POLYSTAR"

Polycarbonate Enclosures

The most durable and reliable polycarbonate enclosures available!

Dimensional Requirements 6"×6" to 24"×24"

Made in the U.S.A., PolyStar™ polycarbonate enclosures can withstand rain, sleet, snow, splashing water, hose directed water and submersion --- and provide superior impact and flame protection!

- 8 standard sizes: 6×6, 8×6, 10×8, 12×10, 14×12, 16×14, 18×16, and 24×24
- Latches and hinges do not penetrate enclosure
- · Easy to remove lid
- High performance inserts
- Integrated lock hasp
- Flush-fit side mount swing panel and DIN rail system



PolyStar™ - Side Mount Solutions

- Increases Usable Space
- Provides more Mounting Options
 - DIN rails
 - Side panels
 - Equipment
- Aluminum slot nuts
 - Variable mounting heights
 - #10-32 machine screw



PolyStar™ – Panel Systems

- Sub-panel Mounting Solution Revolutionary design
 - Variable height mounting
 - Swings open from any side
 - Panel locks into open position
 - Mounting holes are standard JIC
- 0.08" Aluminum Panels
- Back Panels are standard JIC



UL 94 - Flame Rating - 5VA

PolyStar™ Enclosures provide the highest (most flame retardant) UL 94 rating available.





File: E342926

Outstanding Resistance to Environmental Exposure from -20°F to +240°F

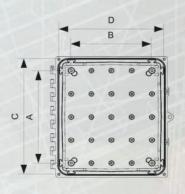
PolyStar™ Enclosures are intended to be utilized for outdoor and indoor applications. The polycarbonate contained in the PolyStar™ Series as well as the enclosure have passed UL tests for suitability. The polycarbonate resin in the PolyStar™ Series received the best rating, an "F1" per UL 746C. This means that the resin has passed tests for UV exposure and water immersion. The PolyStar™ Series enclosures are rated 3R, 4, 4X, 6P, 12 per UL 50 and IP66. IP67, IP68 per IEC 60529. This means that the enclosure provides protection against ingress (of rain, sleet, snow, splashing water, and hose directed water and submersion), impact, and flame protection. The material rating and the product rating can assure the user that the PolyStar™ Series enclosures are suitable for outdoor use and exposure.

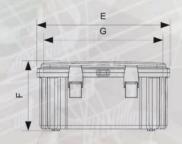
Low Temperature Performance

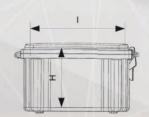
PolyStar[™] enclosures are manufactured with polycarbonate designed to perform in cold weather applications. In general, the product performance will not be adversely affected until temperatures below -40°F are realized. At temperatures below this level, stress, tension, and pressure could start to impact the enclosure's reliability. This includes the latching, opening and/or incidental impacts. In the absence of these potential threats, the enclosures should remain unaffected by the low temperatures. Upon return of temperatures above -40°F, performance reliability should return to normal.

In the PolyStar[™] literature, we document a normal operating temperature of -20°F to +240°F (-20°C to +115°C). We do this to provide a safe operating range, as product application and enclosure placement is determined by the end user, not by Stahlin. End-use testing of specific applications and enclosure placements are key to determining the application specific limits.

6 × 6 × 4 8 × 6 × 4 10 × 8 × 4 2 × 10 × 6 4 × 12 × 6 6 × 14 × 8 8 × 16 × 10 4 × 24 × 10	PolyStar™ Series Enclosure with Opaque Cover					
$8 \times 6 \times 4$ $10 \times 8 \times 4$ $2 \times 10 \times 6$ $4 \times 12 \times 6$ $6 \times 14 \times 8$ $8 \times 16 \times 10$ $4 \times 24 \times 10$	PolyStar™ Series Enclosure with Opaque Cover					
10 × 8 × 4 2 × 10 × 6 4 × 12 × 6 6 × 14 × 8 8 × 16 × 10 4 × 24 × 10	PolyStar™ Series Enclosure with Opaque Cover					
2 × 10 × 6 4 × 12 × 6 6 × 14 × 8 8 × 16 × 10 4 × 24 × 10	PolyStar [™] Series Enclosure with Opaque Cover					
4 × 12 × 6 6 × 14 × 8 8 × 16 × 10 4 × 24 × 10	PolyStar [™] Series Enclosure with Opaque Cover					
4 × 12 × 6 6 × 14 × 8 8 × 16 × 10 4 × 24 × 10	PolyStar [™] Series Enclosure with Opaque Cover PolyStar [™] Series Enclosure with Opaque Cover PolyStar [™] Series Enclosure with Opaque Cover					
$ 8 \times 16 \times 10 \\ 4 \times 24 \times 10 $	PolyStar™ Series Enclosure with Opaque Cover PolyStar™ Series Enclosure with Opaque Cover					
4 × 24 × 10	PolyStar™ Series Enclosure with Opaque Cover					
	PolyStar™ Series Enclosure with Opaque Cover					
CUDE						
DUKE						
$6 \times 6 \times 4$	PolyStar™ Series Enclosure with Clear Cover					
	PolyStar™ Series Enclosure with Clear Cover					
	PolyStar™ Series Enclosure with Clear Cover					
	PolyStar™ Series Enclosure with Clear Cover					
	PolyStar™ Series Enclosure with Clear Cover					
	PolyStar™ Series Enclosure with Clear Cover					
	PolyStar™ Series Enclosure with Clear Cover					
	PolyStar™ Series Enclosure with Clear Cover					
6 × 6	Aluminum Back Panel					
	Aluminum Back Panel					
	Aluminum Back Panel					
	Aluminum Back Panel					
	Aluminum Back Panel					
	Aluminum Back Panel					
	Aluminum Back Panel					
24 × 24	Aluminum Back Panel					
6 × 6	PolyStar™ Series 6×6 Swing Panel Kit (comes with mounts, screws and panel)					
	PolyStar™ Series 8×6 Swing Panel Kit (comes with mounts, screws and panel)					
	PolyStar TM Series 10×8 Swing Panel Kit (comes with mounts, screws and panel)					
	PolyStar TM Series 12×10 Swing Panel Kit (comes with mounts, screws and panel)					
	PolyStar TM Series 12×10 Swing Panel Kit (comes with mounts, screws and panel)					
	PolyStar™ Series 16×14 Swing Panel Kit (comes with mounts, screws and panel)					
	PolyStar™ Series 18×16 Swing Panel Kit (comes with mounts, screws and panel)					
24 × 24	PolyStar™ Series 24×24 Swing Panel Kit (comes with mounts, screws and panel)					
	Slot Nut Kit (includes two nuts & two screws)					
	Swing Panel Mounts (4 per kit)					
	Latch kit (2 latches per kit) - replacement only					
	Accessory kit (includes all screws, inserts, and mounting feet) - replacement only					
-	8 × 6 × 4 10 × 8 × 4 2 × 10 × 6 4 × 12 × 6 6 × 14 × 8 8 × 16 × 10 4 × 24 × 10 6 × 6 8 × 6 10 × 8 12 × 10 14 × 12 16 × 14 18 × 16 24 × 24 6 × 6 8 × 6 10 × 8 12 × 10 14 × 12 16 × 14 18 × 16 24 × 24					







Dimensions (inches)

Enclosure	AxB	C	D	E	F	G	Ĥ	1	Back Panel	Sub-Panel
$6 \times 6 \times 4$	4.25×4.25	6.75	6.75	5.7	5.7	6.3	5	6.3	4.88 × 4.88	5.625 × 5.625
$8 \times 6 \times 4$	6.25×4.25	8.75	6.75	9.4	5.7	8.3	5	6.3	6.88×4.88	7.625×5.625
$10 \times 8 \times 4$	8.25×6.25	10.75	8.75	11.4	6.2	10.3	5.5	8.3	8.88×6.88	9.625×7.625
$12 \times 10 \times 6$	10.25×8.25	12.75	10.75	13.4	7.7	12.3	7	10.3	10.88×8.88	11.625×9.625
$14 \times 12 \times 6$	12.25×10.25	14.75	12.75	15.4	7.7	14.3	7	12.3	12.88×10.88	13.625 × 11.625
$16 \times 14 \times 8$	14.25×12.25	16.75	14.75	17.4	9.7	16.3	9	14.3	14.88 × 12.88	15.625×13.625
$18 \times 16 \times 10$	16.25×14.25	18.75	16.75	19.4	11.7	18.3	11	16.3	16.88 × 14.88	17.625×13.625
$24 \times 24 \times 10$	22.25×22.25	24.75	24.75	25.4	11.7	24.3	11	24.3	22.75×22.75	23.625×23.625

Engineering Properties

Typical Properties	Typical Values	Unit	Standard
Flammability (resin/component)	V-0 / 5V-A		UL 94
UV-light	F1		UL 746C
Enclosure Types	3R, 4, 4X, 6P, 12 / IP66, IP67, IP68		UL 50 / IEC 60529
Falling Dirt Impact (D 3029), 73°F	124	ft-lb	ASTM D 3029
Izod Impact, unnotched, 73°F	60	ft-lb/in	ASTM D 4812
Tensile Impact, Type "S"	250	ft-lb/in ²	ASTM D 1822
HDT, 264 psi, 0.250", unannealed	270	°F	ASTM D 648
CTE, flow, -40°F to 200°F	3.8E-05	1/°F	ASTM E 831
Flexural Stress, yld, 0.05 in/min, 2 in spa	an 13100	psi	ASTM D 790
Normal Temperature Range	-20 to +240 (-20 to +115)	°F (°C)	
Volume Resistivity	>1.E+17	Ohm-cm	ASTM D 257













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