



ROSE+BOPLA
ENCLOSURES

A PHOENIX MECANO COMPANY

BOVISTA Enclosures Product Drawings Last Updated 6/17/2008

Dimensional Drawings



TECHNICAL DATA:

- Color: Base & wall-mount fittings: agate gray similar to RAL 7038 or white similar to RAL 9010.
Lid: light gray (standard color) similar to RAL 7035 or white (special order) similar to RAL 9010.
Module bridges: light gray similar to RAL 7035.
Special colors on request.
- Material: ABS - BVT-MB
Polyamide (PA 6, 15% GF) BVL-MB
- Ingress Protection:
Up to IP 40, according to DIN EN 60529, depending on construction.
Up to IP 30 if used with ventilated bases.
Up to IP 20 if used with lids with secondary flap.
- Surface Resistance: >10¹² Ohm to DIN 53482 (Polyamide).
>10¹⁴ Ohm to DIN 53482 (ABS).
- Disruptive Strength: 17KV/mm to DIN 53481(ABS).
- Flammability: ABS and Polyamide: UL 94 HB/1.6

Bovista is a new, individually adaptable enclosure for use in building automation systems and many other electronics applications. Two basic sizes are available, agate gray (standard color) and

BOVISTA

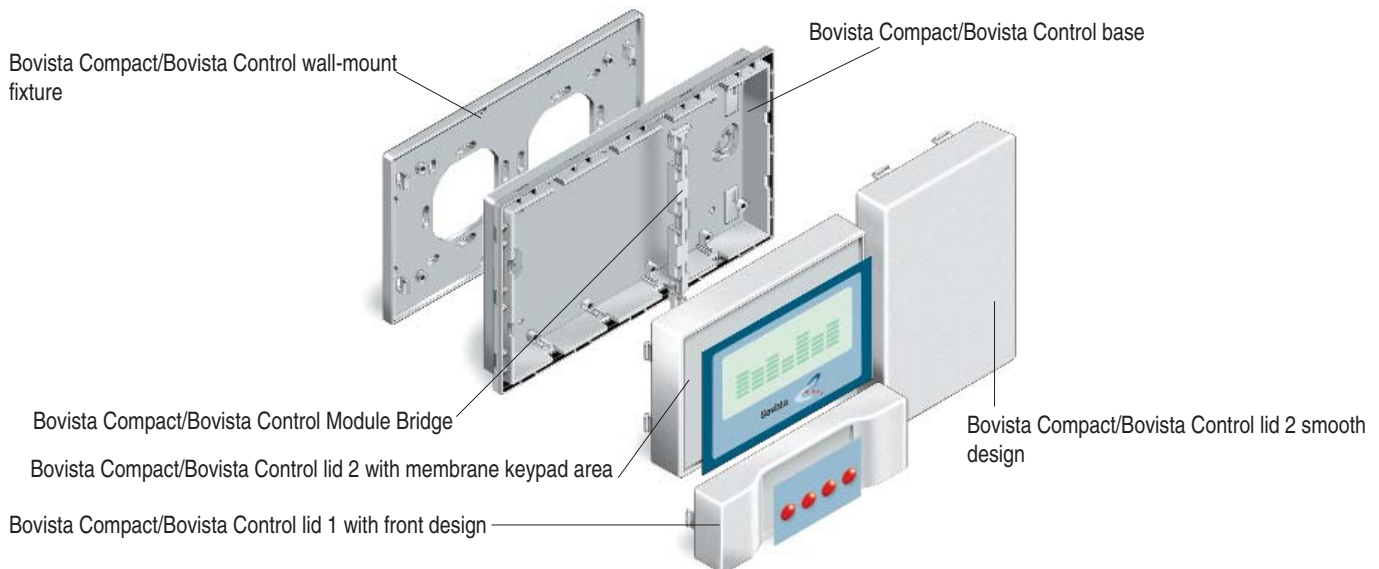
white (special order). Bases can be supplied with or without ventilation. Eight different lid types, in different sizes and shapes, can be attached to the base.

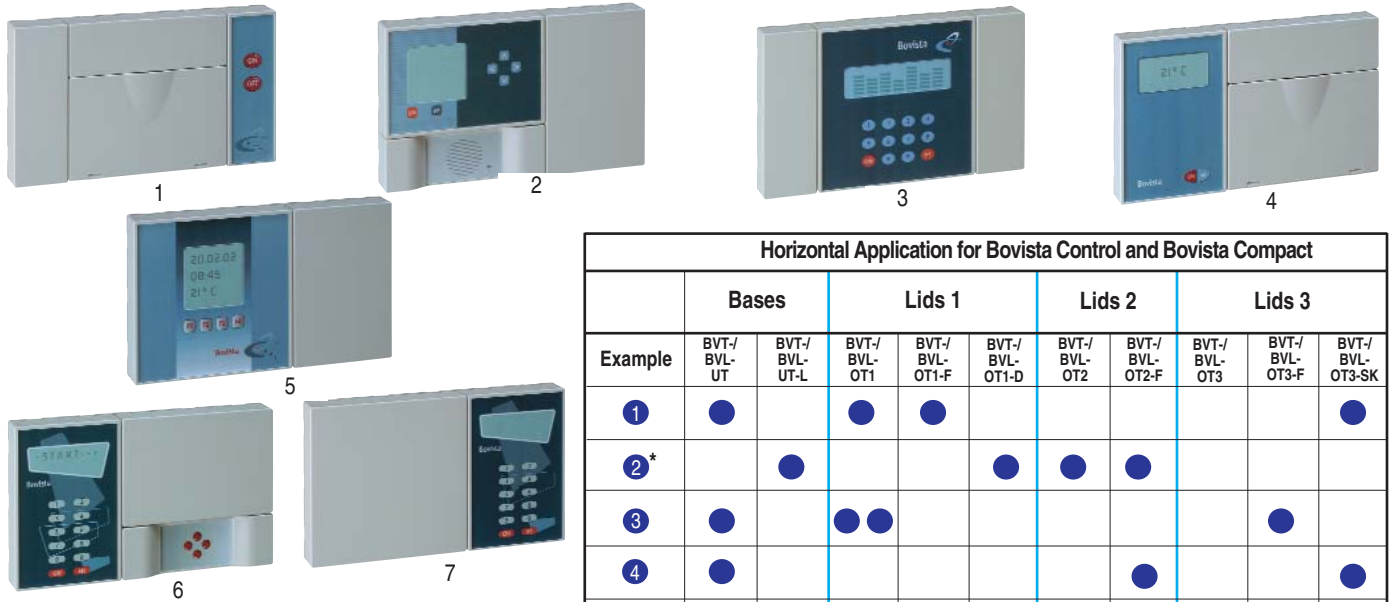
Besides the smooth design, you can choose lids with a membrane keypad area, design front, or a hinged lid. To fit the lid, simply snap it onto the base. The Bovista enclosure design can be mounted horizontally or vertically mounting.

These enclosures can be attached to the wall by means of integrated keyholes in the base, or by the snap-on wall-mount plate. In addition, this plate has two cut-outs so that the enclosure can be used in combination with flush mounted sockets. If you need secondary services, Rose+Bopla can handle silk-screening and machining in-house.

BOVISTA Enclosure Bases					
Model Number	Part Number	Width (Inches/mm)	Length (Inches/mm)	Height (Inches/mm)	Drawing Page #
BVT-UT	40001000	4.72 / 120	7.87 / 200	0.71 / 18	17-209
BVT-UTL	40001100	4.72 / 120	7.87 / 200	0.71 / 18	17-209
BVL-UT	40011000	6.38 / 162	10.63 / 270	1.10 / 28	17-209
BVL-UTL	40011100	6.38 / 162	10.63 / 270	1.10 / 28	17-209

BOVISTA COMPACT: BVT-UT= Base and BVT-UTL = Base with ventilation.
BOVISTA CONTROL: BVL-UT = Base and BVL-UTL = Base with ventilation.
Both bases are suitable for horizontal and vertical use. The enclosure can be mounted to the wall by means of integrated keyholes or the snap-on wall-mount fixture, BVT-WB, which is available as an accessory. The base features integral grooves for bulkhead walls, which separate terminal sections from each other, if necessary. In addition, our enclosures have mounting bosses to accept PCBs. Note: Dimensions are external. Metric is the primary dimension. Inch conversions are for the user's convenience and are for reference only. Accessories shown on drawing page.





With the wide variety of different lid designs available, the Bovista enclosure system offers an almost unlimited range of combinations.

The photos on this page show some of the possible combinations. Details of the combination of the illustrated enclosures can be found in the overview tables provided here.

All the extension variations illustrated can be produced using the two Bovista Compact and Bovista Control basic sizes.

Enclosure lids and bases are available in light gray (standard color) and white (special order).



Horizontal Application for Bovista Control and Bovista Compact										
	Bases		Lids 1			Lids 2		Lids 3		
Example	BVT-/BVL-UT	BVT-/BVL-UT-L	BVT-/BVL-OT1	BVT-/BVL-OT1-F	BVT-/BVL-OT1-D	BVT-/BVL-OT2	BVT-/BVL-OT2-F	BVT-/BVL-OT3	BVT-/BVL-OT3-F	BVT-/BVL-OT3-SK
1	●		●	●						●
2*		●			●	●	●			
3	●		●	●					●	
4	●						●			●
5		●				●			●	
6*	●				●	●	●			
7		●					●	●		

*With this type, a module bridge is required before the lids are attached.

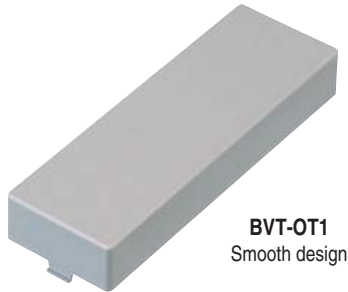
Vertical Application for Bovista Control and Bovista Compact										
	Bases		Lids 1			Lids 2		Lids 3		
Example	BVT-/BVL-UT	BVT-/BVL-UT-L	BVT-/BVL-OT1	BVT-/BVL-OT1-F	BVT-/BVL-OT1-D	BVT-/BVL-OT2	BVT-/BVL-OT2-F	BVT-/BVL-OT3	BVT-/BVL-OT3-F	BVT-/BVL-OT3-SK
8	●			●	●					●
9*		●					●			●
10	●					●			●	
11	●		●		●				●	
12		●			●	●	●			
13*	●				●	●	●			
14		●					●	●		

*With this type, a module bridge is required before the lids are attached.

All Bovista lids can be snapped directly onto the longitudinal sides of the bases. If a lid is turned 90° before being placed on the base, module bridges, BVT-MB, need to be inserted so that

BOVISTA Compact Lids

the lids can be snapped on and stabilized. If module bridges are used, PCBs must be processed according to the corresponding drawings. Caps, EG-AK, which are used to cover keyholes after attaching to the wall, can be ordered separately. All Bovista lids feature latching hooks, which ensure that the enclosure can only be opened by using a tool, and mounting bosses to accept PC boards.



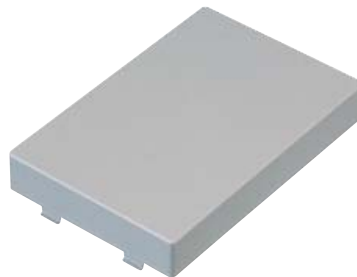
BVT-OT1
Smooth design



BVT-OT1F
Lid with 1.5mm
recessed membrane
keypad area



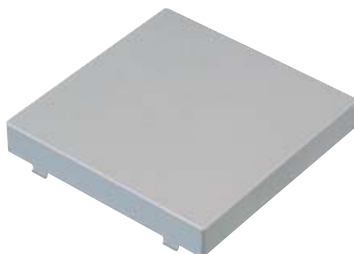
BVT-OT1D
Design front lid with 0.7mm
recessed membrane keypad area



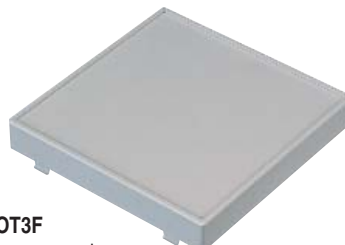
BVT-OT2
Smooth design



BVT-OT2F
Lid with 1.5mm recessed
membrane keypad area



BVT-OT3
Smooth design



BVT-OT3F
Lid with 1.5mm recessed
membrane keypad area



BVT-OT3SK
Lid with secondary flap
and 1.5mm recessed
membrane keypad area
behind flap.

BOVISTA Compact Enclosure Lids					
Model Number	Part Number	Width (Inches/mm)	Length (Inches/mm)	Height (Inches/mm)	Drawing Page #
BVT-OT1	40002100	1.57 / 40	4.72 / 120	0.71 / 18	17-210
BVT-OT1-F	40002110	1.57 / 40	4.72 / 120	0.71 / 18	17-210
BVT-OT1-D	40002120	1.57 / 40	4.72 / 120	0.71 / 18	17-210
BVT-OT2	40002130	3.15 / 80	4.72 / 120	0.71 / 18	17-211
BVT-OT2-F	40002140	3.15 / 80	4.72 / 120	0.71 / 18	17-211
BVT-OT3	40002150	4.72 / 120	4.72 / 120	0.71 / 18	17-211
BVT-OT3-F	40002160	4.72 / 120	4.72 / 120	0.71 / 18	17-211
BVT-OT3-SK	40002170	4.72 / 120	4.72 / 120	0.71 / 18	17-212

BVT-OT. = Lid with smooth design.

BVT-OT.- F = Lid with membrane keypad area (1.5mm recessed membrane keypad area).

BVT-OT. - D = Lid with design front.

BVT-OT.- SK = Lid with secondary flap. A 1.5mm recessed membrane keypad area is provided behind the secondary flap.

Accessories shown on drawing page.

Note: Dimensions are external. Metric is the primary dimension. Inch conversions are for the user's convenience and are for reference only.

All Bovista lids can be snapped directly onto the longitudinal sides of the bases. If a lid is turned 90° before being placed on the base, module bridges, BVL-MB, need to be inserted so that

BOVISTA Control Lids

the lids can be snapped on and stabilized. If module bridges are used, PCBs must be processed according to the corresponding drawings. Caps, EG-AK, which are used to cover keyholes after attaching to the wall, can be ordered separately. All Bovista lids feature latching hooks, which ensure that the enclosure can only be opened by using a tool, and mounting bosses to accept PC boards.



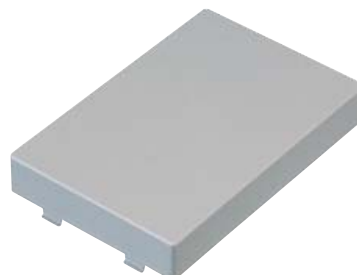
BVL-OT1
Smooth design



BVL-OT1F
Lid with 1.5mm
recessed membrane
keypad area



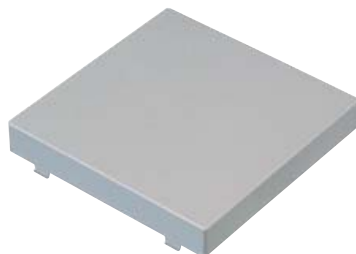
BVL-OT1D
Design front lid with 0.7mm
recessed membrane keypad area



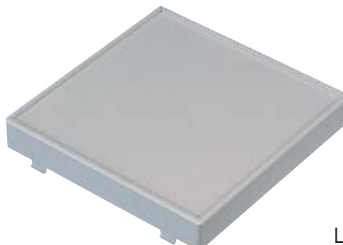
BVL-OT2
Smooth design



BVL-OT2F
Lid with 1.5mm recessed
membrane keypad area



BVL-OT3
Smooth design



BVL-OT3F
Lid with 1.5mm recessed
membrane keypad area



BVL-OT3SK
Lid with secondary flap
and 1.5mm recessed
membrane keypad area
behind flap.

BOVISTA Control Enclosure Lids

Model Number	Part Number	Width (Inches/mm)	Length (Inches/mm)	Height (Inches/mm)	Drawing Page #
BVL-OT1	40012100	2.12 / 54	6.38 / 162	0.87 / 22	17-212
BVL-OT1-F	40012110	2.12 / 54	6.38 / 162	0.87 / 22	17-212
BVL-OT1-D	40012120	2.12 / 54	6.38 / 162	0.87 / 22	17-213
BVL-OT2	40012130	4.25 / 108	6.38 / 162	0.87 / 22	17-213
BVL-OT2-F	40012140	4.25 / 108	6.38 / 162	0.87 / 22	17-213
BVL-OT3	40012150	6.38 / 162	6.38 / 162	0.87 / 22	17-214
BVL-OT3-F	40012160	6.38 / 162	6.38 / 162	0.87 / 22	17-214
BVL-OT3-SK	40112170	6.38 / 162	6.38 / 162	0.87 / 22	17-214

BVL-OT. = Lid with smooth design.

BVL-OT.- F = Lid with membrane keypad area (1.5mm recessed membrane keypad area).

BVL-OT. - D = Lid with design front.

BVL-OT.- SK = Lid with secondary flap. A 1.5mm recessed membrane keypad area is provided behind the secondary flap.

Accessories shown on drawing page.

Note: Dimensions are external. Metric is the primary dimension. Inch conversions are for the user's convenience and are for reference only.

BVT-UT / BVT-UTL

External Dimensions: L 200 x W 120 x H 18 mm

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Standard Features

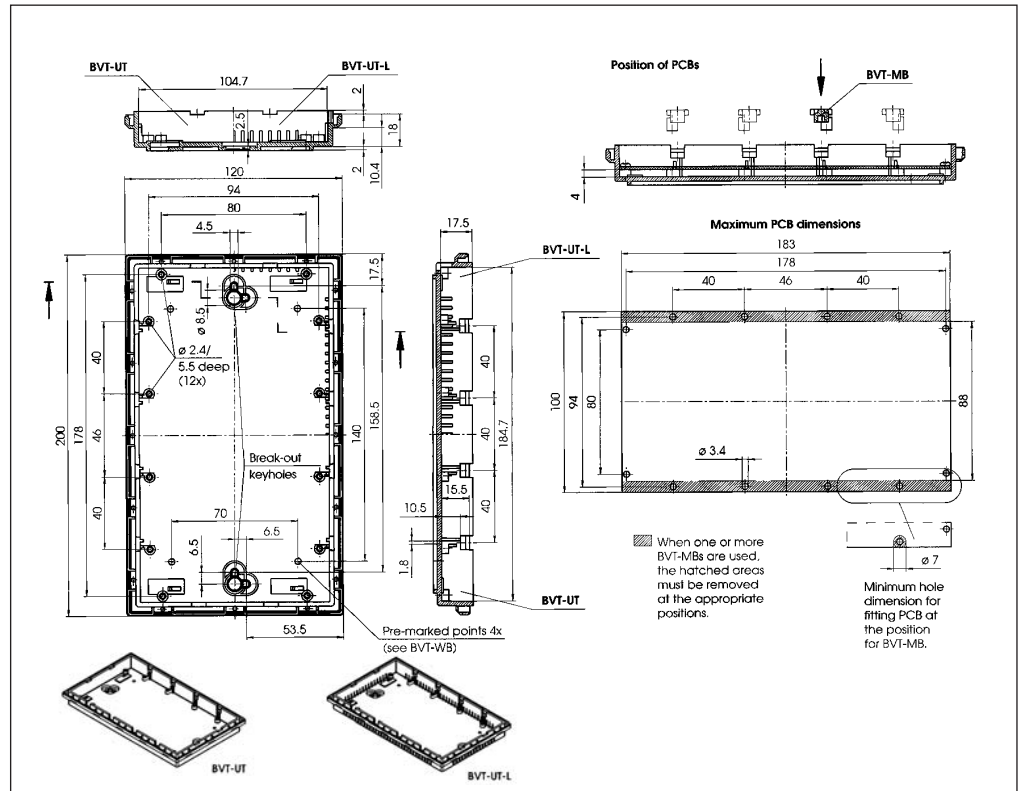
BOVISTA Compact Bases

Both bases are suitable for horizontal and vertical use. The enclosure can be mounted to the wall with our BVT-WB mounting plate. In addition, Bovista Compact bases have mounting bosses to accept PCBs.

- BVT-UT/40001000 Bovista Compact base without ventilation
- BVT-UT-L/40001100 Bovista Compact Base with ventilation

Accessories

- BVT-OT1/40002100 Lid 1 with smooth design. See dwg. on page 17-210.
- BVT-OT1-F/40002110 Lid 1 with membrane keypad area. See dwg. on page 17-210.
- BVT-OT1-D/40002120 Lid 1 with design front. See dwg. on page 17-210.
- BVT-OT2/40002130 Lid 2 smooth design. See dwg. on page 17-211.
- BVT-OT2-F/40002140 Lid 2 with membrane keypad area. See dwg. on page 17-211.
- BVT-OT3/40002150 Lid 3 with smooth design. See dwg. on page 17-211.
- BVT-OT3-F/40002160 Lid 3 with membrane keypad area. See dwg. on page 17-211.
- BVT-OT3-SK/40002170 Lid 3 with secondary flap. See dwg. on page 17-212.
- BVT-MB/40003000 Module bridges (10 pcs. plus hardware). See dwg. on page 17-215.
- BVT-WB/40004000 Wall mounting plate. See dwg. on page 17-215.



BVL-UT / BVL-UTL

External Dimensions: L 270 x W 162 x H 28 mm

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Standard Features

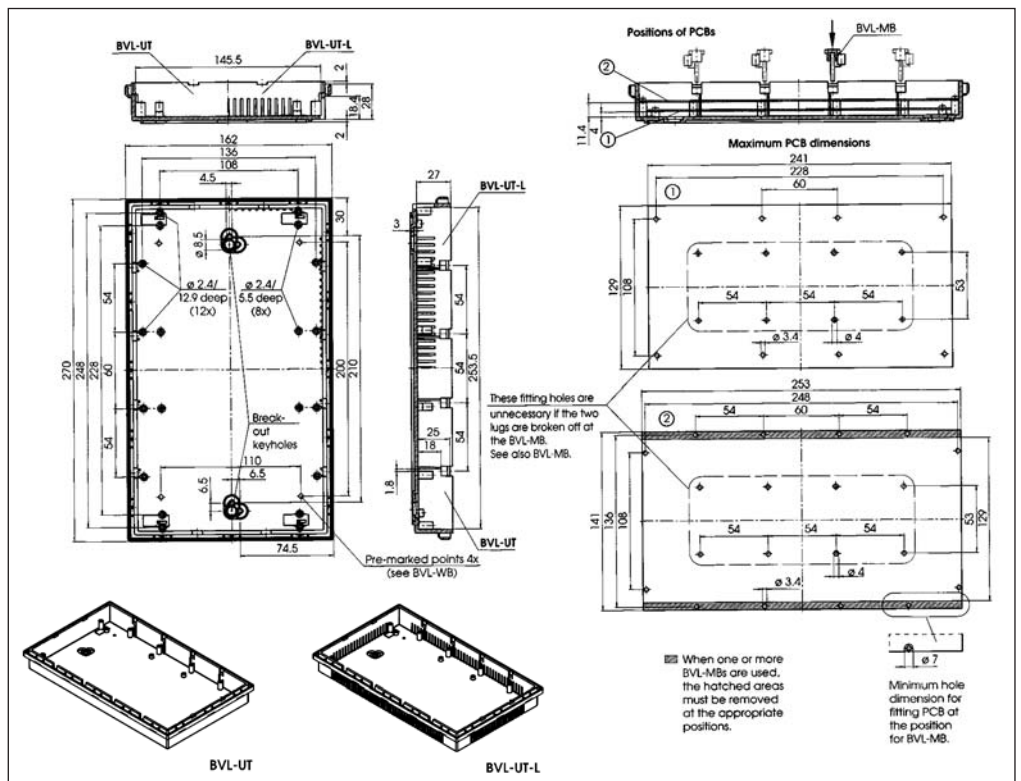
BOVISTA Control Bases

Both bases are suitable for horizontal and vertical use. The enclosure can be mounted to the wall with our BVT-WB mounting plate. In addition, Bovista Control bases have mounting bosses to accept PCBs.

- BVL-UT/40011000 Bovista Control base without ventilation
- BVL-UT-L/40011100 Bovista Control base with ventilation

Accessories

- BVL-OT1/40012100 Lid 1 smooth design. See dwg. on page 17-212.
- BVL-OT1-F/40012110 Lid 1 with membrane keypad area. See dwg. on page 17-212.
- BVL-OT1-D/40012120 Lid 1 with design front. See dwg. on page 17-213.
- BVL-OT2/40012130 Lid 2 smooth design. See dwg. on page 17-213.
- BVL-OT2-F/40012140 Lid 2 with membrane keypad area. See dwg. on page 17-213.
- BVL-OT3/40012150 Lid 3 smooth design. See dwg. on page 17-214.
- BVL-OT3-F/40012160 Lid 3 with membrane keypad area. See dwg. on page 17-214.
- BVL-OT3-SK/40012170 Lid 3 with secondary flap. See dwg. on page 17-214.
- BVL-MB/40013000 Module bridges (10 pcs). See dwg. on page 17-209.
- BVL-WB/40014000 Wall fitting. See dwg. on page 17-209.
- DIBLZ AK 30 x 5/IM3/10/59006986 Distance bolts



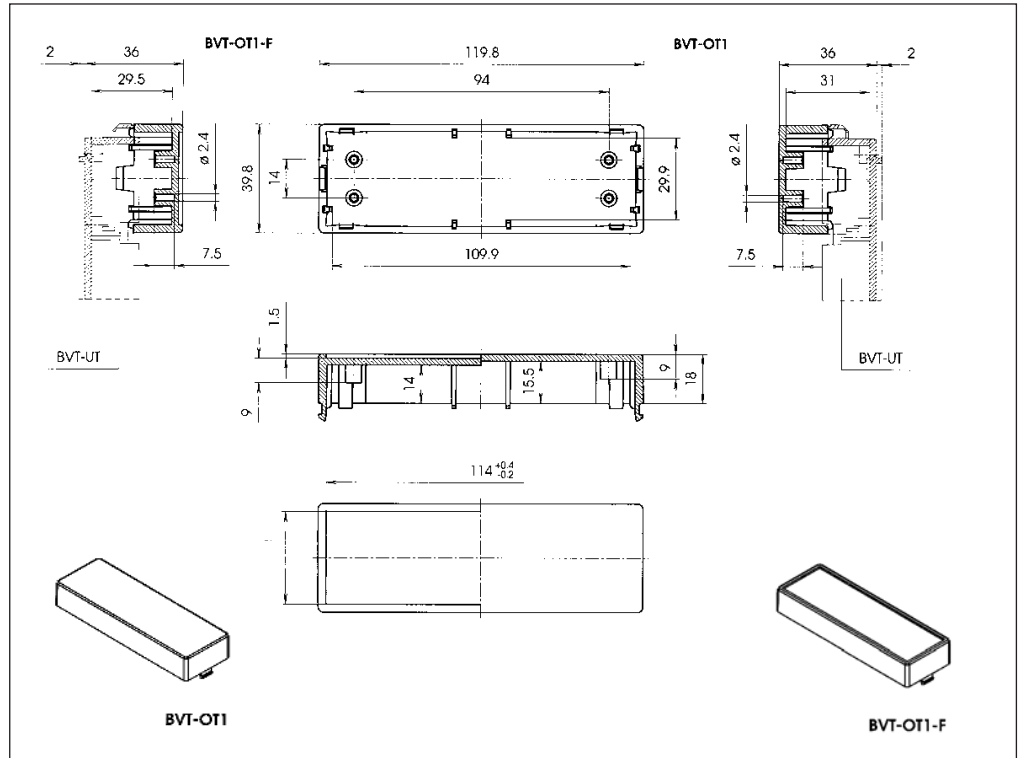
BVT-OT1 / BVT-OT1-F

External Dimensions: L 120 x W 40 x H 18 mm

Page 5-58

Standard Features

- BVT-OT1/40002100 Bovista Compact lid 1 smooth design. Lid is fitted with mounting bosses for PCBs.
- BVT-OT1-F/40002110 Bovista Compact lid 1 with 1.5mm recessed membrane keypad area. Lid is fitted with mounting bosses for PCBs.



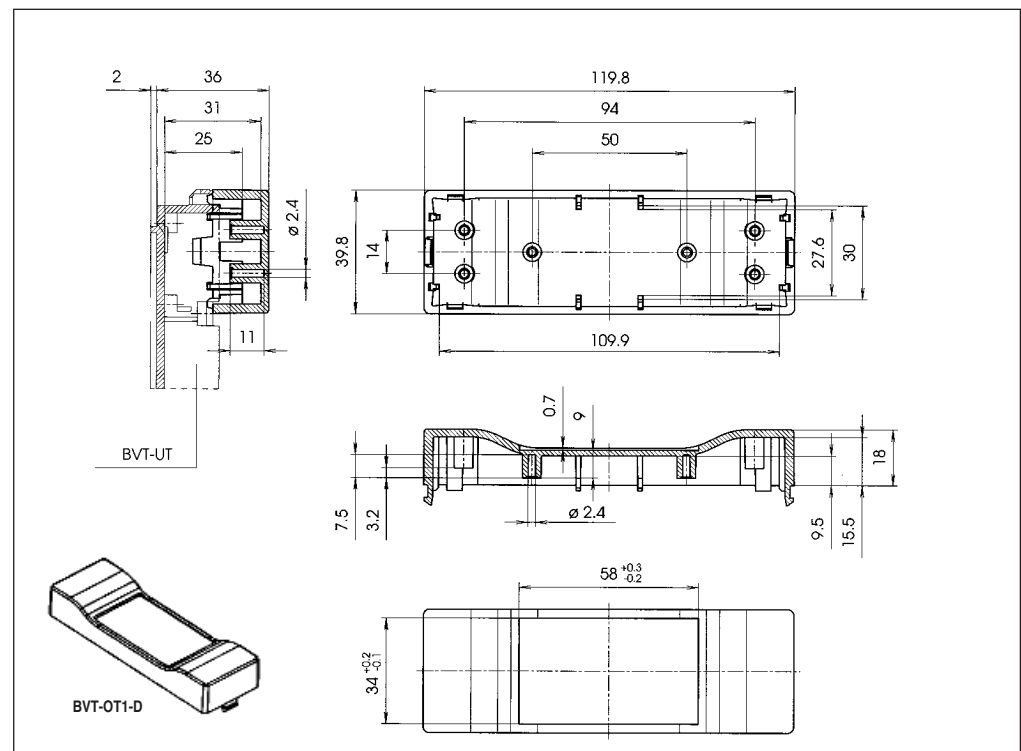
BVT-OT1-D

External Dimensions: L 120 x W 40 x H 18 mm

Page 5-58

Standard Features

- BVT-OT1-D/40002120 Bovista Compact lid 1 with design front and a 0.7mm recessed membrane keypad area. Lid is fitted with mounting bosses for PCBs.



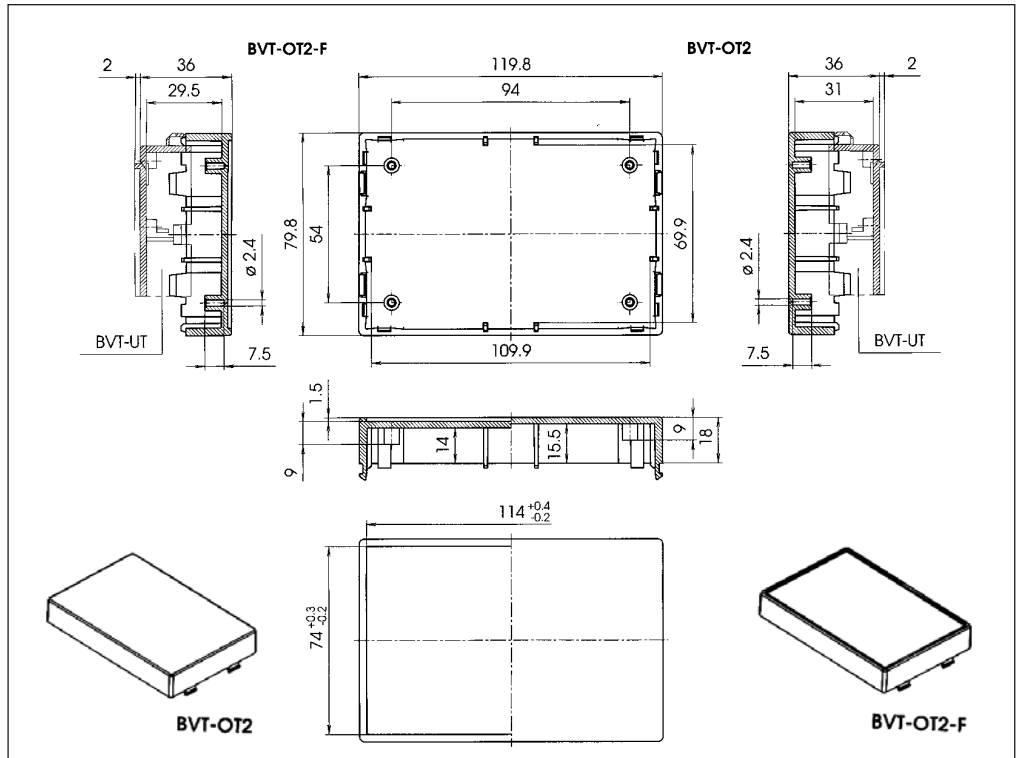
BVT-OT2 / BVT-OT2-F

External Dimensions: L 120 x W 80 x H 18 mm

Page 5-58

Standard Features

- **BVT-OT2/40002130** Bovista Compact lid 2. Lid is fitted with mounting bosses for PCBs.
- **BVT-OT2-F/40002140** Bovista Compact lid 2 with 1.5mm recessed membrane keypad area. Lid is fitted with mounting bosses for PCBs.



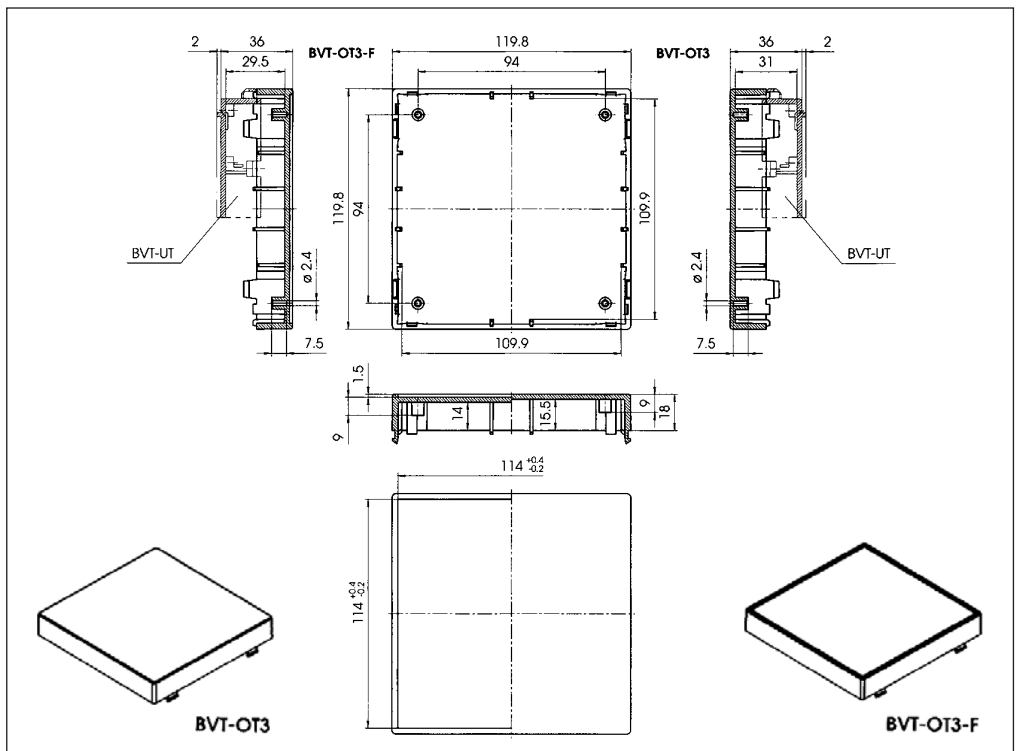
BVT-OT3 / BVT-OT3-F

External Dimensions: L 120 x W 120 x H 18 mm

Page 5-58

Standard Features

- **BVT-OT3/40002150** Bovista Compact lid 3. Lid is fitted with mounting bosses for PCBs.
- **BVT-OT3-F/40002160** Bovista Compact lid 3 with 1.5mm recessed membrane keypad area. Lid is fitted with mounting bosses for PCBs.



Dimensional Drawings

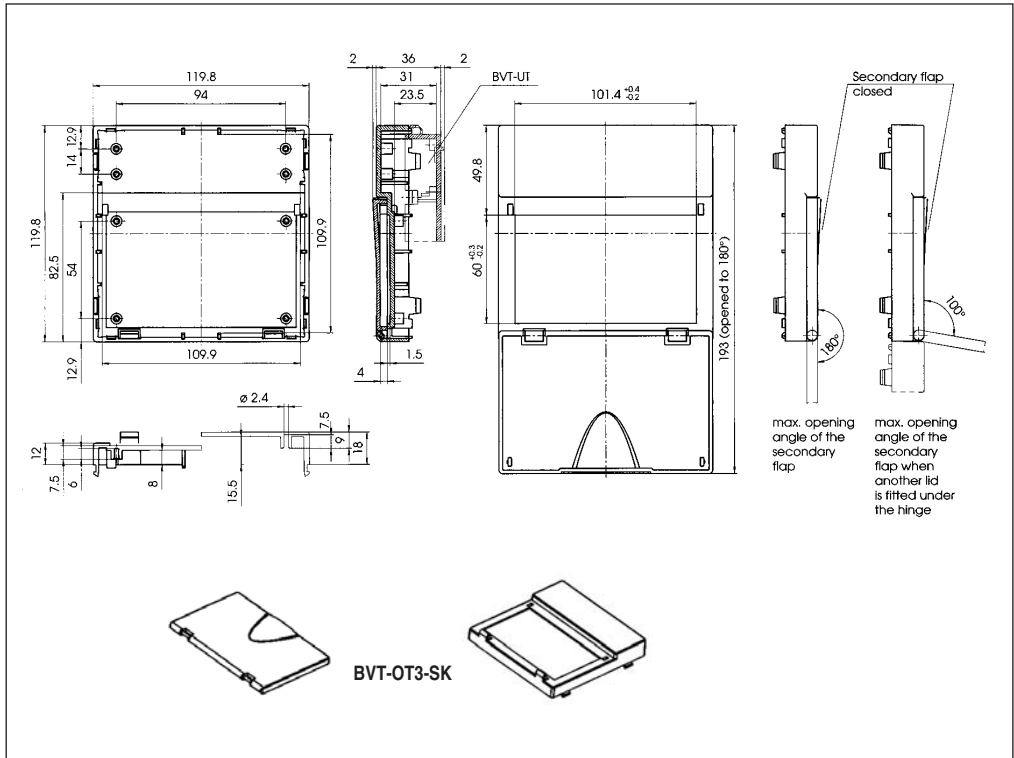
BVT-OT3-SK

External Dimensions: L 120 x W 120 x H 18 mm

Page 5-58

Standard Features

- BVT-OT3-SK/40002170 Bovista Compact lid 3 with secondary flap. Lid is fitted with mounting bosses for PCBs. A 1.5mm recessed membrane keypad area is provided under the flap.



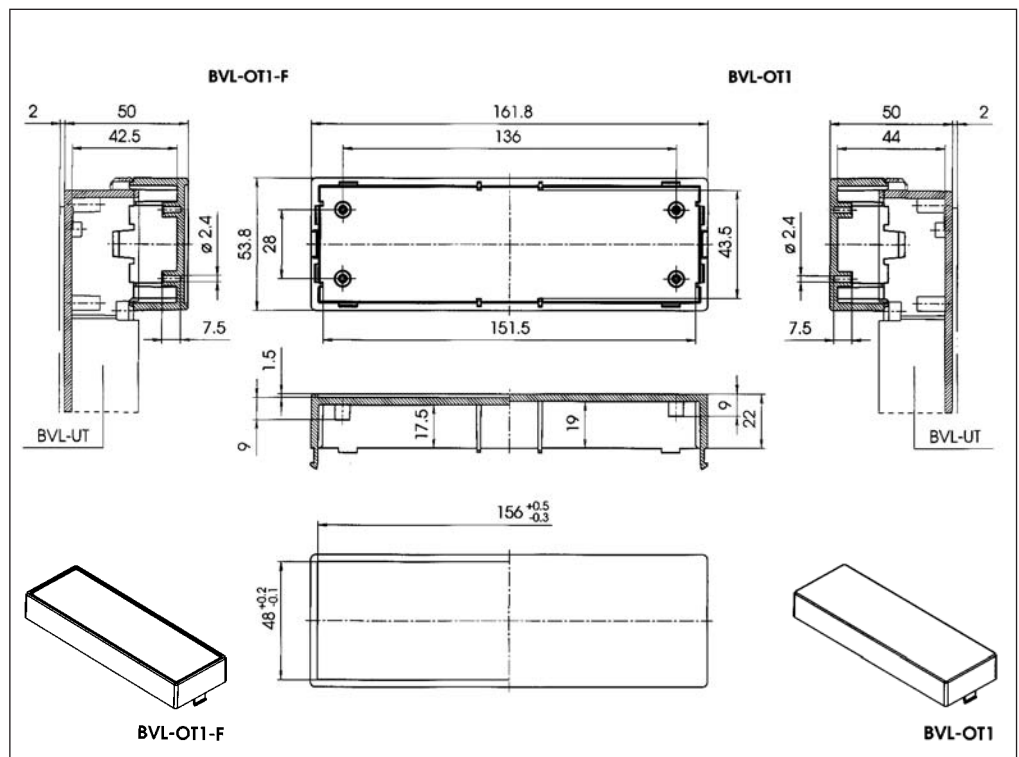
BVL-OT1 / BVL-OT1-F

External Dimensions: L 162 x W 54 x H 22 mm

Page 5-59

Standard Features

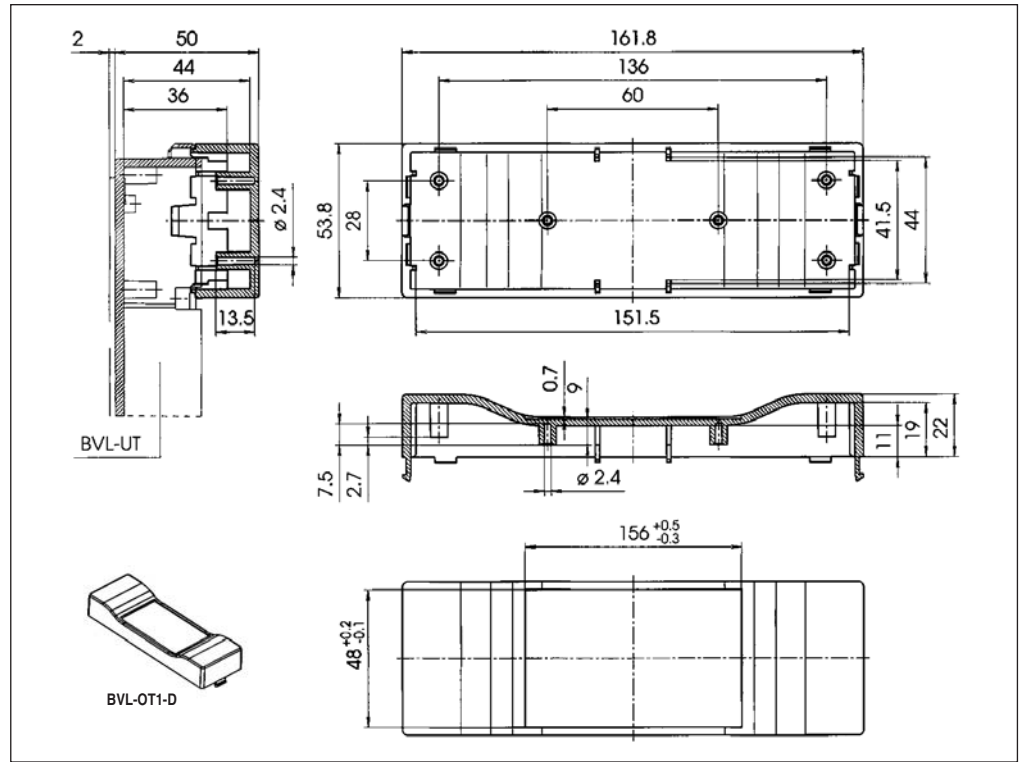
- BVL-OT1/40012100 Bovista Control lid 1 smooth design. Lid is fitted with mounting bosses for PCBs.
- BVL-OT1-F/40012110 Bovista Control lid 1 with a 1.5mm recessed membrane key pad area. Lid is fitted with mounting bosses for PCBs.



BVL-OT1-D External Dimensions: L 162 x W 54 x H 22 mm Page 5-59

Standard Features

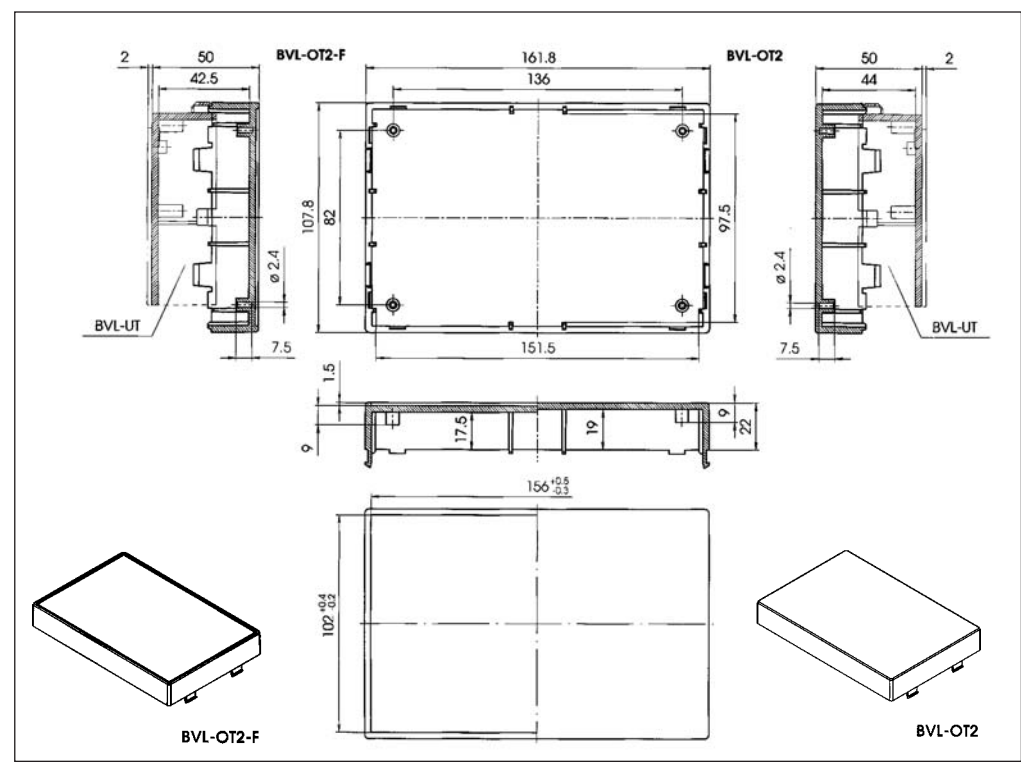
- BVL-OT1-D/40012120 Bovista Control lid 1, design front with a 0.7mm recessed membrane keypad area. Lid is fitted with mounting bosses for PCBs.



BVL-OT2 / BVL-OT2-F External Dimensions: L 162 x W 108 x H 22 mm Page 5-59

Standard Features

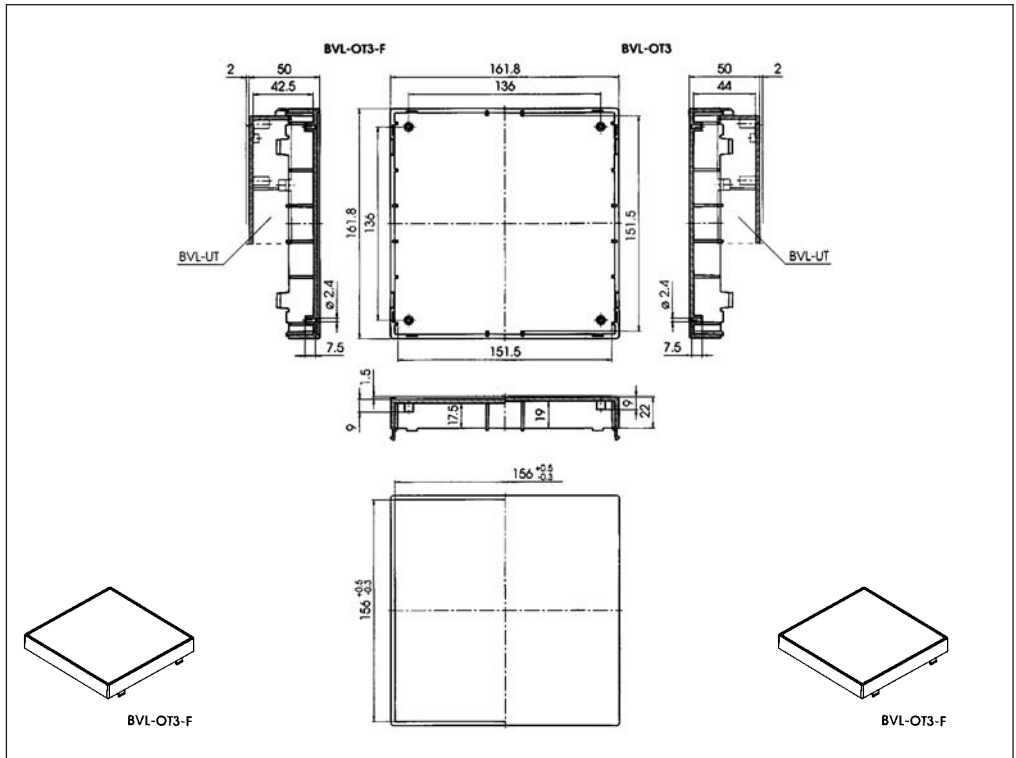
- BVL-OT2/40012130 Bovista Control lid 2, smooth design. Lid is fitted with mounting bosses for PCBs.
- BVL-OT2-F/40012140 Bovista Control lid 2 with a 1.5mm recessed membrane key pad area. Lid is fitted with mounting bosses for PCBs.



Dimensional Drawings

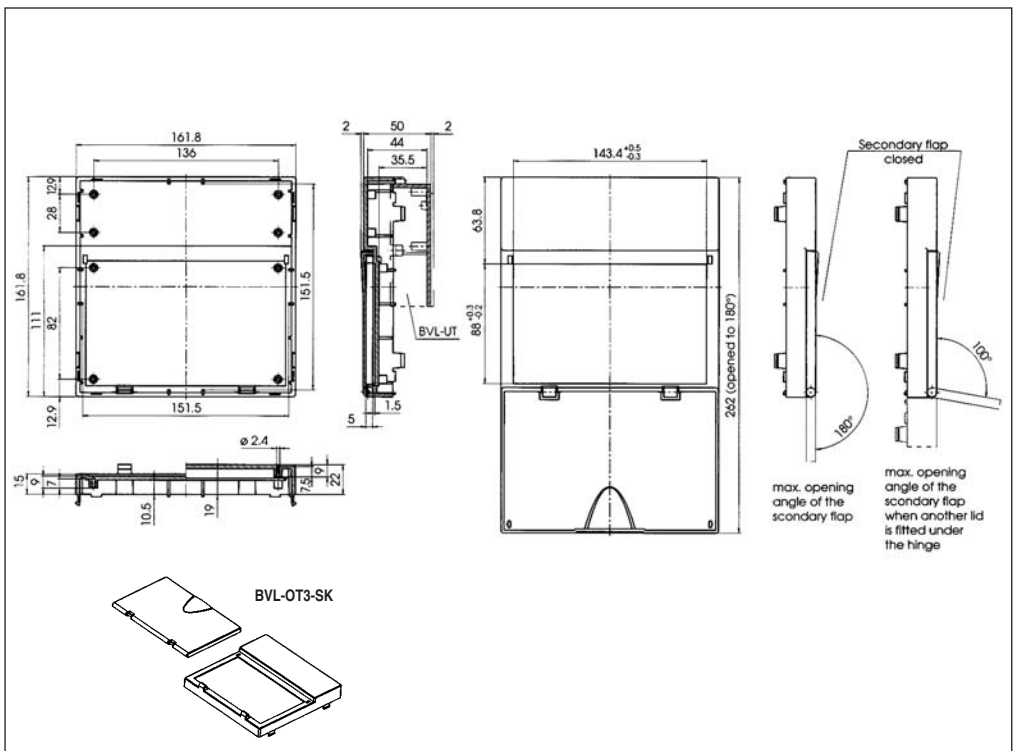
Standard Features

- **BVL-OT3/40012150** Bovista Control lid 3, smooth design. Lid is fitted with mounting bosses for PCBs.
- **BVL-OT3-F/40012160** Bovista Control lid 3 with a 1.5mm recessed membrane keypad area. Lid is fitted with mounting bosses for PCBs.



Standard Features

- **BVL-OT3-SK/40012170** Bovista Control lid 3 with secondary flap. A 1.5mm recessed keypad area is provided under the flap. Lid is fitted with mounting bosses for PCBs.



BOVISTA Module Bridges

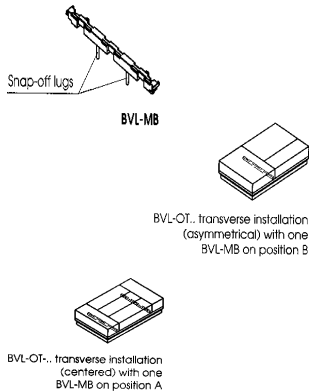
External Dimensions L 114 x W 12 x H 11.5 mm

Standard Features

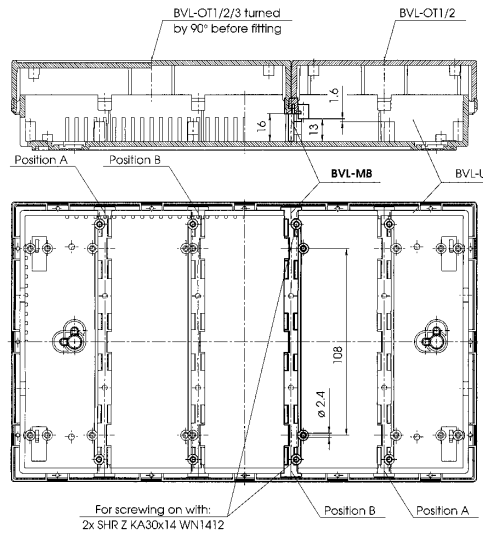
BVL_MB/40013000 Module Bridges

Module Bridges are inserted into the bases and held in position when the lids are snapped on. Alternatively the module bridges can be attached by means of the screws included.

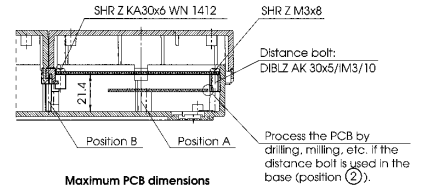
Note: Module bridges must be used when the lids are turned 90° before being placed on the longitudinal sides of the bases. For asymmetrical transverse installation (lids snaps onto the short side of the base), one module bridge is required, for centered transverse installation of the lids, two module bridges are required (see adjacent drawing). Using one module bridge BVL-MB and distance bolts creates an additional level of PCBs (see adjacent drawing).



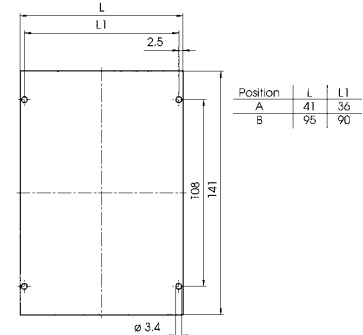
Module Bridges			
Part Number	Length Inches/mm	Width Inches/mm	Height Inches/mm
BVL-MB	4.49/114	.47/12	.45/11.5



Additional PCB position if a BVL-MB and distance bolts are used



Maximum PCB dimensions



BOVISTA Wall Fitting

External Dimensions: L 258 x W 150 x H 6 mm

Standard Features

BVL-WB/40014000 Wall Fitting Plate

The Bovista base is snapped onto the wall fitting plate (both horizontally and vertically). The wall fitting can be placed over flush-mounted branch boxes. The two openings permit connection of the unit to the domestic electronic system.

BOVISTA Wall Fitting			
Part Number	Length Inches/mm	Width Inches/mm	Height Inches/mm
BVL-WB	10.16/258	5.90/150	0.24/6

