

# Simple Specials: -XC79: Tapped Hole, Drilled Hole, Pinned Hole Machined Additionally

These changes are dealt with Simple Specials System. Refer to the front matter pages for details.

## 10 Tapped Hole, Drilled Hole, Pinned Hole Machined Additionally

Symbol

**-XC79**

This simple special is meant for machining additionally tapped hole, drilled hole, and pinned hole, as requested from customer, on parts designed largely for mounting a workpiece, etc. in the combined air cylinders.

But, for each model, since they have the portions which are impossible to machine additionally, refer to the additional machining limitation.

### Applicable Series

Series			Action
MGP	Standard type	MGP-Z	Double acting
	With air cushion	MGP-A-Z	Double acting
	With end lock	MGP-H/R	Double acting
	High precision ball bushing type with end lock	MGP-A-H/R	Double acting
MGQ	Standard type	MGQ	Double acting
MLGP	With lock	MLGP	Double acting

Series			Action
MVGQ	With valve	MVGQ	Double acting
MGG	Standard type	MGG	Double acting
	With end lock	MGG-H/R	Double acting
MGC	Compact type	MGC	Double acting
MLGC	Compact type with lock	MLGC	Double acting
MGF	Standard type	MGF	Double acting
MXH	Standard type	MXH-Z	Double acting

### Applicable Series and Component Parts Machined Additionally

Applicable series	Component parts applicable for additional machining
MGP, MGQ, MLGP, MVGQ	Plate
MGG, MGC, MLGC	Front plate
MGF	Plate (Upper plate only)
MXH	Table

### ⚠ Precautions

- We cannot take any responsibility as for the intensity of holes machined additionally and the effects of decreased intensity for the product itself.
- It will not be plated again for the machined part additionally.
- Be sure to fill in "through" for through-hole, and "effective depth" for blind hole.
- When using by machining through-hole additionally, ensure that the tip of the bolt, etc. for mounting workpiece should not stick into the cylinder side. It may result in an unexpected problem.
- Use caution not to interfere the current mounting hole on the standard products with the hole to be machined additionally. But it is possible to drill additionally the larger size of hole at the same position as the current hole.

### Common Complementary Explanation/Holes which can be additionally machined are the following 3 types.

Tapped hole	Drilled hole	Pinned hole												
<p>Designated nominal diameter and tapped hole of a pitch are machined additionally. (Maximum nominal thread diameter M20)</p> <p>Blind hole is deep into the bottom of prepared hole which sums up A to C in the figure below in contrast to the effective depth of tapped hole. When there is a condition which does not allow through-hole, etc., leave sufficient thickness in the inner part of hole.</p> <p style="text-align: center;">D (Thread size)</p> <p style="text-align: center;">A (Effective thread depth)</p> <p style="text-align: center;">B = 3 x P (Incomplete thread section)</p> <p style="text-align: center;">C = 0.3 x (D - P)</p> <p>Note) P stands for thread pitch.</p>	<p>Drilled hole of a designated internal diameter is machined. (Maximum hole diameter 20 mm)</p> <p>If you wish for blind hole, instruct us with effective depth. (Refer to the figure below.) Besides, dimensional accuracy for internal diameter will be <math>\pm 0.2</math> mm.</p> <p style="text-align: center;">D</p> <p style="text-align: center;">A (Effective depth)</p> <p style="text-align: center;">C = 0.3D</p>	<p>Pinned hole of a designated diameter (reamer hole) is machined. (Maximum hole diameter 20 mm)</p> <p>Internal dimension tolerates H7 tolerance to the designated hole diameter. (Refer to the table below.)</p> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th>Hole dia.</th> <th>3 or less</th> <th>Over 3 to 6</th> <th>Over 6 to 10</th> <th>Over 10 to 18</th> <th>Over 18 to 20</th> </tr> </thead> <tbody> <tr> <td>Tolerance</td> <td>+0.01 0</td> <td>+0.012 0</td> <td>+0.015 0</td> <td>+0.018 0</td> <td>+0.021 0</td> </tr> </tbody> </table> <p style="text-align: center;">D<sub>H7</sub></p> <p style="text-align: center;">A (Effective depth)</p>	Hole dia.	3 or less	Over 3 to 6	Over 6 to 10	Over 10 to 18	Over 18 to 20	Tolerance	+0.01 0	+0.012 0	+0.015 0	+0.018 0	+0.021 0
Hole dia.	3 or less	Over 3 to 6	Over 6 to 10	Over 10 to 18	Over 18 to 20									
Tolerance	+0.01 0	+0.012 0	+0.015 0	+0.018 0	+0.021 0									

# Simple Specials:

## -XC79: Tapped Hole, Drilled Hole, Pinned Hole Machined Additionally

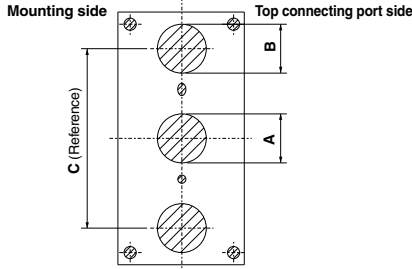
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### 10 Tapped Hole, Drilled Hole, Pinned Hole Machined Additionally

Limitation for Machining Additionally/Since the slanted lines denote the restricted range for machining additionally, design the dimensions, referring to below.

#### MGP/MLGP series

Plate material: Steel

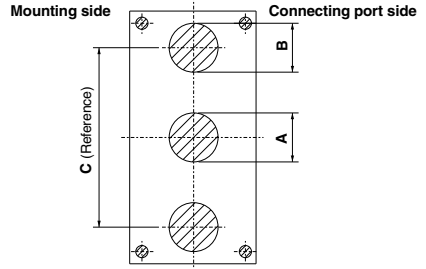


Dimensional Range Not Possible to Machine Additionally (mm)

Bore size (mm)	A	B	C
12	8	11	41
16	10	13	46
20	12	15	54
25	14	21	64
32	25	25	78
40	25	25	86
50	30	30	110
63	30	30	124
80	34	34	156
100	42	42	188

#### MGQ/MVGQ series

Plate material: Steel

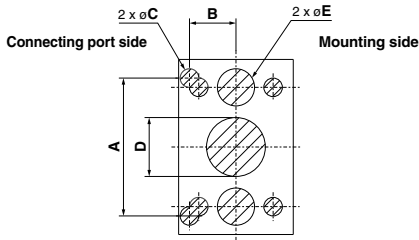


Dimensional Range Not Possible to Machine Additionally (mm)

Bore size (mm)	A	B	C
12	8	11	36
16	10	13	38
20	12	15	46
25	14	21	56
32	25	25	80
40	25	25	90
50	30	30	100
63	30	30	110
80	34	34	140
100	42	42	170

#### MGG series

Front plate material: Steel

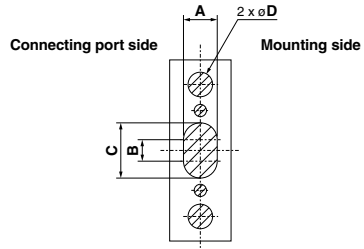


Dimensional Range Not Possible to Machine Additionally (mm)

Bore size (mm)	A	B	C	D	E
20	70	17.5	9	24	12.5
25	85	20	13	31	13
32	91	23	13	31	19
40	114	29	19	36	23
50	132	34	19	44	29
63	156	38	19	44	30
80	186	44	26	58	35
100	214	49	26	64	40

#### MGC/MLGC series

Front plate material: Steel



MGC Dimensional Range Not Possible to Machine Additionally (mm)

Bore size (mm)	A	B	C	D
20	18	10	28	12.5
25	23	13	36	12.5
32	23	13	36	19
40	27	15	42	23
50	33	19	52	28

MLGC Dimensional Range Not Possible to Machine Additionally (mm)

Bore size (mm)	A	B	C	D
20	18	10	28	16
25	23	13	36	20
32	23	13	36	20
40	27	15	42	25

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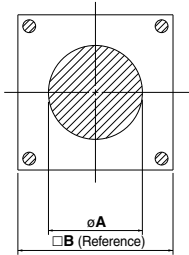
Symbol

**-XC79**

**Limitation for Machining Additionally** Since the slanted lines denote the restricted range for machining additionally, design the dimensions, referring to below.

## MGF series

Top plate material: Aluminum



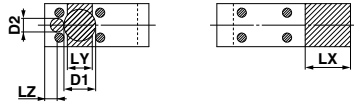
Connecting port side

**Dimensional Range Not Possible to Machine Additionally** (mm)

Model	A	B
<b>MGF40</b>	90	120
<b>MGF63</b>	120	160
<b>MGF100</b>	160	200

## MXH series

Table material: Aluminum



**Dimensional Range Not Possible to Machine Additionally** (mm)

Model	D1	D2	LY	LX	LZ
<b>MXH6</b>	11	5.8	9	20	5.5
<b>MXH10</b>	14	6	11	22	6.5
<b>MXH16</b>	18	7.5	16	29	6.5
<b>MXH20</b>	22	9.7	22	32	7