



DELTRON *Enclosures* 

Aluminium Enclosures

IP Rated

Heavy Duty

Corrosion & Impact Resistant

Plastic

Custom Services



About Us

Deltron Enclosures is a leading UK manufacturer of aluminium and plastic IP rated enclosures for a range of industries and applications worldwide. Our customer portfolio is broad and consists of small and large original equipment manufacturers, wholesalers, catalogue distributors and multi-national blue-chip companies.

Our product portfolio can offer a variety of enclosure options from general purpose IP54 up to our IP68 heavy duty range that offers a high level of corrosion and impact resistance.

- IP54 – IP68
- Aluminium
- EMI/RFI Protected
- Heavy Duty
- Corrosion Resistant
- ABS and Polycarbonate

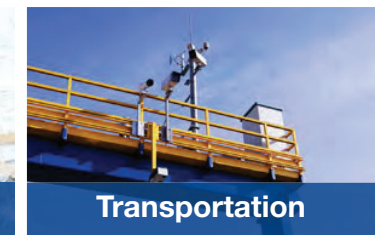
The company was established in 1946 and operates from a 40,000 sq ft. manufacturing facility in Scunthorpe, North Lincolnshire, UK. Deltron Enclosures is one of four brands from DEM Manufacturing; a division of Alpha 3 Manufacturing Ltd, which also comprises three other manufacturing businesses; CTL Manufacturing, CCS Electronics and Tekdata Interconnections Ltd.

For more information, visit www.dem-uk.com/deltron-enclosures where you can download technical product information and 3D CAD models or use our product specifier tool to find suitable products for your project.



Key Markets

We work with a large number of customers from a broad scope of industries. During our 70+ years, we have developed significant knowledge and understanding of the specific requirements and conformities within wide and varied market sectors.



- Push Button Controls
- Radio Frequency Housing
- Radio Transmitters
- Industrial Control Box
- Security Camera Housing
- Pressure Sensors
- Lighting Control Units
- Satellite Navigation Systems
- Passenger Information Displays
- Advertising Display Boards
- Hand Held Controls
- Medical Monitors

Selection Table		Range		General Purpose Ranges								Heavy Duty Ranges				Plastic Range	
				Series		IP54 (-1mm H)*	IP54 with Flanges	IP66	IP66 with Flanges	IP68	IP68 with Flanges	IP68 EMI/RFI	IP68 EMI/RFI with Flanges	Low Cost	IP66	IP68	Fortis Range
		Plain Aluminium Series		459	455	460	456	480	483	480	483	486	486	486	489		
		Powder Coat Series		461	457	453	463	481	484	481	484	487	487	487	490	478	477
Nylon Coat Series		462	458	454	464	482	485	482	485	488	488	488					
Box Code	L (Inc Flg)	Sizes by Length L x W x H (mm)	Page 10	Page 11	Page 12	Page 13	Page 14	Page 15	Page 16	Page 17	Page 32	Page 33	Page 34	Page 42	Page 50	Page 50	
040503		45 x 50 x 30												•			
050503		52 x 50 x 35													•	•	
Q		60 x 55 x 31	•		•		•		•								
060503		64 x 58 x 34												•			
060503		65 x 50 x 35													•	•	
070805		75 x 80 x 57												•			
0140		76 x 51 x 28													•		
P		80 x 55 x 26	•		•		•		•						•		
080805		82 x 80 x 55													•	•	
080808		82 x 80 x 85													•	•	
A	114	89 x 35 x 31	•	•	•	•	•	•	•	•							
101008		100 x 100 x 81												•			
0160		101 x 77 x 40													•		
B	140	114 x 64 x 31	•	•	•	•	•	•	•	•							
C	140	114 x 89 x 56	•	•	•	•	•	•	•	•							
D	140	114 x 65 x 56	•	•	•	•	•	•	•	•							
120805		120 x 80 x 55													•	•	
120808		120 x 80 x 85													•	•	
M	150	120 x 100 x 36	•	•	•	•	•	•	•	•							
0020		122 x 62 x 31													•		
121205		122 x 120 x 55													•	•	
121208		122 x 120 x 81												•			
121209		122 x 120 x 91												•			
120805		125 x 80 x 57												•			
121208		125 x 125 x 80									•	•	•				
121209		125 x 125 x 90									•	•	•				
130806		130 x 80 x 60									•	•	•				
K	170	140 x 102 x 77	•	•	•	•	•	•	•	•							
141409		140 x 140 x 91												•			
160805		160 x 80 x 55													•	•	
160808		160 x 80 x 85													•	•	
161209		160 x 120 x 90													•	•	
161609		160 x 160 x 90									•	•	•				
L		165 x 127 x 77	•		•		•		•								
E	202	172 x 121 x 56	•	•	•	•	•	•	•	•							
F	202	172 x 121 x 107	•	•	•	•	•	•	•	•							
170805		175 x 80 x 57												•			
201207		200 x 120 x 75													•	•	

* IP54 Range - Note height of enclosure is reduced by 1mm due to absence of seal.

Custom sizes, machining and assembly services are available across our ranges. See page 8 for more details.



Selection Table		Range	General Purpose Ranges								Heavy Duty Ranges				Plastic Range	
		Series	IP54 (-1mm H)*	IP54 with Flanges	IP66	IP66 with Flanges	IP68	IP68 with Flanges	IP68 EMI/RFI	IP68 EMI/RFI with Flanges	Low Cost	IP66	IP68	Fortis Range	ABS	Polycarbonate
		Plain Aluminium Series	459	455	460	456	480	483	480	483	486	486	486	489		
		Powder Coat Series	461	457	453	463	481	484	481	484	487	487	487	490	478	477
Nylon Coat Series	462	458	454	464	482	485	482	485	488	488	488					
Box Code	L (Inc Flg)	Sizes by Length L x W x H (mm)	Page 10	Page 11	Page 12	Page 13	Page 14	Page 15	Page 16	Page 17	Page 32	Page 33	Page 34	Page 42	Page 50	Page 50
201209		200 x 120 x 90													•	•
201507		200 x 150 x 75													•	•
221208		220 x 120 x 80									•	•	•			
221208		220 x 120 x 81												•		
221209		220 x 120 x 90									•	•	•			
221209		220 x 120 x 91												•		
G	252	222 x 146 x 56	•	•	•	•	•	•	•	•						
H		222 x 146 x 107	•		•		•		•							
241210		240 x 120 x 100													•	•
241609		240 x 160 x 90													•	•
241612		240 x 160 x 120													•	•
250805		250 x 80 x 57												•		
251609		250 x 160 x 90													•	•
251612		250 x 160 x 120													•	•
N		250 x 250 x 100	•		•		•		•							
261609		260 x 160 x 90									•	•	•			
261609		260 x 160 x 91												•		
261612		260 x 160 x 120									•	•	•			
J		275 x 175 x 66	•		•		•		•							
302308		300 x 230 x 85													•	•
302311		300 x 230 x 110													•	•
362015		360 x 200 x 150													•	•
402318		300 x 230 x181												•		

* IP54 Range - Note height of enclosure is reduced by 1mm due to absence of seal.

Custom sizes, machining and assembly services are available across our ranges. See page 8 for more details.

If the enclosure size you require is not listed, please get in touch as we may still be able to help.
 Tel: +44 (0)1724 273206 | Email: sales@dem-uk.com

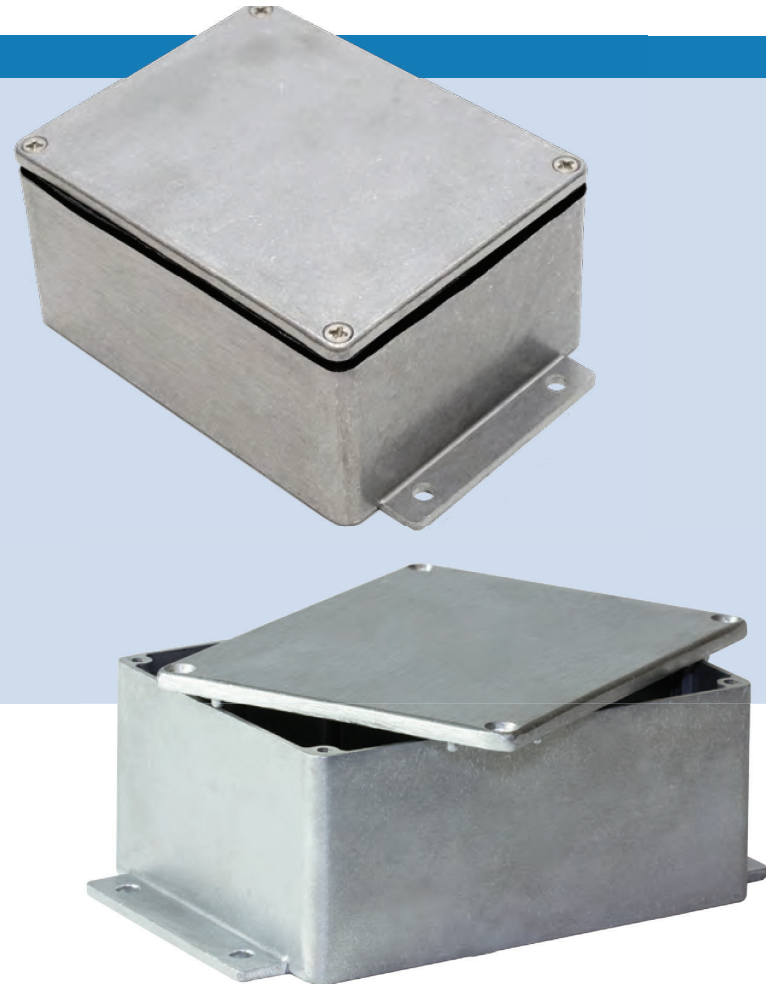
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Plastic Ranges

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Customisation

Utilising our in-house machining capabilities, our ranges can be machined, finished and assembled to your specification.

Benefits of customisation with Deltron Enclosures

- Take advantage of low MOQs or high volume production runs.
- Reduced lead times, reducing your time to market.
- Competitive pricing which helps your budget go further.
- Our engineering team can help you to determine the appropriate enclosure solution.
- The enclosures will be ready for immediate installation once on site.



Machining

Drilling, tapping, milling, louvres, PEMS, insertion of windows, handles or slots and more, to prepare the enclosure for the assembly stage.

Coatings and Chemical Treatments

Enhance the protection of the enclosure by adding a coating or chemical treatment. We offer a textured powder coating or smooth nylon coating as standard to protect from corrosion, UV light and oils, but other treatments are available on request.

Painting

Select an attention grabbing red for health and safety purposes, or choose a lighter colour for an aesthetically pleasing enclosure that blends into the background. Just provide the Pantone/RAL reference for a custom colour.

Printing

8 Incorporate your logo or a specification/product code with our printing options of silk screening and engraving.



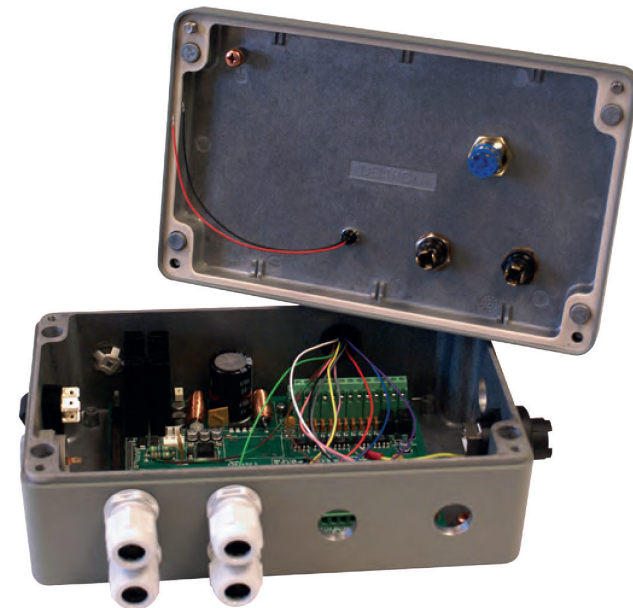
Box Build

Whether your requirement is to control and automate a CNC machine or install a control system for railways, Deltron Enclosures can offer a complete enclosure assembly service to reduce costs and save time.

Available for any box or application, your enclosures can be populated with screens, cable glands, PCBs, keypads and more. Utilising our group purchasing power, we can source and procure high quality components at low prices in preparation for the build, whether high, medium or low volume. We can also supply a completely tested box to meet the IEC 60529:2001 standard using our in-house laboratory.

- You benefit, whether the project is high, medium or low volume.
- Save time without the hassle of managing a long supply chain.
- First class technical and drawing support from our experienced engineers.
- The enclosures will be ready for immediate installation once on site.
- As part of the Alpha 3 Manufacturing Group, we can also manufacture cable assemblies and connectors.

- Switches
- Connectors
- EMC Filters
- Cable Glands
- Screens
- Keypads
- Cable Assemblies
- Terminations



How to obtain a quote

3D CAD models can be downloaded from our website for integration into your software, allowing you to modify the model to show your machining requirements. Email your model to our sales team at sales@dem-uk.com who will then respond with a quotation. Alternatively, a hand drawn specification with a list of requirements would also be adequate.

IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EMI/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

Corrosion & Impact
Resistant

Plastic

IP54 General Purpose Enclosures



Ideal for light duty environments

With an IP54 rating, this versatile range offers light protection against dust and low pressure water spray. Fifteen sizes are available which come complete with screws and selected sizes include PCB guides. This range is suited to applications in low risk environments where only a minor amount of moisture is present.



- IP54 Rated (Light protection against dust and low pressure water spray)
- Certified to BS EN 60529:1992 and RoHS Compliant
- Manufactured from LM2/ADC12/AL-Si10CuFe
- EMI/RFI Screening
- Three finish options of plain aluminium, powder coat or nylon coat
- Can be customised in our UK factory, see page 8 for more details

See page 18 for material specification

See pages 20 - 31 for dimensions

Box Size (mm)					Order Code		
Box Code	PCB Guide	L	W	H	Plain	Powder Coated	Nylon Coated
A	N	89	35	30	459-0010	461-0010*	462-0010*
B	N	114	64	30	459-0020	461-0020*	462-0020*
C	N	114	89	55	459-0030	461-0030*	462-0030*
D	N	114	65	55	459-0040	461-0040*	462-0040*
E	N	172	121	55	459-0050	461-0050*	462-0050*
F	N	172	121	106	459-0060	461-0060*	462-0060*
G	N	222	146	55	459-0070	461-0070*	462-0070*
H	N	222	146	106	459-0080	461-0080*	462-0080*
J	Y	275	175	65	459-0090	461-0090*	462-0090*
K	Y	140	102	76	459-0100	461-0100*	462-0100*
L	Y	165	127	76	459-0110	461-0110*	462-0110*
M	Y	120	100	35	459-0120	461-0120*	462-0120*
N	Y	250	250	100	459-0130	461-0130*	462-0130*
P	Y	80	55	25	459-0140	461-0140*	462-0140*
Q	Y	60	55	30	459-0150	459-0150*	462-0150*

***Code Suffix: Grey = A, Blue = B, Black = E**



Custom Services

Save time and cut costs with our in-house machining service - See page 8 for full details

- Machining • Painting • Printing • Assembly



Technical Assistance

Any questions?
Call +44 (0)1724 273206

IP54 General Purpose Flanged Enclosures



Ideal for light duty environments

With an IP54 rating, this versatile range offers light protection against dust and low pressure water spray. Nine sizes are available which come complete with screws and PCB guides. This range is suited to applications in low risk environments where only a minor amount of moisture is present.



- IP54 Rated (Light protection against dust and low pressure water spray)
- Certified to BS EN 60529:1992 and RoHS Compliant
- Manufactured from LM2/ADC12/AL-Si10CuFe
- EMI/RFI Screening
- Three finish options of plain aluminium, powder coat or nylon coat
- Can be customised in our UK factory, see page 8 for more details

See page 18 for material specification

See pages 20 - 31 for dimensions

Box Code	Box Size (mm)					Order Code		
	PCB Guide	L	L (exc flg)	W	H	Plain	Powder Coat	Nylon Coat
A	Y	114	89	35	30	455-0010	457-0010*	458-0010*
B	Y	140	114	64	30	455-0020	457-0020*	458-0020*
C	Y	140	114	89	55	455-0030	457-0030*	458-0030*
D	Y	140	115	64	55	455-0040	457-0040*	458-0040*
E	Y	202	172	121	55	455-0050	457-0050*	458-0050*
F	Y	202	172	121	106	455-0060	457-0060*	458-0060*
G	Y	252	223	146	55	455-0070	457-0070*	458-0070*
K	Y	170	140	102	76	455-0100	457-0100*	458-0100*
M	Y	150	120	100	35	455-0120	457-0120*	458-0120*

*Code Suffix: Grey = A, Blue = B, Black = E

Custom Services
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Technical Assistance
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IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EMI/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

Corrosion & Impact Resistant

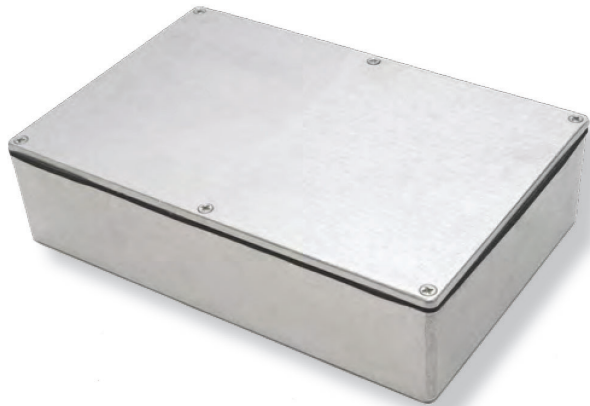
Plastic

IP66 General Purpose Enclosures



Ideal for low-level moisture environments

If light protection against water ingress is essential, this IP66 rated range may be ideal. The range is dust proof, splash proof and protects from powerful jets of water, as per BS EN 60529:1992. Fifteen sizes are available which come complete with screws, and selected sizes include PCB guides.



- IP66 Rated (Dust proof, splash proof, protects from powerful jets of water)
- Certified to BS EN 60529:1992 and RoHS Compliant
- Manufactured from LM2/ADC12/AL-Si10CuFe
- Three finish options of plain aluminium, powder coat or nylon coat
- Can be customised in our UK factory, see page 8 for more details

See page 18 for material specification

See pages 20 - 31 for dimensions

Box Size (mm)					Order Code		
Box Code	PCB Guide	L	W	H	Plain	Powder Coated	Nylon Coated
A	N	89	35	31	460-0010	453-0010*	454-0010*
B	N	114	64	31	460-0020	453-0020*	454-0020*
C	N	114	89	56	460-0030	453-0030*	454-0030*
D	N	114	65	56	460-0040	453-0040*	454-0040*
E	N	172	121	56	460-0050	453-0050*	454-0050*
F	N	172	121	107	460-0060	453-0060*	454-0060*
G	N	222	146	56	460-0070	453-0070*	454-0070*
H	N	222	146	107	460-0080	453-0080*	454-0080*
J	Y	275	175	66	460-0090	453-0090*	454-0090*
K	Y	140	102	77	460-0100	453-0100*	454-0100*
L	Y	165	127	77	460-0110	453-0110*	454-0110*
M	Y	120	100	36	460-0120	453-0120*	454-0120*
N	Y	250	250	100	460-0130	453-0130*	454-0130*
P	Y	80	55	26	460-0140	453-0140*	454-0140*
Q	Y	60	55	31	460-0150	453-0150*	454-0150*

*Code Suffix: Grey = A, Blue = B, Black = E



Custom Services

Save time and cut costs with our in-house machining service - See page 8 for full details

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Technical Assistance

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IP66 General Purpose Flanged Enclosures



Ideal for low-level moisture environments

If light protection against water ingress is essential, this IP66 rated range may be ideal. The range is dust proof, splash proof and protects from powerful jets of water, as per BS EN 60529:1992. Nine sizes are available which come complete screws and PCB guides.



- IP66 Rated (Dust proof, splash proof, protects from powerful jets of water)
- Certified to BS EN 60529:1992 and RoHS Compliant
- Manufactured from LM2/ADC12/AL-Si10CuFe
- Three finish options of plain aluminium, powder coat or nylon coat
- Can be customised in our UK factory, see page 8 for more details

See page 18 for material specification

See pages 20 - 31 for dimensions

Box Size (mm)						Order Code		
Box Code	PCB Guide	L	L (exc flg)	W	H	Plain	Powder Coat	Nylon Coat
A	Y	114	89	35	31	456-0010	463-0010*	464-0010*
B	Y	140	114	64	31	456-0020	463-0020*	464-0020*
C	Y	140	114	89	56	456-0030	463-0030*	464-0030*
D	Y	140	115	64	56	456-0040	463-0040*	464-0040*
E	Y	202	172	121	56	456-0050	463-0050*	464-0050*
F	Y	202	172	121	107	456-0060	463-0060*	464-0060*
G	Y	252	223	146	56	456-0070	463-0070*	464-0070*
K	Y	170	140	102	77	456-0100	463-0100*	464-0100*
M	Y	150	120	100	36	456-0120	463-0120*	464-0120*

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Custom Services

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- Machining • Painting • Printing • Assembly

Technical Assistance

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- IP54 General Purpose
- IP66 General Purpose
- IP68 General Purpose
- EM/RFI General Purpose
- Heavy Duty Low Cost
- IP66 & IP68 Heavy Duty
- Corrosion & Impact Resistant
- Plastic

IP68 General Purpose Enclosures



Ideal for applications subject to high levels of moisture

For more demanding applications, an IP68 enclosure offers protection against complete submersion in water at depths of 5 metres for 1 hour, certified to BS EN 60529:1992. Fifteen sizes are available which come complete with screws and selected sizes also include PCB guides.



- IP68 Rated (Submersion in water at depths of 5 metres for 1 hour)
- Certified to BS EN 60529:1992 and RoHS Compliant
- Manufactured from LM2/ADC12/AL-Si10CuFe
- Three finishes of plain aluminium, powder coat or nylon coat
- Can be customised in our UK factory, see page 8 for more details

See page 18 for material specification

See pages 20 - 31 for dimensions

Box Code	Box Size (mm)				Order Code		
	PCB Guide	L	W	H	Plain	Powder Coated	Nylon Coated
A	N	89	35	31	480-0010	481-0010*	482-0010*
B	N	114	64	31	480-0020	481-0020*	482-0020*
C	N	114	89	56	480-0030	481-0030*	482-0030*
D	N	114	65	56	480-0040	481-0040*	482-0040*
E	N	172	121	56	480-0050	481-0050*	482-0050*
F	N	172	121	107	480-0060	481-0060*	482-0060*
G	N	222	146	56	480-0070	481-0070*	482-0070*
H	N	222	146	107	480-0080	481-0080*	482-0080*
J	Y	275	175	66	480-0090	481-0090*	482-0090*
K	Y	140	102	77	480-0100	481-0100*	482-0100*
L	Y	165	127	77	480-0110	481-0110*	482-0110*
M	Y	120	100	36	480-0120	481-0120*	482-0120*
N	Y	250	250	100	480-0130	481-0130*	482-0130*
P	Y	80	55	26	480-0140	481-0140*	482-0140*
Q	Y	60	55	31	480-0150	481-0150*	482-0150*

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IP68 General Purpose Flanged Enclosures



Ideal for applications subject to high levels of moisture

For more demanding applications, an IP68 enclosure offers protection against complete submersion in water at depths of 5 metres for 1 hour, certified to BS EN 60529:1992. Nine sizes are available which come complete with screws and PCB guides.



- IP68 Rated (Submersion in water at depths of 5 metres for 1 hour)
- Certified to BS EN 60529:1992 and RoHS Compliant
- Manufactured from LM2/ADC12/AL-Si10CuFe
- Three finishes of plain aluminium, powder coat or nylon coat
- Can be customised in our UK factory, see page 8 for more details

See page 18 for material specification

See pages 20 - 31 for dimensions

Box Size (mm)						Order Code		
Box Code	PCB Guide	L	L (exc flg)	W	H	Plain	Powder Coat	Nylon Coat
A	Y	114	89	35	31	483-0010	484-0010*	485-0010*
B	Y	140	114	64	31	483-0020	484-0020*	485-0020*
C	Y	140	114	89	56	483-0030	484-0030*	485-0030*
D	Y	140	115	64	56	483-0040	484-0040*	485-0040*
E	Y	202	172	121	56	483-0050	484-0050*	485-0050*
F	Y	202	172	121	107	483-0060	484-0060*	485-0060*
G	Y	252	223	146	56	483-0070	484-0070*	485-0070*
K	Y	170	140	102	77	483-0100	484-0100*	485-0100*
M	Y	150	120	100	36	483-0120	484-0120*	485-0120*

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IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EM/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

Corrosion & Impact Resistant

Plastic

IP68 EMI/RFI General Purpose Enclosures



Ideal for applications subject to high levels of moisture

Offering enhanced EMI/RFI protection, rated at IP68, this range incorporates a semi-conductive sealing mechanism, which maintains conductivity between the lid and the enclosure whilst maintaining protection from dust and water ingress. Fifteen sizes are available which come complete with screws and selected sizes also include PCB guides.



- Enhanced EMI/RFI protection (See page 19 for more details)
- IP68 Rated (Submersion in water at depths of 5 metres for 1 hour)
- Certified to BS EN 60529:1992 and RoHS Compliant
- Manufactured from LM2/ADC12/AL-Si10CuFe
- Three finishes of plain aluminium, powder coat or nylon coat
- Can be customised in our UK factory, see page 8 for more details

See page 18 for material specification

See pages 20 - 31 for dimensions

Box Size (mm)					Order Code		
Box Code	PCB Guide	L	W	H	Plain	Powder Coated	Nylon Coated
A	N	89	35	31	480-C010	481-C010*	482-C010*
B	N	114	64	31	480-C020	481-C020*	482-C020*
C	N	114	89	56	480-C030	481-C030*	482-C030*
D	N	114	65	56	480-C040	481-C040*	482-C040*
E	N	172	121	56	480-C050	481-C050*	482-C050*
F	N	172	121	107	480-C060	481-C060*	482-C060*
G	N	222	146	56	480-C070	481-C070*	482-C070*
H	N	222	146	107	480-C080	481-C080*	482-C080*
J	Y	275	175	66	480-C090	481-C090*	482-C090*
K	Y	140	102	77	480-C100	481-C100*	482-C100*
L	Y	165	127	77	480-C110	481-C110*	482-C110*
M	Y	120	100	36	480-C120	481-C120*	482-C120*
N	Y	250	250	100	480-C130	481-C130*	482-C130*
P	Y	80	55	26	480-C140	481-C140*	482-C140*
Q	Y	60	55	31	480-C150	481-C150*	482-C150*

*Code Suffix: Grey = A, Blue = B, Black = E



Custom Services

Save time and cut costs with our in-house machining service - See page 8 for full details

- Machining
- Painting
- Printing
- Assembly



Technical Assistance

Any questions?
Call +44 (0)1724 273206

IP68 EMI/RFI Flanged Enclosures



Ideal for applications subject to high levels of moisture

Offering enhanced EMI/RFI protection, rated at IP68, this range incorporates a semi-conductive sealing mechanism, which maintains conductivity between the lid and the enclosure whilst maintaining protection from dust and water ingress. Nine sizes are available which come complete with screws and PCB guides.




- Enhanced EMI/RFI protection (See page 19 for more details)
- IP68 Rated (Submersion in water at depths of 5 metres for 1 hour)
- Certified to BS EN 60529:1992 and RoHS Compliant
- Manufactured from LM2/ADC12/AL-Si10CuFe
- Three finishes of plain aluminium, powder coat or nylon coat
- Can be customised in our UK factory, see page 8 for more details

See page 18 for material specification


See pages 20 - 31 for dimensions

Box Code	PCB Guide	Box Size (mm)				Order Code		
		L	L (exc flg)	W	H	Plain	Powder Coat	Nylon Coat
A	Y	114	89	35	31	483-C010	484-C010*	485-C010*
B	Y	140	114	64	31	483-C020	484-C020*	485-C020*
C	Y	140	114	89	56	483-C030	484-C030*	485-C030*
D	Y	140	115	64	56	483-C040	484-C040*	485-C040*
E	Y	202	172	121	56	483-C050	484-C050*	485-C050*
F	Y	202	172	121	107	483-C060	484-C060*	485-C060*
G	Y	252	223	146	56	483-C070	484-C070*	485-C070*
K	Y	170	140	102	77	483-C100	484-C100*	485-C100*
M	Y	150	120	100	36	483-C120	484-C120*	485-C120*

*Code Suffix: Grey = A, Blue = B, Black = E



Custom Services
Save time and cut costs with our in-house machining service - See page 8 for full details
• Machining • Painting • Printing • Assembly



Technical Assistance
Any questions?
Call +44 (0)1724 273206

IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EMI/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

Corrosion & Impact Resistant

Plastic

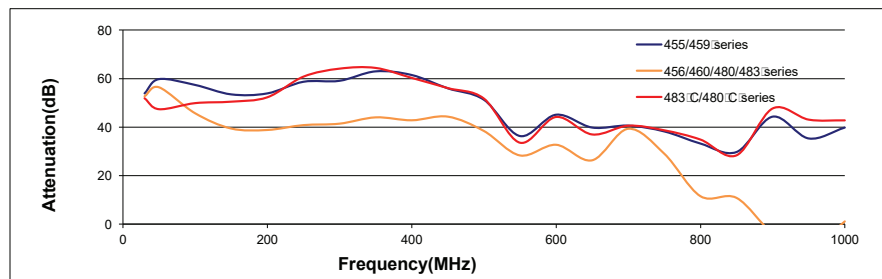
General Purpose Enclosures - Material Specification

Material: ISO Al-Si10Cu2Fe Die Cast Aluminium Alloy			
IP54 General Purpose	Paint Specification:	Polyester Powder Coat – Fine Texture	
	Standard Colours: Chemical Composition: Specification:	Grey to BS 381C-694/P8010/3 Blue to RAL5013/P8010/3 Black to BS 381C-642/P8010/3 Architectural grade TGIC free polyester Qualicoat Class 1 Complies with BS476 Part 6 Fire propagation class 0 Complies with BS476 Part 7 Spread of flame class 1 Powders are available in a range of RAL colours	
IP66 General Purpose	Colours and Finishes:		
	Mechanical and Chemical Properties:		
IP68 General Purpose	Test Thickness:	65 ± 10 µm	UNI EN ISO 2360:2004
	Adhesion:	GTO (equivalent to 5B according to ASTM D3359)	UNI EN ISO 2409:1996
EMI/RFI General Purpose	Pencil Hardness:	H-2H	ASTM D3363-00
	Impact Test:	≥2.5Nm	ASTM D2794-93
Heavy Duty Low Cost	Bending:	5mm	UNI EN ISO 6860:1996
	Erichsen:	≥5mm (no detachments, no cracks)	EN ISO 1520:1995
IP66 & IP68 Heavy Duty	Hardness Buchholz:	≥80	EN ISO 2815:1998
	Salt Spray Resistance:	1000hrs (≤3mm)	ASTM B117-97
Corrosion & Impact Resistant	Acetic Acid Salt Spray:	1000hrs (≤4mm)	ISO 9227:1990
	Humidity Resistance:	1000hrs	DIN 50017:1982
Plastic	Q-Uva (340 nm):	200hrs (loss of gloss <50%)	ASTM G154-00
	Kesternich Corrosion:	> 24 cycles (≤1mm)	EN ISO 3231:1997
IP66 & IP68 Heavy Duty	Chemical Resistance:	Good resistance to diluted acids, alkali and oils at normal temperatures	
	Paint Specification:	Nylon Coat – Gloss	
IP66 & IP68 Heavy Duty	Standard Colours:	Grey to RAL7001/P7000/9 Blue to RAL5012/P7000/9 Black to RAL9005/P7000/9	
	Polymer:	Polyamide 11	
Corrosion & Impact Resistant	Colours and Finishes:	Powders are available in a range of RAL colours	
	Mechanical and Chemical Properties:	(degreased, grit blasted steel and primed)	
IP66 & IP68 Heavy Duty	Specific Gravity at 23°C	1.2 ± 0.15g/cm ³	DIN 53-ISO R 1183
	Average thickness of coating:	100 to 200 micron	
IP66 & IP68 Heavy Duty	VICAT point under 1 daN:	181°C	DIN53 460
	Adhesion:	Class 4	NFT 58-112
IP66 & IP68 Heavy Duty	SHORE D Hardness:	70 ± 10%	DIN53 505
	PERSOZ Hardness at 20%:	160 to 280 second	NFT 30-016
IP66 & IP68 Heavy Duty	Wear TABER Resistance- wheel	4 to 12mg	DIN 16-926/NFT 30-015
	CS 17 Load 1Kg-100 cycles		
IP66 & IP68 Heavy Duty	Temperature Resistance:	-40 to +80°C	
	Chemical Resistance:	Oils – Grease – Solvents, Fuels, Hydrocarbons, Alkalis, Sea Water, Drinking Water and Food Contact (Some colours)	Very Good
IP66 & IP68 Heavy Duty	UV Resistance:	Very Good	
	Impact Resistance Ø 23mm:	From 2 to 8 joule	NFT 30-039
IP66 & IP68 Heavy Duty	Salt spray test after 1000hrs:		ASTM B 117
	Dielectric Breakdown Voltage 330µ	>8Kv	ASTM D 149-81
IP66 & IP68 Heavy Duty	Gloss at 60°C	45 to 75%	DIN 53 223/NFT 30-064
	Fixings:		
IP66 & IP68 Heavy Duty	Lid Screws	Packs of 4 = 000-035-004 Packs of 6 = 000-035-006	
	Standard Screw	M3.5 x 0.6 x 12mm, Recessed Pozi Drive, Countersink Head, Stainless Steel	
IP66 & IP68 Heavy Duty	Black Screw – optional extra	Packs of 6 = 000-086-006 M3.5 x 0.6 x 12mm, Recessed Pozi Drive, Countersink Head, Stainless Steel, Black Nickel Plating	

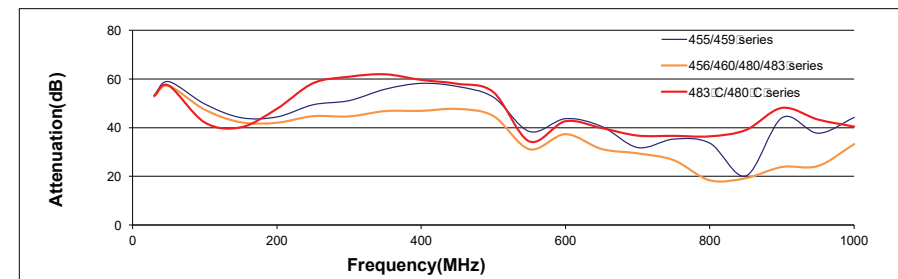
General Purpose Enclosures - Seal Specification

IP66 Seal for General Purpose Enclosures		IP68 Seal for General Purpose Enclosures		IP68 Semi Conductive Seal for General Purpose EMI/RFI Enclosures	
Material:	Neoprene Sponge 3mm thick relaxed	Material:	Silicone Rubber High density closed cell sponge	Material:	AP701/2 semi-conductive (carbon loaded) Silicone Rubber 1.5mm thick uncompressed
Recommended Torque Application:	0.3Nm	Recommended Torque:	0.7Nm	Recommended Torque:	1.0Nm
Hardness Shore 00 Scale:	50	Hardness Shore:	60°C	Hardness Shore:	70°C 1 RHD
Density (Kg.m ³):	96Kg.m ³	Density:	1.30 sg	Density:	1.2 sg
Compression Deflection 25%:	48Kpa	Compression Deflection:	290mm ³	Tensile Strength:	6 Mpa Nmm ²
Compression Set:	<35%	Tensile Strength:	6 Mpa	Elongation:	200%
Tensile Strength:	690 Kpa	Elongation:	280% at break	Water Absorption:	<1%
Elongation:	125%	Water Absorption:	<1%	Abrasion Resistance:	330 mm ³
Water Absorption:	<5% max	Abrasion Resistance:	330 mm ³	Colour:	Black
FMVSS302:	PASS	Colour:	Cream	Temperature Range:	-40°C - +200°C
UL94 HFI:	PASS	Adhesive Backing:	RA 3220	Shielding Effectiveness using mil-G-83528 dB Mil std 285 procedure	
Colour:	Black	Service Temp Constant Low:	-20°C	200Khz	30dB
Adhesive Backing:	05-96ASAB	Service Temp Intermittent Low:	-30°C	100MHz	65dB
Service Temp Constant Low:	-40°C	Service Temp Constant High:	+90°C	500MHz	60dB
Service Temp Intermittent Low:	-57°C	Service Temp Intermittent High:	+110°C	2Ghz	40dB
Service Temp Constant High:	+93°C			10Hz	30dB
Service Temp Intermittent High:	+121°C				

Based on enclosure size – 222 x 146 x 56 ('G' 459-0070)



Based on enclosure size – 114 x 89 x 56 ('C' 459-0030)



IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EMI/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

Corrosion &
Impact
Resistant

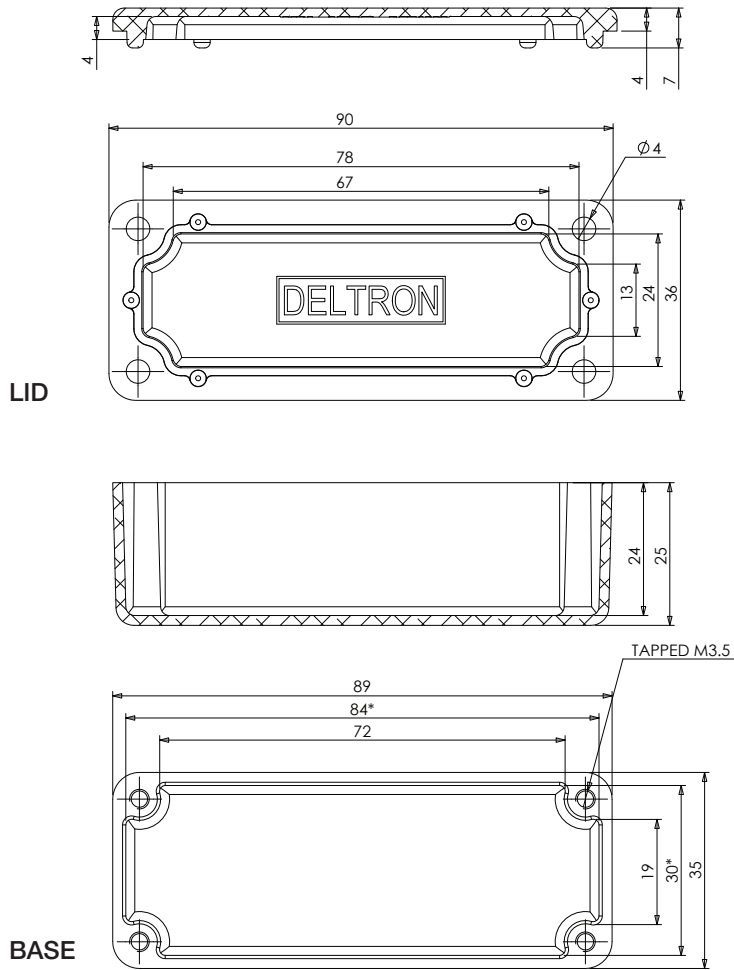
Plastic

General Purpose Enclosure Dimensions - A Box & A Box Flanged

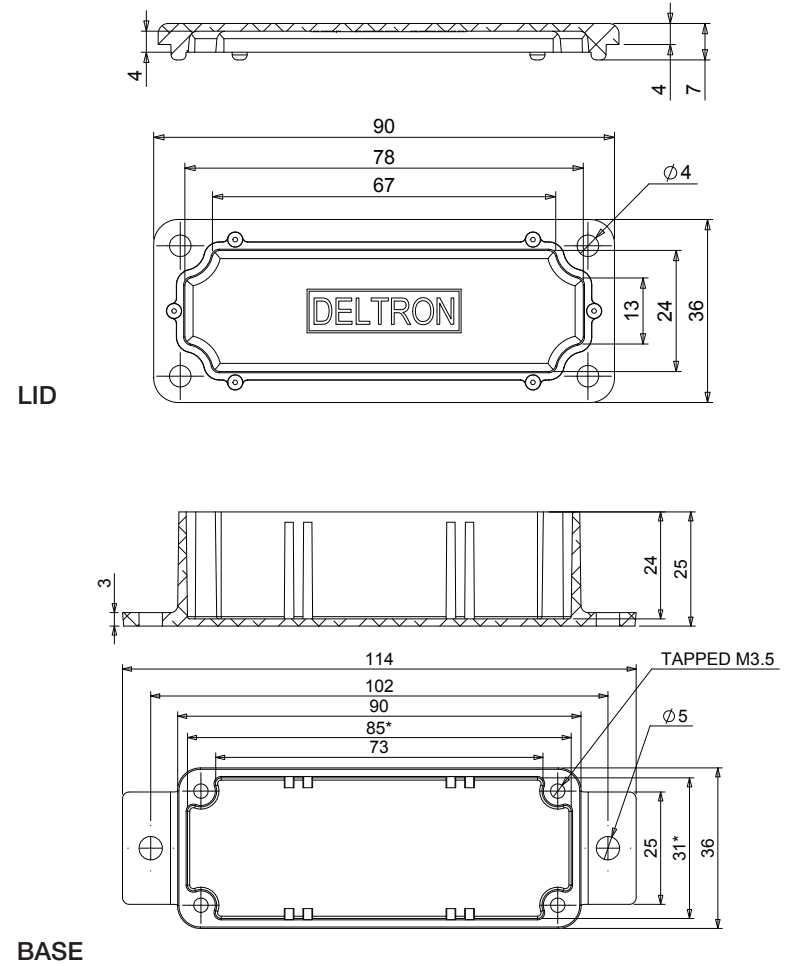
*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

- IP54 General Purpose
- IP66 General Purpose
- IP68 General Purpose
- EMI/RFI General Purpose
- Heavy Duty Low Cost
- IP66 & IP68 Heavy Duty
- Corrosion & Impact Resistant
- Plastic

A Box



A Box Flanged

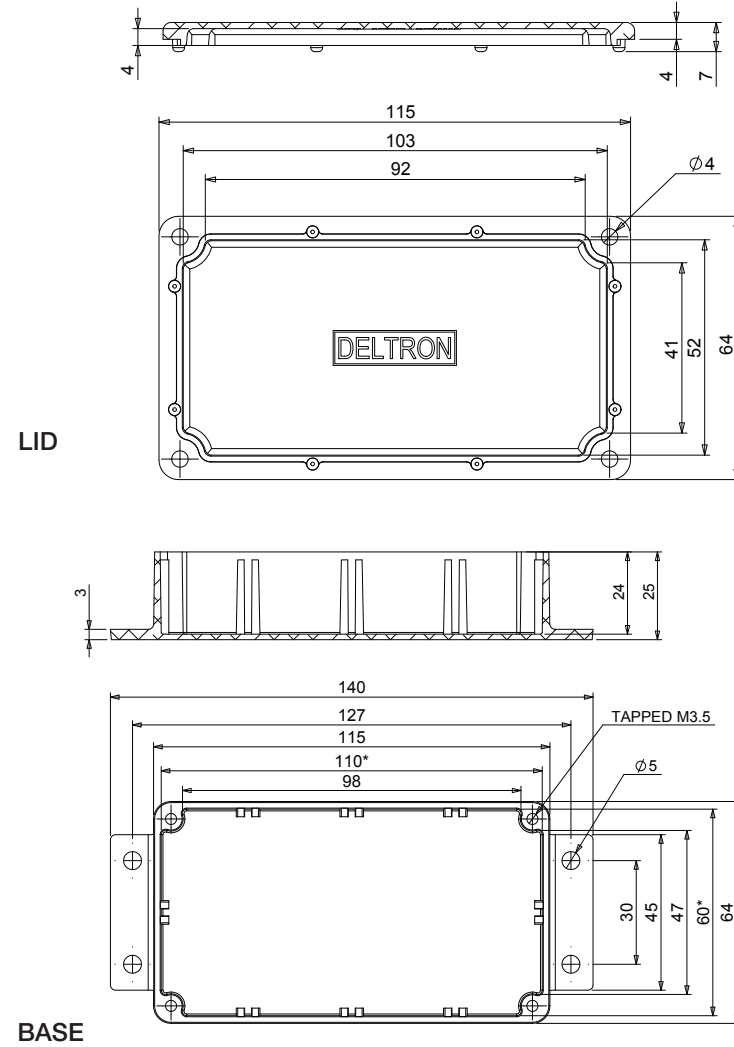
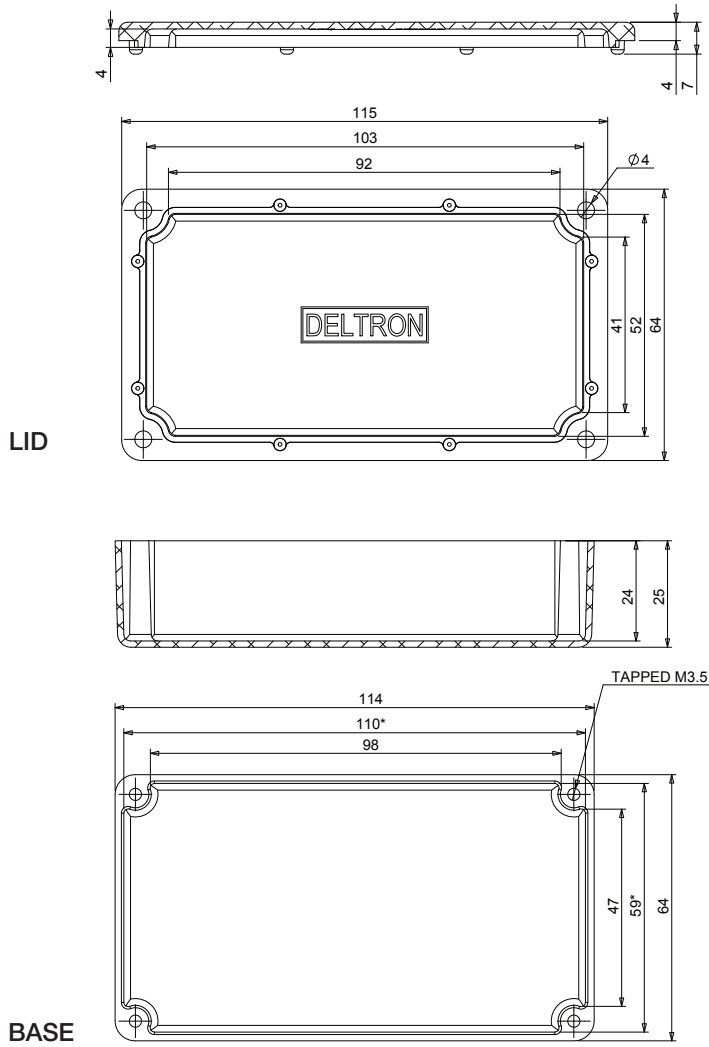


General Purpose Enclosure Dimensions - B Box & B Box Flanged

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

B Box

B Box Flanged



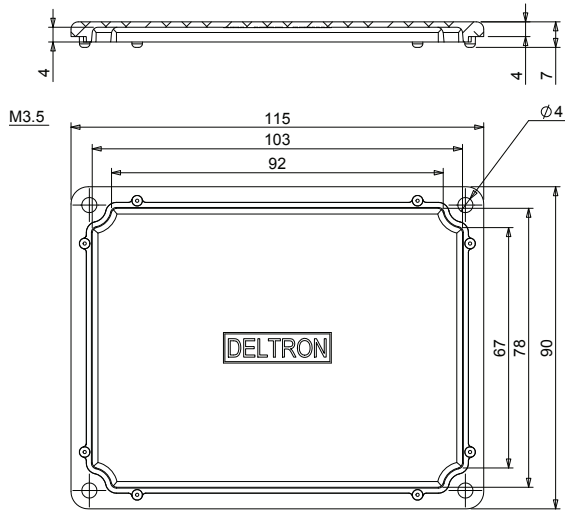
- IP54 General Purpose
- IP66 General Purpose
- IP68 General Purpose
- EM/RFI General Purpose
- Heavy Duty Low Cost
- IP66 & IP68 Heavy Duty
- Corrosion & Impact Resistant
- Plastic

General Purpose Enclosure Dimensions - C Box & C Box Flanged

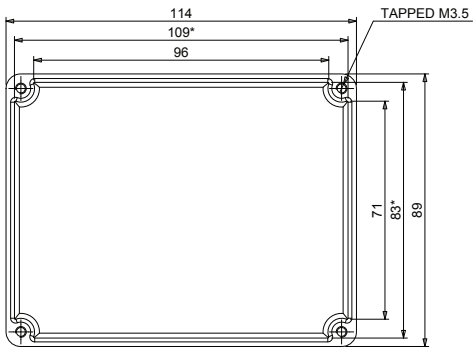
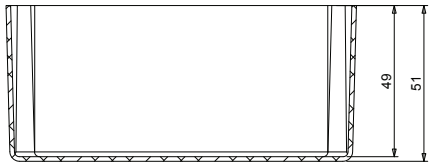
*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

- IP54 General Purpose
- IP66 General Purpose
- IP68 General Purpose
- EMI/RFI General Purpose
- Heavy Duty Low Cost
- IP66 & IP68 Heavy Duty
- Corrosion & Impact Resistant
- Plastic

C Box

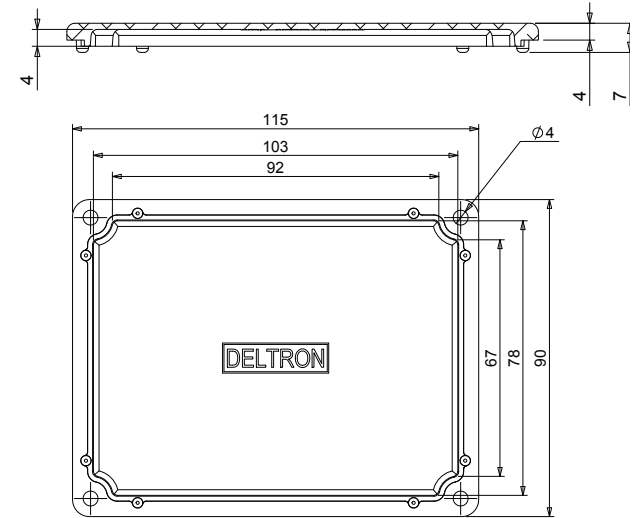


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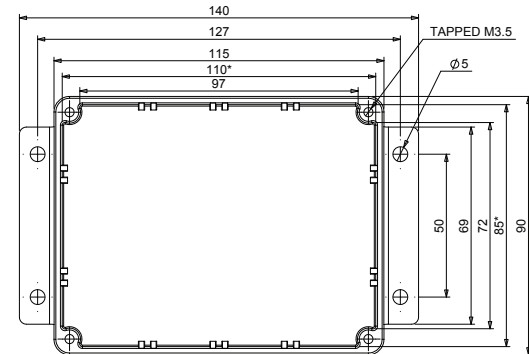
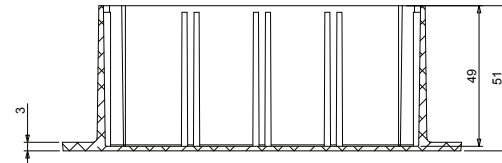


BASE

C Box Flanged



LID

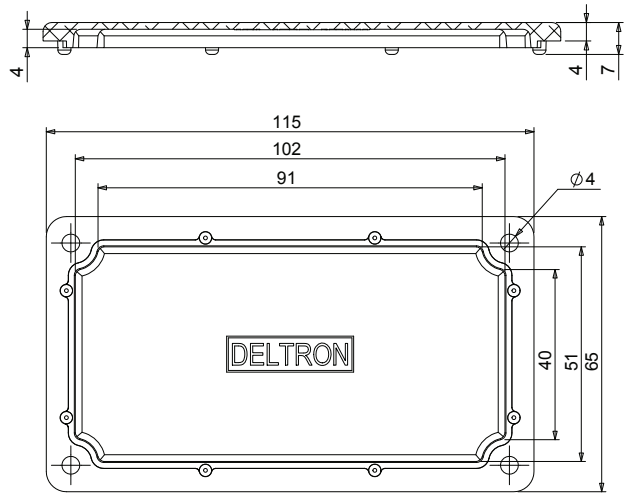


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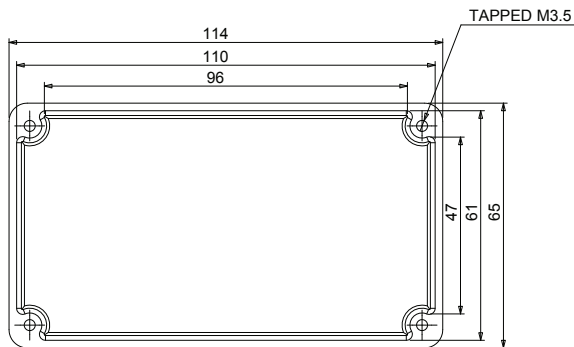
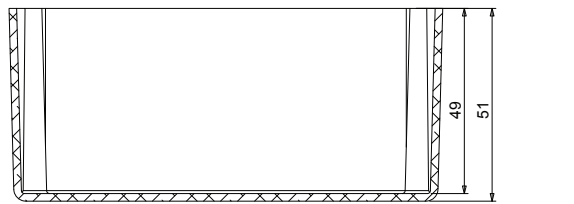
General Purpose Enclosure Dimensions - D Box & D Box Flanged

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

D Box

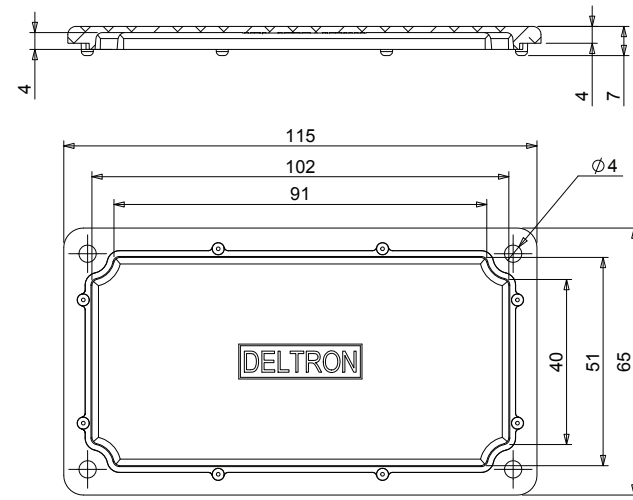


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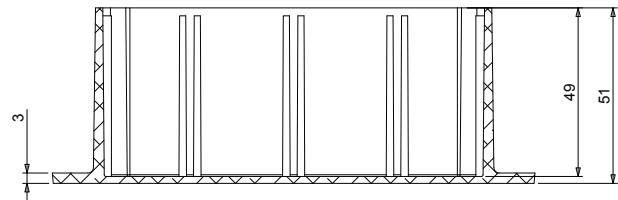


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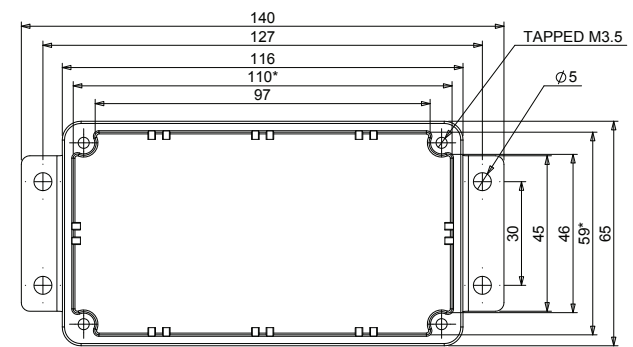
D Box Flanged



LID



BASE



IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EM/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

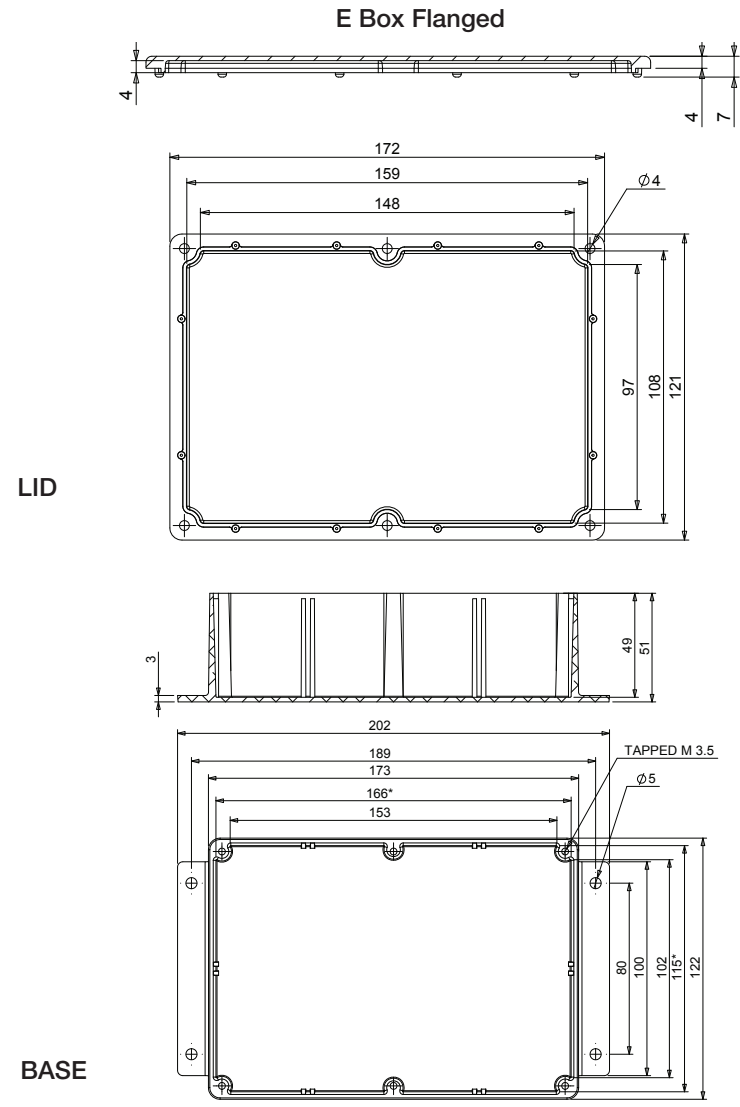
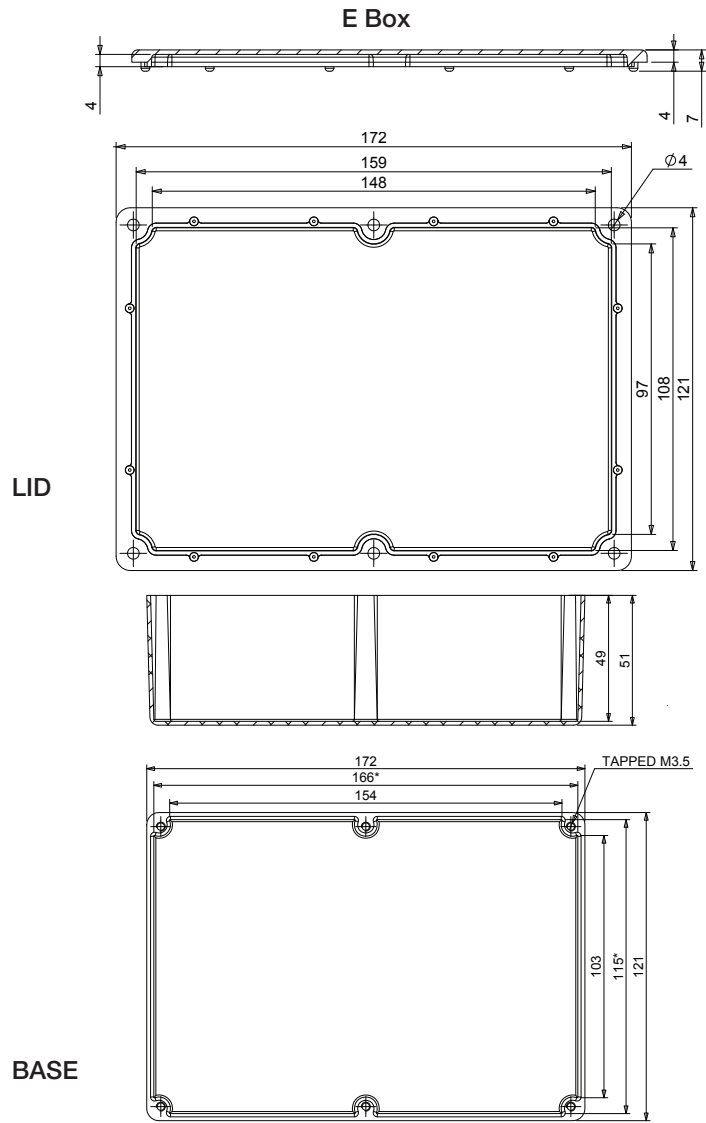
Corrosion &
Impact
Resistant

Plastic

General Purpose Enclosure Dimensions - E Box & E Box Flanged

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

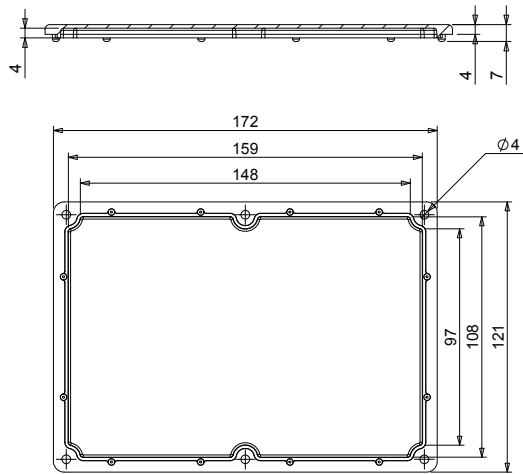
- IP54 General Purpose
- IP66 General Purpose
- IP68 General Purpose
- EMI/RFI General Purpose
- Heavy Duty Low Cost
- IP66 & IP68 Heavy Duty
- Corrosion & Impact Resistant
- Plastic



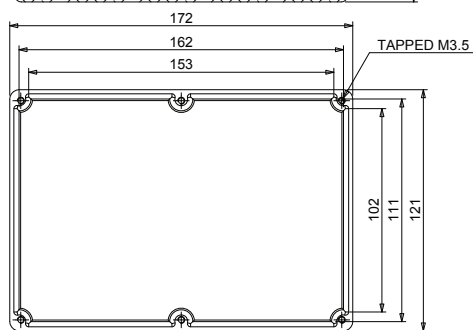
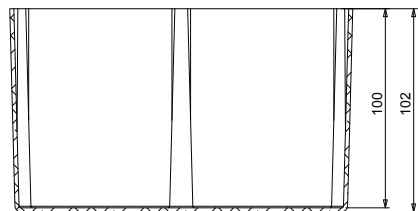
General Purpose Enclosure Dimensions - F Box & F Box Flanged

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

F Box

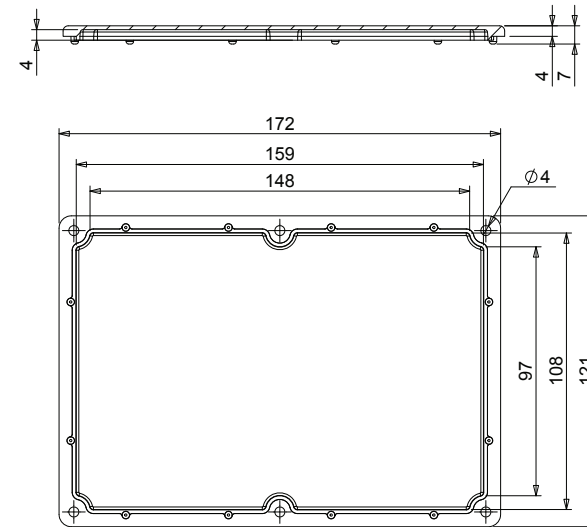


LID

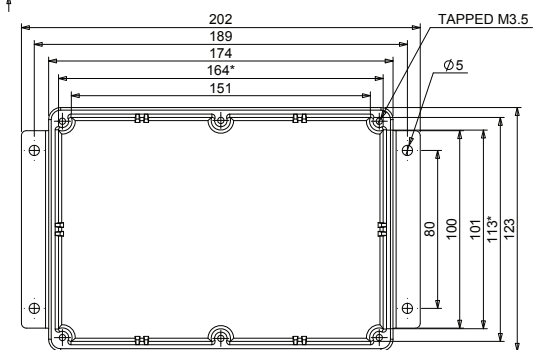
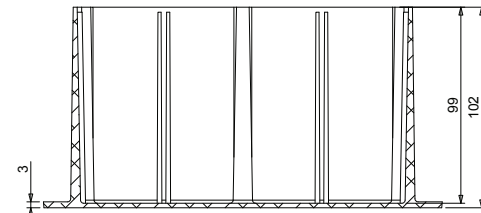


BASE

F Box Flanged



LID



BASE

IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EMI/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

Corrosion &
Impact
Resistant

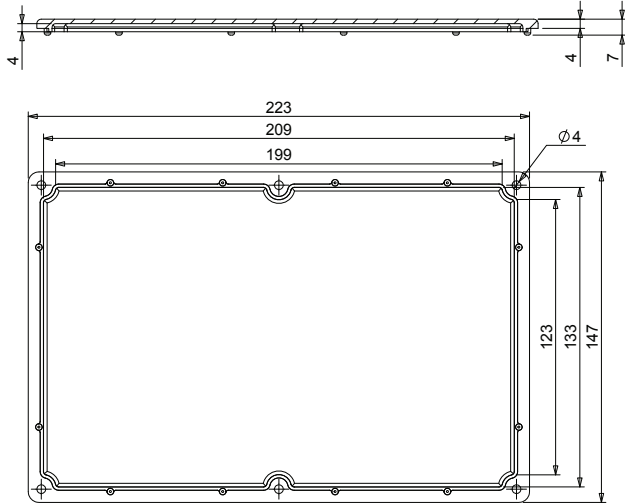
Plastic

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

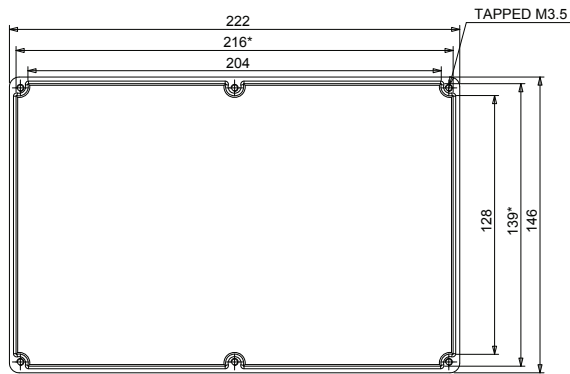
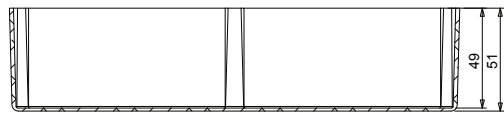
General Purpose Enclosure Dimensions - G Box & G Box Flanged

- IP54 General Purpose
- IP66 General Purpose
- IP68 General Purpose
- EMI/RFI General Purpose
- Heavy Duty Low Cost
- IP66 & IP68 Heavy Duty
- Corrosion & Impact Resistant
- Plastic

G Box

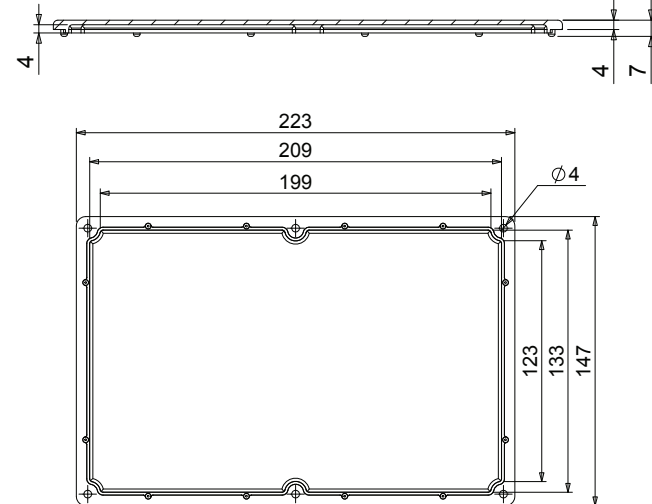


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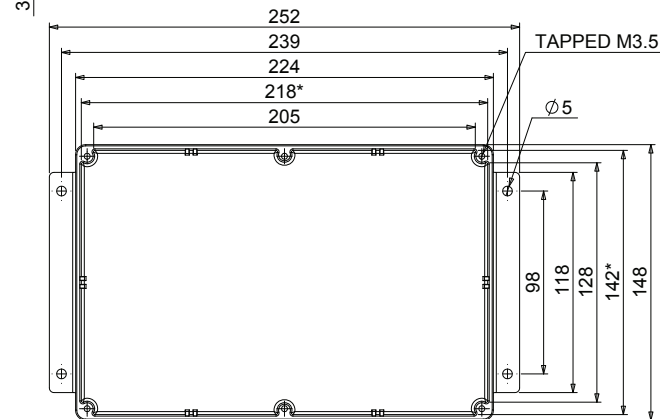
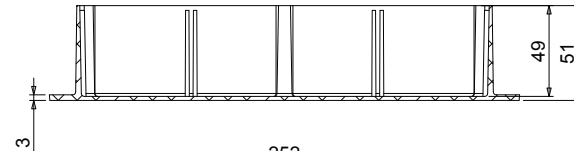


BASE

G Box Flanged



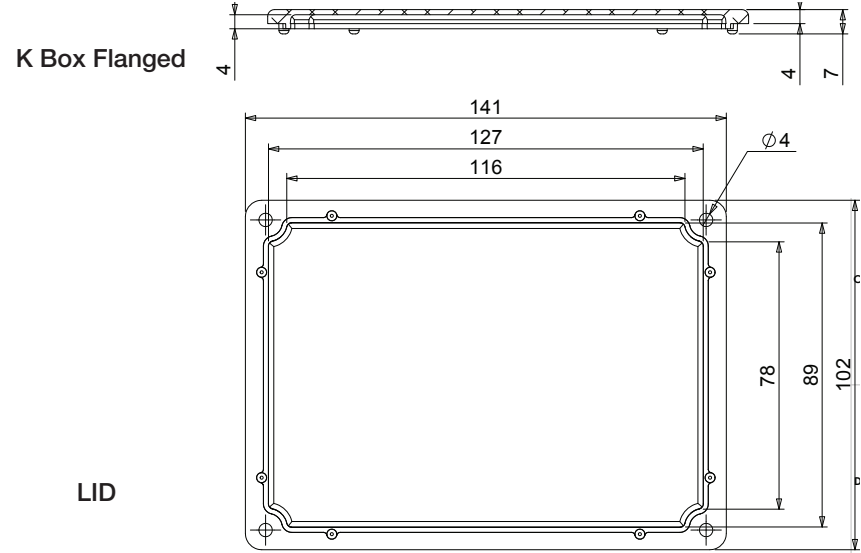
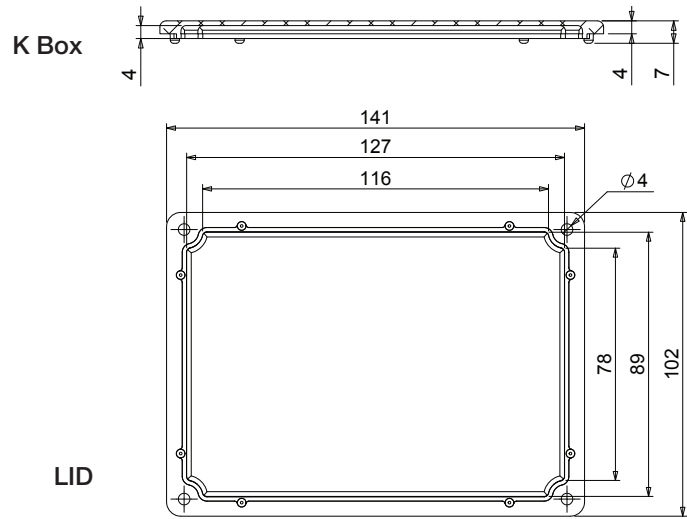
LID



BASE

General Purpose Enclosure Dimensions - K Box & K Box Flanged

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT



IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EM/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

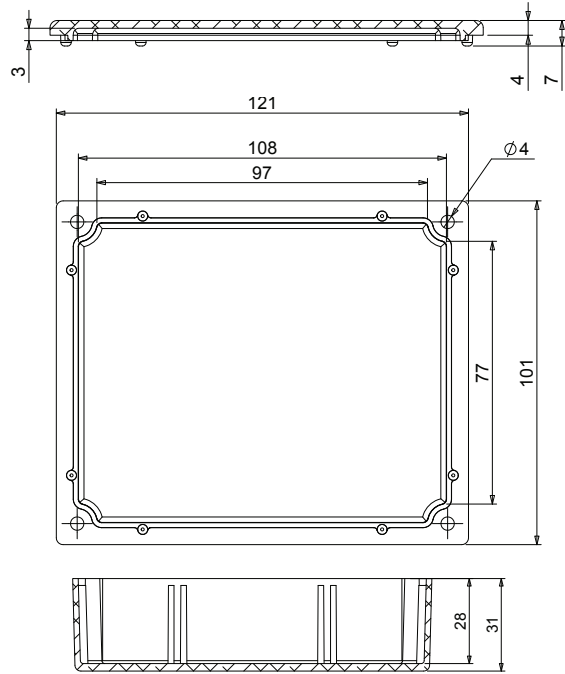
Corrosion &
Impact
Resistant

Plastic

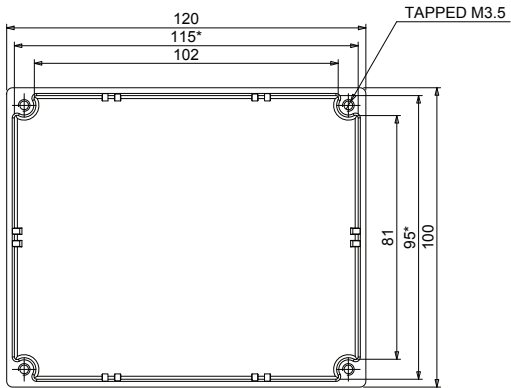
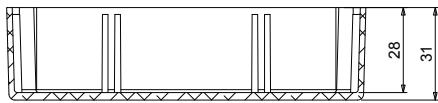
General Purpose Enclosure Dimensions - M Box & M Box Flanged

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

M Box

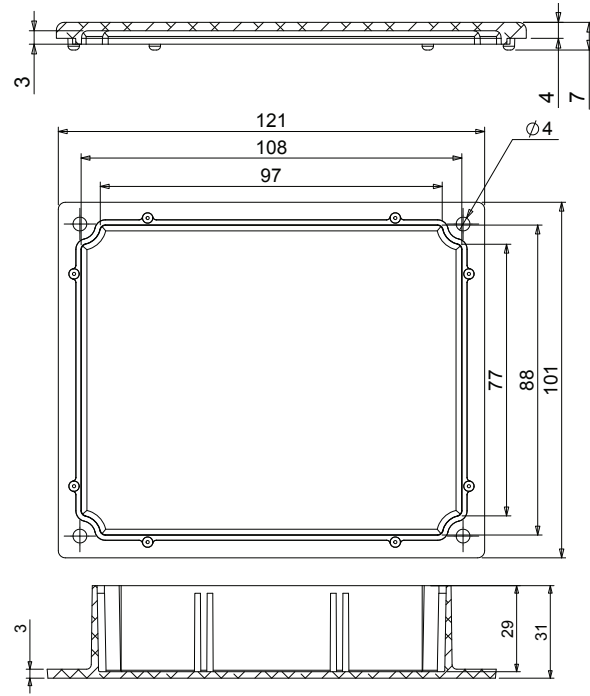


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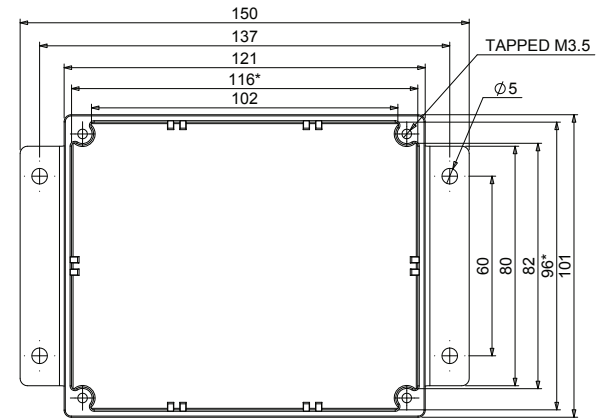
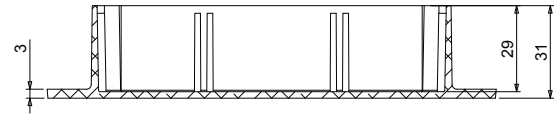


BASE

M Box Flanged



LID

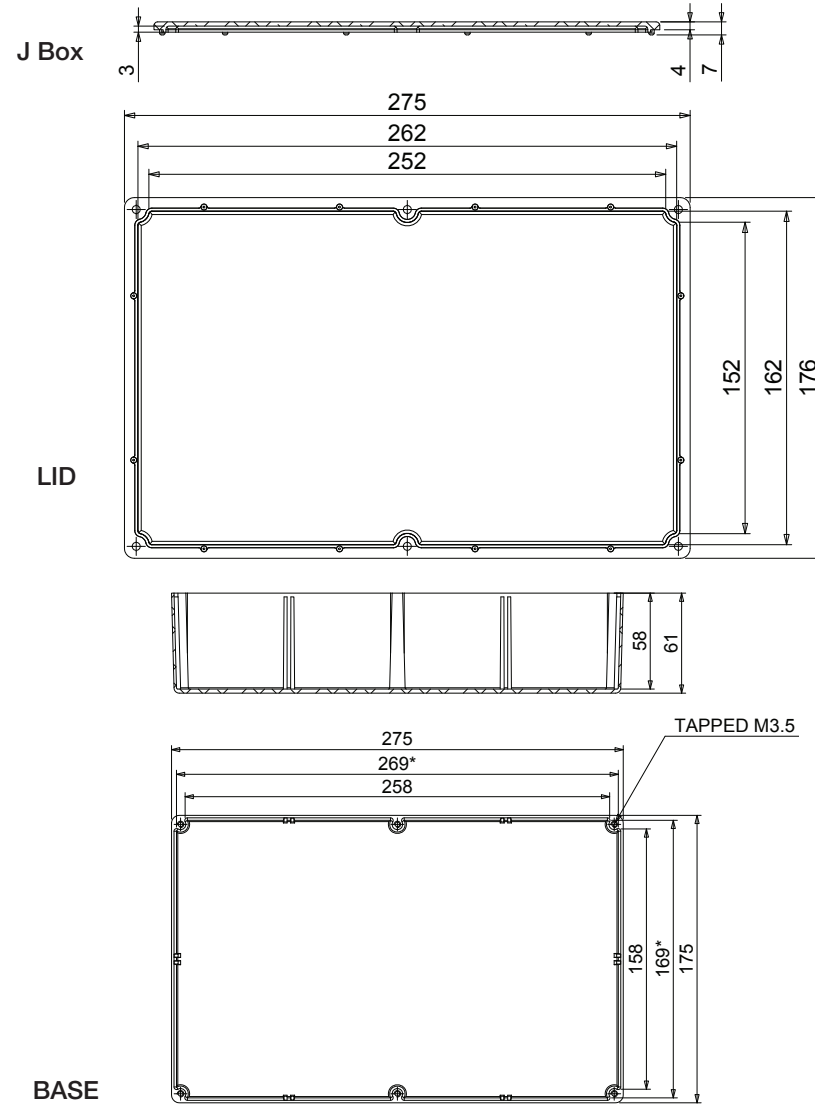
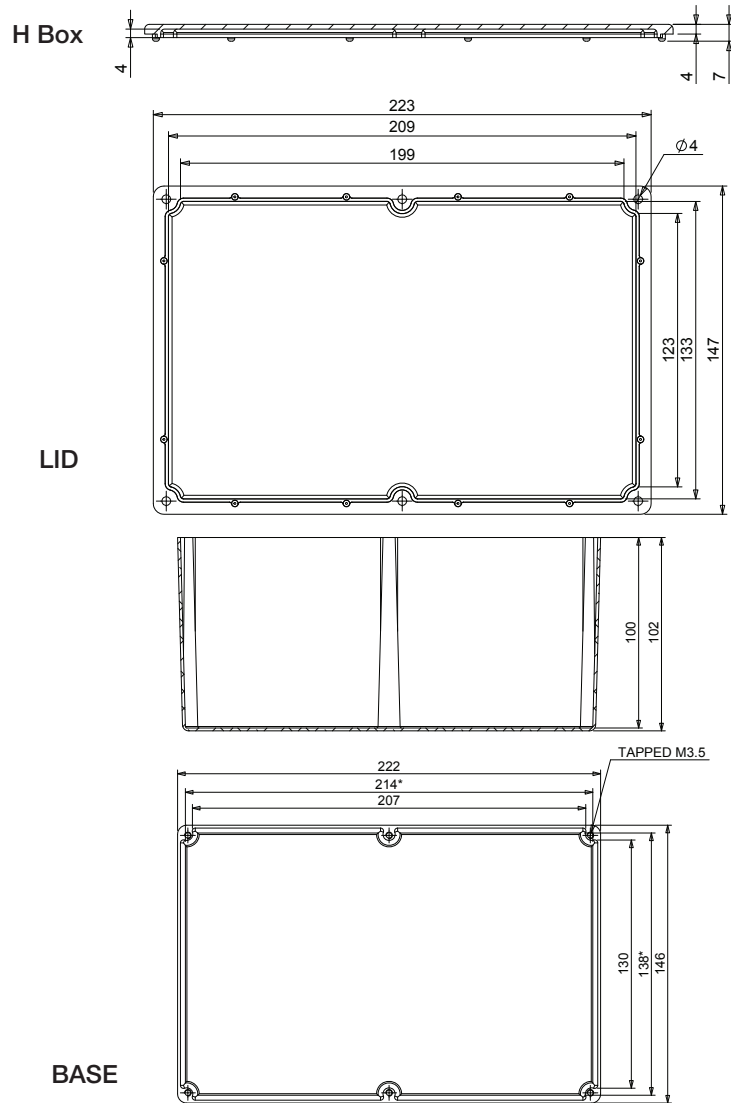


BASE

- IP54
General Purpose
- IP66
General Purpose
- IP68
General Purpose
- EMI/RFI
General Purpose
- Heavy Duty
Low Cost
- IP66 & IP68
Heavy Duty
- Corrosion &
Impact Resistant
- Plastic

General Purpose Enclosure Dimensions - H Box & J Box

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

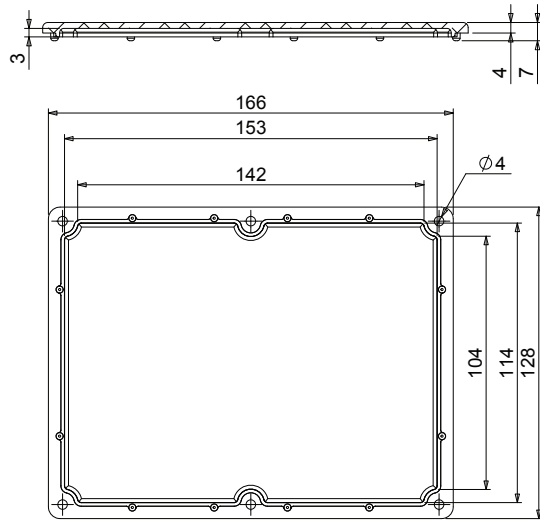


- IP54 General Purpose
- IP66 General Purpose
- IP68 General Purpose
- EM/RFI General Purpose
- Heavy Duty Low Cost
- IP66 & IP68 Heavy Duty
- Corrosion & Impact Resistant
- Plastic

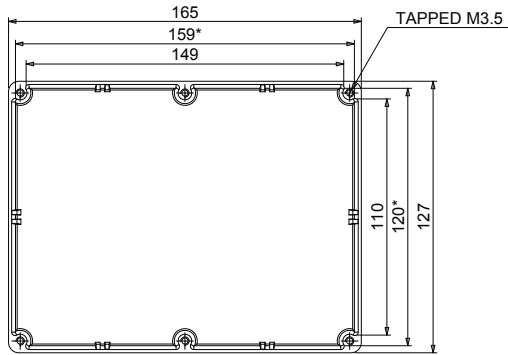
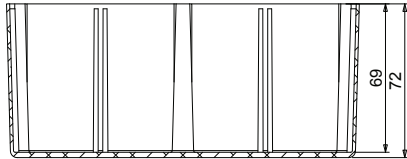
General Purpose Enclosure Dimensions - L Box & N Box

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

L Box

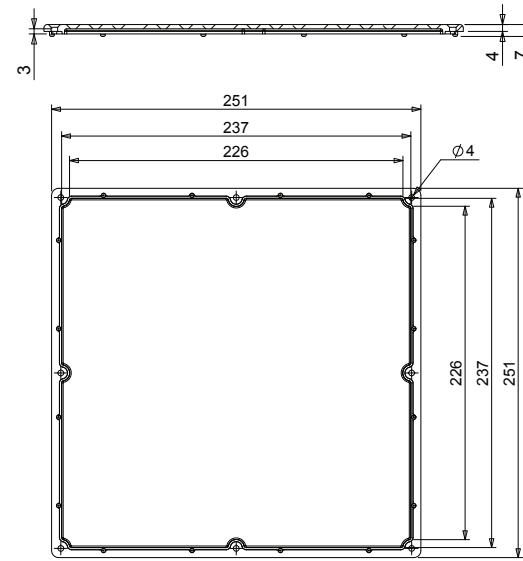


LID

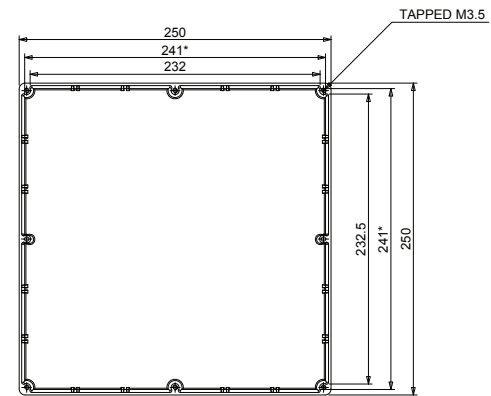
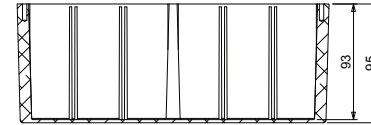


BASE

N Box



LID

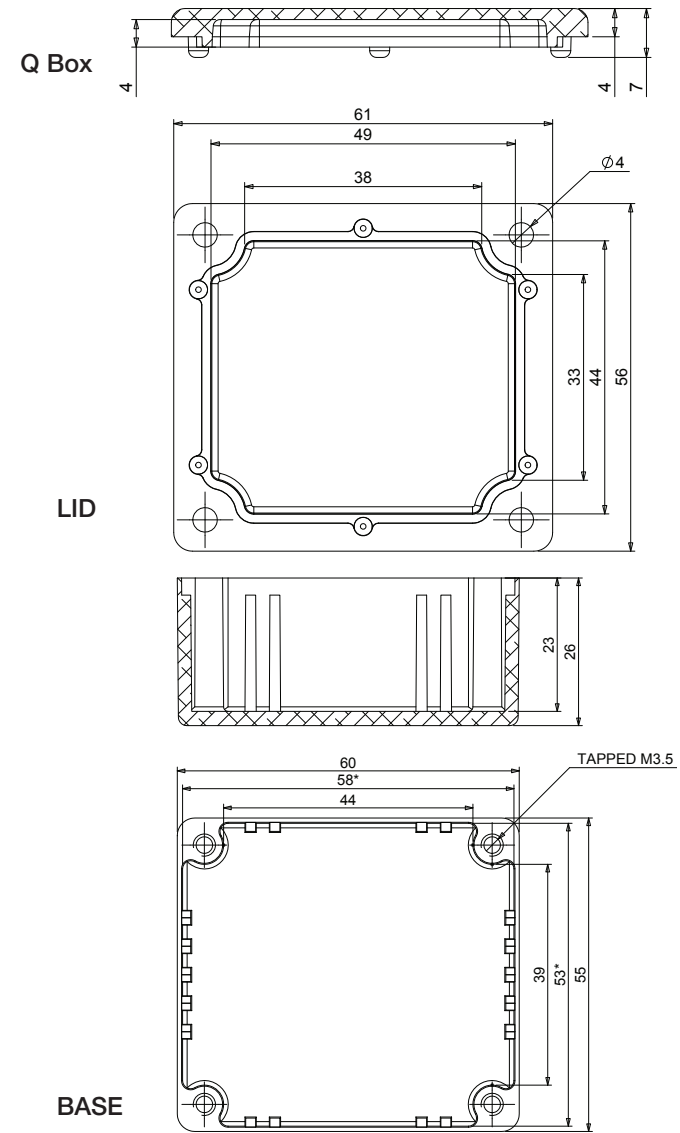
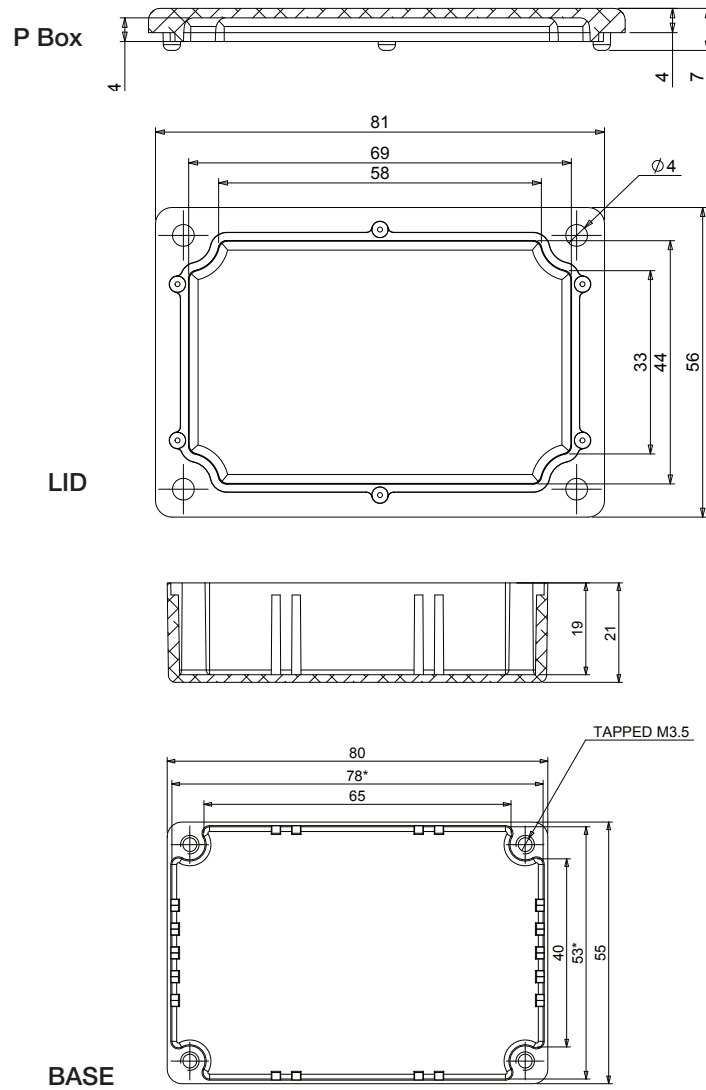


BASE

- IP54 General Purpose
- IP66 General Purpose
- IP68 General Purpose
- EMI/RFI General Purpose
- Heavy Duty Low Cost
- IP66 & IP68 Heavy Duty
- Corrosion & Impact Resistant
- Plastic

General Purpose Enclosure Dimensions - P Box & Q Box

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT



IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EM/RFI
General Purpose


Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

Corrosion &
Impact Resistant

Plastic

Heavy Duty Low Cost Enclosures

 Ideal for applications that require a robust enclosure without ingress protection

For applications where ingress protection is not critical to the performance of the internal components, yet a robust enclosure is required, this range is an excellent low cost option. Eight sizes are available which come complete with captive screws, earth screws, PCB card guides and DIN rail mounting points.



- Low cost enclosure option
- Hard-wearing, robust range
- RoHS Compliant
- Manufactured from LM2/ADC12/AL-Si10CuFe
- Three finishes of plain aluminium, powder coat or nylon coat
- Can be customised in our UK factory, see page 8 for more details

See page 35 for material specification

See pages 38 - 41 for dimensions

Box Code	Box Size (mm)				Order Code		
	PCB Guide	L	W	H	Plain	Powder Coated	Nylon Coated
121208	Y	125	125	80	486-121208	487-121208*	488-121208*
121209	Y	125	125	90	486-121209	487-121209*	488-121209*
130806	Y	130	80	60	486-130806	487-130806*	488-130806*
161609	Y	160	160	90	486-161609	487-161609*	488-161609*
221208	Y	220	120	80	486-221208	487-221208*	488-221208*
221209	Y	220	120	90	486-221209	487-221209*	488-221209*
261609	Y	260	160	90	486-261609	487-261609*	488-261609*
261612	Y	260	160	120	486-261612	487-261612*	488-261612*

*Code Suffix: Grey = A, Blue = B, Black = E



Custom Services

Save time and cut costs with our in-house machining service - See page 8 for full details

- Machining
- Painting
- Printing
- Assembly



Technical Assistance

Any questions?
Call +44 (0)1724 273206

IP66 Heavy Duty Enclosures



Ideal for tough environments where ingress protection is essential

This range is ideal for designs where a robust box with ingress protection is a priority. Eight sizes are available which come complete with captive screws, earth screws, PCB card guides and DIN rail mounting points.



- IP66 rated (Dust proof, splash proof, and protects from powerful jets of water)
- Hard-wearing, robust range
- Certified to BS EN 60529:1992 and RoHS Compliant
- Manufactured from LM2/ADC12/AL-Si10CuFe
- Three finishes of plain aluminium, powder coat or nylon coat
- Can be customised in our UK factory, see page 8 for more details

See page 35 for material specification

See pages 38 - 41 for dimensions

Box Code	Box Size (mm)			Order Code			
	PCB Guide	L	W	H	Plain	Powder Coated	Nylon Coated
121208	Y	125	125	80	486-121208-66	487-121208*-66	488-121208*-66
121209	Y	125	125	90	486-121209-66	487-121209*-66	488-121209*-66
130806	Y	130	80	60	486-130806-66	487-130806*-66	488-130806*-66
161609	Y	160	160	90	486-161609-66	487-161609*-66	488-161609*-66
221208	Y	220	120	80	486-221208-66	487-221208*-66	488-221208*-66
221209	Y	220	120	90	486-221209-66	487-221209*-66	488-221209*-66
261609	Y	260	160	90	486-261609-66	487-261609*-66	488-261609*-66
261612	Y	260	160	120	486-261612-66	487-261612*-66	488-261612*-66

*Code Suffix: Grey = A, Blue = B, Black = E

Custom Services

Save time and cut costs with our in-house machining service - See page 8 for full details

- Machining • Painting • Printing • Assembly

Technical Assistance

Any questions?
Call +44 (0)1724 273206

IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EM/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

Corrosion &
Impact Resistant

Plastic

IP68 Heavy Duty Enclosures



Ideal for demanding environments that require more protection than IP66

Complete ingress protection combined with a hard-wearing enclosure, makes this range ideal for applications in particularly demanding environments. They have been tested submerged up to 10m for 20 hours for excellent ingress protection. Eight sizes are available which come complete with captive screws, earth screws, PCB card guides and DIN rail mounting points.



- IP68 Rated (Submersion in water at depths of 10 metres for 20 hours)
- Hard-wearing, robust range
- Certified to BS EN 60529:1991 and RoHS Compliant
- Manufactured from LM2/ADC12/AL-Si10CuFe
- Three finishes of plain aluminium, powder coat or nylon coat
- Can be customised in our UK factory, see page 8 for more details

See page 35 for material specification

See pages 38 - 41 for dimensions

Box Code	Box Size (mm)				Order Code		
	PCB Guide	L	W	H	Plain	Powder Coat	Nylon Coat
121208	Y	125	125	80	486-121208-68	487-121208*-68	488-121208*-68
121209	Y	125	125	90	486-121209-68	487-121209*-68	488-121209*-68
130806	Y	130	80	60	486-130806-68	487-130806*-68	488-130806*-68
161609	Y	160	160	90	486-161609-68	487-161609*-68	488-161609*-68
221208	Y	220	120	80	486-221208-68	487-221208*-68	488-221208*-68
221209	Y	220	120	90	486-221209-68	487-221209*-68	488-221209*-68
261609	Y	260	160	90	486-261609-68	487-261609*-68	488-261609*-68
261612	Y	260	160	120	486-261612-68	487-261612*-68	488-261612*-68

*Code Suffix: Grey = A, Blue = B, Black = E



Custom Services

Save time and cut costs with our in-house machining service - See page 8 for full details

- Machining • Painting • Printing • Assembly



Technical Assistance

Any questions?
Call +44 (0)1724 273206

Heavy Duty Enclosures – Material Specification

Material: ISO Al-Si10Cu2Fe Die Cast Aluminium Alloy		
Paint Specification:	Polyester Powder Coat – Smooth	
Standard Colours:	Grey to RAL7001/P7000/9 Blue to RAL5013/P7000/9 Black to RAL9005/P7000/9	
Chemical Composition:	Architectural grade TGIC free polyester	
Specification:	Qualicoat Class 1 Complies with BS476 Part 6 Fire propagation class 0	
Colours and Finishes:	Complies with BS476 Part 7 Spread of flame class 1 Powders are available in a range of RAL colours	
Mechanical and Chemical Properties:		
Test Thickness:	65 ± 10 µm	UNI EN ISO 2360:2004
Adhesion:	GTO (equivalent to 5B according to ASTM D3359)	UNI EN ISO 2409:1996
Pencil Hardness:	H-2H	ASTM D3363-00
Impact Test:	≥2.5Nm	ASTM D2794-93
Bending:	5mm	UNI EN ISO 6860:1996
Erichsen:	≥5mm (no detachments, no cracks)	EN ISO 1520:1995
Hardness Buchholz:	≥80	EN ISO 2815:1998
Salt Spray Resistance:	1000hrs (≤3mm)	ASTM B117-97
Acetic Acid Salt Spray:	1000hrs (≤4mm)	ISO 9227:1990
Humidity Resistance:	1000hrs	DIN 50017:1982
Q-Uva (340 nm):	200hrs (loss of gloss <50%)	ASTM G154-00
Kesternich Corrosion:	> 24 cycles (≤1mm)	EN ISO 3231:1997
Chemical Resistance:	Good resistance to diluted acids, alkali and oils at normal temperatures	
Paint Specification:	Nylon Coat - Gloss	
Standard Colours:	Grey to RAL7001/P7000/9 Blue to RAL5012/P7000/9 Black to RAL9005/P7000/9	
Polymer:	Polyamide 11	
Mechanical and Chemical Properties:	(degreased, grit blasted steel and primed)	
Specific Gravity at 23°C	1.2 ± 0.15g/cm³	DIN 53-ISO R 1183
Average thickness of coating:	100 to 200 micron	
VICAT point under 1 daN:	181°C	DIN53 460
Adhesion:	Class 4	NFT 58-112
SHORE D Hardness:	70 ± 10%	DIN53 505
PERSOZ Hardness at 20%:	160 to 280 second	NFT 30-016
Wear TABER Resistance- wheel	4 to 12mg	DIN 16-926/NFT 30-015
CS 17 Load 1Kg-100 cycles		
Temperature Resistance:	-40 to +80°C	
Chemical Resistance:	Oils - Grease - Solvents, Fuels, Hydrocarbons, Alkalis, Sea Water, Drinking Water and Food Contact (Some Colours)	Very Good
UV Resistance:	Very Good	
Impact Resistance Ø 23mm:	From 2 to 8 joule	NFT 30-039
Salt spray test after 1000hrs:		ASTM B 117
Dielectric Breakdown Voltage		
330µ	>8Kv	ASTM D 149-81
Gloss at 60°C	45 to 75%	DIN 53 223/NFT 30-064
Fixings:		
Captive Lid Screw:	Stainless steel SS304 – Cheese Head – M6 x 25mm	
Earth Screw:	Single coil spring washer stem. Material C1010 Cu plating. M6 x 8mm	

IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EM/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

Corrosion & Impact Resistant

Plastic

IP66 & IP68 Heavy Duty Enclosures – Seal Specification

IP66 Seal for Heavy Duty Enclosures	
Material:	Silicone Rubber Sponge
Temperature Rating:	Standard Operating -60°C to +200°C
Environmental Resistance:	Excellent resistance to the following: Ozone – Oxidation – UV Light – Corona Discharge – Cosmic Radiation – Ionising Radiation
Flammability Characteristics:	Limiting oxygen index of 23.2% (BS 2872 Part 1) Tested to FAR 25.853
Moisture Absorption:	The range has an extremely low degree of moisture absorption; mechanical properties shows little change even after very long periods of exposure to liquids.

IP68 Seal for Heavy Duty Enclosures	
Material:	01-255FR - Silicone Rubber Sponge
Temperature Rating:	Standard Operating -60°C to +200°C +240°C for up to 10 hours, brittle point -80°C in accordance with ASTM D746
Environmental Resistance:	Excellent resistance to the following: Ozone – Oxidation – UV Light – Corona Discharge – Cosmic Radiation – Ionising Radiation – General Weathering
Flammability Characteristics:	01-255FR has a limiting oxygen index of 23.2% (BS 2872 Part 1) Tested to FAR 25.853. Appendix F (b) part 5 burn rate of 0.4” per minute exceeds the requirements of FAR 25.853 (a)(1)(i), (a)(1)(ii) vertical and (a)(1)(iv), (a)(1)(v) horizontal flammability tests
Moisture Absorption:	The range has an extremely low degree of moisture absorption; mechanical properties shows little change even after very long periods of exposure to liquids.

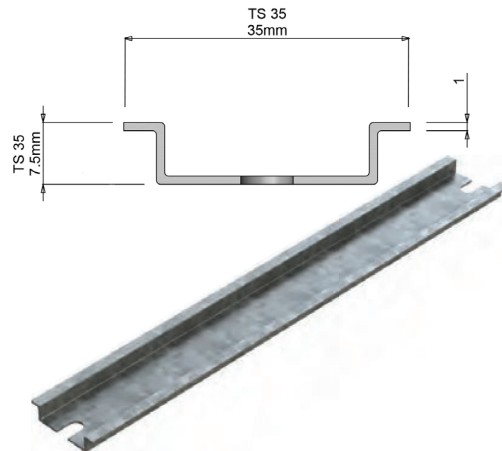
- IP54
General Purpose
- IP66
General Purpose
- IP68
General Purpose
- EMI/RFI
General Purpose
- Heavy Duty
Low Cost
- IP66 & IP68
Heavy Duty
- Corrosion & Impact
Resistant
- Plastic

Heavy Duty Enclosure Accessories

Terminal DIN Rails

- DIN rails for mounting standard components within the enclosure
- Manufactured from steel, galvanised and passivated
- Supplied complete with fixing screws
- Suitable for all Deltron Heavy Duty Enclosure ranges

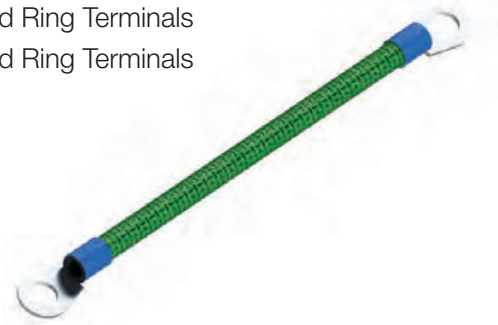
4DR 35 Style	
Box Code	DIN Rail Part Number
121208	4DR3512
121209	4DR3512
130806	4DR3513
161609	4DR3516
221208	4DR3522
221209	4DR3522
261609	4DR3526
261612	4DR3526
120805	4DR3527
170805	4DR3528
250805	4DR3529
101008	4DR3530
121208	4DR3531
121209	4DR3531
141409	4DR3532



Earth Lead

- 12.5mm² Earth Cable
- 4ELM6 = M6-M6 Insulated Ring Terminals
- 4ELM4 = M4-M4 Insulated Ring Terminals

Box Code	Part Number	Length mm
121208	4ELM4	210mm
121209	4ELM4	
130806	4ELM4	
161609	4ELM4	
221208	4ELM4	
221209	4ELM4	
261609	4ELM6	
261612	4ELM6	

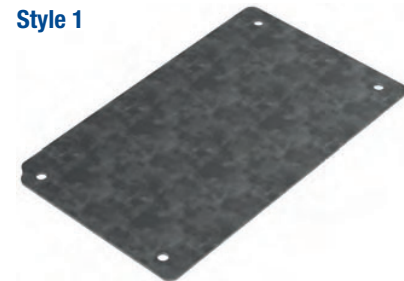


Internal Mounting Plates

- 1.5mm steel, galvanised and passivated
- Supplied complete with fixing screws
- Suitable for all Deltron Heavy Duty Enclosure ranges

Box Code	Mounting Plate Part Number	Style
121208	4MP1212	1
121209	4MP1212	1
130806	4MP1308	2
161609	4MP1616	1
221208	4MP2212	1
221209	4MP2212	1
261609	4MP2616	1
261612	4MP2616	1
060503	4MP0605	1
070805	4MP0708	1
120805	4MP1208	1
170805	4MP1708	1
250805	4MP2508	1
101008	4MP1010	1
121208	4MP1212	1
121209	4MP1212	1
141409	4MP1414	1

Style 1



Style 2



Spares
For spare seals, earth screws and lid screws, please contact us by phoning +44 (0)1724 273206 or email sales@dem-uk.com

IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EM/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

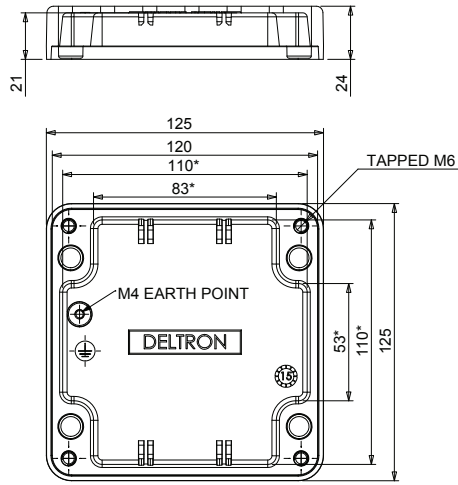
Corrosion & Impact Resistant

Plastic

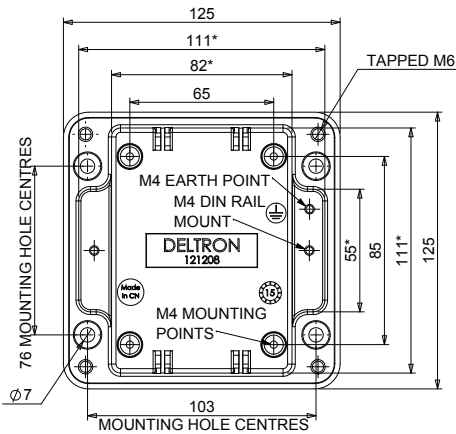
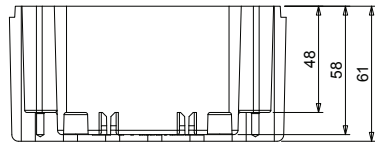
Heavy Duty Enclosure Dimensions - 121208 & 121209

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

121208

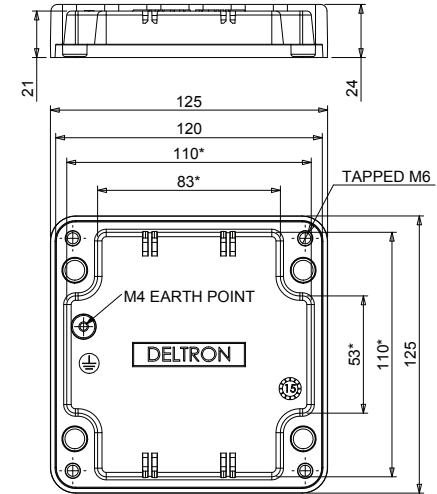


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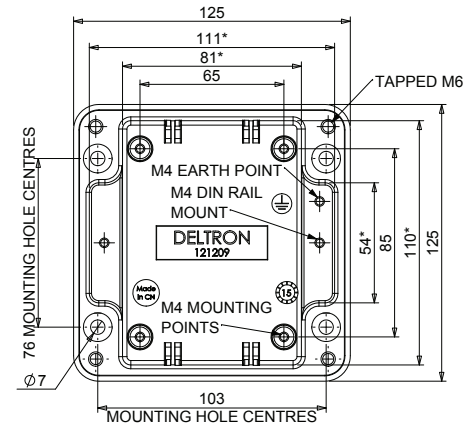
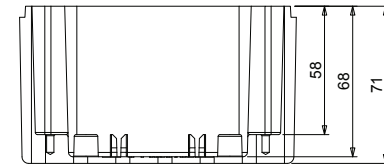


BASE

121209



LID



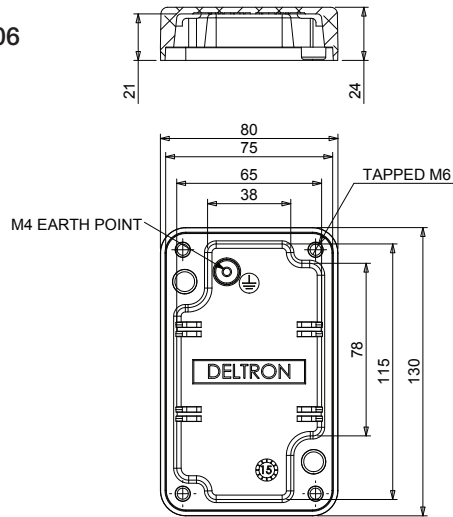
BASE

- IP54
General Purpose
- IP66
General Purpose
- IP68
General Purpose
- EMI/RFI
General Purpose
- Heavy Duty
Low Cost
- IP66 & IP68
Heavy Duty
- Corrosion &
Impact Resistant
- Plastic

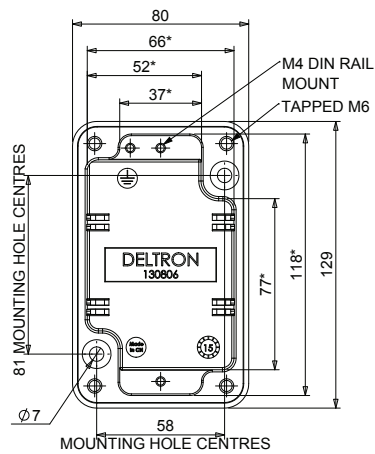
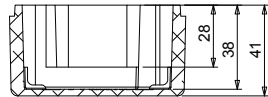
Heavy Duty Enclosure Dimensions - 130806 & 161609

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

130806

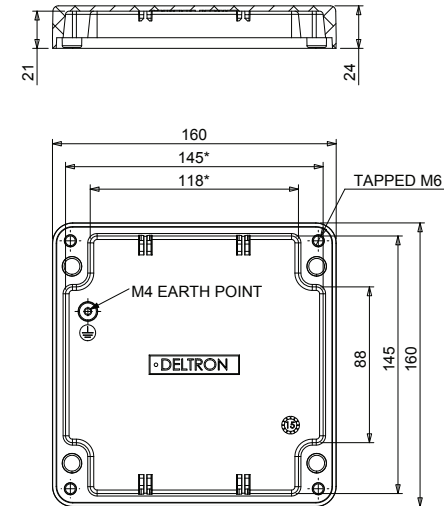


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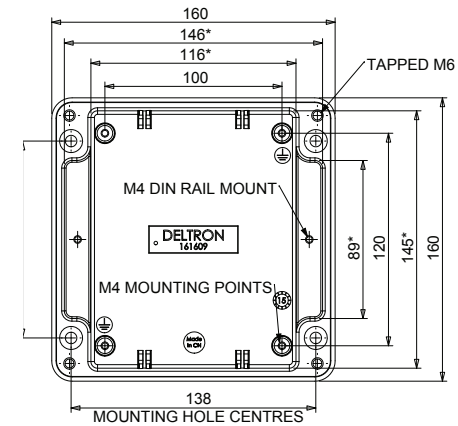
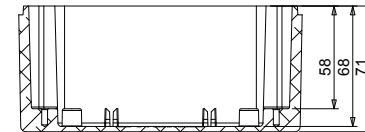


BASE

161609



LID



BASE

IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EMI/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

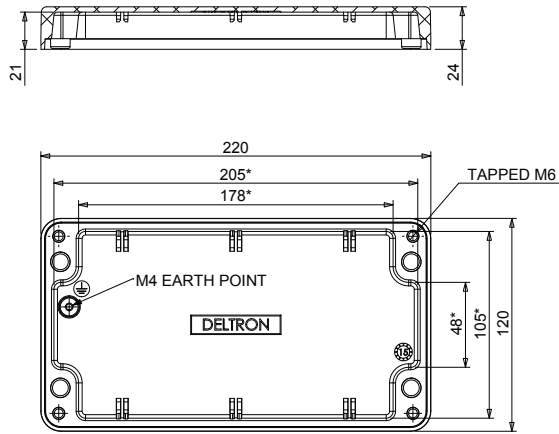
Corrosion &
Impact
Resistant

Plastic

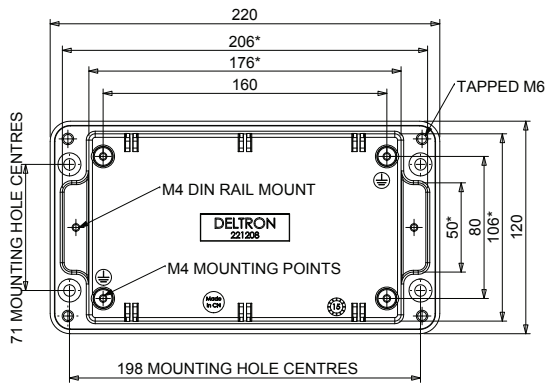
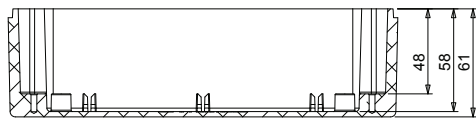
Heavy Duty Enclosure Dimensions - 221208 & 221209

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

221208

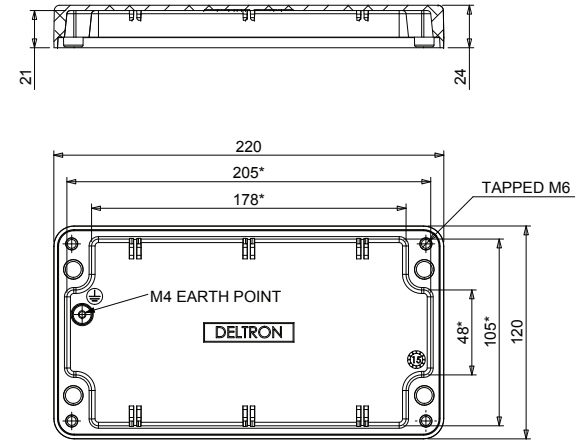


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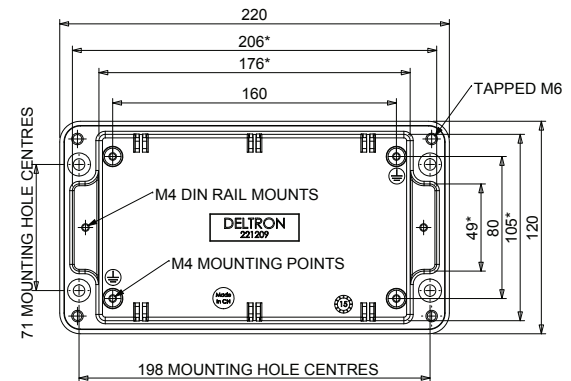
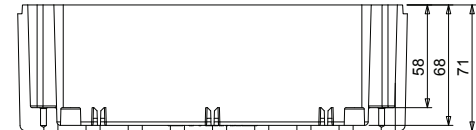


BASE

221209



LID



BASE

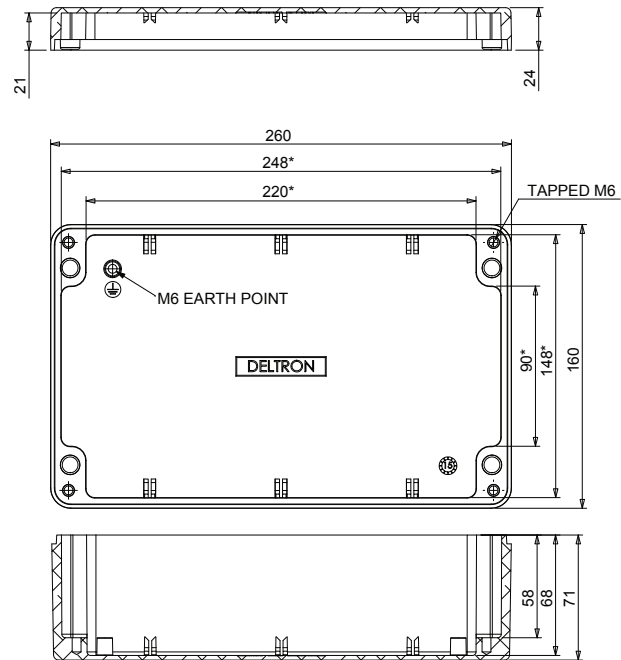
- IP54
General Purpose
- IP66
General Purpose
- IP68
General Purpose
- EMI/RFI
General Purpose
- Heavy Duty
Low Cost
- IP66 & IP68
Heavy Duty
- Corrosion &
Impact Resistant
- Plastic

Heavy Duty Enclosure Dimensions - 261609 & 261612

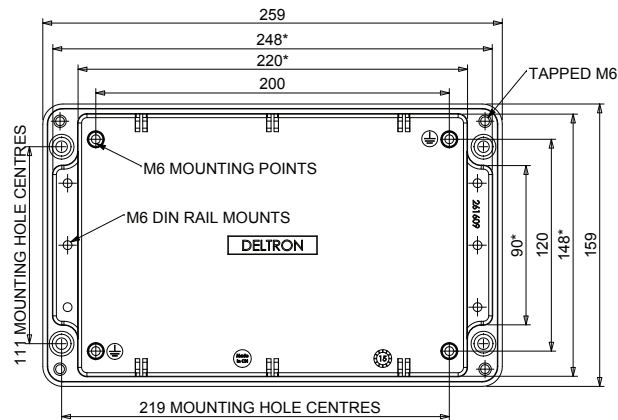
*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

261609

LID

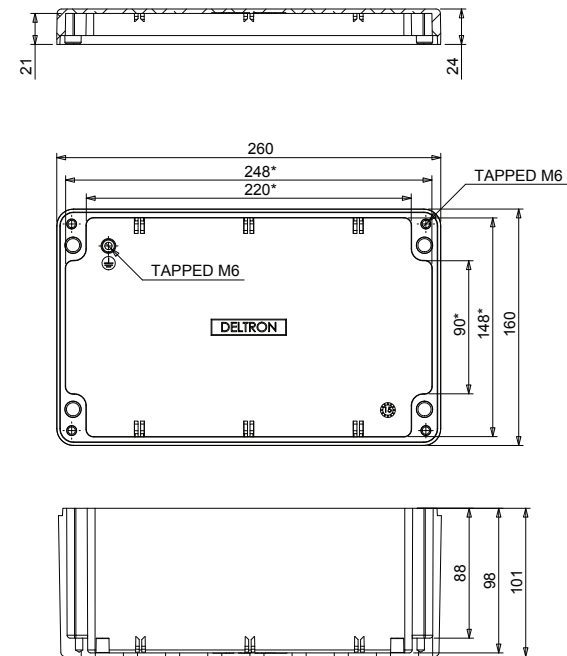


BASE

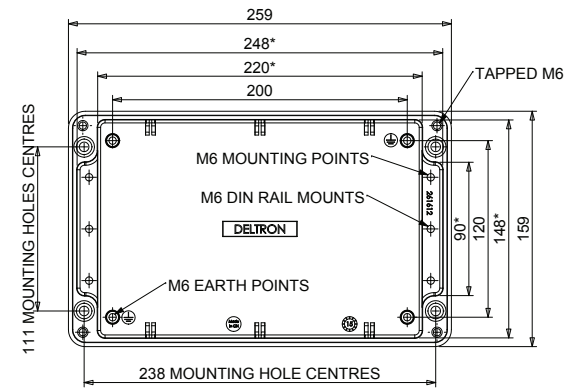


261612

LID



BASE



IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EM/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

Corrosion &
Impact Resistant

Plastic

IP66 Fortis Enclosures



Ideal for environments with high levels of corrosive substances

Manufactured from a premium alloy with outstanding corrosion resistance and high impact and ingress protection, the Fortis Enclosure Range offers the best protection on the market yet over the combined effects of water, impact and corrosive environments.

FORTIS



- Corrosion Resistant (>1000 hours in salt spray)
- Impact Resistant (Up to 7 Joules as per EN 60079)
- IP66 Rated (Dust proof, splash proof, protects from powerful jets of water)
- Manufactured from aluminium alloy GD-ALSi12
- Certified to IS/IEC 60529:2001 and RoHS Compliant
- Finished with an Epoxy-Polyester hybrid coating in grey
- Can be customised in our UK factory, see page 8 for more details

See page 44 for material specification

See pages 45 - 49 for dimensions

Box Code	Box Size (mm)				Order Code	
	PCB Guide	L	W	H	Plain	Powder Coated
040503	N	45	50	30	489-040503-66	490-040503*-66
060503	N	64	58	34	489-060503-66	490-060503*-66
070805	N	75	80	57	489-070805-66	490-070805*-66
120805	N	125	80	57	489-120805-66	490-120805*-66
170805	N	175	80	57	489-170805-66	490-170805*-66
250805	N	250	80	57	489-250805-66	490-250805*-66
101008	N	100	100	81	489-101008-66	490-101008*-66
121208	N	122	120	81	489-121208-66	490-121208*-66
121209	N	122	120	91	489-121209-66	490-121209*-66
141409	N	140	140	91	489-141409-66	490-141409*-66
221208 †	N	220	120	81	489-221208-66	490-221208*-66
221209 †	N	220	120	91	489-221209-66	490-221209*-66
261609 †	N	260	160	91	489-261609-66	490-261609*-66
402318 †	N	400	230	181	489-402318-66	490-402318*-66

*Code Suffix: Grey = A, Black = E, Red = R.

† New size, view dimensions at www.dem-uk.com/deltron-enclosures



Custom Services

Save time and cut costs with our in-house machining service - See page 8 for full details

- Machining • Painting • Printing • Assembly



Technical Assistance

Any questions?
Call +44 (0)1724 273206

IP68 Fortis Enclosures



Ideal for environments with high levels of electrolytes such as marine or buried applications

Manufactured from a premium alloy with outstanding corrosion resistance and high impact and ingress protection, the Fortis Enclosure Range offers the best protection on the market yet over the combined effects of water, impact and corrosive environments.

FORTIS



- Corrosion Resistant (>1000 hours in salt spray)
- Impact Resistant (Up to 7 Joules as per EN 60079)
- IP68 Rated (Submersion in water at depths of 5 metres for 1 hour)
- Manufactured from aluminium alloy GD-ALSi12
- Certified to IS/IEC 60529:2001 and RoHS Compliant
- Finished with an Epoxy-Polyester hybrid coating in grey
- Can be customised in our UK factory, see page 8 for more details

See page 44 for material specification

See pages 45 - 49 for dimensions

Box Code	Box Size (mm)				Order Code	
	PCB Guide	L	W	H	Plain	Powder Coated
040503	N	45	50	30	489-040503-68	490-040503*-68
060503	N	64	58	34	489-060503-68	490-060503*-68
070805	N	75	80	57	489-070805-68	490-070805*-68
120805	N	125	80	57	489-120805-68	490-120805*-68
170805	N	175	80	57	489-170805-68	490-170805*-68
250805	N	250	80	57	489-250805-68	490-250805*-68
101008	N	100	100	81	489-101008-68	490-101008*-68
121208	N	122	120	81	489-121208-68	490-121208*-68
121209	N	122	120	91	489-121209-68	490-121209*-68
141409	N	140	140	91	489-141409-68	490-141409*-68
221208 †	N	220	120	81	489-221208-68	490-221208*-68
221209 †	N	220	120	91	489-221209-68	490-221209*-68
261609 †	N	260	160	91	489-261609-68	490-261609*-68
402318 †	N	400	230	181	489-402318-68	490-402318*-68

*Code Suffix: Grey = A, Black = E, Red = R.

† New size, view dimensions at www.dem-uk.com/deltron-enclosures

Custom Services

Save time and cut costs with our in-house machining service - See page 8 for full details

- Machining • Painting • Printing • Assembly

Technical Assistance

Any questions?
Call +44 (0)1724 273206

IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EM/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

Corrosion &
Impact Resistant

Plastic

Fortis Enclosures - Material Specification

Fortis Enclosures		
Paint Specification:	Thermosetting Epoxy-Polyester Hybrid	
Standard Colours:	Grey (Silvergrau) RAL 7001, Black RAL 9005 and PO Red RAL 3001	
Colours and Finishes:	Powders are available in a range of RAL colours	
Mechanical and Chemical Properties:		
Test Thickness:	60 ±10µm	UNI EN ISO 2360:2004
Adhesion:	Cross Cut / Hatch (1 mm) GT-0 (100%)	DIN 53151
Pencil Hardness:	HB TO 4H	ASTM D3363-00
Impact Test:	Impact Direct Minimum 60 Kg/cm , Impact Reverse Minimum 40 Kg/cm	ASTM D2794
Bending:	≥5mm	DIN 531
Erichsen:	≥5mm	DIN531
Salt Spray Resistance:	1000hrs (≤3mm)	ASTM B117
Humidity Resistance:	1000hrs	ASTM D2247
Chemical Resistance:	Good resistance to diluted acids, alkali and alcohols at normal temperatures	
Scrape Adhesion	≥7.5kg	ASTM D2197

IP66 & IP68 Seal for Fortis Enclosures	
Material:	Moulded Silicon Rubber (Vulcanized/Heat-Treated).
Temperature Rating:	Standard Operating -60°C to +170°C.
Environmental Resistance:	Excellent resistance to the following: Ozone – Oxidation – UV Light – Corona Discharge – Cosmic Radiation – Ionising Radiation – General Weathering
Moisture Absorption:	The range has an extremely low degree of moisture absorption; mechanical properties shows little change even after very long periods of exposure to liquids.

IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EMI/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

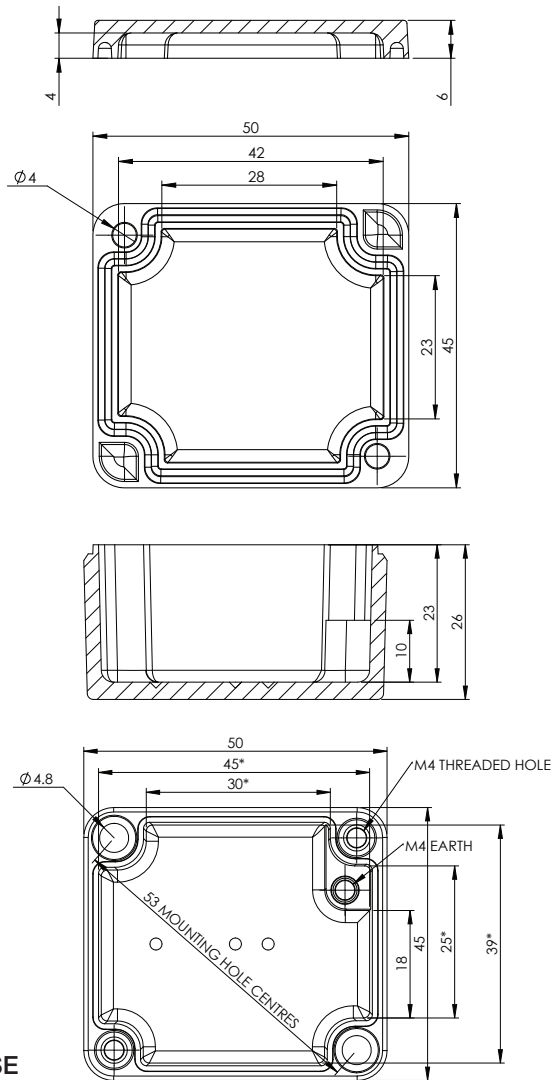
Corrosion & Impact Resistant

Plastic

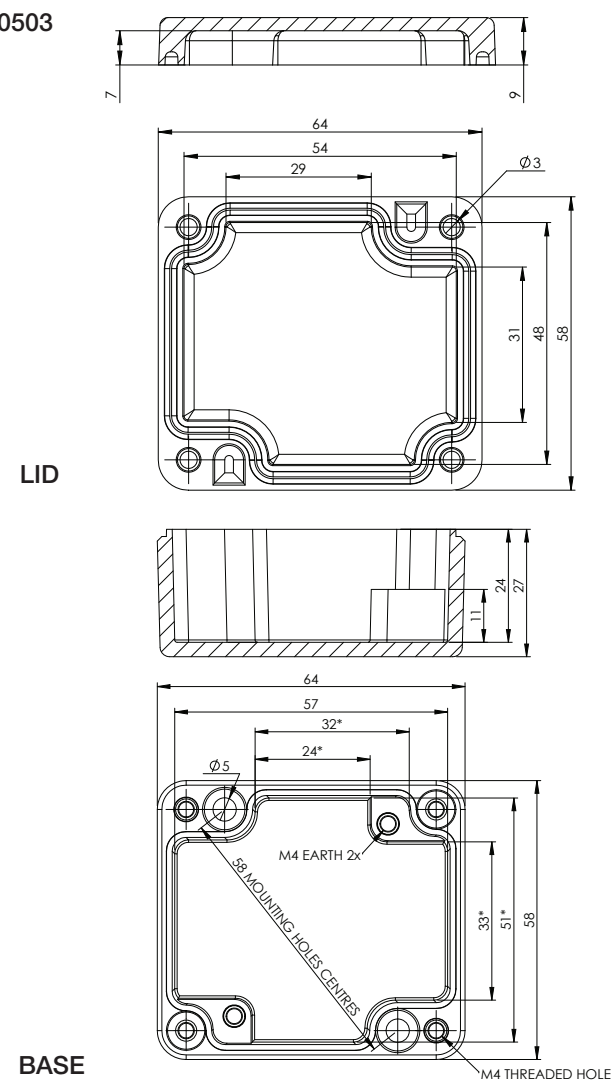
Fortis Enclosure Dimensions - 040503 & 060503

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

040503



060503



IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EM/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

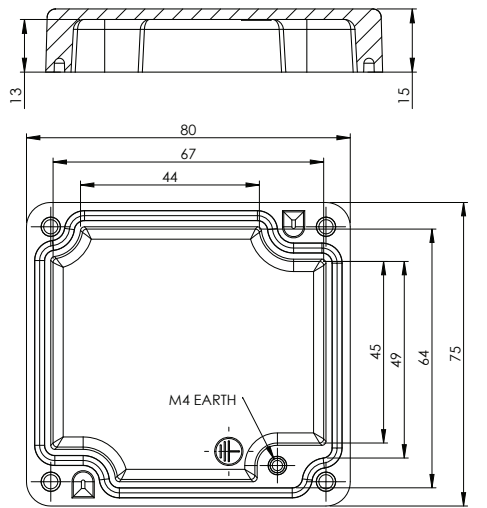
Corrosion &
Impact Resistant

Plastic

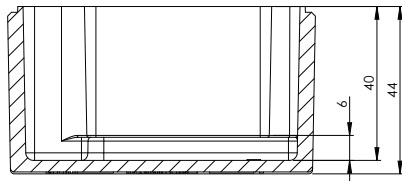
Fortis Enclosure Dimensions - 070805 & 120805

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

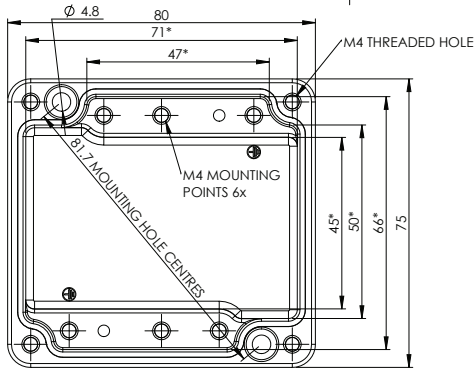
070805



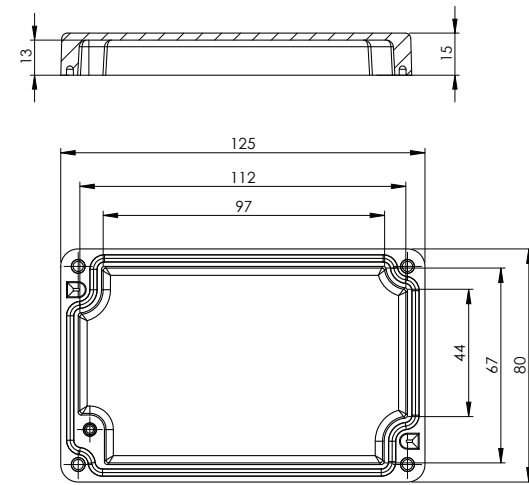
LID



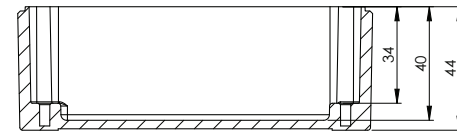
BASE



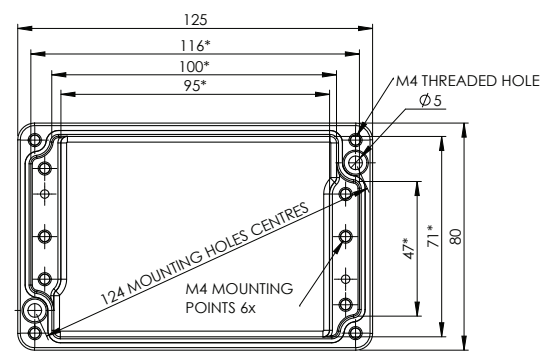
120805



LID



BASE



IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EMI/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

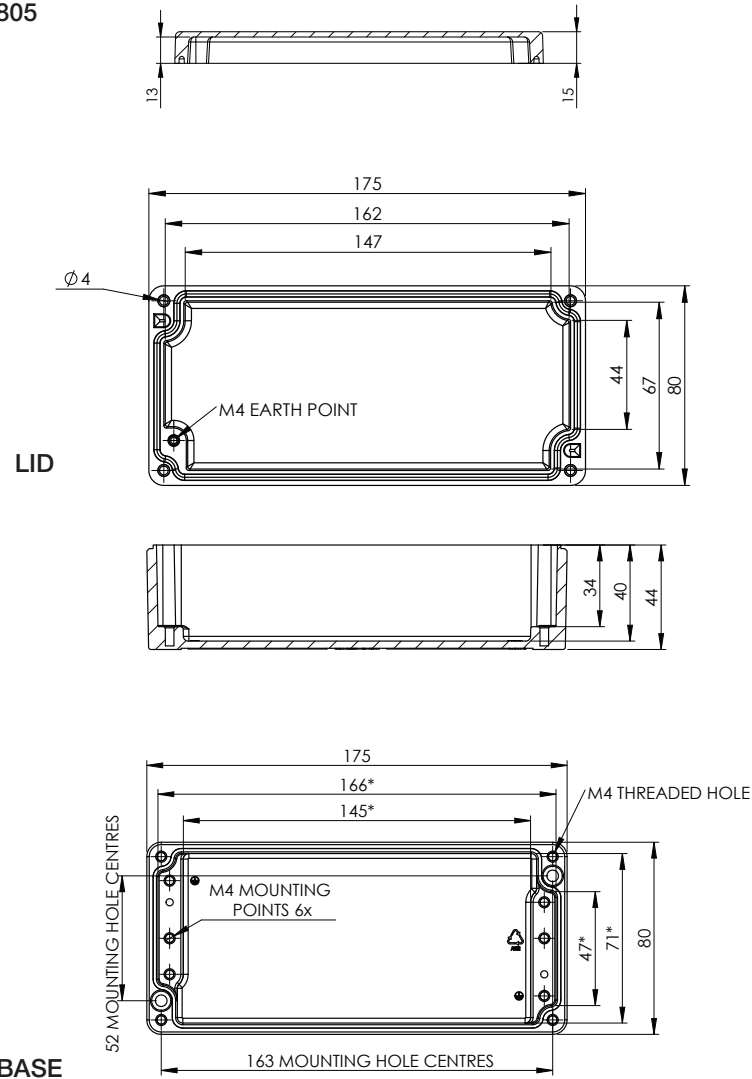
Corrosion &
Impact Resistant

Plastic

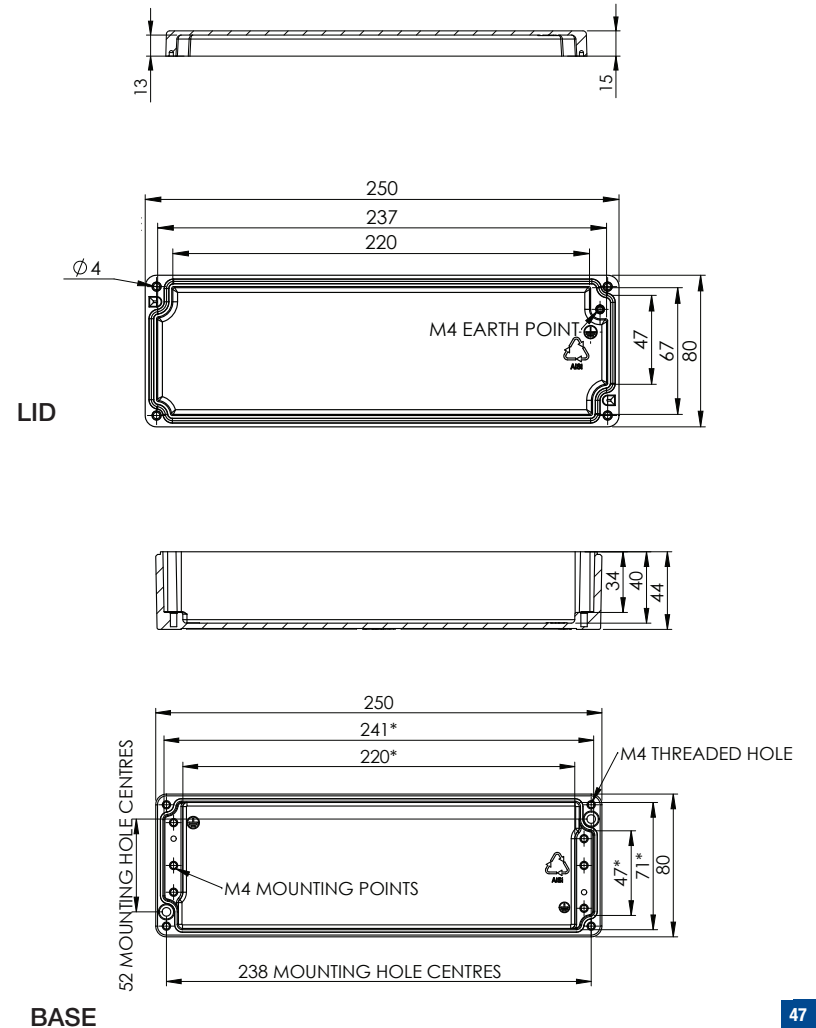
Fortis Enclosure Dimensions - 170805 & 250805

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

170805



250805



IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EM/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

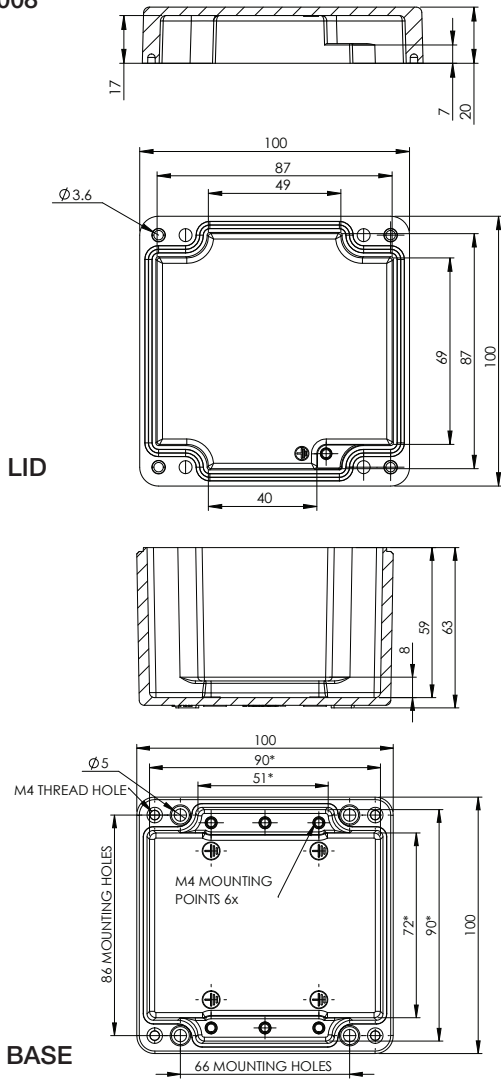
Corrosion & Impact Resistant

Plastic

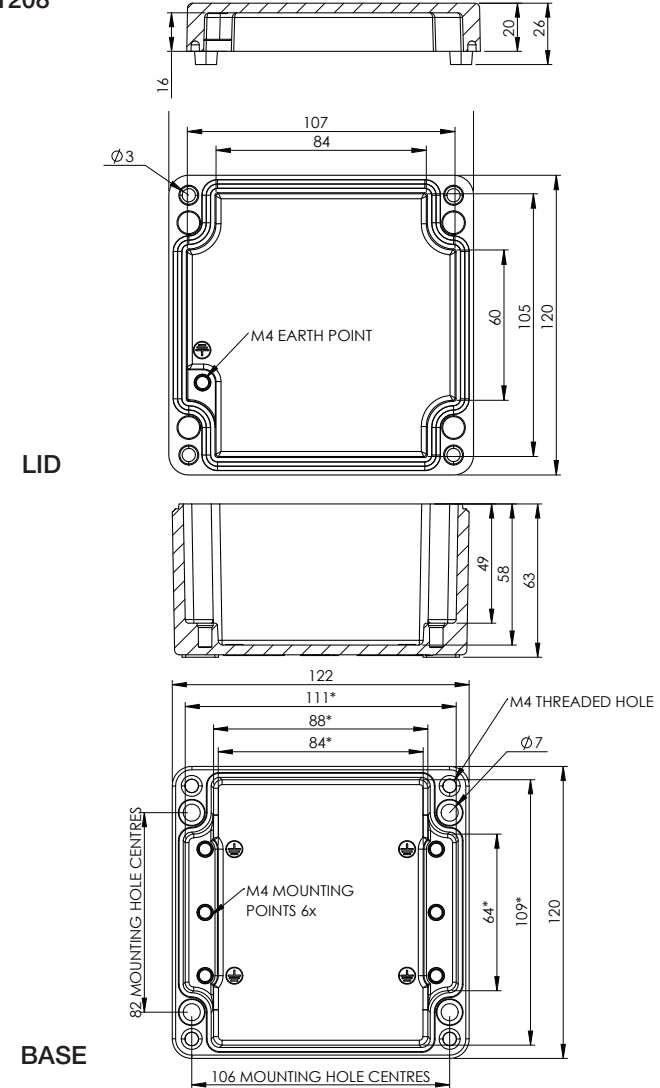
Fortis Enclosure Dimensions - 101008 & 121208

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

101008



121208



IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EMI/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

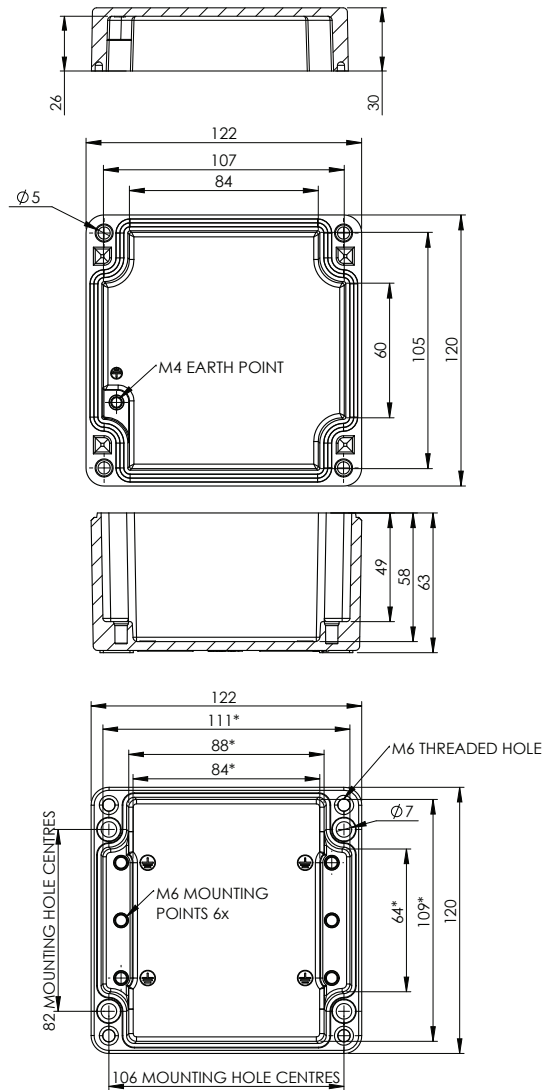
Corrosion &
Impact Resistant

Plastic

Fortis Enclosure Dimensions - 121209 & 141409

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

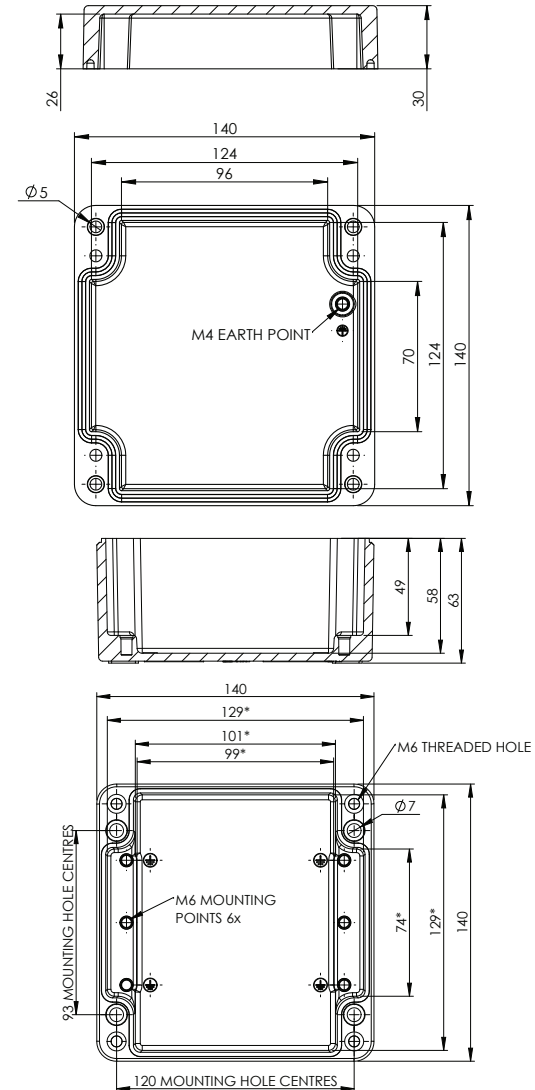
121209



LID

BASE

141409



LID

BASE

IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EM/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

Corrosion & Impact Resistant

Plastic

IP66 Polycarbonate and ABS Enclosures



Ideal when a cost effective or lightweight enclosure is required with ingress protection

Manufactured from high-grade polycarbonate or ABS, these enclosures are ideal when the weight of a metal cannot be supported, if the project budget is stretched or if electrical arcing concerns are raised. They are available in 22 sizes, with a multitude of beneficial properties including good resistance



- Lightweight
- Cost effective
- Good oil resistance
- High impact resistance
- Wide operating temperature range (Polycarbonate)
- Available with a translucent lid
- Can be customised in our UK factory, see page 8 for more details

**For specification, see page 51 (Polycarbonate) and 52 (ABS)
See pages 53 – 63 for dimensions**

Box Code	Box Size (mm)				Order Code	
	PCB Guide	L	W	H	Polycarbonate	ABS
050503	N	52	50	35	477-050503A-66	478-050503A-66
060503	N	65	50	35	477-060503A-66	478-060503A-66
080805	N	82	80	55	477-080805A-66	478-080805A-66
080808	N	82	80	85	477-080808A-66	478-080808A-66
120805	N	120	80	55	477-120805A-66	478-120805A-66
120808	N	120	80	85	477-120808A-66	478-120808A-66
121205	N	122	120	55	477-121205A-66	478-121205A-66
121208	N	122	120	85	477-121208A-66	478-121208A-66
160805	N	160	80	55	477-160805A-66	478-160805A-66
160808	N	160	80	85	477-160808A-66	478-160808A-66
161209	N	160	120	90	477-161209A-66	478-161209A-66

Box Code	Box Size (mm)				Order Code	
	PCB Guide	L	W	H	Polycarbonate	ABS
201207	N	200	120	75	477-201207A-66	478-201207A-66
201209	N	200	120	90	477-201209A-66	478-201209A-66
201507	N	200	150	75	477-201507A-66	478-201507A-66
241210	N	240	120	100	477-241210A-66	478-241210A-66
241609	N	240	160	90	477-241609A-66	478-241609A-66
241612	N	240	160	120	477-241612A-66	478-241612A-66
251609	N	250	160	90	477-251609A-66	478-251609A-66
251612	N	250	160	120	477-251612A-66	478-251612A-66
302308	N	300	230	85	477-302308A-66	478-302308A-66
302311	N	300	230	110	477-302311A-66	478-302311A-66
362015	N	360	200	150	477-362015A-66	478-362015A-66

IP66 Polycarbonate Enclosures - Material Specification

IP66 Polycarbonate Enclosures					
Material:	Polycarbonate				
Enclosure RAL Colour:	RAL 7035 (light grey)				
Operating Temperature :	-40°C to +120°C		Optional silicone Seal: -60°C to +130°C		
Standard PUR seal:	-40°C to +100°C				
Enclosure IP Rating:	IP66 - DIN EN 60529				
Density	DIN 53479	g/cm ³	1.2	Acetone	-
Impact Resistance	DIN 53453	mJ/mm ²	65	Ammonia	-
Toughness	DIN 53453	mJ/mm ²	20	Brake Fluid	-
Tensile Strength	DIN 53455	N/mm ²	65	Butane	+
Elongation of break	DIN 53455	%	90	Diesel Oil	°
Modulus of elasticity (bend test)	DIN 53457	N/mm ²	23000	Acetic Acid	10%
Flexural stress at given strain	DIN 53452	N/mm ²	95	Freon 113	+
Flammability	UL 94	Class	V 2	Fuel Oil	°
Volume Resistivity	DIN 53482	Ohms x cm	10 ¹⁵	Hydraulic Oil	+
Surface Resistance	DIN 53482	Ohms x cm	≥ 10 ¹⁵	Methanol	-
Dielectric Strength	DIN 53481	kV/mm	25-40	Lactic Acid	+
Thermal Conductivity (20°C)	DIN 52612	W/mK	0.21	Mineral Oils	+
UL Label on demand			Yes	Engine Oils	+
CSA label on demand			Yes	Sodium Chloride	+
				Nitric Acid	10%
				Hydrochloric Acid	20%
				Lubricating Oil	+
				Sulphuric Acid	50%
				Detergent	+
				Citric Acid	10%

+ : Resistant to all concentrations, % : Resistant to max % concentrate, ° : Conditionally resistant, - : Not Resistant, Δ : No data

IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EM/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

Corrosion & Impact Resistant

Plastic

IP66 ABS Enclosures - Material Specification

IP66 ABS Enclosures					
Material:		ABS			
Enclosure RAL Colour:	RAL 7035 (light grey)				
Operating Temperature :	-40°C to +80°C				
Standard PUR seal:	-40°C to +100°C				
Enclosure IP Rating:	IP66 - DIN EN 60529				
Density	DIN 53479	g/cm ³	1.05	Acetone	-
Impact Resistance	DIN 53453	mJ/mm ²	60	Ammonia	25%
Toughness	DIN 53453	mJ/mm ²	10	Brake Fluid	°
Tensile Strength	DIN 53455	N/mm ²	43	Butane	+
Elongation of break	DIN 53455	%	20	Diesel Oil	+
Modulus of elasticity (bend test)	DIN 53457	N/mm ²	21000	Acetic Acid	25%
Flexural stress at given strain	DIN 53452	N/mm ²	90	Freon 113	-
Flammability	UL 94	Class	HB	Fuel Oil	°
Volume Resistivity	DIN 53482	Ohms x cm	10 ¹³	Hydraulic Oil	Δ
Surface Resistance	DIN 53482	Ohms x cm	4 x 10 ¹⁴	Methanol	+
Dielectric Strength	DIN 53481	kV/mm	24	Lactic Acid	80%
Thermal Conductivity (20°C)	DIN 52612	W/mK	0.18	Mineral Oils	+
UL Label on demand			No	Engine Oils	+
CSA label on demand			No	Sodium Chloride	+
				Nitric Acid	-
				Hydrochloric Acid	°
				Lubricating Oil	Δ
				Sulphuric Acid	50%
				Detergent	Δ
				Citric Acid	+

+ : Resistant to all concentrations, % : Resistant to max % concentrate, ° : Conditionally resistant, - : Not Resistant, Δ : No data

IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EMI/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

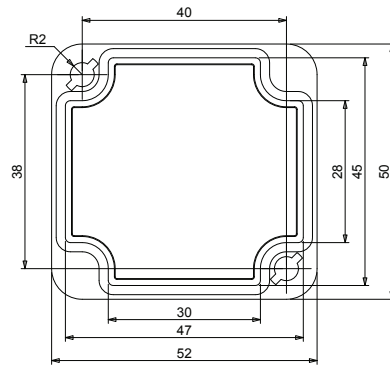
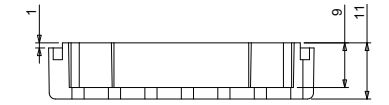
Corrosion & Impact
Resistant

Plastic

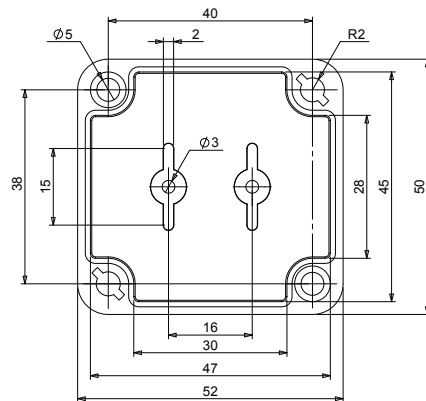
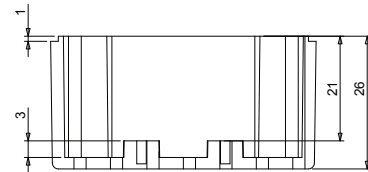
Polycarbonate and ABS Enclosure Dimensions - 050503 & 060503

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

050503

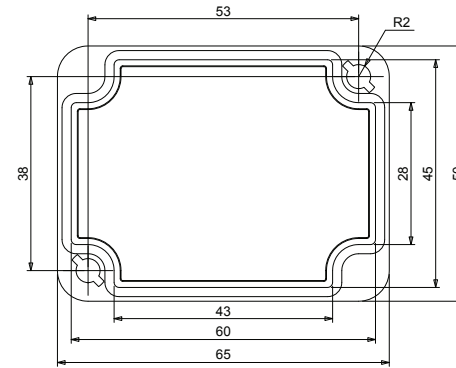
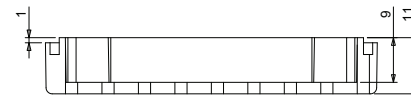


LID

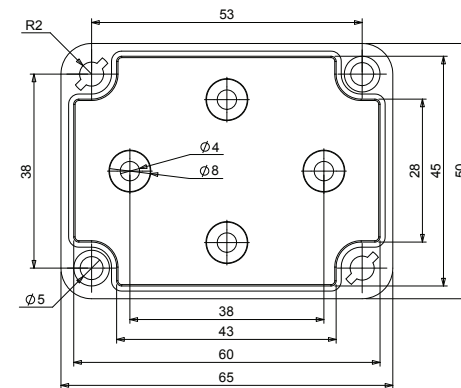
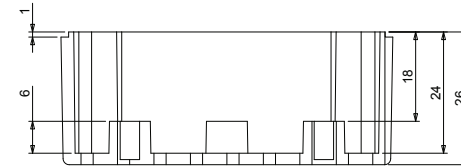


BASE

060503



LID



BASE

IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EM/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

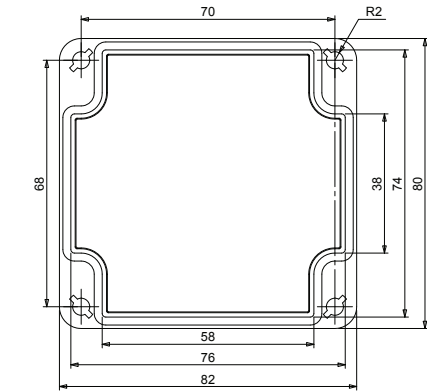
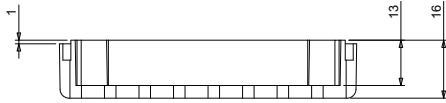
Corrosion & Impact Resistant

Plastic

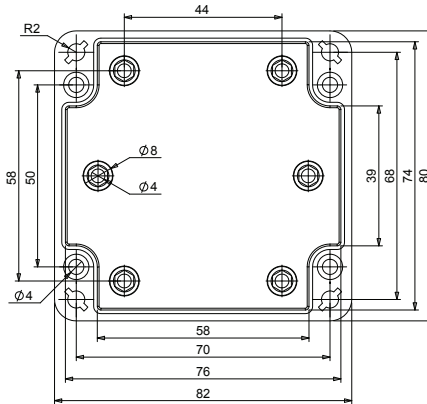
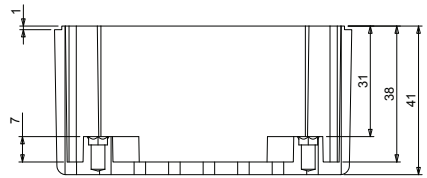
Polycarbonate and ABS Enclosure Dimensions - 080805 & 080808

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

080805

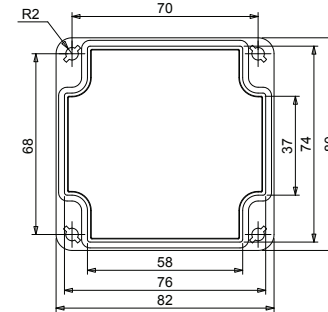
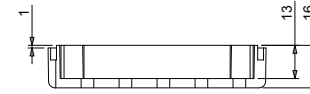


LID

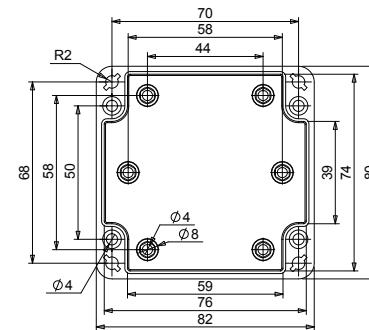
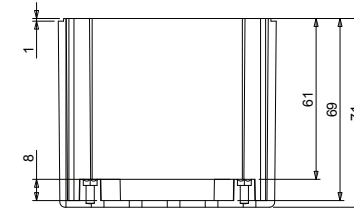


BASE

080808



LID



BASE

- IP54
General Purpose
- IP66
General Purpose
- IP68
General Purpose
- EMI/RFI
General Purpose
- Heavy Duty
Low Cost
- IP66 & IP68
Heavy Duty
- Corrosion &
Impact Resistant
- Plastic

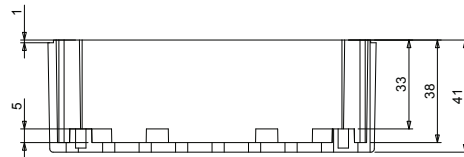
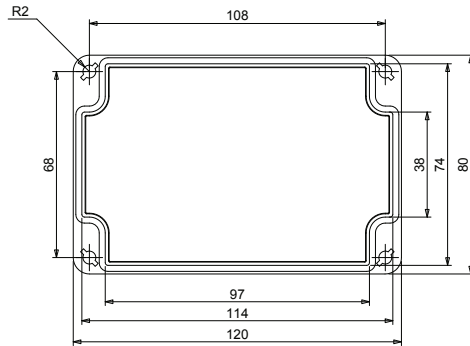
Polycarbonate and ABS Enclosure Dimensions - 120805 & 120808

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

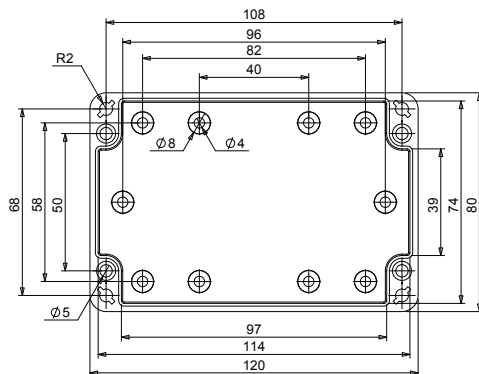
120805



LID



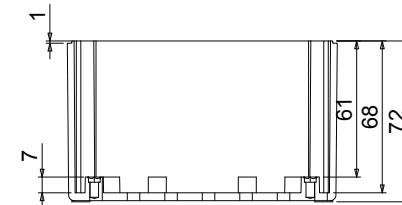
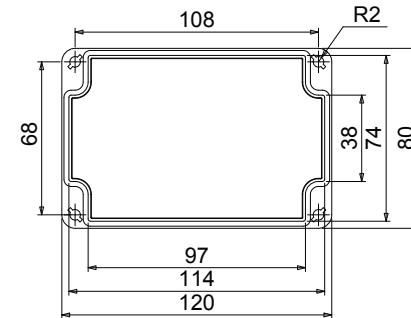
BASE



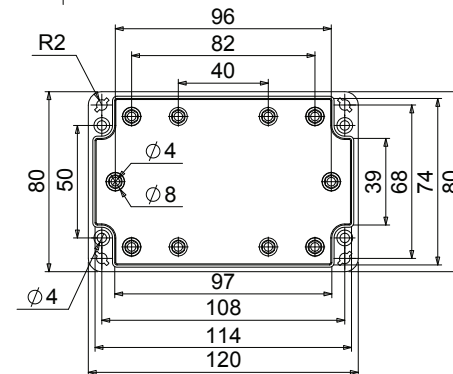
120808



LID



BASE



IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EM/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

Corrosion &
Impact Resistant

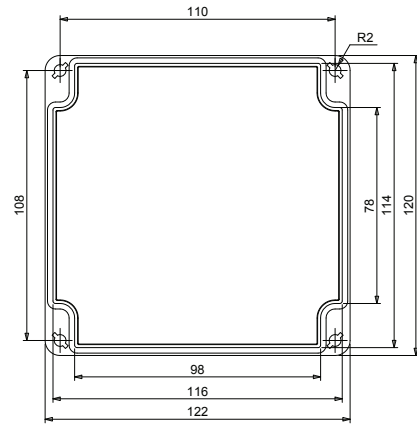
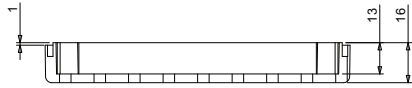
Plastic

Polycarbonate and ABS Enclosure Dimensions - 121205 & 121208

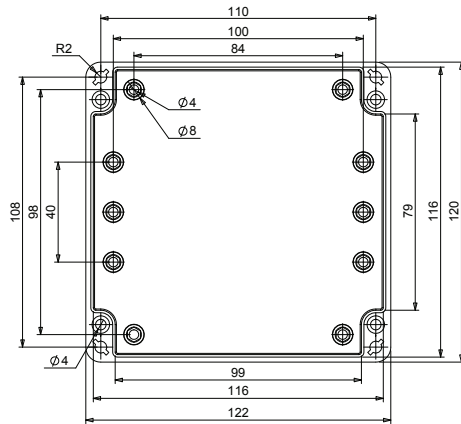
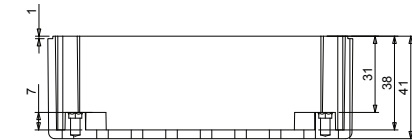
*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

- IP54 General Purpose
- IP66 General Purpose
- IP68 General Purpose
- EMI/RFI General Purpose
- Heavy Duty Low Cost
- IP66 & IP68 Heavy Duty
- Corrosion & Impact Resistant
- Plastic

121205

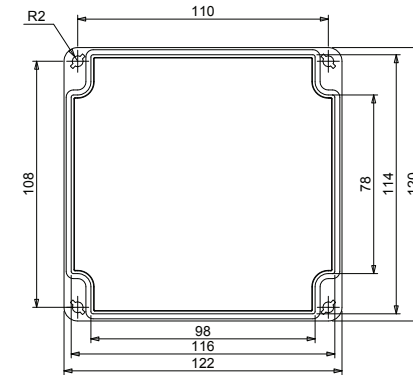


LID

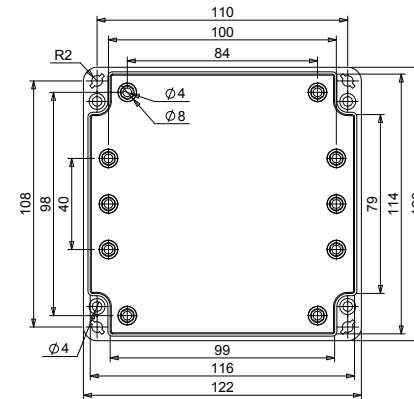
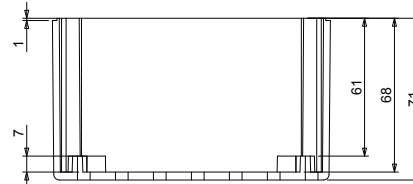


BASE

121208



LID



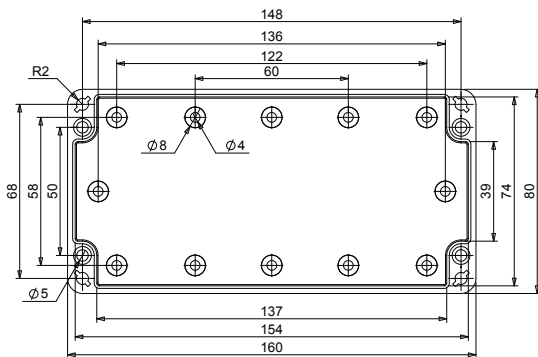
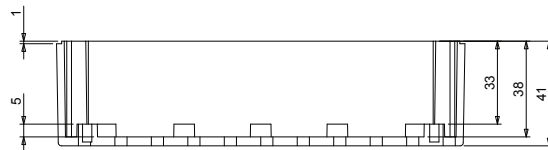
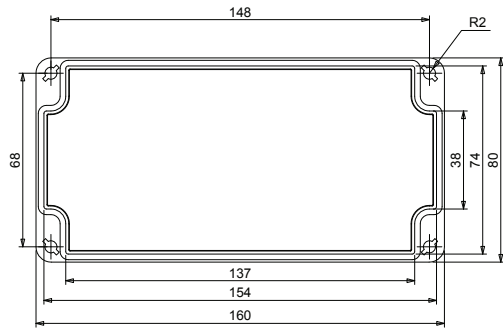
BASE

Polycarbonate and ABS Enclosure Dimensions - 160805 & 160808

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

160805

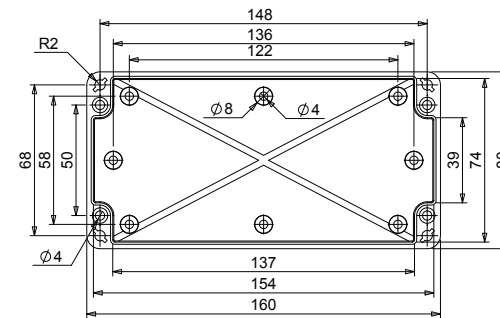
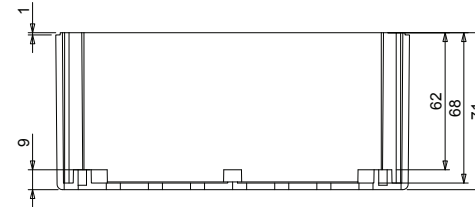
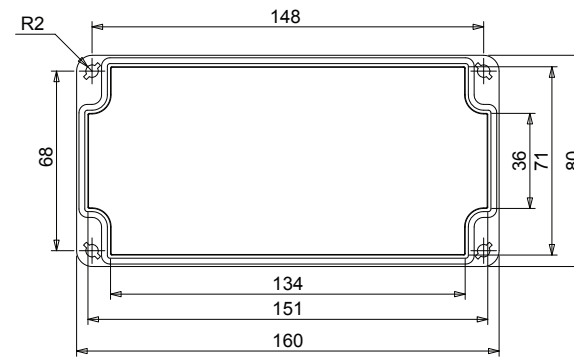
LID



BASE

160808

LID



BASE

IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EM/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

Corrosion &
Impact Resistant

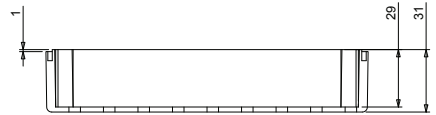
Plastic

Polycarbonate and ABS Enclosure Dimensions - 161209 & 201207

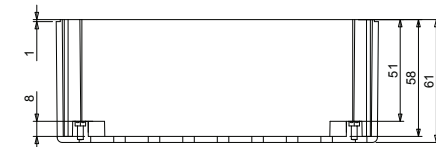
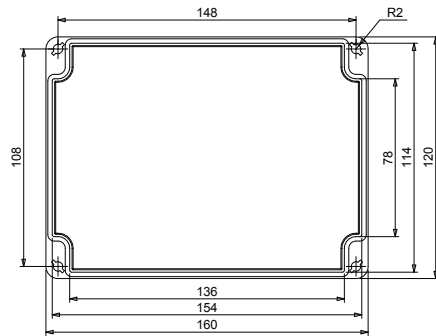
*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

- IP54
General Purpose
- IP66
General Purpose
- IP68
General Purpose
- EMI/RFI
General Purpose
- Heavy Duty
Low Cost
- IP66 & IP68
Heavy Duty
- Corrosion &
Impact Resistant
- Plastic

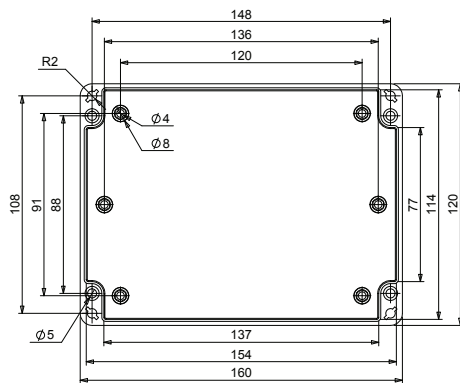
161209



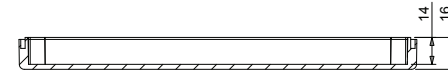
LID



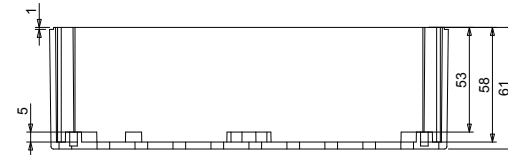
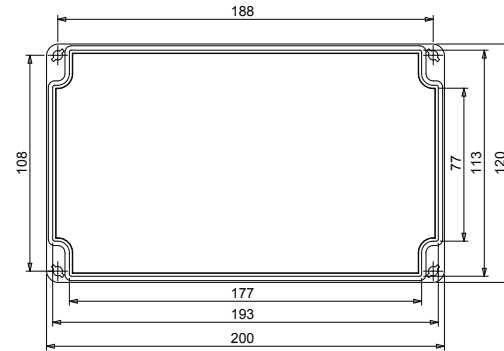
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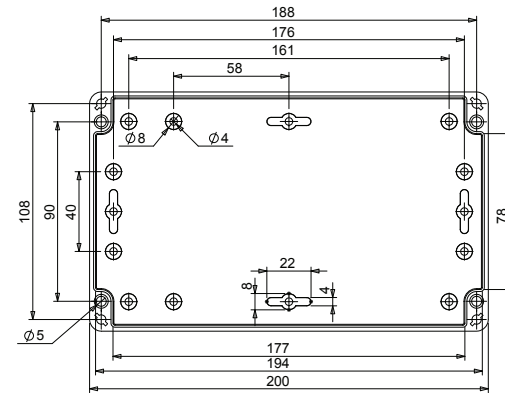
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LID



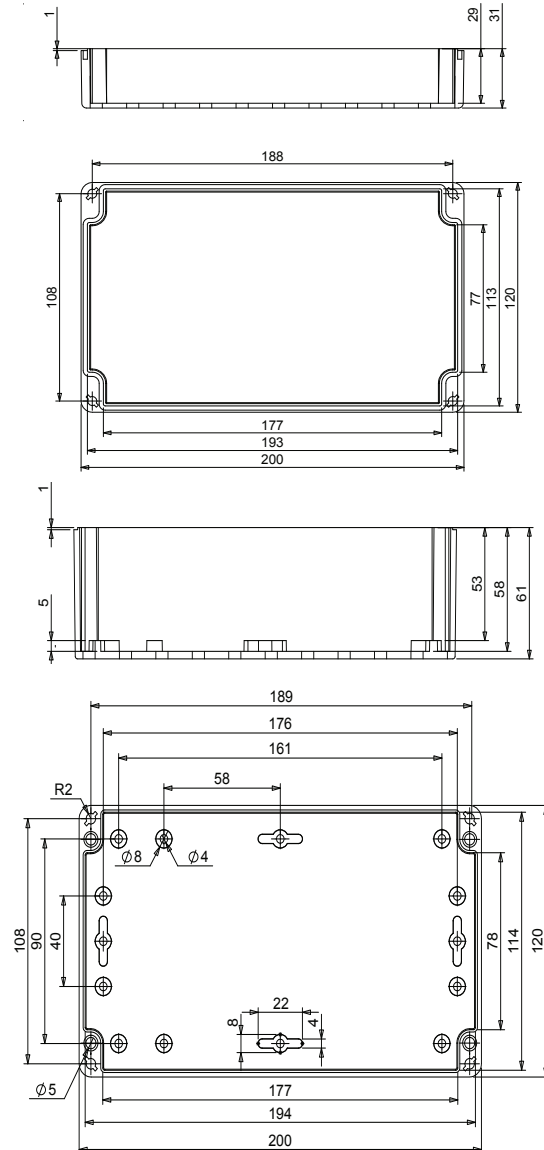
BASE



Polycarbonate and ABS Enclosure Dimensions - 201209 & 201507

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

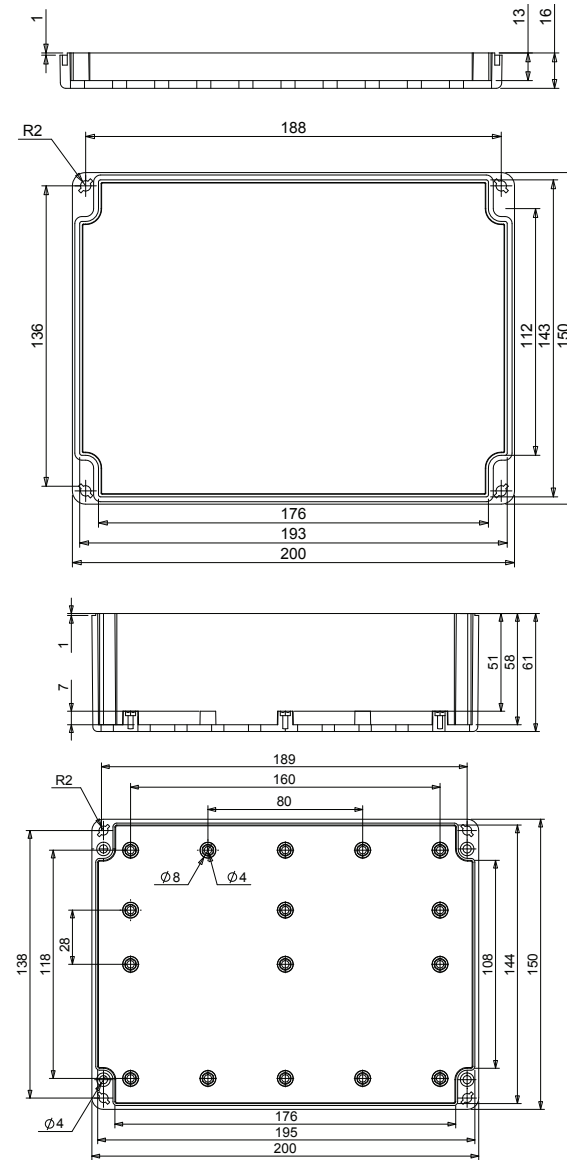
201209



LID

BASE

201507



LID

BASE

IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EM/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

Corrosion & Impact Resistant

Plastic

Polycarbonate and ABS Enclosure Dimensions - 241210 & 241609

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

- IP54 General Purpose
- IP66 General Purpose
- IP68 General Purpose
- EMI/RFI General Purpose
- Heavy Duty Low Cost
- IP66 & IP68 Heavy Duty
- Corrosion & Impact Resistant
- Plastic

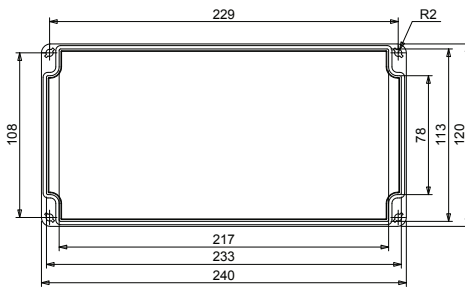
241210



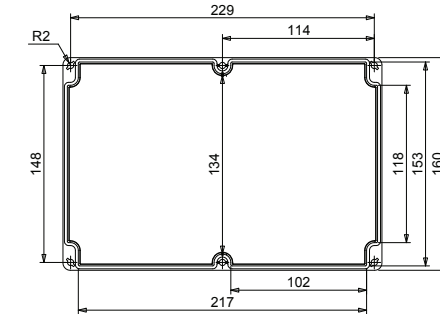
241609



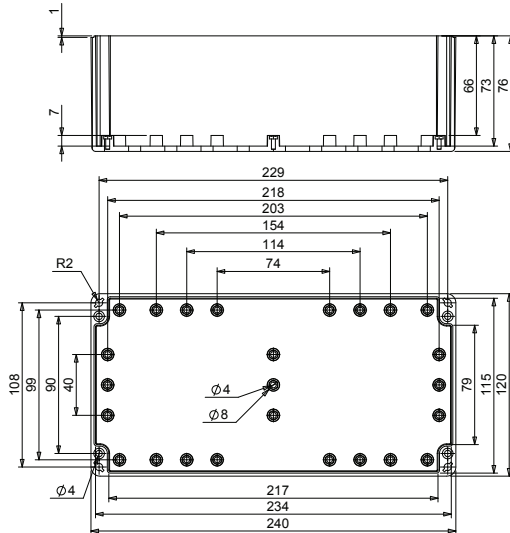
LID



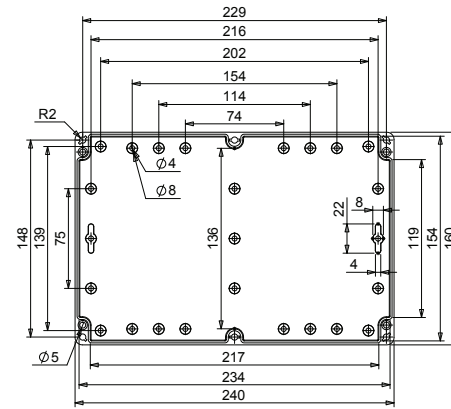
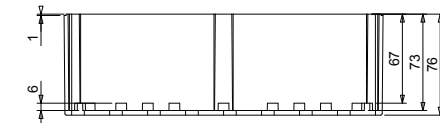
LID



BASE



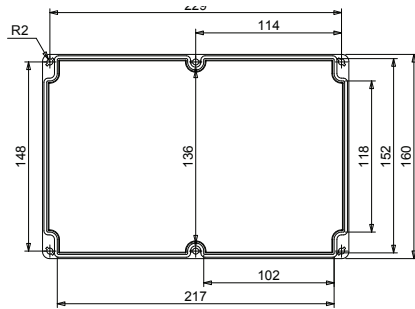
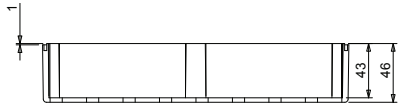
BASE



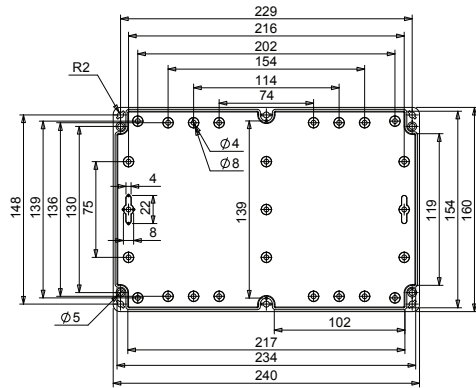
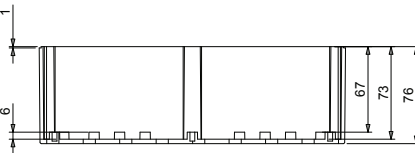
Polycarbonate and ABS Enclosure Dimensions - 241612 & 251609

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

241612

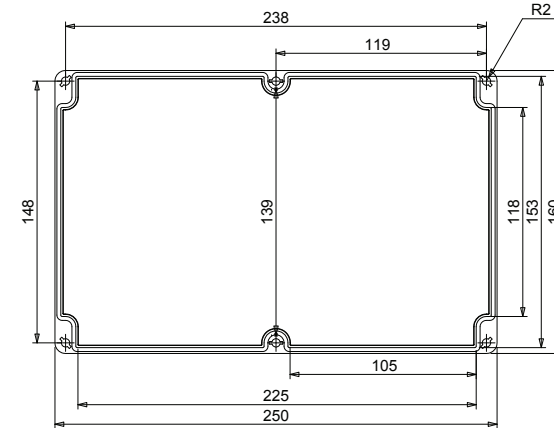
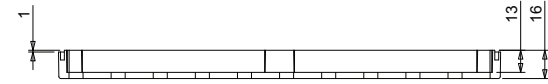


LID

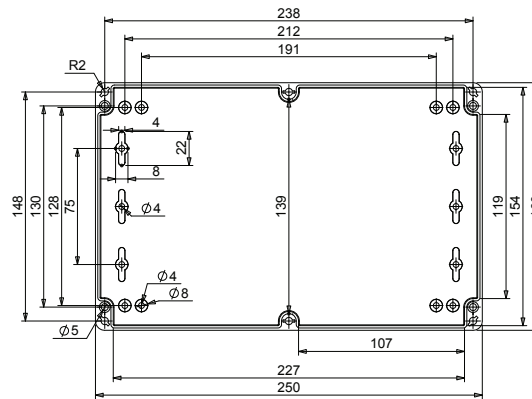
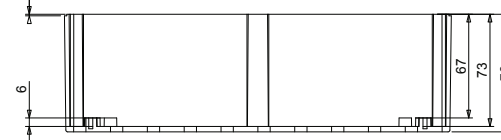


BASE

251609



LID



BASE

IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EM/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

Corrosion & Impact Resistant

Plastic

Polycarbonate and ABS Enclosure Dimensions - 251612 & 302308

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EMI/RFI
General Purpose

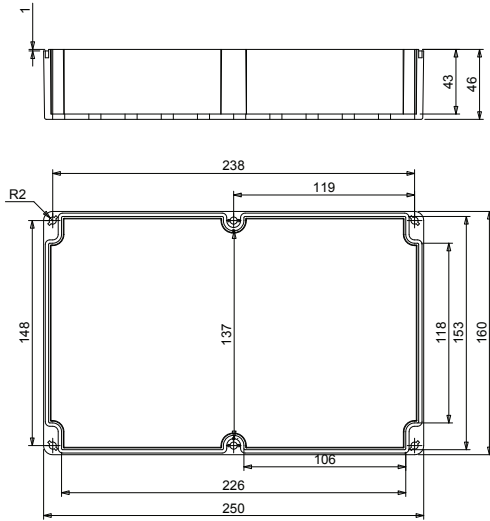
Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

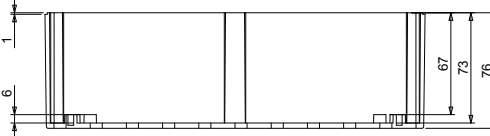
Corrosion &
Impact Resistant

Plastic

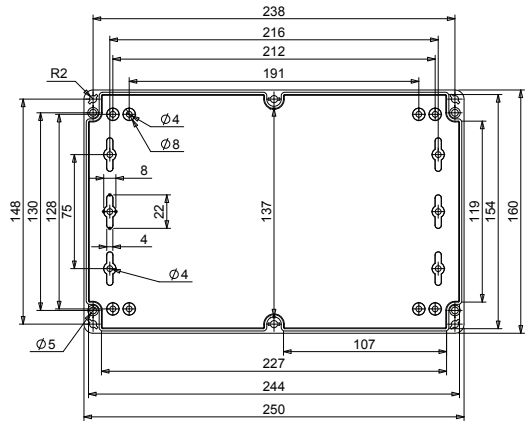
251612



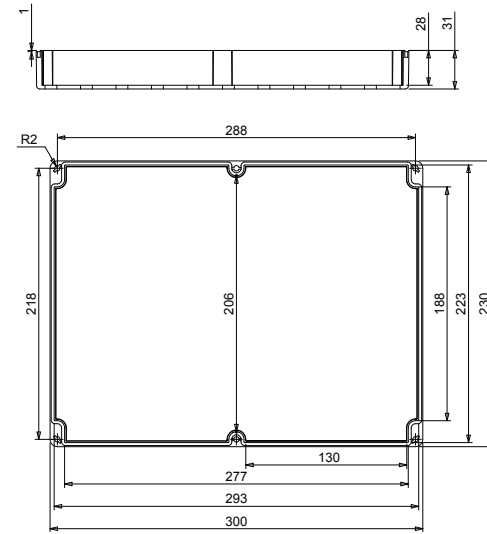
LID



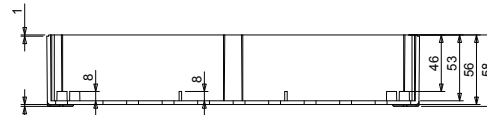
BASE



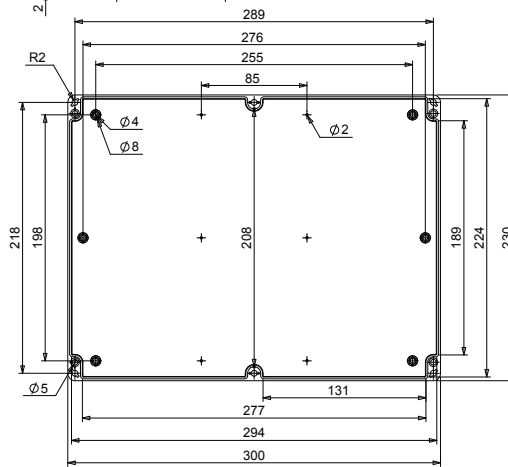
302308



LID



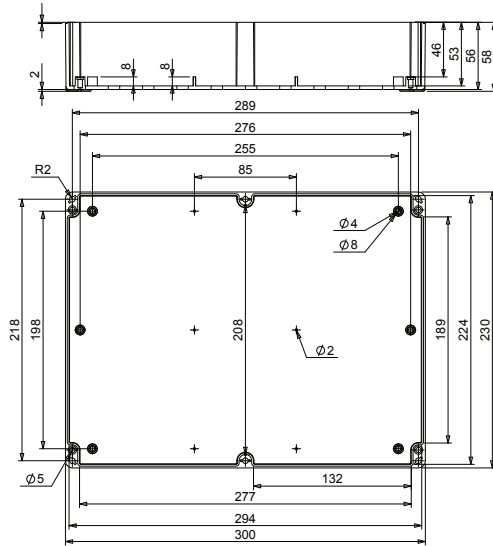
BASE



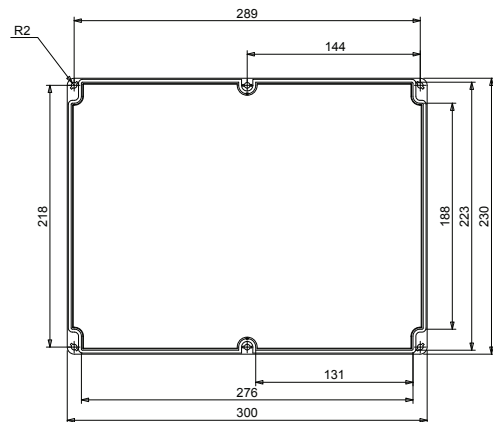
Polycarbonate and ABS Enclosure Dimensions - 302311 & 362015

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

302311

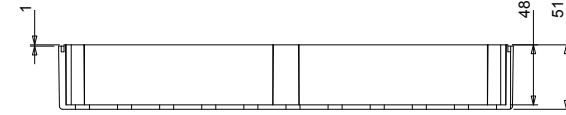


LID

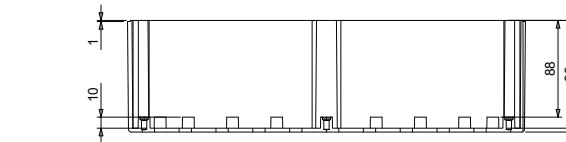
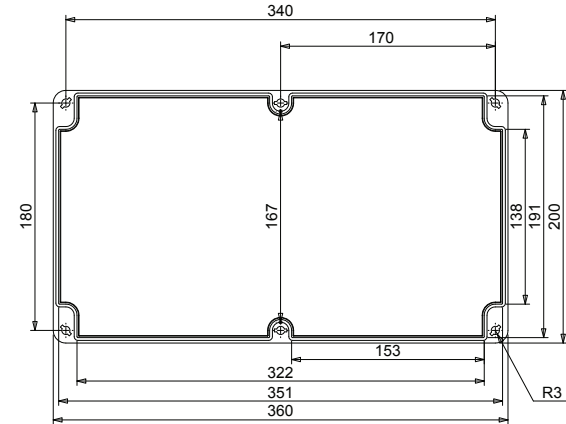


BASE

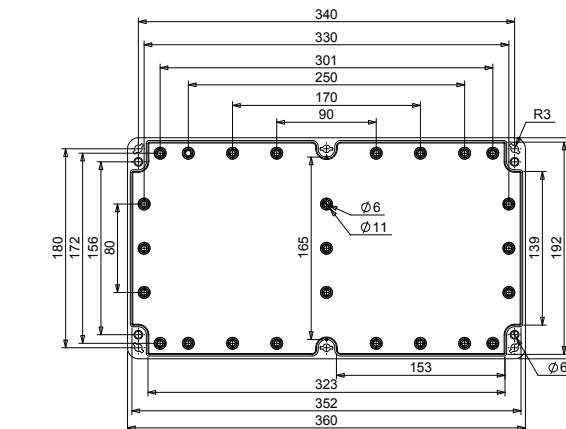
362015



LID



BASE



IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EM/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty

Corrosion & Impact Resistant

Plastic

General Purpose ABS Enclosures

● Ideal for light duty applications

Choose ABS enclosures for a lightweight and low cost enclosure solution. They are an excellent option for applications in light duty environments where ingress protection is not a priority. They are available in three sizes and 12 colours, including clear for an aesthetically pleasing product.



- Injection moulded from impact resistant ABS
- Lightweight and low cost
- Available in 12 colours
- Easy to machine
- RoHS Compliant
- Can be customised in our UK factory, see page 8 for more details

See page 65 for technical drawings

Box Size (mm)		Order Code			Finish	
Box Code	PCB Guide	L	W	H	Part Number	Colours
0020	N	112	62	31	479-0020-*	Clear, Black, Blue, Brown, Green, Red, White, Yellow, Purple, Grey, Orange, Cream
0140	N	76	51	28	479-0140-*	
0160	N	101	77	40	479-0160-*	

***Code Suffix: Clear = 0, Black = 1, Blue = 2, Brown = 3, Green = 4, Red = 5, White = 6, Yellow = 7, Purple = 8, Grey = 9, Orange = 10, Cream = 11**

Custom Services

- Machining
- Painting
- Printing
- Assembly

Save time and cut costs with our in-house machining service - See page 8 for full details

Technical Assistance

Any questions?
Call +44 (0)1724 273206

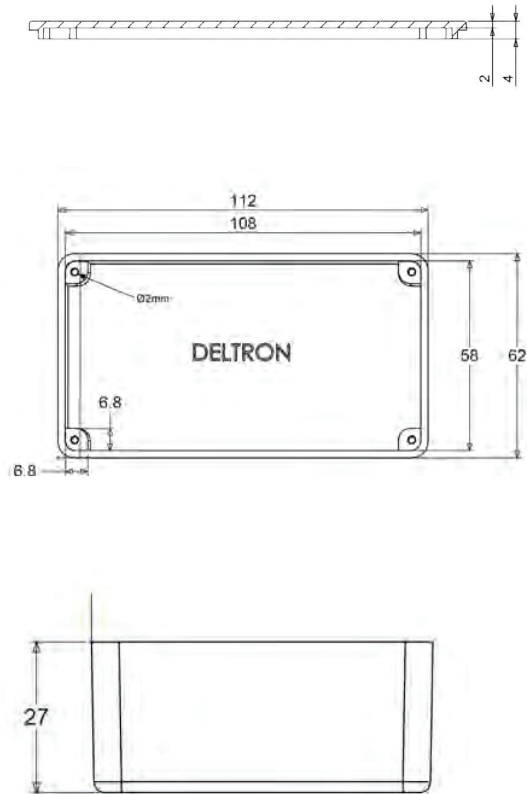
Materials:

- ABS – Various Grades
- ABS/Polycarbonate Blend
- PET/Polycarbonate Blend
- Nylon 6/ 66 GF/ UF
- Nylon Trogamid
- PPS Forton GF
- Noryl GF/UF Blend
- Polycarbonate GF/UF
- Desmopan TPU (Rubber)
- Polypropylene GF + Carbon
- Special Blend Flexible PVC's

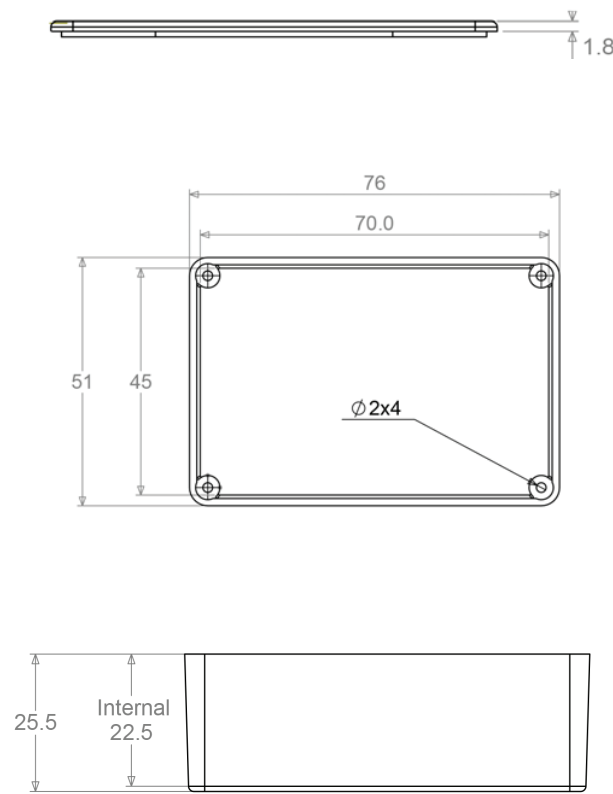
General Purpose ABS Enclosure Dimensions

*NOTE: DRAFT ANGLE 1° DIMENSIONS TAKEN FROM LOWEST POINT

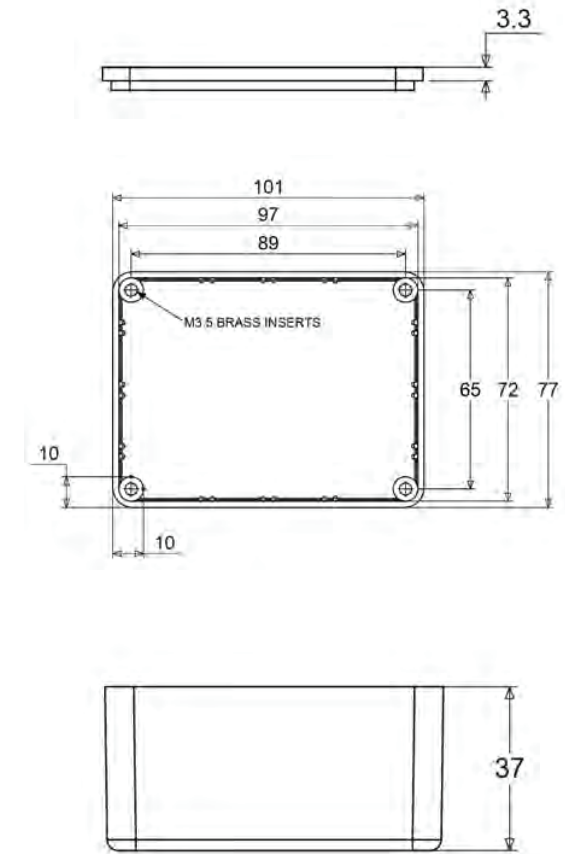
0020



0140



0160



IP54
General Purpose

IP66
General Purpose

IP68
General Purpose

EM/RFI
General Purpose

Heavy Duty
Low Cost

IP66 & IP68
Heavy Duty








Corrosion & Impact Resistant

Plastic










IP Ratings Guide

The first digit on an IP rating determines the level of protection against solid objects. The second digit is the level of protection against water. (Ingress Protection to BS EN 60529:1992)

1st digit - protection against solid objects

	0	No protection/No test required
	1	Protected against objects greater than 50mm diameter
	2	Protected against objects greater than 12.5mm diameter such as a finger
	3	Protected against objects greater than 2.5mm
	4	Protected against objects greater than 1.0mm such as wire
	5	Ingress of dust is not totally prevented but dust does not enter in harmful quantities to interfere with the correct operation or impair safety
	6	No ingress of dust permitted

2nd digit - protection against water

	0	No protection/No test required
	1	Protected against falling drops of water
	2	Protected against drops falling at 15° in 4 fixed positions
	3	Low pressure spray - similar to shower head at up to 60° from vertical tested using an oscillating tube with an arc of 60° for 10 minutes
	4	Low pressure spray - similar to shower head - as per numeral 3 but 180° for 10 minutes
	5	Medium pressure jet - 6.3mm diameter, similar to garden hose - from any angle for 3 minutes at a distance of 2.5-3 metres
	6	High pressure jet - 12.5mm diameter, similar to fire hose - from any angle for 3 minutes at a distance of 2.5-3 metres
	7	Immersion - for temporarily immersion in water under set conditions - 1 metre for 30 minute
	8	Protected against the effects of continuous immersion in water, Ingress of water in quantities causing harmful effects shall not be possible. Conditions should be more severe than for numeral 7
	9	Steam clean, high pressure high temp jet wash to DIN40050(German std), extends BS EN 60529:1992



Deltron Enclosures Stockists

Please visit the website of your local stockist for full information and contact details.
If you have any queries, call our sales team on +44 (0)1724 273206.

Europe			Far East / Asia		
All	Elfa Distralec	www.elfa.se	All	Element14	www.element14.com
Finland	YE International	www.ye.com	China	Shanghai Hang Ou	www.shhangou.com
France	Dicep EMC	www.dicep.com	Hong Kong	Birko Electronics	Email - info@birko.com.hk
	Electro PJP	www.electro-pjp.com	Singapore	Coastal Electronics B&Lee	www.coastal.com www.blee.com.sg
Germany	Conrad	www.conrad.com	Australasia		
	Klotz	www.klotz-ais.de	Australia	Element 14 Switches Plus Components	www.element14.com www.switchesplus.com.au
Ireland	Anglia	www.anglia-live.com	New Zealand	Element 14	www.element14.com
Italy	Elcart	www.elcart.it	USA		
Netherlands	Batenburg Elektronica	www.batenburg-elektronica.nl	Mouser		www.mouser.com
	KimLi	www.kimli.nl	Newark		www.newark.com
	Mulder Hardenburg	www.mulder-hardenburg.com	Africa		
Spain	Beltronica	www.beltronica.es	CP Automation		www.cpaltd.net
Switzerland	CL Electronics	www.cl-electronics.com	Worldwide		
	Compona Connector Systems	www.compona.com	Avnet Abacus		www.avnet-abacus.eu
UK	Anglia	www.anglia-live.com	Farnell		www.farnell.com
	CP Automation	www.cpaltd.net	Mouser		www.mouser.com
N. Ireland	Electronic Excellence	www.eeltd.co.uk			