Carlon®
Nonmetallic Enclosures

Circuit Safe® NEMA

Circuit Safe® JIC

Himeline® HE

Himeline® HS

Himeline® HP

Himeline® HLA/HLS

Himeline® HLP

Slack and Splice Enclosures

Introduction

All the enclosure choices you need.

As the industry leader in nonmetallic, nonconductive wiring management products, Carlon® offers a broader line than anyone — all designed for easier installation, greater performance, and lower installed cost. And what's true across our line holds equally true for our nonmetallic, nonconductive enclosures. Quite simply, we offer the most complete line of such enclosures and accessories of any manufacturer in the market. From routine applications and normal service to the most demanding environments, you can be sure we have the right enclosures in the right sizes for you. In addition, you can count on us for any modification you might require such as color molded enclosures, painted enclosures, and RFI/EMI protection. And whether it's standard or modified, you can also count on us for the very best in service and delivery. Take a closer look at all we offer, then contact us to learn more on how we can reduce your total enclosure costs with our lightweight, easily machinable, corrosion resistant, nonmetallic enclosures.

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Circuit Safe NEMA Enclosures

Circuit Safe NEMA Enclosures are the flagship product of the Carlon Enclosure offering. Molded in tough, durable polycarbonate resin, these enclosures lead the market in terms of design, durability, aesthetics, and economy of use.

Ranging in size from 6"x4"x4" to 16"x14"x6", all Circuit Safe NEMA products are UL-50 Listed and meet Types 4X, 12, and 13. These enclosures utilize recognized materials that carry an ultraviolet rating of F1, ensuring a very long, stable service life when installed outdoors. In addition, the use of polycarbonate material means that these enclosures enjoy an extremely high impact resistance rating…almost three times more impact resistant than traditional fiberglass enclosures.

Installation of components is made easy, too, with the patented Panel Adjuster Kits and Swing Out Panel Kits. Sub-panels can be stacked or suspended at any depth within the enclosure, maximizing the space available for component mounting. Machining polycarbonate is also safe and easy. There are no splintering problems or airborne fibers typical when machining traditional fiberglass products.

Lighter, stronger, easier and safer to use, and better-looking. Check out Carlon's CircutSafe NEMA line today.

Features and Benefits
- 100% non-metallic construction, including hinges
- Sturdy SS latches install without penetration of the enclosure base
- Clear covers are available which eliminates the need for window kits
- All cover screws are captive
- Patented panel suspension system allows the installation of panels at any depth, including stacking of multiple panels
- Swing panels are also available
- Available in junction boxes, external hinge, and hidden hinge versions
- Subpanels are available in steel, PVC, or aluminum
- Non-metallic mounting rails for easy installation
- Less than half the weight of metal enclosures, 25% lighter than fiberglass, easier to handle and less expensive to ship
- Full modification services are available

Applications
- Any outdoor applications especially where sunlight resistance is an issue
- Applications where water is present
- Applications where damage during shipment or installation or use is an issue
- Any applications where it is necessary to view internal components through a clear cover
- Applications where weight is an issue
- Applications where the ability to pass wireless signals is needed
- Applications where rust and corrosion are an issue

Examples
- Septic and pump controls
- Wireless system component protection
- Marina and sea-side installations
- Controls that require though-cover viewing of read-outs and dials
- Machine controls/process controls
- Food and beverage process controls
- Security system controls

Standards
- Meets or exceeds NEMA Types 4X, 12, and 13
- Listed per UL-50 as Types 4X, 12, and 13

NEMA Enclosure Styles

Circuit Safe® NEMA enclosures are available in three different cover options and a wide range of sizes. From our screw cover style enclosures to our hidden hinge cover style enclosures to our external hinge cover style enclosures, Carlon has a Circuit Safe NEMA enclosure to meet your application-specific need.

Styles

• Screw Cover
• External Hinge
• Hidden Hinge

Cover Color Options

• Opaque
• Clear

Material

• Polycarbonate (Bases and Lids)

Screw Cover

External Hinge Cover

Hidden Hinge Cover

Screw-On Cover
Meets NEMA 1, 2, 3, 3S, 3X, 3SX, 4, 4X, 12

Assembled Enclosures

Opaque Cover

Clear Cover

Size	Opaque Cover*	Clear Cover*	Back Panels** Steel/PVC	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.) Opaque/Clear
6 x 4 x 4	NS644	NV644	JP64 / JP64P	1	Opa 1.8 / Clr 1.9
6 x 6 x 4	NS664	NV664	JP66 / JP66P	1	Opa 2.4 / Clr 2.4
8 x 6 x 4	NS864	NV864	JP86 / JP86P	1	Opa 2.9 / Clr 2.8
8 x 8 x 4	NS884	NV884	JP88 / JP88P	1	Opa 3.2 / Clr 3.3
10 x 8 x 4	NS1084	NV1084	JP108 / JP108P	1	Opa 4.0 / Clr 3.9
10 x 8 x 6	NS1086	NV1086	JP108 / JP108P	1	Opa 4.6 / Clr 4.5
10 x 10 x 6	NS10106	NV10106	JP1010 / JP1010P	1	Opa 5.3 / Clr 4.9
12 x 10 x 6	NS12106	NV12106	JP1210 / JP1210P	1	Opa 6.1 / Clr 5.2
12 x 12 x 6	NS12126	NV12126	JP1212 / JP1212P	1	Opa 6.8 / Clr 6.1
14 x 12 x 6	NS14126	NV14126	JP1412 / JP1412P	1	Opa 7.4 / Clr 7.0
16 x 14 x 6	NS16146	NV16146	JP1614 / JP1614P	1	Opa 9.2 / Clr 8.1

* Assembled Enclosures include body, lid and mounting rail kit.
** Order back panels separately.

Individual Components

Enclosure Size	Enclosure Base*			Enclosure Lids				Back Panels**	
	Part Nos.	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)	Opaque Lids	Clear Lids	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)	Steel /PVC Part Nos.	Std. Ctn Qty.
6 x 4 x 4	NP644B	18	21	NS64L	NV64L	16	Opa 6.4 / Clr 5.7	JP64 / JP64P	1
6 x 6 x 4	NP664B	12	17	NS66L	NV66L	12	Opa 6.2 / Clr 5.7	JP66 / JP66P	1
8 x 6 x 4	NP864B	12	18	NS86L	NV86L	9	Opa 6 / Clr 4.4	JP86 / JP86P	1
8 x 8 x 4	NP884B	14	28	NS88L	NV88L	18	Opa 14 / Clr 11.2	JP88 / JP88P	1
10 x 8 x 4	NP1084B	12	26	NS108L	NV108L	12	Opa 13 / Clr 11	JP108 / JP108P	1
10 x 8 x 6	NP1086B	8	23	NS108L	NV108L	12	Opa 13 / Clr 11	JP108 / JP108P	1
10 x 10 x 6	NP1010B	6	20	NS1010L	NV1010L	11	Opa 14 / Clr 12	JP1010 / JP1010P	1
12 x 10 x 6	NP1210B	6	23	NS1210L	NV1210L	12	Opa 15 / Clr 15	JP1210 / JP1210P	1
12 x 12 x 6	NP1212B	5	22	NS1212L	NV1212L	10	Opa 15 / Clr 14	JP1212 / JP1212P	1
14 x 12 x 6	NP1412B	5	24	NS1412L	NV1412L	5	Opa 9 / Clr 9	JP1412 / JP1412P	1
16 x 14 x 6	NP1614B	4	31	NS1614L	NV1614L	5	Opa 11 / Clr 11	JP1614 / JP1614P	1

* Mounting rails are not included. See "Mounting Rails" listed in the Enclosure Accessories section.
** Order back panels separately.

Screw-On Cover

Specifications

Enclosure With Clear Lid Part Nos.*	Opaque Lid Part Nos.*	Enclosure Size						Enclosure Mounting Hole Spacing		Panel Mounting Hole Spacing		Back Panel Size		Back Panel** Part Nos.	
		A	B	C	D	E	F	G	H	I	J	K	L	Steel	PVC
NV644	NS644	6.40	4.40	4.49	3.98	5.13	7.69	6.75	2.00	4.25	2.25	4.88	2.88	JP64	JP64P
NV664	NS664	6.40	6.40	4.49	3.98	5.13	7.69	6.75	4.00	4.25	4.25	4.88	4.88	JP66	JP66P
NV864	NS864	8.40	6.40	4.49	3.98	5.13	9.69	8.75	4.00	6.25	4.25	6.75	4.88	JP86	JP86P
NV884	NS884	8.40	8.40	4.49	3.98	5.13	9.69	8.75	6.00	6.25	6.25	6.75	6.88	JP88	JP88P
NV1084	NS1084	10.40	8.40	4.49	3.98	5.13	11.69	10.75	6.00	8.25	6.25	8.75	6.88	JP108	JP108P
NV1086	NS1086	10.40	8.40	6.49	5.98	7.13	11.69	10.75	6.00	8.25	6.25	8.75	6.88	JP108	JP108P
NV10106	NS10106	10.40	10.40	6.49	5.98	7.13	11.69	10.75	8.00	8.25	8.25	8.75	8.88	JP1010	JP1010P
NV12106	NS12106	12.40	10.40	6.49	5.98	7.13	13.69	12.75	8.00	10.25	8.25	10.75	8.88	JP1210	JP1210P
NV12126	NS12126	12.40	12.40	6.49	5.98	7.13	13.69	12.75	10.00	10.25	10.25	10.75	10.88	JP1212	JP1212P
NV14126	NS14126	14.40	12.40	6.49	5.98	7.13	15.69	14.75	10.00	12.25	10.25	12.75	10.88	JP1412	JP1412P
NV16146	NS16146	16.40	14.40	6.49	5.98	7.13	17.69	16.75	12.00	14.25	12.25	14.75	12.88	JP1614	JP1612P

 * Assembled Enclosures include body, lid and mounting rail kit.
** Order back panels separately. ($10/32$ – $3/8$ Back Panel screws not supplied.)

Mounting Rail
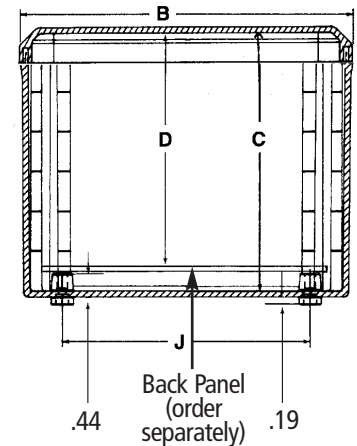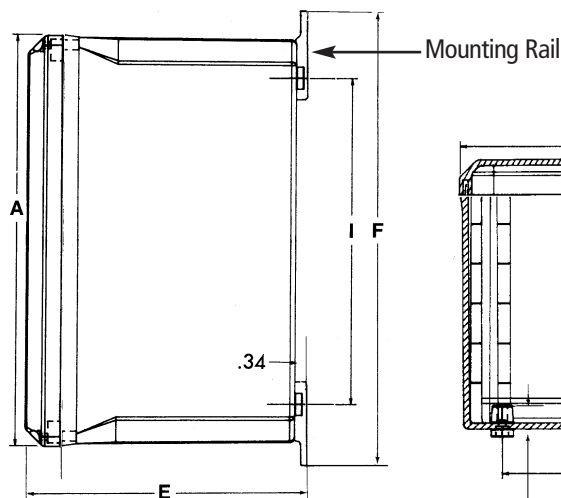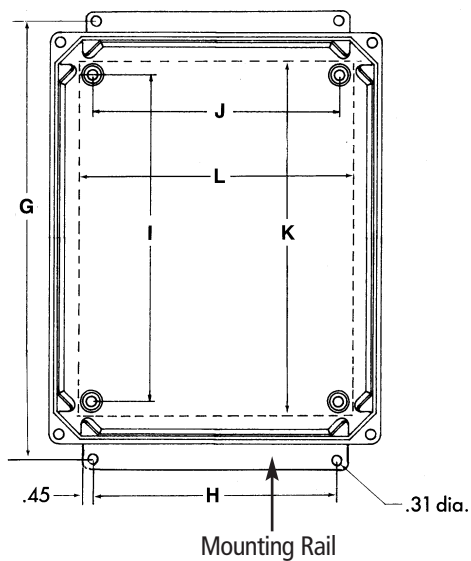
Hidden Hinge Cover
Meets NEMA 1, 2, 3, 3S, 3X, 3SX, 4, 4X, 12

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Assembled Enclosures

Opaque Cover

Clear Cover

Size	Opaque Cover*	Clear Cover*	Back Panels** Steel/PVC	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.) Opaque/Clear
6 x 4 x 5 (y)	NH644	NI644	JP64 / JP64P	1	Opa 2.2 / Clr 2.8
6 x 6 x 5	NH664	NI664	JP66 / JP66P	1	Opa 2.7 / Clr 3.2
8 x 6 x 5	NH864	NI864	JP86 / JP86P	1	Opa 3.3 / Clr 3.8
8 x 8 x 5	NH884	NI884	JP88 / JP88P	1	Opa 3.8 / Clr 3.8
10 x 8 x 5	NH1084	NI1084	JP108 / JP108P	1	Opa 4.0 / Clr 4.5
10 x 8 x 7	NH1086	NI1086	JP108 / JP108P	1	Opa 5.2 / Clr 5.1
10 x 10 x 7	NH10106	NI10106	JP1010 / JP1010P	1	Opa 5.7 / Clr 5.8
12 x 10 x 7	NH12106	NI12106	JP1210 / JP1210P	1	Opa 6.9 / Clr 6.1
12 x 12 x 7	NH12126	NI12126	JP1212 / JP1212P	1	Opa 7.7 / Clr 7.2
14 x 12 x 7	NH14126	NI14126	JP1412 / JP1412P	1	Opa 8.3 / Clr 7.9
16 x 14 x 7	NH16146	NI16146	JP1614 / JP1614P	1	Opa 10.1 / Clr 9.6

   * Assembled Enclosures (except NI1084) include body, lid and mounting rail kit.
 ** Order back panels separately.
  (y) 6 x 4 x 5 size not available with quick-release latches.

Individual Components

Enclosure Size	Enclosure Base*			Enclosure Lids				Collars			Back Panels**		Latches		
	Part Nos.	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)	Opaque Lids Part Nos.	Clear Lids Part Nos.	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)	Part Nos.	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)	Steel/PVC Part Nos.	Std. Ctn. Qty.	Steel Latch Part Nos.	Nonmetallic Latch Part Nos.	Std. Ctn. Qty.
6 x 4 x 5(y)	NP644B	18	21	NH64L	NI64L	16	Opa 6.8 / Clr 6.3	NH64C	16	6	JP64 / JP64P	1	SSLS	NPLIS	1
6 x 4 x 5	NP664B	12	17	NH66L	NI66L	12	Opa 6.8 / Clr 6.3	NH66C	12	5	JP66 / JP66P	1	SSLS	NPLIS	1
8 x 6 x 5	NP864B	12	18	NH86L	NI86L	9	Opa 6.3 / Clr 5.7	NH86C	9	4	JP86 / JP86P	1	SSLS	NPLIS	1
8 x 8 x 5	NP884B	14	28	NH88L	NI88L	18	Opa 16 / Clr 15	NH88C	9	3.6	JP88 / JP88P	1	SSLS	NPLIS	1
10 x 8 x 5	NP1084B	12	26	NH108L	NI108L	12	Opa 13 / Clr 12	NH108C	12	7.8	JP108 / JP108P	1	SSLS	NPLIS	1
10 x 8 x 7	NP1086B	8	23	NH108L	NI108L	12	Opa 13 / Clr 12	NH108C	12	7.8	JP108 / JP108P	1	SSLS	NPLIS	1
10 x 10 x 7	NP1010B	6	20	NH1010L	NI1010L	11	Opa 14 / Clr 13	NH1010C	11	7.5	JP1010 / JP1010P	1	SSLS	NPLIS	1
12 x 10 x 7(z)	NP1210B	6	23	NH1210L	NI1210L	12	Opa 17 / Clr 6	NH1210C	12	8	JP1210 / JP1210P	1	SSLS	NPLIS	1
12 x 12 x 7(z)	NP1212B	5	22	NH1212L	NI1212L	10	Opa 17 / Clr 16	NH1212C	12	7.7	JP1212 / JP1212P	1	SSLS	NPLIS	1
14 x 12 x 7(z)	NP1412B	5	24	NH1412L	NI1412L	5	Opa 10 / Clr 10	NH1412C	5	4.7	JP1412 / JP1412P	1	SSLS	NPLIS	1
16 x 14 x 7(z)	NP1614B	4	31	NH1614L	NI1614L	5	Opa 13 / Clr 12	NH1614C	5	5.6	JP1614 / JP1614P	1	SSLS	NPLIS	1

  * Mounting rails are not included. See "Mounting Rails" listed in the Enclosure Accessories section.
 ** Order back panels separately.
 (y) 6 x 4 x 5 enclosures are not available with quick-release latches.
 (z) Sizes 12 x 10 and larger require two (2) latches per enclosure.

Hidden Hinge Cover

Specifications

Enclosure With Opaque Lid Part Nos.*	Clear Lid Part Nos.*	Enclosure Size						Enclosure Mounting Hole Spacing		Panel Mounting Hole Spacing		Back Panel Size		Back Panel** Part Nos.	
		A	B	C	D	E	F	G	H	I	J	K	L	Steel	PVC
NH644	NI644	6.40	4.40	5.30	4.79	5.94	7.69	6.75	2.00	4.25	2.25	4.88	2.88	JP64	JP64P
NH664	NI664	6.40	6.40	5.30	4.79	5.94	7.69	6.75	4.00	4.25	4.25	4.88	4.88	JP66	JP66P
NH864	NI864	8.40	6.40	5.30	4.79	5.94	9.69	8.75	4.00	6.25	4.25	6.75	4.88	JP86	JP86P
NH884	NI884	8.40	8.40	5.30	4.79	5.94	9.69	8.75	6.00	6.25	6.25	6.75	6.88	JP88	JP88P
NH1084	NI1084	10.40	8.40	5.30	4.79	5.94	11.69	10.75	6.00	8.25	6.25	8.75	6.88	JP108	JP108P
NH1086	NI1086	10.40	8.40	7.30	6.79	7.94	11.69	10.75	6.00	8.25	6.25	8.75	6.88	JP108	JP108P
NH10106	NI10106	10.40	10.40	7.30	6.79	7.94	11.59	10.75	8.00	8.25	8.25	8.75	8.88	JP1010	JP1010P
NH12106	NI12106	12.40	10.40	7.30	6.79	7.94	13.69	12.75	8.00	10.25	8.25	10.75	8.88	JP1210	JP1210P
NH12126	NI12126	12.40	12.40	7.30	6.79	7.94	13.69	12.75	10.00	10.25	10.25	10.75	10.88	JP1212	JP1212P
NH14126	NI14126	14.40	12.40	7.30	6.79	7.94	15.69	14.75	10.00	12.25	10.25	12.75	10.88	JP1412	JP1412P
NH16146	NI16146	16.40	14.40	7.30	6.79	7.94	17.69	16.75	12.00	14.25	12.25	14.75	12.88	JP1614	JP1612P

 * Assembled Enclosures (except NI1084) include body, lid and mounting rail kit.
** Order back panels separately. ($^{10}/_{32}$ – $^3/_8$ Back Panel screws not supplied.)
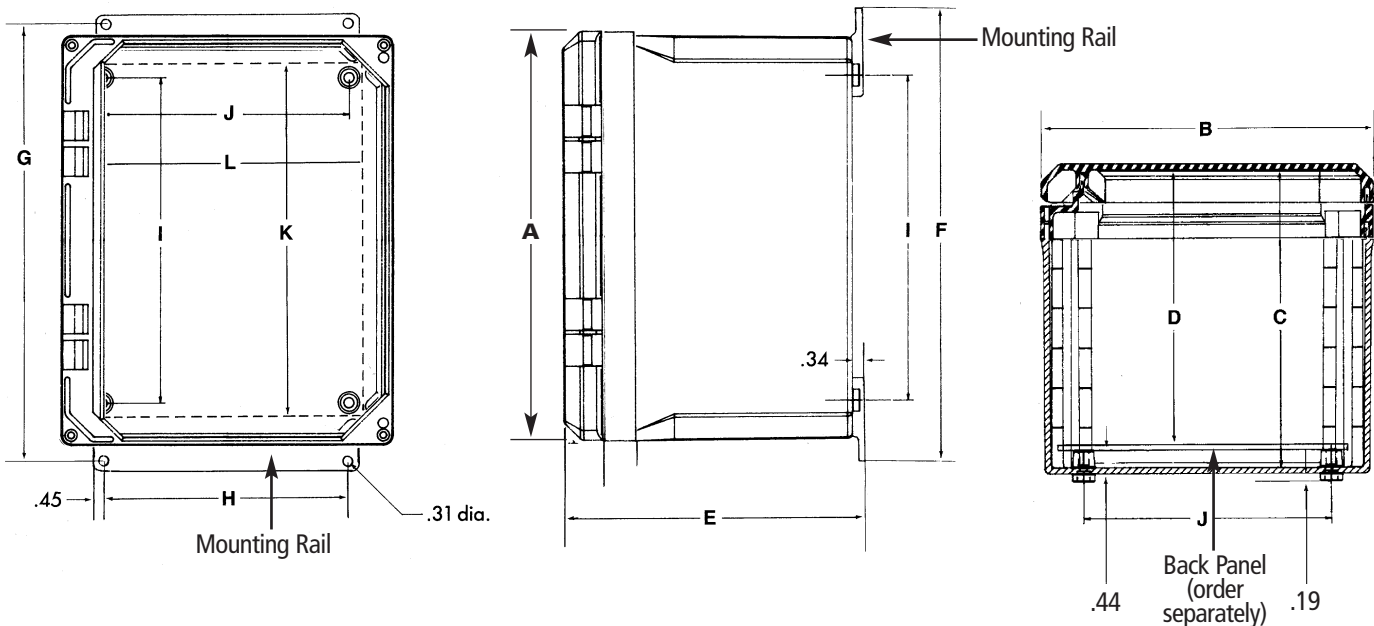
External Hinge Cover

Meets NEMA 1, 2, 3, 3S, 3X, 3SX, 4, 4X, 12

Assembled Enclosures

Opaque Cover

Clear Cover

New *New*

Size	Opaque Cover*	Clear Cover*	Opaque Cover with Latch*	Clear Cover with Latch*	Back Panels** Steel/PVC	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.) Opaque/Clear
6 x 6 x 4	NJ664	NC664	NJ664L	NC664L	JP66 / JP66P	1	Opa 2.4 / Clr 2.4
8 x 6 x 4	NJ864	NC864	NJ864L	NC864L	JP86 / JP86P	1	Opa 2.9 / Clr 2.9
8 x 8 x 4	NJ884	NC884	NJ884L	NC884L	JP88 / JP88P	1	Opa 3.3 / Clr 3.3
10 x 8 x 4	NJ1084	NC1084	NJ1084L	NC1084L	JP108 / JP108P	1	Opa 4 / Clr 4
10 x 8 x 6	NJ1086	NC1086	NJ1086L	NC1086L	JP108 / JP108P	1	Opa 4.6 / Clr 4.7
10 x 10 x 6	NJ10106	NC10106	NJ10106L	NC10106L	JP1010 / JP1010P	1	Opa 5.6 / Clr 5.3
12 x 10 x 6	NJ12106	NC12106	NJ12106L	NC12106L	JP1210 / JP1210P	1	Opa 6.3 / Clr 5.8
12 x 12 x 6	NJ12126	NC12126	NJ12126L	NC12126L	JP1212 / JP1212P	1	Opa 6.9 / Clr 6.6
14 x 12 x 6	NJ14126	NC14126	NJ14126L	NC14126L	JP1412 / JP1412P	1	Opa 7.7 / Clr 7
16 x 14 x 6	NJ16146	NC16146	NJ16146L	NC16146L	JP1614 / JP1614P	1	Opa 8.2 / Clr 8

　* Assembled Enclosures include body, lid and mounting rail kit.
　** Order back panels separately.

Individual Components

Enclosure Size	Enclosure Base*			Enclosure Lids				Back Panels**		Latches		
	Part Nos.	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)	Opaque Lids Part Nos.	Clear Lids Part Nos.	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)	Steel/PVC Part Nos.	Std. Ctn. Qty.	Steel Latch Part Nos.	Nonmetallic Latch Part Nos.	Std. Ctn. Qty.
6 x 6 x 4	NL664B	12	18	NJ66L	NC66L	12	Opa 5.0 / Clr 5.9	JP66 / JP66P	1	SSLS	NPLIS	1
8 x 6 x 4	NL864B	8	14	NJ86L	NC86L	9	Opa 6 / Clr 5.3	JP86 / JP86P	1	SSLS	NPLIS	1
8 x 8 x 4	NL884B	14	28	NJ88L	NC88L	18	Opa 15 / Clr 13.5	JP88 / JP88P	1	SSLS	NPLIS	1
10 x 8 x 4	NL1084B	12	32	NJ108L	NC108L	12	Opa 13 / Clr 11.7	JP108 / JP108P	1	SSLS	NPLIS	1
10 x 8 x 6	NL1086B	8	15	NJ108L	NC108L	12	Opa 13 / Clr 11.7	JP108 / JP108P	1	SSLS	NPLIS	1
10 x 10 x 6	NL1010B	6	20	NJ1010L	NC1010L	11	Opa 14 / Clr 13	JP1010 / JP1010P	1	SSLS	NPLIS	1
12 x 10 x 6(z)	NL1210B	6	24	NJ1210L	NC1210L	12	Opa 14 / Clr 15	JP1210 / JP1210P	1	SSLS	NPLIS	1
12 x 12 x 6(z)	NL1212B	5	21.8	NJ1212L	NC1212L	10	Opa 16 / Clr 14	JP1212 / JP1212P	1	SSLS	NPLIS	1
14 x 12 x 6(z)	NL1412B	4	19	NJ1412L	NC1412L	5	Opa 10 / Clr 9	JP1412 / JP1412P	1	SSLS	NPLIS	1
16 x 14 x (z)	NL1614B	4	31	NJ1614L	NC1614L	5	Opa 13.5 / Clr 12	JP1614 / JP1614P	1	SSLS	NPLIS	1

　* Mounting rails are not included. See "Mounting Rails" listed in the Enclosure Accessories section.
　** Order back panels separately.
　(z) Sizes 12 x 10 and larger require two (2) latches per enclosure.

External Hinge Cover

Specifications

Enclosure With Clear Lid Part Nos.*	Opaque Lid Part Nos.*	A	B	C	D	E	F	G	H	I	J	K	L	Steel	PVC
NC644	NJ644	6.40	4.40	4.49	3.98	5.13	7.69	6.75	2.00	4.25	2.25	4.88	2.88	JP64	JP64P
NC664	NJ664	6.40	6.40	4.49	3.98	5.13	7.69	6.75	4.00	4.25	4.25	4.88	4.88	JP66	JP66P
NC864	NJ864	8.40	6.40	4.49	3.98	5.13	9.69	8.75	4.00	6.25	4.25	6.75	4.88	JP86	JP86P
NC884	NJ884	8.40	8.40	4.49	3.98	5.13	9.69	8.75	6.00	6.25	6.25	6.75	6.88	JP88	JP88P
NC1084	NJ1084	10.40	8.40	4.49	3.98	5.13	11.69	10.75	6.00	8.25	6.25	8.75	6.88	JP108	JP108P
NC1086	NJ1086	10.40	8.40	6.49	5.98	7.13	11.69	10.75	6.00	8.25	6.25	8.75	6.88	JP108	JP108P
NC10106	NJ10106	10.40	10.40	6.49	5.98	7.13	11.69	10.75	8.00	8.25	8.25	8.75	8.88	JP1010	JP1010P
NC12106	NJ12106	12.40	10.40	6.49	5.98	7.13	13.69	12.75	8.00	10.25	8.25	10.75	8.88	JP1210	JP1210P
NC12126	NJ12126	12.40	12.40	6.49	5.98	7.13	13.69	12.75	10.00	10.25	10.25	10.75	10.88	JP1212	JP1212P
NC14126	NJ14126	14.40	12.40	6.49	5.98	7.13	15.69	14.75	10.00	12.25	10.25	12.75	10.88	JP1412	JP1412P
NC16146	NJ16146	16.40	14.40	6.49	5.98	7.13	17.69	16.75	12.00	14.25	12.25	14.75	12.88	JP1614	JP1614P

* Assembled Enclosures; include body, lid and mounting rail kit.
** Order back panels separately. ($^{10}/_{32}$ – $^3/_8$ Back Panel screws not supplied.)

Circuit Safe® NEMA Enclosures
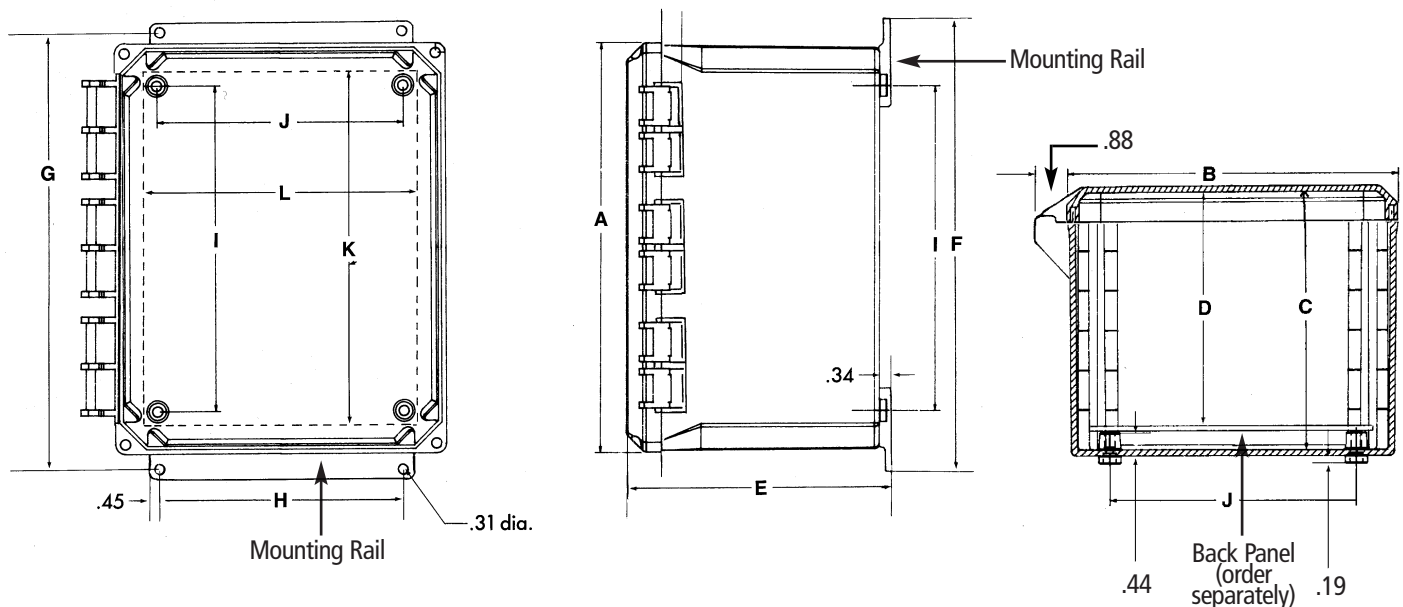
Quick Reference

Screw-On Cover Style

Assembled Enclosures (no Panel or Latches)		Individual Components						Latches (Qty. needed)	
Opaque Lid	Clear Lid	Body	Lid	Collar	Mtg. Rails	Back Panels Steel	PVC	Steel	Nonmetallic
NS644		NP644B	NS64L	N/A	NMK4V	JP64	JP64P	N/A	N/A
	NV644	NP644B	NV64L	N/A	NMK4V	JP64	JP64P	N/A	N/A
NS664		NP664B	NS66L	N/A	NMK6V	JP66	JP66P	N/A	N/A
	NV664	NP664B	NV66L	N/A	NMK6V	JP66	JP66P	N/A	N/A
NS864		NP864B	NS86L	N/A	NMK6V	JP86	JP86P	N/A	N/A
	NV864	NP864B	NV86L	N/A	NMK6V	JP86	JP86P	N/A	N/A
NS884		NP884B	NS88L	N/A	NMK8V	JP88	JP88P	N/A	N/A
	NV884	NP884B	NV88L	N/A	NMK8V	JP88	JP88P	N/A	N/A
NS1084		NP1084B	NS108L	N/A	NMK8V	JP108	JP108P	N/A	N/A
	NV1084	NP1084B	NV108L	N/A	NMK8V	JP108	JP108P	N/A	N/A
NS1086		NP1086B	NS108L	N/A	NMK8V	JP108	JP108P	N/A	N/A
	NV1086	NP1086B	NV108L	N/A	NMK8V	JP108	JP108P	N/A	N/A
NS10106		NP1010B	NS1010L	N/A	NMK10V	JP1010	JP1010P	N/A	N/A
	NV10106	NP1010B	NV1010L	N/A	NMK10V	JP1010	JP1010P	N/A	N/A
NS12106		NP1210B	NS1210L	N/A	NMK10V	JP1210	JP1210P	N/A	N/A
	NV12106	NP1210B	NV1210L	N/A	NMK10V	JP1210	JP1210P	N/A	N/A
NS12126		NP1212B	NS1212L	N/A	NMK12V	JP1212	JP1212P	N/A	N/A
	NV12126	NP1212B	NV1212L	N/A	NMK12V	JP1212	JP1212P	N/A	N/A
NS14126		NP1412B	NS1412L	N/A	NMK12V	JP1412	JP1412P	N/A	N/A
	NV14126	NP1412B	NV1412L	N/A	NMK12V	JP1412	JP1412P	N/A	N/A
NS16146		NP1614B	NS1614L	N/A	NMK14V	JP1614	JP1614P	N/A	N/A
	NV16146	NP1614B	NV1614L	N/A	NMK14V	JP1614	JP1614P	N/A	N/A

External Hinge Cover Style

Assembled Enclosures (no Panel or Latches)		Individual Components						Latches (Qty. needed)	
Opaque Lid	Clear Lid	Body	Lid	Collar	Mtg. Rails	Back Panels Steel	PVC	Steel	Nonmetallic
NJ644		NL644B	NJ64L	N/A	NMK4V	JP64	JP64P	SSLS (1)	NPL1S (1)
	NC644	NL644B	NC64L	N/A	NMK4V	JP64	JP64P	SSLS (1)	NPL1S (1)
NJ664		NL664B	NJ66L	N/A	NMK6V	JP66	JP66P	SSLS (1)	NPL1S (1)
	NC664	NL664B	NC66L	N/A	NMK6V	JP66	JP66P	SSLS (1)	NPL1S (1)
NJ864		NL864B	NJ86L	N/A	NMK6V	JP86	JP86P	SSLS (1)	NPL1S (1)
	NC864	NL864B	NC86L	N/A	NMK6V	JP86	JP86P	SSLS (1)	NPL1S (1)
NJ884		NL884B	NJ88L	N/A	NMK8V	JP88	JP88P	SSLS (1)	NPL1S (1)
	NC884	NL884B	NC88L	N/A	NMK8V	JP88	JP88P	SSLS (1)	NPL1S (1)
NJ1084		NL1084B	NJ108L	N/A	NMK8V	JP108	JP108P	SSLS (1)	NPL1S (1)
	NC1084	NL1084B	NC108L	N/A	NMK8V	JP108	JP108P	SSLS (1)	NPL1S (1)
NJ1086		NL1086B	NJ108L	N/A	NMK8V	JP108	JP108P	SSLS (1)	NPL1S (1)
	NC1086	NL1086B	NC108L	N/A	NMK8V	JP108	JP108P	SSLS (1)	NPL1S (1)
NJ10106		NL1010B	NJ1010L	N/A	NMK10V	JP1010	JP1010P	SSLS (1)	NPL1S (1)
	NC10106	NL1010B	NC1010L	N/A	NMK10V	JP1010	JP1010P	SSLS (1)	NPL1S (1)
NJ12106		NL1210B	NJ1210L	N/A	NMK10V	JP1210	JP1210P	SSLS (2)	NPL1S (2)
	NC12106	NL1210B	NC1210L	N/A	NMK10V	JP1210	JP1210P	SSLS (2)	NPL1S (2)
NJ12126		NL1212B	NJ1212L	N/A	NMK12V	JP1212	JP1212P	SSLS (2)	NPL1S (2)
	NC12126	NL1212B	NC1212L	N/A	NMK12V	JP1212	JP1212P	SSLS (2)	NPL1S (2)
NJ14126		NL1412B	NJ1412L	N/A	NMK12V	JP1412	JP1412P	SSLS (2)	NPL1S (2)
	NC14126	NL1412B	NC1412L	N/A	NMK12V	JP1412	JP1412P	SSLS (2)	NPL1S (2)
NJ16146		NL1614B	NJ1614L	N/A	NMK14V	JP1614	JP1614P	SSLS (2)	NPL1S (2)
	NC16146	NL1614B	NC1614L	N/A	NMK14V	JP1614	JP1614P	SSLS (2)	NPL1S (2)

Quick Reference

Hidden Hinge Cover Style

Assembled Enclosures (no Panel or Latches)		Individual Components				Back Panels		Latches (Qty. needed)	
Opaque Lid	Clear Lid	Body	Lid	Collar	Mtg. Rails	Steel	PVC	Steel	Nonmetallic
NH644		NP644B	NH64L	NH64C	NMK4V	JP64	JP64P	SSLL (1)	NPL1L (1)
	NI644	NP644B	NI64L	NH64C	NMK4V	JP64	JP64P	SSLL (1)	NPL1L (1)
NH664		NP664B	NH66L	NH66C	NMK6V	JP66	JP66P	SSLL (1)	NPL1L (1)
	NI664	NP664B	NI66L	NH66C	NMK6V	JP66	JP66P	SSLL (1)	NPL1L (1)
NH864		NP864B	NH86L	NH86C	NMK6V	JP86	JP86P	SSLL (1)	NPL1L (1)
	NI864	NP864B	NI86L	NH86C	NMK6V	JP86	JP86P	SSLL (1)	NPL1L (1)
NH884		NP884B	NH88L	NH88C	NMK8V	JP88	JP88P	SSLL (1)	NPL1L (1)
	NI884	NP884B	NI88L	NH88C	NMK8V	JP88	JP88P	SSLL (1)	NPL1L (1)
NH1084		NP1084B	NH108L	NH108C	NMK8V	JP108	JP108P	SSLL (1)	NPL1L (1)
	NI1084	NP1084B	NI108L	NH108C	NMK8V	JP108	JP108P	SSLL (1)	NPL1L (1)
NH1086		NP1086B	NH108L	NH108C	NMK8V	JP108	JP108P	SSLL (1)	NPL1L (1)
	NI1086	NP1086B	NI108L	NH108C	NMK8V	JP108	JP108P	SSLL (1)	NPL1L (1)
NH10106		NP1010B	NH1010L	NH1010C	NMK10V	JP1010	JP1010P	SSLL (1)	NPL1L (1)
	NI10106	NP1010B	NI1010L	NH1010C	NMK10V	JP1010	JP1010P	SSLL (1)	NPL1L (1)
NH12106		NP1210B	NH1210L	NH1210C	NMK10V	JP1210	JP1210P	SSLL (2)	NPL1L (2)
	NI12106	NP1210B	NI1210L	NH1210C	NMK10V	JP1210	JP1210P	SSLL (2)	NPL1L (2)
NH12126		NP1212B	NH1212L	NH1212C	NMK12V	JP1212	JP1212P	SSLL (2)	NPL1L (2)
	NI12126	NP1212B	NI1212L	NH1212C	NMK12V	JP1212	JP1212P	SSLL (2)	NPL1L (2)
NH14126		NP1412B	NH1412L	NH1412C	NMK12V	JP1412	JP1412P	SSLL (2)	NPL1L (2)
	NI14126	NP1412B	NI1412L	NH1412C	NMK12V	JP1412	JP1412P	SSLL (2)	NPL1L (2)
NH16146		NP1614B	NH1614L	NH1614C	NMK14V	JP1614	JP1614P	SSLL (2)	NPL1L (2)
	NI16146	NP1614B	NI1614L	NH1614C	NMK14V	JP1614	JP1614P	SSLL (2)	NPL1L (2)

Circuit Safe JIC Enclosures

Manufactured from structural foam thermoplastic, Carlon® Circuit Safe® JIC enclosures provide high impact strength to eliminate dents and deformations along with high dielectric strength, excellent weathering capabilities, and excellent resistance to a wide range of corrosive agents, acids, alkalines, and salts. These UL approved and CSA recognized enclosures also withstand wet and dirty environments, while their thick wall construction make them a particularly good choice wherever condensation is a concern. Rated for use in Type 1, 3, 3S, 3X, 3SX, 4, 4X, 12, and 13 environments, Carlon Circuit Safe JIC enclosures are suited for virtually all indoor/outdoor industrial, MRO, and OEM applications. They are available in 10 sizes from 6 x 6 x 5 through 30 x 24 x 12 with a choice of screw or hinged design, opaque covers, or clear polycarbonate covers which protect devices from hostile environments while allowing monitoring of instrumentation and/or electrical functions.

Features
- Hinge caps make covers captive.
- Nonmetallic molded-in hinges on hinged models.
- No rough corners, sharp edges, or burrs.
- Nonconductive — eliminates danger of electrical shock.
- Lid design provides greater usable internal volume.
- Ample interior space for ease of wiring.
- Fully gasketed.
- Ultraviolet stabilized for outdoor use.

Applications
- Instrument case.
- Junction and terminal boxes.
- Control and switching enclosures.
- Splice and pull boxes.
- Starter, pushbutton, and transformer housings.
- Meter and transformer cabinets.

Standards
- Meets NEMA Types 1, 3, 3S, 3X, 3SX, 4, 4X, 12, 13 as indicated.
- UL Listed per UL 50, enclosures for electrical equipment.
- CSA certified.
- JIC compliance.

Hinged Cover
Meets NEMA 1, 3, 3S, 3X, 3SX, 4, 4X, 12, 13
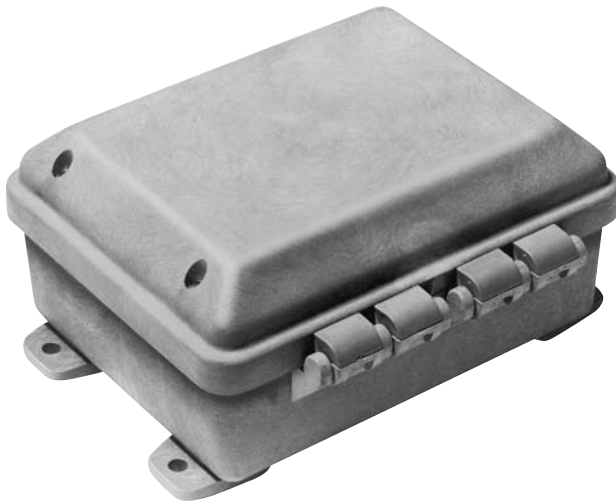
Features
- Nonmetallic mounting feet and all mounting hardware included.
- White painted 14 gauge steel or $1/4$" PVC back panel (order separately).
- 304 (18-8) stainless steel screws (10-32 / $1^1/8$").
- Lid design provides greater usable internal volume.
- Completely nonmetallic hinges.
- Brass screw inserts.
- Temperature Range: -30° to 230°F
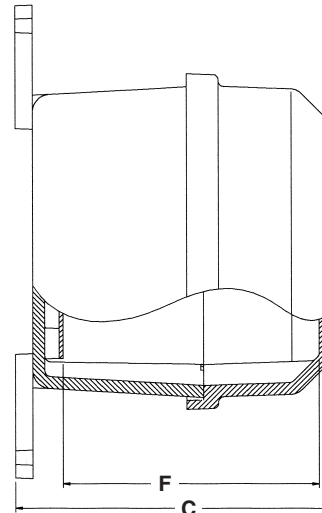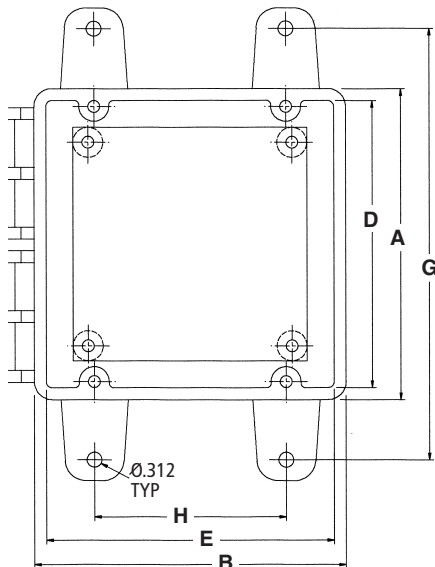- Material: polycarbonate molded base and cover.

Factory Assembled

Opaque Cover Part Nos.	Clear Cover Part Nos.	Dimensions External			Dimensions Internal			Mounting		Std. Ctn. Qty. (lbs.) Opaque/Clear	Back Panel* Part Nos. Steel/PVC	Panel Size	Std. Ctn. Qty. (lbs.) Steel/PVC
		A	B	C	D	E	F	G	H				
CJ665	CC665	6.50	6.50	6.69	6.00	6.00	5.45	9.00	4.00	1 (Opa 3.5) / 1 (Clr 3.1)	JP66/JP66P	4.88 x 4.88	1 (1.0) / 1 (0.3)
CJ863	CC863	8.50	6.50	4.49	8.00	6.00	3.25	11.00	4.00	1 (Opa 2.8) / 1 (Clr 3.1)	JP86/JP86P	6.75 x 4.88	1 (1.0) / 1 (0.78)
CJ1085	CC1085	10.50	8.50	6.69	10.00	8.00	5.45	13.00	6.00	1 (Opa 5.2) / 1 (Clr 5.2)	JP108/JP108P	8.75 x 6.88	1 (1.5) / 1 (0.7)
CJ12106	CC12106	12.50	10.50	7.69	12.00	10.00	6.45	15.00	8.00	1 (Opa 7.1) / 1 (Clr 8.4)	JP1210/JP1210P	10.75 x 8.88	1 (2.0) / 1 (1.2)
CJ14126	CC14126	14.50	12.50	7.72	14.00	12.00	6.48	17.00	10.00	1 (Opa 9.0) / 1 (Clr 8.6)	JP1412/JP1412P	12.75 x 10.88	1 (3.2) / 1 (1.7)
CJ16147	CC16147	16.50	14.50	8.46	16.00	14.00	7.22	19.00	12.00	1 (Opa 10.6) / 1 (Clr 11.9)	JP1614/JP1614P	14.75 x 12.88	1 (4.7) / 1 (2.3)

*Order back panels separately.
Enclosures shipped with mounting feet, hinge caps and screws.
For factory installed pad lockable latch (part no. CJTL), consult Customer Service for price and delivery.

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Screw-On Cover
Meets NEMA 1, 3, 3S, 3X, 3SX, 4, 4X, 12, 13
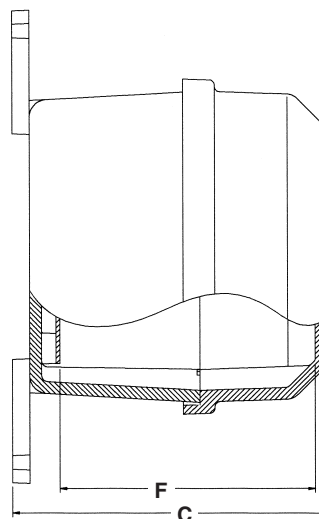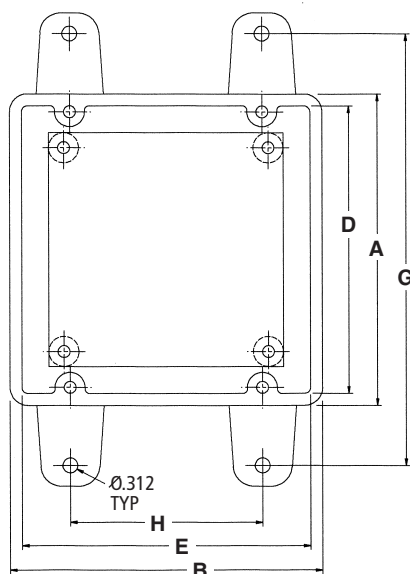

UL LISTED E54381 CSA® LR31146

Features
- Nonmetallic mounting feet and all mounting hardware included.
- 304 (18-8) stainless steel screws (10-32 / $1^1/_8$").
- Brass screw inserts.
- Clear polycarbonate cover available.
- White painted 14 gauge steel or $^1/_4$" PVC back panel (order separately).
- Lid design provides greater usable internal volume.
- Temperature Range: -30° to 230°F
- Material: polycarbonate molded base and cover.

Factory Assembled

Opaque Cover Part Nos.	Clear Cover Part Nos.	Dimensions External			Internal			Mounting		Std. Ctn. Qty. (lbs.) Opaque/Clear	Back Panel* Part Nos. Steel/PVC	Panel Size	Std. Ctn. Qty. (lbs.) Steel/PVC
		A	B	C	D	E	F	G	H				
CS665	CV665	6.50	6.50	6.69	6.00	6.00	5.45	9.00	4.00	1 (Opa 2.7) / 1 (Clr 2.9)	JP66/JP66P	4.88 x 4.88	1 (1.0) / 1 (0.3)
CS863	CV863	8.50	6.50	4.49	8.00	6.00	3.25	11.00	4.00	1 (Opa 2.9) / 1 (Clr 2.9)	JP86/JP86P	6.75 x 4.88	1 (1.0) / 1 (0.4)
CS1085	CV1085	10.50	8.50	6.69	10.00	8.00	5.45	13.00	6.00	1 (Opa 5.0) / 1 (Clr 5.0)	JP108/JP108P	8.75 x 6.88	1 (1.5) / 1 (0.7)
CS12106	CV12106	12.50	10.50	7.69	12.00	10.00	6.45	15.00	8.00	1 (Opa 6.5) / 1 (Clr 7.2)	JP1210/JP1210P	10.75 x 8.88	1 (2.0) / 1 (1.2)
CS14126	CV14126	14.50	12.50	7.72	14.00	12.00	6.48	17.00	10.00	1 (Opa 8.0) / 1 (Clr 8.8)	JP1412/JP1412P	12.75 x 10.88	1 (3.2) / 1 (1.7)
CS16147	CV16147	16.50	14.50	8.46	16.00	14.00	7.22	19.00	12.00	1 (Opa 11.5) / 1 (Clr 10.8)	JP1614/JP1614P	14.75 x 12.88	1 (4.7) / 1 (2.3)

*Order back panels separately.
Enclosures shipped with mounting feet and panel mounting hardware.

Medium Hinged Cover
Meets NEMA 1, 3, 3S, 3X, 3SX, 4, 4X, 12, 13

Features
- Nonmetallic mounting feet and all mounting hardware included.
- White painted 14 gauge steel or $1/4$" PVC back panel (order separately).
- 304 (18-8) stainless steel screws (10-32 / $1^1/8$").
- Completely nonmetallic hinges.
- Brass screw inserts.
- Temperature Range: -40° to 185°F
- Material: NORYL base and cover.

Factory Assembled

Part Nos.*	Dimensions External A	B	C	Internal D	E	F	Mounting G	H	Std. Ctn. Qty. (lbs.)	Back Panel* Part Nos. Steel/PVC	Panel Size	Std. Ctn. Qty. (lbs.) Steel/PVC
C2016A4	20.50	16.50	8.36	17.25	13.25	6.28	21.26	10.00	1 (15.1)	NP2016/NP2016P	17 x 13.25	1 (7.0) / 1 (6.1)
C2016B4	20.50	16.50	10.36	17.25	13.25	8.28	21.26	10.00	1 (17.2)	NP2016/NP2016P	17 x 13.25	1 (7.0) / 1 (6.1)
C2016C4	20.50	16.50	12.36	17.25	13.25	10.28	21.26	10.00	1 (19.7)	NP2016/NP2016P	17 x 13.25	1 (7.0) / 1 (6.1)
C2420A4	24.50	20.50	8.36	21.25	17.25	6.28	25.26	14.00	1 (21.5)	NP2420/NP2420P	21 x 17	1 (10.4) / 1 (4.7)
C2420B4	24.50	20.50	10.36	21.25	17.25	8.28	25.26	14.00	1 (24)	NP2420/NP2420P	21 x 17	1 (10.4) / 1 (4.7)
C2420C4	24.50	20.50	12.36	21.25	17.25	10.28	25.26	14.00	1 (24.9)	NP2420/NP2420P	21 x 17	1 (10.4) / 1 (4.7)
C3024A4	30.50	24.50	8.36	27.25	21.25	6.28	31.26	18.00	1 (28.4)	NP3024/NP3024P	27 x 21	1 (18.0) / 1 (9.8)
C3024B4	30.50	24.50	10.36	27.25	21.25	8.28	31.26	18.00	1 (31.4)	NP3024/NP3024P	27 x 21	1 (18.0) / 1 (9.8)
C3024C4	30.50	24.50	12.36	27.25	21.25	10.28	31.26	18.00	1 (33.8)	NP3024/NP3024P	27 x 21	1 (18.0) / 1 (9.8)

*Enclosure only available with opaque hinged cover.
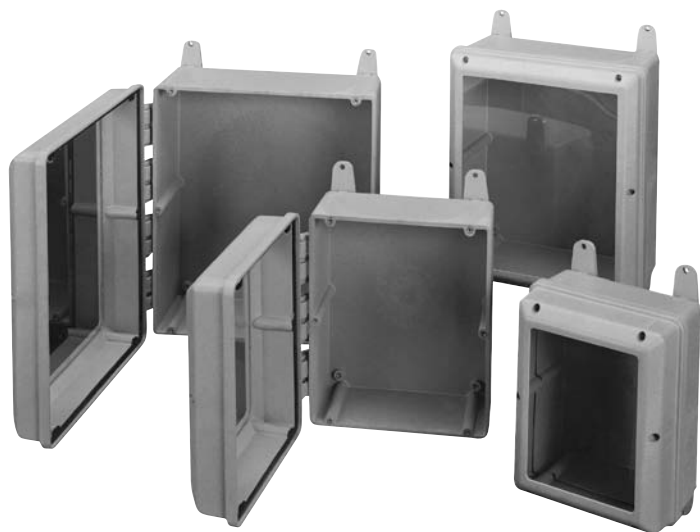Enclosures shipped with mounting feet, hinge caps and screws.
**Order back panels separately.
For factory installed pad lockable latch (part no. CJTL), consult Customer Service for price and delivery.
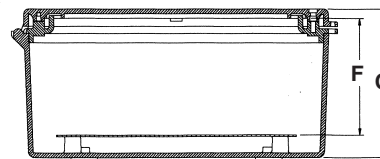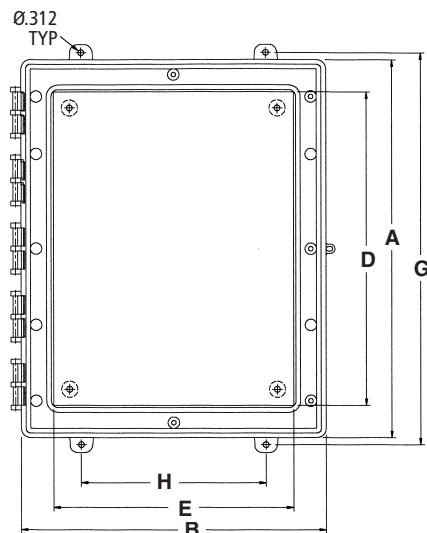
Hinged Window Cover
Meets NEMA 1, 3, 3S, 3X, 3SX, 4, 4X, 12, 13

UL LISTED E54381 CSA LR31146

Features
- Nonmetallic mounting feet and all mounting hardware included.
- 304 (18-8) stainless steel screw (10-32 / $1^1/8$").
- White painted 14 gauge steel or $1/4$" PVC back panel (order separately).
- Completely nonmetallic hinges.
- Lid design provides greater usable internal volume.
- Brass screw inserts.
- Material: polycarbonate molded base and cover.

Note: Window material $1/8$" thick clear polycarbonate is permanently bonded to the cover.

Factory Assembled

| Part Nos.	Dimensions External				Internal			Mounting			Std. Ctn. Qty. (lbs.)	Back Panel* Part Nos. Steel/PVC	Panel Size	Std. Ctn. Qty. (lbs.) Steel/PVC
	A	B	C	D	E	F	G	H	J	K				
J665W	6.50	6.50	6.69	6.00	6.00	5.45	9.00	4.00	3.75	3.75	1 (3.1)	JP66/JP66P	4.88 x 4.88	1 (1.0) / 1 (0.3)
J863W	8.50	6.50	4.49	8.00	6.00	3.25	11.00	4.00	3.75	3.75	1 (3.2)	JP86/JP86P	6.75 x 4.88	1 (1.0) / 1 (0.78)
J1085W	10.50	8.50	6.69	10.00	8.00	5.45	13.00	6.00	7.75	5.75	1 (5.6)	JP108/JP108P	8.75 x 6.88	1 (1.5) / 1 (0.7)
J12106W	12.50	10.50	7.69	12.00	10.00	6.45	15.00	8.00	9.75	7.75	1 (7.4)	JP1210/JP1210P	10.75 x 8.88	1 (2.0) / 1 (1.2)
J14126W	14.50	12.50	7.72	14.00	12.00	6.48	17.00	10.00	11.75	9.75	1 (9)	JP1412/JP1412P	12.75 x 10.88	1 (3.2) / 1 (1.7)
J16147W	16.50	14.50	8.46	16.00	14.00	7.22	19.00	12.00	13.75	11.75	1 (9.3)	JP1614/JP1614P	14.75 x 12.88	1 (4.7) / 1 (2.3)

Enclosures shipped with mounting feet, hinge caps and screws.
*Order back panels separately.
For factory installed pad lockable quick-release latch (part no. CJTL), consult Customer Service for price and delivery.

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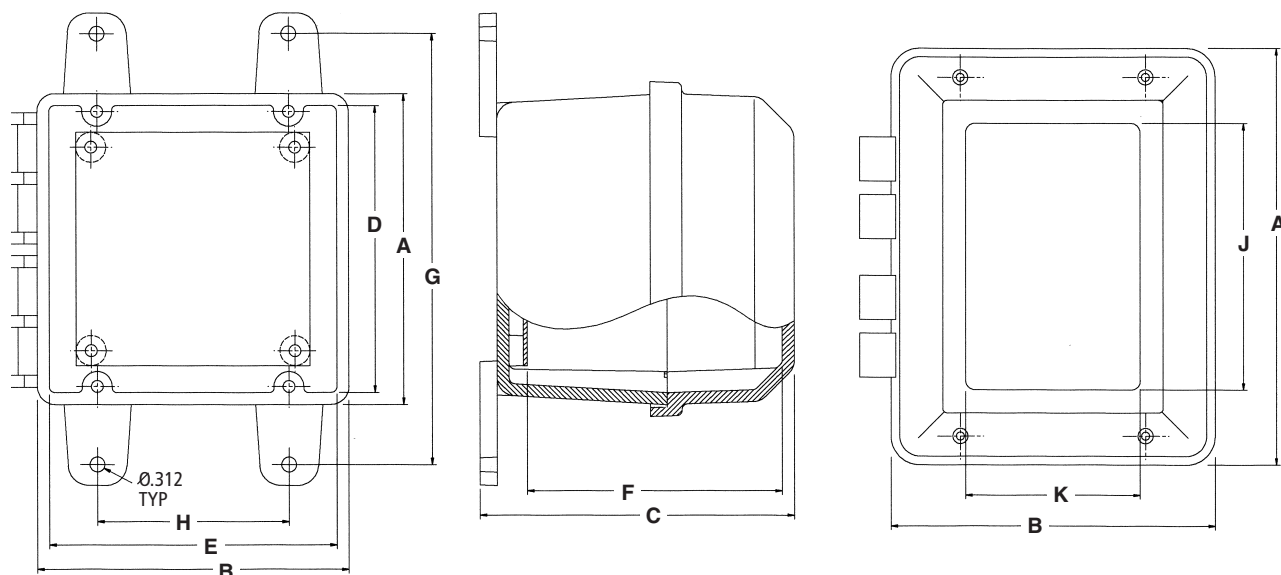
Circuit Safe Pushbutton Enclosures
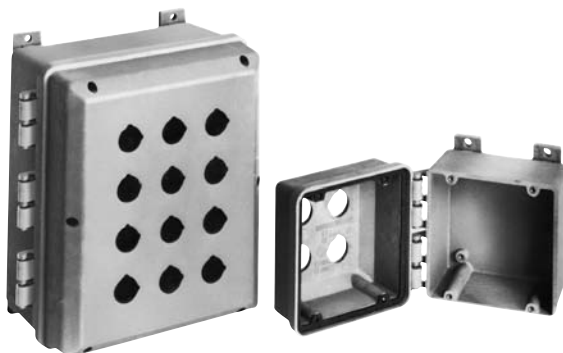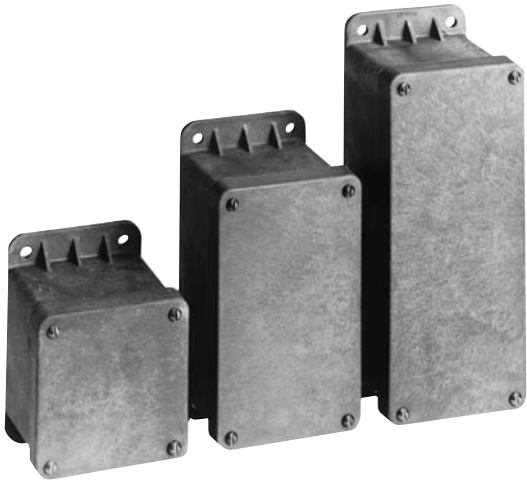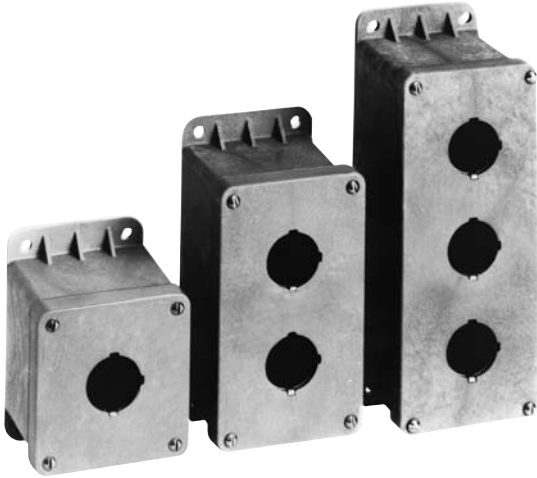
Circuit Safe® nonmetallic pushbutton enclosures are molded from engineered thermoplastic material that is resistant to most corrosive agents. Whether predrilled 1-2-3 hole enclosures, blank cover enclosures or enclosures with multiple hole openings, Carlon's pushbutton enclosure series offers high impact strength, chemical resistance, high dielectric strength and excellent durability for the correct application.

Features
- Engineered thermoplastic base and cover.
- 304 stainless steel screws.
- Brass screw inserts.
- High-impact strength.
- Temperature range from -40° F to 185° F.

Applications
- Standard oil-tight pushbuttons, switches and pilot lights.
- Conduit entries.
- Junction boxes.
- MRO and OEM applications.

Standards
- Standards vary by product.
- Screw cover pushbutton enclosures with 1-2-3 hole openings are Listed per UL 50 for industrial controls.
- Narrow profile blank screw cover enclosures are listed per UL 50 for industrial controls and meets NEMA Type 1, 3, 3S, 3X, 3SX, 4, 4X, 12, and 13.
- Nonmetallic hinged cover enclosures with multiple hole openings are UL Listed.

Screw Cover Enclosures with 1-2-3 Hole Openings
UL Listed per UL 50 for Industrial Controls

UL LISTED E54381   **CSA** LR31146
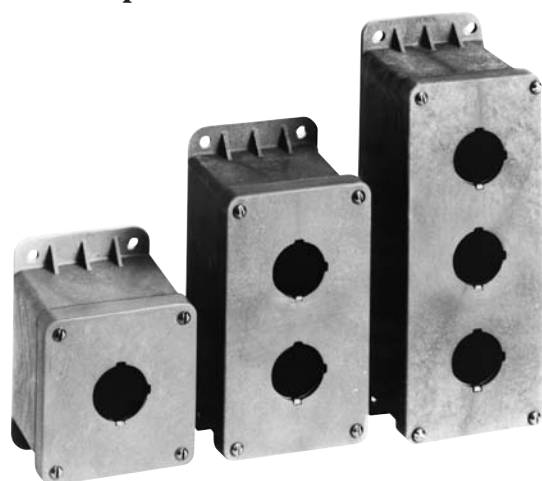
Wall mount pushbutton enclosures are molded from gray, engineered thermoplastic material that is resistant to most corrosive agents. Universal pushbutton holes are designed to accommodate all standard oil-tight pushbuttons, switches and pilot lights. A grounding plate is included on the cover. Auxiliary devices must be rated for appropriate NEMA applications.

Features
- 30.5 mm keyed pushbutton holes.*
- Material: nylon base and cover.
- Integrally molded mounting flange.
- Brass screw inserts.
- 304 (18-8) stainless screws (8-32 / $3/8$ ").
- Temperature range from - 40°F to 185°F.

30.5 mm Pushbutton Enclosures

Part Nos.	Style	Inside Box Size A x B x C	Mounting L x J	Overall Outside Including Mounting Bracket H x W x D	F	G	R	S	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)
CP100N	One Opening	3.13 x 2.81 x 3	4 x 2.38	4.88 x 3.50 x 3.38	3.38	3.25	.63	2.5	12	9
CP200N	Two Openings	5.38 x 2.81 x 3	6.25 x 2.38	7.13 x 3.50 x 3.38	5.63	3.25	.63	2.5	8	8
CP300N	Three Openings	7.38 x 2.81 x 3	8.50 x 2.38	9.38 x 3.50 x 3.38	7.88	3.25	.63	2.5	6	7.60

1/4 Dia. Mtg. Hole
1.210 Dia.
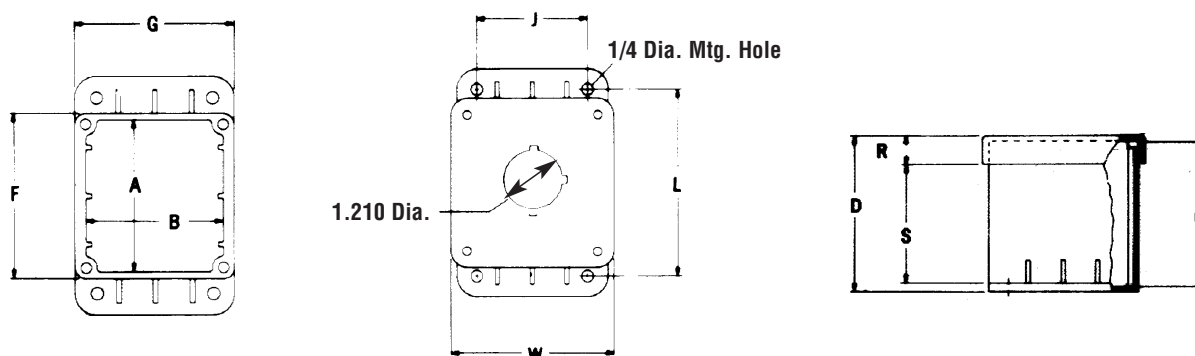
22 mm Pushbutton Enclosures *†

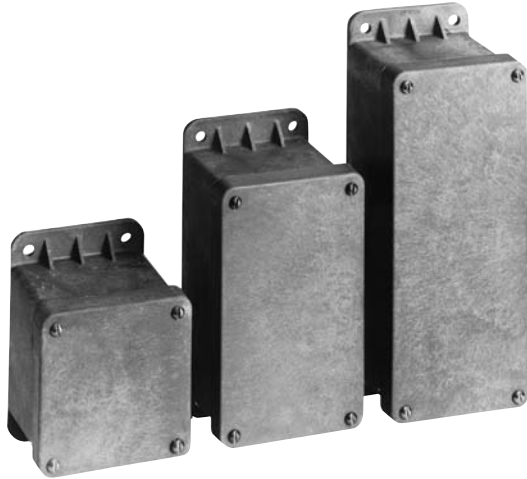| Part Nos.	Style	Inside Box Size A x B x C	Mounting L x J	Overall Outside Including Mounting Bracket H x W x D	F	G	R	S	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)
PX0010	One Opening	3.13 x 2.81 x 3	4 x 2.38	4.88 x 3.50 x 3.38	3.38	3.25	.63	2.5	10	8.26
PX0007	Two Openings	5.38 x 2.81 x 3	6.25 x 2.38	7.13 x 3.50 x 3.38	5.63	3.25	.63	2.5	1	1.31
PX0011	Three Openings	7.38 x 2.81 x 3	8.50 x 2.38	9.38 x 3.50 x 3.38	7.88	3.25	.63	2.5	6	9.43
PX0008	Four Openings	7.38 x 2.81 x 3	8.50 x 2.38	9.38 x 3.50 x 3.38	7.88	3.25	.63	2.5	1	1.60

* All Circuit Safe pushbutton enclosures are furnished with standard hole dimensions: 1-7/32" diameter with keyways at 12 o'clock and 3 o'clock
† Dimensions are in inches unless marked otherwise. Operators not included.

Narrow Profile Blank Screw Cover Enclosures for Small Instrumentation and Control Applications

UL Listed per UL 50 for Industrial Controls
Meets NEMA 1, 3, 3S, 3X, 3SX, 4, 4X, 12, 13

Blank cover enclosures can be easily drilled with a standard hole saw for conduit entries and pushbuttons. Wall mount enclosures are molded from gray, engineered thermoplastic material and are resistant to most corrosive agents.

Features

- Brass screw inserts.
- Material: nylon base and cover.
- Integrally molded mounting flange.
- 304 (18-8) stainless screws (10-32 / $^3/_8$").
- Temperature range from - 40°F to 185°F.

Blank Screw Cover Enclosures*

Part Nos.	Style	Inside Box Size A x B x C	Mounting L x J	Overall Outside Including Mounting Bracket H x W x D	F	G	R	S	Pieces/ Pkg.	Weight (lbs.)/Unit
CP100NB	Blank Cover	3.13 x 2.81 x 3	4 x 2.38	4.88 x 3.50 x 3.38	3.38	3.25	.63	2.5	12	9.60
CP200NB	Blank Cover	5.38 x 2.81 x 3	6.25 x 2.38	7.13 x 3.50 x 3.38	5.63	3.25	.63	2.5	8	8.8
CP300NB	Blank Cover	7.38 x 2.81 x 3	8.50 x 2.38	9.38 x 3.50 x 3.38	7.88	3.25	.63	2.5	6	8.20

* Special openings or positionings available on request.

Hinged Cover Enclosures with Multiple Hole Openings

UL LISTED E54381 CSA LR31146
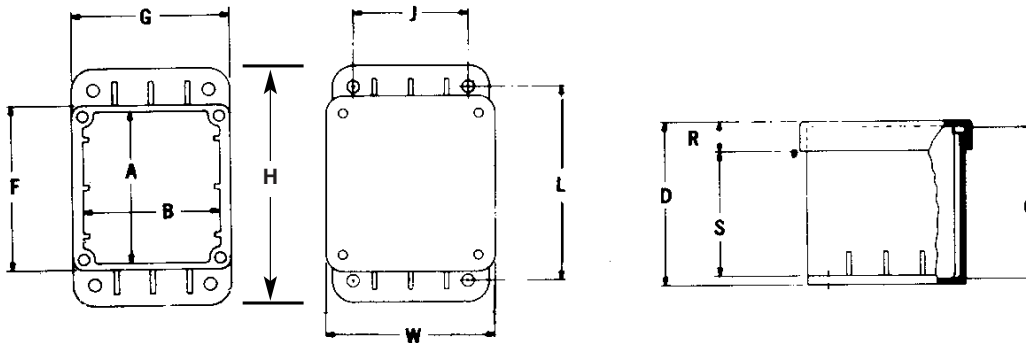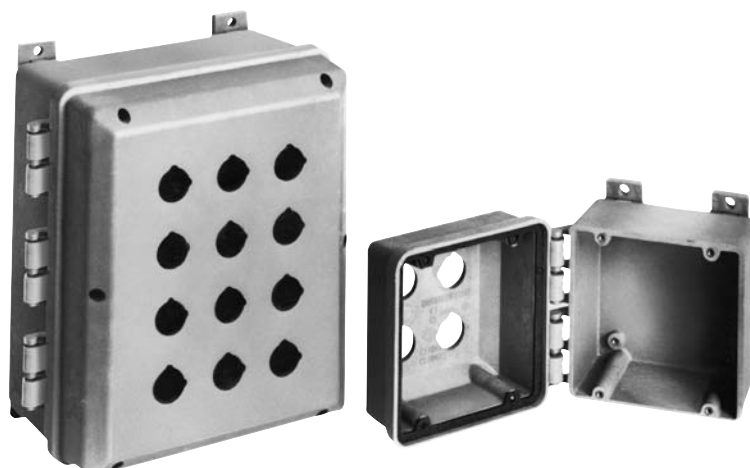
Made from engineered thermoplastic material, these enclosures are ideal for applications that require high-impact strength, chemical resistance, high dielectric strength, and excellent weathering capabilities, including indoor/outdoor industrial, MRO, and OEM applications. Nonmetallic hinges are an integral part of the mold. Hinge caps make cover captive and removable cover allows for easy field adjustment. Auxiliary devices must be rated for appropriate NEMA applications.

Features

- Nonmetallic mounting feet and all mounting hardware included.
- White painted 14 gauge steel or $1^1/8$" PVC back panel (order separately).
- Material: engineered thermoplastic base and cover.
- 304 stainless steel screws.
- Brass screw inserts.
- Lid design provides greater usable volume.
- Completely nonmetallic hinges.
- Temperature range from - 40˚F to 185˚F.

### Screw Cover Pushbutton Enclosures With Multiple 30.5 mm Openings*

Part Nos.	Openings	Inside Box size	Weight	Qty.	Panel Part Nos.	Size Steel/PVC
J665P	4	6 x 6 x 5.88	2.42	1	JP66 / JP66P	4.88 x 4.88
J863P	6	8 x 6 x 3.63	1.86	1	JP86 / JP86P	6.75 x 4.88
J1085P	9	10 x 8 x 5.88	3.59	1	JP108 / JP108P	8.75 x 6.88
J12106P	12	12 x 10 x 6.88	4.29	1	JP1210 / JP1210P	10.75 x 8.88
J14126P	20	14 x 12 x 6.88	7.19	1	JP1412 / JP1412P	12.75 x 10.88
J16147P	25	16 x 14 x 7.63	11.20	1	JP1614 / JP1614P	14.75 x 12.88

For enclosures larger than 25 position, please call Customer Service.
* All Circuit Safe pushbutton enclosures are furnished with standard hole dimensions: $1^7/32$" diameter with keyways at 12 o'clock and 3 o'clock.
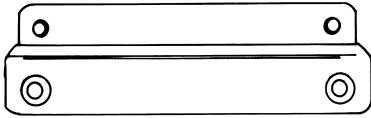Special openings or positionings available on request.

Accessories

Gasketed Pushbutton Hole Plug
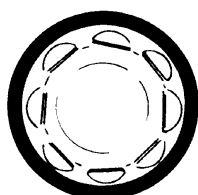
Part Number	Size	Standard Carton Qty.	Standard Weight (lbs.)
CP900	Standard PB hole	100	2.0

Circuit Safe® NEMA Accessories

Mounting Rails*

Mounting Rail Kits Part Number	Size (in.)	Std. Ctn. Qty.	Weight (lbs.)
NMK4V	4	25	5
NMK6V	6	24	7.7
NMK8V	8	24	10.25
NMK10V	10	20	13.26
NMK12V	12	20	11.4
NMK14V	14	25	17.76

*Mounting Rails include 2 rails and 4 stainless steel screws.
 Mounting Rails can be mounted on long or short side of enclosure.
 Does not apply to 16" enclosure.

Panel Adjuster Kits
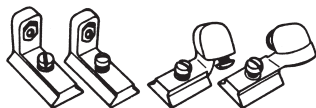
| Product	Part Numbers	Description	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)
Panel Adjuster Kit	NBPADJ2	4 panel adjusters 4 #10-32 screws to mount panel	10 kits	2.07
180° Swing Out Panel Kit	NBPSWG	4 panel adjusters 2 hinges 2 #10-32 screws to mount panel	10 kits	2.68
Swing Out Panel Adjuster Kit	NBPSWG2	2 hinged adjusters 2 panel adjusters 4 #10-32 screws	10 kits	1.80

Circuit Safe® NEMA Accessories

Latch Kits   For NEMA hinged enclosures.
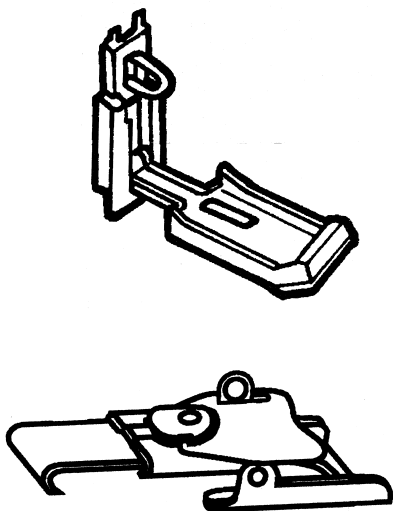
| Product	Part Numbers	Description	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)
Nonmetallic Quick-Release Latch Kit	NPL1L	Quick-Release Latch Kit for use with hidden hinge enclosure for NH & NI Series	25	2.00
Nonmetallic Quick-Release Latch Kit	NPL1S	Quick-Release Latch Kit for use with external hinge enclosure for NJ & NC Series	25	2.00
304 Stainless Steel Quick-Release Latch Kit	SSLL	Quick-Release Latch Kit for use with hidden hinge enclosure for NH & NI Series	25	4.27
304 Stainless Steel Quick-Release Latch Kit	SSLS	Quick-Release Latch Kit for use with external hinge enclosure for NJ & NC Series	25	3.41

Circuit Safe® JIC Accessories

Mounting Feet For Circuit Safe Enclosures – Type CC, CJ, CS, CV, J
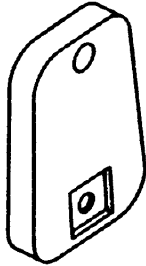
Part No.	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)
CJB159*	As required	0.04

*CJB159 nonmetallic mounting feet provide 1/4" standoff and may be used to mount enclosures in horizontal or vertical mode. They are shipped with all Circuit Safe JIC enclosures. No screws are provided when mounting feet are ordered separately.

Hinge Caps* For Circuit Safe Enclosures – Type CC, CJ, J
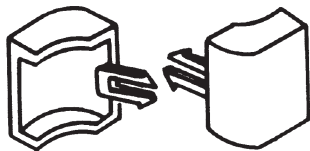
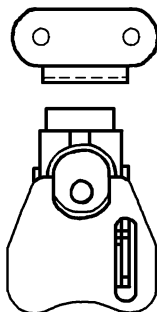| Part No.	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)
CH100R	As required	0.03

*For Circuit Safe enclosures to secure covers to bases.
Shipped as standard with hinge cover enclosure.

JIC Installation Kits*

Part No.	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)
CH208	1 Kit	0.25

*Installation kit is included as standard equipment with all JIC enclosures. Information listed here for purposes of additional purchase only. Kit includes 4 mounting feet, 8 hinge caps, and 8 screws.

JIC Latch Kits*

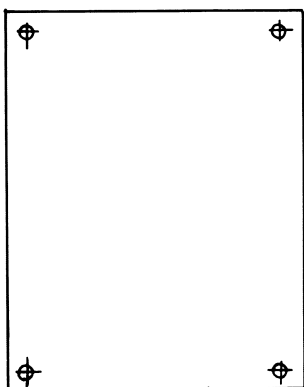| Part No.	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)
CJTL	1 Kit	0.25

Stainless steel. Kit includes latch and keeper.
*Factory installed. Consult customer service for price and delivery.
*Not UL-Listed

Circuit Safe® NEMA and JIC Accessories

Steel Back Panels*

Steel back panels are white painted 14 gauge steel.

Part Nos.	Thickness (in.)	Size (in.)	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)
JP64	14 gauge	4.88 x 2.88	1	0.6
JP66	14 gauge	4.88 x 4.88	1	1.0
JP86	14 gauge	6.75 x 4.88	1	1.0
JP88	14 gauge	6.75 x 6.88	1	1.2
JP108	14 gauge	8.75 x 6.88	1	1.5
JP1010	14 gauge	8.75 x 8.88	1	2.3
JP1210	14 gauge	10.75 x 8.88	1	2.7
JP1212	14 gauge	10.75 x 10.88	1	3.5
JP1412	14 gauge	12.75 x 10.88	1	3.8
JP1614	14 gauge	14.75 x 12.88	1	4.7

PVC Back Panels*

PVC back panels are made from $1/4$" PVC and meet UL94 V-O.
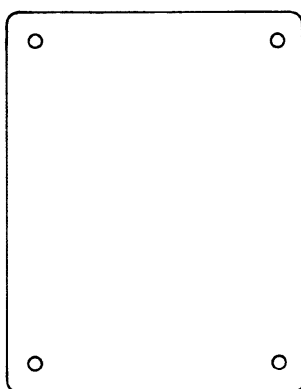
Part Nos.	Size (in.)	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)
JP64P	$4^7/8$ x $2^7/8$	1	0.3
JP66P	$4^7/8$ x $4^7/8$	1	0.3
JP86P	$6^3/4$ x $4^7/8$	1	0.4
JP88P	$6^3/4$ x $6^7/8$	1	0.5
JP108P	$8^3/4$ x $6^7/8$	1	0.7
JP1010P	$8^3/4$ x $8^7/8$	1	0.9
JP1210P	$10^3/4$ x $8^7/8$	1	1.2
JP1212P	$10^3/4$ x $10^7/8$	1	1.5
JP1412P	$12^3/4$ x $10^7/8$	1	1.7
JP1614P	$14^3/4$ x $12^7/8$	1	2.3

Medium NEMA Back Panels*
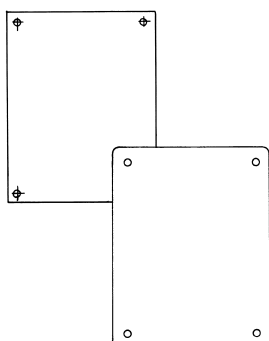
Part Nos. Steel/PVC	Size (in.)	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)
NP2016 / NP2016P	17 x 13	1	7.0 / 6.125
NP2420 / NP2420P	21 x 17	1	10.4 / 4.71
NP3024 / NP3024P	27 x 21	1	18.0 / 9.781

*Circuit Safe NEMA enclosures are not shipped with back panels which must be ordered separately. All accessories can be factory installed. Consult Customer Service for price and delivery.

Circuit Safe® NEMA and JIC Accessories

Draining Device* For 3R Rating and condensation build-up.

Part Number	Standard Carton Qty.
HPVEA9	1

Air Vents* NEMA 1 Rated only.

Part Numbers	Style	Standard Carton Qty.
HPVM25	For fitting outside of all enclosures	1
HPVM35	For fitting inside of all enclosures	1

Enclosure Ventilator* Allows any size enclosure to breathe, yet remains watertight.
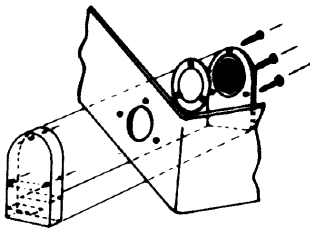
Part Number	Standard Carton Qty.
HVM27	1

*Factory installation available.

Window Kits

NEMA 4X Rated

Carlon hinged window kits are used to create a NEMA 4X environment on electronic control panels. Polycarbonate construction and double gaskets ensure environmental integrity.

Part Nos.*	Size (in.)	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)
NI64W	6 x 4	1	.8
NI66W	6 x 6	1	.9
NI86W	8 x 6	1	1.17
NI88W	8 x 8	1	1.4
NI108W	10 x 8	1	1.5
NI1010W	10 x 10	1	1.82
NI1210W	12 x 10	1	2.12
NI1212W	12 x 12	1	2.65
NI1412W	14 x 12	1	2.67
NI1614W[1]	16 x 14	1	3.10

All window kits can be factory installed to Carlon® enclosures.
Consult factory for price and delivery.
* Non-stock factory order only – consult Customer Service.
[1] NI1614W NEMA Type 12 Rated

Features
- High-impact strength.
- High dielectric strength.
- Suitable for indoor and outdoor use.
- Fully gasketed.

Standards
- UL Listed and meets NEMA Type 4X with the exception of NI1614W. All sizes are NEMA Type 1 & 12 rated.

Applications
- Instrument case.
- Junction and terminal boxes.
- Control and switching enclosures
- Meter and transformer cabinets.
- Small device enclosures.
- Surface mounted instruments
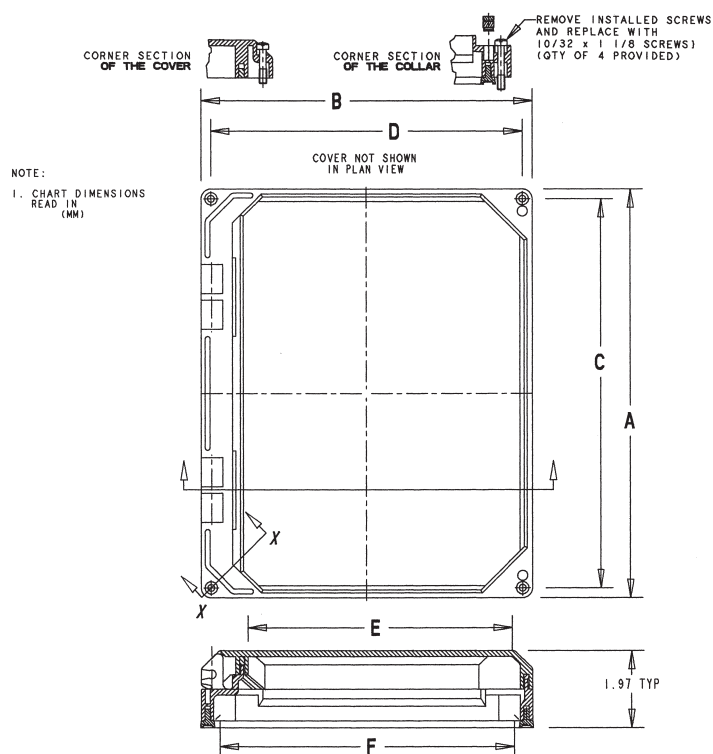
Size	A	B	C	D	E	F
NI64W	6.42 (163.1)	4.41 (112.0)	5.92 (150.4)	3.94 (100.0)	2.72 (69.1)	3.80 (96.5)
NI66W	6.42 (163.1)	6.42 (163.1)	5.94 (150.9)	5.94 (150.9)	4.72 (119.9)	5.80 (147.3)
NI86W	8.44 (214.4)	6.42 (163.1)	7.92 (201.2)	5.94 (150.9)	4.72 (119.9)	5.80 (147.3)
NI88W	8.44 (214.4)	8.43 (214.1)	7.95 (201.9)	7.95 (201.9)	6.72 (170.7)	7.80 (198.1)
NI108W	10.46 (265.7)	8.45 (214.6)	9.95 (253.5)	7.96 (202.2)	6.72 (170.7)	7.80 (198.1)
NI1010W	10.45 (265.4)	10.45 (265.4)	9.97 (253.2)	9.97 (253.2)	8.72 (221.5)	9.80 (248.9)
NI1210W	12.46 (316.5)	10.45 (265.4)	11.99 (304.5)	9.97 (253.2)	8.72 (221.5)	9.80 (248.9)
NI1212W	12.50 (317.5)	12.50 (317.5)	12.00 (304.8)	12.00 (304.8)	10.72 (272.3)	11.80 (299.7)
NI1412W	14.50 (368.3)	12.50 (317.5)	14.01 (355.9)	12.00 (304.8)	10.72 (272.3)	11.80 (299.7)
NI1614W	16.52 (419.6)	14.48 (367.8)	16.03 (407.2)	14.02 (356.1)	12.72 (323.1)	13.80 (350.5)

Himeline Enclosures HE, HS, HP, HLA/HLS Series

Features
- High-impact strength.
- High dielectric strength.
- Suitable for indoor and outdoor use.
- Fully gasketed.
- Lightweight.

Applications
- Instrument case.
- Junction and terminal boxes.
- Control and switching enclosures.
- Meter and transformer cabinets.
- Small device enclosures.

Standards
- Meets NEMA and IP standards as indicated in appropriate section.
- UL Listed as indicated.

Carlon® Himeline® enclosures are the ideal alternative to expensive stainless steel enclosures. They have excellent corrosion resistant properties; are impervious to sunlight, dirt, and moisture. Available in four series (HE, HS, HP, and HLA/HLS), with sizes ranging from 4 x 3 x 2 through 50 x 40 x 17, these enclosures offer choices that include double doors, clear or opaque covers, hinged and screw versions, single or three point closure mechanisms, 4X windows, DIN rail mounting, and adjustable depth door in door option that allow you to customize your enclosures by separating power from communications.

HE Series
(Small Electronic Enclosures/Insulated Industrial Boxes – Except Hinged Boxes)

Lid Options

Opaque low lid. "BASIC" model.
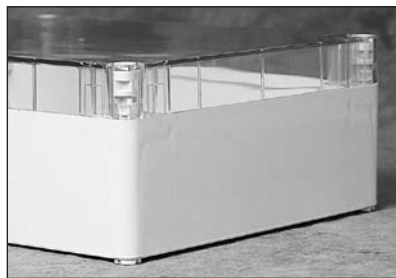
Transparent low lid. "C" models.

Carlon® Himeline® HE Series Enclosures are small Electronic Enclosures/Insulated Industrial Boxes ranging in size from 4 x 3 x 2 to 13 x 11x 4. They have a high-impact, high dielectric resistance, and are lightweight, fully gasketed and suitable for indoor and outdoor applications. The HE Series Enclosures meet IP 55 and are NEMA 4X Rated. All these features combined make these enclosures the ideal alternative to expensive stainless steel enclosures.

Features
- Hidden hinges open 185° for easy access.
- M8x18 screws for back panel mounting (included).
- Sealing gasket on all models.
- Mounting plate available for specific sizes.
- Hinged versions available (factory installed). *For more information contact your Carlon Sales Representative.
- Optional internal/external hinges.
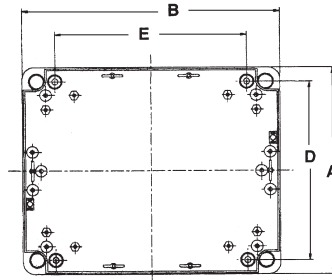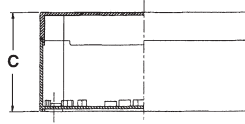- Enclosures attach directly or with wall brackets.

Material
- Opaque – lids and bases - PVC
- Clear – lids and bases - polycarbonate

Standards
- NEMA 4X Rated.
- Meets IP 55.

UL LISTED
E54381
Except where noted by ▶

Opaque Cover Assembly	Clear Cover Assembly	Dimensions External			Internal		Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)	Unit Wt. (lbs.)	Locking Screw Type
		A	B	C	D	E				
HE432	HE432C	4.33	2.96	2.29	4.14	2.76	5	1.1	5.2	Stainless Steel
HE443	HE443C	4.14	4.14	2.60	3.90	3.90	6	3.1	7.5	Stainless Steel
HE533	HE533C	5.32	2.92	2.84	5.12	2.72	5	2.4	6.3	Stainless Steel
HE743	HE743C	6.70	4.14	3.23	6.46	3.90	2	1.2	12.4	Polyamide
HE974	HE974C	8.66	6.62	4.18	8.43	6.38	1	1.1	–	Polyamide
HE1194	–	10.63	8.66	4.14	7.48	9.81	1	2.7	–	Polyamide
HE12105	HE1210C	12.33	9.97	4.53	11.82	9.45	1	3.0	–	Polyamide
HE14114	HE1411C	13.78	11.02	4.14	12.92	10.16	1	4.0	–	Polyamide

Consult customer service for availabililty and delivery.

Accessories

Mounting Plates

To be fitted directly into the boxes with self-tapping screws included in the standard supply. Made of zinc coated steel, 1.5 mm thick.
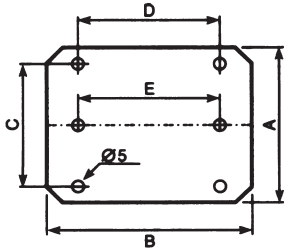
Part Number	Dimensions A	B	C	D	E	Std.Ctn. Qty.	Std.Ctn. Wt. (lbs.)
EMP743	3.74 (95)	6.15 (156)	–	–	5.12 (130)	10	10
EMP974	6.15 (156)	8.07 (205)	5.12 (130)	5.91 (150)	–	10	8.5
EMP1194	8.19 (208)	10.16 (258)	6.34 (161)	8.70 (221)	–	10	13
EMP1210	9.26 (235)	11.62 (295)	6.15 (156)	8.51 (216)	–	5	4.1
EMP1411	9.85 (250)	12.60 (320)	8.27 (210)	9.85 (250)	–	5	3

Air Vents*   NEMA 1 Rated only.

Part Numbers	Style	Std. Ctn. Qty.
▶HPVM25	For fitting outside of all enclosures	1
▶HPVM35	For fitting inside of all enclosures	1

Wall Mounting Bracket
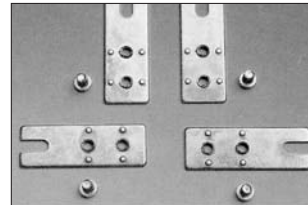
Part Number	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)
▶HEWMB	1	.35

Enclosure Ventilator*
Allows any size enclosure to breathe, yet remains watertight.
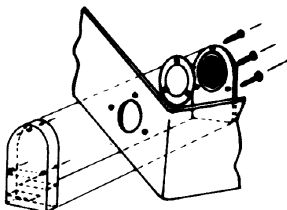
Part Number	Std. Ctn. Qty.
▶HVM27	1

Draining Device*
For 3R Rating and condensation build-up.
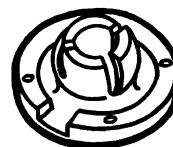
Part Number	Std. Ctn. Qty.
▶HPVEA9	1

*Factory installation available.

HS Series Screw-On Fastened and Hinged Cover Enclosures
• **Meets NEMA 1, 3, 3S, 4, 4X, 12, 13**
• **Meets IP 65**

Himeline® HS Series enclosures are designed for use as junction boxes, terminal wiring boxes, instrument and control housings, and small device enclosure applications. Molded under high pressure, Himeline HS Series enclosures provide high-impact strength, chemical resistance, high dielectric strength, and excellent weathering capabilities.

Features
• Standard slotted locking screw.
• High impact strength.
• Chemical resistance.
• High dielectric strength.
• Excellent weathering capabilities.
• Sealing gasket on all models.

Applications
• Junction boxes.
• Terminal wiring boxes.
• Instrument and control housings.
• Small device enclosure applications.
• Indoor or outdoor use.
• Sunlight resistant.

Standards
• Meets NEMA 1, 3, 3S, 4, 4X, 12, 13 standards as indicated.
• UL Listed per UL 50, enclosures for electrical equipment.
• Meets IP 65.
• UL Listed (E54381).

Material
• Opaque/Clear Lid – Polycarbonate
• Base – Fiberglass Reinforced Polyester

# HS Series Screw-On Fastened and Hinged Cover Enclosures

Features
- Molded under high pressure.
- High impact strength.
- Chemical resistance.
- High dielectric strength.
- Excellent weathering capabilities.
- Clear cover available.

Specifications

| Opaque Screw-On Cover Part Nos.	Clear Screw-On Cover Part Nos.	Opaque Hinged Cover Part Nos.	Clear Hinged Cover Part Nos.	External			Internal			Opaque Wt. (lbs.) each Screw/ Hinged	Clear Wt. (lbs.) each Screw/ Hinged	Std. Pkg.	Back Panel Part Nos.	Dimensions H x W	Thick-ness	Wt. (lbs.)	Std. Ctn. Qty.
				A	B	C	D	E	F								
HS7A7	HS7A7C	HH7A7	HH7A7C	10.63	7.09	7.09	6.26	9.80	6.54	10.7 / 7	10.9 / 6.2	4	HS7ABP	5.51 x 9.05	.08	1.1	1
HS11A7	HS11A7C	HH11A7	HH11A7C	10.63	10.63	7.09	9.80	9.80	6.54	15.2 / 8.5	14 / 8	4	HS11ABP	9.05 x 9.05	.08	1.7	1
HS11B7	HS11B7C	HH11B7	HH11B7C	14.17	10.63	7.09	9.80	13.35	6.54	17 / 4	18 / 4	4	HS11BBP	9.05 x 12.60	.08	2.4	1
HS11C7	HS11C7C	HH11C7	HH11C7C	21.26	10.63	7.09	9.80	20.43	6.54	13 / 13	12.5 / 13	2	HS11CBP	9.05 x 19.68	.08	3.9	1
HS15C7	HS15C7C	HH15C7	HH15C7C	21.26	14.17	7.09	13.35	20.43	6.54	17.7 / 11	18 / 11	2	HS15CBP	12.60 x 19.68	.08	6.6	1
HS21C7	HS21C7C	HH21C7	HH21C7C	21.26	21.26	7.09	20.43	20.43	6.54	12.5 / 13	12 / 13	1	HS21CBP	19.68 x 19.68	.08	8.8	1
HS11A9	HS11A9C	HH11A9	HH11A9C	10.63	10.63	9.06	9.80	9.80	8.47	15 / 4	16.6/5	4	HS11ABP	9.05 x 9.05	.08	1.7	1
HS11B9	HS11B9C	HH11B9	HH11B9C	14.17	10.63	9.06	9.80	13.35	8.47	20 / 6	19 / 6	4	HS11BBP	9.05 x 12.60	.08	2.5	1
HS11C9	HS11C9C	HH11C9	HH11C9C	21.26	10.63	9.06	9.80	20.43	8.47	14 / 9	14 / 9	2	HS11CBP	9.05 x 19.68	.08	3.9	1
HS15C9	HS15C9C	HH15C9	HH15C9C	21.26	14.17	9.06	13.35	20.43	8.47	18.5 / 11	19 / 11	2	HS15CBP	12.60 x 19.68	.08	6.6	1
HS21C9	HS21C9C	HH21C9	HH21C9C	21.26	21.26	9.06	20.43	20.43	8.47	13 / 14	14 / 14	1	HS21CBP	19.68 x 19.68	.08	8.8	1
HS15D9	HS15D9C	HH15D9	HH15D9C	28.35	14.17	9.06	13.35	27.52	8.47	13 / 13	13 / 13	1	HS15DBP	12.60 x 26.77	.10	9.5	1
HS21D9	HS21D9C	HH21D9	HH21D9C	28.35	21.26	9.06	20.43	27.52	8.47	18 / 18	17 / 18	1	HS21DBP	19.68 x 26.77	.10	15.5	1

Back panels and mounting feet must be ordered separately.
Consult customer service for availabililty and delivery.
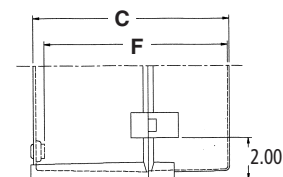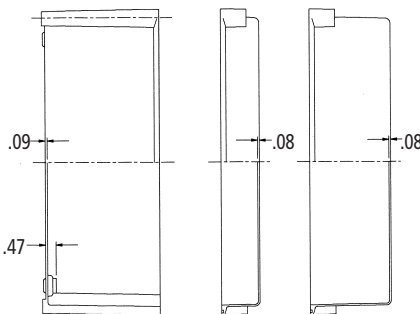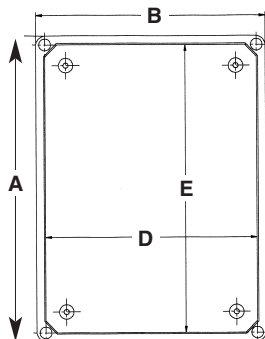
Placement of part P/N HSEH Hinge Kit at top and bottom of long side of HH Series enclosures.

Accessories

Thumb Screws – For Himeline HS Enclosures
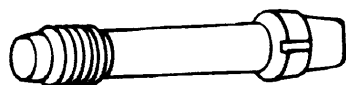
Part Numbers	Standard Carton Qty.	Standard Carton Wt. (lbs.).
HSTS4	4	0.1
HSTS6	6	0.15

Mounting Feet – For Himeline HS Enclosures
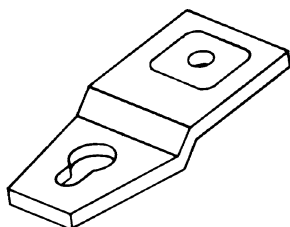
Part Numbers	Description	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)
HSMFZ	Zinc dichromated Steel	4/set	0.2
HSMFSS	304 Stainless Steel	4/set	0.2

Back Panels – For Himeline HS Enclosures* Metal back panels are white painted 14 gauge steel.
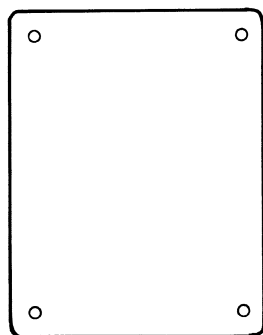
Part Nos.	Size (in.)	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)
HS7ABP	5.51 x 9.05	1	1.2
HS11ABP	9.05 x 9.05	1	2.0
HS11BBP	9.05 x 12.60	1	2.7
HS11CBP	9.05 x 19.68	1	4.3
HS15CBP	12.60 x 19.68	1	7.1
HS21CBP	19.68 x 19.68	1	9.6
HS15DBP	12.60 x 26.77	1	10.2
HS21DBP	19.68 x 26.77	1	16.6

*Himeline HS enclosures are not shipped with back panels. Order separately.
PVC back panels available upon request. Consult Customer Service.

Nonmetallic Carrying Handle Converts enclosures to portable units for meters and portable power.
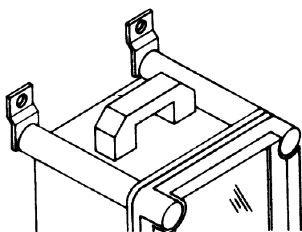
Part Numbers	Standard Carton Qty.	Standard Carton Wt. (lbs.).
HSCH	1	0.2

Accessories

Draining Device* For 3R Rating and condensation build-up.

Part Number	Standard Carton Qty.
HPVEA9	1

Air Vents* NEMA 1 Rated only.

Part Numbers	Style	Standard Carton Qty.
HPVM25	For fitting outside of all enclosures	1
HPVM35	For fitting inside of all enclosures	1

Enclosure Ventilator* Allows any size enclosure to breathe, yet remains watertight.

Part Number	Standard Carton Qty.
HVM27	1

*Factory installation available.

HP Series Enclosures with Hinged Quick-Release Cover
- **Meets NEMA 1, 3, 3S, 4, 4X, 12, 13**
- **Meets IP 66**

Himeline® HP Series enclosures for medium sized devices and equipment provide superior performance as junction and terminal wiring boxes, and instrument and control housing applications.

For indoor/outdoor industrial, MRO, and OEM applications. HP Series enclosures are resistant to corrosion, sunlight, chemicals, dirt, and moisture. Temperature range from -58° F to 320° F.

Features
- Projections for affixing cover mounted panel.
- Door locking mechanism convertible to key lock.
- M8x18 studs for back panel mounting (included).
- Hidden hinges open 185° for easy access.
- Multipositional DIN rail fixing components.
- Removable stainless steel hinge pins.
- Single piece construction.
- Opaque or tempered glass window option.
- Steel, nonmetallic & slotted back panels available.
- External & internal venting available.
- Hinged variable height inner panel option.
- Quick lock 1/4-turn entry.
- Underside grid pattern on inner door panel.
- Self-positioning panel depth adjusters.
- Pole mounting kit.
- Pedestal mounting capability.
- Sunlight resistant.

Applications
- Junction boxes.
- Terminal wiring boxes.
- Instrument and control housing.
- Indoor or outdoor use.

Standards
- NEMA Type 1, 3, 3S, 4, 4X, 12, 13.
- UL Listed per UL 50, enclosures for electrical equipment.
- Meets IP 66.

Material
- Lids/Bases – Fiberglass reinforced polyester.

HP Series Enclosures with Hinged Quick-Release Cover

Specifications

| Enclosure With Opaque Cover Part Nos. | Std. Ctn. Wt. (lbs.) | Enclosure With Clear Window* | Std. Ctn. Wt. (lbs.) | Window Dimension (H x W) (in.) | External | | | Internal Dimensions | | | Mounting | | Window | | Std. Ctn. Qty. |
					A	B	C	D	E	F	G	H	J	K	
HP1612B	11.04	HC1612B	12.5	11 x 7.87	16.93	12.99	7.87	14.96	10.24	6.61	14.76	5.91	11.02	7.87	1
HP2016B	16.80	HC2016B	17.2	14.96 x 11.81	20.87	16.93	7.87	18.90	14.17	6.61	18.70	9.84	14.96	11.81	1
HP2416C	21.13	HC2416C	24.12	18.89 x 11.81	25.47	17.17	9.84	22.83	14.17	8.35	22.64	9.84	18.90	11.81	1
HP3020D	32.28	HC3020D**	36.02	22.83 x 15.74	29.41	21.10	11.81	26.77	18.11	10.28	26.57	13.78	22.83	15.75	1
HP3325D	39.00	HC3325D**	43.12	26.77 x 19.68	33.35	25.04	11.81	30.71	22.05	10.28	30.51	17.72	26.77	19.69	1

 * HC Enclosures are IP 65 Rated. Clear window is glass.
** This series of enclosures come standard with body, lid and mounting rail kit. Consult customer service for availabililty and delivery.

Depth with back panel installed
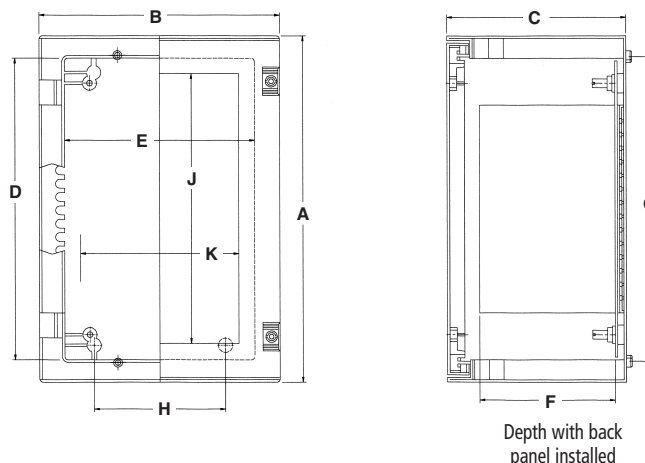
Hinged Internal Door

- Internal fiberglass reinforced polyester door assembly.
- Grid pattern on the inside for quicker positioning of equipment.
- Quick locking 1/4-turn entry.

| Part Numbers | A | | B | | C | | D | | Std. Ctn. Qty. | Std. Ctn. Wt. (lbs.) |
	in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)		
PID1612	12.40	(315)	18.07	(205)	5.98	(152)	1.02	(26)	1	2.05
PID2016	16.34	(415)	12.00	(305)	5.98	(152)	1.02	(26)	1	3.15
PID2416	20.28	(515)	12.00	(305)	7.64	(194)	1.26	(32)	1	4.50
PID3020	24.21	(615)	15.94	(405)	9.61	(244)	1.26	(32)	1	6.50
PID3325	28.15	(715)	19.88	(505)	9.61	(244)	1.26	(32)	1	8.45
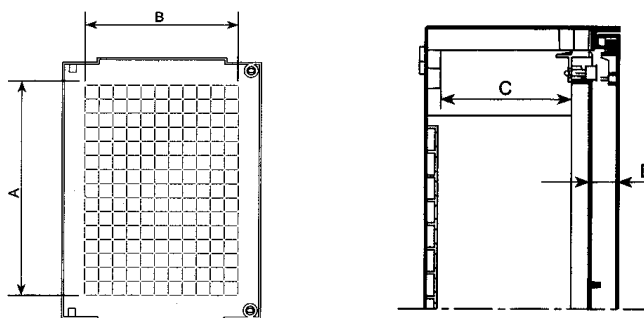
Accessories

Back Panels Dimensions

A complete range of plates, which can be directly fixed to the enclosure supports or to the adjustable depth supports.

Steel Back Panels   Steel back panels are white painted 14 gauge steel.

To Fit Enclosures	Part Numbers	Thickness in.	(mm)	Weight lbs.	(kg)	P in.	S in.
HP1612B	PMM1612	.079	(2)	3.10	(1.6)	14.37	9.84
HP2016B	PMM2016	.079	(2)	6.15	(2.5)	18.30	13.78
HP2416C	PMM2416	.079	(2)	8.0	(3.1)	22.24	13.78
HP3020D	PMM3020	.079	(2)	12.04	(4.6)	26.18	17.72
HP3325D	PMM3325	.118	(3)	20.0	(9.9)	30.11	21.65

PVC Insulating Back Panels   PVC back panels are made from $1/4$" PVC and meet UL94 V-0.

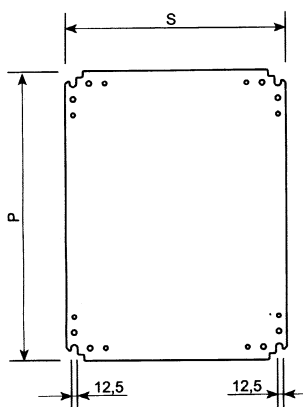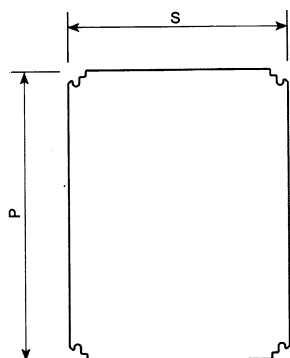| To Fit Enclosures	Part Numbers	Weight lbs.	(kg)	P in.	(mm)	S in.	(mm)
HP1612B	PMB1612	1.10	(0.5)	14.37	(365)	9.84	(250)
HP2016B	PMB2016	2.65	(1.2)	18.30	(465)	13.78	(350)
HP2416C	PMB2416	3.09	(1.4)	22.24	(565)	13.78	(350)
HP3020D	PMB3020	4.63	(2.1)	26.18	(665)	17.72	(450)
HP3325D	PMB3325	6.62	(3.0)	30.11	(765)	21.65	(550)

Slotted Back Panels   Zinc dichromated coated steel plates perforated for addition of electrical circuitry.
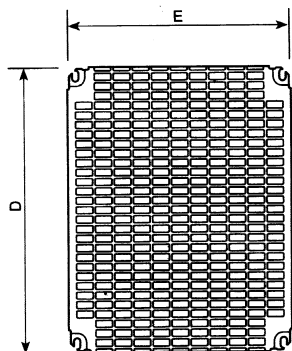
To Fit Enclosures	Part Numbers	Weight lbs.	(kg)	D in.	(mm)	E in.	(mm)
HP1612B	PMR1612	1.54	(0.7)	13.74	(349)	9.8	(251)
HP2016B	PMR2016	2.87	(1.3)	17.72	(450)	13.82	(351)
HP2416C	PMR2416	3.53	(1.6)	21.85	(555)	13.82	(351)
HP3020D	PMR3020	5.07	(2.3)	25.39	(645)	17.76	(451)
HP3325D	PMR3325	7.06	(3.2)	29.53	(750)	21.69	(551)

Refer to the Enclosure Accessories section for back panel accessories.

Accessories

Pole Mounting Set
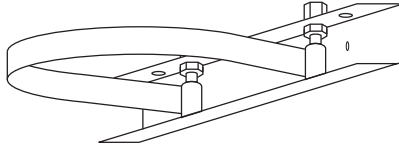
Part Numbers	To Fit To Enclosures	Standard Carton Quantity
HPPF300	HP1612B	1
HPPF400	HP2016B HP2416C	1
HPPF500	HP3020D	1
HPPF600	HP3325D	1

35 mm Symmetrical DIN Rail
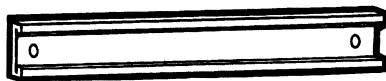
Part Numbers	To Fit To Enclosures	Width (in.)	Std. Ctn. Qty.
HPCO300	HP1612B	11.02	1
HPCO400	HP2016B, HP2416C	14.96	1
HPCO500	HP3020D	18.90	1

Rail Mounting Insert
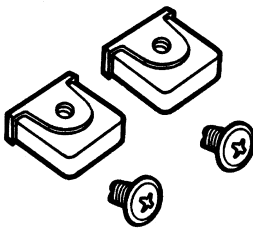
Part Number	Features	Standard Carton Quantity
HPRFK	Fits all enclosures	1

Wall Mounting Set   (includes brass inserts and installation tools)

Part Number	Standard Carton Quantity	Standard Carton Weight (lbs.)
HPWMF	4	0.1

Blanking Grommet   To close off openings on enclosure backs.
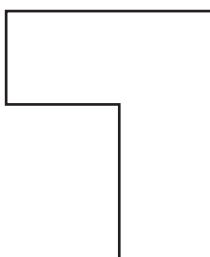
Part Numbers	Fits Enclosure Sizes	Description	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)
HPBNGB	16 x 12 and 20 x 16	Blanking Grommet	Set of 4	1.00
HPBNGC	24 x 16, 30 x 20 and 33 x 25	Blanking Grommet	Set of 4	1.00

Accessories

Fixing Accessories For Slotted Plates
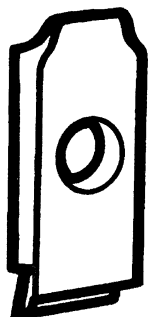
Part Numbers	FIXING NUT Type Of Thread	Std. Ctn. Qty.	Part Numbers	FIXING BOLT WITH WASHER Length (in.)	Std. Ctn. Qty.
HPFA4	M4	100	HPFB104	.39	100
HPFA4	M4	100	HPFB164	.63	100
HPFA5	M5	100	HPFB125	.47	100
HPFA5	M5	100	HPFB185	.71	100
HPFA6	M6	100	HPFB126	.47	100
HPFA6	M6	100	HPFB186	.71	100

For slotted back panels, see page 34

Back Panel Depth Adjustable Supports

Supports designed to fit 7.87" (200 mm), 9.84" (250 mm), 11.81" (300 mm) and 13.78" (350 mm) deep enclosures. Self-positioning slots allow for adjustment every .49" (12.5 mm). Made of zinc dichromated coated steel.
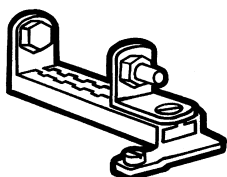
To Fit Enclosures	Part Numbers	A in./mm	B in./mm	Standard Carton Quantity
HP1612B & HP2016B	HPLM200 HPLM200	5.98/152	3.90/99	1 set of 4
HP2416C	HPLM250	8.07/205	4.13/105	1 set of 4
HP3020D & HP3325D	HPLM300 HPLM300	10.04/255	8.07/205	1 set of 4

Pedestal Mount
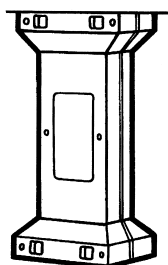
Part Number	To Fit To Enclosures	Standard Carton Qty.
HPSFS1	HP2016B HP2416C	1

Draining Device* For 3R Rating and condensation build-up.
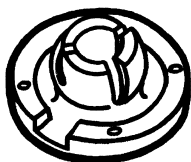
Part Number	Standard Carton Qty.
HPVEA9	1

*Factory installation available.

Accessories

Air Vents* NEMA 1 Rated only.

Part Numbers	Style	Standard Carton Qty.
HPVM25	For fitting outside of all enclosures	1
HPVM35	For fitting inside of all enclosures	1

*Factory installation available.

Enclosure Ventilator* Allows any size enclosure to breathe, yet remains watertight.
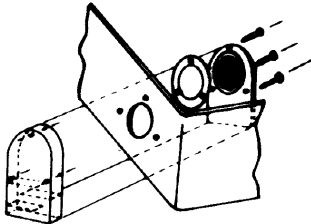
Part Number	Standard Carton Qty.
HVM27	1

*Factory installation available.

Coupling Frame For Himeline HP Enclosures HP3020D and HP3325D

Part Number	Standard Carton Qty.
HPBU	1

Replacement Standard Handle
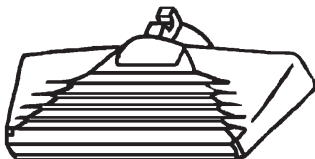
Part Number	Standard Carton Quantity	Standard Carton Weight (lbs.)
HPRSH	1	0.05

Locks For Himeline HP Enclosures
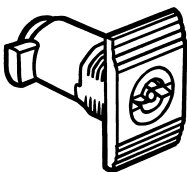
Replacement Door Lock

Part Number	Std. Ctn. Qty.
HPRLA	1

For replacement handle, order HPRSH.

Cylinder Key Lock (Keyed Alike)

Part Number	Std. Ctn. Qty.
HPTPLM	1

For replacement key, order HPRKO.

Padlocking Service

Part Number	Std. Ctn. Qty.
HPPLH	1

HLA/HLS Series Enclosures

Carlon® Himeline® HLA/HLS Series Enclosures are large Fiber Reinforced Polyester Cabinets ranging in sizes 20 x 20 x 17 to 50 x 40 x 17 and 20 x 20 x 12 to 50 x 40 x 12, respectively. They have operating temperatures of -50° to 150° C and can accommodate large devices and equipment for a wide range of applications including junction and terminal wiring boxes, instruments, and control housings. They are ideal for indoor/outdoor industrial, MRO and OEM applications, and offer superior strength and high resistance to corrosion, moisture, dust, oil and UV light, enabling them to withstand the harshest of environments.

The HLA/HLS Series Enclosures are fitted with a watertight gasket and are available in one-and two-door configurations. These cabinets have a closed top and bottom and the two-door version includes a central upright to maintain rigidity.

To maintain the watertight seal, the locking mechanism is positioned outside the gasketed area. A wide variety of accessories are available such as steel and nonmetallic back panels, self-positioning panel depth adjusters, and ventilator kits.

Carlon Enclosures…the ideal alternative to expensive stainless steel enclosures.

Features
- Fiber reinforced polyester.
- Temperature range of -58° to 302° F (-50° to 150° C).
- Indoor/outdoor applications.
- Superior strength.
- High resistance to harsh environments.
- Watertight gasket seal.
- One- and two-door configurations.
- Locking mechanism and hinge are outside gasketed area.
- Floor or wall mounted.

Applications
- Contain large devices and equipment.
- Junction and terminal wiring boxes.
- Instrument and control housings.

Standards
- IP 65 Rating (Single door versions only)
- 4/4X Rated (Single door versions only)
- UL Listed

HLA/HLS Series Single and Double Hinged Cover Enclosures with Latches*

c(UL)us
LISTED
E54381

One Door NEMA Types 1, 2, 3, 3R, 4, 4X, 5, 12, 13

HLA One Door (17" Deep)

Part No.	Dimensions			Std. Ctn. Qty.	Std. Ctn. Wt.
	H	W	D		
HLA2020	20	20	17	1	38.3
HLA2030	20	30	17	1	53.9
HLA3020	30	20	17	1	53.9
HLA3030	30	30	17	1	60.7
HLA4020	40	20	17	1	63.1
HLA4030	40	30	17	1	81.0
HLA5020	50	20	17	1	78.7
HLA5030	50	30	17	1	96.7

* Consult customer service for availabililty and delivery.

HLS One Door (12" Deep)

Part No.	Dimensions			Std. Ctn. Qty.	Std. Ctn. Wt.
	H	W	D		
HLS2020	20	20	12	1	29.8
HLS2030	20	30	12	1	40.59
HLS3020	30	20	12	1	49.5
HLS3030	30	30	12	1	55.1
HLS4020	40	20	12	1	56.81
HLS4030	40	30	12	1	61.7
HLS5020	50	20	12	1	67.56
HLS5030	50	30	12	1	76.83

* Consult customer service for availabililty and delivery.

Two Door NEMA Types 1, 2, 12, 13

HLA Two Door (17" Deep)

Part No.	Dimensions			Std. Ctn. Qty.	Std. Ctn. Wt.
	H	W	D		
HLA30402	30	40	17	1	81.0
HLA40402	40	40	17	1	114.7
HLA40502	40	50	17	1	135.0
HLA50402	50	40	17	1	135.0

* Consult customer service for availabililty and delivery.

HLS Two Door (12" Deep)

Part No.	Dimensions			Std. Ctn. Qty.	Std. Ctn. Wt.
	H	W	D		
HLS30402	30	40	12	1	62.57
HLS40402	40	40	12	1	87.59
HLS40502	40	50	12	1	104.28
HLS50402	50	40	12	1	104.28

* Consult customer service for availabililty and delivery.

Accessories

Nonmetallic Thermosetting Plastic (Bakelite)

One Door

Part No.	Dimensions H	W	Std. Ctn. Qty.	Std. Ctn. Wt.
LP2020BP	15.4	14.8	1	2.1
LP3020BP*	25.2	14.8	1	3.0
LP3030BP	25.2	24.6	1	6.3
LP4020BP	35.0	14.8	1	5.2
LP4030BP	35.0	24.6	1	8.8
LP5020BP	44.3	14.8	1	6.7
LP5030BP	44.3	24.6	1	11.2

* Use Back Panel LP3020BP for Enclosures HLA2030, HLA3020, HLS2030 and HLS3020

Two Door

Part No.	Dimensions H	W	Std. Ctn. Qty.	Std. Ctn. Wt.
LP30402BP	25.2	34.4	1	8.8
LP40402BP	35.0	34.4	1	12.3
LP40502BP	35.0	44.3	1	16.1
LP50402BP	44.3	34.4	1	16.1

Metal – Galvanized Steel
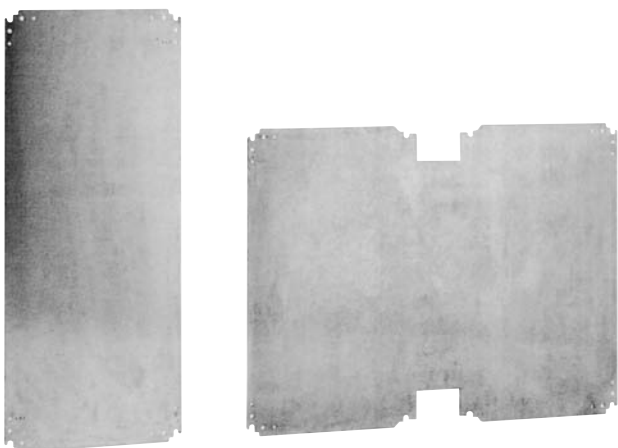
One Door

Part No.	Dimensions H	W	Std. Ctn. Qty.	Std. Ctn. Wt.
LA2020BP	15.4	14.8	1	5.6
LA3020BP*	25.2	14.8	1	8.6
LA3030BP	25.2	24.6	1	17.6
LA4020BP	35.0	14.8	1	14.6
LA4030BP	35.0	24.6	1	24.3
LA5020BP	44.3	14.8	1	19.4
LA5030BP	44.3	24.6	1	31.9

* Use Back Panel LA3020BP for Enclosures HLA2030, HLA3020, HLS2030 and HLS3020

Two Door

Part No.	Dimensions H	W	Std. Ctn. Qty.	Std. Ctn. Wt.
LA30402BP	25.2	34.4	1	24.1
LA40402BP	35.0	34.4	1	33.8
LA40502BP	35.0	44.3	1	43.4
LA50402BP	44.3	34.4	1	43.7

Accessories

Mounting Feet

Part No.	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)
HLAMFSS	1 ea. (set of 4)	.6

Replacement Handle with Cylinder Key Lock
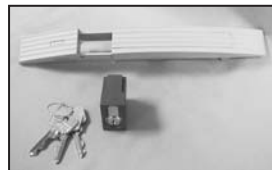
Part No.	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)
HLATEL	1 ea.	.41

Panel Adjuster Kit

Part No.	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)
HLABPA4	1 ea. (set of 4)	.31

Standard Replacement Bar Lock with Key

Part No.	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)
HLATD	1 ea.	.21

Padlock Device

Part No.	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)
HLAPAD	1 ea.	.61

Replacement Handle with Push Button

Part No.	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)
HLAHAN	1	.40

Draining Device*
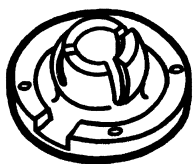
Part No.	Std. Ctn. Qty.
HPVEA9	1

For 3R Rating and condensation build-up.

Air Vents*

Part No.	Style	Std. Ctn. Wt. (lbs.)
HPVM25	For fitting outside of all enclosures	1
HPVM35	For fitting inside of all enclosures	1

NEMA 1 Rated only.

Enclosure Ventilator*
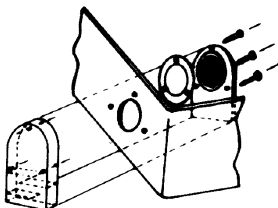
Part No.	Std. Ctn. Qty.
HVM27	1

Allows any size enclosure to breathe, yet remains watertight.

*Factory installation available.

HLP Series Enclosure and Pedestal
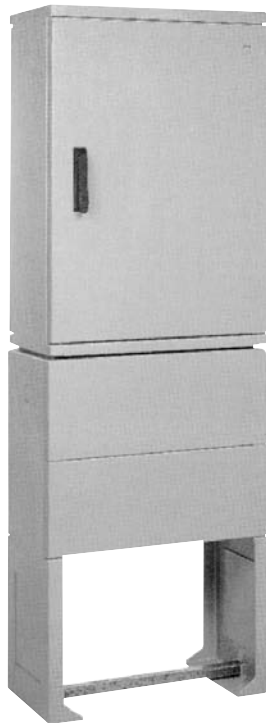
Himeline HLP Enclosures and Pedestals are designed to accommodate all types of electrical equipment for electrical distribution applications. The enclosure may be directly installed on the ground or on top of a pedestal, and the pedestal is approved for direct bury applications. Both are manufactured using fiber reinforced polyester to provide high impact resistance and allow effortless modifications. And each have an IP-43 Self-Ventilated and IP-54 Watertight rating and a temperature range of -58°F to 302°F.

Enclosure

Pedestal

Features
- High impact resistance
- Nonconductive and noncorrosive.
- Fits all type of electrical equipment
- IP-43 Self-Ventilated.
- IP-54 Watertight.
- One and two door configurations.
- Install directly on the ground or on a pedestal.
- Removable inner hinges for great access.
- Doors open 180°

Features
- Can be direct buried.
- Nonconductive and noncorrosive
- Detachable upper front for easy access.
- High impact resistance.
- Auxiliary outlet on the side.
- IP-43 Self-Ventilated.
- IP-54 Watertight.
- Floor or wall mountable.

Material
- Fiberglass Reinforced Polyester

Applications
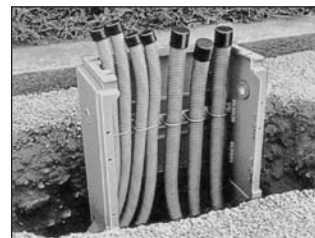
HLP Enclosure and Pedestal

Specifications

Enclosures

Part No.	No. of Doors	No. of Locks	A Height	B Width	C Depth	Ctn Qty.	Wt. lbs.
HLP3318	1	1	33.46	18.31	12.60	1	40.79
HLP3323	1	1	33.46	23.23	12.60	1	48.50
HLP3331	1	1	33.46	30.91	12.60	1	55.12
HLP33442	2	1	33.46	43.90	12.60	1	77.16
HLP33442L	2	2	33.46	43.90	12.60	1	77.16

* Consult customer service for availabililty and delivery.

Pedestals

Part No.	A Height	B Width	C Depth	Ctn Qty.	Wt. lbs.
HLPED3318	35.43	18.31	12.20	1	33.10
HLPED3323	35.43	23.23	12.20	1	37.48
HLPED3331	35.43	30.91	12.20	1	44.10
HLPED33442	35.43	43.90	12.20	1	55.12
HLPED33442L	35.43	43.90	12.20	1	55.12

* Consult customer service for availabililty and delivery.
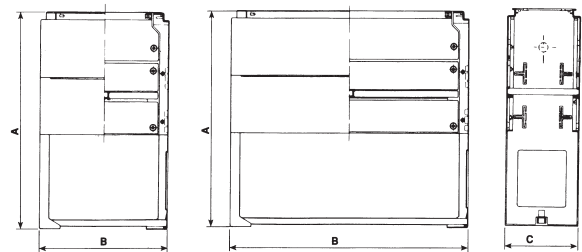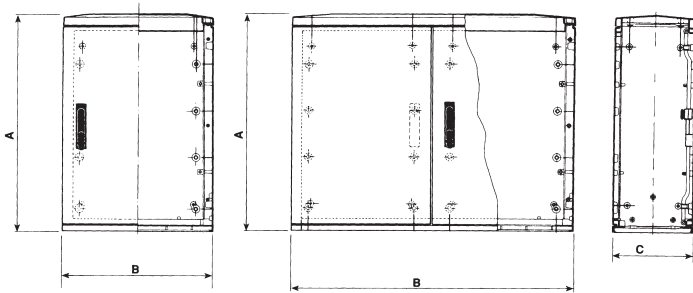
Mounting Plates

Part No.	Enclosure Part No.	Pedestal Part No.	# of Plates per Encl.	D	E	Thick-ness	Ctn Qty.	Wt. lbs.
LA1412BP	HLP3318	HLPED3318	1	14.02	11.97	.20	1	4.41
LA1816BP	HLP33442L	HLPED33442L	2	17.64	15.59	.20	1	11.02
LA1916BP	HLP3323	HLPED3323	1	18.94	16.89	.20	1	6.00
LA2725BP	HLP3331	HLPED3331	1	26.61	24.57	.20	1	8.38

* Consult customer service for availabililty and delivery.
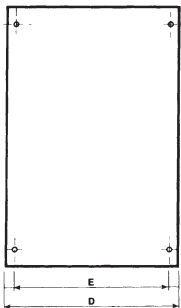
Accessories

Gasket

Part No.	Size H x W x D	Ctn Qty.	Wt. lbs.
HLP3318G	33 x 18 x 12	1	2.2
HLP3323G	33 x 23 x 12	1	2.2
HLP3331G	33 x 31 x 12	1	2.2
HLP3344G	33 x 44 x 12	1	2.2

* Consult customer service for availabililty and delivery.

Slack and Splice Enclosures

Carlon's state-of-the-art modification capabilities allow for design of Slack and Splice Enclosures to meet specific application requirements.

Features

• Slack and Splice Enclosures provide maximum protection of slack fiber and splice unit assemblies.

• Eliminates need for difficult aerial and vault splicing.

• Stores adequate slack fiber to facilitate splicing at ground level work station.

• Enclosure sized to maintain minimum required radius of fiber optic cable.

• Splice tube to accommodate industry standard splice and tray assemblies (Splice enclosure only).

Slack Enclosures

Cable Retainer Clips

Structural Foam Thermoplastic Enclosure

Hinged Cover for Easy Access

Slack Fiber Optic Cable

Weatherproof Split Cable Grommets

Aluminum Channel for Pole or Vault Wall Mounting
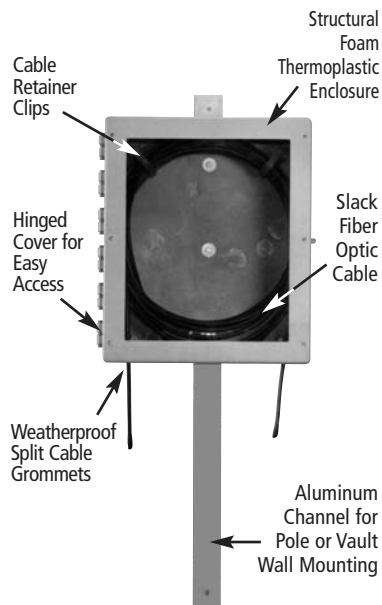
Part Number	Inside Box Size A x B x C	Box Opening E x F	Dimensions		
			K	M	N
SLK11	30 x 24 x 11$^{1}/_{2}$	27$^{1}/_{4}$ x 21 $^{1}/_{4}$	10 $^{1}/_{4}$	10 $^{1}/_{2}$	1
SLK12	30 x 24 x 9 $^{1}/_{2}$	27 $^{1}/_{4}$ x 21 $^{1}/_{4}$	8 $^{1}/_{4}$	8 $^{1}/_{2}$	1
SLK21	24 x 20 x 11$^{1}/_{2}$	21$^{1}/_{4}$ x 17 $^{1}/_{4}$	10 $^{1}/_{4}$	10 $^{1}/_{2}$	1
SLK22	24 x 20 x 9 $^{1}/_{2}$	21$^{1}/_{4}$ x 17 $^{1}/_{4}$	8 $^{1}/_{4}$	8 $^{1}/_{2}$	1
SLK31	20 x 16 x 11$^{1}/_{2}$	17 $^{1}/_{4}$ x 13 $^{1}/_{4}$	10 $^{1}/_{4}$	10 $^{1}/_{2}$	1
SLK32	20 x 16 x 9 $^{1}/_{2}$	17 $^{1}/_{4}$ x 13 $^{1}/_{4}$	10 $^{1}/_{4}$	10 $^{1}/_{2}$	1

1/4" Thick UL Approved Gasket

Splice Enclosures

Cable Retainer Clips

Structural Foam Thermoplastic Enclosure

Hinged Cover for Easy Access

Slack Fiber Optic Cable

Weatherproof Split Cable Grommets

Splice Closure (Not Included)

Weatherproof Splice Tube

Aluminum Channel for Pole or Vault Wall Mounting
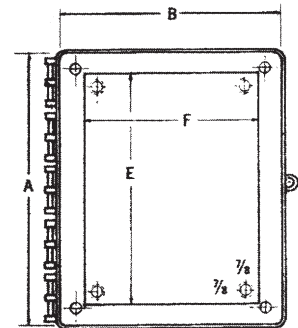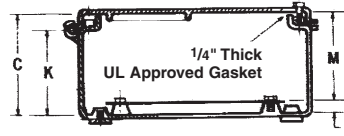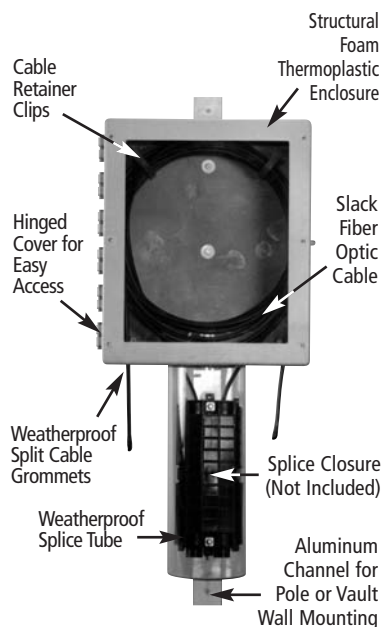
Part Number	Inside Box Size A x B x C	Tube Size	Box Opening E x F	Dimensions		
				K	M	N
SPL111	30 x 24 x 11$^{1}/_{2}$	10"	27 $^{1}/_{4}$ x 21 $^{1}/_{4}$	10 $^{1}/_{4}$	10 $^{1}/_{2}$	1
SPL122	30 x 24 x 9 $^{1}/_{2}$	8"	27 $^{1}/_{4}$ x 21 $^{1}/_{4}$	8 $^{1}/_{4}$	8 $^{1}/_{2}$	1
SPL211	24 x 20 x 11$^{1}/_{2}$	10"	21$^{1}/_{4}$ x 17 $^{1}/_{4}$	10 $^{1}/_{4}$	10 $^{1}/_{2}$	1
SPL222	24 x 20 x 9 $^{1}/_{2}$	8"	21$^{1}/_{4}$ x 17 $^{1}/_{4}$	8 $^{1}/_{4}$	8 $^{1}/_{2}$	1

For All Enclosures

Painted JIC enclosure with painted back panel. Installed clear cover with handle and quick-release latch.

Color molded JIC unit with addition of window and pushbuttons.

Molded junction box painted with addition of mounted weatherproof cover.

Painted JIC enclosure with pocket installed in cover for control pad.

Color Molded Enclosures

All Circuit Safe® enclosures can be molded in a variety of colors. Minimum quantities for single shipment or releases against blanket orders are required.

Painted/Silkscreened Enclosures

All enclosures can be painted, interior and exterior, or by special request. Enclosure covers can also be silkscreened on request.

EMI/RFI Protection

For applications where Radio Frequency Interference is a factor, the interior can be coated with an acrylic base paint with a nickel filler. Windows can be covered with fine copper mesh.

Other Modifications Available

Our factory is capable of modifying any of our enclosures to a customer's specifications. Factory's capabilities include:

- Precision milling of button holes, windows, and pockets for keypad installations.
- Hole tapping.
- Ventilators.
- Mounting bosses.
- Access windows.
- Hinged windows.
- Mounted in use weatherproof covers.
- Handles for portable units.
- Latches.
- Enclosure coolers.
- Cylinder locking systems.
- And more!

NEMA Types – Definitions Pertaining to Nonhazardous Locations
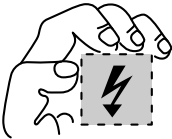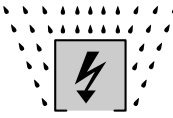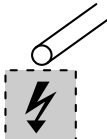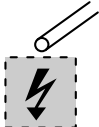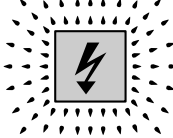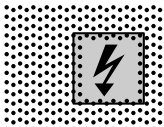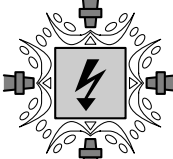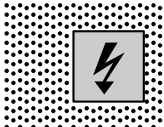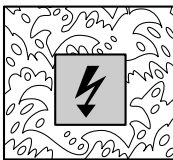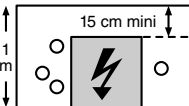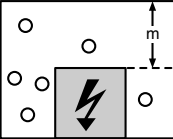
Enclosures for Electrical Equipment

An enclosure is a surrounding case constructed to provide protection from accidental contact with the enclosed equipment and to provide protection to the enclosed equipment from specified environmental conditions. A brief description of the more common types of enclosures used by the electrical industry follows.

Type 1 Enclosure: Intended for indoor use primarily to provide protection against contact with enclosed equipment and a degree of protection against falling dirt.

Type 2 Enclosure: Intended for indoor use primarily to provide a degree of protection against limited amounts of falling water and dirt.

Type 3 Enclosure: Intended for outdoor use primarily to provide a degree of protection against wind-blown dust, rain, sleet and external ice formation.

Type 3R Enclosure: Intended for outdoor use primarily to provide a degree of protection against falling rain, sleet and external ice formation.

Type 3S Enclosure: Intended for outdoor use primarily to provide a degree of protection against wind-blown dust, rain, and sleet, and to provide for operation of external mechanism when ice laden.

Type 3X Enclosure: Intended for outdoor use primarily to provide a degree of protection against wind-blown dust, rain, sleet, external ice formation, and corrosion.

Type 3SX Enclosure: Intended for outdoor use primarily to provide a degree of protection against wind-blown dust, rain, sleet, and corrosion,and to provide for operation of external mechanism when ice laden.

Type 4 Enclosure: Intended for indoor or outdoor use primarily to provide a degree of protection against wind-blown dust and rain, splashing water and hose-directed water.

Type 4X Enclosure: Intended for indoor or outdoor use primarily to provide a degree of protection against corrosion, wind-blown dust and rain, splashing water and hose-directed water.

Type 6 Enclosure: Intended for indoor or outdoor use primarily to avoid a degree of protection against contact with enclosed equipment, falling dirt, hose-directed water, entry of water during occasional temporary submersion at a limited depth and external ice formation.

Type 6P Enclosure: Intended for indoor or outdoor use primarily to provide a degree of protection against contact with enclosed equipment, falling dirt, hose-directed water, entry of water during prolonged submersion at a limited depth and external ice formation.

Type 12 Enclosure: Intended for indoor use primarily to provide a degree of protection against dust, falling dirt and dripping noncorrosive liquids.

Type 13 Enclosure: Intended for indoor use primarily to provide a degree of protection against dust, spraying of water, oil and noncorrosive coolant.

International Standards IP Protection Classification Data

The letters IP followed by three characteristic numbers symbolize the degree of protection.

First Digit
Protection Against Solid Bodies

Second Digit
Protection Against Liquids

IP	Test		IP	Test
0	No protection		**0**	No protection
1	Protection against solid bodies larger than 50 mm (for example accidentally touching with the hand)		**1**	Protection against vertical water drops condensation
2	Protection against solid bodies larger than 12 mm (for example a finger)		**2**	Protected against water drops at up to 15° from the vertical
3	Protection against solid bodies larger than 2.5 mm (tools, wires)		**3**	Protected against rain at up to 60° from the vertical
4	Protection against solid bodies larger than 1 mm (tools, small wires)		**4**	Protected against water splashing from all directions
5	Protection against dust (no harmful deposits)		**5**	Protected against water sprayed from a hose from all directions
6	Complete protection against dust		**6**	Protected against water projections similar to sea wave splashes
			7	Protected against the effector immersion (15 cm mini, 1 m)
			8	Protected against effects of prolonged immersion under pressure (...m)

Clearance Holes For Carflex® Fittings or PVC Male Terminal Adapters

Carflex Fittings & PVC Male Terminal Adapters Trade Sizes	Nominal Size (in.)	Actual Size (in.)	Actual Size (mm)
1/2	.875	.879	22.4
3/4	1.093	1.107	28.2
1	1.344	1.357	34.6
1 1/4	1.813	1.699	43.2
1 1/2	1.938	1.949	49.6
2	2.375	2.413	61.5
2 1/2	2.875	2.914	74.0
3	3.5	3.539	89.8
3 1/2	4	4.044	102.7
4	4.5	4.544	115.4
5	5.625	5.675	143.7

Engineering Properties Of Enclosures

Property	Test Method	Opaque Polycarbonate Covers & Boxes	Clear Polycarbonate Cover	FRP	NORYL
Thermal And Mechanical					
Temperature Range (°F)	-	-30° to 230°	-30° to 230°	-58° to 320°	-40° to 185°
Specific Gravity (oz./in^3)	ASTM D792	1.20	1.20	1.79	0.85
Thermal Conductivity (BTU•in/hr•ft^2•°F)	ASTM D177	1.35	1.35	1.68	0.86
Heat Deflection Temperature @ 264 PSI (°F)	ASTM D648	265	260	392	180
Tensile Strength (PSI)	ASTM D638	8,800	9,000	13,000	3,400
Flexural Strength (PSI)	ASTM D790	13,500	14,000	19,000	6,800
Compressive Strength @ 10% Deformation (PSI)	ASTM D695	12,500	12,500	24,000	5,200
Impact Strength IZOD Notched (ft.lbs./in.)	ASTM D256	12	12	12	-
Water Absorption – 24 hrs. @ 73°F (%)	ASTM D570	0.15	0.15	0.17	0.06
UV Rating	UL 746C	F1	F1	F2	
Electrical					
Dielectric Strength (VOLTS/MIL.)	ASTM D149	380	380	467	192
Dielectric Constant	ASTM D150				
60 Hz		3.0	3.0	-	-
100 Hz		-	-	-	2.27
106		2.96	2.96	-	2.18
Volume Resistivity @ 73°F (OHM-CM)	ASTM D257	>10^{16}	>10^{16}	2.0 x 10^{15}	1.0 x 10^{16}
Arc Resistance (SEC)	ASTM D495	120	120	200+	67

Chemical Resistance Data

Environmental Resistance Table: *E–Excellent, G–Good, L–Limited, U–Unsatisfactory*

IMPORTANT: These environmental resistance ratings are based upon tests where the specimens were placed in complete submergence in the reagent listed. Ratings listed in this chart apply to a 48-Hour exposure period. **(The information in this chart is to be used ONLY as a guide in selecting equipment for appropriate chemical compatibility. Before permanent installation, test the equipment with the chemicals and under the specific conditions of your application.)**

Chemical	PVC Himeline HE - Opaque Cover w/Base	Polycarbonate Circuit Safe NEMA / Circuit Safe JIC / Himeline HE - Clear Cover w/Base / Himeline HS - Opaque w/Clear Lids	FRP (Fiberglass Reinforced Polyester) Himeline HS - Bases / Himeline HP / Himeline HLA/HLS / Himeline HLP	Noryl Circuit Safe Medium JIC
Acetaldehyde	U	L	-	-
Acetamide	U	U	-	-
Acetate Solvent	U	-	-	U
Acetic Acid	U	G	E	E
Acetic Acid 20%	U	E	E	E
Acetic Acid 80%	L	G	E	E
Acetic Acid, Glacial	U	G	E	E
Acetic Anhydride	U	U	E	U
Acetone	U	U	U	U
Acetyl Bromide	U	-	-	-
Acetyl Chloride (dry)	L	U	-	U
Acetylene	E	U	-	-
Acrylonitrile	G	U	-	-
Adipic Acid	E	-	-	-
Alcohols:Amyl	E	G	-	L
Alcohols:Benzyl	U	-	-	U
Alcohols:Butyl	E	E	-	E
Alcohols:Diacetone	G	-	-	E
Alcohols:Ethyl	L	G	-	E
Alcohols:Hexyl	E	-	-	E
Alcohols:Isobutyl	E	-	-	E
Alcohols:Isopropyl	E	E	-	E
Alcohols:Methyl	E	G	-	E
Alcohols:Octyl	-	-	-	E
Alcohols:Propyl	E	-	-	E
Aluminum Chloride	E	E	E	E
Aluminum Chloride 20%	E	E	-	E
Aluminum Fluoride	E	-	-	E
Aluminum Hydroxide	E	G	-	E
Aluminum Nitrate	G	E	-	-
Aluminum Potassium Sulfate 10%	E	E	-	E
Aluminum Potassium Sulfate 100%	E	E	-	E
Aluminum Sulfate	E	E	E	E
Amines	U	U	-	U
Ammonia 10%	G	U	-	E
Ammonia Nitrate	G	-	-	E
Ammonia, anhydrous	E	U	-	G
Ammonia, liquid	E	U	L	-
Ammonium Acetate	E	-	-	-
Ammonium Bifluoride	E	-	-	E
Ammonium Carbonate	E	-	L	E
Ammonium Caseinate	-	-	-	E
Ammonium Chloride	E	E	E	E
Ammonium Hydroxide	E	U	L	E
Ammonium Nitrate	E	-	L	E
Ammonium Oxalate	E	E	-	-
Ammonium Persulfate	E	-	-	E
Ammonium Phosphate, Dibasic	E	E	-	E
Ammonium Phosphate, Monobasic	E	-	-	E
Ammonium Phosphate, Tribasic	E	-	-	E
Ammonium Sulfate	E	E	E	E
Ammonium Sulfite	E	-	E	E
Amyl Acetate	U	U	L	U
Amyl Alcohol	E	G	L	L
Amyl Chloride	U	-	U	U
Aniline	L	U	U	U
Aniline Hydrochloride	G	U	-	-
Antifreeze	E	-	-	E
Antimony Trichloride	E	E	E	E
Aqua Regia (80% HCl, 20% HNO3)	L	U	-	U
Aromatic Hydrocarbons	U	-	-	U
Arsenic Acid	E	E	-	E
Arsenic Salts	E	-	-	-
Asphalt	E	U	-	-
Barium Carbonate	E	E	E	E
Barium Chloride	E	E	E	E
Barium Cyanide	U	-	-	-
Barium Hydroxide	E	U	U	E
Barium Nitrate	E	U	-	E
Barium Sulfate	G	U	E	E
Barium Sulfide	E	-	E	E
Beer	E	E	-	E
Beet Sugar Liquids	E	-	-	E
Benzaldehyde	U	U	U	G
Benzene	L	U	L	U
Benzene Sulfonic Acid	E	U	E	E
Benzoic Acid	E	G	-	G
Benzol	-	U	-	G
Benzonitrile	-	E	-	-
Benzyl Chloride	-	-	-	U
Bleaching Liquors	E	-	-	-
Borax (Sodium Borate)	E	-	-	E
Boric Acid	E	-	E	E
Bromine	L	L	-	E
Butadiene	L	U	-	U
Butane	L	U	-	U
Butanol (Butyl Alcohol)	L	G	-	E
Butyl Amine	U	U	-	U
Butyl Ether	E	-	-	U
Butyl Phthalate	-	U	-	E
Butylacetate	U	U	U	G
Butylene	E	U	-	-
Butyric Acid	G	U	-	U
Calcium Bisulfate	-	U	-	-
Calcium Bisulfide	E	-	-	E
Calcium Bisulfite	G	U	-	E
Calcium Carbonate	E	L	E	E
Calcium Chlorate	G	-	E	-
Calcium Chloride	L	-	E	E
Calcium Hydroxide	G	U	U	E
Calcium Hypochlorite	G	U	L	E
Calcium Nitrate	E	E	E	E
Calcium Oxide	G	-	-	E
Calcium Sulfate	G	E	E	E
Calgon	-	-	-	E
Cane Juice	E	-	-	-
Carbolic Acid (Phenol)	U	U	-	U
Carbon Bisulfide	U	-	L	-
Carbon Dioxide (dry)	E	-	-	E
Carbon Dioxide (wet)	E	-	-	E
Carbon Disulfide	U	U	-	U
Carbon Monoxide	E	-	-	E
Carbon Tetrachloride	U	U	E	U
Carbon Tetrachloride (dry)	-	-	-	U
Carbon Tetrachloride (wet)	-	-	-	U
Carbonated Water	E	-	-	E
Carbonic Acid	E	E	-	E
Catsup	E	-	-	E
Chloric Acid	E	-	-	U
Chlorine (dry)	U	-	-	G

Chemical Resistance Data

Environmental Resistance Table: *E–Excellent, G–Good, L–Limited, U–Unsatisfactory*

IMPORTANT: These environmental resistance ratings are based upon tests where the specimens were placed in complete submergence in the reagent listed. Ratings listed in this chart apply to a 48-Hour exposure period. **(The information in this chart is to be used ONLY as a guide in selecting equipment for appropriate chemical compatibility. Before permanent installation, test the equipment with the chemicals and under the specific conditions of your application.)**

Chemical	PVC Himeline HE - Opaque Cover w/Base	Polycarbonate Circuit Safe NEMA / Circuit Safe JIC / Himeline HE - Clear Cover w/Base / Himeline HS - Opaque w/Clear Lids	FRP (Fiberglass Reinforced Polyester) Himeline HS - Bases / Himeline HP / Himeline HLA/HLS / Himeline HLP	Noryl Circuit Safe Medium JIC
Chlorine Water	E	-	E	L
Chlorine, Anhydrous Liquid	U	L	-	G
Chloroacetic Acid	G	U	-	-
Chlorobenzene (Mono)	U	U	U	U
Chlorobromomethane	U	-	-	-
Chloroform	U	U	-	U
Chlorosulfonic Acid	U	L	-	U
Chocolate Syrup	-	E	-	E
Chromic Acid 10%	E	G	E	E
Chromic Acid 30%	E	L	-	U
Chromic Acid 5%	E	G	-	E
Chromic Acid 50%	U	U	-	U
Chromium Salts	E	-	-	-
Citric Acid	G	E	E	E
Citric Oils	-	-	-	E
Clorox® (Bleach)	E	-	-	E
Copper Chloride	E	-	-	E
Copper Cyanide	E	U	-	E
Copper Fluoborate	E	-	-	-
Copper Nitrate	E	U	-	E
Copper Sulfate >5%	E	E	-	E
Copper Sulfate 5%	E	E	-	E
Cresols	U	U	U	U
Cresylic Acid	U	U	-	-
Cupric Acid	E	E	-	E
Cyclohexane	U	G	-	U
Cyclohexanone	U	U	-	U
Detergents	E	E	-	E
Diacetone Alcohol	U	U	-	-
Dichlorobenzene	U	U	-	-
Dichloroethane	U	U	-	E
Diesel Fuel	E	E	-	U
Diethyl Ether	U	U	-	-
Diethylamine	U	U	-	-
Diethylene Glycol	L	G	-	E
Dimethyl Aniline	U	U	U	U
Dimethyl Formamide	U	U	-	U
Diphenyl Oxide	U	-	-	-
Dyes	G	-	-	E
Epsom Salts (Magnesium Sulfate)	E	E	-	E
Ethane	E	-	-	-
Ethanol	L	G	-	E
Ethanolamine	U	-	-	E
Ether	U	-	L	U
Ethyl Acetate	U	U	L	E
Ethyl Benzoate	U	U	-	E
Ethyl Chloride	U	U	L	U
Ethyl Ether	U	-	U	U
Ethylene Bromide	U	U	-	-
Ethylene Chloride	U	U	-	U
Ethylene Chlorohydrin	U	U	E	-
Ethylene Diamine	U	E	-	U
Ethylene Dichloride	U	U	U	U
Ethylene Glycol	E	G	E	E
Ethylene Oxide	U	L	-	E
Fatty Acids	E	G	-	E
Ferric Chloride	E	E	E	E
Ferric Nitrate	E	E	E	E
Ferric Sulfate	E	E	E	E
Ferrous Chloride	E	U	E	E
Ferrous Sulfate	E	E	E	E
Fluoboric Acid	E	-	-	E
Fluorine	U	L	-	-
Fluosilicic Acid	U	E	-	E
Formaldehyde 100%	E	E	-	E
Formaldehyde 40%	E	E	E	E
Formic Acid	E	E	L	E
Freon 113	G	G	-	U
Freon 12	E	-	-	U
Freon 22	E	-	-	G
Freon TF	G	-	-	-
Freon® 11	E	-	-	G
Fuel Oils	E	G	-	G
Furan Resin	E	-	-	-
Furfural	U	U	L	U
Gallic Acid	G	-	-	E
Gasoline (high-aromatic)	E	E	-	G
Gasoline, leaded, ref.	G	E	E	G
Gasoline, unleaded	L	E	-	U
Gelatin	G	-	-	E
Glucose	E	E	E	E
Glue, P.V.A.	L	-	-	-
Glycerin	E	E	E	E
Glycolic Acid	G	-	-	-
Grease	E	-	-	-
Heptane	L	G	E	G
Hexane	G	U	U	G
Hydraulic Oil (Petro)	E	-	-	-
Hydraulic Oil (Synthetic)	E	-	-	-
Hydrazine	-	U	-	-
Hydrobromic Acid 100%	E	-	-	G
Hydrobromic Acid 20%	G	-	-	G
Hydrochloric Acid 100%	U	U	-	E
Hydrochloric Acid 20%	E	G	E	E
Hydrochloric Acid 37%	G	U	L	E
Hydrochloric Acid, Dry Gas	E	-	-	E
Hydrocyanic Acid	G	-	-	E
Hydrocyanic Acid (Gas 10%)	E	G	-	L
Hydrofluoric Acid 100%	L	U	-	U
Hydrofluoric Acid 20%	G	U	-	L
Hydrofluoric Acid 50%	G	U	-	U
Hydrofluoric Acid 75%	L	U	-	U
Hydrofluosilicic Acid 100%	G	-	-	G
Hydrofluosilicic Acid 20%	E	-	-	G
Hydrogen Gas	E	E	-	E
Hydrogen Peroxide 10%	E	E	-	E
Hydrogen Peroxide 100%	E	E	-	E
Hydrogen Peroxide 30%	E	E	E	E
Hydrogen Peroxide 50%	E	E	E	-
Hydrogen Sulfide (aqua)	G	E	-	E
Hydrogen Sulfide (dry)	E	-	-	-
Hydroquinone	G	-	-	-
Hydroxyacetic Acid 70%	U	-	-	-
Ink	L	-	-	L
Iodine	E	-	-	-
Iodine (in alcohol)	E	-	-	-
Iodoform	E	-	-	-
Isooctane	E	G	-	U
Isopropyl Acetate	U	U	-	-
Isopropyl Ether	G	U	-	-

General Information

Chemical Resistance Data

Environmental Resistance Table: *E–Excellent, G–Good, L–Limited, U–Unsatisfactory*

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Chemical	PVC Himeline HE - Opaque Cover w/Base	Polycarbonate Circuit Safe NEMA, Circuit Safe JIC, Himeline HE - Clear Cover w/Base, Himeline HS - Opaque w/Clear Lids	FRP (Fiberglass Reinforced Polyester) Himeline HS - Bases, Himeline HP, Himeline HLA/HLS, Himeline HLP	Noryl Circuit Safe Medium JIC
Isotane	E	-	-	-
Jet Fuel (JP3, JP4, JP5)	L	E	-	U
Kerosene	E	U	-	U
Ketones	U	U	-	U
Lacquer Thinners	U	G	-	U
Lacquers	U	U	-	U
Lactic Acid	G	G	E	E
Lard	E	E	-	E
Lead Acetate	G	-	-	E
Lead Nitrate	E	-	-	E
Lead Sulfamate	G	E	-	-
Lime	G	-	-	-
Linoleic Acid	E	-	-	-
Lithium Chloride	U	G	-	-
Lithium Hydroxide	-	U	-	-
Lubricants	G	E	-	L
Lye: Ca(OH)2 Calcium Hydroxide	G	U	-	E
Lye: KOH Potassium Hydroxide	G	U	-	E
Lye: NaOH Sodium Hydroxide	E	U	-	E
Magnesium Bisulfate	E	E	-	-
Magnesium Carbonate	G	E	E	E
Magnesium Chloride	G	E	E	E
Magnesium Hydroxide	E	E	G	E
Magnesium Nitrate	E	E	-	E
Magnesium Oxide	-	-	-	-
Magnesium Sulfate (Epsom Salts)	E	E	E	E
Maleic Acid	E	-	-	E
Malic Acid	E	-	-	-
Manganese Sulfate	L	E	-	E
Mayonnaise	U	-	-	-
Melamine	U	-	-	-
Mercuric Chloride (dilute)	E	E	-	E
Mercuric Cyanide	E	-	-	-
Mercurous Nitrate	E	E	-	E
Mercury	E	U	-	E
Methane	G	-	-	-
Methanol (Methyl Alcohol)	E	G	L	E
Methyl Acetate	U	U	-	-
Methyl Acetone	U	-	-	-
Methyl Alcohol 10%	E	G	-	E
Methyl Bromide	U	-	-	-
Methyl Butyl Ketone	E	U	-	-
Methyl Cellosolve	U	U	-	-
Methyl Chloride	U	U	-	U
Methyl Dichloride	E	-	-	-
Methyl Ethyl Ketone	U	U	E	U
Methyl Isobutyl Ketone	U	U	-	U
Methyl Isopropyl Ketone	U	U	-	U
Methyl Methacrylate	E	-	-	-
Methylamine	U	-	-	-
Methylene Chloride	U	U	U	U
Mineral Spirits	E	L	-	E
Monochloroacetic acid	-	U	-	-
Monoethanolamine	U	-	-	E
Morpholine	-	U	-	U
Motor oil	G	E	-	E
Naphtha	E	G	E	U
Naphthalene	U	-	-	U
Natural Gas	E	-	-	-
Nickel Chloride	E	E	-	E
Nickel Nitrate	E	U	-	E
Nickel Sulfate	E	E	-	E
Nitrating Acid (<15% HNO3)	U	-	-	-
Nitrating Acid (>15% H2SO4)	U	-	-	-
Nitrating Acid (_1% Acid)	U	-	-	-
Nitrating Acid (_15% H2SO4)	U	-	-	-
Nitric Acid (20%)	E	G	G	G
Nitric Acid (50%)	G	G	-	G
Nitric Acid (5-10%)	E	E	-	E
Nitric Acid (Concentrated)	G	L	-	G
Nitrobenzene	U	U	L	U
Nitromethane	G	U	-	U
Nitrous Acid	E	-	-	-
Nitrous Oxide	E	-	-	-
Oils:Aniline	U	-	-	U
Oils:Citric	G	E	-	E
Oils:Creosote	L	-	-	U
Oils:Diesel Fuel (20, 30, 40, 50)	G	-	-	U
Oils:Fuel (1, 2, 3, 5A, 5B, 6)	E	G	-	E
Oils:Hydraulic Oil (Petro)	E	-	-	-
Oils:Hydraulic Oil (Synthetic)	E	-	-	-
Oils:Mineral	G	G	-	E
Oils:Olive	L	E	-	E
Oils:Orange	L	L	-	-
Oils:Pine	U	E	-	-
Oils:Rosin	L	-	-	-
Oils:Silicone	E	-	-	E
Oils:Transformer	G	-	-	-
Oils:Turbine	E	-	-	-
Oleic Acid	L	-	E	E
Oleum 100%	U	-	-	E
Oleum 25%	U	-	-	-
Oxalic Acid (cold)	G	-	E	E
Ozone	G	E	-	-
Palmitic Acid	G	-	-	-
Paraffin	G	E	-	E
Pentane	E	E	-	-
Perchloric Acid	L	-	-	-
Perchloroethylene	L	U	-	U
Petrolatum	G	-	-	-
Petroleum	-	-	-	U
Phenol (10%)	L	G	L	U
Phenol (Carbolic Acid)	U	U	-	U
Phosphoric Acid (>40%)	G	E	-	E
Phosphoric Acid (crude)	G	E	-	E
Phosphoric Acid (molten)	U	-	-	-
Phosphoric Acid (_40%)	G	E	-	E
Phosphoric Acid Anhydride	-	U	-	-
Phosphorus	E	-	-	-
Phosphorus Trichloride	U	L	-	-
Photographic Developer	E	E	-	E
Photographic Solutions	E	E	-	E
Phthalic Anhydride	U	E	-	-
Picric Acid	U	U	-	-
Potash (Potassium Carbonate)	E	-	L	E
Potassium Bicarbonate	E	-	-	E
Potassium Bromide	E	E	-	E
Potassium Chlorate	E	E	-	E
Potassium Chloride	E	E	E	E
Potassium Chromate	E	-	E	E

Chemical Resistance Data

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Chemical	PVC Himeline HE - Opaque Cover w/Base	Polycarbonate Circuit Safe NEMA Circuit Safe JIC Himeline HE - Clear Cover w/Base Himeline HS - Opaque w/Clear Lids	FRP (Fiberglass Reinforced Polyester) Himeline HS - Bases Himeline HP Himeline HLA/HLS Himeline HLP	Noryl Circuit Safe Medium JIC
Potassium Cyanide Solutions	E	-	-	E
Potassium Dichromate	E	E	-	E
Potassium Ferricyanide	E	-	E	E
Potassium Ferrocyanide	E	-	E	E
Potassium Hydroxide (Caustic Potash)	E	U	L	E
Potassium Hypochlorite	G	-	-	-
Potassium Iodide	E	-	-	-
Potassium Nitrate	E	E	E	E
Potassium Oxalate	-	-	-	-
Potassium Permanganate	E	E	E	E
Potassium Sulfate	E	E	E	E
Potassium Sulfide	E	-	-	E
Propane (liquefied)	E	L	-	E
Propylene	G	-	-	-
Propylene Glycol	L	G	-	-
Pyridine	U	U	-	G
Pyrogallic Acid	E	-	-	-
Resorcinal	L	G	-	-
Rosins	L	-	-	-
Salicylic Acid	G	E	-	-
Salt Brine (NaCl saturated)	E	E	-	E
Sea Water	E	E	-	E
Silicone	E	E	-	E
Silver Bromide	-	-	-	E
Silver Nitrate	E	E	-	E
Soap Solutions	E	E	-	E
Soda Ash (see Sodium Carbonate)	E	E	-	E
Sodium Acetate	G	E	E	E
Sodium Aluminate	-	-	-	E
Sodium Benzoate	G	E	-	-
Sodium Bicarbonate	E	E	E	E
Sodium Bisulfate	E	E	-	E
Sodium Bisulfite	E	E	-	E
Sodium Borate (Borax)	E	E	-	E
Sodium Bromide	G	-	E	E
Sodium Carbonate	E	E	-	E
Sodium Chlorate	E	E	E	E
Sodium Chloride	E	E	E	E
Sodium Chromate	-	E	-	E
Sodium Cyanide	E	-	-	E
Sodium Ferrocyanide	E	-	E	E
Sodium Fluoride	E	-	-	E
Sodium Hydrosulfite	L	-	-	-
Sodium Hydroxide (20%)	E	E	U	E
Sodium Hydroxide (50%)	E	U	U	E
Sodium Hydroxide (80%)	E	U	U	E
Sodium Hypochlorite (<20%)	E	L	L	E
Sodium Hypochlorite (100%)	G	-	-	E
Sodium Metaphosphate	E	-	-	-
Sodium Metasilicate	E	-	-	-
Sodium Nitrate	E	-	U	E
Sodium Perborate	E	-	-	E
Sodium Peroxide	G	E	-	-
Sodium Polyphosphate	E	-	-	E
Sodium Silicate	E	-	-	E
Sodium Sulfate	E	E	E	E
Sodium Sulfide	E	U	U	E
Sodium Sulfite	E	-	E	E
Sodium Tetraborate	E	-	-	E
Sodium Thiosulfate (hypo)	E	U	-	E

Chemical	PVC Himeline HE - Opaque Cover w/Base	Polycarbonate Circuit Safe NEMA Circuit Safe JIC Himeline HE - Clear Cover w/Base Himeline HS - Opaque w/Clear Lids	FRP (Fiberglass Reinforced Polyester) Himeline HS - Bases Himeline HP Himeline HLA/HLS Himeline HLP	Noryl Circuit Safe Medium JIC
Stannic Chloride	E	E	-	E
Stannic Fluoborate	-	-	-	E
Stannous Chloride	E	-	-	E
Stearic Acid	G	E	-	E
Stoddard Solvent	L	E	-	U
Styrene	U	U	-	E
Sulfate (Liquors)	G	-	-	-
Sulfur Chloride	L	-	-	E
Sulfur Dioxide	E	-	-	E
Sulfur Dioxide (dry)	E	E	-	E
Sulfur Hexafluoride	G	-	-	-
Sulfur Trioxide	E	-	-	U
Sulfur Trioxide (dry)	E	-	-	U
Sulfuric Acid (<10%)	E	E	E	U
Sulfuric Acid (10-75%)	E	G	U	E
Sulfuric Acid (75-100%)	U	U	-	E
Sulfuric Acid (cold concentrated)	U	-	-	E
Sulfuric Acid (hot concentrated)	U	U	-	U
Sulfurous Acid	E	-	-	E
Tallow	-	-	-	E
Tannic Acid	E	L	-	E
Tanning Liquors	E	-	-	E
Tartaric Acid	E	-	E	E
Tetrachloroethane	L	-	-	U
Tetrachloroethylene	U	U	-	U
Tetrahydrofuran	U	U	L	U
Tin Salts	E	-	-	-
Toluene (Toluol)	U	U	-	U
Trichloroacetic Acid	G	U	-	-
Trichloroethane	L	U	-	U
Trichloroethylene	U	-	U	U
Trichloropropane	-	-	-	U
Tricresylphosphate	U	-	-	E
Triethylamine	G	-	-	G
Trisodium Phosphate	E	-	-	E
Turpentine	U	U	E	U
Urea	U	U	L	E
Uric Acid	E	-	-	-
Varnish	U	-	-	U
Vinegar	G	E	E	E
Vinyl Acetate	U	-	-	-
Vinyl Chloride	U	-	-	-
Water, Acid, Mine	G	G	-	-
Water, Deionized	E	-	-	E
Water, Distilled	E	E	-	E
Water, Fresh	G	E	-	E
Water, Salt	G	E	-	E
Whiskey & Wines	E	E	-	E
White Liquor (Pulp Mill)	E	-	-	E
White Water (Paper Mill)	E	-	-	U
Xylene	U	U	E	G
Zinc Chloride	G	E	E	E
Zinc Hydrosulfite	-	-	-	E
Zinc Sulfate	E	E	E	E

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