



INNOVATIVE CUSTOM ENGINEERING

SOFT JAWS SERIES

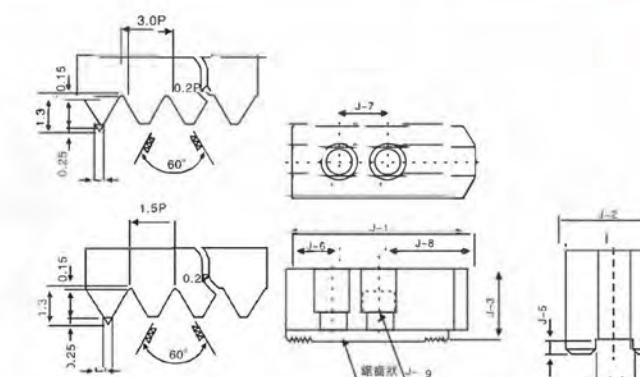
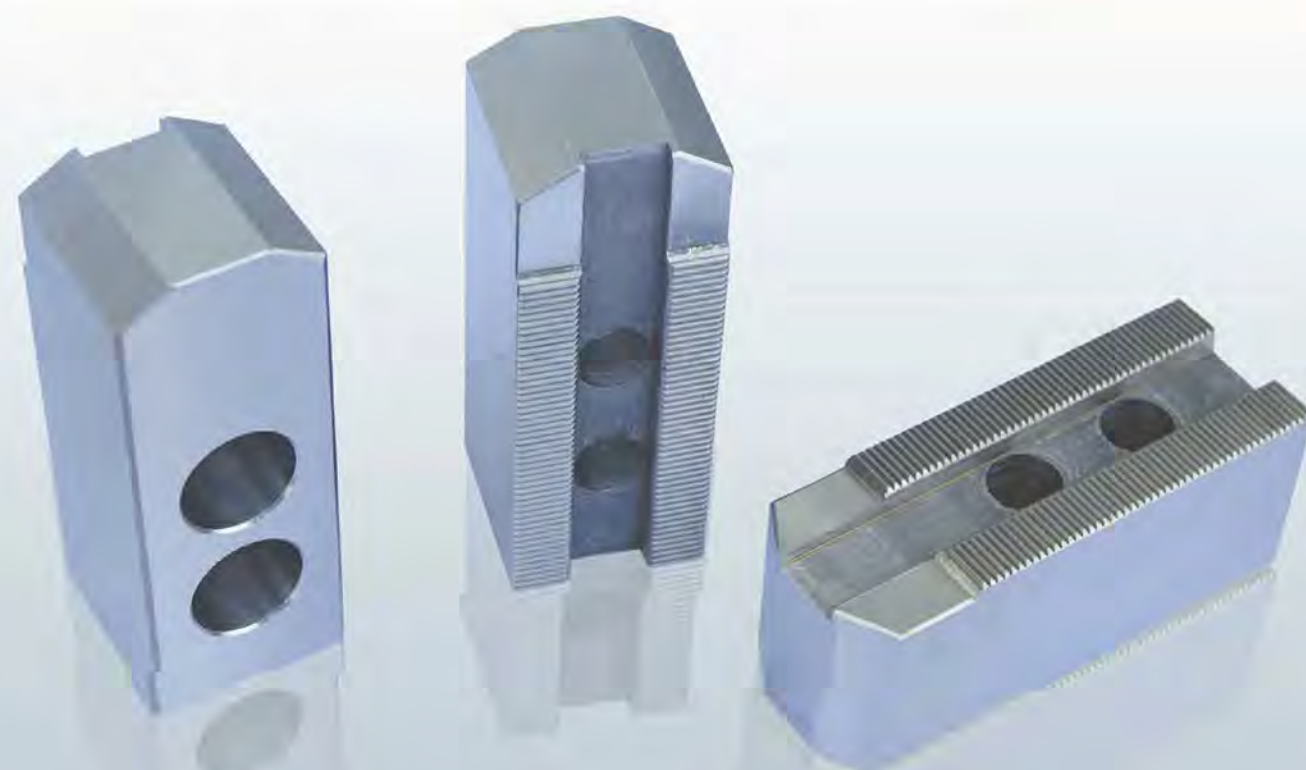
**ICE is a high-tech engineering group
specializing in tooling and hard
material technologies**

TOOLING FOR THE FUTURE

SOFT JAWS SERIES

SOFT JAWS FOR HYDRAULIC CHUCKS

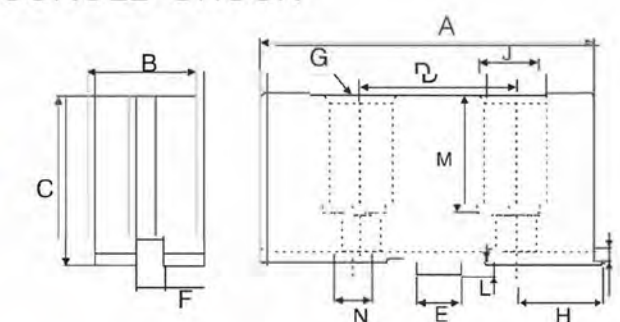
SOFT JAWS SERIES



Specification

SPEC/SIZE	Length J-1	Width J-2	Height J-3	Slot width J-4	Slot depth J-5	J-6	Hole center distance J-7	J-8	Screw J-9	Serration pitch	N.W.(KG)
SC-04	53	23	23	10	4	9	14	29	M8	1.5×60°	0.42
SC-05	62	25	30	10	4	10	14	38	M8	1.5×60°	0.85
SC-06	73	31	36	12	5	15	20	38	M10	1.5×60° 3.0×60°	1.5
SC-08	95	35	38	14	5	24	25	46	M12	1.5×60° 3.0×60°	2.4
SC-10	110	40	42	16	5	30	30	50	M12	1.5×60° 3.0×60°	3.6
SC-12	129	50	50	21	6	39	30	60	M16	1.5×60° 3.0×60°	6.1
SC-12	129	50	50	18	6	39	30	60	M14	1.5×60° 3.0×60°	6.2
SC-15 18"	165	62	62	22	8	37	43	85	M20	1.5×60° 3.0×60°	12.5
SC-15 18"	165	62	62	25.5(26)	6(9)	37	43	85	M20	1.5×60° 3.0×60°	12.5
SC-24 21"	180	65	70	25	9	40	60	80	M20	3.0×60°	16.2
SC-32	210	74	90	25	9	40	80	90	M20	3.0×60°	29.2
SC-40	270	85	110	30	4		76.2		M24		
SC-50	270	85	110	30	4		76.2		M24		
SC-63	270	110	110	30	4		76.2		M24		
SC-79	270	110	110	30	4		76.2		M24		

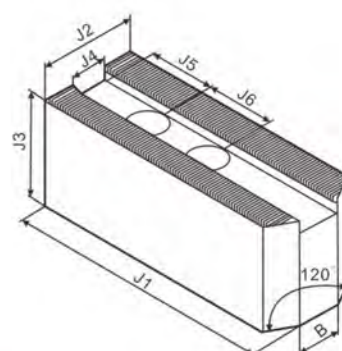
SOFT JAWS FOR SCROLL CHUCK



Specification

SPEC. MODEL	Length A	Width B	Height C	D	Slot width E	Slot depth F	Screw G	H	J	K	L	M	N	G.W.(KG)
CP-04	52	19	30	24	9.53	7.94	M6x1.0P	14	11	3	2.5	21	7	0.45
CP-05	62	24	35	32	12.68	7.94	M8x1.25P	15	14	3.5	3	24	9	0.9
CP-06	73	26	37	38.1	12.68	7.94	M8x1.25P	17	14	3.5	3	25	9	1.2
CP-07(08)	95	31	48	44.45	12.68	7.94	M10x1.5P	25.3	17	3.8	3	34	11	2.65
CP-09(10)	110	37	48	53.98	19.03	12.7	M12x1.75P	28	19	4.2	3	34	13	3.8
CP-12	125	42	54	63.5	19.03	12.7	M12x1.75P	31	19	4.2	3	38	13	5.3
CP-16	160	50	70	76.2	19.03	12.7	M16x2.0P	42	25	5.5	6	48	17	11.5
CP-20	160	55	80	76.2	19.03	12.7	M20x2.5P	42	32	5.5	6	58	21	15.5
HE-2486	155	59	86	76.2	19.03	12.7	M20		32	5	6	66	21	17.2

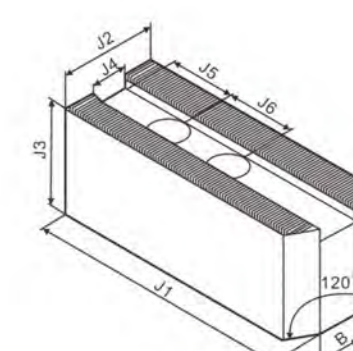
SC06 EXTRA HEIGHT SOFT JAWS



1.5mmx60° Serration Pitch:1.5mmx60° UNIT:mm

MODEL	WEIGHT kg/set	SCREW	Size (mm)						
			J1	J2	J3	J4	J5	J6	B
SC06H50	2				50				
SC06H60	2.6				60				
SC06H70	3				70				
SC06H80	3.4				80				
SC06H90	3.8				90				
SC06H100	4.2				100				
SC06H110	4.6				110				
SC06H120	5.0				120				
SC06H130	5.5	M10	73	31	130	12	15	20	14
SC06H140	6.0				140				
SC06H150	6.5				150				
SC06H160	7.0				160				
SC06H170	7.5				170				
SC06H180	8.0				180				
SC06H190	8.5				190				
SC06H200	9.0				200				

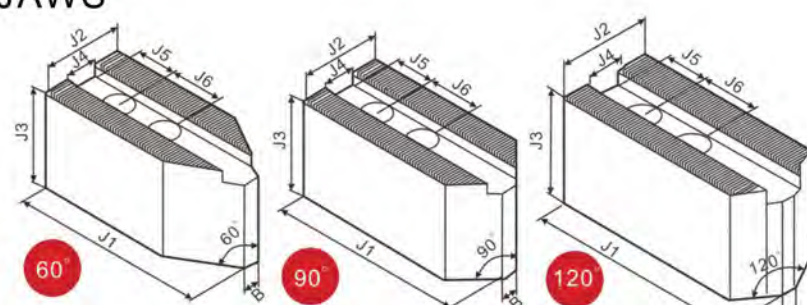
SC08 EXTRA HEIGHT SOFT JAWS



1.5mmx60° Serration Pitch:1.5mmx60° UNIT:mm

MODEL	WEIGHT kg/set	SCREW	Size (mm)						
			J1	J2	J3	J4	J5	J6	B
SC08H50	3.2				50				
SC08H60	3.8				60				
SC08H70	4.4				70				
SC08H80	5.1				80				
SC08H90	5.8				90				
SC08H100	6.4				100				
SC08H110	7.0				110				
SC08H120	7.6				120				
SC08H130	8.2	M12	95	35	130	14	24	25	16
SC08H140	8.8				140				
SC08H150	9.4				150				
SC08H160	10.1				160				
SC08H170	11.7				170				
SC08H180	11.4				180				
SC08H190	12				190				
SC08H200	12.6				200				

SC06 POINTED SOFT JAWS



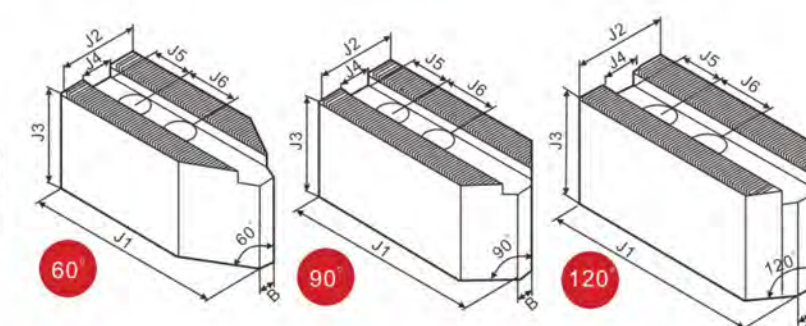
1.5mmx60° Serration Pitch:1.5mmx60° UNIT:mm

MODEL	WEIGHT kg/set	SCREW	Size (mm)						
			J1	J2	J3	J4	J5	J6	B
SC06H36P	1.5				36				
SC06H50P	2				50				
SC06H60P	2.5				60				
SC06H70P	2.9				70				
SC06H80P	3.3				80				
SC06H90P	3.7				90				
SC06H100P	4	M10	73	31	100	12	10	20	3
SC06H110P	4.4				110				
SC06H120P	4.8				120				
SC06H130P	5.3				130				
SC06H140P	5.8				140				
SC06H150P	6.2				150				
SC06H160P	6.6				160				

60° 、 90° 、 120°

Option for pointed soft jaws: 60/90/120 angle degree or other special requirements;Customized spec can be made.

SC08 POINTED SOFT JAWS



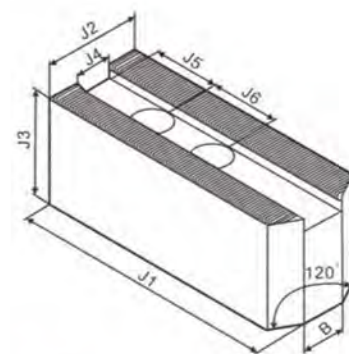
1.5mmx60° Serration Pitch:1.5mmx60° UNIT:mm

MODEL	WEIGHT kg/set	SCREW	Size (mm)						
			J1	J2	J3	J4	J5	J6	B
SC08H38P	2.5				38				
SC08H50P	3.2				50				
SC08H60P	3.8				60				
SC08H70P	4.4	M12	95	35	70	14	15	25	3
SC08H80P	5.1				80				
SC08H90P	5.8				90				
SC08H100P	6.4				100				

60° 、 90° 、 120°

Option for pointed soft jaws: 60/90/120 angle degree or other special requirements;Customized spec can be made.

SC10 EXTRA HEIGHT SOFT

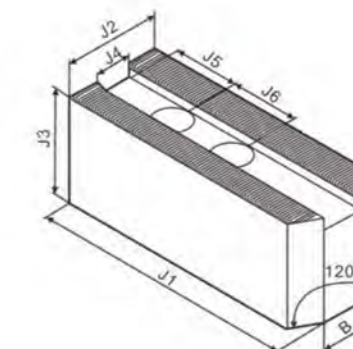


1.5mmx60° Serration Pitch:1.5mmx60° UNIT:mm

MODEL	WEIGHT kg/set	SCREW	Size (mm)						
			J1	J2	J3	J4	J5	J6	B
SC10H50	4.2	M12	110	40	50	16	30	30	18
SC10H60	5.3				60				
SC10H70	6.1				70				
SC10H80	7.1				80				
SC10H90	8				90				
SC10H100	8.8				100				
SC10H110	9.5				110				
SC10H120	10.5				120				
SC10H130	11.1				130				
SC10H140	12.2				140				
SC10H150	13.0				150				
SC10H160	14.0				160				
SC10H170	14.8				170				
SC10H180	15.8				180				
SC10H190	16.6				190				
SC10H200	17.5				200				

SC12 EXTRA HEIGHT SOFT JAWS

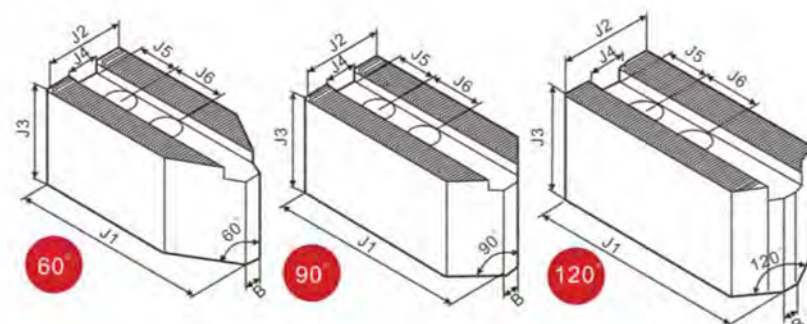
FOR NON THROUGH CHUCK



1.5mmx60° Serration Pitch:1.5mmx60° UNIT:mm

MODEL	WEIGHT kg/set	SCREW	Size (mm)						
			J1	J2	J3	J4	J5	J6	B
SC12H60N	7.8	M14	129	50	60	18	39	30	20
SC12H70N	9.1				70				
SC12H80N	10.5				80				
SC12H90N	11.6				90				
SC12H100N	12.9				100				
SC12H110N	14.2				110				
SC12H120N	15.6				120				
SC12H130N	17.0				130				

SC10 POINTED SOFT JAWS



1.5mmx60° Serration Pitch:1.5mmx60° UNIT:mm

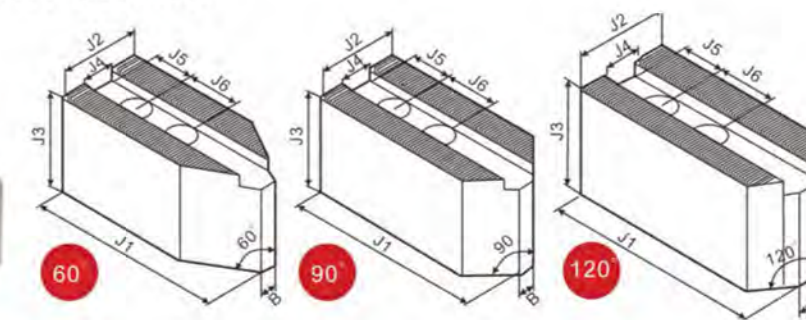
MODEL	WEIGHT kg/set	SCREW	Size (mm)						
			J1	J2	J3	J4	J5	J6	B
SC10H42P	3.7	M12	110	40	42	16	20	30	3
SC10H50P	4.2				50				
SC10H60P	5.1				60				
SC10H70P	6.1				70				
SC10H80P	6.9				80				
SC10H90P	7.7				90				
SC10H100P	8.5				100				

60° 、 90° 、 120°

Option for pointed soft jaws: 60/90/120 angle degree or other special requirements;Customized spec can be made.

SC12 POINTED SOFT JAWS

FOR NON THROUGH CHUCK

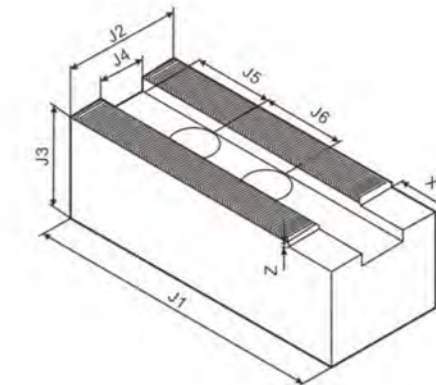
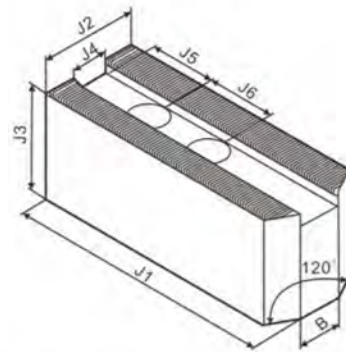


1.5mmx60° Serration Pitch:1.5mmx60° UNIT:mm

MODEL	WEIGHT kg/set	SCREW	Size (mm)						
			J1	J2	J3	J4	J5	J6	B
SC12H50PN	6.3	M14	129	50	50	18	25	30	6
SC12H60PN	7.5				60				
SC12H70PN	8.8				70				
SC12H80PN	10.1				80				
SC12H90PN	11.5				90				

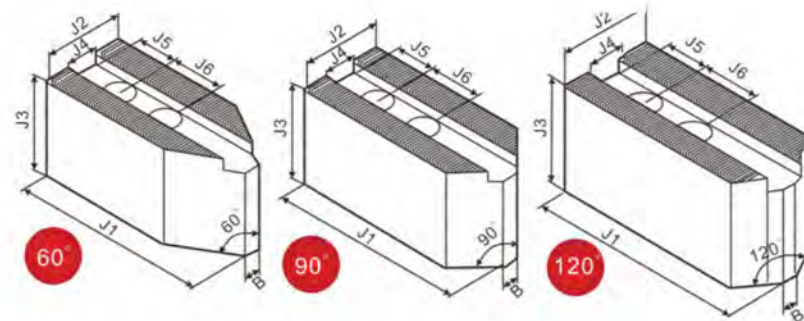
60° 、 90° 、 120°

Option for pointed soft jaws: 60/90/120 angle degree or other special requirements;Customized spec can be made.



1.5mmx60°		Serration Pitch:1.5mmx60°		Size (mm)						UNIT:mm	
MODEL	WEIGHT kg/set	SCREW	J1	J2	J3	J4	J5	J6	B		
SC12H60	7.5	M16	129	50	60	21	39	30	23		
SC12H70	8.7				70						
SC12H80	10				80						
SC12H90	11.2				90						
SC12H100	12.5				100						
SC12H110	13.8				110						
SC12H120	15.2				120						
SC12H130	16.5				130						

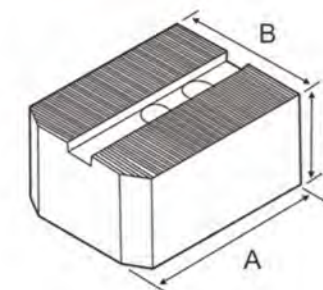
1.5mmx60°		Serration Pitch:1.5mmx60°									UNIT:mm	
MODEL	WEIGHT kg/set	SCREW	Size (mm)									
			J1	J2	J3	J4	J5	J6	X	Z		
SC15H80	16.1	M20	165	62	80	22 (22.5)	37	43	25	2		
SC15H90	18.2				90							
SC15H100	20				100							
SC15H110	22.3				110							
SC15H120	25.0				120							
SC15H130	26.8				130							
SC15H140	28.5				140							
SC15H150	30				150							



1.5mmx60°		Serration Pitch:1.5mmx60°		Size (mm)						UNIT:mm	
MODEL	WEIGHT kg/set	SCREW	J1	J2	J3	J4	J5	J6	B		
SC12H50P	6.0	M16	129	50	50	21	25	30	6		
SC12H60P	7.2				60						
SC12H70P	8.4				70						
SC12H80P	9.5				80						
SC12H90P	11.0				90						

60°、90°、120°

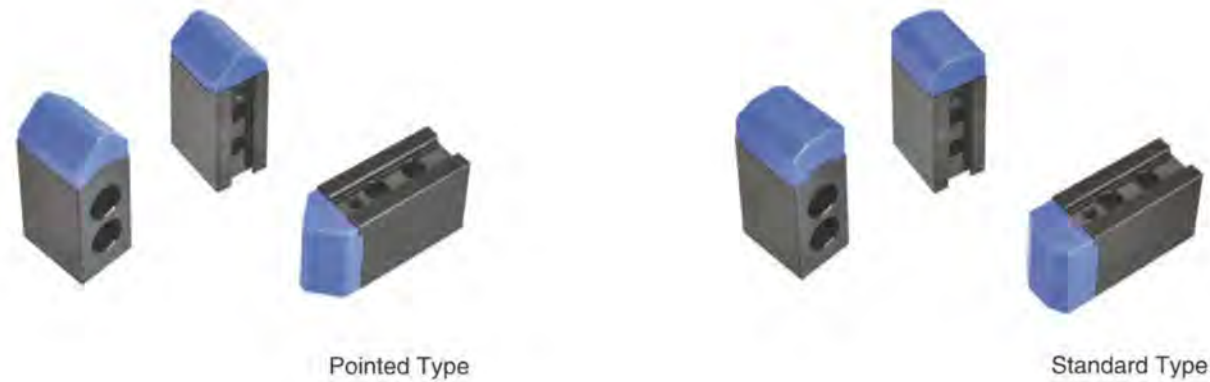
Option for pointed soft jaws: 60/90/120 angle degree or other special requirements; Customized spec can be made.



Model/Spec	Length A	Weight B	Height C	Serration
SC0603048	73	48	30	1.5°60°
SC0603060	73	60	30	1.5°60°
SC0603080	73	80	30	1.5°60°
SC0604848	73	48	48	1.5°60°
SC0604863	73	63	48	1.5°60°
SC0606060	73	60	60	1.5°60°
SC0803648	95	48	36	1.5°60°
SC0803663	95	63	36	1.5°60°
SC0803680	95	80	36	1.5°60°
SC0804848	95	48	48	1.5°60°
SC0804873	95	73	48	1.5°60°
SC0804890	95	90	48	1.5°60°
SC0806363	95	63	63	1.5°60°
SC0807373	95	73	73	1.5°60°
SC0808383	95	83	83	1.5°60°
SC1004263	110	63	42	1.5°60°
SC10042100	110	100	42	1.5°60°
SC1004873	110	73	48	1.5°60°
SC1006363	110	63	63	1.5°60°
SC1007373	110	73	73	1.5°60°
SC1008383	110	83	83	1.5°60°

POM HEAD SOFT JAWS FOR HYDRAULIC CHUCK

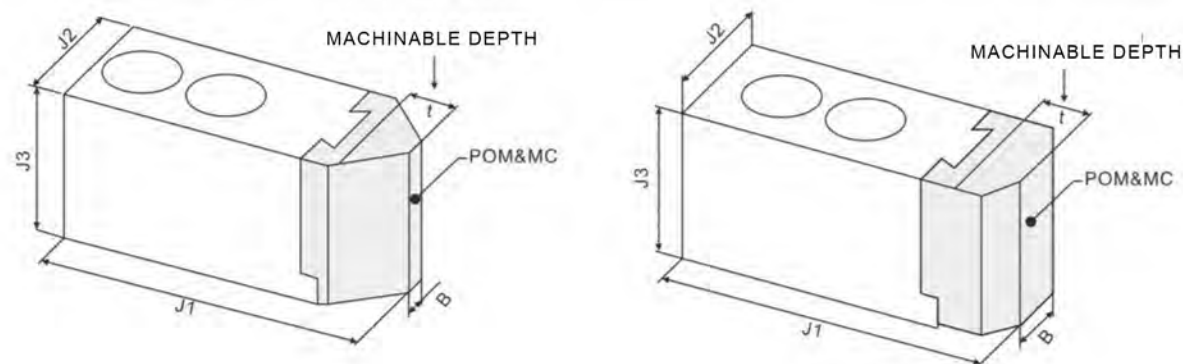
The POM/MC head is tight fit with steel parts, can't be changed, it can improve the gripping stability and protect the work piece surface.



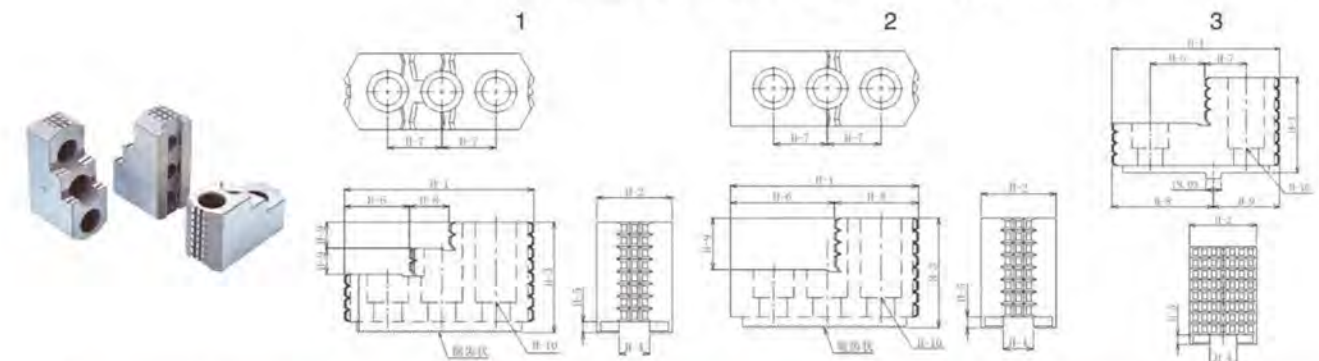
MODEL	Size (mm)						ANGLE	Material	
	J1	J2	J3	B	t			MC/NYLON	POM
6"H50	73	31	50	14	11	120		V	V
6"H50 POINTED	73	31	50	5	11	90		V	V
8"H50	95	35	50	16	16	120		V	V
8"H50 POINTED	95	35	50	5	16	90		V	V
10"H50	110	40	50	18	16	120		V	V
10"H50 POINTED	110	40	50	5	16	90		V	V

(Remarks):

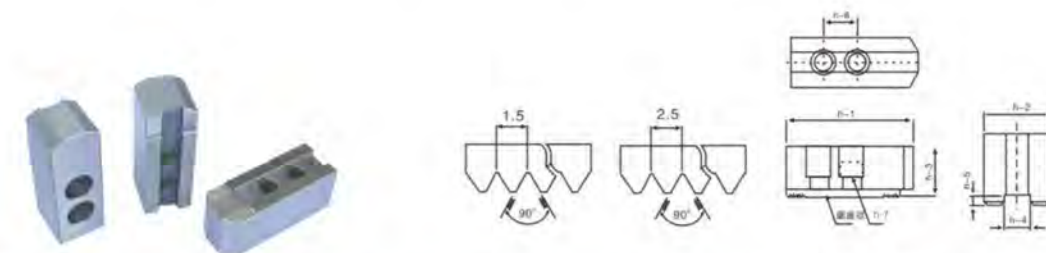
1. It's made for customized order
2. The available material is MC nylon (blue) and POM (white)



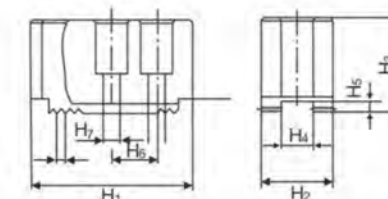
HARD JAWS FOR HYDRAULIC CHUCK



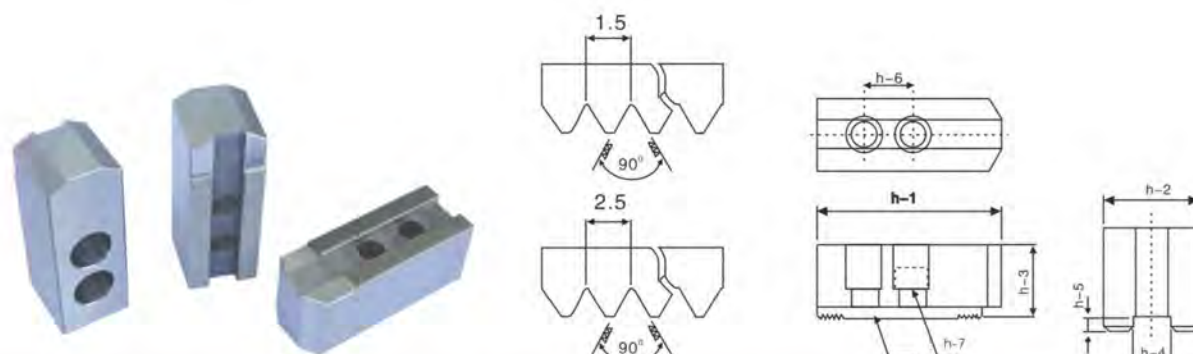
SPEC. MODEL	H-1	H-2	H-3	H-4	H-5	H-6	H-7	H-8	H-9	H-10	Serration Pitch	Gross Weight(kg)	Ref
HJ-05	53	23	28	10	4	30.5	14	22.5	10	M8	1.5×60°	0.4	2
HJ-06	67	31	36	12	5	39	20	28	12	M10	1.5×60°	0.95	Fig2
HJ-08	86	35	51	14	5	31	25	18	12	M12	1.5×60°	1.95	1
HJ-10	100	40	54	16	5	43	30	17	14	M12	1.5×60°	2.85	Fig1
HJ-12	103	50	52	21(18)	5	69.5	30	43.5	20	M16(M14)	1.5×60°	3.9	1
HJ-15(18)	149	62	86	22(25.5)	(5)8	55	43	38	20	M20	1.5×60°	9.45	Fig1
HJ-15-1	149	62	86	26	8	55	43	38	20	M20	3.0×60°	9.45	
HJ-24(21)	159.5	80	90	25	9	104.5	50	55	40	M20	3.0×60°	14.3	2
HJ-32	159.5	80	90	25	9	104.5	50	55	40	M20	3.0×60°	14.3	Fig2
HJ-40(50)	223	85	117	30	7	72.6	38.1	140	83	M24	-	-	3
HJ-63(79)	223	110	117	30	7	72.6	38.1	140	83	M24	-	-	Fig3



SPEC/SIZE	Length h-1	Width h-2	Height h-3	Slot width h-4	Slot depth h-5	Hole center distance h-6	Screw h-7	Serration pitch
CH-06(160)	62	35	38	11	4.5	20	M8	1.5×90°
CH-08(200)	80	40	45	13	4.5	24	M10	1.5×90°
CH-10(250)	100	45	52	15	4.5	28	M12	1.5×90°
CH-12(320)	115	50	62	18	4.5	32	M14	2.5×90°
CH-15(400)	140	50	75	20	6	45	M16	2.5×90°
CH-20(500)	160	55	85	22	6	50	M18	2.5×90°
CH-24(630)	190	60	100	26	6	55	M21	2.5×90°

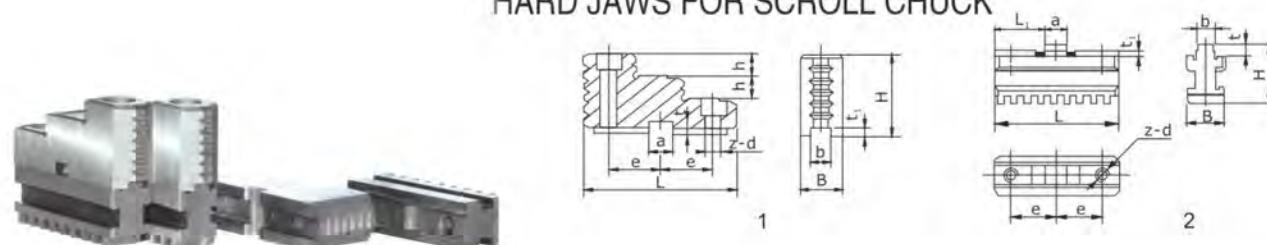


size	H1	H2	H3	H4	H5	Serration pitch	H6	H7
200	85	40	45	16	4	1/16"×90°	24	2-13
320	118	50	62	21	4	3/32"×90°	32	2-17
400	140	50	75	22	5.5	3/32"×90°	45	2-17
500	160	75	75	26	5.5	3/32"×90°	38	2-22
630	160	75	75	26	5.5	3/32"×90°	38	2-22
800	160	75	75	26	5.5	3/32"×90°	38	2-22
1000	200	85	110	30	9		100	2-26
1250	200	85	110	30	9		100	2-26



MODELS/DIMENSION	Length h-1	Width h-2	Height h-3	Slot width h-4	Slot depth h-5	Hole center distance h-6	Screw h-7	Serration pitch
CH-125	56	25	32	11	3.5	16	M8	1.5×90°
CH-160	70	35	42	13	4	20	M10	1.5×90°
CH-200	82	40	46	16	4	24	M12	1.5×90°
CH-250	95	45	50	17	4	28	M12	1.5×90°
CH-315	118	50	62	21	4	32	M16	2.5×90°
CH-400	148	55	72	22	5	45	M16	2.5×90°

HARD JAWS FOR SCROLL CHUCK



Two-Piece Jaws for Form C

Size	L	B	H	h	a	b	e	t	t ₁	z-d	
200	88	22	44	12	13	11	28	7	3	2-9	1
240	108	27	46	12	13	13	35	7	3	2-11	1
250	108	27	46	12	13	13	35	7	3	2-11	1

Size	L	L1	B	H	a	b	e	t	t ₁	Z-d	
200	76	31.5	22	36	13	11	28	6	2	2-M8	2
240	95	41	27	39	13	13	35	6	2	2-M10	2
250	95	41	27	39	13	13	35	6	2	2-M10	2

Size	L	B	H	h	a	b	e	t	t ₁	z-d	
320	127	36	59.5	17	28	15	44	7.5	2.8	2-13	3
325	127	36	59.5	17	28	15	44	7.5	2.8	2-13	3
380	127	36	59.5	17	28	15	44	7.5	2.8	2-13	3

Size	L	L1	B	H	a	b	e	t	t ₁	z-d	
320	114	43	36	40	28	15	44	8.5	3.5	2-M12	4
325	114	43	36	40	28	15	44	8.5	3.5	2-M12	4
380	114	43	36	40	28	15	44	8.5	3.5	2-M12	4

The jaws are composed of top jaws and master jaws.

HARD JAWS FOR SCROLL CHUCK



- ⊗ Hard jaws include one-piece jaws and two-piece jaws for form A, D, C.
- ⊗ All kinds of hard jaws can be provided as the request of customers.

One-Piece Jaws

Size	80	100	125	130	160	165	190	200	240	250	315 320 325 380
L	32	42	56	56	70	70	72	85	105	105	130
B	12	15	16	16	18.5	18.5	22	22	27	27	36
H	33	38	45	45	54	54	57	61	69	69	91
h	6.5	7	9	9	12	12	12	12	12	12	18

- ⊗ The chuck with one-piece jaws is provided with each set of internal and external ones.

Two-Piece Jaws for Form A, D

Size	160	200	250	315	325	380	400	500	630
L	67	80	95	108	108 130	130	130	132	132
B	25	30	36	45	45	45	45	45	54
H	41	45	53	61	61 70	70	70	82	82
h	9	10.5	13.5	17.5	17.5 17	17	17	22	22
a	12.675	12.675	19.025	19.025	19.025	19.025	19.025	19.025	19.025
b	7.94	7.94	12.7	12.7	12.7	12.7	12.7	12.7	12.7
e	19	22.2	27	31.75	31.75 38.1	38.1	38.1	38.1	38.1
t	3	3	3	3	3 6	6	6	6	6
t ₁	4	4	4	4	4	4	4	4	4
z-d	2-11	2-11	2-13	2-13	2-13 2-18	2-18	2-18	2-22	2-22

Size	160	200	250	315	325	380	400	500	630
L	64	80	98	110	110 114	114	114	152	210
L1	29	34.9	39.7	47.6	47.6 47.5	47.5	47.5	47.4	59
B	20	22	27	36	36	36	36	45	50
H	33	35	38	42	42 46	46	46	55	60
a	12.675	12.675	19.025	19.025	19.025	19.025	19.025	19.025	19.025
b	7.94	7.94	12.7	12.7	12.7	12.7	12.7	12.7	12.7
e	19	22.2	27	31.75	31.75 38.1	38.1	38.1	38.1	38.1
t	4	4.2	4.2	4.2	4.2 7	7	7	7	7
t ₁	3	3	3	3	3	3	3	3	3
z-d	2-M10	2-M10	2-M12	3-M12	3-M12 3-M16	3-M16	3-M16	4-M20	5-M20

- ⊗ The jaws are composed of top jaws and master jaws. Master jaws for form A size 325, 380 and form D without clamping arc.



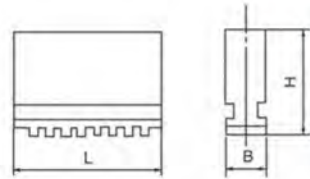
- ⊗ All kinds of soft jaws can be provided as the request of customers for K11, K10, K12 series chucks.
- ⊗ Soft jaws include one-piece soft jaws and two-piece soft jaws(form C, A).



- ⊗ Form A: Matched with hard top jaws with serrations.
- ⊗ Form B: Matched with soft top jaws with cross tenon.

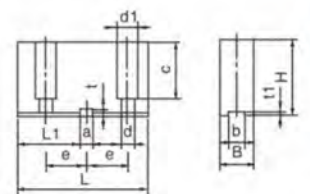


One-piece soft jaws

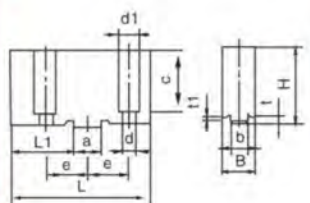


Model	RZ1180	RZ11100	RZ11125	RZ11130	RZ11160	RZ11165	RZ11190	RZ11200	RZ11240	RZ11250	RZ11315 RZ11320	RZ11325 RZ11380
L	32	42	56	56	70	70	72	85	105	105	130	130
B	12	15	16	16	18.5	18.5	22	22	27	27	36	36
H	32	38	45	45	54	54	57	61	69	69	91	91

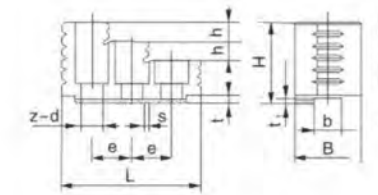
Soft top jaws(Type C)



Model	L	L1	B	H	a	b	e	t	l1	c	d	d1
RZ11200C	93	46	25	50	13	11	28	7	3	39	9	15
RZ11240C	113	58	27	58	13	13	35	7	3	48	11	17
RZ11250C	113	58	27	58	13	13	35	7	3	48	11	17

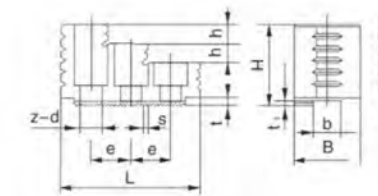


Model	L	L1	B	H	a	b	e	t	l1	c	d	d1
RZ11320C	137	64	36	75	28	15	44	7.5	2.8	60.5	13	20
RZ11325C	137	64	36	75	28	15	44	7.5	2.8	60.5	13	20
RZ11380C	137	64	36	75	28	15	44	7.5	2.8	60.5	13	20



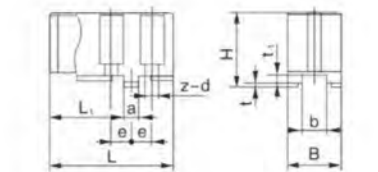
K52A

Size	L	B	H	b	e	t	t ₁	s	h	z-d
160	70	35	42	13	20	4.5	4	1.5×90°	10	3-11
200	82	40	48	16	24	4.5	4	1.5×90°	11	3-13
250	95	45	50	17	28	4.5	4	1.5×90°	12	3-13
315	114	50	62	21	32	4.5	4		15	3-17
400	148	55	72	22	45	5.5	5		18	3-17



K54A, K55A, K55A-IV

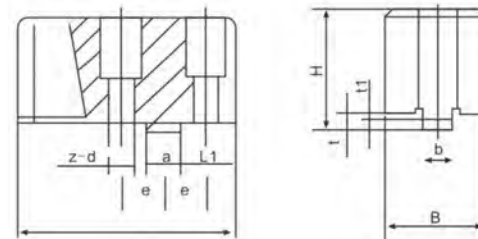
Size	L	B	H	b	e	t	t ₁	s	h	z-d
125	56	23	32	11	16	4	3.5	1.5×90°	7.5	3-9
160	68	30	42	13	20	4.5	4	1.5×90°	10	3-11
200	84	36	48	16	24	4.5	4	1.5×90°	11	3-13
250	90	40	50	17	28	4.5	4	1.5×90°	12	3-13
315	112	50	62	21	32	4.5	4		15	3-17



K52B, K55B

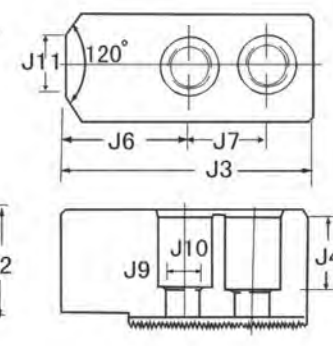
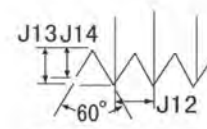
Size	L	B	H	a	b	e	t	t ₁	L ₁	z-d
160	74	35	45	12	12	12.5	3	4	44	2-11
200	90	40	49	12	15	15	3	4	54.5	2-13
250	115	45	53	15	15	20	3	4	70.5	2-13
315	145	50	65	15	20	24	3	4	95	2-17
400	180	55	75	20	20	30	3	4	120	2-17

WEDGE TYPE POWER CHUCK JAWS



Spec	L	L1	B	H	a	b	e	t	t1	z-d	Net WT
160	70	18	35	42	11	11	14	5	1.5	2-9	11
200	86	20	40	50	13	13	16	6	2	2-11	20
250	105	25	45	58	15	15	20	7	2.5	2-13	31
320	130	28	50	69	18	18	22.5	8	3	2-15	53
400	160	40	50	80	20	20	30	9	3.5	2-17	83
500	19	56	55	85	22	22	39	9	3.5	2-19	134
630	235	76	60	100	24	24	50	10	4	2-22	-

SOFT JAWS FOR JIS STANDARD



Spec	J1	J2	J3	J4	J5	J6	J7	J8	J9	J10	J11	J12	J13	J14	Screw
6	30	34	80	26	3.5	41	25	11	9	14	10	1.5	1.3	0.15	M8
8	36	40	90	27	3.5	45	25	14	13	17	20	1.5	1.3	0.15	M12
10	40	40	110	31	6	50	30	16	13	19	25	1.5	1.3	0.15	M12
12	50	50	130	33	6	60	30	18	15	23	30	1.5	1.3	0.15	M14
15	62	62	150	43	0.5	55	50	22	22	32	-	3.0	2.6	0.5	M20
18	62	62	150	43	8.5	55	50	22	22	32	-	3.0	2.6	0.5	M20

JAWS FOR DIN SERIES CHUCK

Inch serrated hard top jaws "D"

If high concentricity is required jaws have to be ground on the chuck at clamping pressure

Id.No.*	Serration inch	B mm	H mm	L mm	N mm	T mm	a mm	b mm	Mass kg/jaw
12081306	1/16"x90°	30	34	58	12	8.5	13	16	0.2
12081636	1/16"x90°	34	39	65	14	10	18	16.5	0.3
12082036	1/16"x90°	40	45	82	17	10.5	19	23	0.57
12082626	1/16"x90°	45	56	100	17	15.5	23	30	0.85
12083036	1/16"x90°	45	56	105	21	13.5	26	30	0.95
12084006	1/16"x90°	55	73	120	21	22	30	34	1.70
12085046	3/32"x90°	55	73	145	25.5	32	46	38	2.2
12084546	3/32"x90°	60	75	140	25.5	19	38	38	2.5
12086346	3/32"x90°	70	75	145	25.5	32	46	38	3

Inch serrated soft blank top jaws "D"

Id.No.*	Serration inch	B mm	H mm	L mm	N mm	T mm	a mm	b mm	Mass kg/jaw
12071300	1/16"x90°	30	30	60	12	29	16	16	0.3
12071680	1/16"x90°	30	35	70	14	38	16.5	23	0.42
12072130	1/16"x90°	35	40	90	17	47	23	30	0.85
12072620	1/16"x90°	40	45	110	17	60	30	30	1.23
12072500	1/16"x90°	45	45	110	21	60	30	30	1.25
90072500	1/16"x90°	60	60	120	25.5	64	34	34	2.6
12073000	1/16"x90°	50	50	125	21	73	30	30	1.85
12074030	1/16"x90°	60	60	140	21	81	34	34	3.2
12074040	3/32"x90°	60	60	140	25.5	75	38	38	3.2
12075050	3/32"x90°	60	60	170	25.5	105	38	38	3.6
12075040	3/32"x90°	75	75	160	25.5	97	38	38	5.5
12075140	3/32"x90°	60	60	205	25.5	104	38	38	4.5

Metric serrated hard top jaws "M"

If high concentricity is required jaws have to be ground on the chuck at clamping pressure

Id.No.*	Serration mm	B mm	H mm	L mm	N mm	T mm	a mm	b mm	Mass kg/jaw
12081307	1.5x60°	30	34	58	12	8.5	13	16	0.2
12081627	1.5x60°	34	39	67	12	10	14	20	0.31
12082127	1.5x60°	40	45	86	14	10.5	19	25	0.60
12082627	1.5x60°	45	56	100	16	15.5	23	30	0.85
12083037	1.5x60°	45	56	105	21	13.5	26	30	0.95
12084007	1.5x60°	55	73	120	21	22	30	34	1.70
12084047	1.5x60°	55	73	145	25.5	32	46	38	2.2
12084527	1.5x60°	60	75	140	22	19	38	38	2.5

Metric serrated soft blank top jaws "M"

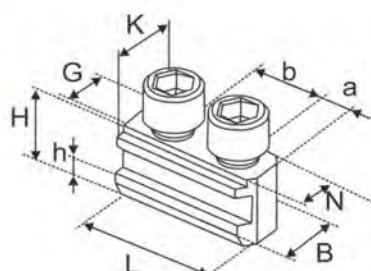
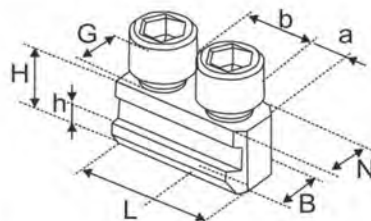
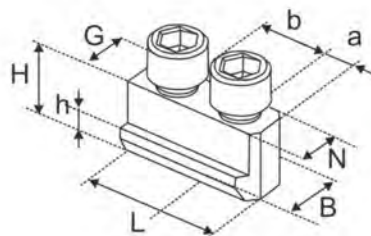
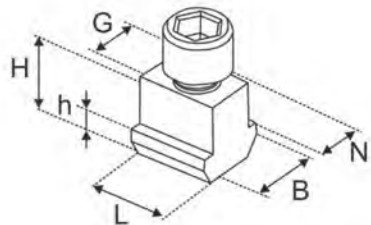
Id.No.*	Serration inch	B mm	H mm	L mm	N mm	T mm	a mm	b mm	Mass kg/jaw
12071301	1.5x60°	30	30	60	12	29	16	16	0.3
12071621	1.5x60°	30	35	70	12	34	20	20	0.42
12072121	1.5x60°	35	40	90	14	47	25	25	0.85
12072621	1.5x60°	45	45	110	16	60	30	30	1.3
12073001	1.5x60°	50	50	125	21	73	30	30	1.85
12074021	1.5x60°	60	60	140	22	75	38	38	3.2
12074031	1.5x60°	60	60	140	21	81	34	34	3.2
12074041	1.5x60°	60	60	140	25.5	75	38	38	3.2

Tongue & groove soft blank top jaws "C"

American standard tongue & groove

Id.No.*	B mm	H mm	L mm	N mm	D mm	E mm	I mm	Mass kg/jaw
12041660	30	35	80	7.94	30	38.1	12.68	0.58
12042060	40	40	100	7.94	35	44.4	12.68	0.92
12042560	50	50	120	12.70	42	54	19.03	1.25
12043060	50	50	140	12.70	50	63.5	19.03	2.15
12044050	60	60	165	12.70	60	76.2	19.03	3.6
12045050	75	75	165	12.70	60	76.2	19.03	5.5

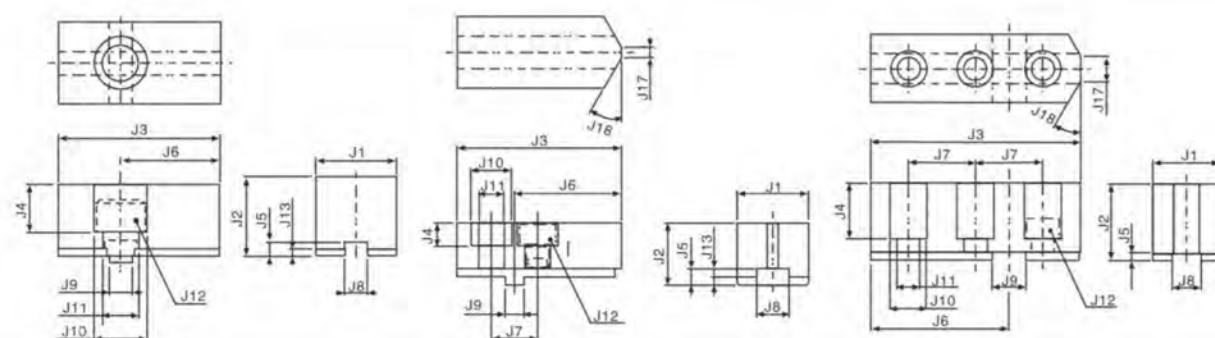
PAGE 17



Chuck series number		Compatible chuck series number			
H01MA	4	H022M5	H024M5	H012D4	
	6				H010D6
	8				H010D8
H022M	15	H01MA18	H01MA21	H01MA24	
	6	H023M8	H024M6		H024D6
	8	H023M10	H024M8		H024D8
	10	H023M12	H024M10		
	12	H023M15	H024M12		
H037M	6	H032M8	H027M6	H012D6	H024D6
	8	H032M10	H027M8	H012D8	H024D8
	10	H032M12	H027M10	H012D10	
	12		H027M12		
H027M	15		H037M15		H047M15

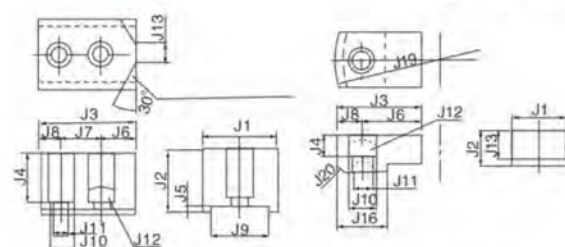
SOFT JAWS FOR JIS STANDARD (TONGUE AND GROOVE TYPE)

C1 C1TYPE C2 C2TYPE C3 C3TYPE



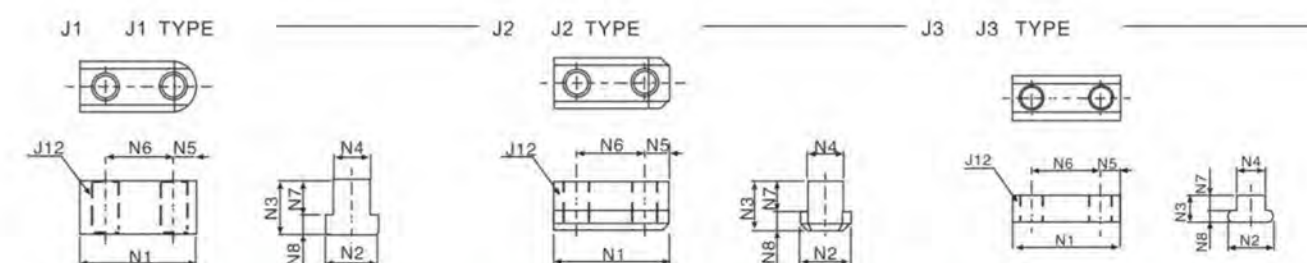
Chuck series number		J1	J2	J3	J4	J5	J6	J7	J8	J9	J10	J11	J12	J13	J17	J18	Weight	Jaw type		
H011MC		4	25	22	50	13	5.5	28	–	8	8	17.5	11	M10	2.5	–	–	0.2	C1	
H011MC		5	30	27	56	15	5.5	33	–	8	8	20	13.5	M12	2.5	–	–	0.3		
H011MC	H014M	6	35	34	70	21	6	43	–	10	10	23	15.5	M14	3	–	–	0.5		
		6	35	33.5	70	18	7	47	20	14	8	17.5	11	M10	3.5	8	30°	0.5	C2	
	H013M	6	35	33.5	70	18	7	47	20	14	8	17.5	11	M10	3.5	(2)	(45°)	0.5		
H011MC	H013M	H014M	H021MB (H055M)	8	40	44.5	84	29	7	53	26	16	12	20	13.5	M12	3.5	(2)		(45°)
H011MC	H013M	H014M	H021MB (H055M)	10	50	49.5	100	32	7	62	32	18	15	23	15.5	M14	3.5	(2)	(45°)	1.6
H011MC	H013M		H021MB (H055M)	12	60	54.5	120	36	7	78	36	20	17	26	17.5	M16	3.5	(2)	(60°)	2.4
		8	32	36	100	26	3.5	66	32	14	16	17.5	11	M10	–	12	30°	0.8	C3	
	H018M	10	35	43	110	33	3.5	72	34	16	16	20	13.5	M12	–	12	30°	1.1		
		12	40	50	130	40	3.5	85	40	16	20	20	13.5	M12	–	12	30°	1.9		
		15	40	50	160	40	3.5	107.5	55	16	25	20	13.5	M12	–	12	30°	2.3		

H063M/H064M/H3EF SOFT JAWS FOR JIS STANDARD (TYPE H063M/H064M.H3EF)



Chuck series number	J1	J2	J3	J4	J5	J6	J7	J8	J9	J10	J11	J12	J13	J16	J19	J20	Weight
H063M	6	50	44	68	35	4	23.64	29.36	15	38.1	17.5	11	M10	14	-	-	1.0
H064M	8	55	54	83	43.5	4	33.87	34.13	15	44.4	20	13.5	M12	18	-	-	1.6
H064M	10	70	64	100	52.5	4	36.55	44.45	19	57.1	26	17.5	M16	40	-	-	2.9
H064M	12	70	64	110	52.5	4	46.55	44.45	19	57.1	26	17.5	M16	70	-	-	3.2
H3EF	6	32	22	47	12	-	32	-	15	-	17.5	11	M10	17	30	118	C5 0.2
H3EF	8	40	27	60	16	-	42	-	18	-	20	13.5	M12	22	35	150	C5 0.4

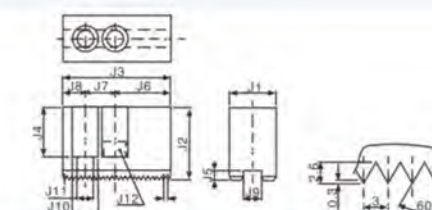
T-NUT FOR JIS CHUCK SERIES



Chuck series number	N1	N2	N3	N4	N5	N6	N7	N8	J12	Weight	Jaw nut type
H01MA	4	25.5	15	16.5	10	5.5	14	11	5.5	M8	0.027
H01MA	5	30.5	15	16.5	10	5.5	19	11	5.5	M8	0.034
H01MA	6	37	17	21.5	12	8	20	14	7.5	M10	0.061
H01MA	8	46	20	23.5	14	10	25	15	8.5	M12	0.095
H01MA	10	51	23	23.5	16	10	30	15	8.5	M12	0.140
H01MA	12	53	28	33	18	11	30	19	14	M14	0.262
H01MA	15	82	34	40	26	16	50	23	17	M20	0.560
H037M	4	29	16	16.5	11	6.5	16	10	6.5	M8	0.036
H037M	8	45	22	26.5	16	10	25	18	8.5	M12	0.120
H037M	10	52	24	27.5	18	11	30	18	9.5	M14	0.161
H037M	12	60	27	29	21	12	35	18.5	10.5	M16	0.242
H037M	15	74	34	40	26	16	42	23	17	M20	0.530
H05M	12	65	27	29	21	12	40	18.5	10.5	M16	0.252
H3KT	6	36	17	18.5	12	8	20	11	7.5	M10	0.054
H3KT	8	46.5	20	20.5	14	10.5	25	12	8.5	M12	0.092
H3KT	10	51	22.5	21.5	16	11	30	13	8.5	M12	0.126
H3KT	12	55.5	29.5	27.5	21	12	30	16	11.5	M16	0.211
H063M	6	46.8	20.00	11.0	12.5	8.7	29.36	6.1	4.9	M10	0.050
H064M	8	53.3	22.25	13.3	14.1	9.6	34.13	7.5	5.8	M12	0.075
H064M	10/12	68.4	28.30	17.6	18.9	12.0	44.45	10.3	7.3	M16	0.160

COMPATIBILITY OF T-NUT

Chuck series number	J1	J2	J3	J4	J5	J6	J7	J8	J9	J10	J11	J12	J13	J16	J19	J20	Weight
H01MA	4	H022M5															H012D4
H01MA	6	H022M6	H023M8	H024M6	H027M6	H034M6	H047M6	H037M6	H05M6	H032M8	H012D6						
H01MA	15	H01MA18	H01MA21	H01MA24													
H037M	4				H027M4	H027M5		H037M5		H032M6							
H037M	8	H022M8	H023M10	H024M8	H027M8	H034M8	H047M8		H05M8	H032M10	H012D8						
H037M	10	H022M10	H023M12	H024M10	H027M10	H034M10	H047M10		H05M10	H032M12	H012D10						
H037M	12				H027M12	H034M12	H047M12										
H037M	15				H027M15	H034M15	H047M15										
H05M	12	H022M12	H023M15	H024M12													



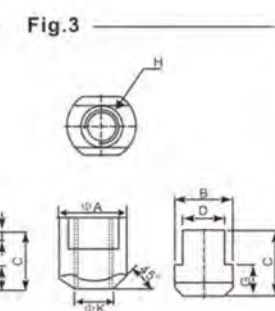
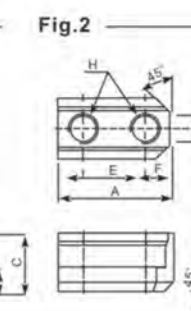
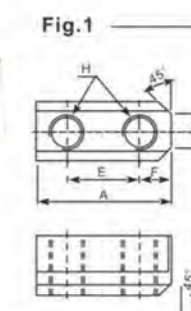
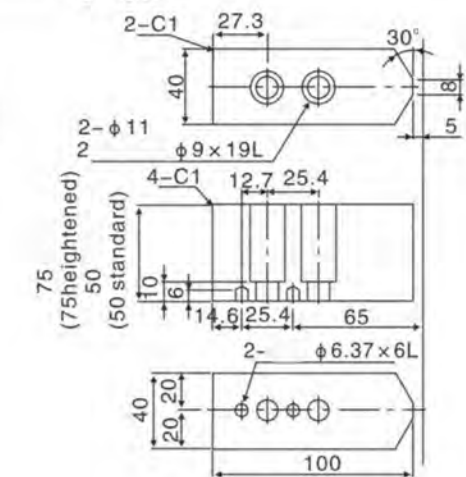
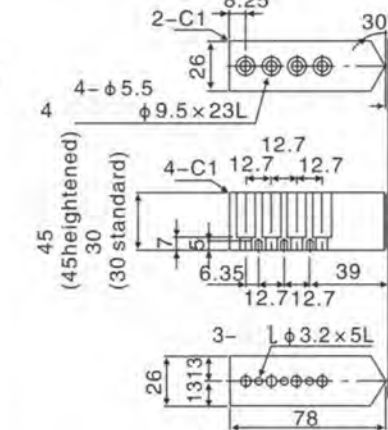
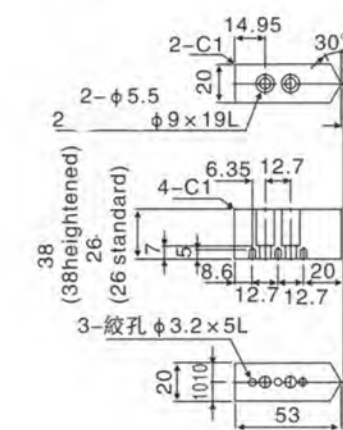
SOFT JAWS FOR JIS SERIES S1 TYPE

Chuck series number	Jaw number	Serration Pitch	J1	J2	J3	J4	J5	J6	J7	J8	J9	J10	J11	J12	Weight
H01MA	6	401-062-0-000	3	40	55	87	40	6	51	20	16	12	17.5	11	M10 1.4
H01MA	8	401-062-1-000	3	40	60	102	42	6	57	25	20	14	20	13.5	M12 1.6
H01MA	10	401-062-2-000	3	50	70	123	52	6	63	30	30	16	20	13.5	M12 3
H01MA	12	401-062-3-000	3	62	80	144	63	6	75	30	39	18	23	15.5	M14 5

J-04



J-08

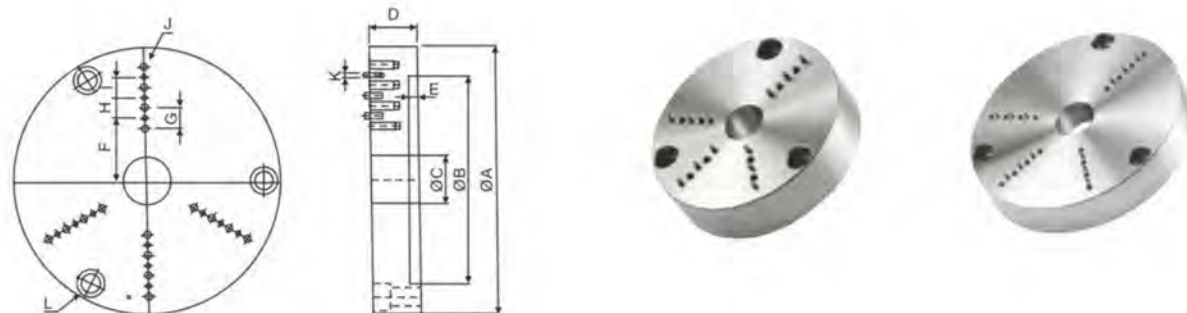


Model	A	B	C	D	E	F	G	H	J	K	L	M	Fig
5"	26	14.5	15	10	14	6	5.5	M8	5	2			1
6"	36	17.5	18.5	12	20	8.2	7.5	M10	8	2.5			1
8"	46.5	20.5	20.5	14	25	10.5	8.5	M12	12	4			1
10"	51	22.5	21.5	16	30	11	8.5	M12	11	3			1
12"	55.5	29.5	27.5	21	30	12	11.5	M16	13	4.5			1
15"(18")	80	33.5	45.5	24	43	17	16.5	M20	11	5	8	22	2
6"	36.5	17.5	22.5	12	20	7.5	7.5	M10	6	3			1
8"	48	20.5	25.5	14	25	11	9.5	M12	8	4			1
10"	55	22.5	25.5	16	30	11	9.5	M12	8	4			1
12"	55.5	26.5	33.54	18	30	11.5	13.5	M14	12	5			1
Non-Thru 15"(18")	42	35	39.5	25.5			19	M20		25			3
15"(18")3.0	42	35	41.5	26			19	M20		25			3
24"(21")	46	37.5	45	25			19	M20		26.5			3

Chuck series number		seration Pitch	JH1	JH2	JH3	JH4	JH5	JH6	JH7	JH9	JH10	JH11	JH18	JH19	JH21	JH22	JH23	JH24	JH25	JH26	weight	Jaw type	
H01MA	6	3	35	46	85.2	31	6	13.5	20	12	17.5	11	10	10	44	104	128	56	106	25	0.6	H1	
	8	3	40	55	87.8	37	6	17	25	14	20	13.5	12	12	42	108	160	48	106.5	22.5	0.7		
	10	3	40	56	98.7	39	6	15	30	16	20	13.5	13	13	86	145	208	53	120	45	1.0		
	12	3	50	62	104.4	45	6	16	30	18	23	16	15	15	140	200	260	70	134.5	71.5	1.5		
	15	3	65	75	153.3	55	8	20	50	26	32	22	30	—	—	—	300	150	225	68	3.3		
H037M H027M	4	1.5	28	30	54.3	20	5	12	14	11	14	9	8	—	—	—	75	20	63	12	0.3	H2	
	5		35	35	64.3	22	5	10	20	12	17.5	11	11	—	—	—	86	12	69.5	9.5	0.4		
	6		1.5	40	40	80.1	26	5	11.5	25	16	20	13.5	13	—	—	—	106	16	87	11		0.8
	10		1.5	45	45	95.3	30	5	15	30	18	23	16	15	—	—	—	138	24	106	16		1.2
	12		1.5	50	50	109.7	37	5	15.5	35	21	26	18	20	—	—	—	166	32	124.5	17.5		1.8
H3KT	15	3	60	60	132.5	41	8	18	42	26	32	22	20	12	90	116	205	65	164	32	3.0	H3	
	6	1.5	31	35	70.8	23	5	14	20	12	17.5	11	12	12	71	136	68	—	104	36	0.3		
	8	1.5	35	51	87	36	5	19	25	14	20	13.5	12	13	100	186	169	87	127	38	0.6		
	10	1.5	40	54	101.3	39	5	10.5	30	16	20	13.5	13	—	—	—	220	82	136.5	54.5	1.0		
	12	1.5	50	52	106.64	35	5	20.25	30	21	26	17.5	17	—	—	—	210	84	145.25	47.75	1.3		
Chuck series number		seration Pitch	J1	J2	J3	J4	J5	J6	J7	J8	J9	J10	J11	J12	J13	J14	J15	J16	J17	J18	weight	Jaw type	
H05M	6	1.5	31	23.5	73	10	5	38	20	15	12	17.5	11	M10	15.5	6	13	46.5	1.5	60°	0.4	H4	
	8	1.5	35	26	89.5	12	5	44.5	25	20	16	20	13.5	M12	18	7	14.5	57	1.5	60°	0.5		
	10	1.5	40	29	103.5	14	5	48.5	30	25	18	23	15.5	M14	21	7	16	67.5	1.5	60°	0.7		
	12	1.5	45	32	122	16	5	52	40	30	21	26	17.5	M16	22	7	16.5	85.5	1.5	60°	0.9		

Bolt number		1~2								2~3							
Chuck series number		A		B		C		D		A		B		C		D	
H01MA	6	49	~ 66	25	~ 41	85	~ 101	109	~ 125	19	~ 23	60	~ 75	120	~ 136	144	~ 160
	8	75	~ 109	18	~ 50	83	~ 117	135	~ 169	23	~ 57	69	~ 103	136	~ 169	188	~ 222
	10	82	~ 136	27	~ 81	85	~ 140	148	~ 203	24	~ 76	86	~ 139	145	~ 199	208	~ 262
	12	83	~ 166	34	~ 119	94	~ 179	154	~ 239	24	~ 107	94	~ 178	154	~ 238	214	~ 298
	15	116	~ 200					198	~ 284	32	~ 100					300	~ 384
H037M H027M	4	23	~ 40					61	~ 67	11	~ 15					75	~ 93
	5	28	~ 63					63	~ 89	10	~ 36					80	~ 116
	6	54	~ 82					87	~ 114	13	~ 40					128	~ 155
	8	54	~ 103					102	~ 151	10	~ 55					152	~ 201
	10	84	~ 132					140	~ 187	26	~ 72					199	~ 247
H3KT	12	94	~ 160					173	~ 239	26	~ 92					241	~ 307
	15	119	~ 204					200	~ 284	36	~ 121					282	~ 367
	6	48	~ 78	96	~ 126	32	~ 60			12	~ 36	60	~ 84	71	~ 101		
	8	75	~ 109	9	~ 43	74	~ 109	107	~ 142	24	~ 58	60	~ 94	125	~ 159	158	~ 192
	10	74	~ 119	34	~ 79	121	~ 165	155	~ 199	14	~ 59	94	~ 139	180	~ 224	214	~ 259
	12	101	~ 166					166	~ 233	42	~ 108					226	~ 292

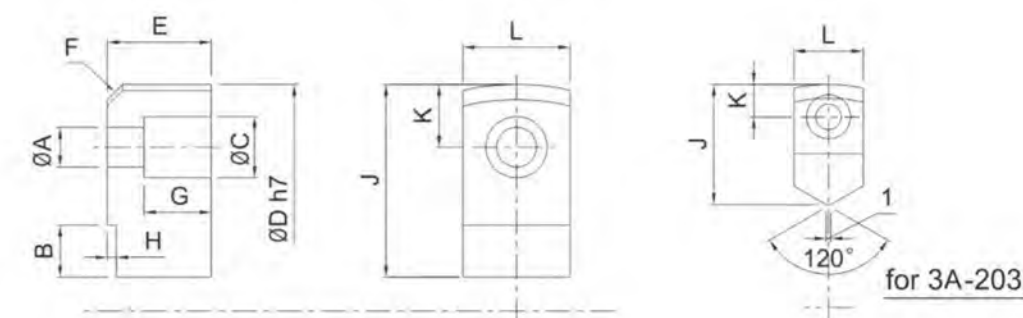
FR FORMING RINGS (FOR SOFT JAWS OF SUPER PRECISION CHUCKS)



Size table

MODEL /SPEC.	A	B	C	D	E	F	G	H	I	J	K	L	UNIT:mm
FR-04	112	80	22	30	6	21	12.7	12.7	12.7	6-M5X0.8P	9-Ø3.175	3-M8X1.25P	(Kg) Weight
FR-06	167	130	30	30	6	40	12.7	12.7	12.7	12-M5X0.8P	9-Ø3.175	3-M10X1.5P	4.3
FR-08	203	160	54	35	6	66	25.4	25.4	--	6-M10X1.5P	6-Ø6.35	3-M10X1.5P	7.2

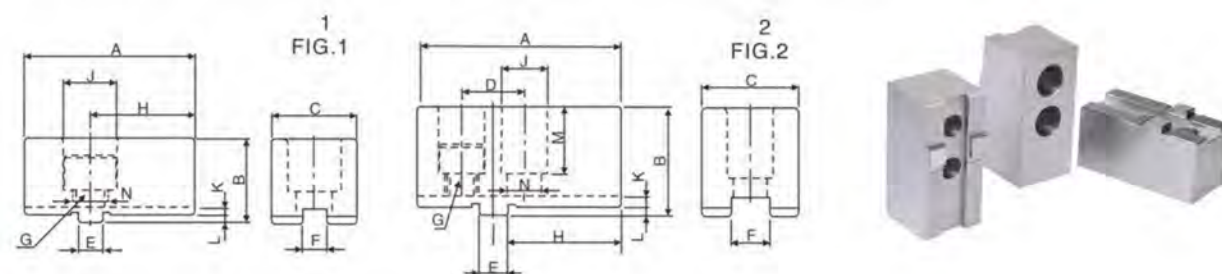
STANDARD SOFT JAW FOR 3A CHUCK



Subject to technical changes

Model/Dim.	A	B	C	D	E	F	G	H	J	K	L
3A-203	5.5	11	9.5	66	12	C3	7	3	26	7	15
3A-204	6.6	11	11	84	17	C4	11	3	32	9.5	20
3A-205	9	13.5	14	108	20	C4	12	3	41.5	13	24
3A-206	11	15	17	129	30	C5	20	3	50	17	30
3A-208	13	15	20	156	34	C5	22	3	63	20.5	35
3A-210	15	20	22	187	39	C5	24	4	74	23	40
3A-212	15	18	22	234	44	C5	29	4	72	23	40

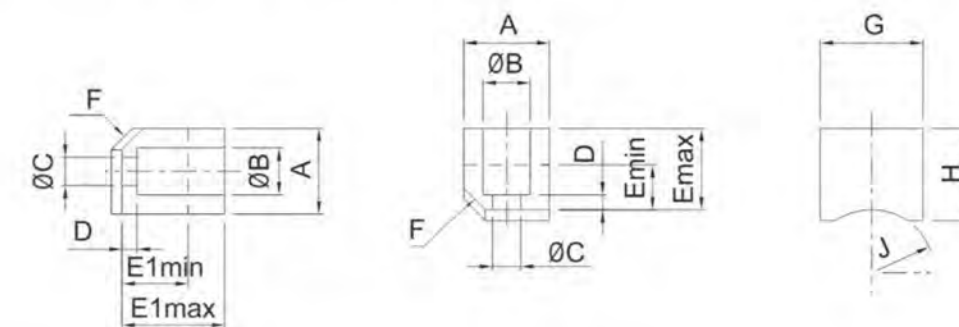
SOFR JAWS FOR PULL BACK POWER CHUCKS



Size table

MODEL /SPEC.	A	B	C	D	E	F	G	H	J	K	L	M	N	Reference Drawing
S-04	52	19.5	25	-	8	8	M10x1.5P	30	17.5	2.5	2.5	13	11	圖.1 fig.1
S-05	56	27	30	-	8	8	M10x1.5P	33	20	2.5	2.5	15	11	圖.2 fig.2
S-06	70	34	35	-	10	10	M14X2P	43	23	3.0	3.0	21	15.5	圖.2 fig.2
S-08	84	44.5	40	26	12	16	M12X1.75P	53	20	3.5	3.5	29	13.5	圖.2 fig.2
S-10	100	49.5	50	32	15	18	M14X2P	62	23	3.5	3.5	32	15.5	圖.1 fig.1
S-12	120	54.5	60	36	17	20	M16X2P	78	26	3.5	3.5	36	17.5	圖.1 fig.1
S-15	165	60	70	40	20	24	M17x2P	105	26	5	5	40	18	

STANDARD SOFT JAW FOR 3E CHUCK



Subject to technical changes

Model/Dim.	A	B	C	D	Emax.	Emin.	E1max.	E1min.	F	G	H	J
3E-05	20	11	6.6	3.5	34	25	41.5	33.5	C5	24	21.5	14.7
3E-06	23	11	6.6	4	44	35	54	43.5		30	28.5	22.7
3E-08	32	14	9	6	54	45	70.5	57.5		35	37	33.25

HIGHER FULL GRIP PIE JAWS

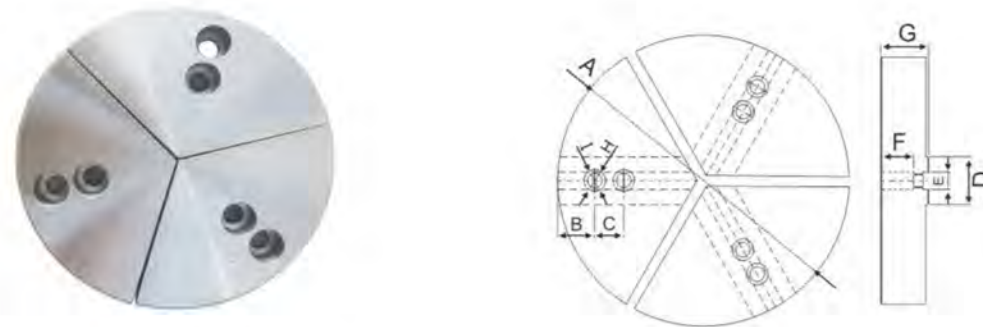


1.5mmx60° Serration Pitch:1.5mmx60°

UNIT:mm

MODEL SPEC (mm)	A	B	C	D	E	F	G	H	I
PJ-05H	130	10	14	25	10	28/38/48	40/50/60	13.5	9
PJ-06H	160	15	20	31	12	25/35/45	40/50/60	17	11
PJ-08H	200	24	25	35	14	34/44/54	50/60/70	19	13
PJ-10H	240	25	30	42	16	44/54/64	60/70/80	19	13
PJ-12H	290	35	30	50	21/18	40/50/60	60/70/80	25/23	17/15
PJ-15H	370	37	43	62	22/25.5	46/56/66	70/80/90	32	21

STANDARD FULL GRIP PIE JAWS



1.5mmx60° Serration Pitch:1.5mmx60°

Model/Spec (mm)	A	B	C	D	E	F	G	H	I	GW KG
PJ-05	130	10	14	25	10	18	30	13.5	9	3.6
PJ-06	160	15	20	31	12	21	36	17	11	4.9
PJ-08	200	24	25	35	14	22	38	19	13	10.6
PJ-10	240	25	30	42	16	26	42	19	13	13.6
PJ-12	290	35	30	50	21/18	30	50	25/23	17/15	23.8
PJ-15	370	37	43	62	22/25.5	38	62	32	21	45.8

Customized spec can be made.

JAW BORING RING FOR SOFT JAWS



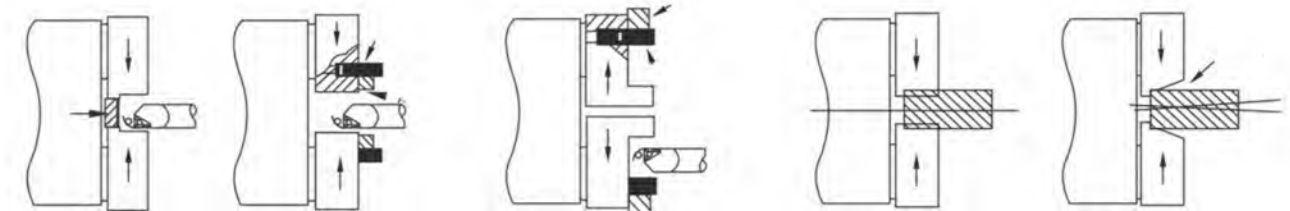
FEATURE

To Suit for CNC lathe

For adjusting the high accuracy of chuck during machining process.

The operation process as following:

1. Set the jaws to correct position. 2. Adjust the jaw boring ring to fit the bolt holes.
3. Lock the chuck to clamp the jaw boring ring. 4. Machining the required size.
5. Unlock the chuck. 6. If these steps are operated correctly, the clamping accuracy will be very precise.



Size table

MODELS	H	D1	D2	S1	S2	G	H1	O
5"	12	140	60	12	28	10	9	13.5
6"	12	168	80	12	32	10	9	16.5
8"	12	218	115	17	36	10	9	18.5
10"	12	258	150	15	40	10	9	18.5
12" Thru-hole	15	316	188	21	50	10	9	24.5
12" Non-Thru	15	316	188	21	50	10	9	21.5
15"	20	380	230	23	52	12	16	31
21"	It's made for customized order							
24"								
32"								
40"								
63"								
79"								

JAW BORING FIXTURE FOR SOFT JAWS

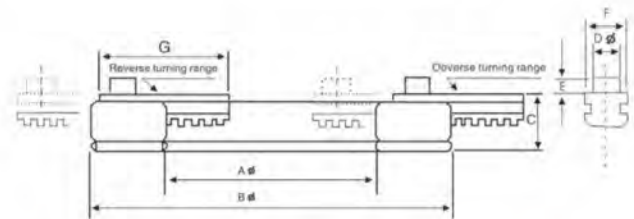
FEATURE

To Suit for CNC lathe

This type jaw boring fixture with a continuous fine adjusting ring can provide accurate position, to reduce the abrasion of soft jaws. Soft jaws can be made to requirements size by this fixture easily. Only several simple process, soft jaws can be bored precisely. With anticlockwise lock, the machining field can be easily expended.



reverse turning range
obverse turning range

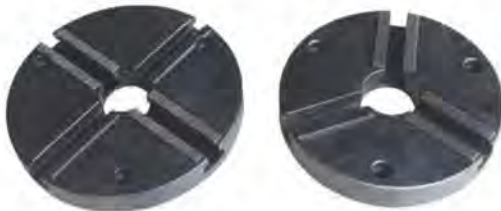


SPECIFICATIONS

UNIT: mm

Spec/Model	A	B	C	D	E	F	G	Jaw Stroke (Dia)	Max Gripping (Kgf)	Max RPM	Weight (Kg)	Matching Chuck
TL-100	100	170	26	13	7	19	61	7.4	1500	800	2.7	5"/6"/8"
TL-125	125	200	26	16.3	8	19	61	7.4	1500	700	3.5	6"/8"/10"
TL-160	160	248	31	18.3	8	24	80	8.5	1750	600	5.6	8"/10"/12"

FORMING PLATE FOR SOFT JAWS



It is applicable to make the mould by EDM processing or machining and milling processing.

5" 6" 8" 10" 12"

The available spec of this forming plate are 5" 6" 8" 10" 12" size.

The available forming plate type are 2-jaw or 3-jaw or 4-jaw type.

Jaw boring ring for outside diameter

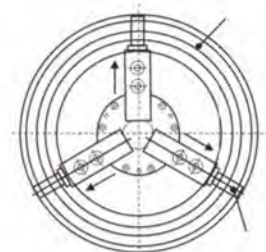
This Jaw boring ring is for machining the external circle of the jaws, in order to expand the workpiece precisely

SPECIFICATION

Model	Range	For Chuck
OR-6	Φ 140-Φ 170	6"
OR-8	Φ 170-Φ 215	8"
OR-10	Φ 215-Φ 270	10"

OR-12 OR-15

For OR-12 or OR-15 and other spec is available for customized order.



Applications





ICE

INNOVATIVE CUSTOM ENGINEERING