

Ultra High-Molecular-Weight Polyethylene Plates

Standard / Conductive

Ultra High-molecular-weight Polyethylene is light in specific gravity and weight. Excels in abrasion resistance and sliding property. In addition to Standard Type, Conductive Grade for antistatic is also available.

*Details of color samples and features, see P.3070

Ultra High-Molecular-Weight Polyethylene Plates – Standard / Conductive

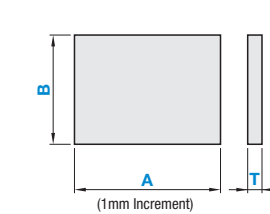


Type	Grade	Color	Operating Ambient Temperature	4 Sides		Upper-Lower Surface	
				Drilling Method	Finish Symbol	Drilling Method	Finish Symbol
UPA	Standard	Milky White	-100~80°C	Circular Sawing	✓	Material	—
UPACA	Electric Conductive	Black					

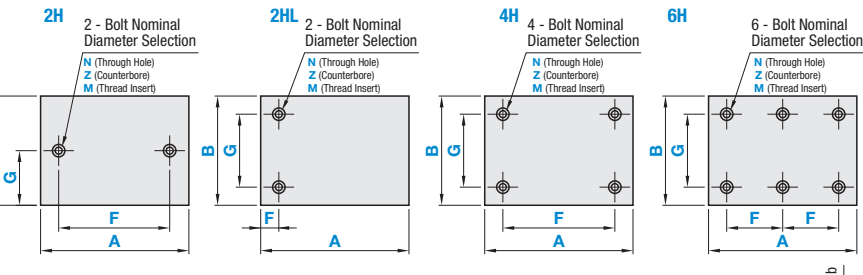
Finish	4 Sides		Upper-Lower Surface	
	Drilling Method	Finish Symbol	Drilling Method	Finish Symbol
Saw Cut	Circular Sawing	✓	Material	—

Standard Type

ⓐ A≈B



Pre-Drilled Type



Drilling Details				
N (Through Hole)	Z (Counterbore Hole)	N (Through Hole) Z (Counterbored Hole) Details		M (Thread Insert)
		Bolt Nominal Dia.	3 4 5 6 8 10	
		d	3.5 4.5 5.5 6.5 9 11	
		d _i	6.5 8 9.5 11 14 —	
		h	4 5 6 7 9 —	
		Ordering Code: (Ex.) M4-L6		
		ⓐ L≤T-1		
		ⓑ When L+5<T, drilled holes will be blind ones.		

Table 1 M (Thread Insert) Details						
Bolt Nominal Dia.	3	4	5	6	8	10
d	3.5	4.5	5.5	6.5	9	11
L	4.5	6	7.5	9	12	15
	6	8	10	12	16	20

Hole Diameter	b (Min. value)
3-10	2.5

Material: Ultra High-Molecular-Weight Polyethylene (UHMWPE)

Standard Type

Part Number	A	B	T
Type	1 mm Increment		
UPA Standard	20-500	20-400	3 5 8 10 15 20
UPACA Conductive			10 15 20

ⓐ For T1.0, 2.0, see P.3084
 ⓑ T3, T5 have camber, and T3 camber is particularly large.

T Dimension Tolerance, Rate of Camber & Torsion

T	T Dimension Tolerance		Rates of Camber & Torsion per 1,000 mm
	UPA	UPACA	
3	-0.2~+0.5	—	10% or Less
5	0~+0.8	—	2.0% or Less
8	0~+1.0	—	
10	0~+1.5	—	
15	0~+2.0	+0.4~+1.0	1.5% or Less
20	0~+2.5	—	

Dimensional Tolerances of A & B

A, B Unit: mm	A, B Dimension Tolerance
~99	±0.5
100-250	±0.75
251~	±1.0

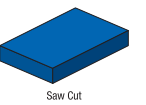
Pre-Drilled Type

Part Number	A	B	T	F	G	Pre-Drilled Hole Nominal Diameter				
						Through Hole	Counterbore Hole	Thread Insert		
Type	Nominal					N	Z	M	L	
	1 mm Increment									
UPA Standard	20-500	20-400	3	—	6-491.5 (2H, 4H)	4	—	3 4	—	
			5	—			4.5-395.5 (2HL)	5	4 5	3 4 5 6 8
			8	—			4.5-395.5 (2HL)	6	4 5 6	3 4 5 6 8 10
UPACA Conductive			10	10			6-391.5 (2HL, 4H, 6H)	8	4 5 6 8	3 4 5 6 8 10
			15	15			6-245.5 (6H)	10	4 5 6 8	3 4 5 6 8 10
	20	20								

ⓐ 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, $d(d_i)+2.5 \leq F \leq (A-d(d_i)-5)/2$.
 ⓑ 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, $d(d_i)+2.5 \leq G \leq B-d(d_i)-5$.
 (d for through hole and threaded insert, d_i for counterbore)
 ⓑ For Pre-drilled Type, select N (through hole) or Z (counterbore hole); for Threaded Insert Type, select M (threaded insert) and L (insertion length).

Ultra High-Molecular-Weight Polyethylene Plates

Standard / Conductive, continued



Part Number Example

Standard Type
Part Number - A - B - T
UPA - 150 - 118 - 5

Pre-Drilled / Thread Insert Type

Part Number	A	B	T	F	G	Bolt Nominal Diameter	L
UPA2H	50	25	8	F34	G10	N4	—
UPA2H	200	100	10	F70	G20	M5	L7.5

Part Number Example (Ex.)

Pre-Drilled
Part Number - A - B - T - F - G - Bolt Nominal Diameter
UPA4H - 300 - 200 - 10 - F240 - G160 - N8

Part Number	A	B	T	F	G	Bolt Nominal Diameter	L
UPACA2H	300	200	10	F240	G160	M5	L5

Part Number Alterations

Part Number	A	B	T	F	G	Bolt Nominal Diameter	(XC, YC, CRA...etc.)
UPA4H	200	180	8	F100	G140	Z4	XC10
UPACA	200	130	15				CRA10 - CRB10

Alterations	Corner Radius	Corner Cut	Hole Position from Left	Hole Position from Bottom
	Code	CRA, CRB, CRC, CRD	CCA, CCB, CCC, CCD	XC
Spec.	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 ⓑ Available for Standard Type only.	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 ⓑ Available for Standard Type only.	XC = 0.5 mm Increment ⓐ (2H, 4H Type) d(d _i)/2+2.5≤XC≤A-F-d(d _i)/2-2.5 ⓑ (6H Type) d(d _i)/2+2.5≤XC≤A-2F-d(d _i)/2-2.5	YC = 0.5 mm Increment ⓐ d(d _i)/2+2.5≤YC≤B-G-d(d _i)/2-2.5 ⓑ Not available for 2H