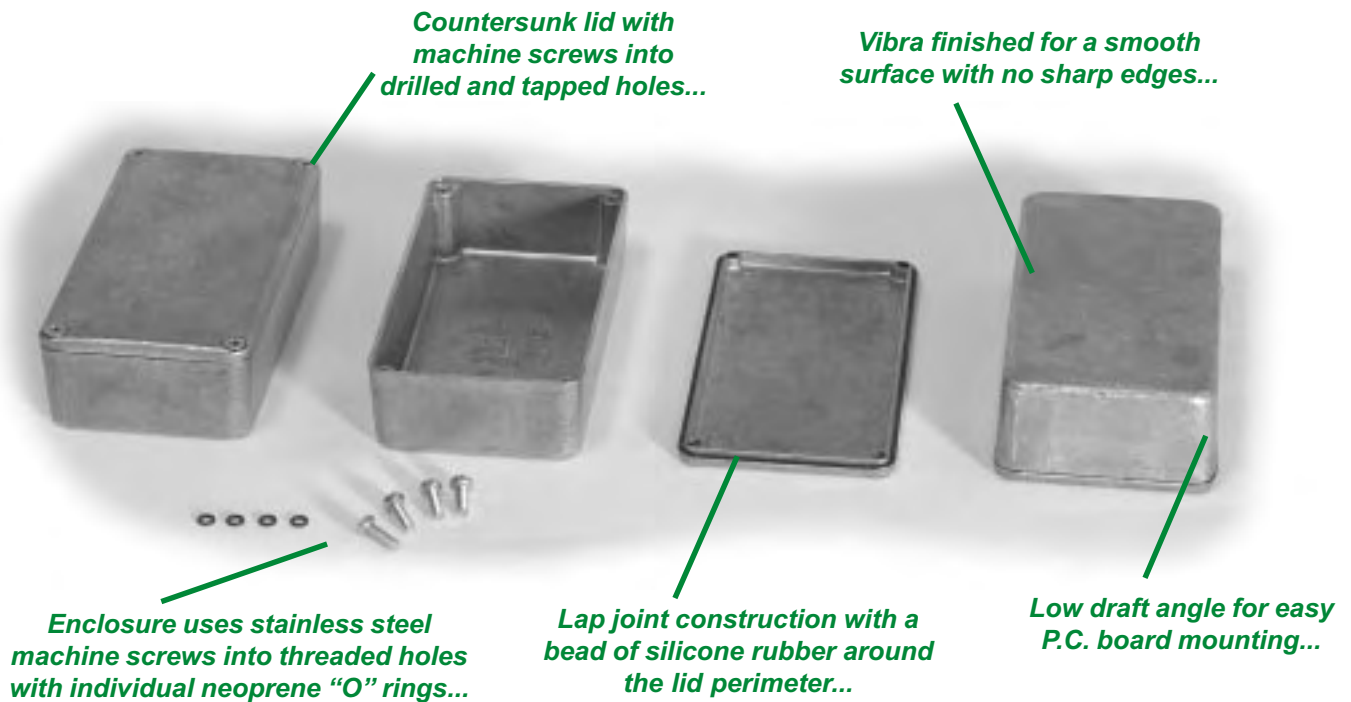


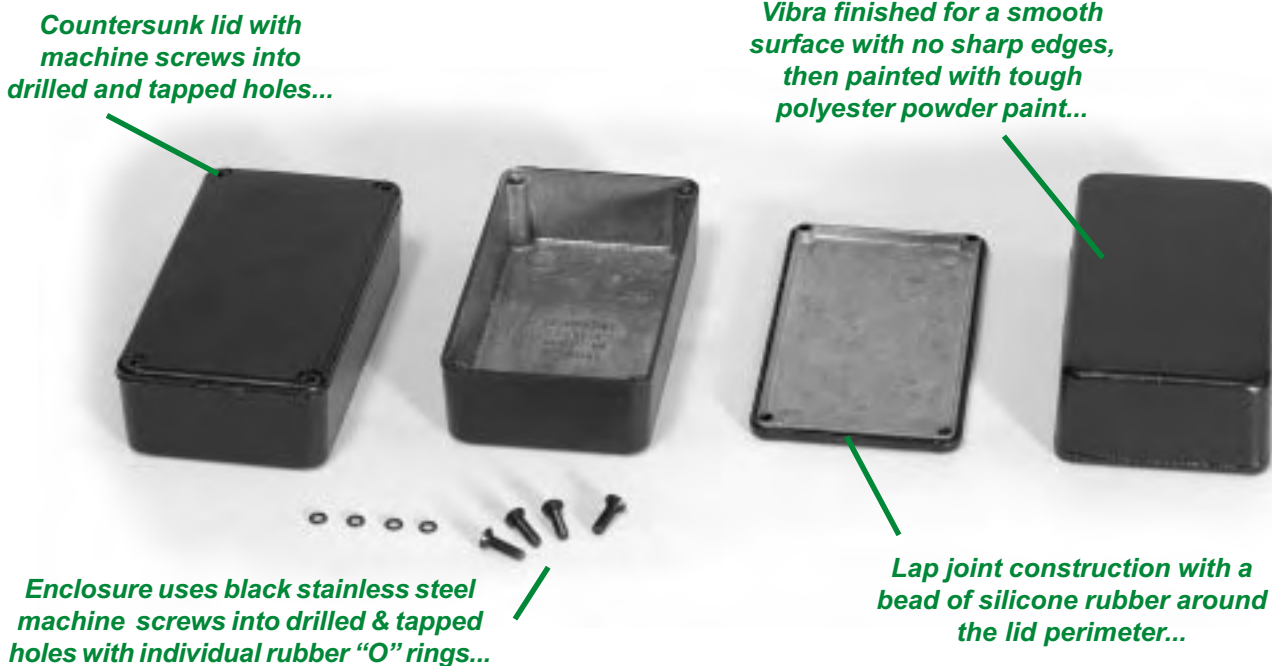
Natural & Painted Watertight (1590W Series)



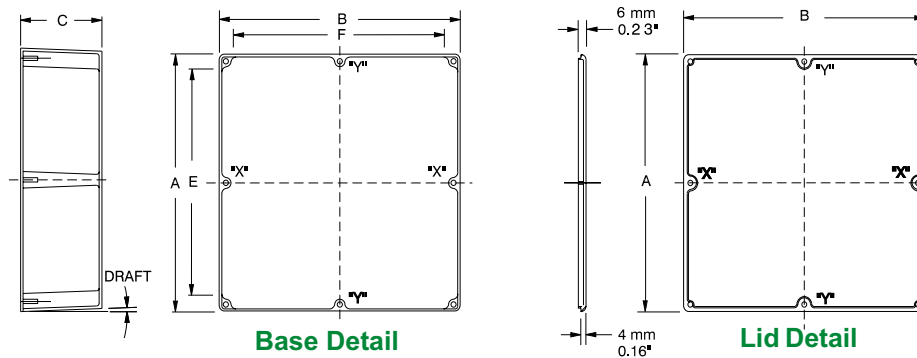
OTHER KEY FEATURES

Sealed Diecast

- Rugged, diecast aluminum alloy (tough yet easy to machine), electronic instrument enclosure.
- Two piece lap joint construction with a bead of silicone rubber around the perimeter provides protection against access of dust and water. Silicone rubber remains usable from -62 to +232°C (-80 to +450 °F)
- Painted version is painted with tough polyester powder paint for a lasting finish, even after machining.
- 4 (or 6 in 1590D, DD & E, 8 in 1590F) 6-32 x 1/2" stainless steel machine screws secure lid - into tapped holes.
- Designed to meet IP65.
- Replacement screws for natural finish series, stainless steel, 6-32 x 1/2" - **1590WMS100**
- Replacement black oxide screws for black finish, stainless steel, 6-32 x 1/2" - **1590WMS100BK**



Natural & Painted Watertight (1590W Series)



Base Detail

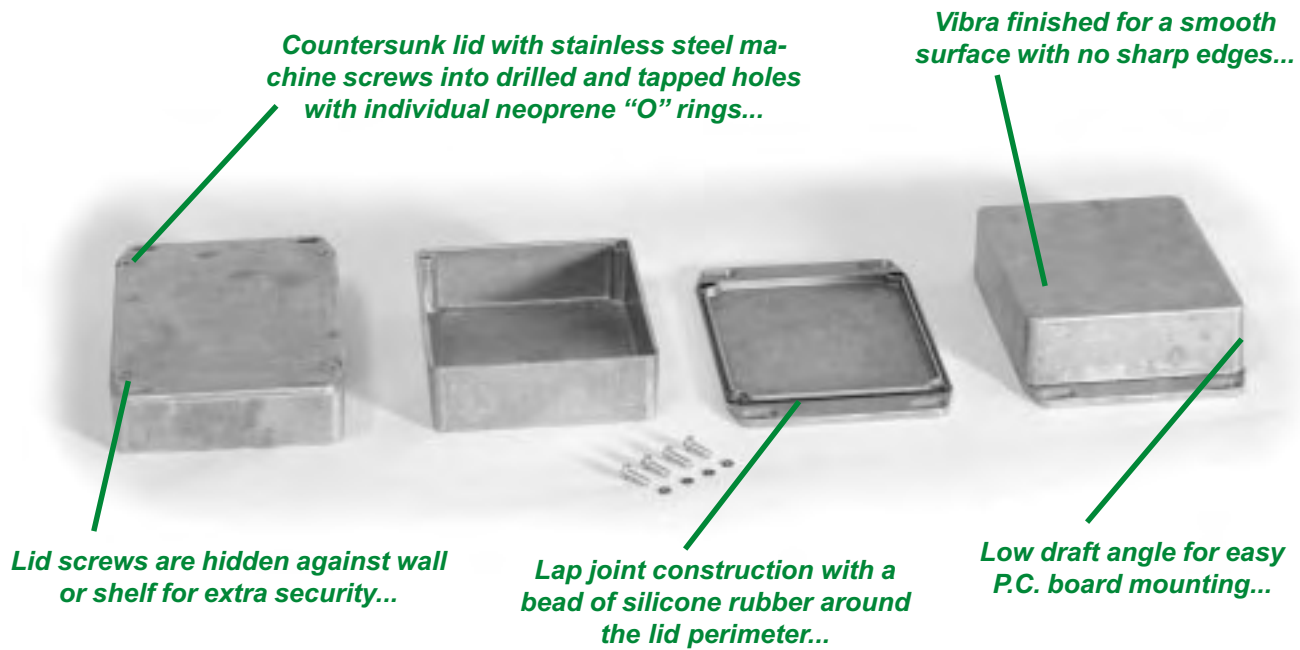
Lid Detail

Part Number		Units	Dimensions					Apx. Draft
Unpainted	Black		A	B	C (No Lid)	E	F	
1590WLLB	1590WLLBBK	inch mm	1.97 50	1.97 50	0.83 21	1.22 31	1.22 31	1°15'
1590WLB	1590WLBK	inch mm	1.99 50.5	1.99 50.5	1.06 27	1.36 34.5	1.36 34.5	1°15'
1590WH	1590WHBK	inch mm	2.07 52.5	1.50 38	1.06 27	1.41 35.9	.86 21.8	1°15'
1590WY	1590WYBK	inch mm	3.62 92	3.62 92	1.50 38	2.70 69	2.70 69	1°15'
1590WA	1590WABK	inch mm	3.64 92.5	1.52 38.5	1.06 27	3.01 76.5	.89 22.5	1°15'
1590WG	1590WGBK	inch mm	3.94 100	1.97 50	0.83 21	3.31 84	1.34 34	1°15'
1590WS	1590WSBK	inch mm	4.35 110.5	3.21 81.5	1.57 40	3.72 94.5	2.58 65.5	1°15'
1590WB	1590WBBK	inch mm	4.39 111.5	2.34 59.5	1.06 27	3.76 95.5	1.71 43.5	1°15'
1590WBB	1590WBBBK	inch mm	4.67 118.5	3.68 93.5	1.18 30	4.04 102.5	3.05 77.5	1°15'
1590WU	1590WUBK	inch mm	4.70 119.5	4.70 119.5	2.17 55	4.07 103.5	4.07 103.5	1°15'
1590WV	1590WVBK	inch mm	4.70 119.5	4.70 119.5	3.54 90	4.07 103.5	4.07 103.5	1°15'
1590WC	1590WCBK	inch mm	4.72 120	3.70 94	2.07 52.5	4.09 104	3.07 78	2°
1590WQ	1590WQBK	inch mm	4.72 120	4.72 120	1.18 30	4.09 104	4.09 104	1°15'
1590WT	1590WTBK	inch mm	4.74 120.5	3.13 79.5	2.17 55	4.11 104.5	2.50 63.5	1°15'
1590WN1	1590WN1BK	inch mm	4.77 121.1	2.60 66	1.39 35.3	4.09 103.8	1.92 48.7	1°15'
1590WKK	1590WKKBK	inch mm	4.92 125	4.92 125	2.10 53	4.13 105	4.13 105	1°15'
1590WK	1590WKBK	inch mm	4.92 125	4.92 125	2.95 75	4.27 108.5	4.27 108.5	1°15'
1590WJ	1590WJBK	inch mm	5.71 145	3.74 95	1.77 45	5.06 128.5	3.09 78.5	2°
1590WP1	1590WP1BK	inch mm	6.01 153	3.24 82	1.81 46	5.38 137	2.48 63	2°
1590WDD	1590WDDBK	inch mm	7.38 187.5	4.70 119.5	1.30 33	6.77 172	4.07 103.5	1°15'
1590WD	1590WDBK	inch mm	7.38 187.5	4.70 119.5	2.05 52	6.75 171.5	4.07 103.5	2°
1590WE	1590WEBK	inch mm	7.38 187.5	4.70 119.5	3.07 78	6.75 171.5	4.07 103.5	2°
1590WF	1590WFBK	inch mm	7.38 187.5	7.38 187.5	2.48 63	6.75 171.5	6.75 171.5	2°
1590WR1	1590WR1BK	inch mm	7.55 192	4.38 111	2.24 57	6.92 176	3.76 95.4	2°

Sealed Diecast

Notes: Assembled height = dimension "C" + .16" (4.0 mm). Wall & lid thickness is roughly .08" (2 mm) and varies with draft due to part being cast. Posts "X" exist on parts 1590D, 1590DD & 1590E. Posts "X" & "Y" exist on part 1590F. For detailed drawings, CAD files or color photos visit our website at: www.hammondmg.com

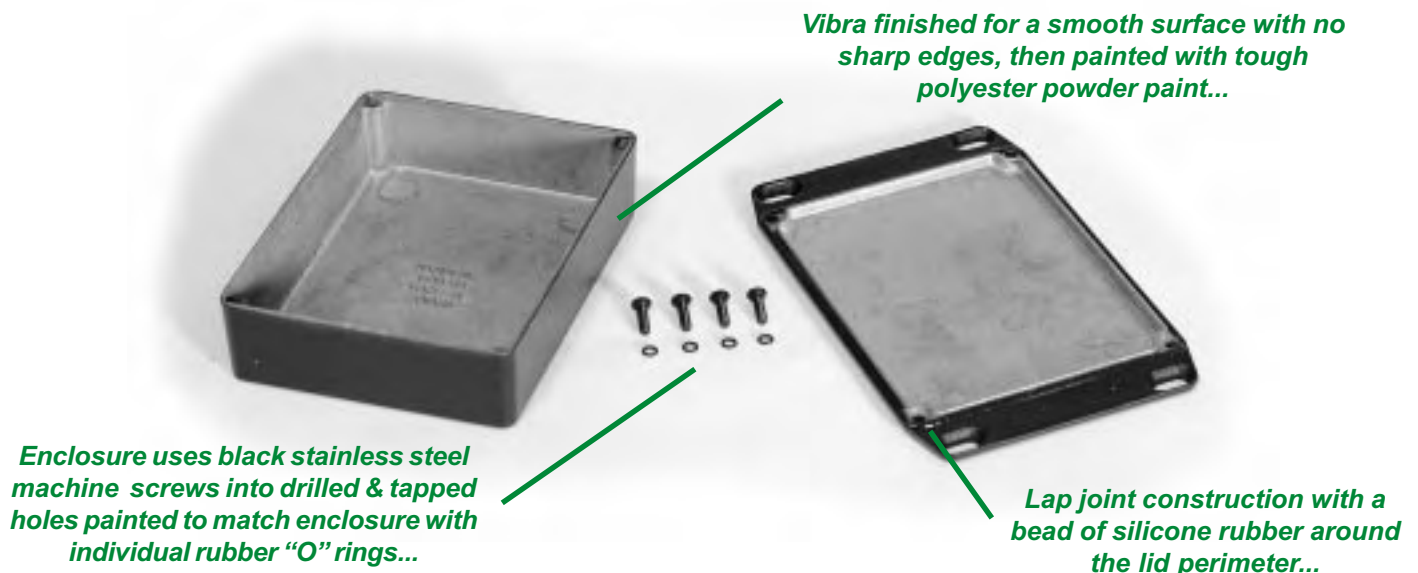
Watertight With Flanged Lid (1590W Series)



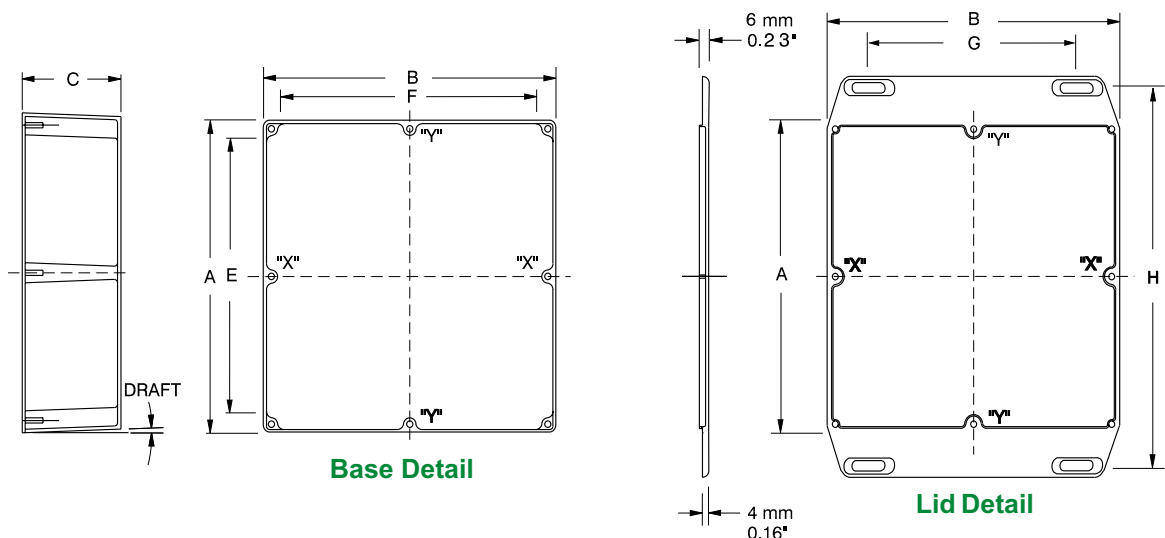
KEY FEATURES

Sealed Diecast

- Rugged, diecast aluminum alloy (tough yet easy to machine), electronic instrument enclosure.
- Two piece lap joint construction with a bead of silicone rubber around the perimeter provides protection against access of dust and water. Silicone rubber remains usable from -62 to +232°C (-80 to +450 °F)•
- Flanged lid allows for easy mounting to walls or shelves.
- These enclosures share the same body and features as our regular type 1590 enclosure except the lid is extended and four countersunk holes are cast into the flanges.
- The flanged lid allows for added security as the lid screws are hidden against the wall or shelf.
- Painted version is painted with tough polyester powder paint for a lasting finish, even after machining.
- Four (or 6 in 1590D, 1590DD & 1590E, 8 in 1590F) 6-32 x 1/2" machine screws secure lid - into tapped holes.
- Designed to meet IP65
- Replacement screws for natural finish series, stainless steel, 6-32 x 1/2" - **1590WMS100**
- Replacement black oxide screws for black finish, stainless steel, 6-32 x 1/2" - **1590WMS100BK**



Watertight With Flanged Lid (1590W Series)



Part Number		Units	Dimensions							Apx. Draft
Unpainted	Black		A	B	C (No Lid)	E	F	G	H	
1590WLBFL	1590WLBFLBK	inch mm	1.99 50.5	1.99 50.5	1.06 27	1.36 34.5	1.36 34.5	1.04 26	2.57 65	1°15'
1590WAFL	1590WAFLBK	inch mm	3.64 92.5	1.52 38.5	1.06 27	3.01 76.5	.89 22.5	.54 14	4.32 110	1°15'
1590WGFL	1590WGFLBK	inch mm	3.94 100	1.97 50	0.83 21	3.31 84	1.34 34	0.99 25.3	4.45 113	1°15'
1590WSFL	1590WSFLBK	inch mm	4.35 110.5	3.21 81.5	1.57 40	3.72 94.5	2.58 65.5	2.26 57	5.03 128	1°15'
1590WBFL	1590WBFLBK	inch mm	4.39 111.5	2.34 59.5	1.06 27	3.76 95.5	1.71 43.5	1.40 35.6	4.99 127	1°15'
1590WBBFL	1590WBBFLBK	inch mm	4.67 118.5	3.68 93.5	1.18 30	4.04 102.5	3.05 77.5	2.73 69	5.38 137	1°15'
1590WUFL	1590WUFLBK	inch mm	4.70 119.5	4.70 119.5	2.17 55	4.07 103.5	4.07 103.5	3.77 96	5.42 138	1°15'
1590WVFL	1590WVFLBK	inch mm	4.70 119.5	4.70 119.5	3.54 90	4.07 103.5	4.07 103.5	3.73 96	5.42 138	1°15'
1590WCFL	1590WCFLBK	inch mm	4.72 120	3.70 94	2.07 52.5	4.09 104	3.07 78	2.73 69	5.38 137	2°
1590WQFL	1590WQFLBK	inch mm	4.72 120	4.72 120	1.18 30	4.09 104	4.09 104	2.73 69	8.04 204	1°15'
1590WTFL	1590WTFLBK	inch mm	4.74 120.5	3.13 79.5	2.17 55	4.11 104.5	2.50 63.5	2.19 56	5.42 138	1°15'
1590WN1FL	1590WN1FLBK	inch mm	4.77 121.1	2.60 66	1.39 35.3	4.09 103.8	1.92 48.7	1.52 38.5	5.35 135.8	1°15'
1590WP1FL	1590WP1FLBK	inch mm	6.01 153	3.24 82	1.81 46	5.38 137	2.48 63	2.20 56	6.62 168	2°
1590WDDFL	1590WDDFLBK	inch mm	7.38 187.5	4.70 119.5	1.30 33	6.77 172	4.07 103.5	3.73 95	8.08 205	1°15'
1590WDFL	1590WDFLBK	inch mm	7.38 187.5	4.70 119.5	2.05 52	6.75 171.5	4.07 103.5	3.73 96	8.08 205	2°
1590WEFL	1590WEFLBK	inch mm	7.38 187.5	4.70 119.5	3.07 78	6.75 171.5	4.07 103.5	3.73 96	8.08 205	2°
1590WFFL	1590WFFLBK	inch mm	7.38 187.5	7.38 187.5	2.48 63	6.75 171.5	6.75 171.5	6.43 163	8.08 205	2°
1590WR1FL	1590WR1FLBK	inch mm	7.55 192	4.38 111	2.24 57	6.92 176	3.76 95.4	3.13 79.4	8.05 204	2°

Notes: Assembled height = dimension "C" + .16" (4.0 mm). Wall & lid thickness is roughly .08" (2 mm) and varies with draft due to part being cast. Posts "X" exist on parts 1590D, 1590DD & 1590E. Posts "X" & "Y" exist on part 1590F. For detailed drawings, CAD files or color photos visit our website at: www.hammondmfg.com

Sealed Diecast

Watertight With Bottom Flange (1590W Series)

Bottom flange is an aluminum plate, welded onto the base of the enclosure...

Lid screws are exposed for easy enclosure access...

Countersunk lid with stainless steel machine screws into drilled and tapped holes with individual neoprene "O" rings...



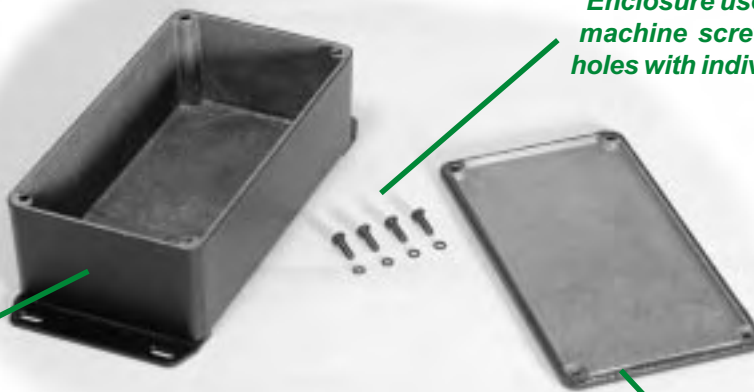
Vibra finished for a smooth surface with no sharp edges...

Lap joint construction with a bead of silicone rubber around the lid perimeter...

OTHER KEY FEATURES

- Rugged, diecast aluminum alloy (tough yet easy to machine), electronic instrument enclosure.
- Two piece lap joint construction with a bead of silicone rubber around the perimeter provides protection against access of dust and water. Silicone rubber remains usable from -62 to +232°C (-80 to +450 °F)
- Painted version is painted with tough polyester powder paint for a lasting finish, even after machining.
- Four (or 6 in 1590D, 1590DD & 1590E, 8 in 1590F) 6-32 x 1/2" stainless steel machine screws secure lid - into tapped holes.
- Low side wall draft angle (2 degrees or less) for easy P.C. board mounting.
- Designed to meet IP65
- Replacement screws for natural finish series, stainless steel, 6-32 x 1/2" - **1590WMS100**
- Replacement black oxide screws for black finish, stainless steel, 6-32 x 1/2" - **1590WMS100BK**

Enclosure uses black stainless steel machine screws into drilled & tapped holes with individual rubber "O" rings...

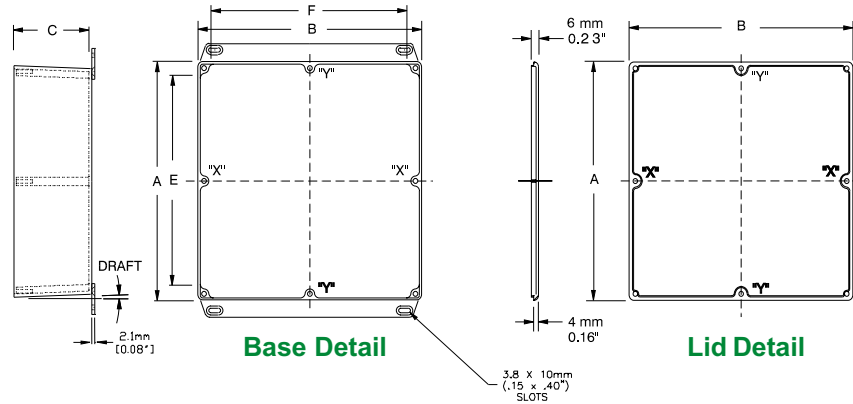


Vibra finished for a smooth surface with no sharp edges, then painted with tough polyester powder paint...

Lap joint construction with a bead of silicone rubber around the lid perimeter...

Sealed Diecast

Watertight With Bottom Flange (1590W Series)



Part Number		Units	Dimensions					Apx. Draft
Unpainted	Black		A	B	C (No Lid)	E	F	
1590WLLBF	1590WLLBFBK	inch mm	1.97 50	1.97 50	0.83 21	1.22 31	1.22 31	1°15'
1590WLBFB	1590WLBFBK	inch mm	1.99 50.5	1.99 50.5	1.06 27	1.36 34.5	1.36 34.5	1°15'
1590WHFB	1590WHFBK	inch mm	2.07 52.5	1.50 38	1.06 27	1.41 35.9	.86 21.8	1°15'
1590WYFB	1590WYFBK	inch mm	3.62 92	3.62 92	1.50 38	2.70 69	2.70 69	1°15'
1590WAFB	1590WAFBK	inch mm	3.64 92.5	1.52 38.5	1.06 27	3.01 76.5	.89 22.5	1°15'
1590WGBF	1590WGBFBK	inch mm	3.94 100	1.97 50	0.83 21	3.31 84	1.34 34	1°15'
1590WSFB	1590WSFBK	inch mm	4.35 110.5	3.21 81.5	1.57 40	3.72 94.5	2.58 65.5	1°15'
1590WBF	1590WBFBK	inch mm	4.39 111.5	2.34 59.5	1.06 27	3.76 95.5	1.71 43.5	1°15'
1590WBBFB	1590WBBFBK	inch mm	4.67 118.5	3.68 93.5	1.18 30	4.04 102.5	3.05 77.5	1°15'
1590WUFB	1590WUFBK	inch mm	4.70 119.5	4.70 119.5	2.17 55	4.07 103.5	4.07 103.5	1°15'
1590WVFB	1590WVFBK	inch mm	4.70 119.5	4.70 119.5	3.54 90	4.07 103.5	4.07 103.5	1°15'
1590WCFB	1590WCFBK	inch mm	4.72 120	3.70 94	2.07 52.5	4.09 104	3.07 78	2°
1590WQFB	1590WQFBK	inch mm	4.72 120	4.72 120	1.18 30	4.09 104	4.09 104	1°15'
1590WTFB	1590WTFBK	inch mm	4.74 120.5	3.13 79.5	2.17 55	4.11 104.5	2.50 63.5	1°15'
1590WN1FB	1590WN1FBK	inch mm	4.77 121.1	2.60 66	1.39 35.3	4.09 103.8	1.92 48.7	1°15'
1590WKKFB	1590WKKFBK	inch mm	4.92 125	4.92 125	2.10 53	4.13 105	4.13 105	1°15'
1590WKFB	1590WKFBK	inch mm	4.92 125	4.92 125	2.95 75	4.27 108.5	4.27 108.5	1°15'
1590WJFB	1590WJFBK	inch mm	5.71 145	3.74 95	1.77 45	5.06 128.5	3.09 78.5	2°
1590WP1FB	1590WP1FBK	inch mm	6.01 153	3.24 82	1.81 46	5.38 137	2.48 63	2°
1590WDDFB	1590WDDFBK	inch mm	7.38 187.5	4.70 119.5	1.30 33	6.77 172	4.07 103.5	1°15'
1590WDFB	1590WDFBK	inch mm	7.38 187.5	4.70 119.5	2.05 52	6.75 171.5	4.07 103.5	2°
1590WEFB	1590WEFBK	inch mm	7.38 187.5	4.70 119.5	3.07 78	6.75 171.5	4.07 103.5	2°
1590WFFB	1590WFFBK	inch mm	7.38 187.5	7.38 187.5	2.48 63	6.75 171.5	6.75 171.5	2°
1590WR1FB	1590WR1FBK	inch mm	7.55 192	4.38 111	2.24 57	6.92 176	3.76 95.4	2°

Notes: Assembled height = dimension "C" + .16" (4.0 mm). Wall & lid thickness is roughly .08" (2 mm) and varies with draft due to part being cast. Posts "X" exist on parts 1590D, 1590DD & 1590E. Posts "X" & "Y" exist on part 1590F. For detailed drawings, CAD files or color photos visit our website at: www.hammondmgf.com

Sealed Diecast

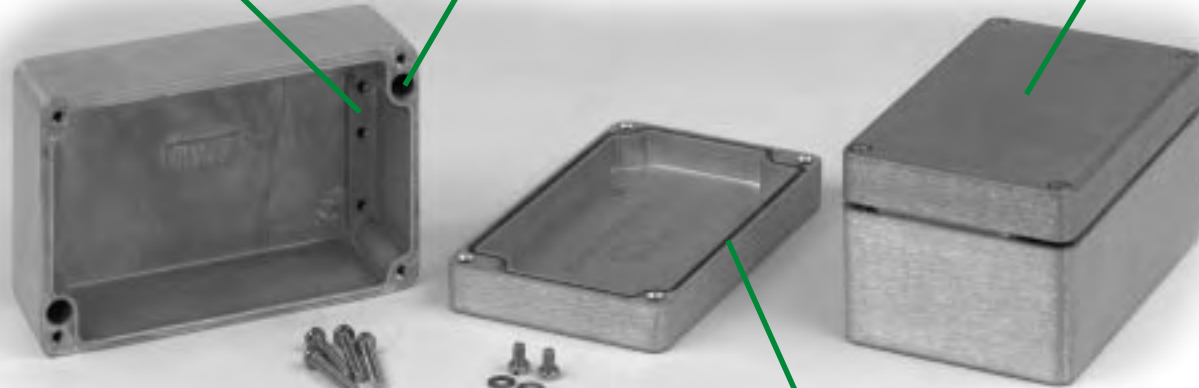
Watertight, heavy duty - thick wall (1590Z Series)

With Mounting Shelf

Mounting shelf

Easy wall mounting via "through box - blind hole" construction, outside of gasket protection...

Natural aluminum with a smooth brushed finish...



Stainless steel captivated machine screws ...

Copper ground screws & washers...

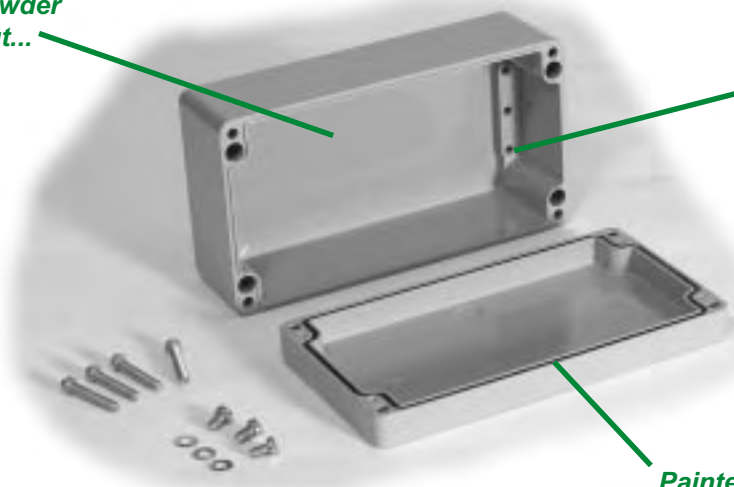
Molded, one piece silicone rubber gasket mounts into cast lid groove, compressed by box tongue...

KEY FEATURES

- Rugged, diecast aluminum alloy (tough yet easy to machine), electronic instrument enclosure.
- "Tongue & groove" construction to provide protection against access of dust and water. Ideal for repetitive opening and closing.
- Unpainted version comes with an installed preformed silicone rubber gasket.
- Painted versions have a poured in silicone rubber gasket.
- Four recessed stainless steel machine screws secure lid into tapped holes. Screws are self capturing.
- Designed to meet IP65.
- North American Mark of Safety - cUL & UL listed. Certified to Nema 4X standards (UL508) - File #E65324.
- Painted version is designed for outdoor applications, painted inside and out with a tough polyester powder paint. Choice of grey (RAL 7001) or black.

Painted versions are powder painted inside and out...

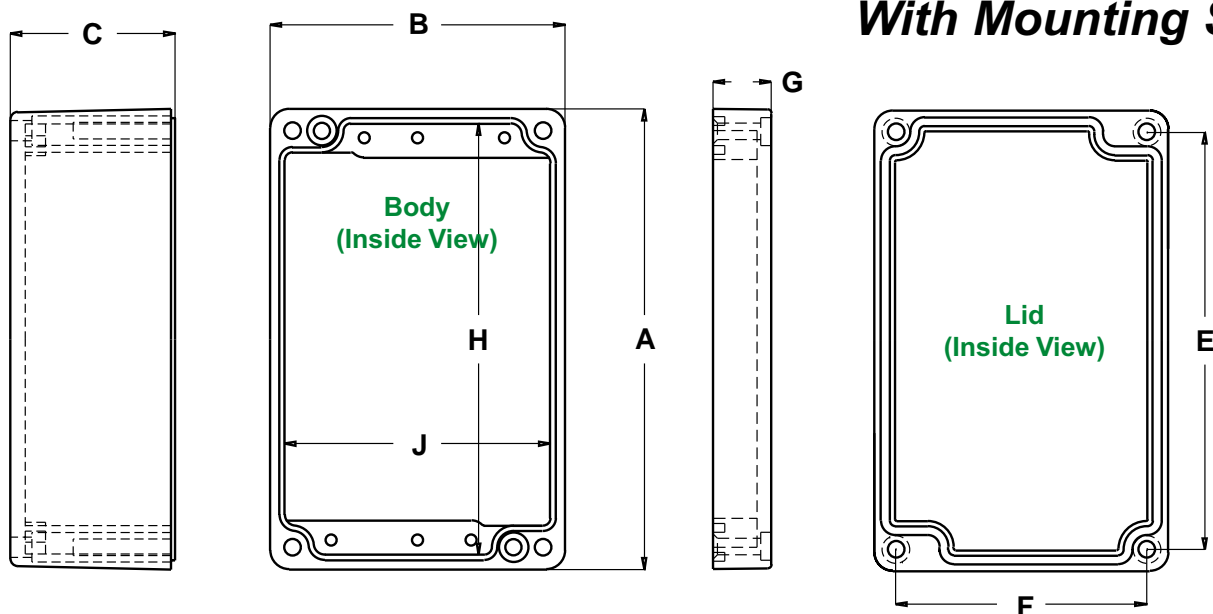
Ground points are left unpainted...



Painted versions include a poured in silicone rubber gasket...



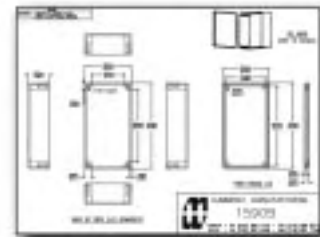
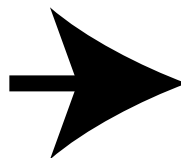
Watertight, heavy duty - thick wall (1590Z Series)



With Mounting Shelf

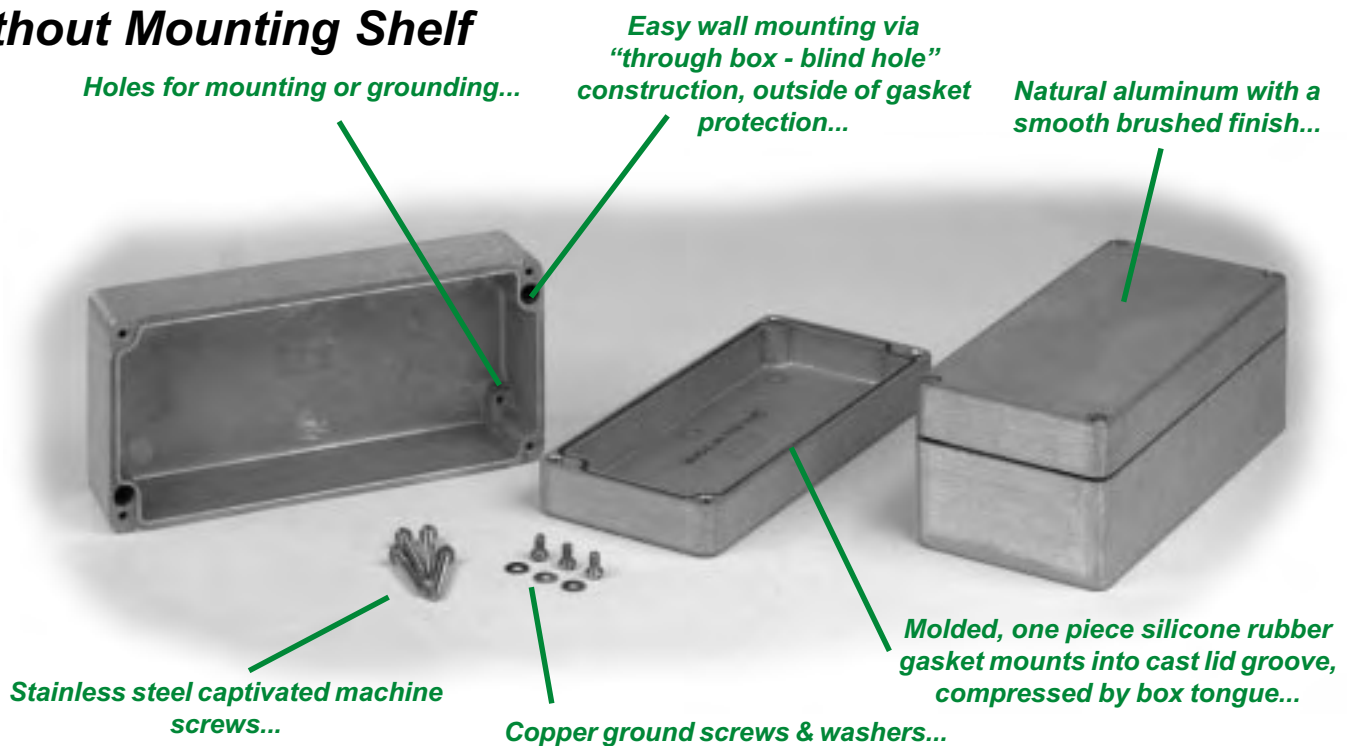
Part Number			Units	Dimensions								Lid Grounding Screw	Mounting Shelf
Unpainted	Black	Grey		A	B	C (No Lid)	E	F	G	H	J		
1590Z100	1590Z100BK	1590Z100GY	inch mm	2.94 75	3.14 80	1.57 40	2.49 63	2.68 68	.47 12	2.64 67	2.84 72	No	Yes
1590Z119	1590Z119BK	1590Z119GY	inch mm	4.80 122	4.72 120	2.36 60	4.14 105	4.09 104	.80 20	4.45 113	4.36 111	Yes	Yes
1590Z120	1590Z120BK	1590Z120GY	inch mm	4.92 125	3.15 80	1.72 43	4.46 113	2.68 68	.62 15	4.61 117	2.84 72	No	Yes
1590Z160	1590Z160BK	1590Z160GY	inch mm	6.30 160	6.30 160	2.76 70	5.55 141	5.55 141	.79 20	5.98 152	5.98 152	Yes	Yes
1590Z231	1590Z231BK	1590Z231GY	inch mm	7.88 200	9.05 230	3.63 92	7.10 180	8.28 210	.80 20	7.62 194	8.45 215	Yes	Yes
1590Z150	1590Z150BK	1590Z150GY	inch mm	8.70 220	4.76 120	2.39 60	8.07 205	4.09 104	.79 20	8.31 211	4.37 111	No	Yes
1590Z162	1590Z162BK	1590Z162GY	inch mm	10.24 260	6.25 159	2.75 70	9.38 238	5.50 140	.79 20	9.83 249	5.94 151	Yes	Yes
1590Z166	1590Z166BK	1590Z166GY	inch mm	14.17 360	6.30 160	2.76 70	13.38 340	4.34 110	.79 20	13.7 349	5.87 149	Yes	Yes

Sealed Diecast



Watertight, heavy duty - thick wall (1590Z Series)

Without Mounting Shelf



KEY FEATURES

- Rugged, diecast aluminum alloy (tough yet easy to machine), electronic instrument enclosure.
- "Tongue & groove" construction provides protection against access of dust and water. Ideal for repetitive opening and closing.
- Unpainted version comes with an installed preformed silicone rubber gasket.
- Painted versions have a poured in silicone rubber gasket.
- Four recessed stainless steel machine screws secure lid into tapped holes. Screws are self captivated.
- Designed to meet IP65.
- North American Mark of Safety - cUL & UL listed. Certified to Nema 4X standards (UL508) - File #E65324.
- Painted version is designed for outdoor applications, painted inside and out with a tough polyester powder paint. Choice of grey (RAL 7001) or black

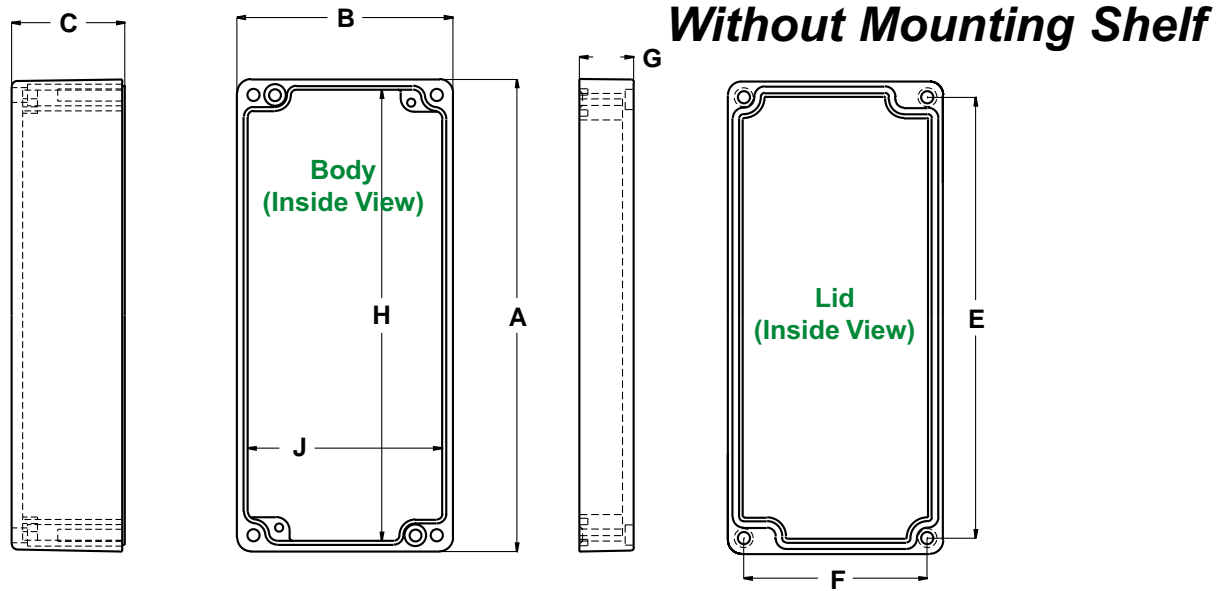
Painted versions are powder painted inside and out...

Ground points are left unpainted...



Painted versions include poured in silicone rubber gasket...

Watertight, heavy duty - thick wall (1590Z Series)



Without Mounting Shelf

Part Number			Units	Dimensions								Lid Grounding Screw	Mounting Shelf
Unpainted	Black	Grey		A	B	C (No Lid)	E	F	G	H	J		
1590Z060	1590Z060BK	1590Z060GY	inch mm	1.98 50	1.77 45	.95 24	1.62 41	1.44 37	.24 6	1.77 45	1.57 40	Yes	No
1590Z061	1590Z061BK	1590Z061GY	inch mm	2.51 64	2.29 58	1.03 26	2.04 52	1.80 46	.39 10	2.21 56	1.97 50	No	No
1590Z110	1590Z110BK	1590Z110GY	inch mm	2.94 75	3.14 80	1.57 40	2.49 63	2.68 68	.47 12	2.64 67	2.84 72	No	No
1590Z062	1590Z062BK	1590Z062GY	inch mm	3.86 98	2.52 64	1.03 26	3.40 86	2.00 52	.39 10	3.50 90	2.20 56	No	No
1590Z063	1590Z063BK	1590Z063GY	inch mm	5.89 150	2.51 64	1.03 26	5.42 138	2.02 51	.39 10	5.60 142	2.20 56	No	No
1590Z130	1590Z130BK	1590Z130GY	inch mm	6.89 175	3.15 80	1.61 40	6.43 163	2.68 68	.47 12	6.56 167	2.84 72	No	No
1590Z135	1590Z135BK	1590Z135GY	inch mm	6.89 175	3.15 80	1.61 40	6.43 163	2.68 68	.79 20	6.56 167	2.84 72	Yes	No

Sealed Diecast

