

6 Surface Milled Mounting Plates, Brackets

External Dimension Configurable

Part Number Type	Material Symbol	Material	Surface Treatment
HFZZA	SC	S45C	-
HFMQA HFNQA	SCB		Black Oxide
HFNRA HFCCA	SCM		Electroless Nickel Plating
HFMPA HFMSA	AM		-
HFCBA HFMDA	AMW	A5052	Anodize (Clear)
HFFDA HFJDA	AMB		Anodize (Black)
HFFCB HFJCB	SU	SUS304	-
HFMDB HFMCB			
HFMCC HFMCA			

HFZZA 4-C2 or less (Common Dimension)

There may be some hanger holes on anodized HFZZA.

Thickness (T) tolerance can be changed (See alterations).
 Thickness parallelism is 0.05 per 100mm.
 C0.2 to C0.5, unless otherwise specified.
 For other accuracy references, see P.1833

RoHS10

HFMQA

Hole specification 1: N M Z
Hole specification 2: NA MA ZF ZB DA

HFNQA

Hole specification 2: NA MA ZF ZB DA

HFNRA

Hole specification 2: NA MA ZF ZB DA

HFCCA

2-Hole specification 1: N M Z
Hole specification 2: NA MA ZF ZB DA

HFMPA

2-Hole specification 1: N M Z
2-Hole specification 2: NA MA ZF ZB DA

HFMSA

2-Hole specification 1: N M Z
2-Hole specification 2: NA MA ZF ZB DA

HFCBA

2-Hole specification 1: N M Z
2-Hole specification 2: NA MA ZF ZB DA

HFMDA

4-Hole specification 1: N M Z
4-Hole specification 2: NA MA ZF ZB DA

HFFDA

2-Hole specification 1: N M Z
4-Hole specification 2: NA MA ZF ZB DA

HFJDA

2-Hole specification 1: N M Z
4-Hole specification 2: NA MA ZF ZB DA

HFFCB

2-Hole specification 1: N M Z
4-Hole specification 2: NA MA ZF ZB DA

HFJCB

2-Hole specification 1: N M Z
4-Hole specification 2: NA MA ZF ZB DA

HFMDB

4-Hole specification 1: N M Z
4-Hole specification 2: NA MA ZF ZB DA

HFMCB

4-Hole specification 1: N M Z
4-Hole specification 2: NA MA ZF ZB DA

HFMCC

2-Hole specification 1: N M Z
4-Hole specification 2: NA MA ZF ZB DA

HFMCB

4-Hole specification 1: N M Z
4-Hole specification 2: NA MA ZF ZB DA

Part Number Type	Material Symbol	0.1mm Increment			X	Y	W	Hole Specification ①		K	L	H	D	F	S	G	Hole Specification ②		J
		A	B	T				Code	Nominal Dia.								Code	Nominal Dia.	
HFZZA								N	0								NA	0	
HFMQA HFNQA	SC							M	(No Hole)								MA	(No Hole)	
HFNRA HFCCA	SCB	25.0	10.0	3.0				Z		0.1mm		3~30				ZF	3		
HFMPA HFMSA	SCM	200.0	200.0	30.0						Ks1x10		0.5mm Increment				ZB	4		
HFCBA HFMDA	AM											0.1mm Increment						5	
HFFDA HFJDA	AMW											0.1mm Increment						6	DA
HFFCB HFJCB	AMB											0.1mm Increment						8	3
HFMDB HFMCB	SU											0.1mm Increment						10	30
HFMCC HFMCB												0.1mm Increment						12	
HFMCA												0.1mm Increment						14	
												0.1mm Increment						16	

For AMW and AMB, T_{≥5} For SU, T_{≤25.0}

Ordering Example

Part Number: HFMCC - AMB - A100 - B80 - T10 - X15 - V70 - Y10 - W60 - Z6 - L50 - H40 - D30 - F50 - MA6

Hole Type Selection Chart

Hole Type Code	Tapped Holes M, MA	Bolt Hole N, NA	Counterbore Front Z, ZF	Counterbore Back ZB	Through Hole DA																																					
Shape Diagram																																										
Machining Specifications	Effective Tap Length Max. M, MAx2 When T=M, MAx3, tap pilot might not go through.		Screw Nominal Size		Dimensions/Tolerance																																					
			<table border="1"> <thead> <tr> <th>Dimensions</th> <th>3</th> <th>4</th> <th>5</th> <th>6</th> <th>8</th> <th>10</th> <th>12</th> <th>14</th> <th>16</th> </tr> </thead> <tbody> <tr> <td>d, h</td> <td>3.5</td> <td>4.5</td> <td>5.5</td> <td>6.5</td> <td>9</td> <td>11</td> <td>14</td> <td>16</td> <td>18</td> </tr> <tr> <td>d1</td> <td>6.5</td> <td>8</td> <td>9.5</td> <td>11</td> <td>14</td> <td>18</td> <td>20</td> <td>23</td> <td>26</td> </tr> </tbody> </table>		Dimensions	3	4	5	6	8	10	12	14	16	d, h	3.5	4.5	5.5	6.5	9	11	14	16	18	d1	6.5	8	9.5	11	14	18	20	23	26	<table border="1"> <thead> <tr> <th>Dimensions/Tolerance</th> <th>3.0-6.0</th> <th>±0.1</th> </tr> </thead> <tbody> <tr> <td>3.0-6.0</td> <td>±0.1</td> </tr> <tr> <td>6.5-30.0</td> <td>±0.2</td> </tr> </tbody> </table>	Dimensions/Tolerance	3.0-6.0	±0.1	3.0-6.0	±0.1	6.5-30.0	±0.2
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Machining Limits: There are machining limits for thickness between holes, and between hole and edge. (Ex: "b" on the drawing below) For limit values, see P.1833.

There may be some hanger holes (tapped) on anodize (clear, black) treated HFZZA. The holes are not anodized.

Alterations

Part Number: HFMCC - AMB - A100 - B80 - T10 - X15 - V70 - Y10 - W60 - Z6 - L50 - H40 - D30 - F50 - MA6 - CC10

Alterations	Corner cut change	Plate thickness (T dim.) Tolerance Change	Slotted Hole Angle Change	Center D Hole Change to H7
	Code	CC	TKC, THC	RC
Spec.	Changes corner cuts. CC = 1mm Increment. 1 ≤ CC ≤ 50. Add CC at the end of the Part Number designation. (Ex) ~ -CC10	Changes Plate thickness (T dim.) Tolerance. TKC Tolerance ±0.05. THC Tolerance ±0.02. Only SC, SCB and SCM material symbols are applicable. TKC and THC cannot be specified simultaneously. Add TKC or THC at the end of the type designation. (Ex) ~ -TKC, ~ -THC	Slotted holes are changed as shown above. Note the dimensions relationship. Add RC at the end of the type designation. (Ex) ~ -RC	Center hole D is changed to a precision hole (H7). DC = 1mm Increment. 3 ≤ DC ≤ 100. Applicable only to HFFCB, HFJCB, HFMCB, HFMCC and HFMCB. Specify by replacing dim. D with DC. (Ex) ~ -DC30

Green colored parameters can be omitted. If the parameter setting is omitted, the holes will be evenly distributed about the center. For details, see P.1834.