

# Polycarbonate Plates

## Standard Type

The level of impact strength is ranked as the highest among the transparent resin materials (30 times stronger than Acrylic) and also excellent in heat-resistance and cold-resistance.

Type	Grade	Color	Light transmittance	Operating Ambient Temperature
PCTA	Standard	Transparent	90%	-30~100°C
PCTBA	Standard	Smoke Brown	35%	
PCTGA	Standard	Smoke Gray	33%	
PCTTA	Antistatic	Transparent	86%	
PCTBTA	Antistatic	Smoke Brown	35%	
PCTSP	Abrasion-Resistant	Transparent	91%	

T	Tolerance
3-6	±0.5
8, 10	±1.0

Finish	4 Sides		Top / Bottom	
	Drilling Method	Finish Symbol	Drilling Method	Finish Symbol
Saw Cut	Saw Cut	✓	Material	—

## Standard Type

Part Number	A	B	T						
			1mm Increment						
<b>PCTA</b> Standard Transparent	20-1200	20-1000	3	4	5	6	8	10	
<b>PCTBA</b> Standard Smoke Brown			3	5					
<b>PCTGA</b> Standard Smoke Gray									
<b>PCTTA</b> Antistatic Transparent									
<b>PCTBTA</b> Antistatic Smoke Brown									
<b>PCTSP</b> Abrasion Resistance Transparent									
<b>Large Size</b>									
<b>L-PCTA</b> Standard Transparent	1201-2000	20-1000	3						
<b>L-PCTBA</b> Standard Smoke Brown									
<b>L-PCTGA</b> Standard Smoke Gray									
<b>L-PCTTA</b> Antistatic Transparent									
<b>L-PCTBTA</b> Antistatic Smoke Brown									
<b>L-PCTSP</b> Abrasion Resistance Transparent									

For T0.5-2.0, refer to P3084

**Part Number Example**

Standard Size: **PCTA** - 1200 - 800 - 8

Large Size: **L-PCTSP** - 1300 - 800 - 3

**Part Number Alterations**

Part Number - A - B - T - (CRA, CRB...etc.)

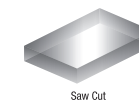
**PCTA** - 200 - 200 - 5 - CRA5

Alterations	Notching for Blind Joints of Aluminum Frame	Relief at Four Corners	Corner Radius	Corner Cut
Code	F_ / E_ / J_ / K_	CN	CRA / CRB / CRC / CRD	CCA / CCB / CCC / CCD
Spec.	Machines relief for blind joints of aluminum frame extrusions. Thermal expansion of the plate is not taken into account. Longitudinal direction of notching is all on A dimension side. Not available for Pre-Drilled Type. Applicable to only T=3, 5. Ordering Code: F S 6 Frame Type Joint Type Notching Position (See the diagram above.)	CN = 1 mm Increment Machines relief at four corners. 5 ≤ CN ≤ 50 Not available for Pre-Drilled Type. Ordering Code: CN=25 → CN25	Adds radius to any corner. R = 5 mm Increment 10 ≤ A(B)-R(2R) 5 ≤ CRA, CRB, CRC, CRD ≤ 100 Ordering Code: Ex.) Adds R10 at the corner of A and C. CRA10-CRC10 Not available for Pre-Drilled Type.	Cuts any corners. 5 ≤ Corner Cut ≤ 50 5 mm Increment Ordering Code: (Ex.) When the corners of A and D are cut by C5 → CCA5-CCD5 Not available for Pre-Drilled Type.

For details of notching alterations for blind joint of aluminum frame extrusions, refer to P3073

# Polycarbonate Plates

## Pre-Drilled Type



Type	Grade	Color	Light transmittance	Operating Ambient Temperature
PCTA	Standard	Transparent	90%	-30~100°C
PCTBA	Standard	Smoke Brown	35%	
PCTGA	Standard	Smoke Gray	33%	
PCTTA	Antistatic	Transparent	86%	
PCTBTA	Antistatic	Smoke Brown	35%	
PCTSP	Abrasion-resistant	Transparent	91%	

T	Tolerance
3-6	±0.5
8, 10	±1.0

Finish	4 Sides		Upper-lower Surface	
	Drilling Method	Finish Symbol	Drilling Method	Finish Symbol
Saw Cut	Saw Cut	✓	Material	—

**Dimension Tolerance of A & B: ±1.0**

2H	2HL	4H	6H	8H
2 - Bolt Nominal Diameter Selection	2 - Bolt Nominal Diameter Selection	4 - Bolt Nominal Diameter Selection	6 - Bolt Nominal Diameter Selection	8 - Bolt Nominal Diameter Selection
N (Through Hole) P (Countersink) M (Thread Insert) Q (Keyhole)	N (Through Hole) P (Countersink) M (Thread Insert) Q (Keyhole)	N (Through Hole) P (Countersink) M (Thread Insert) Q (Keyhole)	N (Through Hole) P (Countersink) M (Thread Insert) Q (Keyhole)	N (Through Hole) P (Countersink) M (Thread Insert) Q (Keyhole)

Drilling Details				
N (Through hole)	P (Countersink)	M (Thread Insert)	Drilling Conditions (N-P-M)	Q (Keyhole)
Ordering Code: (Ex.) M4-L6 L ≤ T For details of thread insert HLTS, refer to P2461			Keyhole Reference Position Keyhole Machining Conditions a ≥ 5b ≥ 5c ≥ 5 2H / 4H / 6H / 8H 2HL	
Table 1 Bolt Nominal Dia. 3 4 5 6 8 10 d 3.5 4.5 5.5 6.5 9 11 d <sub>i</sub> 7.5 9.5 11.5 13.5 19 23 h 2 2.5 3 3.5 5 6		Hole Diameter 3-10 b (Min. value) 2.5		Keyhole Nominal Dia. 5 6 8 d <sub>1</sub> 6 7 9 d <sub>2</sub> 14 16 20 h 11 12 15
Keyhole Position (1) When 2H, the center of diameter d <sub>1</sub> is consistent with G. (2) When 4H and 6H, the center of G dimension is consistent with the center of B dimension. (3) When 8H, the diameter d <sub>1</sub> center of the middle Keyhole is consistent with the center of B dimension. (4) When 2HL, keyholes turn sideways and the center of diameter d <sub>1</sub> is consistent with F.				

## Pre-drilled Type

Part Number	Nominal	A	B	T	F	G	Select Mounting Holes				
							Through Hole	Countersink	Keyhole	Thread Insert	
<b>PCTA</b> Standard Transparent	2H (Horizontal) 2HL (Vertical)	20-1200	20-1000	3	6-1191.5 (2H, 4H) 4.5-1195.5 (2HL) 6-595.5 (6H, 8H)	4.5-995.5 (2H) 6-991.5 (2HL, 4H, 6H) 6-495.5 (8H)	N	P	Q	M	L
<b>PCTBA</b> Standard Smoke Brown				3			3	—	—	—	
<b>PCTGA</b> Standard Smoke Gray				4			3 4 5	—	3	—	
<b>PCTTA</b> Antistatic Transparent				5			3 4 5 6	5 6	3 4	—	
<b>PCTBTA</b> Antistatic Smoke Brown				6			4 5 6	8	4 5	—	
<b>PCTSP</b> Abrasion Resistance Transparent				8			4 5 6 8	—	4 5 6	—	
				10			4 5 6 8 10	—	4 5 6 8	—	

Dimension F Specification Range For 2H and 4H:  $d(d_i)+2.5 \leq F \leq A-d(d_i)-5$ ; for 2HL:  $d(d_i)/2+2.5 \leq F \leq A-d(d_i)/2-2.5$ ; for 6H and 8H:  $d(d_i)+2.5 \leq F \leq (A-d(d_i)-5)/2$ .  
 Dimension G Specification Range For 2H:  $d(d_i)/2+2.5 \leq G \leq B-d(d_i)/2-2.5$ ; for 2HL, 4H and 6H:  $(d_i)+2.5 \leq G \leq B-d(d_i)-5$ ; for 8H:  $d(d_i)+2.5 \leq G \leq (B-d(d_i)-5)/2$ . (d for through hole; d<sub>i</sub> for countersink)

**Part Number Example**

Part Number - A - B - T - F - G - Bolt Nominal Diameter - (XC / YC)

**PCTA4H** - 100 - 80 - 4 - F50 - G60 - N4 - XC10

Alterations	Hole Position from Left	Hole Position from Bottom
	Code	XC
Spec.	XC = 0.5 mm Increment (2H, 4H Type) $d(d_i)/2+2.5 \leq XC \leq A-F-d(d_i)/2-2.5$ (6H, 8H Type) $d(d_i)/2+2.5 \leq XC \leq A-2F-d(d_i)/2-2.5$	YC = 0.5 mm Increment (4H, 6H Type) $d(d_i)/2+2.5 \leq YC \leq B-G-d(d_i)/2-2.5$ (8H Type) $d(d_i)/2+2.5 \leq YC \leq B-2G-d(d_i)/2-2.5$ Not available for 2H.