



CHUCK

▶ **P.63~P.69**

Scroll chuck

Scroll chuck



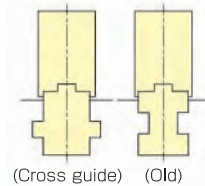
CHUCK

Scroll Chuck with Integrated Jaw (Straight Recess) SC·JN series

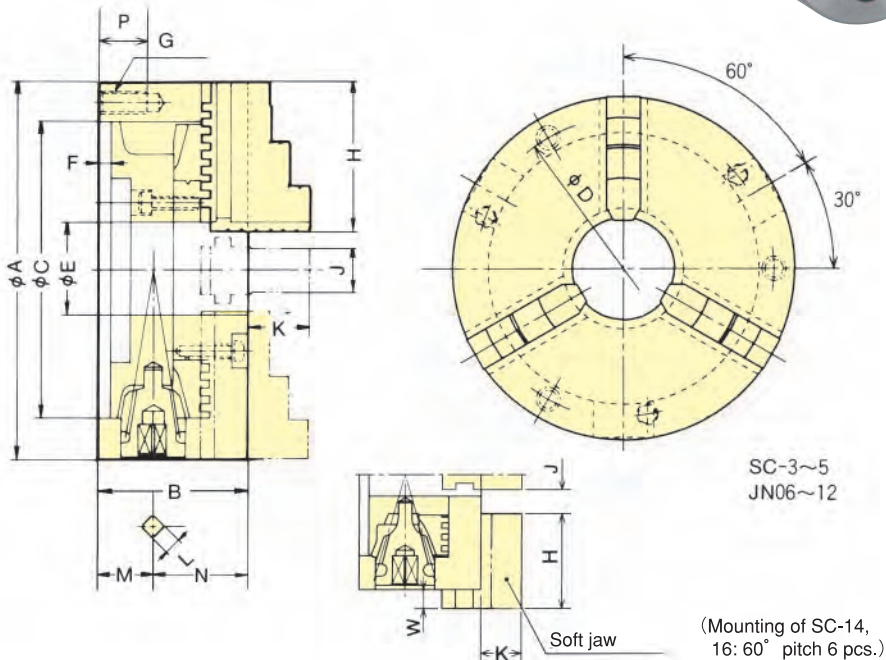
**Durable, reliable and versatile
KITAGAWA'S standard type**

- Straight Recess
- Jaw
Available with hard jaw for internal and external gripping.
- Steel body
Body is manufactured from high quality steel to increase rigidity, durability and rotational speed.

(SC-3, 4, 5, 14, 16 are made of cast iron,
and JN-6, 7, 9, 10 and 12 are made of steel.)



Dimensional Drawings



Dimensions

Type	Size	A	B	C (HG)	D	E	F	G	H	J	K	L	M	N	P	W max.	W min.
SC-3(F)		85	45	60	73	16	3.5	3-M 6	35	11	15	7	17	28	13	(1.5)	(- 7)
SC-4(F)		110	58	80	95	24	4.5	3-M 8	42	14	18	8	24.5	33.5	16	(2.5)	(-12)
SC-5(F)		130	60	100	115	32	4.5	3-M 8	50	16	20	8	22.5	37.5	16	(3.5)	(-14.5)
JN06		165	65	130	147	45	5	3-M10	66	20.5	27	10	24	41	20		
JN07		190	75	155	172	55	5	3-M10	78	22.5	31	11	27.5	47.5	20		
JN09		232	84	190	210	70	6	3-M12	88	26.5	33	12	29.5	54.5	23		
JN10		273	86	230	250	85	6	3-M12	98	26.5	37	12	31.5	54.5	23		
JN12		310	96	260	285	96	7	3-M12	113	30.5	44	14	31.5	64.5	25		
SC-14		355	110	300	328	100	7	6-M12	132	35	52	15	38	72	35		
SC-16		405	120	345	375	110	8	6-M12	146	40	58	15	43.5	76.5	35		

Specifications

Spec. Type	Thru-Hole mm	Max. static gripping force kN(kgf)	Max. speed min ⁻¹ (r.p.m)	Weight (with standard jaws) kg	Moment of inertia kg·m ²	Gripping range Outer dia.φmm Inner dia.φmm	Handle torque N·m(kgf·m)
SC-3(F)	16	9.0(918)	2500	1.5	0.001	2~ 70 24~ 64	29.4(3.0)
SC-4(F)	24	12.0(1224)	2500	3.1	0.004	3~ 95 29~ 84	44.1(4.5)
SC-5(F)	32	15.0(1530)	2500	4.4	0.009	3~110 33~100	63.7(6.5)
JN06	45	31.0(3161)	4000	8.4	0.030	3~160 48~150	88.3(9.0)
JN07	55	31.0(3161)	3500	12.2	0.060	4~180 56~170	107.9(11.0)
Spec. Type	Thru-Hole mm	Max. static gripping force kN(kgf)	Max. speed min ⁻¹ (r.p.m)	Weight (with standard jaws) kg	Moment of inertia kg·m ²	Gripping range Outer dia.φmm Inner dia.φmm	Handle torque N·m(kgf·m)
JN09	70	37.0(3773)	2900	21.2	0.160	5~220 62~210	147.0(15.0)
JN10	85	46.0(4691)	2500	28.0	0.253	5~260 70~250	176.5(18.0)
JN12	96	55.0(5608)	2200	41.0	0.588	10~300 86~290	206.0(21.0)
SC-14	100	40.5(4130)	1500	54.0	0.950	25~315 107~290	225.6(23.0)
SC-16	110	45.0(4589)	1500	74.0	1.725	25~360 113~340	245.0(25.0)

※SC type and JN type, each one set of inner jaws and outer jaws are attached as standard. SC-F type, each one set of inner jaws, outer jaws and soft jaws are attached as standard. ※When the soft jaws are used for SC-F type, use the chuck of lower specification.

※Since there are types mounted to the front side, please contact your agent if required.

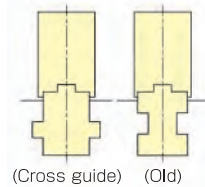


CHUCK

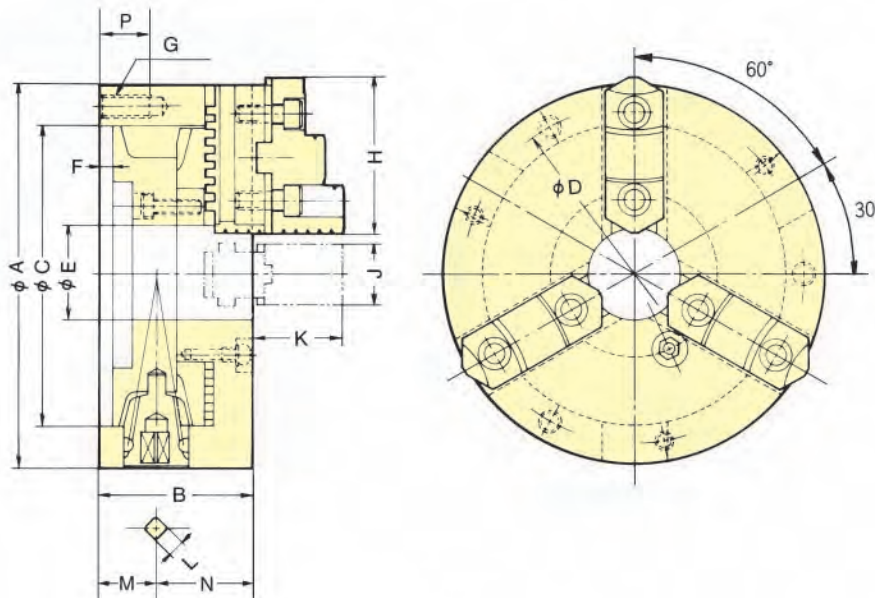
Scroll Chuck with Integrated Jaw (Straight Recess) JN..T series

Two piece jaw

- Straight Recess
- Cross guide (JN..T series)
Base jaw is located using cross guide reducing runout and distortion.
- Separated-jaw type (with hard jaw and soft jaws)
Top jaw can be changed according to application (i.e. hard jaw suitable for heavy cutting, and soft jaw suitable for precisely machining. Each jaw can also be changed easily. Especially, the hard jaw can clamp inner diameter and outer diameter of work.
- Steel body
Body is manufactured from high quality steel to increase rigidity, durability and rotational speed.



Dimensional Drawings



Dimensions

Type	Size	A	B	C (H6)	D	E	F	G	H	J	K	L	M	N	P
JN06T	165	65	130	147	45	5	3-M10	68	26	39	10	24	41	20	
JN07T	190	75	155	172	55	5	3-M10	80	28	42	11	27.5	47.5	20	
JN09T	232	84	190	210	70	6	3-M12	90	32	50	12	29.5	54.5	23	
JN10T	273	86	230	250	85	6	3-M12	100	35	54	12	31.5	54.5	23	
JN12T	310	96	260	285	96	7	3-M12	115	40	56	14	31.5	64.5	25	

Specifications

Type	Spec.	Thru-Hole mm	Max. static gripping force KN(kgf)	Max. speed mn ⁻¹ (r.p.m)	Weight (with standard jaws) kg	Gripping range kg·m ²	Gripping range		Matching soft jaw (hard jaw)	Handle torque N·m(kgf·m)
							Outer dia. φ mm	Inner dia. φ mm		
JN06T	45	31.0(3161)	4000	9.0	0.033	3~160	55~150	SBS06(HBS06C)	88.3(9.0)	
JN07T	55	31.0(3161)	3500	13.0	0.063	4~180	62~170	SBS07(HBS07C)	107.9(11.0)	
JN09T	70	37.0(3773)	2900	22.0	0.163	5~220	70~210	SBS09(HBS09C)	147.0(15.0)	
JN10T	85	46.0(4691)	2500	29.0	0.265	5~260	80~250	SBS10(HBS10C)	176.5(18.0)	
JN12T	96	55.0(5608)	2200	43.0	0.588	10~300	90~290	SBS12(HBS12C)	206.0(21.0)	

※For dimensions of soft jaws and hard jaws, refer to pages 87 and 88 on the catalog.
Since there are types mounted to the front side, please contact your agent if required.



CHUCK

Scroll Chuck with Two Piece Jaw JN..RA series

Two piece jaw

- Short taper

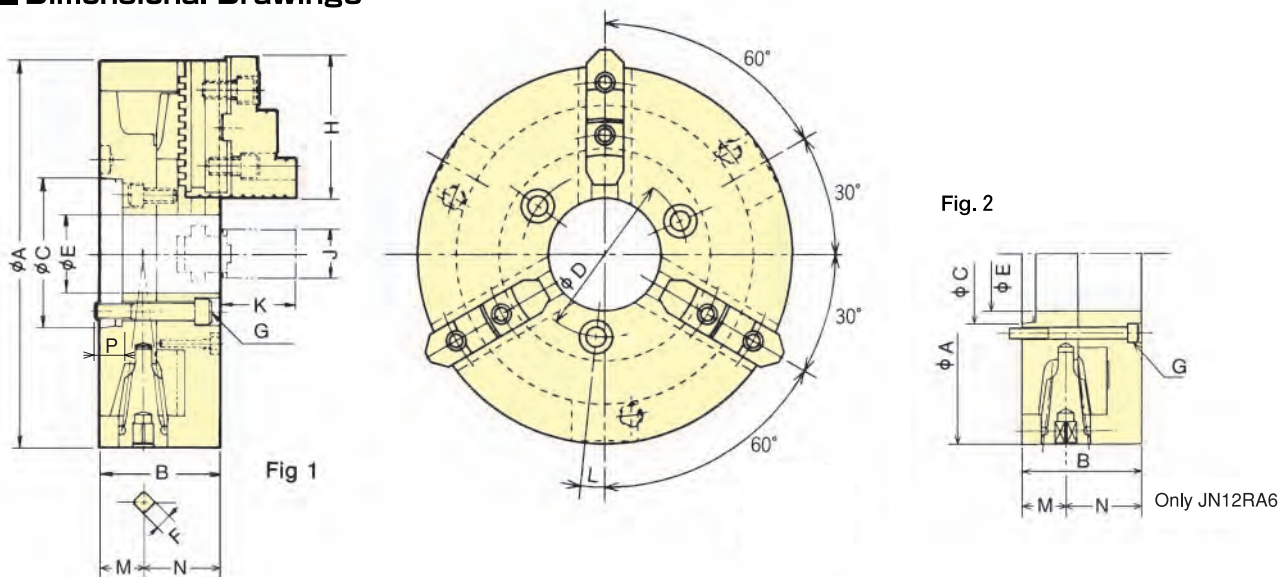
Direct mount to short taper without the need for separate adaptor.

- Soft jaw (option)

Supplied with standard hard jaws (fitted). Soft jaw can also be used. (Option, used together with JN-T type)



Dimensional Drawings



Dimensions

Type	Size	A	B	C	D	E	F	G	H	J	K	L	M	N	P
JN06RA5	165	65.5	82.563	61.9	40	10	3-M10	68	26	39	6°	24	41	16	
JN07RA5	190	75	82.563	61.9	40	11	3-M10	80	28	42	5°	27.5	47.5	16.5	
JN08RA6	210	75	106.375	82.6	59	11	3-M12	80	28	42	6°	29	46	15.5	
JN09RA6	232	84	106.375	82.6	59	12	3-M12	90	32	50	6°	29.5	54.5	16.5	
JN10RA6	273	86	106.375	82.6	59	12	3-M12	100	35	54	0°	31.5	54.5	14.5	
JN10RA8	273	86	139.719	111.1	78	12	3-M16	100	35	54	15°	31.5	54.5	18.5	
JN12RA6	310	96	106.375	133.4	96	14	3-M12	115	40	56	0°	31.5	64.5	18.5	
JN12RA8	310	96	139.719	111.1	78	14	3-M16	115	40	56	0°	31.5	64.5	23.5	

Specifications

Type	Spec.	Thru-Hole mm	Max. static gripping force kN(kgf)	Max. speed min ⁻¹ (r.p.m)	Weight kg	Moment of inertia kg·m ²	Gripping range		Matching hard jaw	Handle torque N·m(kgf·m)
							Outer dia. φmm	Inner dia. φmm		
JN06RA5		40	31.0(3161)	4000	9.3	0.035	3~160	55~150	HBS06C	88.3(9.0)
JN07RA5		40	31.0(3161)	3500	13.4	0.068	4~180	62~170	HBS07C	107.9(11.0)
JN08RA6		59	31.0(3161)	3200	18.0	0.103	4~200	62~190	HBS07C	107.9(11.0)
JN09RA6		59	37.0(3773)	2900	23.5	0.170	5~220	70~210	HBS09C	147.0(15.0)
JN10RA6		59	46.0(4691)	2500	30.5	0.275	5~260	80~250	HBS10C	176.5(18.0)
JN10RA8		78	46.0(4691)	2500	31.0	0.280	5~260	80~250	HBS10C	176.5(18.0)
JN12RA6		96	55.0(5608)	2200	44.0	0.595	10~300	90~290	HBS12C	206.0(21.0)
JN12RA8		78	55.0(5608)	2200	45.0	0.608	10~300	90~290	HBS12C	206.0(21.0)



CHUCK

2-Jaw Scroll Chuck

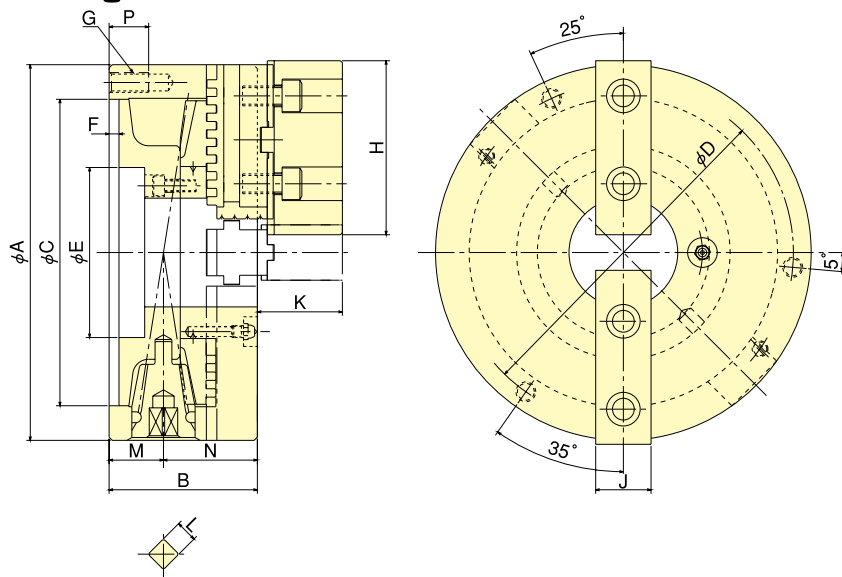
JT series

This two jaw chuck provides the optimum solution for gripping valves, pipe joints and other irregularly shaped components



- Straight recess
Mounting dimensions are the same as the JN type.

Dimensional Drawings



Dimensions

Type	Size	A	B	C Size	C Tolerance	D Size	D Tolerance	E	F	G	H	J	K	L Size	L Tolerance	M	N	P
JT07		190	75	155	$+0.025$ 0	172	± 0.2	55	5	3-M10	88	28	43	11	$+0.15$ $+0.05$	27.5	47.5	20
JT09		232	84	190	$+0.029$ 0	210	± 0.2	70	6	3-M12	100	32	50	12	$+0.15$ $+0.05$	29.5	54.5	23

Specifications

Type	Spec.	Thru-Hole mm	Max. static gripping force kN(kgf)	Max. speed min ⁻¹ (r.p.m)	Weight (with standard jaws) kg	Moment of inertia kg·m ²	Gripping range		Matching soft jaw	Handle torque N·m(kgf·m)
							Outer dia.φmm	Inner dia.φmm		
JT07		55	20.7(2110)	3500	12.6	0.065	4~180	62~170	For JT07	73.5 (7.5)
JT09		70	24.7(2518)	2900	21.4	0.160	5~220	70~210	For JT09	98.0 (10.0)



CHUCK

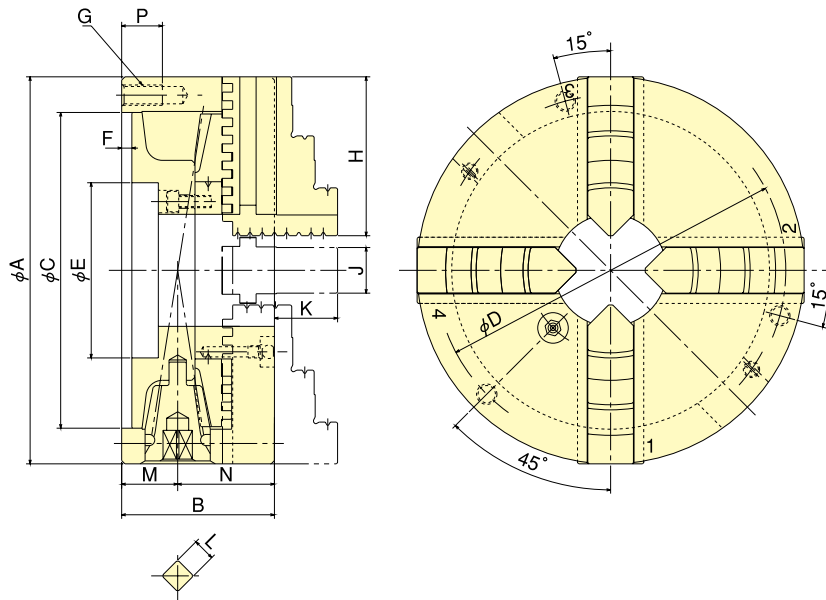
4-Jaw Scroll Chuck JS series

Reliable and effective gripping of irregularly shaped components

- Thin walled materials ensure minimal distortion, even with thin-walled cylindrical pipe
- Straight recess
Mounting dimensions are the same as the JN type.



Dimensional Drawings



Dimensions

Type	Size	A	B	C Size	C Tolerance	D Size	D Tolerance	E	F	G	H	J	K	L Size	L Tolerance	M	N	P
JS07		190	75	155	$^{+0.025}_0$	172	± 0.2	55	5	3-M10	78	22.4	31	11	$^{+0.15}_{+0.05}$	27.5	47.5	20
JS09		232	84	190	$^{+0.029}_0$	210	± 0.2	70	6	3-M12	88	26.4	33	12	$^{+0.15}_{+0.05}$	29.5	54.5	23

Specifications

Type	Spec.	Thru-Hole mm	Max. static gripping force kN(kgf)	Max. speed min ⁻¹ (r.p.m)	Weight kg	Moment of inertia kg·m ²	Gripping range		Handle torque N·m(kgf·m)
							Outer dia.φ mm	Inner dia.φ mm	
JS07		55	31.0 (3161)	3500	12.5	0.063	4~180	56~170	107.9 (11.0)
JS09		70	37.0 (3773)	2900	21.5	0.163	5~220	62~210	147.0 (15.0)



CHUCK

Independent Chuck (Straight Recess)

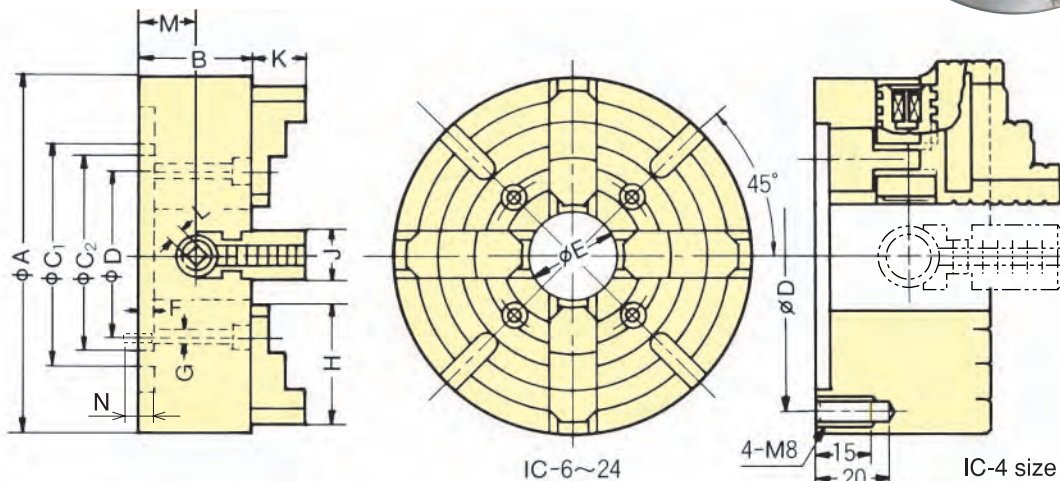
IC series

Independent 4 Jaw Chuck

● Straight recess



Dimensional Drawings



(Note) In IC-4, 6 and 8, there is no T-groove on the chuck surface.

Dimensions

Type	Size	A	B	C ₁	Size	Tolerance	C ₂	D	E	F	G	H	J	K	Size	Tolerance	L	M	N
IC-4	100	48	-	75H7	+0.030	0	86	30	4	-	40	18	20	6		26	-		
IC-6	150	60	-	130H7	+0.040	0	115	40	5	4-M10	55	25	25	8		33	16		
IC-8	200	75	-	175H7	+0.040	0	155	50	6	4-M12	75	30	30	10		43.5	20		
IC-10	250	80	165	150H7	0		125	55	6	4-M12	90	30	35	10		47.5	21		
IC-12	300	90	186	170H7			140	65	6	4-M12	100	35	40	12		53	21		
IC-14	350	90	210	190H7			160	75	8	4-M12	110	35	45	12		53	18		
IC-16	400	100	230	210H7	+0.046	0	180	90	8	4-M16	120	40	50	14	+0.15	58.5	24		
IC-18	450	105	250	230H7	0		200	100	8	4-M16	130	40	55	14	+0.05	63.5	24		
IC-20	500	110	272	250H7			220	110	8	4-M16	140	45	60	14		56.5	24		
IC-22	550	115	300	275H7	+0.052	0	240	115	10	4-M20	150	45	65	14		61.5	28		
IC-24	600	120	330	300H7	0		260	120	10	4-M20	160	50	70	15		65.5	32		
IC-26	660	140	355	325H8	+0.089	0	275	125	12	8-M16	170	50	80	15		76	23		
IC-28	710	146	382	350H8	0		300	130	12	8-M20	190	55	85	17		73	29		

Specifications ※Mounting of IC26 - 40: 45° pitch 8 pcs.

Type	Spec. Thru-Hole mm	Max. static gripping force		Max gripping dia.		Min. gripping dia.	Chuck		
		Handle torque N·m (kgf·m)	Tightening force of a jaw kN (kgf)	Inner jaw φmm	Outer jaw φmm	Inner jaw φmm	Weight kg	Moment of inertia kg·m ²	Max. speed min ⁻¹ (r.p.m)
IC-4	30	34.0 (3.5)	5.0 (510)	40	90	8	2.4	0.003	2000
IC-6	40	49.0 (5.0)	6.0 (612)	60	140	8	6.1	0.020	1600
IC-8	50	83.0 (8.5)	10.0 (1020)	75	185	14	14.8	0.075	1600
IC-10	55	118.0 (12.0)	14.0 (1428)	95	220	14	21.0	0.150	1600
IC-12	65	147.0 (15.0)	16.0 (1632)	125	265	18	29.5	0.350	1400
IC-14	75	157.0 (16.0)	17.0 (1733)	155	310	20	40.0	0.725	1400
IC-16	90	216.0 (22.0)	20.0 (2039)	190	360	30	56.5	1.125	1200
IC-18	100	216.0 (22.0)	20.0 (2039)	220	405	35	70.0	1.750	1200
IC-20	110	245.0 (25.0)	22.0 (2243)	250	450	40	90.0	2.950	900
IC-22	115	245.0 (22.0)	22.0 (2243)	290	500	40	135.0	4.400	900
IC-24	120	275.0 (28.0)	23.0 (2345)	320	550	40	150.0	6.325	900
IC-26	125	294.0 (30.0)	23.0 (2345)	370	610	40	176.0	10.500	900
IC-28	130	294.0 (30.0)	23.5 (2396)	385	650	45	247.0	14.500	900

※A single jaw guide way is used for types from IC-4 to IC24 and a double jaw guide way from IC-26 to IC-40.

※T-slot for jig mounting is provided from IC-10 or more.

※Four mounting bolts are provided from IC-4 to IC24 and eight mounting bolts from IC-26 to IC-40. (Except IC-4, chucks are mounted with hexagon socket set screws. Consequently, tap the backplate.)

※One hex wrench is attached for the chuck of each size (except IC-4).



CHUCK

Independent Chuck (Short Taper)

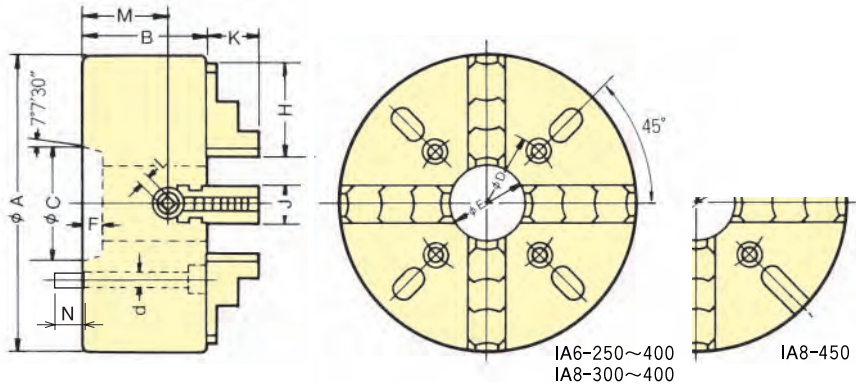
IA series

Independent 4 Jaw Chuck

- Chuck for short taper that can be directly mounted without back plate.



Dimensional Drawings



Dimensions

Spindle nose	Type	Size	A	B	C	D	E	F	H	J	K	L	M	N	(Mounting bolt)	Number of mounting bolts
A ₂ - 5	IA 5 -200	200	70	82.563	104.8	50	15	75	30	30	10	38.5	17	M10×75	4	
	IA 6 -250	250	77	106.375	133.4	55	17	90	30	35	10	44.5	17	M12×80	4	
A ₂ - 6	IA 6 -300	300	90	106.375	133.4	65	17	100	35	40	12	53	19	M12×95	4	
	IA 6 -350	350	90	106.375	133.4	75	17	110	35	45	12	53	19	M12×95	4	
	IA 6 -400	400	100	106.375	133.4	75	17	120	40	50	14	58.5	17	M12×100	4	
	IA 6 -450	450	105	106.375	133.4	80	17	130	40	55	14	63.5	20	M12×110	8	
	IA 6 -500	500	109	106.375	133.4	90	17	140	40	60	14	63.5	16	M12×110	8	
A ₂ - 8	IA 8 -300	300	100	139.719	171.4	75	18.5	120	40	50	14	58.5	24	M16×105	4	
	IA 8 -350	350	100	139.719	171.4	75	18.5	120	40	50	14	58.5	24	M16×105	4	
	IA 8 -400	400	105	139.719	171.4	90	18.5	120	40	50	14	58.5	24	M16×110	4	
	IA 8 -450	450	105	139.719	171.4	100	18.5	130	40	55	14	63.5	24	M16×110	4	
	IA 8 -500	500	112	139.719	171.4	110	18.5	140	45	60	14	58.5	22	M16×115	8	
	IA 8 -550	550	110	139.719	171.4	110	18.5	150	45	65	14	56.5	24	M16×115	8	
A ₂ - 11	IA 8 -610	610	120	139.719	171.4	120	18.5	160	50	70	15	65.5	24	M16×125	8	
	IA11-500	500	130	196.869	235	110	22	140	45	75	14	67.8	31.5	M20×140	8	
	IA11-550	550	130	196.869	235	110	20	155	45	75	14	67.8	31.5	M20×140	8	
	IA11-610	610	140	196.869	235	120	20	170	50	80	15	76	31.5	M20×150	8	
	IA11-710	710	146	196.869	235	130	20	190	55	85	19	73	29	M20×150	8	

Specifications ※Mounting of IA-6-450, 500 or more : 45° pitch, 8 pcs.

Spindle nose	Type	Spec.	Thru-Hole mm	Max. static gripping force		Max gripping dia.		Min. gripping dia.		Chuck		
				Handle torque N·m(kgf·m)	Tightening force of a jaw kN(kgf)	Inner jaw φmm	Outer jaw φmm	Inner jaw φmm	Weight kg	Moment of inertia kg·m ²	Max. speed min ⁻¹ (r.p.m)	
A ₂ - 5	IA 5 -200	50	83.0(8.5)	10(1020)	75	185	14	14.9	0.080	3600		
	IA 6 -250	55	118.0(12.0)	15(1530)	95	220	14	24.2	0.188	3000		
A ₂ - 6	IA 6 -300	65	147.0(15.0)	16(1632)	125	265	18	39.1	0.400	2000		
	IA 6 -350	75	147.0(15.0)	16(1632)	155	310	20	50.9	0.750	2000		
	IA 6 -400	75	216.0(22.0)	20(2039)	190	360	30	69.8	1.175	1800		
	IA 6 -450	80	245.0(25.0)	23(2345)	220	405	35	97.2	1.775	1200		
	IA 6 -500	90	245.0(25.0)	23(2345)	250	450	40	103.5	3.380	1200		
A ₂ - 8	IA 8 -300	75	147.0(15.0)	16(1632)	125	265	18	39.1	0.400	2000		
	IA 8 -350	75	216.0(22.0)	20(2039)	155	310	20	56.2	0.775	2000		
	IA 8 -400	90	245.0(25.0)	23(2345)	190	360	30	73.8	1.250	1800		
	IA 8 -450	100	245.0(25.0)	23(2345)	220	405	35	102.5	1.825	1200		
	IA 8 -500	110	245.0(25.0)	23(2345)	250	450	40	108.4	3.550	1200		
	IA 8 -550	110	245.0(25.0)	23(2345)	290	500	40	123	4.025	1200		
A ₂ - 11	IA 8 -610	120	275.0(28.0)	23(2345)	320	550	40	136	5.700	1100		
	IA11-500	110	216.0(22.0)	19(1937)	250	450	40	130	4.225	1200		
	IA11-550	110	216.0(22.0)	19(1937)	290	500	40	145	4.725	1100		
	IA11-610	120	275.0(28.0)	23(2345)	320	550	40	204	8.625	900		
	IA11-710	130	392.0(40.0)	30(3059)	385	650	45	257	15.000	800		

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