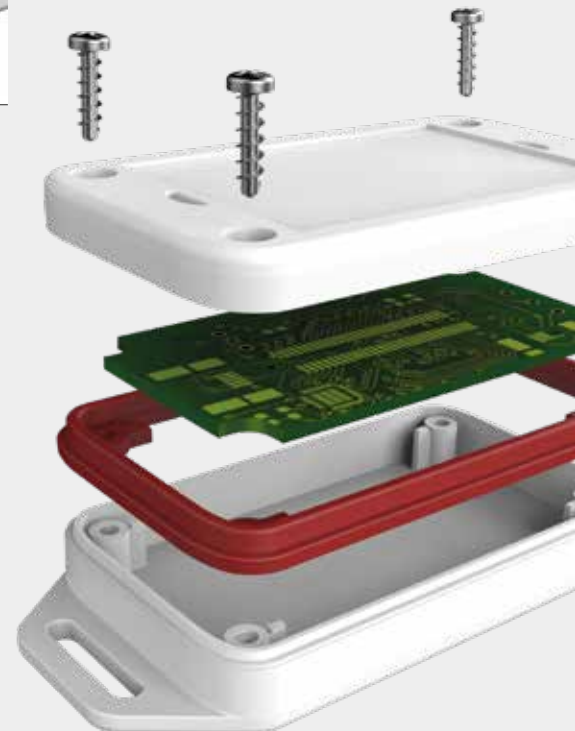
Model	Dimensions
BL 704015 WL2 DO	70 x 42.4 x 15,5 mm
BL 704020 WL2 DO	70 x 42.9 x 22 mm
BL 704025 WL2 DO	71 x 43.2 x 26 mm

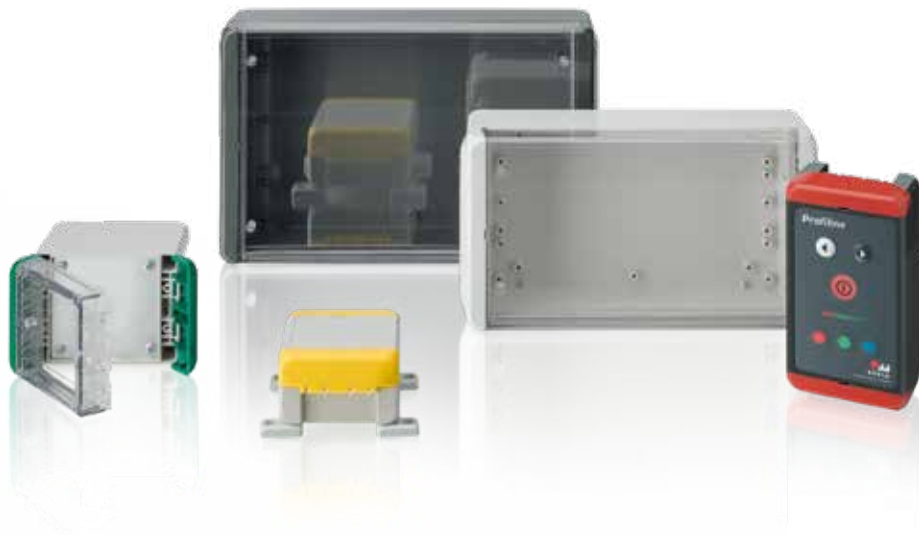


**Design seals IP65**



**Pressure compensation DAE**

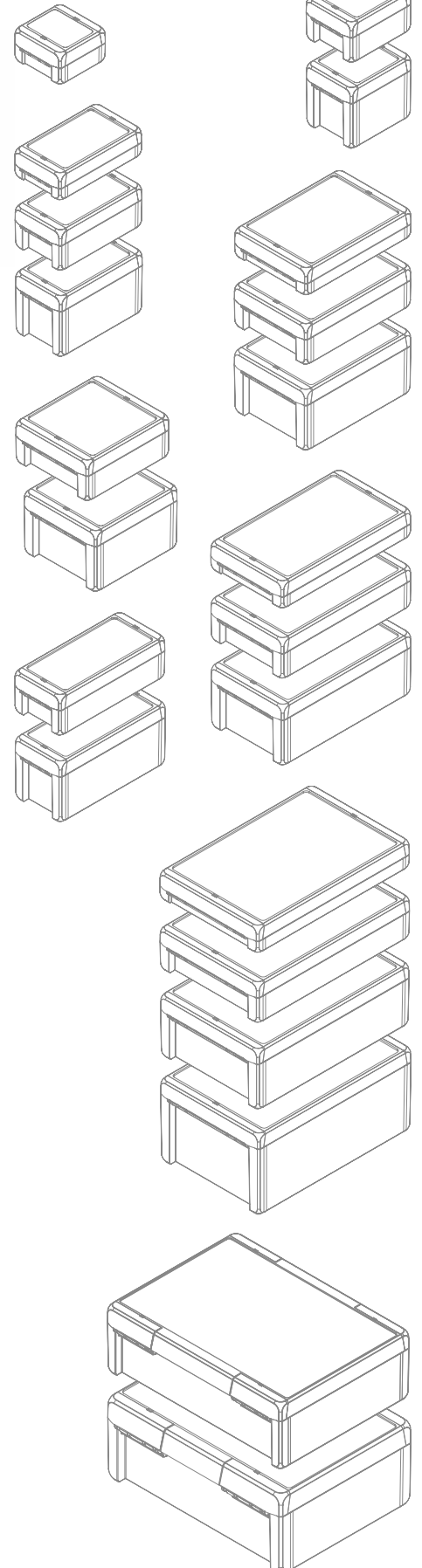




**NEW**

Enclosure size B 100804

113 x 80 x 40 mm



# Bocube

- 23 sizes, 138 standard combinations possible
- 2 material types: ABS or PC UL 94 V0, flame-resistant and self-extinguishing
- Patented, innovative, hinged quick-release catch technology without screws: open with a screwdriver, close by hand
- Captive lid with membrane keypad area, available in 2 variants: grey or crystal-clear
- Elegant design, hinged quick-release catches available in different colours (hand or tool operated)

**Colour:** Graphite grey, similar to RAL 7024;  
Light grey, similar to RAL 7035; special colours on request

**Protection Class:** IP66 / IP68 – 1.2 m (2 hours) DIN EN 60529

**Material:** Enclosure: ABS or PC UL 94 V0 (material is suitable for outdoor use; f1-listing according to UL 746C)  
Seal: PU foamed



**Light grey enclosure:**  
Single-coloured or with crystal-clear lid.



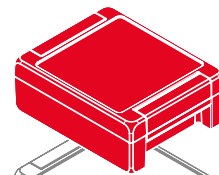
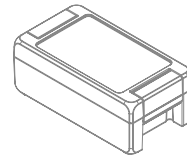
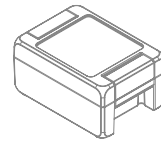
**Graphite grey enclosure:**  
Single-coloured or with crystal-clear lid.



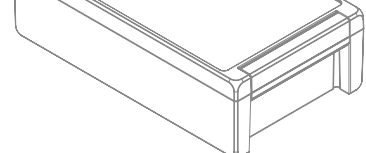
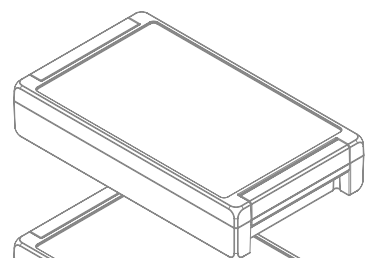
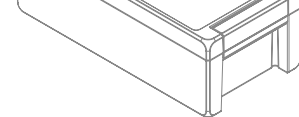
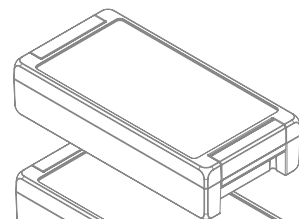
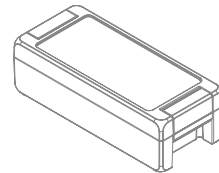
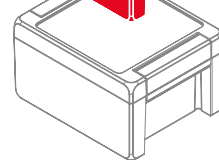


**NEW**

Enclosure size BA 141306



159 x 128 x 60 mm



# Bocube Alu

- 9 sizes
- Modern design, corresponding to the Bocube plastic enclosure
- All enclosure components made of metal
- All versions are listed under UL file no. 196 706
- Captive lid with smooth surface or recessed membrane keypad area
- Hinge integrated in the enclosure design
- Also available screwed on both sides (without hinge)
- No visible enclosure screws
- Prepared for cost-efficient integration of pressure compensation elements
- Mounting space for rectangular panels and PCBs
- Terminals and mounting on request

**Colour:** Graphite grey, similar to RAL 7024;  
Light grey, similar to RAL 7035; special colours on request

**Protection Class:** IP66 / IP68 – 1.2 m (2 hrs.) / IP69 DIN EN 60529  
Impact protection IK 08 acc. to IEC 62262 (max. IP66 / IP68)  
Impact protection IK 07 acc. to IEC 62262 (IP69)

**Material:** Enclosure: GD Al Si 12  
Seal: PU foamed  
Hinges / covers: Al Mg Si 0.5 powder-coated / natural-coloured anodised  
The materials correspond to requirements set R1 or R7 acc. to DIN EN 45545-2 of hazard level HL3.

## New accessory components



Enclosure handle elements, also for protection of built-in components.

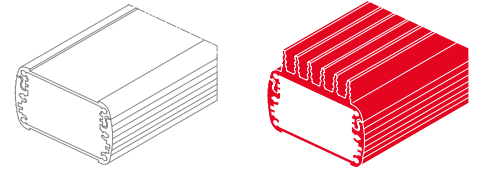


The new quick-release fastener – available as an option – in anodised aluminium is operated by hand and forms an attractive contrast to the dark grey enclosure.

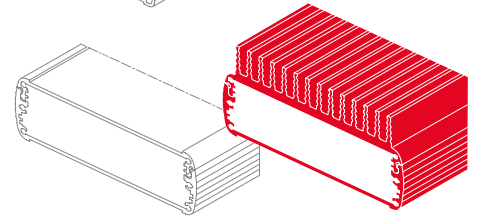
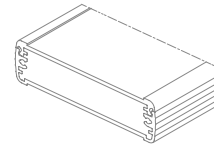
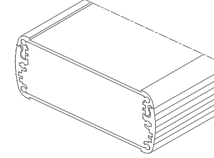


**NEW**

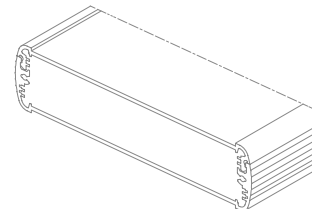
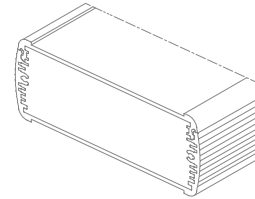
3 Profiles with heat-sink  
1 Profile horizontally-divided



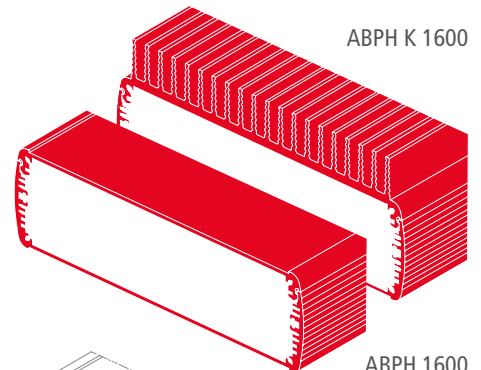
ABPH K 600



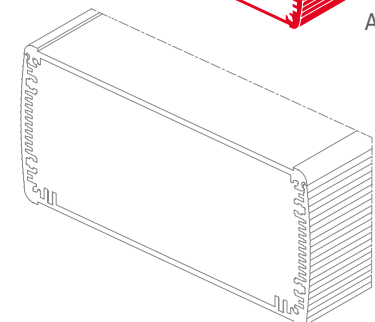
ABPH K 1000



ABPH K 1600



ABPH 1600



# Alubos

- 4 profile variants
- 9 profile cross-sections
- Standard lengths ex warehouse
- Special lengths available at short notice
- Functional diecast aluminium end covers
- Good EMC shielding
- Design seals in 5 colours
- Wide range of accessories
- Good heat dissipation in combination with IP 65

**Colour:** Black, similar to RAL 9005; special colours on request

**Protection Class:** ABP, ABPH: up to IP65 / DIN EN 60529;  
ABPU: IP40 / DIN EN 60529

**Material:** Extruded profiles: Al Mg Si 0.5 powder-coated  
Diecast lid: GB Al Si 12, powder-coated  
Seal: TPE



**ABPH K 600**

Cross-section 57 x 32 mm\*



**ABPH K 1000**

Cross-section 106 x 32mm\*



**ABPH K 1600**

Cross-section 169 x 52 mm\*



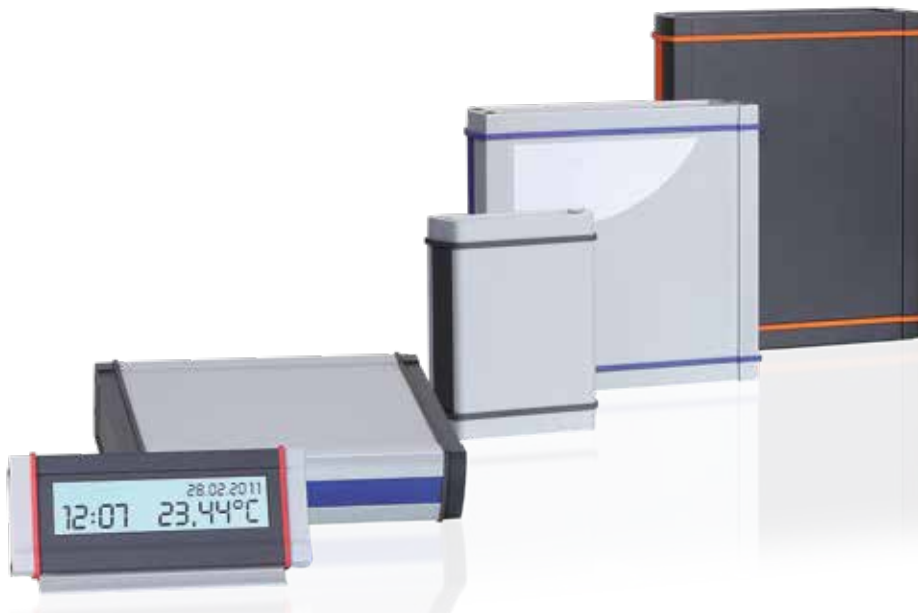
**Impact protection seal**  
For lid ABD 1040



**ABPH 1600**

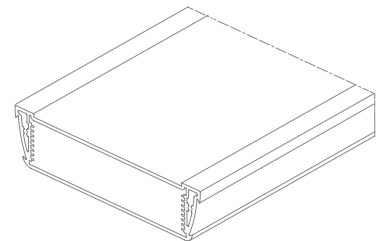
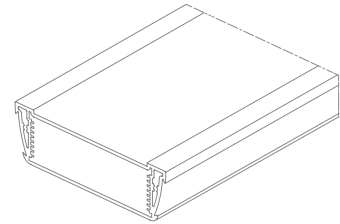
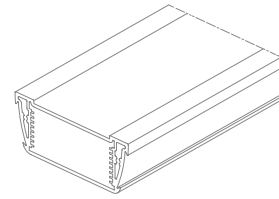
Cross-section 169 x 52 mm

\*Dimension without cooling fins

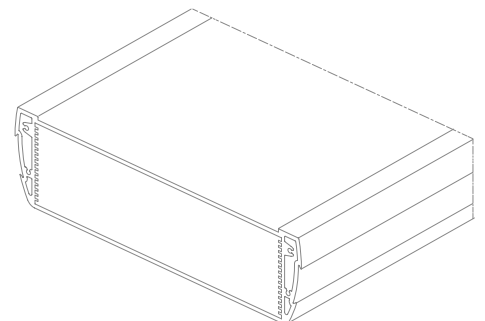


**NEW**

1 New profile cross-section  
AS 1540



AS 1540



# Alustyle

- 3 profile variants
- 5 profile cross-sections
- Standard lengths ex warehouse
- Special lengths available at short notice
- Functional end covers
- Good EMC shielding
- Powder-coating, depending on type, similar to RAL 7024 or 9006
- Design seals in 5 colours
- Special colours on request
- Wide range of accessories

**Colour:** Graphite grey, similar to RAL 7024 or Silver, similar to RAL 9006  
Dark grey seal; special colours on request

**Protection Class:** ASP: up to IP66 / IP68 – 1,2m (2 hours) / DIN EN 60529  
when used with ASD

**Material:** ASPH: IP65 / DIN EN 60529; ASPU: IP40 / DIN EN 60529  
Extruded profiles: Al Mg Si 0.5 powder-coated  
Ddiecast lid: zinc alloy Z410 / aluminium GD Al Si 12 (ASD 1540),  
powder-coated  
Seal: TPE



AS 1540: Ideal for applications with 7"-touch screens.

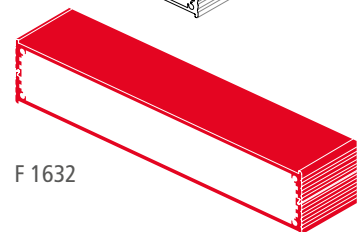
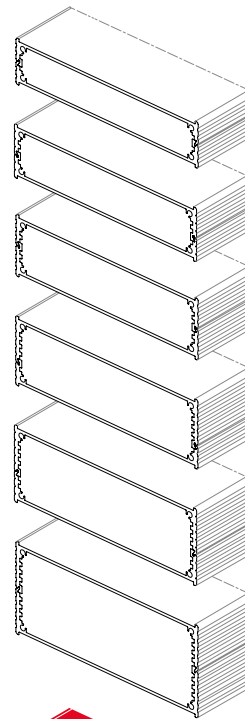
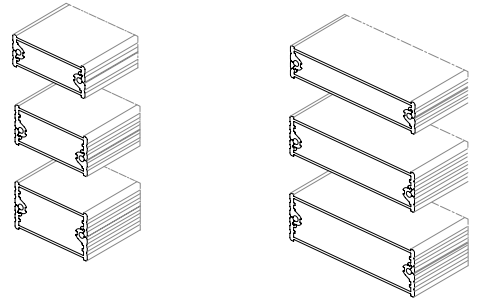
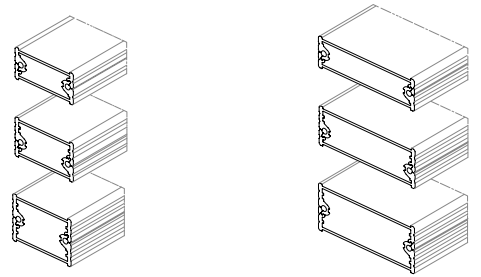


AS 1540: Light weight version due to diecast aluminum lid.



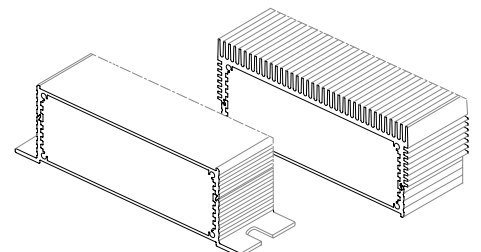
**NEW**

1 New profile cross-section  
F 1632



F 1632

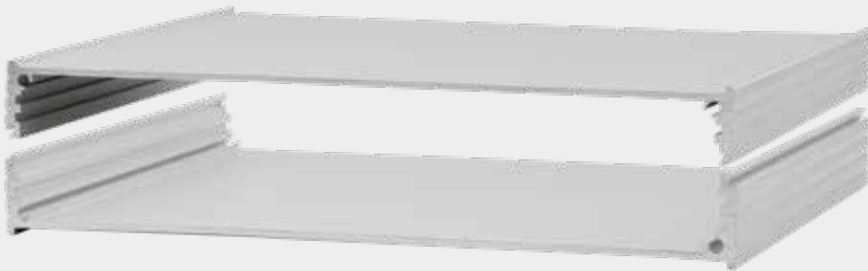
Filotec enclosures are also available in many sizes.  
Wall brackets, heat-sinks or both available.



# Filotec

- More than 100 standard enclosures, comprised of 6 widths, up to 6 heights, 3 variants and various standard lengths
- Profile variants: Variant with membrane keypad area (1 mm and 1.5 mm), variant with cooling fins, variant with moulded-on wall brackets
- Special lengths available at short notice
- Anodised aluminium end cover

**Colour:** Natural-coloured anodised  
**Protection Class:** IP40 / DIN EN 60529  
**Material:** Al Mg Si 0.5 anodised



**F 1632**

162 x 33 mm



Filotec enclosures are also available with cooling fins and / or wall brackets.



All enclosures are equipped with a 1 mm or 1.5 mm recessed surface for membrane keypads.





# BOS-Ecoline

- 3 profile variants
- 4 profile cross-sections
- 3 standard lengths ex warehouse, special lengths available at short notice
- End covers also available with moulded-on wall fitting
- Console type on request

**Colour:** Profile natural-coloured anodised aluminium;  
Black plastic lid, similar to RAL 9005  
Dust grey, similar to RAL 7037; special colours on request

**Protection Class:** IP40 / DIN EN 60529; ELP with optional seal, upgradable to IP54 / DIN EN 60529; ELPH with IP54 / DIN EN 60529 on request

**Material:** Extruded profiles: Al Mg Si 0.5 anodised  
Plastic lid: ABS

**NEW**

Black end cover  
similar to RAL 9005



ELP...D – Standard end cover



ELP...DW – End cover with wall fixings



# Alu-Topline

- 4 standard lengths; flexible length design available
- 2 heights, more dimensions on request
- Horizontally-divided profiles for easy mounting
- Recessed membrane keypad area in the lid
- Mounting grooves inside
- „Invisible“ wall fitting as accessory

**Colour:** Profile: natural-coloured anodised aluminium  
Plastic lid: Black, similar to RAL 9005  
or graphite grey, similar to RAL 7024; special colours on request

**Protection Class:** IP40 / DIN EN 60529; IP54 / DIN EN 60529 as an option

**Material:** Extruded profiles: Al Mg Si 0.5 anodised  
Plastic lid: ABS

**NEW**

Black end cover  
similar to RAL 9005



ELP...D – Standard end cover  
Black



ELP...D – Standard end cover  
Graphite grey



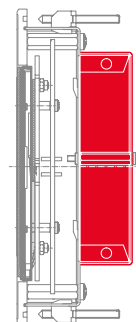
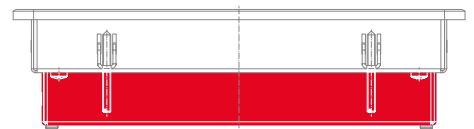
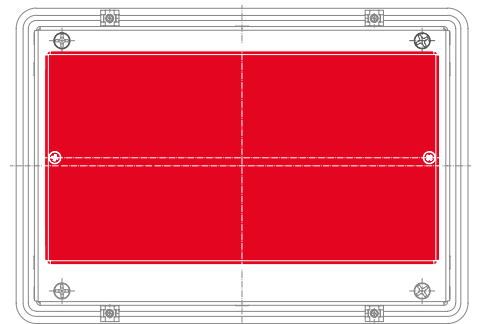
**NEW**

Split rear hood at  
BoTouch Aluminium

# BoTouch Alu

- BoTouch Aluminium (BTA) designed for use with resistive touch screens (from 5.7" to 12.1")
- Project-specific variants on request
- Enclosure front / front membrane: project-specific printing
- Rear hood/enclosure frame fitted with clamps for panel installation
- Project-specific display retaining plate made of aluminium (the following are required for preparation work: sample, CAD data or a datasheet for the touch / display combination)
- Starter kits are available consisting of enclosure incl. mounted display for various designs

**Colour:** Customer-specific  
**Protection Class:** Up to IP65 / DIN EN 60529 for the installation area  
**Material:** Rear hood: galvanised sheet steel  
 Rear panel: anodised aluminium  
 Front frame: aluminium anodised or powder-coated



**BTA 7.0 Starter kit:**  
 Consisting of front frame, front foil, display incl. retaining plate, split rear hood, mounting plate, screws and clamping elements. Available upon request.



**Enclosure backside:**  
 View with split rear hood made of aluminium.

- BoTouch BTK:** Further variants made of plastic available!
- Up to IP65
  - Optimized for capacitive touchscreens (4.3" - 10.4")
  - Starter kits are available in 5" and 7"

# Cable glands / Pressure compensation elements



## Pressure compensation element DAE bis IP69

Model	Order number	Note
DAE M6 7035	52041060	Light grey, M6 x 0.75
DAE M6 9005	52042060	Black, M6 x 0.75
DAE M12 7035	52041000	M12 x 1.5
DAE M12 9005	52042000	M12 x 1.5
DAE M12 Metal	52042505	M12 x 1.5

Scope Of Delivery: 5 pieces / DAE Metal: 1 piece



## Pressure compensation gland MBF / polyamide light grey / IP66, IP67

Model	Order number	Note
DAE-MBF 12	12004100	M12 x 1.5; cable diameter 4-7mm
DAE-MBF 16	12004200	M16 x 1.5; cable diameter 4-7mm
DAE-MBF 20	12004300	M20 x 1.5; cable diameter 6-11mm



## Pressure compensation gland MSBF / nickel-plated brass / IP66, IP67

Model	Order number	Note
DAE-MSBF 12	13004100	M12 x 1.5; cable diameter 4-7mm
DAE-MSBF 16-1	13004200	M16 x 1.5; cable diameter 4-7mm
DAE-MSBF 16-2	13004250	M16 x 1.5; cable diameter 5-9mm
DAE-MSBF 20	13004300	M20 x 1.5; cable diameter 6-11mm



## Plug-in cable gland / polyamide light grey / IP66, IP68

Model	Order number	Note
S-MBF 16	12003200	Drill hole $\varnothing$ 16.3; cable diameter 5-10 mm
S-MBF 20	12003300	Drill hole $\varnothing$ 20.3; cable diameter 6-12 mm
S-MBF 25	12003400	Drill hole $\varnothing$ 25.3; cable diameter 11-17 mm
S-MBF 32	12003500	Drill hole $\varnothing$ 32.3; cable diameter 15-21 mm

Note: Dismantling tool available.



## Cable gland MBF with slotted sealing insert / polyamide light grey / IP66, IP68

Model	Order number	Note
MBF 20-RJ45	12002418	Max. connector $\varnothing$ 14.5 mm, cable $\varnothing$ 3-6 mm
MBF 25C-USB	12002414	Max. connector $\varnothing$ 17.0 mm, cable $\varnothing$ 3-8 mm
MBF 25-USB	12002404	Max. connector $\varnothing$ 18.5 mm, cable $\varnothing$ 3-8 mm

## Cable gland MSBF with slotted sealing insert / nickel-plated brass / IP66, IP68

Model	Order number	Note
MSBF 32-USB	13002504	Max. connector $\varnothing$ 18,5 mm, cable $\varnothing$ 3-8 mm

Note: With slotted sealing insert for mounting cables with a connector.

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Phone +49 (0) 5223-969-0 | Fax +49 (0) 5223-969-100  
info@bopla.de | www.bopla.de



**BOPLA**

A Phoenix Mecano Company

Detailed product information can be found on [www.bopla.de](http://www.bopla.de)



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