



ROSE+BOPLA
ENCLOSURES

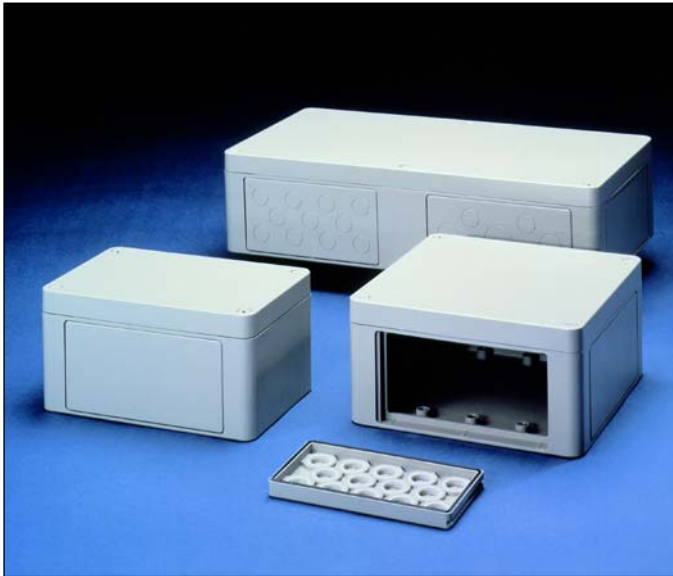
A PHOENIX MECANO COMPANY

Fiberglass Watertight Modular Flange Product Drawings Last Updated 1/6/2006

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Dimensional Drawings

For Secondary Services, Product Support, or To Order, Call 1-301-696-9800



All sizes are available with an optional clear viewing lid. The clear polycarbonate lid version makes an ideal outdoor meter housing. All meters, LED readouts, and adjusting knobs can be mounted right under the lid with the optional aluminum display panel faceplate mounted on stud bolt posts.

Optional internal hinges/lid screws can replace the standard lid screws and quickly turn these enclosures into wall-mounted indoor/outdoor cabinets with doors.

TECHNICAL DATA:

- Color: Gray similar to RAL 7032, or Transparent Lid.
- Material: Enclosure. Glass-fiber reinforced polyester.
Transparent Lid, Polycarbonate
- Surface resistance: Enclosure, $>10^{12}$ Ohm/VDE 0303
Transparent Lid, $>10^{15}$ Ohm, DIN 53482.
- Impact Resistance: $>7\text{Nm}$, EN50014.
- Flammability: Enclosure, Self-extinguishing, UL 94 V0.
Transparent Lid, UL 94 V2
- Gasket Temperature Range:
Neoprene Foam Gasket -40°F to $+212^{\circ}\text{F}$
Polyurethane Foam Gasket -40°F to $+194^{\circ}\text{F}$
Silicone Foam Gasket -76°F to $+266^{\circ}\text{F}$
- Disruptive Strength: Enclosure, 18KV/mm / VDE 0303
Transparent Lid, $>30\text{KV/mm}$ / VDE 0303
- Captive 3/4 Turn Lid Screws.
- Toxicity: Halogen Free.
- Protection Classifications:
NEMA Types: up to Nema 12
IP 65, EN 60529
- Approvals:
Maritime Register of Shipping #83.033.250.

Rose+Bopla's Fiberglass Modular Flange System consists of three different enclosures that can be used as stand alone units or can be quickly bolted together with connecting tunnel flanges

Fiberglass Modular Flange

and wedges. This fast system of joining enclosures together not only guarantees a watertight seal, but also offers greatly expanded internal component mounting space. The length and width dimensions are expandable by adding additional enclosures.

These 3 expandable systems offer all the advantages of molded products: clean design, tight tolerances, consistent dimensions, strength, low cost and resistance to weather and industrial corrosion. They also offer what is not normally available with molded products: expansion capability.

All units are made from compression-molded fiberglass mats that are UV stabilized. This system offers strength, ruggedness and weather/corrosion resistance, unmatched by metal enclosures. The rugged compression molded plastic will not give off toxic halogenated gases when burned. This makes these units ideal for areas where strict fire codes limit the use of plastic cases in harsh manufacturing high fire hazard areas. These fiberglass modular enclosures are ideal for electrical junction boxes in caustic petro-chemical plants or electroplating plants.

Rose+Bopla's fiberglass modular enclosures have also been used to house car wash controls and as outdoor post-mounted railroad signal control boxes. These units can be used alone as individual control or junction boxes, or can be snapped together quickly to create an expandable, wall-mounted, outdoor, electrical control center. These modular enclosures are ideal for outdoor use, as they are impervious to sun, rain, sleet, ice and acid rain. These boxes will outlast any metal unit outdoors.

Each enclosure includes compression molded lid and base, non-reinforced fiberglass (POCAN) 3/4 turn lid screws and a non-removable polyurethane gasket. **Flanges, connecting tunnels, hinges, mounting plates (mounting plate drawings, on page 17-48), etc., are options and must be ordered separately.** (Flange wedges are included with flanges).

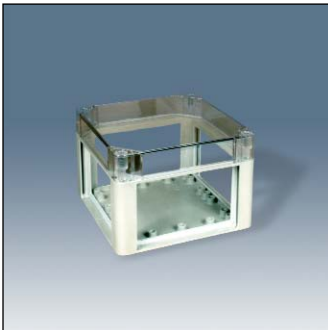
Optional pre-threaded flanges have molded-in knockouts, which are easily removed with a screwdriver. This exposes the molded-in threads designed for Rose+Bopla's fiberglass watertight cable grips. The grips are threaded and offer a watertight power cable entry/exit in seconds. The optional blank flange can be machined to fit any connector requirements, or unmachined, can be used to fill flange openings.

Wall mounting holes are molded into each box. The lid must be removed to wall mount with this method. Optional external wall mounting brackets can be bolted onto the rear of the box. The lid does not have to be removed when using external wall-mount brackets.

Fiberglass Watertight Modular Flange System



1401: The 1401 model is the smallest of the units. This unit has two removable side flanges that allow rapid installation of electrical power cables with various Rose+Bopla flanges available.
 270mm/10.63" L x 170mm/6.69" W x 135mm/5.31" H, Opaque Lid
 270mm/10.63" L x 170mm/6.69" W x 150mm/5.91" H, Clear Lid



1402: This is the intermediate size of the Rose+Bopla Fiberglass Modular Flange Units. Two 1402 units make one 1403 unit. This unit is square and has four removable flanges, which allow for the rapid installation of electrical power cables with various Rose+Bopla flanges available.
 270mm/10.63" L x 270mm/10.63" W x 135mm/5.31" H, Opaque Lid
 270mm/10.63" L x 270mm/10.63" W x 150mm/5.91" H, Clear Lid



1403: The largest of the Rose+Bopla Fiberglass Modular Flange Units with six removable flanges, the 1403 offers unrestricted access on all sides when installing electrical power cables. This model is exactly twice the size of the 1402 model. It can be used as a standalone unit or connected to other units for expanded internal mounting space.
 540mm/21.26" L x 270mm/10.63" W x 135mm/5.31" H, Opaque Lid
 540mm/21.26" L x 270mm/10.63" W x 150mm/5.91" H, Clear Lid

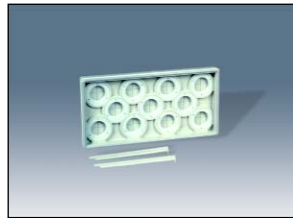
| Fiberglass Watertight Modular Flange System | | | | | | | |
|--|---------------------------------|-----------------|--------------------|-------------------|--------------------|----------|----------------|
| Part Number | Description | Flange Openings | Length (Inches/mm) | Width (Inches/mm) | Height (Inches/mm) | Weight | Drawing Page # |
| 14010000 00 | Box without Flanges/Opaque Lid* | 2 | 10.63 / 270 | 6.69 / 170 | 5.31 / 135 | 3.73 lbs | 17-47 |
| 14010001 00 | Box without Flanges/Clear Lid* | 2 | 10.63 / 270 | 6.69 / 170 | 5.91 / 150 | 3.73 lbs | 17-47 |
| 14020000 00 | Box without Flanges/Opaque Lid* | 4 | 10.63 / 270 | 10.63 / 270 | 5.31 / 135 | 4.19 lbs | 17-47 |
| 14020001 00 | Box without Flanges/Clear Lid* | 4 | 10.63 / 270 | 10.63 / 270 | 5.91 / 150 | 4.19 lbs | 17-47 |
| 14030000 00 | Box without Flanges/Opaque Lid* | 6 | 21.26 / 540 | 10.63 / 270 | 5.31 / 135 | 7.93 lbs | 17-48 |
| 14030001 00 | Box without Flanges/Clear Lid* | 6 | 21.26 / 540 | 10.63 / 270 | 5.91 / 150 | 7.93 lbs | 17-48 |

Note: Dimensions are external. Metric is the primary dimension. Inch conversions and weights are for the user's convenience and are for reference only.
 *Flanges and Flange wedges sold separately. See dimensional drawings. Accessoires show on drawing pages.

Fiberglass Watertight Modular Flange System



14000020 00



14000021 00



14000022 00



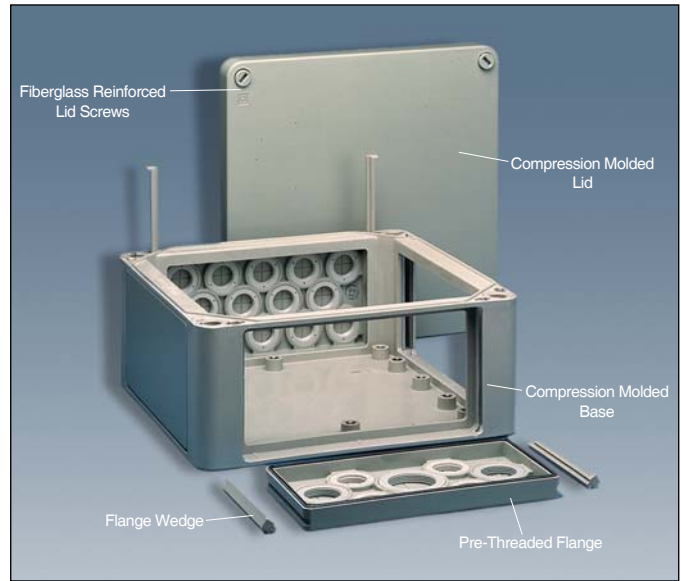
14000023 00



14000030 00

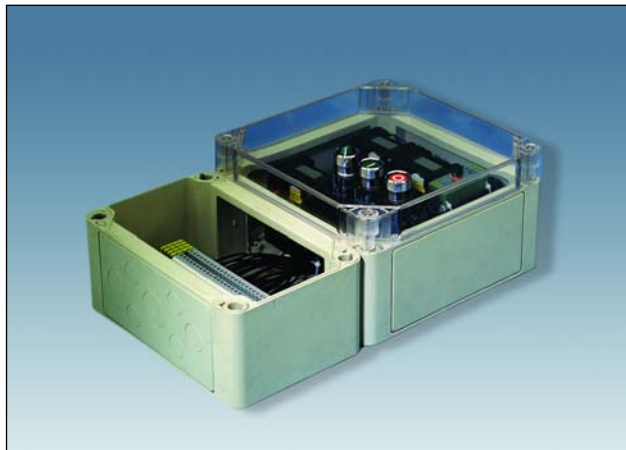


14000025 00

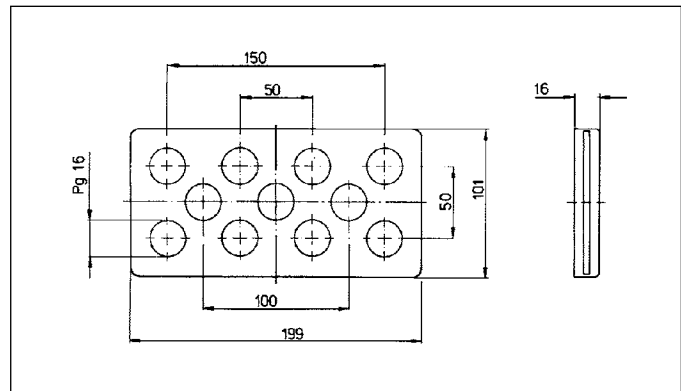


| Fiberglass Watertight Modular Flanges | | | |
|--|---------------------------------|------------------|------|
| Part Number | Flange Description | Cable Grip Holes | |
| | | Qty | Size |
| 14000020 00 | Blank Flange | - | - |
| 14000021 00 | Pre-Threaded Flange with wedges | 11 | M 32 |
| 14000022 00 | Pre-Threaded Flange with wedges | 14 | M 25 |
| 14000023 00 | Pre-Threaded Flange with wedges | 4 | M 32 |
| | | 2 | M 40 |
| | | 1 | M 50 |
| 14000030 00 | Pre-Threaded Flange | 17 | M 20 |
| 14000025 00 | Connecting Tunnel Flange | - | - |

Note: Flanges must be ordered separately.



Fiberglass Modular Flange 1400 with Clear Lid



Fiberglass Modular Flange 1400 Threaded Flange



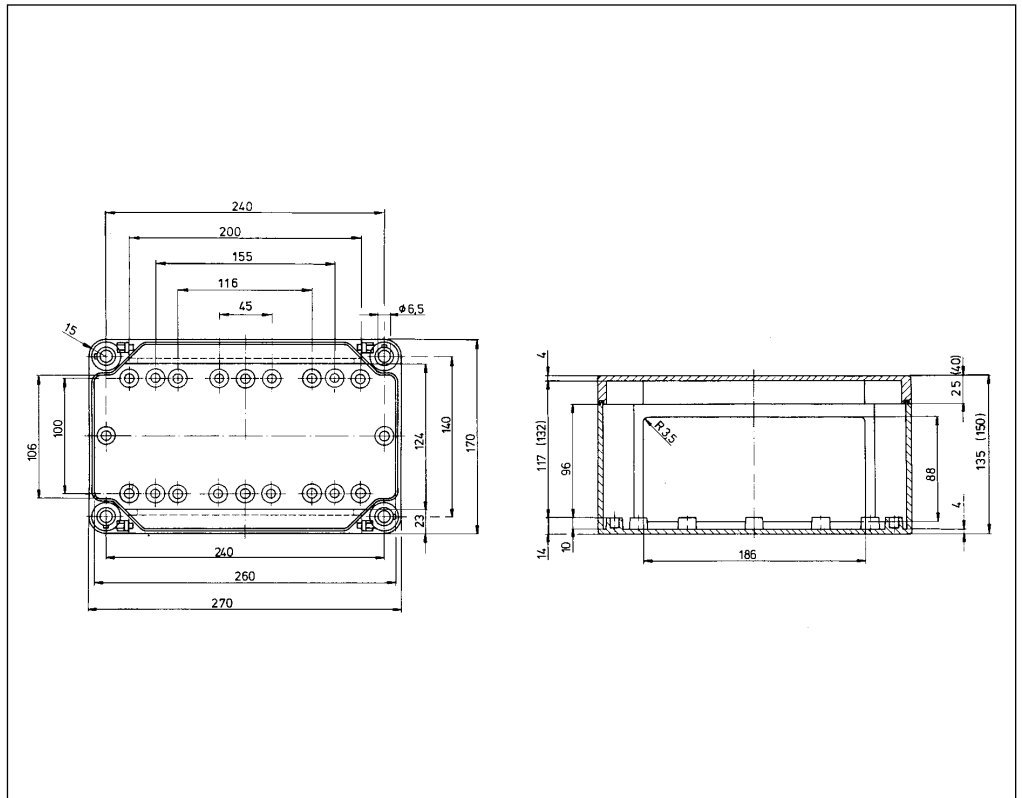
Fiberglass Flange

1401

External Dimensions: L 270 x W 170 x H 135 mm

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| Standard Features |
|---|
| <ul style="list-style-type: none"> • 10039021 00 ¾ turn Pocolid lid screws. • 10093229 00 M6x10 Copper ground screws. • Non-Removable foamed-in Polyurethane gasket |
| Accessories |
| <ul style="list-style-type: none"> • 10061721 00 Terminal Rails (TS 35) • 10050416 00 Grounding Strip • 10052034 00 External Wall Mounting Brackets (Set of 4) • 14000026 00 Internal Hinges (Set of 2) • 10051017 00 Threaded Inserts (Set of 10) |

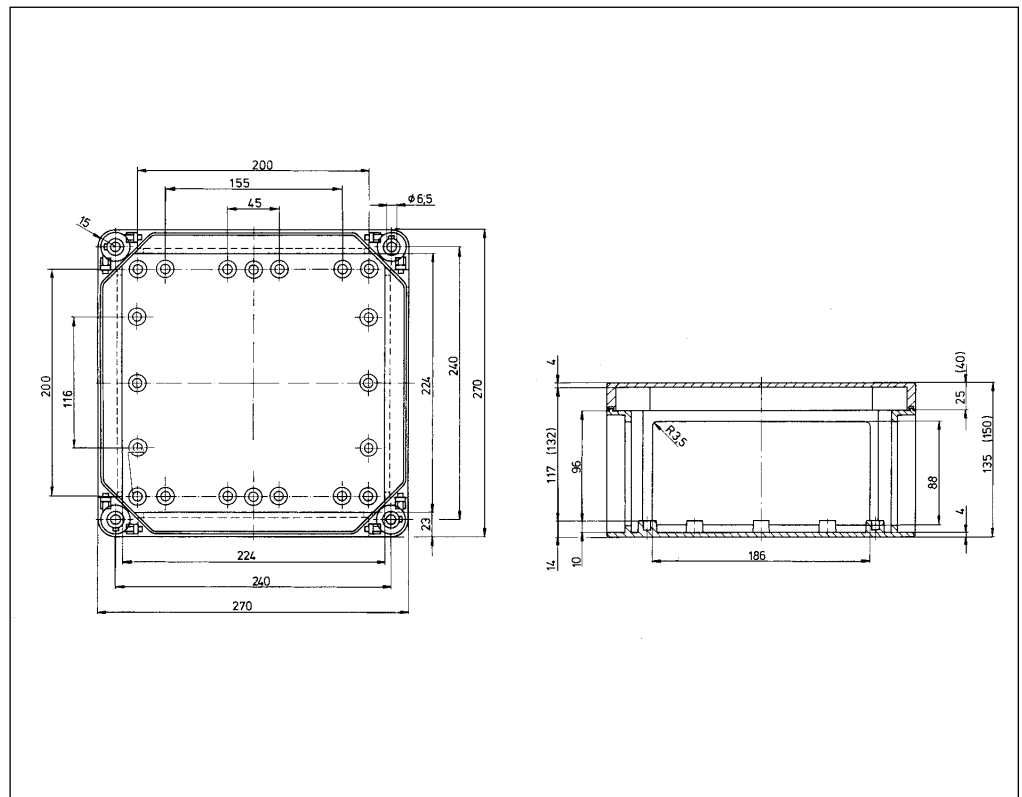


1402

External Dimensions: L 270 x W 270 x H 135 mm

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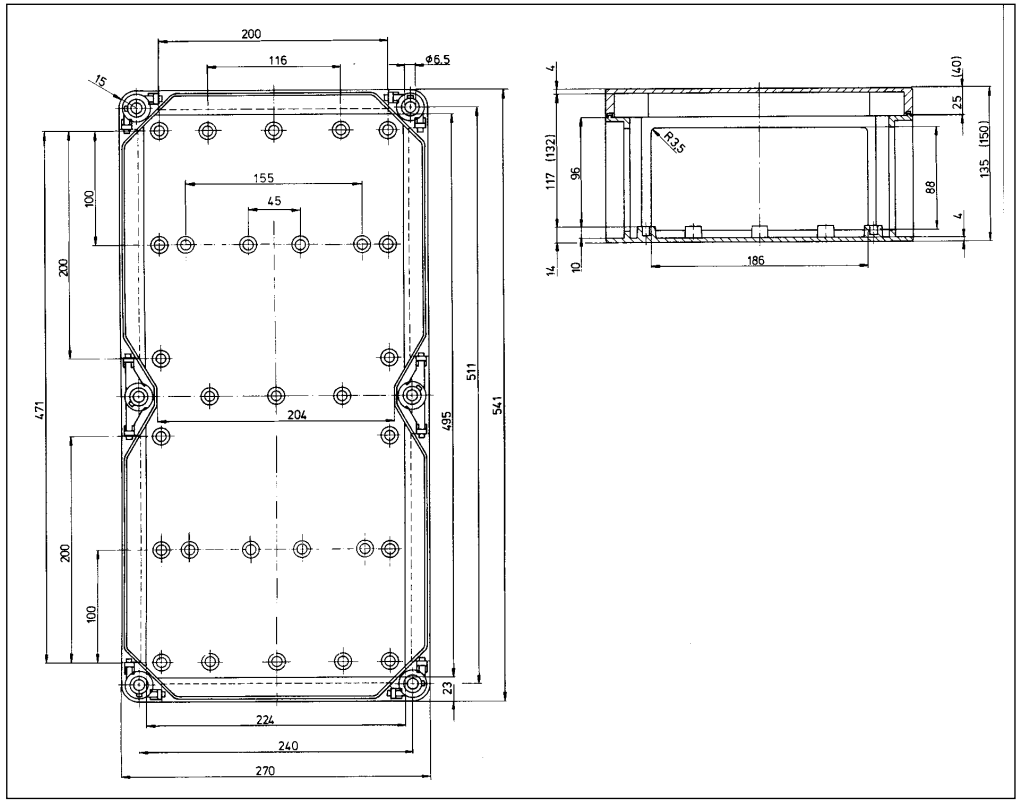
| Standard Features |
|--|
| <ul style="list-style-type: none"> • 10039021 00 ¾ turn Pocolid lid screws. • 10093229 00 M6x10 Copper ground screws. • Non-Removable foamed-in Polyurethane gasket. |
| Accessories |
| <ul style="list-style-type: none"> • 10061722 00 Terminal Block Rails. • 10050416 00 Grounding Strip. • 10052034 00 External Wall Mounting Brackets (Set of 4). • 14000026 00 Internal Hinges (Set of 2). • 10051017 00 Threaded Inserts (Set of 10). |



Dimensional Drawings

Fiberglass Flange

| Standard Features |
|---|
| <ul style="list-style-type: none"> • 10039021 00 ¾ turn Poca lid screws. • 10093229 00 M6x10 Copper ground screws. • Non-Removable foamed-in Polyurethane gasket. |
| Accessories |
| <ul style="list-style-type: none"> • 10061723 00 Terminal Rails. • 10050418 00 Grounding Strip with screws. • 10052034 00 External Wall Mounting Brackets (Set of 4). • 14000026 00 Internal Hinges (Set of 2). • 10051017 00 Threaded Inserts (Set of 10) (M6). |



| Mounting Plates |
|--|
| <ul style="list-style-type: none"> • 1400011 00 Internal phenolic mounting plate with screws for 1401 series • 1400012 00 Internal phenolic mounting plate with screws for 1402 series • 1400013 00 Internal phenolic mounting plate with screws for 1403 series • 1400027 00 Aluminum Display Panel with hardware for 1401 series • 1400028 00 Aluminum Display Panel with hardware for 1402 series • 1400029 00 Aluminum Display Panel with hardware for 1403 series |

