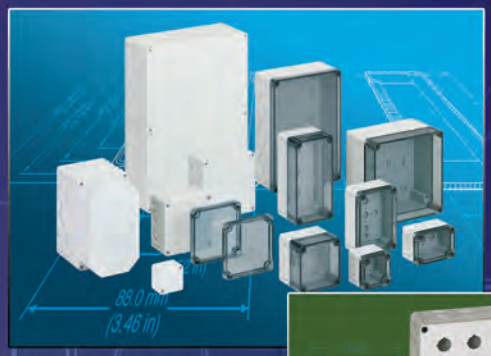
Altech Corp.®

Serving the Automation & Control Industry since 1984

Quality System

Quality Endorsed Company



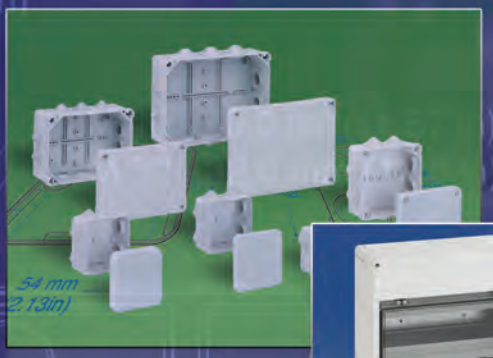


















Side A

30.4 mm (1.20 in)

73.0 mm (2.87 in)

Side B

89.0 mm (3.50 in)

254 mm (10.0 in.)

150 mm (5.91 in.)

132 mm (5.20 in.)

els spelsberg

Industrial Enclosures

Industrial Enclosures

Since 1984, Altech Corporation has grown to become a leading supplier of automation and industrial control components. Headquartered in Flemington, NJ, Altech has an experienced staff of engineering, manufacturing and sales personnel to provide the highest quality products with superior service. This is the Altech Commitment!

Altech's line of industrial enclosures are manufactured by els Spelsberg, a company well known in Europe for its quality enclosures. Their fully automated manufacturing facility produces more than 100,000 enclosures per day. At any given time, approximately one million enclosures of various sizes and types are in inventory, ready for immediate shipment to customers worldwide.

Our well trained technical experts welcome the opportunity to answer your technical questions and provide solutions to your automation and control needs. Give us a call or visit www.altechcorp.com.





Quality Commitment

Altech's control components meet diverse national and international standards such as UL, NEC, CSA, IEC, VDE and more. Altech provides superior customer service and delivery through Total Quality Management and Continuous Process Improvement. Altech is ISO 9001 approved. We perform these services with honesty and integrity and are committed to achieve these goals.



Altech Corp.® • 35 Royal Road • Flemington, NJ 08822-6000 • Phone (908)806-9400 • FAX (908)806-9490

Table of Contents



TK Series
Small to medium enclosures
50 x 52 x 35 to 360 x 254 x 165 mm
1.97 x 2.05 x 1.38 to 14.2 x 10.0 x 6.50 in
10-45



TG Series
Small to medium enclosures
84 x 82 x 55 to 302 x 232 x 110 mm
3.31 x 3.23 x 2.17 to 11.89 x 9.13 x 4.33 in
46-63



AL Series
Small to medium size enclosures made of aluminum
50 x 45 x 30 to 388 x 270 x 117 mm
1.97 x 1.77 x 1.18 to 15.28 x 10.63 x 4.61 in
64-89



Abox Series
Small to medium junction boxes
80 x 80 x 52 to 250 x 250 x 115 mm
3.15 x 3.15 x 2.05 to 9.84 x 9.84 x 4.53 in
90-98



Abox-i Series
Small to medium junction boxes for harsh environments
80 x 80 x 52 to 250 x 250 x 115 mm
3.15 x 3.15 x 2.05 to 9.84 x 9.84 x 4.53 in
100-107



AKL Series
Medium to large enclosures
150 x 300 x 132 to 600 x 300 x 210 mm
5.91 x 11.81 x 5.20 to 23.62 x 11.81 x 8.27 in
108-113



EK Series
Small to medium size enclosures with transparent doors
130 x 94 x 80 to 361 x 254 x 110 mm
5.12 x 3.70 x 3.15 to 14.21 x 10.0 x 4.33 in
114-120



AK Series
Small to large size enclosures with transparent doors
100 x 150 x 96 to 900 x 300 x 142 mm
3.94 x 5.91 x 3.78 to 35.43 x 11.81 x 5.59 in
122-136



HP Series
Economy junction boxes
75 x 75 x 42 to 199 x 149 x 70 mm
2.95 x 2.95 x 1.65 to 7.83 x 5.87 x 3.03 in
138-145



PB Series
Push button enclosures
94 x 94 x 81 to 180 x 94 x 81 mm
3.70 x 3.70 x 3.19 to 7.09 x 3.70 x 3.19 in
146-147



Accessories
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No matter the application or condition we have your components covered.

Altech enclosures by els spelsberg provide needed protection in a functional and creative way, while enhancing the value of your product with their appealing designs.

Whatever your application, you can rely on our enclosure to meet the most demanding requirements for housing and protecting components and devices. And we do it with functional, yet appealing designs that can enhance the value of your product. From light to heavy duty industrial or marine environments, our family of enclosures secure and protect control components, DIN rail mount terminal blocks and circuit breakers, switches, meters, printed circuit boards, as well as instruments and sensors.

Using state of the art machining, we can equip your enclosures with terminal blocks and other custom components to meet your special requirements.







CONNECT



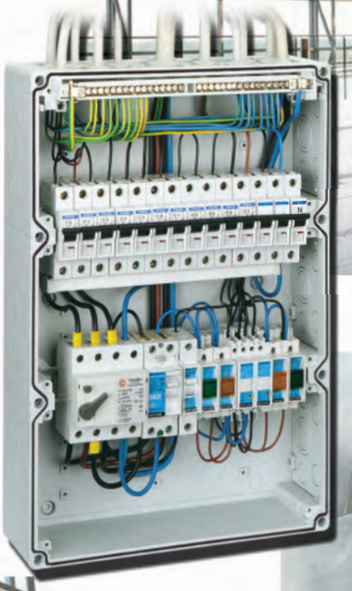


ALUMINUM



PRINTABLE









BENEFITS

Rustproof
- Polycarbonate/Polystyrene enclosures will last indefinitely without corrosion

Visibility
- Components and devices are fully visible through transparent covers, while completely protected and insulated

Impact Resistant
- Non-metallic enclosures withstand bumps and blows, they will not dent

Maintenance Free
- Surface finish does not deteriorate and requires no special painting or refinishing

Chemical resistant
- Resist weak and strong acids and alkali

Lightweight
- Non-metallic enclosures weigh significantly less than metal, simplifying handling

Flexibility
- Enclosures can be easily customized



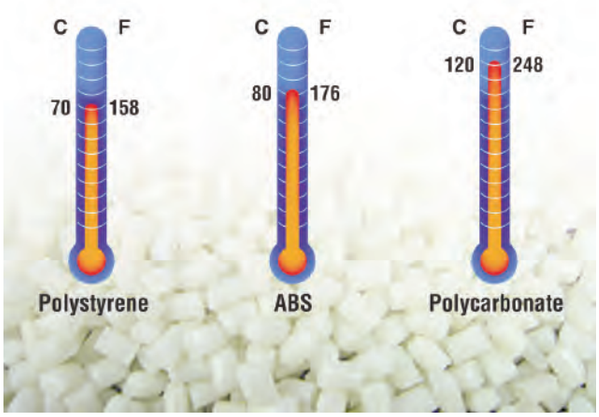
Illustrated are just a few of the applications for our enclosures.

DESIGN FEATURES



Smooth or Knockout Sidewalls

Smooth sidewalls provide for installation of custom openings for wire, cable, conduit fittings, or mounting of devices
(TK, EK Series). Sidewall knockouts provide factory molded knockouts conveniently positioned for wire, cable or conduit fittings. They are quickly and easily removed by pushing out after scoring.



Materials

Only flame retardant polystyrene, ABS or glass filled polycarbonate materials are used to meet the requirements of UL94 and VDE 0471.
Polycarbonate is suitable for temperatures up to 120°C (248°F), ABS is rated for temperatures up to 80°C (176°F) and 70°C (158°F) for Polystyrene. Polycarbonate is UV stabile making it the appropriate choice for outdoor applications.



Customization

Our enclosures can be factory supplied with custom openings. Using state of the art machining, we can punch, drill, mill or cut to your most exacting specifications. We customize quickly and accurately, ... at a reasonable cost!



Colors

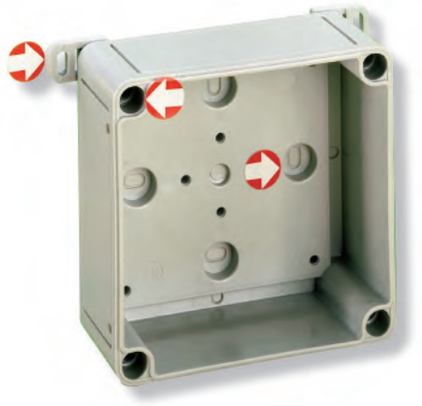
The standard color for the enclosure base is light gray. Covers are available in gray or tinted transparent (TK, EK, AK Series). Custom colors are available in production quantities upon request.

DESIGN FEATURES



Protection

Protection up to IP67 (NEMA 4, 4X) can be attained depending on enclosure series and fittings selected.



Enclosure Mounting

Altech enclosures by els spelsberg can be mounted directly onto a panel, frame or other mounting surface through corner mounting holes, knockout holes molded into the base, or optional mounting tabs. Sealing caps for base mounted screws are included.

Note: Corner hole or flange mounting is required to maintain the NEMA 4X rating on TK and EK Enclosures.



Covers

Covers are available in alternate heights, in standard gray or tinted transparent. Quick release, polyamide screws make cover removal easy.



Enclosure Printing

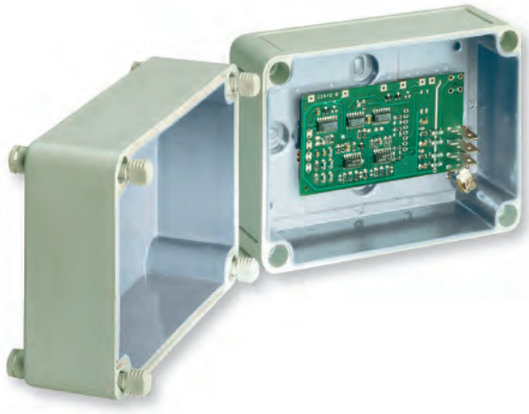
Three Altech printing options are available; digital printing, screen printing and adhesive labels. Printing customizes the enclosure giving it a professional look. This service is offered even at low initial production quantities.

DESIGN FEATURES



Combination Kits

Enclosures can be combined to create layer units or special configurations with the use of combination kits. The combination kit ensures that the degree of protection will be maintained. Refer to page 149 for ordering information.



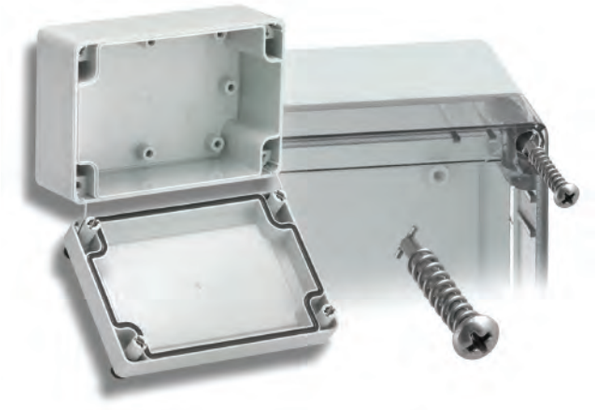
EMI/RFI Coating

The TK Series Enclosures can be EMI/RFI shielded. The enclosures are internally vacuum coated with conducting metal. This coating effectively protects valuable equipment from electromagnetic interference and electrostatic discharge.



Hinge Kits

Hinges maximize accessibility. They are supplied as kits, complete with mounting instructions, hardware and a mounting template. Hinges do not compromise NEMA or IEC ratings when installed to factory guidelines or when factory installed. Refer to page 150 for ordering information.



TG Series Unique Design

The TG series incorporates design features to make work faster, easier and more efficient. All TG Enclosures have integral cover retainers. This captive lid often eliminates the need for additional hinge sets while keeping the lid close at hand. Quick turn screws are optional on the TG series. These screws feature 1/4 turn functionality for fast, reliable access to the enclosure. A simple 1/4 turn releases the screw, pushing the screw back in and another 1/4 turn secures it.

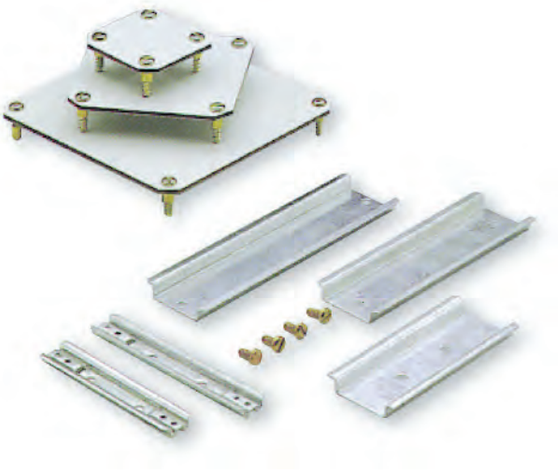
DESIGN FEATURES



Seals

A groove and lip type seal design is used on most series to provide the highest possible degree of protection. The seamless polyurethane seals are automatically injected into the grooves, insuring consistent quality.

Having excellent memory characteristics, our seals will not dry out, crack or deteriorate.



Mounting Plates and DIN Rails

Mounting plates and DIN rails are supplied as kits complete with screws and spacers where needed. Mounting plates are used to attach components and devices having specific hole patterns that do not match standard base mounting provisions. Refer to pages 149-151 for specifying and ordering information.



Fittings

Fittings are an important part of the enclosure's sealing system. To satisfy the appropriate NEMA and/or IEC requirements, the proper fittings must be selected. For our wide selection of Pg, metric and NPT fittings, refer to pages 150-152.



Function Guarantee Fire Protection

WKE Series junction boxes protect electrical installations during a fire for critical systems such as emergency lighting, ventilation systems and lifts. Flame protection is provided for 30 to 90 minutes, depending on model, and water ingress protection up to IP65. Typical applications include tunnels, mining operations, high rise buildings and other areas where evacuation route power must be maintained for life saving escape routes and rescue equipment. Please consult Altech for more information on these specialty products.



TK Series

Designed for tough industrial environments and a wide variety of applications, TK Enclosures are available with standard gray or tinted transparent covers in several heights. Sidewalls are supplied smooth or with knockouts. Precision molded from impact and flame resistant materials, they offer functionality and appealing solutions for diverse application requirements.

- 18 different enclosures with up to 3 different cover heights
- IP66 (NEMA 4X)
- Polystyrene or Polycarbonate
- Gray or tinted transparent covers
- Smooth sidewalls or sidewalls with knockouts
- Four cover mounting screws
- Tongue and groove with polyurethane gasket (CFC free)
- Gasket inserted by robots
- HF - EMC models available
- Knockout mounting holes in enclosure base
- Screw fastening cover design requires six turns to lock
- Dust and moisture proof
- Non flammable and halogen free

The TK Choice

Sample application.



Different cover heights.





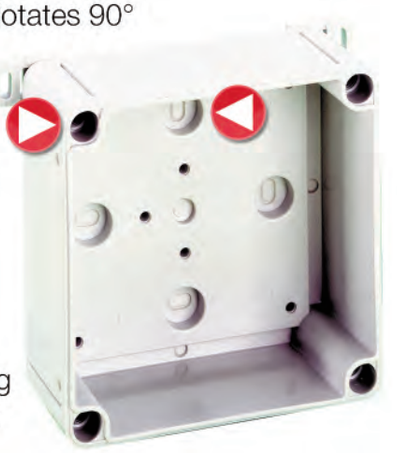
Combinable



External hinges

Rotates 90°

Choice of mounting method



Mounting Tab Kit

TK 55/TK75 – Polycarbonate – 50 x 52 mm (1.97 x 2.05 in.) / 65 x 50 mm (2.56 x 1.97 in.)

Standard Features

- **Protection Level:** IP66 (NEMA Type: 4X with gray cover, 12K with transparent cover)
- **Technical:** Smooth Sidewalls
  1 Sidewall Knockout or Integral Cable Gland (5-10mm cable diameter)
  Gray or Clear Transparent Cover
- **Enclosure Materials:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** Polycarbonate
  -40°C to 120°C (-40°F to 248°F)
- **Accessories:** See section below

CE UL* C US E208470



TK55 - 50 x 52 mm — Polycarbonate

Ordering Information	Height mm (in)	Cat. No.	Type	Cover Color	Std. Pk.
Enclosure - smooth sidewall	35 mm (1.38 in)	120-455	PC 55-4-o	gray	5
Enclosure - smooth sidewall	35 mm (1.38 in)	130-455	PC 55-4-to	trans.	5
Enclosure - metric knockout	35 mm (1.38 in)	127-455	PC 55-4-m	gray	5
Enclosure - metric knockout	35 mm (1.38 in)	137-455	PC 55-4-tm	trans.	5
Enclosure - Integral Cable Gland	35 mm (1.38 in)	129-455	PC 55-4-v	gray	5
Enclosure - Integral Cable Gland	35 mm (1.38 in)	139-455	PC 55-4-tv	trans.	5

TK75 - 65 x 50 mm — Polycarbonate

Ordering Information	Height mm (in)	Cat. No.	Type	Cover Color	Std. Pk.
Enclosure - smooth sidewall	35 mm (1.38 in)	120-475	PC 75-4-o	gray	5
Enclosure - smooth sidewall	35 mm (1.38 in)	130-475	PC 75-4-to	trans.	5
Enclosure - metric knockout	35 mm (1.38 in)	127-475	PC 75-4-m	gray	5
Enclosure - metric knockout	35 mm (1.38 in)	137-475	PC 75-4-tm	trans.	5
Enclosure - Integral Cable Gland	35 mm (1.38 in)	129-475	PC 75-4-v	gray	5
Enclosure - Integral Cable Gland	35 mm (1.38 in)	139-475	PC 75-4-tv	trans.	5
Enclosure - 2 x Integral Cable Gland	35 mm (1.38 in)	128-475	PC 75-4-2v	gray	5
Enclosure - 2 x Integral Cable Gland	35 mm (1.38 in)	138-475	PC 75-4-2tv	trans.	5

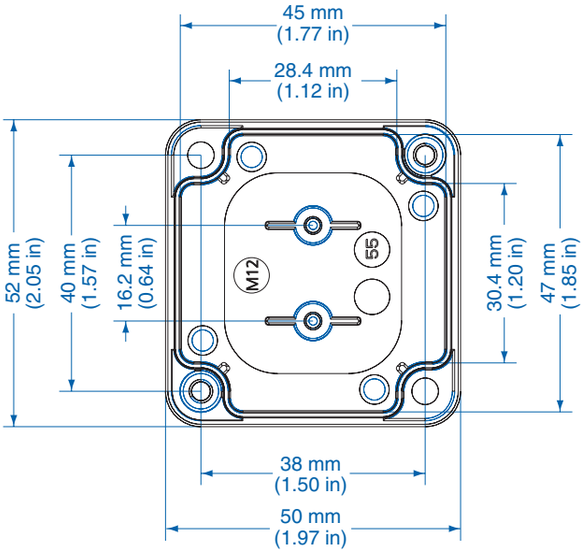
Accessories

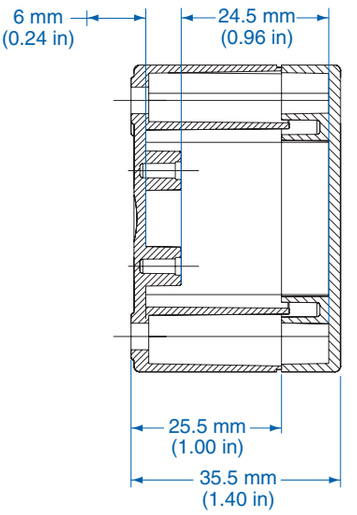
Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (TK55)	195-055	TKMPI-55	5
Mounting Plate (TK75)	195-075	TKMPI-75	5
PCB Bracket	194-110	MP/LPH	2
Mounting Bracket	194-002	MB	1

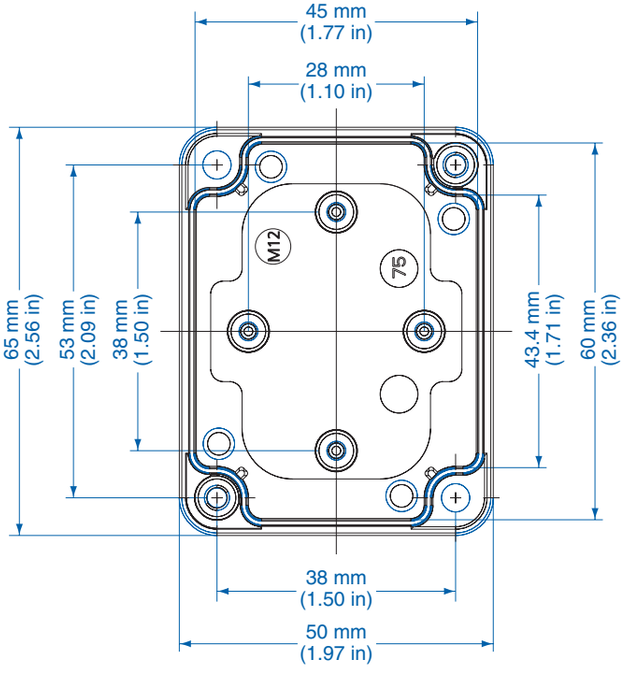
Please refer to pages 149-152 for additional accessories and detailed information.

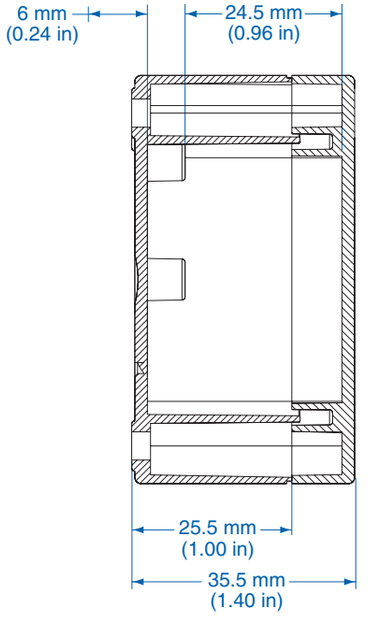
* Only parts without integral cable glands are UL listed.

Dimensions



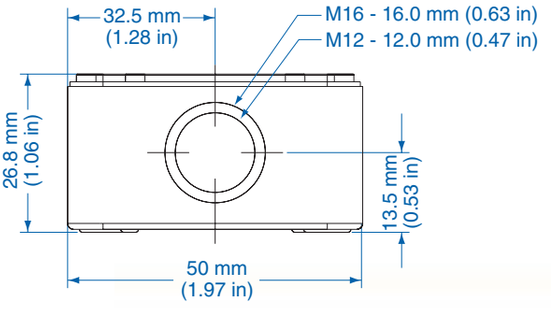






Knockout Positions

(one side only)



TK 77 – Polystyrene and Polycarbonate – 65 x 65 mm (2.56 x 2.56 in.)

Standard Features

- **Protection Level:** IP66 (NEMA Type: 4X with gray cover, 12K with transparent cover)
- **Technical:** Smooth or Knockout Sidewalls
  Gray or Tinted Transparent Cover
  Multiple Enclosure Mounting Options
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** Polystyrene
  -40°C to 70°C (-40°F to 158°F)
  Polycarbonate
  -40°C to 120°C (-40°F to 248°F)
- **Accessories:** See section below

E208470
Polycarbonate Only



Smooth Sidewalls

Ordering Information	Height mm (in)	Polystyrene Cat. No.	Type	Cover Color	Std. Pk.	Polycarbonate Cat. No.	Type	Cover Color	Std. Pk.
Enclosure - low cover	57 mm (2.24 in)	110-401	PS 77-6-o	gray	5	120-401	PC 77-6-o	gray	5
Enclosure - high cover	81 mm (3.19 in)	110-901	PS 77-8-o	gray	5	120-901	PC 77-8-o	gray	5
Enclosure - low cover	57 mm (2.24 in)	111-001	PS 77-6-to	trans.	5	130-001	PC 77-6-to	trans.	5
Enclosure - high cover	81 mm (3.19 in)	111-501	PS 77-8-to	trans.	5	130-501	PC 77-8-to	trans.	5

Sidewalls with Metric Knockouts

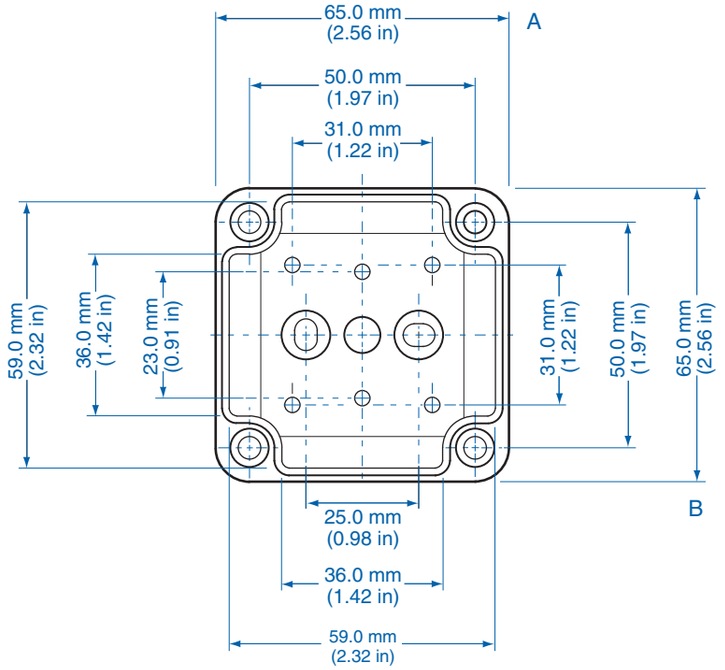
Ordering Information	Height mm (in)	Polystyrene Cat. No.	Type	Cover Color	Std. Pk.	Polycarbonate Cat. No.	Type.	Cover Color	Std. Pk.
Enclosure - low cover	57 mm (2.24 in)	105-401	PS 77-6-m	gray	5	127-401	PC 77-6-m	gray	5
Enclosure - high cover	81 mm (3.19 in)	105-901	PS 77-8-m	gray	5	127-901	PC 77-8-m	gray	5
Enclosure - low cover	57 mm (2.24 in)	106-001	PS 77-6-tm	trans.	5	137-001	PC 77-6-tm	trans.	5
Enclosure - high cover	81 mm (3.19 in)	106-501	PS 77-8-tm	trans.	5	137-501	PC 77-8-tm	trans.	5

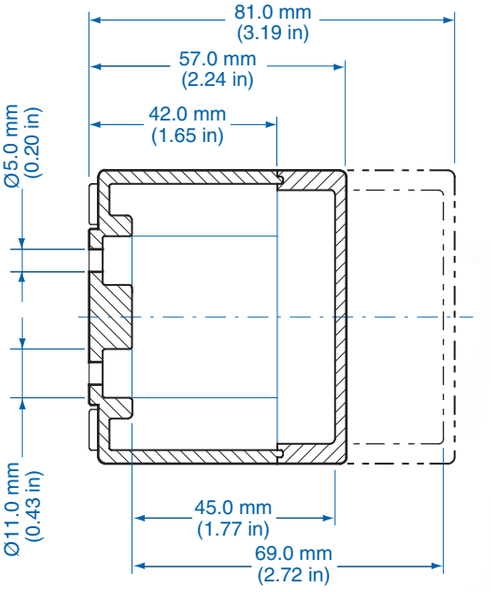
Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	195-001	TKMPI-77	1
Mounting Plate (steel)	197-001	TKMPS-77	1
DIN Rail TS15-49.5mm	197-049	TS 15/49.5	1
Hinge Kit Set	190-002	HK1	1
Mounting Tab Kit	194-001	MT1	1

Please refer to pages 149-152 for additional accessories and detailed information.

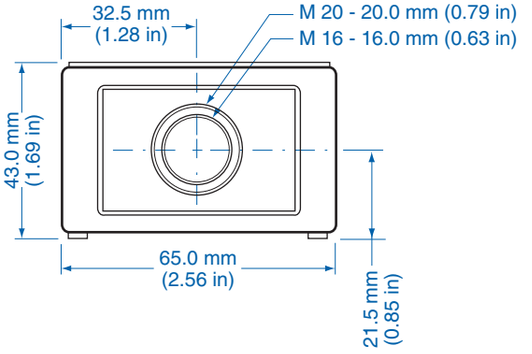
Dimensions





Knockout Positions

(all 4 sides)



TK 97 – Polystyrene and Polycarbonate – 94 x 65 mm (3.70 x 2.56 in.)

Standard Features

- **Protection Level:** IP66 (NEMA Type: 4X with gray cover, 12K with transparent cover)
- **Technical:** Smooth or Knockout Sidewalls
  Gray or Tinted Transparent Cover
  Multiple Enclosure Mounting Options
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** Polystyrene
  -40°C to 70°C (-40°F to 158°F)
  Polycarbonate
  -40°C to 120°C (-40°F to 248°F)
- **Accessories:** See section below

E208470
Polycarbonate Only



Smooth Sidewalls

Ordering Information	Height mm (in)	Polystyrene Cat. No.	Type	Cover Color	Std. Pk.	Polycarbonate Cat. No.	Type	Cover Color	Std. Pk.
Enclosure - low cover	57 mm (2.24 in)	110-402	PS 97-6-o	gray	5	120-402	PC 97-6-o	gray	5
Enclosure - high cover	81 mm (3.19 in)	110-902	PS 97-8-o	gray	5	120-902	PC 97-8-o	gray	5
Enclosure - low cover	57 mm (2.24 in)	111-002	PS 97-6-to	trans.	5	130-002	PC 97-6-to	trans.	5
Enclosure - high cover	81 mm (3.19 in)	111-502	PS 97-8-to	trans.	5	130-502	PC 97-8-to	trans.	5

Sidewalls with Metric Knockouts

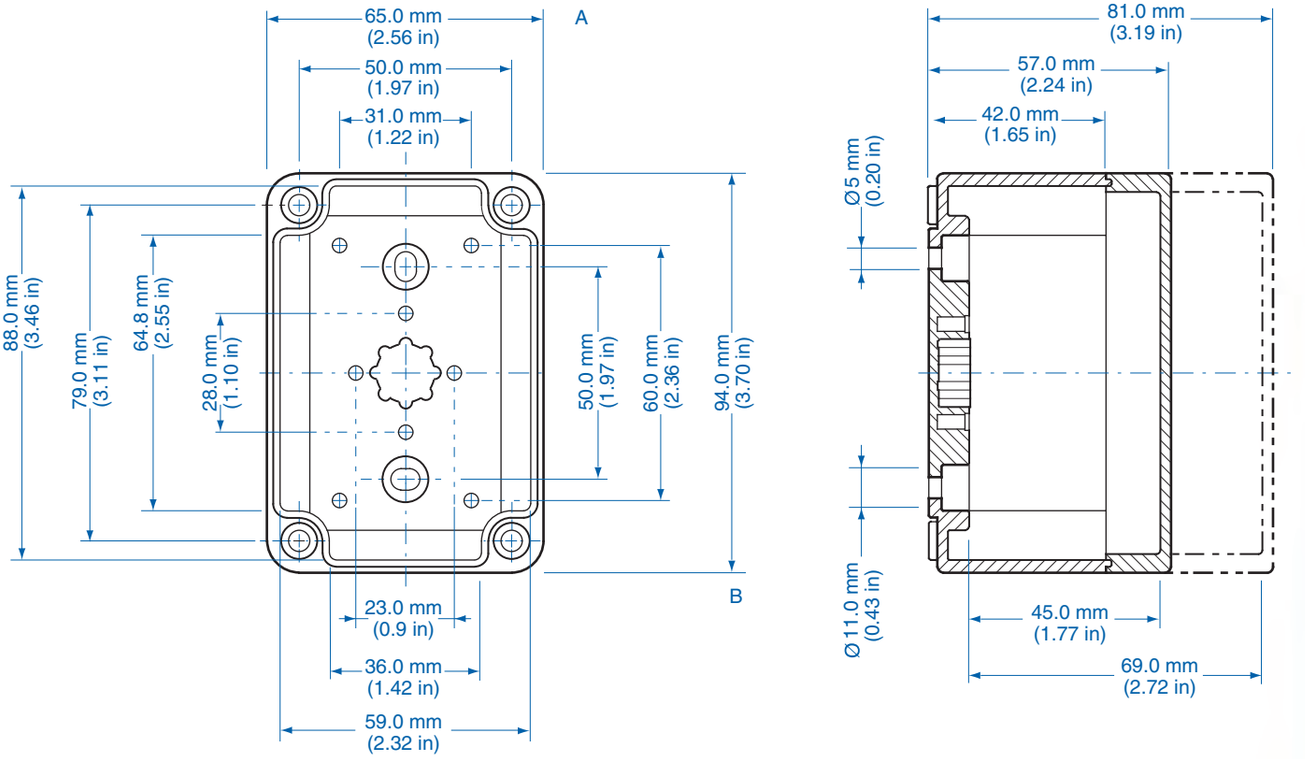
Ordering Information	Height mm (in)	Polystyrene Cat. No.	Type	Cover Color	Std. Pk.	Polycarbonate Cat. No.	Type	Cover Color	Std. Pk.
Enclosure - low cover	57 mm (2.24 in)	105-402	PS 97-6-m	gray	5	127-402	PC 97-6-m	gray	5
Enclosure - high cover	81 mm (3.19 in)	105-902	PS 97-8-m	gray	5	127-902	PC 97-8-m	gray	5
Enclosure - low cover	57 mm (2.24 in)	106-002	PS 97-6-tm	trans.	5	137-002	PC 97-6-tm	trans.	5
Enclosure - high cover	81 mm (3.19 in)	106-502	PS 97-8-tm	trans.	5	137-502	PC 97-8-tm	trans.	5

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	195-002	TKMPI-97	1
Mounting Plate (steel)	197-002	TKMPS-97	1
DIN Rail TS15-80mm	197-080	TS 15/80	1
Hinge Kit Set	190-002	HK1	1
Mounting Tab Kit	194-001	MT1	1

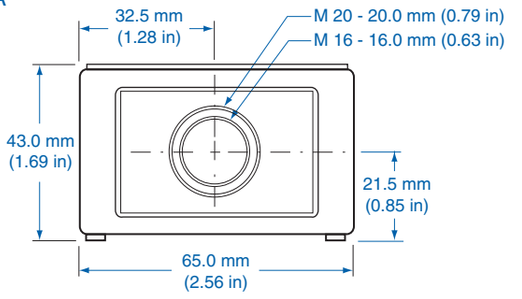
Please refer to pages 149-152 for additional accessories and detailed information.

Dimensions

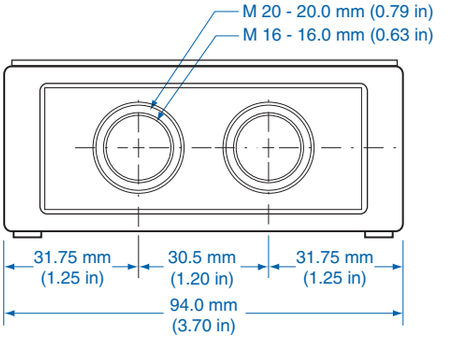


Knockout Positions

Side A



Side B



TK 99 – Polystyrene and Polycarbonate – 94 x 94 mm (3.70 x 3.70 in.)

Standard Features

- **Protection Level:** IP66 (NEMA Type: 4X with gray cover, 12K with transparent cover)
- **Technical:** Smooth or Knockout Sidewalls
  Gray or Tinted Transparent Cover
  Multiple Enclosure Mounting Options
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** Polystyrene
  -40°C to 70°C (-40°F to 158°F)
  Polycarbonate
  -40°C to 120°C (-40°F to 248°F)
- **Accessories:** See section below

E208470
Polycarbonate Only



Smooth Sidewalls

Ordering Information	Height mm (in)	Polystyrene Cat. No.	Type	Cover Color	Std. Pk.	Polycarbonate Cat. No.	Type	Cover Color	Std. Pk.
Enclosure - low cover	57 mm (2.24 in)	110-403	PS 99-6-o	gray	4	120-403	PC 99-6-o	gray	4
Enclosure - high cover	81 mm (3.19 in)	110-903	PS 99-8-o	gray	3	120-903	PC 99-8-o	gray	3
Enclosure - low cover	57 mm (2.24 in)	111-003	PS 99-6-to	trans.	4	130-003	PC 99-6-to	trans.	4
Enclosure - high cover	81 mm (3.19 in)	111-503	PS 99-8-to	trans.	3	130-503	PC 99-8-to	trans.	3

Sidewalls with Metric Knockouts

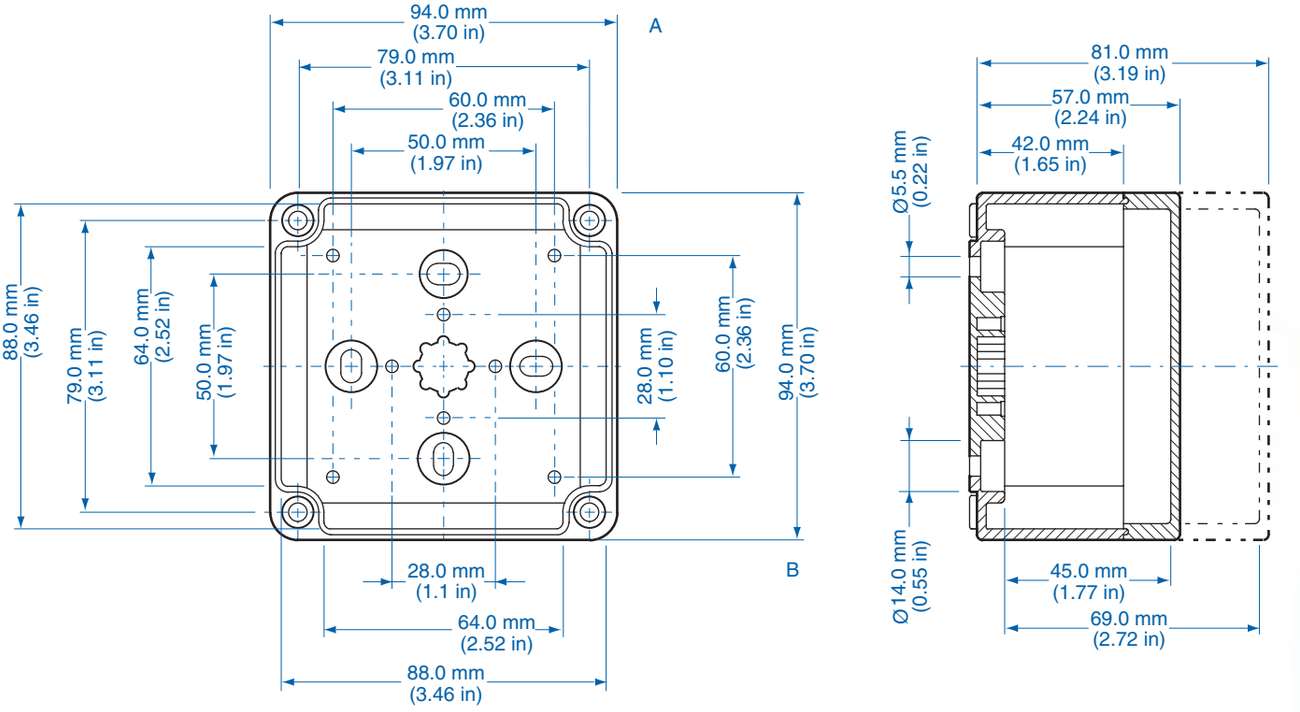
Ordering Information	Height mm (in)	Polystyrene Cat. No.	Type	Cover Color	Std. Pk.	Polycarbonate Cat. No.	Type	Cover Color	Std. Pk.
Enclosure - low cover	57 mm (2.24 in)	105-403	PS 99-6-m	gray	4	127-403	PC 99-6-m	gray	4
Enclosure - high cover	81 mm (3.19 in)	105-903	PS 99-8-m	gray	3	127-903	PC 99-8-m	gray	3
Enclosure - low cover	57 mm (2.24 in)	106-003	PS 99-6-tm	trans.	4	137-003	PC 99-6-tm	trans.	4
Enclosure - high cover	81 mm (3.19 in)	106-503	PS 99-8-tm	trans.	3	137-503	PC 99-8-tm	trans.	3

Accessories

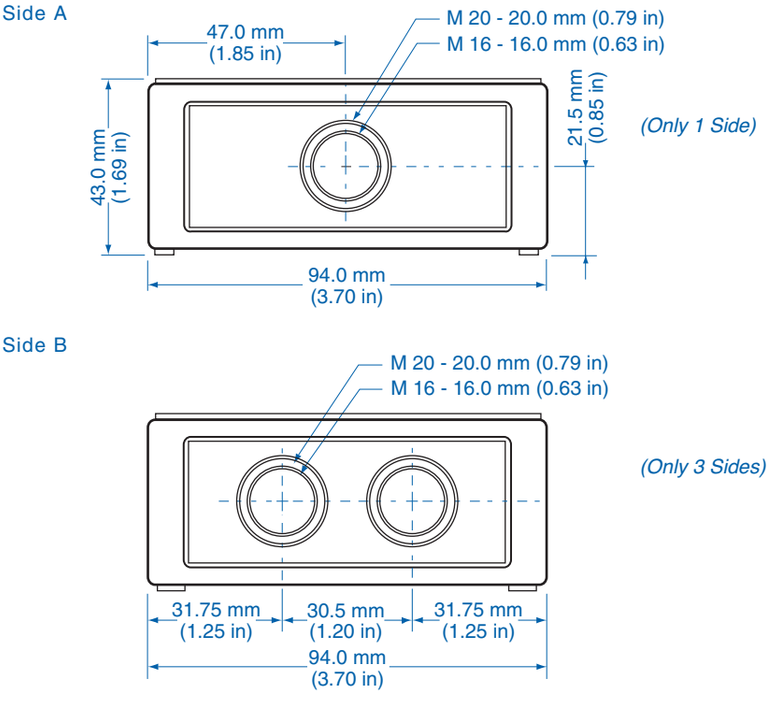
Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	195-003	TKMPI-99	1
Mounting Plate (steel)	197-003	TKMPS-99	1
DIN Rail TS15 - 80 mm	197-080	TS 15/80	1
Hinge Kit Set	190-002	HK1	1
Mounting Tab Kit	194-001	MT1	1

Please refer to pages 149-152 for additional accessories and detailed information.

Dimensions



Knockout Positions



TK 1111 – Polystyrene and Polycarbonate – 110 x 110 mm (4.33 x 4.33 in.)

Standard Features

- **Protection Level:** IP66 (NEMA Type: 4X with gray cover, 12K with transparent cover)
- **Technical:** Smooth or Knockout Sidewalls
  Gray or Tinted Transparent Cover
  Multiple Enclosure Mounting Options
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** Polystyrene
  -40°C to 70°C (-40°F to 158°F)
  Polycarbonate
  -40°C to 120°C (-40°F to 248°F)
- **Accessories:** See section below

E208470
Polycarbonate Only



Smooth Sidewalls

Ordering Information	Height mm (in)	Polystyrene Cat. No.	Polystyrene Type	Polystyrene Cover Color	Polystyrene Std. Pk.	Polycarbonate Cat. No.	Polycarbonate Type	Polycarbonate Cover Color	Polycarbonate Std. Pk.
Enclosure - low cover	66 mm (2.60 in)	110-404	PS 1111-7-o	gray	3	120-404	PC 1111-7-o	gray	3
Enclosure - high cover	90 mm (3.54 in)	110-904	PS 1111-9-o	gray	3	120-904	PC 1111-9-o	gray	3
Enclosure - low cover	66 mm (2.60 in)	111-004	PS 1111-7-to	trans.	3	130-004	PC 1111-7-to	trans.	3
Enclosure - high cover	90 mm (3.54 in)	111-504	PS 1111-9-to	trans.	3	130-504	PC 1111-9-to	trans.	3

Sidewalls with Metric Knockouts

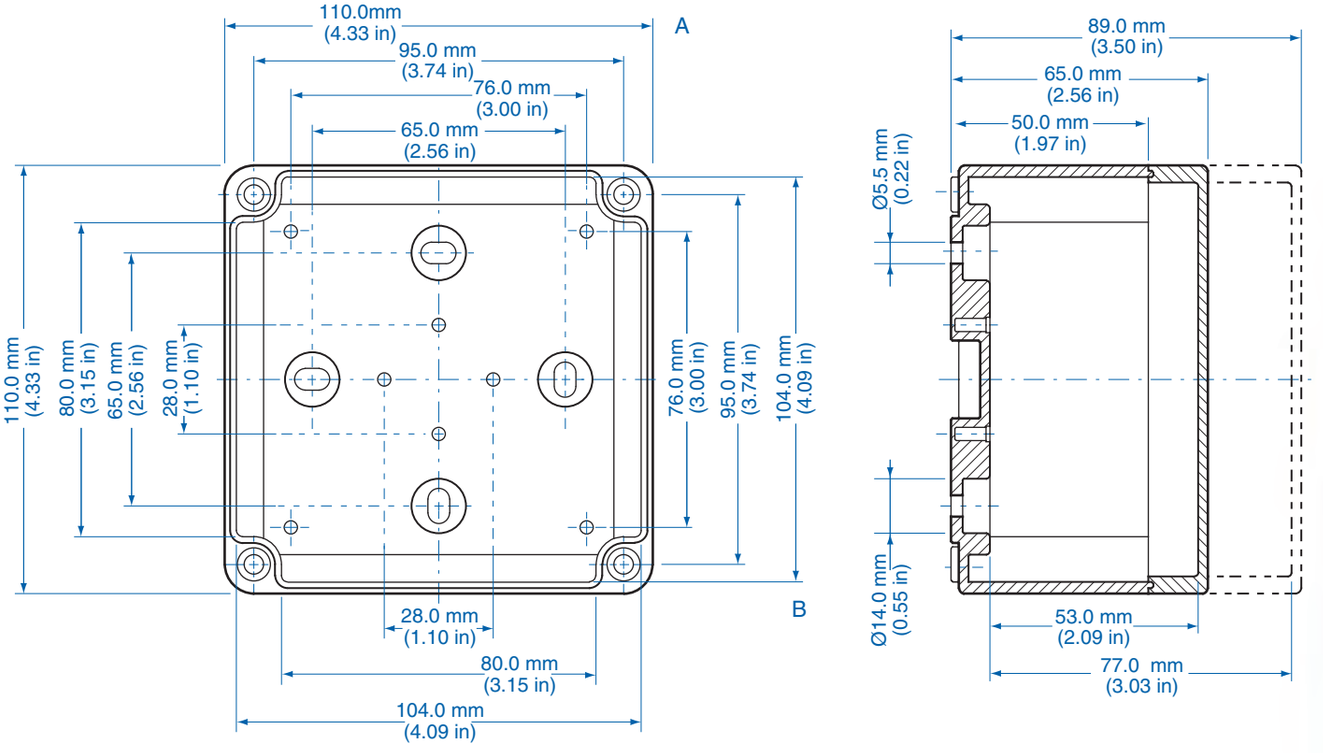
Ordering Information	Height mm (in)	Polystyrene Cat. No.	Polystyrene Type	Polystyrene Cover Color	Polystyrene Std. Pk.	Polycarbonate Cat. No.	Polycarbonate Type	Polycarbonate Cover Color	Polycarbonate Std. Pk.
Enclosure - low cover	66 mm (2.60 in)	105-404	PS 1111-7-m	gray	3	127-404	PC 1111-7-m	gray	3
Enclosure - high cover	90 mm (3.54 in)	105-904	PS 1111-9-m	gray	3	127-904	PC 1111-9-m	gray	3
Enclosure - low cover	66 mm (2.60 in)	106-004	PS 1111-7-tm	trans.	3	137-004	PC 1111-7-tm	trans.	3
Enclosure - high cover	90 mm (3.54 in)	106-504	PS 1111-9-tm	trans.	3	137-504	PC 1111-9-tm	trans.	3

Accessories

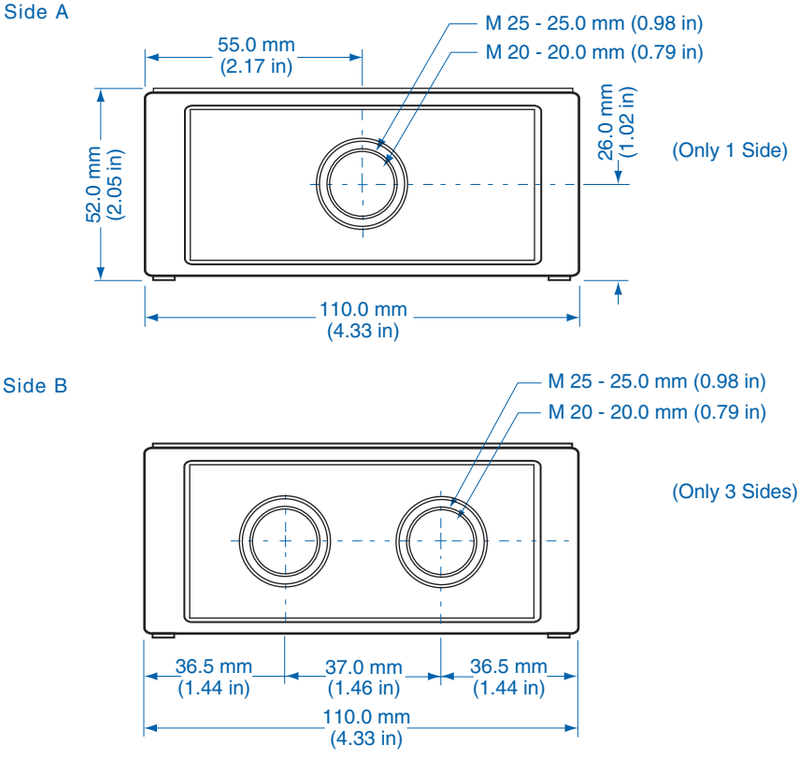
Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	195-004	TKMPI-1111	1
Mounting Plate (steel)	197-004	TKMPS-1111	1
DIN Rail TS35-81mm	198-081	TS 35/81	1
DIN Rail TS15-92mm	197-092	TS 15/92	1
Hinge Kit Set	190-002	HK1	1
Mounting Tab Kit	194-001	MT1	1

Please refer to pages 149-152 for additional accessories and detailed information.

Dimensions



Knockout Positions



TK 1309 – Polystyrene and Polycarbonate – 130 x 94 mm (5.12 x 3.70 in.)

Standard Features

- **Protection Level:** IP66 (NEMA Type: 4X with gray cover, 12K with transparent cover)
- **Technical:** Smooth or Knockout Sidewalls
  Gray or Tinted Transparent Cover
  Multiple Enclosure Mounting Options
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** Polystyrene
  -40°C to 70°C (-40°F to 158°F)
  Polycarbonate
  -40°C to 120°C (-40°F to 248°F)
- **Accessories:** See section below

E208470
Polycarbonate Only



Smooth Sidewalls

Ordering Information	Height mm (in)	Polystyrene Cat. No.	Polystyrene Type	Polystyrene Cover Color	Polystyrene Std. Pk.	Polycarbonate Cat. No.	Polycarbonate Type	Polycarbonate Cover Color	Polycarbonate Std. Pk.
Enclosure - low cover	57 mm (2.24 in)	110-409	PS 1309-6-o	gray	3	120-409	PC 1309-6-o	gray	3
Enclosure - high cover	81 mm (3.19 in)	110-909	PS 1309-8-o	gray	3	120-909	PC 1309-8-o	gray	3
Enclosure - low cover	57 mm (2.24 in)	111-009	PS 1309-6-to	trans.	3	130-009	PC 1309-6-to	trans.	3
Enclosure - high cover	81 mm (3.19 in)	111-509	PS 1309-8-to	trans.	3	130-509	PC 1309-8-to	trans.	3

Sidewalls with Metric Knockouts

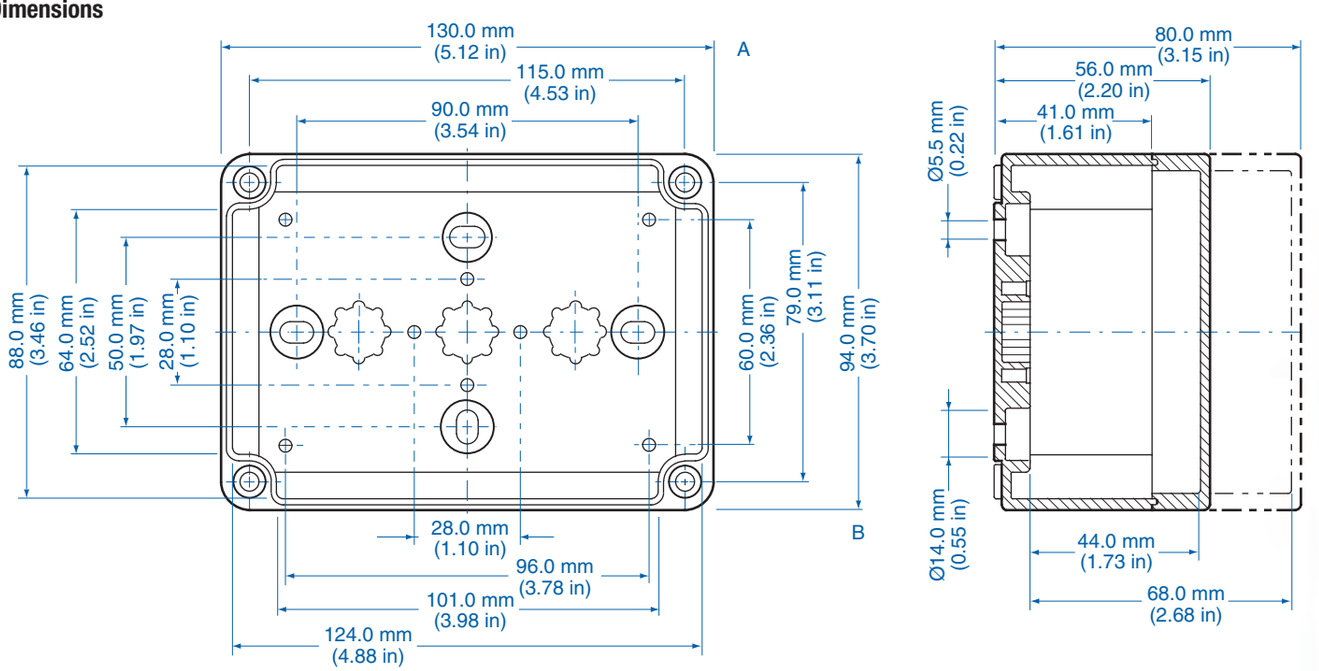
Ordering Information	Height mm (in)	Polystyrene Cat. No.	Polystyrene Type	Polystyrene Cover Color	Polystyrene Std. Pk.	Polycarbonate Cat. No.	Polycarbonate Type	Polycarbonate Cover Color	Polycarbonate Std. Pk.
Enclosure - low cover	57 mm (2.24 in)	105-409	PS 1309-6-m	gray	3	127-409	PC 1309-6-m	gray	3
Enclosure - high cover	81 mm (3.19 in)	105-909	PS 1309-8-m	gray	3	127-909	PC 1309-8-m	gray	3
Enclosure - low cover	57 mm (2.24 in)	106-009	PS 1309-6-tm	trans.	3	137-009	PC 1309-6-tm	trans.	3
Enclosure - high cover	81 mm (3.19 in)	106-509	PS 1309-8-tm	trans.	3	137-509	PC 1309-8-tm	trans.	3

Accessories

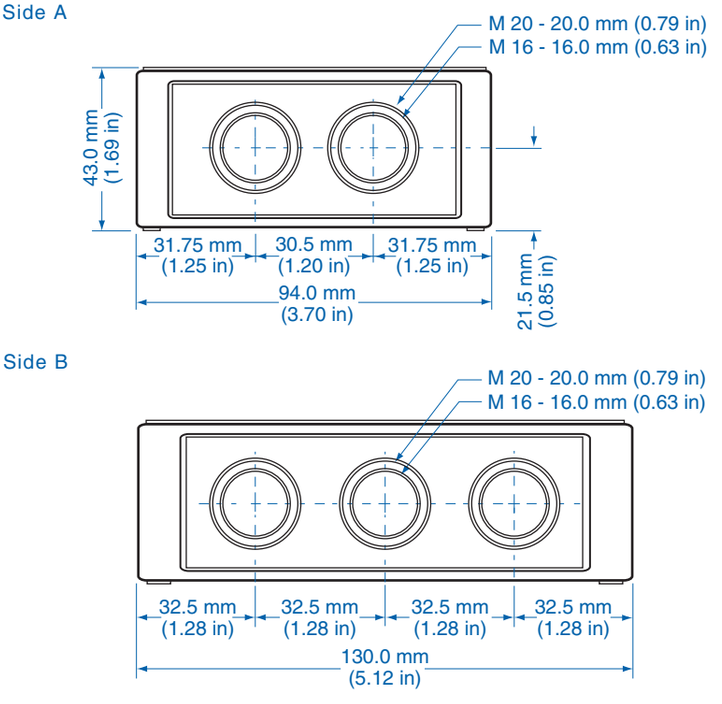
Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	195-009	TKMPI-1309	1
Mounting Plate (steel)	197-009	TKMPS-1309	1
DIN Rail TS35-106mm	198-106	TS 35/106	1
DIN Rail TS15-111mm	197-111	TS 15/111	1
Hinge Kit Set	190-002	HK1	1
Mounting Tab Kit	194-001	MT1	1

Please refer to pages 149-152 for additional accessories and detailed information.

Dimensions



Knockout Positions



TK 1313 – Polystyrene and Polycarbonate – 130 x 130 mm (5.12 x 5.12 in.)

Standard Features

- **Protection Level:** IP66 (NEMA Type: 4X with gray cover, 12K with transparent cover)
- **Technical:** Smooth or Knockout Sidewalls
  Gray or Tinted Transparent Cover
  Multiple Enclosure Mounting Options
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** Polystyrene
  -40°C to 70°C (-40°F to 158°F)
  Polycarbonate
  -40°C to 120°C (-40°F to 248°F)
- **Accessories:** See section below

E208470
Polycarbonate Only



Smooth Sidewalls

Ordering Information	Height mm (in)	Polystyrene Cat. No.	Polystyrene Type	Polystyrene Cover Color	Polystyrene Std. Pk.	Polycarbonate Cat. No.	Polycarbonate Type	Polycarbonate Cover Color	Polycarbonate Std. Pk.
Enclosure - low cover	75 mm (2.95 in)	110-405	PS 1313-7-o	gray	2	120-405	PC 1313-7-o	gray	2
Enclosure - high cover	99 mm (3.90 in)	110-905	PS 1313-10-o	gray	2	120-905	PC 1313-10-o	gray	2
Enclosure - low cover	75 mm (2.95 in)	111-005	PS 1313-7-to	trans.	2	130-005	PC 1313-7-to	trans.	2
Enclosure - high cover	99 mm (3.90 in)	111-505	PS 1313-10-to	trans.	2	130-505	PC 1313-10-to	trans.	2

Sidewalls with Metric Knockouts

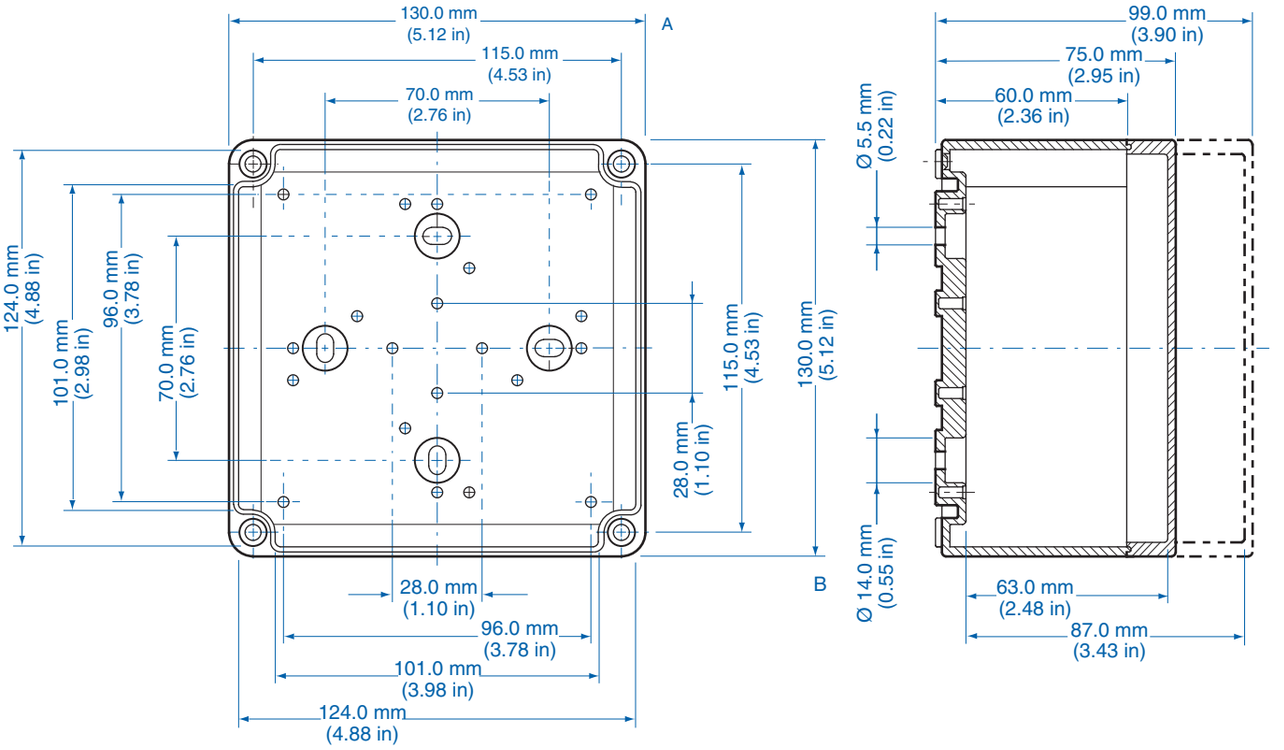
Ordering Information	Height mm (in)	Polystyrene Cat. No.	Polystyrene Type	Polystyrene Cover Color	Polystyrene Std. Pk.	Polycarbonate Cat. No.	Polycarbonate Type	Polycarbonate Cover Color	Polycarbonate Std. Pk.
Enclosure - low cover	75 mm (2.95 in)	105-405	PS 1313-7-m	gray	2	127-405	PC 1313-7-m	gray	2
Enclosure - high cover	99 mm (3.90 in)	105-905	PS 1313-10-m	gray	2	127-905	PC 1313-10-m	gray	2
Enclosure - low cover	75 mm (2.95 in)	106-005	PS 1313-7-tm	trans.	2	137-005	PC 1313-7-tm	trans.	2
Enclosure - high cover	99 mm (3.90 in)	106-505	PS 1313-10-tm	trans.	2	137-505	PC 1313-10-tm	trans.	2

Accessories

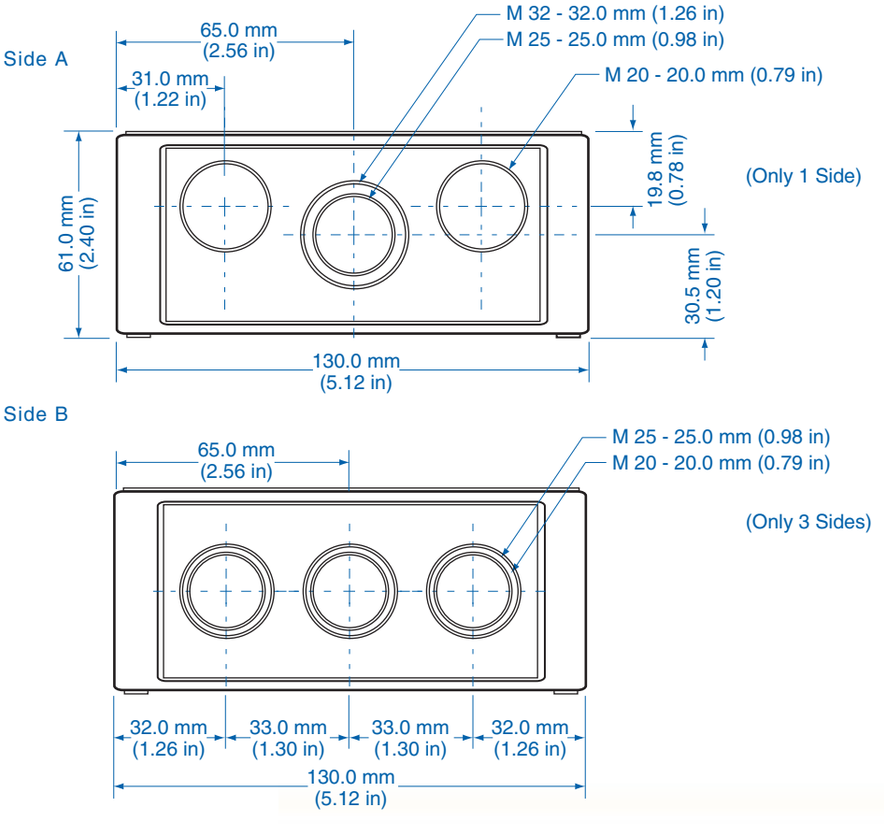
Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	195-005	TKMPI-1313	1
Mounting Plate (steel)	197-005	TKMPS-1313	1
DIN Rail TS35-106mm	198-106	TS 35/106	1
DIN Rail TS15-111mm	197-111	TS 15/111	1
Hinge Kit Set	190-002	HK1	1
Mounting Tab Kit	194-001	MT1	1

Please refer to pages 149-152 for additional accessories and detailed information.

Dimensions



Knockout Positions



TK 1809 – Polystyrene and Polycarbonate – 180 x 94 mm (7.09 x 3.70 in.)

Standard Features

- **Protection Level:** IP66 (NEMA Type: 4X with gray cover, 12K with transparent cover)
- **Technical:** Smooth or Knockout Sidewalls
  Gray or Tinted Transparent Cover
  Multiple Enclosure Mounting Options
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** Polystyrene
  -40°C to 70°C (-40°F to 158°F)
  Polycarbonate
  -40°C to 120°C (-40°F to 248°F)
- **Accessories:** See section below

E208470
Polycarbonate Only



Smooth Sidewalls

Ordering Information	Height mm (in)	Polystyrene Cat. No.	Polystyrene Type	Polystyrene Cover Color	Polystyrene Std. Pk.	Polycarbonate Cat. No.	Polycarbonate Type	Polycarbonate Cover Color	Polycarbonate Std. Pk.
Enclosure - low cover	57 mm (2.24 in)	110-410	PS 1809-6-o	gray	2	120-410	PC 1809-6-o	gray	2
Enclosure - high cover	81 mm (3.19 in)	110-910	PS 1809-8-o	gray	2	120-910	PC 1809-8-o	gray	2
Enclosure - low cover	57 mm (2.24 in)	111-010	PS 1809-6-to	trans.	2	130-010	PC 1809-6-to	trans.	2
Enclosure - high cover	81 mm (3.19 in)	111-510	PS 1809-8-to	trans.	2	130-510	PC 1809-8-to	trans.	2

Sidewalls with Metric Knockouts

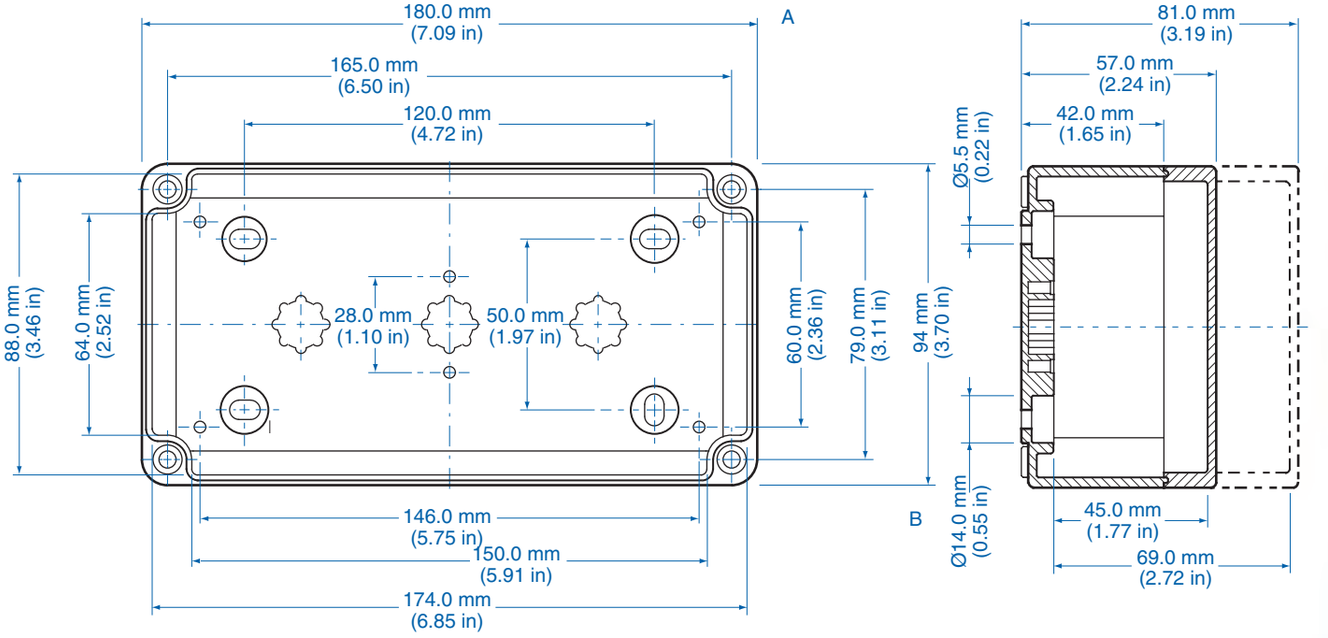
Ordering Information	Height mm (in)	Polystyrene Cat. No.	Polystyrene Type	Polystyrene Cover Color	Polystyrene Std. Pk.	Polycarbonate Cat. No.	Polycarbonate Type	Polycarbonate Cover Color	Polycarbonate Std. Pk.
Enclosure - low cover	57 mm (2.24 in)	105-410	PS 1809-6-m	gray	2	127-410	PC 1809-6-m	gray	2
Enclosure - high cover	81 mm (3.19 in)	105-910	PS 1809-8-m	gray	2	127-910	PC 1809-8-m	gray	2
Enclosure - low cover	57 mm (2.24 in)	106-010	PS 1809-6-tm	trans.	2	137-010	PC 1809-6-tm	trans.	2
Enclosure - high cover	81 mm (3.19 in)	106-510	PS 1809-8-tm	trans.	2	137-510	PC 1809-8-tm	trans.	2

Accessories

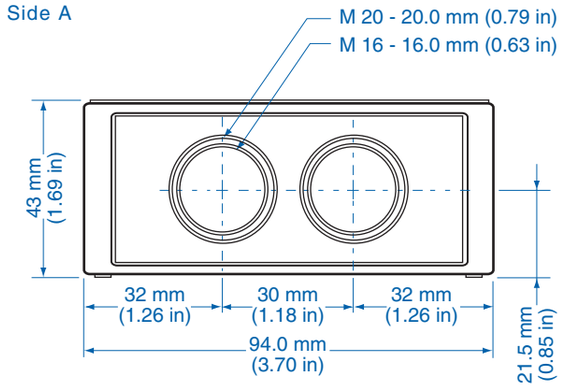
Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	195-010	TKMPI-1809	1
Mounting Plate (steel)	197-010	TKMPS-1809	1
DIN Rail TS35-144mm	198-144	TS 35/144	1
DIN Rail TS15-154mm	197-154	TS 15/154	1
Hinge Kit Set	190-002	HK1	1
Mounting Tab Kit	194-001	MT1	1

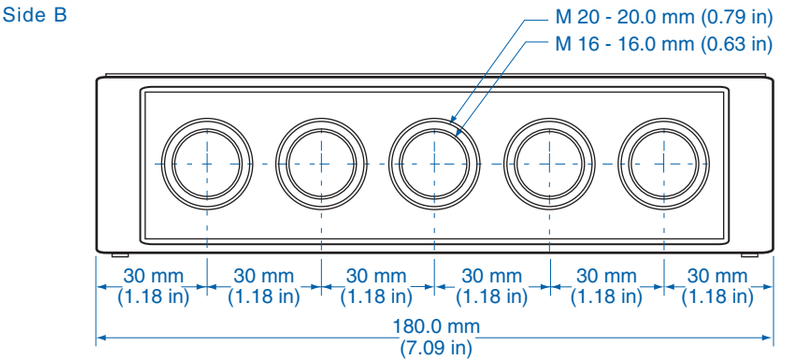
Please refer to pages 149-152 for additional accessories and detailed information.

Dimensions



Knockout Positions





TK 1811f – Polystyrene and Polycarbonate – 180 x 110 mm (7.09 x 4.33 in.)

Standard Features

- **Protection Level:** IP66 (NEMA Type: 4X with gray cover, 12K with transparent cover)
- **Technical:** Smooth or Knockout Sidewalls
  Gray or Tinted Transparent Cover
  Multiple Enclosure Mounting Options
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** Polystyrene
  -40°C to 70°C (-40°F to 158°F)
  Polycarbonate
  -40°C to 120°C (-40°F to 248°F)
- **Accessories:** See section below

E254144
Polycarbonate Only



Smooth Sidewalls

Ordering Information	Height mm (in)	Polystyrene Cat. No.	Polystyrene Type	Polystyrene Cover Color	Polystyrene Std. Pk.	Polycarbonate Cat. No.	Polycarbonate Type	Polycarbonate Cover Color	Polycarbonate Std. Pk.
Enclosure - low cover	63 mm (2.48 in)	110-414	PS 1811-6f-o	gray	2	120-414	PC 1811-6f-o	gray	2
Enclosure - high cover	84 mm (3.31 in)	110-914	PS 1811-8f-o	gray	2	120-914	PC 1811-8f-o	gray	2
Enclosure - top hat cover	137 mm (5.39 in)	109-414	PS 1811-13f-o	gray	2	121-414	PC 1811-13f-o	gray	2
Enclosure - low cover	63 mm (2.48 in)	111-014	PS 1811-6f-to	trans.	2	130-014	PC 1811-6f-to	trans.	2
Enclosure - high cover	84 mm (3.31 in)	111-514	PS 1811-8f-to	trans.	2	130-514	PC 1811-8f-to	trans.	2
Enclosure - top hat cover	137 mm (5.39 in)	112-014	PS 1811-13f-to	trans.	2	131-014	PC 1811-13f-to	trans.	2

Sidewalls with Metric Knockouts

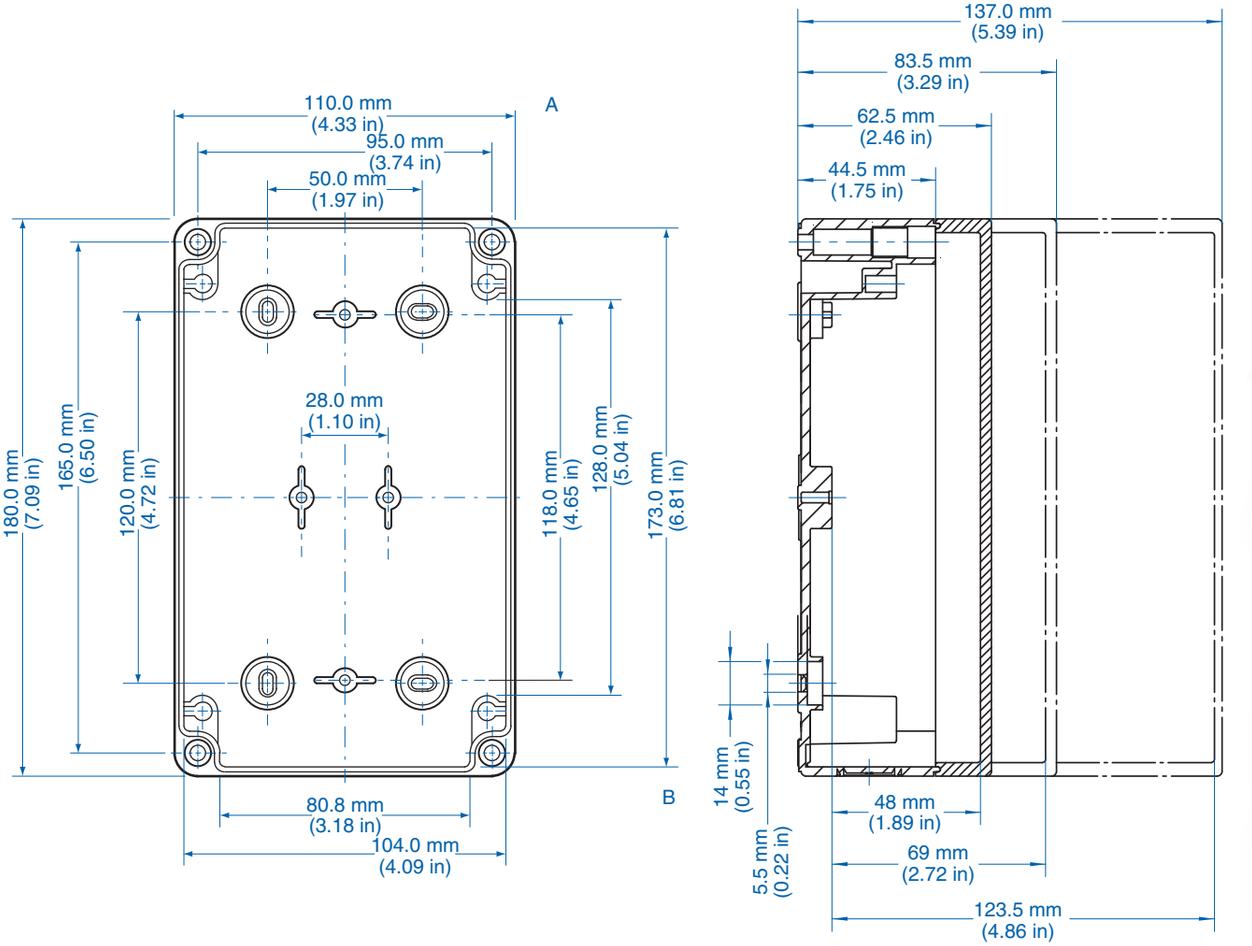
Ordering Information	Height mm (in)	Polystyrene Cat. No.	Polystyrene Type	Polystyrene Cover Color	Polystyrene Std. Pk.	Polycarbonate Cat. No.	Polycarbonate Type	Polycarbonate Cover Color	Polycarbonate Std. Pk.
Enclosure - low cover	63 mm (2.48 in)	105-414	PS 1811-6f-m	gray	2	127-414	PC 1811-6f-m	gray	2
Enclosure - high cover	84 mm (3.31 in)	105-914	PS 1811-8f-m	gray	2	127-914	PC 1811-8f-m	gray	2
Enclosure - top hat cover	137 mm (5.39 in)	104-414	PS 1811-13f-m	gray	2	128-414	PC 1811-13f-m	gray	2
Enclosure - low cover	63 mm (2.48 in)	106-014	PS 1811-6f-tm	trans.	2	137-014	PC 1811-6f-tm	trans.	2
Enclosure - high cover	84 mm (3.31 in)	106-514	PS 1811-8f-tm	trans.	2	137-514	PC 1811-8f-tm	trans.	2
Enclosure - top hat cover	137 mm (5.39 in)	107-014	PS 1811-13f-tm	trans.	2	138-014	PC 1811-13f-tm	trans.	2

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	195-006	TKMPI-1811	1
Mounting Plate (steel)	197-006	TKMPS-1811	1
DIN Rail TS35-144mm	198-144	TS 35/144	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit	194-001	MT1	1

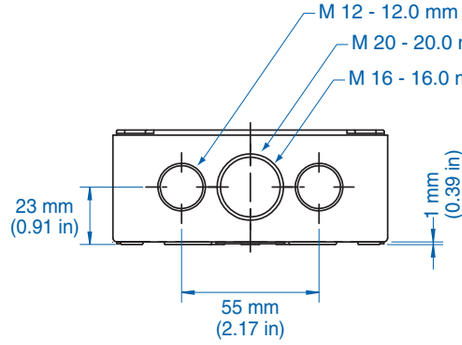
Please refer to pages 149-152 for additional accessories and detailed information.

Dimensions

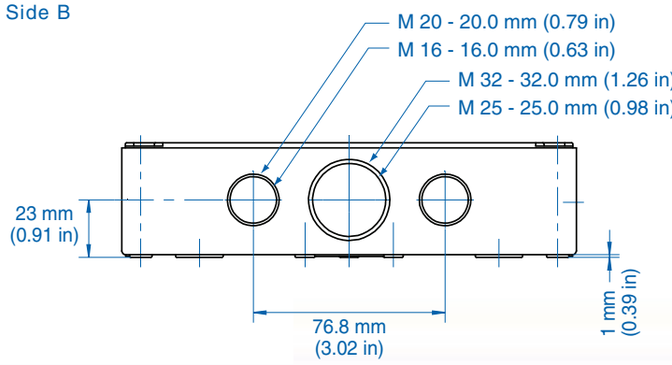


Knockout Positions

Side A



Side B



TK 1811 – Polystyrene and Polycarbonate – 180 x 110 mm (7.09 x 4.33 in.)

Standard Features

- **Protection Level:** IP66 (NEMA Type: 4X with gray cover, 12K with transparent cover)
- **Technical:** Smooth or Knockout Sidewalls
  Gray or Tinted Transparent Cover
  Multiple Enclosure Mounting Options
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** Polystyrene
  -40°C to 70°C (-40°F to 158°F)
  Polycarbonate
  -40°C to 120°C (-40°F to 248°F)
- **Accessories:** See section below

C UL US
E254144
Polycarbonate Only



Smooth Sidewalls

Ordering Information	Height mm (in)	Polystyrene Cat. No.	Polystyrene Type	Polystyrene Cover Color	Polystyrene Std. Pk.	Polycarbonate Cat. No.	Polycarbonate Type	Polycarbonate Cover Color	Polycarbonate Std. Pk.
Enclosure - low cover	90 mm (3.54 in)	110-406	PS 1811-9-o	gray	2	120-406	PC 1811-9-o	gray	2
Enclosure - high cover	111 mm (4.37 in)	110-906	PS 1811-11-o	gray	2	120-906	PC 1811-11-o	gray	2
Enclosure - top hat cover	165 mm (6.50 in)	109-406	PS 1811-16-o	gray	2	121-406	PC 1811-16-o	gray	2
Enclosure - low cover	90 mm (3.54 in)	111-006	PS 1811-9-to	trans.	2	130-006	PC 1811-9-to	trans.	2
Enclosure - high cover	111 mm (4.37 in)	111-506	PS 1811-11-to	trans.	2	130-506	PC 1811-11-to	trans.	2
Enclosure - top hat cover	165 mm (6.50 in)	112-006	PS 1811-16-to	trans.	2	131-006	PC 1811-16-to	trans.	2

Sidewalls with Metric Knockouts

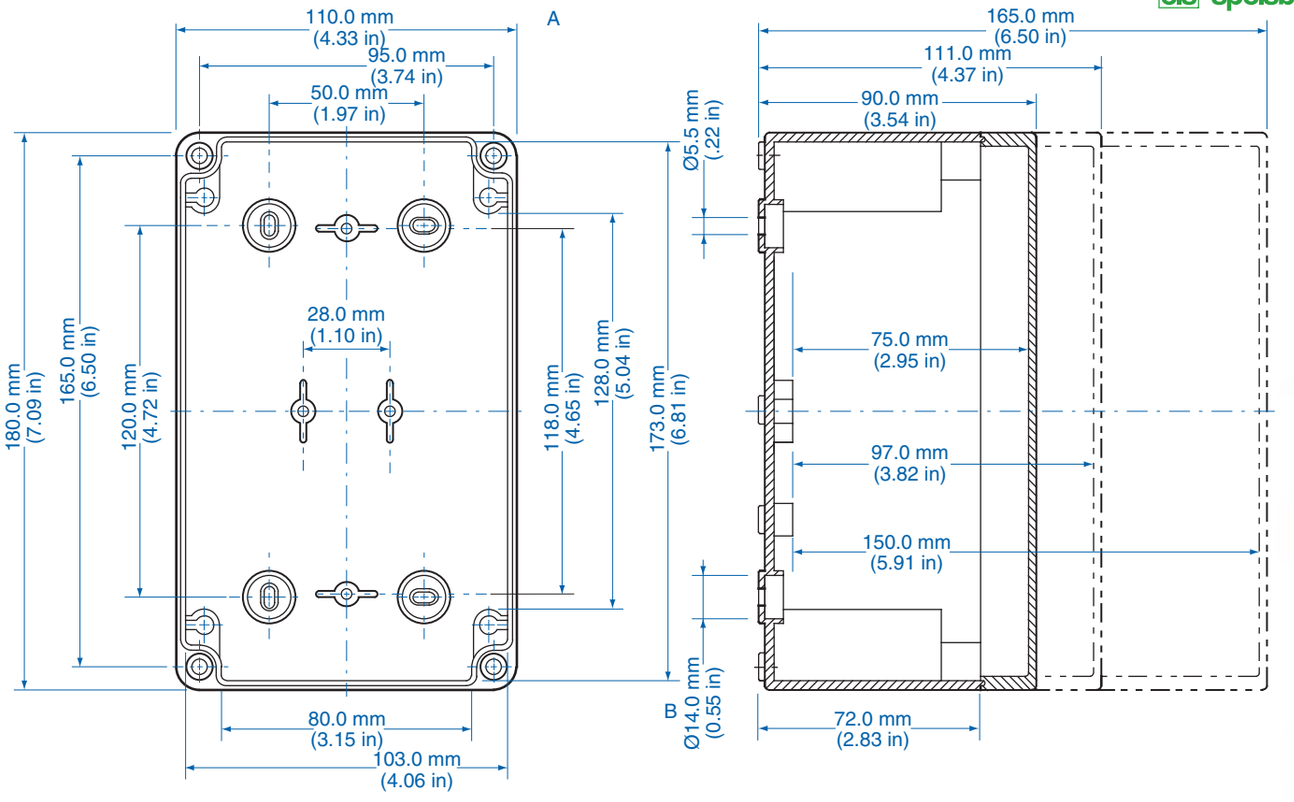
Ordering Information	Height mm (in)	Polystyrene Cat. No.	Polystyrene Type	Polystyrene Cover Color	Polystyrene Std. Pk.	Polycarbonate Cat. No.	Polycarbonate Type	Polycarbonate Cover Color	Polycarbonate Std. Pk.
Enclosure - low cover	90 mm (3.54 in)	105-406	PS 1811-9-m	gray	2	127-406	PC 1811-9-m	gray	2
Enclosure - high cover	111 mm (4.37 in)	105-906	PS 1811-11-m	gray	2	127-906	PC 1811-11-m	gray	2
Enclosure - top hat cover	165 mm (6.50 in)	104-406	PS 1811-16-m	gray	2	128-406	PC 1811-16-m	gray	2
Enclosure - low cover	90 mm (3.54 in)	106-006	PS 1811-9-tm	trans.	2	137-006	PC 1811-9-tm	trans.	2
Enclosure - high cover	111 mm (4.37 in)	106-506	PS 1811-11-tm	trans.	2	137-506	PC 1811-11-tm	trans.	2
Enclosure - top hat cover	165 mm (6.50 in)	107-006	PS 1811-16-tm	trans.	2	138-006	PC 1811-16-tm	trans.	2

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	195-006	TKMPI-1811	1
Mounting Plate (steel)	197-006	TKMPS-1811	1
DIN Rail TS35-144mm	198-144	TS 35/144	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit	194-001	MT1	1

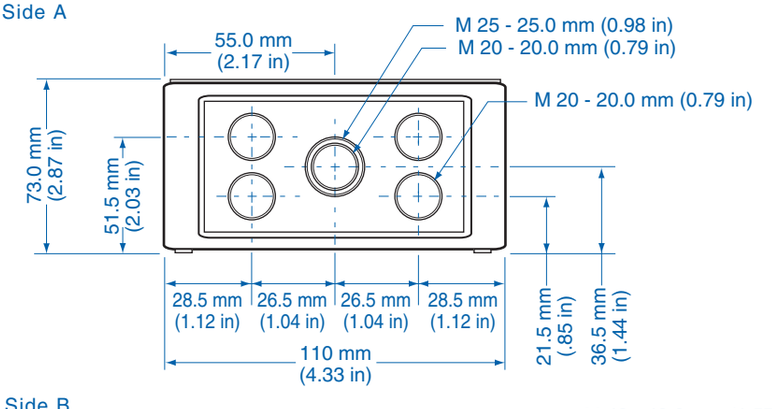
Please refer to pages 149-152 for additional accessories and detailed information.

Dimensions

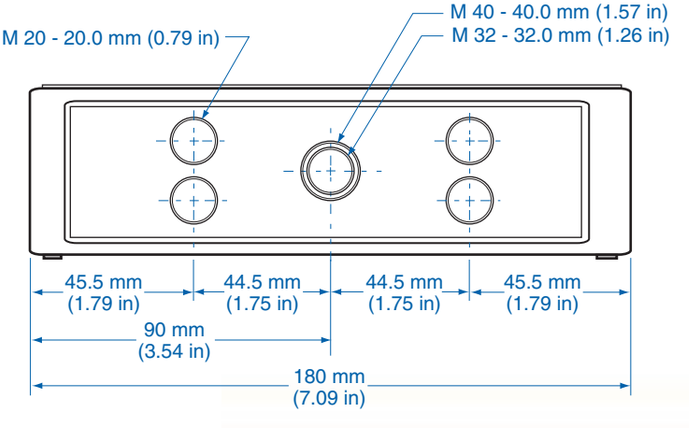


Knockout Positions

Side A



Side B



TK 1813f – Polystyrene and Polycarbonate – 180 x 130 mm (7.09 x 5.12in.)

NEW

Standard Features

- **Protection Level:** IP66 (NEMA Type: 4X with gray cover, 12K with transparent cover)
- **Technical:** Smooth or Knockout Sidewalls
  Gray or Tinted Transparent Cover
  Multiple Enclosure Mounting Options
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** Polystyrene
  -40°C to 70°C (-40°F to 158°F)
  Polycarbonate
  -40°C to 120°C (-40°F to 248°F)
- **Accessories:** See section below

E254144
Polycarbonate Only



Smooth Sidewalls

Ordering Information	Height mm (in)	Polystyrene Cat. No.	Type	Cover Color	Std. Pk.	Polycarbonate Cat. No.	Type	Cover Color	Std. Pk.
Enclosure - low cover	63 mm (2.48 in)	110-415	PS 1813-6f-o	gray	2	120-415	PC 1813-6f-o	gray	2
Enclosure - high cover	84 mm (3.31 in)	110-915	PS 1813-8f-o	gray	2	120-915	PC 1813-8f-o	gray	2
Enclosure - top hat cover	137 mm (5.39 in)	109-415	PS 1813-13f-o	gray	1	121-415	PC 1813-13f-o	gray	1
Enclosure - low cover	63 mm (2.48 in)	111-015	PS 1813-6f-to	trans.	2	130-015	PC 1813-6f-to	trans.	2
Enclosure - high cover	84 mm (3.31 in)	111-515	PS 1813-8f-to	trans.	2	130-515	PC 1813-8f-to	trans.	2
Enclosure - top hat cover	137 mm (5.39 in)	112-015	PS 1813-13f-to	trans.	1	131-015	PC 1813-13f-to	trans.	1

Sidewalls with Metric Knockouts

Ordering Information	Height mm (in)	Polystyrene Cat. No.	Type	Cover Color	Std. Pk.	Polycarbonate Cat. No.	Type	Cover Color	Std. Pk.
Enclosure - low cover	63 mm (2.48 in)	105-415	PS 1813-6f-m	gray	2	127-415	PC 1813-6f-m	gray	2
Enclosure - high cover	84 mm (3.31 in)	105-915	PS 1813-8f-m	gray	2	127-915	PC 1813-8f-m	gray	2
Enclosure - top hat cover	137 mm (5.39 in)	104-415	PS 1813-13f-m	gray	1	128-415	PC 1813-13f-m	gray	1
Enclosure - low cover	63 mm (2.48 in)	106-015	PS 1813-6f-tm	trans.	2	137-015	PC 1813-6f-tm	trans.	2
Enclosure - high cover	84 mm (3.31 in)	106-515	PS 1813-8f-tm	trans.	2	137-515	PC 1813-8f-tm	trans.	2
Enclosure - top hat cover	137 mm (5.39 in)	107-015	PS 1813-13f-tm	trans.	1	138-015	PC 1813-13f-tm	trans	1

Accessories

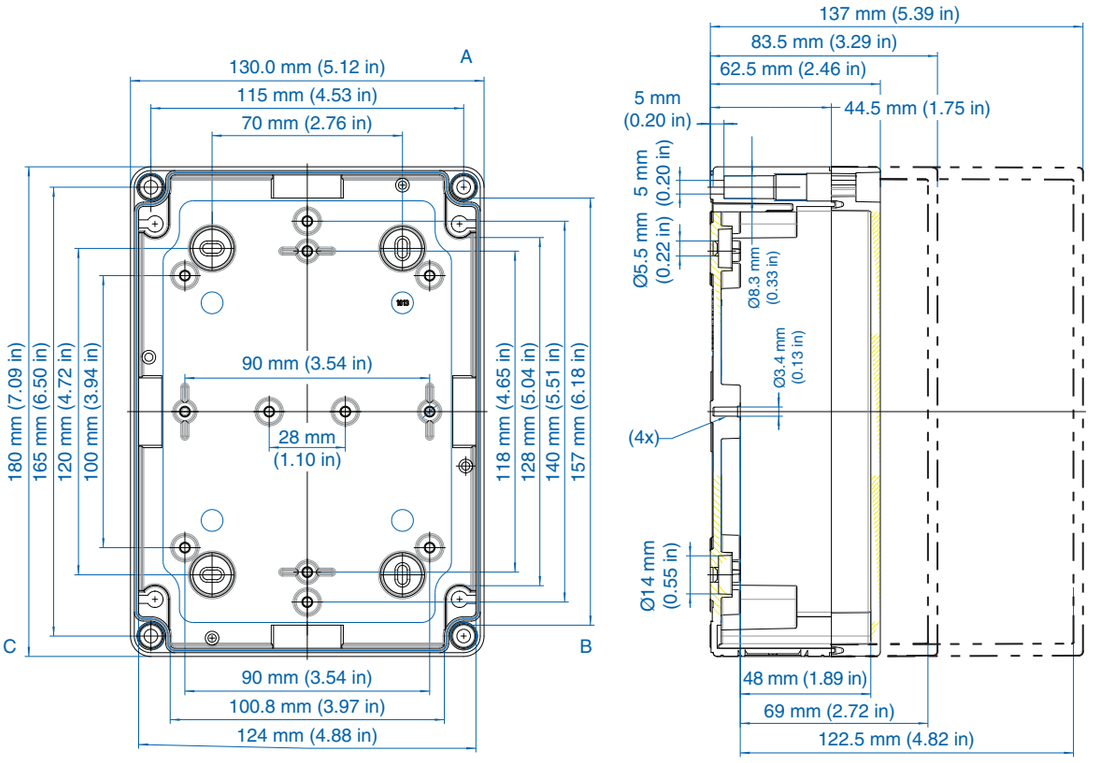
Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	195-011	TKMPI-1813	1
Mounting Plate (steel)	197-011	TKMPS-1813	1
DIN Rail TS35-144mm	198-144	TS 35/144	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit	194-001	MT1	1

Please refer to pages 149-152 for additional accessories and detailed information.

NEW

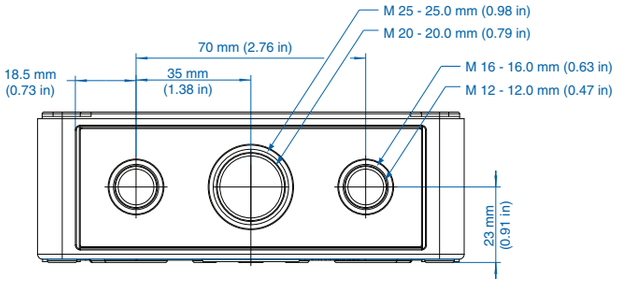
Altech by els spelsberg

Dimensions

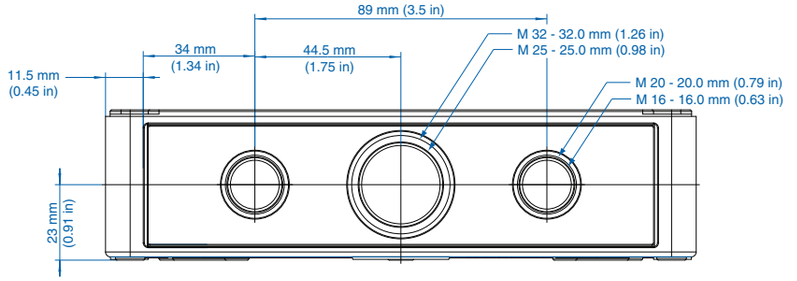


Knockout Positions

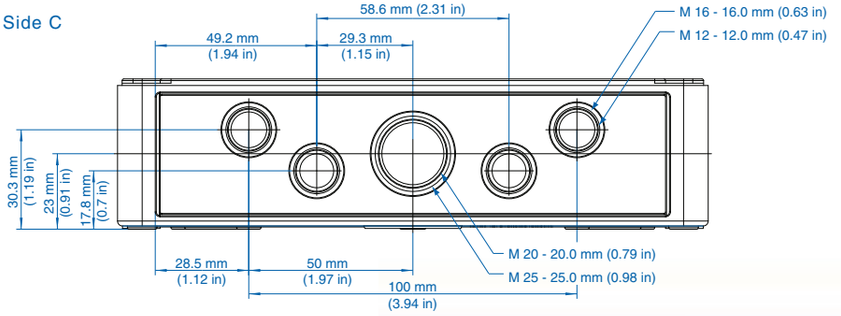
Side A (2x)



Side B



Side C



TK 1813 – Polystyrene and Polycarbonate – 180 x 130 mm (7.09 x 5.12in.)

NEW

Standard Features

- **Protection Level:** IP66 (NEMA Type: 4X with gray cover, 12K with transparent cover)
- **Technical:** Smooth or Knockout Sidewalls
  Gray or Tinted Transparent Cover
  Multiple Enclosure Mounting Options
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** Polystyrene
  -40°C to 70°C (-40°F to 158°F)
  Polycarbonate
  -40°C to 120°C (-40°F to 248°F)
- **Accessories:** See section below

E254144
Polycarbonate Only





Smooth Sidewalls

Ordering Information	Height mm (in)	Polystyrene Cat. No.	Type	Cover Color	Std. Pk.	Polycarbonate Cat. No.	Type	Cover Color	Std. Pk.
Enclosure - low cover	90 mm (3.54 in)	110-416	PS 1813-9-o	gray	2	120-416	PC 1813-9-o	gray	2
Enclosure - high cover	111 mm (4.37 in)	110-916	PS 1813-11-o	gray	2	120-916	PC 1813-11-o	gray	2
Enclosure - top hat cover	165 mm (6.50 in)	109-416	PS 1813-16-o	gray	1	121-416	PC 1813-16-o	gray	1
Enclosure - low cover	90 mm (3.54 in)	111-016	PS 1813-9-to	trans.	2	130-016	PC 1813-9-to	trans.	2
Enclosure - high cover	111 mm (4.37 in)	111-516	PS 1813-11-to	trans.	2	130-516	PC 1813-11-to	trans.	2
Enclosure - top hat cover	165 mm (6.50 in)	112-016	PS 1813-16-to	trans.	1	131-016	PC 1813-16-to	trans.	1

Sidewalls with Metric Knockouts

Ordering Information	Height mm (in)	Polystyrene Cat. No.	Type	Cover Color	Std. Pk.	Polycarbonate Cat. No.	Type	Cover Color	Std. Pk.
Enclosure - low cover	90 mm (3.54 in)	105-416	PS 1813-9-m	gray	2	127-416	PC 1813-9-m	gray	2
Enclosure - high cover	111 mm (4.37 in)	105-916	PS 1813-11-m	gray	2	127-916	PC 1813-11-m	gray	2
Enclosure - top hat cover	165 mm (6.50 in)	104-416	PS 1813-16-m	gray	1	128-416	PC 1813-16-m	gray	1
Enclosure - low cover	90 mm (3.54 in)	106-016	PS 1813-9-tm	trans.	2	137-016	PC 1813-9-tm	trans.	2
Enclosure - high cover	111 mm (4.37 in)	106-516	PS 1813-11-tm	trans.	2	137-516	PC 1813-11-tm	trans.	2
Enclosure - top hat cover	165 mm (6.50 in)	107-016	PS 1813-16-tm	trans.	1	138-016	PC 1813-16-tm	trans	1

Accessories

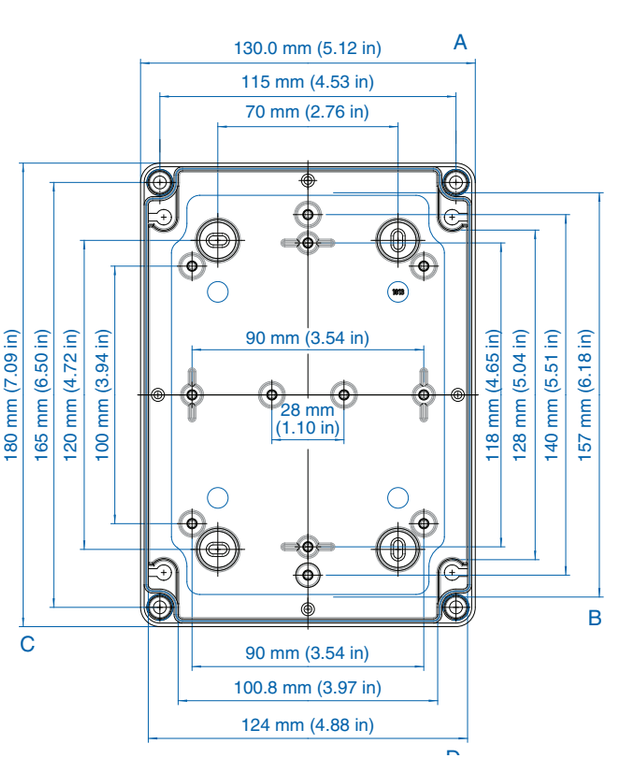
Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	195-011	TKMPI-1813	1
Mounting Plate (steel)	197-011	TKMPS-1813	1
DIN Rail TS35-144mm	198-144	TS 35/144	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit	194-001	MT1	1

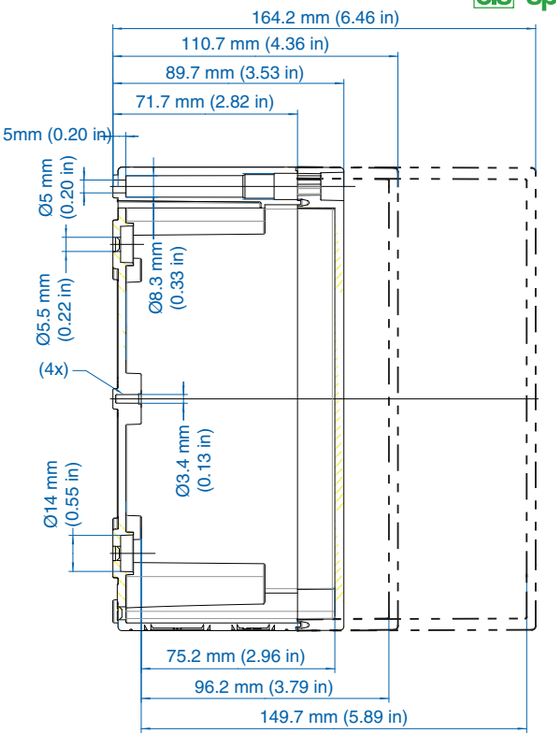
Please refer to pages 149-152 for additional accessories and detailed information.

NEW

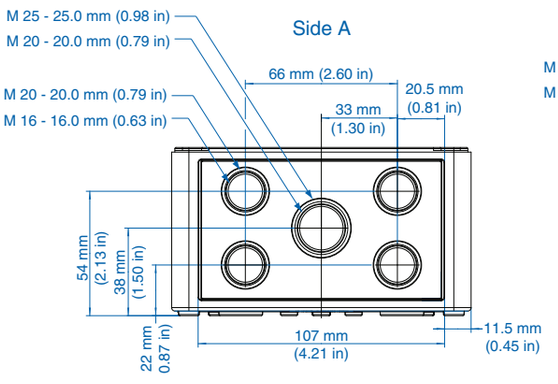
Altech by els spelsberg

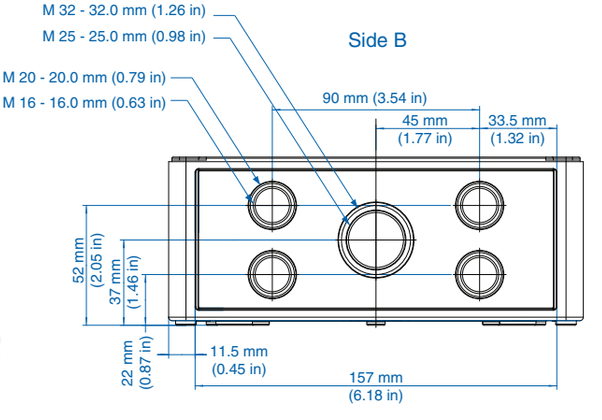
Dimensions

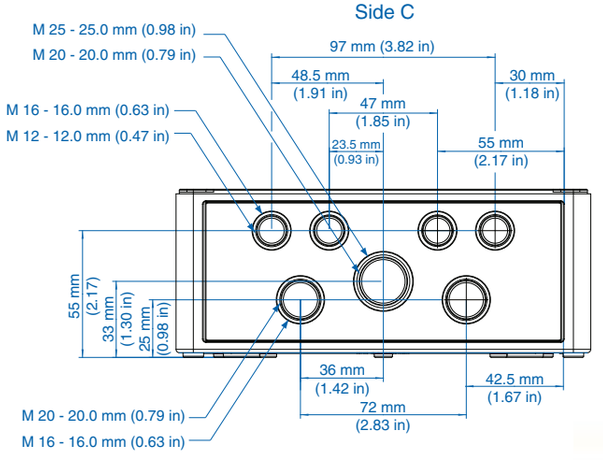


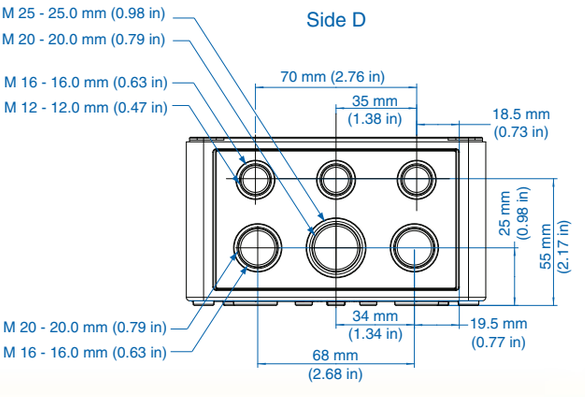


Knockout Positions









TK 1818f – Polystyrene and Polycarbonate – 182 x 180 mm (7.17 x 7.09 in.)

Standard Features

- **Protection Level:** IP66 (NEMA Type: 4X with gray cover, 12K with transparent cover)
- **Technical:** Smooth or Knockout Sidewalls
  Gray or Tinted Transparent Cover
  Multiple Enclosure Mounting Options
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** Polystyrene
  -40°C to 70°C (-40°F to 158°F)
  Polycarbonate
  -40°C to 120°C (-40°F to 248°F)
- **Accessories:** See section below

E254144
Polycarbonate Only



Smooth Sidewalls

Ordering Information	Height mm (in)	Polystyrene Cat. No.	Polystyrene Type	Cover Color	Std. Pk.	Polycarbonate Cat. No.	Polycarbonate Type	Cover Color	Std. Pk.
Enclosure - low cover	63 mm (2.48 in)	110-413	PS 1818-6f-o	gray	2	120-413	PC 1818-6f-o	gray	2
Enclosure - high cover	84 mm (3.31 in)	110-913	PS 1818-8f-o	gray	2	120-913	PC 1818-8f-o	gray	2
Enclosure - top hat cover	137 mm (5.39 in)	109-413	PS 1818-13f-o	gray	1	121-413	PC 1818-13f-o	gray	1
Enclosure - low cover	63 mm (2.48 in)	111-013	PS 1818-6f-to	trans.	2	130-013	PC 1818-6f-to	trans.	2
Enclosure - high cover	84 mm (3.31 in)	111-513	PS 1818-8f-to	trans.	2	130-513	PC 1818-8f-to	trans.	2
Enclosure - top hat cover	137 mm (5.39 in)	112-013	PS 1818-13f-to	trans.	1	131-013	PC 1818-13f-to	trans.	1

Sidewalls with Metric Knockouts

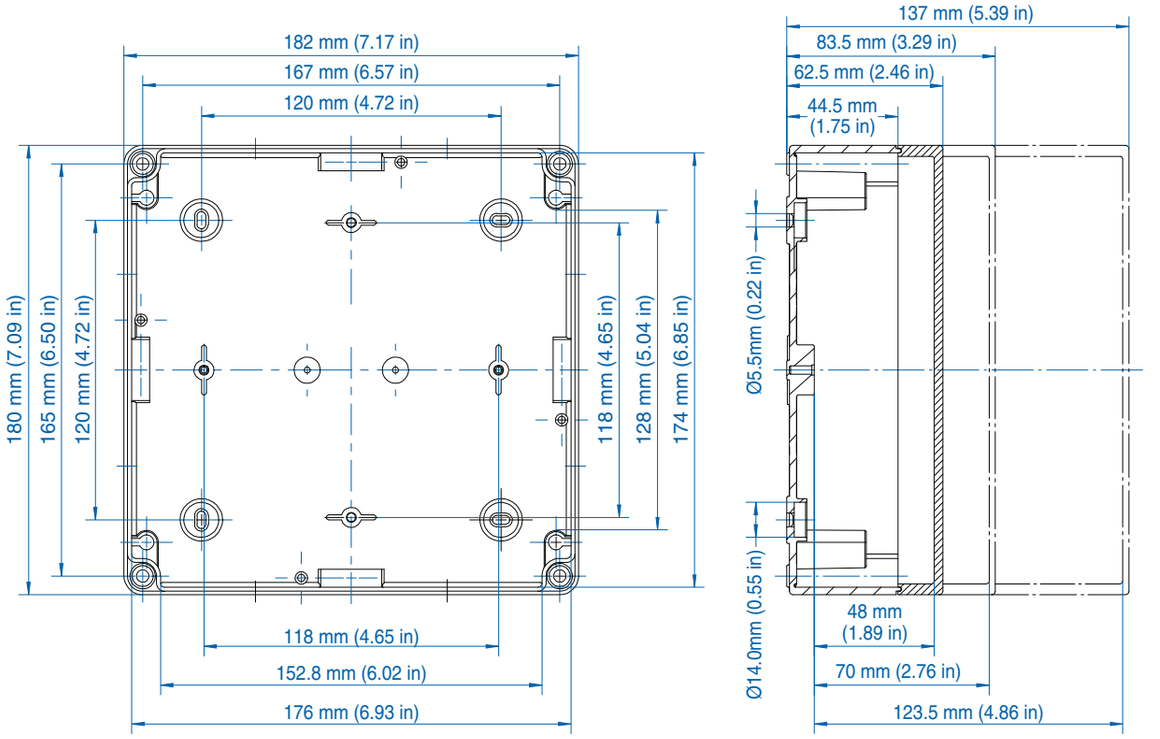
Ordering Information	Height mm (in)	Polystyrene Cat. No.	Polystyrene Type	Cover Color	Std. Pk.	Polycarbonate Cat. No.	Polycarbonate Type	Cover Color	Std. Pk.
Enclosure - low cover	63 mm (2.48 in)	105-413	PS 1818-6f-m	gray	2	127-413	PC 1818-6f-m	gray	2
Enclosure - high cover	84 mm (3.31 in)	105-913	PS 1818-8f-m	gray	2	127-913	PC 1818-8f-m	gray	2
Enclosure - top hat cover	137 mm (5.39 in)	104-413	PS 1818-13f-m	gray	1	128-413	PC 1818-13f-m	gray	1
Enclosure - low cover	63 mm (2.48 in)	106-013	PS 1818-6f-tm	trans.	2	137-013	PC 1818-6f-tm	trans.	2
Enclosure - high cover	84 mm (3.31 in)	106-513	PS 1818-8f-tm	trans.	2	137-513	PC 1818-8f-tm	trans.	2
Enclosure - top hat cover	137 mm (5.39 in)	107-013	PS 1818-13f-tm	trans.	1	138-013	PC 1818-13f-tm	trans	1

Accessories

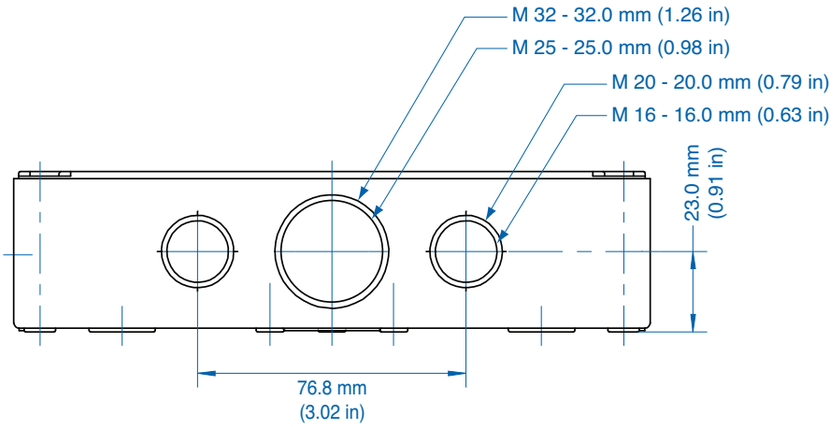
Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	195-007	TKMPI-1818	1
Mounting Plate (steel)	197-007	TKMPS-1818	1
DIN Rail TS35-144mm	198-144	TS 35/144	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit	194-001	MT1	1

Please refer to pages 149-152 for additional accessories and detailed information.

Dimensions



Knockout Positions



TK 1818 – Polystyrene and Polycarbonate – 182 x 180 mm (7.17 x 7.09 in.)

Standard Features

- **Protection Level:** IP66 (NEMA Type: 4X with gray cover, 12K with transparent cover)
- **Technical:** Smooth or Knockout Sidewalls
  Gray or Tinted Transparent Cover
  Multiple Enclosure Mounting Options
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** Polystyrene
  -40°C to 70°C (-40°F to 158°F)
  Polycarbonate
  -40°C to 120°C (-40°F to 248°F)
- **Accessories:** See section below

E254144
Polycarbonate Only



Smooth Sidewalls

Ordering Information	Height mm (in)	Polystyrene Cat. No.	Polystyrene Type	Polystyrene Cover Color	Polystyrene Std. Pk.	Polycarbonate Cat. No.	Polycarbonate Type	Polycarbonate Cover Color	Polycarbonate Std. Pk.
Enclosure - low cover	90 mm (3.54 in)	110-407	PS 1818-9-o	gray	2	120-407	PC 1818-9-o	gray	2
Enclosure - high cover	111 mm (4.37 in)	110-907	PS 1818-11-o	gray	2	120-907	PC 1818-11-o	gray	2
Enclosure - top hat cover	165 mm (6.50 in)	109-407	PS 1818-16-o	gray	1	121-407	PC 1818-16-o	gray	1
Enclosure - low cover	90 mm (3.54 in)	111-007	PS 1818-9-to	trans.	2	130-007	PC 1818-9-to	trans.	2
Enclosure - high cover	111 mm (4.37 in)	111-507	PS 1818-11-to	trans.	2	130-507	PC 1818-11-to	trans.	2
Enclosure - top hat cover	165 mm (6.50 in)	112-007	PS 1818-16-to	trans.	1	131-007	PC 1818-16-to	trans.	1

Sidewalls with Metric Knockouts

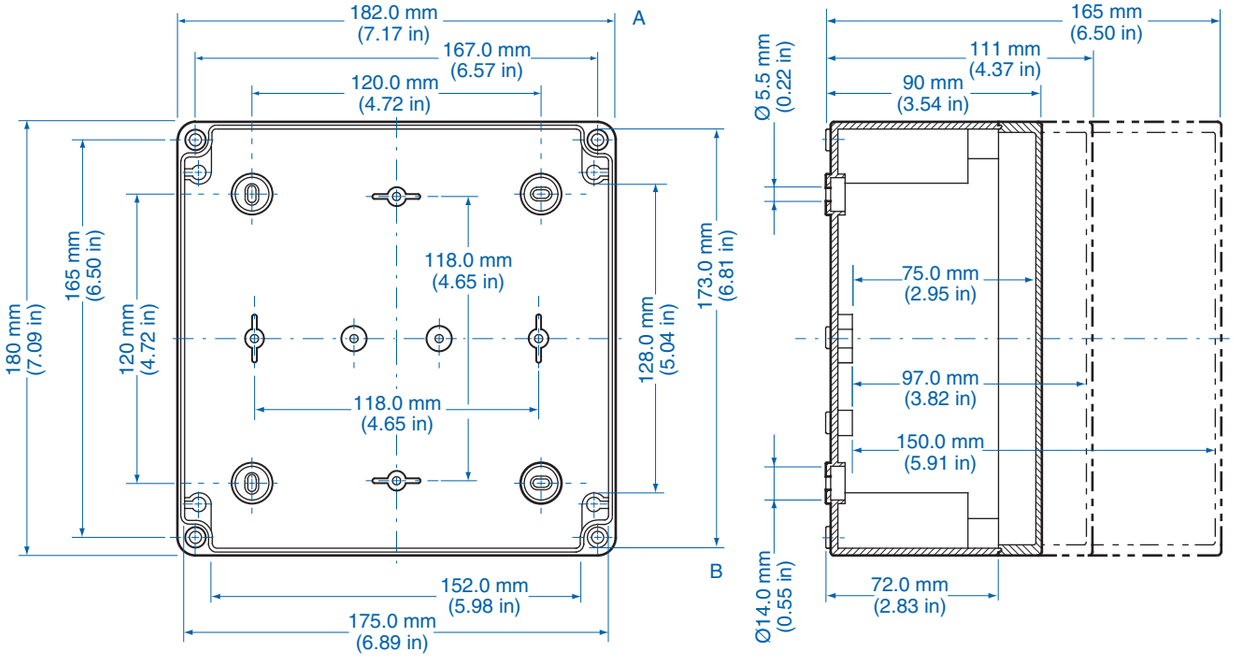
Ordering Information	Height mm (in)	Polystyrene Cat. No.	Polystyrene Type	Polystyrene Cover Color	Polystyrene Std. Pk.	Polycarbonate Cat. No.	Polycarbonate Type	Polycarbonate Cover Color	Polycarbonate Std. Pk.
Enclosure - low cover	90 mm (3.54 in)	105-407	PS 1818-9-m	gray	2	127-407	PC 1818-9-m	gray	2
Enclosure - high cover	111 mm (4.37 in)	105-907	PS 1818-11-m	gray	2	127-907	PC 1818-11-m	gray	2
Enclosure - top hat cover	165 mm (6.50 in)	104-407	PS 1818-16-m	gray	1	128-407	PC 1818-16-m	gray	1
Enclosure - low cover	90 mm (3.54 in)	106-007	PS 1818-9-tm	trans.	2	137-007	PC 1818-9-tm	trans.	2
Enclosure - high cover	111 mm (4.37 in)	106-507	PS 1818-11-tm	trans.	2	137-507	PC 1818-11-tm	trans.	2
Enclosure - top hat cover	165 mm (6.50 in)	107-007	PS 1818-16-tm	trans.	1	138-007	PC 1818-16-tm	trans	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	195-007	TKMPI-1818	1
Mounting Plate (steel)	197-007	TKMPS-1818	1
DIN Rail TS35-144mm	198-144	TS 35/144	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit	194-001	MT1	1

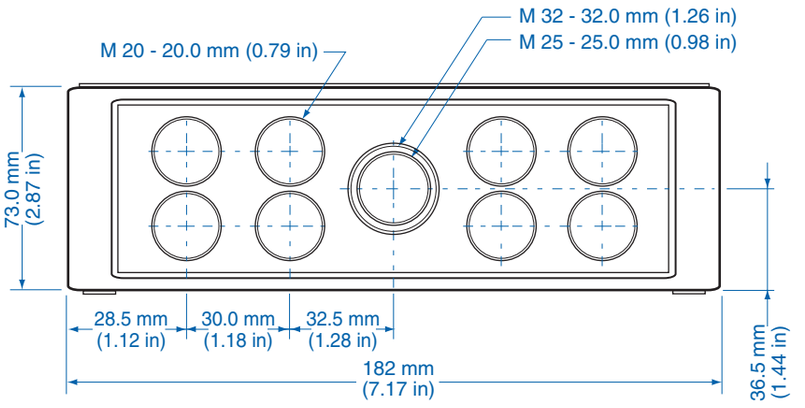
Please refer to pages 149-152 for additional accessories and detailed information.

Dimensions

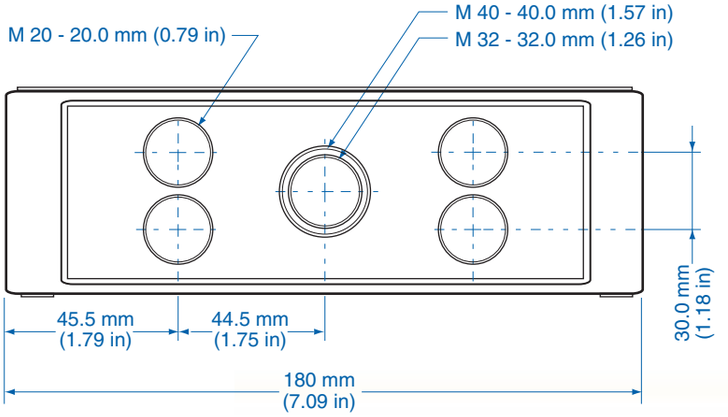


Knockout Positions

Side A



Side B



TK 2518f – Polystyrene and Polycarbonate – 254 x 180 mm (10.0 x 7.09 in.)

Standard Features

- **Protection Level:** IP66 (NEMA Type: 4X with gray cover, 12K with transparent cover)
- **Technical:** Smooth or Knockout Sidewalls
  Gray or Tinted Transparent Cover
  Multiple Enclosure Mounting Options
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** Polystyrene
  -40°C to 70°C (-40°F to 158°F)
  Polycarbonate
  -40°C to 120°C (-40°F to 248°F)
- **Accessories:** See section below

C UL US
E254144
Polycarbonate Only



Smooth Sidewalls

Ordering Information	Height mm (in)	Polystyrene Cat. No.	Polystyrene Type	Polystyrene Cover Color	Polystyrene Std. Pk.	Polycarbonate Cat. No.	Polycarbonate Type	Polycarbonate Cover Color	Polycarbonate Std. Pk.
Enclosure - low cover	63 mm (2.48 in)	110-411	PS 2518-6f-o	gray	1	120-411	PC 2518-6f-o	gray	1
Enclosure - high cover	84 mm (3.31 in)	110-911	PS 2518-8f-o	gray	1	120-911	PC 2518-8f-o	gray	1
Enclosure - top hat cover	137 mm (5.39 in)	109-411	PS 2518-14f-o	gray	1	121-411	PC 2518-14f-o	gray	1
Enclosure - low cover	63 mm (2.48 in)	111-011	PS 2518-6f-to	trans.	1	130-011	PC 2518-6f-to	trans.	1
Enclosure - high cover	84 mm (3.31 in)	111-511	PS 2518-8f-to	trans.	1	130-511	PC 2518-8f-to	trans.	1
Enclosure - top hat cover	137 mm (5.39 in)	112-011	PS 2518-14f-to	trans.	1	131-011	PC 2518-14f-to	trans.	1

Sidewalls with Metric Knockouts

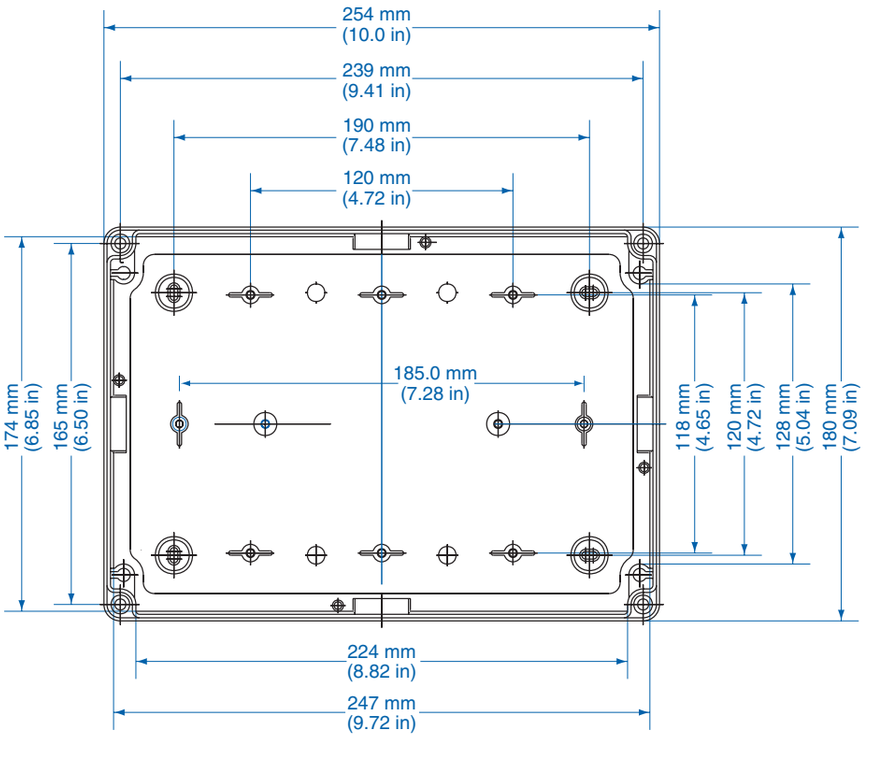
Ordering Information	Height mm (in)	Polystyrene Cat. No.	Polystyrene Type	Polystyrene Cover Color	Polystyrene Std. Pk.	Polycarbonate Cat. No.	Polycarbonate Type	Polycarbonate Cover Color	Polycarbonate Std. Pk.
Enclosure - low cover	63 mm (2.48 in)	105-411	PS 2518-6f-m	gray	1	127-411	PC 2518-6f-m	gray	1
Enclosure - high cover	84 mm (3.31 in)	105-911	PS 2518-8f-m	gray	1	127-911	PC 2518-8f-m	gray	1
Enclosure - top hat cover	137 mm (5.39 in)	104-411	PS 2518-14f-m	gray	1	128-411	PC 2518-14f-m	gray	1
Enclosure - low cover	63 mm (2.48 in)	106-011	PS 2518-6f-tm	trans.	1	137-011	PC 2518-6f-tm	trans.	1
Enclosure - high cover	84 mm (3.31 in)	106-511	PS 2518-8f-tm	trans.	1	137-511	PC 2518-8f-tm	trans.	1
Enclosure - top hat cover	137 mm (5.39 in)	107-011	PS 2518-14f-tm	trans.	1	138-011	PC 2518-14f-tm	trans.	1

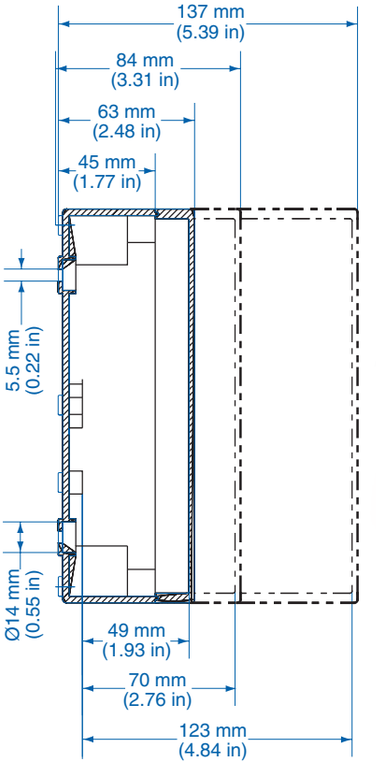
Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	195-008	TKMPI-2518	1
Mounting Plate (steel)	197-008	TKMPS-2518	1
DIN Rail TS35-216mm	198-216	TS 35/216	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit	194-001	MT1	1

Please refer to pages 149-152 for additional accessories and detailed information.

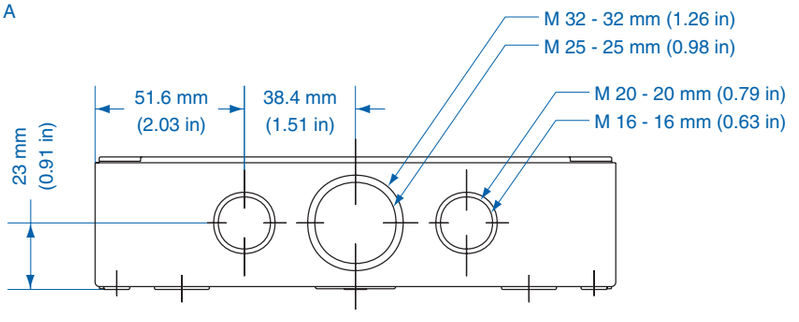
Dimensions



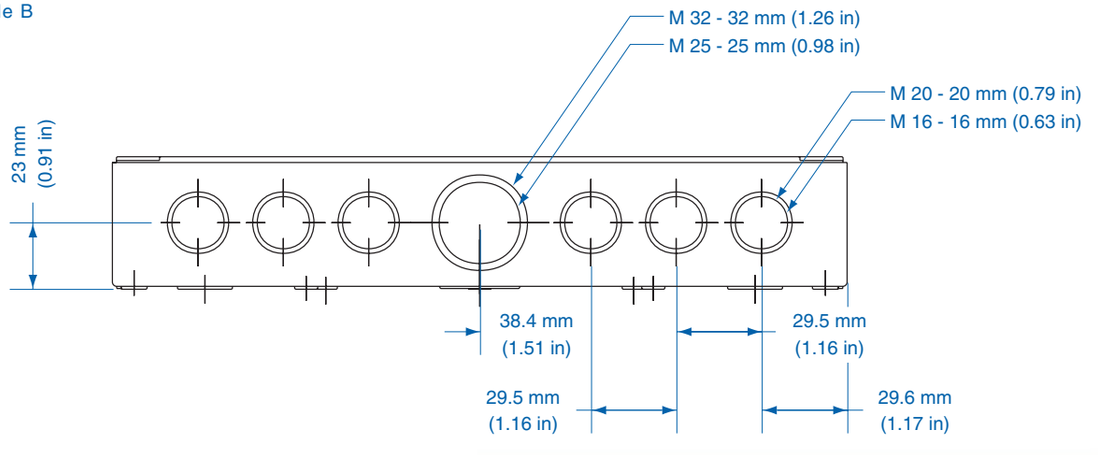


Knockout Positions

Side A



Side B



TK 2518 – Polystyrene and Polycarbonate – 254 x 180 mm (10.0 x 7.09 in.)

Standard Features

- **Protection Level:** IP66 (NEMA Type: 4X with gray cover, 12K with transparent cover)
- **Technical:** Smooth or Knockout Sidewalls
  Gray or Tinted Transparent Cover
  Multiple Enclosure Mounting Options
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** Polystyrene
  -40°C to 70°C (-40°F to 158°F)
  Polycarbonate
  -40°C to 120°C (-40°F to 248°F)
- **Accessories:** See section below

E254144
Polycarbonate Only



Smooth Sidewalls

Ordering Information	Height mm (in)	Polystyrene Cat. No.	Type	Cover Color	Std. Pk.	Polycarbonate Cat. No.	Type	Cover Color	Std. Pk.
Enclosure - low cover	90 mm (3.54 in)	110-408	PS 2518-9-o	gray	1	120-408	PC 2518-9-o	gray	1
Enclosure - high cover	111 mm (4.37 in)	110-908	PS 2518-11-o	gray	1	120-908	PC 2518-11-o	gray	1
Enclosure - top hat cover	165 mm (6.50 in)	109-408	PS 2518-16-o	gray	1	121-408	PC 2518-16-o	gray	1
Enclosure - low cover	90 mm (3.54 in)	111-008	PS 2518-9-to	trans.	1	130-008	PC 2518-9-to	trans.	1
Enclosure - high cover	111 mm (4.37 in)	111-508	PS 2518-11-to	trans.	1	130-508	PC 2518-11-to	trans.	1
Enclosure - top hat cover	165 mm (6.50 in)	112-008	PS 2518-16-to	trans.	1	131-008	PC 2518-16-to	trans.	1

Sidewalls with Metric Knockouts

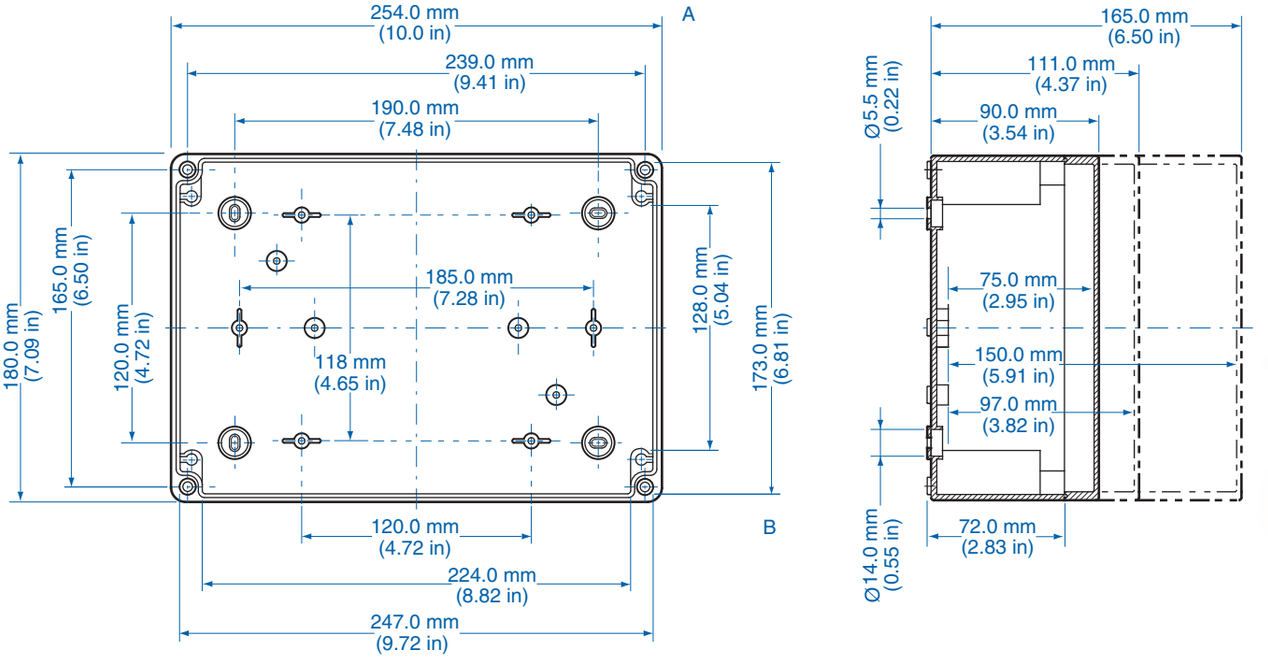
Ordering Information	Height mm (in)	Polystyrene Cat. No.	Type	Cover Color	Std. Pk.	Polycarbonate Cat. No.	Type	Cover Color	Std. Pk.
Enclosure - low cover	90 mm (3.54 in)	105-408	PS 2518-9-m	gray	1	127-408	PC 2518-9-m	gray	1
Enclosure - high cover	111 mm (4.37 in)	105-908	PS 2518-11-m	gray	1	127-908	PC 2518-11-m	gray	1
Enclosure - top hat cover	165 mm (6.50 in)	104-408	PS 2518-16-m	gray	1	128-408	PC 2518-16-m	gray	1
Enclosure - low cover	90 mm (3.54 in)	106-008	PS 2518-9-tm	trans.	1	137-008	PC 2518-9-tm	trans.	1
Enclosure - high cover	111 mm (4.37 in)	106-508	PS 2518-11-tm	trans.	1	137-508	PC 2518-11-tm	trans.	1
Enclosure - top hat cover	165 mm (6.50 in)	107-008	PS 2518-16-tm	trans.	1	138-008	PC 2518-16-tm	trans.	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	195-008	TKMPI-2518	1
Mounting Plate (steel)	197-008	TKMPS-2518	1
DIN Rail TS35-216mm	198-216	TS 35/216	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit	194-001	MT1	1

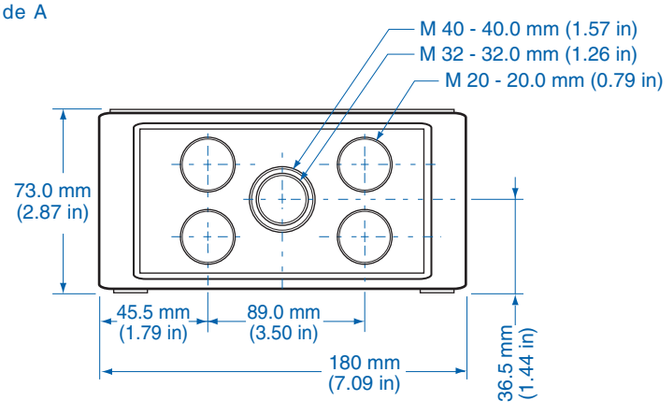
Please refer to pages 149-152 for additional accessories and detailed information.

Dimensions

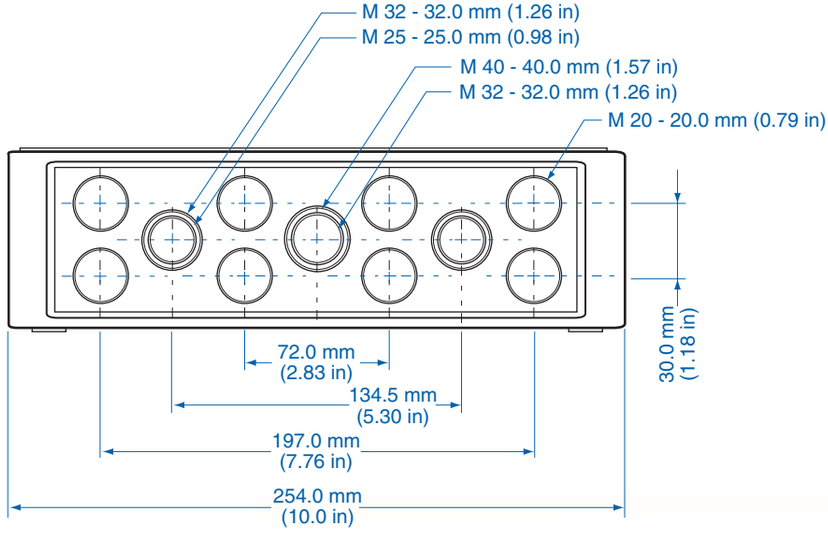


Knockout Positions

Side A



Side B



TK 3625 – Polystyrene and Polycarbonate – 360 x 254 mm (14.2 x 10.0 in.)

Standard Features

- **Protection Level:** IP66 (NEMA Type: 4X with gray cover, 12K with transparent cover)
- **Technical:** Smooth or Knockout Sidewalls
  Gray or Tinted Transparent Cover
  Multiple Enclosure Mounting Options
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** Polystyrene
  -40°C to 70°C (-40°F to 158°F)
  Polycarbonate
  -40°C to 120°C (-40°F to 248°F)
- **Accessories:** See section below

E254144
Polycarbonate Only



Smooth Sidewalls

Ordering Information	Height mm (in)	Polystyrene Cat. No.	Type	Cover Color	Std. Pk.	Polycarbonate Cat. No.	Type	Cover Color	Std. Pk.
Enclosure - low cover	111 mm (4.37 in)	110-412	PS 3625-11-o	gray	1	120-412	PC 3625-11-o	gray	1
Enclosure - high cover	165 mm (6.50 in)	110-912	PS 3625-16-o	gray	1	120-912	PC 3625-16-o	gray	1
Enclosure - low cover	111 mm (4.37 in)	111-012	PS 3625-11-to	trans.	1	130-012	PC 3625-11-to	trans.	1
Enclosure - high cover	165 mm (6.50 in)	111-512	PS 3625-16-to	trans.	1	130-512	PC 3625-16-to	trans.	1

Sidewalls with Metric Knockouts

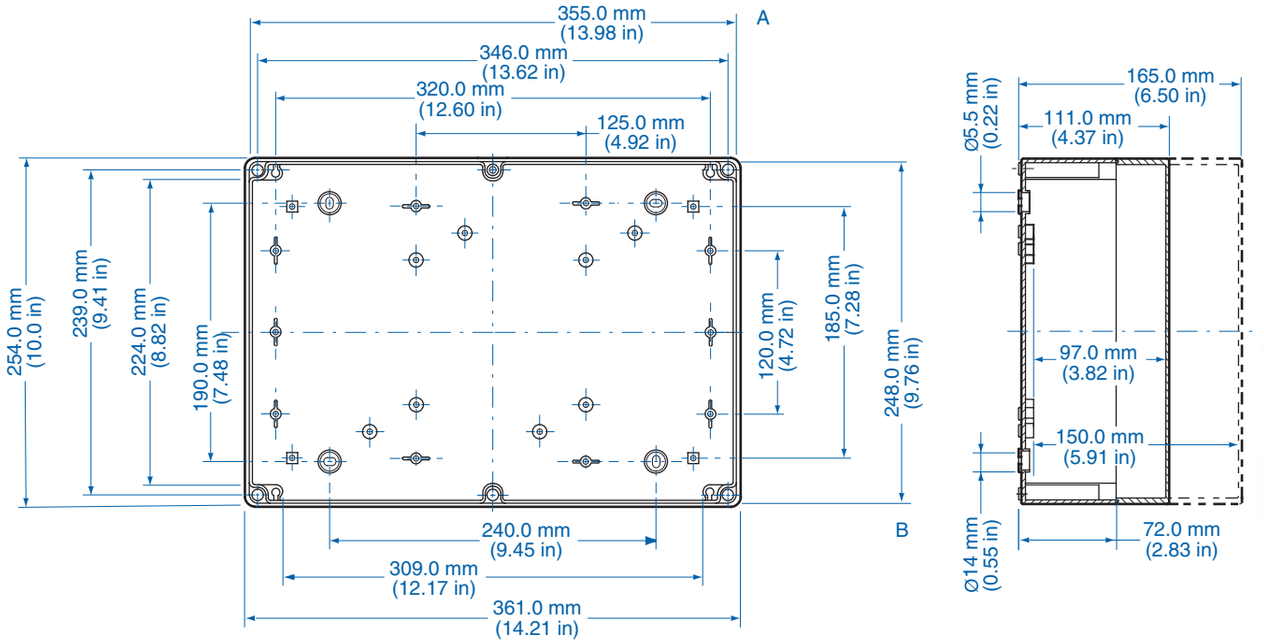
Ordering Information	Height mm (in)	Polystyrene Cat. No.	Type	Cover Color	Std. Pk.	Polycarbonate Cat. No.	Type	Cover Color	Std. Pk.
Enclosure - low cover	111 mm (4.37 in)	105-412	PS 3625-11-m	gray	1	127-412	PC 3625-11-m	gray	1
Enclosure - high cover	165 mm (6.50 in)	105-912	PS 3625-16-m	gray	1	127-912	PC 3625-16-m	gray	1
Enclosure - low cover	111 mm (4.37 in)	106-012	PS 3625-11-tm	trans.	1	137-012	PC 3625-11-tm	trans.	1
Enclosure - high cover	165 mm (6.50 in)	106-512	PS 3625-16-tm	trans.	1	137-512	PC 3625-16-tm	trans.	1

Accessories

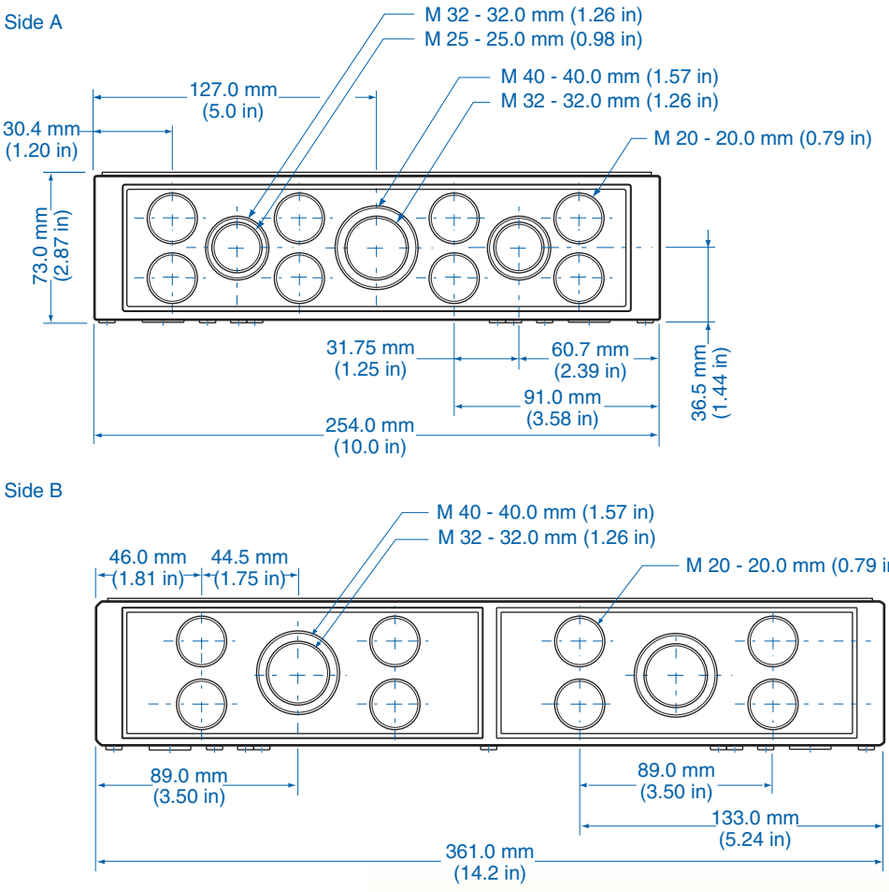
Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	195-012	TKMPI-3625	1
Mounting Plate (steel)	197-012	TKMPS-3625	1
DIN Rail TS35-336mm	198-336	TS 35/ 336	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit	194-001	MT1	1

Please refer to pages 149-152 for additional accessories and detailed information.

Dimensions



Knockout Positions





TG Series

Featuring an attractive, high-gloss finish, the TG enclosure series is manufactured from high-quality plastics, with a choice of ABS or Polycarbonate for unsurpassed industrial quality. These high quality materials are impact and flame resistant as well as being halogen free. Rated to protection class IP 67, they are not only dustproof but also reliably protect installed electrical or electronic equipment against ingress of water during short-term submersion. The TG series therefore satisfies the most demanding applications and provides sure protection in harsh industrial environments even for highly sensitive electronics.

- 16 sizes available
- IP67 (NEMA TYPE 4X)
- ABS or Polycarbonate
- Gray or transparent covers
- Smooth Sidewalls
- Stainless Steel cover screws (choice of standard screws or 1/4 turn quick release screws)
- Integral cover retainers
- Integral mounting studs in base
- Recessed cover for label inlays or membrane keypads
- Flame resistant and halogen free

The TG Advantage

Recess in cover for inlays.





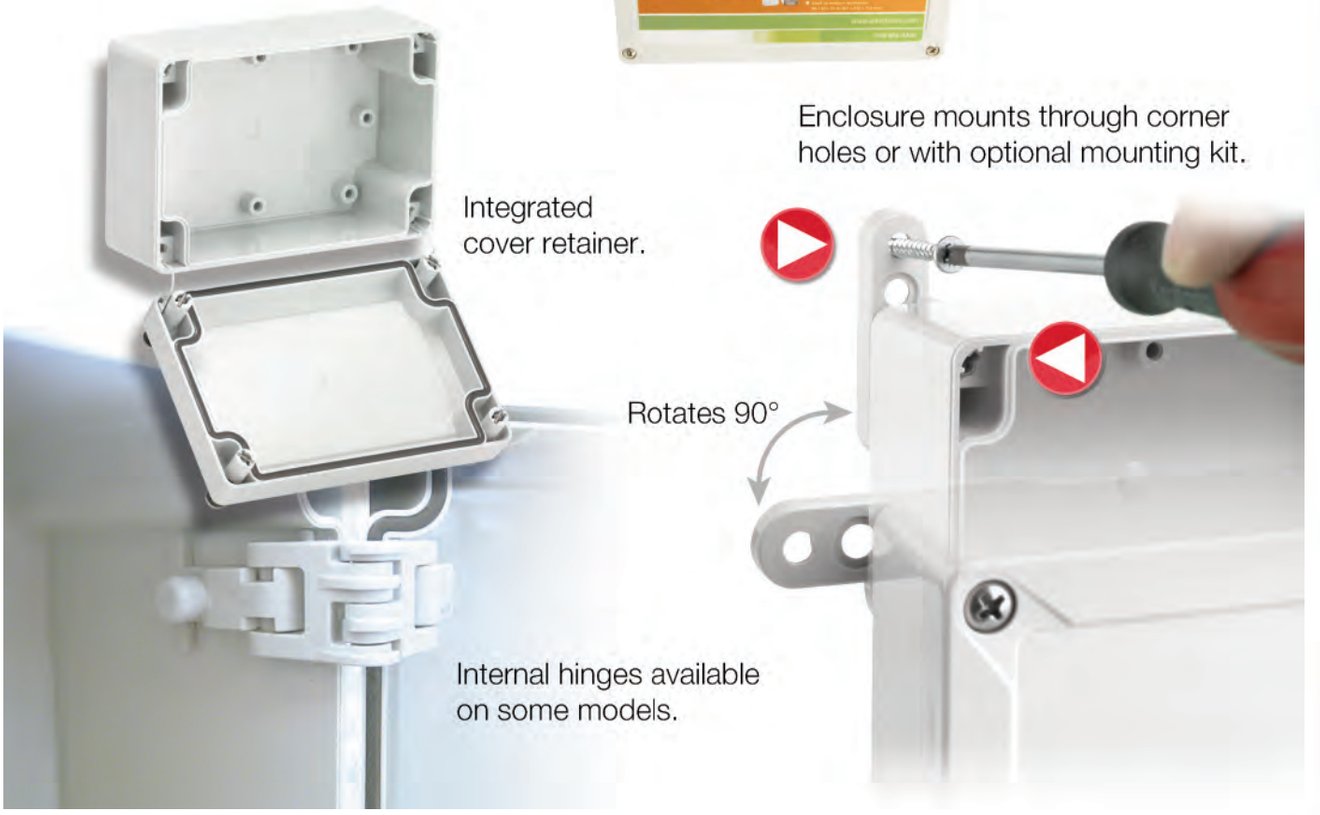
Quick Turn Screws
Open or Close with 1/4 Turn

Enclosure Printing.
Digital printing, screen printing
and adhesive labels.



Enclosure mounts through corner
holes or with optional mounting kit.

Integrated
cover retainer.



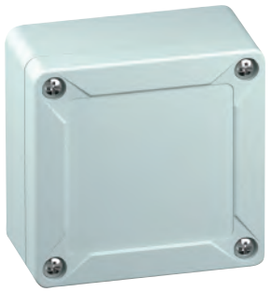
Rotates 90°

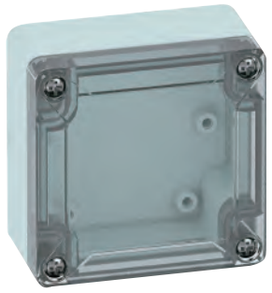
Internal hinges available
on some models.

TG88-6 – ABS and Polycarbonate – 84 x 82 x 55 mm (3.31 x 3.23 x 2.17 in.)

Standard Features

- **Protection Level:** IP67 (NEMA 4X)
- **Technical:** Smooth Sidewalls
  Gray or Transparent Cover
  Standard or Quick Turn Screws
  60 x 58 x 0.4 mm Recess in Cover
  Integrated Cover Retainer
- **UL Recognized Enclosure Materials:** ABS or Polycarbonate
- **Transparent Cover Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** ABS
  -40˚C to 80˚C (-40˚F to 176˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Accessories:** See section below





E208470
Polycarbonate with standard screws Only

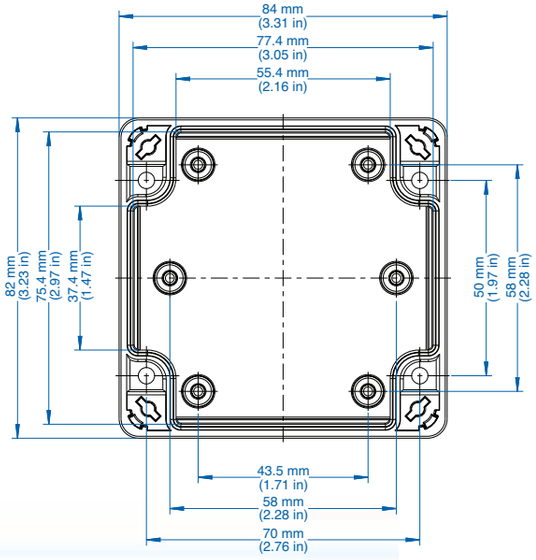
TG

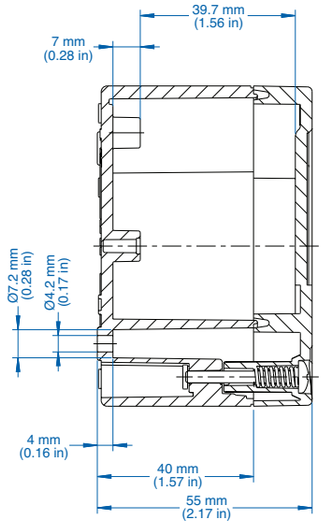
Ordering Information	Cat. No. w/ Standard Screws	Cat. No. w/ Quick Turn Screws	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
ABS							
Gray cover	100-403-91	100-403-01	TGABS88-6-o	84 mm (3.31 in.)	82 mm (3.23 in.)	55 mm (2.17 in.)	1
Transparent cover	101-003-91	101-003-01	TGABS88-6-to	84 mm (3.31 in.)	82 mm (3.23 in.)	55 mm (2.17 in.)	1
Polycarbonate							
Gray cover	200-403-91	200-403-01	TGPC88-6-o	84 mm (3.31 in.)	82 mm (3.23 in.)	55 mm (2.17 in.)	1
Transparent cover	201-003-91	201-003-01	TGPC88-6-to	84 mm (3.31 in.)	82 mm (3.23 in.)	55 mm (2.17 in.)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	186-003	TGMPI-88	1
Mounting Plate (steel)	187-003	TGMPS-88	1
DIN Rail – TS35-68	198-068	NS35-68	1
DIN Rail - TS15-68	197-069	TS15-68	1
Mounting Tab Kit	182-002	TGABL	1

Please refer to pages 149-152 additional accessories and detailed information





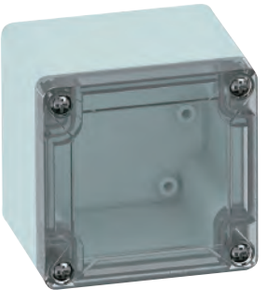
TG88-9 – ABS and Polycarbonate – 84 x 82 x 85 mm (3.31 x 3.23 x 3.35 in.)

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Standard Features

- **Protection Level:** IP67 (NEMA 4X)
- **Technical:** Smooth Sidewalls
  Gray or Transparent Cover
  Standard or Quick Turn Screws
  60 x 58 x 0.4 mm Recess in Cover
  Integrated Cover Retainer
- **UL Recognized Enclosure Materials:** ABS or Polycarbonate
- **Transparent Cover Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** ABS
  -40˚C to 80˚C (-40˚F to 176˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Accessories:** See section below





E208470
Polycarbonate with standard screws Only

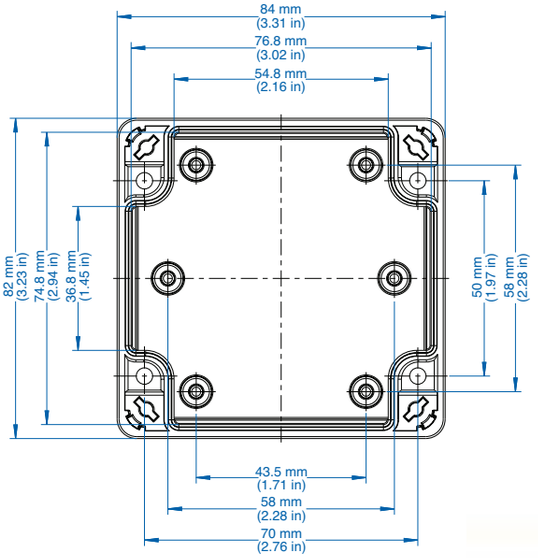
TG

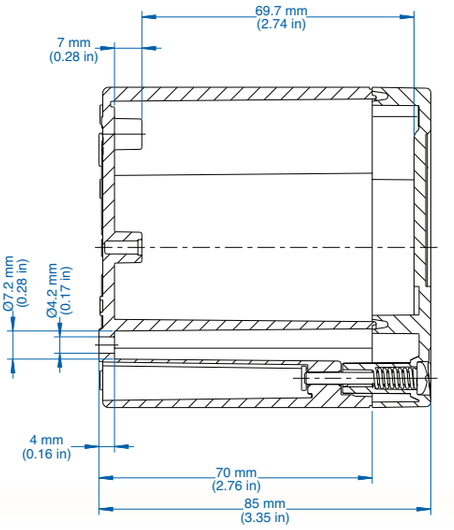
Ordering Information	Cat. No. w/ Standard Screws	Cat. No. w/ Quick Turn Screws	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
ABS							
Gray cover	100-903-91	100-903-01	TGABS88-9-o	84 mm (3.31 in.)	82 mm (3.23 in.)	85 mm (3.35 in.)	1
Transparent cover	101-503-91	101-503-01	TGABS88-9-to	84 mm (3.31 in.)	82 mm (3.23 in.)	85 mm (3.35 in.)	1
Polycarbonate							
Gray cover	200-903-91	200-903-01	TGPC88-9-o	84 mm (3.31 in.)	82 mm (3.23 in.)	85 mm (3.35 in.)	1
Transparent cover	201-503-91	201-503-01	TGPC88-9-to	84 mm (3.31 in.)	82 mm (3.23 in.)	85 mm (3.35 in.)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	186-003	TGMPI-88	1
Mounting Plate (steel)	187-003	TGMPS-88	1
DIN Rail – TS35-68	198-068	NS35-68	1
DIN Rail - TS15-68	197-069	TS15-68	1
Mounting Tab Kit	182-002	TGABL	1

Please refer to pages 149-152 additional accessories and detailed information



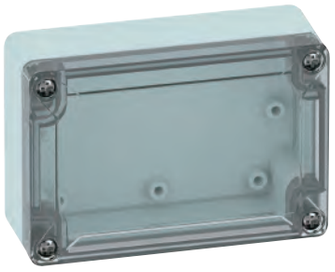


TG1208-6 – ABS and Polycarbonate – 122 x 82 x 55 mm (4.80 x 3.23 x 2.17 in.)

Standard Features

- **Protection Level:** IP67 (NEMA 4X)
- **Technical:** Smooth Sidewalls
  Gray or Transparent Cover
  Standard or Quick Turn Screws
  98 x 58 x 0.4 mm Recess in Cover
  Integrated Cover Retainer
- **UL Recognized Enclosure Materials:** ABS or Polycarbonate
- **Transparent Cover Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** ABS
  -40˚C to 80˚C (-40˚F to 176˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Accessories:** See section below





E208470
Polycarbonate with standard screws Only

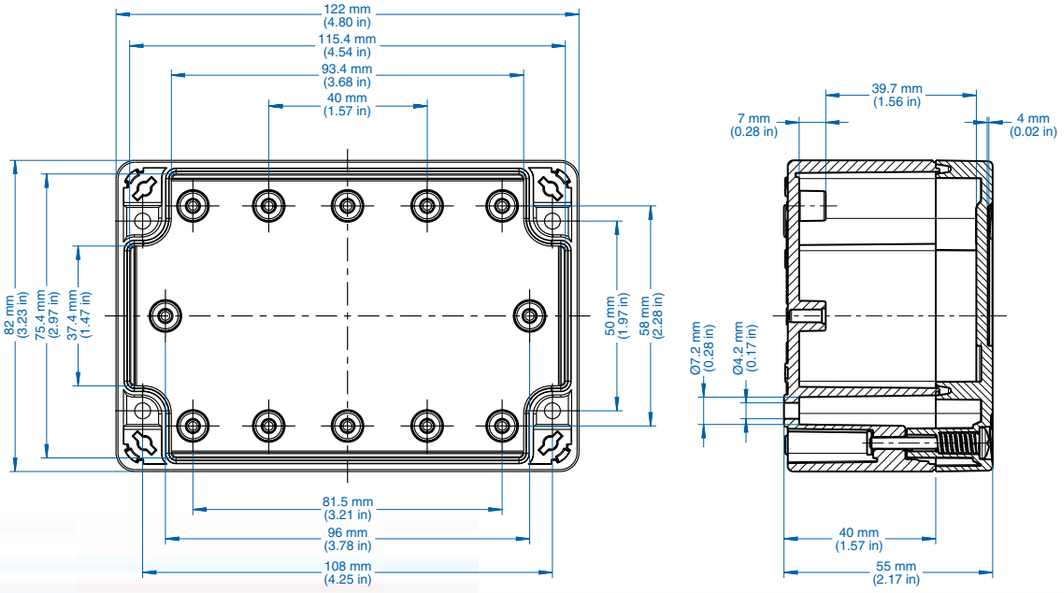
TG

Ordering Information	Cat. No. w/ Standard Screws	Cat. No. w/ Quick Turn Screws	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
ABS							
Gray cover	100-404-91	100-404-01	TGABS1208-6-o	122 mm (4.80 in.)	82 mm (3.23 in.)	55 mm (2.17 in.)	1
Transparent cover	101-004-91	101-004-01	TGABS1208-6-to	122 mm (4.80 in.)	82 mm (3.23 in.)	55 mm (2.17 in.)	1
Polycarbonate							
Gray cover	200-404-91	200-404-01	TGPC1208-6-o	122 mm (4.80 in.)	82 mm (3.23 in.)	55 mm (2.17 in.)	1
Transparent cover	201-004-91	201-004-01	TGPC1208-6-to	122 mm (4.80 in.)	82 mm (3.23 in.)	55 mm (2.17 in.)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	186-004	TGMPI-1208	1
Mounting Plate (steel)	187-004	TGMPS-1208	1
DIN Rail – TS35-106	198-107	NS35-106/2	1
DIN Rail - TS15-106	197-107	TS15-106/2	1
Mounting Tab Kit	182-002	TGABL	1

Please refer to pages 149-152 additional accessories and detailed information



TG1208-9 – ABS and Polycarbonate – 122 x 82 x 85 mm (4.80 x 3.23 x 3.35 in.)

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Standard Features

- **Protection Level:** IP67 (NEMA 4X)
- **Technical:** Smooth Sidewalls
  Gray or Transparent Cover
  Standard or Quick Turn Screws
  98 x 58 x 0.4 mm Recess in Cover
  Integrated Cover Retainer
- **UL Recognized Enclosure Materials:** ABS or Polycarbonate
- **Transparent Cover Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** ABS
  -40˚C to 80˚C (-40˚F to 176˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Accessories:** See section below



E208470
Polycarbonate with standard screws Only

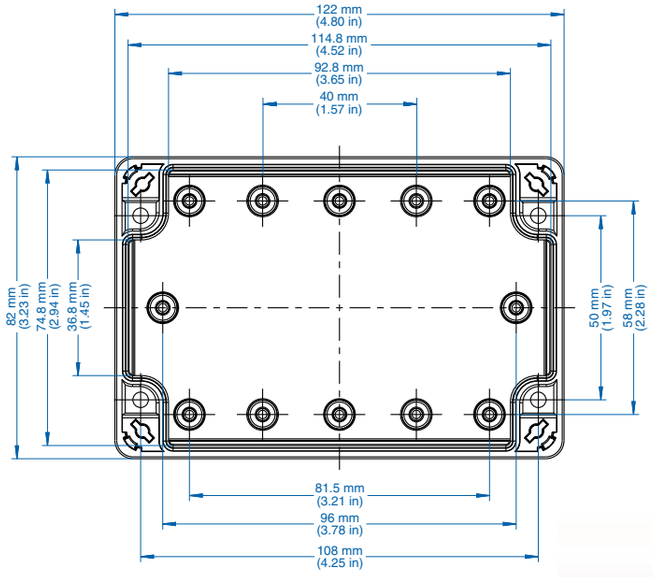
TG

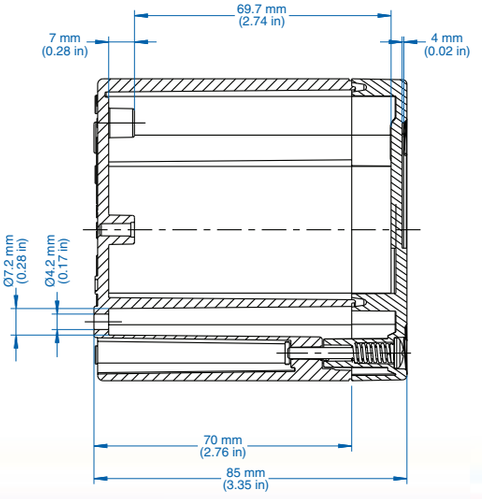
Ordering Information	Cat. No. w/ Standard Screws	Cat. No. w/ Quick Turn Screws	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
ABS							
Gray cover	100-904-91	100-904-01	TGABS1208-9-o	122 mm (4.80 in.)	82 mm (3.23 in.)	85 mm (3.35 in.)	1
Transparent cover	101-504-91	101-504-01	TGABS1208-9-to	122 mm (4.80 in.)	82 mm (3.23 in.)	85 mm (3.35 in.)	1
Polycarbonate							
Gray cover	200-904-91	200-904-01	TGPC1208-9-o	122 mm (4.80 in.)	82 mm (3.23 in.)	85 mm (3.35 in.)	1
Transparent cover	201-504-91	201-504-01	TGPC1208-9-to	122 mm (4.80 in.)	82 mm (3.23 in.)	85 mm (3.35 in.)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	186-004	TGMPI-1208	1
Mounting Plate (steel)	187-004	TGMPS-1208	1
DIN Rail – TS35-106	198-107	NS35-106/2	1
DIN Rail - TS15-106	197-107	TS15-106/2	1
Mounting Tab Kit	182-002	TGABL	1

Please refer to pages 149-152 additional accessories and detailed information





TG1212-6 – ABS and Polycarbonate – 124 x 122 x 55 mm (4.88 x 4.80 x 2.17 in.)

Standard Features

- **Protection Level:** IP67 (NEMA 4X)
- **Technical:** Smooth Sidewalls
  Gray or Transparent Cover
  Standard or Quick Turn Screws
  97 x 95 x 0.4 mm Recess in Cover
  Integrated Cover Retainer
- **UL Recognized Enclosure Materials:** ABS or Polycarbonate
- **Transparent Cover Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** ABS
  -40˚C to 80˚C (-40˚F to 176˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Accessories:** See section below



E208470
Polycarbonate with standard screws Only

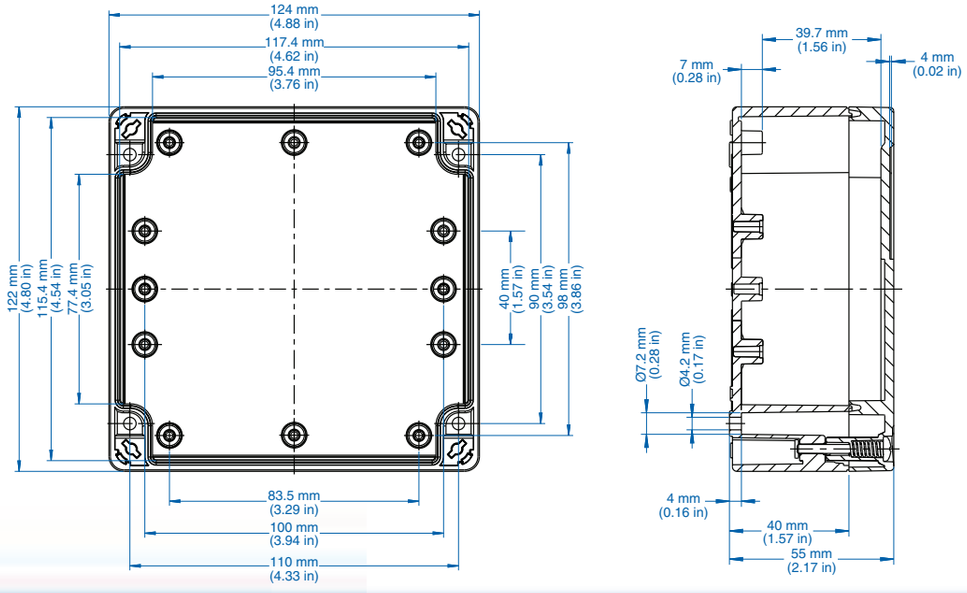
TG

Ordering Information	Cat. No. w/ Standard Screws	Cat. No. w/ Quick Turn Screws	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
ABS							
Gray cover	100-405-91	100-405-01	TGABS1212-6-o	124 mm (4.88 in.)	122 mm (4.80 in.)	55 mm (2.17 in.)	1
Transparent cover	101-005-91	101-005-01	TGABS1212-6-to	124 mm (4.88 in.)	122 mm (4.80 in.)	55 mm (2.17 in.)	1
Polycarbonate							
Gray cover	200-405-91	200-405-01	TGPC1212-6-o	124 mm (4.88 in.)	122 mm (4.80 in.)	55 mm (2.17 in.)	1
Transparent cover	201-005-91	201-005-01	TGPC1212-6-to	124 mm (4.88 in.)	122 mm (4.80 in.)	55 mm (2.17 in.)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	186-005	TGMPI-1212	1
Mounting Plate (steel)	187-005	TGMPS-1212	1
DIN Rail – TS35-110	198-110	NS35-110	1
DIN Rail - TS15-110	197-110	TS15-110	1
Internal Hinge Kit Set (longside)	182-001	TGISS	1
Mounting Tab Kit	182-002	TGABL	1

Please refer to pages 149-152 additional accessories and detailed information



TG1212-9 – ABS and Polycarbonate – 124 x 122 x 85 mm (4.88 x 4.80 x 3.35in.)

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Standard Features

- **Protection Level:** IP67 (NEMA 4X)
- **Technical:** Smooth Sidewalls
  Gray or Transparent Cover
  Standard or Quick Turn Screws
  97 x 95 x 0.4 mm Recess in Cover
  Integrated Cover Retainer
- **UL Recognized Enclosure Materials:** ABS or Polycarbonate
- **Transparent Cover Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** ABS
  -40˚C to 80˚C (-40˚F to 176˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Accessories:** See section below



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Polycarbonate with standard screws Only

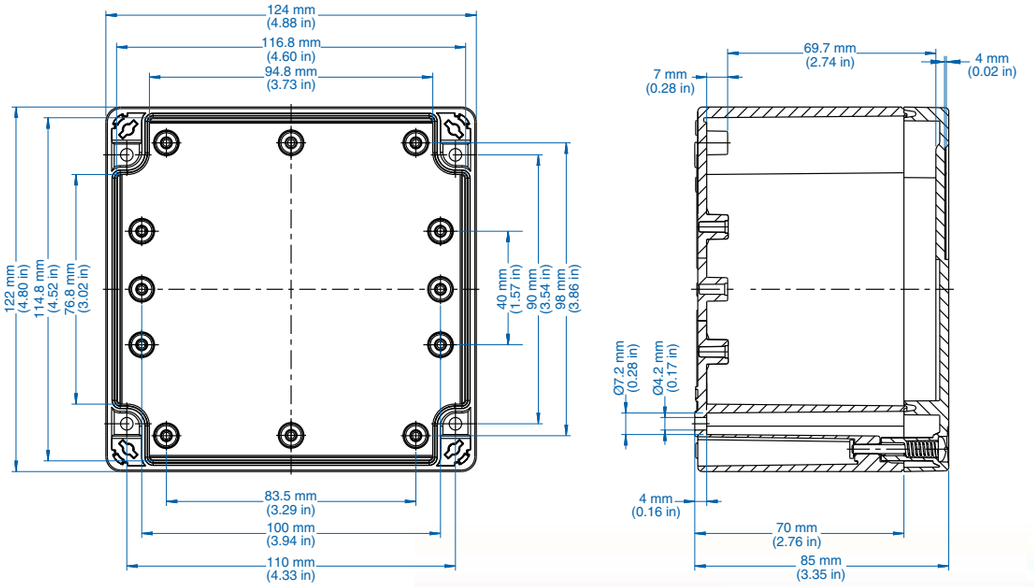
TG

Ordering Information	Cat. No. w/ Standard Screws	Cat. No. w/ Quick Turn Screws	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
ABS							
Gray cover	100-905-91	100-905-01	TGABS1212-9-o	124 mm (4.88 in.)	122 mm (4.80 in.)	85 mm (3.35 in.)	1
Transparent cover	101-505-91	101-505-01	TGABS1212-9-to	124 mm (4.88 in.)	122 mm (4.80 in.)	85 mm (3.35 in.)	1
Polycarbonate							
Gray cover	200-905-91	200-905-01	TGPC1212-9-o	124 mm (4.88 in.)	122 mm (4.80 in.)	85 mm (3.35 in.)	1
Transparent cover	201-505-91	201-505-01	TGPC1212-9-to	124 mm (4.88 in.)	122 mm (4.80 in.)	85 mm (3.35 in.)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	186-005	TGMPI-1212	1
Mounting Plate (steel)	187-005	TGMPS-1212	1
DIN Rail – TS35-110	198-110	NS35-110	1
DIN Rail - TS15-110	197-110	TS15-110	1
Internal Hinge Kit Set (longside)	182-001	TGISS	1
Mounting Tab Kit	182-002	TGABL	1

Please refer to pages 149-152 additional accessories and detailed information



TG1608-6 – ABS and Polycarbonate – 162 x 82 x 55 mm (6.38 x 3.23 x 2.17 in.)

Standard Features

- **Protection Level:** IP67 (NEMA 4X)
- **Technical:** Smooth Sidewalls
  Gray or Transparent Cover
  Standard or Quick Turn Screws
  138 x 58 x 0.4 mm Recess in Cover
  Integrated Cover Retainer
- **UL Recognized Enclosure Materials:** ABS or Polycarbonate
- **Transparent Cover Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** ABS
  -40˚C to 80˚C (-40˚F to 176˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Accessories:** See section below



E208470
Polycarbonate with standard screws Only

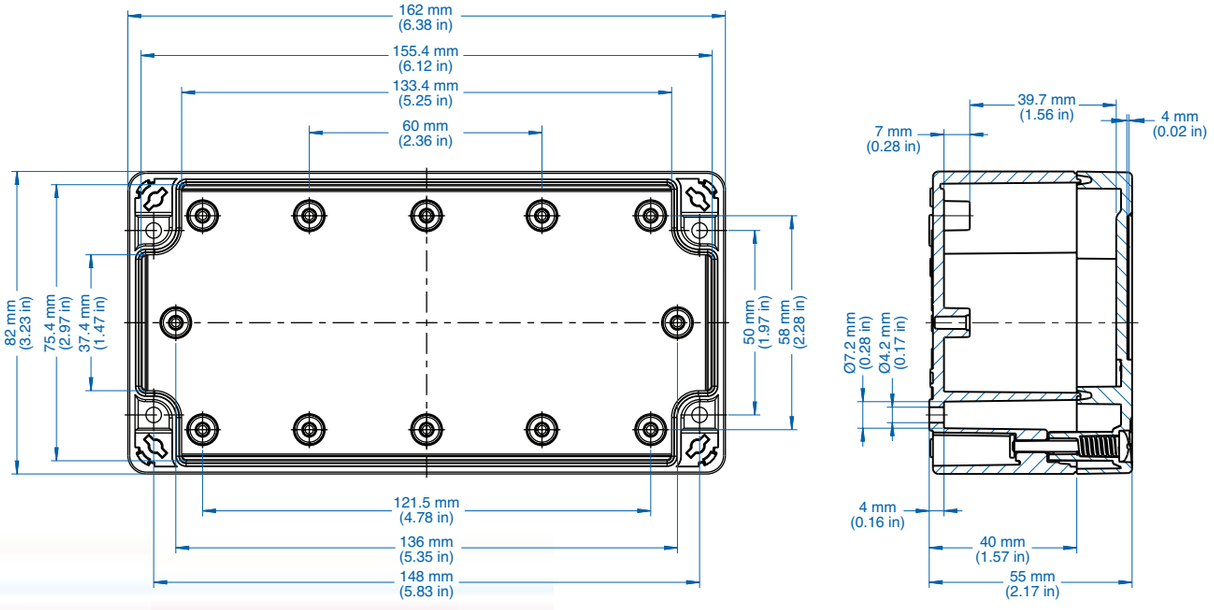
TG

Ordering Information	Cat. No. w/ Standard Screws	Cat. No. w/ Quick Turn Screws	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
ABS							
Gray cover	100-406-91	100-406-01	TGABS1608-6-o	162 mm (6.38 in.)	82 mm (3.23 in.)	55 mm (2.17 in.)	1
Transparent cover	101-006-91	101-006-01	TGABS1608-6-to	162 mm (6.38 in.)	82 mm (3.23 in.)	55 mm (2.17 in.)	1
Polycarbonate							
Gray cover	200-406-91	200-406-01	TGPC1608-6-o	162 mm (6.38 in.)	82 mm (3.23 in.)	55 mm (2.17 in.)	1
Transparent cover	201-006-91	201-006-01	TGPC1608-6-to	162 mm (6.38 in.)	82 mm (3.23 in.)	55 mm (2.17 in.)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	186-006	TGMPI-1608	1
Mounting Plate (steel)	187-006	TGMPS-1608	1
DIN Rail – TS35-146	198-146	NS35-146	1
DIN Rail - TS15-146	197-146	TS15-146	1
Mounting Tab Kit	182-002	TGABL	1

Please refer to pages 149-152 additional accessories and detailed information



TG1608-9 – ABS and Polycarbonate – 162 x 82 x 85mm (6.38 x 3.23 x 3.35 in.)

Standard Features

- **Protection Level:** IP67 (NEMA 4X)
- **Technical:** Smooth Sidewalls
  Gray or Transparent Cover
  Standard or Quick Turn Screws
  138 x 58 x 0.4 mm Recess in Cover
  Integrated Cover Retainer
- **UL Recognized Enclosure Materials:** ABS or Polycarbonate
- **Transparent Cover Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** ABS
  -40˚C to 80˚C (-40˚F to 176˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Accessories:** See section below



E208470
Polycarbonate with standard screws Only

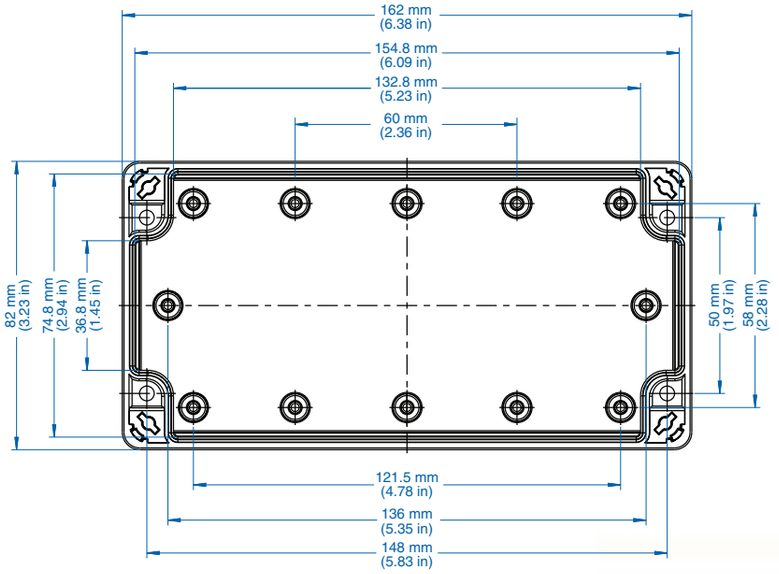
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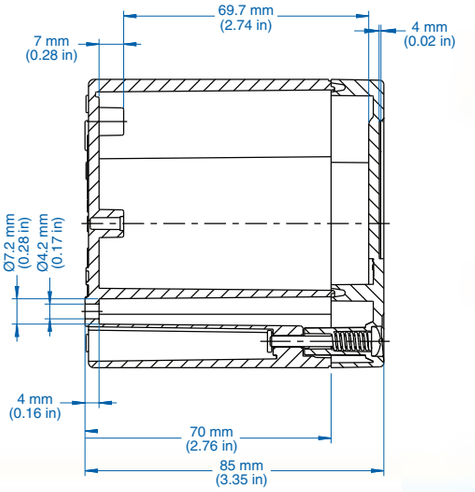
Ordering Information	Cat. No. w/ Standard Screws	Cat. No. w/ Quick Turn Screws	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
ABS							
Gray cover	100-906-91	100-906-01	TGABS1608-9-o	162 mm (6.38 in.)	82 mm (3.23 in.)	85 mm (3.35 in.)	1
Transparent cover	101-506-91	101-506-01	TGABS1608-9-to	162 mm (6.38 in.)	82 mm (3.23 in.)	85 mm (3.35 in.)	1
Polycarbonate							
Gray cover	200-906-91	200-906-01	TGPC1608-9-o	162 mm (6.38 in.)	82 mm (3.23 in.)	85 mm (3.35 in.)	1
Transparent cover	201-506-91	201-506-01	TGPC1608-9-to	162 mm (6.38 in.)	82 mm (3.23 in.)	85 mm (3.35 in.)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	186-006	TGMPI-1608	1
Mounting Plate (steel)	187-006	TGMPS-1608	1
DIN Rail – TS35-146	198-146	NS35-146	1
DIN Rail - TS15-146	197-146	TS15-146	1
Mounting Tab Kit	182-002	TGABL	1

Please refer to pages 149-152 additional accessories and detailed information

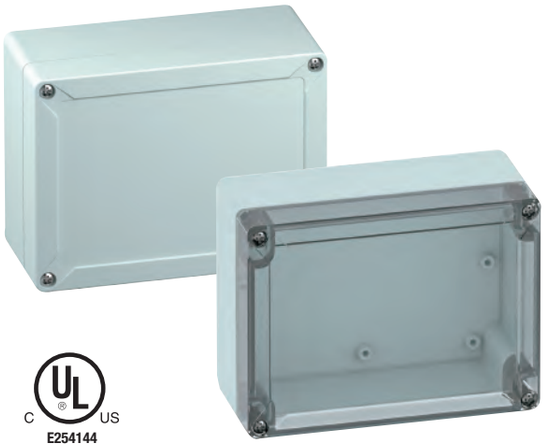




TG1612-9 – ABS and Polycarbonate – 162 x 122 x 90 mm (6.38 x 4.80 x 3.54 in.)

Standard Features

- **Protection Level:** IP67 (NEMA 4X)
- **Technical:** Smooth Sidewalls
  Gray or Transparent Cover
  Standard or Quick Turn Screws
  135 x 95 x 0.4 mm Recess in Cover
  Integrated Cover Retainer
- **UL Recognized Enclosure Materials:** ABS or Polycarbonate
- **Transparent Cover Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** ABS
  -40˚C to 80˚C (-40˚F to 176˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Accessories:** See section below



E254144
Polycarbonate with standard screws Only

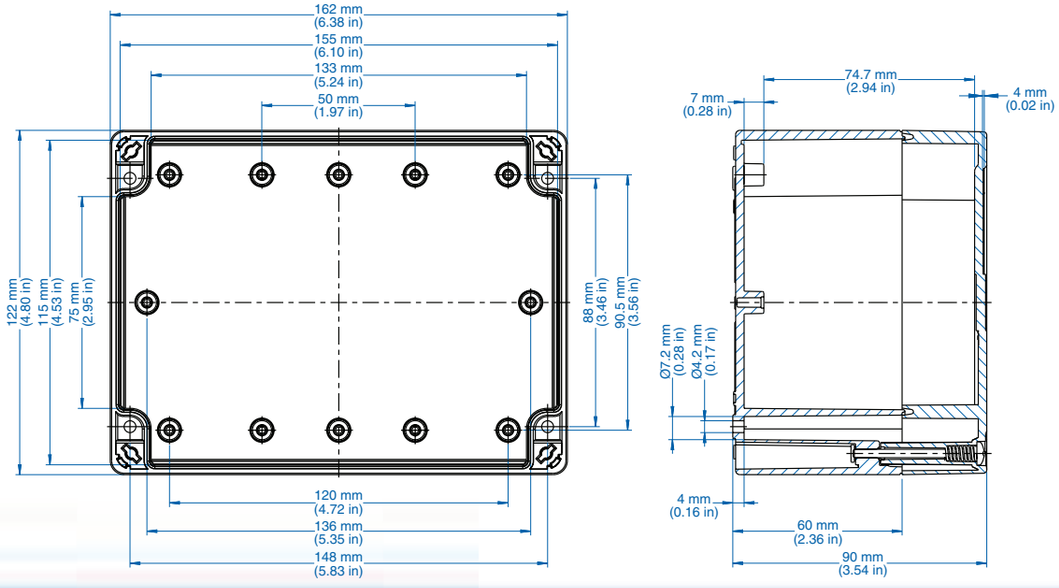
TG

Ordering Information	Cat. No. w/ Standard Screws	Cat. No. w/ Quick Turn Screws	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
ABS							
Gray cover	100-407-91	100-407-01	TGABS1612-6-o	162 mm (6.38 in.)	122 mm (4.80 in.)	90 mm (3.54 in.)	1
Transparent cover	101-007-91	101-007-01	TGABS1612-6-to	162 mm (6.38 in.)	122 mm (4.80 in.)	90 mm (3.54 in.)	1
Polycarbonate							
Gray cover	200-407-91	200-407-01	TGPC1612-6-o	162 mm (6.38 in.)	122 mm (4.80 in.)	90 mm (3.54 in.)	1
Transparent cover	201-007-91	201-007-01	TGPC1612-6-to	162 mm (6.38 in.)	122 mm (4.80 in.)	90 mm (3.54 in.)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	186-007	TGMPI-1612	1
Mounting Plate (steel)	187-007	TGMPS-1612	1
DIN Rail – TS35-146	198-146	NS35-146	1
DIN Rail - TS15-146	197-146	TS15-146	1
Internal Hinge Kit Set (longside)	182-001	TGISS	1
Mounting Tab Kit	182-002	TGABL	1

Please refer to pages 149-152 additional accessories and detailed information



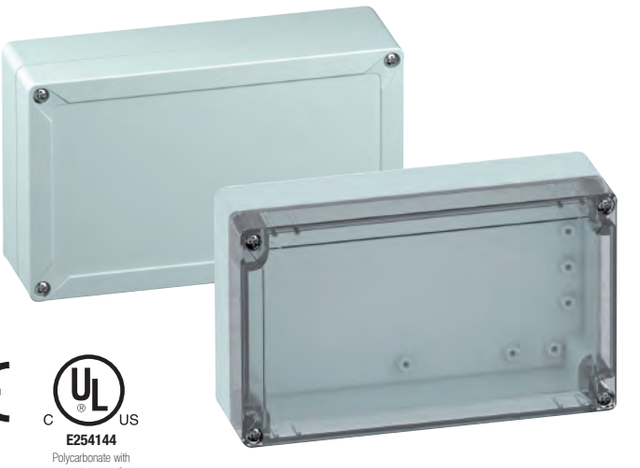
TG2012-8 – ABS and Polycarbonate – 202 x 122 x 75 mm (7.95 x 4.80 x 2.95 in.)

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Standard Features

- **Protection Level:** IP67 (NEMA 4X)
- **Technical:** Smooth Sidewalls
  Gray or Transparent Cover
  Standard or Quick Turn Screws
  175 x 95 x 0.4 mm Recess in Cover
  Integrated Cover Retainer
- **UL Recognized Enclosure Materials:** ABS or Polycarbonate
- **Transparent Cover Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** ABS
  -40˚C to 80˚C (-40˚F to 176˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Accessories:** See section below



CE

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E254144
Polycarbonate with standard screws Only

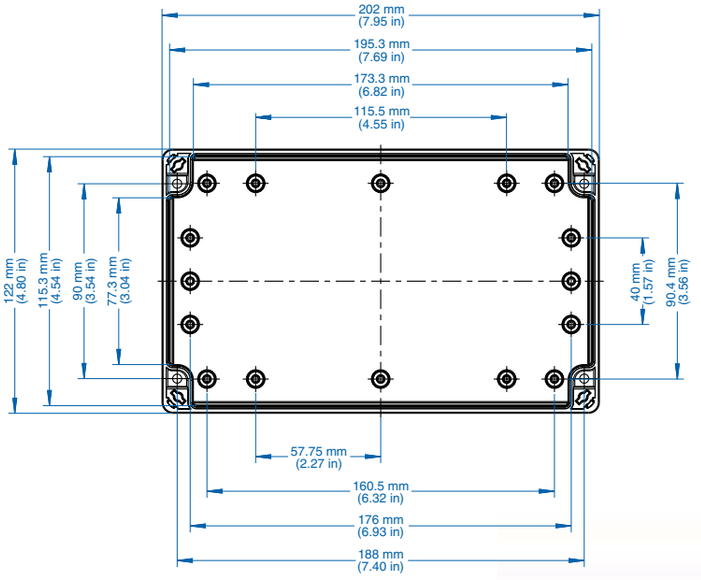
TG

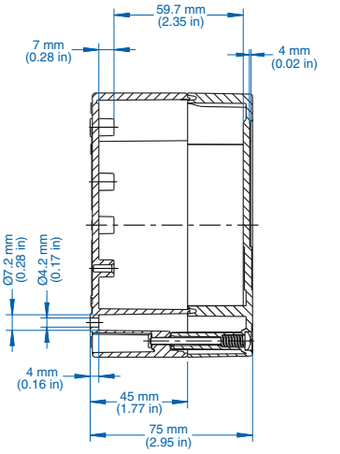
Ordering Information	Cat. No. w/ Standard Screws	Cat. No. w/ Quick Turn Screws	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
ABS							
Gray cover	100-408-91	100-408-01	TGABS2012-8-o	202 mm (7.95 in.)	122 mm (4.80 in.)	75 mm (2.95 in.)	1
Transparent cover	101-008-91	101-008-01	TGABS2012-8-to	202 mm (7.95 in.)	122 mm (4.80 in.)	75 mm (2.95 in.)	1
Polycarbonate							
Gray cover	200-408-91	200-408-01	TGPC2012-8-o	202 mm (7.95 in.)	122 mm (4.80 in.)	75 mm (2.95 in.)	1
Transparent cover	201-008-91	201-008-01	TGPC2012-8-to	202 mm (7.95 in.)	122 mm (4.80 in.)	75 mm (2.95 in.)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	186-008	TGMPI-2012	1
Mounting Plate (steel)	187-008	TGMPS-2012	1
DIN Rail – TS35-186	198-186	NS35-186	1
DIN Rail - TS15-186	197-186	TS15-186	1
Internal Hinge Kit Set (longside)	182-001	TGISS	1
Mounting Tab Kit	182-002	TGABL	1

Please refer to pages 149-152 additional accessories and detailed information

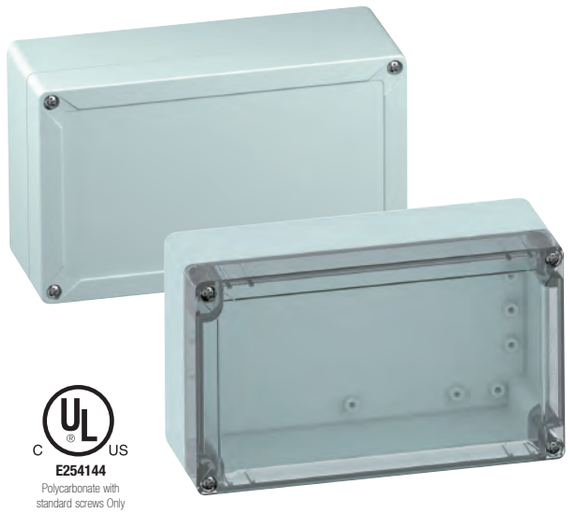




TG2012-9 – ABS and Polycarbonate – 202 x 122 x 90 mm (7.95 x 4.80 x 3.54 in.)

Standard Features

- **Protection Level:** IP67 (NEMA 4X)
- **Technical:** Smooth Sidewalls
  Gray or Transparent Cover
  Standard or Quick Turn Screws
  175 x 95 x 0.4 mm Recess in Cover
  Integrated Cover Retainer
- **UL Recognized Enclosure Materials:** ABS or Polycarbonate
- **Transparent Cover Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** ABS
  -40˚C to 80˚C (-40˚F to 176˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Accessories:** See section below



E254144
Polycarbonate with standard screws Only

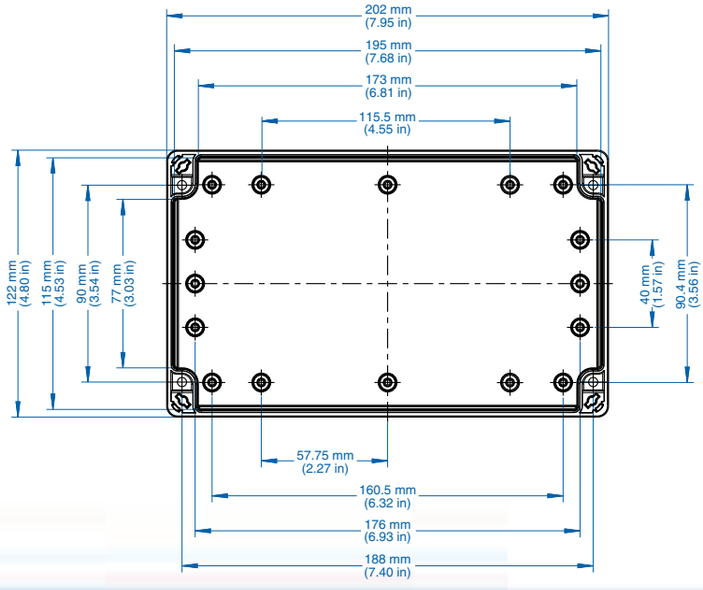
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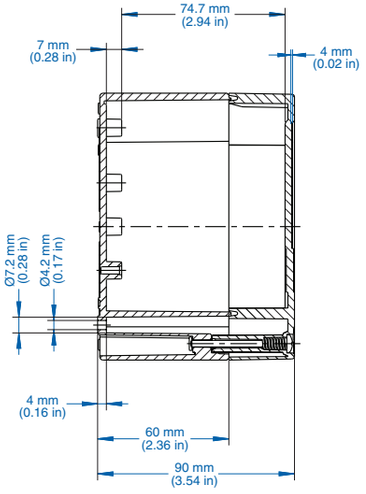
Ordering Information	Cat. No. w/ Standard Screws	Cat. No. w/ Quick Turn Screws	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
ABS							
Gray cover	100-908-91	100-908-01	TGABS2012-9-o	202 mm (7.95 in.)	122 mm (4.80 in.)	90 mm (3.54 in.)	1
Transparent cover	101-508-91	101-508-01	TGABS2012-9-to	202 mm (7.95 in.)	122 mm (4.80 in.)	90 mm (3.54 in.)	1
Polycarbonate							
Gray cover	200-908-91	200-908-01	TGPC2012-9-o	202 mm (7.95 in.)	122 mm (4.80 in.)	90 mm (3.54 in.)	1
Transparent cover	201-508-91	201-508-01	TGPC2012-9-to	202 mm (7.95 in.)	122 mm (4.80 in.)	90 mm (3.54 in.)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	186-008	TGMPI-2012	1
Mounting Plate (steel)	187-008	TGMPS-2012	1
DIN Rail – TS35-186	198-186	NS35-186	1
DIN Rail - TS15-186	197-186	TS15-186	1
Internal Hinge Kit Set (longside)	182-001	TGISS	1
Mounting Tab Kit	182-002	TGABL	1

Please refer to pages 149-152 additional accessories and detailed information





Standard Features

- **Protection Level:** IP67 (NEMA 4X)
- **Technical:** Smooth Sidewalls
  Gray or Transparent Cover
  Standard or Quick Turn Screws
  175 x 125 x 0.4 mm Recess in Cover
  Integrated Cover Retainer
- **UL Recognized Enclosure Materials:** ABS or Polycarbonate
- **Transparent Cover Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** ABS
  -40˚C to 80˚C (-40˚F to 176˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Accessories:** See section below



E254144
Polycarbonate with standard screws Only

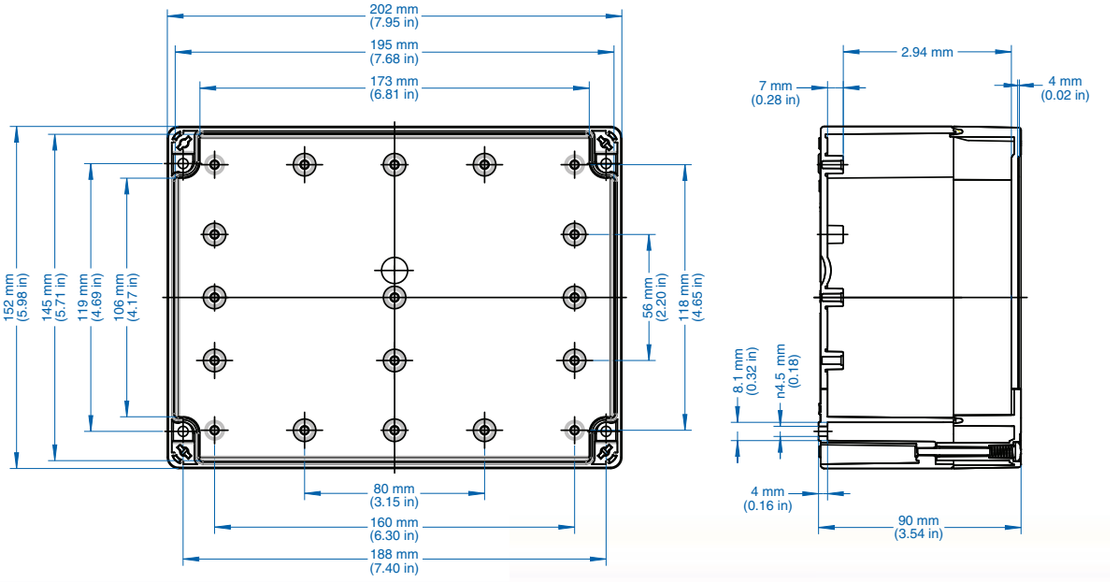
TG

Ordering Information	Cat. No. w/ Standard Screws	Cat. No. w/ Quick Turn Screws	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
ABS							
Gray cover	100-409-91	100-409-01	TGABS2015-9-o	202 mm (7.95 in.)	152 mm (5.98 in.)	90 mm (3.54 in.)	1
Transparent cover	101-009-91	101-009-01	TGABS2015-9-to	202 mm (7.95 in.)	152 mm (5.98 in.)	90 mm (3.54 in.)	1
Polycarbonate							
Gray cover	200-409-91	200-409-01	TGPC2015-9-o	202 mm (7.95 in.)	152 mm (5.98 in.)	90 mm (3.54 in.)	1
Transparent cover	201-009-91	201-009-01	TGPC2015-9-to	202 mm (7.95 in.)	152 mm (5.98 in.)	90 mm (3.54 in.)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	186-009	TGMPI-2015	1
Mounting Plate (steel)	187-009	TGMPS-2015	1
DIN Rail – TS35-170	198-170	NS35-170	1
DIN Rail - TS15-170	197-170	TS15-170	1
Internal Hinge Kit Set	182-001	TGISS	1
Mounting Tab Kit	182-002	TGABL	1

Please refer to pages 149-152 additional accessories and detailed information



TG2516-9 – ABS and Polycarbonate – 252 x 162 x 90 mm (9.92 x 6.38 x 3.54 in.)

Standard Features

- **Protection Level:** IP67 (NEMA 4X)
- **Technical:** Smooth Sidewalls
  Gray or Transparent Cover
  Standard or Quick Turn Screws
  225 x 135 x 0.4 mm Recess in Cover
  Integrated Cover Retainer
- **UL Recognized Enclosure Materials:** ABS or Polycarbonate
- **Transparent Cover Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** ABS
  -40˚C to 80˚C (-40˚F to 176˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Accessories:** See section below



E254144
Polycarbonate with standard screws Only

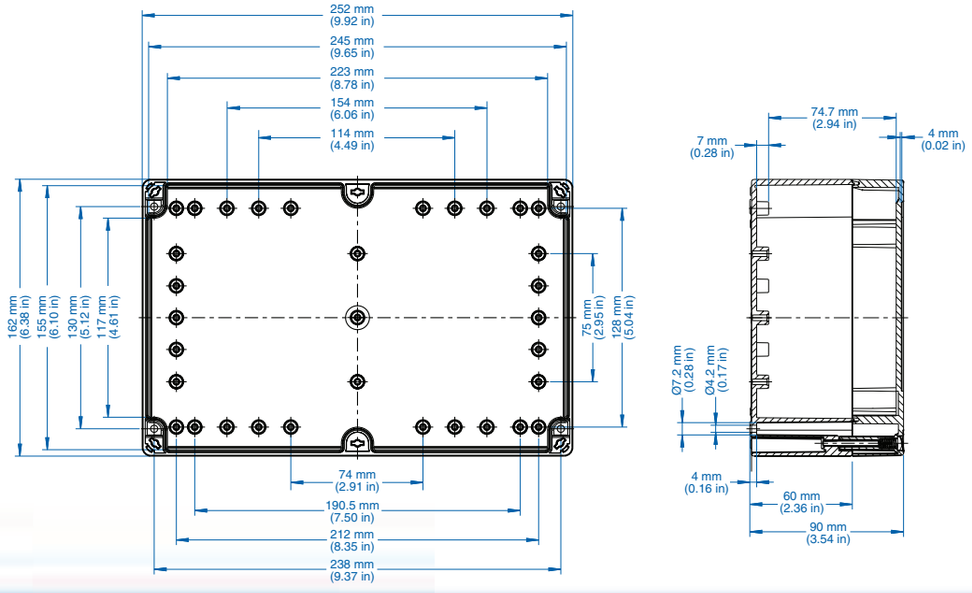
TG

Ordering Information	Cat. No. w/ Standard Screws	Cat. No. w/ Quick Turn Screws	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
ABS							
Gray cover	100-412-91	100-412-01	TGABS2516-9-o	252 mm (9.92 in.)	162 mm (6.38 in.)	90 mm (3.54 in.)	1
Transparent cover	101-012-91	101-012-01	TGABS2516-9-to	252 mm (9.92 in.)	162 mm (6.38 in.)	90 mm (3.54 in.)	1
Polycarbonate							
Gray cover	200-412-91	200-412-01	TGPC2516-9-o	252 mm (9.92 in.)	162 mm (6.38 in.)	90 mm (3.54 in.)	1
Transparent cover	201-012-91	201-012-01	TGPC2516-9-to	252 mm (9.92 in.)	162 mm (6.38 in.)	90 mm (3.54 in.)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	186-012	TGMPI-2516	1
Mounting Plate (steel)	187-012	TGMPS-2516	1
DIN Rail – TS35-222	198-222	NS35-222	1
DIN Rail - TS15-222	197-222	TS15-222	1
Internal Hinge Kit Set	182-001	TGISS	1
Mounting Tab Kit	182-002	TGABL	1

Please refer to pages 149-152 additional accessories and detailed information



TG2516-12 – ABS and Polycarbonate – 252 x 162 x 120 mm (9.92 x 6.38 x 4.72 in.)

Standard Features

- **Protection Level:** IP67 (NEMA 4X)
- **Technical:** Smooth Sidewalls
  Gray or Transparent Cover
  Standard or Quick Turn Screws
  225 x 135 x 0.4 mm Recess in Cover
  Integrated Cover Retainer
- **UL Recognized Enclosure Materials:** ABS or Polycarbonate
- **Transparent Cover Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** ABS
  -40˚C to 80˚C (-40˚F to 176˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Accessories:** See section below



E254144
Polycarbonate with standard screws Only

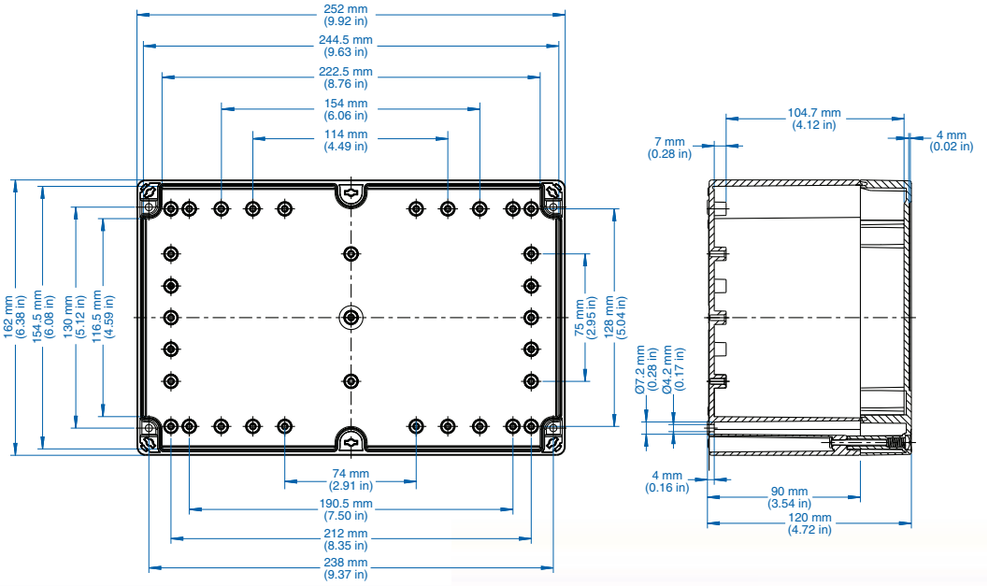
TG

Ordering Information	Cat. No. w/ Standard Screws	Cat. No. w/ Quick Turn Screws	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
ABS							
Gray cover	100-912-91	100-912-01	TGABS2516-12-o	252 mm (9.92 in.)	162 mm (6.38 in.)	120 mm (4.72 in.)	1
Transparent cover	101-512-91	101-512-01	TGABS2516-12-to	252 mm (9.92 in.)	162 mm (6.38 in.)	120 mm (4.72 in.)	1
Polycarbonate							
Gray cover	200-912-91	200-912-01	TGPC2516-12-o	252 mm (9.92 in.)	162 mm (6.38 in.)	120 mm (4.72 in.)	1
Transparent cover	201-512-91	201-512-01	TGPC2516-12-to	252 mm (9.92 in.)	162 mm (6.38 in.)	120 mm (4.72 in.)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	186-012	TGMPI-2516	1
Mounting Plate (steel)	187-012	TGMPS-2516	1
DIN Rail – TS35-222	198-222	NS35-222	1
DIN Rail - TS15-222	197-222	TS15-222	1
Internal Hinge Kit Set	182-001	TGISS	1
Mounting Tab Kit	182-002	TGABL	1

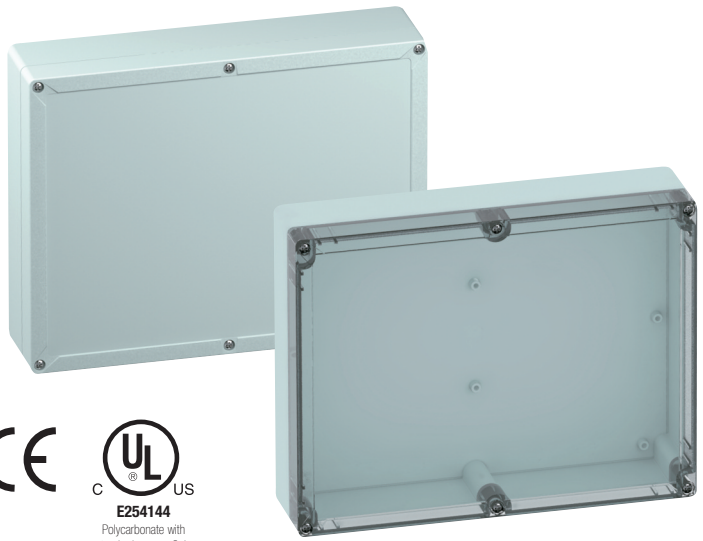
Please refer to pages 149-152 additional accessories and detailed information



TG3023-9 – ABS and Polycarbonate – 302 x 232 x 90 mm (11.89 x 9.13 x 3.54 in.)

Standard Features

- **Protection Level:** IP67 (NEMA 4X)
- **Technical:** Smooth Sidewalls
  Gray or Transparent Cover
  Standard or Quick Turn Screws
  275 x 205 x 0.4 mm Recess in Cover
  Integrated Cover Retainer
- **UL Recognized Enclosure Materials:** ABS or Polycarbonate
- **Transparent Cover Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** ABS
  -40˚C to 80˚C (-40˚F to 176˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Accessories:** See section below



E254144
Polycarbonate with standard screws Only

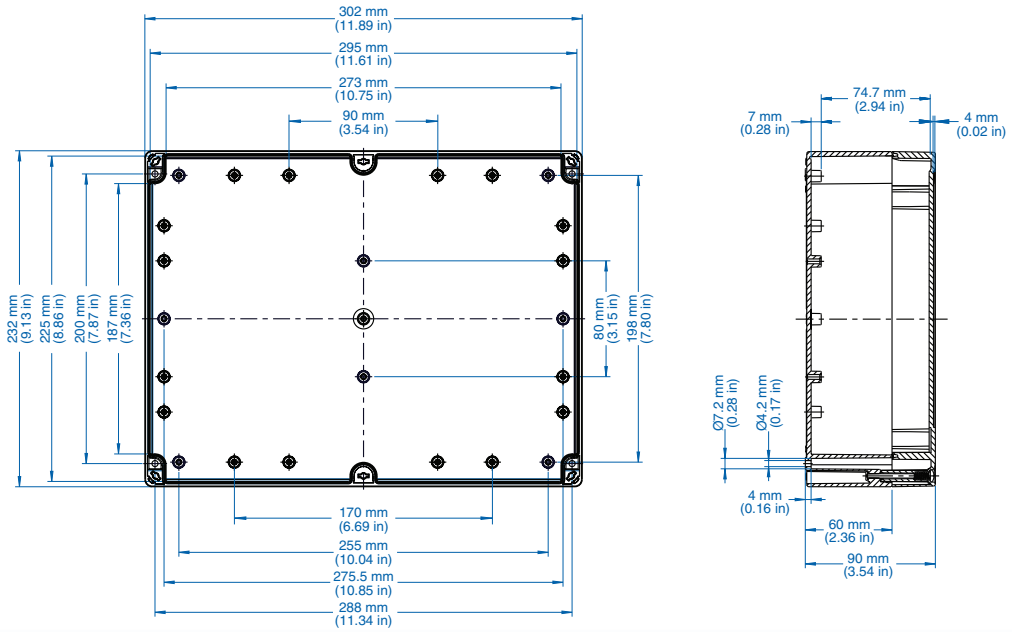
TG

Ordering Information	Cat. No. w/ Standard Screws	Cat. No. w/ Quick Turn Screws	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
ABS							
Gray cover	100-413-91	100-413-01	TGABS3023-9-o	302 mm (11.89 in.)	232 mm (9.13 in.)	90 mm (3.54 in.)	1
Transparent cover	101-013-91	101-013-01	TGABS3023-9-to	302 mm (11.89 in.)	232 mm (9.13 in.)	90 mm (3.54 in.)	1
Polycarbonate							
Gray cover	200-413-91	200-413-01	TGPC3023-9-o	302 mm (11.89 in.)	232 mm (9.13 in.)	90 mm (3.54 in.)	1
Transparent cover	201-013-91	201-013-01	TGPC3023-9-to	302 mm (11.89 in.)	232 mm (9.13 in.)	90 mm (3.54 in.)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	186-013	TGMPI-3023	1
Mounting Plate (steel)	187-013	TGMPS-3023	1
DIN Rail – TS35-285	198-285	NS35-285	1
DIN Rail - TS15-285	197-285	TS15-285	1
Internal Hinge Kit Set	182-001	TGISS	1
Mounting Tab Kit	182-002	TGABL	1

Please refer to pages 149-152 additional accessories and detailed information



TG3023-11 – ABS and Polycarbonate – 302 x 232 x 110 mm (11.89 x 9.13 x 4.33 in.)

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Standard Features

- **Protection Level:** IP67 (NEMA 4X)
- **Technical:** Smooth Sidewalls
  Gray or Transparent Cover
  Standard or Quick Turn Screws
  275 x 205 x 0.4 mm Recess in Cover
  Integrated Cover Retainer
- **UL Recognized Enclosure Materials:** ABS or Polycarbonate
- **Transparent Cover Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** ABS
  -40˚C to 80˚C (-40˚F to 176˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Accessories:** See section below



CE UL C US
E254144
Polycarbonate with standard screws Only

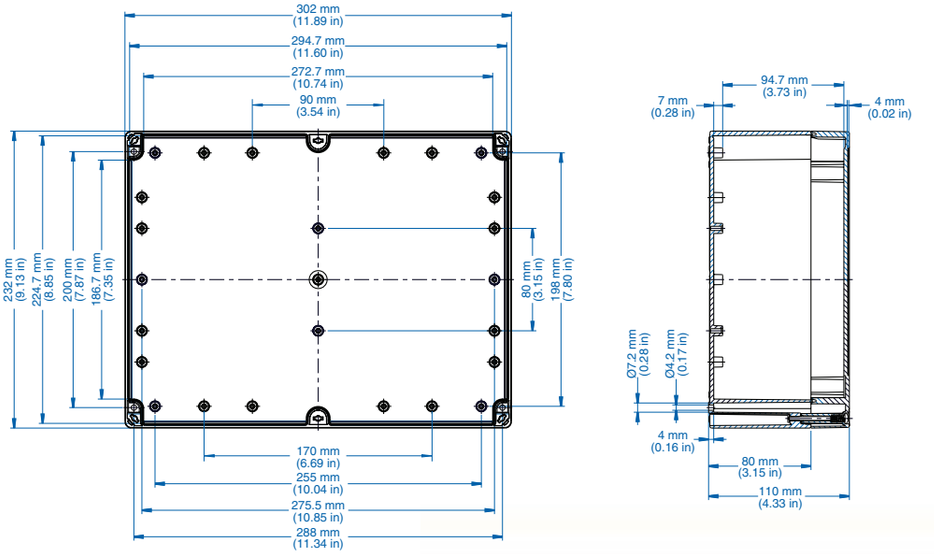
TG

Ordering Information	Cat. No. w/ Standard Screws	Cat. No. w/ Quick Turn Screws	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
ABS							
Gray cover	100-913-91	100-913-01	TGABS3023-11-o	302 mm (11.89 in.)	232 mm (9.13 in.)	110 mm (4.33 in.)	1
Transparent cover	101-513-91	101-513-01	TGABS3023-11-to	302 mm (11.89 in.)	232 mm (9.13 in.)	110 mm (4.33 in.)	1
Polycarbonate							
Gray cover	200-913-91	200-913-01	TGPC3023-11-o	302 mm (11.89 in.)	232 mm (9.13 in.)	110 mm (4.33 in.)	1
Transparent cover	201-513-91	201-513-01	TGPC3023-11-to	302 mm (11.89 in.)	232 mm (9.13 in.)	110 mm (4.33 in.)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	186-013	TGMPI-3023	1
Mounting Plate (steel)	187-013	TGMPS-3023	1
DIN Rail – TS35-285	198-285	NS35-285	1
DIN Rail - TS15-285	197-285	TS15-285	1
Internal Hinge Kit Set	182-001	TGISS	1
Mounting Tab Kit	182-002	TGABL	1

Please refer to pages 149-152 additional accessories and detailed information





AL Series

The enclosures of the AL Series are constructed of cast aluminum material. The enclosure base and cover are connected with pre-mounted, stainless steel cover screws (compatible with both Phillips and straight blade screwdrivers). The foam seal in the key/slot system guarantees an IP66 ingress protection and long lasting service life. A high quality coating covers and protects the enclosure from weather and corrosion. Several international safety certificates insure the overall quality of the AL Series.

8 new enclosure sizes have been added to the AL series. These enclosures are called TK AL enclosures because the sizes were taken from the most popular sizes in the TK enclosure series. The inside dimensions match those of the comparable TK version. These new enclosures were also designed with UL approvals in mind. UL approval is currently pending on these parts but they will soon have UL listing with a NEMA 4X Type rating in early 2015.

The complete series of 24 enclosures ranges from 50 x 45 x 30 mm to 388 x 270 x 117 mm.

The exterior of the enclosure is protected by powder coating (silver-gray - RAL 7001) and combines an elegant appearance with outstanding protection against corrosion.

The enclosure material (Al Si 12) ensures both a high degree of impact resistance (>7Nm, DIN 50014) and continued operation in extreme temperatures.

The advantages of the AL Series include:

- IP66 protection, which is necessary for industry approval.
- High degree of resistance to chemicals and other damaging materials.
- Protection against electromagnetic interference (EMI).

The specially designed AL Series accessories make the AL Enclosures flexible and highly secure.

The external mounting tabs allow for solid and safe wall mounting of the AL Enclosures. The installation of the clamps to the enclosure can be varied up to 90 degrees.

Through the use of external hinges, the covers of the AL Series can be converted into hinged doors. This is especially useful when devices such as push-button systems are integrated into the enclosure. The external hinges, constructed of cast aluminum can be swiveled up to 150 degrees.

With the help of the steel mounting plates, even large and heavy components can be securely mounted. The mounting plates are available from enclosures AL 88-6 and larger.



External Hinges*



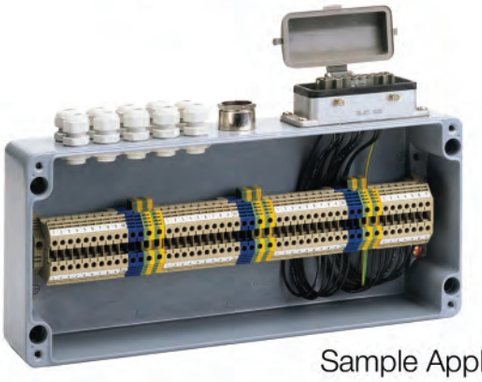
DIN Rail*

Sample Application



External Mounting Tabs*





Sample Application

* sold separately

AL 55-3 – Aluminum – 50 x 45 mm (1.97 x 1.77 in.)

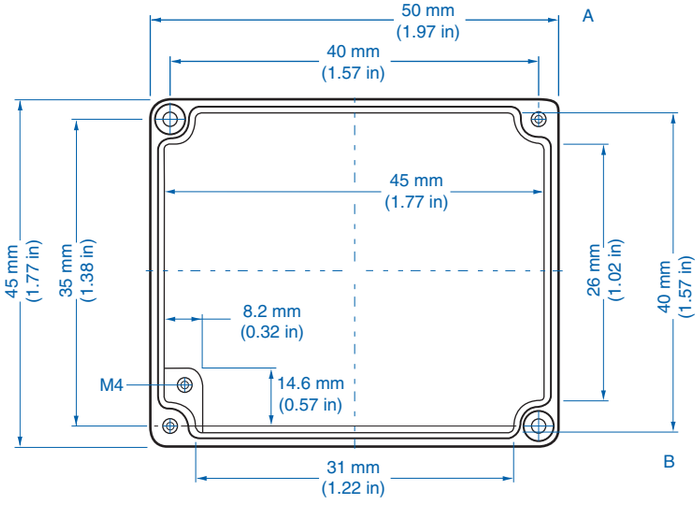
Standard Features

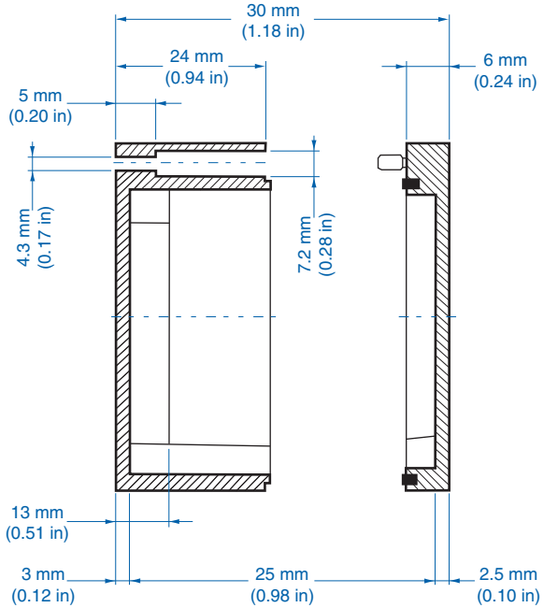
- **Protection Level:** IP66
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Gasket Material:** Polyurethane
- **Temperature Range:** -35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



Aluminum

Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	150-001	AL 55-3	50 mm (1.97 in)	45 mm (1.77 in)	30 mm (1.18 in)	1





Standard Features

- **Protection Level:** IP66
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Gasket Material:** Polyurethane
- **Temperature Range:** -35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



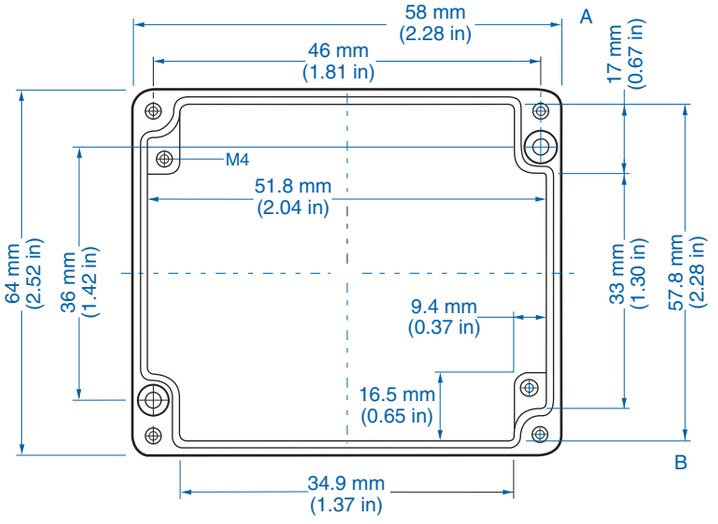
Aluminum

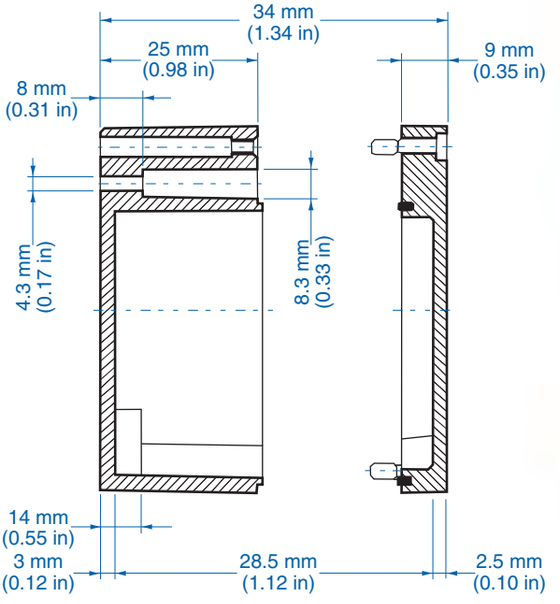
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	150-002	AL 66-3	64 mm (2.52 in)	58 mm (2.28 in)	34 mm (1.34 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Tab Kit - small	154-004	MT-AL1	1

Please refer to pages 149-152 for additional accessories and detailed information.

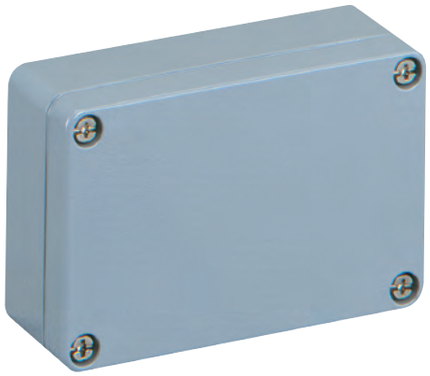




AL 1006-3 – Aluminum – 98 x 64 mm (3.86 x 2.52 in.)

Standard Features

- **Protection Level:** IP66
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Gasket Material:** Polyurethane
- **Temperature Range:** -35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



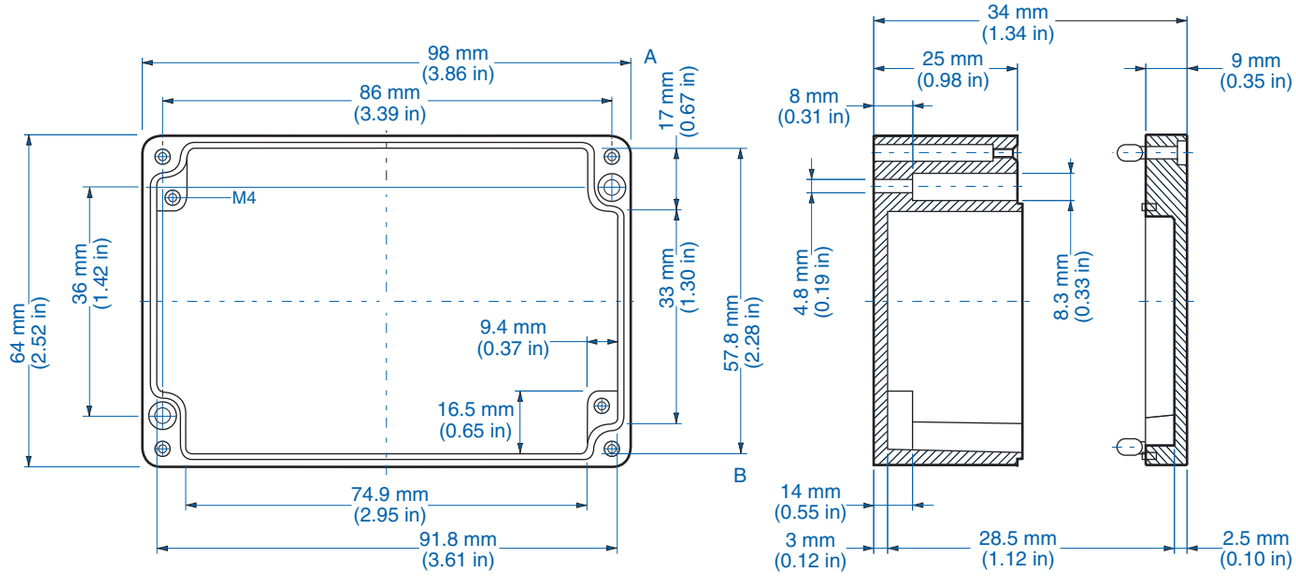
Aluminum

Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	150-003	AL 1006-3	98 mm (3.86 in)	64 mm (2.52 in)	34 mm (1.34 in)	1

Accessories

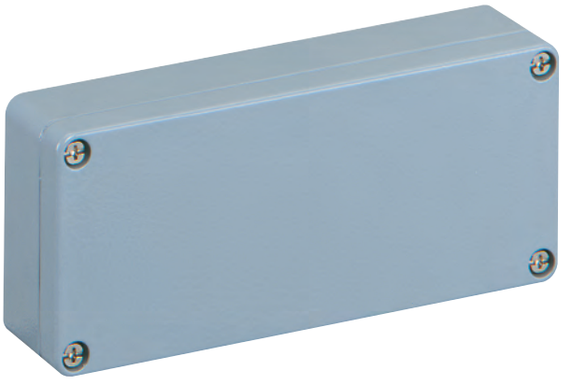
Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Tab Kit - small	154-004	MT-AL1	1

Please refer to pages 149-152 for additional accessories and detailed information.



Standard Features

- **Protection Level:** IP66
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Gasket Material:** Polyurethane
- **Temperature Range:** -35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



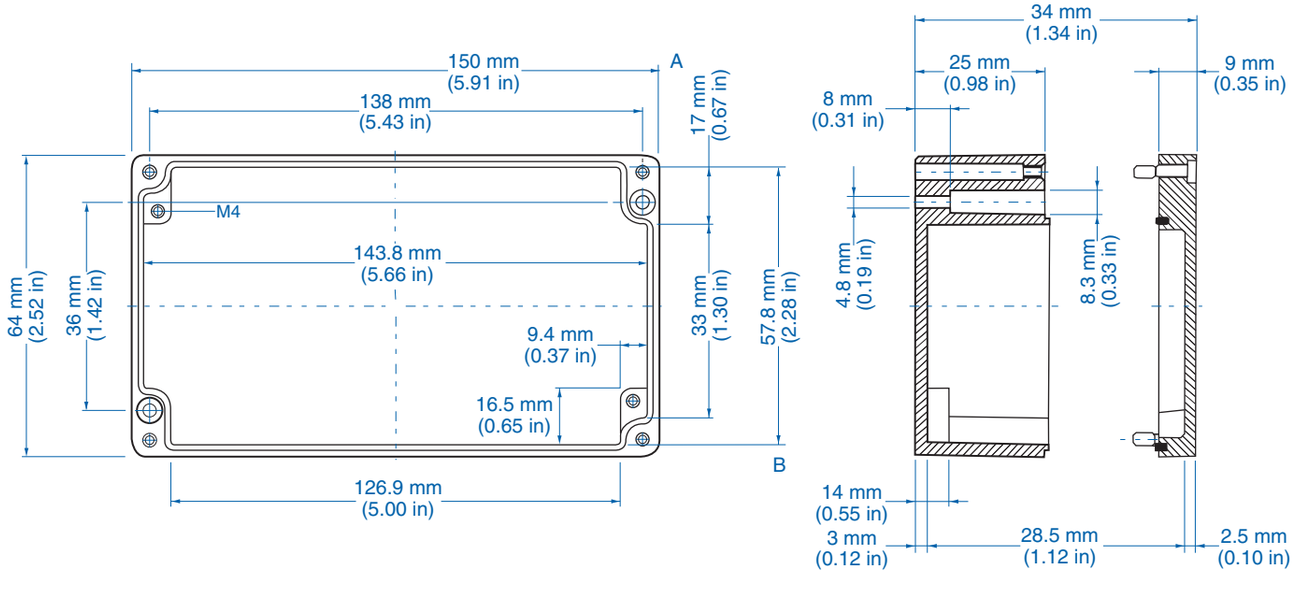
Aluminum

Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	150-004	AL 1506-3	150 mm (5.91 in)	64 mm (2.52 in)	34 mm (1.34 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Tab Kit- small	154-004	MT-AL1	1

Please refer to pages 149-152 for additional accessories and detailed information.



AL 88-6 – Aluminum – 80 x 75 mm (3.15 x 2.95 in.)

Standard Features

- **Protection Level:** IP66
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Gasket Material:** Polyurethane
- **Temperature Range:** -35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



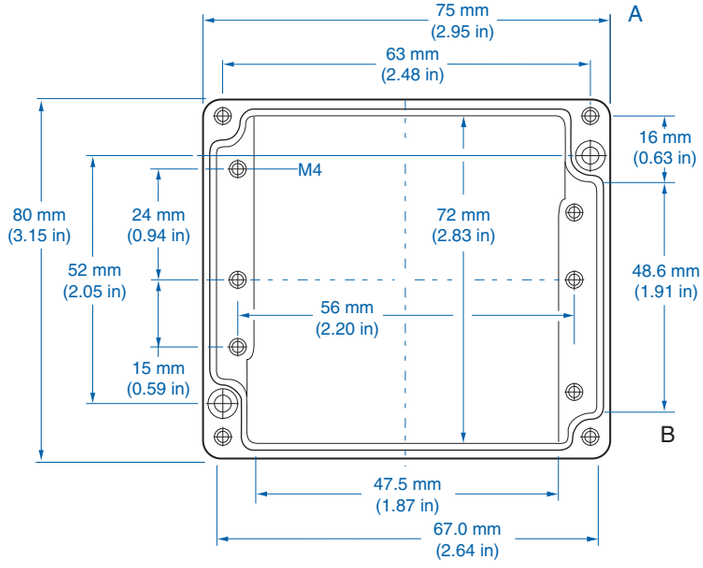
Aluminum

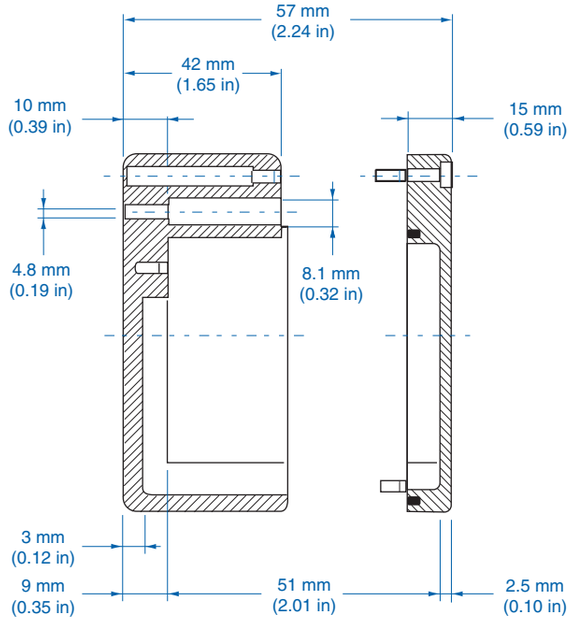
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	150-005	AL 88-6	80 mm (3.15 in)	75 mm (2.95 in)	57 mm (2.24 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate	155-005	ALMPS-88	1
Mounting Tab Kit - small	154-004	MT-AL1	1

Please refer to pages 149-152 for additional accessories and detailed information.





TKAL77-6 – Aluminum – 89 x 89 mm (3.50 x 3.50 in.)

NEW

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Standard Features

- **Protection Level:** IP66
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Gasket Material:** Silicone
- **Temperature Range:** -35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below

C UL US PENDING



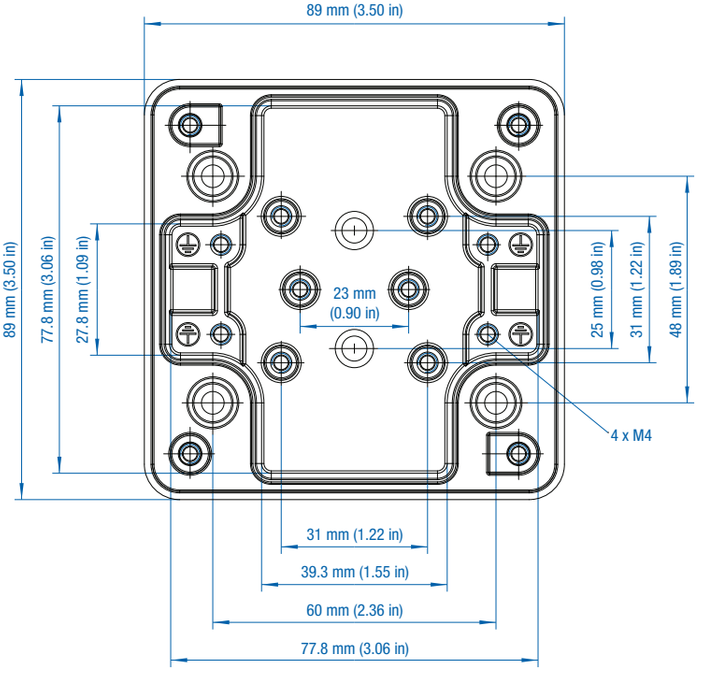
Aluminum

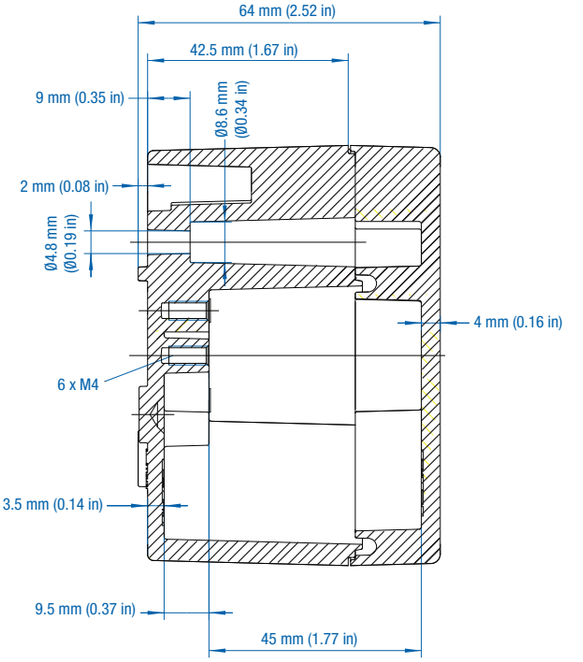
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	151-001	TKAL77-6	89 mm (3.50 in)	89 mm (3.50 in)	64 mm (2.52 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	195-001	TKMPI-77	1
Mounting Plate (steel)	197-001	TKMPS-77	1
DIN Rail TS15-49.5 mm	197-049	TS15/49.5	1
Mounting Tab Kit - small	154-004	MT-AL1	1

Please refer to pages 149-152 for additional accessories and detailed information.

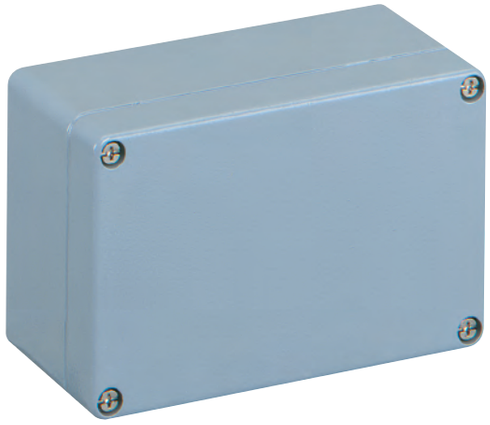




AL 1308-6 – Aluminum – 125 x 80 mm (4.92 x 3.15 in.)

Standard Features

- **Protection Level:** IP66
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Gasket Material:** Polyurethane
- **Temperature Range:** -35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



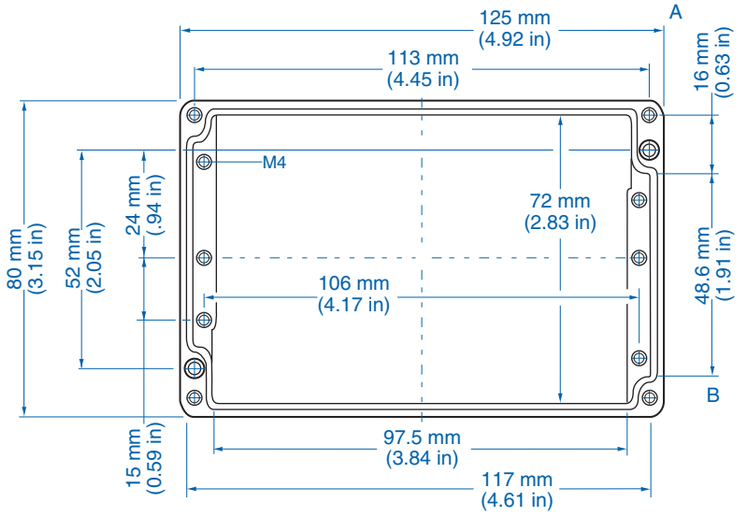
Aluminum

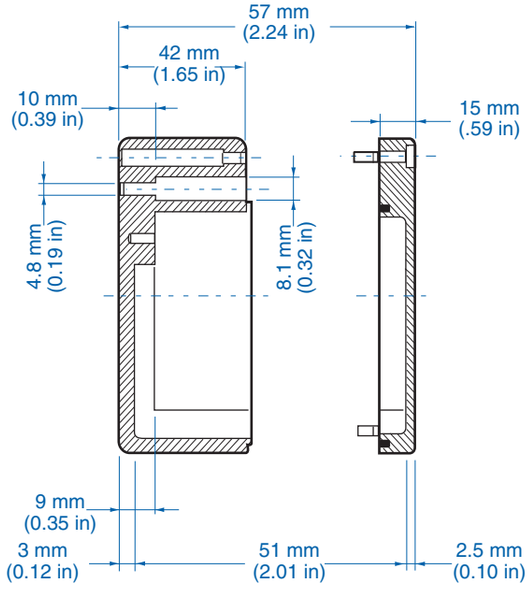
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	150-006	AL 1308-6	125 mm (4.92 in)	80 mm (3.15 in)	57 mm (2.24 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate	155-006	ALMPS-1308	1
Mounting Tab Kit - small	154-004	MT-AL1	1

Please refer to pages 149-152 for additional accessories and detailed information.

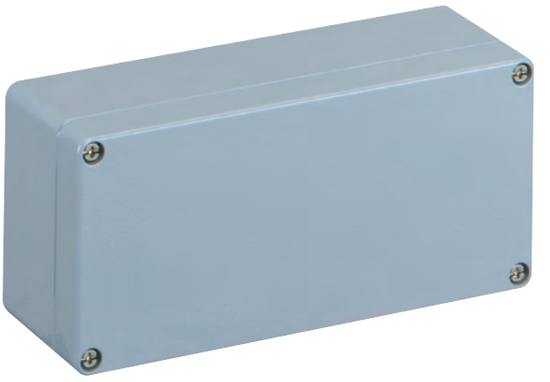




AL 1808-6 – Aluminum – 175 x 80 mm (6.89 x 3.15 in.)

Standard Features

- **Protection Level:** IP66
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Gasket Material:** Polyurethane
- **Temperature Range:** -35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



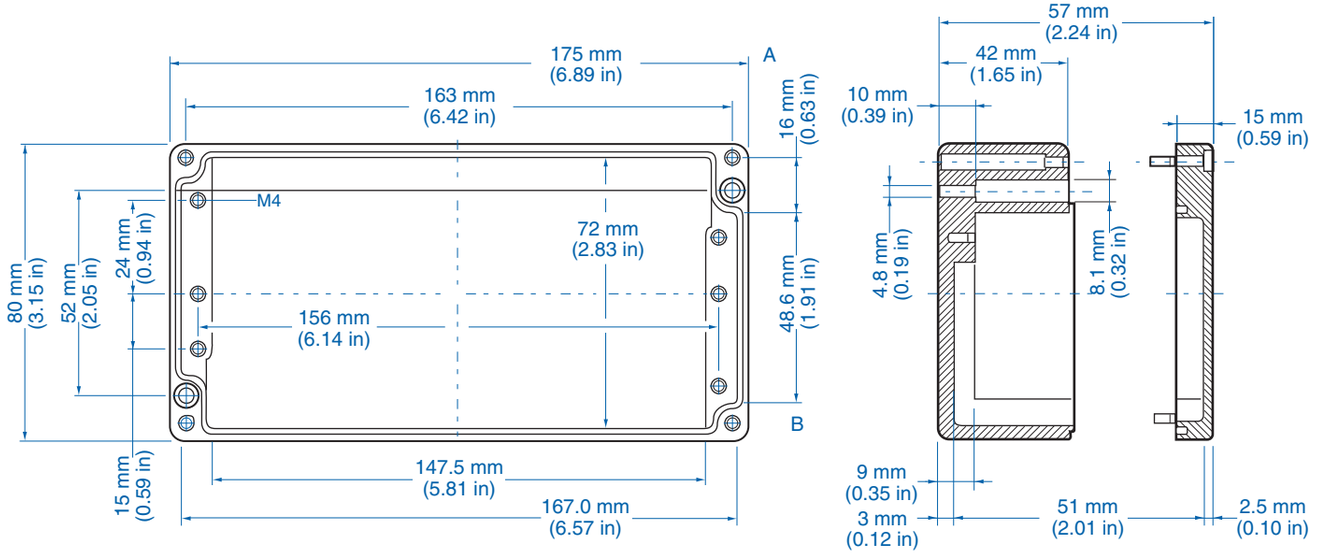
Aluminum

Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	150-007	AL 1808-6	175 mm (6.89 in)	80 mm (3.15 in)	57 mm (2.24 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate	155-007	ALMPS-1808	1
Mounting Tab Kit - small	154-004	MT-AL1	1

Please refer to pages 149-152 for additional accessories and detailed information.



AL 1010-8 – Aluminum – 100 x 100 mm (3.94 x 3.94 in.)

Standard Features

- **Protection Level:** IP66
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Gasket Material:** Polyurethane
- **Temperature Range:** -35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



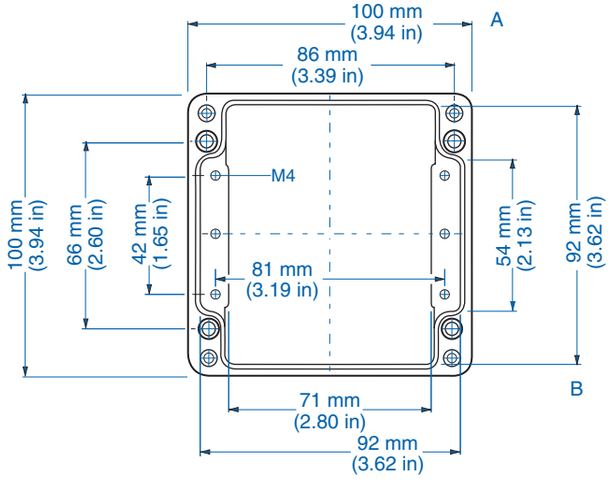
Aluminum

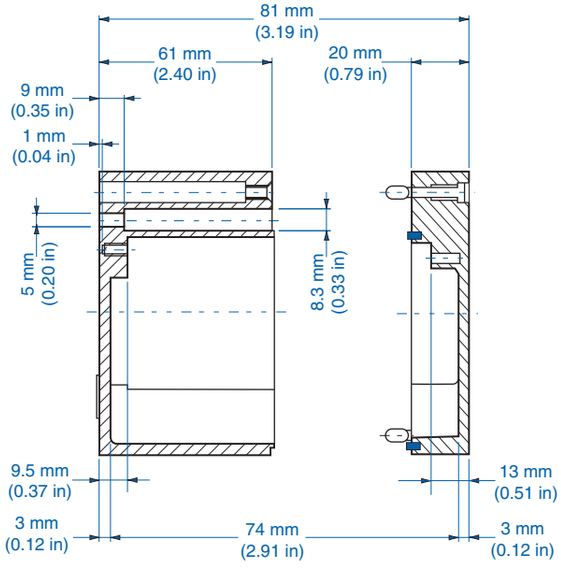
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	150-008	AL 1010-8	100 mm (3.94 in)	100 mm (3.94 in)	80 mm (3.15 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate	155-008	ALMPS-1010	1
Hinge Kit Set	154-210	HK-AL	1
Mounting Tab Kit - small	154-004	MT-AL1	1

Please refer to pages 149-152 for additional accessories and detailed information.





TKAL99-6 – Aluminum – 119 x 119 mm (4.69 x 4.69 in.)

NEW

Altech by els spelsberg

Standard Features

- **Protection Level:** IP66
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Gasket Material:** Silicone
- **Temperature Range:** -35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below

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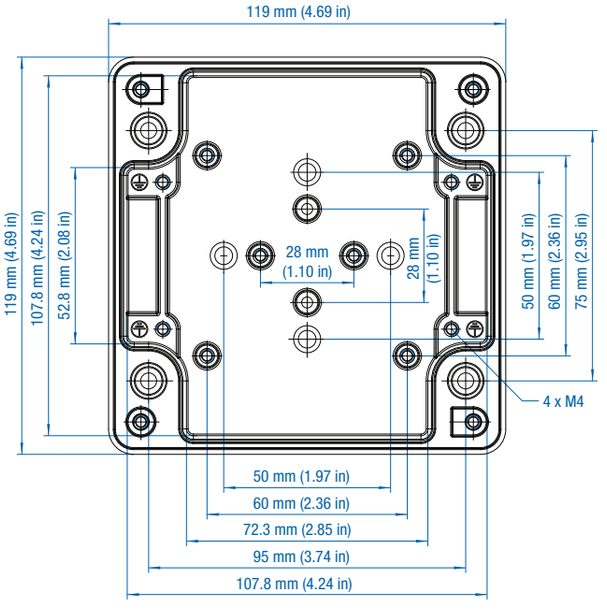
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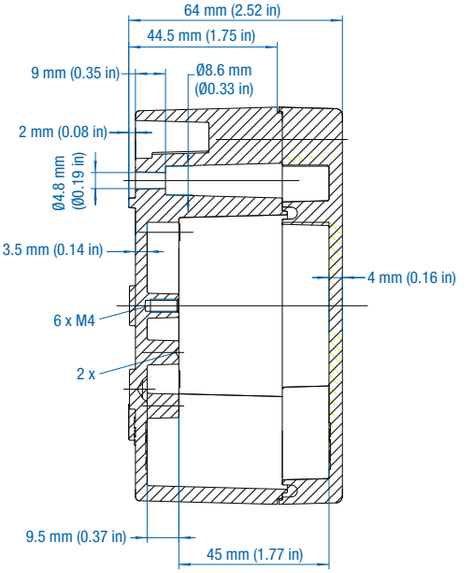
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	151-003	TKAL99-6	119 mm (4.69 in)	119 mm (4.69 in)	64 mm (2.52 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	195-003	TKMPI-99	1
Mounting Plate (steel)	197-003	TKMPS-99	1
DIN Rail TS15-80 mm	197-080	TS15/80	1
Mounting Tab Kit - small	154-004	MT-AL1	1

Please refer to pages 149-152 for additional accessories and detailed information.





AL 1212-8 – Aluminum – 122 x 120 mm (4.80 x 4.72 in.)

Standard Features

- **Protection Level:** IP66
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Gasket Material:** Polyurethane
- **Temperature Range:** -35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



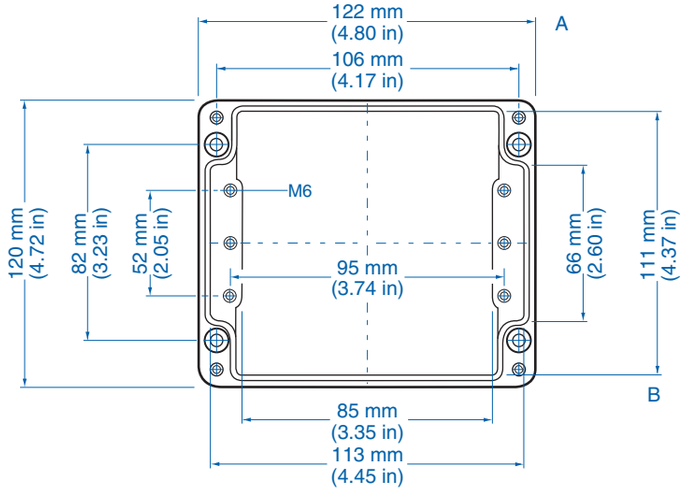
Aluminum

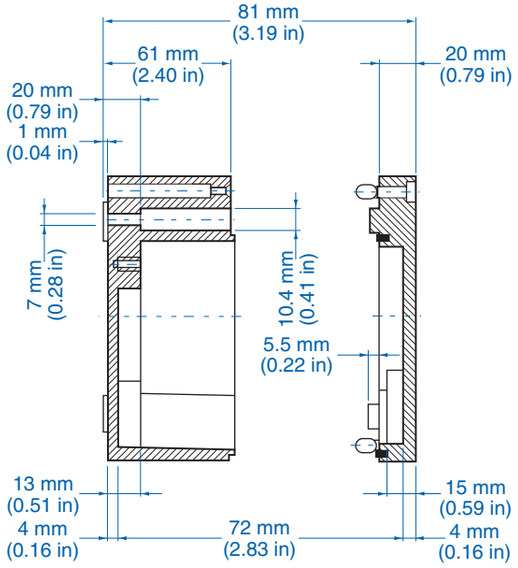
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	150-009	AL 1212-8	122 mm (4.80 in)	120 mm (4.72 in)	80 mm (3.15 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate	155-009	ALMPS-1212	1
Hinge Kit Set	154-210	HK-AL	1
DIN Rail TS 35 - 35 x 110 mm	162-009	TS35/110	1
Mounting Tab Kit - large	154-006	MT-AL2	1

Please refer to pages 149-152 for additional accessories and detailed information.





TKAL1111-7 – Aluminum – 139 x 139 mm (5.47 x 5.47 in.)

NEW

Altech by els spelsberg

Standard Features

- **Protection Level:** IP66
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Gasket Material:** Silicone
- **Temperature Range:** -35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below

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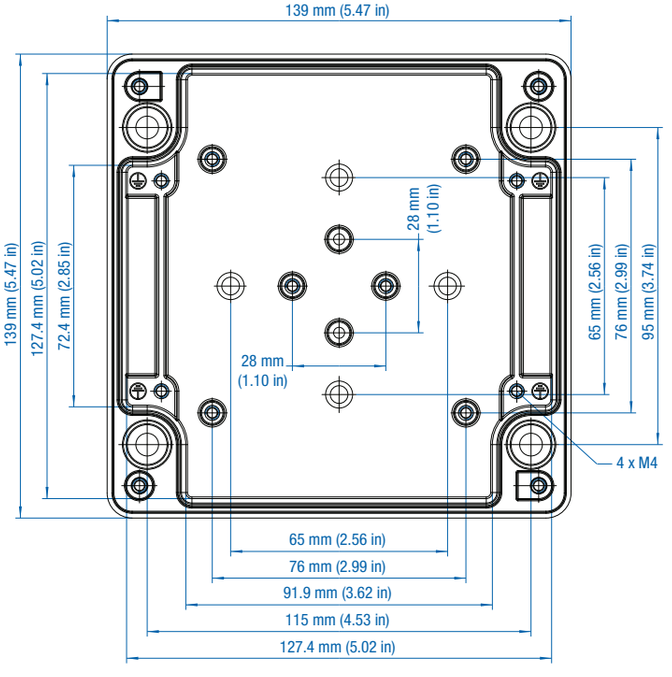
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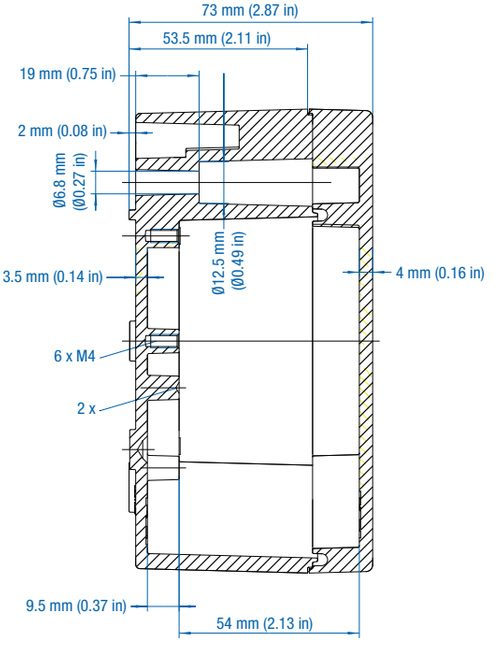
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	151-004	TKAL1111-7	139 mm (5.47 in)	139 mm (5.47 in)	73 mm (2.87 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	195-004	TKMPI-1111	1
Mounting Plate (steel)	197-004	TKMPS-1111	1
DIN Rail TS 35 - 81 mm	198-081	TS35/81	1
DIN Rail TS 15 - 92 mm	197-092	TS15/92	1
Mounting Tab Kit - large	154-006	MT-AL2	1

Please refer to pages 149-152 for additional accessories and detailed information.





TKAL1313-7 – Aluminum – 154 x 154 mm (6.06 x 6.06 in.)

NEW

Standard Features

- **Protection Level:** IP66
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Gasket Material:** Silicone
- **Temperature Range:** -35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below

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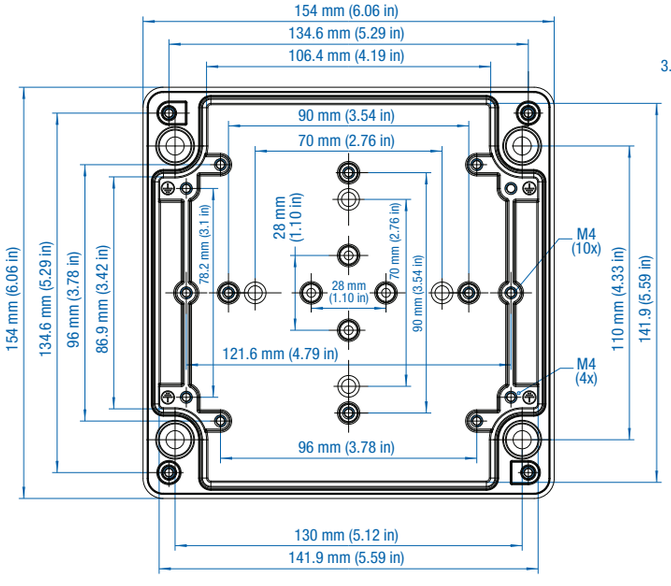
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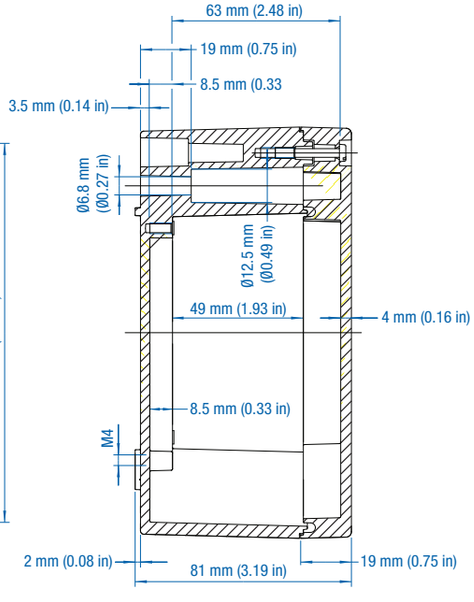
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	151-005	TKAL1313-7	154 mm (6.06 in)	154 mm (6.06 in)	81 mm (3.19 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	195-005	TKMPI-1313	1
Mounting Plate (steel)	197-005	TKMPS-1313	1
Hinge Kit Set	154-210	HK-AL	1
DIN Rail TS 35 - 106 mm	198-106	TS35/106	1
DIN Rail TS 15 - 111 mm	197-111	TS15/111	1
Mounting Tab Kit - large	154-006	MT-AL2	1

Please refer to pages 149-152 for additional accessories and detailed information.





TKAL1811-9 – Aluminum – 199 x 114 mm (7.83 x 4.49 in.)

NEW

Altech by els spelsberg

Standard Features

- **Protection Level:** IP66
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Gasket Material:** Silicone
- **Temperature Range:** -35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below

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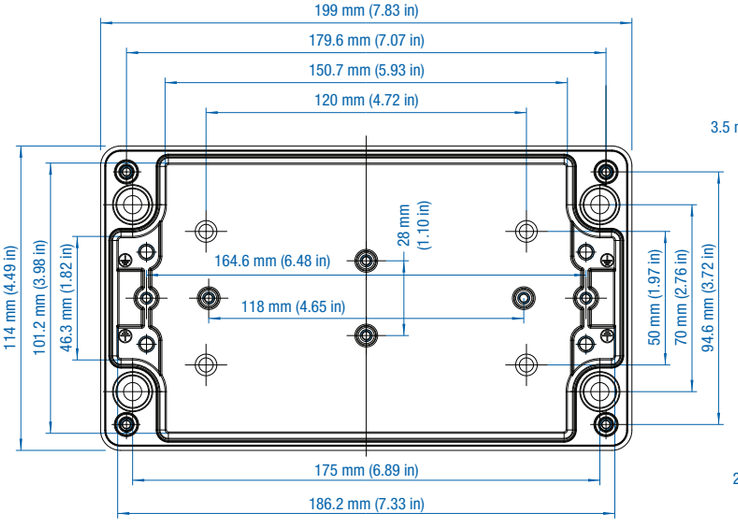
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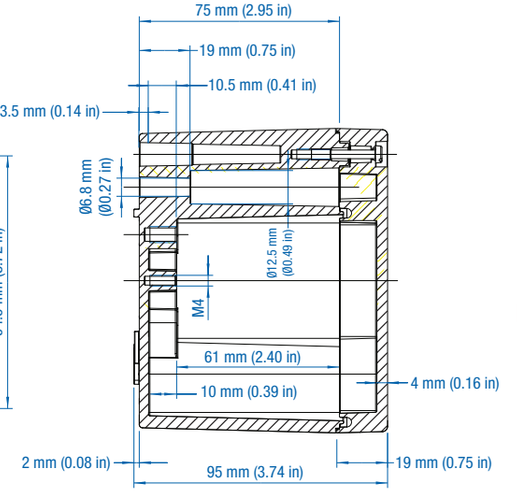
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	151-006	TKAL1811-9	199 mm (7.83 in)	114 mm (4.49 in)	95 mm (3.74 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	195-006	TKMPI-1811	1
Mounting Plate (steel)	197-006	TKMPS-1811	1
Hinge Kit Set	154-210	HK-AL	1
DIN Rail TS 35 - 144 mm	198-144	TS35/144	1
Mounting Tab Kit - large	154-006	MT-AL2	1

Please refer to pages 149-152 for additional accessories and detailed information.

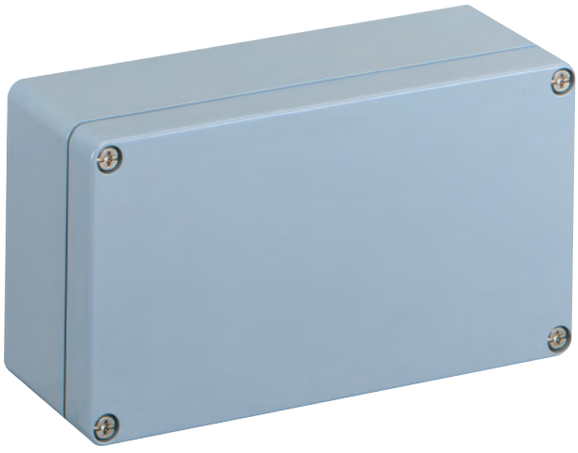




AL 2212-8 – Aluminum – 220 x 120 mm (8.66 x 4.72 in.)

Standard Features

- **Protection Level:** IP66
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Gasket Material:** Polyurethane
- **Temperature Range:** -35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



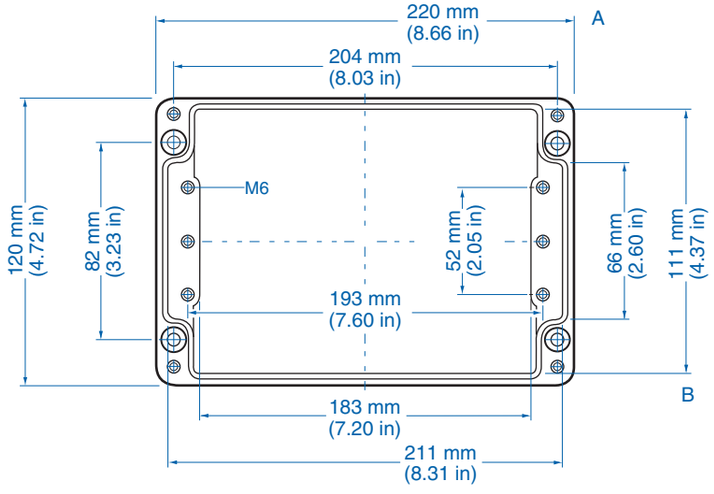
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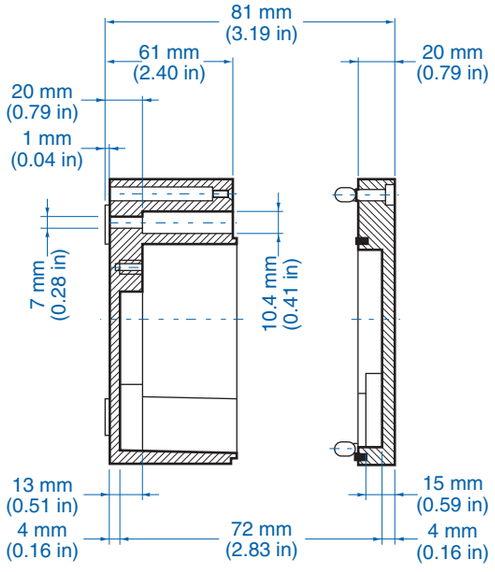
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	150-010	AL 2212-8	220 mm (8.66 in)	120 mm (4.72 in)	80 mm (3.15 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate	155-010	ALMPS-2212	1
Hinge Kit Set	154-210	HK-AL	1
DIN Rail TS 35 - 35 x 208mm	162-010	TS35/208	1
Mounting Tab Kit - large	154-006	MT-AL2	1

Please refer to pages 149-152 for additional accessories and detailed information.





Standard Features

- **Protection Level:** IP66
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Gasket Material:** Polyurethane
- **Temperature Range:** -35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



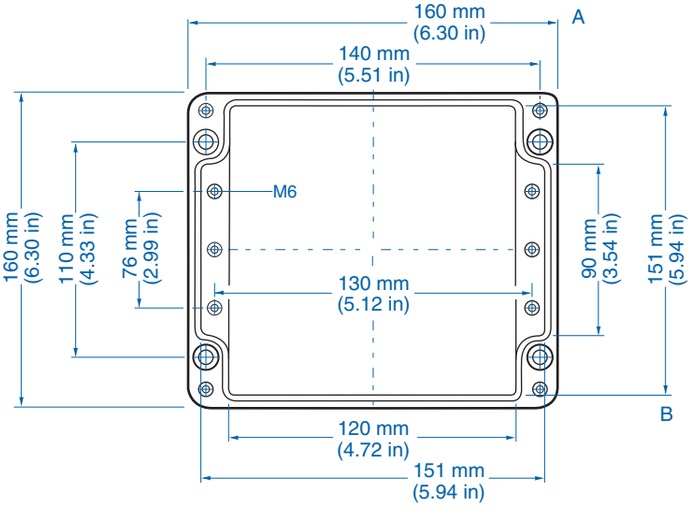
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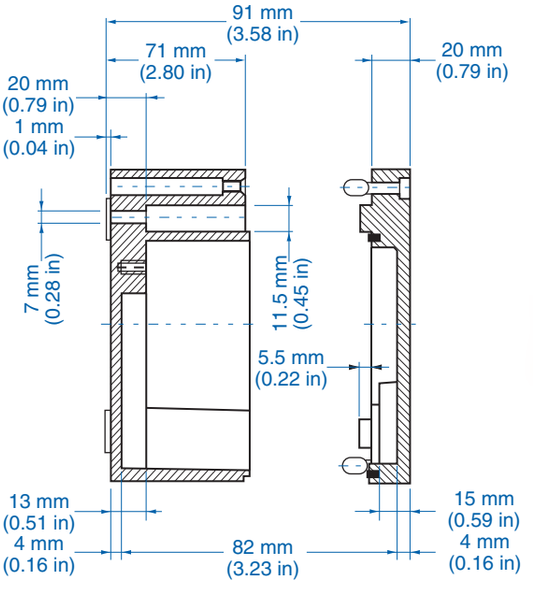
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	150-011	AL 1616-9	160 mm (6.30 in)	160 mm (6.30 in)	90 mm (3.54 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate	155-011	ALMPS-1616	1
Hinge Kit Set	154-210	HK-AL	1
DIN Rail TS 35 - 35 x 145mm	162-011	TS35/145	1
Mounting Tab Kit - large	154-006	MT-AL2	1

Please refer to pages 149-152 for additional accessories and detailed information.





TKAL1818-9 – Aluminum – 199 x 199 mm (7.83 x 7.83 in.)

NEW

Standard Features

- **Protection Level:** IP66
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Gasket Material:** Silicone
- **Temperature Range:** -35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below

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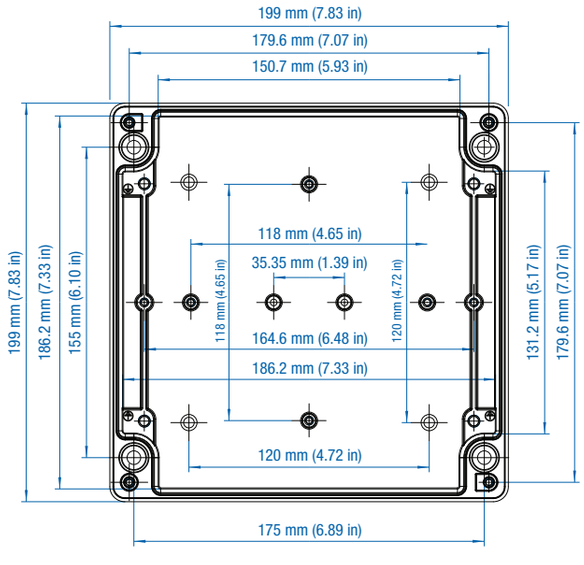
Aluminum

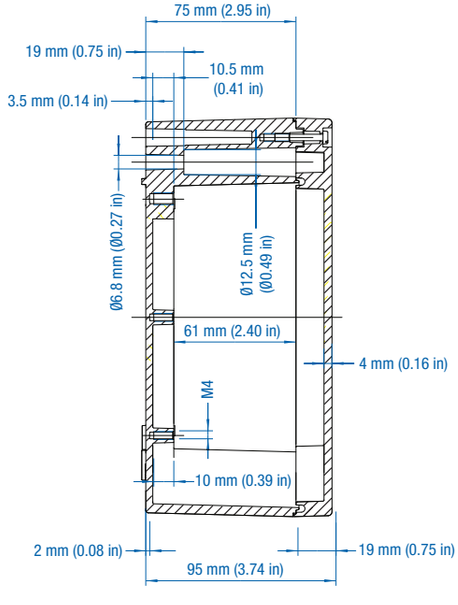
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	151-007	TKAL1818-9	199 mm (7.83 in)	199 mm (7.83 in)	95 mm (3.74 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	195-007	TKMPI-1818	1
Mounting Plate (steel)	197-007	TKMPS-1818	1
Hinge Kit Set	154-210	HK-AL	1
DIN Rail TS 35 - 144 mm	198-144	TS35/144	1
Mounting Tab Kit - large	154-006	MT-AL2	1

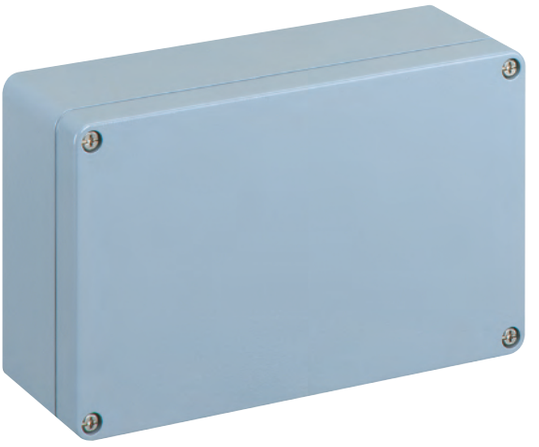
Please refer to pages 149-152 for additional accessories and detailed information.





Standard Features

- **Protection Level:** IP66
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Gasket Material:** Polyurethane
- **Temperature Range:** -35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



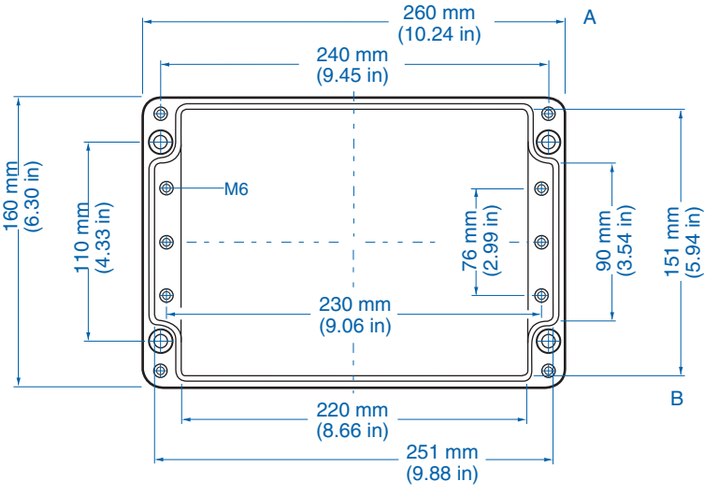
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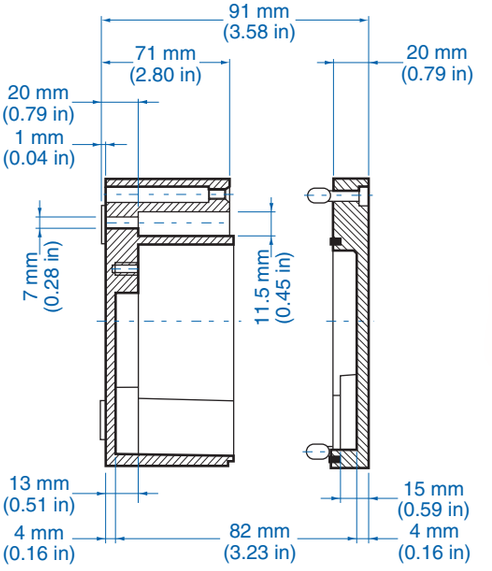
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	150-012	AL 2616-9	260 mm (10.24 in)	160 mm (6.30 in)	90 mm (3.54 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate	155-012	ALMPS-2616	1
Hinge Kit Set	154-210	HK-AL	1
DIN Rail TS 35 - 35 x 245mm	162-012	TS35/245	1
Mounting Tab Kit - large	154-006	MT-AL2	1

Please refer to pages 149-152 for additional accessories and detailed information.

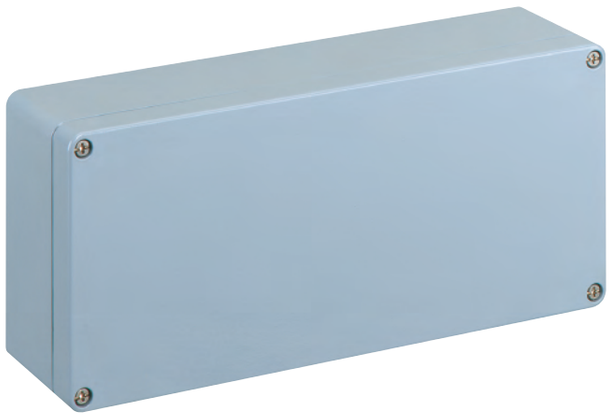




AL 3616-9 – Aluminum – 360 x160 mm (14.17 x 6.30 in.)

Standard Features

- **Protection Level:** IP66
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Gasket Material:** Polyurethane
- **Temperature Range:** -35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



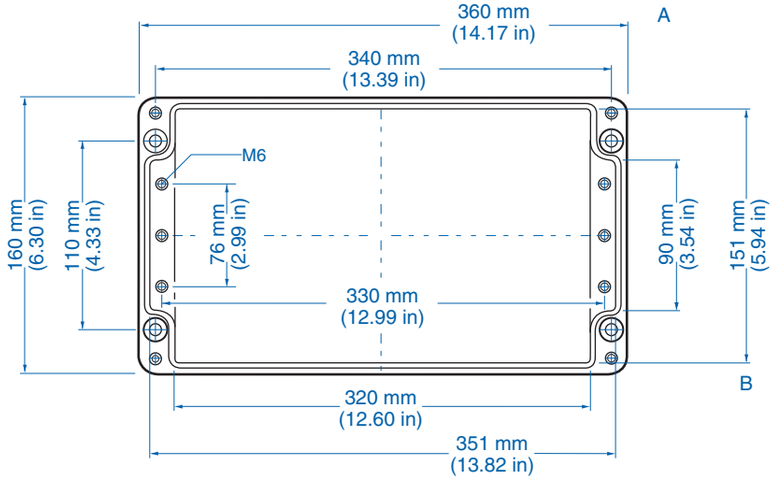
Aluminum

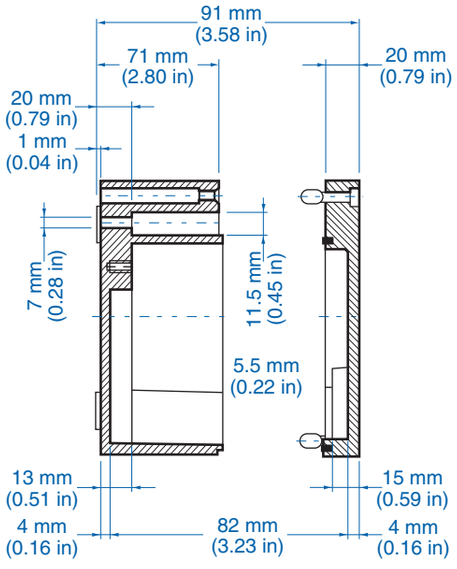
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	150-013	AL 3616-9	360 mm (14.17 in)	160 mm (6.30 in)	90 mm (3.54 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate	155-013	ALMPS-3616	1
Hinge Kit Set	154-210	HK-AL	1
DIN Rail TS 35 - 35 x 345mm	162-013	TS35/345	1
Mounting Tab Kit - large	154-006	MT-AL2	1

Please refer to pages 149-152 for additional accessories and detailed information.





Standard Features

- **Protection Level:** IP66
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Gasket Material:** Polyurethane
- **Temperature Range:** -35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



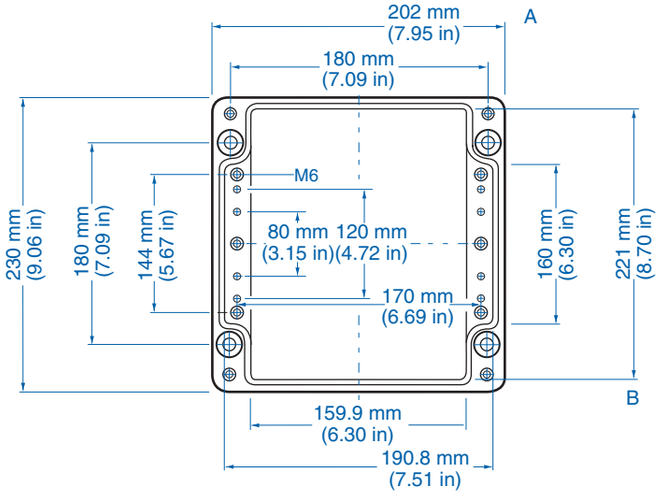
Aluminum

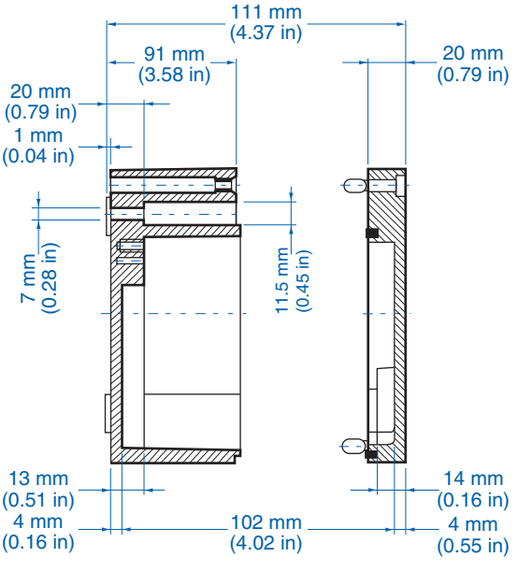
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	150-014	AL 2023-11	202 mm (7.95 in)	230 mm (9.06 in)	111 mm (4.37 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate	155-014	ALMPS-2023	1
Hinge Kit Set	154-210	HK-AL	1
DIN Rail TS 35 - 35 x 186mm	162-014	TS35/186	1
Mounting Tab Kit - large	154-006	MT-AL2	1

Please refer to pages 149-152 for additional accessories and detailed information.





TKAL2518-9 – Aluminum – 273 x 205 mm (10.75 x 8.07 in.)

NEW

Standard Features

- **Protection Level:** IP66
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Gasket Material:** Silicone
- **Temperature Range:** -35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below

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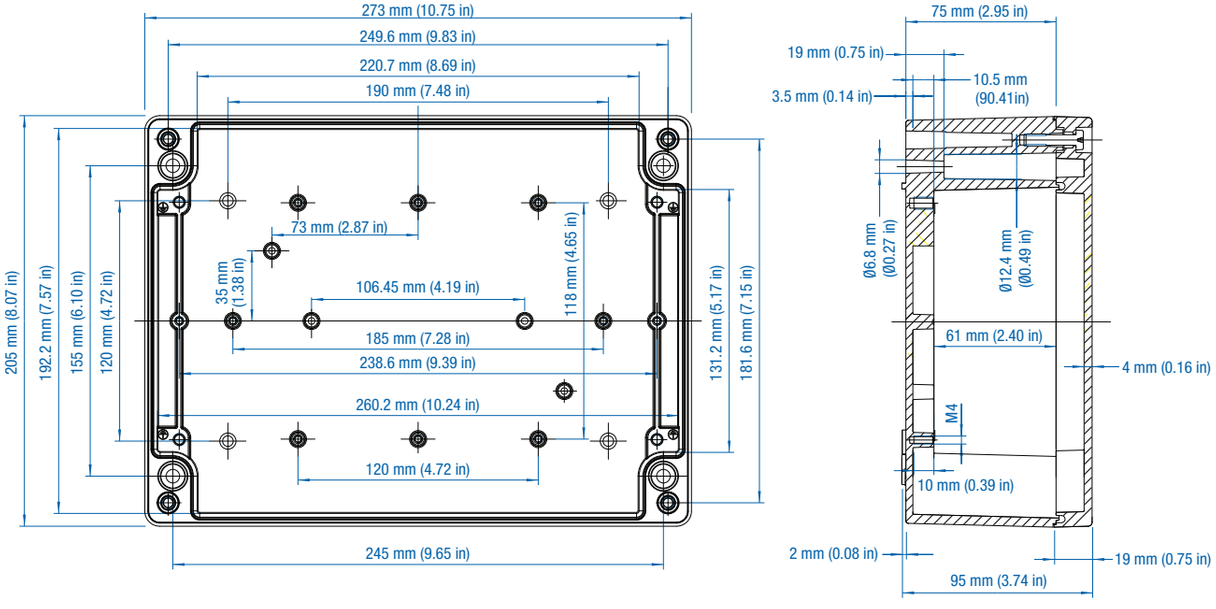
Aluminum

Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	151-008	TKAL2518-9	273 mm (10.75 in)	205 mm (8.07 in)	95 mm (3.74 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	195-008	TKMPI-2518	1
Mounting Plate (steel)	197-008	TKMPS-2518	1
Hinge Kit Set	154-210	HK-AL	1
DIN Rail TS 35 - 216 mm	198-216	TS35/216	1
Mounting Tab Kit - large	154-006	MT-AL2	1

Please refer to pages 149-152 for additional accessories and detailed information.



Standard Features

- **Protection Level:** IP66
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Gasket Material:** Polyurethane
- **Temperature Range:** -35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



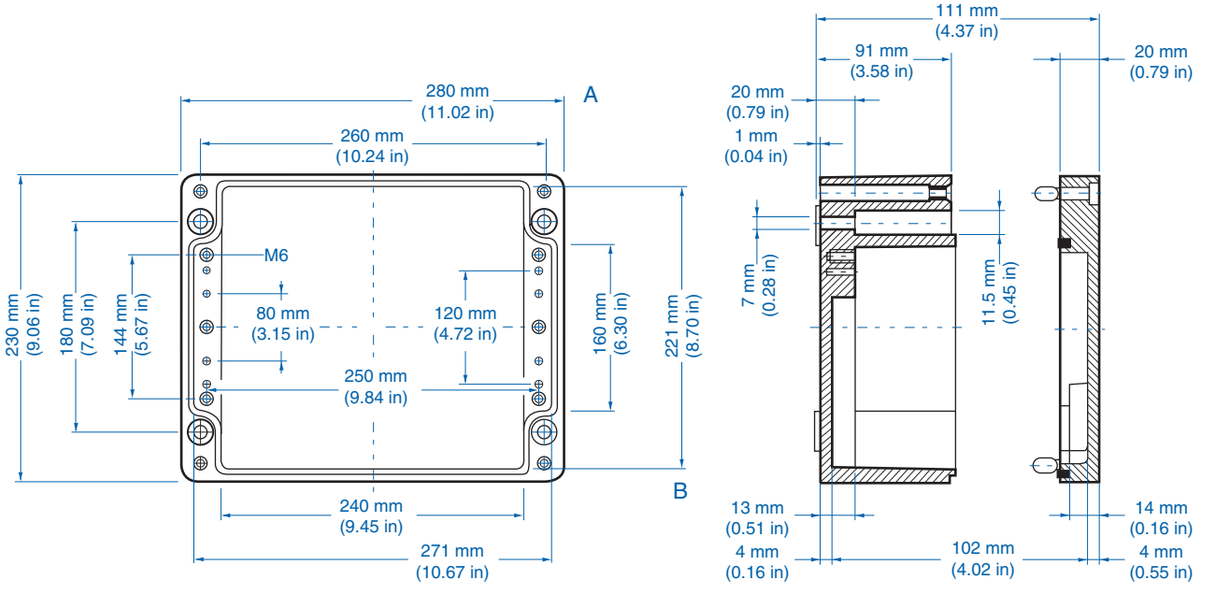
Aluminum

Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	150-015	AL 2823-11	280 mm (11.02 in)	230 mm (9.06 in)	111 mm (4.37 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate	155-015	ALMPS-2823	1
Hinge Kit Set	154-210	HK-AL	1
DIN Rail TS 35 - 35 x 266mm	162-015	TS35/266	1
Mounting Tab Kit - large	154-006	MT-AL2	1

Please refer to pages 149-152 for additional accessories and detailed information.



AL 3323-11 – Aluminum – 330 x 230 mm (12.99 x 9.06 in.)

Standard Features

- **Protection Level:** IP66
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Gasket Material:** Polyurethane
- **Temperature Range:** -35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



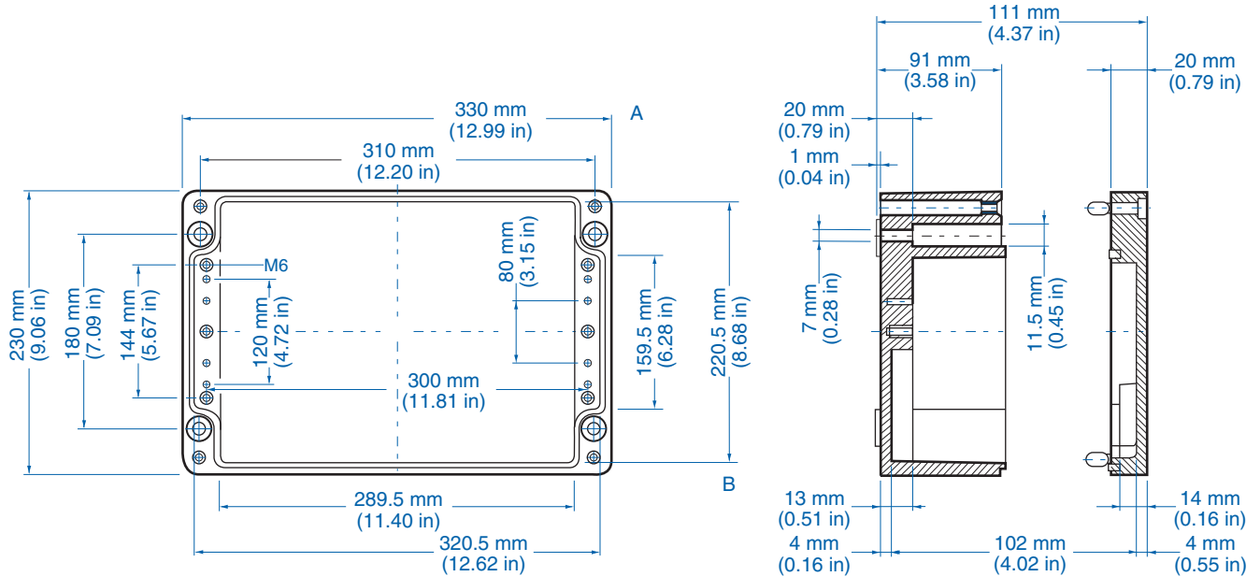
Aluminum

Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	150-016	AL 3323-11	330 mm (12.99 in)	230 mm (9.06 in)	111 mm (4.37 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate	155-016	ALMPS-3323	1
Hinge Kit Set	154-210	HK-AL	1
DIN Rail TS 35 - 35 x 316mm	162-016	TS35/316	1
Mounting Tab Kit - large	154-006	MT-AL2	1

Please refer to pages 149-152 for additional accessories and detailed information.



TKAL3625-11 – Aluminum – 388 x 270 mm (15.28 x 10.63 in.)

NEW

Altech by els spelsberg

Standard Features

- **Protection Level:** IP66
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Gasket Material:** Silicone
- **Temperature Range:** -35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below

C UL US
PENDING



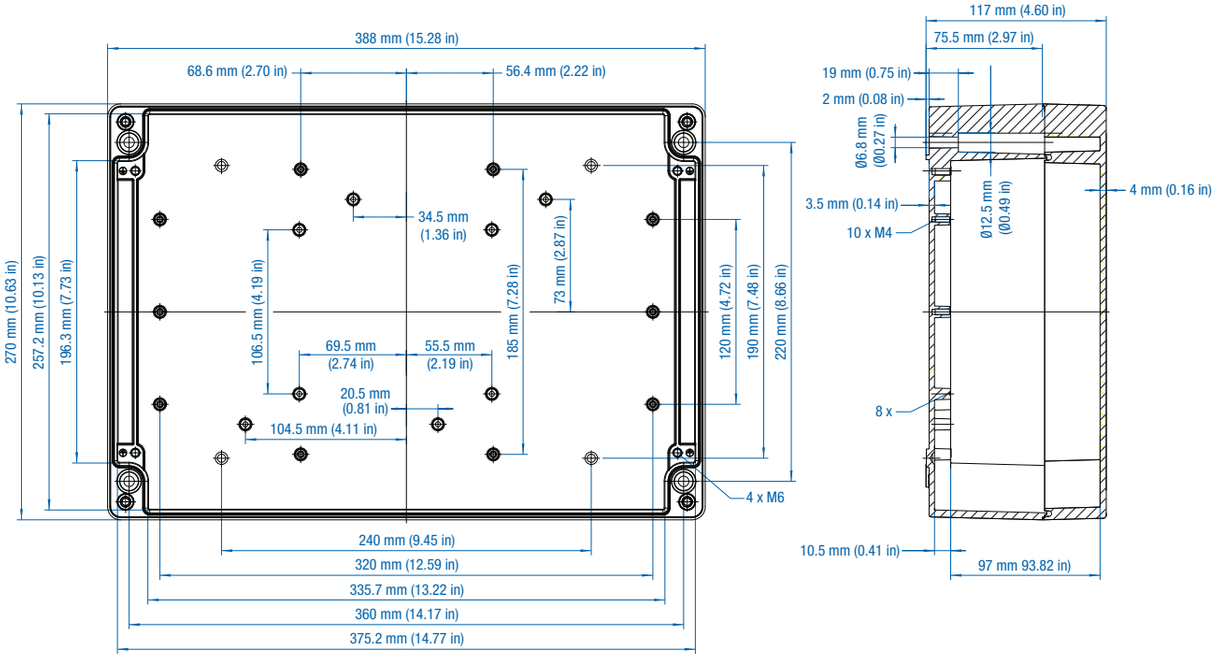
Aluminum

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in) Width	Height	Std. Pk.
Enclosure	151-012	TKAL3625-11	388 mm (15.28 in)	270 mm (10.63 in)	117 mm (4.61 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic)	195-012	TKMPI-3625	1
Mounting Plate (steel)	197-012	TKMPS-3625	1
Hinge Kit Set	154-210	HK-AL	1
DIN Rail TS 35 - 336 mm	198-336	TS35/336	1
Mounting Tab Kit - large	154-006	MT-AL2	1

Please refer to pages 149-152 for additional accessories and detailed information.





Abox Series

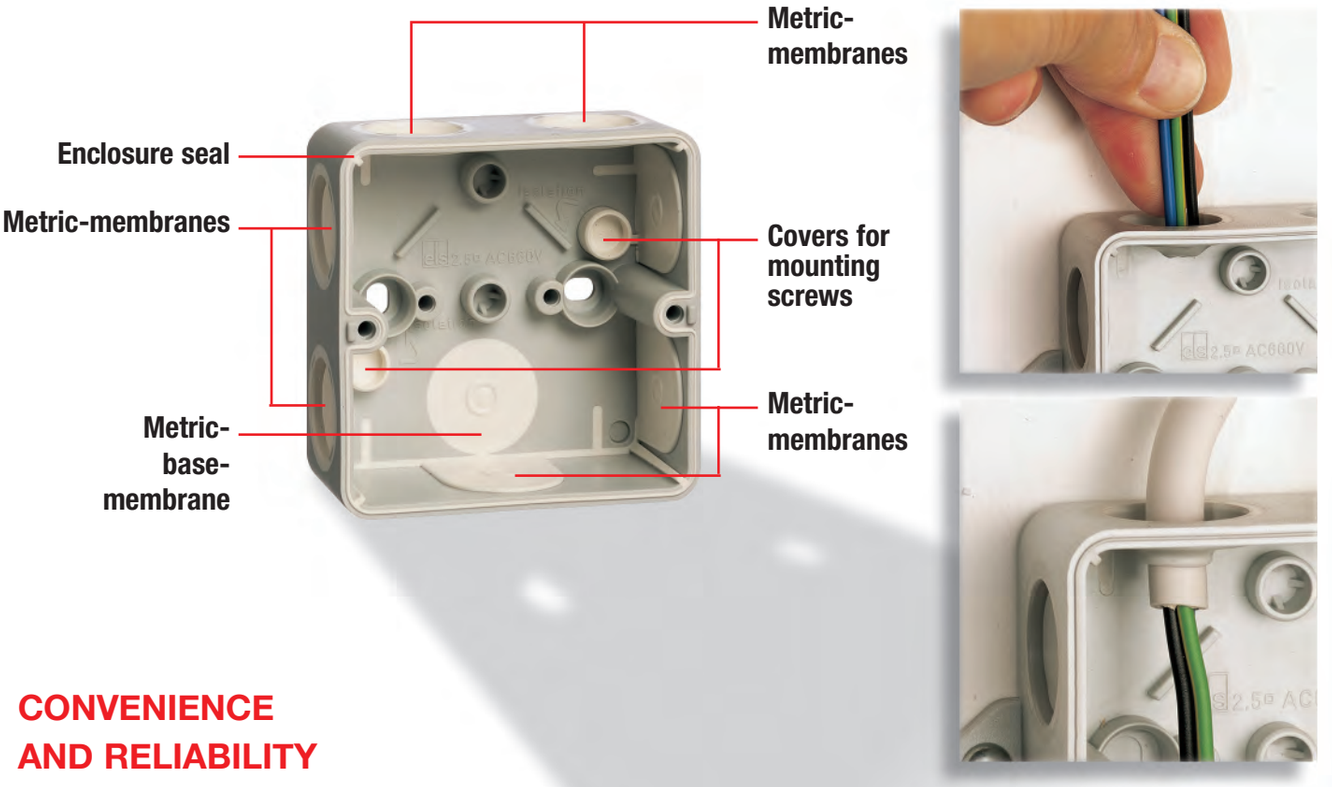
The Abox family consists of six enclosures that feature an attractive modern design and shape that allow for optimum use of installation space. Each enclosure has either membranes or knockouts on each sidewall and on the backside.

Two of the six enclosures in this family feature "Dual Molding Technology". This feature incorporates rubber membranes molded right into the polystyrene body. This allows the user to simply push wires through the membrane or cut them out to install a cable gland. These access holes can accommodate metric cable glands and entry spouts.

Abox Enclosures are available in sizes ranging from 80 x 80 x 52 mm (3.15 x 3.15 x 2.05 in.) to 250 x 250 x 115 mm (9.84 x 9.84 x 4.53 in.).

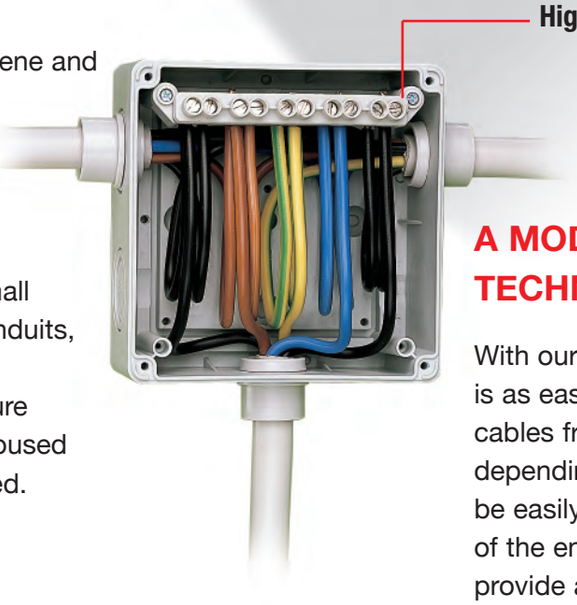
Most enclosures in the family can maintain IP65 protection with the use of complementary IP65 cable glands. The dual membrane models are IP65, without the addition of cable glands.

- Two to four high grade self taping screws secure the lid
- Tongue and groove sealing system with polyurethane gasket
- Made from non-flammable Polystyrene



CONVENIENCE AND RELIABILITY

Abox Enclosures are manufactured in Polystyrene and are approved by several international test agencies. The unique design of Metric-Membranes allows for installation of large or small cables, cable glands, conduits, and entry spouts while ensuring that the enclosure remains sealed and all housed components are protected.



A MODERN TERMINAL TECHNIQUE

With our new Abox Enclosures wiring is as easy as 1-2-3. Large numbers of cables from AWG 18 to AWG 2 depending on the enclosure size, can be easily installed. The square shape of the enclosure and the domed cover provide ample room for even the toughest wiring job.

Abox 025 – Polystyrene – 80 x 80 mm (3.15 x 3.15 in.)

Standard Features

- **Protection Level:** IP65
- **Technical:** Self Sealing Soft Elastic Membranes Suitable for Metric Entry
- **Sealing Area:** M20 - 2 to 16mm
- **UL Recognized Enclosure Material:** Polystyrene
- **Gasket Material:** Polyurethane
- **Color:** Light Gray or White
- **Material Temperature Range:** Polystyrene -40˚C to 70˚C (-40˚F to 158˚F)
- **Accessories:** See section below



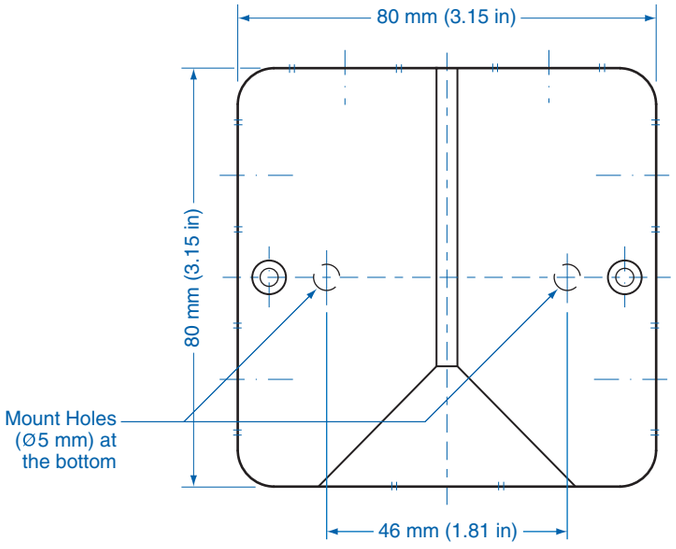
Abox

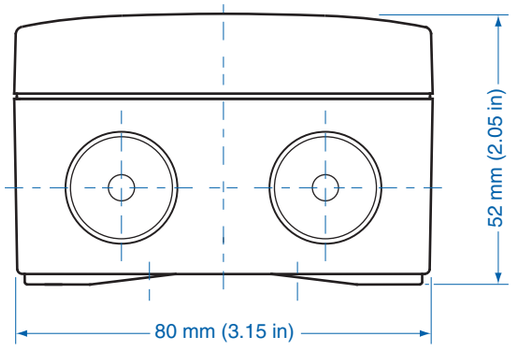
Ordering Information	Cat. No.	Color	Terminal	Length	Dimensions mm (in) Width	Height	Std. Pk.
Enclosure with terminals	802-407	gray	2.5 mm^2 - 5 pole	80 mm (3.15 in)	80 mm (3.15 in)	52 mm (2.05 in)	3
Enclosure with terminals	802-107	white	2.5 mm^2 - 5 pole	80 mm (3.15 in)	80 mm (3.15 in)	52 mm (2.05 in)	3
Enclosure - empty	802-907	gray	NA	80 mm (3.15 in)	80 mm (3.15 in)	52 mm (2.05 in)	3
Enclosure - empty	802-607	white	NA	80 mm (3.15 in)	80 mm (3.15 in)	52 mm (2.05 in)	3

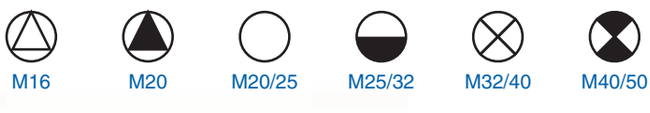
Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Terminal (base mount)	840-004	2.5/4 mm^2 - 5 pole	10

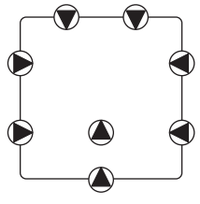
Please refer to pages 149-152 for additional accessories and detailed information.







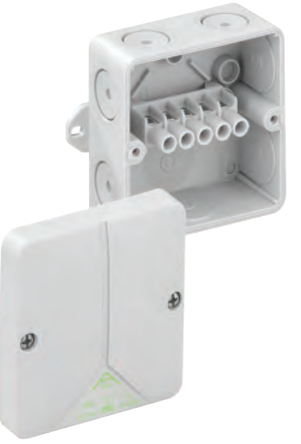
Knockout Detail



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Standard Features

- **Protection Level:** IP65
- **Technical:** Self Sealing Soft Elastic Membranes Suitable for Metric Entry
- **Sealing Area:** M20 - 2 to 16mm
- **UL Recognized Enclosure Material:** Polystyrene
- **Gasket Material:** Polyurethane
- **Color:** Light Gray or White
- **Material Temperature Range:** Polystyrene -40˚C to 70˚C (-40˚F to 158˚F)
- **Accessories:** See section below



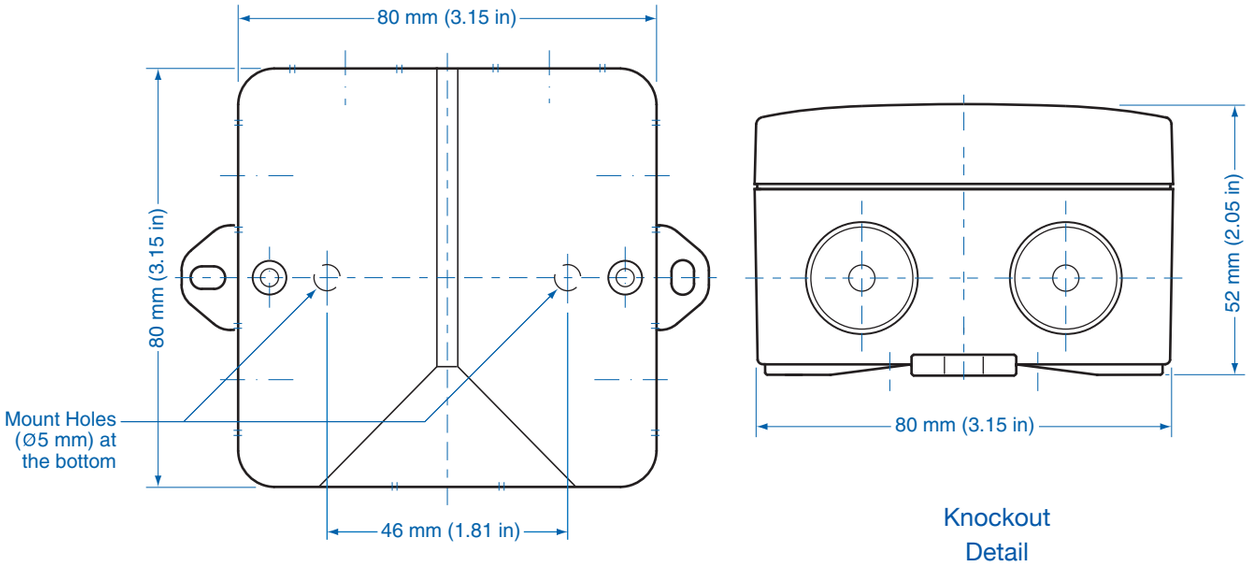
Abox

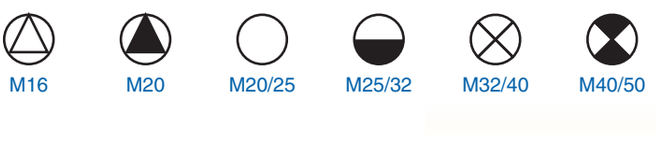
Ordering Information	Cat. No.	Color	Terminal	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure with terminals	803-407	gray	2.5 mm^2 - 5 pole	80 mm (3.15 in)	80 mm (3.15 in)	52 mm (2.05 in)	3
Enclosure with terminals	803-107	white	2.5 mm^2 - 5 pole	80 mm (3.15 in)	80 mm (3.15 in)	52 mm (2.05 in)	3
Enclosure - empty	803-907	gray	NA	80 mm (3.15 in)	80 mm (3.15 in)	52 mm (2.05 in)	3
Enclosure - empty	803-607	white	NA	80 mm (3.15 in)	80 mm (3.15 in)	52 mm (2.05 in)	3

Accessories

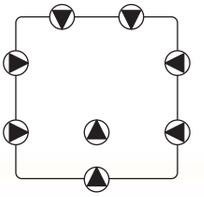
Ordering Information	Cat. No.	Type	Std. Pk.
Terminal (base mount)	840-004	2.5/4 mm^2 - 5 pole	10

Please refer to pages 149-152 for additional accessories and detailed information.





Knockout Detail



Abox 040 – Polystyrene – 93 x 93 mm (3.66 x 3.66 in.)

Standard Features

- **Protection Level:** IP65
- **Technical:** Self Sealing Soft Elastic Membranes Suitable for Metric Entry
- **Sealing Area:** M20 - 2 to 16mm
- **UL Recognized Enclosure Material:** Polystyrene
- **Gasket Material:** Polyurethane
- **Color:** Light Gray or White
- **Material Temperature Range:** Polystyrene -40˚C to 70˚C (-40˚F to 158˚F)
- **Accessories:** See section below



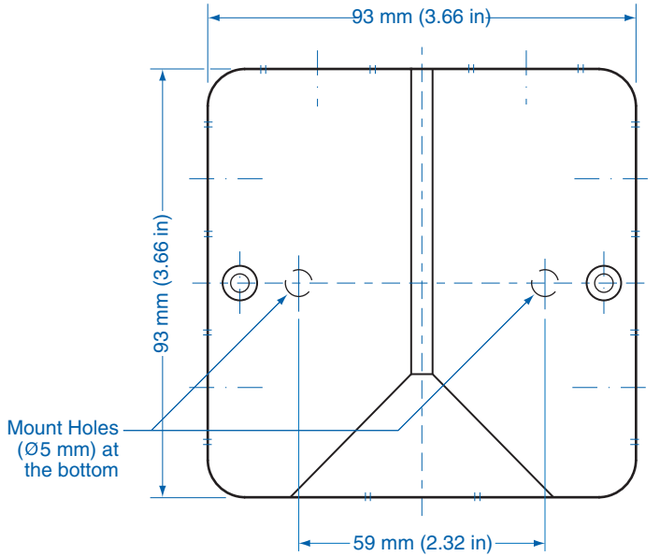
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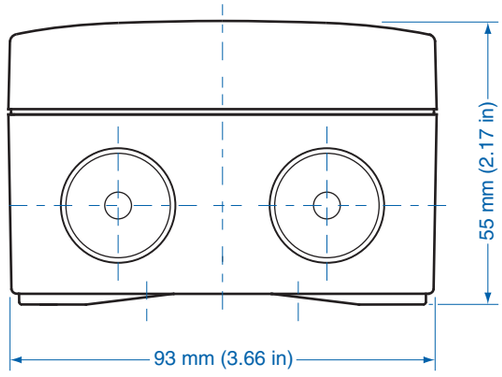
Ordering Information	Cat. No.	Color	Terminal	Length	Dimensions mm (in) Width	Height	Std. Pk.
Enclosure with terminals	804-407	gray	4 mm^2 - 5 pole	93 mm (3.66 in)	93 mm (3.66 in)	55 mm (2.17 in)	3
Enclosure with terminals	804-107	white	4 mm^2 - 5 pole	93 mm (3.66 in)	93 mm (3.66 in)	55 mm (2.17 in)	3
Enclosure - empty	804-907	gray	NA	93 mm (3.66 in)	93 mm (3.66 in)	55 mm (2.17 in)	3
Enclosure - empty	804-607	white	NA	93 mm (3.66 in)	93 mm (3.66 in)	55 mm (2.17 in)	3

Accessories

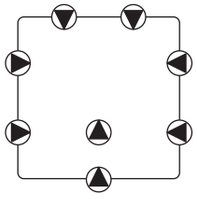
Ordering Information	Cat. No.	Type	Std. Pk.
Terminal (base mount)	840-004	2.5/4 mm^2 - 5 pole	10

Please refer to pages 149-152 for additional accessories and detailed information.





Knockout Detail





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Standard Features

- **Protection Level:** IP54* / IP65**
- **Technical:** Knockout Sidewalls
- **UL Recognized Enclosure Material:** Polystyrene
- **Gasket Material:** Polyurethane
- **Color:** Light Gray or White
- **Material Temperature Range:** Polystyrene -40˚C to 70˚C (-40˚F to 158˚F)
- **Included Accessories:** (4) M25 Entry Spouts for Cables 9-18mm (1) M25 Sealing Plug
- **Accessories:** See section below



* With Supplied Entry Spouts

** As Equipped or With Optional IP65 Cable Glands

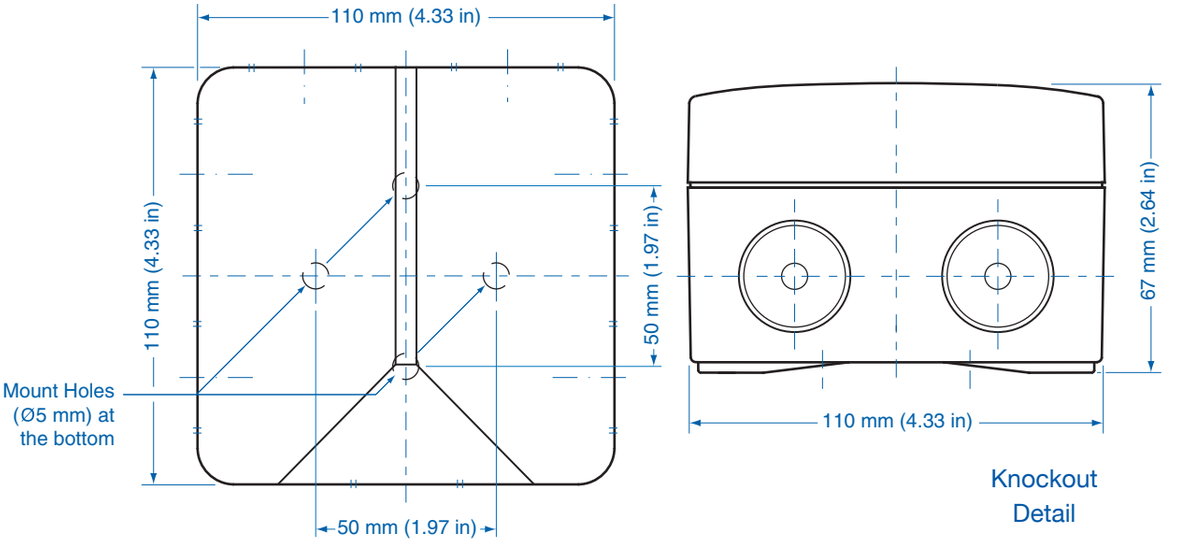
Abox

Ordering Information	Cat. No.	Color	Terminal	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure with terminals	806-407	gray	6 mm^2 - 5 pole	110 mm (4.33 in)	110 mm (4.33 in)	67 mm (2.64 in)	2
Enclosure - empty	806-907	gray	NA	110 mm (4.33 in)	110 mm (4.33 in)	67 mm (2.64 in)	2

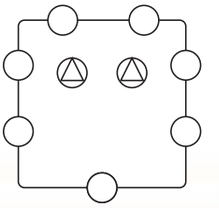
Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate	895-006	MP060	1
DIN Rail TS 35 – 35x81 mm	198-081	TS 35/81	1
Terminal (high-set)	840-006	6 mm^2 - 5 pole	5

Please refer to pages 149-152 for additional accessories and detailed information.



Knockout Detail





Abox 100 – Polystyrene – 140 x 140 mm (5.51 x 5.51 in.)

Standard Features

- **Protection Level:** IP54* / IP65**
- **Technical:** Knockout Sidewalls
- **UL Recognized Enclosure Material:** Polystyrene
- **Gasket Material:** Polyurethane
- **Color:** Light Gray or White
- **Material Temperature Range:** Polystyrene -40˚C to 70˚C (-40˚F to 158˚F)
- **Included Accessories:** (4) M32 Entry Spouts for Cables 11-23mm (1) M32 Sealing Plug
- **Accessories:** See section below

* With Supplied Entry Spouts

** As Equipped or With Optional IP65 Cable Glands



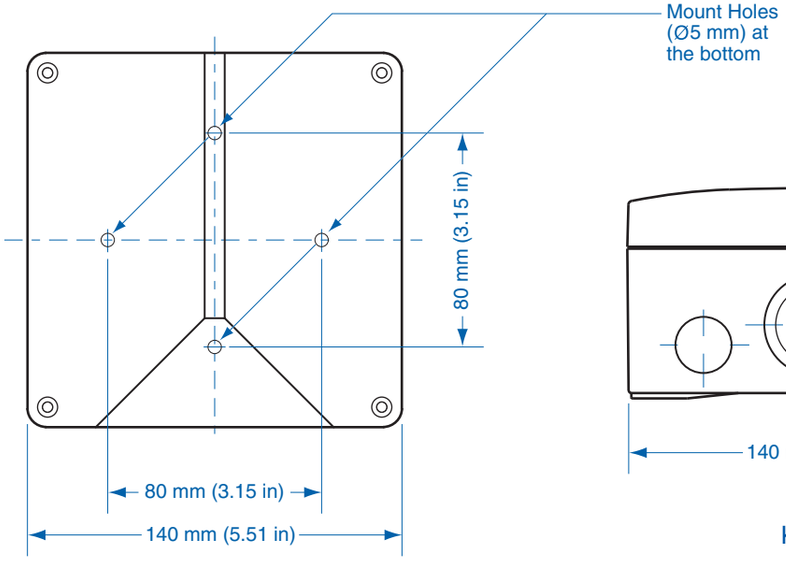
Abox

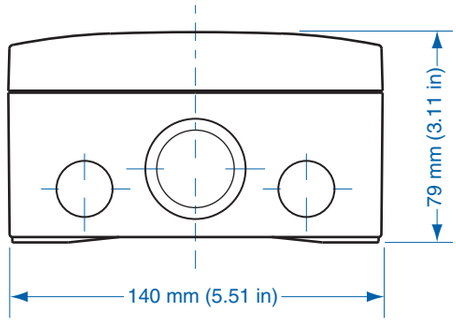
Ordering Information.	Cat. No	Color	Terminal	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure with terminals	810-410	gray	10 mm^2-5 pole	140 mm (5.51 in)	140 mm (5.51 in)	79 mm (3.11 in)	2
Enclosure - empty	810-910	gray	NA	140 mm (5.51 in)	140 mm (5.51 in)	79 mm (3.11 in)	2

Accessories

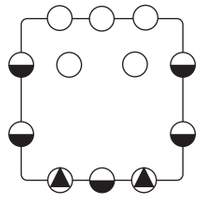
Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate	895-010	MP100	1
DIN Rail TS 35 – 35x106 mm	198-106	TS 35/106	1
Terminal (high-set)	840-010	10 mm^2 - 5 pole	5

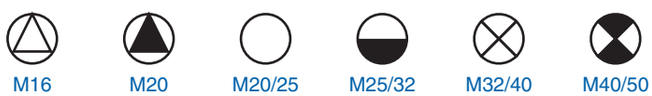
Please refer to pages 149-152 for additional accessories and detailed information.





Knockout Detail





Abox 160 – Polystyrene – 180 x 180mm (7.09 x 7.09 in.)

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Standard Features

- **Protection Level:** IP54* / IP65**
- **Technical:** Knockout Sidewalls
- **UL Recognized Enclosure Material:** Polystyrene
- **Gasket Material:** Polyurethane
- **Color:** Light Gray or White
- **Material Temperature Range:** Polystyrene -40˚C to 70˚C (-40˚F to 158˚F)
- **Included Accessories:** (4) M40 Entry Spouts for Cables 17-30mm
  (1) M40 Sealing Plug
  (1) Tamper Kit
- **Accessories:** See section below



* With Supplied Entry Spouts

**As Equipped or With Optional IP65 Cable Glands

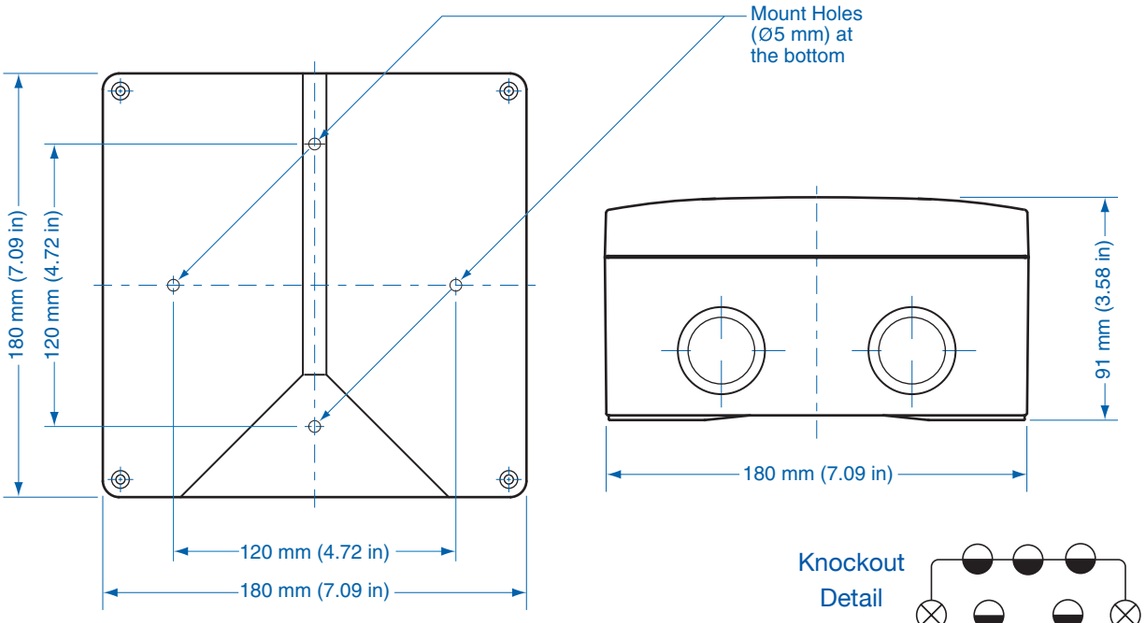
Abox

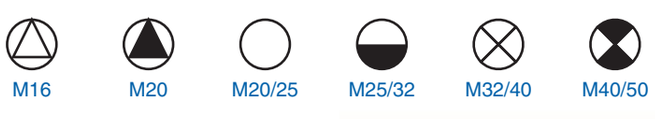
Ordering Information	Cat. No.	Color	Terminal	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure with terminals	816-410	gray	16/25 mm^2-5 pole	180 mm (7.09 in)	180 mm (7.09 in)	91 mm (3.58 in)	1
Enclosure - empty	816-910	gray	NA	180 mm (7.09 in)	180 mm (7.09 in)	91 mm (3.58 in)	1

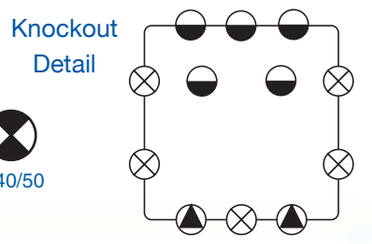
Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate	895-016	MP160	1
DIN Rail TS 35 – 35x144 mm	894-016	TS 35/144	1
Terminal (high-set)	840-016	16/25mm^2 - 5 pole	2

Please refer to pages 149-152 for additional accessories and detailed information.







Abox 350 – Polystyrene – 250 x 250 mm (9.84 x 9.84 in.)

Standard Features

- **Protection Level:** IP54* / IP65**
- **Technical:** Knockout Sidewalls
- **UL Recognized Enclosure Material:** Polystyrene
- **Gasket Material:** Polyurethane
- **Color:** Light Gray or White
- **Material Temperature Range:** Polystyrene -40˚C to 70˚C (-40˚F to 158˚F)
- **Included Accessories:** (4) M40 Entry Spouts for Cables 17-30mm (1) M40 Sealing Plug (1) Tamper Kit
- **Accessories:** See section below

* With Supplied Entry Spouts

**As Equipped or With Optional IP65 Cable Glands



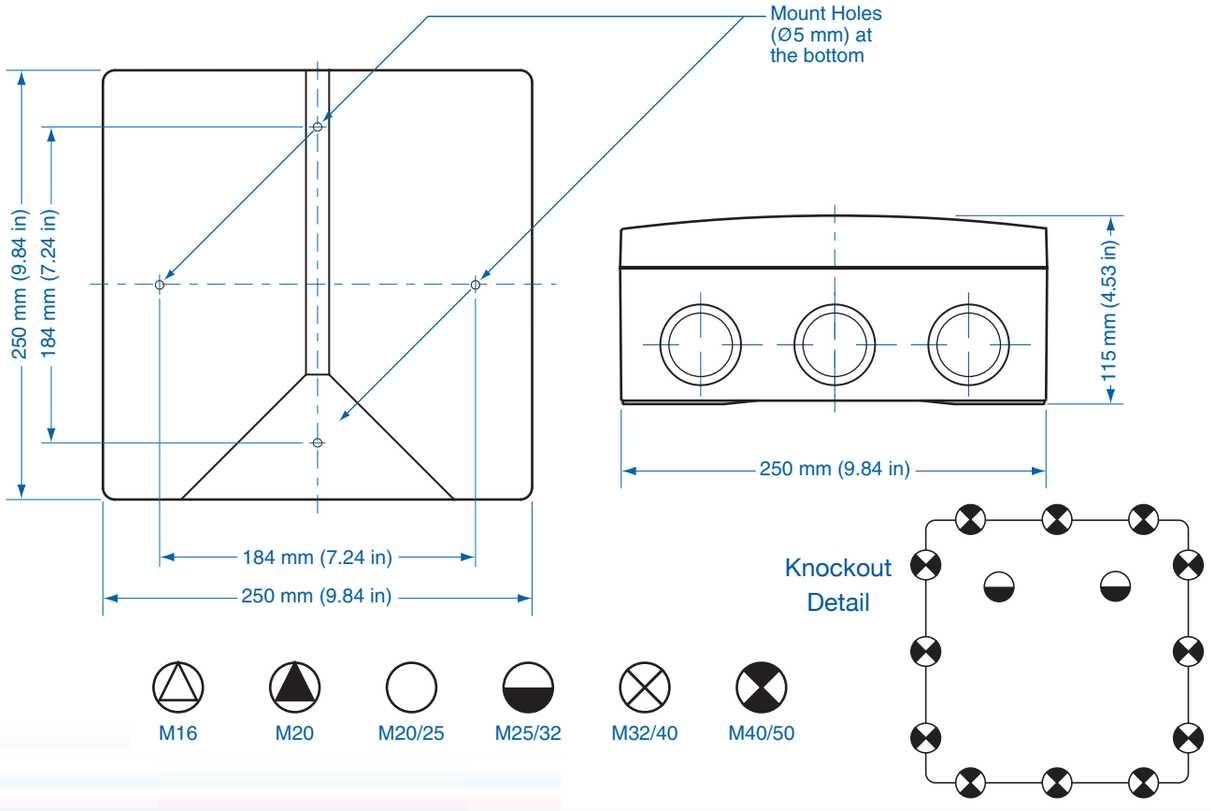
Abox

Ordering Information	Cat. No.	Color	Terminal	Length	Dimensions mm (in) Width	Height	Std. Pk.
Enclosure with terminals	835-410	gray	35/25 mm^2 - 5 pole	250 mm (9.84 in)	250 mm (9.84 in)	115 mm (4.53 in)	1
Enclosure - empty	835-910	gray	NA	250 mm (9.84 in)	250 mm (9.84 in)	115 mm (4.53 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate	895-035	MP350	1
DIN Rail TS 35 – 35x216 mm	894-035	TS 35/216	1
Terminal (high-set)	840-035	35/25 mm^2 - 5 pole	1

Please refer to pages 149-152 for additional accessories and detailed information.



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including a variety of materials, accessories and conduit



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Abox-i Series

Abox-i Series (formerly the Nautic Series) junction boxes for harsh environments are supplied complete with terminal blocks. These enclosures can be used wherever extreme conditions are encountered: offshore platforms, ocean vessels, petrochemical plants, steel mills and railways.

- Direct mount
- Glass reinforced Polycarbonate
- Integral seal
- Impervious to sea air and water
- IP65 protection
- High temperature resistance 120°C (248°F)
- High mechanical strength
- Corrosion and maintenance free
- Halogen free
- Standard knockouts
- 6 different sizes
- Contemporary styling
- UV fade resistance for optimal outdoor use
- High chemical resistance
- Wire sizes from 2.5mm^2 sq. to 35mm^2 sq. (14-2 AWG)
- Ideal for installations in high risk fire areas

ABOX-i Harsh Conditions







The highly resistant material of the Abox-i Series allows the enclosures to be used in the harshest environmental conditions.

Abox-i 025 – Polycarbonate – 80 x 80 mm (3.15 x 3.15 in.)

Standard Features

- **Protection Level:** IP65
- **Technical:** Self Sealing, Soft Elastic Membranes
  Suitable for Metric Entry
- **Sealing Area:** M20 - 2 to 16mm
- **UL Recognized**
  Enclosure Material: Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material**
  Temperature Range: Polycarbonate
  -40°C to 120°C (-40°F to 248°F)
- **Accessories:** See section below



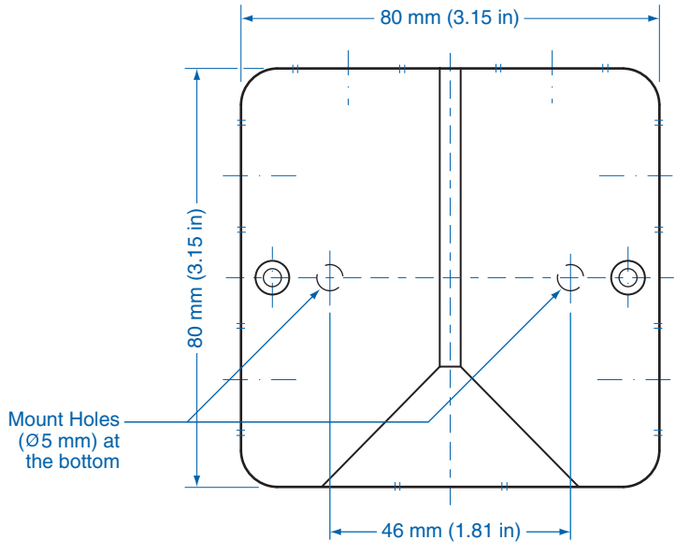
Abox-i

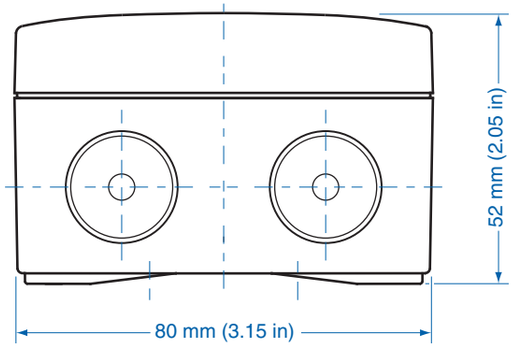
Ordering Information	Cat. No.	Terminal	Length	Dimensions mm (in) Width	Height	Std. Pk.
Enclosure with terminals	490-402	2.5/4 mm^2 - 5 pole	80 mm (3.15 in)	80 mm (3.15 in)	52 mm (2.05 in)	5
Enclosure - empty	490-902	NA	80 mm (3.15 in)	80 mm (3.15 in)	52 mm (2.05 in)	5

Accessories

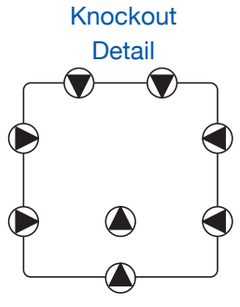
Ordering Information	Cat. No.	Type	Std. Pk.
Terminal (base mount)	840-004	2.5/4 mm^2 - 5 pole	10

Please refer to pages 149-152 for additional accessories and detailed information.









Abox-i 040 – Polycarbonate – 93 x 93 mm (3.66 x 3.66 in.)

Altech by els spelsberg

Standard Features

- **Protection Level:** IP65
- **Technical:** Self Sealing, Soft Elastic Membranes
  Suitable for Metric Entry
- **Sealing Area:** M20 - 2 to 16mm
- **UL Recognized**
  Enclosure Material: Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material**
  Temperature Range: Polycarbonate
  -40°C to 120°C (-40°F to 248°F)
- **Accessories:** See section below



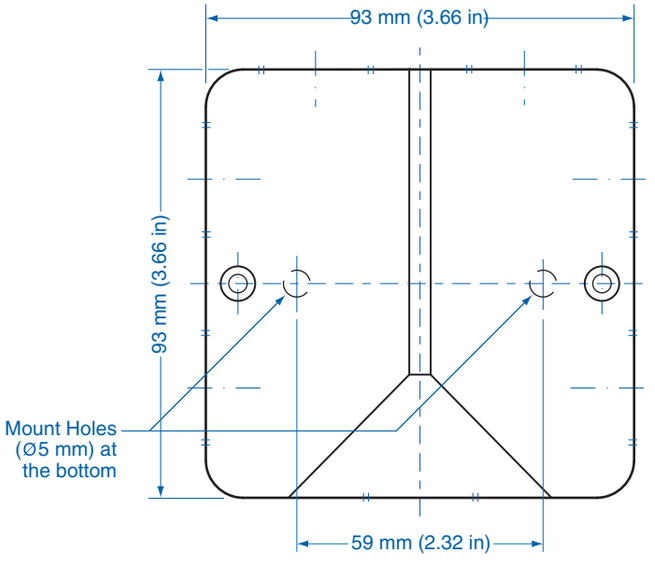
Abox-i

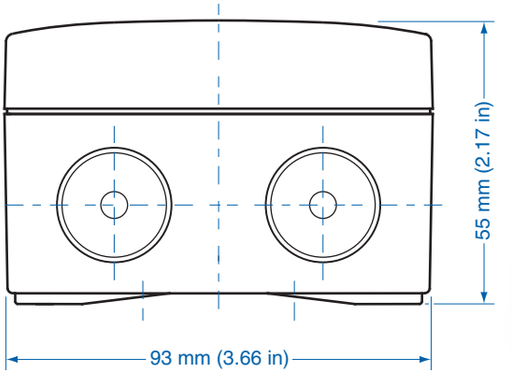
Ordering Information	Cat. No.	Terminal	Length	Dimensions mm (in) Width	Height	Std. Pk.
Enclosure with terminals	490-404	2.5/4 mm^2 - 5 pole	93 mm (3.66 in)	93 mm (3.66 in)	55 mm (2.17 in)	4
Enclosure - empty	490-904	NA	93 mm (3.66 in)	93 mm (3.66 in)	55 mm (2.17 in)	4

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Terminal (base mount)	840-004	2.5/4 mm^2 - 5 pole	10

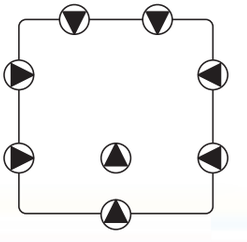
Please refer to pages 149-152 for additional accessories and detailed information.







Knockout Detail



Abox-i 060 – Polycarbonate – 110 x 110 mm (4.33 x 4.33 in.)

Standard Features

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls
- **UL Recognized Enclosure Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** Polycarbonate -40°C to 120°C (-40°F to 248°F)
- **Included Accessories:** (4) M25 Double Membrane Seals - 9-16mm
- **Accessories:** See section below



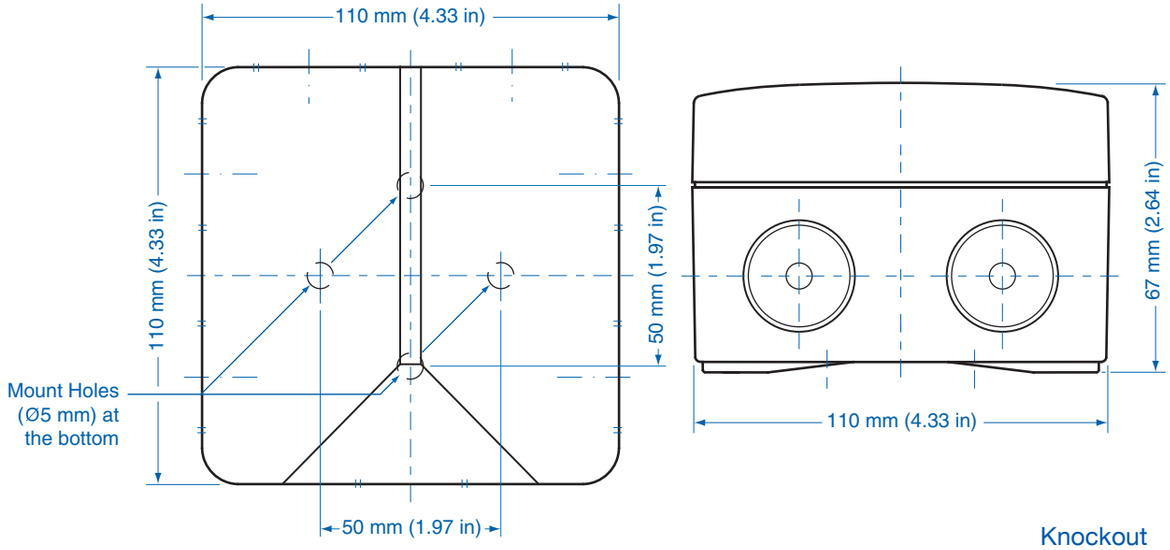
Abox-i

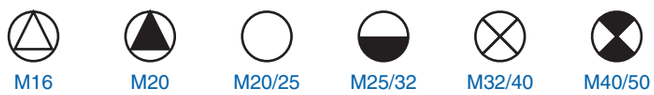
Ordering Information	Cat. No.	Terminal	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure with terminals	490-406	6mm^2 - 5 pole	110 mm (4.33 in)	110 mm (4.33 in)	67 mm (2.64 in)	2
Enclosure - empty	490-906	NA	110 mm (4.33 in)	110 mm (4.33 in)	67 mm (2.64 in)	2

Accessories

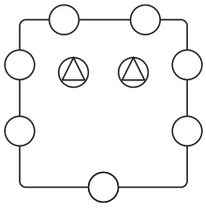
Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate	895-006	MP060	1
DIN Rail TS35 -35x81mm	198-081	TS35/81	1
Terminal (high-set)	840-006	6mm^2 - 5 pole	5

Please refer to pages 149-152 for additional accessories and detailed information.





Knockout Detail



Standard Features

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls
- **UL Recognized Enclosure Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** Polycarbonate -40°C to 120°C (-40°F to 248°F)
- **Included Accessories:** (4) M32 Double Membrane Seals - 14-21mm
- **Accessories:** See section below



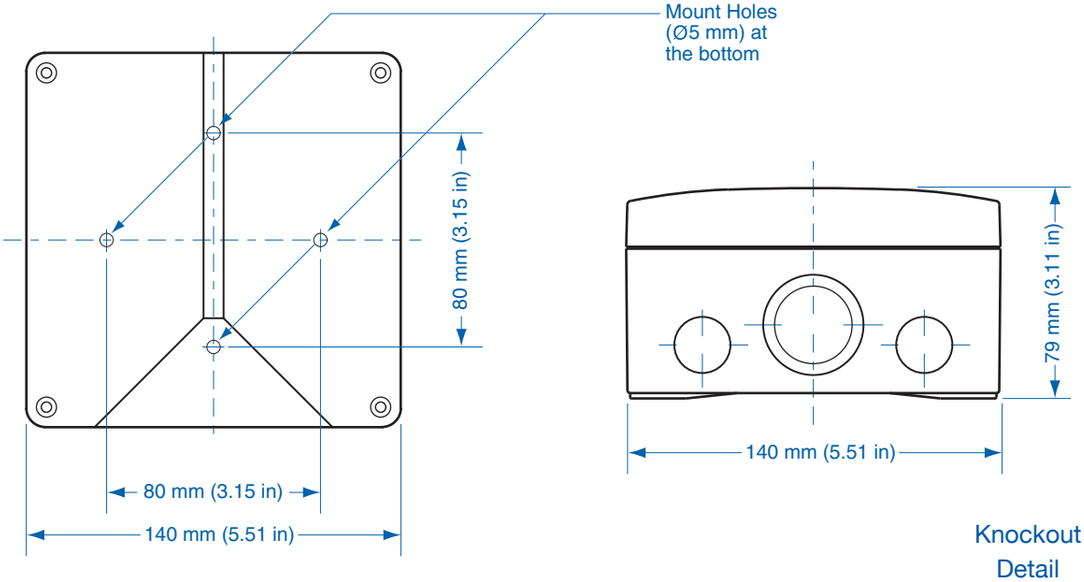
Abox-i

Ordering Information	Cat. No.	Terminal	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure with terminals	490-410	10 mm^2 - 5 pole	140 mm (5.51 in)	140 mm (5.51 in)	79 mm (3.11 in)	2
Enclosure - empty	490-910	NA	140 mm (5.51 in)	140 mm (5.51 in)	79 mm (3.11 in)	2

Accessories

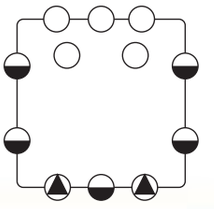
Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate	895-010	MP100	1
DIN Rail TS35 - 35x106mm	198-106	TS35/106	1
Terminal (high-set)	840-010	10 mm^2 - 5 pole	5

Please refer to pages 149-152 for additional accessories and detailed information.





Knockout Detail



Abox-i 160 – Polycarbonate – 180 x 180 mm (7.09 x 7.09 in.)

Standard Features

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls
- **UL Recognized Enclosure Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** Polycarbonate -40°C to 120°C (-40°F to 248°F)
- **Included Accessories:** Tamper Kit
- **Accessories:** See section below



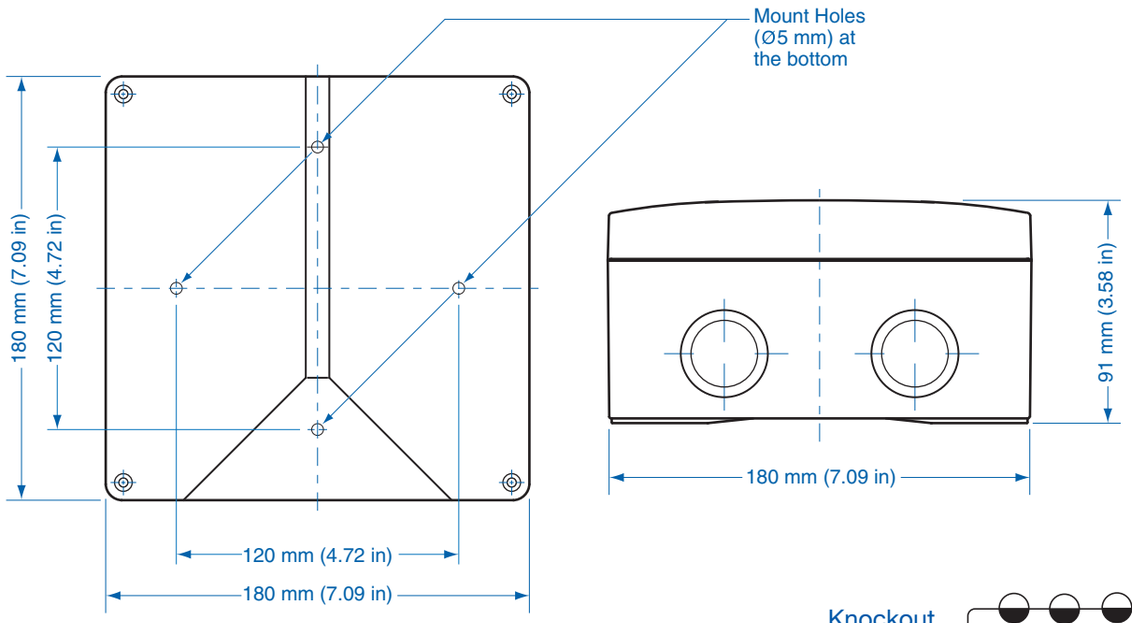
Abox-i

Ordering Information	Cat. No.	Terminal	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure with terminals	490-416	16/25 mm^2 - 5 pole	180 mm (7.09 in)	180 mm (7.09 in)	91 mm (3.58 in)	1
Enclosure - empty	490-916	NA	180 mm (7.09 in)	180 mm (7.09 in)	91 mm (3.58 in)	1

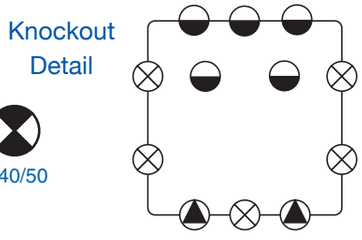
Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate	895-016	MP160	1
DIN Rail TS35 - 35x144mm	894-016	TS35/144	1
Terminal (high-set)	840-016	16/25 mm^2 - 5 pole	2

Please refer to pages 149-152 for additional accessories and detailed information.







Altech by els spelsberg

Standard Features

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls
- **UL Recognized Enclosure Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** Polycarbonate -40°C to 120°C (-40°F to 248°F)
- **Included Accessories:** Tamper Kit
- **Accessories:** See section below



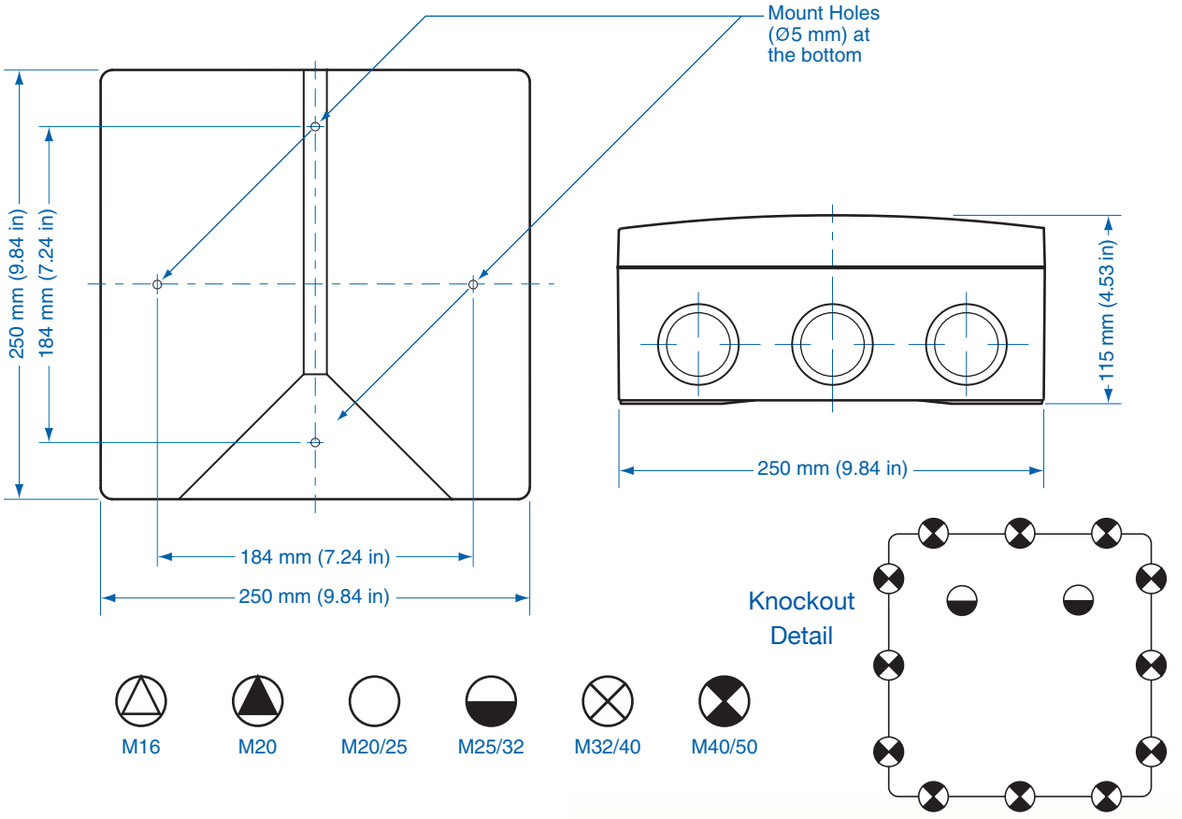
Abox-i

Ordering Information	Cat. No.	Terminal	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure with terminals	490-435	35/25 mm^2 - 5 pole	250 mm (9.84 in)	250 mm (9.84 in)	115 mm (4.53 in)	1
Enclosure - empty	490-935	NA	250 mm (9.84 in)	250 mm (9.84 in)	115 mm (4.53 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate	895-035	MP350	1
DIN Rail TS35 - 35x216mm	894-035	TS35/216	1
Terminal (high-set)	840-035	35/25 mm^2 - 5 pole	1

Please refer to pages 149-152 for additional accessories and detailed information.





AKL Series

AKL Enclosures are very similar to their door bearing cousins, the AKII. The main feature that differentiates this family from the AKII is the configuration of the covers and bases.

The AKL Series, like the AKII Series, features aesthetically pleasing smooth exterior walls. Knockout patterns are on the inside, except on the top where standard knockouts exist.

The AKL Series offers larger sizes, ranging from 150 x 300 x 142 mm (5.91 x 11.81 x 5.59 in.) to 600 x 300 x 210 mm (23.62 x 11.81 x 8.27 in.). Some models feature low or high covers, available in gray or tinted transparent. Standardized dimensions allow for joining multiple AKL Enclosures or combining AKII and AKL Enclosures with a common combination kit to create larger enclosure combinations.

As with the AKII, the AKL family features the same 150 mm (5.91 in.) center to center DIN rail spacing. The standard ingress protection level when using appropriate strain reliefs is IP65.

AKL has you covered



External mounting tabs
(sold separtely)



Optional DIN rail,
mounting plates,
partition

Combinable



External hinges
(sold separtely)



AKL1 – Polystyrene and Polycarbonate – 150 x 300 mm (5.91 x 11.81 in.)

Standard Features

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls
  Gray or Tinted Transparent Cover
  Multiple Enclosure Combination Options
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Transparent Cover Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** Polystyrene
  -40˚C to 70˚C (-40˚F to 158˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Included Accessories:** (10) M20 Double Membrane Seals
  (2) M25 Double Membrane Seals
  (2) M32 Double Membrane Seals
  (1) M40 Entry Spout
- **Accessories:** See section below



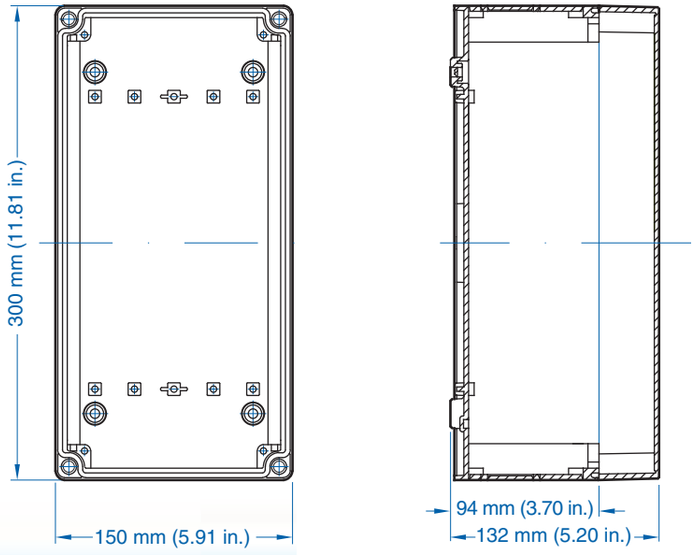
AKL

Ordering Information	Cat. No.	Cover Type / Color	Dimensions mm (in) Length	Width	Height	Std. Pk.
Polystyrene						
Enclosure - low cover	740-401	AKL 1-g / gray	150 mm (5.91 in.)	300 mm (11.81 in.)	132 mm (5.20 in)	1
Transparent - low cover	744-001	AKL 1-t / trans.	150 mm (5.91 in.)	300 mm (11.81 in.)	132 mm (5.20 in)	1
Polycarbonate						
Enclosure - low cover	741-401	AKi 1-g / gray	150 mm (5.91 in.)	300 mm (11.81 in.)	132 mm (5.20 in)	1
Transparent - low cover	745-001	AKi 1-t / trans.	150 mm (5.91 in.)	300 mm (11.81 in.)	132 mm (5.20 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate – 240 x 112 mm	795-001	AKMPI 1	1
DIN Rail – 216 mm Surface Mounted	795-030	NS35-216/3	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit (metal)	793-004	MT2	1

Please refer to pages 149-152 for additional accessories and detailed information



Please refer to page 158 for Knockout details.

Standard Features

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls
  Gray or Tinted Transparent Cover
  Multiple Enclosure Combination Options
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Transparent Cover Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** Polystyrene
  -40˚C to 70˚C (-40˚F to 158˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Included Accessories:** (10) M20 Double Membrane Seals
  (2) M25 Double Membrane Seals
  (2) M32 Double Membrane Seals
  (1) M40 Entry Spout
- **Accessories:** See section below



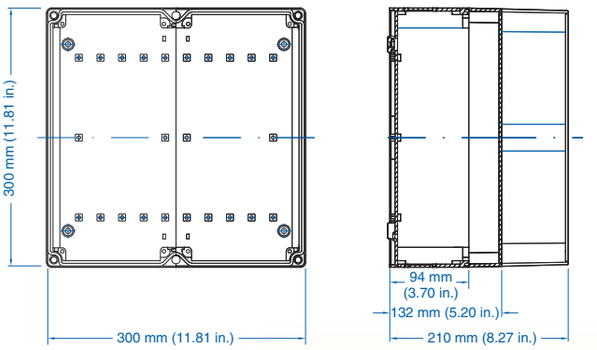
AKL

Ordering Information	Cat. No.	Cover Type / Color	Dimensions mm (in) Length	Width	Height	Std. Pk.
Polystyrene						
Enclosure - low cover	740-402	AKL 2-g / gray	300 mm (11.81 in.)	300 mm (11.81 in.)	132 mm (5.20 in)	1
Enclosure - high cover	742-902	AKL 2-gh / gray	300 mm (11.81 in.)	300 mm (11.81 in.)	210 mm (8.27 in)	1
Transparent - low cover	744-002	AKL 2-t / trans.	300 mm (11.81 in.)	300 mm (11.81 in.)	132 mm (5.20 in)	1
Transparent - high cover	746-902	AKL 2-th / trans.	300 mm (11.81 in.)	300 mm (11.81 in.)	210 mm (8.27 in)	1
Polycarbonate						
Enclosure - low cover	741-402	AKi 2-g / gray	300 mm (11.81 in.)	300 mm (11.81 in.)	132 mm (5.20 in)	1
Enclosure - high cover	743-902	AKi 2-gh / gray	300 mm (11.81 in.)	300 mm (11.81 in.)	210 mm (8.27 in)	1
Transparent - low cover	745-002	AKi 2-t / trans.	300 mm (11.81 in.)	300 mm (11.81 in.)	132 mm (5.20 in)	1
Transparent - high cover	747-902	AKi 2-th / trans.	300 mm (11.81 in.)	300 mm (11.81 in.)	210 mm (8.27 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic) – 240 x 240 mm	795-002	AKMPI 2	1
Mounting Plate (steel) – 240 x 240 mm	795-012	AKMPS 2	1
DIN Rail – 250 mm Clip-in	562-735	CITS35/250	1
DIN Rail – 216 mm Surface Mounted	795-030	NS35-216/3	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit (metal)	793-004	MT2	1

Please refer to pages 149-152 for additional accessories and detailed information.



Please refer to page 158 for Knockout details.

AKL3 – Polystyrene and Polycarbonate – 450 x 300 mm (17.72 x 11.81 in.)

Standard Features

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls
  Gray or Tinted Transparent Cover
  Multiple Enclosure Combination Options
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Transparent Cover Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** Polystyrene
  -40˚C to 70˚C (-40˚F to 158˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Included Accessories:** (10) M20 Double Membrane Seals
  (2) M25 Double Membrane Seals
  (2) M32 Double Membrane Seals
  (1) M40 Entry Spout
- **Accessories:** See section below



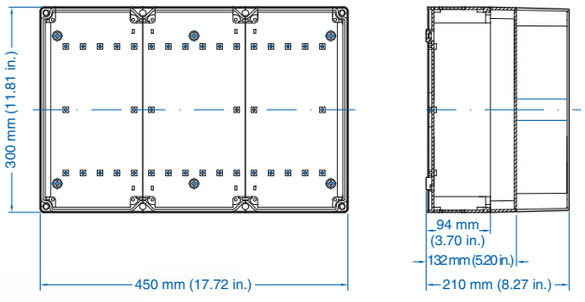
AKL

Ordering Information	Cat. No.	Cover Type / Color	Dimensions mm (in) Length	Width	Height	Std. Pk.
Polystyrene						
Enclosure - low cover	740-403	AKL 3-g / gray	450 mm (17.72 in.)	300 mm (11.81 in.)	132 mm (5.20 in)	1
Enclosure - high cover	742-903	AKL 3-gh / gray	450 mm (17.72 in.)	300 mm (11.81 in.)	210 mm (8.27 in)	1
Transparent - low cover	744-003	AKL 3-t / trans.	450 mm (17.72 in.)	300 mm (11.81 in.)	132 mm (5.20 in)	1
Transparent - high cover	746-903	AKL 3-th / trans.	450 mm (17.72 in.)	300 mm (11.81 in.)	210 mm (8.27 in)	1
Polycarbonate						
Enclosure - low cover	741-403	AKi 3-g / gray	450 mm (17.72 in.)	300 mm (11.81 in.)	132 mm (5.20 in)	1
Enclosure - high cover	743-903	AKi 3-gh / gray	450 mm (17.72 in.)	300 mm (11.81 in.)	210 mm (8.27 in)	1
Transparent - low cover	745-003	AKi 3-t / trans.	450 mm (17.72 in.)	300 mm (11.81 in.)	132 mm (5.20 in)	1
Transparent - high cover	747-903	AKi 3-th / trans.	450 mm (17.72 in.)	300 mm (11.81 in.)	210 mm (8.27 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic) – 240 x 390 mm	795-003	AKMPI 3	1
Mounting Plate (steel) – 240 x 390 mm	795-013	AKMPS 3	1
DIN Rail – 250 mm Clip-in	562-735	CITS35/250	1
DIN Rail – 216 mm Surface Mounted	795-030	NS35-216/3	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit (metal)	793-004	MT2	1

Please refer to pages 149-152 for additional accessories and detailed information.



Please refer to page 158 for Knockout details.

AKL4 – Polystyrene and Polycarbonate – 600 x 300 mm (23.62 x 11.81 in.)

Standard Features

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls
  Gray or Tinted Transparent Cover
  Multiple Enclosure Combination Options
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Transparent Cover Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Material Temperature Range:** Polystyrene
  -40˚C to 70˚C (-40˚F to 158˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Included Accessories:** (10) M20 Double Membrane Seals
  (2) M25 Double Membrane Seals
  (2) M32 Double Membrane Seals
  (1) M40 Entry Spout
- **Accessories:** See section below



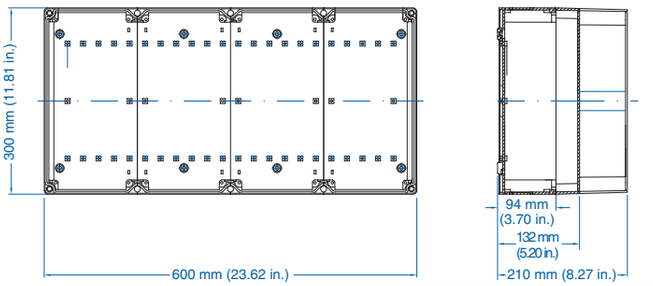
AKL

Ordering Information	Cat. No.	Cover Type / Color	Dimensions mm (in) Length	Width	Height	Std. Pk.
Polystyrene						
Enclosure - low cover	740-404	AKL 4-g / gray	600 mm (23.62 in.)	300 mm (11.81 in.)	132 mm (5.20 in)	1
Enclosure - high cover	742-904	AKL 4-gh / gray	600 mm (23.62 in.)	300 mm (11.81 in.)	210 mm (8.27 in)	1
Transparent - low cover	744-004	AKL 4-t / trans.	600 mm (23.62 in.)	300 mm (11.81 in.)	132 mm (5.20 in)	1
Transparent - high cover	746-904	AKL 4-th / trans.	600 mm (23.62 in.)	300 mm (11.81 in.)	210 mm (8.27 in)	1
Polycarbonate						
Enclosure - low cover	741-404	AKi 4-g / gray	600 mm (23.62 in.)	300 mm (11.81 in.)	132 mm (5.20 in)	1
Enclosure - high cover	743-904	AKi 4-gh / gray	600 mm (23.62 in.)	300 mm (11.81 in.)	210 mm (8.27 in)	1
Transparent - low cover	745-004	AKi 4-t / trans.	600 mm (23.62 in.)	300 mm (11.81 in.)	132 mm (5.20 in)	1
Transparent - high cover	747-904	AKi 4-th / trans.	600 mm (23.62 in.)	300 mm (11.81 in.)	210 mm (8.27 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (plastic) – 240 x 540 mm	795-004	AKMPI 4	1
Mounting Plate (steel) – 240 x 540 mm	795-014	AKMPS 4	1
DIN Rail – 250 mm Clip-in	562-735	CITS35/250	1
DIN Rail – 216 mm Surface Mounted	795-030	NS35-216/3	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit (metal)	793-004	MT2	1

Please refer to pages 149-152 for additional accessories and detailed information.



Please refer to page 158 for Knockout details.



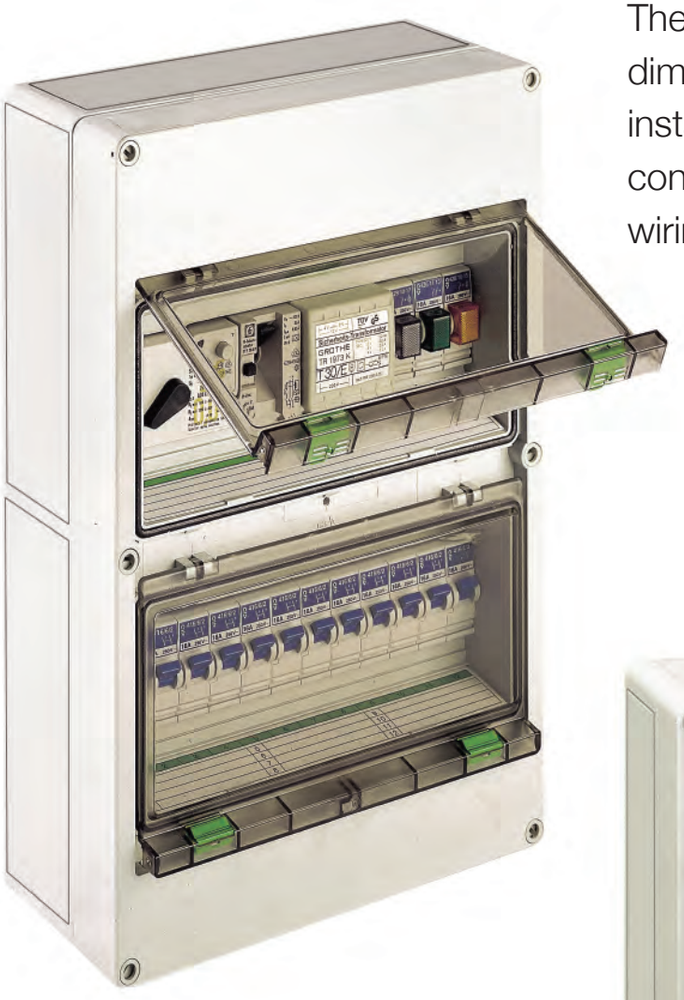
EK Series

Compact EK Series Enclosures are designed to house and protect standard IEC components, such as DIN rail mount circuit breakers, switches, meters and other control devices.

The unique cover design features a shrouded cut out and transparent hinged doors, for quick access and visibility. The shrouded cut out, spanning the width of the cover, exposes mounted components for easy adjustment and isolates wiring for increased safety. The transparent hinged doors have push release latches and can be optionally equipped with a tamper seal.

- UL Listed
- Direct mount
- Small to medium size
- Polycarbonate base and cover
- Integral seals
- Dust and moisture proof
- IP65 protection
- High mechanical strength
- Corrosion and maintenance free
- Halogen free

EK compact design



The EK Series features compact dimensions for space-efficient installation, while offering sufficient connection space for a secure wiring job.



The transparent doors make for an ideal display of timers, LEDs, circuit breakers, and other DIN rail mount devices. Access to components is quick and easy.

EK002 – Polycarbonate – 130 x 94 mm (5.12 x 3.70 in.)

Standard Features

- **Protection Level:** IP65 - Nema Type 4x
- **Technical:** Fits 2 Circuit Breaker Poles
  (3 if side pieces are removed)
  Smooth Sidewalls
  Tinted Transparent Door
- **Enclosure Material:** Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Material Temperature Range:** -40°C to 120°C (-40°F to 248°F)
- **Color:** Light Gray
- **Included Accessories:** 35mm DIN Rail
  Label Strip
- **Accessories:** See section below

E208470



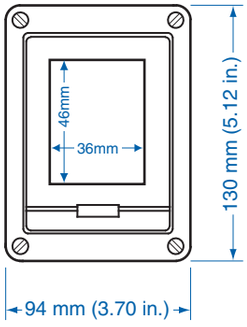
EK

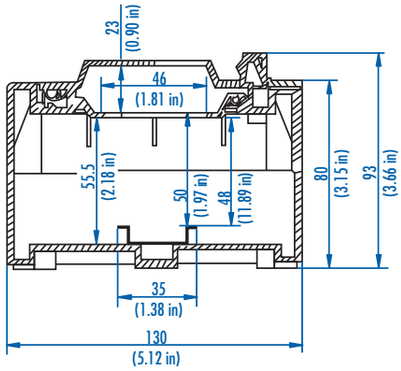
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	542-502	EK002	130 mm (5.12 in)	94 mm (3.70 in)	80 mm (3.15 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Terminal	X-573	PE/N Terminal - 3 pole (1x16 / 2x6 mm^2)	1
Filler Strip	799-012	108 mm piece (6 divisions)	1

Please refer to pages 149-152 for additional accessories and detailed information.





Standard Features

- **Protection Level:** IP65 - Nema Type 4x
- **Technical:** Fits 4 Circuit Breaker Poles
  Smooth Sidewalls
  Tinted Transparent Door
- **Enclosure Material:** Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Material Temperature Range:** -40°C to 120°C (-40°F to 248°F)
- **Color:** Light Gray
- **Included Accessories:** 35mm DIN Rail
  Label Strip
- **Accessories:** See section below

E254144



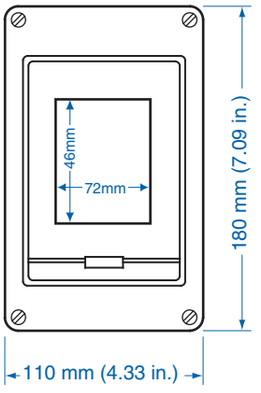
EK

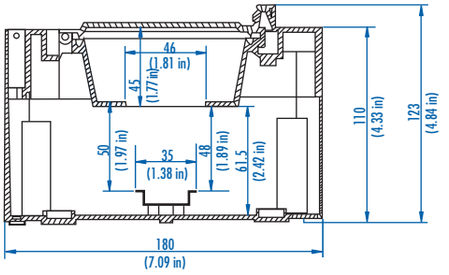
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	542-504	EK004	180 mm (7.09 in)	110 mm (4.33 in)	110 mm (4.33 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Terminal	790-205	PE/N Terminal - 2x5 pole (2x16 / 3x6 mm^2)	1
Filler Strip	799-012	108 mm piece (6 divisions)	1

Please refer to pages 149-152 for additional accessories and detailed information.





EK008 – Polycarbonate – 180 x 182 mm (7.09 x 7.17 in.)

Standard Features

- **Protection Level:** IP65 - Nema Type 4x
- **Technical:** Fits 8 Circuit Breaker Poles
  Smooth Sidewalls
  Tinted Transparent Door
- **Enclosure Material:** Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Material Temperature Range:** -40°C to 120°C (-40°F to 248°F)
- **Color:** Light Gray
- **Included Accessories:** 35mm DIN Rail
  Label Strip
- **Accessories:** See section below

E254144



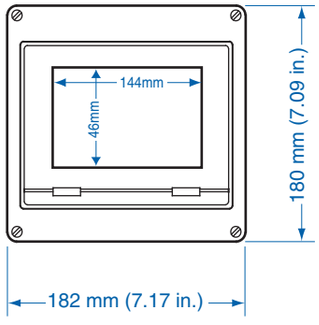
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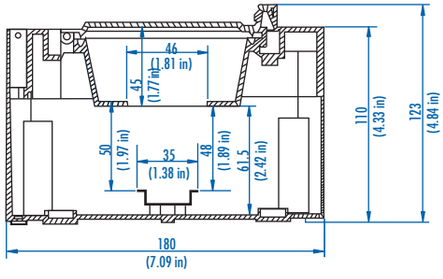
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	542-508	EK008	180 mm (7.09 in)	182 mm (7.17 in)	110 mm (4.33 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Terminal	790-207	PE/N Terminal - 2x7 pole (2x16 / 5x6 mm^2)	1
Filler Strip	799-012	108 mm piece (6 divisions)	1

Please refer to pages 149-152 for additional accessories and detailed information.





EK012 – Polycarbonate – 180 x 254 mm (7.09 x 10.00 in.)

Standard Features

- **Protection Level:** IP65 - Nema Type 4x
- **Technical:** Fits 12 Circuit Breaker Poles
  Smooth Sidewalls
  Tinted Transparent Door
- **Enclosure Material:** Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Material Temperature Range:** -40°C to 120°C (-40°F to 248°F)
- **Color:** Light Gray
- **Included Accessories:** 35mm DIN Rail
  Label Strip
- **Accessories:** See section below

E254144



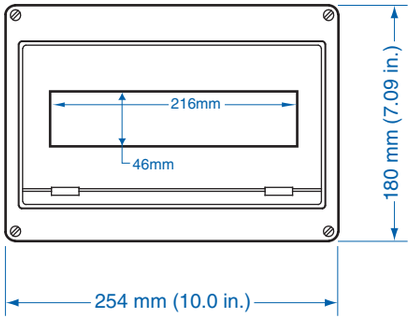
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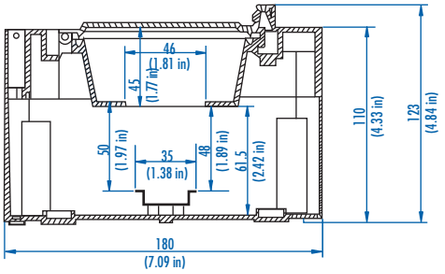
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	542-512	EK012	180 mm (7.09 in)	254 mm (10.00 in)	110 mm (4.33 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Terminal	790-211	PE/N Terminal - 2x12 pole (2x16 / 10x6 mm^2)	1
Filler Strip	799-012	108 mm piece (6 divisions)	1

Please refer to pages 149-152 for additional accessories and detailed information.





EK024 – Polycarbonate – 361 x 254 mm (14.21 x 10.00 in.)

Standard Features

- **Protection Level:** IP65 - Nema Type 4x
- **Technical:** Fits 24 Circuit Breaker Poles (12 per section)
  Smooth Sidewalls
  Tinted Transparent Door
- **Enclosure Material:** Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Material Temperature Range:** -40°C to 120°C (-40°F to 248°F)
- **Color:** Light Gray
- **Included Accessories:** 2 ea. 35mm DIN Rail
  2 ea. Label Strips
- **Accessories:** See section below

E254144



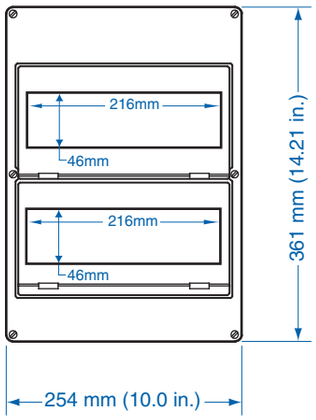
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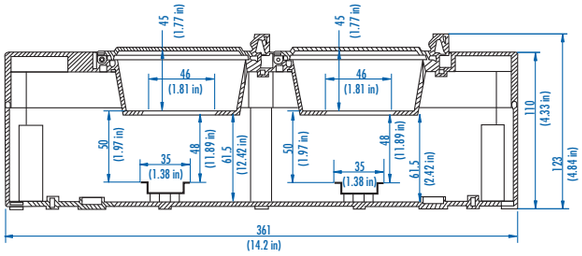
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	542-524	EK024	361 mm (14.21 in)	254 mm (10.00 in)	110 mm (4.33 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Terminal	X-721-02	PE/N Terminal - 2x17 pole (1x25 / 4x16 / 12x6 mm^2)	1
Filler Strip	799-012	108 mm piece (6 divisions)	1

Please refer to pages 149-152 for additional accessories and detailed information.





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AK Series

The AK Series are small to large enclosures designed to house and protect standard IEC components, such as DIN rail mount circuit breakers, switches, meters and other control devices. Larger than the EK Series, they offer increased capacity for mounting components and provide additional space for more convenient wiring.

The unique cover design features a shrouded cut out and transparent hinged doors for quick access and visibility. The shrouded cut out, spanning the width of the cover, exposes mounted components for easy adjustment while isolating wiring for increased safety. Doors have push release latches with reversible hinge feature to open from the left or right side. Keylocks can be added to the doors for increased security. Most enclosures are supplied with removable terminal strip assemblies for ground / neutral distribution and DIN rails.

Equipped with pre-installed entry plugs, these enclosures provide IP65 protection. Use of appropriate sealing connector assemblies for wire, cable or conduit entry can maintain IP65 protection. Using the entry spouts provided, enclosures have IP54 protection.

- Direct mount
- Corrosion and maintenance free
- Small to large size
- Polystyrene or Polycarbonate base and cover
- Polycarbonate transparent doors
- Integral seals
- High mechanical strength
- Dust and moisture proof
- Halogen free
- Up to IP65 protection

AK - IEC Protection

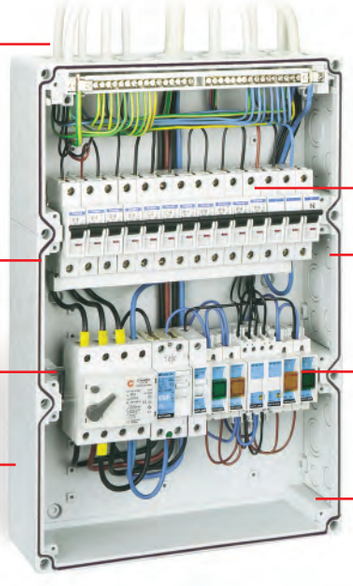


M20/Pg13.5 double membrane entry seals guarantee IP65 protection. These entries are also suited to accept threaded cord grips.

Removable sidewalls facilitate and allow enclosure combination with other AK or AKL models.

DIN Rail distance of 150 mm (5.91 in.) center to center gives room for comfortable and timely installations.

Smooth external sidewalls combine functionality with aesthetics.



Up to 14 components can be mounted to each DIN rail.

The enclosure material is impact and flame resistant Polystyrene.

Snap in 35 mm DIN rail.

The large number of pre-punched “holes” makes for easy cable installation.

AK03 – Polystyrene and Polycarbonate - 100 x 150 mm (3.94 x 5.91 in.)

Standard Features

- **Protection Level:** IP65
- **Technical:** Fits 3 Circuit Breaker Poles
  Knockout Sidewalls and Installed Double Membrane Seals
  Tinted Transparent Door
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Material Temperature Range:** Polystyrene
  -40˚C to 70˚C (-40˚F to 158˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Color:** Light Gray
- **Included Accessories:** DIN Rail, 2x4 Pole Ground/Neutral Terminal Strip, Filler Strips, (3) M20 Double Membrane Seals



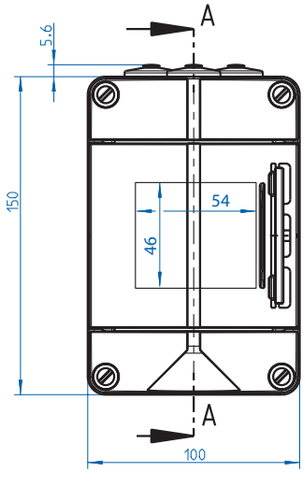
AK03

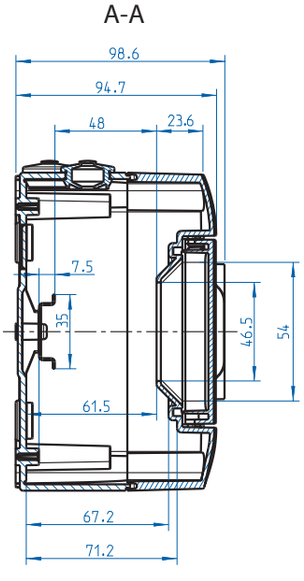
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Polystyrene						
Enclosure	735-403	AK03	100 mm (3.94 in)	150 mm (5.91 in)	96 mm (3.78 in)	1
Polycarbonate						
Enclosure	736-403	AKi03	100 mm (3.94 in)	150 mm (5.91 in)	96 mm (3.78 in)	1

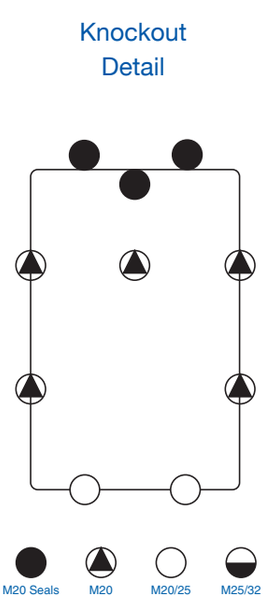
Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Key Lock	706-102	KL2	1
Terminal	790-204	PE/N Terminal - 2x4 pole (1x16 / 3x6 mm^2)	1
Filler Strip	799-012	108 mm piece (6 divisions)	1

Please refer to pages 149-152 for additional accessories and detailed information.







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Standard Features

- **Protection Level:** IP65
- **Technical:** Fits 5 Circuit Breaker Poles
  Knockout Sidewalls and Installed Double Membrane Seals
  Tinted Transparent Door
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Material Temperature Range:** Polystyrene
  -40˚C to 70˚C (-40˚F to 158˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Color:** Light Gray
- **Included Accessories:** DIN Rail, 2x5 Pole Ground/Neutral Terminal Strip, Filler Strips, (4) M20 Double Membrane Seals



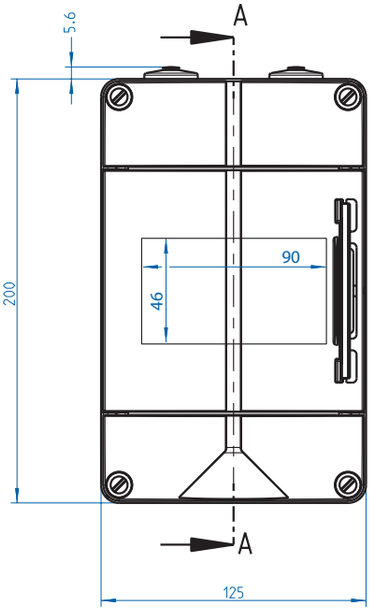
AK05

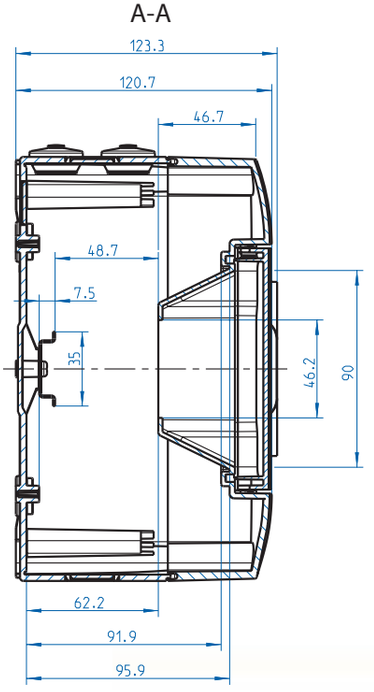
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Polystyrene						
Enclosure	735-405	AK05	125 mm (4.92 in)	200 mm (7.87 in)	122 mm (4.80 in)	1
Polycarbonate						
Enclosure	736-405	AKi05	125 mm (4.92 in)	200 mm (7.87 in)	122 mm (4.80 in)	1

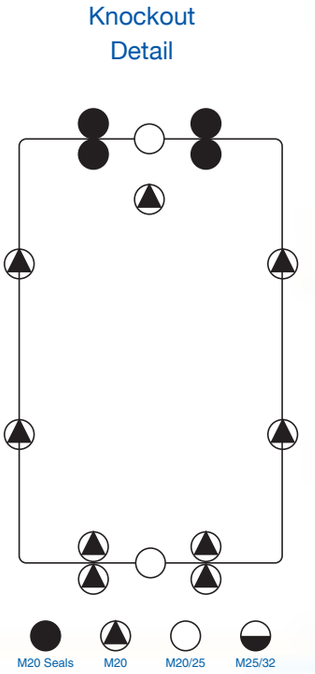
Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Key Lock	706-102	KL2	1
Terminal	790-205	PE/N Terminal - 2x5 pole (2x16 / 3x6 mm^2)	1
Filler Strip	799-012	108 mm piece (6 divisions)	1

Please refer to pages 149-152 for additional accessories and detailed information.







AK09 – Polystyrene and Polycarbonate - 200 x 200 mm (7.87 x 7.87 in.)

Standard Features

- **Protection Level:** IP65
- **Technical:** Fits 9 Circuit Breaker Poles
  Knockout Sidewalls and Installed Double Membrane Seals
  Tinted Transparent Door
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Material Temperature Range:** Polystyrene
  -40˚C to 70˚C (-40˚F to 158˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Color:** Light Gray
- **Included Accessories:** DIN Rail, 2x7 Pole Ground/Neutral Terminal Strip, Filler Strips, (6) M20 Double Membrane Seals



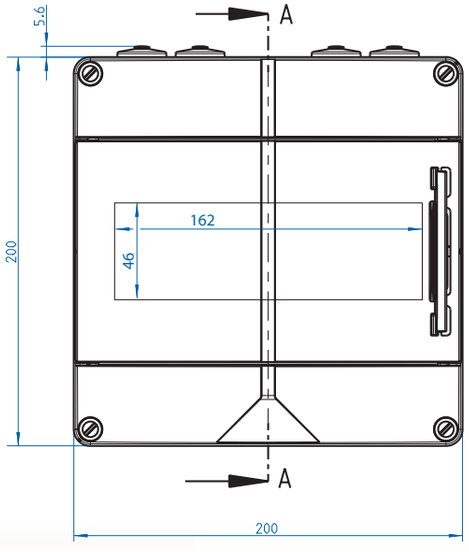
AK09

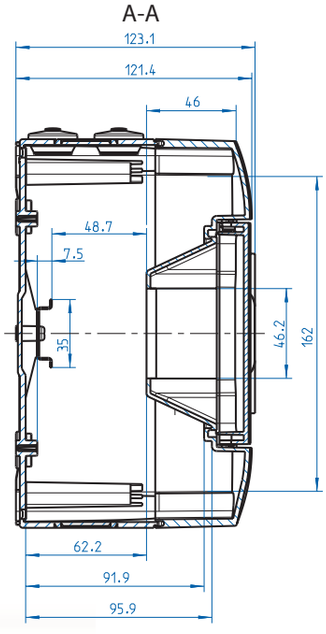
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Polystyrene						
Enclosure	735-409	AK09	200 mm (7.87 in)	200 mm (7.87 in)	122 mm (4.80 in)	1
Polycarbonate						
Enclosure	736-409	AKi09	200 mm (7.87 in)	200 mm (7.87 in)	122 mm (4.80 in)	1

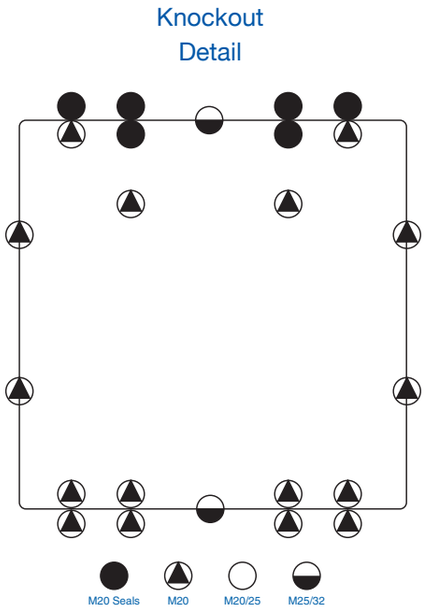
Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Key Lock	706-102	KL2	1
Terminal	790-207	PE/N Terminal - 2x7 pole (2x16 / 5x6 mm^2)	1
Filler Strip	799-012	108 mm piece (6 divisions)	1

Please refer to pages 149-152 for additional accessories and detailed information.







AK12 – Polystyrene and Polycarbonate - 250 x 200 mm (9.84 x 7.87 in.)

Standard Features

- **Protection Level:** IP65
- **Technical:** Fits 12 Circuit Breaker Poles
  Knockout Sidewalls and Installed Double Membrane Seals
  Tinted Transparent Door
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Material Temperature Range:** Polystyrene
  -40˚C to 70˚C (-40˚F to 158˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Color:** Light Gray
- **Included Accessories:** DIN Rail, 2x12 Pole Ground/Neutral Terminal Strip, Filler Strips, (8) M20 Double Membrane Seals



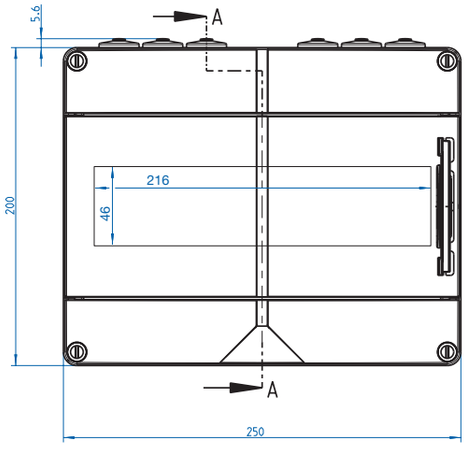
AK12

Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Polystyrene						
Enclosure	735-412	AK12	250 mm (9.84 in)	200 mm (7.87 in)	122 mm (4.80 in)	1
Polycarbonate						
Enclosure	736-412	AKi12	250 mm (9.84 in)	200 mm (7.87 in)	122 mm (4.80 in)	1

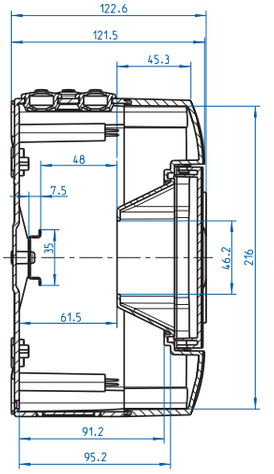
Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Key Lock	706-102	KL2	1
Terminal	790-211	PE/N Terminal - 2x12 pole (2x16 / 10x6 mm^2)	1
Filler Strip	799-012	108 mm piece (6 divisions)	1

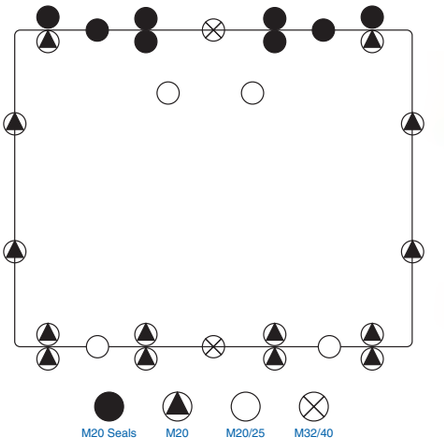
Please refer to pages 149-152 for additional accessories and detailed information.



A-A



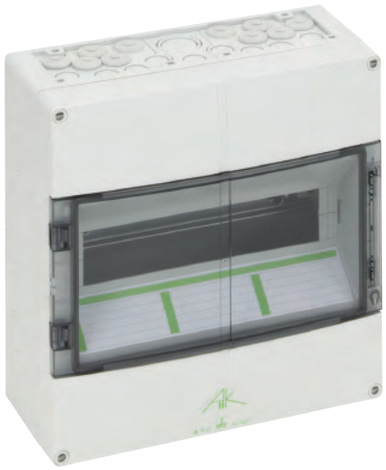
Knockout Detail



AK 14 – Polystyrene and Polycarbonate – 300 x 300 mm (11.81 x 11.81 in.)

Standard Features

- **Protection Level:** IP65
- **Technical:** Fits 14 Circuit Breaker Poles
  Knockout Sidewalls and installed double membrane seals
  Tinted Transparent Door
  Multiple Enclosure Combination Option
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Material Temperature Range:** Polystyrene
  -40˚C to 70˚C (-40˚F to 158˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Color:** Light Gray
- **Included Accessories:** DIN Rail, 17 Pole Ground/Neutral Terminal Strip, Cable Shield, Filler Strips, Label Strip,
  (5) M20 Double Membrane Seals, (2) M25 Double Membrane Seals,
  (1) M32 Double Membrane Seals, (1) M40 Entry Spout
- **Accessories:** See section below



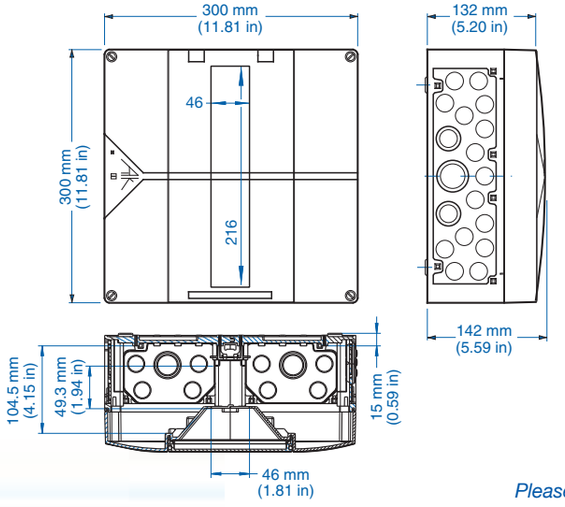
AK 14

Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Polystyrene						
Enclosure	735-414	AK14	300 mm (11.81 in)	300 mm (11.81 in)	142 mm (5.59 in)	1
Polycarbonate						
Enclosure	736-414	AKi14	300 mm (11.81 in)	300 mm (11.81 in)	142 mm (5.59 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Key Lock	706-102	KL2	1
Mounting Plate – 240 x 112 mm	795-001	MPI 1	1
Mounting Plate – 240 x 240 mm	795-002	MPI 2	1
DIN Rail - 216 mm Surface Mounted	795-030	NS35-216/3	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit (metal)	793-004	MT2	1
Filler Strip	799-012	108 mm piece (6 divisions)	1

Please refer to pages 149-152 for additional accessories and detailed information.



Please refer to page 158 for Knockout details.

Standard Features

- **Protection Level:** IP65
- **Technical:** Fits 14 Circuit Breaker Poles
  Knockout Sidewalls and installed double membrane seals
  Tinted Transparent Door
  Multiple Enclosure Combination Option
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Material Temperature Range:** Polystyrene
  -40˚C to 70˚C (-40˚F to 158˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Color:** Light Gray
- **Included Accessories:** (2) DIN Rails, Cable Shield, Filler Strips, (1) Label Strip, (15) M20 Double Membrane Seals, (2) M25 Double Membrane Seals, (1) M32 Double Membrane Seals, (1) M40 Entry Spout
- **Accessories:** See section below



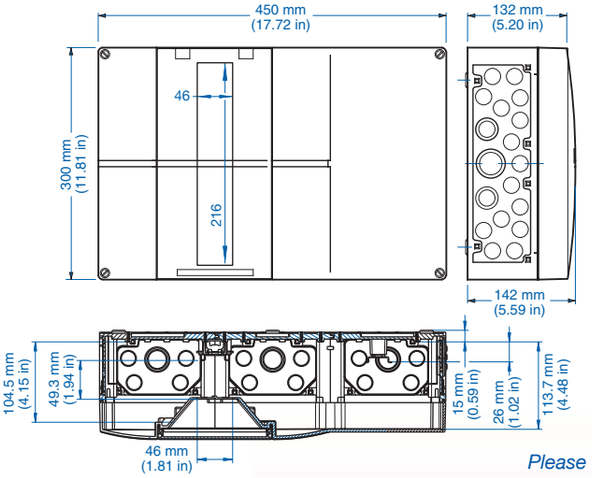
AK 14+1

Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Polystyrene						
Enclosure	737-414	AK14+1	450 mm (17.72 in)	300 mm (11.81 in)	142 mm (5.59 in)	1
Polycarbonate						
Enclosure	738-414	AKi14+1	450 mm (17.72 in)	300 mm (11.81 in)	142 mm (5.59 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Key Lock	706-102	KL2	1
Mounting Plate – 240 x 112 mm	795-001	MPI 1	1
Mounting Plate – 240 x 240 mm	795-002	MPI 2	1
Mounting Plate – 240 x 390 mm	795-003	MPI 3	1
DIN Rail - 216 mm Surface Mounted	795-030	NS35-216/3	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit (metal)	793-004	MT2	1
Filler Strip	799-012	108 mm piece (6 divisions)	1
2x17 Pole Ground/Neutral Terminal Strip (3 screw clamps 2.5-16mm², 14 spring clamps 1.5-4mm² each)	790-317	AK14PE/N-SL	1

Please refer to pages 149-152 for additional accessories and detailed information.



Please refer to page 158 for Knockout details.

AK 28 – Polystyrene and Polycarbonate – 450 x 300 mm (17.72 x 11.81 in.)

Standard Features

- **Protection Level:** IP65
- **Technical:** Fits 28 Circuit Breaker Poles (14 per section)
  Knockout Sidewalls and installed double membrane seals
  Tinted Transparent Door
  Multiple Enclosure Combination Option
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Material Temperature Range:** Polystyrene
  -40˚C to 70˚C (-40˚F to 158˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Color:** Light Gray
- **Included Accessories:** (2) DIN Rails, 2x27 Pole Ground/Neutral Terminal, Strip, Cable Shield, Filler Strips, (2) Label Strips, Accessory Case, (5) M20 Double Membrane Seals, (2) M25 Double Membrane Seals, (1) M32 Double Membrane Seals, (1) M40 Entry Spout
- **Accessories:** See section below



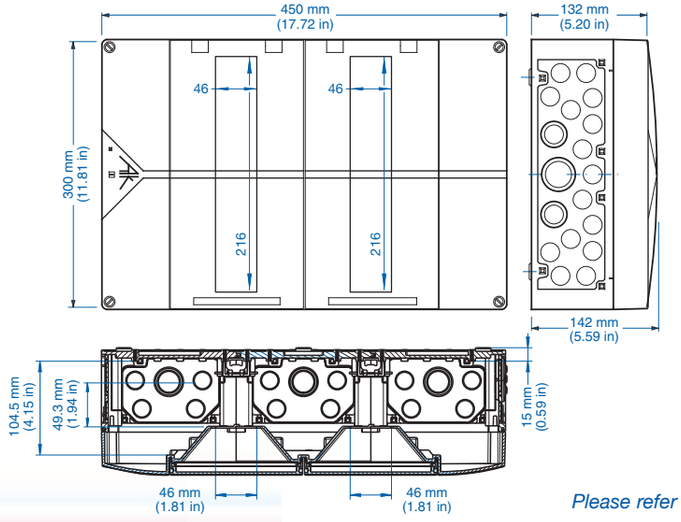
AK 28

Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Polystyrene						
Enclosure	735-428	AK28	450 mm (17.72 in)	300 mm (11.81 in)	142 mm (5.59 in)	1
Polycarbonate						
Enclosure	736-428	AKi28	450 mm (17.72 in)	300 mm (11.81 in)	142 mm (5.59 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Key Lock	706-102	KL2	1
Mounting Plate – 240 x 112 mm	795-001	MPI 1	1
Mounting Plate – 240 x 240 mm	795-002	MPI 2	1
Mounting Plate – 240 x 390 mm	795-003	MPI 3	1
DIN Rail - 216 mm Surface Mounted	795-030	NS35-216/3	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit (metal)	793-004	MT2	1
Filler Strip	799-012	108 mm piece (6 divisions)	1

Please refer to pages 149-152 for additional accessories and detailed information.



Please refer to page 158 for Knockout details.

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Standard Features

- **Protection Level:** IP65
- **Technical:** Fits 28 Circuit Breaker Poles (14 per section)
  Knockout Sidewalls and installed double membrane seals
  Tinted Transparent Door
  Multiple Enclosure Combination Option
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Material Temperature Range:** Polystyrene
  -40˚C to 70˚C (-40˚F to 158˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Color:** Light Gray
- **Included Accessories:** (3) DIN Rails, Cable Shield, Filler Strips, (2) Label Strips, (15) M20 Double Membrane Seals, (2) M25 Double Membrane Seals, (1) M32 Double Membrane Seals, (1) M40 Entry Spout
- **Accessories:** See section below



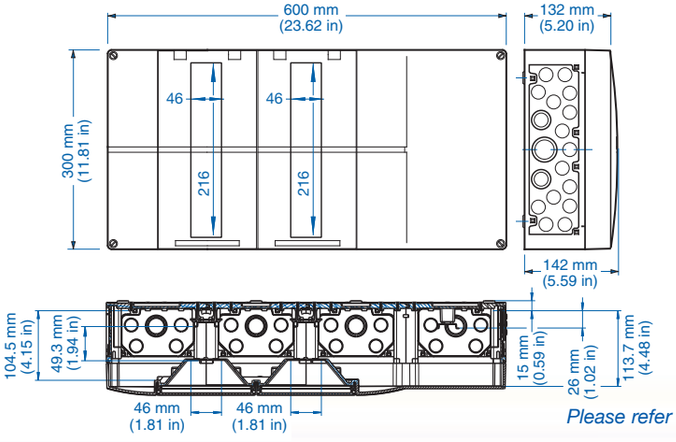
AK 28+1

Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Polystyrene						
Enclosure	737-428	AK28+1	600 mm (23.62 in)	300 mm (11.81 in)	142 mm (5.59 in)	1
Polycarbonate						
Enclosure	738-428	AKi28+1	600 mm (23.62 in)	300 mm (11.81 in)	142 mm (5.59 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Key Lock	706-102	KL2	1
Mounting Plate – 240 x 112 mm	795-001	MPI 1	1
Mounting Plate – 240 x 240 mm	795-002	MPI 2	1
Mounting Plate – 240 x 390 mm	795-003	MPI 3	1
Mounting Plate – 240 x 540 mm	795-004	MPI 4	1
DIN Rail - 216 mm Surface Mounted	795-030	NS35-216/3	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit (metal)	793-004	MT2	1
Filler Strip	799-012	108 mm piece (6 divisions)	1
2x27 Pole Ground/Neutral Terminal Strip (6 screw clamps 2.5-16mm², 21 spring clamps 1.5-4mm² each)	790-327	AK28PE/N-SL	1

Please refer to pages 149-152 for additional accessories and detailed information.



Please refer to page 158 for Knockout details.

AK 42 – Polystyrene and Polycarbonate – 600 x 300 mm (23.62 x 11.81 in.)

Standard Features

- **Protection Level:** IP65
- **Technical:** Fits 42 Circuit Breaker Poles (14 per section)
  Knockout Sidewalls and installed double membrane seals
  Tinted Transparent Door
  Multiple Enclosure Combination Option
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Material Temperature Range:** Polystyrene
  -40˚C to 70˚C (-40˚F to 158˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Color:** Light Gray
- **Included Accessories:** (3) DIN Rails, 2x27 Pole Ground/Neutral Terminal, Strip, Cable Shield, Filler Strips, (3) Label Strips, Accessory Case, (15) M20 Double Membrane Seals, (2) M25 Double Membrane Seals, (1) M32 Double Membrane Seals, (1) M40 Entry Spout,
- **Accessories:** See section below



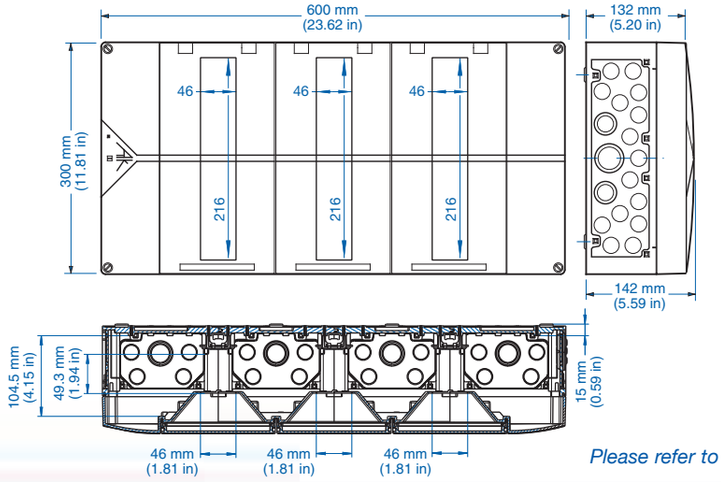
AK 42

Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Polystyrene						
Enclosure	735-442	AK42	600 mm (23.62 in)	300 mm (11.81 in)	142 mm (5.59 in)	1
Polycarbonate						
Enclosure	736-442	AKi42	600 mm (23.62 in)	300 mm (11.81 in)	142 mm (5.59 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Key Lock	706-102	KL2	1
Mounting Plate – 240 x 112 mm	795-001	MPI 1	1
Mounting Plate – 240 x 240 mm	795-002	MPI 2	1
Mounting Plate – 240 x 390 mm	795-003	MPI 3	1
Mounting Plate – 240 x 540 mm	795-004	MPI 4	1
DIN Rail - 216 mm Surface Mounted	795-030	NS35-216/3	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit (metal)	793-004	MT2	1
Filler Strip	799-012	108 mm piece (6 divisions)	1

Please refer to pages 149-152 for additional accessories and detailed information.



Please refer to page 158 for Knockout details.

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Standard Features

- **Protection Level:** IP65
- **Technical:** Fits 42 Circuit Breaker Poles (14 per section)
  Knockout Sidewalls and installed double membrane seals
  Tinted Transparent Door
  Multiple Enclosure Combination Option
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Material Temperature Range:** Polystyrene
  -40˚C to 70˚C (-40˚F to 158˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Color:** Light Gray
- **Included Accessories:** (4) DIN Rails, Cable Shield, Filler Strips, (3) Label Strips, (15) M20 Double Membrane Seals, (2) M25 Double Membrane Seals, (1) M32 Double Membrane Seals, (1) M40 Entry Spout,
- **Accessories:** See section below



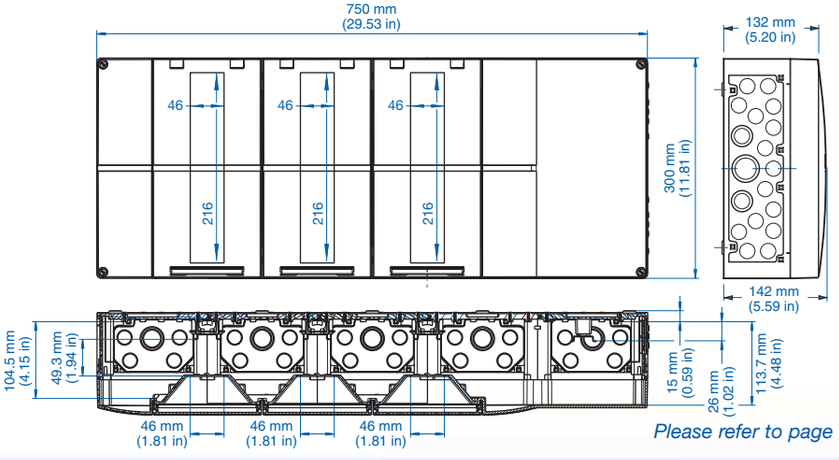
AK 42+1

Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Polystyrene						
Enclosure	737-442	AK42+1	750 mm (29.53 in)	300 mm (11.81 in)	142 mm (5.59 in)	1
Polycarbonate						
Enclosure	738-442	AKi42+1	750 mm (29.53 in)	300 mm (11.81 in)	142 mm (5.59 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Key Lock	706-102	KL2	1
Mounting Plate – 240 x 112 mm	795-001	MPI 1	1
Mounting Plate – 240 x 240 mm	795-002	MPI 2	1
Mounting Plate – 240 x 390 mm	795-003	MPI 3	1
Mounting Plate – 240 x 540 mm	795-004	MPI 4	1
DIN Rail - 216 mm Surface Mounted	795-030	NS35-216/3	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit (metal)	793-004	MT2	1
Filler Strip	799-012	108 mm piece (6 divisions)	1
2x27 Pole Ground/Neutral Terminal Strip (6 screw clamps 2.5-16mm², 21 spring clamps 1.5-4mm² each)	790-327	AK28PE/N-SL	1

Please refer to pages 149-152 for additional accessories and detailed information.



Please refer to page 158 for Knockout details.

AK 56 – Polystyrene and Polycarbonate – 750 x 300 mm (29.53 x 11.81 in.)

Standard Features

- **Protection Level:** IP65
- **Technical:** Fits 56 Circuit Breaker Poles (14 per section)
  Knockout Sidewalls and installed double membrane seals
  Tinted Transparent Door
  Multiple Enclosure Combination Option
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Material Temperature Range:** Polystyrene
  -40˚C to 70˚C (-40˚F to 158˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Color:** Light Gray
- **Included Accessories:** (4) DIN Rails, 2x27 Pole Ground/Neutral Terminal Strip, Cable Shield, Filler Strips, (4) Label Strips, Accessory Case, (15) M20 Double Membrane Seals, (2) M25 Double Membrane Seals, (1) M32 Double Membrane Seals, (1) M40 Entry Spout
- **Accessories:** See section below



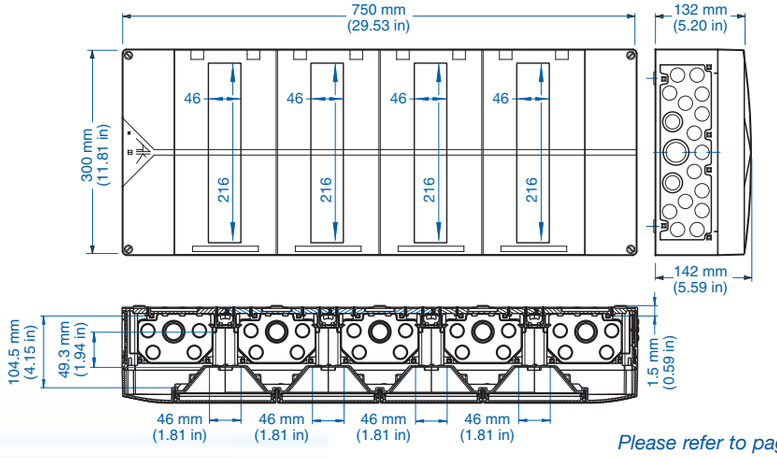
AK 56

Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Polystyrene						
Enclosure	735-456	AK56	750 mm (29.53 in)	300 mm (11.81 in)	142 mm (5.59 in)	1
Polycarbonate						
Enclosure	736-456	AKi56	750 mm (29.53 in)	300 mm (11.81 in)	142 mm (5.59 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Key Lock	706-102	KL2	1
Mounting Plate – 240 x 112 mm	795-001	MPI 1	1
Mounting Plate – 240 x 240 mm	795-002	MPI 2	1
Mounting Plate – 240 x 390 mm	795-003	MPI 3	1
Mounting Plate – 240 x 540 mm	795-004	MPI 4	1
DIN Rail - 216 mm Surface Mounted	795-030	NS35-216/3	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit (metal)	793-004	MT2	1
Filler Strip	799-012	108 mm piece (6 divisions)	1

Please refer to pages 149-152 for additional accessories and detailed information.



Please refer to page 158 for Knockout details.

Standard Features

- **Protection Level:** IP65
- **Technical:** Fits 56 Circuit Breaker Poles (14 per section)
  Knockout Sidewalls and installed double membrane seals
  Tinted Transparent Door
  Multiple Enclosure Combination Option
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Material Temperature Range:** Polystyrene
  -40˚C to 70˚C (-40˚F to 158˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Color:** Light Gray
- **Included Accessories:** (5) DIN Rails, Cable Shield, Filler Strips, (4) Label Strips, (15) M20 Double Membrane Seals, (2) M25 Double Membrane Seals, (1) M32 Double Membrane Seals, (1) M40 Entry Spout
- **Accessories:** See section below



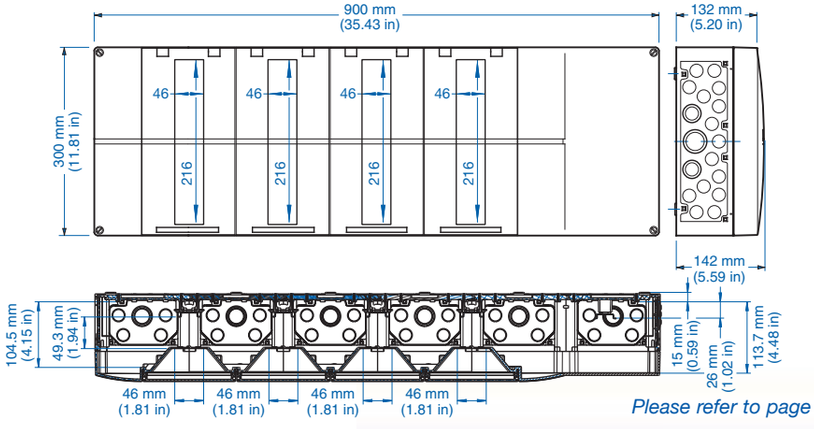
AK 56+1

Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Polystyrene						
Enclosure	737-456	AK56+1	900 mm (35.43 in)	300 mm (11.81 in)	142 mm (5.59 in)	1
Polycarbonate						
Enclosure	738-456	AKi56+1	900 mm (35.43 in)	300 mm (11.81 in)	142 mm (5.59 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Key Lock	706-102	KL2	1
Mounting Plate – 240 x 112 mm	795-001	MPI 1	1
Mounting Plate – 240 x 240 mm	795-002	MPI 2	1
Mounting Plate – 240 x 390 mm	795-003	MPI 3	1
Mounting Plate – 240 x 540 mm	795-004	MPI 4	1
DIN Rail - 216 mm Surface Mounted	795-030	NS35-216/3	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit (metal)	793-004	MT2	1
Filler Strip	799-012	108 mm piece (6 divisions)	1
2x27 Pole Ground/Neutral Terminal Strip (6 screw clamps 2.5-16mm², 21 spring clamps 1.5-4mm² each)	790-327	AK28PE/N-SL	1

Please refer to pages 149-152 for additional accessories and detailed information.



Please refer to page 158 for Knockout details.

AK 70 – Polystyrene and Polycarbonate – 900 x 300 mm (35.43 x 11.81 in.)

Standard Features

- **Protection Level:** IP65
- **Technical:** Fits 70 Circuit Breaker Poles (14 per section)
  Knockout Sidewalls and installed double membrane seals
  Tinted Transparent Door
  Multiple Enclosure Combination Option
- **UL Recognized Enclosure Materials:** Polystyrene or Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Material Temperature Range:** Polystyrene
  -40˚C to 70˚C (-40˚F to 158˚F)
  Polycarbonate
  -40˚C to 120˚C (-40˚F to 248˚F)
- **Color:** Light Gray
- **Included Accessories:** (5) DIN Rails, 2x27 Pole Ground/Neutral Terminal Strip, Cable Shield, Filler Strips, (5) Label Strips, Accessory Case (15) M20 Double Membrane Seals, (2) M25 Double Membrane Seals, (1) M32 Double Membrane Seals, (1) M40 Entry Spout
- **Accessories:** See section below



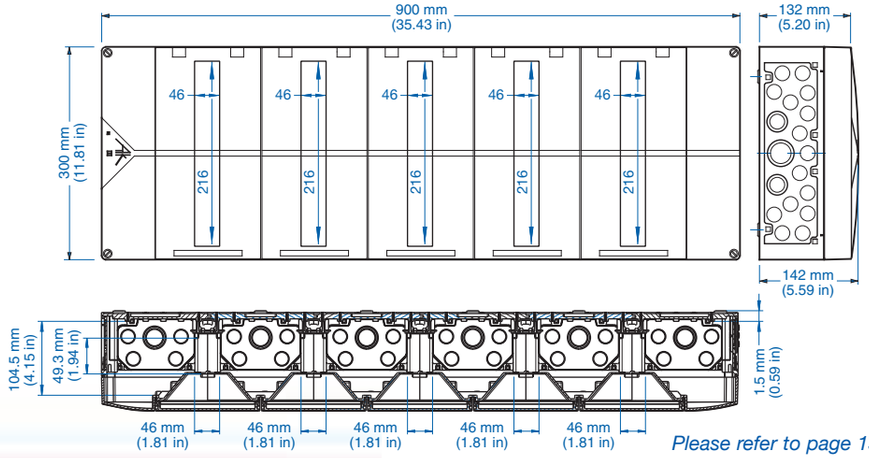
AK 70

Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Polystyrene						
Enclosure	735-470	AK70	900 mm (35.43 in)	300 mm (11.81 in)	142 mm (5.59 in)	1
Polycarbonate						
Enclosure	736-470	AKi70	900 mm (35.43 in)	300 mm (11.81 in)	142 mm (5.59 in)	1

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Key Lock	706-102	KL2	1
Mounting Plate – 240 x 112 mm	795-001	MPI 1	1
Mounting Plate – 240 x 240 mm	795-002	MPI 2	1
Mounting Plate – 240 x 390 mm	795-003	MPI 3	1
Mounting Plate – 240 x 540 mm	795-004	MPI 4	1
DIN Rail - 216 mm Surface Mounted	795-030	NS35-216/3	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit (metal)	793-004	MT2	1
Filler Strip	799-012	108 mm piece (6 divisions)	1

Please refer to pages 149-152 for additional accessories and detailed information.



Please refer to page 158 for Knockout details.

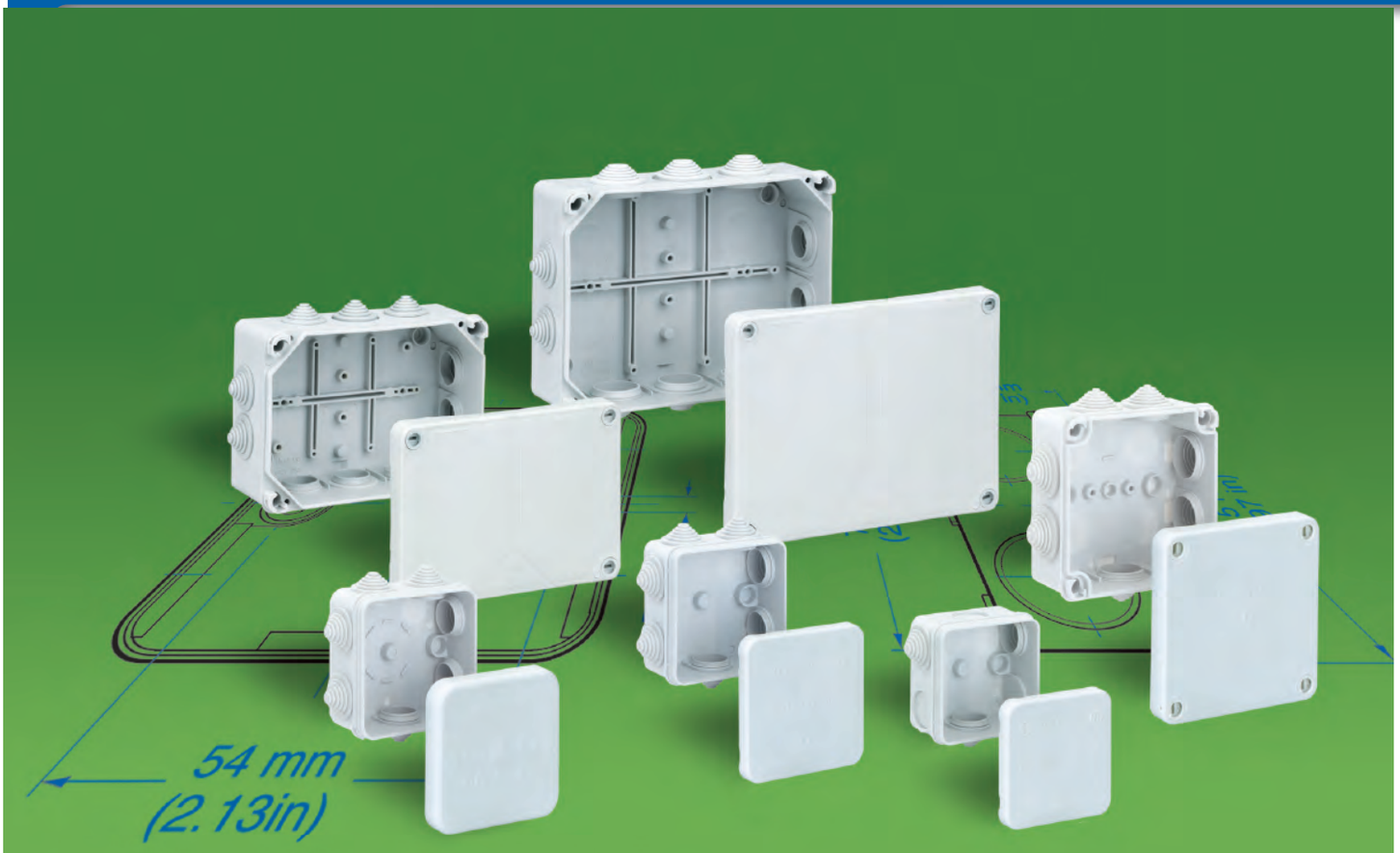
The Q Series Low Voltage Wire Management Solution



Using the Q Series data & signal wiring enclosure is fast and easy. Even if the splicing mess already exists. Simply mount the polypropylene enclosure using its convenient mounting ears with a screw or zip strap. Then press the wires into the Q Series unique retaing slots and snap on the cover and your done.

Available sizes:

Q 12-L – Polypropylene – 85 x 85 x 37 mm (3.35 x 3.35 x 1.46 in.)
Q 12 SB-L – Polypropylene – 85 x 85 x 37 mm (3.35 x 3.35 x 1.46 in.)
Q 4-L – Polypropylene – 56 x 40 x 23 mm (2.20 x 1.57 x 0.91 in.)



HP Series

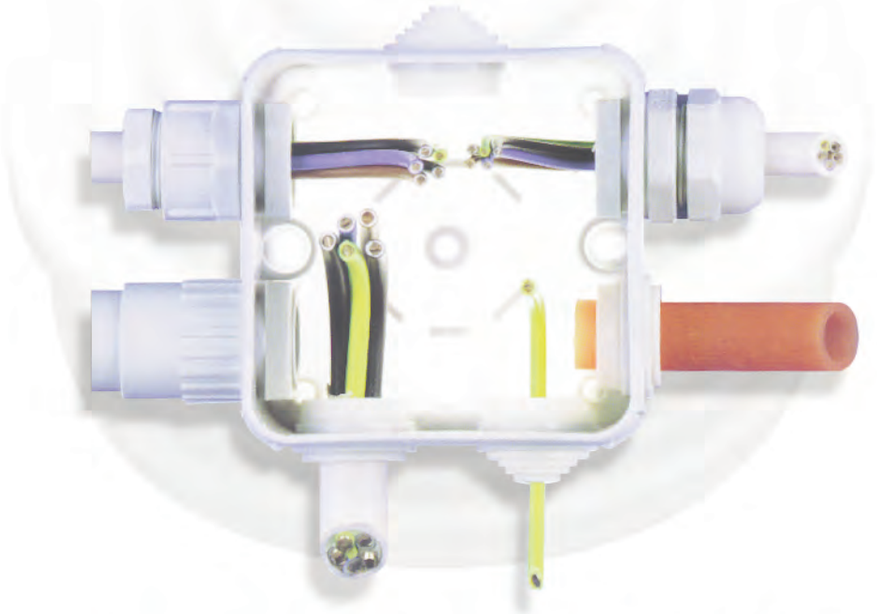
The HP Series are economy junction boxes for lighter duty applications. The HP70, 80 and 90 feature snap on covers, while the HP100, 150 and 190 feature 4 quick release screws. HP Enclosures are supplied with universal entry seals that can be easily cut to create the required wire, cable or conduit adapter opening. These universal entry seals provide protection up to IP55.

The preinstalled entry seals in the HP Series can accommodate a wide variety of connection possibilities. Large or small cable, cable glands, entry spouts and even single wires can be used, while still remaining watertight and dust free. With such versatility, these enclosures are extremely economical.

- Direct mount
- Semi rigid polypropylene
- Dust and splash proof
- Contact labyrinth seal
- Temperature range up to 100°C (212°F)
- IP55 protection
- Universal entry seals
- Standard rear knockouts
- Corrosion and maintenance free
- Non-flammable
- Low halogen
- Drainage possibilities for condensed water by drainage inlets
- Metric inlets on all sides

The HP Function

The preinstalled entry seals in the HP Series can accommodate a wide variety of connection possibilities. Large or small cable, cable glands, entry spouts and even single wires can be used, while still remaining watertight and dust free. With such versatility, these enclosures are extremely economical.







HP 70 – Polypropylene – 75 x 75 mm (2.95 x 2.95 in.)

Standard Features

- **Protection Level:** IP55
- **Technical:** Metric - Inlets
  6 x M20 - Sides
  1 x M16 - Rear
  3 Installed M20 Entry Seals
  (5-16 mm)
  2 Spare Entry Seals
  Snap-on Cover
- **Enclosure Material:** Semi - Rigid Polypropylene
- **Material Temperature Range:** -30˚C to 100˚C (-22˚F to 212˚F)
- **Gasket Material:** None / Contact Labyrinth Seal
- **Color:** Light Gray
- **Accessories:** See section below



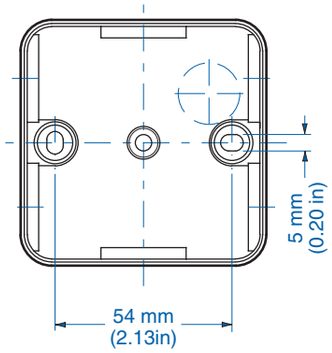
HP

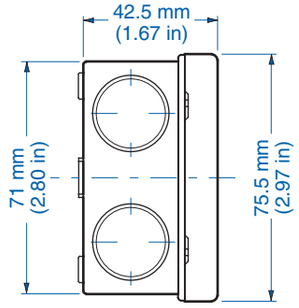
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	320-970	HP70	75 mm (2.95 in)	75 mm (2.95 in)	42 mm (1.65 in)	10

Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Terminal	460-525	2.5mm^2 - 5 pole	10
Universal Entry Seal - M20	216-420	M20	100

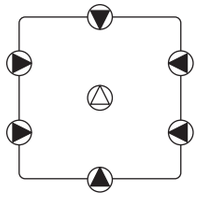
For Liquid Tight Strain Reliefs please refer to catalog pages 150-152.







Knockout Detail



HP 80 – Polypropylene – 85 x 85 mm (3.35 x 3.35 in.)

Standard Features

- **Protection Level:** IP55
- **Technical:** Metric - Inlets
  7 x M20 - Sides
  1 x M16 - Rear
  7 Installed M20 Entry Seals
  (5 - 16mm)
  Snap-on Cover
- **Enclosure Material:** Semi - Rigid Polypropylene
- **Material Temperature Range:** -30˚C to 100˚C (-22˚F to 212˚F)
- **Gasket Material:** None / Contact Labyrinth Seal
- **Color:** Light Gray
- **Accessories:** See section below



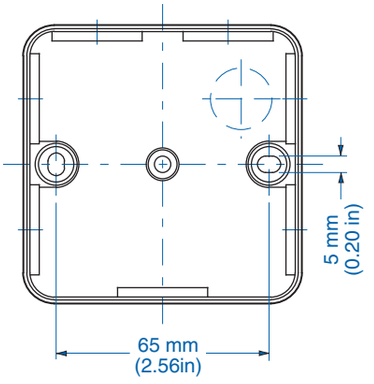
HP

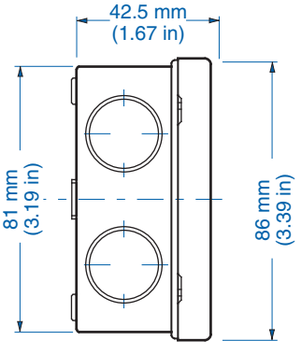
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	322-980	HP80	85 mm (3.35 in)	85 mm (3.35 in)	42 mm (1.65 in)	10

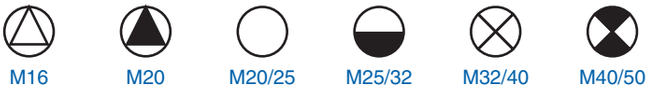
Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Terminal	460-525	2.5mm^2 - 5 pole	10
Universal Entry Seal - M20	216-420	M20	100

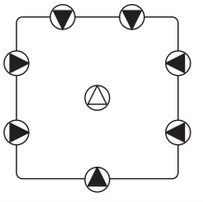
For Liquid Tight Strain Reliefs please refer to catalog pages 150-152.







Knockout Detail



HP 90 – Polypropylene – 90 x 90 mm (3.54 x 3.54 in.)

Standard Features

- **Protection Level:** IP55
- **Technical:** Metric - Inlets
  7 x M20 - Sides
  1 x M16 - Rear
  7 Installed M20 Entry Seals
  (5 - 16mm)
  Snap-on Cover
- **Enclosure Material:** Semi - Rigid Polypropylene
- **Material Temperature Range:** -30˚C to 100˚C (-22˚F to 212˚F)
- **Gasket Material:** None / Contact Labyrinth Seal
- **Color:** Light Gray
- **Accessories:** See section below



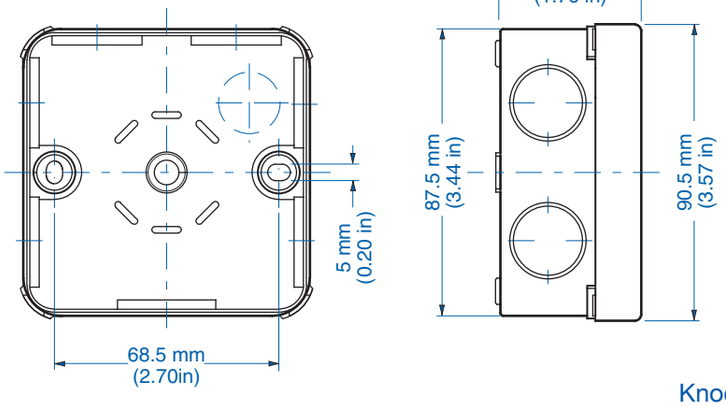
HP

Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	325-990	HP90	90 mm (3.54 in)	90 mm (3.54 in)	45 mm (1.77 in)	10

Accessories

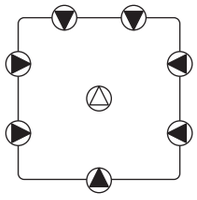
Ordering Information	Cat. No.	Type	Std. Pk.
Terminal	840-004	4mm^2 - 5 pole	10
Universal Entry Seal - M20	216-420	M20	100

For Liquid Tight Strain Reliefs please refer to catalog pages 150-152.





Knockout Detail



HP 100 – Polypropylene – 113 x 113 mm (4.45 x 4.45 in.)

Standard Features

- **Protection Level:** IP55
- **Technical:** Metric - Inlets
  7 x M20/M25 - Sides
  4 x M20 - Rear
  7 Installed M25 Entry Seals
  (5 - 21 mm)
  Quick Close Cover
- **Enclosure Material:** Semi - Rigid Polypropylene
- **Material Temperature Range:** -30˚C to 100˚C (-22˚F to 212˚F)
- **Gasket Material:** None / Contact Labyrinth Seal
- **Color:** Light Gray
- **Accessories:** See section below



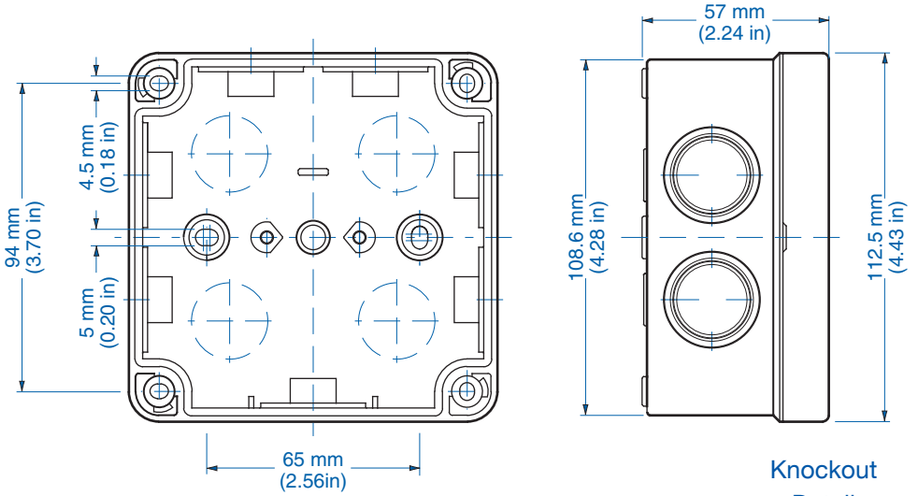
HP

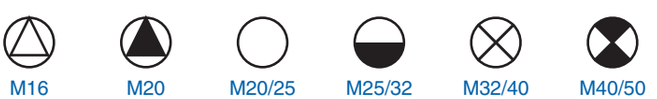
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	326-900	HP100	113 mm (4.45 in)	113 mm (4.45 in)	58 mm (2.28 in)	2

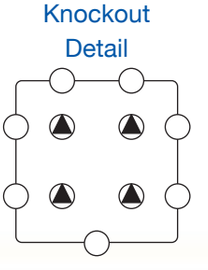
Accessories

Ordering Information	Cat. No.	Type	Std. Pk.
Terminal	840-004	$4mm^2$ - 5 pole	10
Universal Entry Seal - M25	216-425	M25	50

For Liquid Tight Strain Reliefs please refer to catalog pages 150-152.



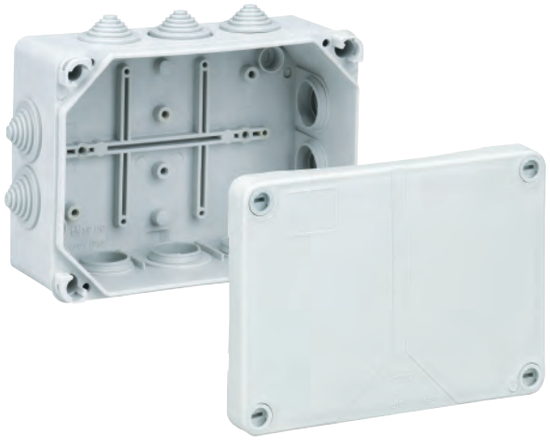




HP 150 – Polypropylene – 164 x 119 mm (6.46 x 4.69 in.)

Standard Features

- **Protection Level:** IP55
- **Technical:** Metric - Inlets
  8 x M25 - Sides
  2 x M32/M25 - Sides
  4 x M20 - Rear
  10 Installed M25 Entry Seals
  (5 - 21 mm)
  Quick Close Cover
- **Enclosure Material:** Semi - Rigid Polypropylene
- **Material Temperature Range:** -30˚C to 100˚C (-22˚F to 212˚F)
- **Gasket Material:** None / Contact Labyrinth Seal
- **Color:** Light Gray
- **Accessories:** See section below



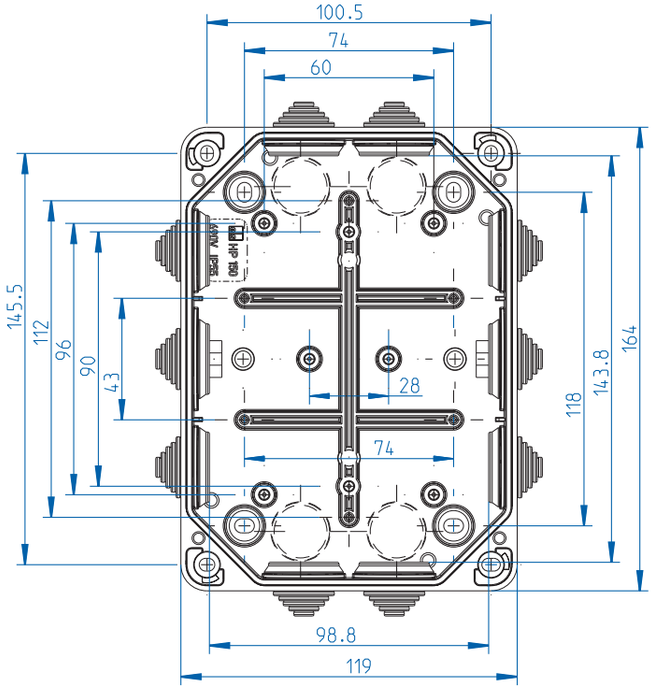
HP

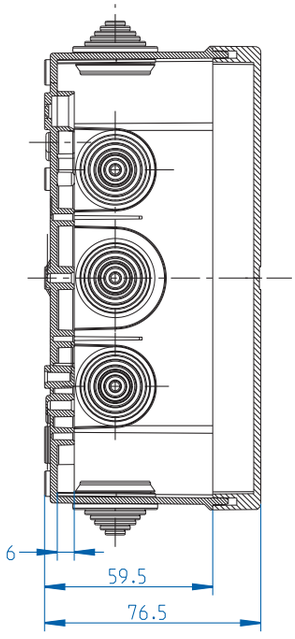
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	326-950	HP150	164 mm (6.46 in)	119 mm (4.69 in)	77 mm (3.03 in)	1

Accessories

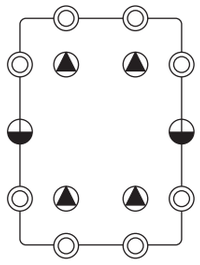
Ordering Information	Cat. No.	Type	Std. Pk.
DIN Rail - TS35 - 106mm	198-106	TS35/106	1
Universal Entry Seal - M25	216-425	M25	50

For Liquid Tight Strain Reliefs please refer to catalog pages 150-152.





Knockout Detail



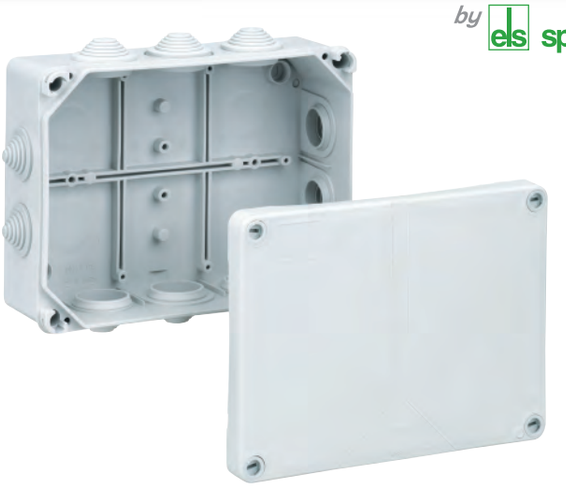


M20 M25 M25/32

HP 190 – Polypropylene – 199 x 149 mm (7.83 x 5.87 in.)

Standard Features

- **Protection Level:** IP55
- **Technical:** Metric - Inlets
  8 x M32 - Sides
  2 x M40/M32 - Sides
  4 x M25 - Rear
  10 Installed M32 Entry Seals
  (13 - 26.5 mm)
  Quick Close Cover
- **Enclosure Material:** Semi - Rigid Polypropylene
- **Material Temperature Range:** -30˚C to 100˚C (-22˚F to 212˚F)
- **Gasket Material:** None / Contact Labyrinth Seal
- **Color:** Light Gray
- **Accessories:** See section below



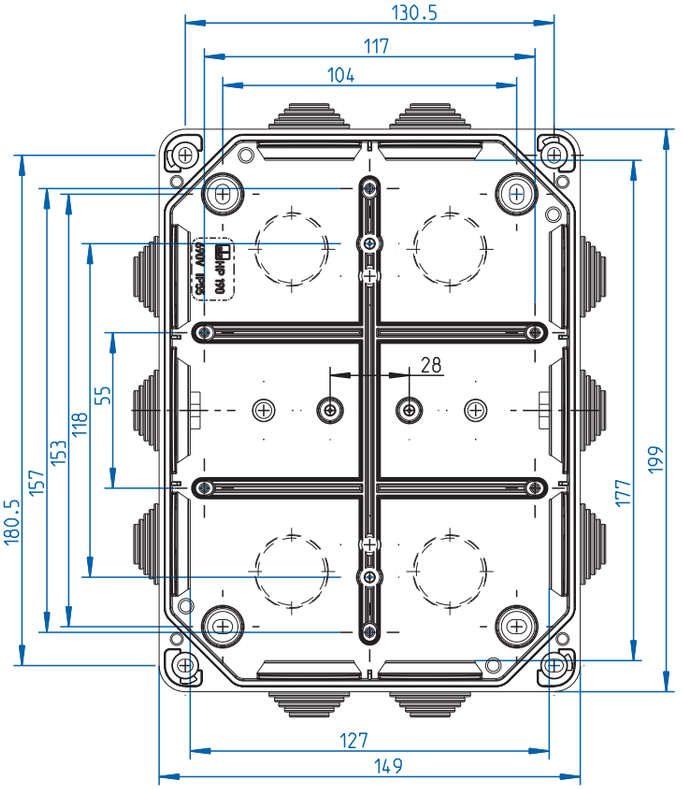
HP

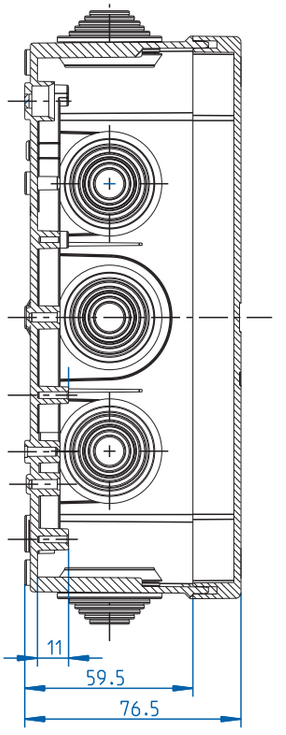
Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
Enclosure	326-990	HP190	199 mm (7.83 in)	149 mm (5.87 in)	70 mm (3.03 in)	1

Accessories

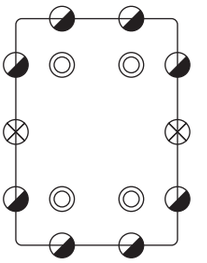
Ordering Information	Cat. No.	Type	Std. Pk.
DIN Rail - TS35 - 144mm	198-144	TS35/144	1
Universal Entry Seal - M32	216-432	M32	25

For Liquid Tight Strain Reliefs please refer to catalog pages 150-152.





Knockout Detail







PB Series - Push Button

The PB Series features modern, rugged enclosures made of glass fiber reinforced Polycarbonate, designed to protect and insulate 22.5 mm push buttons in dusty, corrosive and wet environments. Five different standard enclosures have pre-drilled mounting holes for up to five switches. Custom enclosures are available in different sizes and hole patterns to suit your specific application. Call Altech for further information.

- Universal fit for nearly all 22.5mm dia. push buttons
- Compatible with the EK and TK Enclosure Series
- Customization services available - design and quantity considerations may apply
- Proven technology with modern design
- Black cover screws are standard with all models
- IP66 / Nema 4X
- UV, weather and impact resistant

Standard Features

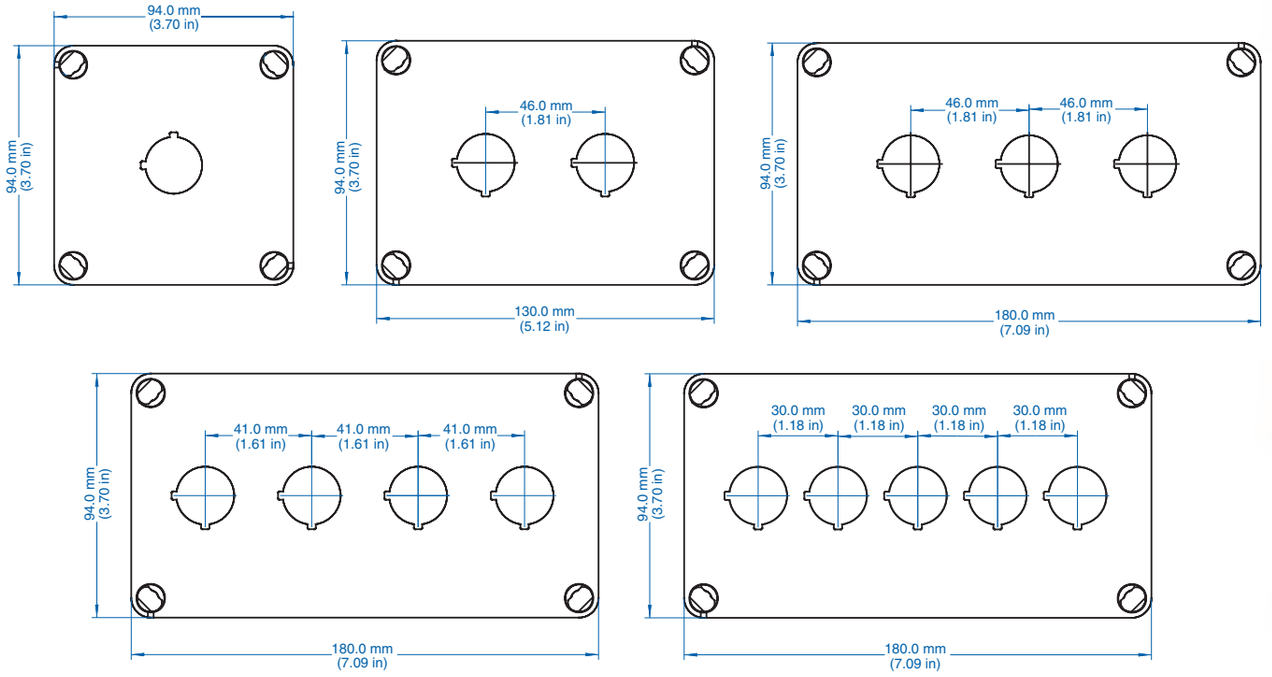
- **Protection Level:** IP66*
- **Technical:** M16/20 Knockout Sidewalls[1]
  22.5 mm Diameter Push Button Holes
- **UL Recognized Enclosure Material:** Polycarbonate
- **Material Temperature Range:** -40˚C to 120˚C (-40˚F to 248˚F)
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Accessories:** See section below

* IP66 when suitable installation devices are used.



PB

Ordering Information	Cat. No.	Type	Dimensions mm (in) Length	Width	Height	Std. Pk.
One Button Enclosure	153-901	PB1-L	94 mm (3.70 in)	94 mm (3.70 in)	81 mm (3.19 in)	1
Two Button Enclosure	153-902	PB2-L	130 mm (5.12 in)	94 mm (3.70 in)	81 mm (3.19 in)	1
Three Button Enclosure	153-903	PB3-L	180 mm (7.09 in)	94 mm (3.70 in)	81 mm (3.19 in)	1
Four Button Enclosure	153-904	PB4-L	180 mm (7.09 in)	94 mm (3.70 in)	81 mm (3.19 in)	1
Five Button Enclosure	153-905	PB5-L	180 mm (7.09 in)	94 mm (3.70 in)	81 mm (3.19 in)	1



[1] Consult Altech for knockout location and quantity.



Accessories

Carefully selected accessories complement the Altech/Spelsberg Enclosure family. A full line, including connectors for wire, cable, or conduit; ground/neutral busbars, mounting plates and hardware, locks, hinge kits, DIN rails, terminal block assemblies and more are available to enhance the overall design capabilities.

Altech/Spelsberg has the right accessories to make your job easier.

- Liquid Tight Strain Relief connectors and connector assemblies
- Mounting plates
- DIN rail support racks
- DIN rails
- Enclosure mounting screws
- Key lock sets
- Hinge kits
- Cover plates
- Combination kits, flange type
- Ground/neutral busbars

Altech by els spelsberg

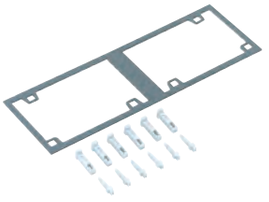


Combination Kits

Used to combine series specific enclosures to make larger units. Connect horizontally or vertically.

Fitting Type Combination Kit
Threaded with locknut seal for connecting sidewalls. Fits standard Metric knockouts. Drilling template included to ensure enclosure ingress integrity.

Type	Wall Thickness For Series	Cat. No.	Std. Pack
CK/M20	2x3 mm	192-020	1
CK/M25	2x3 mm	192-025	1
CK/M32	2x3.5 mm	192-032	1



Pin Type Combination Set
For combining AK and AKL Series Enclosures for 150mm and 300mm sides.

CK/AKII	AK, AKL	791-001	1

Din Rails

DIN rails allow for mounting DIN Terminal Blocks and other control components. All required hardware included.



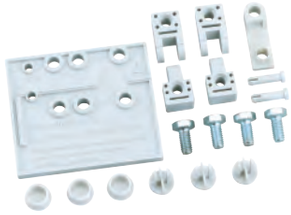
Type	For Series	Cat. No.	Std. Pack
TS15x5 mm / for TK+Abox Series			
TS15/49.5	TK77, 97	197-049	1
TS15/80	TK97, 99	197-080	1
TS15/92	TK1111	197-092	1
TS15/111	TK1309, 1313	197-111	1
TS15/154	TK1809	197-154	1
TS15x5 mm / for TG Series (mounting hardware comes with enclosure)			
TS15/68	TG88	197-069	1
TS15/106	TG1208	197-107	1
TS15/110	TG1212	197-110	1
TS15/146	TG1608, 1612	197-146	1
TS15/186	TG2012	197-186	1
TS15/170	TG2015	197-170	1
TS15/222	TG2516	197-222	1
TS15/285	TG3023	197-285	1
TS35x7.5 mm / for TK+Abox Series			
TS35/81	TK1111, Abox060	198-081	1
TS35/106	TK1309, 1313, Abox100, HP150	198-106	1
TS35/144	TK1809, 1811, 1813, 1818, HP190	198-144	1
TS35/144	Abox160	894-016	1
TS35/216	TK2518	198-216	1
TS35/216	Abox350	894-035	1
TS35/336	TK3625	198-336	1
TS35x7.5 mm / for TG Series (mounting hardware comes with enclosure)			
TS35/68	TG88	198-068	1
TS35/106	TG1208	198-107	1
TS35/110	TG1212	198-110	1
TS35/146	TG1608, 1612	198-146	1
TS35/186	TG2012	198-186	1
TS35/170	TG2015	198-170	1
TS35/222	TG2516	198-222	1
TS35/285	TG3023	198-285	1
TS35x7.5 mm / Special Variants			
CITS35/250	AKII, AKL	562-735	1
NS35/216-3	AKII, AKL, EK12, 24	795-030	1
TS35x7.5 mm / for AL Series			
TS35/110	AL1212	162-009	1
TS35/208	AL2212	162-010	1
TS35/145	AL1616	162-011	1
TS35/245	AL2616	162-012	1
TS35/345	AL3616	162-013	1
TS35/186	AL2023	162-014	1
TS35/266	AL2823	162-015	1
TS35/316	AL3323	162-016	1



Component Mounting Screws

For mounting DIN rails, mounting plates, etc. into molded base holes.
- Select appropriate length
- Self tapping

Type	For Series	Cat. No.	Std. Pack
ST/3.9x9 mm	For	D-409	100
ST/3.9x13 mm	All Plastic	D-413	100
ST/3.9x17 mm	Series	D-417	100
ST/3.9x28 mm		D-428	100



Hinge Kits

Attach the enclosure cover and base together for easy opening and closing of the enclosure. All required hardware and instructions are included.

Type	For Series	Cat. No.	Std. Pack
Small Plastic	HK1	TK77 - 1809, EK002	190-002	1
Large Plastic	HK2	TK1811 - 3625, EK004 - 024, AK, AKL	190-005	1
TG Internal Plastic	TGISS	TGxx12 and TG2015-TG3023	182-001	1
Metal	HK-AL	AL1212 - AL3323	154-210	1



Enclosure Lid Screws

Replacements for existing screws.

Type	For Series	Cat. No.	Std. Pack
Short-Gray	TKLS-SG	TK - low cover, gray	190-010	1
Long-Gray	TKLS-LG	TK - high cover, gray	190-011	1
Short-Black	TKLS-SB	TK - low cover, transparent	190-012	1
Long-Black	TKLS-LB	TK - high cover, transparent	190-013	1
Thumb Screw Caps	TS	TK, EK, AK, AKL	190-001	1



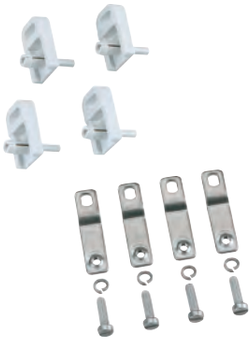
Locksets

Locksets prevent the unauthorized opening of enclosure lids or doors.

KL Locksets with two keys easily install into hinged transparent doors.

Enclosure Padlock and Hinge set with all mounting accessories.

Type	For Series	Cat. No.	Std. Pack
KL2	AK	706-102	1
PL	AK, AKL, TK1811 & up	190-100	1



Mounting Tabs

Enables enclosure to be surface mounted.
1 set = 4 mounting tabs

Type	For Series	Cat. No.	Std. Pack
Plastic	MT1	TK, EK	194-001	1
	TGABL	TG	182-002	1
Metal	MT2	AKL, AK14 and up	793-004	1
	MT-AL1	AL66-3 to AL1010-8	154-004	1
	MT-AL2	AL1212-8 to AL3323-11	154-006	1









Snap In and Threaded Entry Spouts and Vents

Mounting Hole Type	Cable Dia. mm (in.)	Cat. No.	Std. Pack
Snap In Double Membrane Entry Seals			
- Fits and seals removed Pg knockouts	M16	5 - 9 (.20 - .35)	260-416	50
- IP66	M20	7 - 12 (.28 - .47)	260-420	50
- Features two integral sealing membranes	M25	9 - 16 (.35 - .63)	260-425	50
	M32	14 - 21 (.55 - .83)	260-432	25
Universal Snap In Entry Seal			
- IP55	M20	5 - 16 (.20 - .63)	216-420	100
- Polyethelyene	M25	5 - 21 (.20 - .83)	216-425	50
- Cut steps to fit desired cable size	M32	13 - 26.5 (.51 - 1.04)	216-432	25
Snap In Air Vents			
- Allows moisture to escape from the enclosure	M20	N/A	262-420	100
- Labyrinth seal to prevent water formation				
- IPX4				
Threaded Vent - M12x1.5			
- Provides pressure compensation	M12	N/A	262-412	5
- Air permeable and water-tight membrane				
- Reduces condensation formation				
- IP68				

Mounting Plates



TK Series
Complete with screws.
Hole patterns match mounting provisions in enclosure base.

Plastic laminate 2.5 mm (.10 in) thick.
Color: Gray

Steel 2.0 mm (.08 in) thick.



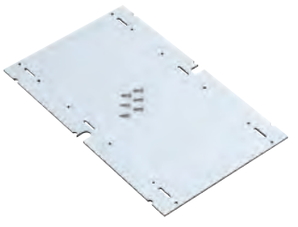
TG Series*
Plastic laminate 2.5 mm (.10 in) thick.
Color: Gray

Steel 2.0 mm (0.08 in) thick.



Abox Series
Plastic laminate
Color: Gray

Aluminum Series
Steel plates for the mounting and installation of large / heavy devices and components.
- For AL Series only

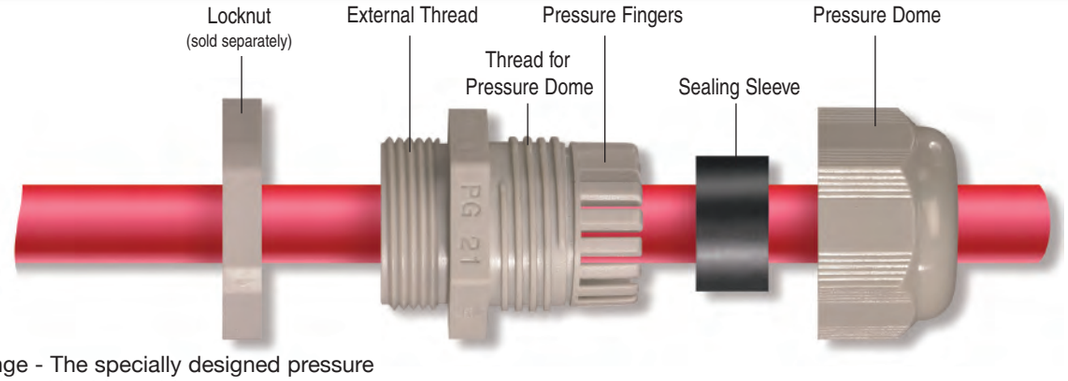


AK Series
Plastic laminate 4 mm (.16 in) thick
Color: Gray

Steel 2.0 mm (0.08 in) thick.

*Mounting hardware included with enclosure.

Type	Enclosure Series	Size mm (in.)	Cat. No.	Std. Pack
TKMPI-55	TK55	46x44 (1.81x1.73)	195-055	5
TKMPI-75	TK75	59x44 (2.32x1.73)	195-075	5
TKMPI-77	TK77	45x45 (1.77x1.77)	195-001	1
TKMPI-97	TK97	74x45 (2.91x1.77)	195-002	1
TKMPI-99	TK99	74x74 (2.91x2.91)	195-003	1
TKMPI-1111	TK1111	90x90 (3.54x3.54)	195-004	1
TKMPI-1309	TK1309	110x74 (4.33x2.91)	195-009	1
TKMPI-1313	TK1313	110x110 (4.33x4.33)	195-005	1
TKMPI-1809	TK1809	160x74 (6.30x2.91)	195-010	1
TKMPI-1811	TK1811	150x90 (5.91x3.54)	195-006	1
TKMPI-1813	TK1813	146x100 (5.75x3.94)	195-011	1
TKMPI-1818	TK1818	150x150 (5.91x5.91)	195-007	1
TKMPI-2518	TK2518	220x150 (8.66x5.91)	195-008	1
TKMPI-3625	TK3625	331x220 (13.03x8.66)	195-012	1
TKMPS-77	TK77	45x45 (1.77x1.77)	197-001	1
TKMPS-97	TK97	75x45 (2.95x1.77)	197-002	1
TKMPS-99	TK99	74x74 (2.91x2.91)	197-003	1
TKMPS-1111	TK1111	90x90 (3.54x3.54)	197-004	1
TKMPS-1309	TK1309	110x74 (4.33x2.91)	197-009	1
TKMPS-1313	TK1313	110x110 (4.33x4.33)	197-005	1
TKMPS-1809	TK1809	160x74 (6.30x2.91)	197-010	1
TKMPS-1811	TK1811	150x90 (5.91x3.54)	197-006	1
TKMPS-1813	TK1813	146x100 (5.75x3.94)	197-011	1
TKMPS-1818	TK1818	150x150 (5.91x5.91)	197-007	1
TKMPS-2518	TK2518	220x150 (8.66x5.91)	197-008	1
TKMPS-3625	TK3625	331x220 (13.03x8.66)	197-012	1
TGMPI-88	TG88	73x73 (2.87x2.87)	186-003	1
TGMPI-1208	TG1208	91X73 (3.58X2.87)	186-004	1
TGMPI-1212	TG1212	113x93 (4.45x3.58)	186-005	1
TGMPI-1608	TG1608	131x73 (5.16x2.87)	186-006	1
TGMPI-1612	TG1612	131x113 (5.16x4.45)	186-007	1
TGMPI-2012	TG2012	171x113 (6.73x4.45)	186-008	1
TGMPI-2015	TG2015	171x143 (6.73x5.63)	186-009	1
TGMPI-2516	TG2516	220x152 (8.66x5.98)	186-012	1
TGMPI-3023	TG3023	270x220 (10.63x5.98)	186-013	1
TGMPS-88	TG88	73x73 (2.87x2.87)	187-003	1
TGMPS-1208	TG1208	91X73 (3.58X2.87)	187-004	1
TGMPS-1212	TG1212	113x93 (4.45x3.58)	187-005	1
TGMPS-1608	TG1608	131x73 (5.16x2.87)	187-006	1
TGMPS-1612	TG1612	131x113 (5.16x4.45)	187-007	1
TGMPS-2012	TG2012	171x113 (6.73x4.45)	187-008	1
TGMPS-2015	TG2015	171x143 (6.73x5.63)	187-009	1
TGMPS-2516	TG2516	220x152 (8.66x5.98)	187-012	1
TGMPS-3023	TG3023	270x220 (10.63x5.98)	187-013	1
MP060	Abox060	83x83 (3.27x3.27)	895-006	1
MP100	Abox100	109x109 (4.29x4.29)	895-010	1
MP160	Abox160	149x149 (5.87x5.87)	895-016	1
MP350	Abox350	217x217 (8.54x8.54)	895-035	1
ALMPS-88	AL88	68.8x64 (2.71x2.52)	155-005	1
ALMPS-1308	AL1308	114x68.8 (4.49x2.71)	155-006	1
ALMPS-1808	AL1808	164x68.8 (6.46x2.71)	155-007	1
ALMPS-1010	AL1010	88x88 (3.46x3.46)	155-008	1
ALMPS-1212	AL1212	109x107 (4.29x4.21)	155-009	1
ALMPS-2212	AL2212	207x107 (8.15x4.21)	155-010	1
ALMPS-1616	AL1616	145x143 (5.71x5.63)	155-011	1
ALMPS-2616	AL2616	245x143 (9.65x5.63)	155-012	1
ALMPS-3616	AL3616	345x143 (13.6x5.63)	155-013	1
ALMPS-2023	AL2023	214x184 (8.43x7.24)	155-014	1
ALMPS-2823	AL2823	264x214 (10.4x8.43)	155-015	1
ALMPS-3323	AL3323	314x214 (12.4x8.43)	155-016	1
AKMPI 1	AK, AKL	240x112 (9.45x4.41)	795-001	1
AKMPI 2	AK, AKL	240x240 (9.45x9.45)	795-002	1
AKMPI 3	AK, AKL	240x390 (9.45x15.35)	795-003	1
AKMPI 4	AK, AKL	240x540 (9.45x21.26)	795-004	1
AKMPS 2	AK, AKL	240x240 (9.45x9.45)	795-012	1
AKMPS 3	AK, AKL	240x390 (9.45x15.35)	795-013	1
AKMPS 4	AK, AKL	240x540 (9.45x21.26)	795-014	1

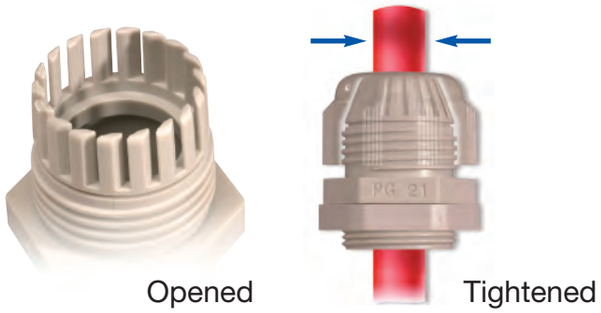


- Increased Cable Range - The specially designed pressure fingers allow for up to 60% wider cable range.
- IP68 achieved without seal rings - The redesigned integral sealing ridge obtains an IP68 protection rating without the use of seal rings.

Material:
- Body: Polyamide 6
- Seal: Neoprene

Technical properties:
- Maximum strain relief through clamping range
- IP68 achieved without seal rings (PG and metric only)
- Trapezoidal thread with high torque guarantees tight and permanent fit of the dome nut
- Gas- and watertight

Applications:
- Machines and devices

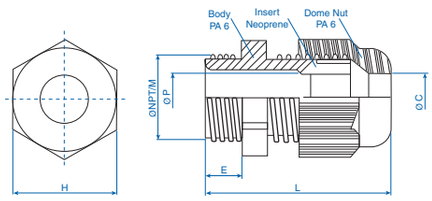


Opened Tightened

Cable Gland, Polyamide, Metric Thread

Thread	Cable Range mm	Cat. No. Light grey	Cat. No. Black	Std. Pk.
M 12 x 1.5	1.5-5	5309612	5309712	100
M 12 x 1.5	2.5-6.5	5308950	5308940	100
M 16 x 1.5/9	1.5-6	5309615	5309715	50
M 16 x 1.5/11	2-7	5309616	5309716	50
M 16 x 1.5/9	2.5-8	5308958	5308948	50
M 16 x 1.5/11	3.5-10	5308951	5308941	50
M 20 x 1.5/13	3-9	5309619	5309719	50
M 20 x 1.5/16	5-12	5309620	5309720	50
M 20 x 1.5/13	5-12	5308959	5308949	50
M 20 x 1.5/16	7-14	5308952	5308942	50
M 25 x 1.5/16	5-12	5309624	5309724	50
M 25 x 1.5/21	7-16	5309625	5309725	25
M 25 x 1.5/16	7-14	5308960	5308962	50
M 25 x 1.5/21	9-18	5308953	5308943	25
M 32 x 1.5	11-21	5309632	5309732	20
M 32 x 1.5	14-25	5308954	5308944	20
M 40 x 1.5	13-26	5309640	5309740	10
M 40 x 1.5	18-32	5308955	5308945	10
M 50 x 1.5	17-31	5309650	5309750	5
M 50 x 1.5	24-38.5	5308956	5308946	5
M 63 x 1.5	26-39	5309663	5309763	5
M 63 x 1.5	35-48	5308957	5308947	5

Temperature Range	
PA6	Neoprene
-25 to 100°C (-13 to 212°F)	-25 to 100°C (-13 to 212°F)



Dimensions

Thread Size	H mm	E mm	L mm	ØC mm	ØP mm	ØThread mm
M12x1.5	15	8	32	6.7	6.8	12.0
M16x1.5/9	19	10	37	8.5	8.5	16.0
M16x1.5/11	22	10	39	10.5	10.5	16.0
M20x1.5/13	24	10	40	12.5	12.5	20.0
M20x1.5/16	27	10	43	14.5	14.5	20.0
M25x1.5/16	27	10	45	14.5	14.5	25.0
M25x1.5/21	33	10	49	18.5	18.5	25.0
M32x1.5	42	10	52	25.5	25.5	32.0
M40x1.5	53	10	62	32.5	32.5	40.0
M50x1.5	60	12	67	39.0	39.0	50.0
M63x1.5	70	12	68	48.5	48.5	63.0

Lock Nuts, Polyamide, Metric Thread

Material:
- Polyamide 6
- 25 % Glass fiber Reinforced

Thread	Thickness (E) mm	SW mm	Cat. No. Light grey	Cat. No. Black	Std. Pk.
Metric					
M 12 x 1.5	5	19	7211979	7211974	50
M 16 x 1.5	5	22	7211980	7211975	50
M 20 x 1.5	5	24	7211981	7211976	50
M 25 x 1.5	6	30	7211982	7211977	50
M 32 x 1.5	7.5	38	7211983	7211978	50
M 40 x 1.5	8	50	7211984	7211990	20
M 50 x 1.5	9	60	7211985	7211991	10
M 63 x 1.5	10	75	7211986	7211992	5

Temperature Range PA
-30 to 120°C (-22 to 248°F)

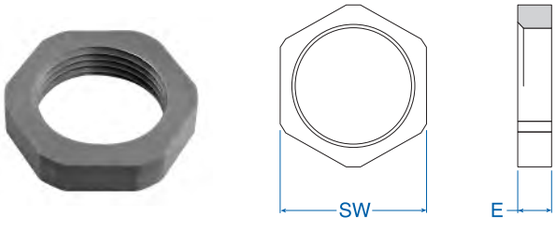


CHART I International Protection (IP) Ratings to IEC 529

Protection Modes to EN 60529 DIN VDE 0470 Part 1			Second Digit – Degree of Water Protection								
First Digit	Person touching	Protection against penetration of foreign bodies	IP X0 No Protection	IP X1 Protection against dripping water falling vertically	IP X2 Protection against dripping water even when tilted 15° vertically	IP X3 Protection against dripping water even when tilted 60°	IP X4 Protection against splashing water from any direction	IP X5 Protection against water jets from any direction	IP X6 Protection against heavy seas from any direction	IP X7 Protection against effects of immersion	IP X8 Protection against submersion
IP 0X	No protection	No protection	IP 00								
IP 1X	Protection against touching with the hand	Protection against large solid bodies > 50mm Ø	IP 10	IP 11	IP 12						
IP 2X	Protection against touching with the finger	Protect. against med., solid bodies > 12.5 mm Ø	IP 20	IP 21	IP 22	IP 23					
IP 3X	Protection against touching with tools, wires, etc., > 2.5 mm Ø	Protection against small, solid bodies > 2.5 mm Ø	IP 30	IP 31	IP 32	IP 33	IP 34				
IP 4X	Protection against touching with tools, wires, etc., > 1 mm Ø	Protection against small, solid bodies > 1 mm Ø	IP 40	IP 41	IP 42	IP 43	IP 44				
IP 5X	Protection against touching with tools, wires, etc., > 1 mm Ø	Protection against internal dust accumulation	IP 50				IP 54	IP 55			
IP 6X	Protection against touching with tools, wires, etc., > 1 mm Ø	Protection against all dust penetration	IP 60					IP 65	IP 66	IP 67	IP 68

In some countries a third digit is added. It gives information about the mechanical properties of the equipment.
This designation has not yet been standardized according to current DIN and IEC regulations.
Devices in this catalogue correspond to digit IP .7.

CHART II NEMA / IP Cross Reference

The chart below provides a cross-reference from NEMA to International Protection (IP) Ratings. This cross-reference is an approximation based on the most current information available. It is not sanctioned by NEMA, IEC, or any other regulatory body. This chart should be used only as a guideline.

IEC 529 Protection Ratings	NEMA Ratings									
	1	2	3	3R	4	4X	5	6	12	13
IP 00	↓									
IP 10		↓								
IP 11										
IP 20										
IP 21										
IP 22										
IP 23										
IP 30										
IP 31										
IP 32				↓						
IP 33										
IP 40										
IP 41										
IP 42										
IP 43										
IP 50							↓			
IP 51										
IP 52										
IP 53										
IP 54										↓
IP 55										
IP 56										
IP 60										
IP 61										
IP 62			↓							
IP 63										
IP 64										
IP 65					↓	↓				
IP 66										
IP 67								↓	↓	
IP 68										

Properties of used Materials

Material	Product	Temperature Resistance			Temperature Range to Maintain IP Rating	Flammability Rating acc. to DIN EN 60695	
		Short-Term	Constant	Min. Temp.		UL 94	VDE 0471
Polystyrene, flame resistant, impact resistant	TK//AK/AKL and Abox series	80° C 176° F	70° C 158° F	-40° C -40° F	-35 – 40° C -31 – 104° F	HB	650° C 1202° F
Polycarbonate, glass fiber reinforced, flame-impact resistant	TK/TG/AK-i/AKL/EK and Abox-i series	130° C 266° F	120° C 248° F	-40° C -40° F	-35 – 80° C -31 – 176° F	V - 2 (5V)[1]	960° C 1706° F
Polycarbonate, transparent	TK/TG/EK/AK/AKL hinged door and transparent lid	130° C 266° F	120° C 248° F	-40° C -40° F	-35 – 80° C -31 – 176° F	V - 2 (5V)[1]	850° C 1562° F
ABS, flame resistant, impact resistant	TG Series	90° C 194° F	80° C 176° F	-40° C -40° F	-35 – 40° C -31 – 104° F	HB	650° C 1202° F
Thermoplastic Elastomer	Membrane plugs, membranes Abox 025/040	110° C 230° F	80° C 176° F	-30° C -22° F	NA	HB	750° C 1382° F
Polyethylene, flame resistant	Entry Spouts	100° C 212° F	70° C 158° F	-40° C -40° F	NA	HB	650° C 1202° F
Aluminum Al 12Si	AL series	130° C 266° F	100° C 212° F	-40° C -40° F	-35 – 75° C -31 – 167° F	–	–
Polypropylene, flame resistant	HP series	120° C 248° F	100° C 212° F	-30° C -22° F	-25 – 40° C -13 – 104° F	V - 2	960° C 1760° F

All data given according to specifications of manufacturers; no guarantee from Altech/Spelsberg can be claimed.
[1]Approved for TK and TG enclosures.

Maximum permissible number of terminals and conductors to DIN 57606/VDE 0606

The table below indicates the numbers of terminals and conductors which can be used in the respective Altech/Spelsberg junction box:

Box Size Rated Cross-Section mm²	Minimum Box Volume cm³	Applies to Altech/Spelsberg Box Models	Number of Terminals and Conductors	Conductor cross section mm²					
				1.5	2.5	4	6	10	16
2.5 mm2	115 cm3	HP 70/80 Abox 025	Terminal Conductor	6 20	5 15				
4 mm2	200 cm3	HP 90 Abox 040	Terminal Conductor	8 24	6 20	5 15			
6 mm2	300 cm3	HP 100 Abox 060	Terminal Conductor	10 30	8 24	6 20	5 15		
10 mm2	500 cm3	Abox 100	Terminal Conductor	12 36	10 30	8 24	6 20	5 15	
16 mm2	825 cm3	Abox 160	Terminal Conductor	18 54	15 45	12 36	8 24	6 20	5 15

Chemical Resistance Materials

Material	Product	water	weak acid	strong acid	weak alkali	strong alkali	alcohol	petrol	benzene	mineral oil	diesel	vegetable fat	animal fat	Ammonia
Polystyrene, flame resistant, impact resistant	TK/AK/AKL and Abox series	●	●	◒	●	●	●	⊗	⊗	◒	⊗	◒	◒	●
ABS	TG ABS	●	●	◒	●	●	●	⊗	⊗	●	●	◒	◒	⊗
Polycarbonate, glass fiber reinforced, flame-, impact resistant	TK/AK-i/AKL/EK and Abox-i series	●	●	●	⊗	⊗	●	●	⊗	●	◒	●	●	⊗
Polycarbonate	TG PC	●	●	●	⊗	⊗	●	●	⊗	●	◒	●	●	⊗
Polycarbonate, transparent	TK/EK/AK/AKL/TG hinged door and transparent lid	●	●	●	⊗	⊗	◒	◒	⊗	●	◒	●	●	⊗
Thermoplastic Elastomer	Membrane plug, membranes Abox 025/040	●	●	◒	●	◒	●	◒	◒	◒	◒	●	●	◒
Polyethylene, flame resistant	Entry Spouts	●	●	●	●	●	●	◒	⊗	◒	◒	●	●	●
Polyurethane	Lid seals for all models	●	◒	◒	◒	◒	◒	◒	◒	●	◒	●	●	◒
Aluminum Al 12 Si	AL series	●	●	◒	●	●	◒	●	⊗	●	●	◒	◒	●
Polypropylene, flame resistant	HP series	●	●	◒	●	◒	●	◒	◒	●	◒	●	●	●

● = resistant ◒ = limited resistance ⊗ = non-resistant

UV - Resistance

The degree of weather resistance given by the polycarbonate enclosures used is generally adequate. The enclosures have been tested under practical conditions in tropical regions for many years. If transparent lids are used, it is recommended to protect them against the direct effects of sun radiation.

The American UL testing laboratories have approved several types of the PC series. A part of this examination is the test for UV resistance (UL 746 C).

The weather proof test according to DIN 53 387 / 1000 hours was conducted at the "National Materials Testing Authority" in Dortmund.

Materials tested:	Polycarbonate, 15% GV, gray
	Polycarbonate, transparent
	Polycarbonate, tinted
	Polypropylene, gray

Approval through «Bureau Veritas»

The following program series have been approved (Nr. 2661/2869/BO/OD) and are consequently suitable for installation in ships and shipyards:

- EK- Series distribution boards
- TK- Series empty enclosures

Polyurethane - sealing material

All enclosure types utilize a seal composed of a dual-component, specialty mixture. The seals are halogen-free, chemically resistant and especially temperature resistant. The seals are inserted by robots, are exactly evenly distributed, and have a solid grip on the upper section of the enclosure. Consequently, a secure and safe respect reliable function of the seals is guaranteed.

Protection against condensation

The more tightly sealed the equipment, for example junction boxes or distributor housings, the greater the likelihood of condensation forming. This is especially the case at locations where highly fluctuating temperatures are to be expected. These effects are intensified by the power loss generated in the enclosures.

Owing to the differences in temperature, a difference also arises in the pressure conditions, which causes the enclosure to draw in air when the temperature changes. The next time the temperature increases, the humidity in this air condenses on the cold surface of the housing, for example on the lid. This process is only reversible to a limited extent, so the water collects in the housing.

Since this effect occurs regularly, even daily to an extent, a considerable volume of water may collect internally. If this housing has an increased protection rating, it no longer discharges this water.

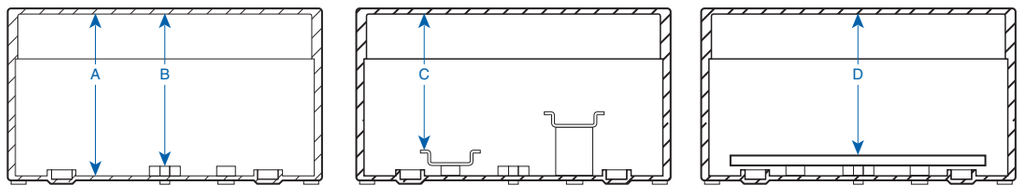
Precautions must be taken with respect to drainage of water if water collects or condensation can occur. We recommend the use of ventilation seals. (see page 150)

Protection against rain / snow (precipitation)

The protection rating tests carried out under DIN EN 60529 and UL 746 C are used as comparative tests and for classification of properties. The tests are limited to a few minutes and cannot emulate frequent exposure to rain / snow or cleaning with water jets. In addition, the local conditions may differ so greatly that a general exposure test cannot be defined.

Installations should be done in protected outdoor areas so that damage cannot be caused by condensation or ingress of water.

Clearance Installation Heights for Spelsberg Enclosures



A) from base bottom
B) from standoffs in base

C) from top of mounting rail NS 35 (mounted on base standoffs)

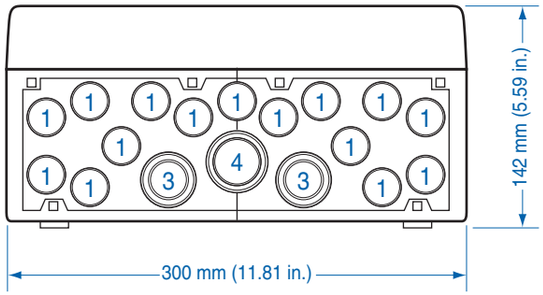
D) from top of plastic mounting plate

[all dimensions in mm (in)]

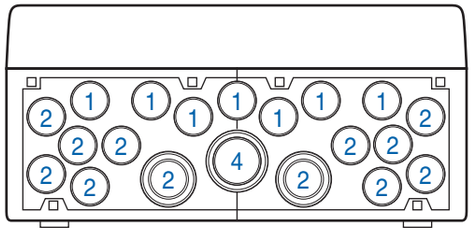
Series	A	B	C	D
HP- Series				
HP 70/80	38.5 (1.52)	31.5 (1.24)		
HP 90	40 (1.57)	33 (1.30)		
HP 100	52.5 (2.07)	46.5 (1.83)		
Abox/Abox-i - Junction boxes				
Abox/Abox-i 025	42 (1.65)	36 (1.42)		
Abox/Abox-i 040	45 (1.77)	39 (1.54)	34 [TS 15] (1.34)	
Abox/Abox-i 060	49 (1.93)	49 (1.93)	41.5 (1.63)	38.5 (1.52)
Abox/Abox-i 100	60 (2.36)	60 (2.36)	52.5 (2.07)	49.5 (1.95)
Abox/Abox-i 160	71 (2.80)	71 (2.80)	63.5 (2.50)	60.5 (2.38)
Abox/Abox-i 350	92 (3.62)	92 (3.62)	84.5 (3.33)	81.5 (3.21)
AK/AKi - Distribution Boxes				
AK/AKi03	85 (3.35)	79 (3.11)	71.5 (2.81)	
AK/AKi05 to 24	111 (4.37)	105 (4.13)	98.5 (3.88)	
AK/AKi14 to 70	117.5 (4.63)	114 (4.49)	96 (3.78)	
AKL/AKi - Enclosures				
AKL/AKi 1 to 4	117.5 (4.63)	114 (4.49)	106.5 (4.19)	110 (4.33)
AKL/AKi 2-h to 4-h	194.5 (7.66)	191 (7.52)	183.5 (7.22)	187 (7.36)
EK- Distribution boxes				
EK 002	69 (2.76)	69 (2.76)	63.5 (2.50)	
EK 004/008/012/024	103 (4.06)	97 (3.82)	89.5 (3.52)	
TK- Enclosures - low cover				
TK 77/97/99/1309/1809	45 (1.77)	45 (1.77)	40 [TS 15] (1.57)	36 (1.42)
TK 1111	53 (2.09)	53 (2.09)	45.5 (1.79)	44 (1.73)
TK 1313	63 (2.48)	63 (2.48)	55.5 (2.19)	54 (2.13)
TK 1811f/1813f/1818f/2518f	55 (2.17)	48 (1.89)	40.5 (1.59)	45 (1.77)
TK 1811/1813/1818/2518	81 (3.19)	75 (2.95)	67.5 (2.66)	72 (2.83)
TK 3625	103 (4.06)	97 (3.82)	89.5 (3.41)	94 (3.70)
TK- Enclosures - high cover				
TK 77/97/99/1309/1809	69 (2.72)	69 (2.72)	64.0 [TS 15] (2.52)	60 (2.36)
TK 1111	77 (3.03)	77 (3.03)	69.5 (2.74)	68 (2.68)
TK 1313	87 (3.43)	87 (3.43)	79.5 (3.13)	78 (3.07)
TK 1811f/1813f/1818f/2518f	76 (2.99)	69 (2.72)	61.5 (2.42)	66 (2.60)
TK 1811/1813/1818/2518	103 (4.06)	97 (3.82)	89.5 (3.52)	94 (3.70)
TK 3625	156 (6.14)	150 (5.90)	142.5 (5.61)	147 (5.79)
TK- Enclosures - extra high cover				
TK 1811f/1813f/1818f/2518f	130 (5.12)	123 (4.84)	115.5 (4.55)	120 (4.72)
TK 1811/1818/2518 – 16	156 (6.14)	150 (5.90)	142.5 (5.61)	147.5 (5.81)
TG - Enclosures				
TG88/1208/1212/1608-6	46.7 (1.84)	39.7 (1.56)	32 (1.26)	37 (1.46)
TG88/1208/1212/1608-9	76.7 (3.02)	69.7 (2.74)	62 (2.44)	67 (2.64)
TG1612/2012/2516/3023-9	81.7 (3.22)	74.7 (2.94)	67 (2.64)	72 (2.83)
TG2012/2015-8	66.7 (2.63)	59.7 (2.35)	52 (2.05)	57 (2.24)
TG2516-12	111.7 (4.40)	104.7 (4.12)	97 (3.82)	102 (4.02)
TG3023-11	101.7 (4.00)	94.7 (3.73)	87 (3.43)	92 (3.62)

AK and AKL Knockout Details

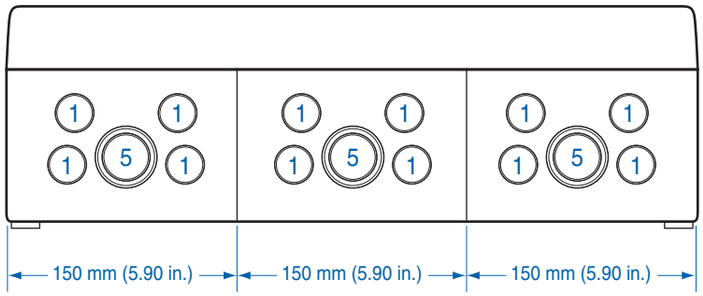
End View
AK - Bottom Only
AKL - Top and Bottom



End View
AK - Top Only



Side View
AK
AKL



(1) = M20 (Knockout)
(2) = M20 (Installed Double Membrane Seal)
(3) = M20/M25 (Knockout)
(4) = M32/M40 (Knockout)
(5) = M25/M32 (Knockout)

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STANDARD TERMS AND CONDITIONS OF SALE

TITLE - Title to the products of ALTECH shall remain with ALTECH until payment is made in full by Customer. Such reservation of title is for the purpose of securing the purchase price and shall not relieve Customer of the duty to inspect the products upon receipt, to notify ALTECH of any deficiencies or defects, and to exercise due care in the use, installation, operation, and maintenance of the products when on the premise of the Customer or under the control of the Customer. Notwithstanding any reservation of title by ALTECH, risk of loss shall pass to customer at any time of shipment.

SHIPMENT AND DELIVERY - All orders for destination in the mainland United States (less Hawaii, Alaska and non-continental United States possessions) will be shipped F.O.B. Flemington, N.J. All destination, shipping and other charges shall be paid by the Customer in accordance with ALTECH's then current shipping and billing practices.

Delivery dates given in the acceptance of any order are approximate. ALTECH shall not be liable for delays in delivery or in performance due to causes beyond its reasonable control including acts of God, acts of Customer, acts of civil or military authority, fires, strikes or other labor disturbances, war, riot or delays in transportation. In the event of such delay, the date of delivery or performance shall be extended for a period equal to the time lost by reason of the delay.

PRICE - PRICES in any ALTECH publication are subject to change without prior notification. Catalog prices are based on prices published in the current price list. All written quotations are valid for thirty (30) days from the date of quotation. Customer shall pay all sales, use, excise or similar taxes whenever ALTECH must itself pay and/or collect such tax from Customer arising out of the sale.

PAYMENT - Customer agrees to make payment within thirty (30) days of date of the invoice from ALTECH. Customer agrees to pay a late payment charge of one and one-half percent (1.5% per month, or the maximum late payment charge permitted by applicable law, whichever is less, on any unpaid amount for each calendar month (or fraction thereof) that such payment is in default. Orders amounting to less than $100.00 will be billed at $100.00 plus freight. Full carton purchases are required. In the event of referral to an attorney for collection, reasonable attorney's fees for collection of the overdue amount shall be paid by Customer. In the event payment is not received within 30 days from the date of invoice, any discount shall be cancelled and the full list price will be due.

LIMITED WARRANTY - ALTECH warrants to Customer that the equipment purchases shall be free from defects in material and workmanship under normal use and service for a period of one year from shipment.

Written notice as an explanation of the circumstances of any claim that the equipment has proved defective in material or workmanship shall be given promptly by the Customer to ALTECH.

ALTECH will not be liable for any misuse, improper operations, improper installation, improper maintenance, alteration, modification, accident or unusual degradation of the equipment or parts due to an unsuitable installation environment.

No representation of other affirmation of facts, including but not limited to statements regarding capacity, suitability for use or performance of the equipment, shall be or be deemed to be a warranty or representation by ALTECH for any purpose, nor give rise to any liability or obligation of ALTECH whatsoever.

Customer's sole and exclusive remedy in the event of breach of warranty, as set forth herein, is expressly limited to (1) the correction of the defect by adjustment, repair, modification, or replacement, or (2) issuance of a credit or refund of the purchase price for the defective equipment at ALTECH's election and sole expense.

EXCEPT AS SPECIFICALLY PROVIDED IN THIS AGREEMENT, THERE ARE NO OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

THIS WARRANTY EXTENDS ONLY TO THE CUSTOMER FROM ALTECH OR ITS AUTHORIZED DISTRIBUTOR.

LIMITATION OF LIABILITY - IN NO EVENT, SHALL ALTECH BE LIABLE FOR LOSS OF PROFITS, INDIRECT, SPECIAL, CONSEQUENTIAL OR OTHER SIMILAR DAMAGES ARISING OUT OF ANY BREACH OF THIS AGREEMENT OR OBLIGATIONS UNDER THE AGREEMENT.

ALTECH SHALL NOT BE LIABLE FOR ANY DAMAGES CAUSED BY DELAY IN SHIPMENT, INSTALLATION OR FURNISHING OF EQUIPMENT OR SERVICES UNDER THIS AGREEMENT.

No action arising out of any claimed breach of this Agreement may be brought by either party more than two (2) years after the cause of action has accrued.

PATENT INDEMNITY - ALTECH shall defend or settle any suit or proceeding brought against Customer based on a claim that any equipment made to ALTECH design and furnished hereunder constitutes an infringement of any existing United States patent, provided (ALTECH) is notified promptly in writing and is given complete authorization and information required for the defense, and ALTECH shall pay all damages and costs awarded against Customer, but shall not be responsible for any costs, expense or compromise incurred or made by Customer without ALTECH's prior written consent. If any equipment is in ALTECH's opinion likely to or does become the subject of a claim for patent infringement, ALTECH may at its option and expense procure for Customer the right to continue using the device, modify it to become non-infringing, but in the event ALTECH is not reasonably able to modify, substitute, or otherwise procure for Customer the right to continue using it, ALTECH will remove such equipment and refund to Customer the amount paid in excess of a reasonable rental for past use.

ALTECH shall not be liable for any infringement or claim based upon use of the equipment in combination with other equipment not supplied by ALTECH or with modifications made by Customer.

The foregoing states the entire liability of ALTECH to Customer arising from patent infringement.

SELLER'S REMEDIES - Should Customer fail to make any payment within ten (10) days of its due date, or fail to perform any other of the Customer's obligation hereunder upon thirty (30) days written notice, or should Customer be or become insolvent or be a party to any bankruptcy receivership proceeding prior to full payment of all amounts payable hereunder, ALTECH may: (a) with or without demand or notice to customer declare the entire amount unpaid immediately due and payable; (b) enter upon the premises where the equipment may be found and remove it (Customer shall assemble the equipment and make it available to ALTECH at a place reasonably convenient to both parties and shall permit and assist ALTECH in effecting the retaking and removal of the equipment); and (c) sell any or all the equipment as permitted under applicable law, applying the proceeds of the sale to payment of the expenses of retaking, repairing and selling the equipment, reasonable attorney fees and to the satisfaction of all indebtedness then due and unpaid under this Agreement. Any surplus shall be paid to Customer and any deficiency shall be paid to ALTECH by Customer.

The remedies provided herein shall be cumulative and in addition to all other remedies provided by law or equity or under the Uniform Commercial Code.

GOVERNING LAW - This agreement will be governed by the Laws of the State of New Jersey.

GENERAL - This Agreement shall only become effective and binding when either (a) it has been accepted and executed by an authorized representative of ALTECH, or (b) the equipment has been shipped to Customer, with or without acceptance in writing hereon. Notice of acceptance is hereby waived by Customer. Customer hereby acknowledges receipt of a true and complete copy hereof.

No addition to or modification of any of the Terms and Conditions of Sale as they appear herein shall be binding upon ALTECH unless signed in writing by duly authorized representative of ALTECH in Flemington, N.J.

Typographical and clerical errors in quotations, orders and acknowledgments are subject to correction.

This Agreement is not assignable without the prior written consent of ALTECH. Any attempt to assign any of the rights, duties or obligations of this Agreement without such consent is void.

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THE CUSTOMER ACKNOWLEDGES THAT HE HAS READ THE AGREEMENT, UNDERSTANDS IT, AND AGREES TO BE BOUND BY ITS TERMS AND CONDITIONS. FURTHERMORE, THE CUSTOMER AGREES THAT IT IS THE COMPLETE AND EXCLUSIVE STATEMENT OF THE AGREEMENT BETWEEN THE PARTIES, WHICH SUPERSEDES ALL PROPOSALS OR PRIOR AGREEMENTS, ORAL OR WRITTEN, EXPRESSED OR IMPLIED, AND ALL OTHER COMMUNICATIONS BETWEEN THE PARTIES RELATING TO THE SUBJECT MATTER OF THIS AGREEMENT.

Circuit Protection Devices



Altech the market leader in UL508 Manual Motor Controllers/ Miniature Circuit Breakers now introduces UL489 Miniature Circuit Breakers and UL1077 Supplementary Protectors. The UL489 versions are DIN rail mounted, 17.5mm wide, thermal magnetic, 240V, 480Y/277V AC, 50/60Hz, 125 and 250 VDC models, with short circuit interrupt capacity of 10kA, a positive trip indicator, and are line/load reversible. The UL1077 versions are DIN rail mounted, 17.5mm wide, thermal magnetic, 480Y/277V AC, 50/60Hz, a short circuit withstand capacity 10kA, have a positive trip indicator.

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Interface Modules and Industrial Relays



Altech offers a wide range of DIN Rail or panel mount cable interface modules, relay interface modules, power supplies, carrier modules, and custom designed modules. Cable to connector models include: D-Sub connectors, ribbon cable connectors, and Dip socket connectors to terminals. Standard relay modules from 1 to 16 channels, and safety relay modules from 1 to 16 channels and up to 10 poles are included. The catalog also contains a large selection of industrial relays, and custom designed interface modules.

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Contactors and More!



Altech's now carries contactors, mini contactors, definite purpose contactors & overload relays. The contactors come in 3 and 4 pole configurations at 9A to 800A. Available in Single Phase (115 -230V) and Three Phase (200 - 575V) AC and DC models. A large variety of coil voltages are supported and the accessories are auxiliary contacts and overload relays. The mini contactors come in screw clamp, fast-on, cage clamp and solder pin types.

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Terminal Blocks



Altech offers a NEW Terminal Block catalog with the most competitively priced blocks in the industry. We feature screw and spring clamp models for DIN rail and panel mount applications. This advanced line of wire termination products will increase your design options and help to get the job done more efficiently. Our line of blocks include feed-through (single, double or triple level), distribution, ground, fuse, disconnect, thermocouple, surge suppressor and indicator. A wide variety of accessories, tools and ferrules are available.

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Safety Relays



Altech has the broadest line of safety relays that meet the New ASME A17.1-2000 specification. Our Safety Relay catalog and flyer outlines a complete selection of the safety relays featuring forced-guided contacts, a mandatory requirement of the European Machinery Directive EMD 89/392 EEC, which makes them indispensable when designing safety circuits for the international market. Our relays are approved for use in safety applications such as Emergency Stop, Two Hand Safety, Safety Gate, or as specified in IEC 204, EN 60204, and DIN/VDE 0113.

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Liquid Tight Strain Reliefs



This 64-page catalog introduces Altech's full line Liquid Tight Strain Reliefs (Cord Grips) which are used to seal cable entries, keep contaminant's from entering enclosures, provide strain relief and thus reduce stress on components and termination points inside enclosures. Available in standard, high-performance, and economy versions, functions include Straight-Through, Increased Strain Relief, Bend Protection, Pull/Bend Protection, Multi-conductor, Flat Cable and EMI/RFI. They can be used with almost any type of cable, cord or conductor - solid, stranded, flat, shielded, high temperature, etc.

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DIN Enclosures



Our NEW catalog features many new models plus our current four distinct DIN Rail mount enclosure families with a multitude of sizes and features. Internationally accepted, these enclosures are offered complete with up to 144 ready-to-wire terminals, integral PC Board guides and a selection of terminal-to-board connection options. They can be customized with imprints, markings, cutouts, etc. and snap onto standard 35mm DIN Rails or can be panel mounted. The catalog is complete with technical drawings to assistant you in your designs.

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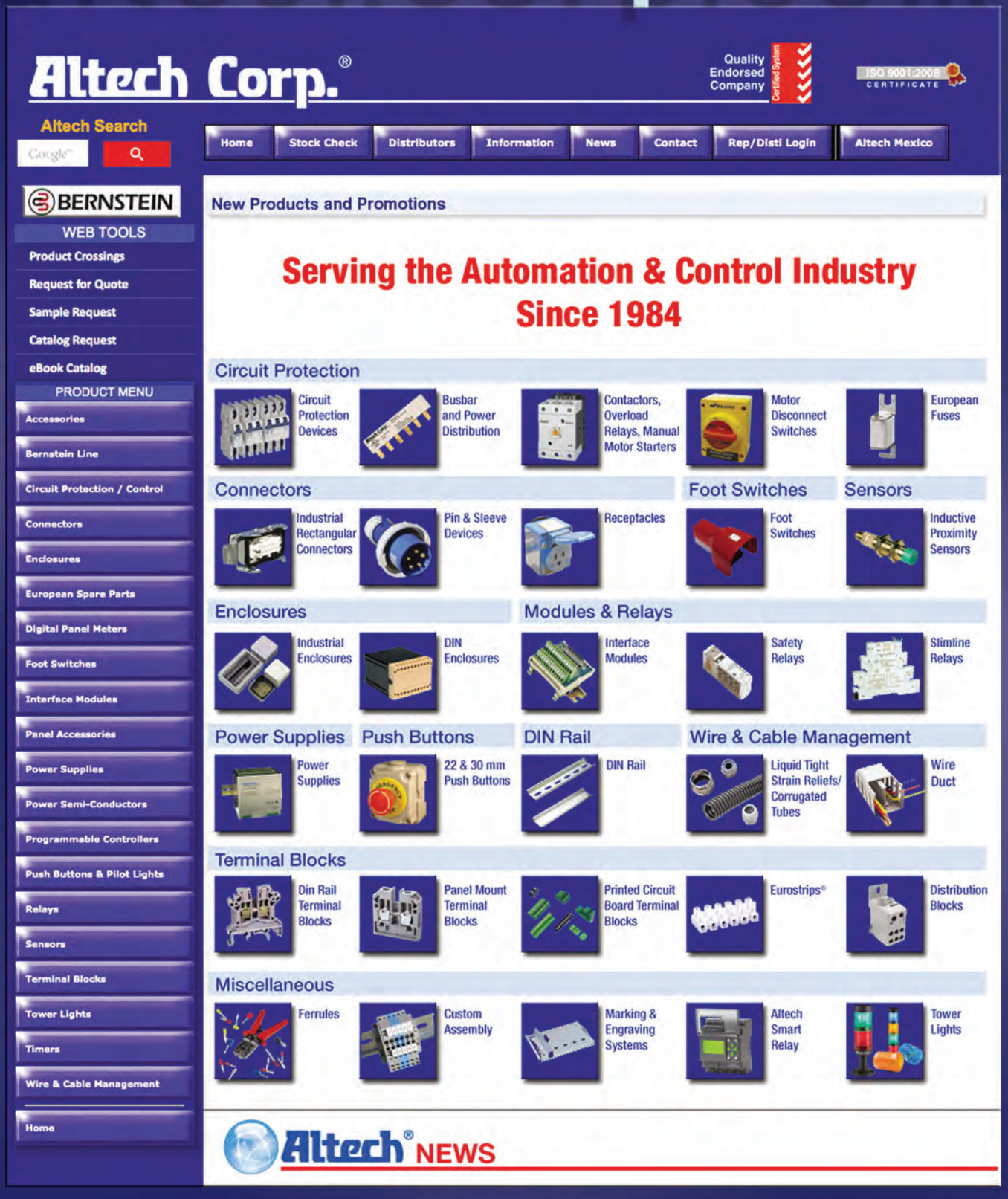
Motor Disconnect Switches



Altech's line of Motor Disconnect Switches are UL 508 listed as Manual Motor Controllers for AC Motor Starting Across-the-line and AC General use. This new 16 page catalog includes the 3 different handle designs, which are all available in gray/black or yellow/red housings. Electrical ratings are 25-150A / 600V. The switches are non-fused DIN Rail mountable. Neat features include: snap-on auxiliary switches, door mounting kit and a retrofit 30A fuse holder. Also featured are Enclosed Motor Disconnect Switches & Fused Enclosed Motor Disconnect Switch (30A) in plastic or stainless housings.

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