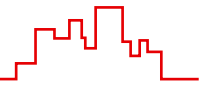BOS-Ecoline combines the advantages of aluminium profiles with the optimal cost effectiveness of plastic caps to create a superior enclosure concept. Different sizes and profile types permit use with an extremely wide range of electronic products.

Four cross-section formats are available, each in a closed, open-on-one-side or divided version. The robust aluminium profiles are available in each size and design in three standard lengths ex-warehouse.

Plastic caps, with or without integrated wall brackets, are available as end elements. Depending on the profile type, ingress protection category IP 40 can be increased to IP 54 by means of a seal set.

As a system supplier, in addition to mechanical processing, BOPLA can supply customer-specific membrane keypads and the assembly of complete enclosures including electronic components.

Enclosure material: Aluminium-extruded profile: Al Mg Si0.5. Plastic cover: ABS. Technical data see page 646-655

Colour: Profiles, anodised, colourless, cover dust grey, similar to RAL 7037; special colours on request.

Ingress protection: IP 40 / DIN EN 60529. Can be upgraded to IP 54 if ELP is used with EL ... DI. IP 54 protection for ELPH ... on request.
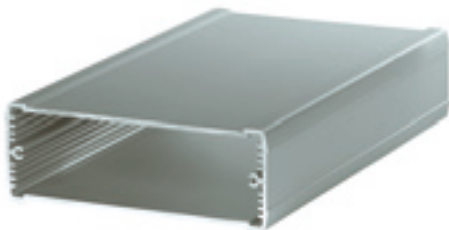
Accessories (additional charge):
EL ... DI: Seal for ingress protection IP 54

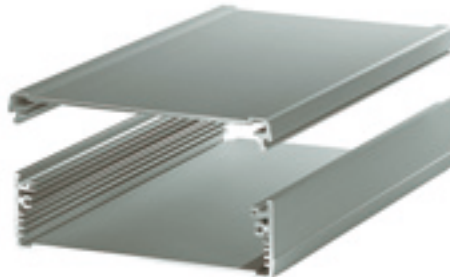For Universal Docking Station UDS, see page 606.

Note

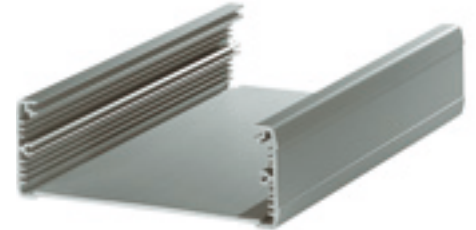Desktop model for all BOS-Ecoline sizes available on request.

The individual components:

ELP closed profile

ELPH horizontally-divided profile

ELPU open-on-one-side profile

The profiles are fitted with grooves to take PCBs or mounting panels.
There are recessed surfaces on the top and bottom sides for the fitting of membrane keypads. The side surfaces also have smooth surfaces so that elements such as USB interfaces, Sub-D plugs or similar can be placed on the sides.
With the horizontally-divided version, it is possible to fit elements which project through the keypad area.
Both profiles are held together by means of a tried-and-tested snap connection. The design is the same as that used for the closed type, except that in the area of the snap-on device the grooves are closer to the middle of the enclosure.
With the version which is open on one side, front panels made of a very wide range of materials, or pre-assembled PCBs, can be used as an operating front.
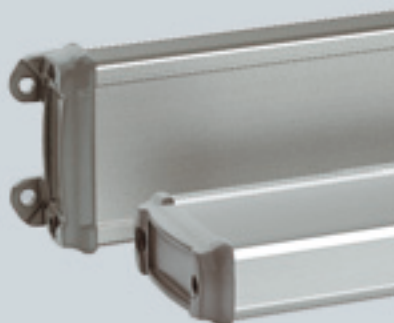

End cover without integrated wall brackets (... D)

The end covers have a 1.5 mm deep recessed area to take front membranes or membrane keypads. On the inside there are screw-on bosses (except for EL 620) for the fitting of PCBs parallel to the membrane keypad area and which are designed to match the height of short-stroke keys.
The wall-fixing covers are identical to the end caps described above, but with wall-fixing brackets integrated in the design.

End cover with integrated wall brackets (... DW)

All dimensions in mm. Please refer to technical data. 525

BOS-Ecoline 620

The robust aluminium profile is 57.5 mm wide and 22 mm high. A closed, a horizontally-divided and an open-on-one-side type are available. End element plastic caps made of ABS (with or without wall brackets) are included in the scope of delivery. Infrared-permissive end elements are available on request.
The enclosure system provides ingress protection IP 40 as standard, which can be increased to a maximum of IP 54 in the closed ELP 620 profile type by using seal EL 620 DI. For the horizontally-divided profile type ELPH 620, ingress protection can be increased to IP 54 on request.

Sealing

Front panels for ELPU 620 (not illustrated). The front panels for the ELPU 620 profile are manufactured as standard of anodised 1.5 mm thick aluminium. In the case of running lights and similar product features, these front panels can also be manufactured out of red translucent or clear plastic. In addition, preassembled PCBs can be used together with a front membrane as an operating front.

Enclosure combination with closed profile (ELP)

Order designation

Model	Order no.	Profile length	Ingress protection
ELP 620-0100 D	83062100.S1	100	IP 40
ELP 620-0150 D	83062150.S1	150	IP 40
ELP 620-0200 D	83062200.S1	200	IP 40
ELP 620-0100 DW	83062100.S2	100	IP 40
ELP 620-0150 DW	83062150.S2	150	IP 40
ELP 620-0200 DW	83062200.S2	200	IP 40

Enclosure combination with horizontally-divided profile (ELPH)

Order designation

Model	Order no.	Profile length	Ingress protection
ELPH 620-0100 D	83626100.S1	100	IP 40
ELPH 620-0150 D	83626150.S1	150	IP 40
ELPH 620-0200 D	83626200.S1	200	IP 40
ELPH 620-0100 DW	83626100.S2	100	IP 40
ELPH 620-0150 DW	83626150.S2	150	IP 40
ELPH 620-0200 DW	83626200.S2	200	IP 40

Enclosure combination with U-shaped profile (ELPU)

Order designation

Model	Order no.	Profile length	Ingress protection
ELPU 620-0100 D	83627100.S1	100	IP 40
ELPU 620-0150 D	83627150.S1	150	IP 40
ELPU 620-0200 D	83627200.S1	200	IP 40
ELPU 620-0100 DW	83627100.S2	100	IP 40
ELPU 620-0150 DW	83627150.S2	150	IP 40
ELPU 620-0200 DW	83627200.S2	200	IP 40

Front panels for ELPU 620 please order separately.

Code ...   D   = end cover without wall bracket
Code ...   DW = end cover with wall bracket

Scope of delivery: 1 enclosure profile, 2 plastic end covers, 4 screws, 4 screw covers

Seal for ingress protection IP 54 (not with ELPU; IP 54 for ELPH on request)
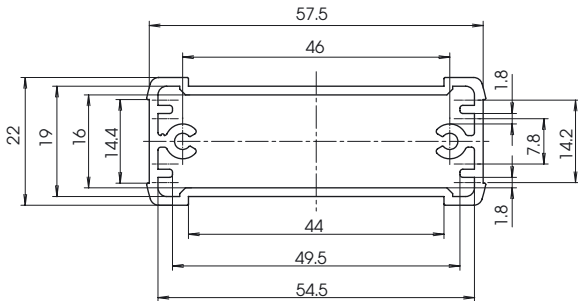**Order designation**

Model	Order no.	Scope of delivery
EL 620 DI	83206210	10 sponge rubber seals

Front panels for U-shaped profile (ELPU)

Order designation

Model	Order no.	L = profile length	Width	Thickness
ELPU 620-0100 FP1,5	83628100	100	51.5	1.5
ELPU 620-0150 FP1,5	83628150	150	51.5	1.5
ELPU 620-0200 FP1,5	83628200	200	51.5	1.5

ELP 620

57.5
46
1.8
22
19
16
14.4
7.8
14.2
44
49.5
54.5

Z-2802502

ELPH 620   **EL 620**

57.5
49.5
48.5
44.5
1.8
22
19
16
14.4
7.8
14.2
46
44
1.8
49.5
54.5

Z-2802503

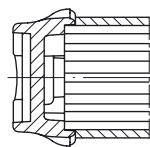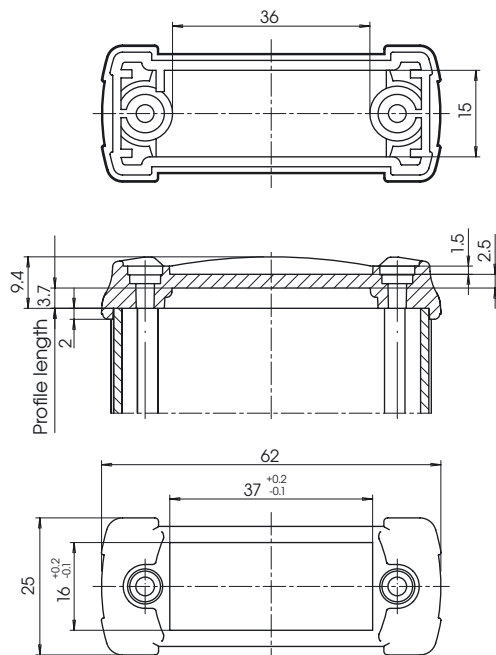**ELPU 620**

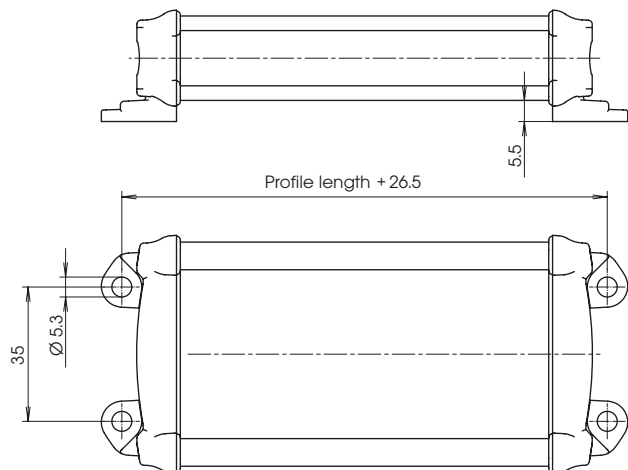57.5
52
48
44
1.8
22
19
14.4
1.7
2.7
7.8
* 7.8
8
44
46
49.5
54.5

Z-2802504

✱ Combination panels can be inserted into these slots, e.g. 1.5 mm front panel and 1 mm membrane keypad.

ELD(W) 620

36
15

1.5
2.5
9.4
Profile length
3.7
2

62
37 +0.2 −0.1
25
16 +0.2 −0.1

ELDW 620

Profile length + 26.5
5.5
35
Ø 5.3

Z-2802505

BOS-Ecoline 840

The robust aluminium profile is 80 mm wide and 42 mm high. A closed, a horizontally-divided and an open-on-one-side type are available. End element plastic caps made of ABS (with or without wall brackets) are included in the scope of delivery. Infrared-permissive end elements are available on request.
The enclosure system provides ingress protection IP 40 as standard, which can be increased to a maximum of IP 54 in the closed ELP 840 profile type by using seal EL 840 DI. For the horizontally-divided profile type ELPH 840, ingress protection can be increased to IP 54 on request.

Sealing

Front panels for ELPU 840 (not illustrated). The front panels for the ELPU 840 profile are manufactured as standard of anodised 2 mm thick aluminium. In the case of running lights and similar product features, these front panels can also be manufactured out of red translucent or clear plastic. In addition, preassembled PCBs can be used together with a front membrane as an operating front.

Enclosure combination with closed profile (ELP)

Order designation

Model	Order no.	Profile length	Ingress protection
ELP 840-0100 D	83084100.S1	100	IP 40
ELP 840-0150 D	83084150.S1	150	IP 40
ELP 840-0200 D	83084200.S1	200	IP 40
ELP 840-0100 DW	83084100.S2	100	IP 40
ELP 840-0150 DW	83084150.S2	150	IP 40
ELP 840-0200 DW	83084200.S2	200	IP 40

Enclosure combination with horizontally-divided profile (ELPH)

Order designation

Model	Order no.	Profile length	Ingress protection
ELPH 840-0100 D	83846100.S1	100	IP 40
ELPH 840-0150 D	83846150.S1	150	IP 40
ELPH 840-0200 D	83846200.S1	200	IP 40
ELPH 840-0100 DW	83846100.S2	100	IP 40
ELPH 840-0150 DW	83846150.S2	150	IP 40
ELPH 840-0200 DW	83846200.S2	200	IP 40

Enclosure combination with U-shaped profile (ELPU)

Order designation

Model	Order no.	Profile length	Ingress protection
ELPU 840-0100 D	83847100.S1	100	IP 40
ELPU 840-0150 D	83847150.S1	150	IP 40
ELPU 840-0200 D	83847200.S1	200	IP 40
ELPU 840-0100 DW	83847100.S2	100	IP 40
ELPU 840-0150 DW	83847150.S2	150	IP 40
ELPU 840-0200 DW	83847200.S2	200	IP 40

Front panels for ELPU 840 please order separately.

Code ...   D   = end cover without wall bracket
Code ...   DW = end cover with wall bracket

Scope of delivery: 1 enclosure profile, 2 plastic end covers, 4 screws, 4 screw covers

Seal for ingress protection IP 54 (not with ELPU; IP 54 for ELPH on request)
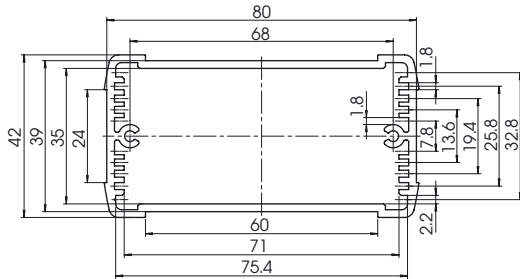**Order designation**

Model	Order no.	Scope of delivery
EL 840 DI	83208410	10 sponge rubber seals

Front panels for U-shaped profile (ELPU)

Order designation

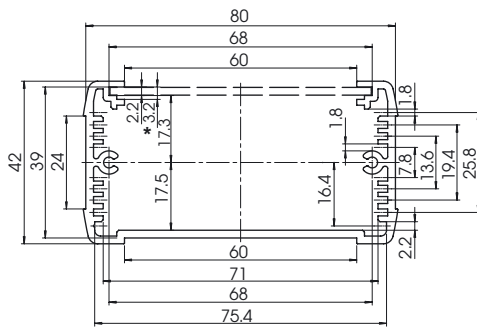| Model	Order no.	L = profile length	Width	Thickness
ELPU 840-0100 FP 2	83848100	100	67.5	2
ELPU 840-0150 FP 2	83848150	150	67.5	2
ELPU 840-0200 FP 2	83848200	200	67.5	2

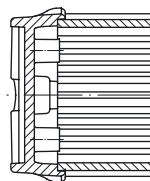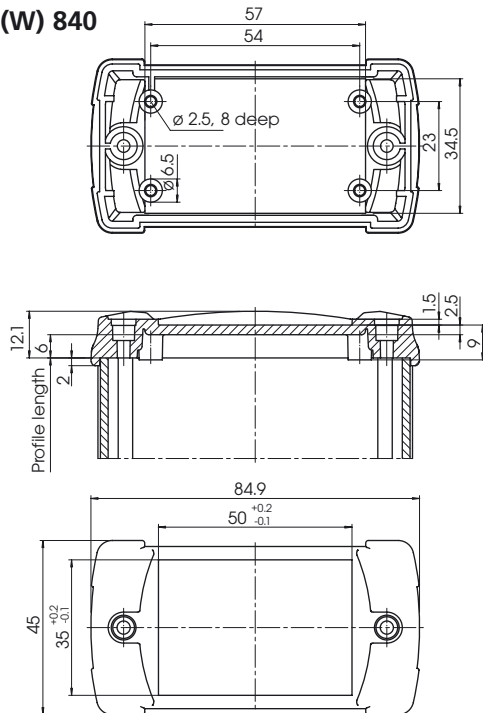## ELP 840

Z-2802502

ELPH 840

EL 840

Z-2802503

ELPU 840
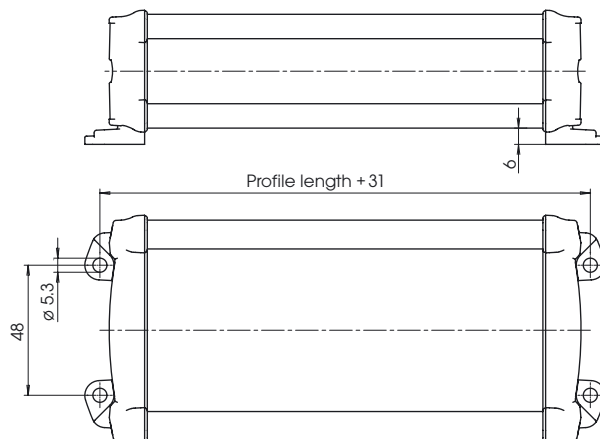

Z-2802504

✱ Combination panels can be inserted into these slots, e.g. 2 mm front panel and 1 mm membrane keypad.

ELD(W) 840

ø 2.5, 8 deep

ELDW 840

Profile length + 31

ø 5.3

Z-2802506

The robust aluminium profile is 106 mm wide and 52 mm high. A closed, a horizontally-divided and an open-on-one-side type are available. End element plastic caps made of ABS (with or without wall brackets) are included in the scope of delivery. Infrared-permissive end elements are available on request.
The enclosure system provides ingress protection IP 40 as standard, which can be increased to a maximum of IP 54 in the closed ELP 1050 profile type by using seal EL 1050 DI. For the horizontally-divided profile type ELPH 1050, ingress protection can be increased to IP 54 on request.

Sealing

Front panels for ELPU 1050 (not illustrated). The front panels for the ELPU 1050 profile are manufactured as standard of anodised 2 mm thick aluminium. In the case of running lights and similar product features, these front panels can also be manufactured out of red translucent or clear plastic. In addition, preassembled PCBs can be used together with a front membrane as an operating front.

Enclosure combination with closed profile (ELP)

Order designation

Model	Order no.	Profile length	Ingress protection
ELP 1050-0100 D	83105100.S1	100	IP 40
ELP 1050-0150 D	83105150.S1	150	IP 40
ELP 1050-0200 D	83105200.S1	200	IP 40
ELP 1050-0100 DW	83105100.S2	100	IP 40
ELP 1050-0150 DW	83105150.S2	150	IP 40
ELP 1050-0200 DW	83105200.S2	200	IP 40

Enclosure combination with horizontally-divided profile (ELPH)

Order designation

Model	Order no.	Profile length	Ingress protection
ELPH 1050-0100 D	83056100.S1	100	IP 40
ELPH 1050-0150 D	83056150.S1	150	IP 40
ELPH 1050-0200 D	83056200.S1	200	IP 40
ELPH 1050-0100 DW	83056100.S2	100	IP 40
ELPH 1050-0150 DW	83056150.S2	150	IP 40
ELPH 1050-0200 DW	83056200.S2	200	IP 40

Enclosure combination with U-shaped profile (ELPU)

Order designation

Model	Order no.	Profile length	Ingress protection
ELPU 1050-0100 D	83057100.S1	100	IP 40
ELPU 1050-0150 D	83057150.S1	150	IP 40
ELPU 1050-0200 D	83057200.S1	200	IP 40
ELPU 1050-0100 DW	83057100.S2	100	IP 40
ELPU 1050-0150 DW	83057150.S2	150	IP 40
ELPU 1050-0200 DW	83057200.S2	200	IP 40

Front panels for ELPU 1050 please order separately.

Code ...   D   = end cover without wall bracket
Code ...   DW = end cover with wall bracket

Scope of delivery: 1 enclosure profile, 2 plastic end covers, 4 screws, 4 screw covers

Seal for ingress protection IP 54 (not with ELPU; IP 54 for ELPH on request)
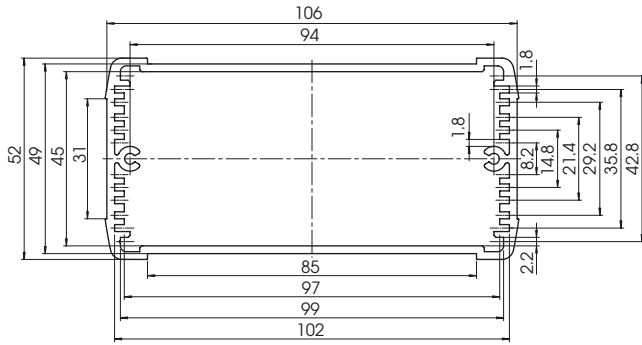
Order designation

Model	Order no.	Scope of delivery
EL 1050 DI	83210510	10 sponge rubber seals

Front panels for U-shaped profile (ELPU)

Order designation

Model	Order no.	L = profile length	Width	Thickness
ELPU 1050-0100 FP 2	83058100	100	92.5	2
ELPU 1050-0150 FP 2	83058150	150	92.5	2
ELPU 1050-0200 FP 2	83058200	200	92.5	2

BOPLA
A Phoenix Mecano Company

ELP 1050
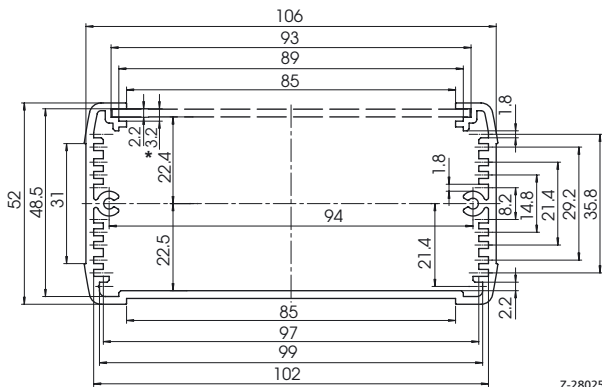

Z-2802502

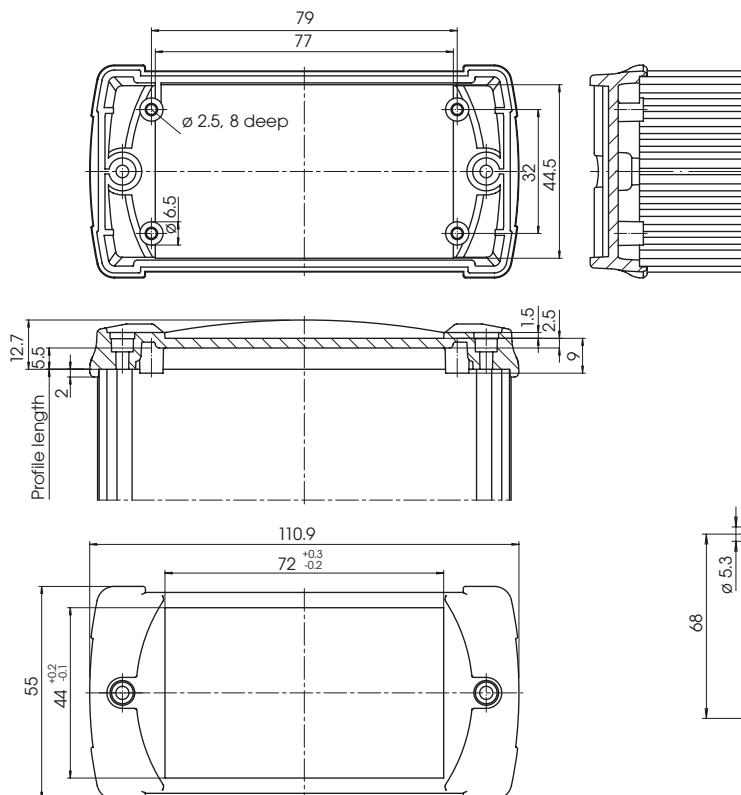## ELPH 1050 ELPU 1050

ELPH 1050 / EL 1050

Z-2802503

ELPU 1050
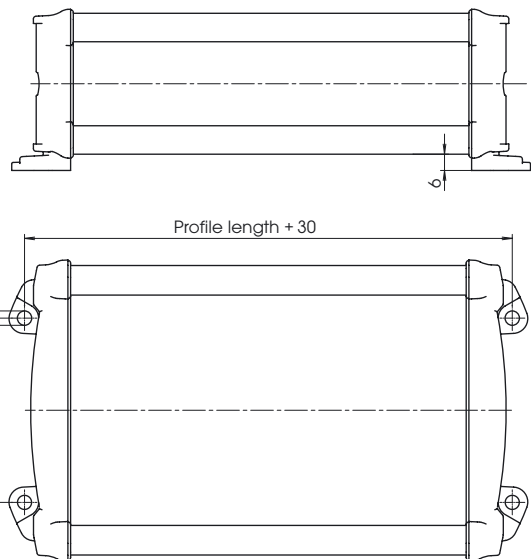

Z-2802504

* Combination panels can be
inserted into these slots, e.g.
2 mm front panel and 1 mm
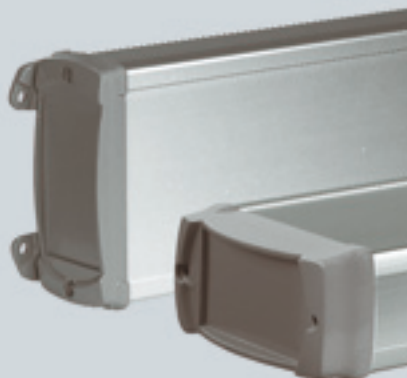membrane keypad.

ELD(W) 1050

ø 2.5, 8 deep

ø 6.5

ELDW 1050

Profile length + 30

ø 5.3

Z-2802507

All dimensions in mm. Please refer to technical data. 531

The robust aluminium profile is 120 mm wide and 42 mm high. A closed, a horizontally-divided and an open-on-one-side type are available. End element plastic caps made of ABS (with or without wall brackets) are included in the scope of delivery. Infrared-permissive end elements are available on request.
The enclosure system provides ingress protection IP 40 as standard, which can be increased to a maximum of IP 54 in the closed ELP 1240 profile type by using seal EL 1240 DI. For the horizontally-divided profile type ELPH 1240, ingress protection can be increased to IP 54 on request.

Sealing

Front panels for ELPU 1240 (not illustrated). The front panels for the ELPU 1240 profile are manufactured as standard of anodised 2 mm thick aluminium. In the case of running lights and similar product features, these front panels can also be manufactured out of red translucent or clear plastic. In addition, preassembled PCBs can be used together with a front membrane as an operating front.

Enclosure combination with closed profile (ELP)

Order designation

Model	Order no.	Profile length	Ingress protection
ELP 1240-0100 D	83124100.S1	100	IP 40
ELP 1240-0150 D	83124150.S1	150	IP 40
ELP 1240-0200 D	83124200.S1	200	IP 40
ELP 1240-0100 DW	83124100.S2	100	IP 40
ELP 1240-0150 DW	83124150.S2	150	IP 40
ELP 1240-0200 DW	83124200.S2	200	IP 40

Enclosure combination with horizontally-divided profile (ELPH)

Order designation

Model	Order no.	Profile length	Ingress protection
ELPH 1240-0100 D	83246100.S1	100	IP 40
ELPH 1240-0150 D	83246150.S1	150	IP 40
ELPH 1240-0200 D	83246200.S1	200	IP 40
ELPH 1240-0100 DW	83246100.S2	100	IP 40
ELPH 1240-0150 DW	83246150.S2	150	IP 40
ELPH 1240-0200 DW	83246200.S2	200	IP 40

Enclosure combination with U-shaped profile (ELPU)

Order designation

Model	Order no.	Profile length	Ingress protection
ELPU 1240-0100 D	83247100.S1	100	IP 40
ELPU 1240-0150 D	83247150.S1	150	IP 40
ELPU 1240-0200 D	83247200.S1	200	IP 40
ELPU 1240-0100 DW	83247100.S2	100	IP 40
ELPU 1240-0150 DW	83247150.S2	150	IP 40
ELPU 1240-0200 DW	83247200.S2	200	IP 40

Front panels for ELPU 1240 please order separately.

Code ...   D   = end cover without wall bracket
Code ...   DW = end cover with wall bracket

Scope of delivery: 1 enclosure profile, 2 plastic end covers, 4 screws, 4 screw covers

Seal for ingress protection IP 54 (not with ELPU; IP 54 for ELPH on request)
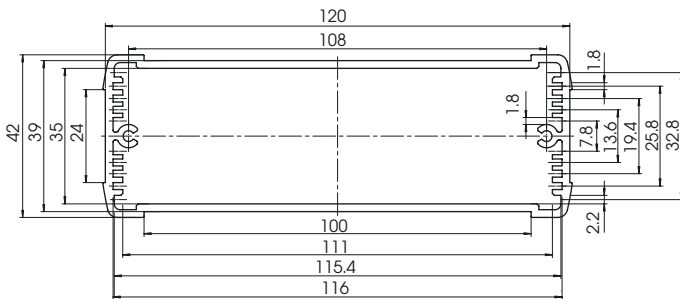
Order designation

Model	Order no.	Scope of delivery
EL 1240 DI	83212410	10 sponge rubber seals

Front panels for U-shaped profile (ELPU)

Order designation

Model	Order no.	L = Profile length	Width	Thickness
ELPU 1240-0100 FP 2	83248100	100	107.5	2
ELPU 1240-0150 FP 2	83248150	150	107.5	2
ELPU 1240-0200 FP 2	83248200	200	107.5	2

ELP 1240

ELPH 1240

EL 1240
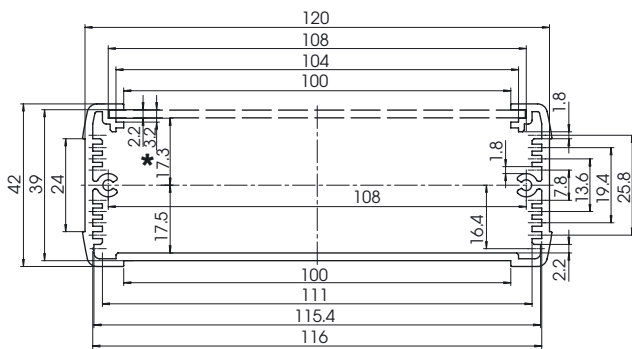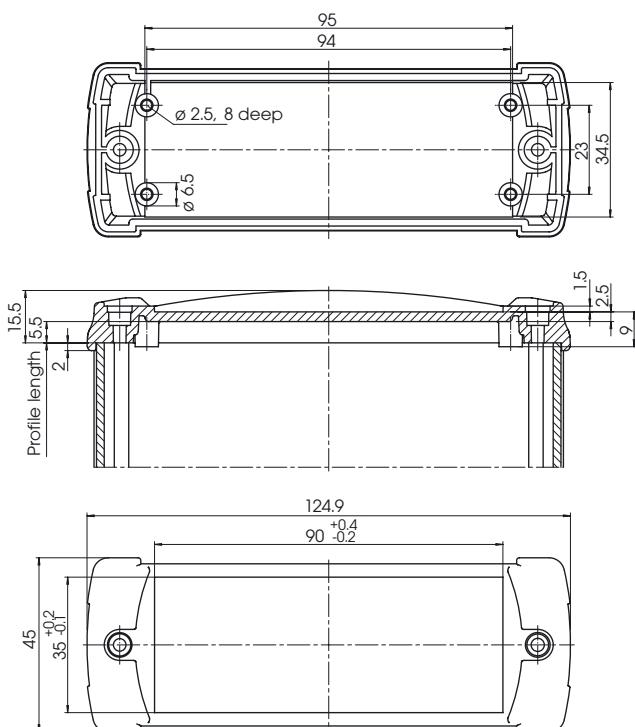
Z-2802502

Z-2802503

ELPU 1240
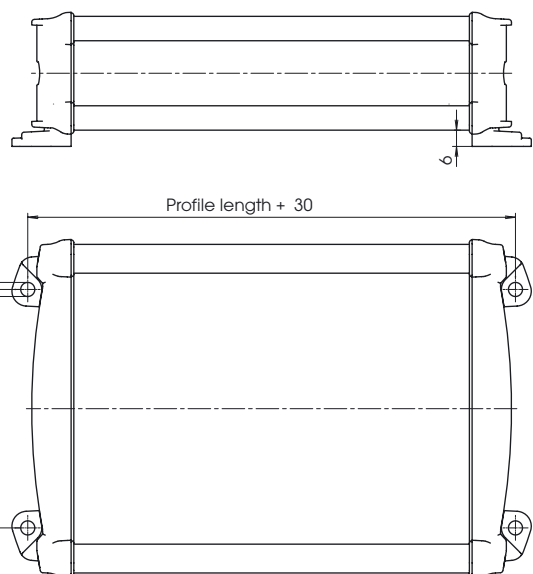
Z-2802504

* Combination panels can be inserted into these slots, e.g. 2 mm front panel and 1 mm membrane keypad.

ELD(W) 1240

ø 2.5, 8 deep

ø 6.5

Profile length

124.9

90 +0.4 -0.2

45

35 +0.2 -0.1

ELDW 1240

Profile length + 30

ø 5.3

88

Z-2802508

All dimensions in mm. Please refer to technical data.   533