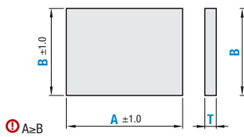
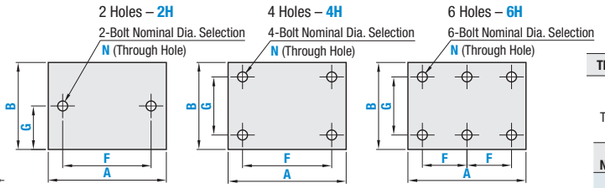
High Temperature Insulation Sheets

Type	Grade	Color	Operating Ambient Temperature
HIPYKH	High Strength	Brown	Room Temperature ~180°C
HIPLKH	High Temp. Resistance	White	-80~400°C
HIPSKH	Thin / Heat Resistant	Gray	Room Temperature ~800°C

Standard



Hole, Threaded Insert Machining Type



Thread Insert Machining Details

Bolt Nom. Dia.	3	4	5	6	8	10
d	3.5	4.5	5.5	6.5	9	11

Standard

Part Number	1 mm Increment		Selection
Type	A	B	T
HIPYKH	20–500	20–500	1
HIPLKH			2
HIPSKH			1.5 2

Hole, Thread Insert Machining Type

Part Number		1 mm Increment		T	0.5 mm Increment		Hole Machined Bolt Nominal Dia.
Type	Hole Selection	A	B		F	G	N (Through hole)
HIPYKH HIPLKH	2H 4H 6H	20–500	20–500	1 2	9–491 (2H/4H Type)	5–495 (2H Type)	3 4 5 6 8 10
HIPSKH				1.5 2	9–245 (6H Type)	9–491 (4H/6H Type)	

- F Dimension Range: For 2H and 4H, d+5≤F≤A-d-5; for 6H, d+5≤F≤A/2-d/2-2.5.
- G Dimension Specification Range: For 2H, d/2+2.5≤G≤B-d/2-2.5; for 4H and 6H, d+5≤G≤B-d-5.

Characteristics of HIPSKH

Overview: Inorganic mineral, Fiber, Filler and Binding Agent are main materials. Dried after paper making formation.

Item	Unit	Characteristic Values
Density	kg/m³	900
Tensile Strength	N/mm²	2.45
Compression Rate (6.86 MPa)	%	20
Recovery Rate (6.86 MPa)	%	35
Thermal Conductivity	W/(m-K) {cal/cm - sec - °C}	0.11 {0.26 x 10⁻³}

- Handle with care as the material is fragile.
- Characteristics of HIPYKH and HIPLKH **P.3790**.
- The above values are references only.

Precision Standards

T Dimension Tolerance

T1.0	T2.0
±0.15	±0.25

Part Number Example

Standard

Part Number	-	A	-	B	-	T
HIPYKH	-	300	-	200	-	1

Hole, Threaded Insert Machining Type

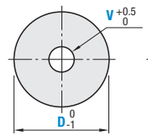
Part Number	-	A	-	B	-	T	-	F	-	G	-	Bolt Nominal Dia.
HIPLKH2H	-	300	-	200	-	2	-	F50	-	G50	-	N4

Heat Insulating Plates

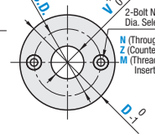
Circular Type

ENJHP
ENJHH
ENJHY
ENJHL
ENJHA

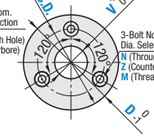
Standard



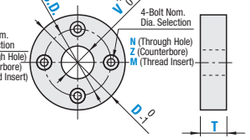
2 Holes – 2H



3 Holes – 3H



4 Holes – 4H

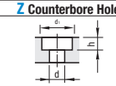
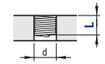


Properties **P.3779**

Standard

Part Number			1 mm Increment	
Type	T	T Tolerance	D	V
ENJHP Standard Grade	5 10 15	±0.05	50–400	0–50 V≤D-10
ENJHH Heat Resistant Grade	5 10 15	±0.05		
ENJHY High Strength Grade	5 10 15	±0.05		
ENJHL High Temperature Resistant Grade	5 10 15	±0.05		
ENJHA High Temperature Insulating Grade	3 5 10	±0.05		

Threaded Insert Machining Details

N Through Hole	Z Counterbore Hole	M Thread Insert
		

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

Table 1

Bolt Nominal Diameter	3	4	5	6	8
d	3.5	4.5	5.5	6.5	9
L	3 4.5 6	4 6 8	5 7.5 10	6 9 12	8 12 —

Ordering Code: (Ex.) M4-L6

- L≤T
- For details of thread insert HLTS, refer to **P.2461**.

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

Hole, Thread Insert Machining Type

Part Number			1 mm Increment			Hole Machined Bolt Nominal Diameter			
Type	Hole Selection	T	D	V	P.C.D.	Through Hole	Counterbore Hole	Thread Insert	
						N	Z	M	L
ENJHP T≥5 ENJHH T≥5 ENJHL T≥5 ENJHA T≥10	2H 3H 4H	3	50–400	0–50 (V≤D-10)	20–390*	3 4 5 6 8 10	—	—	—
		5						3 4	Select from Table above
		10					4 5 6	3 4 5 6	
		15					4 5 6 8	3 4 5 6 8	

- For Hole Type, select N (through hole) or Z (counterbore hole), for Thread Insert Type, select M (thread insert) or L (insertion length).

* P.C.D. V+5+d(d_1)≤P.C.D≤D-5-d(d_1) (d for through holes and thread insert; d1 for counterbore and countersink)

Part Number Example

Standard

Part Number	-	D	-	V	-	T
ENJHP5	-	300	-	50	-	1

Hole, Threaded Insert Machining Type

Part Number	-	D	-	V	-	P.C.D	-	Bolt Nominal Dia.	-	L
ENJHP2H5	-	300	-	50	-	80	-	N3		
ENJHP2H5	-	300	-	50	-	80	-	M3	-	L3