

# Altech Corp.®

Serving the Automation & Control Industry since 1984



Quality  
Endorsed  
Company



61.0 mm  
(2.40 in)

Side A

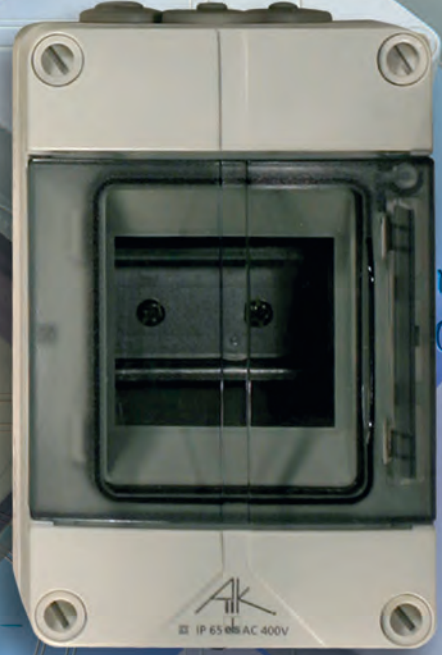
Side B



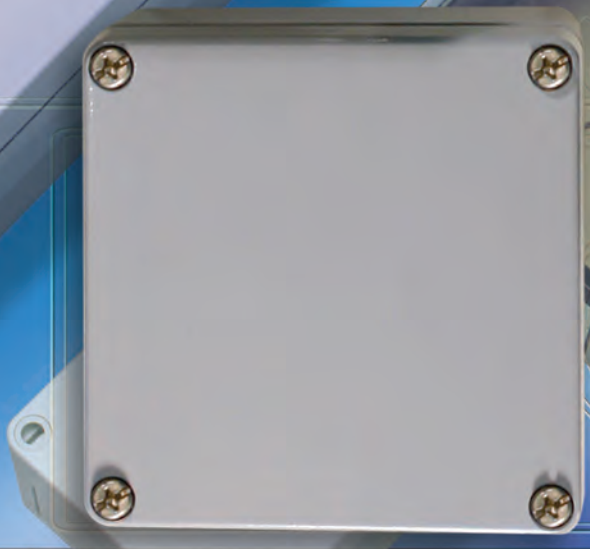
1.14 in)  
(0.91 in)

30.5 mm  
(1.20 in)

30.0 mm  
(1.18 in)



mm (1.  
0 mm (0



50.0 mm  
(1.97 in)  
130.0 mm  
(5.12 in)

els spelsberg

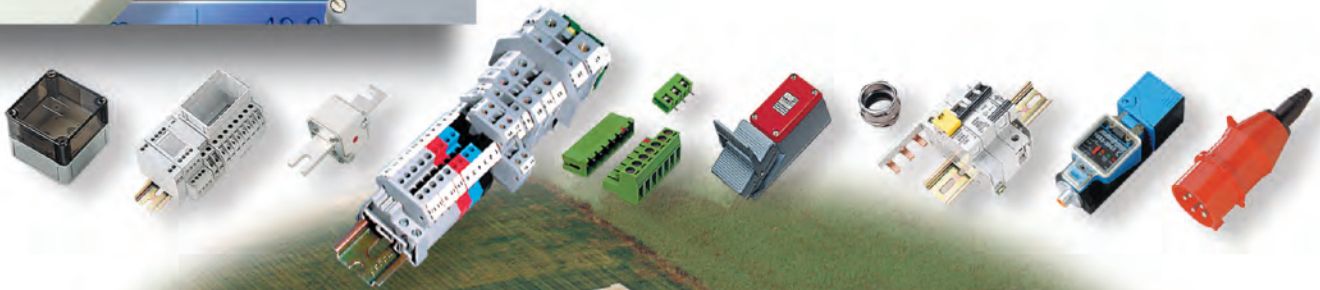
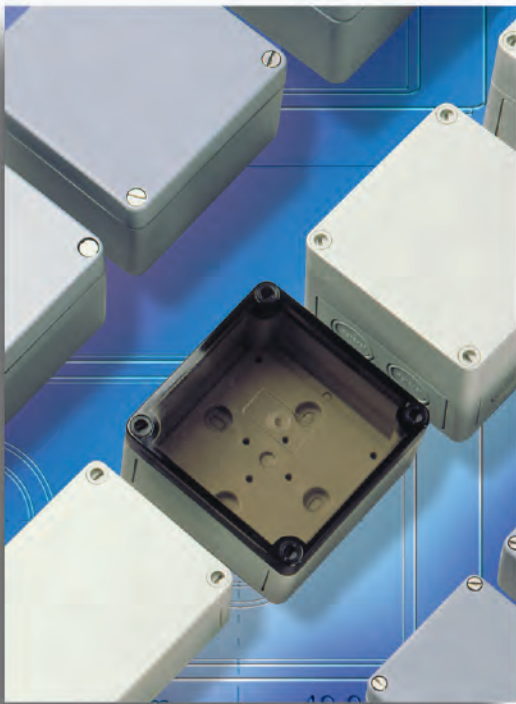
Industrial  
Enclosures

# Altech Corporation

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 trained technical experts welcome the opportunity to answer your technical questions and provide solutions to your automation and control problems. Give us a call or visit [www.altechcorp.com](http://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.*

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Small to Medium Size Enclosures

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## EK Series

Small to Medium Size Enclosures with Transparent Doors

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**40-57**



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# Enclosures that **Protect** and **LOOK GOOD** too!

**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 may be, you can rely on our enclosures to meet the most demanding requirements.

## **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**

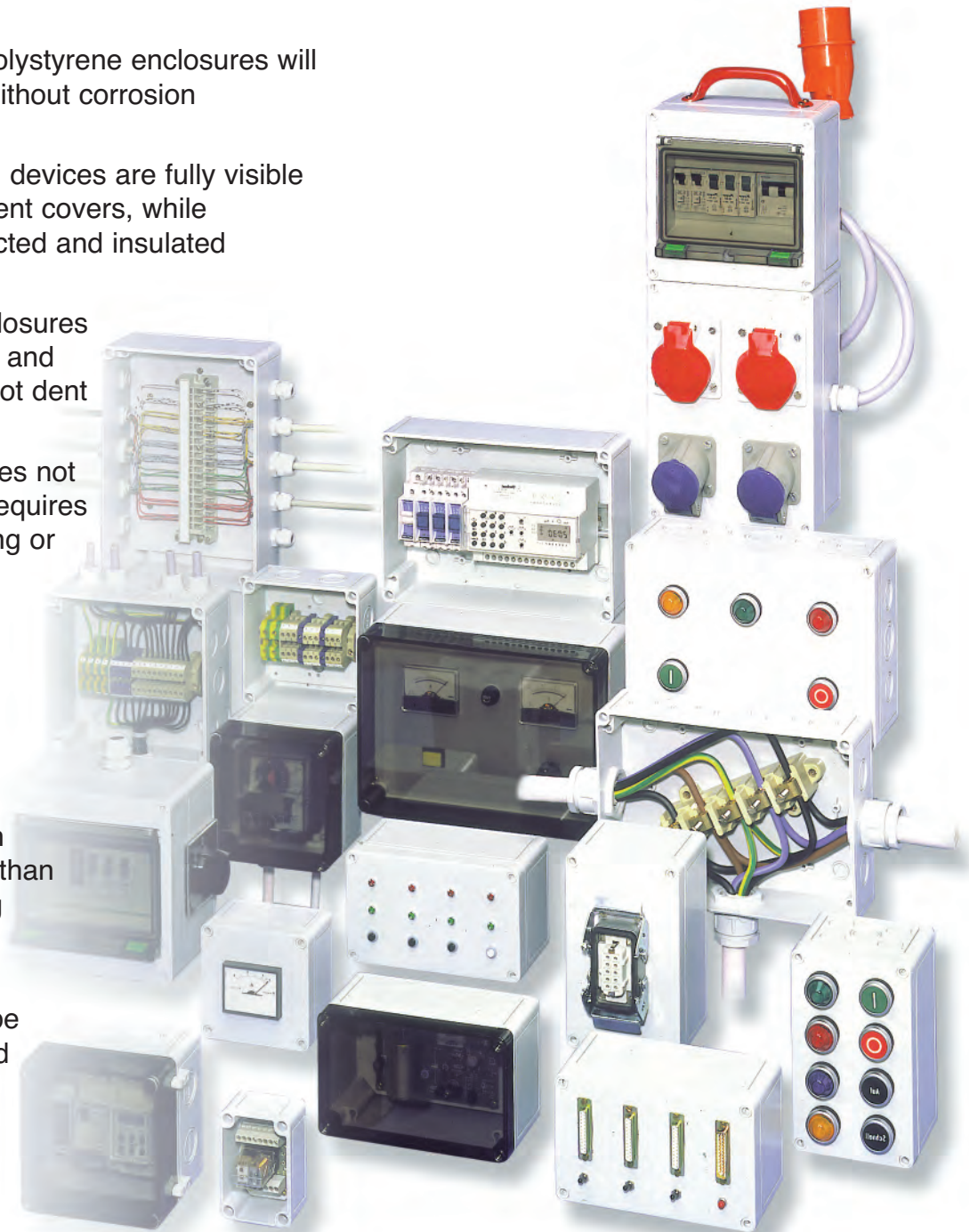
- Resist weak and strong acids and alkali

## **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.*

# Application Ideas

Whatever your application, you can rely on **Altech** enclosures by **els** spelsberg 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.



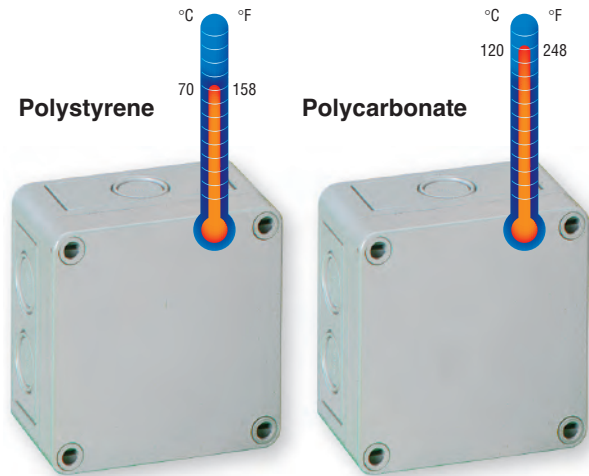
*Illustrated are just a few of the applications for our enclosures.*

# 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 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) while polystyrene can be safely used at temperatures up to 70°C (158°F). Polycarbonate is UV stable 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

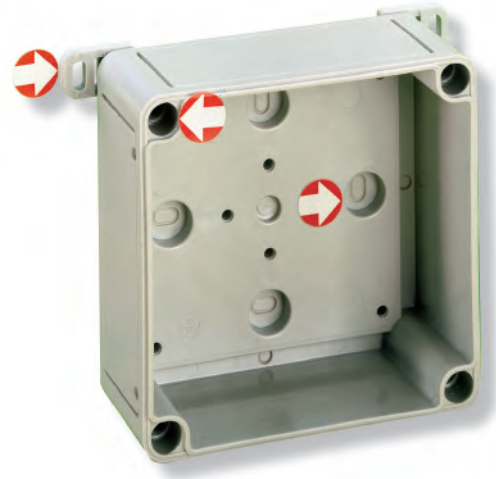
The standard color for the enclosure base is light gray. Covers are available in gray or tinted transparent (TK, EK, AK Series). Custom colors are available in production quantities upon request.

# Design Features



## Protection

Protection up to IP66 (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

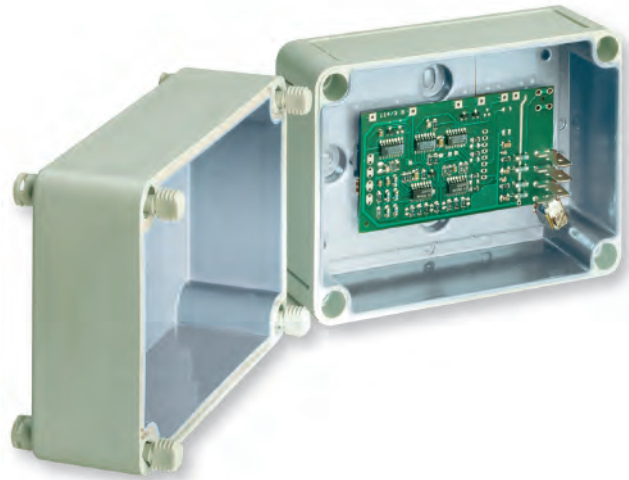
Covers are available in alternate heights, in standard gray or tinted transparent. Quick release, polyamide screws make cover removal easy.

# 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 117 for ordering information.



## EMI/RFI Coating

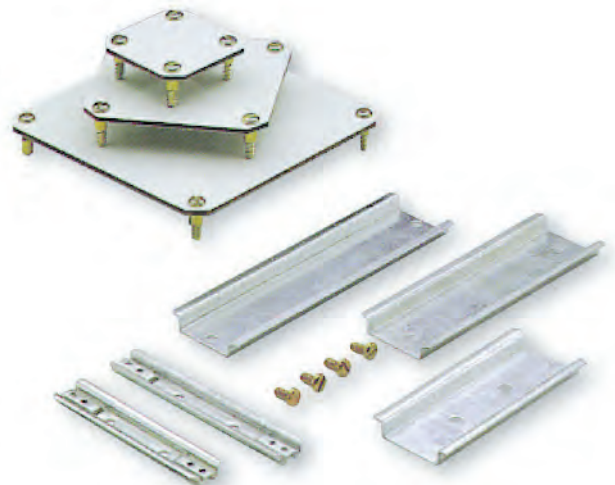
The TK Series Enclosures can be EMI/RFI shielded. The enclosures are internally vacuum coated with conducting metal. This coating effectively protects valuable equipment from electromagnetic interference and electrostatic discharge.



## 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 118 for ordering information.

# 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.

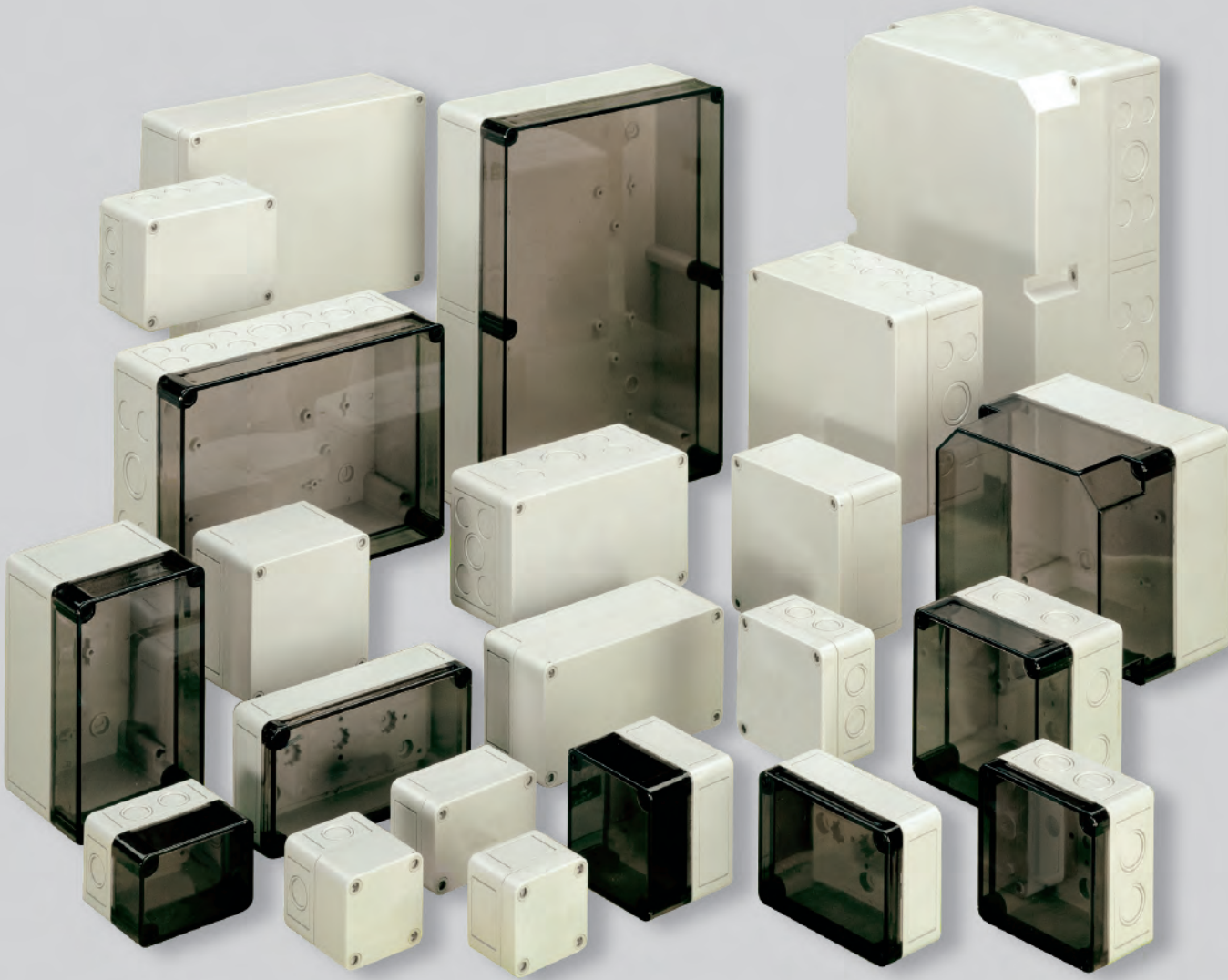
## Mounting Plates and DIN Rails

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 117-119 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 119-120.



# 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 and endwalls are supplied smooth or with knockouts. Precision molded from impact and flame resistant materials, they offer functionality and appealing solutions for diverse application requirements.

- 15 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

# TK Series Enclosures

## 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 with optional mounting flanges. 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.

## Customization

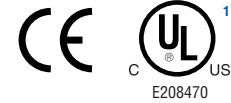
Our enclosures can be factory supplied with custom openings. Using state of the art machining, we can punch, drill, mill or cut to your most exacting specifications. We customize quickly and accurately, ... at a reasonable cost!

EMI/RFI shielding is also available to protect sensitive electronic components.



**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 Material:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Temperature Range:** Polystyrene -40°C to 70°C (-40°F to 158°F)  
Polycarbonate -35°C to 120°C (-31°F to 248°F)
- **Accessories:** See section below



**TK55**

**Polystyrene**

**Polycarbonate<sup>1</sup>**

Ordering Information	Height mm (in)	Cat. No.	Type	Cover Color	Std. Pk.	Cat. No.	Type	Cover Color	Std. Pk.
Enclosure - smooth sidewall	35 mm (1.38 in)	110-455	PS 55-4-o	gray	5	120-455	PC55-4-o	gray	5
Enclosure - smooth sidewall	35 mm (1.38 in)	111-455	PS 55-4-to	trans.	5	130-455	PC55-4-to	trans.	5
Enclosure - metric knockout	35 mm (1.38 in)	105-455	PS 55-4-m	gray	5	127-455	PC 55-4-m	gray	5
Enclosure - metric knockout	35 mm (1.38 in)	106-455	PS 55-4-tm	trans.	5	137-455	PC 55-4-tm	trans.	5
Enclosure - Integral Cable Gland	35 mm (1.38 in)	145-455	PS 55-4-v	gray	5	129-455	PC 55-4-v	gray	5
Enclosure - Integral Cable Gland	35 mm (1.38 in)	146-455	PS 55-4-tv	trans.	5	139-455	PC 55-4-tv	trans.	5

**TK75**

**Polystyrene**

**Polycarbonate<sup>1</sup>**

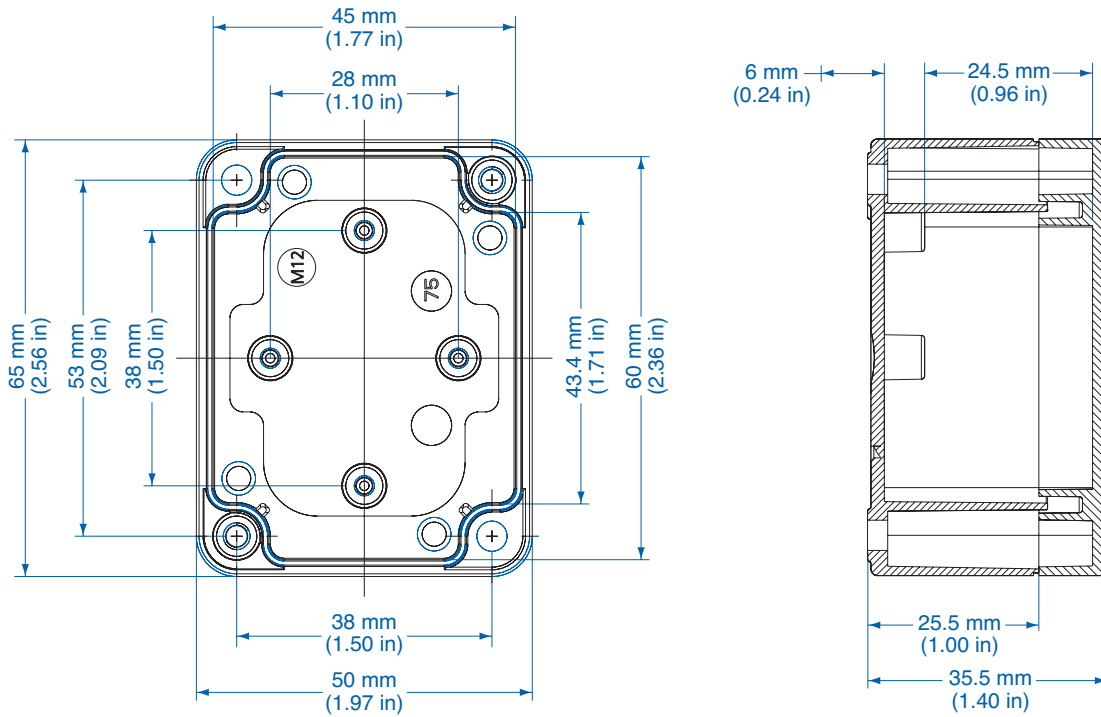
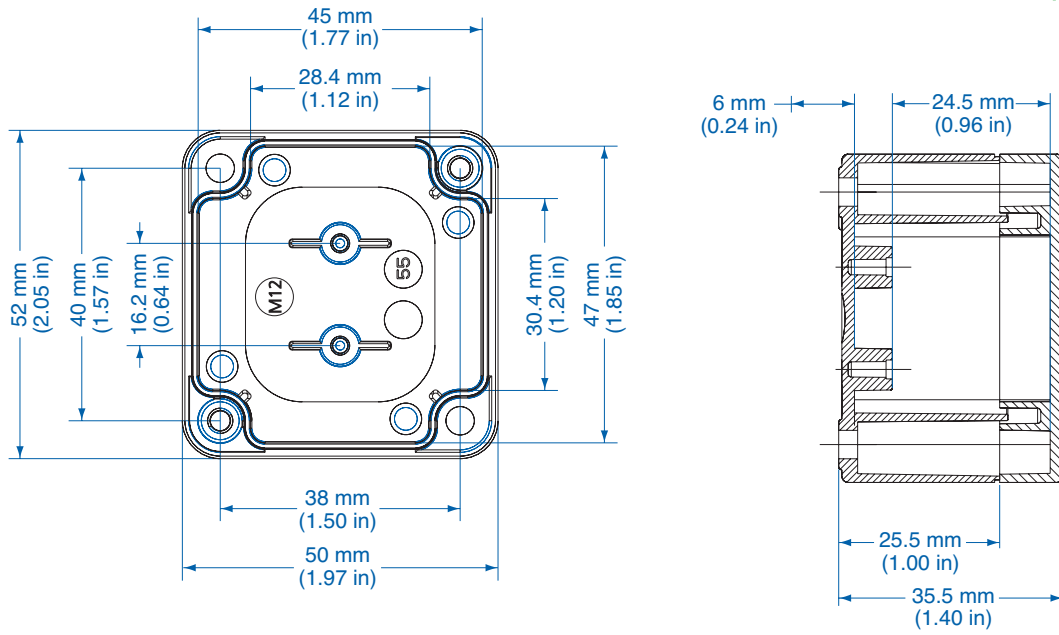
Ordering Information	Height mm (in)	Cat. No.	Type	Cover Color	Std. Pk.	Cat. No.	Type	Cover Color	Std. Pk.
Enclosure - smooth sidewall	35 mm (1.38 in)	110-475	PS 75-4-o	gray	5	120-475	PC75-4-o	gray	5
Enclosure - smooth sidewall	35 mm (1.38 in)	111-475	PS 75-4-to	trans.	5	130-475	PC75-4-to	trans.	5
Enclosure - metric knockout	35 mm (1.38 in)	105-475	PS 75-4-m	gray	5	127-475	PC 75-4-m	gray	5
Enclosure - metric knockout	35 mm (1.38 in)	106-475	PS 75-4-tm	trans.	5	137-475	PC 75-4-tm	trans.	5
Enclosure - Integral Cable Gland	35 mm (1.38 in)	145-475	PS 75-4-v	gray	5	129-475	PC 75-4-v	gray	5
Enclosure - Integral Cable Gland	35 mm (1.38 in)	146-475	PS 75-4-tv	trans.	5	139-475	PC 75-4-tv	trans.	5

**Accessories**

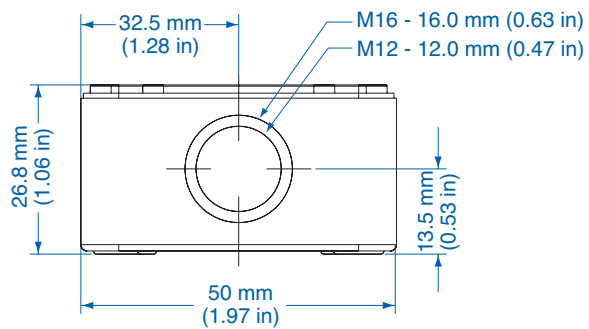
Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate (TK55)	195-055	MP55	1
Mounting Plate (TK75)	195-075	MP75	1
PCB Bracket	194-110	MP/LPH	2
Mounting Bracket	194-002	MB	1

Please refer to pages 116-120 for additional accessories and detailed information.

**Dimensions**



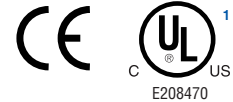
**Knockout Positions**  
(one side only)



# TK 77 – Polystyrene and Polycarbonate – 65x65mm (2.56x2.56in.)

## 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
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Temperature Range:** Polystyrene  
-40°C to 70°C (-40°F to 158°F)  
Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Accessories:** See section below



## Smooth Sidewalls

Ordering Information	Height mm (in)	Polystyrene				Polycarbonate <sup>1</sup>			
		Cat. No.	Type	Cover Color	Std. Pk.	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

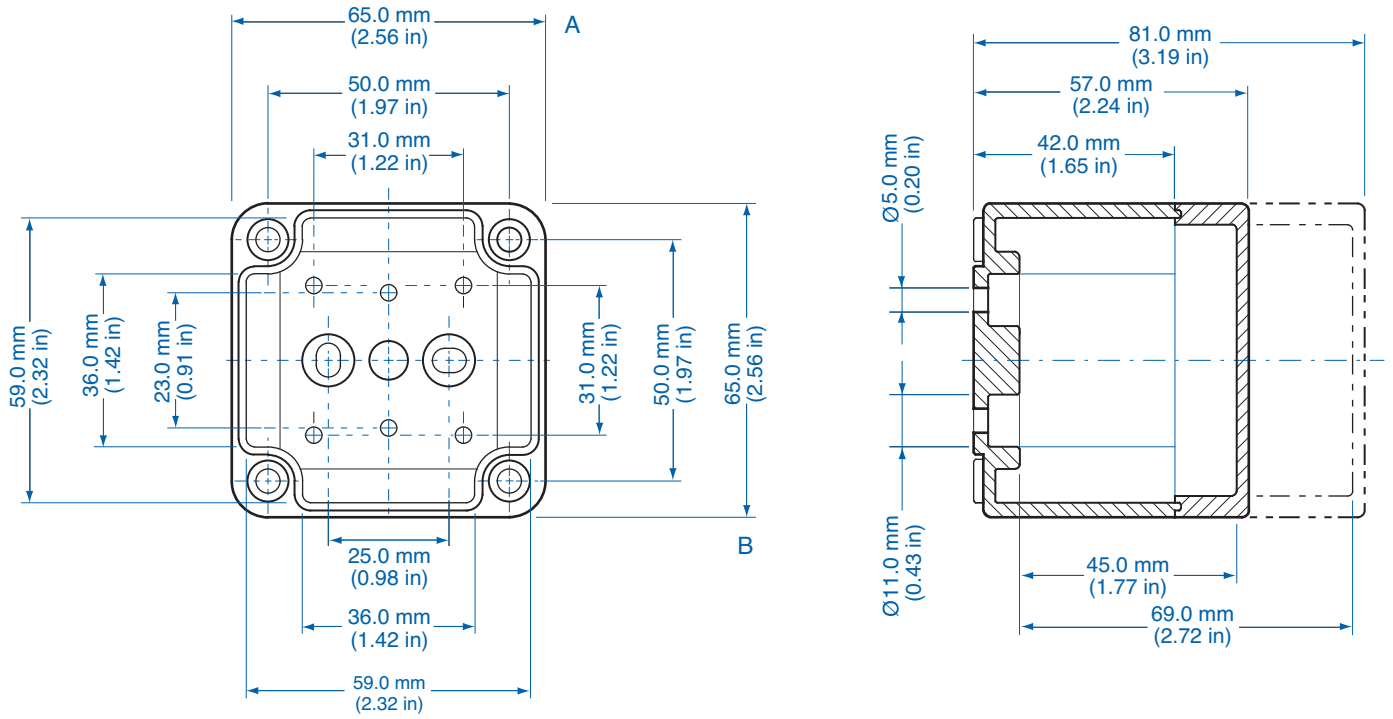
Ordering Information	Height mm (in)	Polystyrene				Polycarbonate <sup>1</sup>			
		Cat. No.	Type	Cover Color	Std. Pk.	Cat. No.	Type	Cover Color	Std. Pk.
Enclosure - low cover	57 mm (2.24 in)	105-401	PS 77-6-m	gray	5	127-401	PC 77-6-m	gray	5
Enclosure - high cover	81 mm (3.19 in)	105-901	PS 77-8-m	gray	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

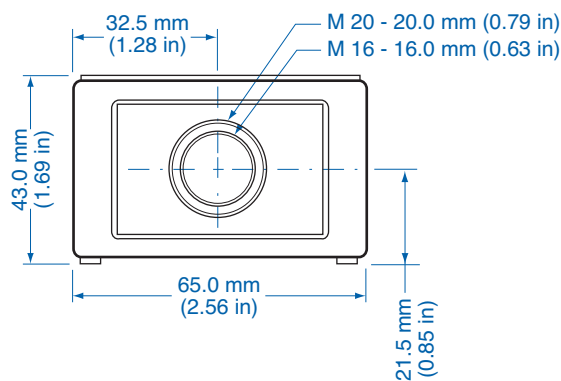
Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate	195-001	MP77	1
DIN Rail TS15-49.5mm	197-049	TS 15/49.5	1
Hinge Kit Set	190-002	HK1	1
Mounting Tab Kit	194-001	MT1	1

Please refer to pages 116-120 for additional accessories and detailed information.

**Dimensions**



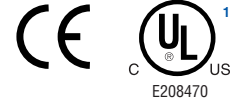
**Knockout Positions**  
(all 4 sides)



# TK 97 – Polystyrene and Polycarbonate – 94x65mm (3.70x2.56in.)

## 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
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Temperature Range:** Polystyrene  
-40°C to 70°C (-40°F to 158°F)  
Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Accessories:** See section below



## Smooth Sidewalls

### Polystyrene

### Polycarbonate<sup>1</sup>

Ordering Information	Height mm (in)	Cat. No.	Type	Cover Color	Std. Pk.	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

### Polystyrene

### Polycarbonate<sup>1</sup>

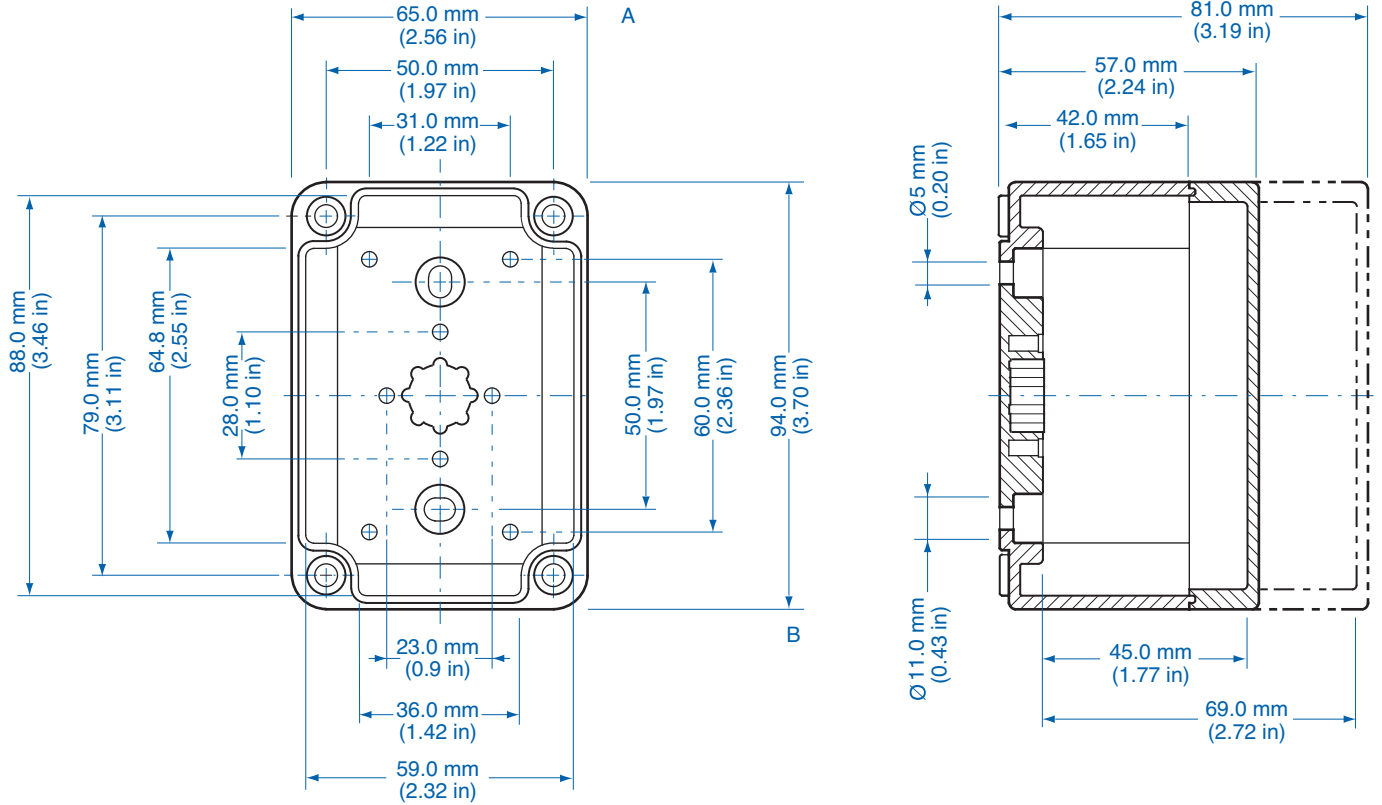
Ordering Information	Height mm (in)	Cat. No.	Type	Cover Color	Std. Pk.	Cat. No.	Type	Cover Color	Std. Pk.
Enclosure - low cover	57 mm (2.24 in)	105-402	PS 97-6-m	gray	5	127-402	PC 97-6-m	gray	5
Enclosure - high cover	81 mm (3.19 in)	105-902	PS 97-8-m	gray	5	127-902	PC 97-8-m	gray	5
Enclosure - low cover	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	195-002	MP97	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

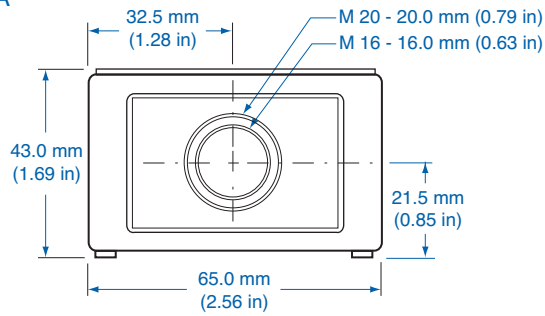
Please refer to pages 116-120 for additional accessories and detailed information.

**Dimensions**

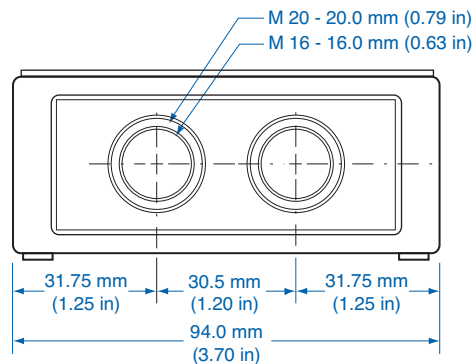


**Knockout Positions**

Side A



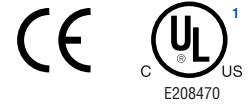
Side B



# TK 99 – Polystyrene and Polycarbonate – 94x94mm (3.70x3.70in.)

## 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
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Temperature Range:** Polystyrene  
-40°C to 70°C (-40°F to 158°F)  
Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Accessories:** See section below



## Smooth Sidewalls

### Polystyrene

### Polycarbonate<sup>1</sup>

Ordering Information	Height mm (in)	Cat. No.	Type	Cover Color	Std. Pk.	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

### Polystyrene

### Polycarbonate<sup>1</sup>

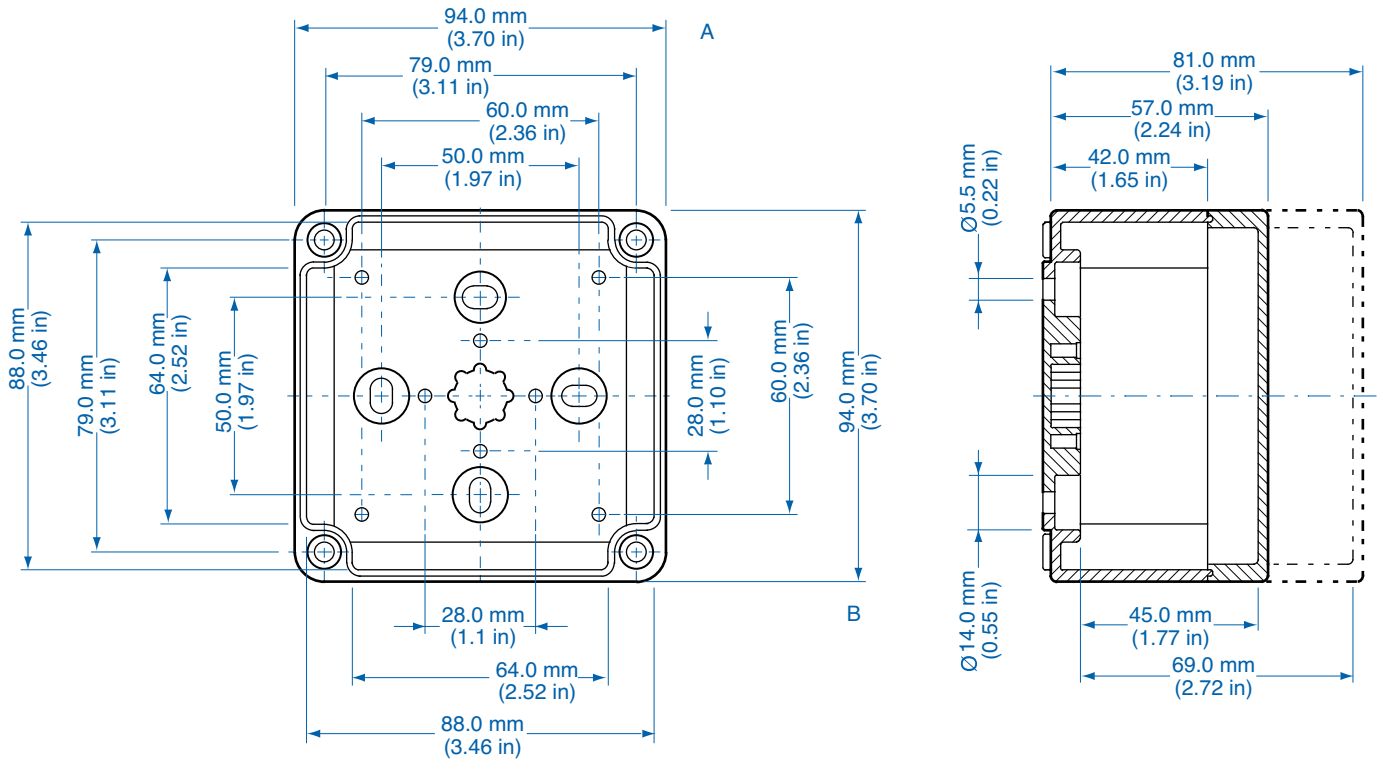
Ordering Information	Height mm (in)	Cat. No.	Type	Cover Color	Std. Pk.	Cat. No.	Type	Cover Color	Std. Pk.
☐ Enclosure - low cover	57 mm (2.24 in)	105-403	PS 99-6-m	gray	4	127-403	PC 99-6-m	gray	4
☐ Enclosure - high cover	81 mm (3.19 in)	105-903	PS 99-8-m	gray	3	127-903	PC 99-8-m	gray	3
☐ Enclosure -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

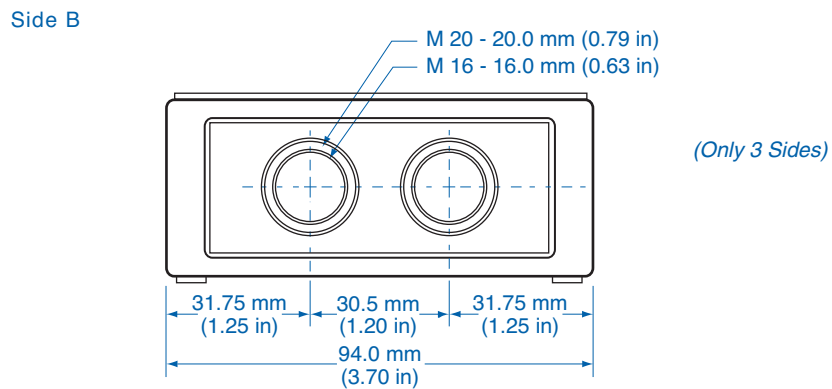
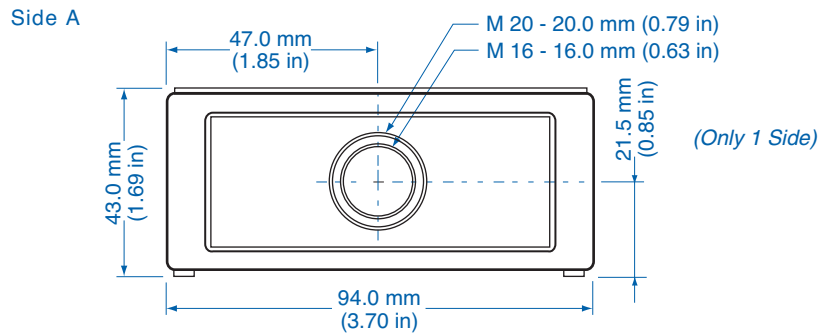
Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate	195-003	MP99	1
DIN Rail TS15 - 80 mm	197-080	TS 15/80	1
Hinge Kit Set	190-002	HK1	1
Mounting Tab Kit	194-001	MT1	1

Please refer to pages 116-120 for additional accessories and detailed information.

**Dimensions**



**Knockout Positions**



# TK 1111 – Polystyrene and Polycarbonate – 110x110mm (4.33x4.33in.)

## 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
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Temperature Range:** Polystyrene  
-40°C to 70°C (-40°F to 158°F)  
Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Accessories:** See section below



## Smooth Sidewalls

### Polystyrene

### Polycarbonate<sup>1</sup>

Ordering Information	Height mm (in)	Cat. No.	Type	Cover Color	Std. Pk.	Cat. No.	Type	Cover Color	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

### Polystyrene

### Polycarbonate<sup>1</sup>

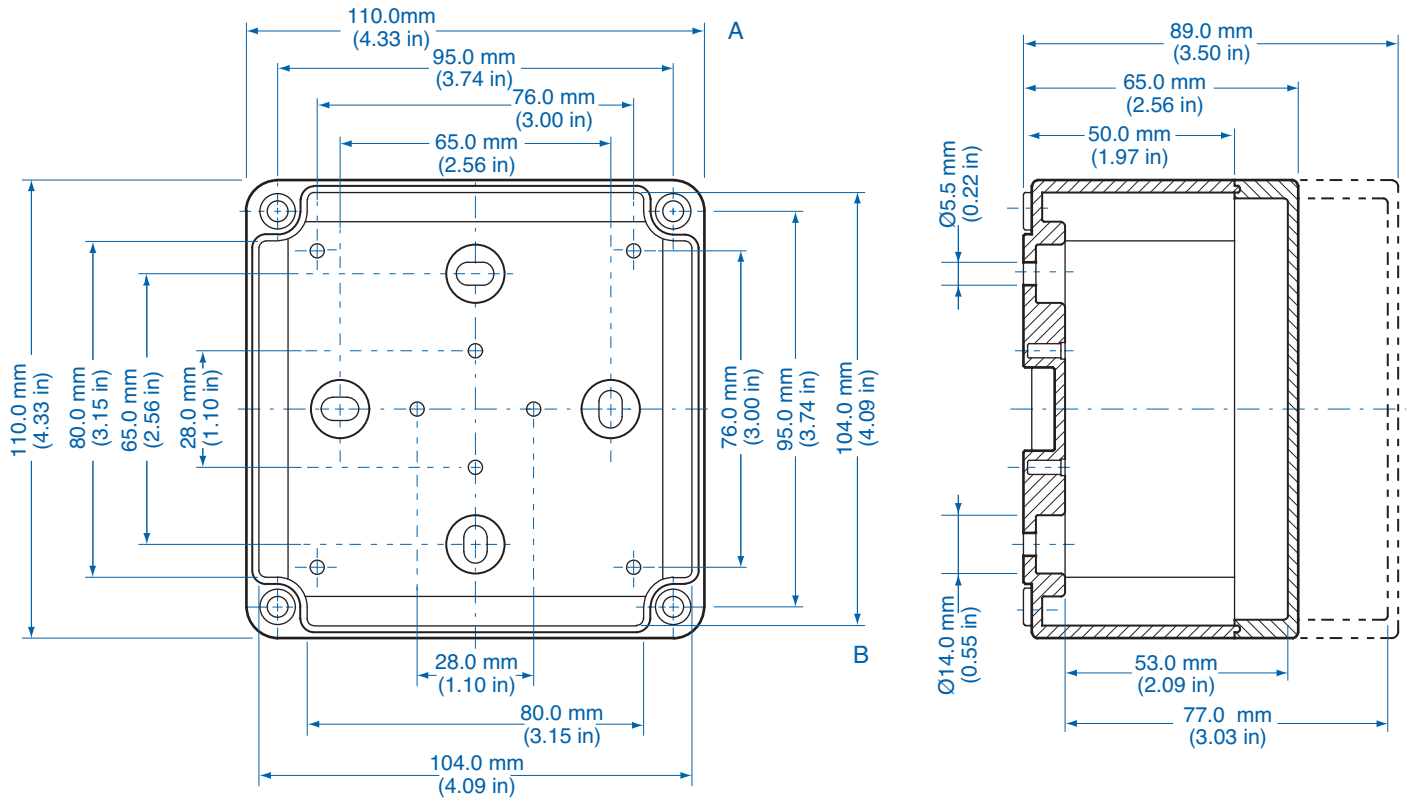
Ordering Information	Height mm (in)	Cat. No.	Type	Cover Color	Std. Pk.	Cat. No.	Type	Cover Color	Std. Pk.
☐ Enclosure - low cover	66 mm (2.60 in)	105-404	PS 1111-7-m	gray	3	127-404	PC 1111-7-m	gray	3
☐ Enclosure - high cover	90 mm (3.54 in)	105-904	PS 1111-9-m	gray	3	127-904	PC 1111-9-m	gray	3
☐ Enclosure - 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	195-004	MP1111	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

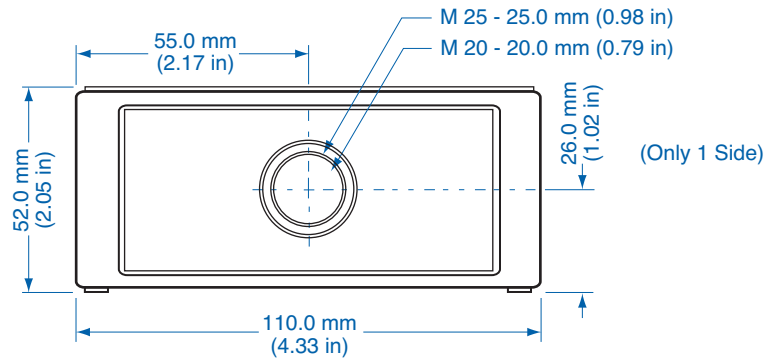
Please refer to pages 116-120 for additional accessories and detailed information.

**Dimensions**

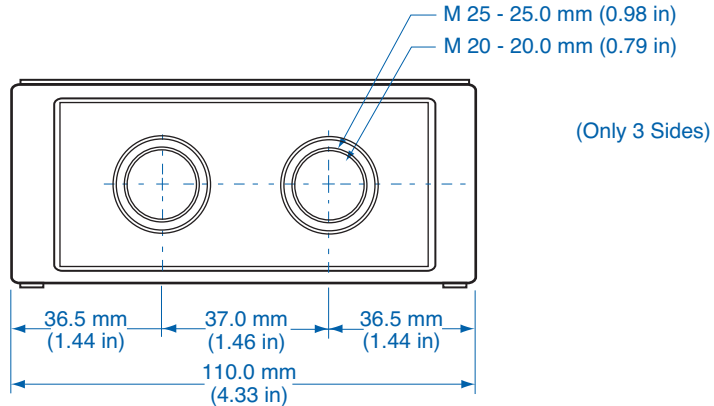


**Knockout Positions**

Side A



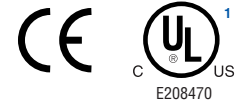
Side B



# TK 1309 – Polystyrene and Polycarbonate – 130x94mm (5.12x3.70in.)

## 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
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Temperature Range:** Polystyrene  
-40°C to 70°C (-40°F to 158°F)  
Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Accessories:** See section below



## Smooth Sidewalls

Ordering Information		Height mm (in)	Polystyrene				Polycarbonate <sup>1</sup>			
			Cat. No.	Type	Cover Color	Std. Pk.	Cat. No.	Type	Cover Color	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

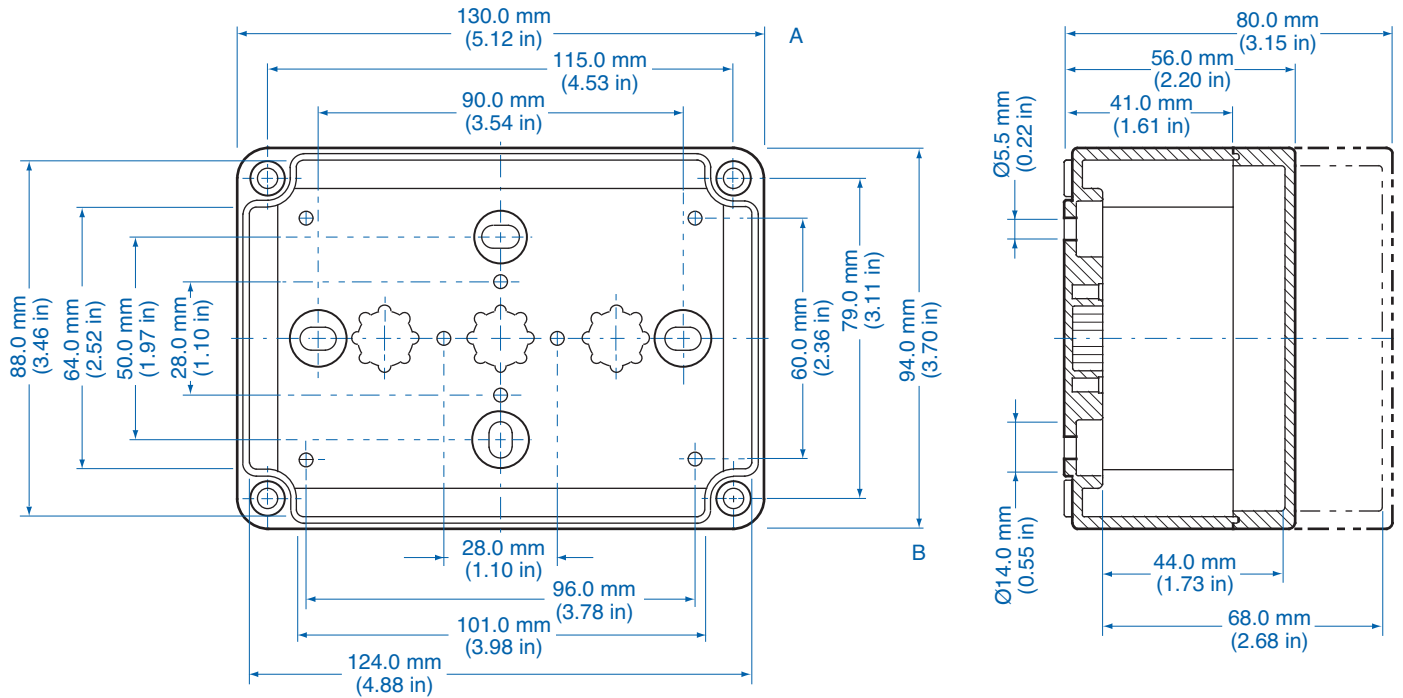
Ordering Information		Height mm (in)	Polystyrene				Polycarbonate <sup>1</sup>			
			Cat. No.	Type	Cover Color	Std. Pk.	Cat. No.	Type	Cover Color	Std. Pk.
	Enclosure - low cover	57 mm (2.24 in)	105-409	PS 1309-6-m	gray	3	127-409	PC 1309-6-m	gray	3
	Enclosure - high cover	81 mm (3.19 in)	105-909	PS 1309-8-m	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	195-009	MP1309	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

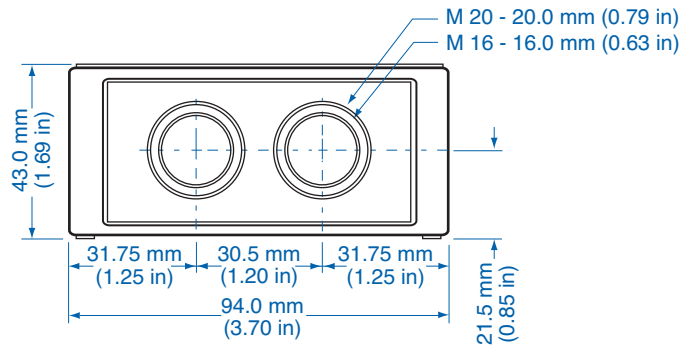
Please refer to pages 116-120 for additional accessories and detailed information.

**Dimensions**

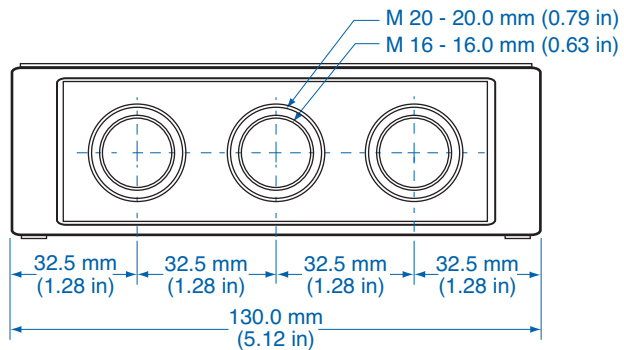


**Knockout Positions**

Side A



Side B



# TK 1313 – Polystyrene and Polycarbonate – 130x130mm (5.12x5.12in.)

## 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
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Temperature Range:** Polystyrene  
-40°C to 70°C (-40°F to 158°F)  
Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Accessories:** See section below



## Smooth Sidewalls

Ordering Information	Height mm (in)	Polystyrene					Polycarbonate <sup>1</sup>				
		Cat. No.	Type	Cover Color	Std. Pk.	Cat. No.	Type	Cover Color	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

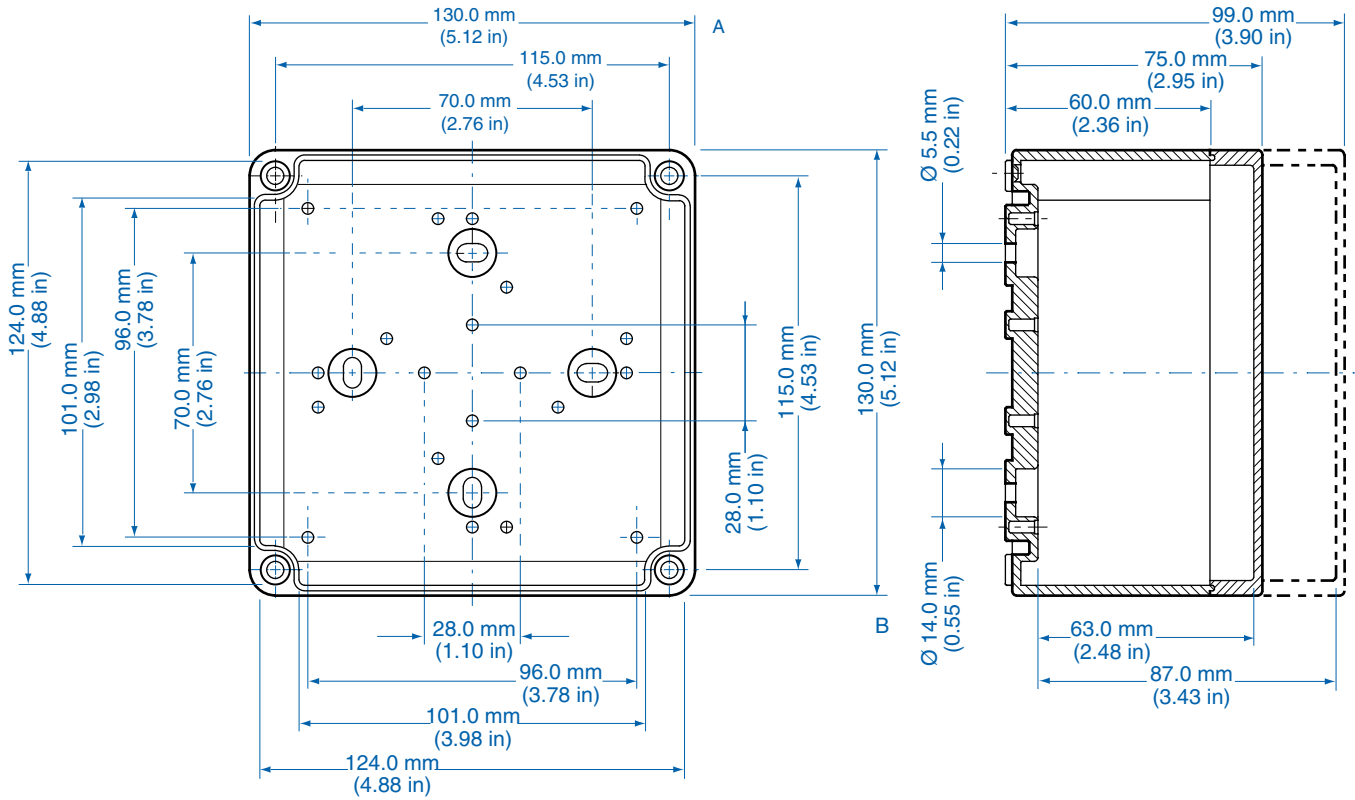
Ordering Information	Height mm (in)	Polystyrene					Polycarbonate <sup>1</sup>				
		Cat. No.	Type	Cover Color	Std. Pk.	Cat. No.	Type	Cover Color	Std. Pk.		
☐ Enclosure - low cover	75 mm (2.95 in)	105-405	PS 1313-7-m	gray	2	127-405	PC 1313-7-m	gray	2		
☐ Enclosure - high cover	99 mm (3.90 in)	105-905	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

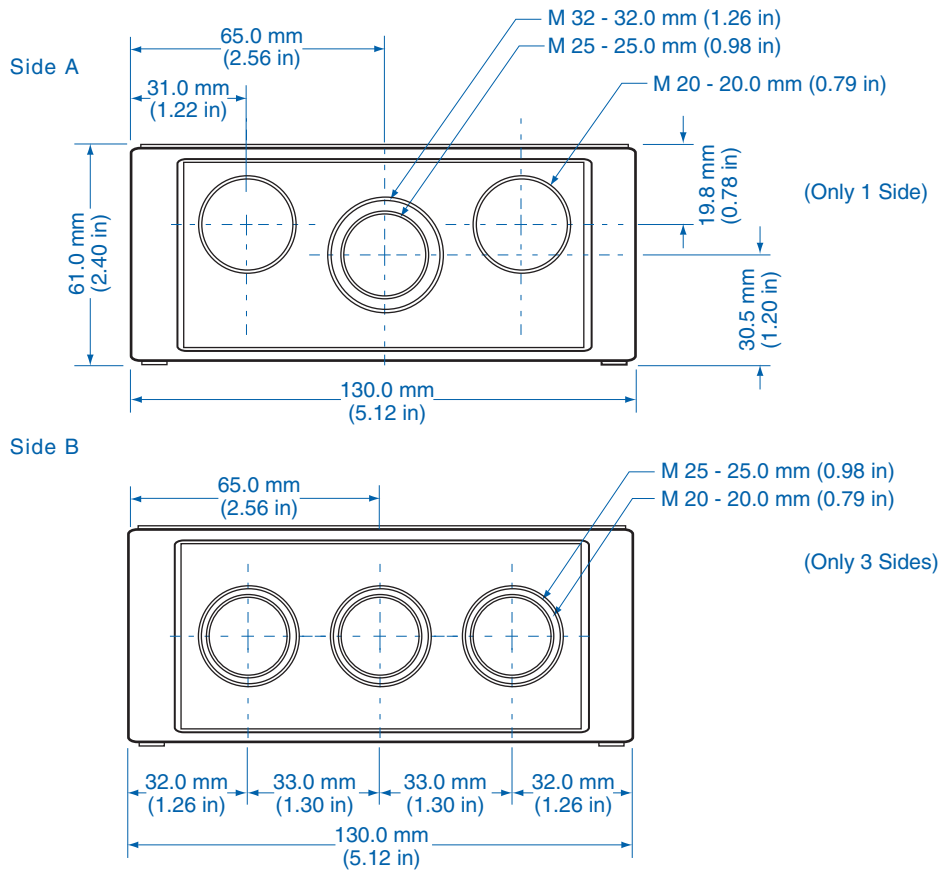
Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate	195-005	MP1313	1
DIN Rail TS35-106mm	198-106	TS 35/106	1
DIN Rail TS15-111mm	197-111	TS 15/111	1
Hinge Kit Set	190-002	HK1	1
Mounting Tab Kit	194-001	MT1	1

Please refer to pages 116-120 for additional accessories and detailed information.

Dimensions



Knockout Positions



# TK 1809 – Polystyrene and Polycarbonate – 180x94mm (7.09x3.70in.)

## 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
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Temperature Range:** Polystyrene  
-40°C to 70°C (-40°F to 158°F)  
Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Accessories:** See section below



## Smooth Sidewalls

### Polystyrene

### Polycarbonate<sup>1</sup>

Ordering Information	Height mm (in)	Cat. No.	Type	Cover Color	Std. Pk.	Cat. No.	Type	Cover Color	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

### Polystyrene

### Polycarbonate<sup>1</sup>

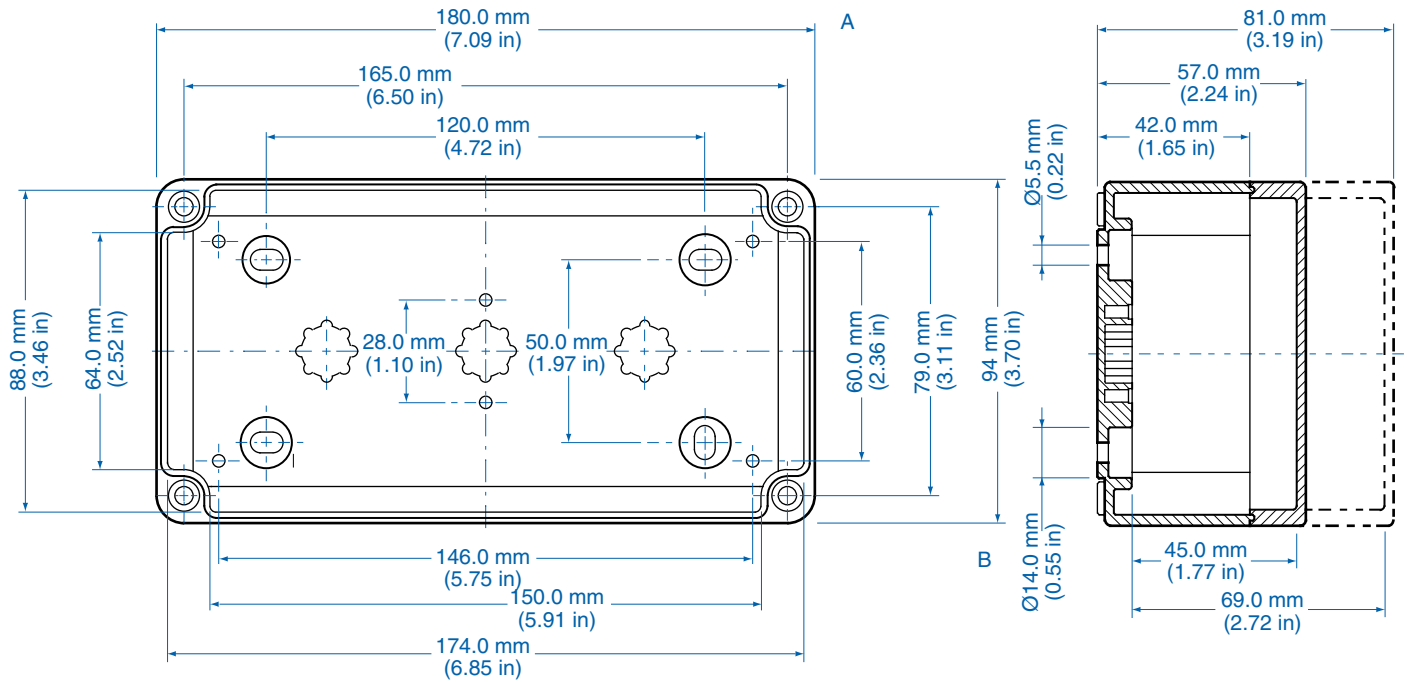
Ordering Information	Height mm (in)	Cat. No.	Type	Cover Color	Std. Pk.	Cat. No.	Type	Cover Color	Std. Pk.
☐ Enclosure - low cover	57 mm (2.24 in)	105-410	PS 1809-6-m	gray	2	127-410	PC 1809-6-m	gray	2
☐ Enclosure - high cover	81 mm (3.19 in)	105-910	PS 1809-8-m	gray	2	127-910	PC 1809-8-m	gray	2
☐ Enclosure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

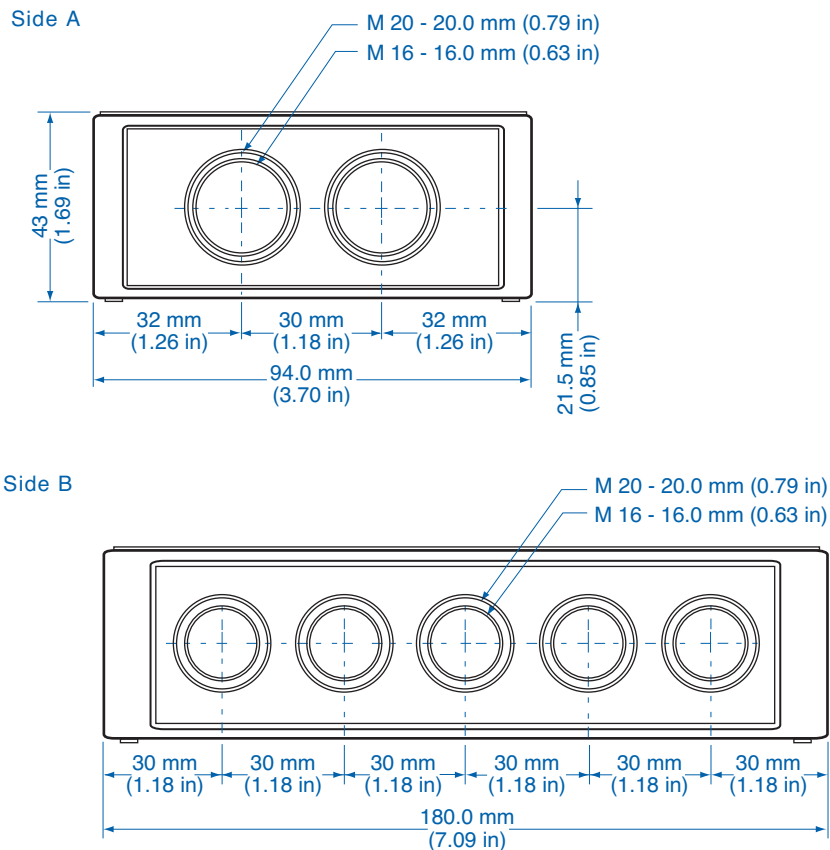
Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate	195-010	MP1809	1
DIN Rail TS35-144mm	198-144	TS 35/144	1
DIN Rail TS15-154mm	197-154	TS 15/154	1
Hinge Kit Set	190-002	HK1	1
Mounting Tab Kit	194-001	MT1	1

Please refer to pages 116-120 for additional accessories and detailed information.

Dimensions



Knockout Positions



# TK 1811 – Polystyrene and Polycarbonate – 180x110mm (7.09x4.33in.)

## 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
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Temperature Range:** Polystyrene  
-40°C to 70°C (-40°F to 158°F)  
Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Accessories:** See section below



## Smooth Sidewalls

Ordering Information	Height mm (in)	Polystyrene				Polycarbonate <sup>1</sup>			
		Cat. No.	Type	Cover Color	Std. Pk.	Cat. No.	Type	Cover Color	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

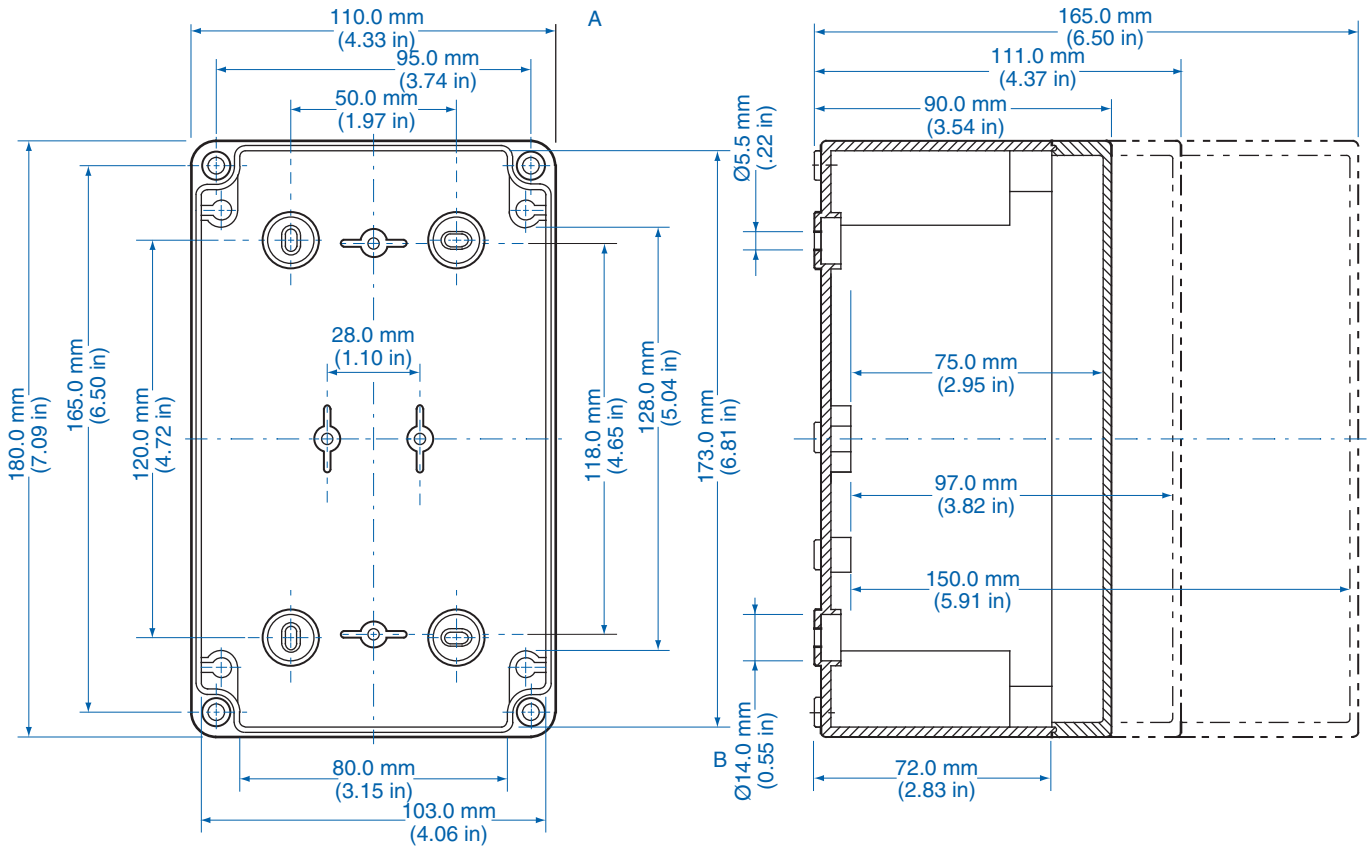
Ordering Information	Height mm (in)	Polystyrene				Polycarbonate <sup>1</sup>			
		Cat. No.	Type	Cover Color	Std. Pk.	Cat. No.	Type	Cover Color	Std. Pk.
Enclosure - low cover	90 mm (3.54 in)	105-406	PS 1811-9-m	gray	2	127-406	PC 1811-9-m	gray	2
Enclosure - high cover	111 mm (4.37 in)	105-906	PS 1811-11-m	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	195-006	MP1811	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

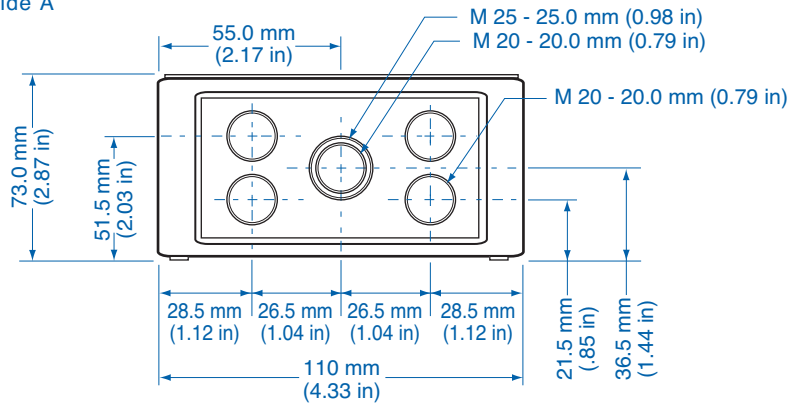
Please refer to pages 116-120 for additional accessories and detailed information.

Dimensions

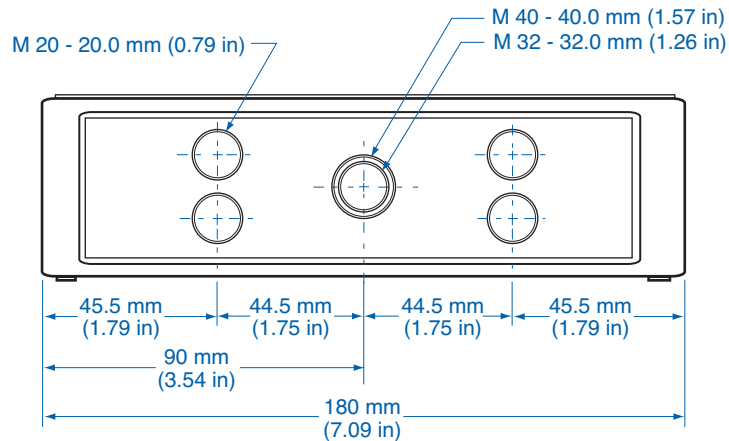


Knockout Positions

Side A



Side B



# TK 1818f – Polystyrene and Polycarbonate – 182x180mm (7.17x7.09in.)

## 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
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Temperature Range:** Polystyrene  
-40°C to 70°C (-40°F to 158°F)  
Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Accessories:** See section below



## Smooth Sidewalls

### Polystyrene

### Polycarbonate<sup>1</sup>

Ordering Information	Height mm (in)	Cat. No.	Type	Cover Color	Std. Pk.	Cat. No.	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

### Polystyrene

### Polycarbonate<sup>1</sup>

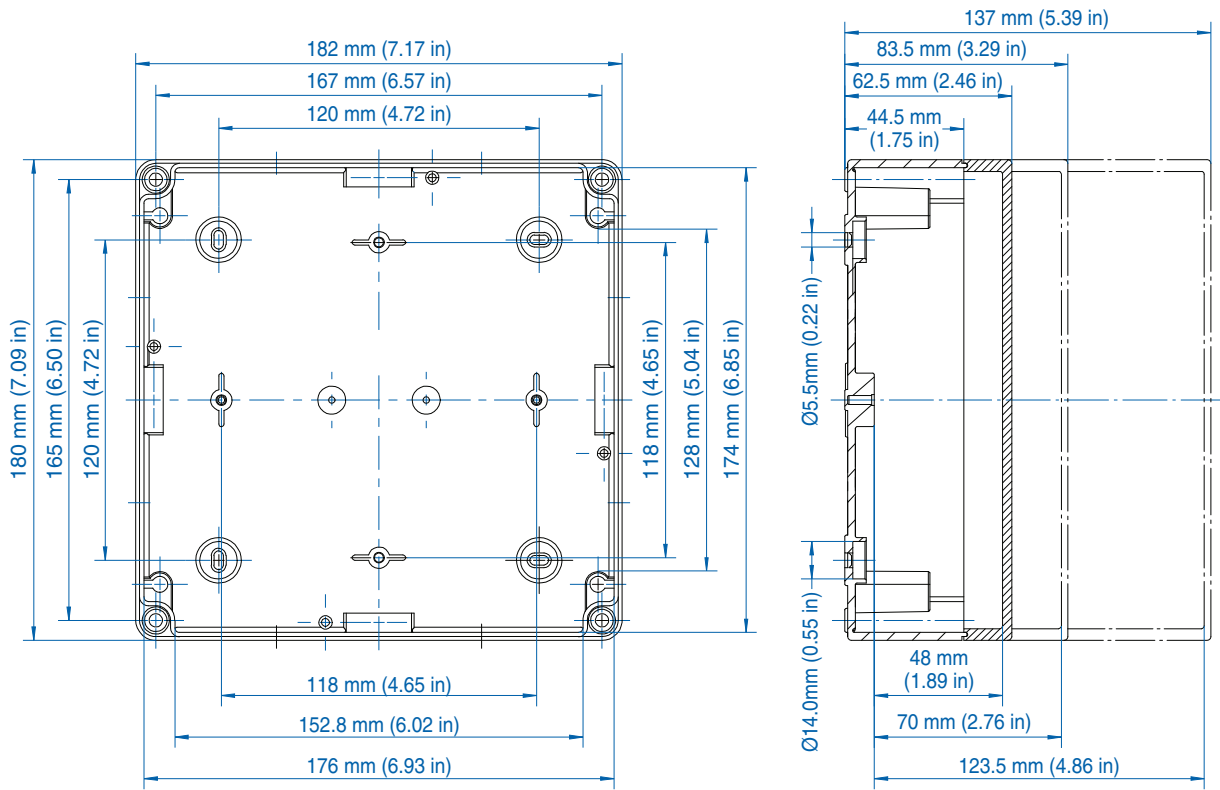
Ordering Information	Height mm (in)	Cat. No.	Type	Cover Color	Std. Pk.	Cat. No.	Type	Cover Color	Std. Pk.
Enclosure - low cover	63 mm (2.48 in)	105-413	PS 1818-6f-m	gray	2	127-413	PC 1818-6f-m	gray	2
Enclosure - high cover	84 mm (3.31 in)	105-913	PS 1818-8f-m	gray	2	127-913	PC 1818-8f-m	gray	2
Enclosure - 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

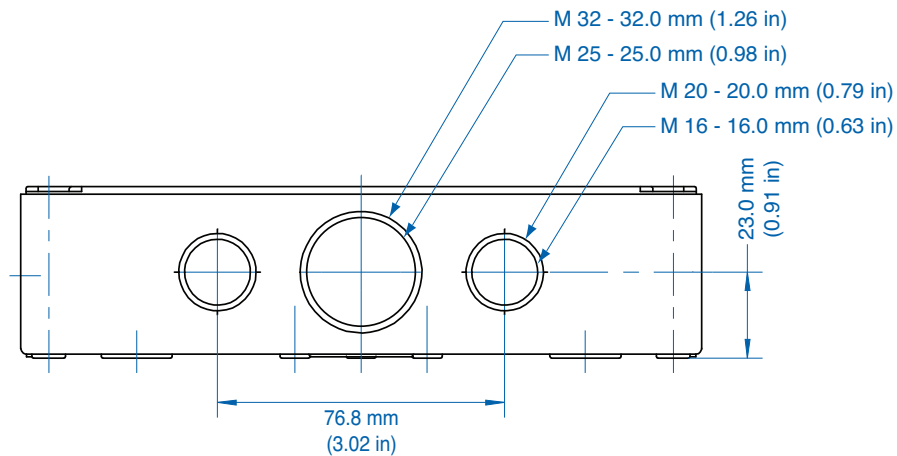
Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate	195-007	MP1818	1
DIN Rail TS35-144mm	198-144	TS 35/144	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit	194-001	MT1	1

Please refer to pages 116-120 for additional accessories and detailed information.

**Dimensions**



**Knockout Positions**



# TK 1818 – Polystyrene and Polycarbonate – 182x180mm (7.17x7.09in.)

## 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
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Temperature Range:** Polystyrene  
-40°C to 70°C (-40°F to 158°F)  
Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Accessories:** See section below



## Smooth Sidewalls

Ordering Information		Height mm (in)	Polystyrene			Polycarbonate <sup>1</sup>			
Ordering Information	Height mm (in)	Cat. No.	Type	Cover Color	Std. Pk.	Cat. No.	Type	Cover Color	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

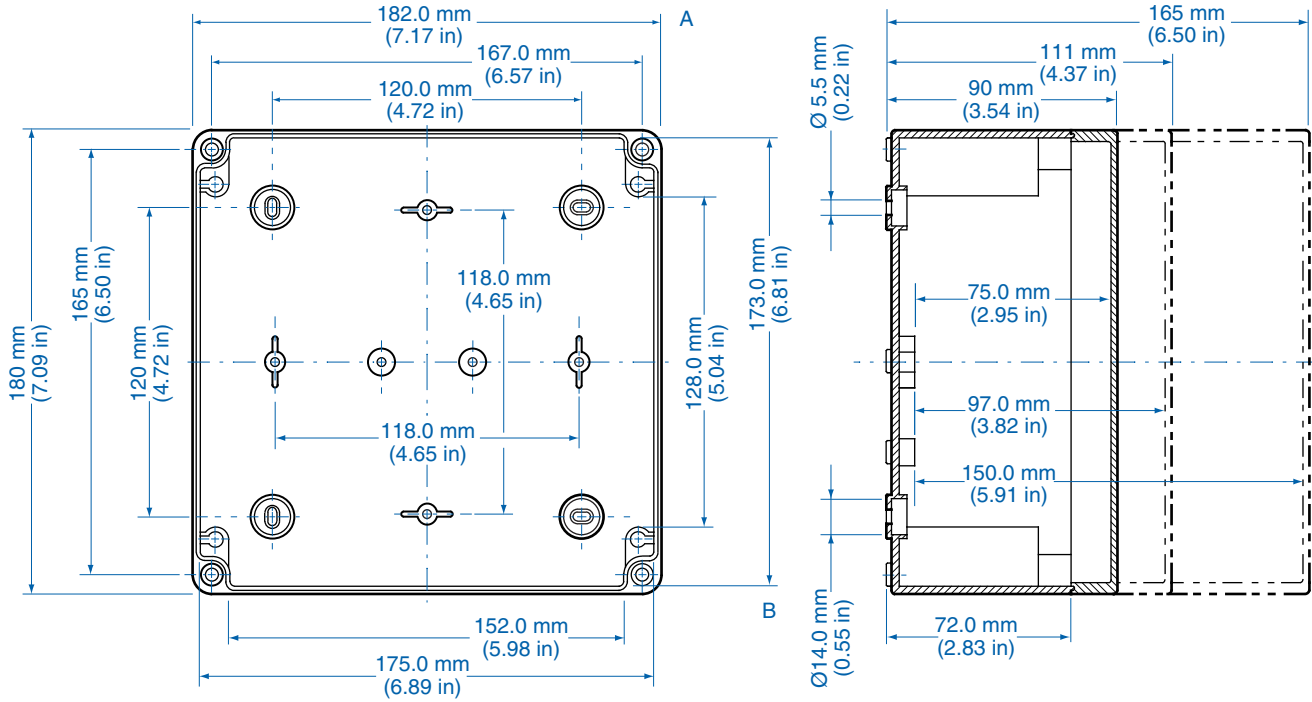
Ordering Information		Height mm (in)	Polystyrene			Polycarbonate <sup>1</sup>			
Ordering Information	Height mm (in)	Cat. No.	Type	Cover Color	Std. Pk.	Cat. No.	Type	Cover Color	Std. Pk.
☐ Enclosure - low cover	90 mm (3.54 in)	105-407	PS 1818-9-m	gray	2	127-407	PC 1818-9-m	gray	2
☐ Enclosure - high cover	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	195-007	MP1818	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

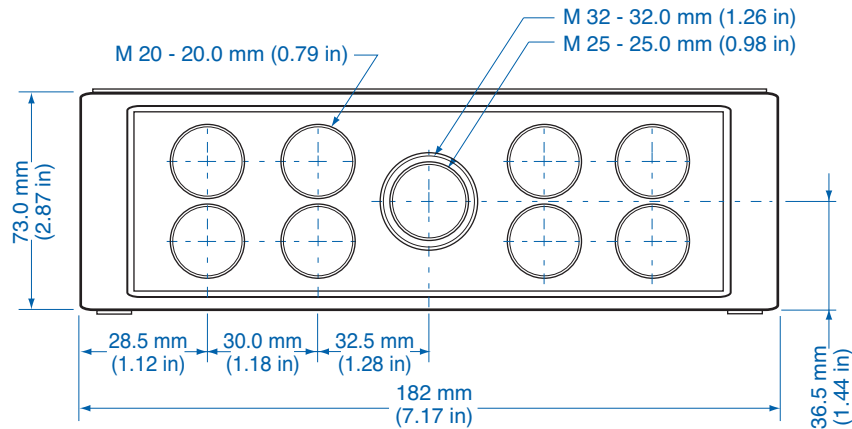
Please refer to pages 116-120 for additional accessories and detailed information.

Dimensions

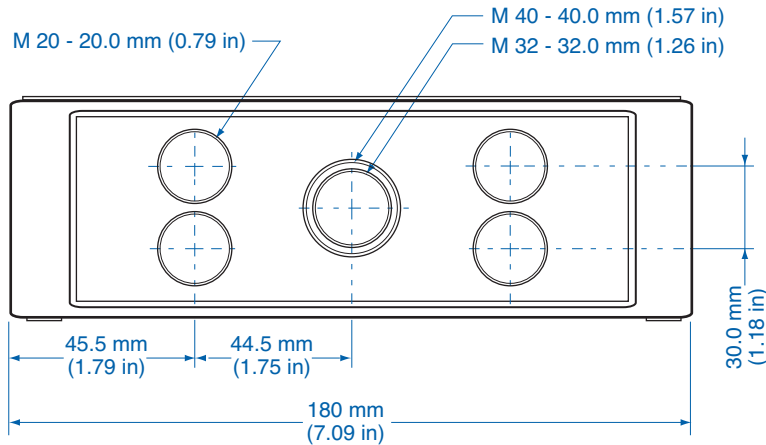


Knockout Positions

Side A



Side B



# TK 2518f – Polystyrene and Polycarbonate – 254x180mm (10.0x7.09in.)

## 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
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Temperature Range:** Polystyrene  
-40°C to 70°C (-40°F to 158°F)  
Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Accessories:** See section below



## Smooth Sidewalls

Ordering Information	Height mm (in)	Polystyrene				Polycarbonate <sup>1</sup>			
		Cat. No.	Type	Cover Color	Std. Pk.	Cat. No.	Type	Cover Color	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

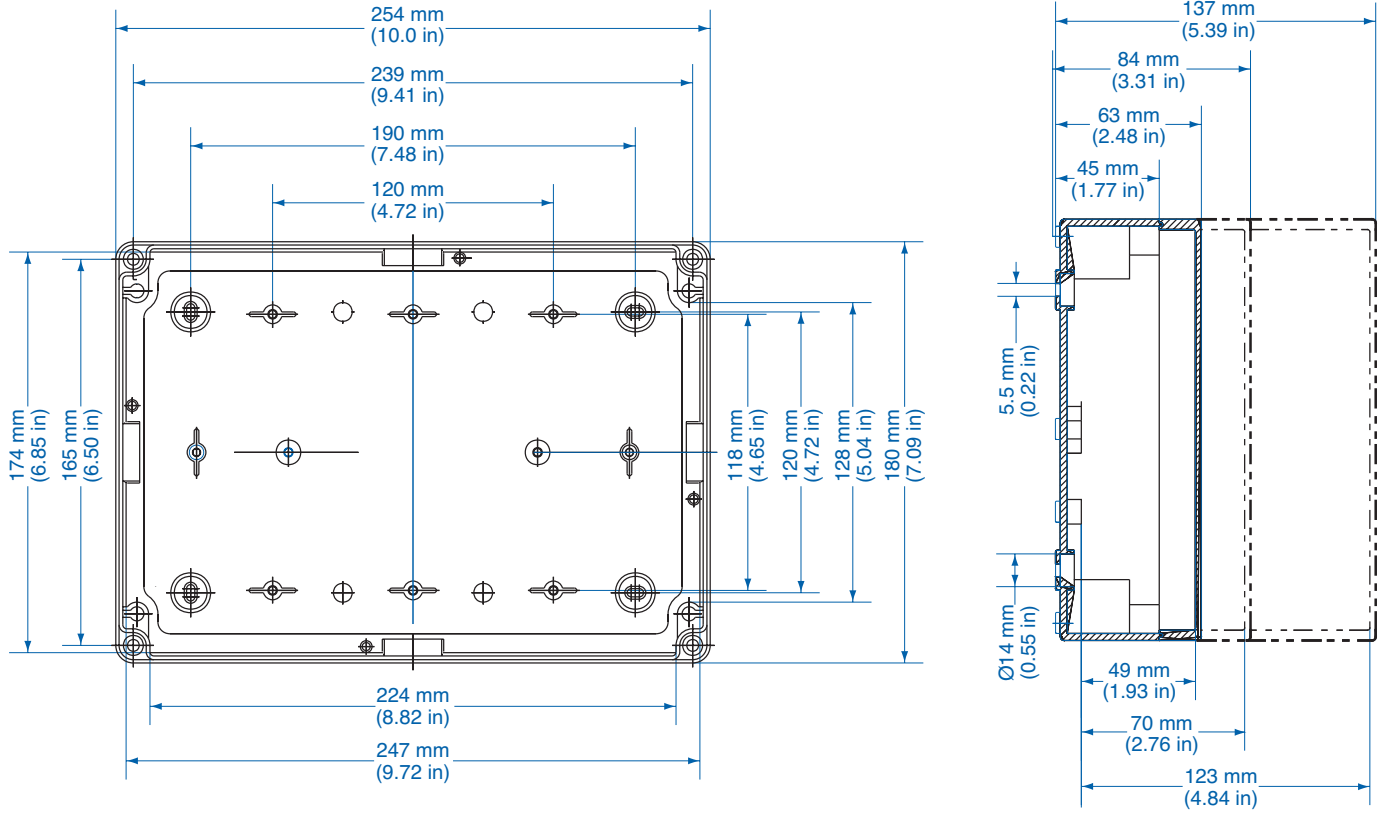
Ordering Information	Height mm (in)	Polystyrene				Polycarbonate <sup>1</sup>			
		Cat. No.	Type	Cover Color	Std. Pk.	Cat. No.	Type	Cover Color	Std. Pk.
Enclosure - low cover	63 mm (2.48 in)	105-411	PS 2518-6f-m	gray	1	127-411	PC 2518-6f-m	gray	1
Enclosure - high cover	84 mm (3.31 in)	105-911	PS 2518-8f-m	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	195-008	MP2518	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

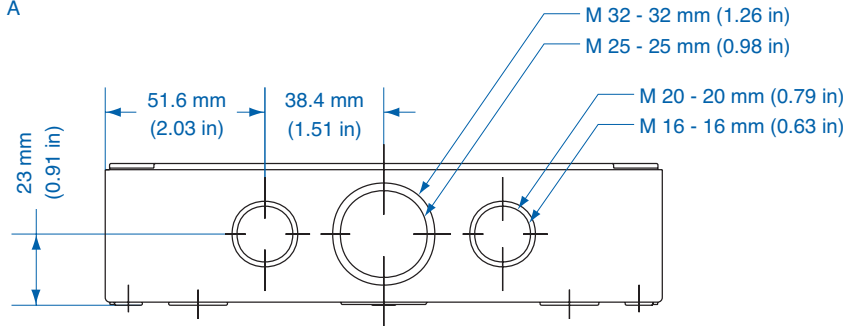
Please refer to pages 116-120 for additional accessories and detailed information.

**Dimensions**

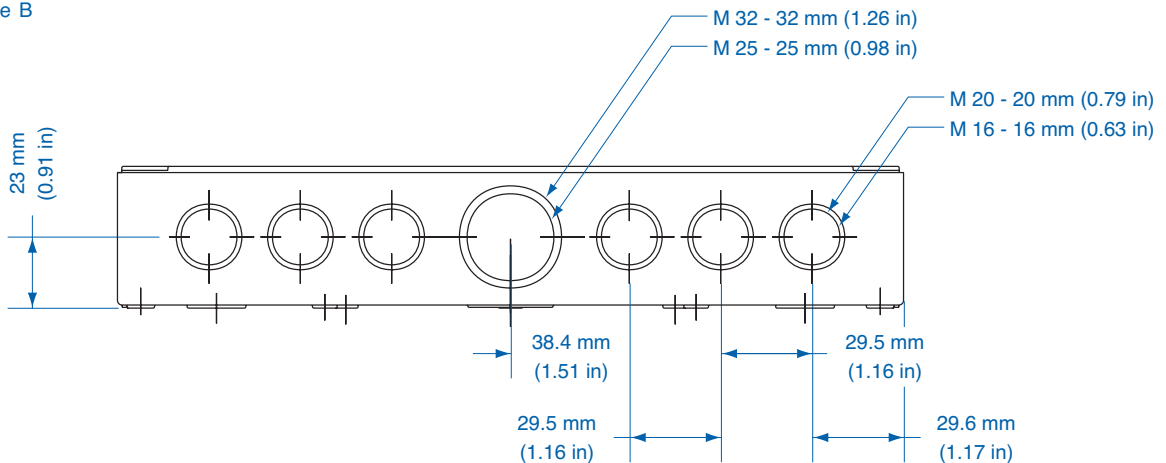


**Knockout Positions**

Side A



Side B



# TK 2518 – Polystyrene and Polycarbonate – 254x180mm (10.0x7.09in.)

## 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
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Temperature Range:** Polystyrene  
-40°C to 70°C (-40°F to 158°F)  
Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Accessories:** See section below



## Smooth Sidewalls

### Polystyrene

### Polycarbonate<sup>1</sup>

Ordering Information	Height mm (in)	Cat. No.	Type	Cover Color	Std. Pk.	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

### Polystyrene

### Polycarbonate<sup>1</sup>

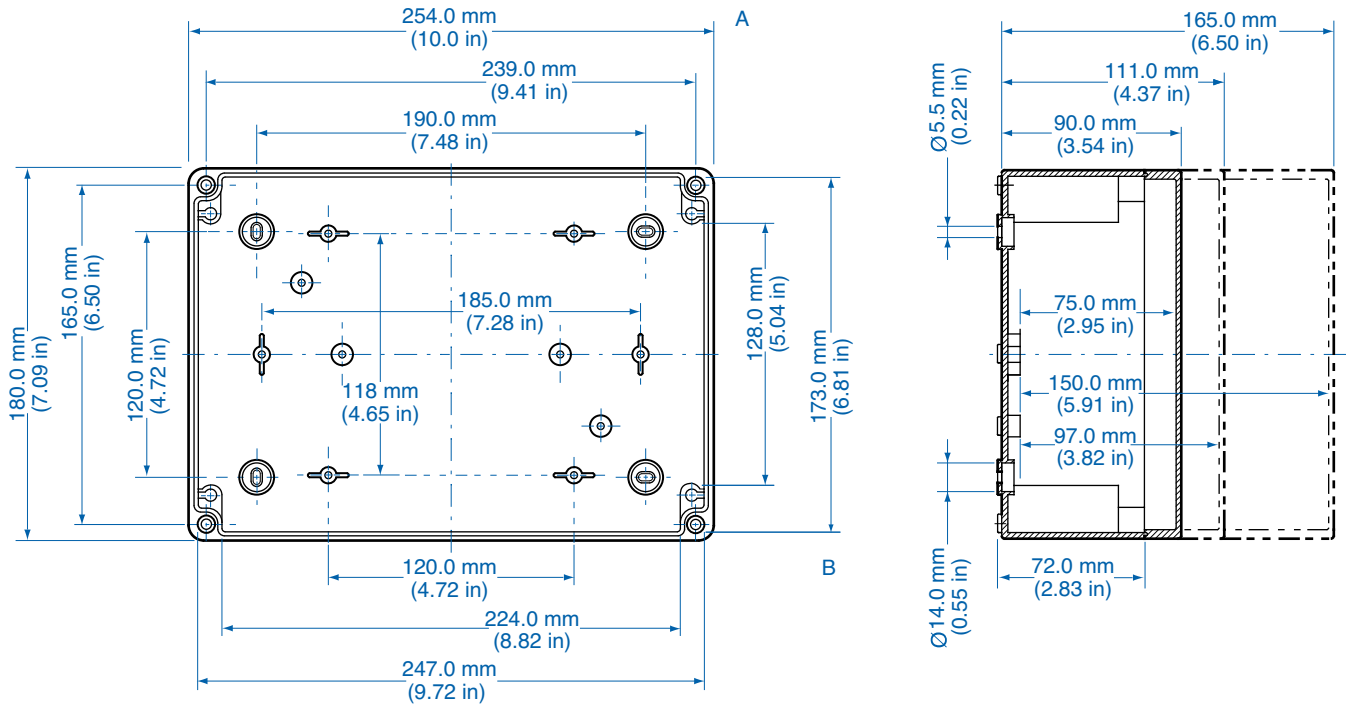
Ordering Information	Height mm (in)	Cat. No.	Type	Cover Color	Std. Pk.	Cat. No.	Type	Cover Color	Std. Pk.
Enclosure - low cover	90 mm (3.54 in)	105-408	PS 2518-9-m	gray	1	127-408	PC 2518-9-m	gray	1
Enclosure - high cover	111 mm (4.37 in)	105-908	PS 2518-11-m	gray	1	127-908	PC 2518-11-m	gray	1
Enclosure - 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	195-008	MP2518	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

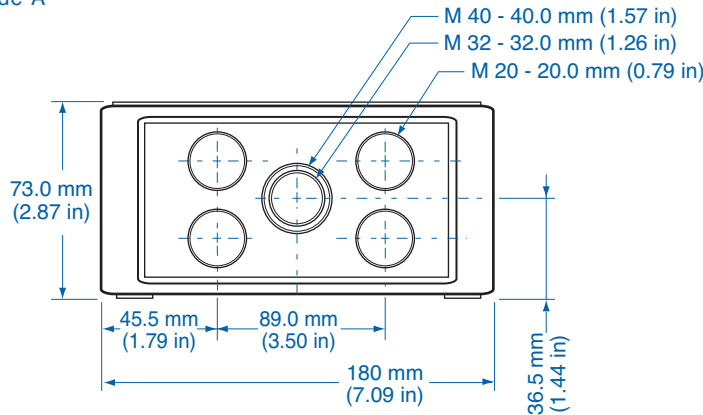
Please refer to pages 116-120 for additional accessories and detailed information.

Dimensions

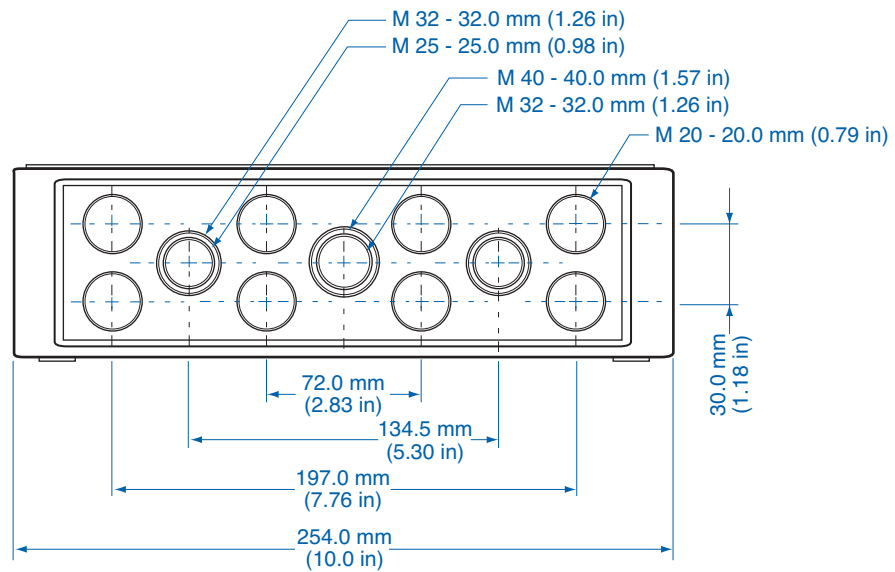


Knockout Positions

Side A



Side B



# TK 3625 – Polystyrene and Polycarbonate – 360x254mm (14.2x10.0in.)

## 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
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Temperature Range:** Polystyrene  
-40°C to 70°C (-40°F to 158°F)  
Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Accessories:** See section below



## Smooth Sidewalls

Ordering Information	Height mm (in)	Polystyrene					Polycarbonate <sup>1</sup>				
		Cat. No.	Type	Cover Color	Std. Pk.	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

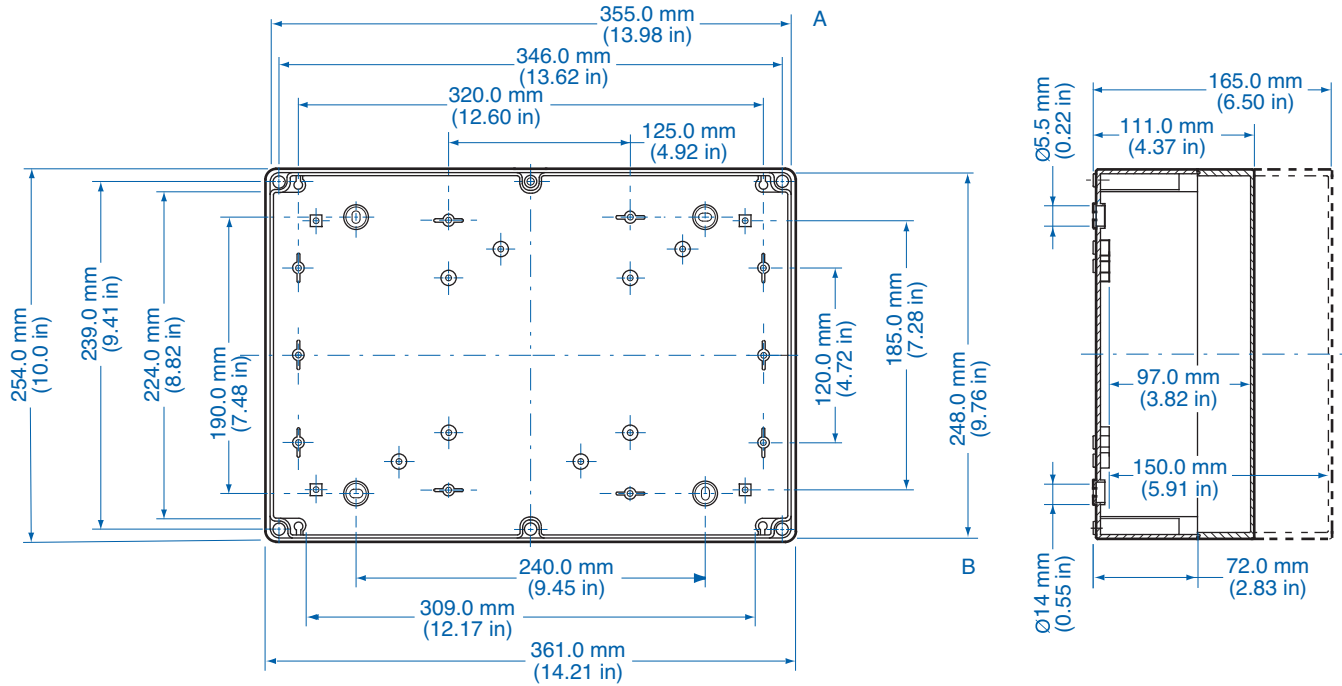
Ordering Information	Height mm (in)	Polystyrene					Polycarbonate <sup>1</sup>				
		Cat. No.	Type	Cover Color	Std. Pk.	Cat. No.	Type	Cover Color	Std. Pk.		
Enclosure - low cover	111 mm (4.37 in)	105-412	PS 3625-11-m	gray	1	127-412	PC 3625-11-m	gray	1		
Enclosure - high cover	165 mm (6.50 in)	105-912	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

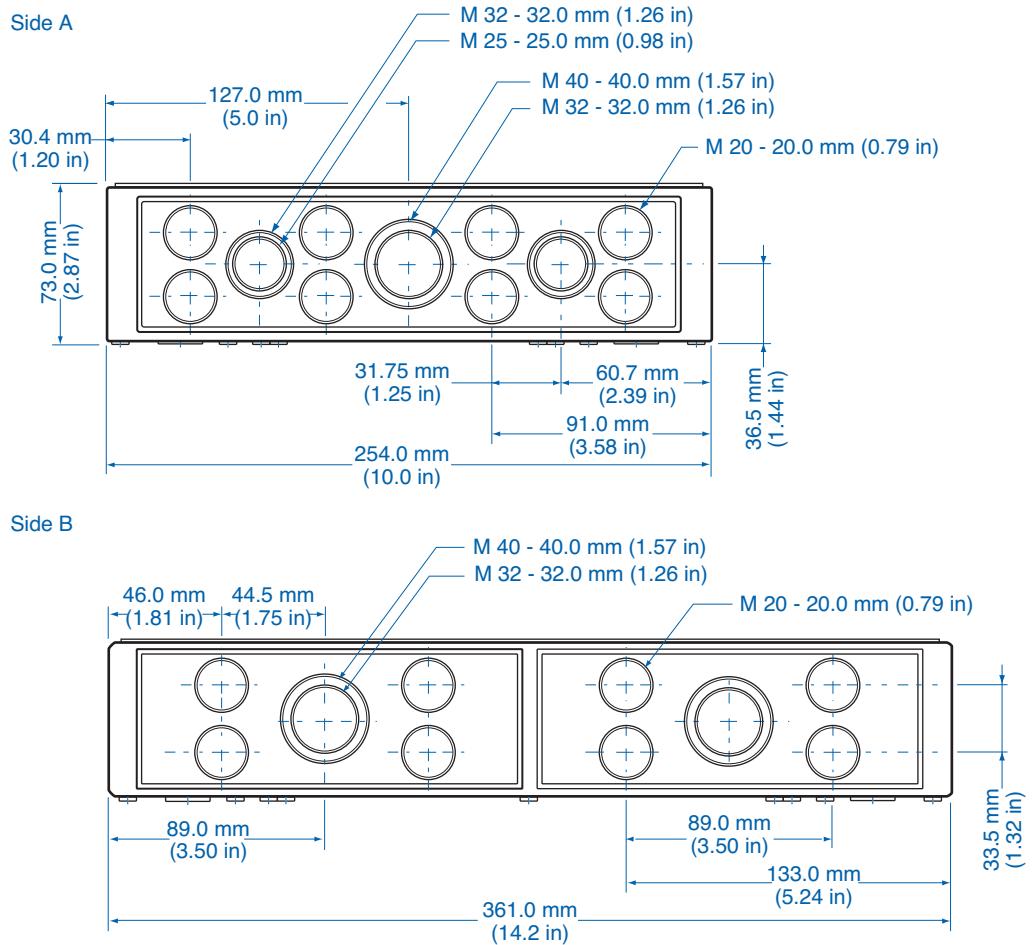
Ordering Information	Cat. No.	Type	Std. Pk.
Mounting Plate	195-012	MP3625	1
DIN Rail TS35-336mm	198-336	TS 35/ 336	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit	194-001	MT1	1

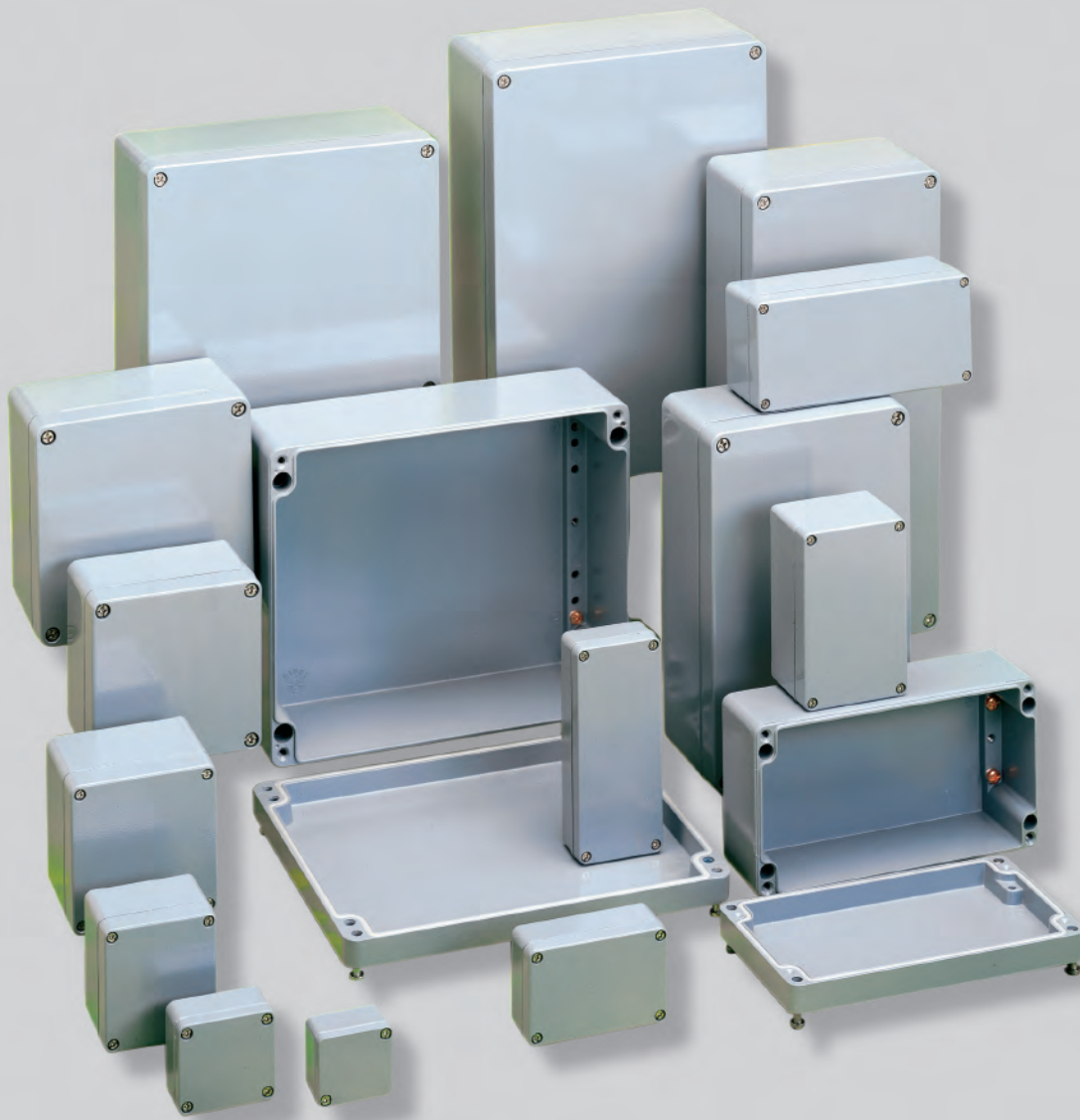
Please refer to pages 116-120 for additional accessories and detailed information.

Dimensions



Knockout Positions





# 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 IP65 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.

The complete series of 16 enclosures ranges from 50x45x30mm to 330x230x110mm.

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.

# AL Series Enclosures

The advantages of the AL Series include:

- IP65 protection, which is necessary for industry approval.
- High degree of resistance to chemicals and other damaging materials.
- Protection against electromagnetic interference (EMI).

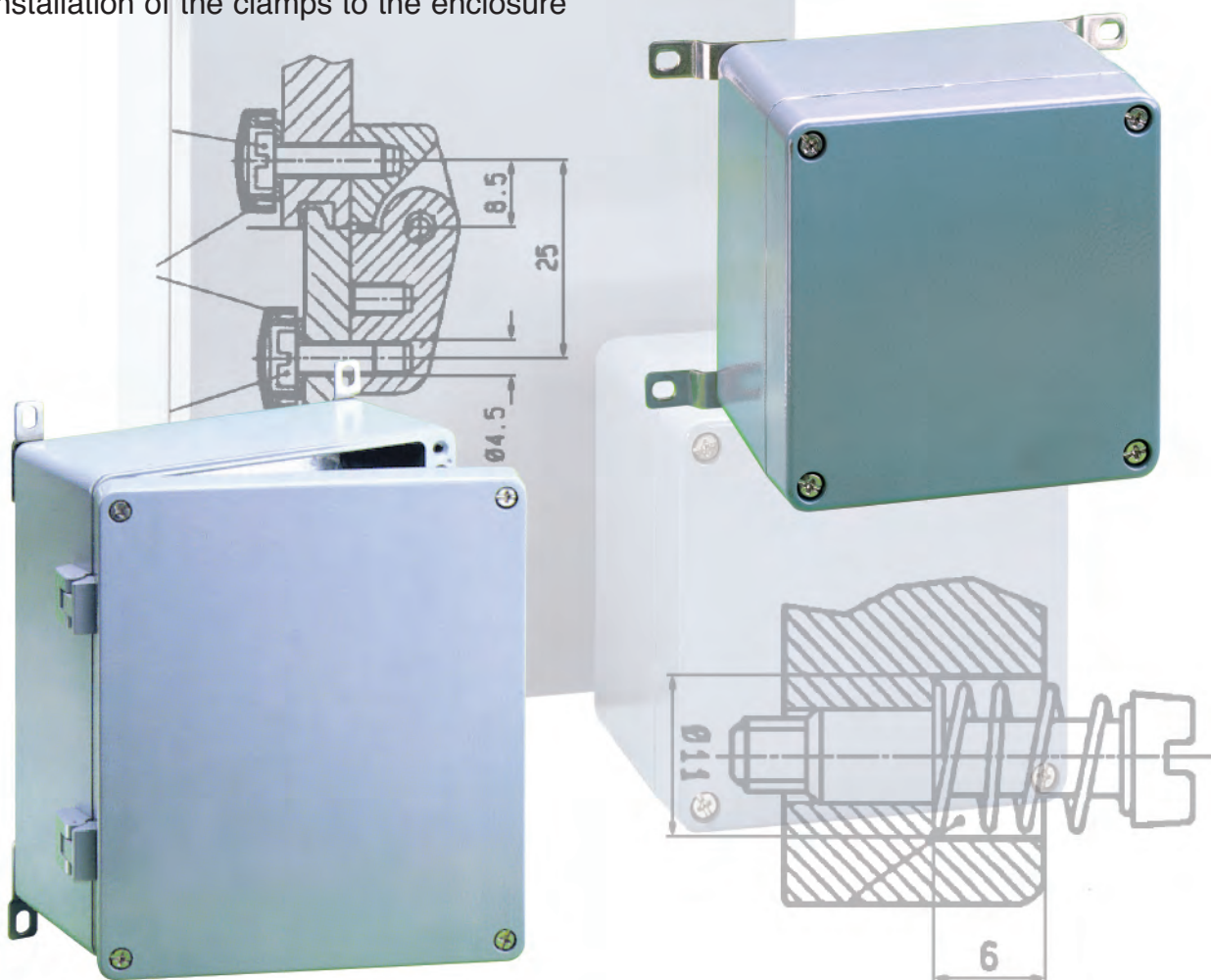
The specially designed AL Series accessories make the AL Enclosures flexible and highly secure.

The external fastening clamps 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 outer 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.



# AL 55-3 – Aluminum – 50x45mm (1.97x1.77in.)

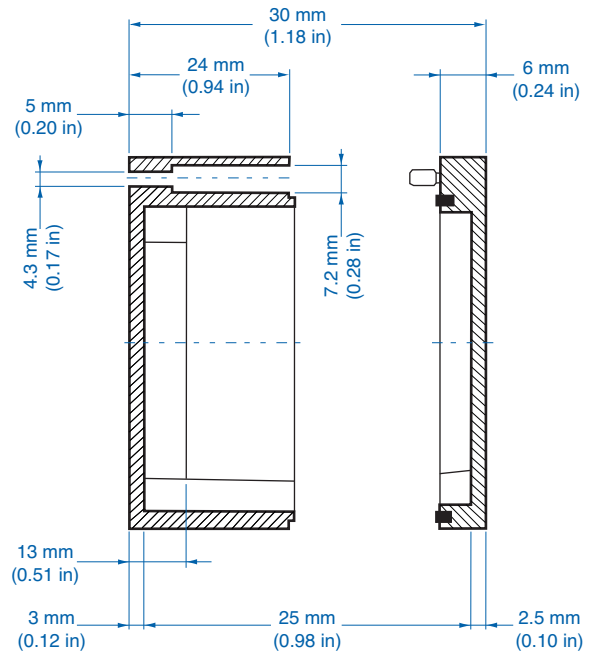
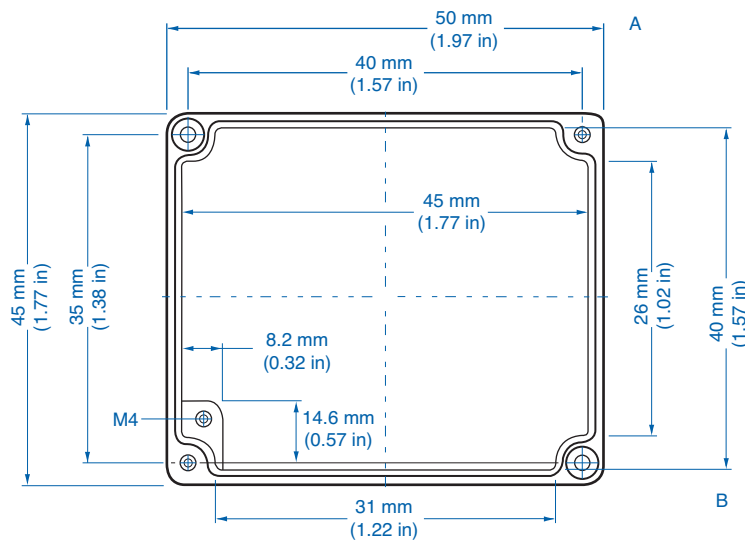
## Standard Features

- **Protection Level:** IP65
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Temperature Range:** -40°C to 100°C (-40°F to 212°F)
- **Gasket Material:** Polyurethane  
-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	Length	Dimensions mm (in)		Std. Pk.
				Width	Height	
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:** IP65
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Temperature Range:** -40°C to 100°C (-40°F to 212°F)
- **Gasket Material:** Polyurethane  
-35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



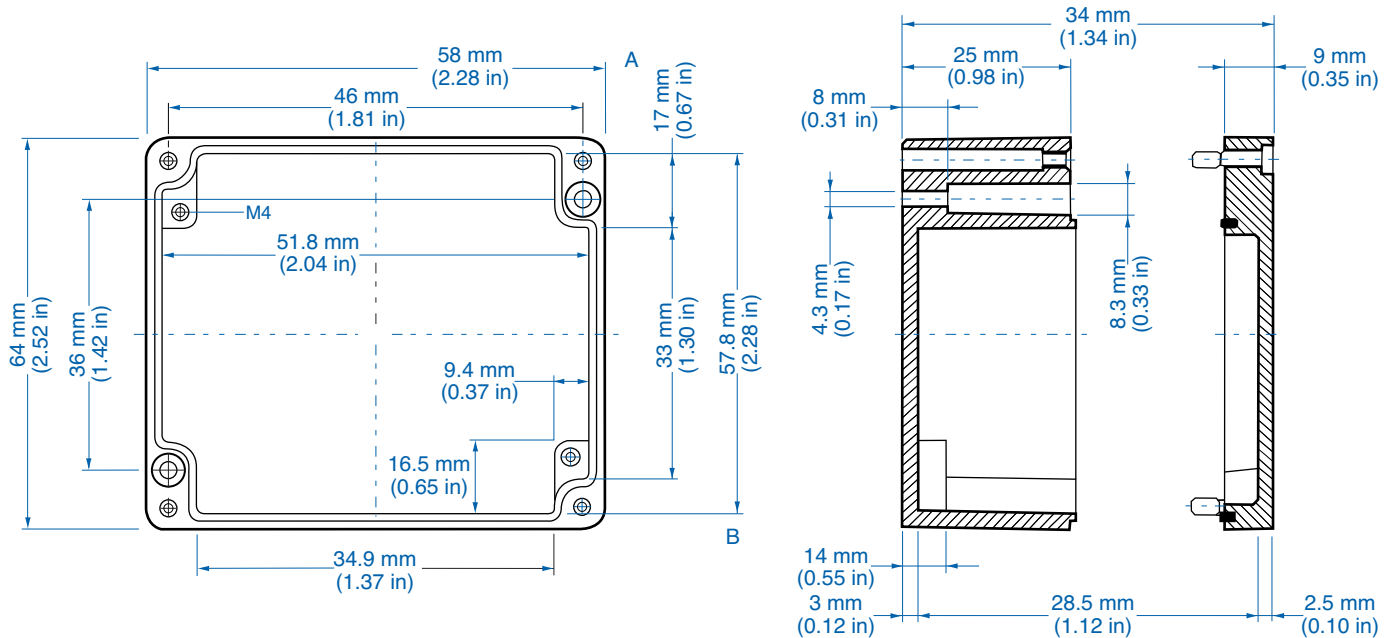
**Aluminum**

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in)		Std. Pk.
				Width	Height	
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 116-120 for additional accessories and detailed information.



## AL 1006-3 – Aluminum – 98x64mm (3.86x2.52in.)

### Standard Features

- **Protection Level:** IP65
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Temperature Range:** -40°C to 100°C (-40°F to 212°F)
- **Gasket Material:** Polyurethane  
-35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



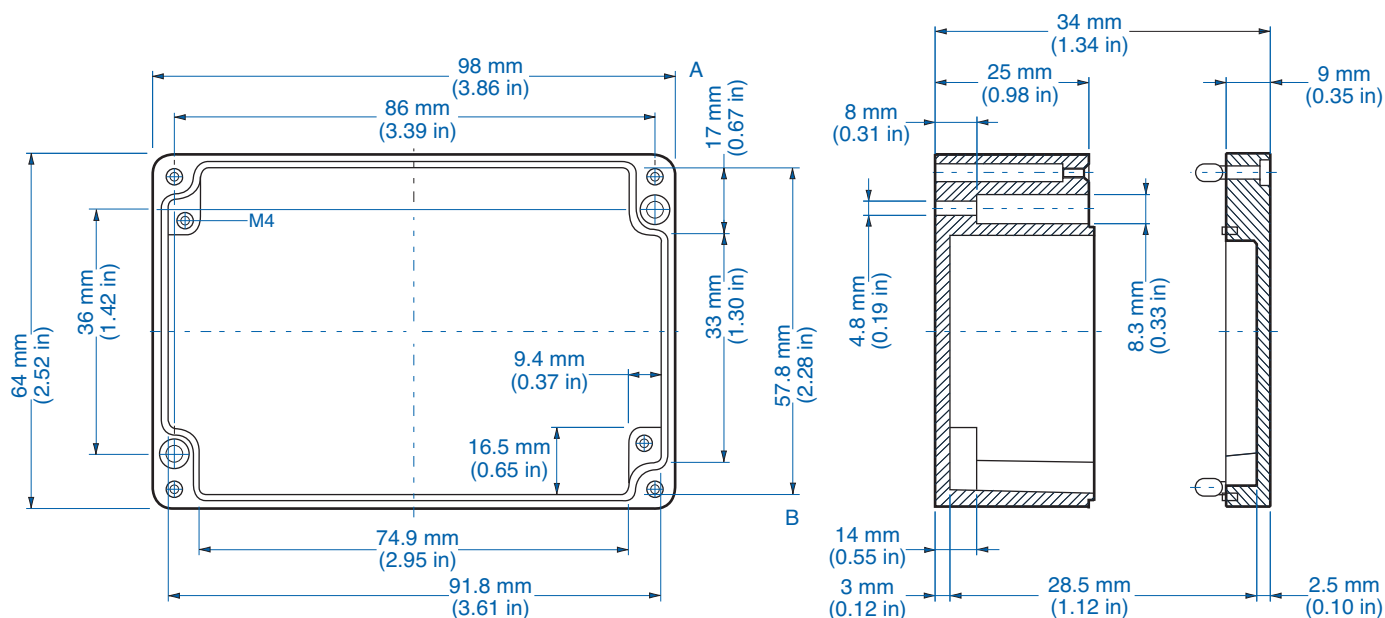
### Aluminum

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in)		Std. Pk.
				Width	Height	
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 116-120 for additional accessories and detailed information.



**Standard Features**

- **Protection Level:** IP65
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Temperature Range:** -40°C to 100°C (-40°F to 212°F)
- **Gasket Material:** Polyurethane  
-35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



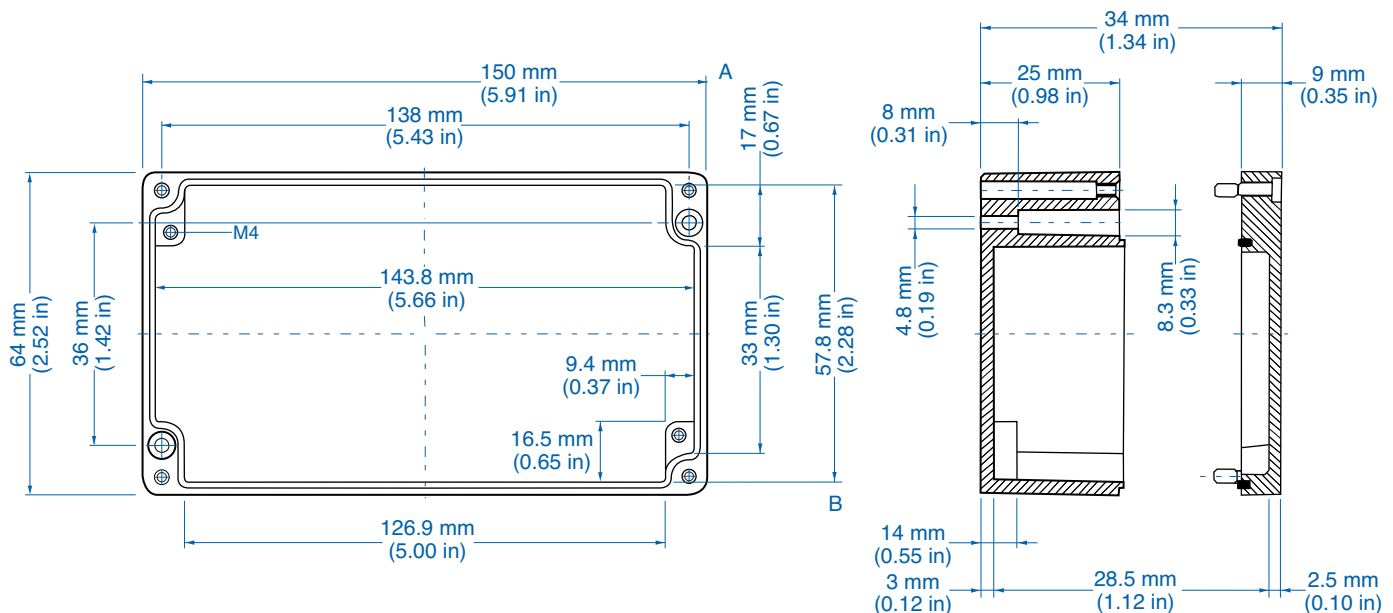
**Aluminum**

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in)		Std. Pk.
				Width	Height	
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 116-120 for additional accessories and detailed information.



# AL 88-6 – Aluminum – 80x75mm (3.15x2.95in.)

## Standard Features

- **Protection Level:** IP65
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Temperature Range:** -40°C to 100°C (-40°F to 212°F)
- **Gasket Material:** Polyurethane  
-35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



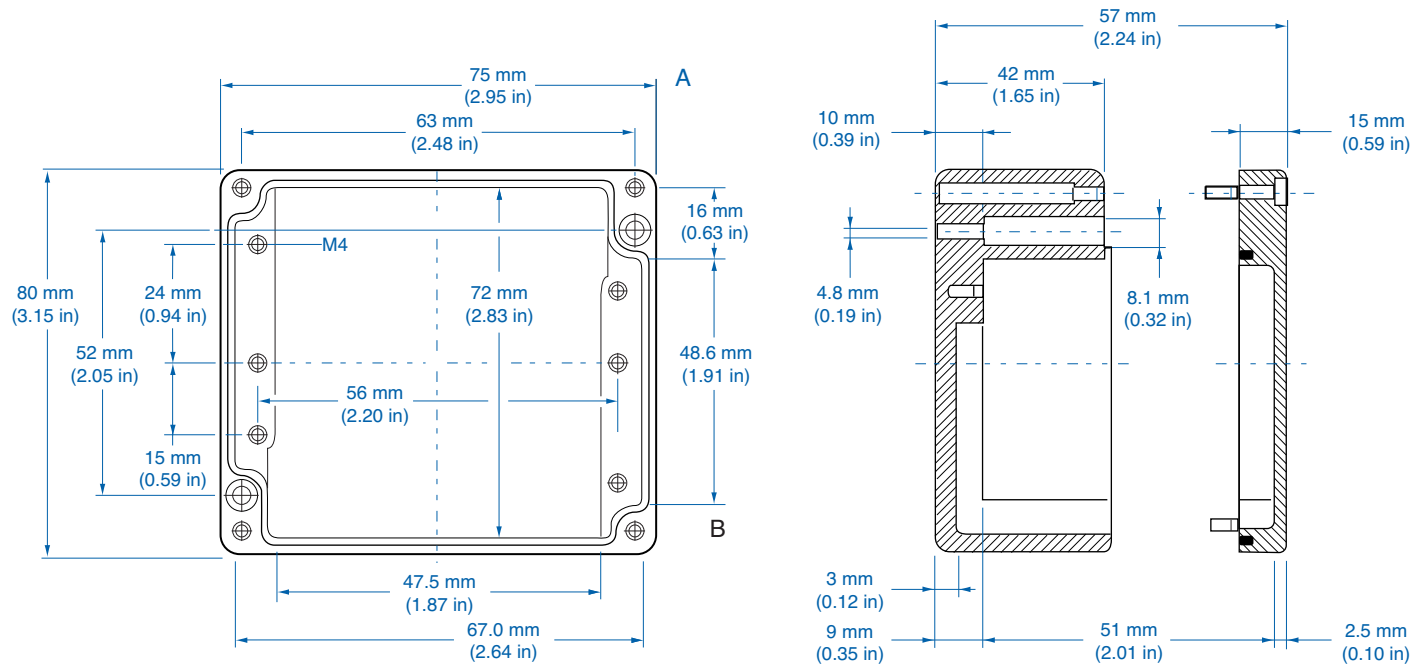
## Aluminum

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in) 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	MP88	1
Mounting Tab Kit - small	154-004	MT-AL1	1

Please refer to pages 116-120 for additional accessories and detailed information.



**Standard Features**

- **Protection Level:** IP65
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Temperature Range:** -40°C to 100°C (-40°F to 212°F)
- **Gasket Material:** Polyurethane  
-35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



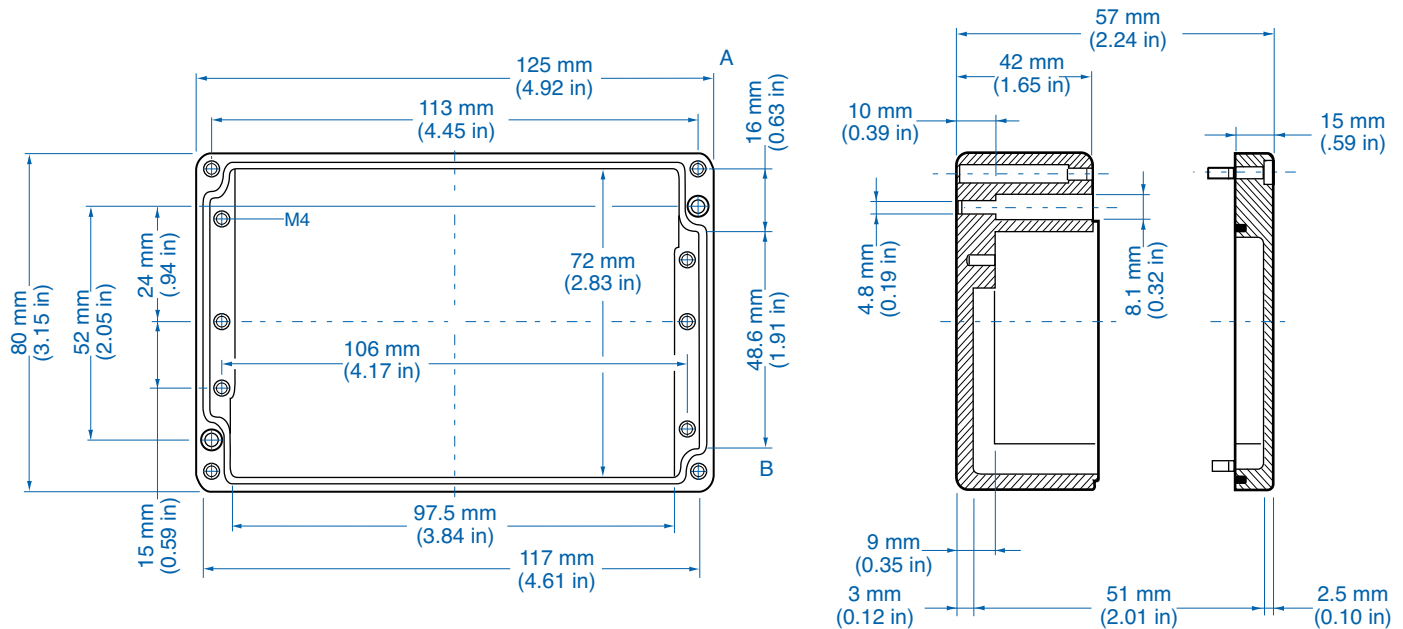
**Aluminum**

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in) 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	MP1308	1
Mounting Tab Kit - small	154-004	MT-AL1	1

Please refer to pages 116-120 for additional accessories and detailed information.



# AL 1808-6 – Aluminum – 175x80mm (6.89x3.15in.)

## Standard Features

- **Protection Level:** IP65
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Temperature Range:** -40°C to 100°C (-40°F to 212°F)
- **Gasket Material:** Polyurethane  
-35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



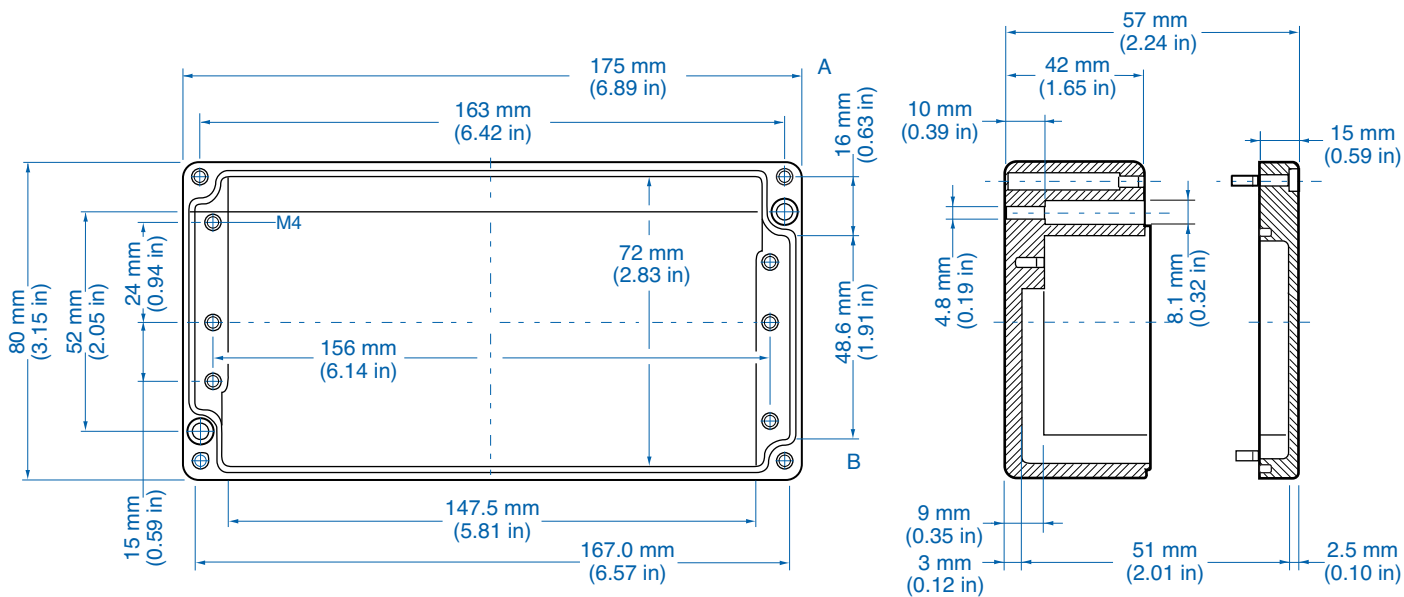
## Aluminum

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in)		Std. Pk.
				Width	Height	
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	MP1808	1
Mounting Tab Kit - small	154-004	MT-AL1	1

Please refer to pages 116-120 for additional accessories and detailed information.



**Standard Features**

- **Protection Level:** IP65
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Temperature Range:** -40°C to 100°C (-40°F to 212°F)
- **Gasket Material:** Polyurethane  
-35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



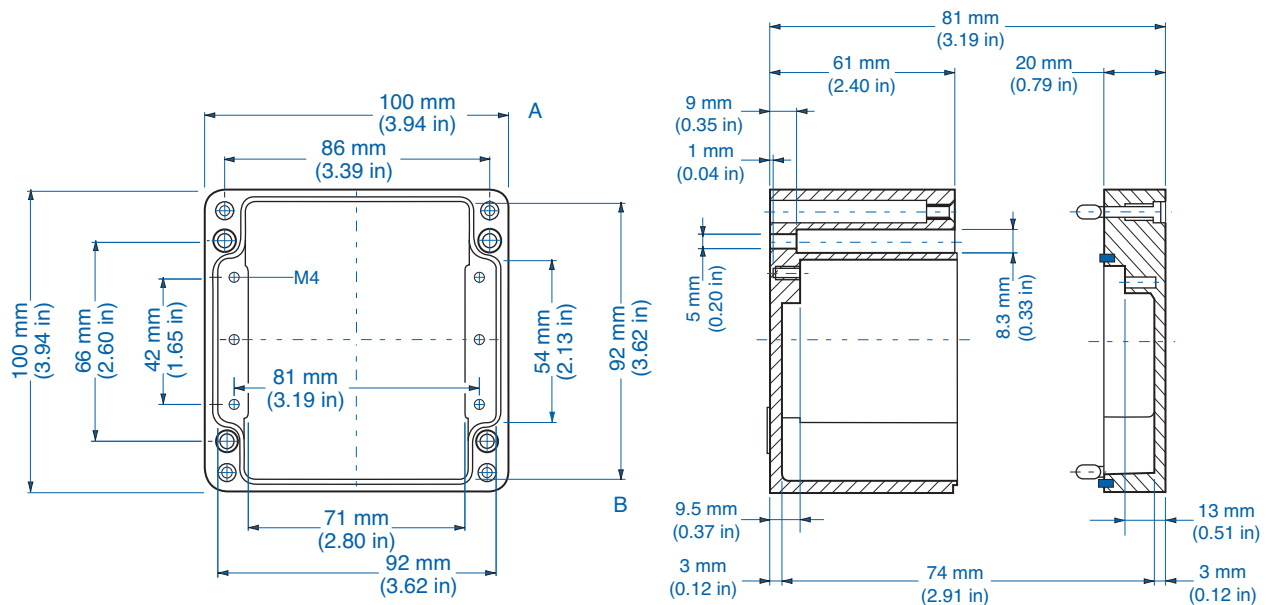
**Aluminum**

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in)	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	MP1010	1
Hinge Kit Set	154-210	HK-AL	1
Mounting Tab Kit - small	154-004	MT-AL1	1

Please refer to pages 116-120 for additional accessories and detailed information.



# AL 1212-8 – Aluminum – 122x120mm (4.80x4.72in.)

## Standard Features

- **Protection Level:** IP65
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Temperature Range:** -40°C to 100°C (-40°F to 212°F)
- **Gasket Material:** Polyurethane  
-35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



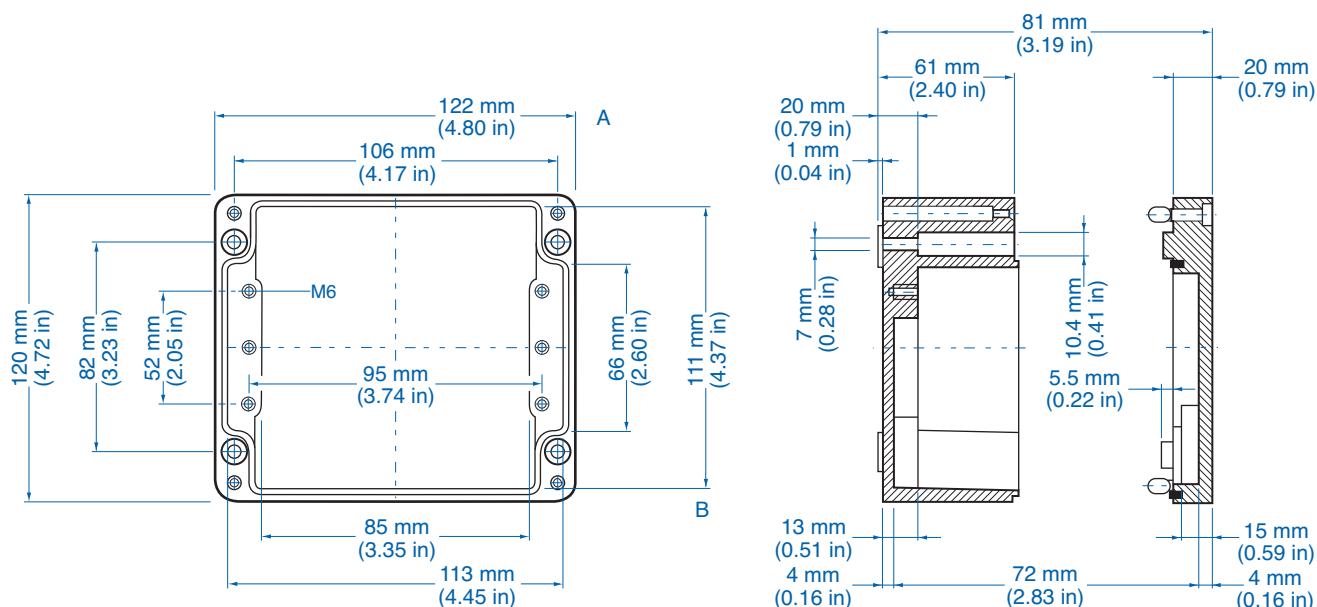
## Aluminum

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in) 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	MP1212	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 116-120 for additional accessories and detailed information.



**Standard Features**

- **Protection Level:** IP65
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Temperature Range:** -40°C to 100°C (-40°F to 212°F)
- **Gasket Material:** Polyurethane  
-35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



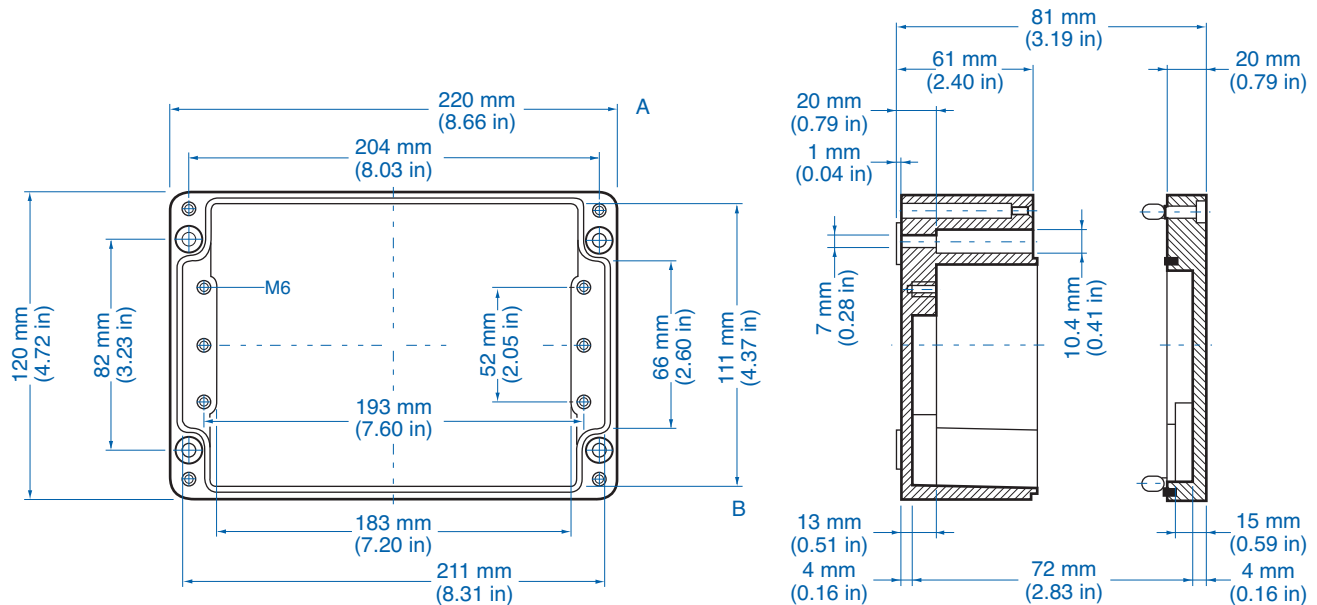
**Aluminum**

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in)		Std. Pk.
				Width	Height	
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	MP2212	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 116-120 for additional accessories and detailed information.



# AL 1616-9 – Aluminum – 160x160mm (6.30x6.30in.)

## Standard Features

- **Protection Level:** IP65
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Temperature Range:** -40°C to 100°C (-40°F to 212°F)
- **Gasket Material:** Polyurethane  
-35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



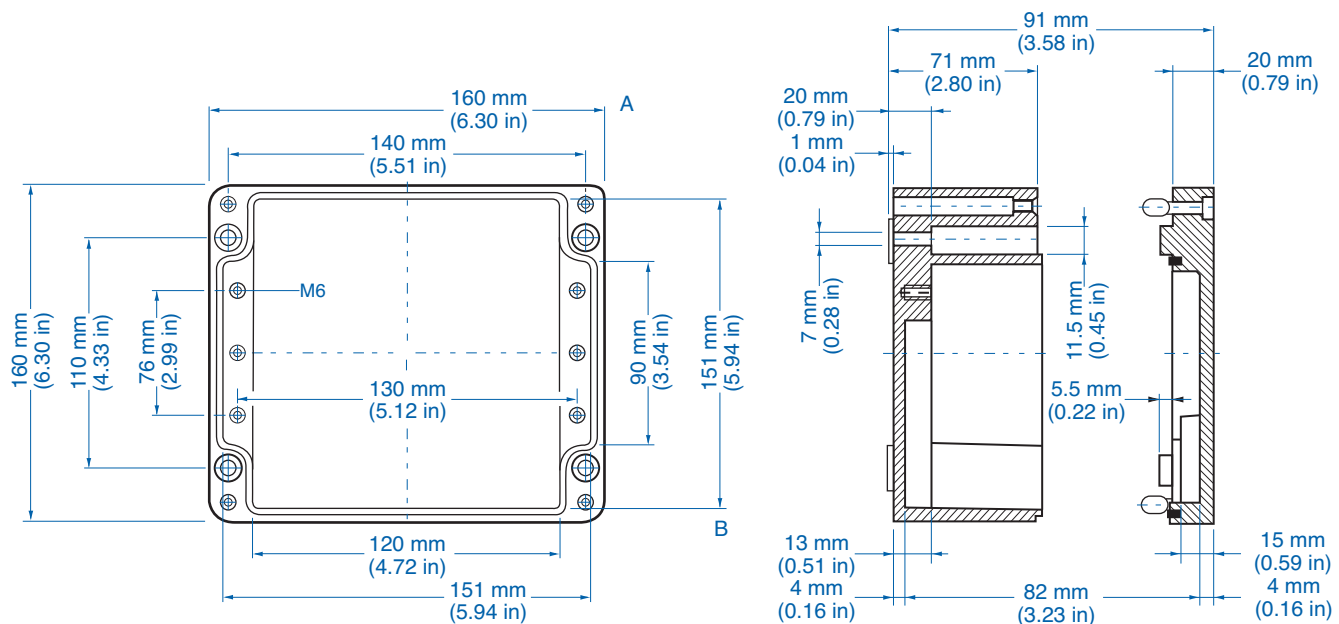
## Aluminum

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in)	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	MP1616	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 116-120 for additional accessories and detailed information.



**Standard Features**

- **Protection Level:** IP65
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Temperature Range:** -40°C to 100°C (-40°F to 212°F)
- **Gasket Material:** Polyurethane  
-35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



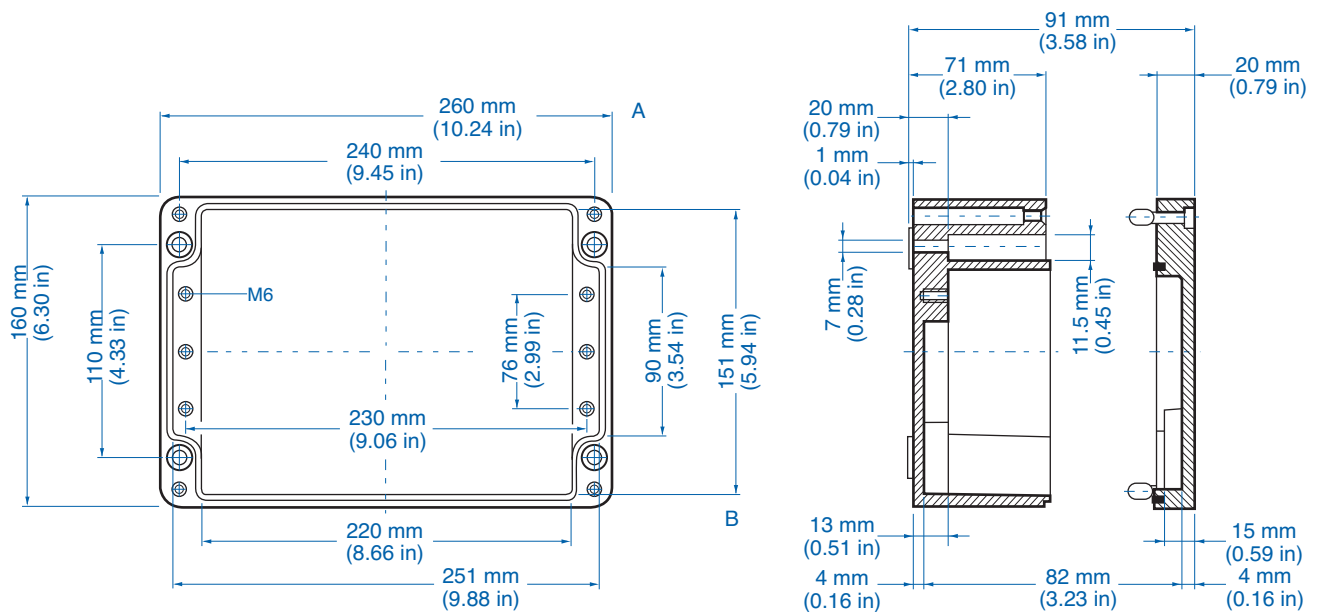
**Aluminum**

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in)		Std. Pk.
				Width	Height	
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	MP2616	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 116-120 for additional accessories and detailed information.



# AL 3616-9 – Aluminum – 360x160mm (14.17x6.30in.)

## Standard Features

- **Protection Level:** IP65
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Temperature Range:** -40°C to 100°C (-40°F to 212°F)
- **Gasket Material:** Polyurethane  
-35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



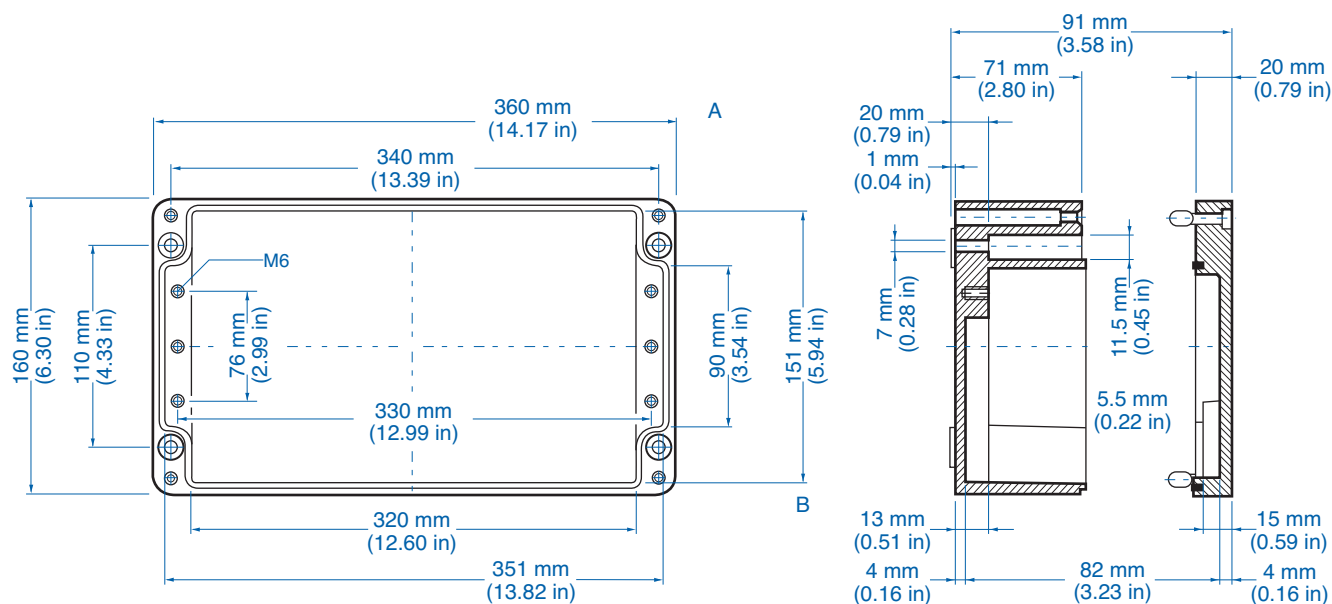
## Aluminum

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in) 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	MP3616	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 116-120 for additional accessories and detailed information.



**Standard Features**

- **Protection Level:** IP65
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Temperature Range:** -40°C to 100°C (-40°F to 212°F)
- **Gasket Material:** Polyurethane  
-35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



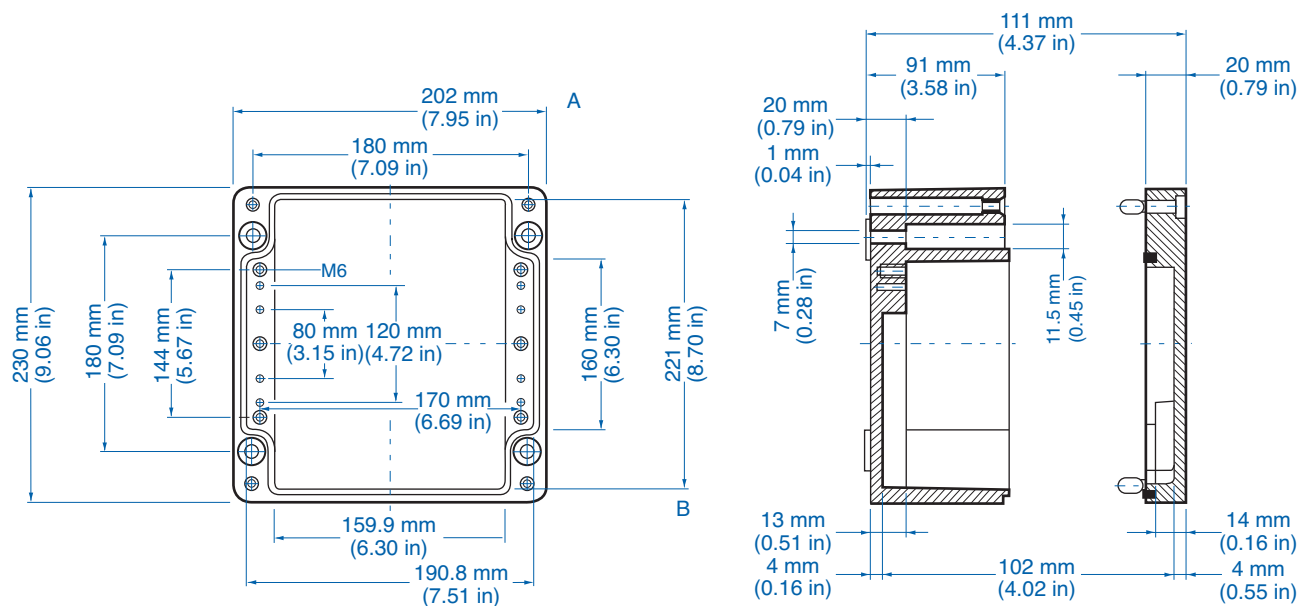
**Aluminum**

Ordering Information	Cat. No	Type	Length	Dimensions mm (in)		Std. Pk.
				Width	Height	
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	MP2023	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 116-120 for additional accessories and detailed information.



# AL 2823-11 – Aluminum – 280x230mm (11.02x9.06in.)

## Standard Features

- **Protection Level:** IP65
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Temperature Range:** -40°C to 100°C (-40°F to 212°F)
- **Gasket Material:** Polyurethane  
-35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



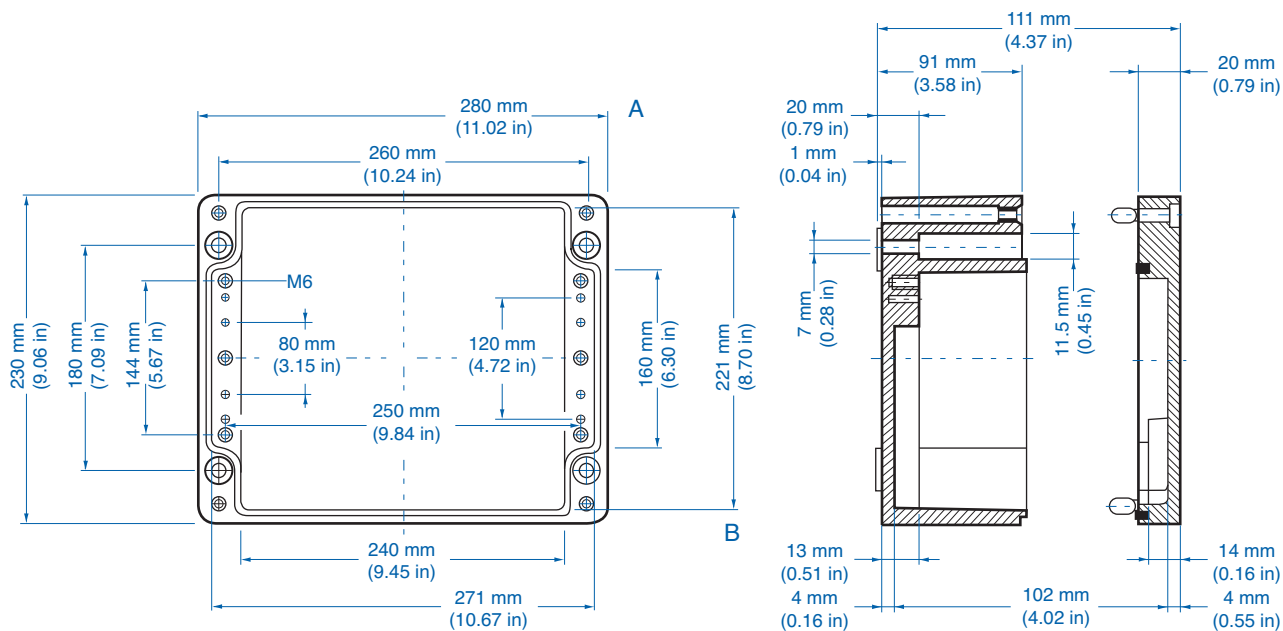
## Aluminum

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in) 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	MP2823	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 116-120 for additional accessories and detailed information.



**Standard Features**

- **Protection Level:** IP65
- **Technical:** Smooth Sidewalls
- **Enclosure Material:** Cast Aluminum, Al Si 12
- **Temperature Range:** -40°C to 100°C (-40°F to 212°F)
- **Gasket Material:** Polyurethane  
-35°C to 80°C (-31°F to 176°F)
- **Color:** Silver Gray, RAL 7001
- **Accessories:** See section below



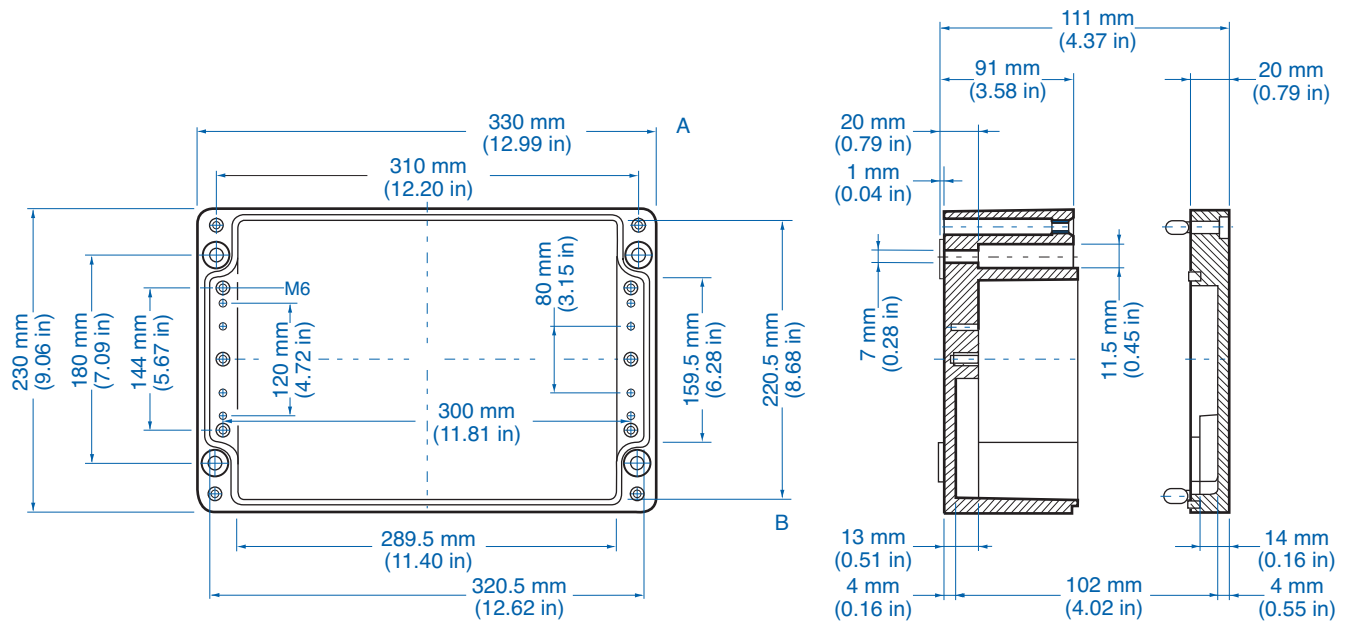
**Aluminum**

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in) 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	MP3323	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 116-120 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.

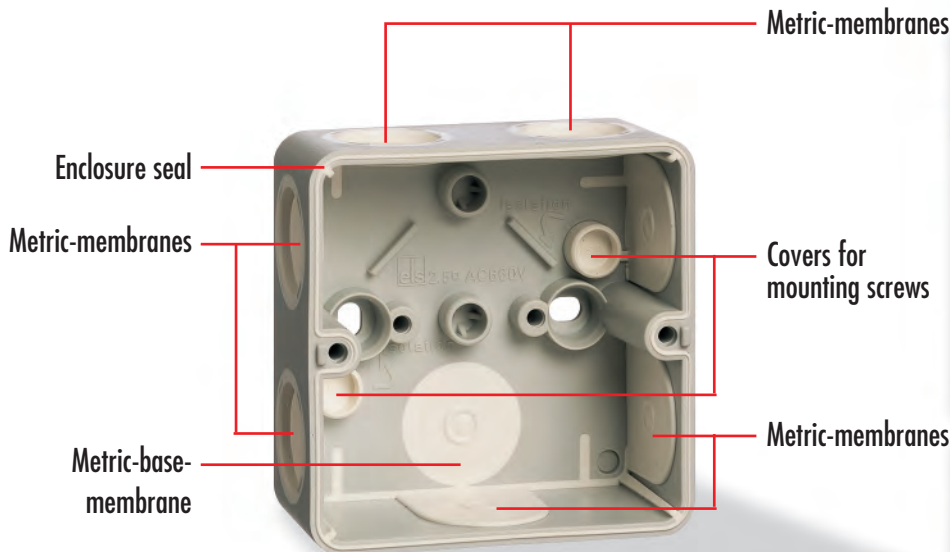
Two of the six enclosures in this family feature "Dual Molding Technology". This feature incorporates rubber membranes molded right into the polystyrene body. This allows the user to simply push wires through the membrane or cut them out to install a cable gland. These access holes can accommodate metric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

Abox Enclosures are available in sizes ranging from 80x80x52 mm (3.15x3.15x2.05 in.) to 250x250x115 mm (9.84x9.84x4.53 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.

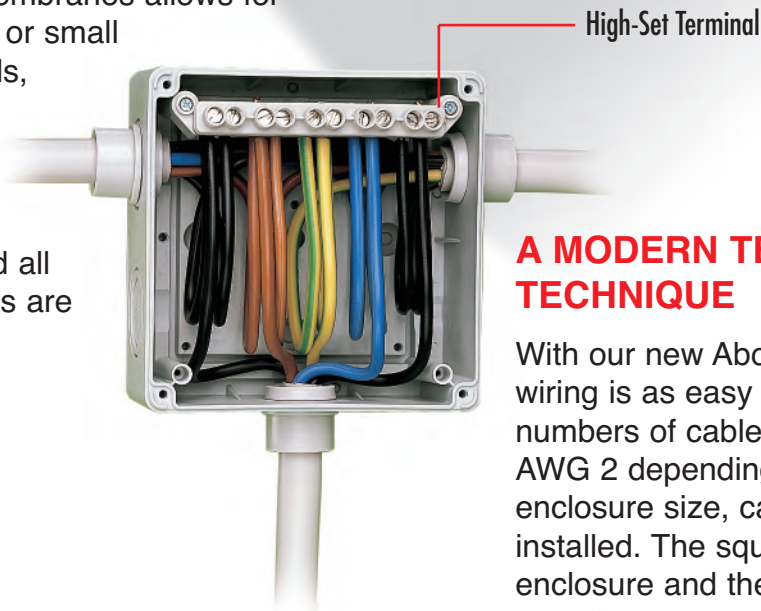
- Two to four high grade self tapping screws secure the lid
- Tongue and groove sealing system with polyurethane gasket
- Made from non-flammable Polystyrene

# Abox Enclosures



## 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 – 80x80mm (3.15x3.15in.)

## Standard Features

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



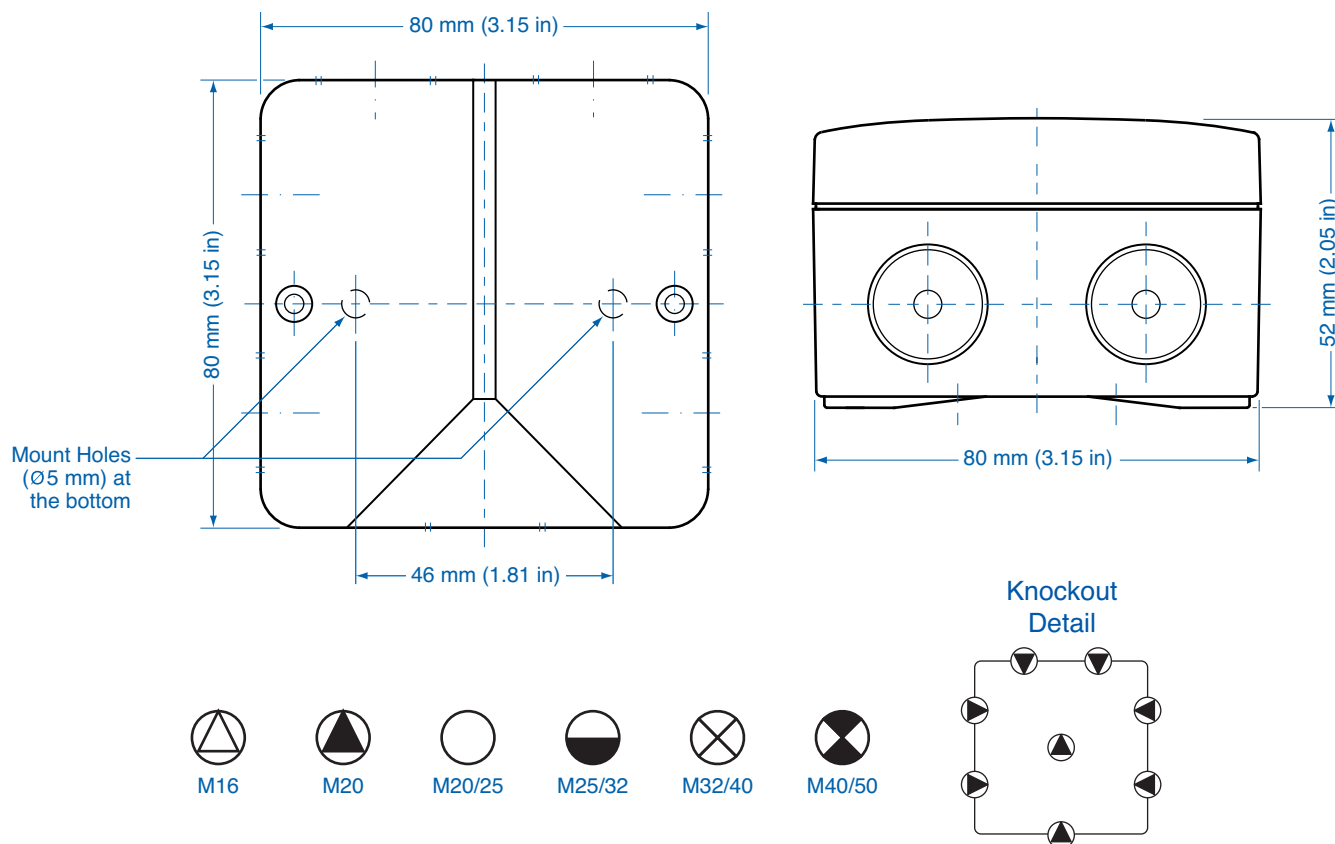
## Abox

Ordering Information	Cat. No.	Color	Terminal	Length	Dimensions mm (in)		Std. Pk.
					Width	Height	
Enclosure with terminals	802-407	gray	2.5 mm <sup>2</sup> - 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 <sup>2</sup> - 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

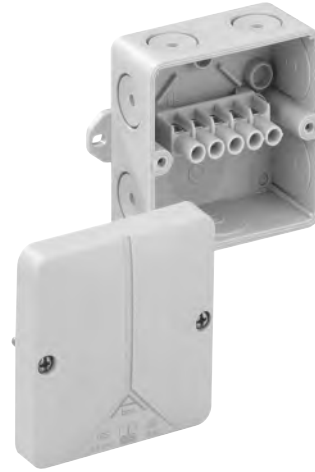
Ordering Information	Cat. No.	Type	Std. Pk.
Terminal (base mount)	840-004	2.5/4 mm <sup>2</sup> - 5 pole	10

Please refer to pages 116-120 for additional accessories and detailed information.



**Standard Features**

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



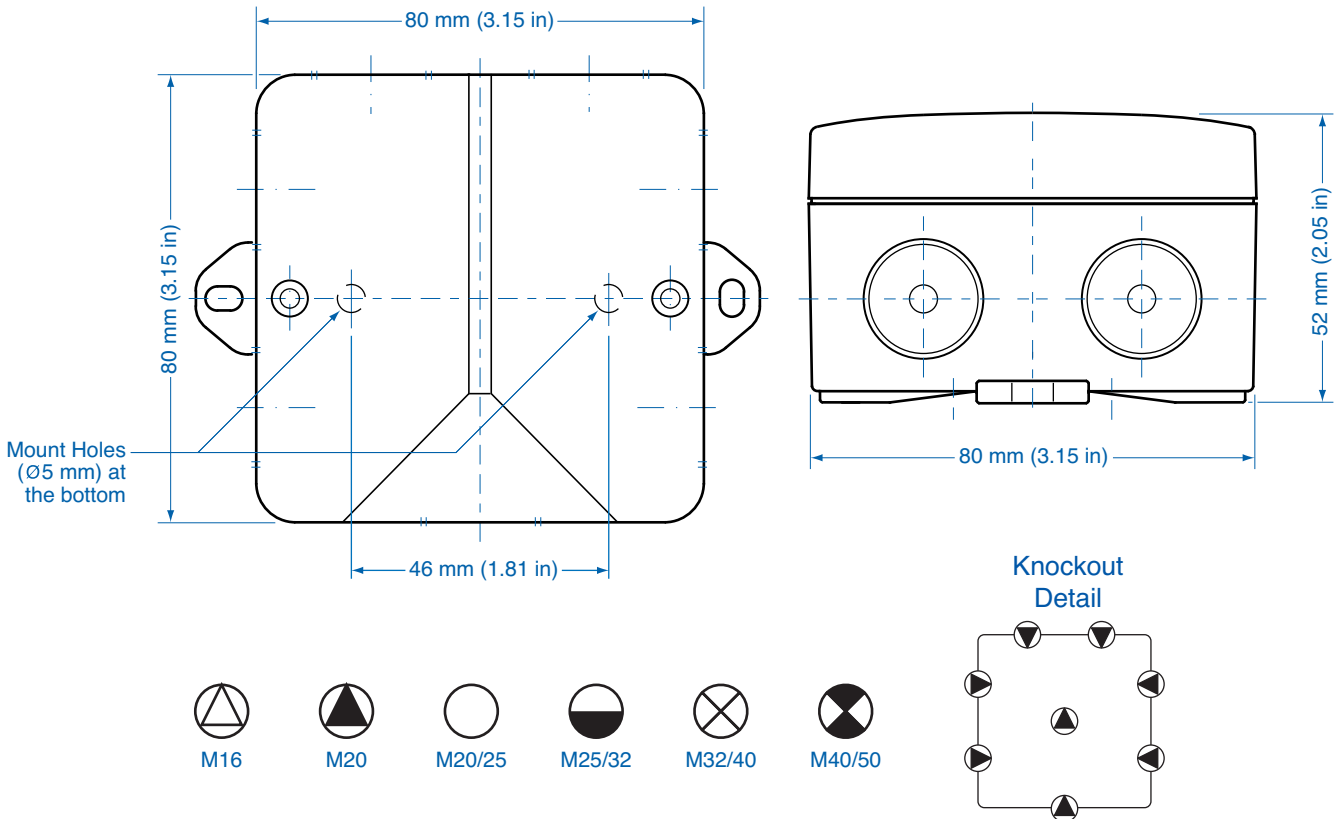
**Abox**

Ordering Information	Cat. No.	Color	Terminal	Length	Dimensions mm (in)		Std. Pk.
					Width	Height	
Enclosure with terminals	803-407	gray	2.5 mm <sup>2</sup> - 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 <sup>2</sup> - 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 <sup>2</sup> - 5 pole	10

Please refer to pages 116-120 for additional accessories and detailed information.



# Abox 040 – Polystyrene – 93x93mm (3.66x3.66in.)

## Standard Features

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



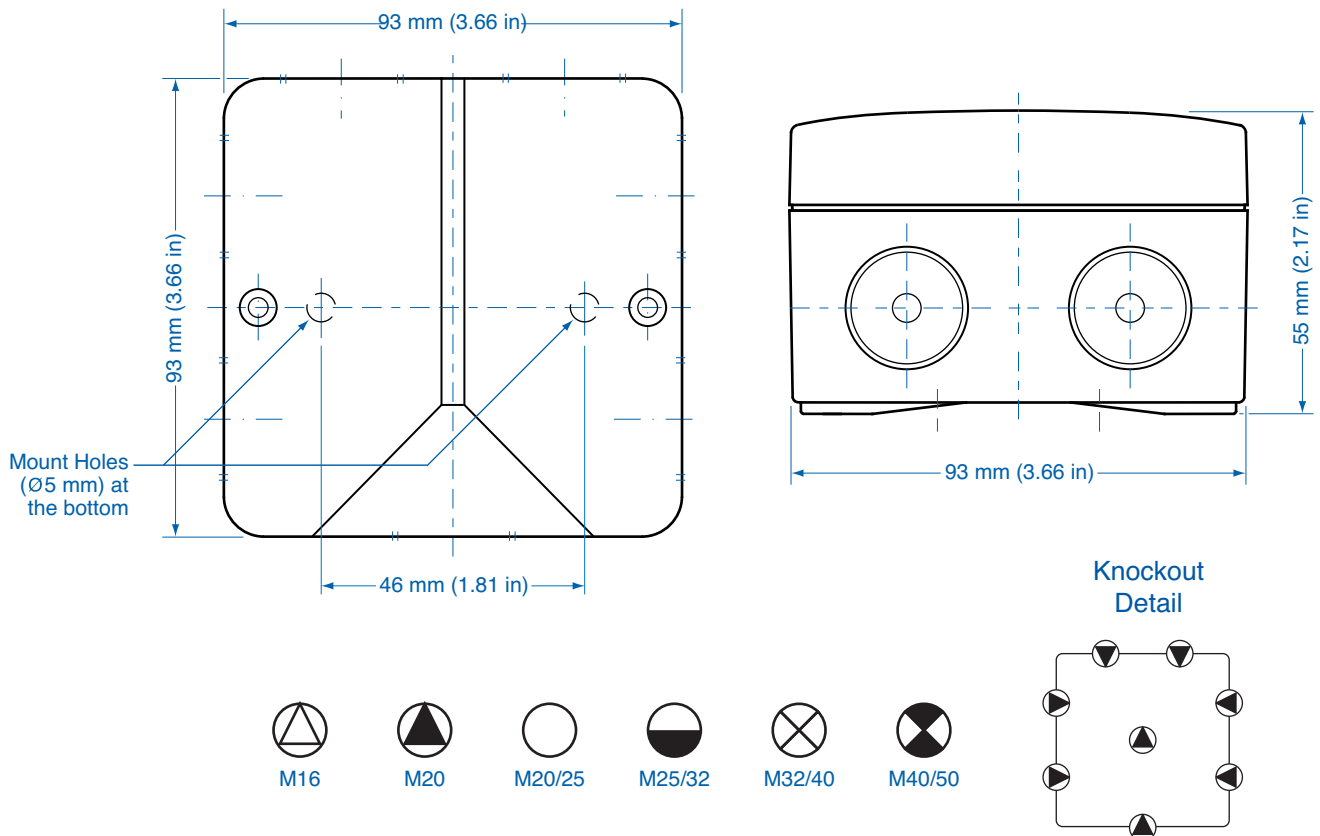
## Abox

Ordering Information	Cat. No.	Color	Terminal	Length	Dimensions mm (in)		Std. Pk.
					Width	Height	
Enclosure with terminals	804-407	gray	4 mm <sup>2</sup> - 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 <sup>2</sup> - 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 <sup>2</sup> - 5 pole	10

Please refer to pages 116-120 for additional accessories and detailed information.



**Standard Features**

- **Protection Level:** IP54\* / IP65\*\*
- **Technical:** Knockout Sidewalls
- **Enclosure Material:** Polystyrene
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **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

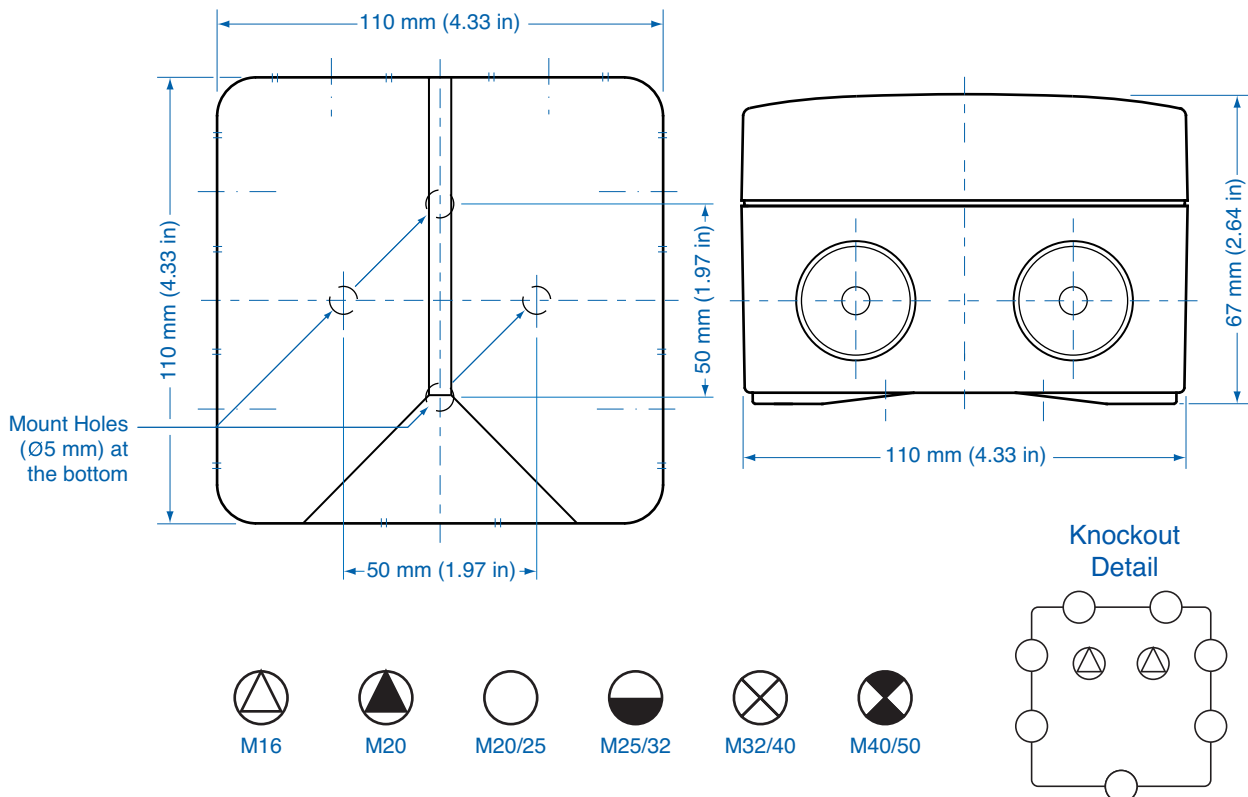
**Abox**

Ordering Information	Cat. No.	Color	Terminal	Length	Dimensions mm (in)	Width	Height	Std. Pk.
Enclosure with terminals	806-407	gray	6 mm <sup>2</sup> - 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 <sup>2</sup> - 5 pole	5

Please refer to pages 116-120 for additional accessories and detailed information.



# Abox 100 – Polystyrene – 140x140mm (5.51x5.51in.)

## Standard Features

- **Protection Level:** IP54\* / IP65\*\*
- **Technical:** Knockout Sidewalls
- **Enclosure Material:** Polystyrene
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **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

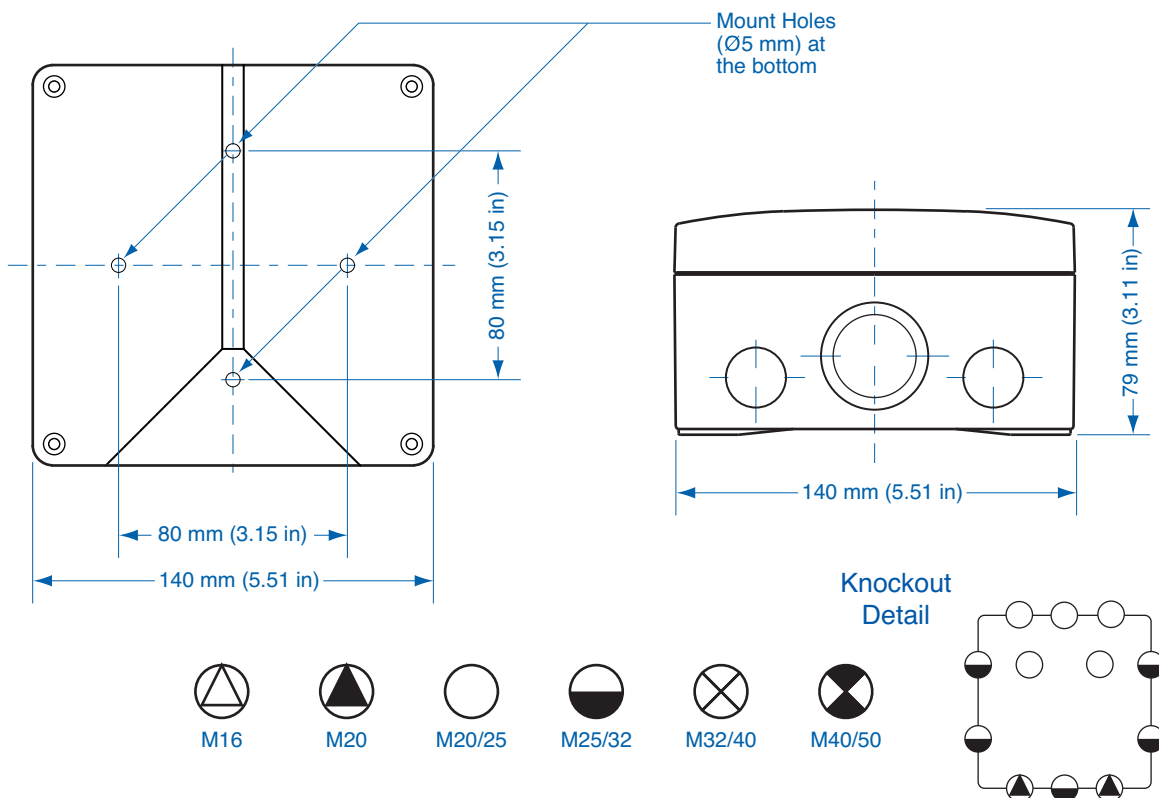
## Abox

Ordering Information.	Cat. No	Color	Terminal	Length	Dimensions mm (in)		Std. Pk.
					Width	Height	
Enclosure with terminals	810-410	gray	10 mm <sup>2</sup> -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 <sup>2</sup> - 5 pole	5

Please refer to pages 116-120 for additional accessories and detailed information.



**Standard Features**

- **Protection Level:** IP54\* / IP65\*\*
- **Technical:** Knockout Sidewalls
- **Enclosure Material:** Polystyrene
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **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

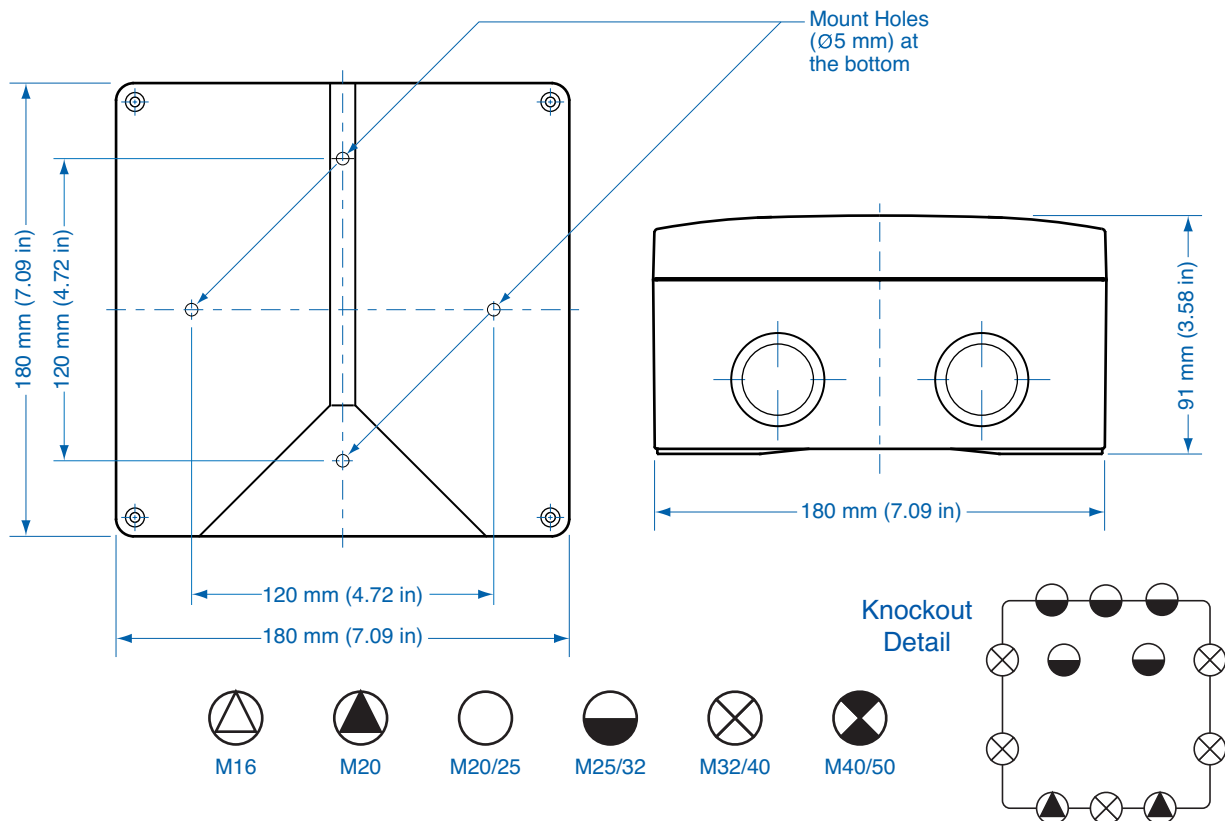
**Abox**

Ordering Information	Cat. No.	Color	Terminal	Length	Dimensions mm (in)		Std. Pk.
					Width	Height	
Enclosure with terminals	816-410	gray	16/25 mm <sup>2</sup> -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 <sup>2</sup> - 5 pole	2

Please refer to pages 116-120 for additional accessories and detailed information.



# Abox 350 – Polystyrene – 250x250mm (9.84x9.84in.)

## Standard Features

- **Protection Level:** IP54\* / IP65\*\*
- **Technical:** Knockout Sidewalls
- **Enclosure Material:** Polystyrene
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **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



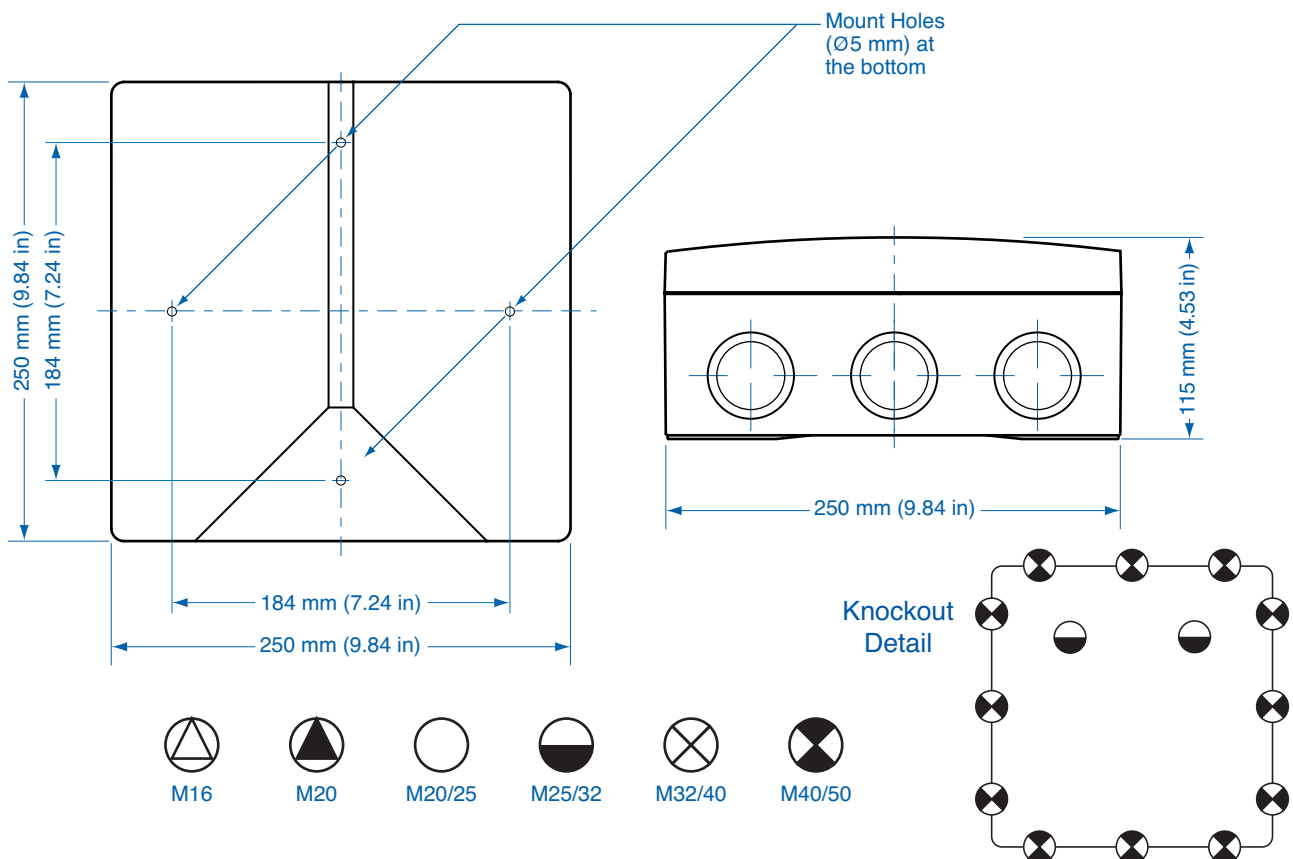
## Abox

Ordering Information	Cat. No.	Color	Terminal	Length	Dimensions mm (in)		Std. Pk.
					Width	Height	
Enclosure with terminals	835-410	gray	35/25 mm <sup>2</sup> - 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 <sup>2</sup> - 5 pole	1

Please refer to pages 116-120 for additional accessories and detailed information.

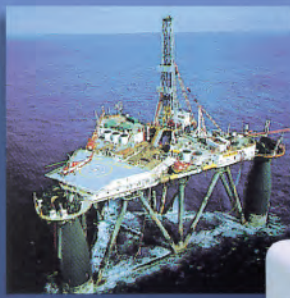


# ***Altech's New Terminal Block Catalog***

***Containing DIN Rail, Panel Mount, Printed Circuit Board Terminal Blocks and more!***



***Contact Altech today or download a catalog at [www.altechcorp.com](http://www.altechcorp.com).***



# 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
- Integral seal
- 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<sup>2</sup> sq. to 35mm<sup>2</sup> sq. (14-2 AWG)
- Ideal for installations in high risk fire areas
- Glass reinforced Polycarbonate
- Impervious to sea air and water

# Abox-i Enclosures

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



# Abox-i 025 – Polycarbonate – 80x80mm (3.15x3.15in.)

## Standard Features

- **Protection Level:** IP65
- **Technical:** Self Sealing, Soft Elastic Membranes  
Suitable for Metric Entry
- **Sealing Area:** M20 - 2 to 16mm
- **Enclosure Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Temperature Range:** Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Accessories:** See section below



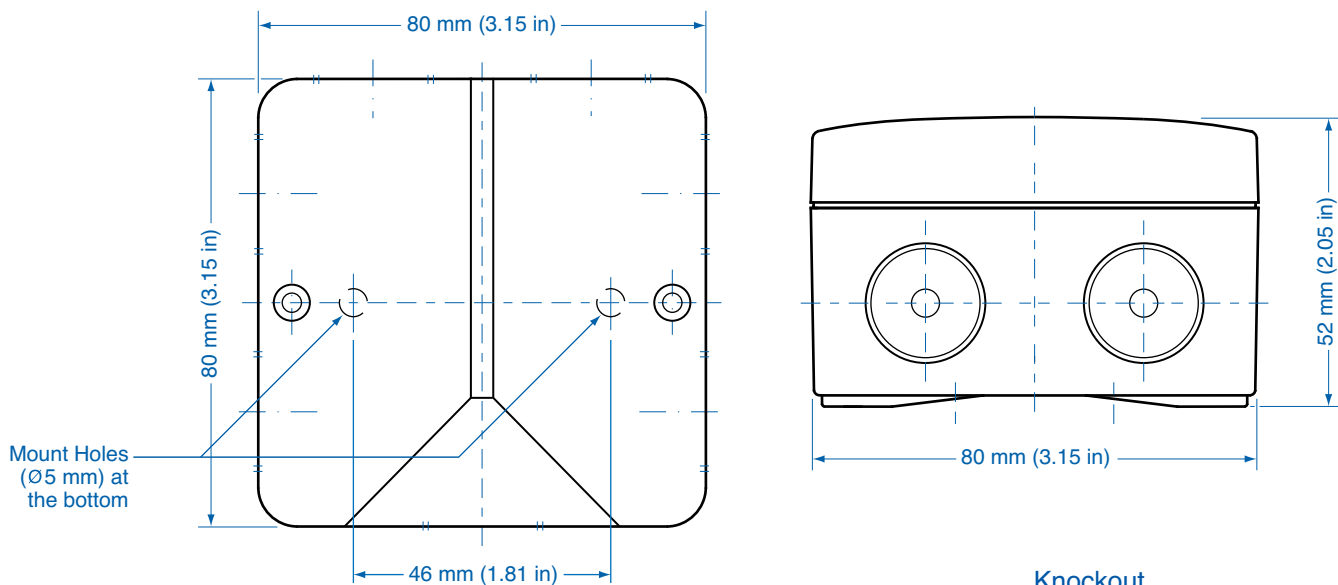
## Abox-i

Ordering Information	Cat. No.	Terminal	Length	Dimensions mm (in)		Std. Pk.
				Width	Height	
Enclosure with terminals	490-402	2.5/4 mm <sup>2</sup> - 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

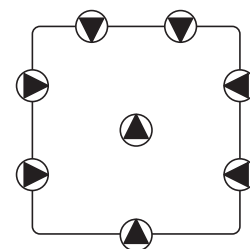
## Accessories

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

Please refer to pages 116-120 for additional accessories and detailed information.



Knockout Detail



**Standard Features**

- **Protection Level:** IP65
- **Technical:** Self Sealing, Soft Elastic Membranes  
Suitable for Metric Entry
- **Sealing Area:** M20 - 2 to 16mm
- **Enclosure Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Temperature Range:** Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Accessories:** See section below



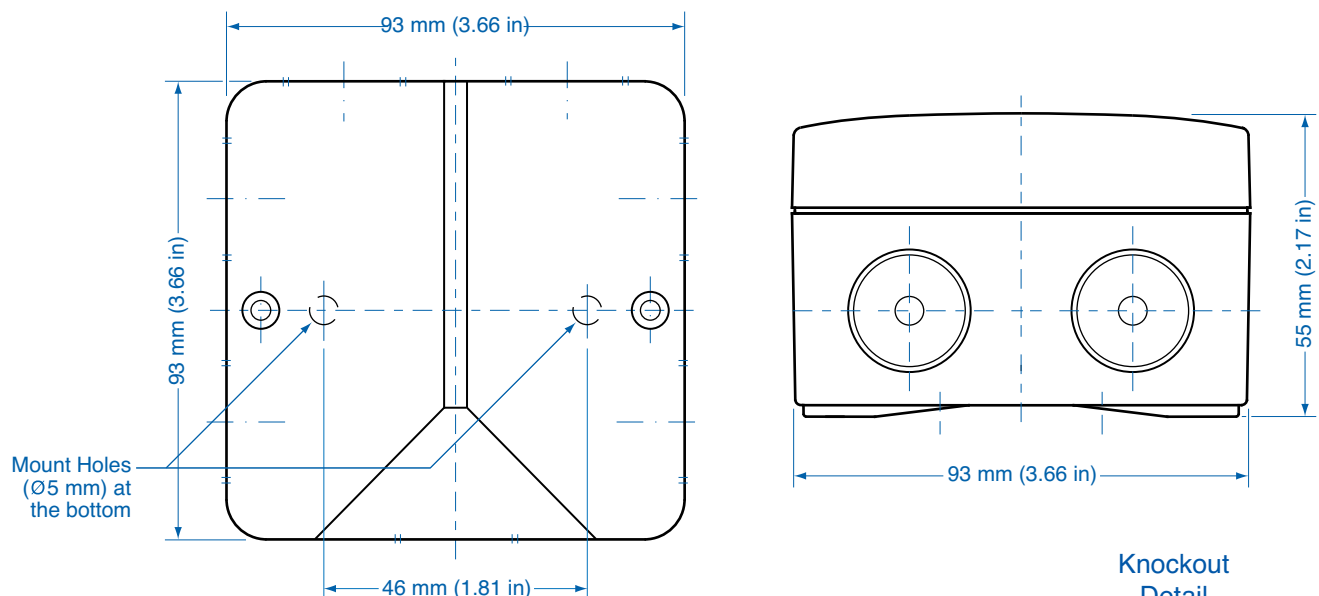
**Abox-i**

Ordering Information	Cat. No.	Terminal	Length	Dimensions mm (in) Width	Height	Std. Pk.
Enclosure with terminals	490-404	2.5/4 mm <sup>2</sup> - 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 <sup>2</sup> - 5 pole	10

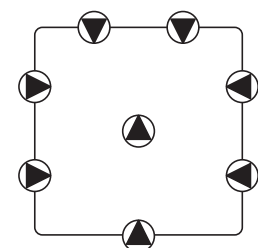
Please refer to pages 116-120 for additional accessories and detailed information.



Mount Holes (Ø5 mm) at the bottom



**Knockout Detail**



# Abox-i 060 – Polycarbonate – 110x110mm (4.33x4.33in.)

## Standard Features

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls
- **Enclosure Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Temperature Range:** Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Included Accessories:** (4) M25 Double Membrane Seals - 9-16mm
- **Accessories:** See section below



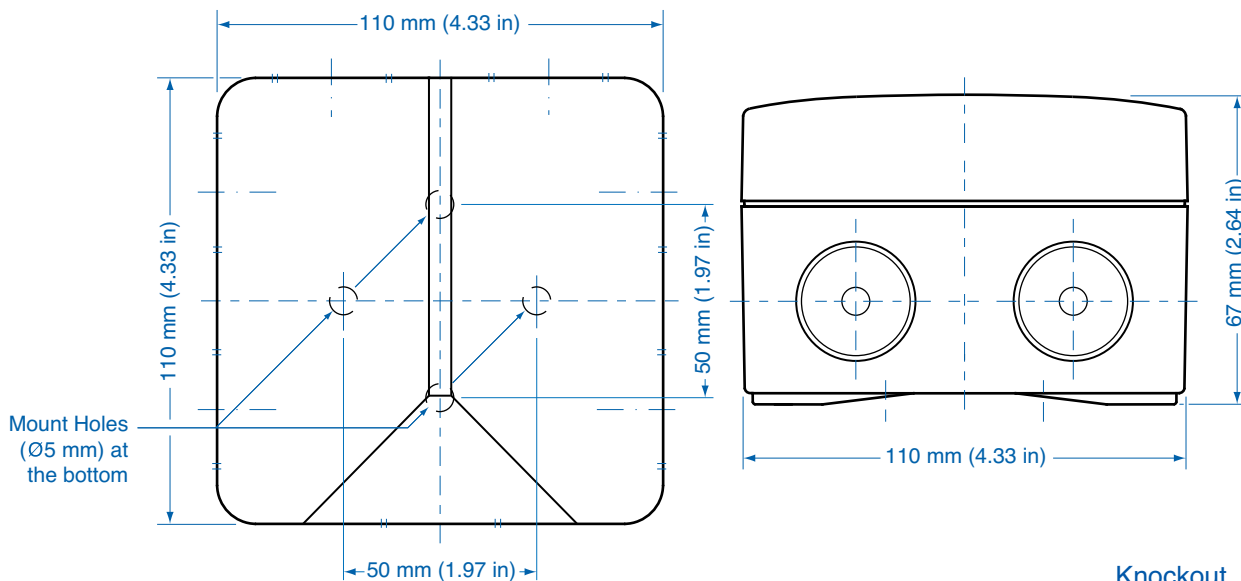
## Abox-i

Ordering Information	Cat. No.	Terminal	Length	Dimensions mm (in)		Std. Pk.
				Width	Height	
Enclosure with terminals	490-406	6mm <sup>2</sup> - 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

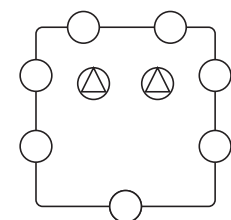
## Accessories

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 <sup>2</sup> - 5 pole	5

Please refer to pages 116-120 for additional accessories and detailed information.



## Knockout Detail



**Standard Features**

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls
- **Enclosure Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Temperature Range:** Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Included Accessories:** (4) M32 Double Membrane Seals - 14-21mm
- **Accessories:** See section below



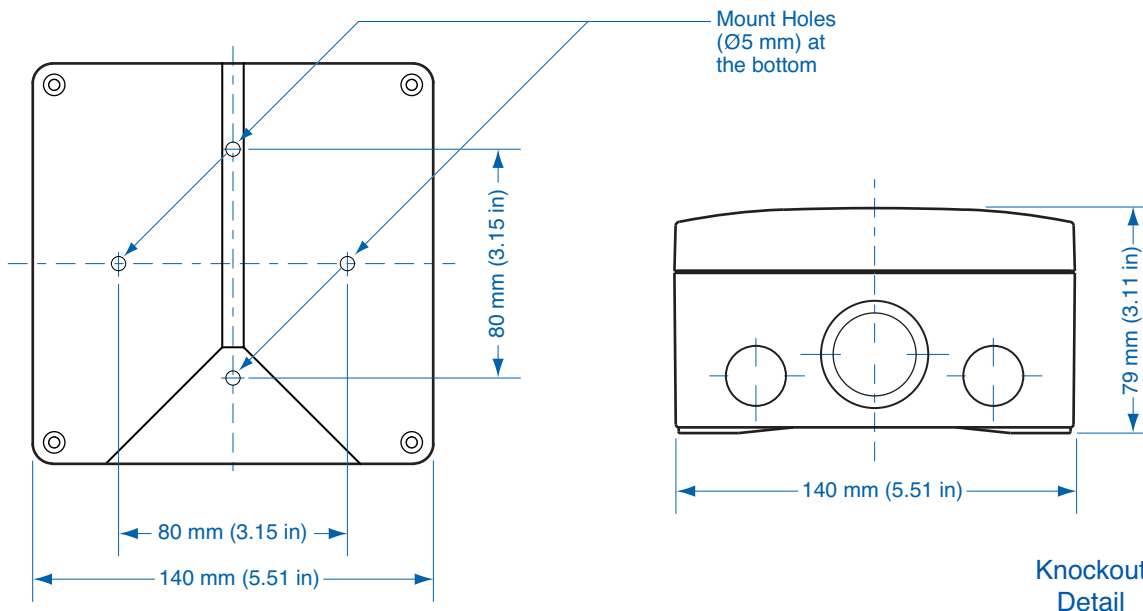
**Abox-i**

Ordering Information	Cat. No.	Terminal	Length	Dimensions mm (in) Width	Height	Std. Pk.
Enclosure with terminals	490-410	10 mm <sup>2</sup> - 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 <sup>2</sup> - 5 pole	5

Please refer to pages 116-120 for additional accessories and detailed information.



M16



M20



M20/25



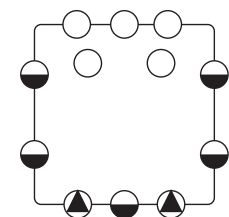
M25/32



M32/40



M40/50



# Abox-i 160 – Polycarbonate – 180x180mm (7.09x7.09in.)

## Standard Features

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls
- **Enclosure Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Temperature Range:** Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Included Accessories:** Tamper Kit
- **Accessories:** See section below



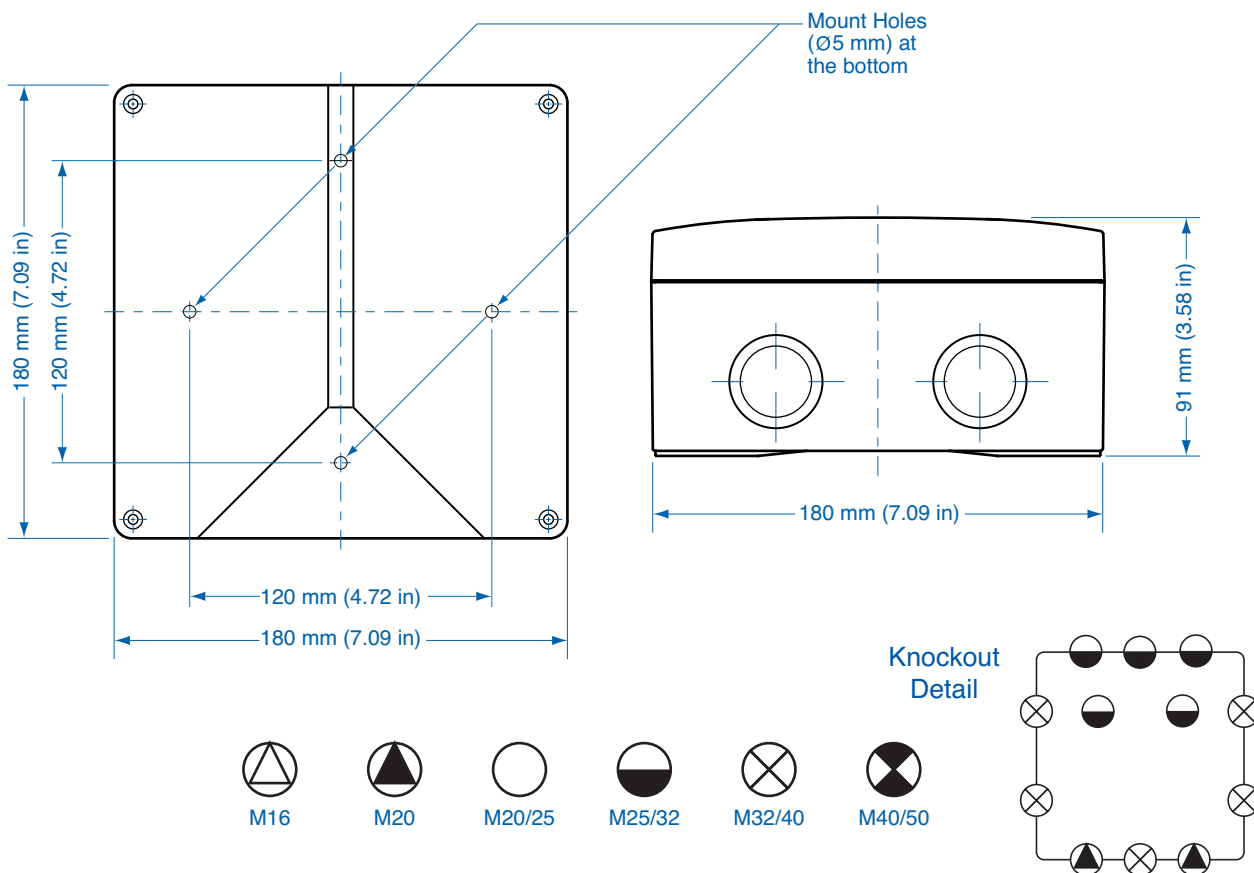
## Abox-i

Ordering Information	Cat. No.	Terminal	Length	Dimensions mm (in)		Std. Pk.
				Width	Height	
Enclosure with terminals	490-416	16/25 mm <sup>2</sup> - 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 <sup>2</sup> - 5 pole	2

Please refer to pages 116-120 for additional accessories and detailed information.



**Standard Features**

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls
- **Enclosure Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Temperature Range:** Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Included Accessories:** Tamper Kit
- **Accessories:** See section below



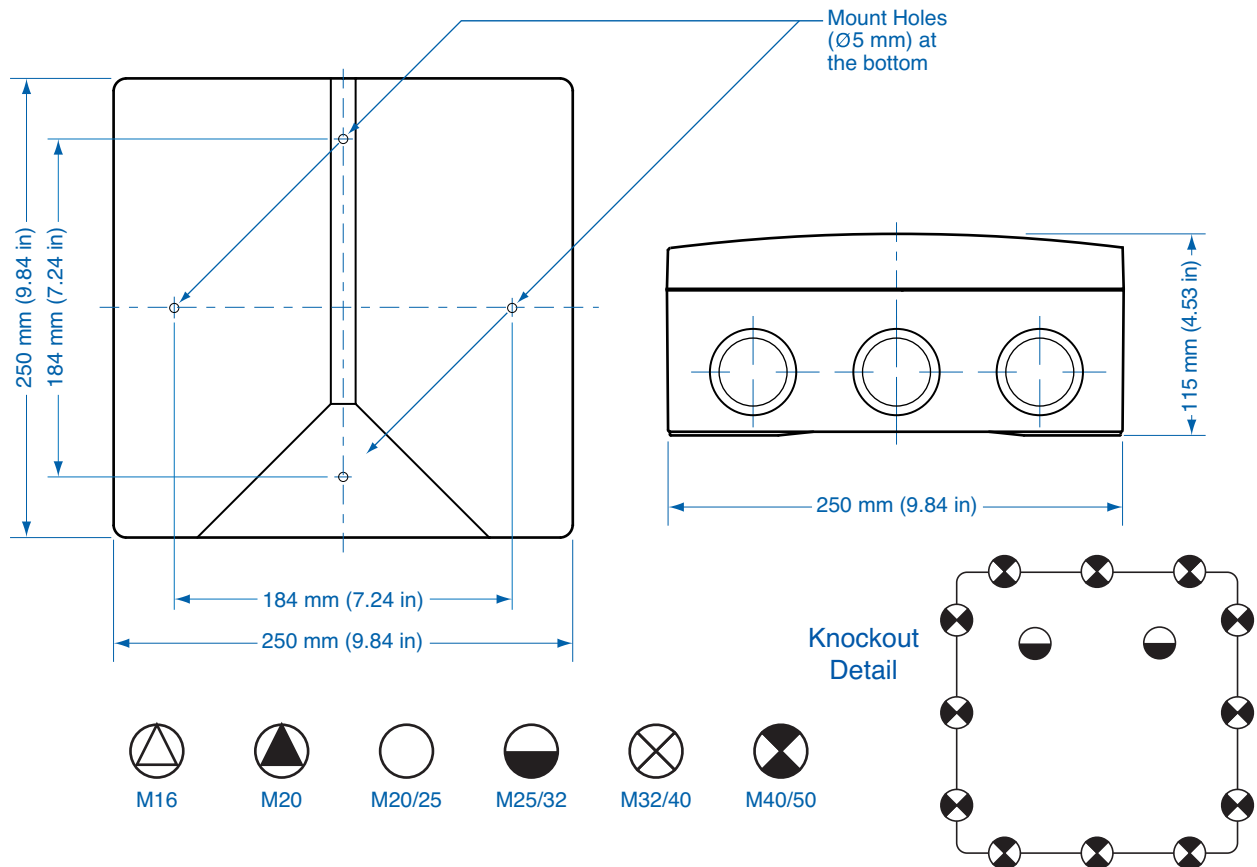
**Abox-i**

Ordering Information	Cat. No.	Terminal	Length	Dimensions mm (in) Width	Height	Std. Pk.
Enclosure with terminals	490-435	35/25 mm <sup>2</sup> - 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 <sup>2</sup> - 5 pole	1

Please refer to pages 116-120 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, with identical tops and bottoms.

The AKL Series offers larger sizes, ranging from 150x300x142 mm (5.91x11.81x5.59 in.) to 600x300x210 mm (23.62x11.81x8.27 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.

**Standard Features**

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls  
Gray or Tinted Transparent Cover  
Multiple Enclosure Combination Options
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Transparent Cover Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Temperature Range:** Polystyrene  
-40°C to 70°C (-40°F to 158°F)  
Polycarbonate  
-35°C to 120°C (-31°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



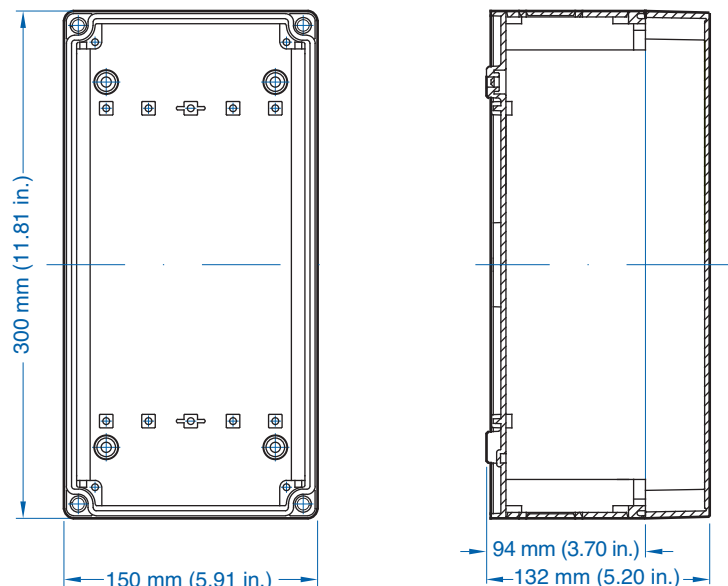
**AKL**

Ordering Information	Cat. No.	Cover Type / Color	Length	Dimensions mm (in) Width	Height	Std. Pk.
<b>Polystyrene</b>						
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
<b>Polycarbonate</b>						
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	MPI 1	1
DIN Rail – 216 mm Surface Mounted	562-035	SMTS35/216	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit (metal)	793-004	MT2	1

Please refer to pages 116-120 for additional accessories and detailed information



Please refer to page 126 for Knockout details.

# AKL2 – Polystyrene and Polycarbonate – 300x300mm (11.81x11.81in.)

## Standard Features

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls  
Gray or Tinted Transparent Cover  
Multiple Enclosure Combination Options
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Transparent Cover Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Temperature Range:** Polystyrene  
-40°C to 70°C (-40°F to 158°F)  
Polycarbonate  
-35°C to 120°C (-31°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	Length	Dimensions mm (in) Width	Height	Std. Pk.
<b>Polystyrene</b>						
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

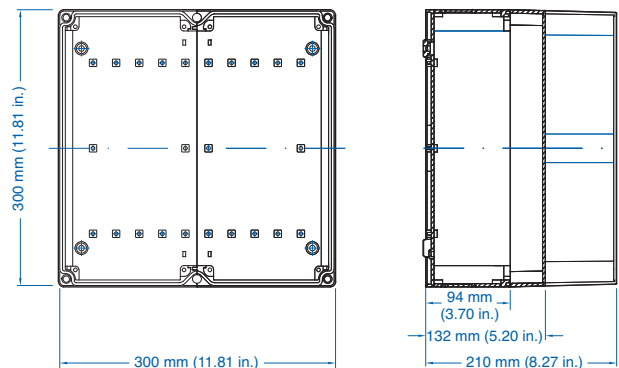
## Polycarbonate

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	MPI 2	1
Mounting Plate (steel) – 240 x 240 mm	795-012	MPS 2	1
DIN Rail – 250 mm Clip-in	562-735	CITS35/250	1
DIN Rail – 216 mm Surface Mounted	562-035	SMTS35/216	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit (metal)	793-004	MT2	1

Please refer to pages 116-120 for additional accessories and detailed information.



Please refer to page 126 for Knockout details.

**Standard Features**

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls  
Gray or Tinted Transparent Cover  
Multiple Enclosure Combination Options
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Transparent Cover Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Temperature Range:** Polystyrene  
-40°C to 70°C (-40°F to 158°F)  
Polycarbonate  
-35°C to 120°C (-31°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	Length	Dimensions mm (in) Width	Height	Std. Pk.
<b>Polystyrene</b>						
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

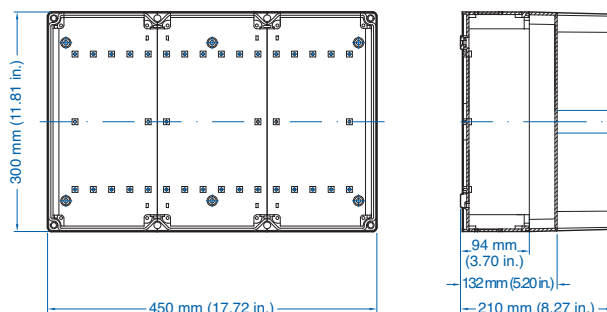
**Polycarbonate**

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	MPI 3	1
Mounting Plate (steel) – 240 x 390 mm	795-013	MPS 3	1
DIN Rail – 250 mm Clip-in	562-735	CITS35/250	1
DIN Rail – 216 mm Surface Mounted	562-035	SMTS35/216	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit (metal)	793-004	MT2	1

Please refer to pages 116-120 for additional accessories and detailed information.



Please refer to page 126 for Knockout details.

# AKL4 – Polystyrene and Polycarbonate – 600x300mm (23.62x11.81in.)

## Standard Features

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls  
Gray or Tinted Transparent Cover  
Multiple Enclosure Combination Options
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Transparent Cover Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Temperature Range:** Polystyrene  
-40°C to 70°C (-40°F to 158°F)  
Polycarbonate  
-35°C to 120°C (-31°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



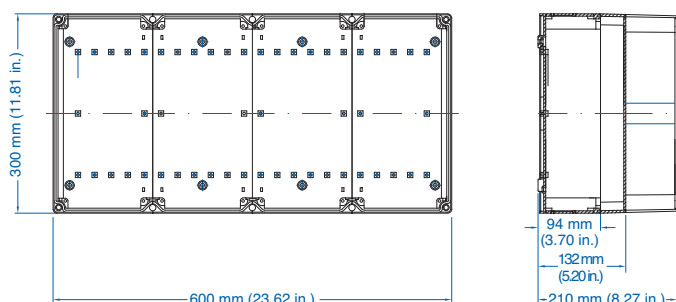
## AKL

Ordering Information	Cat. No.	Cover Type / Color	Length	Dimensions mm (in) Width	Height	Std. Pk.
<b>Polystyrene</b>						
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
<b>Polycarbonate</b>						
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	MPI 4	1
Mounting Plate (steel) – 240 x 540 mm	795-014	MPS 4	1
DIN Rail – 250 mm Clip-in	562-735	CITS35/250	1
DIN Rail – 216 mm Surface Mounted	562-035	SMTS35/216	1
Hinge Kit Set	190-005	HK2	1
Mounting Tab Kit (metal)	793-004	MT2	1

Please refer to pages 116-120 for additional accessories and detailed information.



Please refer to page 126 for Knockout details.

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# 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.

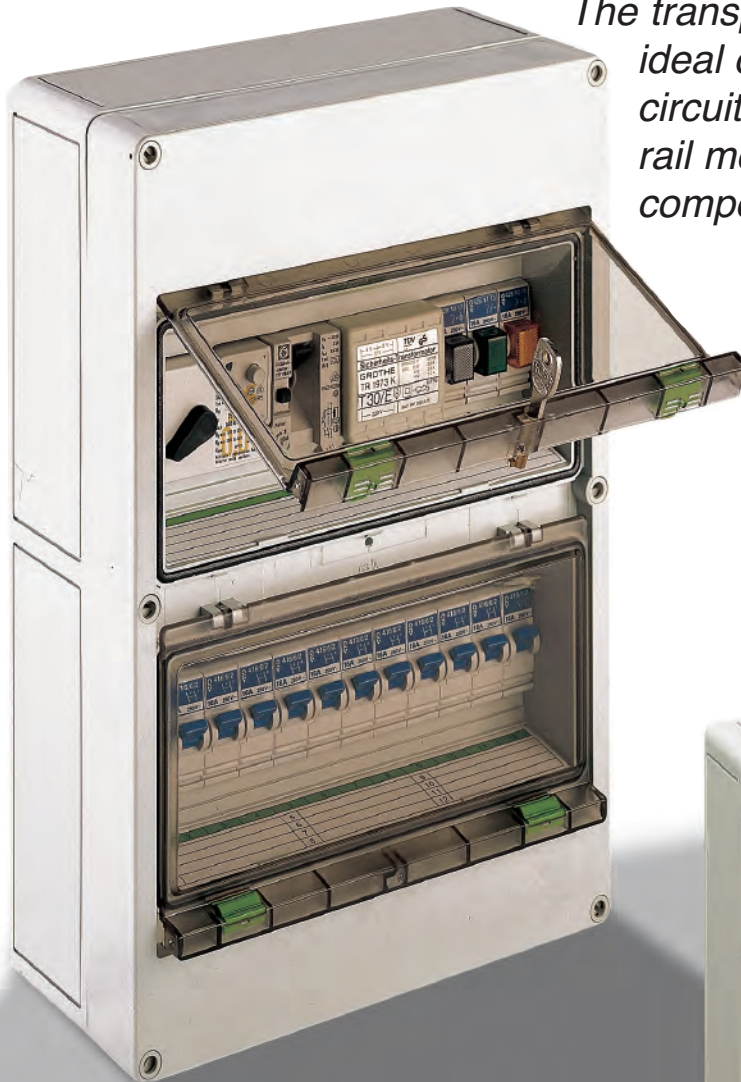
The unique cover design features a shrouded cut out and transparent hinged doors, for quick access and visibility. The shrouded cut out, spanning the width of the cover, exposes mounted components for easy adjustment and isolates wiring for increased safety. The transparent hinged doors have push release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

- 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 Series Enclosures

*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 – 130x94mm (5.12x3.70in.)

## Standard Features

- **Protection Level:** IP65 - Nema Type 4x
- **Technical:** Smooth Sidewalls  
Tinted Transparent Door
- **Enclosure Material:** Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Temperature Range:** -35°C to 120°C (-31°F to 248°F)
- **Color:** Light Gray
- **Included Accessories:** 35mm DIN Rail  
Label Strip
- **Accessories:** See section below



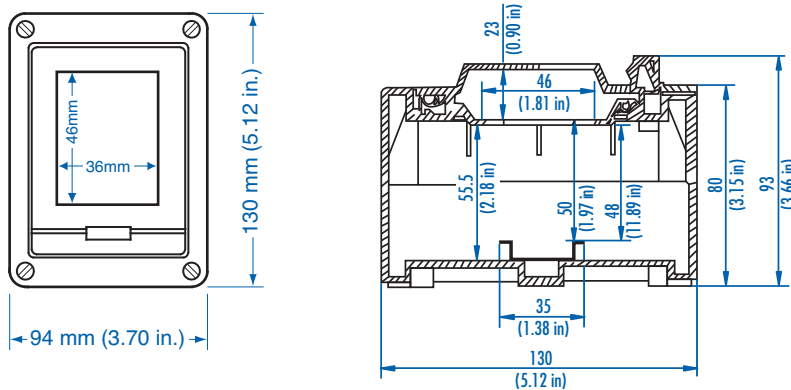
## EK

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in) 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.
Key Lock	548-102	KL	1
Terminal	X-573	PE/N Terminal - 3 pole	1
Filler Strip	799-012	108 mm piece (6 divisions)	1

Please refer to pages 116-120 for additional accessories and detailed information.



**Standard Features**

- **Protection Level:** IP65 - Nema Type 4x
- **Technical:** Smooth Sidewalls  
Tinted Transparent Door
- **Enclosure Material:** Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Temperature Range:** -35°C to 120°C (-31°F to 248°F)
- **Color:** Light Gray
- **Included Accessories:** 35mm DIN Rail  
Label Strip
- **Accessories:** See section below



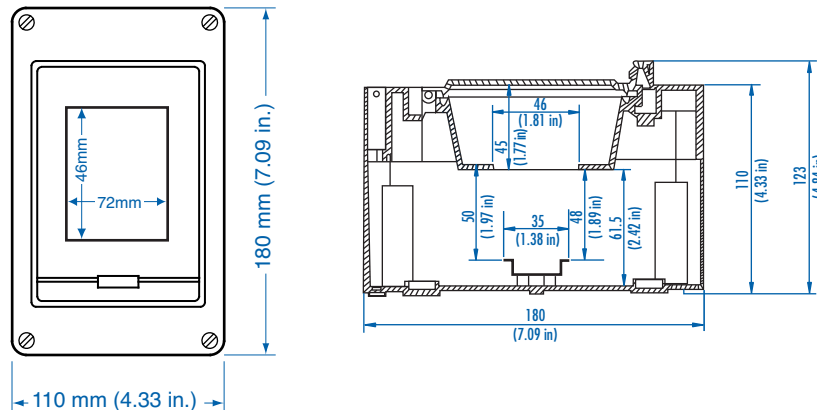
**EK**

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in) 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.
Key Lock	548-102	KL	1
Terminal	X-575	PE/N Terminal - 5 pole	1
Filler Strip	799-012	108 mm piece (6 divisions)	1

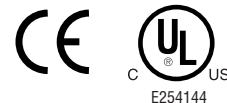
Please refer to pages 116-120 for additional accessories and detailed information.



# EK008 – Polycarbonate – 180x182mm (7.09x7.17in.)

## Standard Features

- **Protection Level:** IP65 - Nema Type 4x
- **Technical:** Smooth Sidewalls  
Tinted Transparent Door
- **Enclosure Material:** Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Temperature Range:** -35°C to 120°C (-31°F to 248°F)
- **Color:** Light Gray
- **Included Accessories:** 35mm DIN Rail  
Label Strip
- **Accessories:** See section below



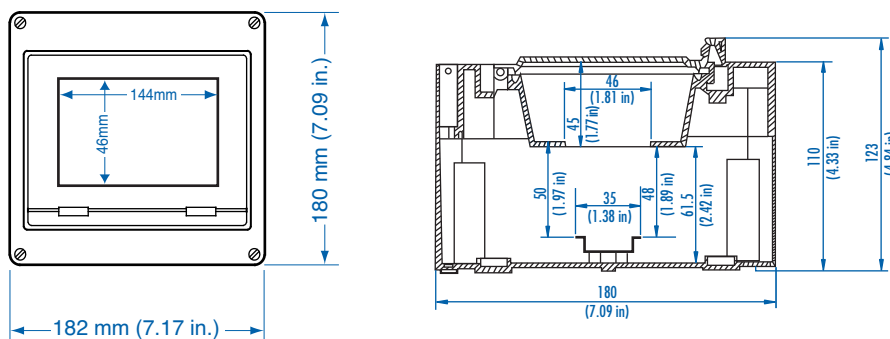
## EK

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in) 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.
Key Lock	548-102	KL	1
Terminal	X-578	PE/N Terminal - 7 pole	1
Filler Strip	799-012	108 mm piece (6 divisions)	1

Please refer to pages 116-120 for additional accessories and detailed information.





**Standard Features**

- **Protection Level:** IP65 - Nema Type 4x
- **Technical:** Smooth Sidewalls  
Tinted Transparent Door
- **Enclosure Material:** Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Temperature Range:** -35°C to 120°C (-31°F to 248°F)
- **Color:** Light Gray
- **Included Accessories:** 35mm DIN Rail  
Label Strip
- **Accessories:** See section below



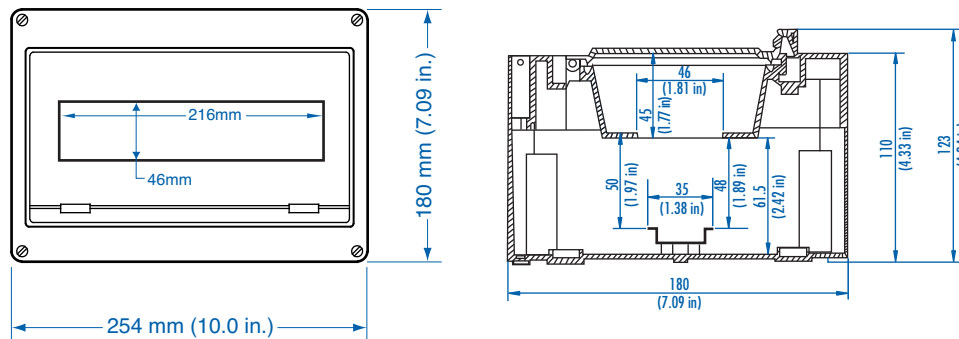
**EK**

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in) 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.
Key Lock	548-102	KL	1
Terminal	X-583	PE/N Terminal - 12 pole	1
Filler Strip	799-012	108 mm piece (6 divisions)	1

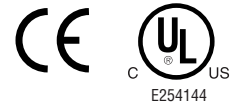
Please refer to pages 116-120 for additional accessories and detailed information.



# EK024 – Polycarbonate – 361x254mm (14.21x10.00in.)

## Standard Features

- **Protection Level:** IP65 - Nema Type 4x
- **Technical:** Smooth Sidewalls  
Tinted Transparent Door
- **Enclosure Material:** Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Temperature Range:** -35°C to 120°C (-31°F to 248°F)
- **Color:** Light Gray
- **Included Accessories:** 2 ea. 35mm DIN Rail  
2 ea. Label Strips
- **Accessories:** See section below



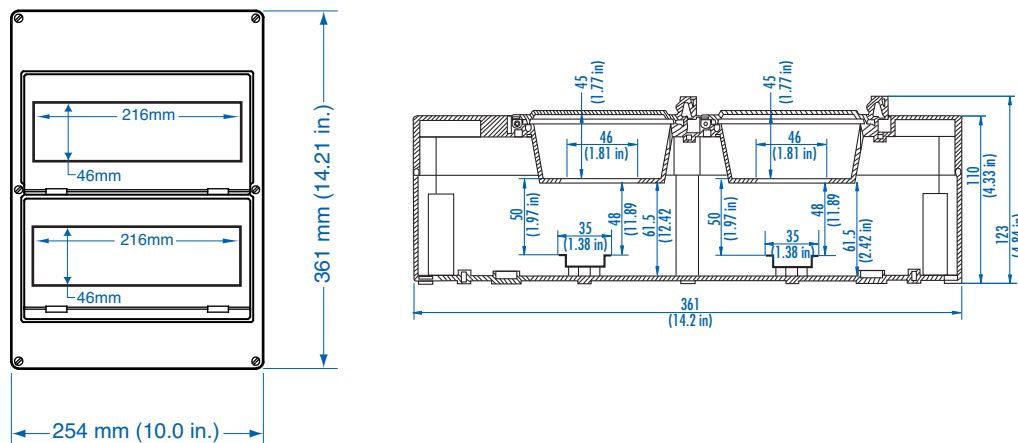
## EK

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in) 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.
Key Lock	548-102	KL	1
Terminal	X-721-02	PE/N Terminal - 17 pole	1
Filler Strip	799-012	108 mm piece (6 divisions)	1

Please refer to pages 116-120 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. Each enclosure is 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 Series Enclosures

# AK

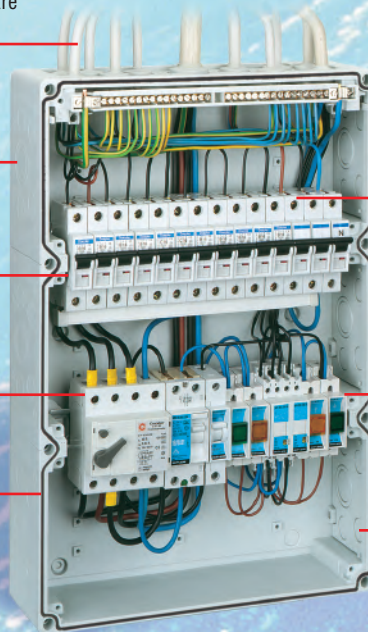


M20/Pg13.5 double membrane entry seals guarantee IP65 protection. These entries are also suited to accept threaded cord grips.

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 or Polycarbonate.

Snap in 35 mm DIN rail.

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

# AK03 – Polystyrene and Polycarbonate - 100x150mm (3.94x5.91in.)

## Standard Features

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls and Installed Double Membrane Seals  
Tinted Transparent Door
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Temperature Range:** Polystyrene  
-40°C to 70°C (-40°F to 158°F)  
Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Color:** Light Gray
- **Included Accessories:** DIN Rail, 4 Pole Ground/Neutral Terminal Strip, Filler Strips, (3) M20 Double Membrane Seals



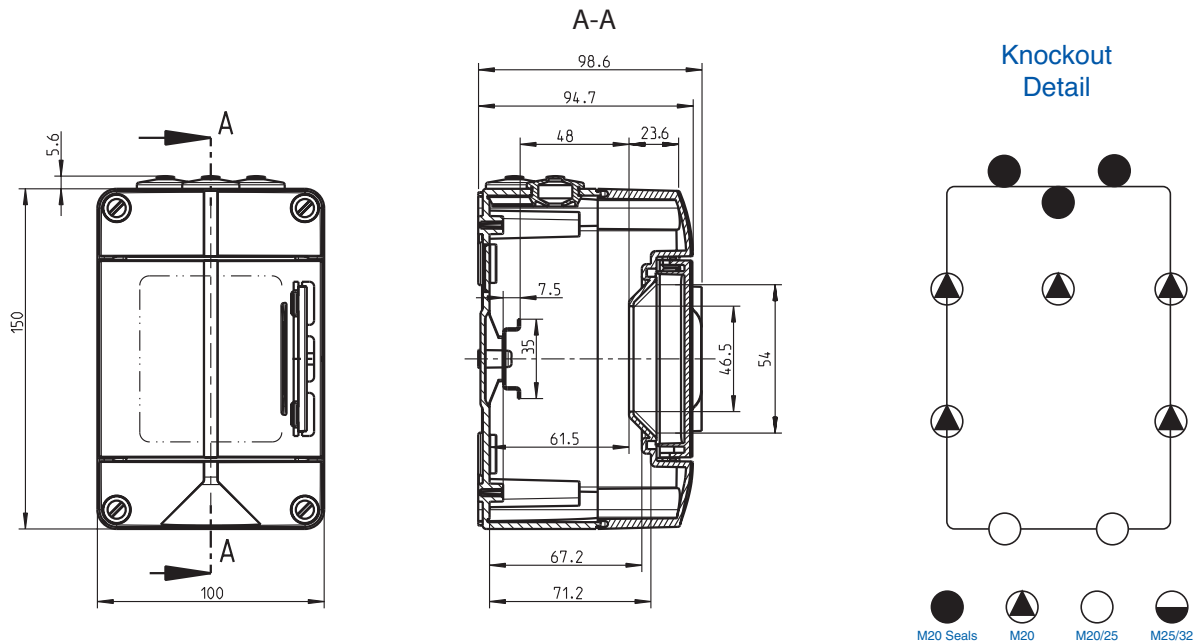
## AK03

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in) Width	Height	Std. Pk.
<b>Polystyrene</b>						
Enclosure	735-403	AK03	100 mm (3.94 in)	150 mm (5.91 in)	96 mm (3.78 in)	1
<b>Polycarbonate</b>						
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 - 4 pole	1
Filler Strip	799-012	108 mm piece (6 divisions)	1

Please refer to pages 116-120 for additional accessories and detailed information.



## Standard Features

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls and Installed Double Membrane Seals  
Tinted Transparent Door
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Temperature Range:** Polystyrene  
-40°C to 70°C (-40°F to 158°F)  
Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Color:** Light Gray
- **Included Accessories:** DIN Rail, 5 Pole Ground/Neutral Terminal Strip, Filler Strips, (4) M20 Double Membrane Seals



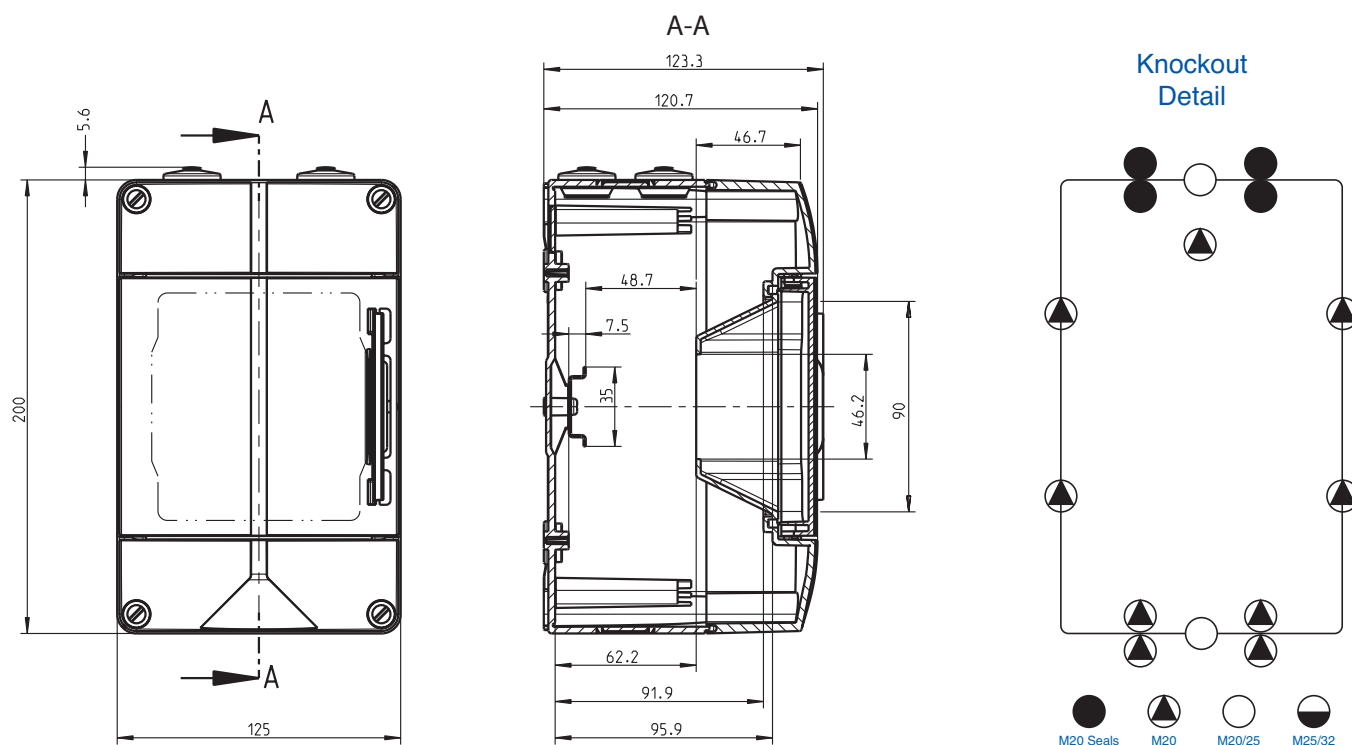
## AK05

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in) Width	Height	Std. Pk.
<b>Polystyrene</b>						
Enclosure	735-405	AK05	125 mm (4.92 in)	200 mm (7.87 in)	122 mm (4.80 in)	1
<b>Polycarbonate</b>						
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 - 5 pole	1
Filler Strip	799-012	108 mm piece (6 divisions)	1

Please refer to pages 116-120 for additional accessories and detailed information.



# AK09 – Polystyrene and Polycarbonate - 200x200mm (7.87x7.87in.)

## Standard Features

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls and Installed Double Membrane Seals  
Tinted Transparent Door
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Temperature Range:** Polystyrene  
-40°C to 70°C (-40°F to 158°F)  
Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Color:** Light Gray
- **Included Accessories:** DIN Rail, 7 Pole Ground/Neutral Terminal Strip, Filler Strips, (6) M20 Double Membrane Seals



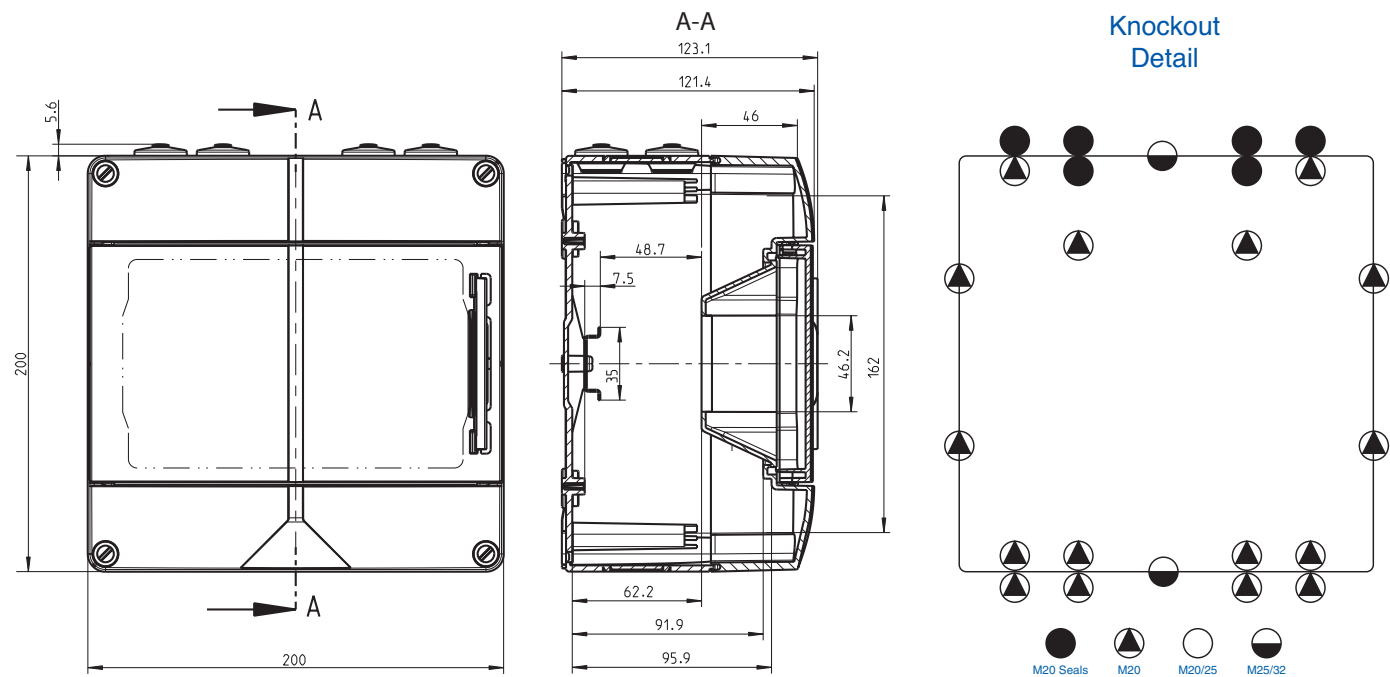
## AK09

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in) Width	Height	Std. Pk.
<b>Polystyrene</b>						
Enclosure	735-409	AK09	200 mm (7.87 in)	200 mm (7.87 in)	122 mm (4.80 in)	1
<b>Polycarbonate</b>						
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 - 7 pole	1
Filler Strip	799-012	108 mm piece (6 divisions)	1

Please refer to pages 116-120 for additional accessories and detailed information.



## Standard Features

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls and Installed Double Membrane Seals  
Tinted Transparent Door
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Temperature Range:** Polystyrene  
-40°C to 70°C (-40°F to 158°F)  
Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Color:** Light Gray
- **Included Accessories:** DIN Rail, 12 Pole Ground/Neutral Terminal Strip, Filler Strips, (8) M20 Double Membrane Seals



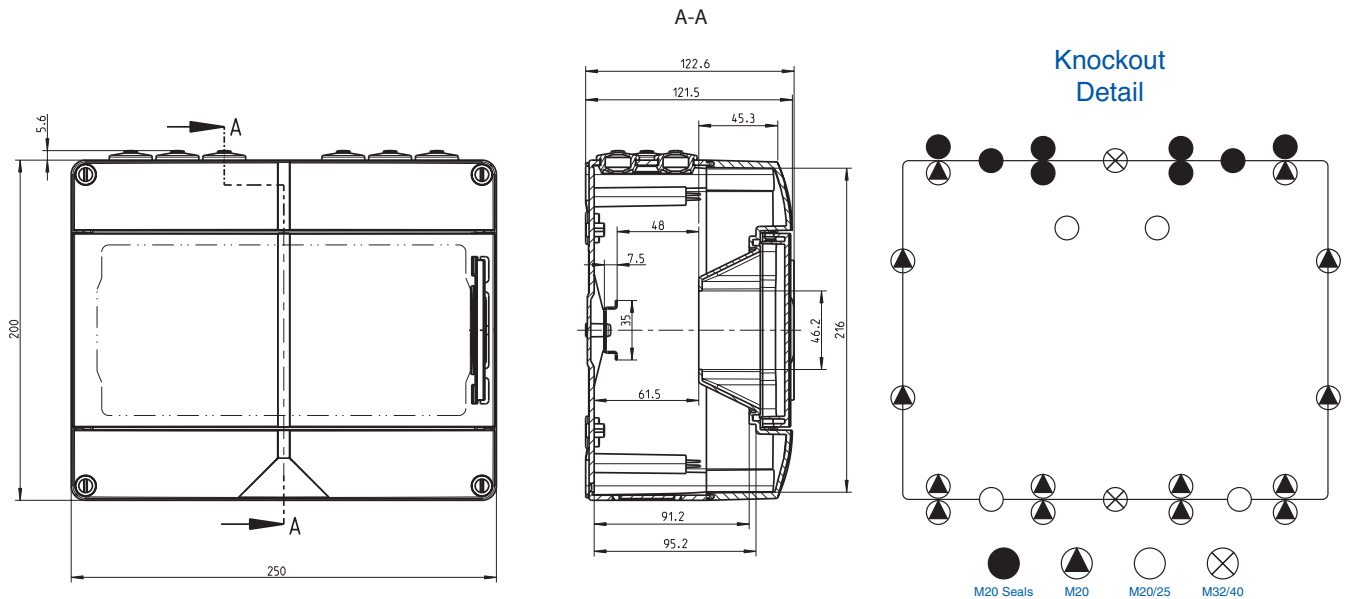
## AK12

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in) Width	Height	Std. Pk.
<b>Polystyrene</b>						
Enclosure	735-412	AK12	250 mm (9.84 in)	200 mm (7.87 in)	122 mm (4.80 in)	1
<b>Polycarbonate</b>						
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 - 12 pole	1
Filler Strip	799-012	108 mm piece (6 divisions)	1

Please refer to pages 116-120 for additional accessories and detailed information.



# AK 14 – Polystyrene and Polycarbonate – 300x300mm (11.81x11.81in.)

## Standard Features

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls and Installed Double Membrane Seals  
Tinted Transparent Door  
Multiple Enclosure Combination Option
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Temperature Range:** Polystyrene  
-40°C to 70°C (-40°F to 158°F)  
Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Color:** Light Gray
- **Included Accessories:** DIN Rail, 12 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



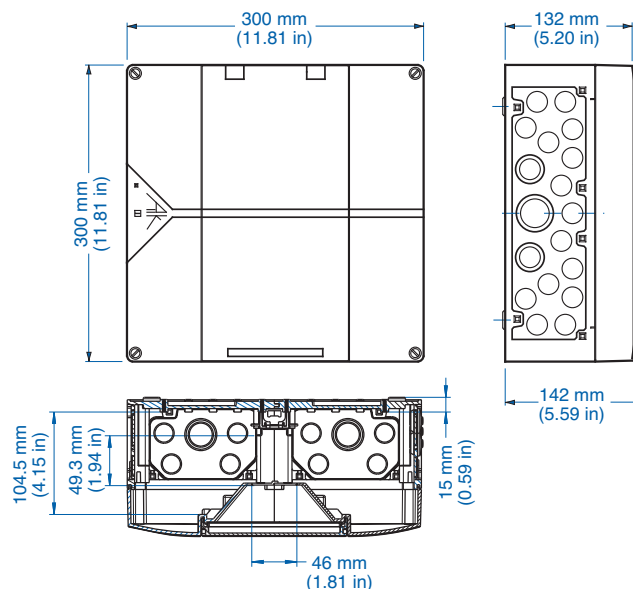
## AK 14

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in) Width	Height	Std. Pk.
<b>Polystyrene</b>						
Enclosure	735-414	AK14	300 mm (11.81 in)	300 mm (11.81 in)	142 mm (5.59 in)	1
<b>Polycarbonate</b>						
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	562-035	SMTS35/216	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 116-120 for additional accessories and detailed information.



Please refer to page 126 for Knockout details.

**Standard Features**

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls and Installed Double Membrane Seals  
Tinted Transparent Door  
Multiple Enclosure Combination Option
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Temperature Range:** Polystyrene  
-40°C to 70°C (-40°F to 158°F)  
Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Color:** Light Gray
- **Included Accessories:** (2) DIN Rails, 17 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



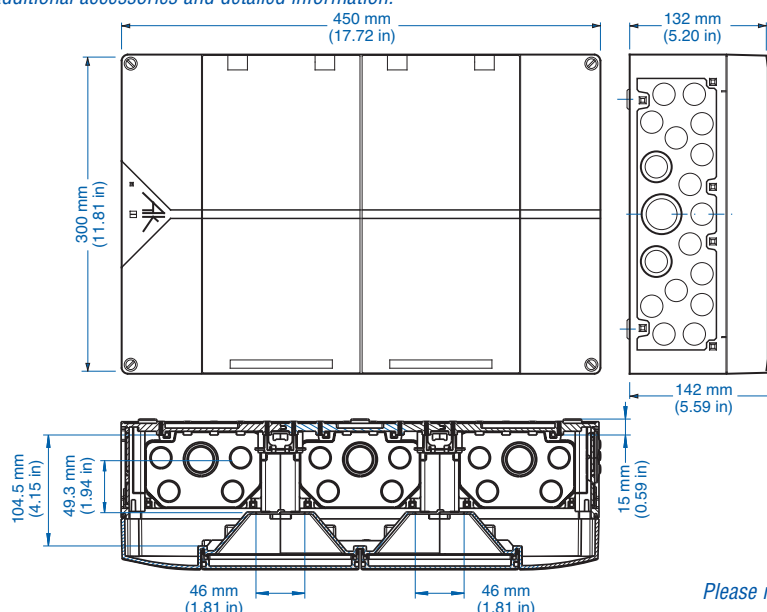
**AK 28**

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in) Width	Height	Std. Pk.
<b>Polystyrene</b>						
Enclosure	735-428	AK28	450 mm (17.72 in)	300 mm (11.81 in)	142 mm (5.59 in)	1
<b>Polycarbonate</b>						
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	562-035	SMTS35/216	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 116-120 for additional accessories and detailed information.



Please refer to page 126 for Knockout details.

# AK 42 – Polystyrene and Polycarbonate – 600x300mm (23.62x11.81in.)

## Standard Features

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls and Installed Double Membrane Seals  
Tinted Transparent Door  
Multiple Enclosure Combination Option
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Temperature Range:** Polystyrene  
-40°C to 70°C (-40°F to 158°F)  
Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Color:** Light Gray
- **Included Accessories:** (3) DIN Rails, 25 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



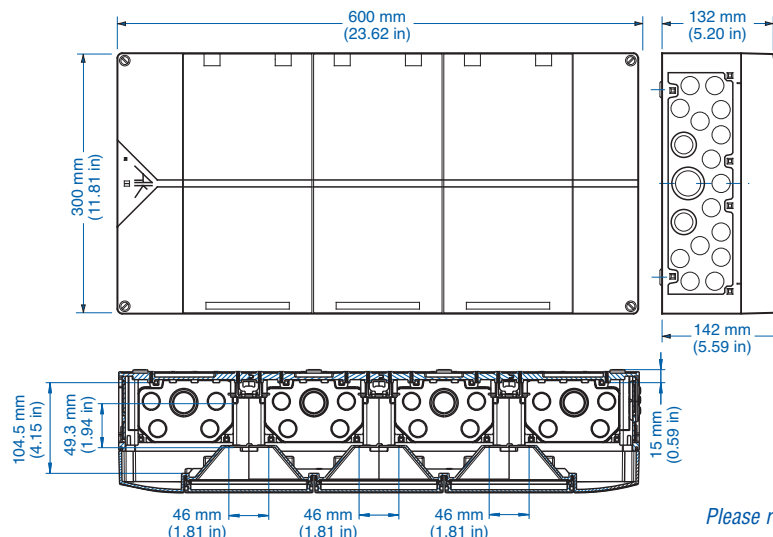
## AK 42

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in) Width	Height	Std. Pk.
<b>Polystyrene</b>						
Enclosure	735-442	AK42	600 mm (23.62 in)	300 mm (11.81 in)	142 mm (5.59 in)	1
<b>Polycarbonate</b>						
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	562-035	SMTS35/216	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 116-120 for additional accessories and detailed information.



Please refer to page 126 for Knockout details.

**Standard Features**

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls and Installed Double Membrane Seals  
Tinted Transparent Door  
Multiple Enclosure Combination Option
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Temperature Range:** Polystyrene  
-40°C to 70°C (-40°F to 158°F)  
Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Color:** Light Gray
- **Included Accessories:** (4) DIN Rails, 25 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



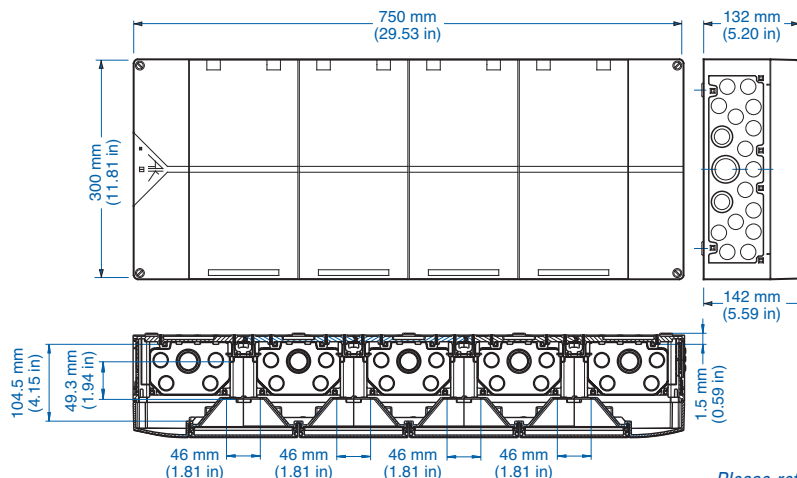
**AK 56**

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in) Width	Height	Std. Pk.
<b>Polystyrene</b>						
Enclosure	735-456	AK56	750 mm (29.53 in)	300 mm (11.81 in)	142 mm (5.59 in)	1
<b>Polycarbonate</b>						
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	562-035	SMTS35/216	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 116-120 for additional accessories and detailed information.



Please refer to page 126 for Knockout details.

# AK 70 – Polystyrene and Polycarbonate – 900x300mm (35.43x11.81in.)

## Standard Features

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls and Installed Double Membrane Seals  
Tinted Transparent Door  
Multiple Enclosure Combination Option
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Temperature Range:** Polystyrene  
-40°C to 70°C (-40°F to 158°F)  
Polycarbonate  
-35°C to 120°C (-31°F to 248°F)
- **Color:** Light Gray
- **Included Accessories:** (5) DIN Rails, 25 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 Seal  
(1) M40 Entry Spout
- **Accessories:** See section below



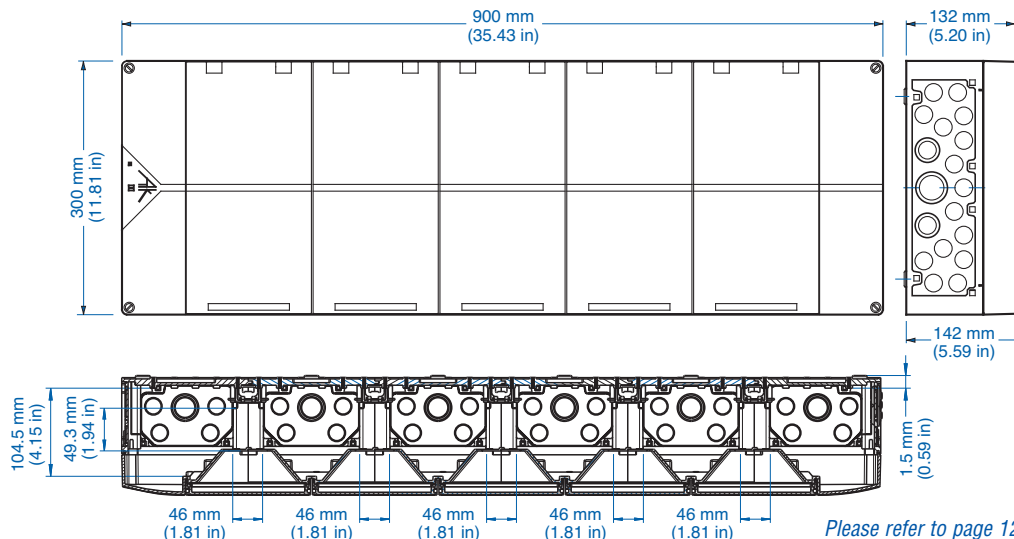
## AK 70

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in)	Width	Height	Std. Pk.
<b>Polystyrene</b>							
Enclosure	735-470	AK70	900 mm (35.43 in)	300 mm (11.81 in)	142 mm (5.59 in)		1
<b>Polycarbonate</b>							
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	562-035	SMTS35/216	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 116-120 for additional accessories and detailed information.



Please refer to page 126 for Knockout details.

**Standard Features**

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls and Installed Double Membrane Seals  
Tinted Transparent Door  
Multiple Enclosure Combination Option
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Temperature Range:** Polystyrene -40°C to 70°C (-40°F to 158°F)  
Polycarbonate -35°C to 120°C (-31°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



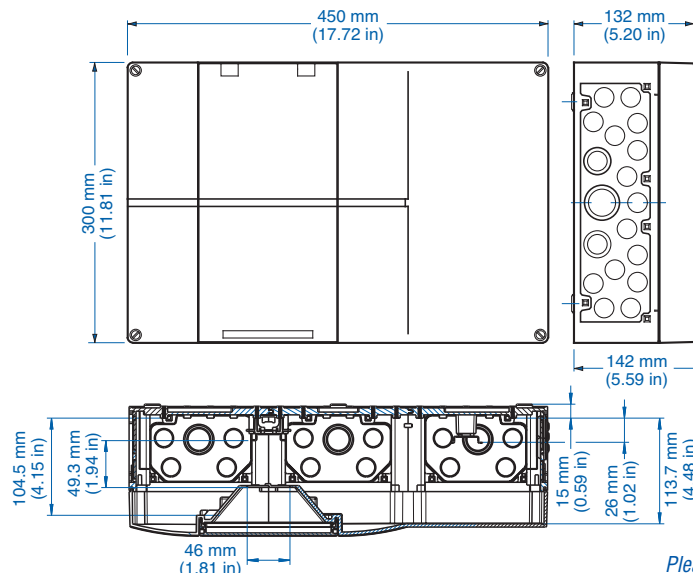
**AK 14+1**

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in) Width	Height	Std. Pk.
<b>Polystyrene</b>						
Enclosure	737-414	AK14+1	450 mm (17.72 in)	300 mm (11.81 in)	142 mm (5.59 in)	1
<b>Polycarbonate</b>						
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	562-035	SMTS35/216	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 116-120 for additional accessories and detailed information.



Please refer to page 126 for Knockout details.

# AK 28+1 – Polystyrene and Polycarbonate – 600x300mm (23.62x11.81in.)

## Standard Features

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls and Installed Double Membrane Seals  
Tinted Transparent Door  
Multiple Enclosure Combination Option
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Temperature Range:** Polystyrene  
-40°C to 70°C (-40°F to 158°F)  
Polycarbonate  
-35°C to 120°C (-31°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



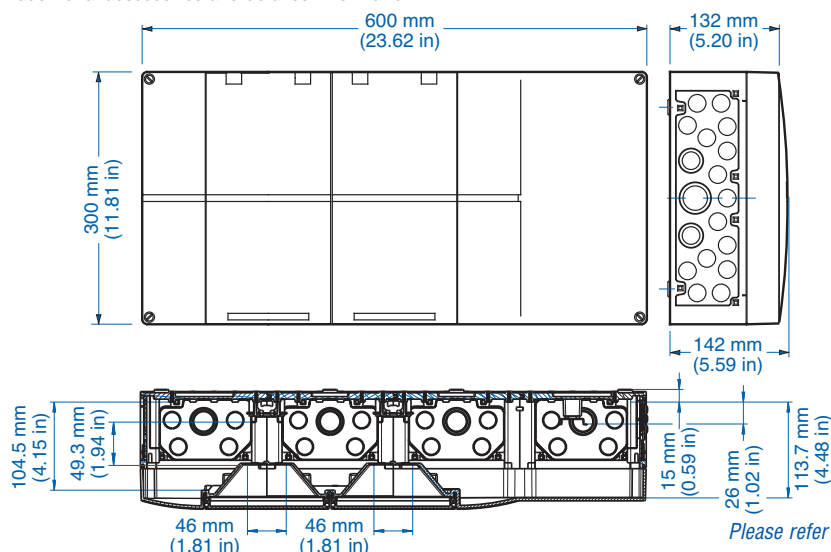
## AK 28+1

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in) Width	Height	Std. Pk.
<b>Polystyrene</b>						
Enclosure	737-428	AK28+1	600 mm (23.62 in)	300 mm (11.81 in)	142 mm (5.59 in)	1
<b>Polycarbonate</b>						
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	562-035	SMTS35/216	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 116-120 for additional accessories and detailed information.



Please refer to page 126 for Knockout details.

**Standard Features**

- **Protection Level:** IP65
- **Technical:** Knockout Sidewalls and Installed Double Membrane Seals  
Tinted Transparent Door  
Multiple Enclosure Combination Option
- **Enclosure Material:** Polystyrene or Polycarbonate
- **Door Material:** Polycarbonate
- **Gasket Material:** Polyurethane
- **Temperature Range:** Polystyrene -40°C to 70°C (-40°F to 158°F)  
Polycarbonate -35°C to 120°C (-31°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



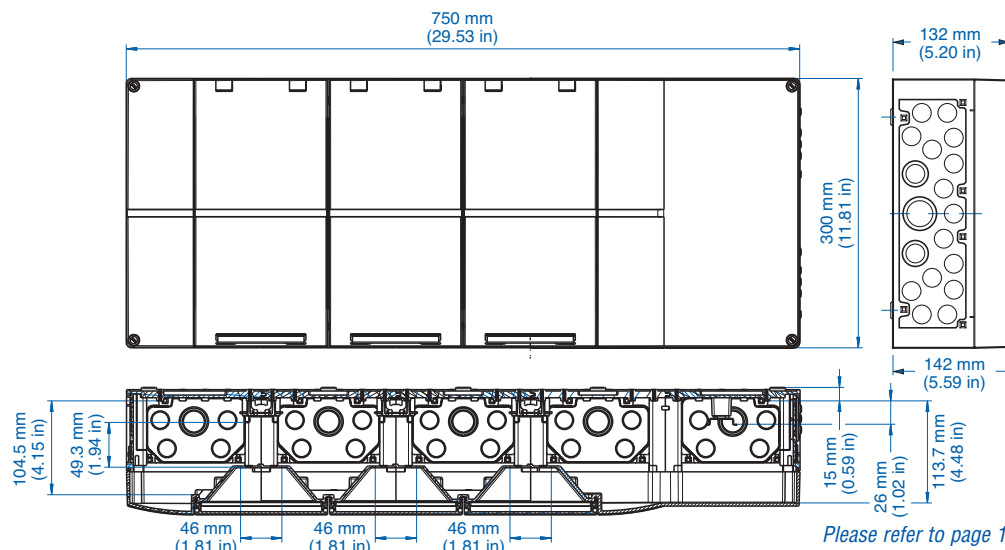
**AK 42+1**

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in) Width	Height	Std. Pk.
<b>Polystyrene</b>						
Enclosure	737-442	AK42+1	750 mm (29.53 in)	300 mm (11.81 in)	142 mm (5.59 in)	1
<b>Polycarbonate</b>						
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	562-035	SMTS35/216	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 116-120 for additional accessories and detailed information.



Please refer to page 126 for Knockout details.



**Check Out Our latest  
Liquid Tight Strain Relief Catalog**  
*including a variety of materials, accessories and conduit*



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catalog at [www.altechcorp.com](http://www.altechcorp.com).**



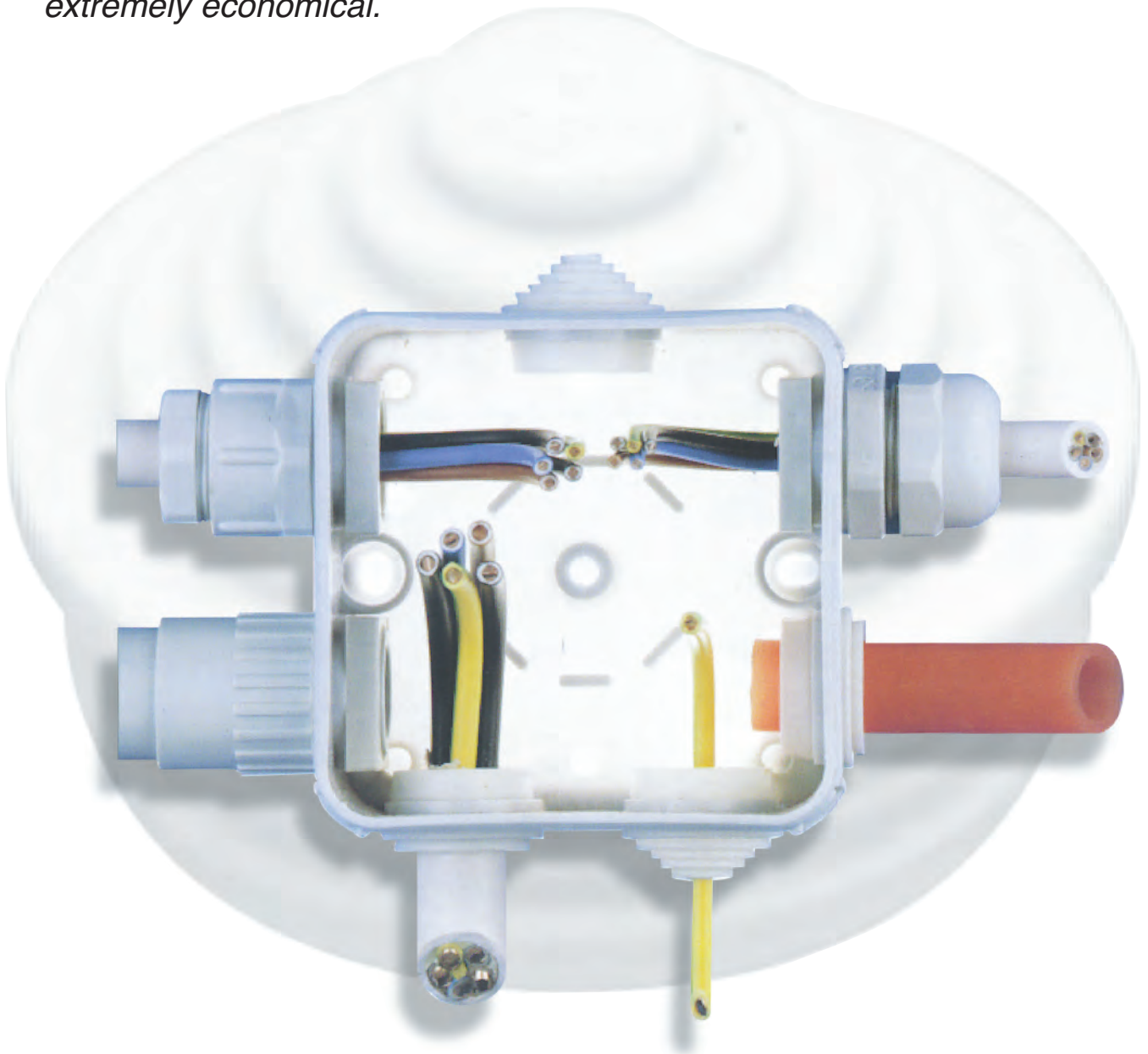
# HP Series

The HP Series are economy junction boxes for lighter duty applications. The HP70, 80 and 90 feature snap on covers, while the HP100 features 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 IP54.

- Direct mount
- Semi rigid polypropylene
- Dust and splash proof
- Contact labyrinth seal
- Temperature range up to 100°C (212°F)
- IP54 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

# HP Series Enclosures

*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 – 75x75mm (2.95x2.95in.)

## 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
- **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



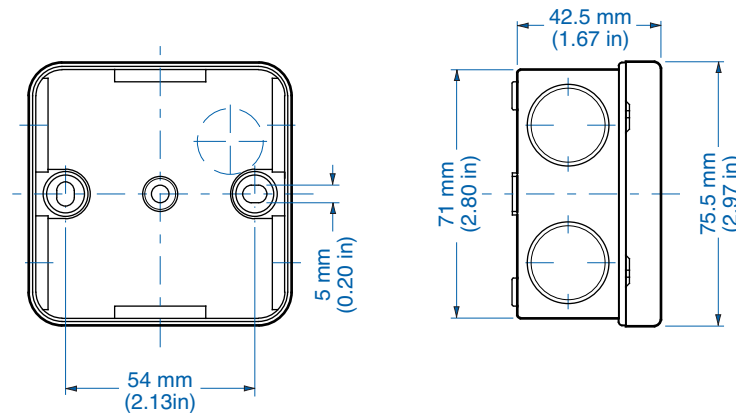
## HP

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

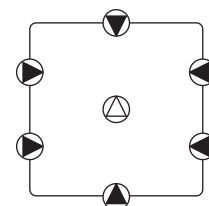
## Accessories

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

For Liquid Tight Strain Reliefs please refer to catalog pages 119-120.



## Knockout Detail



**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
- **Temperature Range:** -30°C to 100°C (-22°F to 272°F)
- **Gasket Material:** None / Contact Labyrinth Seal
- **Color:** Light Gray
- **Accessories:** See section below



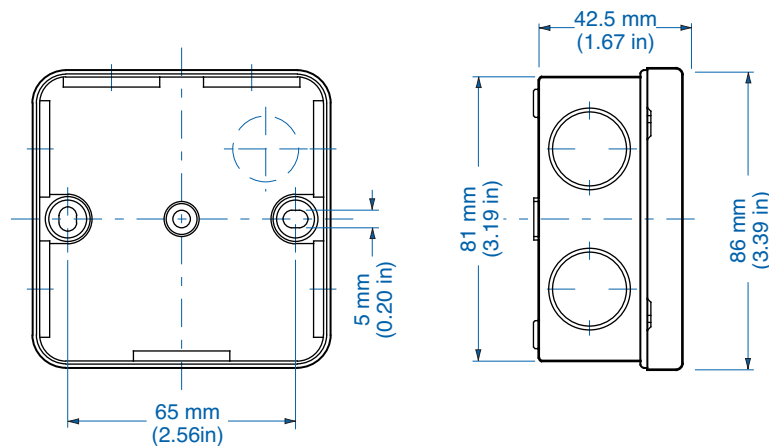
**HP**

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

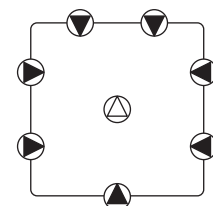
**Accessories**

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

For Liquid Tight Strain Reliefs please refer to catalog pages 119-120.



**Knockout Detail**



# HP 90 – Polypropylene – 90x90mm (3.54x3.54in.)

## 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
- **Temperature Range:** -30°C to 100°C (-22°F to 272°F)
- **Gasket Material:** None / Contact Labyrinth Seal
- **Color:** Light Gray
- **Accessories:** See section below



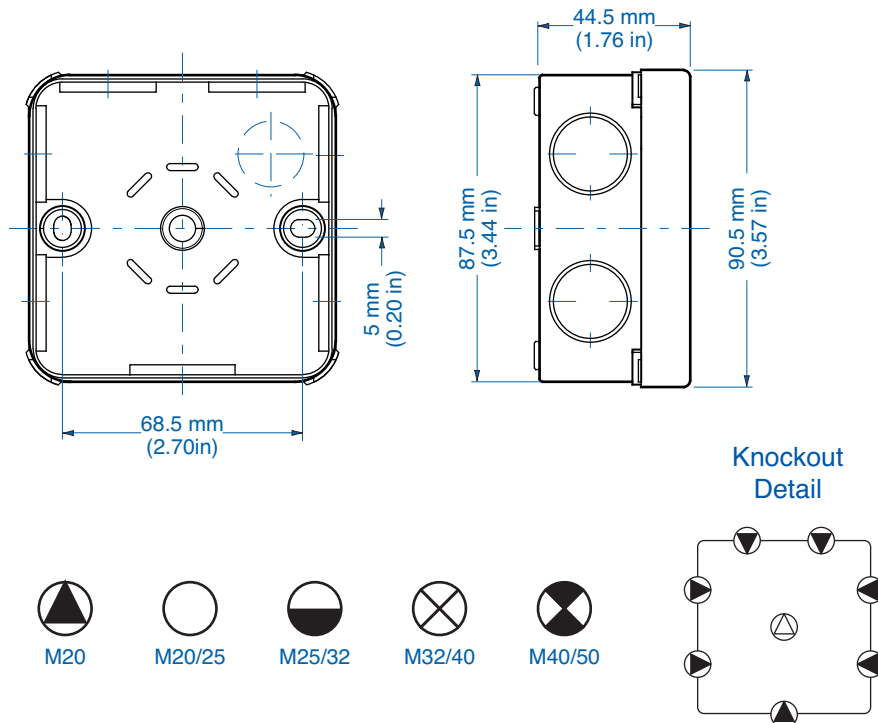
## HP

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in)	Width	Height	Std. Pk.
Enclosure	325-990	HP90	90 mm (3.54 in)	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 <sup>2</sup> - 5 pole	10
Universal Entry Seal - M20	216-420	M20	100

For Liquid Tight Strain Reliefs please refer to catalog pages 119-120.



**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
- **Temperature Range:** -30°C to 100°C (-22°F to 272°F)
- **Gasket Material:** None / Contact Labyrinth Seal
- **Color:** Light Gray
- **Accessories:** See section below



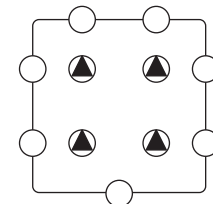
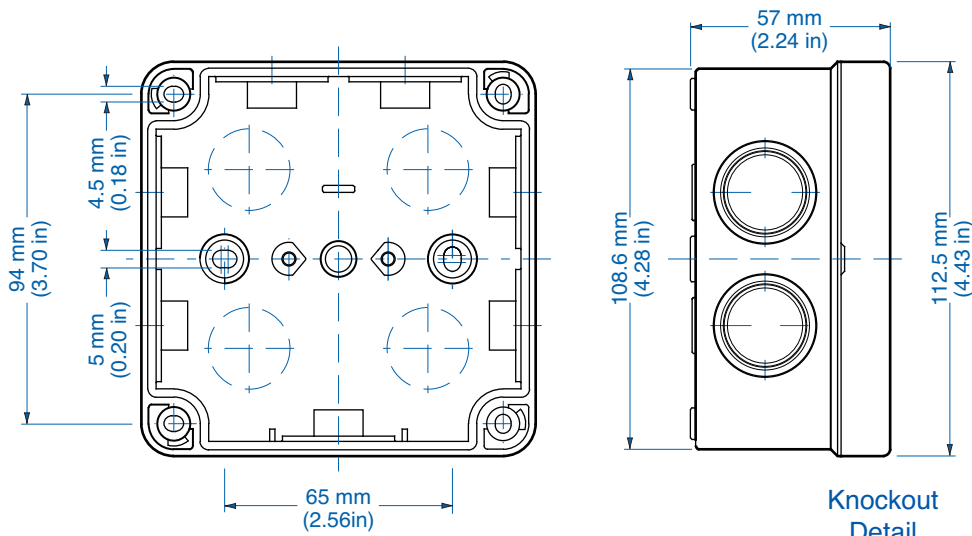
**HP**

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in)	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 <sup>2</sup> - 5 pole	10
Universal Entry Seal - M25	216-425	M25	50

For Liquid Tight Strain Reliefs please refer to catalog pages 119-120.



# HP 150 – Polypropylene – 164x119mm (6.46x4.69in.)

## 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
- **Temperature Range:** -30°C to 100°C (-22°F to 272°F)
- **Gasket Material:** None / Contact Labyrinth Seal
- **Color:** Light Gray
- **Accessories:** See section below



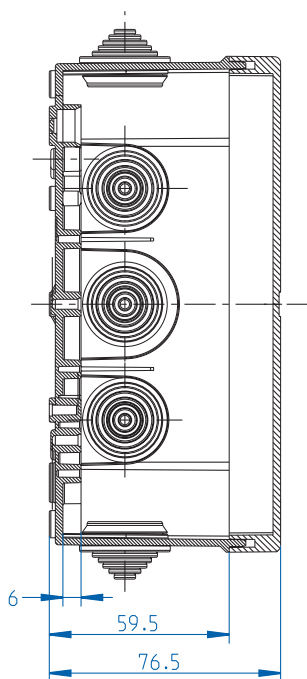
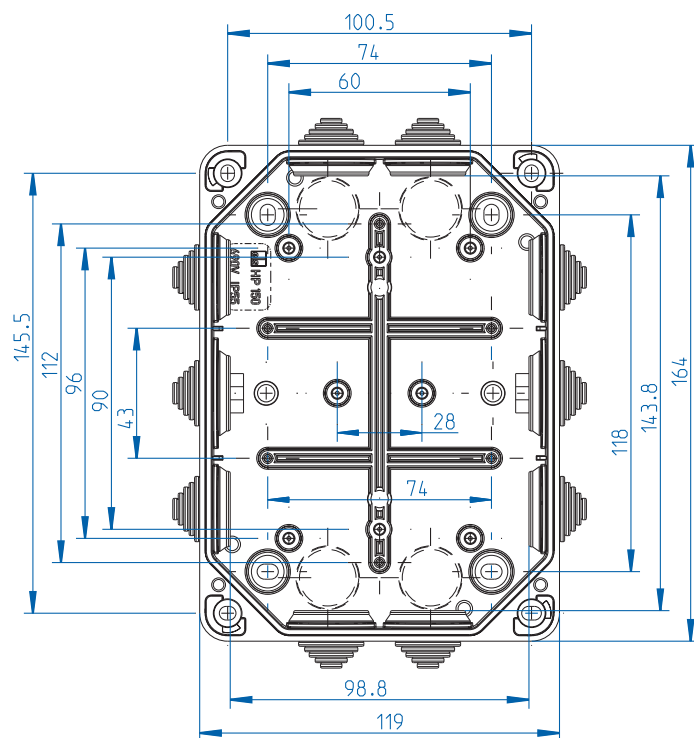
## HP

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

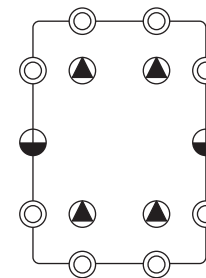
## Accessories

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 119-120.



Knockout Detail



**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
- **Temperature Range:** -30°C to 100°C (-22°F to 272°F)
- **Gasket Material:** None / Contact Labyrinth Seal
- **Color:** Light Gray
- **Accessories:** See section below



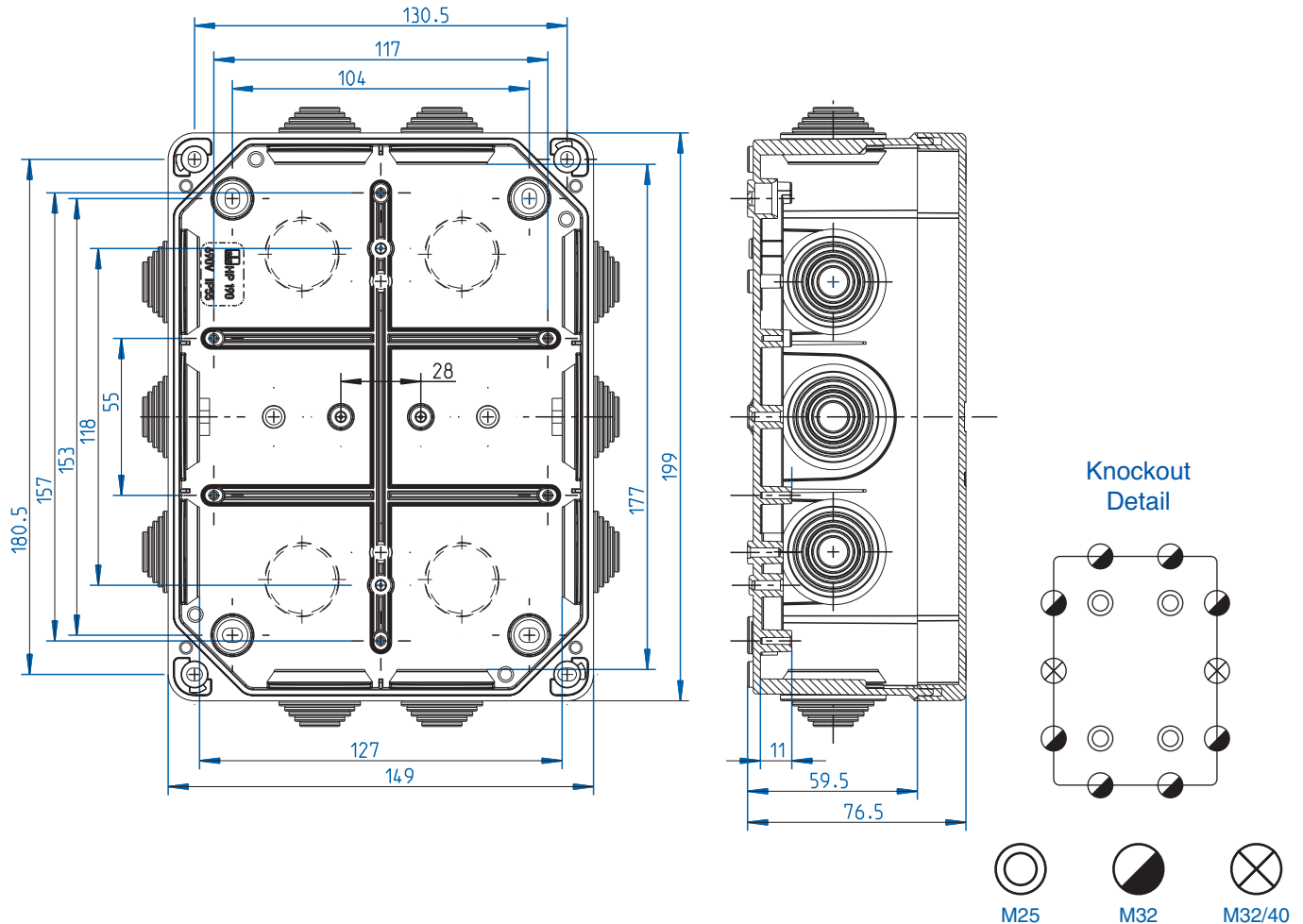
**HP**

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in) 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 119-120.





# PB Series - Push Button Enclosures

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<sup>1</sup>  
22.5 mm Diameter Push Button Holes
- **Enclosure Material:** Polycarbonate
- **Temperature Range:** -35°C to 130°C (-31°F to 266°F)
- **Gasket Material:** Polyurethane
- **Color:** Light Gray
- **Accessories:** See section below

\* IP66 when suitable installation devices are used.



**PB**

Ordering Information	Cat. No.	Type	Length	Dimensions mm (in)		Std. Pk.
				Width	Height	
One Button Enclosure	153-901	PB1-L	94 mm (3.70 in)	94 mm (3.70 in)	81 mm (3.19 in)	1
One Button Enclosure with Yellow cover	153-601	PB1-L/Y	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



<sup>1</sup> Consult Altech for knockout location and quantity.



# Enclosure Accessories

Carefully selected accessories and tools 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, drilling tools 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 locksets
- Hinge kits
- Cover plates
- Combination kits, flange type
- Ground/neutral busbars



**Combination Kits**

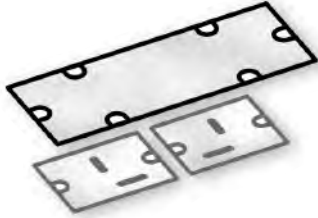
Used to combine series specific enclosures to make larger units. Connect horizontally or vertically.

**Fitting Type Combination Kit**

Threaded with locknut seal for connecting sidewalls.

Fits standard Pg knockouts.

Drilling template included to ensure enclosure ingress integrity.



**Pin Type Combination Set**

For combining AK and AKL Series Enclosures for 150mm and 300mm sides.

Type / Size	Wall Thickness up to	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

CK/AKII	AK, AKL	791-001	1
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**Din Rails**

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



**TS15x5 mm**

**TS35x7.5 mm**

**TS35x7.5 mm / Special Variants**

**TS35x7.5 mm / for AL Series**

Type	For Series	Cat. No.	Std. Pack
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
TS35/81	TK1111, Abox060	198-081	1
TS35/106	TK1309, 1313, Abox100, HP150	198-106	1
TS35/144	TK1809, 1811, 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
CITS35/250	AKII, AKL	562-735	1
SMTS35/216	AKII, AKL, EK12, 24	562-035	1
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

**Enclosure Mounting Screws**

For mounting enclosures through corner holes.



**Wood Screws**

**Machine Screws**

**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
WS/4x35	TK, EK	194-035	100
MS/4x12	TK, EK	194-412	100
MS/4x25	TK, EK	194-425	100
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.

**Small Plastic**  
**Large Plastic**  
**Metal - Outer**



## Enclosure Lid Screws

Replacements for existing screws.

**Short-Gray**  
**Long-Gray**  
**Short-Black**  
**Long-Black**



## Thumb Screw Caps

## 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.



## 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

### Abox Series

Plastic laminate  
Color: Gray

Type	For Series	Cat. No.	Std. Pack
HK1	TK77 - 1809, EK002	190-002	1
HK2	TK1811 - 3625, EK004 - 024, AK, AKL	190-005	1
HK-AL	AL1212 - AL3323	154-210	1

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

Type	For Series	Cat. No.	Std. Pack
KL	EK	548-102	1
KL2	AK	706-102	1
PL	AK, AKL, TK1811 & up	190-100	1

Type	Enclosure Series	Size mm (in.)	Cat. No.	Std. Pack
MP55	TK55	46x44 (1.81x1.73)	195-055	1
MP75	TK75	59x44 (2.32x1.73)	195-075	1
MP77	TK77	45x45 (1.77x1.77)	195-001	1
MP97	TK97	74x45 (2.91x1.77)	195-002	1
MP99	TK99	74x74 (2.91x2.91)	195-003	1
MP1111	TK1111	90x90 (3.54x3.54)	195-004	1
MP1309	TK1309	110x74 (4.33x2.91)	195-009	1
MP1313	TK1313	110x110 (4.33x4.33)	195-005	1
MP1809	TK1809	160x74 (6.30x2.91)	195-010	1
MP1811	TK1811	150x90 (5.91x3.54)	195-006	1
MP1818	TK1818	150x150 (5.91x5.91)	195-007	1
MP2518	TK2518	220x150 (8.66x5.91)	195-008	1
MP3625	TK3625	331x220 (13.03x8.66)	195-012	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

### Mounting Plates

#### 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

Type	Enclosure Series	Size mm (in.)	Cat. No.	Std. Pack
MP88	AL88	68.8x64 (2.71x2.52)	155-005	1
MP1308	AL1308	114x68.8 (4.49x2.71)	155-006	1
MP1808	AL1808	164x68.8 (6.46x2.71)	155-007	1
MP1010	AL1010	88x88 (3.46x3.46)	155-008	1
MP1212	AL1212	109x107 (4.29x4.21)	155-009	1
MP2212	AL2212	207x107 (8.15x4.21)	155-010	1
MP1616	AL1616	145x143 (5.71x5.63)	155-011	1
MP2616	AL2616	245x143 (9.65x5.63)	155-012	1
MP3616	AL3616	345x143 (13.6x5.63)	155-013	1
MP2023	AL2023	214x184 (8.43x7.24)	155-014	1
MP2823	AL2823	264x214 (10.4x8.43)	155-015	1
MP3323	AL3323	314x214 (12.4x8.43)	155-016	1

MPI1	AK, AKL	240x112 (9.45x4.41)	795-001	1
MPI2	AK, AKL	240x240 (9.45x9.45)	795-002	1
MPI3	AK, AKL	240x390 (9.45x15.35)	795-003	1
MPI4	AK, AKL	240x540 (9.45x21.26)	795-004	1

### Mounting Tabs

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



**Plastic**  
**Metal**

Type	For Series	Cat. No.	Std. Pack
MT1	TK, EK	194-001	1
MT2	AK, AKL	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



#### Snap In Double Membrane Entry Seals

- Fits and seals removed Pg knockouts
- IP66
- Features two integral sealing membranes

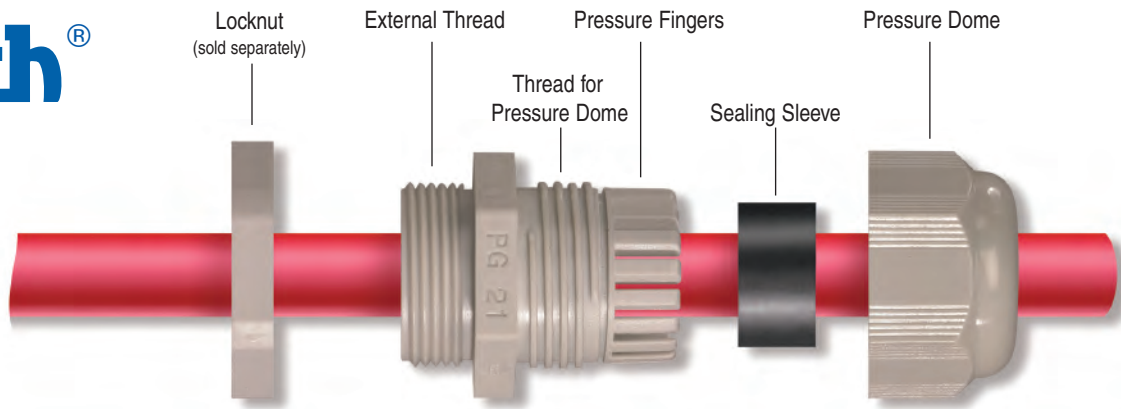
#### Universal Snap In Entry Seal

- IP55
- Polyethylene
- Cut steps to fit desired cable size

#### Snap In Air Vents

- Allows moisture to escape from the enclosure
- Labyrinth seal to prevent water formation

Mounting Hole Type	Cable Dia. mm (in.)	Cat. No.	Std. Pack
M16	5 - 9 (.20 - .35)	260-416	50
M20	7 - 12 (.28 - .47)	260-420	50
M25	9 - 16 (.35 - .63)	260-425	50
M32	14 - 21 (.55 - .83)	260-432	25
M20	5 - 16 (.20 - .63)	216-420	100
M25	5 - 21 (.20 - .83)	216-425	50
M32	13 - 26.5 (.51 - 1.04)	216-432	25
M20	N/A	262-420	100



- **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

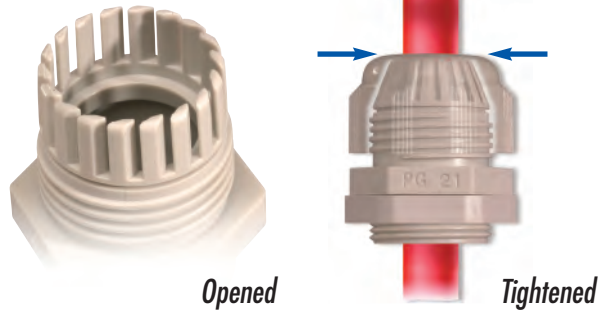
**Technical properties:**

- 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



## 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	
<b>PA6</b>	<b>Neoprene</b>
-25 to 100°C (-13 to 212°F)	-25 to 100°C (-13 to 212°F)

Body  
PA 6

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

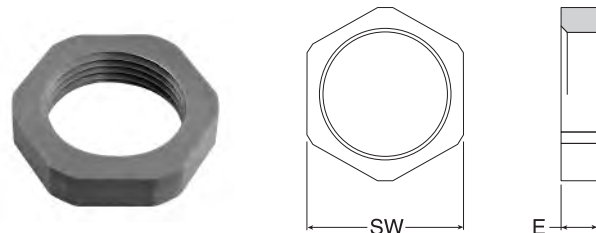
## Lock Nuts, Polyamide, Metric Thread

**Material:**

- Polyamide 6
- 25 % Glass fiber Reinforced

Thread	Thickness (E) mm	SW mm	Cat. No. Light grey	Cat. No. Black	Std. Pk.
<b>Metric</b>					
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										
		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		
First Digit	Person touching	Protection against penetration of foreign bodies										
	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			Flammability Rating acc. to		Halogen Content
		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	V - 2	960° C 1760° F	none
Polycarbonate, glass fibre reinforced, flame-impact resistant	TK/AK-i/AKL/EK and Abox-i series	130° C 266° F	120° C 248° F	-35° C -31° F	V - 2 (5V) <sup>1</sup>	960° C 1760° F	none
Polycarbonate, transparent	TK/EK/AK/AKL hinged door and transparent lid	130° C 266° F	120° C 248° F	-35° C -31° F	V - 2 (5V) <sup>1</sup>	850° C 1562° F	none
Thermoplastic Elastomer	Membrane plugs, membranes Abox 025/040	110° C 230° F	80° C 176° F	-30° C -22° F	HB	750° C 1382° F	none
Polyethylene, flame resistant	Entry Spouts	100° C 212° F	70° C 158° F	-40° C -40° F	HB	960° C 1760° F	none
Aluminum Al 12Si	AL series	130° C 266° F	100° C 212° F	-40° C -40° F	--		none
Polypropylene, flame resistant	HP series	120° C 248° F	100° C 212° F	-30° C -22° F	V-2	960° C 1760° F	none*

All data given according to specifications of manufacturers; no guarantee from Altech/Spelsberg can be claimed.  
<sup>1</sup> Approved for TK enclosures.  
 \* The basic material is halogen-free. Small amounts of halogen are contained in the flame proof finish of which approximately 6% is added to the materials.

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 mm <sup>2</sup>	Minimum Box Volume cm <sup>3</sup>	Applies to Altech/Spelsberg Box Models	Number of Terminals and Conductors	Conductor cross section mm <sup>2</sup>					
				1.5	2.5	4	6	10	16
2.5 mm <sup>2</sup>	115 cm <sup>3</sup>	HP 70/80 Abox 025	Terminal Conductor	6 20	5 15				
4 mm <sup>2</sup>	200 cm <sup>3</sup>	HP 90 Abox 040	Terminal Conductor	8 24	6 20	5 15			
6 mm <sup>2</sup>	300 cm <sup>3</sup>	HP 100 Abox 060	Terminal Conductor	10 30	8 24	6 20	5 15		
10 mm <sup>2</sup>	500 cm <sup>3</sup>	Abox 100	Terminal Conductor	12 36	10 30	8 24	6 20	5 15	
16 mm <sup>2</sup>	825 cm <sup>3</sup>	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	●	●	◐	●	●	●	⊗	⊗	◐	⊗	◐	◐	●
Polycarbonate, glass fibre reinforced, flame-, impact resistant	TK/AK-i/AKL/EK and Abox-i series	●	●	●	⊗	⊗	●	●	⊗	●	◐	●	●	⊗
Polycarbonate, transparent	TK/EK/AK/AKL 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:	Polyethylene gray + black	Polycarbonate, 15% GV, gray
	Polypropylene gray	Polycarbonate, transparent
	TPE gray	Polycarbonate, smoky topaz
	FS 131 gray	

Note: The test reports can be obtained from us free of charge.

**Shock-Testing by the Federal Office for Civil Defense**

For installation in air raid shelters in accordance with standard test class RK 0.63/6.3, safety degree A. Devices up to an allowable weight of 2 kg are not subject to compulsory testing.

Of the larger enclosures, the following types have been tested and approved:

- TK 2518, TK 3625 as empty enclosure
- RK 2518, RK 3625 as serial terminal enclosure
- EK 12, EK 24 as distribution box
- AK 12, AK 24 as distribution board (Application certificate 023/95)

**Approval through «Bureau Veritas»**

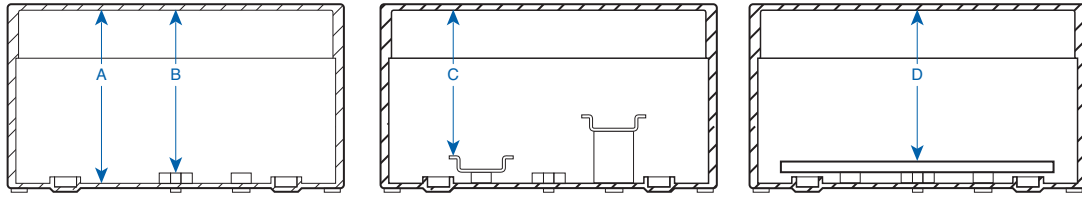
The following program series have been approved (Nr. 2661/2869/BO/OD) and are consequently suitable for installation in ships and shipyards:

- EK- Series distribution boards
- Nautic- Series junction boxes
- RK- Series terminal boxes
- 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 (see summary on pg. 120) 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.

### Clearance Installation Heights for Spelsberg Enclosures



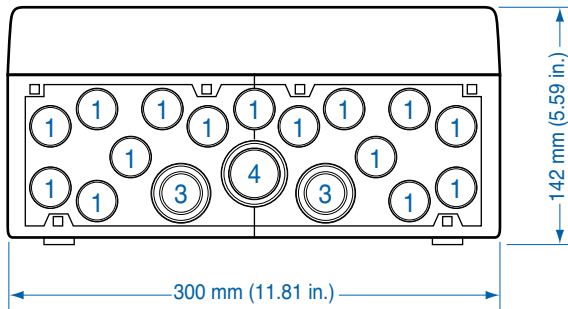
A) from base bottom  
 B) from standoffs in base  
 C) from top of mounting rail NS 35 (mounted on base standoffs)  
 D) from top of mounting plate  
 [all dimensions in mm (in)]

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 0	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 (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 1811/1818/2518	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 (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 1811/1818/2518	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 1811/1818/2518 – 16	156 (6.14)	150 (5.90)	142.5 (5.61)	147.5 (5.81)

## AK and AKL Knockout Details

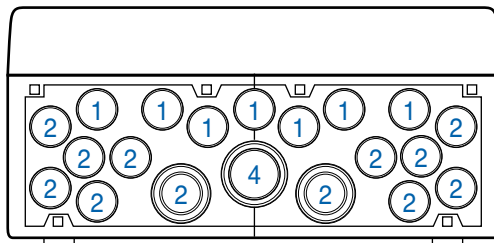
End View  
 AK - Bottom Only  
 AKL - Top and Bottom

End View  
 AK / AKL



End View  
 AK - Top Only

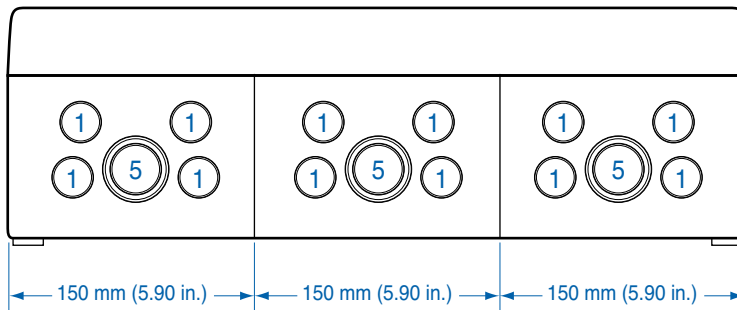
End View  
 AK - Top Only



Side View

AK  
 AKL

Side View  
 AKL / 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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105-401	14	109-408	36	112-013	30
105-402	16	109-411	34	120-401	14
105-403	18	109-413	30	120-402	16
105-404	20	110-401	14	120-403	18
105-405	24	110-402	16	120-404	20
105-406	28	110-403	18	120-405	24
105-407	32	110-404	20	120-406	28
105-408	36	110-405	24	120-407	32
105-409	22	110-406	28	120-408	36
105-410	26	110-407	32	120-409	22
105-411	34	110-408	36	120-410	26
105-412	38	110-409	22	120-411	34
105-413	30	110-410	26	120-412	38
105-455	12	110-411	34	120-413	30
105-475	12	110-412	38	120-455	12
105-901	14	110-413	30	120-475	12
105-902	16	110-455	12	120-901	14
105-903	18	110-475	12	120-902	16
105-904	20	110-901	14	120-903	18
105-905	24	110-902	16	120-904	20
105-906	28	110-903	18	120-905	24
105-907	32	110-904	20	120-906	28
105-908	36	110-905	24	120-907	32
105-909	22	110-906	28	120-908	36
105-910	26	110-907	32	120-909	22
105-911	34	110-908	36	120-910	26
105-912	38	110-909	22	120-911	34
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106-003	18	110-913	30	121-407	32
106-004	20	111-001	14	121-408	36
106-005	24	111-002	16	121-411	34
106-006	28	111-003	18	121-413	30
106-007	32	111-004	20	127-401	14
106-008	36	111-005	24	127-402	16
106-009	22	111-006	28	127-403	18
106-010	26	111-007	32	127-404	20
106-011	34	111-008	36	127-405	24
106-012	38	111-009	22	127-406	28
106-013	30	111-010	26	127-407	32
106-455	12	111-011	34	127-408	36
106-475	12	111-012	38	127-409	22
106-501	14	111-013	30	127-410	26
106-502	16	111-455	12	127-411	34
106-503	18	111-475	12	127-412	38
106-504	20	111-501	14	127-413	30
106-505	24	111-502	16	127-455	12
106-506	28	111-503	18	127-475	12
106-507	32	111-504	20	127-901	14
106-508	36	111-505	24	127-902	16
106-509	22	111-506	28	127-903	18
106-510	26	111-507	32	127-904	20
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106-512	38	111-509	22	127-906	28
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130-004	20	139-455	12	194-002	112
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130-007	32	145-475	12	194-412	117
130-008	36	146-455	12	194-425	117
130-009	22	146-475	12	195-001	118
130-010	26	150-001	42	195-002	118
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130-012	38	150-003	44	195-004	118
130-013	30	150-004	45	195-005	118
130-455	12	150-005	46	195-006	118
130-475	12	150-006	47	195-007	118
130-501	14	150-007	48	195-008	118
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130-503	18	150-009	50	195-010	118
130-504	20	150-010	51	195-012	118
130-505	24	150-011	52	195-055	118
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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.

If any provision or provisions of this Agreement shall be held to be invalid, illegal or unenforceable, the validity, legality and enforceability, of the remaining provisions shall not in any way be affected or impaired thereby.

ALTECH is not responsible for failure to fulfill its obligation under this Agreement due to causes beyond its control, or except as agreed herein.

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.

# Here are other great catalogs available from Altech!

## 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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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 switching power supplies, linear power supplies, and custom designed interface modules.

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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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## 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 contaminants 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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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 assist 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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Altech's busbar system is an innovative way to jumper Miniature Circuit Breakers.

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**CONTACTORS, MINI CONTACTORS, DEFINITE PURPOSE CONTACTORS & OVERLOAD RELAYS**

Altech's new line of contactors come in 3 and 4 pole configurations at 9A to 800A.

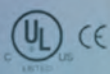
- Single Phase (115 -230V)
- Three Phase (200 - 575V) AC and DC
- A large variety of coil voltages are supported
- Accessories include auxiliary contacts and overload relays
- Mini contactors come in screw clamp, fast-on, cage clamp and solder pin types



**MOTOR DISCONNECT SWITCHES**

Altech Motor Disconnect Switches are UL508 Listed Manual Motor Controllers for AC Motor Across-the-line, AC General Use.

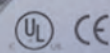
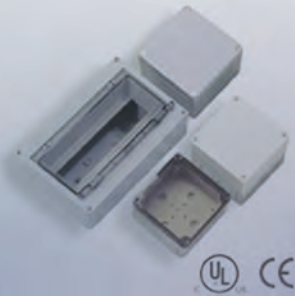
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New Catalog January 2006

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