

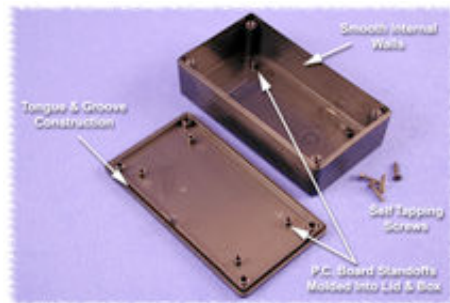
## Multipurpose Plastic Enclosures (1591XX "S" Series) Economical Version



**Assembled View  
(Top)**



**Assembled View  
(Bottom)**



**Open View**

### Key Features:

- Ideally suited for mounting printed circuit boards horizontally. If you prefer vertical board mount (using our internally ribbed enclosures) - link to our [1591 "S" series](#)).
- Internal sides of enclosure are smooth for easy connector installation (see photos) - except for the largest enclosure the 1591XXFSBK which is a universal type (ie...includes P.C.board standoffs in the lid and enclosure PLUS includes card guides). See drawing and/or photo tables for more details.
- Strong - tongue and groove lid to box construction provides protection against access of dust and splashing water.
- Designed to meet IP54.
- Lid and box both contain - molded in PC board standoffs.
- Molded from easy to machine, economical black plastic, with a satin texture.
- Link here to our [flame retardant ABS plastic version](#) of these enclosures.
- Lid is secured with black self-tapping #4 x 0.5" philips screws.

| Part Number       | Color | PDF Reader File                                                                          | AutoCAD .dwg Files (zipped)                                                              | 3D Solid Model .igs & .stp files (zipped)                                                  | Units  | Length | Width | Enclosure Depth (Less Lid) |
|-------------------|-------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------|--------|-------|----------------------------|
| <b>1591XXMSBK</b> | Black |  376K |  214K |  640K | Inches | 3.3    | 2.2   | 0.8                        |
|                   |       |                                                                                          |                                                                                          |                                                                                            | mm     | 85     | 56    | 21                         |
| <b>1591XXLSBK</b> | Black |  233K |  276K |  655K | Inches | 3.4    | 2.2   | 1.4                        |
|                   |       |                                                                                          |                                                                                          |                                                                                            | mm     | 87     | 57    | 36                         |
| <b>1591XXASBK</b> | Black |  228K |  187K |  609K | Inches | 3.9    | 2.0   | 0.8                        |
|                   |       |                                                                                          |                                                                                          |                                                                                            | mm     | 100    | 51    | 22                         |
| <b>1591XXSSBK</b> | Black |  233K |  249K |  656K | Inches | 4.3    | 3.2   | 1.6                        |
|                   |       |                                                                                          |                                                                                          |                                                                                            | mm     | 110    | 82    | 40                         |
| <b>1591XXBSBK</b> | Black |  188K |  279K |  670K | Inches | 4.4    | 2.5   | 1.1                        |
|                   |       |                                                                                          |                                                                                          |                                                                                            | mm     | 113    | 63    | 28                         |
| <b>1591XXCSBK</b> | Black |  189K |  270K |  670K | Inches | 4.7    | 2.6   | 1.4                        |
|                   |       |                                                                                          |                                                                                          |                                                                                            | mm     | 121    | 66    | 37                         |
| <b>1591XXTSBK</b> | Black |  187K |  312K |  670K | Inches | 4.8    | 3.2   | 2.2                        |
|                   |       |                                                                                          |                                                                                          |                                                                                            | mm     | 123    | 83    | 56                         |
| <b>1591XXGSBK</b> | Black |  265K |  201K |  654K | Inches | 4.8    | 3.7   | 1.2                        |
|                   |       |                                                                                          |                                                                                          |                                                                                            | mm     | 121    | 94    | 30                         |
| <b>1591XXDSBK</b> | Black |  184K |  300K |  668K | Inches | 6.0    | 3.2   | 1.8                        |
|                   |       |                                                                                          |                                                                                          |                                                                                            | mm     | 152    | 82    | 47                         |
| <b>1591XXESBK</b> | Black |  219K |  388K |  803K | Inches | 7.6    | 4.4   | 2.2                        |
|                   |       |                                                                                          |                                                                                          |                                                                                            | mm     | 193    | 113   | 58                         |
| <b>1591XXFSBK</b> | Black |  229K |  209K |  685K | Inches | 8.7    | 5.9   | 2.3                        |
|                   |       |                                                                                          |                                                                                          |                                                                                            | mm     | 221    | 150   | 60                         |

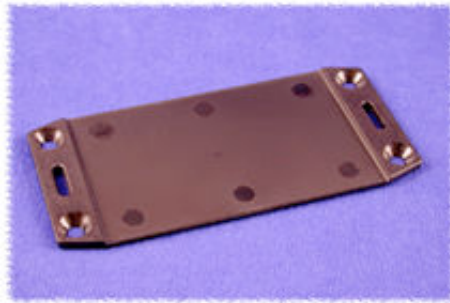
## NOTES:

- Add lid thickness of 0.12" (3 mm) to enclosure depth for total outside depth.
- Average wall thickness is 2 mm (.079") - except 1591XXSFBK - 3.1 mm (.124")
- Accessory screws for mounting P.C. boards into standoffs (#4 x 1/4" pan head) P/N **1593ATS50** (qty. 50), P/N **1593ATS100** (qty. 100).
- Internal construction is different for the 1591XXSFBK size (ie...includes P.C.board standoffs in the lid and enclosure PLUS includes card guides (see drawing and/or photo tables for more details).
- Link here to our [flanged lid version](#)

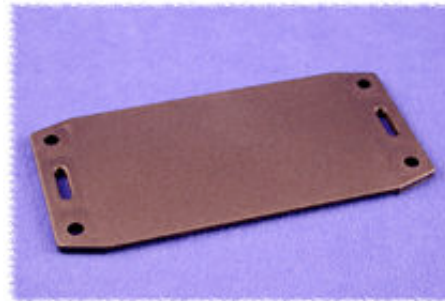
## Accessories

### Bottom Flange Kits:

Top View



Bottom View



### Replacement Screws:

- Accessory screws for mounting P.C. boards into standoffs (#4 x 1/4" pan head) P/N **1593ATS50** (qty. 50), P/N **1593ATS100** (qty. 100).

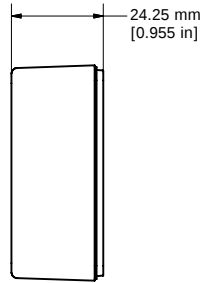
### Belt / Pocket Clip Option:



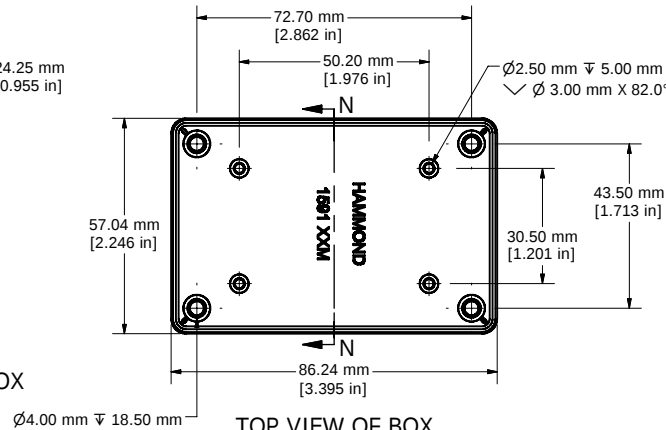
- Molded from tough nylon (choice of Black or Grey).
- Includes 2 nylon screws (insulated to avoid internal interference).
- Mounting template included.

Black - Part Number **1599CLIP**  
Grey - Part Number **1599CLIPGY**

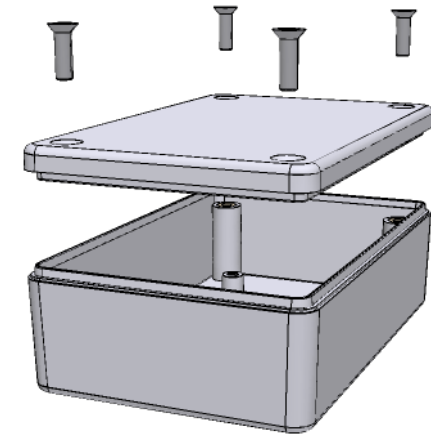
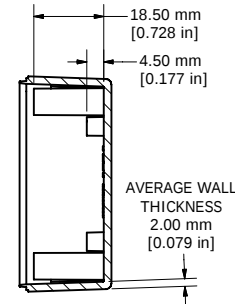
SIDE VIEW OF BOX



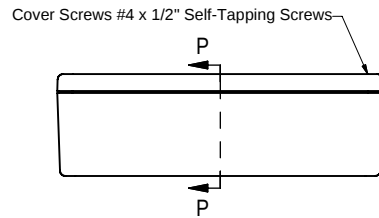
TOP VIEW OF BOX



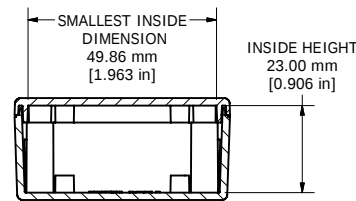
SECTION N-N



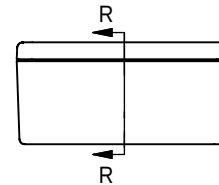
SIDE VIEW OF ENCLOSURE



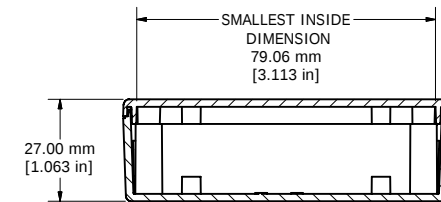
SECTION P-P



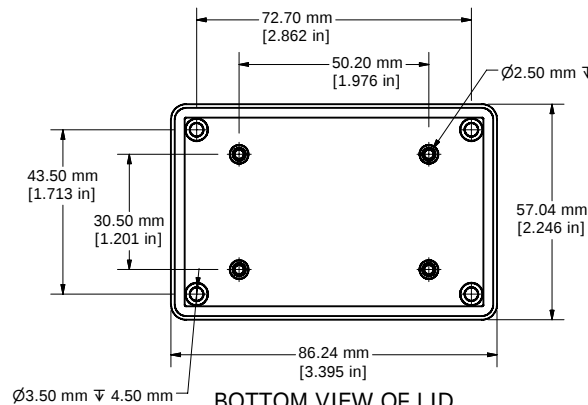
END VIEW OF ENCLOSURE



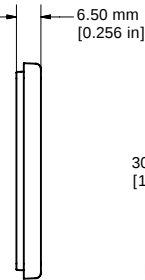
SECTION R-R



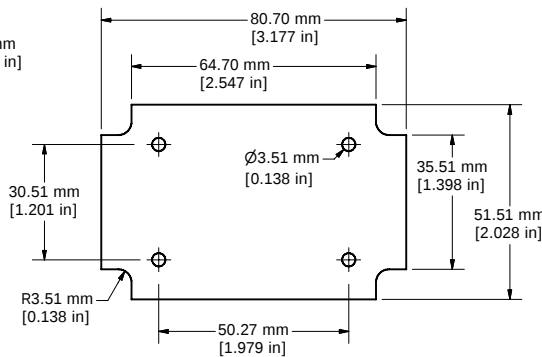
BOTTOM VIEW OF LID



SIDE VIEW OF LID



MAX PC BOARD SIZE (NOT INCLUDED)



Enclosures can be Factory Modified (Milling, Drilling, Printing etc.)  
Solid models of this enclosure available in STEP or IGES.  
Contact Factory [mjm@hammondmg.com](mailto:mjm@hammondmg.com)

| NOTE                                                 |                       |  |
|------------------------------------------------------|-----------------------|--|
| Enclosure molded from GRABS UL 94-HB Plastic.        |                       |  |
| No Brass Inserts Included                            |                       |  |
| Other materials / colours available consult factory. |                       |  |
| 1591XXMS                                             |                       |  |
| 1591XXMS Box Enclosure                               |                       |  |
| Black Enclosure - RAL 7011                           | 1591XXMSBK            |  |
| Gray Enclosure - RAL 7035                            | 1591XXMSGY            |  |
| ACCESSORIES                                          |                       |  |
| Lid Screws self-tapping Black                        | 1591TS100BK (Pkg 100) |  |
| Lid Screws self-tapping Standard                     | 1591TS100 (Pkg 100)   |  |
| P.C. Board Screws (All Boxes)                        |                       |  |
| P.C. Board Screws                                    | 1593ATS50 (Pkg 50)    |  |
| #4 x 1/4" self-tapping (6.4mm)                       | 1593ATS100 (Pkg 100)  |  |

**HAMMOND**  
**MANUFACTURING™**  
**1591XXMS**  
[www.hammondmg.com](http://www.hammondmg.com)