Heat Insulating Plates

High Temperature Insulating GradeHigh Temperature Super Insulating Grade

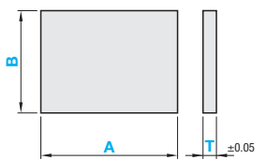
■High Temperature Insulating ■High Temperature Super Insulating

RoHS10

Type	Tolerance Selection	Dim. Tolerance of A and B	Grade	Color	Operating Ambient Temperature
HIPIA	Not Specified	+1.0 0	High Temperature Insulating	Natural Color	Room Temp. ~ 180°C
	P	±0.3			
HIPAL	Not Specified	+1.0 0	High Temperature Super Insulating	White	Room Temp. ~ 400°C
	P	±0.3			

Properties and Machining Conditions P.1675

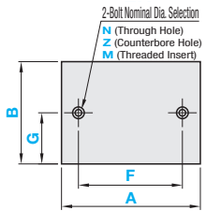
Standard



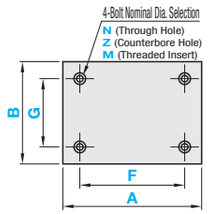
A≥B

With Holes

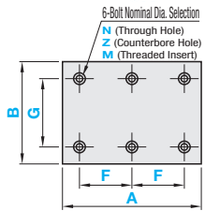
-2 Holes- 2H



-4 Holes- 4H



-6 Holes- 6H

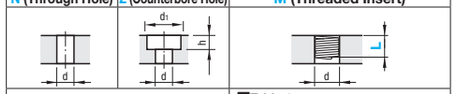


■Standard

Part Number		1mm Increment		T Selection	
Type	Tolerance Selection	A	B	HIPIA	HIPAL
HIPIA HIPAL	Not Specified	20~800	20~600	3 5 10 15	3 5 10 15
	P	20~200	20~200	5 10	5 10

Hole Machining Detail

N (Through Hole) Z (Counterbore Hole) M (Threaded Insert)



Bolt Nominal Dia.	3	4	5	6	8	10
d	3.5	4.5	5.5	6.5	9	11
d_1	-	8	9.5	11	14	-
h	-	5	6	7	9	-

■Table 1

Bolt Nominal Dia.	3	4	5	6	8	10
d	3.5	4.5	5.5	6.5	9	11
L	3 4.5 6	4 6 8	5 7.5 10	6 9 12	8 12 -	10 15 -

Ordering Code (Ex.) M4-L6

L≤T-1

For details of Threaded Insert HLTS,See P.271

When L+5<T, machined holes will be blind ones.

■With Holes

Part Number			1mm Increment		T Selection		0.5mm Increment		Bolt Hole Nominal Dia. Selection			
									Through Hole	Counterbore Hole	Threaded Insert	
Type	Tolerance Selection	Number of Holes	A	B	HIPIA	HIPAL	F	G	N	Z	M	L
HIPIA HIPAL	Not Specified	2H 4H 6H	20~800	20~600	3	3	9~791 (2H, 4H Type)	5~595 (2H)	3 4 5 6 8 10	-	-	-
					5	5				-	3 4	Select from Table 1
					10	10	9~395 (6H Type)	9~591 (Other than 2H)		4 5 6	3 4 5 6 8	
					15	15				4 5 6 8	3 4 5 6 8 10	
	P		20~200	20~200	5	5	9~191 (2H, 4H Type)	5~195 (2H)		-	3 4	
					10	10	9~95 (6H Type)	9~191 (Other than 2H)		4 5 6	3 4 5 6 8	

F Dimension Range: For 2H and 4H, $d(d_1)+5 \le F \le A-d(d_1)-5$; for 6H, $d(d_1)+5 \le F \le A/2-d(d_1)/2-2.5$.

G Dimension Range: For 2H, $d(d_1)/2+2.5 \le G \le B-d(d_1)/2-2.5$; for 4H and 6H, $d(d_1)+5 \le G \le B-d(d_1)-5$.
(d for through hole and threaded insert, d_1 for counterbore)

For Hole Type, select N (through hole), Z (counterbore hole), or M (threaded insert) and L (insert length).

Ordering Example

■Standard

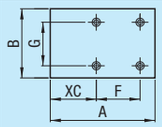
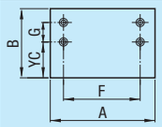
Part Number - A - B - T
HIPIA - 300 - 222 - 10
HIPALP - 200 - 100 - 5

■With Holes

Part Number - A - B - T - F - G - Bolt Nominal Dia. - L
HIPIAP2H - 200 - 170 - 10 - F100 - G70 - N8
HIPIA4H - 300 - 200 - 10 - F150 - G120 - M5 - L7.5

Alterations

Part Number - A - B - T - F - G - Bolt Nominal Dia. - (XC, YC)
HIPIA4H - 100 - 100 - 5 - F40 - G50 - N6 - XC30-YC20

Alterations Code	Hole Position from Left	Hole Position from Bottom
	XC	YC
Spec.	 XC=1 mm Increment 5≤XC≤786 (2H, 4H Type) $d(d_1)/2+2.5 \le XC \le A-F-d(d_1)/2-2.5$ (6H Type) $d(d_1)/2+2.5 \le XC \le A-2F-d(d_1)/2-2.5$	 YC=1mm Increment 5≤YC≤586 $d(d_1)/2+2.5 \le YC \le B-G-d(d_1)/2-2.5$ Not applicable to 2H Type.

■Standard Type Unit Price (HIPIA, HIPAL)

The price of HIPIAP and HIPALP is found by adding the tolerance selection charge to the Standard Type unit price.

Part Number	T	A	Unit Price HIPIA Qty. 1 ~ 50 B												Unit Price HIPIAL Qty. 1 ~ 20 B											
			20~50	51~100	101~150	151~200	201~250	251~300	301~350	351~400	401~450	451~500	501~550	551~600	20~50	51~100	101~150	151~200	201~250	251~300	301~350	351~400	401~450	451~500	501~550	551~600
HIPIA HIPAL	3	20~50		-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
		51~100			-	-	-	-	-	-	-	-	-	-			-	-	-	-	-	-	-	-	-	-
		101~150				-	-	-	-	-	-	-	-	-				-	-	-	-	-	-	-	-	-
		151~200					-	-	-	-	-	-	-	-					-	-	-	-	-	-	-	-
		201~250						-	-	-	-	-	-	-						-	-	-	-	-	-	-
		251~300							-	-	-	-	-	-							-	-	-	-	-	-
		301~350								-	-	-	-	-								-	-	-	-	-
		351~400									-	-	-	-									-	-	-	-
		401~450										-	-	-										-	-	-
		451~500											-	-											-	-
		501~550												-												-
		551~600																								
		601~650																								
		651~700																								
		701~750																								
		751~800																								
	5	20~50		-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
		51~100			-	-	-	-	-	-	-	-	-	-			-	-	-	-	-	-	-	-	-	-
		101~150				-	-	-	-	-	-	-	-	-				-	-	-	-	-	-	-	-	-
		151~200					-	-	-	-	-	-	-	-					-	-	-	-	-	-	-	-
		201~250						-	-	-	-	-	-	-						-	-	-	-	-	-	-
		251~300							-	-	-	-	-	-							-	-	-	-	-	-
		301~350								-	-	-	-	-								-	-	-	-	-
		351~400									-	-	-	-									-	-	-	-
		401~450										-	-	-										-	-	-
		451~500											-	-											-	-
		501~550												-												-
		551~600																								
		601~650																								
		651~700																								
		701~750																								
		751~800																								
	10	20~50		-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
		51~100			-	-	-	-	-	-	-	-	-	-			-	-	-	-	-	-	-	-	-	-
		101~150				-	-	-	-	-	-	-	-	-				-	-	-	-	-	-	-	-	-
		151~200					-	-	-	-	-	-	-	-					-	-	-	-	-	-	-	-
		201~250						-	-	-	-	-	-	-						-	-	-	-	-	-	-
		251~300							-	-	-	-	-	-							-	-	-	-	-	-
		301~350								-	-	-	-	-								-	-	-	-	-
		351~400									-	-	-	-									-	-	-	-
		401~450										-	-	-										-	-	-
		451~500											-	-											-	-
		501~550												-												-
		551~600																								
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		701~750																								
		751~800																								
	15	20~50		-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
		51~100			-	-	-	-	-	-	-	-	-	-			-	-	-	-	-	-	-	-	-	-
		101~150				-	-	-	-	-	-	-	-	-				-	-	-	-	-	-	-	-	-
		151~200					-	-	-	-	-	-	-	-					-	-	-	-	-	-	-	-
		201~250						-	-	-	-	-	-	-						-	-	-	-	-	-	-
		251~300							-	-	-	-	-	-							-	-	-	-	-	-
		301~350								-	-	-	-	-								-	-	-	-	-
		351~400									-	-	-	-									-	-	-	-
		401~450										-	-	-										-	-	-
		451~500											-	-											-	-
		501~550												-												-
		551~600																								
		601~650																								
		651~700																								
		701~750																								
		751~800																								

■Tolerance Selection Charge

Additional Price		Unit Price B	
		20~100	101~200
A	20~100		-
	101~200		

■Hole Machining Charge

With Holes	Unit Price Bolt Nominal		
	N (Through Hole)	Z (Counterbore Hole)	M (Threaded Insert)
2H			
4H			
6H			

The price of Hole Type is Standard Type Unit Price plus Hole Machining Charge.

(Ex.) Part Number - A - B - T - F - G - Bolt Nominal Dia.
HIPIA4H - 300 - 200 - 10 - F240 - G160 - Z6

(Standard Type Unit Price) + (Hole Machining Charge) = Hole Machined Type Unit Price