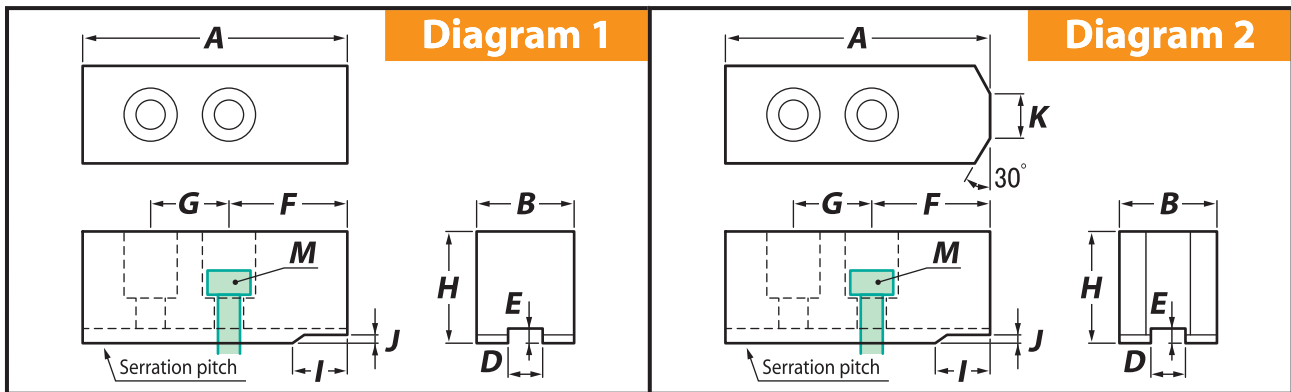


**Steel
Soft Jaw.**

MADE IN JAPAN



Note • HO-12 chuck does not fit with "HO-12A", "HO-12S", "HO-12K". HO-12 chuck only fit with "UVE315K", "HO-12".

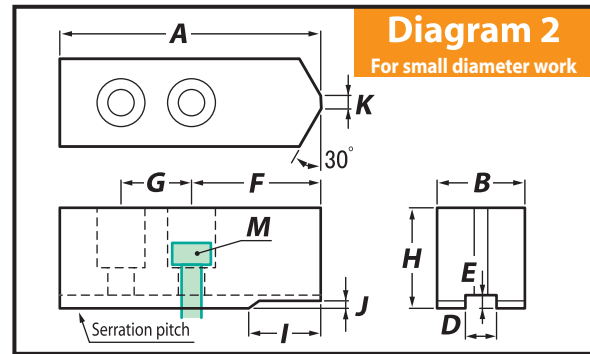
ARM		Item No.	A	B	H	D	E	F	G	M	I	J	K	Serration pitch	Diagram
HO	4	H23	48	19	23	8	3	25	15	M6	6	1.5	6	1.5	2
		H40			40										
	5	H31	57	23	31	10	3	29	18	M8	6	1.5	12	1.5	2
		H40			40										
		H60			60										
	6	H36	75	32	36	12	5	37	20	M10	15	1.5	13	1.5	2
		H60			60										
		H80			80										
		H100			100										
	8	H42	95	35	42	14	5	46	25	M12	20	1.5	15	1.5	2
		H60			60										
		H80			80										
		H100			100										
		H120			120										
	10	H42	110	40	42	16	5	50	30	M12	20	1.5	17	1.5	2
H60		60													
H80		80													
H100		100													
H120		120													
12A	H50	129	50	50	18	5	60	30	M14	20	1.5	19	1.5	2	
	H80			80											
	H100			100											
	H120			120											
12	H50	129	50	50	18	5	59	38	M14	-	-	-	1.5	1	
15	H66	165	62	66	22	8	85	43	M20	40	1.5	-	-	1.5	1
	H100			100											
	H120			120											

N-15/18	H60	135	50	60	25.5	5	66	43	M20	20	1.5	-	1.5	1
	H110			110										
N-21/B-21	H70	180	65	70	25	9	80	60	M20	50	3.0	-	3.0	1
	H110			110										
	H110			110										

HO-4, HO-5, HO-6, HO-8, HO-10, these Jaw has Aluminium series.

**Steel
Soft Jaw.**

MADE IN JAPAN

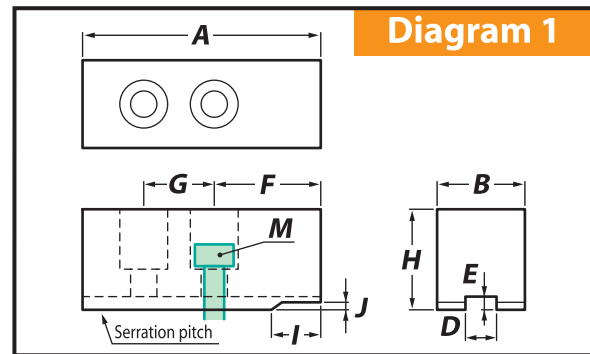


ARM		Item No.	A	B	H	D	E	F	G	M	I	J	K	Serration pitch	Diagram
HO	6S	H36	80	32	36	12	5	42	20	M10	20	1.5	3	1.5	2
		H60			60										
		H80			80										
	8S	H42	100	35	42	14	5	51	25	M12	25	1.5	5	1.5	2
		H60			60										
		H80			80										
	10S	H42	120	40	42	16	5	60	30	M12	30	1.5	8	1.5	2
		H60			60										
		H80			80										
	12S	H50	144	50	50	18	5	75	30	M14	35	1.5	8	1.5	2
		H80			80										
	15S	H66	180	62	66	22	8	100	43	M20	55	1.5	10	1.5	2
H100		100													

HO-6S, HO-8S, HO-10S, these Jaw has Aluminium series.

**Steel
Soft Jaw.**

MADE IN JAPAN



ARM		Item No.	A	B	H	D	E	F	G	M	I	J	K	Serration pitch	Diagram
HO	6K	H36	75	32	36	12	5	37	20	M10	-	-	-	1.5	1
		H60			60										
		H80			80										
	8K	H42	95	35	42	14	5	46	25	M12	-	-	-	1.5	1
		H60			60										
		H80			80										
	10K	H42	110	40	42	16	5	50	30	M12	-	-	-	1.5	1
		H60			60										
		H80			80										
	12K	H50	129	50	50	18	6	60	30	M14	-	-	-	1.5	1
		H80			80										
		H100			100										
				120											

HO-6K, HO-8K, HO-10K, these Jaw has Aluminium series.

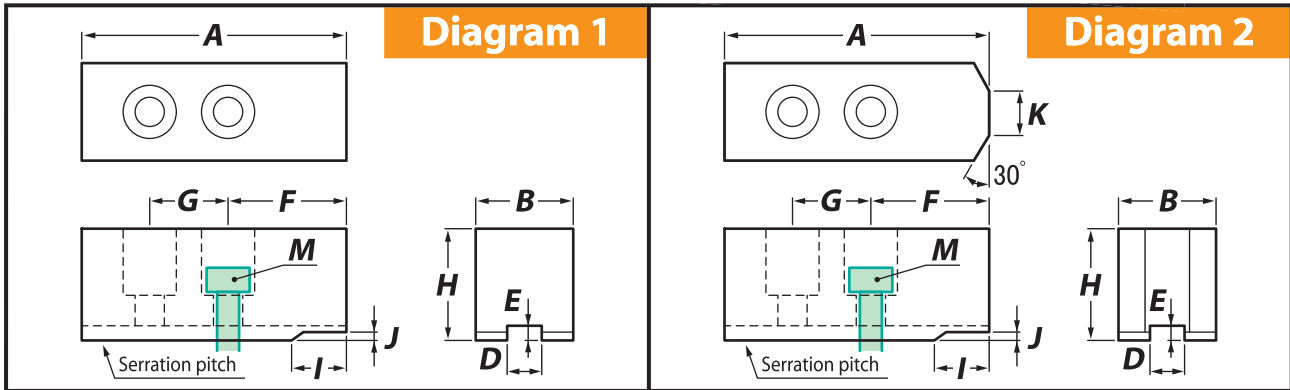
B-200

Kitagawa
Hydraulic / Air Chuck

"KITAGAWA"
Size chart.

Steel
Soft Jaw.

MADE IN JAPAN



ARM	Item No.	A	B	H	D	E	F	G	M	I	J	K	Serration pitch	Diagram		
B	204	H23	49.5	23	10	4	25.5	14	M8	7.5	1.5	4	1.5	2		
		H40													23	40
	205	H25	54	23	10	4	28	14	M8	7.5	1.5	5	1.5	2		
		H40													25	40
		H60													25	60
	206	H28	66	26	12	5	34	20	M10	12	1.5	5	1.5	2		
		H40													28	40
		H60													28	60
	208	When the Chuck number is B-208, Soft Jaw HO-8 should be used.														
	210	When the Chuck number is B-210, Soft Jaw HO-10 should be used.														
212	H50	111	50	21	4	60	30	M16	20	1.5	-	1.5	1			
	H90													50	90	
	H120													50	120	
215	When the Chuck number is B-215, Soft Jaw N-15/18 should be used.															

B-204, B-205, B-206, these Jaw has Aluminium series.

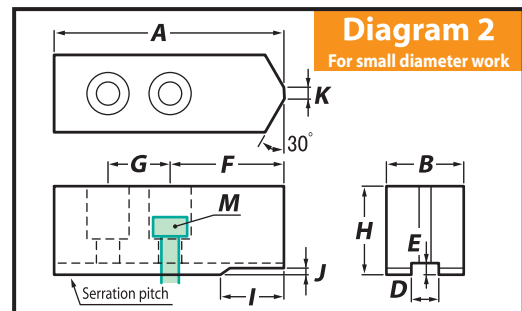
B-200 for small diameter work

Kitagawa
Hydraulic / Air Chuck

"KITAGAWA"
Size chart.

Steel
Soft Jaw.

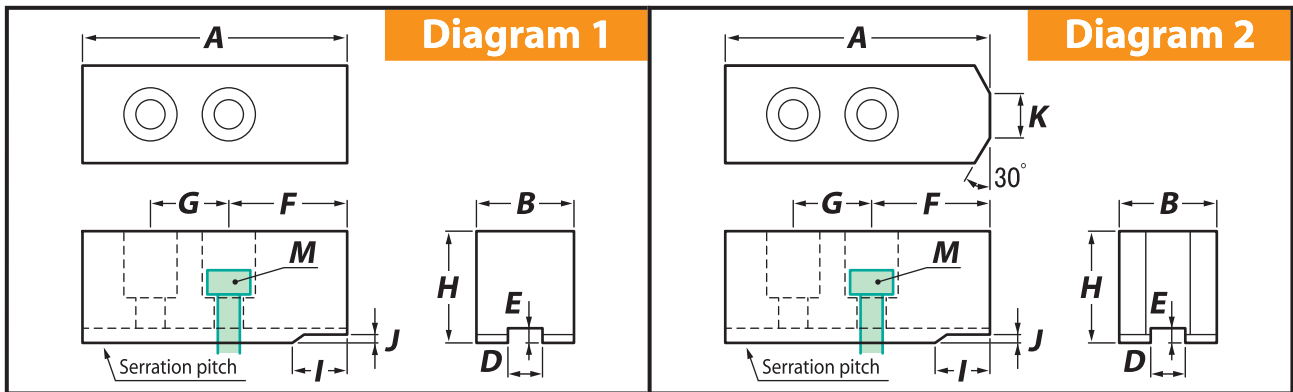
MADE IN JAPAN



ARM	Item No.	A	B	H	D	E	F	G	M	I	J	K	Serration pitch	Diagram
	B-208	When the Chuck number is B-208, specialised for small diameter work, Soft Jaw HO-8S should be used.												
	B-210	When the Chuck number is B-210, specialised for small diameter work, Soft Jaw HO-10S should be used.												
B-212S	H50	144	50	21	4	93	30	M16	53	1.5	8	1.5	2	
	H90													50

**Steel
Soft Jaw.**

MADE IN JAPAN



ARM		Item No.	A	B	H	D	E	F	G	M	I	J	K	Serration pitch	Diagram	
HJ	4	H25	55	23	25	10	4	28	14	M8	13	1.5	3	1.5	2	
		H40			40											
	5	H27	62	23	27	10	4	29	19	M8	14	1.5	11	1.5	2	
		H40			40											
	6	H36	75	32	36	12	6	36	20	M10	-	-	-	3.0	1	
		H60			60											
	8	8	H42	95	35	42	14	6	46	25	M12	-	-	-	3.0	1
			H60			60										
			H80			80										
			H100			100										
	10	10	H42	110	40	42	16	6	50	30	M12	-	-	-	3.0	1
			H60			60										
H80			80													
H100			100													
12	12	H50	129	50	50	18	6	59	38	M14	-	-	-	3.0	1	
		H80			80											
		H100			100											

AL HO

Kitagawa
Hydraulic / Air Chuck

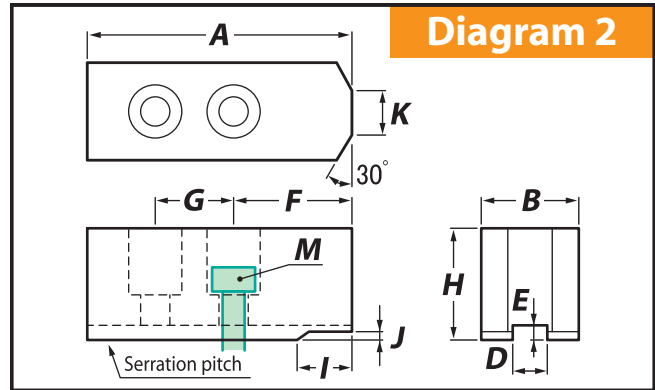
"KITAGAWA"
Size chart.

Aluminium
Soft Jaw.

MADE IN JAPAN

Specification of Aluminium Jaw. (Compare to Steel Jaw)

- The work will not be harmed due to soft material of Jaw.
- Light weight of Jaw ensures gripping power.
- Easy cutting process of Jaw shaping.



ARM		Item No.	A	B	H	D	E	F	G	M	I	J	K	Serration pitch	Diagram
AL HO	4	H23	48	19	23	8	3	25	15	M6	6	1.5	6	1.5	2
	5	H31	57	23	31	10	3	29	18	M8	6	1.5	12	1.5	2
	6	H36	75	32	36	12	5	37	20	M10	15	1.5	13	1.5	2
		H60			60										
	8	H42	95	35	42	14	5	46	25	M12	20	1.5	15	1.5	2
H60		60													
10	H42	110	40	42	16	5	50	30	M12	20	1.5	17	1.5	2	
	H60			60											

AL HO for small diameter work

Kitagawa
Hydraulic / Air Chuck

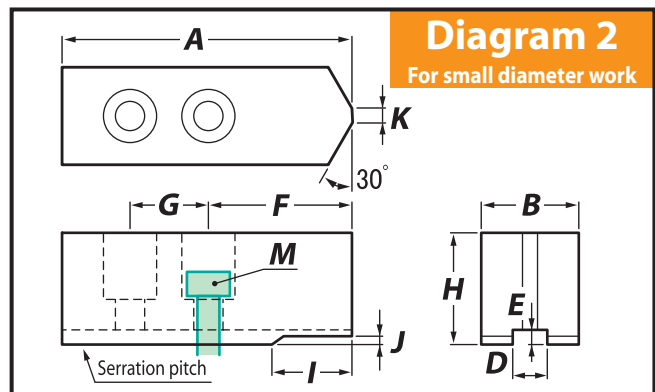
"KITAGAWA"
Size chart.

Aluminium
Soft Jaw.

MADE IN JAPAN

Specification of Aluminium Jaw. (Compare to Steel Jaw)

- The work will not be harmed due to soft material of Jaw.
- Light weight of Jaw ensures gripping power.
- Easy cutting process of Jaw shaping.



ARM		Item No.	A	B	H	D	E	F	G	M	I	J	K	Serration pitch	Diagram
AL HO	6S	H36	80	32	36	12	5	42	20	M10	20	1.5	3	1.5	2
	8S	H42	100	35	42	14	5	51	25	M12	25	1.5	5	1.5	2
	10S	H42	120	40	42	16	5	60	30	M12	30	1.5	8	1.5	2

AL HO Square Nose type

Kitagawa
Hydraulic / Air Chuck

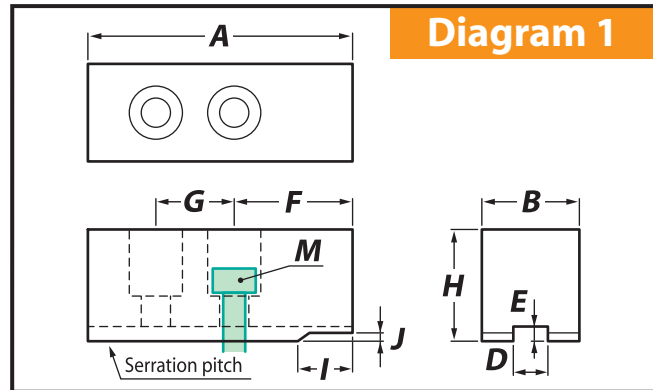
"KITAGAWA"
Size chart.

Aluminium
Soft Jaw.

MADE IN JAPAN

Specification of Aluminium Jaw. (Compare to Steel Jaw)

- The work will not be harmed due to soft material of Jaw.
- Light weight of Jaw ensures gripping power.
- Easy cutting process of Jaw shaping.



ARM Item No.		A	B	H	D	E	F	G	M	I	J	K	Serration pitch	Diagram
AL HO	6K H36	75	32	36	12	5	37	20	M10	-	-	-	1.5	1
	8K H42	95	35	42	14	5	46	25	M12	-	-	-	1.5	1
	10K H42	110	40	42	16	5	50	30	M12	-	-	-	1.5	1

AL B-200

Kitagawa
Hydraulic / Air Chuck

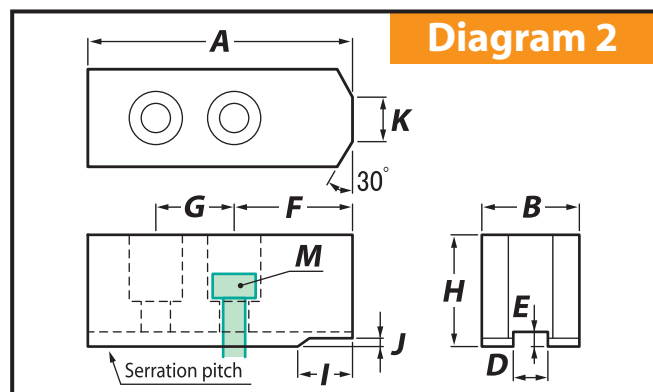
"KITAGAWA"
Size chart.

Aluminium
Soft Jaw.

MADE IN JAPAN

Specification of Aluminium Jaw. (Compare to Steel Jaw)

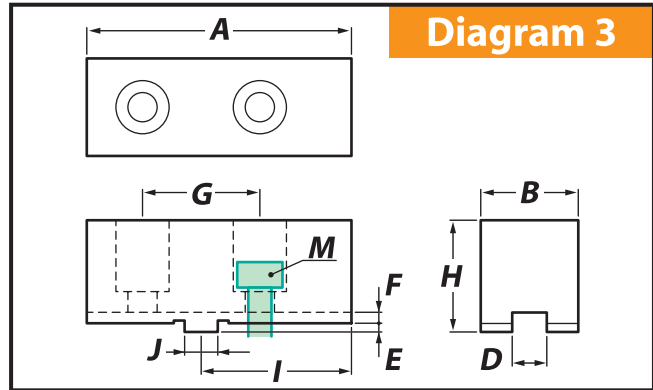
- The work will not be harmed due to soft material of Jaw.
- Light weight of Jaw ensures gripping power.
- Easy cutting process of Jaw shaping.



ARM Item No.		A	B	H	D	E	F	G	M	I	J	K	Serration pitch	Diagram
AL B	204 H23	49.5	23	23	10	4	25.5	14	M8	7.5	1.5	4	1.5	2
	205 H25	54	23	25	10	4	28	14	M8	7.5	1.5	5	1.5	2
				28										
	206	H40	66	26	40	12	5	34	20	M10	12	1.5	5	1.5
H60		60												

**Steel
Soft Jaw.**

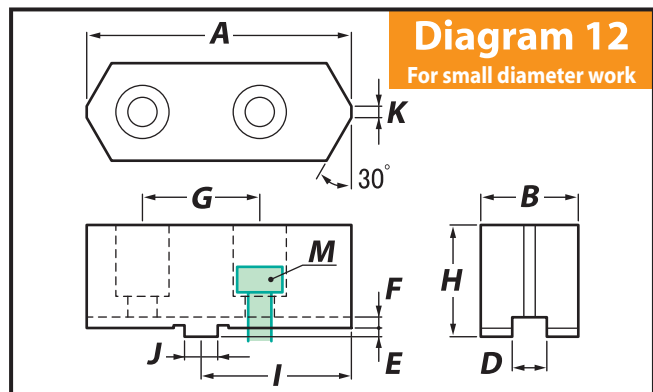
MADE IN JAPAN



ARM Item No.		A	B	H	D	E	F	G	M	I	J	K	Diagram	
SBS	6	H35	75	26	35	7.94	3	3.5	38.1	M8	41	12.68	-	3
		H60			60									
	7	H38	88	28	38	7.94	3	3.5	44.45	M10	48	12.68	-	3
		H60			60									
		H90			90									
	9	H45	100	32	45	12.7	3	3.5	53.98	M12	55	19.03	-	3
		H60			60									
		H90			90									
	10	H48	110	35	48	12.7	3	3.5	53.98	M12	60	19.03	-	3
		H60			60									
		H90			90									
	12	H51	125	40	51	12.7	3	3.5	63.5	M12	67.5	19.03	-	3
H90		90												

**Steel
Soft Jaw.**

MADE IN JAPAN



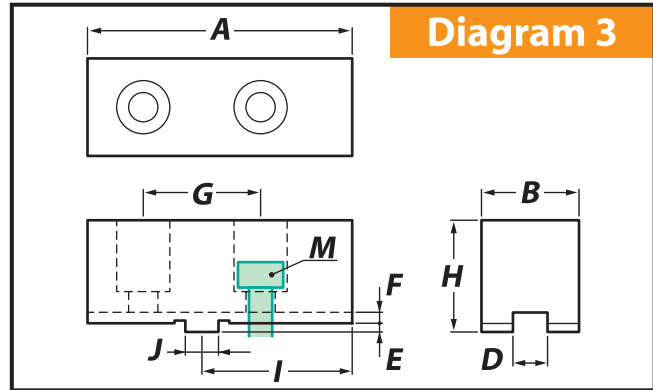
ARM Item No.		A	B	H	D	E	F	G	M	I	J	K	Diagram
SBS	6S H35	75	26	35	7.94	3	3.5	38.1	M8	41	12.68	3	12
	7S H38	88	28	38	7.94	3	3.5	44.45	M10	48	12.68	3	12
	9S H45	100	32	45	12.7	3	3.5	53.98	M12	55	19.03	3	12
	10S H48	110	35	48	12.7	3	3.5	53.98	M12	60	19.03	3	12
	12S H51	125	40	51	12.7	3	3.5	63.5	M12	67.5	19.03	3	12

Aluminium
Soft Jaw.

MADE IN JAPAN

Specification of Aluminium Jaw. (Compare to Steel Jaw)

- The work will not be harmed due to soft material of Jaw.
- Light weight of Jaw ensures gripping power.
- Easy cutting process of Jaw shaping.



ARM Item No.		A	B	H	D	E	F	G	M	I	J	K	Diagram	
AL SBS	6	H35	75	26	35	7.94	3	3.5	38.1	M8	41	12.68	-	3
		H60			60									
	7	H38	88	28	38	7.94	3	3.5	44.45	M10	48	12.68	-	3
		H60			60									
	9	H45	100	32	45	12.7	3	3.5	53.98	M12	55	19.03	-	3
		H60			60									
	10	H48	110	35	48	12.7	3	3.5	53.98	M12	60	19.03	-	3
		H60			60									

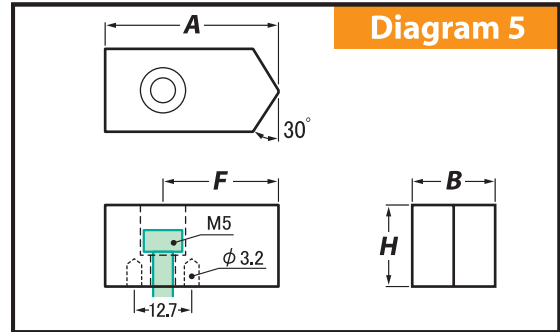
KPC80

Kitagawa Air Chuck "KPC"

"KITAGAWA"
Size chart.

**Steel
Soft Jaw.**

MADE IN JAPAN



ARM Item No.		A	B	H	F	Diagram
KPC80	H19	38.4	20	19	25	5
	H25			25		
	H38			38		
	H50			50		

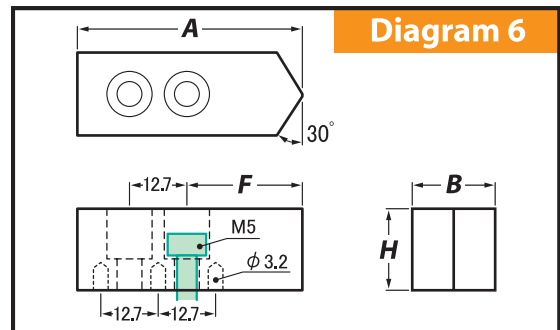
KPC4

Kitagawa Air Chuck "KPC"

"KITAGAWA"
Size chart.

**Steel
Soft Jaw.**

MADE IN JAPAN



ARM Item No.		A	B	H	F	Diagram
KPC4	H19	48.4	20	19	26	6
	H25			25		
	H38			38		
	H50			50		

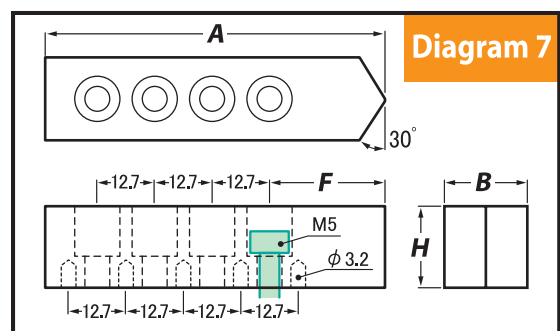
KPC6

Kitagawa Air Chuck "KPC"

"KITAGAWA"
Size chart.

**Steel
Soft Jaw.**

MADE IN JAPAN



ARM Item No.		A	B	H	F	Diagram
KPC6	H19	73.4	25	19	26	7
	H25			25		
	H38			38		
	H50			50		

AL KPC80

Kitagawa Air Chuck "KPC"

"KITAGAWA"
Size chart.

Aluminium
Soft Jaw.

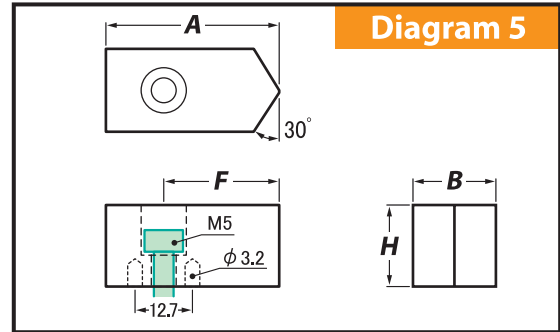
MADE IN JAPAN



Specification of Aluminium Jaw. (Compare to Steel Jaw)

- The work will not be harmed due to soft material of Jaw.
- Light weight of Jaw ensures gripping power.
- Easy cutting process of Jaw shaping.

ARM Item No.		A	B	H	F	Diagram
AL KPC80	H19	38.4	20	19	25	5
	H25			25		
	H38			38		
	H50			50		



AL KPC4

Kitagawa Air Chuck "KPC"

"KITAGAWA"
Size chart.

Aluminium
Soft Jaw.

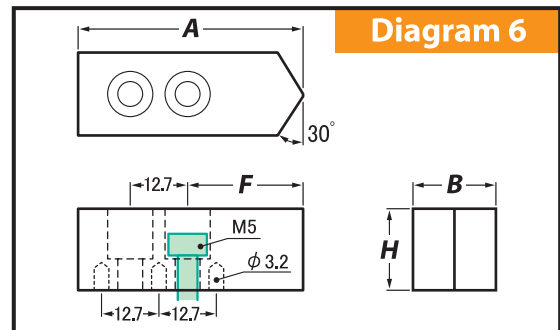
MADE IN JAPAN



Specification of Aluminium Jaw. (Compare to Steel Jaw)

- The work will not be harmed due to soft material of Jaw.
- Light weight of Jaw ensures gripping power.
- Easy cutting process of Jaw shaping.

ARM Item No.		A	B	H	F	Diagram
AL KPC4	H19	48.4	20	19	26	6
	H25			25		
	H38			38		
	H50			50		



AL KPC6

Kitagawa Air Chuck "KPC"

"KITAGAWA"
Size chart.

Aluminium
Soft Jaw.

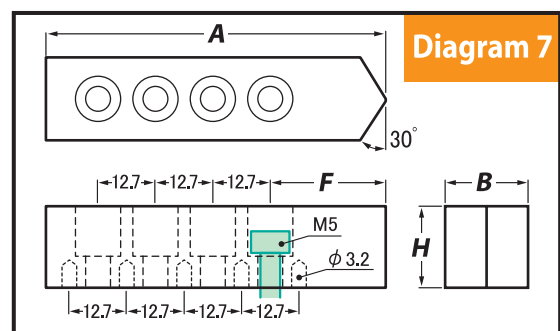
MADE IN JAPAN



Specification of Aluminium Jaw. (Compare to Steel Jaw)

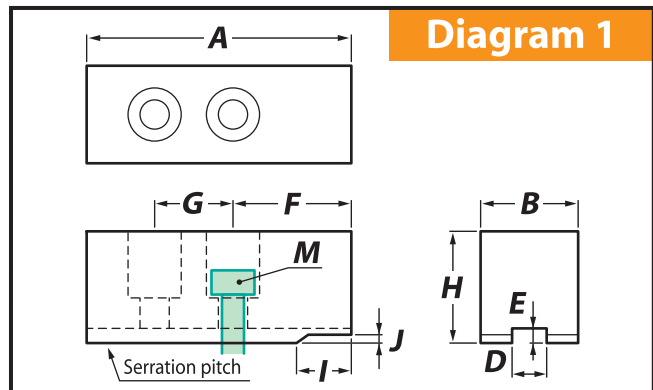
- The work will not be harmed due to soft material of Jaw.
- Light weight of Jaw ensures gripping power.
- Easy cutting process of Jaw shaping.

ARM Item No.		A	B	H	F	Diagram
AL KPC6	H19	73.4	25	19	26	7
	H25			25		
	H38			38		
	H50			50		



**Steel
Soft Jaw.**

MADE IN JAPAN



P1.5 Serration pitch

Note HO1MA-6, 8, 10 has 2 variation of serration pitch, 1.5mm and 3.0mm.

(ARM) Item No.	A	B	H	D	E	F	G	M	I	J	K	Serration pitch	Diagram		
HO1MA P1.5	4	H25	54	25	25	10	5	30	14	M8	-	-	-	1.5	1
	5	H25	58.5	25	25	10	5	31.5	19	M8	-	-	-	1.5	1
	6	72	31	H40	12	6	37	20	M10	-	-	-	1.5	1	
				H60											
				H80											
				H100											
	8	90	34	H40	14	6	45	25	M12	-	-	-	1.5	1	
				H60											
				H80											
				H100											
	10	111	40	H40	16	6	51	30	M12	-	-	-	1.5	1	
				H60											
				H80											
				H100											

P3.0 Serration pitch

(ARM) Item No.	A	B	H	D	E	F	G	M	I	J	K	Serration pitch	Diagram	
HO1MA P3.0	6	72	31	H40	12	6	37	20	M10	-	-	-	3.0	1
				H60										
				H80										
				H100										
	8	90	34	H40	14	6	45	25	M12	-	-	-	3.0	1
				H60										
				H80										
				H100										
	10	111	40	H40	16	6	51	30	M12	-	-	-	3.0	1
				H60										
				H80										
				H100										
	12	129	50	H50	18	6	60	30	M14	-	-	-	3.0	1
				H80										
				H100										
				H120										
15	156	65	H70	26	8	72	50	M20	25	3	-	3.0	1	
24			H100											

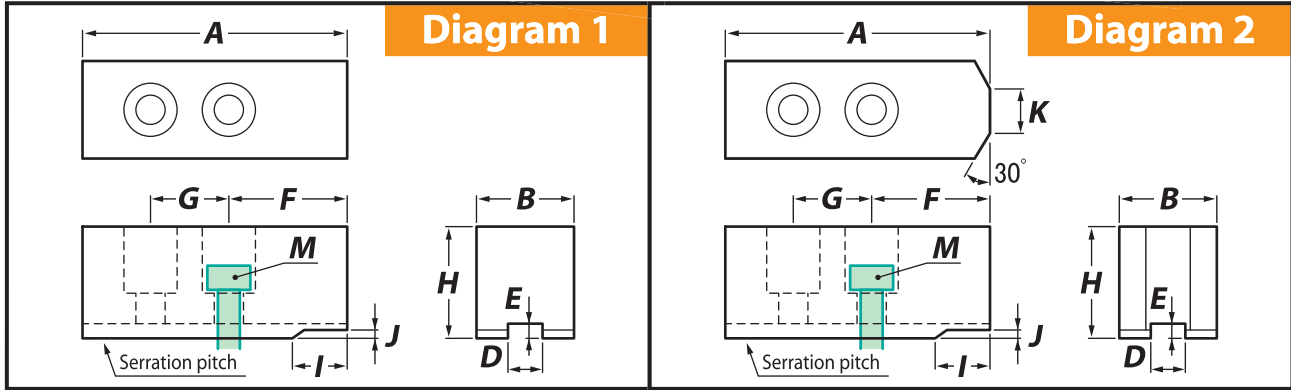
HO27M (HO37M)

HOWA
Hydraulic / Air Chuck

"HOWA"
Size chart.

Steel
Soft Jaw.

MADE IN JAPAN



ARM Item No.		A	B	H	D	E	F	G	M	I	J	K	Serration pitch	Diagram	
HO27M (HO37M)	4/5	H25	47.5	25	25	11	4	22	16	M8	10	1.5	12	1.5	2
		H40			40										
	6	H35	66	35	35	12	5	31.5	20	M10	13	1.5	13	1.5	2
		H60			60										
	8	H40	85.5	40	40	16	5	40.5	25	M12	15	1.5	17	1.5	2
		H60			60										
		H80			80										
		H100			100										
	10	H45	108	45	45	18	5	54	30	M14	15	1.5	19	1.5	2
		H60			60										
		H80			80										
		H100			100										
	12	H60	111	50	60	21	5	51	35	M16	-	-	-	1.5	1
		H80			80										
		H100			100										
15	H66	138	60	66	26	8	66	42	M20	11	3	-	3.0	1	

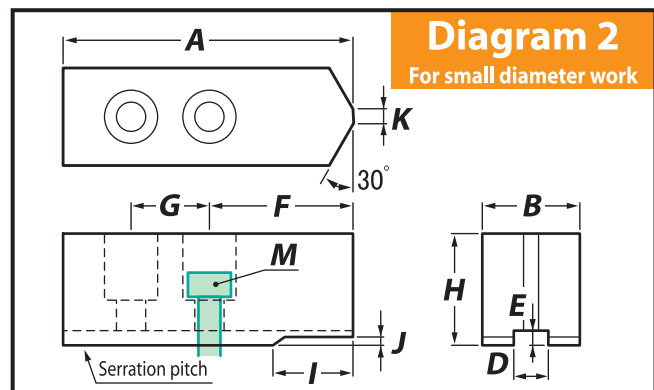
HO27M (HO37M)

HOWA Hydraulic / Air Chuck
for small diameter work

"HOWA"
Size chart.

Steel
Soft Jaw.

MADE IN JAPAN



ARM Item No.		A	B	H	D	E	F	G	M	I	J	K	Serration pitch	Diagram
HO27M (HO37M)	6S H35	79	35	35	12	5	44.5	20	M10	26	1.5	3	1.5	2
	8S H40	98	40	40	16	5	53	25	M12	27.5	1.5	5	1.5	2
	10S H45	118	45	45	18	5	64	30	M14	25	1.5	8	1.5	2
	12S H60	140	50	60	21	5	80	35	M16	29	1.5	8	1.5	2

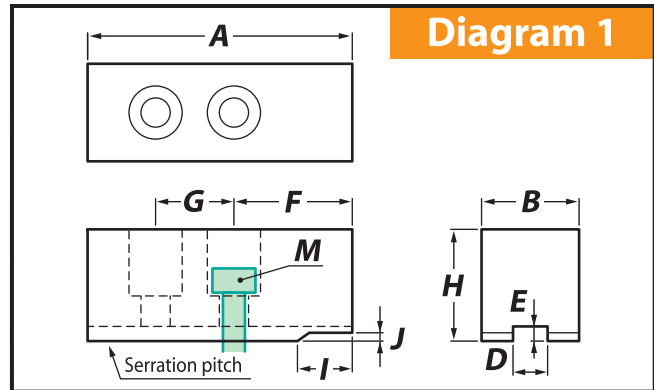
HO7MA

HOWA
Hydraulic / Air Chuck

"HOWA"
Size chart.

Steel
Soft Jaw.

MADE IN JAPAN



ARM Item No.		A	B	H	D	E	F	G	M	I	J	K	Serration pitch	Diagram
HO7MA	6 H30	70.5	30	30	12	5	36	20	M10	-	-	-	1.5	1
	8 H35	90	32	35	14	5	45	25	M12	-	-	-	1.5	1
	10 H40	90	35	40	16	5	45	25	M12	-	-	-	1.5	1
	12 H48	105	40	48	18	5	51	30	M14	-	-	-	1.5	1
	15 H60	126	50	60	21	6	60	40	M16	-	-	-	3.0	1

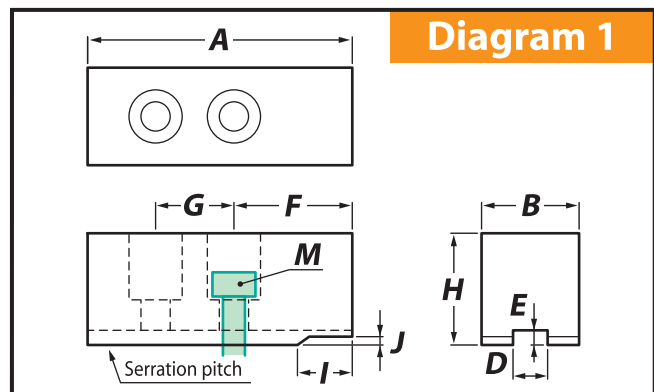
HO22M

HOWA
Hydraulic / Air Chuck

"HOWA"
Size chart.

Steel
Soft Jaw.

MADE IN JAPAN



ARM Item No.		A	B	H	D	E	F	G	M	I	J	K	Serration pitch	Diagram	
HO22M	5	When the Chuck number is HO22M-5, Soft Jaw HO1MA-4 should be used.													
	6 H30	70.5	30	30	12	5	36	20	M10	-	-	-	1.5	1	
	8 H40	90	35	40	16	5	45	25	M12	-	-	-	1.5	1	
	10 H48	105	40	48	18	5	51	30	M14	-	-	-	1.5	1	
	12 H60	126	50	60	21	6	60	40	M16	-	-	-	3.0	1	

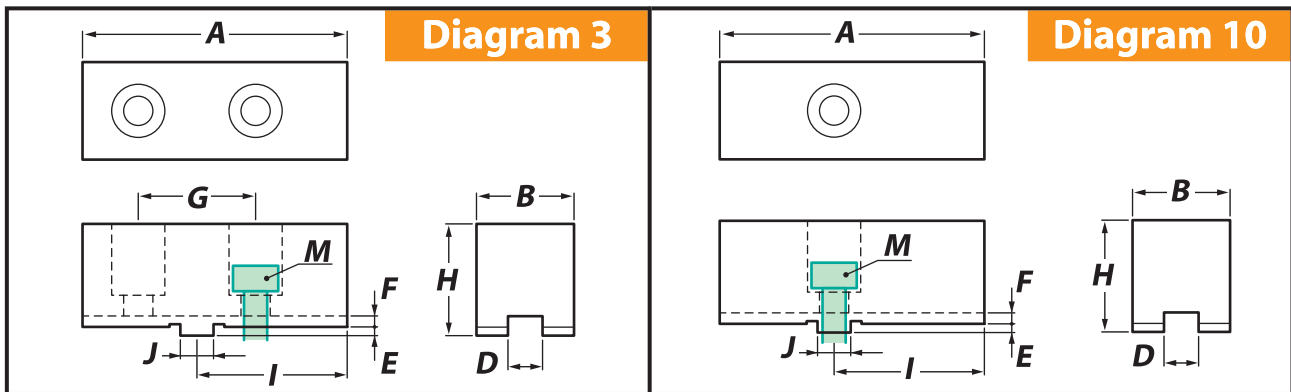
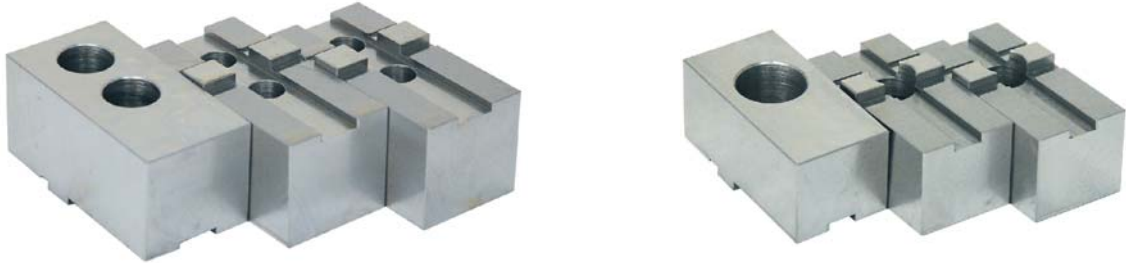
HO11MC

HOWA
Draw Down Chuck

"HOWA"
Size chart.

Steel
Soft Jaw.

MADE IN JAPAN



ARM Item No.			A	B	H	D	E	F	G	M	I	J	K	Diagram
HO11MC	6	H34	70	35	34	10	3	3	-	M14	43	10	-	10
	8	H45	84	40	45	16	3.5	3.5	26	M12	53	12	-	3
	10	H50	100	50	50	18	3.5	3.5	32	M14	62	15	-	3
	12	H55	120	60	55	20	3.5	3.5	36	M16	78	17	-	3

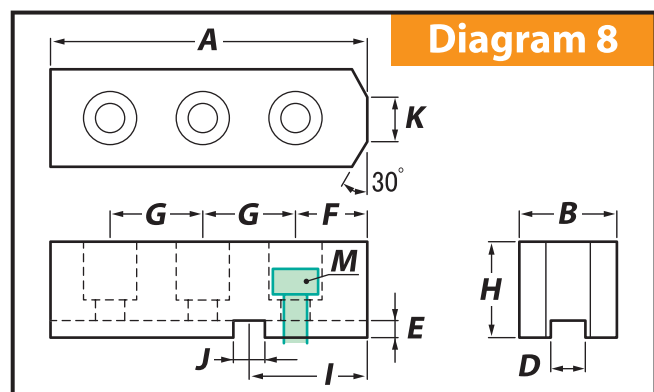
HO18M

HOWA
Quick Change Chuck

"HOWA"
Size chart.

Steel
Soft Jaw.

MADE IN JAPAN



ARM Item No.			A	B	H	D	E	F	G	M	I	J	K	Diagram
HO18M	8	H36	100	32	36	14	3.5	18	32	M10	34	16	12	8
	10	H43	110	35	43	16	3.5	21	34	M12	38	16	12	8
	12	H50	130	40	50	16	3.5	25	40	M12	45	20	12	8
	15	H50	160	40	50	16	3.5	25	55	M12	52.5	25	12	8



Matsumoto
Hydraulic / Air Chuck

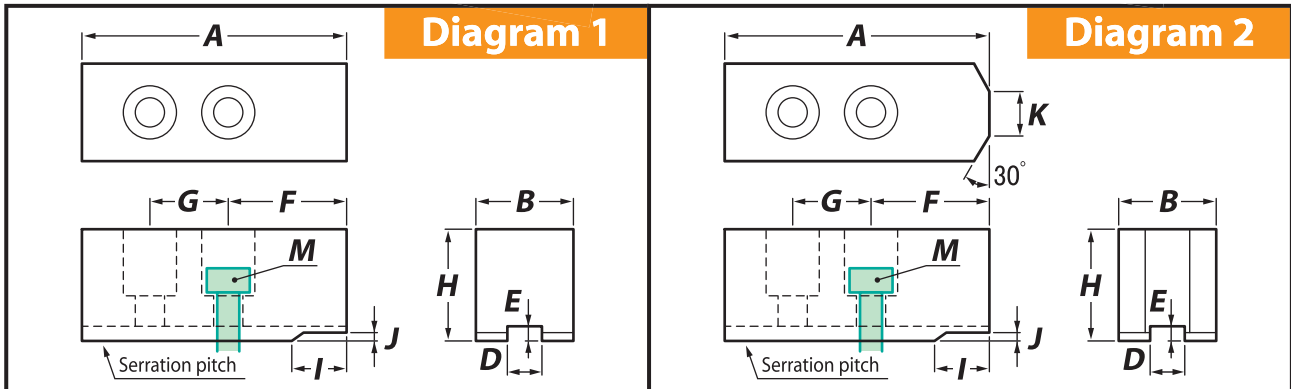
"MATSUMOTO"
Size chart.

Steel
Soft Jaw.

MADE IN JAPAN



- Note
- Confirm Jaw size A, G and F, before purchasing Matsumoto or Hitachi Jaw.
 - It is hard to distinguish Matsumoto and Hitachi Jaw from their chuck number.(10"~18")



ARM		Item No.	A	B	H	D	E	F	G	M	I	J	K	Serration pitch	Diagram
M	6	H34	80	30	34	11	3.5	41	25	M8	18	3.7	12	1.5	2
		H60			60										
	8	H40	90	36	40	14	5	45	25	M12	23	5.5	15	1.5	2
		H60			60										
		H80			80										
	10/11	H100	110	40	100	16	6	50	30	M12	23	6.3	17	1.5	2
		H48			48										
		H60			60										
	12	H80	130	50	80	18	6	60	30	M14	30	6.3	19	1.5	2
		H50			50										
		H100			100										
	15/18	H62	150	62	62	22	8.5	55	50	M20	27.5	9	-	3.0	1

HITACHI / NR

Hitachi
Hydraulic / Air Chuck

"MATSUMOTO"
Size chart.

ARM		Item No.	A	B	H	D	E	F	G	M	I	J	K	Serration pitch	Diagram
HITACHI	6	H34	80	30	34	11	3.5	41	25	M8	18	3.7	12	1.5	2
		H60			60										
	8	H40	90	36	40	14	5	45	25	M12	23	5.5	15	1.5	2
		H60			60										
		H80			80										
	10/11	H100	103	40	100	16	6	50	32	M12	15	6.5	25	1.5	2
		H48			48										
		H60			60										
	12	H80	140	50	80	18	6	68	32	M14	30	6.3	20	1.5	2
		H50			50										
		H100			100										
	15/18	H62	150	62	62	22	8.5	70	50	M20	30	9	-	3.0	1

NR-15	6	H30	75	27	30	11	4.5	38	25	M8	25	5	3	1.5	2
NR-20	8	H40	79	34	40	14	5	39	25	M12	21	5.5	15	1.5	2
NR-23	10	H48	113	40	48	16	6	60	32	M12	25	6.5	10	1.5	2
	10S	H48	118					65							

AL M**Matsumoto**
Hydraulic / Air Chuck**"MATSUMOTO"**
Size chart.**Aluminium**
Soft Jaw.

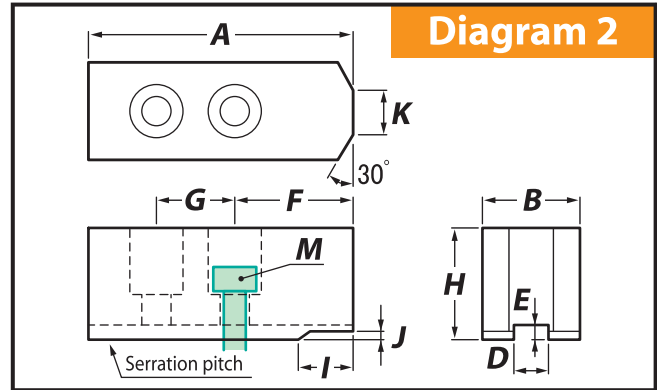
MADE IN JAPAN

**Note**

- Confirm Jaw size A, G and F, before purchasing Matsumoto or Hitachi Jaw.
- It is hard to distinguish Matsumoto and Hitachi Jaw from their chuck number.(10"~18")

Specification of Aluminium Jaw. (Compare to Steel Jaw)

- The work will not be harmed due to soft material of Jaw.
- Light weight of Jaw ensures gripping power.
- Easy cutting process of Jaw shaping.



(ARM) Item No.		A	B	H	D	E	F	G	M	I	J	K	Serration pitch	Diagram
AL M	6	H34	80	30	11	3.5	41	25	M8	18	3.7	12	1.5	2
		H60												
	8	H40	90	36	14	5	45	25	M12	23	5.5	15	1.5	2
		H60												
	10/11	H48	110	40	16	6	50	30	M12	23	6.3	17	1.5	2
		H60												

AL HITACHI**Hitachi**
Hydraulic / Air Chuck**"MATSUMOTO"**
Size chart.**Aluminium**
Soft Jaw.

MADE IN JAPAN

**Note**

- Confirm Jaw size A, G and F, before purchasing Matsumoto or Hitachi Jaw.
- It is hard to distinguish Matsumoto and Hitachi Jaw from their chuck number.(10"~18")

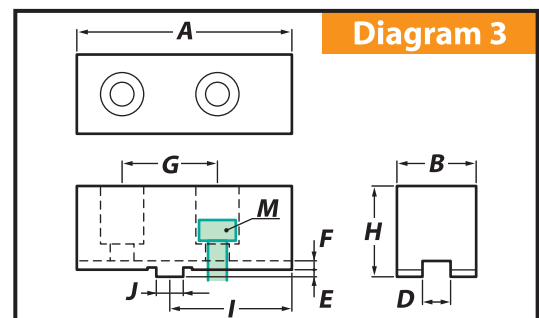
Specification of Aluminium Jaw. (Compare to Steel Jaw)

- The work will not be harmed due to soft material of Jaw.
- Light weight of Jaw ensures gripping power.
- Easy cutting process of Jaw shaping.

(ARM) Item No.		A	B	H	D	E	F	G	M	I	J	K	Serration pitch	Diagram
AL HITACHI	6	H34	80	30	11	3.5	41	25	M8	18	3.7	12	1.5	2
		H60												
	8	H40	90	36	14	5	45	25	M12	23	5.5	15	1.5	2
		H60												
	10/11	H48	103	40	16	6	50	32	M12	15	6.5	25	1.5	2
		H60												

MS**Matsumoto**
Scroll Chuck**"MATSUMOTO"**
Size chart.**Steel**
Soft Jaw.

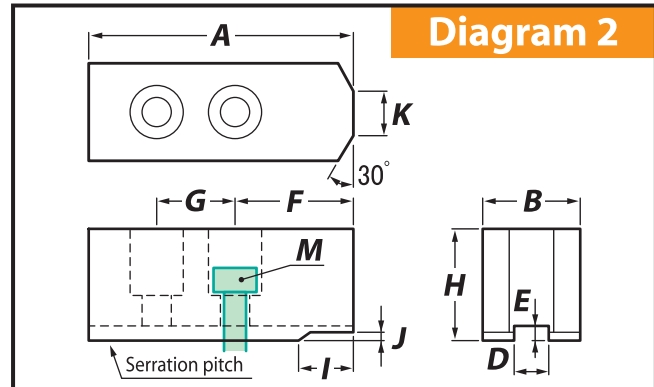
MADE IN JAPAN



(ARM) Item No.		A	B	H	D	E	F	G	M	I	J	K	Diagram
MS	6 H36	79	24	36	14	2.5	3	42	M10	42	12	-	3
	8 H36	100	24	36	14	2.5	3.5	58	M10	55	16	-	3

HFNikko
Hydraulic / Air Chuck**"NIKKO"
Size chart.****Steel
Soft Jaw.**

MADE IN JAPAN



ARM		Item No.	A	B	H	D	E	F	G	M	I	J	K	Serration pitch	Diagram
HF	5	H34	60	26	34	11	3.5	31	17	M8	21	3.5	3	1.5	2
		H60			60										
	6	H34	77	27.5	34	11	3.5	38	25	M8	27.5	3.5	7	1.5	2
		H60			60										
		H80			80										
	8	H42	95	34	42	14	3.5	45	30	M10	30.5	3.5	10	1.5	2
		H60			60										
		H80			80										
		H100			100										
	10	H48	110	44	48	20	4.5	57	30	M12	38	4.5	15	1.5	2
		H60			60										
		H80			80										
		H100			100										
	12	H48	120	44	48	20	4.5	60	35	M12	39	4.5	15	1.5	2
H60		60													
H80		80													
H100		100													
14/16	H72	150	49	72	21	5	76	45	M16	48	5	20	1.5	2	
18	H85	180	57	85	26	5	100	50	M20	60	5	20	1.5	2	

AL HFNikko
Hydraulic / Air Chuck**"NIKKO"
Size chart.****Aluminium
Soft Jaw.**

MADE IN JAPAN



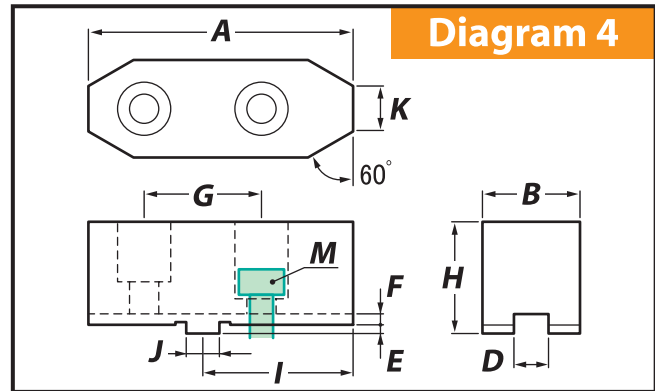
Specification of Aluminium Jaw. (Compare to Steel Jaw)

- The work will not be harmed due to soft material of Jaw.
- Light weight of Jaw ensures gripping power.
- Easy cutting process of Jaw shaping.

ARM		Item No.	A	B	H	D	E	F	G	M	I	J	K	Serration pitch	Diagram
AL HF	5	H34	60	26	34	11	3.5	31	17	M8	21	3.5	3	1.5	2
		H60			60										
	6	H34	77	27.5	34	11	3.5	38	25	M8	27.5	3.5	7	1.5	2
		H60			60										
	8	H42	95	34	42	14	3.5	45	30	M10	30.5	3.5	10	1.5	2
		H60			60										
10	H48	110	44	48	20	4.5	57	30	M12	38	4.5	15	1.5	2	
	H60			60											

**Steel
Soft Jaw.**

MADE IN JAPAN



ARM Item No.			A	B	H	D	E	F	G	M	I	J	K	Diagram
MSE	6	H36	77	26	36	8	3	4	38	M10	36.5	12.7	15	4
		H60			60									
	7	H38	92	28	38	8	3	4	44	M10	43.5	12.7	15	4
		H60			60									
		H90			90									
	9	H45	107	34	45	12.7	3	4	54	M12	50.5	19	15	4
		H60			60									
		H90			90									
	10	H48	107	36	48	12.7	3	4	54	M12	50.5	19	15	4
		H60			60									
H90		90												
12	H53	125	42	53	12.7	3	4	63.5	M12	60	19	22	4	
	H90			90										
15	H63	155	50	63	12.7	6	4	76.2	M16	74	19	22	4	

HS	8	H43	98	31.5	43	8	3	4	46	M12	49	12	20	4
	9	H60	114	38	60	9.7	3	4	50	M12	57	16	20	4
	10	H61	129	40	61	9.7	3	4	64	M12	64.5	18	20	4
	12	H62	145	42	62	12.7	3	4	68	M14	72.5	18	20	4

**Aluminium
Soft Jaw.**

MADE IN JAPAN



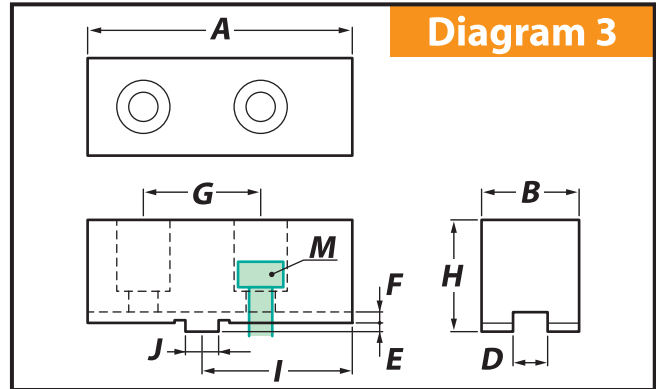
Specification of Aluminium Jaw. (Compare to Steel Jaw)

- The work will not be harmed due to soft material of Jaw.
- Light weight of Jaw ensures gripping power.
- Easy cutting process of Jaw shaping.

ARM Item No.			A	B	H	D	E	F	G	M	I	J	K	Diagram
AL MSE	6	H36	77	26	36	8	3	4	38	M10	36.5	12.7	15	4
		H60			60									
	7	H38	92	28	38	8	3	4	44	M10	43.5	12.7	15	4
		H60			60									
		H90			90									
	9	H45	107	34	45	12.7	3	4	54	M12	50.5	19	15	4
		H60			60									
		H48			48									
	10	H60	107	36	60	12.7	3	4	54	M12	50.5	19	15	4

**Steel
Soft Jaw.**

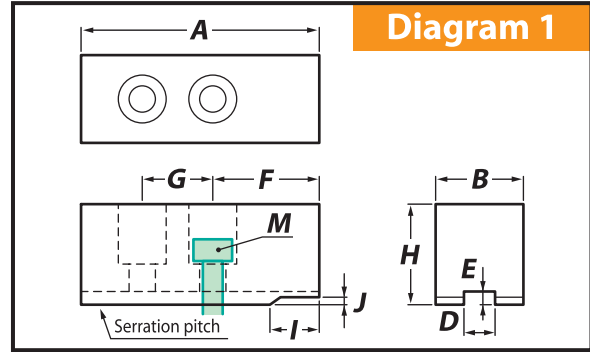
MADE IN JAPAN



ARM Item No.		A	B	H	D	E	F	G	M	I	J	K	Diagram		
STA	110 (4")	H30	53	19	7.94	2.5	3.2	24	M6	27.76	9.53	-	3		
		H45												30	45
	130 (5")	H35	62	23	7.94	3	3.7	32	M8	33.34	12.68	-	3		
		H45												35	45
	165 (6")	H40	75	30	7.94	3	3.8	38	M10	41.34	12.68	-	3		
		H60												40	60
	190 (7")	H40	88	30	7.94	3	3.8	44.4	M10	48.34	12.68	-	3		
		H60												40	60
		H80												80	
	230 (9")	H45	100	35	12.7	3	3.8	54	M12	54.51	19.03	-	3		
		H60												45	60
		H80												80	
	273 (10")	H45	110	35	12.7	3	3.8	54	M12	60.51	19.03	-	3		
		H60												45	60
		H80												80	
310 (12")	H50	120	40	12.7	3	3.8	63.5	M12	65.51	19.03	-	3			
	H80												50	80	
	H100												100		
385 (15")	H80	140	43	12.7	6	3.8	76.2	M16	76.51	19.03	-	3			
	H100												80	100	
460 (18")	H80	140	50	12.7	6	3.8	76.2	M20	76.51	19.03	-	3			
	H100												80	100	

BHD**SMW-AUTOBLOK**
P1/16" x 90° Inch Serrations**"SMW-AUTOBLOK"**
Size chart.**Steel**
Soft Jaw.

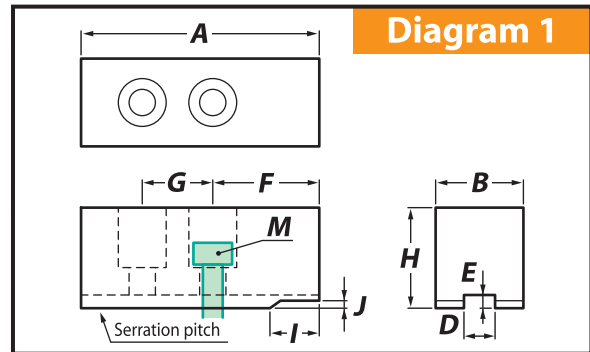
MADE IN JAPAN

**Diagram 1****P1/16" x 90° Inch**
Serrations

ARM Item No.		A	B	H	D	E	F	G	M	I	J	K	Serration pitch	Diagram
BHD	125 (5") H30	60	30	30	12	4	29	16	M8	-	-	-	1/16"	1
	165 (6") H35 H60	70	30	35	14	5	38	16.5	M10	-	-	-	1/16"	1
				60										
	210 (8") H40 H60 H80 H100	90	35	40	17	5	47	23	M12	-	-	-	1/16"	1
				60										
				80										
	250 (10") H45 H80 H100 H120	110	45	45	21	6	60	30	M16	-	-	-	1/16"	1
				80										
				100										
				120										
	315 (12") H50 H80 H100 H120	125	50	50	21	6	73	30	M16	-	-	-	1/16"	1
				80										
100														
120														

BHM**SMW-AUTOBLOK**
P1.5 x 60° Metric Serrations**"SMW-AUTOBLOK"**
Size chart.**Steel**
Soft Jaw.

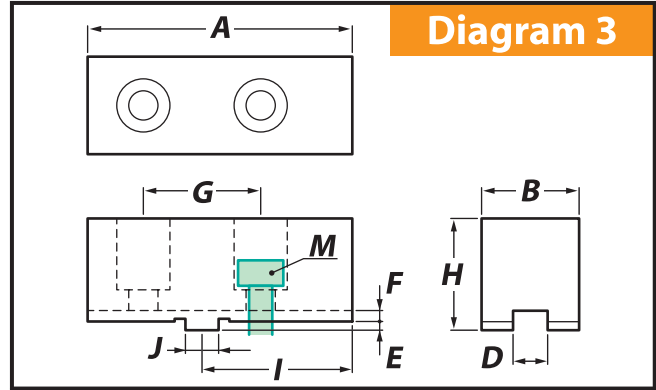
MADE IN JAPAN

**Diagram 1****P1.5 x 60° Metric**
Serrations

ARM Item No.		A	B	H	D	E	F	G	M	I	J	K	Serration pitch	Diagram
BHM	125 (5") H30	60	30	30	12	4	29	16	M8	-	-	-	1.5	1
	165 (6") H35 H60	70	30	35	12	5	34	20	M10	-	-	-	1.5	1
				60										
	210 (8") H40 H60 H80 H100	90	35	40	14	5	47	25	M12	-	-	-	1.5	1
				60										
				80										
	250 (10") H45 H80 H100 H120	110	45	45	16	6	60	30	M12	-	-	-	1.5	1
				80										
				100										
				120										
	315 (12") H50 H80 H100 H120	125	50	50	21	6	73	30	M16	-	-	-	1.5	1
				80										
100														
120														

**Steel
Soft Jaw.**

MADE IN JAPAN



ARM Item No.		A	B	H	D	E	F	G	M	I	J	K	Diagram	
ANC	165 (6")	H35	80	30	35	7.94	3	4	38	M10	50	12.68	-	3
		H60			60									
	210 (8")	H40 H60 H80	100	40	40	7.94	3	4	44.4	M12	65	12.68	-	3
					60									
					80									
	250 (10")	H50 H80 H100	120	50	50	12.7	3	4	54	M16	78	19.03	-	3
					80									
					100									
	315 (12")	H50 H80 H120	140	50	50	12.7	3	4	63.5	M16	90	19.03	-	3
					80									
					120									