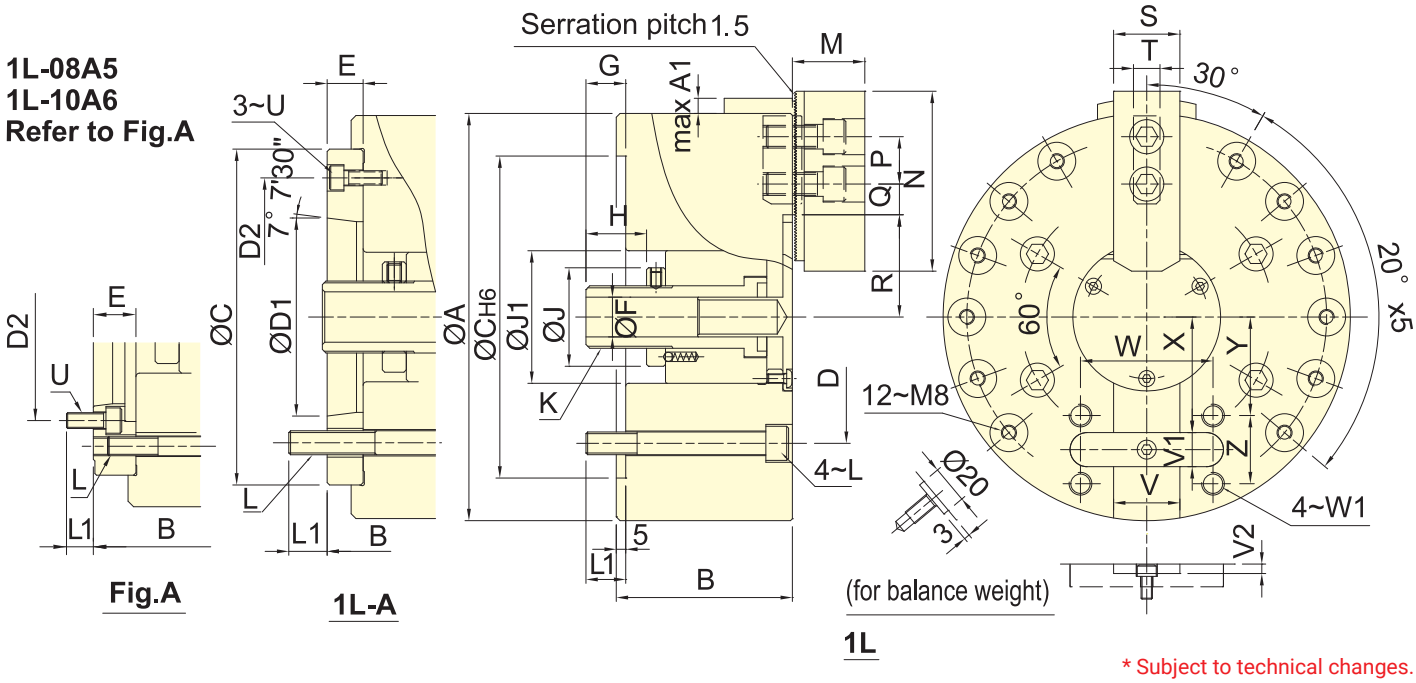
Application/customer benefits

- It's a CRANK type single-jaw with the large through-hole, and extra long jaw stroke.
- Suitable for clamping the jig.
- Construction of high rigidity and high clamping accuracy.



* Subject to technical changes.

Specifications

Model		Plunger stroke (mm)	Jaw stroke (Dia.) (mm)	Chucking Dia. Max. (mm)	Chucking Dia. Min. (mm)	Max. D.B. pull kN (kgf)	Max. clamping force kN (kgf)	Max. speed min^{-1}(r.p.m.)	I kg • m^2	Weight (kg)		Matching cyl.	Max. pressure MPa (kgf/cm^2)
1L-06	A5	20	16	168	17	12.3(1250)	27.3(2780)	3800	0.05	12.5	14.3	RK-100	1.7(17.5)
1L-08	A5	25	20	215	20	15.7(1600)	37.2(3800)	3000	0.15	24.2	27.1	RK-125	1.4(14.3)
1L-08	A6	25	20	215	20	15.7(1600)	37.2(3800)	3000	0.15	24.2	25.3	RK-125	1.4(14.3)
1L-10	A6	30	24	254	25	21.6(2200)	48.5(4950)	2400	0.28	38.8	46	RK-125	1.9(19.5)
1L-10	A8	30	24	254	25	21.6(2200)	48.5(4950)	2400	0.28	38.8	44.3	RK-125	1.9(19.5)

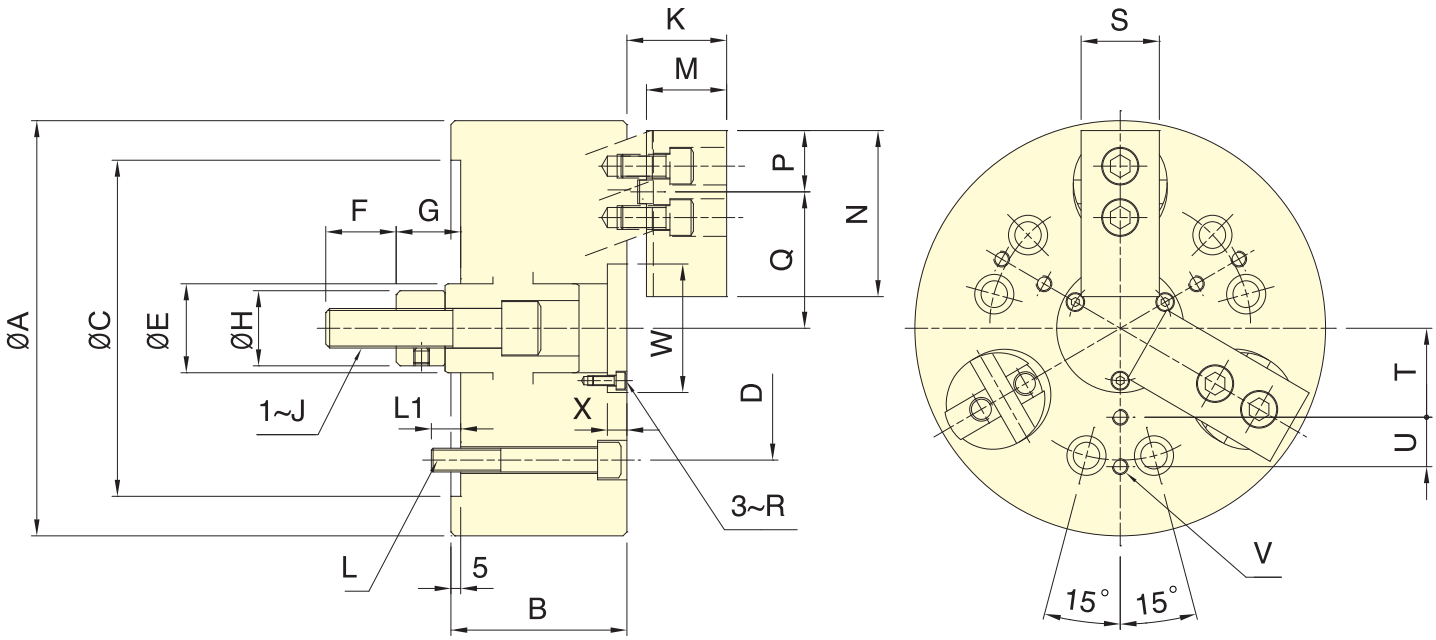
Dimensions

Model		A	A1	B	B	C	D	D1	D2	E	F	Gmax	Gmin	H	J	J1	K max.	L	L1	L1	M	N	P	Q max.	Q min.	R max.	R min.	S	T	U	V(H6)	V1(h9)	V2	W	W1	X	Y	Z
1L-06	A5	168	9.5	80	90	140	104.8	82.56	116	15	21	37	17	25	46	54	M30x1.5	M10	16	16	37	73	20	19.75	7.75	46	30	31	12	M6	30	15	4.5	64	M10	45	36	30
1L-08	A5	215	8	93	111	170	133.4	82.56	104.8	23	21	46	21	32	52	70	M33x1.5	M12	21	19	38	95	25	25.25	10.25	54	34	35	14	M6	35	18	4.5	70	M12	61	52	36
1L-08	A6	215	8	93	105	170	133.4	106.38	150	17	21	46	21	32	52	70	M33x1.5	M12	21	20	38	95	25	25.25	10.25	54	34	35	14	M6	35	18	4.5	70	M12	61	52	36
1L-10	A6	254	13.5	108	128	220	171.4	106.38	133.4	25	30	47	17	30	62	90	M45x1.5	M16	25	20	43	110	30	33.75	11.25	67	43	40	16	M8	40	20	5	90	M12	71	58.5	45
1L-10	A8	254	13.5	108	121	220	171.4	139.72	190	18	30	47	17	30	62	90	M45x1.5	M16	25	27	43	110	30	33.75	11.25	67	43	40	16	M8	40	20	5	90	M12	71	58.5	45

SPECIAL PURPOSE

Application/customer benefits

- With workpiece can do radial clamp and axial pull-down at the same time, which able to closer surface of the chuck.
- Can cooperate with the airtight detection, and axial position confirm, suitable for the precision of large length size process.
- The body with heat treatment and the organization of cylinder pull-down, and fine boring, which guarantee to the high clamping precision and durableness, it's suitable for heavy duty machining.



* Subject to technical changes.

Specifications

Model	Plunger stroke (mm)	Jaw stroke (Dia.) (mm)	Chucking Dia. Max. (mm)	Chucking Dia. Min. (mm)	Max. D.B. pull kN (kgf)	Max. clamping force kN (kgf)	Max. speed min^{-1}(r.p.m.)	I kg • m^2	Weight (kg)	Matching cyl.	Max. pressure MPa (kgf/cm^2)
3D-04	7	5	110	13	6.0(612)	10.5(1070)	3500	0.007	4.5	RK-75	1.6(16.5)
3D-05	7	5	135	21	10.0(1020)	17.0(1730)	3500	0.018	7.9	RK-75	2.7(27.5)
3D-06	10	7.2	165	22	15.0(1530)	25.0(2550)	3500	0.051	15	RK-100	2.1(21.4)
3D-08	10	7.2	210	28	25.0(2550)	45.0(4590)	3000	0.15	26	RK-125	2.2(22.5)
3D-10	15	10.8	254	35	35.0(3569)	60.0(6118)	2500	0.37	46	RK-125	3.1(31.6)
3D-12	15	10.8	304	50	45.0(4590)	75.0(7650)	2000	0.79	70	RK-150	2.8(28.5)
* 3D-15	20	14.5	381	60	53.9(5500)	90.0(9180)	1500	2.25	132	RK-150	3.4(34.2)

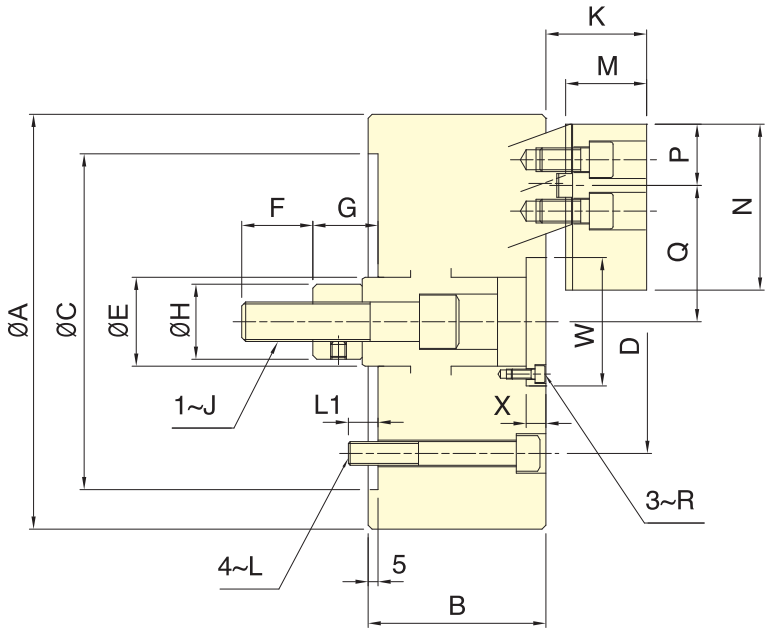
Dimensions

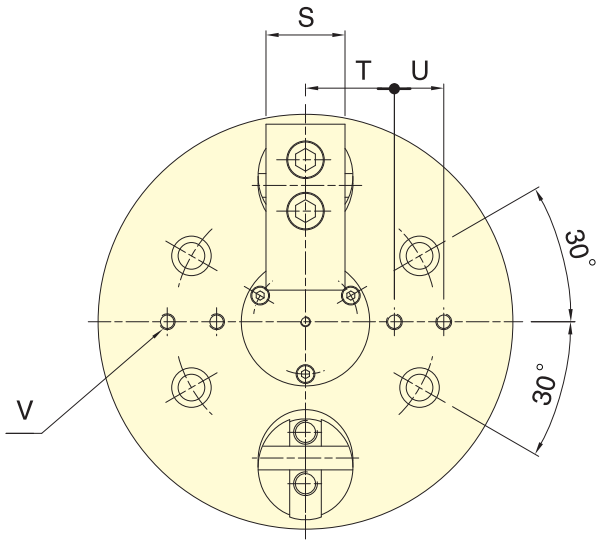
Model	A	B	C	D	E	F	G max.	G min.	H	J	K max.	K Min.	L	L1	M	N	P	Q max.	Q min.	R	S	T	U	V	W	X
3D-04	110	60	85	70.6	25	20	22	15	25	M10	30	23	3~M10	15	19.5	50	22	37	34.5	M3	25	22.5	-	3~M6	35	2
3D-05	135	70	110	82.6	30	25	24	17	28	M12	35	28	3~M10	16	24.5	56	23	46	43.5	M3	30	27.5	-	3~M6	44	2
3D-06	165	85	140	104.8	35	36	37	27	32	M16	45	35	6~M10	16	31	70	27	57.7	54.3	M4	35	35	20	6~M6	52	7
3D-08	210	90	170	133.4	45	36	38	28	38	M20	56	46	6~M12	15	41	84	31	70.8	67.2	M5	40	45	25	6~M8	65	10
3D-10	254	110	220	171.5	55	46	47	32	50	M24	65	50	6~M16	24	46	100	38	85	79.6	M6	50	55	30	6~M8	75	12
3D-12	304	125	220	171.5	55	50	49.5	34.5	53	M27	65	50	6~M16	22	51	120	42	101.9	96.5	M6	60	70	35	6~M10	90	12
* 3D-15	381	140	300	235	70	55	61	41	55	M30	86	66	6~M20	30	60	165	60	135.6	128.3	M8	70	95	45	6~M12	120	13

*model produced only by order.

Application/customer benefits

- With workpiece can do radial clamp and axial pull-down at the same time, which able to closer surface of the chuck.
- Can cooperate with the airtight detection, and axial position confirm, suitable for the precision of large length size process.
- The body with heat treatment and the organization of cylinder pull-down, and fine boring, which guarantee to the high clamping precision and durableness, it's suitable for heavy duty machining.





* Subject to technical changes.

Specifications

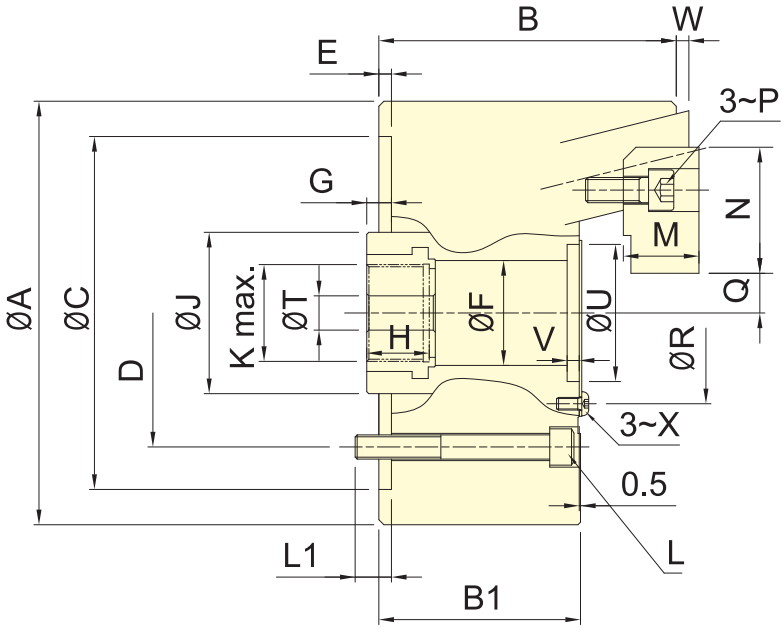
Model	Plunger stroke (mm)	Jaw stroke (Dia.) (mm)	Chucking Dia. Max. (mm)	Chucking Dia. Min. (mm)	Max. D.B. pull kN (kgf)	Max. clamping force kN (kgf)	Max. speed min^{-1}(r.p.m.)	I kg • m^2	Weight (kg)	Matching cyl.	Max. pressure MPa (kgf/cm^2)
2D-06	10	7.2	165	22	10.0(1020)	16.7(1700)	3500	0.045	12	RK-100	1.4(14.3)
2D-08	10	7.2	210	28	16.7(1700)	30.0(3060)	3500	0.13	23	RK-125	1.5(15)
2D-10	15	10.8	254	35	23.3(2379)	40.0(4079)	2500	0.34	43	RK-125	2.1(21.1)

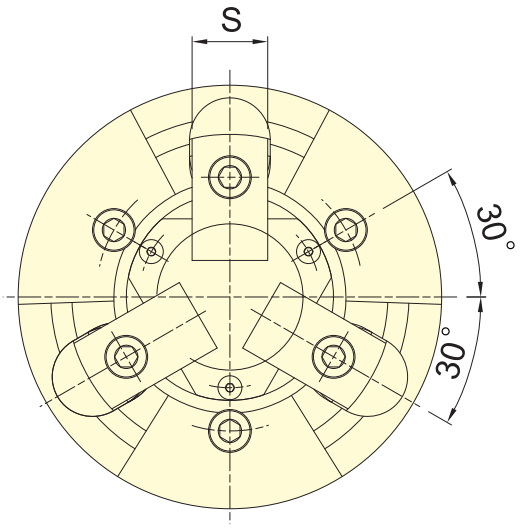
Dimensions

Model	A	B	C	D	E	F	G max.	G min.	H	J	K max.	K Min.	L	L1	M	N	P	Q max.	Q min.	R	S	T	U	V	W	X
2D-06	165	85	140	104.8	35	36	37	27	32	M16	45	35	M10	16	31	70	27	57.7	54.3	M4	35	35	20	4~M6	52	7
2D-08	210	90	170	133.4	45	36	38	28	38	M20	56	46	M12	15	41	84	31	70.8	67.2	M5	40	45	25	4~M8	65	10
2D-10	254	110	220	171.4	55	46	47	32	50	M24	65	50	M16	24	46	100	38	85	79.6	M6	50	55	30	4~M8	75	12

Application/customer benefits

- It's a Pin-Arbor Draw Down type 3-jaw thru-hole power chuck.
- High radial gripping force and high accuracy.
- Suitable for heavy machining.





* Subject to technical changes.

Specifications

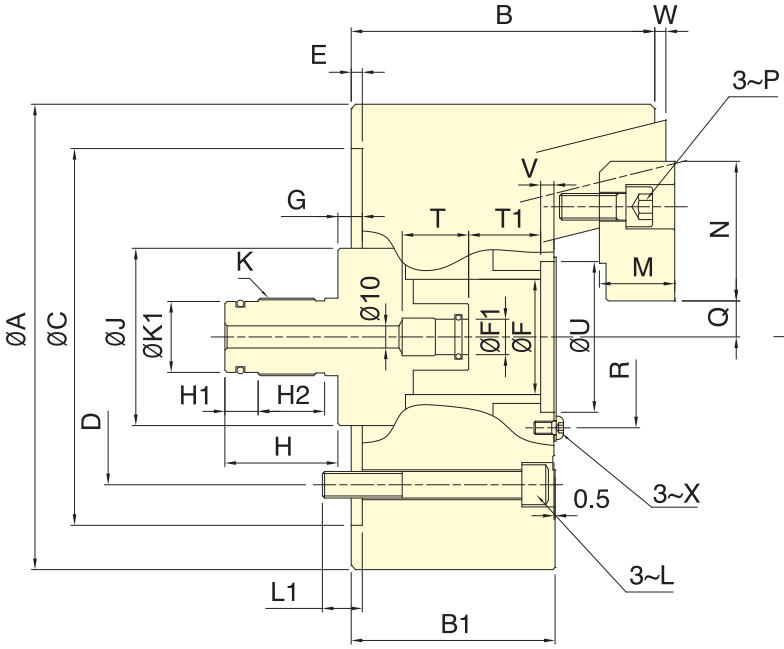
Model	Plunger stroke (mm)	Jaw stroke (Dia.) (mm)	Chucking Dia. Max. (mm)	Chucking Dia. Min. (mm)	Max. D.B. pull kN (kgf)	Max. clamping force kN (kgf)	Max. speed min^{-1}(r.p.m.)	I kg • m^2	Weight (kg)	Matching cyl.	Max. pressure MPa (kgf/cm^2)
3U-203	4	2	42	14	5.8(590)	16.7(1700)	10000	0.001	1.8	RK-75(N)	1.6(16)
3U-204	6	3	60	10	10.0(1020)	28.4(2900)	8000	0.005	3.9	RK-75(N)	2.7(27)
3U-205	6	3	84	15	13.9(1420)	39.7(4050)	8000	0.012	6.8	RK-100(N)	2.0(20)
3U-206	10	5	105	24	17.9(1830)	57.8(5900)	7000	0.055	14.7	RK-100(N)	2.6(26)
3U-208	10	5	132	25	25.0(2550)	80.0(8150)	6000	0.14	25.5	RK-125(N)	2.2(22)
3U-210	10	5	163	34	35.0(3570)	100.0(10100)	4500	0.36	43.5	RK-125(N)	3.1(31)
3U-212	10	5	210	81	35.0(3570)	100.0(10100)	3600	0.68	63	RK-125(N)	3.1(31)

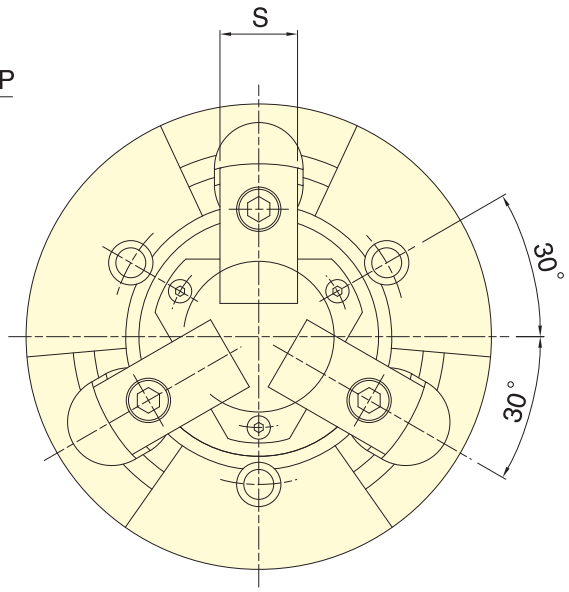
Dimensions

Model	A	B	B1	C(H6)	D	E	F	G max.	G min.	H	J	K	L	L1	M	N	P	Q max.	Q min.	R	S	T	U(H6)	V	W Max.	W Min.	X
3U-203	85	54.5	42	70	54	3.5	25	18	14	22	38	M20x1.5	3~M8	11	12	26	M5	7.5	6.5	38	15	10	32	3.5	2	-2	M3
3U-204	110	72.5	55	85	70.6	4	30	16	10	24.5	42	M24x1.5	3~M10	12	17	32	M6	10.75	9.25	46	20	10	38	4	3	-3	M4
3U-205	135	84.5	63	110	82.6	4	35	16	10	26	50	M28x1.5	3~M10	15	20	41.5	M8	13.25	11.75	55	24	10	45	5	3	-3	M5
3U-206	168	118	80	140	104.8	5	45	20	10	31	60	M35x1.5	3~M10	16.5	30	50	M10	15.75	13.25	72	30	17	58	6	5	-5	M5
3U-208	210	137	92	170	133.4	5	52	21	11	31	80	M48x2	3~M12	18	34	63	M12	16.25	13.75	82	35	17	68	6	5	-5	M6
3U-210	254	152	102	220	171.4	5	75	25	15	37	105	M68x2	3~M16	23	39	74	M14	20.75	18.25	107	40	17	93	6	5	-5	M8
3U-212	304	157	102	220	171.4	5	100	25	15	37	135	M92x2	3~M16	26	44	74	M14	44.25	41.75	130	40	17	114	6	5	-5	M10

Application/customer benefits

- It's a Pin-Arbor Draw Down type 3-jaw non-thru-hole power chuck.
- High radial gripping force and high accuracy.
- Suitable for heavy machining.





* Subject to technical changes.

Specifications

Model	Plunger stroke (mm)	Jaw stroke (Dia.) (mm)	Chucking Dia. Max. (mm)	Chucking Dia. Min. (mm)	Max. D.B. pull kN (kgf)	Max. clamping force kN (kgf)	Max. speed min^{-1}(r.p.m.)	I kg • m^2	Weight (kg)	Matching cyl.	Max. pressure MPa (kgf/cm^2)
3U-205K	6	3	84	15	13.9(1420)	39.7(4050)	8000	0.018	6.8	RL-100 RL-A100N	2.0(20)
3U-206K	10	5	105	24	18.0(1835)	58.0(5910)	7000	0.055	14.9	RL-100 RL-A100N	2.5(25)
3U-208K	10	5	132	25	25.0(2550)	80.0(8150)	6000	0.14	25.8	RL-125 RL-A125N	2.2(22)
3U-210K	10	5	163	34	35.0(3570)	100(10100)	4500	0.36	44	RL-125 RL-A125N	3.1(31)
3U-212K	10	5	210	81	35.0(3570)	100(10100)	3600	0.68	63.8	RL-125 RL-A125N	3.1(31)

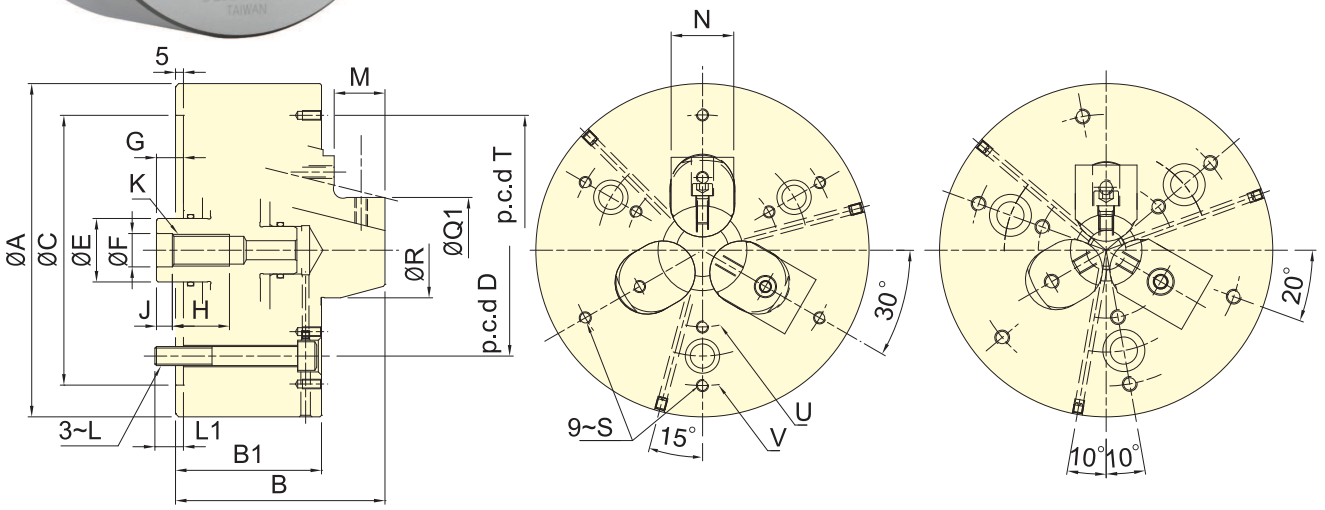
Dimensions

Model	A	B	B1	C(H6)	D	E	F	F1(H8)	G max.	G min.	H	H1	H2	J	K	K1	L	L1	M	N	P	Q max.	Q min.	R	S	T	T1	U(H6)	V	W Max.	W Min.	X
3U-205K	135	84.5	63	110	82.6	4	35	14	16	10	42	12	-	50	M25X1.5	22	M10	15	20	41.5	M8	13.25	11.75	55	24	25	15.5	45	5	3	-3	M5
3U-206K	168	118	80	140	104.8	4	45	14	20	10	48	12	30	60	M28X1.5	24	M10	16.5	30	50	M10	15.75	13.25	72	30	30	26.5	58	6	5	-5	M5
3U-208K	210	137	92	170	133.4	5	52	16	21	11	51	15	30	80	M35X1.5	30	M12	18	34	63	M12	16.25	13.75	82	35	30	32.5	68	6	5	-5	M6
3U-210K	254	152	102	220	171.4	5	75	16	25	15	51	15	30	105	M38X1.5	34	M16	23	39	74	M14	20.75	18.25	107	40	30	36.5	93	6	5	-5	M8
3U-212K	304	157	102	220	171.4	5	100	16	25	15	51	15	30	135	M45X1.5	40	M16	26	44	74	M14	44.25	41.75	130	40	30	36.5	114	6	5	-5	M10

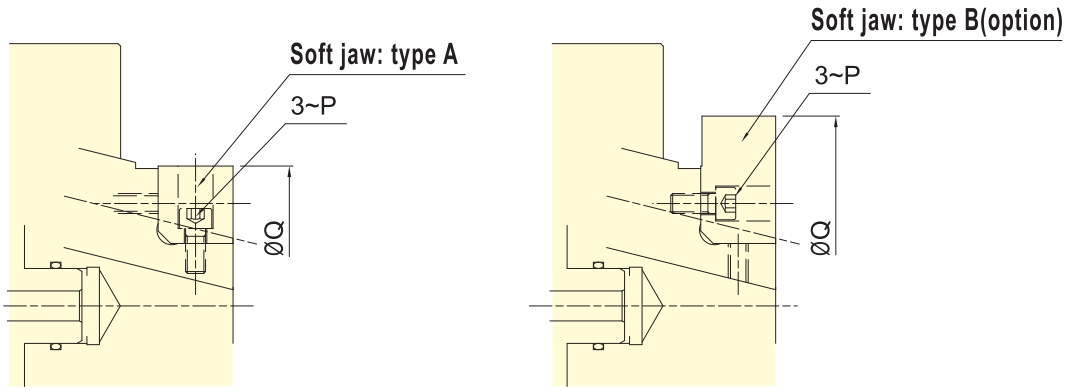
SPECIAL PURPOSE

Application/customer benefits

- Master jaw can gripped the workpiece directly when the gripping diameter is small.
- Pull back is suitable for gripped.It can perform the pressure detection function.
- With high precision and stability that chuck suitable for end process.



3E-06、08、10　　3E-05



Specifications

* Subject to technical changes.

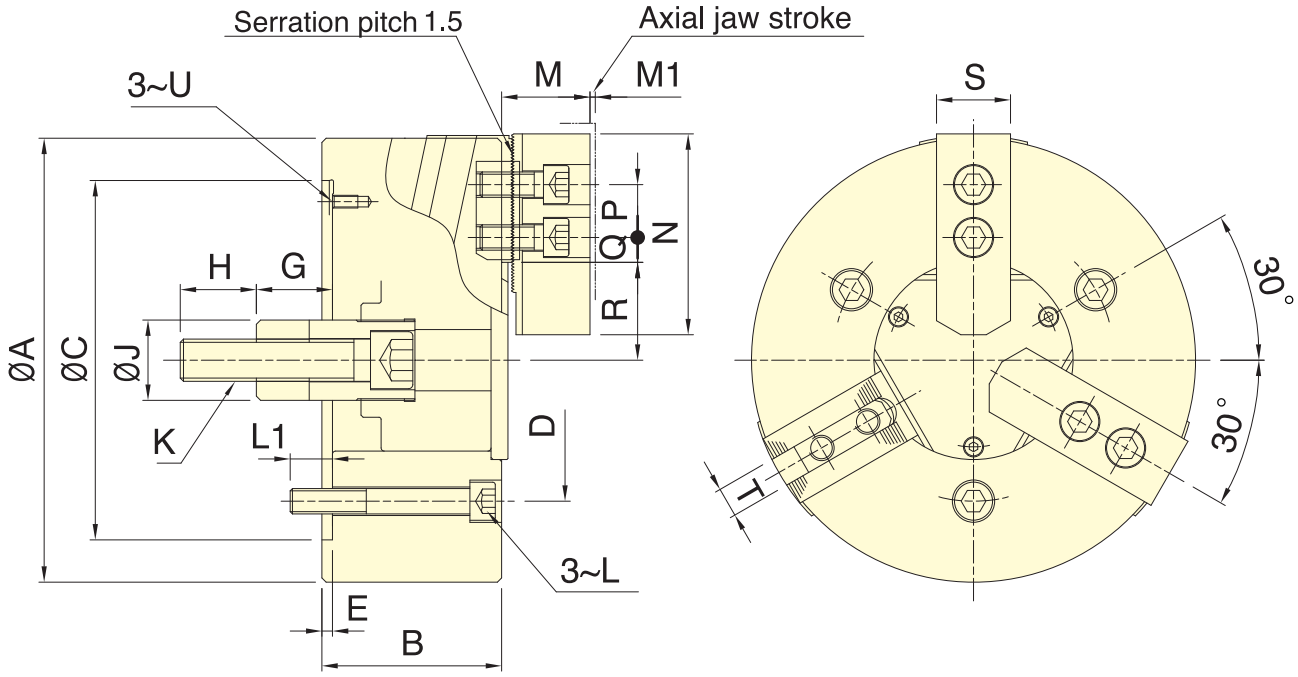
Model	Plunger stroke (mm)	Jaw stroke (Dia.) (mm)	Chucking Dia. Max. (mm)	Chucking Dia. Min. (mm)	Max. D.B. pull kN (kgf)	Max. clamping force kN (kgf)	Max. speed min^{-1}(r.p.m.)	I kg・m^2	Weight (kg)	Matching cyl.	Max. pressure MPa (kgf/cm^2)
3E-05	6	3	83	29	13.0(1325)	42.0(4280)	7000	0.018	7.2	RK-100	1.8(18.5)
3E-06	10	5	110	44	18.0(1835)	58.0(5910)	6000	0.042	13.6	RK-100	2.5(25.6)
3E-08	10	5	150	50	25.0(2530)	80.0(8150)	5000	0.14	26.5	RK-125	2.2(22.5)
3E-10	10	5	190	60	35.0(3570)	100.0(10200)	3600	0.31	39.5	RK-150	2.8(28.5)

Dimensions

型號	A	B	B1	C(H6)	D	E	F(H8)	G max.	G min.	H	J	K	L	L1	M	N	P	Type A		Ttype B		Q1		R	S	T	U	V
																		Q max.	Q min.	Q max.	Q min.	Q max.	Q min.					
3E-05	135	98	72	110	82.6	25	18	18	12	25	8	M16	M10	15	20	25	M6	68	50	83	67	50	29	25	M6X12	110	55	110
3E-06	165	112	80	140	104.8	35	18	22	12	30	8	M16	M10	16	23	31	M6	90	70	110	89	70	44	40	M6X12	130	76	134
3E-08	210	132	90	170	133.4	40	21	22	12	36	10	M20	M12	18	30	35	M8	110	90	150	108	90	50	49	M6X12	170	100	170
3E-10	254	152	102	220	171.4	50	25	25	15	48	10	M24	M16	23	35	40	M10	127	110	190	125	110	60	59	M8X16	210	120	210

Application/customer benefits

- The surface of the center covers through grinding treatment that couldable to in position base of the jig or the workpiece.
- The main jaws slideway oblique, improve the clamping force and float situation of the workpiece, equipped with standard top jaws.
- The chuck body and component through heat treatment to be enhance higher precision and lifetime.
- External gripping only



Specifications

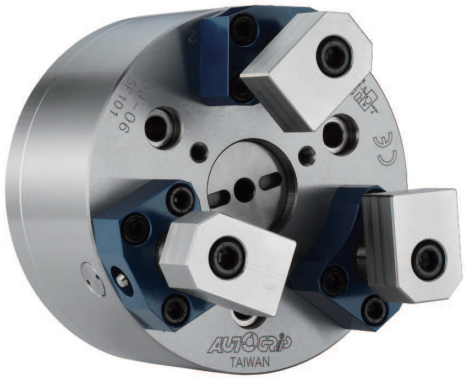
* Subject to technical changes.

Model	Plunger stroke (mm)	Jaw stroke (Dia.) (mm)	Chucking Dia. Max. (mm)	Chucking Dia. Min. (mm)	Max. D.B. pull kN (kgf)	Max. clamping force kN (kgf)	Max. speed min^{-1}(r.p.m.)	I kg・m^2	Weight (kg)	Matching cyl.	Max. pressure MPa (kgf/cm^2)
3N-06	20	8.1(Axial0.9)	165	14	18(1835)	61.5(6270)	5000	0.05	11.1	RK-100(N)	2.6(26)
3N-08	23	9.4(Axial1.0)	210	17	25(2540)	85.8(8750)	4500	0.14	24.5	RK-125(N)	2.2(22)
3N-10	25	10.2(Axial1.1)	254	22	29(2950)	108(11000)	4000	0.32	34.5	RK-150(N)	1.8(18)

Dimensions

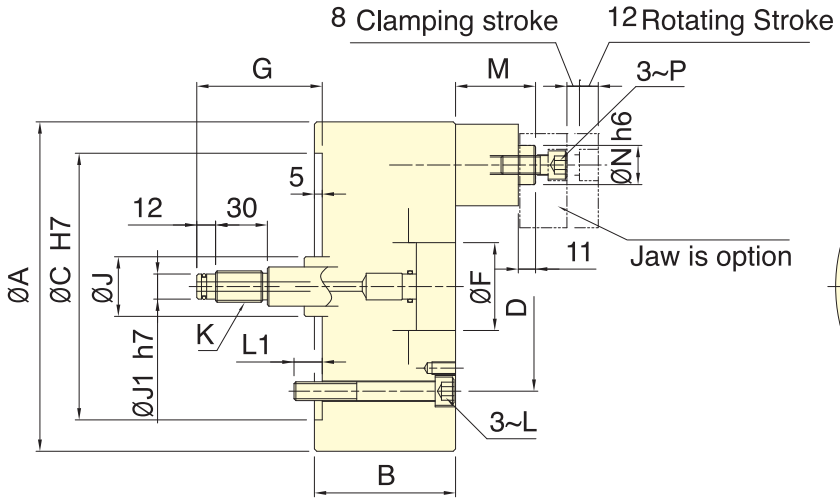
Model	A	B	C(H6)	D	E	G max.	G min.	H	J	K	L	L1	M	M1	N	P	Q max.	Q min.	R max.	R min.	S	T	U
3N-06	165	72	140	104.8	5	54.5	34.5	36	34	M16X2	M10	16	41	0.9	73	20	15.25	7.75	38.3	34.05	31	12	M6
3N-08	210	85	170	133.4	5	59	36	36	38	M20X2.5	M12	20	42	1	95	25	22.25	11.75	46.3	41.45	35	14	M6
3N-10	254	89	220	171.4	5	63	38	36	45	M20X2.5	M16	24	47	1.1	110	30	33.75	11.25	52.1	46.8	40	16	M8

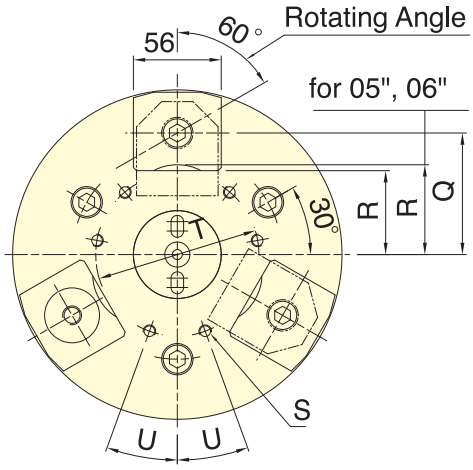
SPECIAL PURPOSE

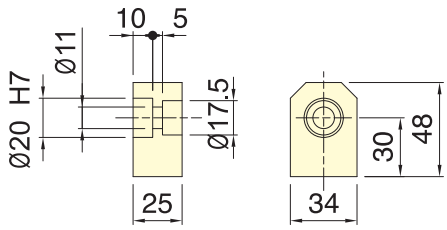


Application/customer benefits

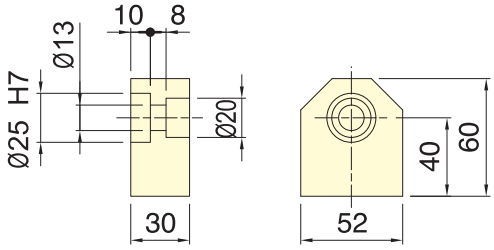
- Prevent deformation of workpiece for gripping the terminal surface, suitable for thin workpiece process.
- The compensating mechanism of gripping that can grasp the workpieces of the irregular surface.
- Additional check device able to install in the center of chuck.







for 05", 06"



for 08", 10", 12"

* Subject to technical changes.

Specifications

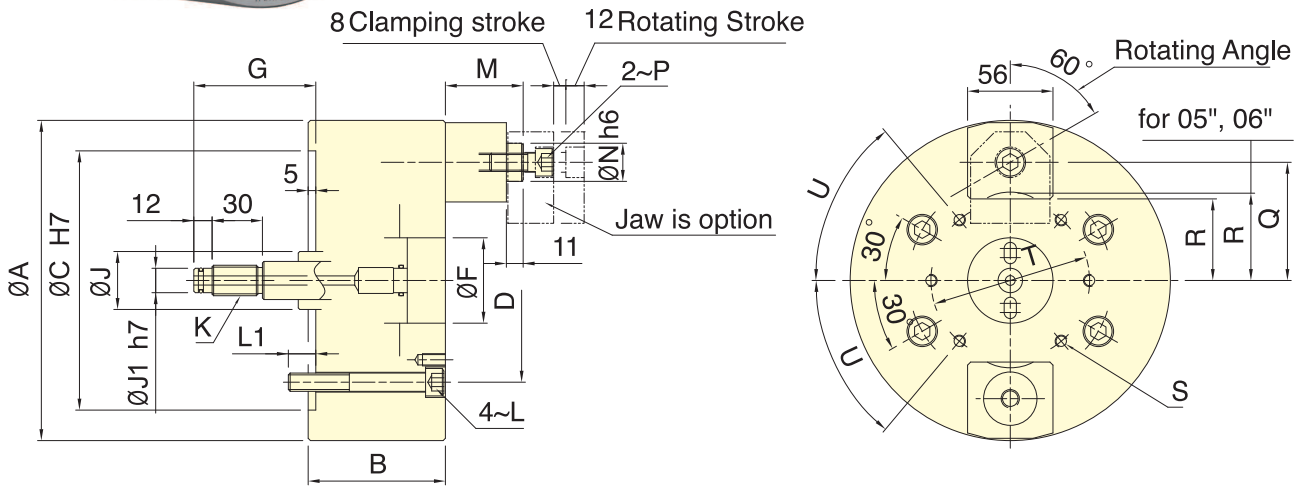
Model	Plunger stroke (mm)	Jaw stroke (Dia.) (mm)	Jaw's compensation (mm)	Chucking Dia. Max. (mm)	Chucking Dia. Min. (mm)	Max. D.B. pull kN (kgf)	Max. clamping force kN (kgf)	Max. speed min^{-1}(r.p.m.)	I $kg \cdot m^2$	Weight (kg)	Matching cyl.	Max. pressure MPa (kgf/cm^2)
3J-05	12	8	2	53	25	7.5(765)	6.0(612)	4000	0.02	11	RK-100 OR RK-100(N)	1.0(10)
3J-06	12	8	2	79	55	9.0(918)	7.5(765)	4000	0.04	12	RK-100 OR RK-100(N)	1.2(12)
3J-08	12	8	2	106	75	18.0(1835)	16.5(1680)	3500	0.13	23	RK-100 OR RK-100(N)	2.5(25)
3J-10	12	8	2.5	150	119	18.0(1835)	16.5(1680)	3500	0.3	33	RK-100 OR RK-100(N)	2.5(25)
3J-12	12	8	2.5	200	169	18.0(1835)	16.5(1680)	3000	0.56	44	RK-100 OR RK-100(N)	2.5(25)

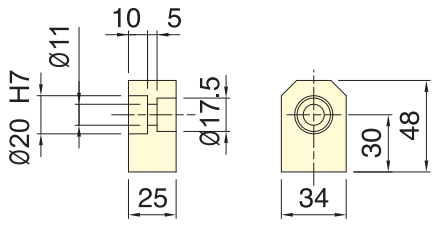
Dimensions

Model	A	B	C	D	F	G max.	G min.	J	J1	K	L	L1	M Max.	M Min.	N	P	Q	R	S	T	U
3J-05	135	86	110	82.6	40	75	55	25	9	M12X1.75	M10	15	56	36	20	M10	42.5	27	3~M6	50	-
3J-06	165	86	140	104.8	45	75	55	28	12	M16X2	M10	15	56	36	20	M10	57.5	40	3~M8	64	-
3J-08	210	90	170	133.4	56	80	60	38	16	M20X2.5	M12	18	71	51	25	M12	77.5	53.5	6~M8	104	20°
3J-10	254	95	220	171.4	56	75	55	38	16	M20X2.5	M16	24	71	51	25	M12	99.5	75.5	6~M8	140	20°
3J-12	304	95	220	171.4	56	75	55	38	16	M20X2.5	M16	24	71	51	25	M12	124.5	100.5	6~M8	190	20°

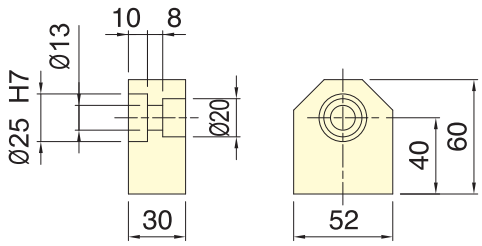
Application/customer benefits

- Prevent deformation of workpiece for gripping the terminal surface, suitable for thin workpiece process.
- The compensating mechanism of gripping that can grasp the workpieces of the irregular surface.
- Additional check device able to install in the center of chuck.





for 05", 06"



for 08", 10", 12"

* Subject to technical changes.

Specifications

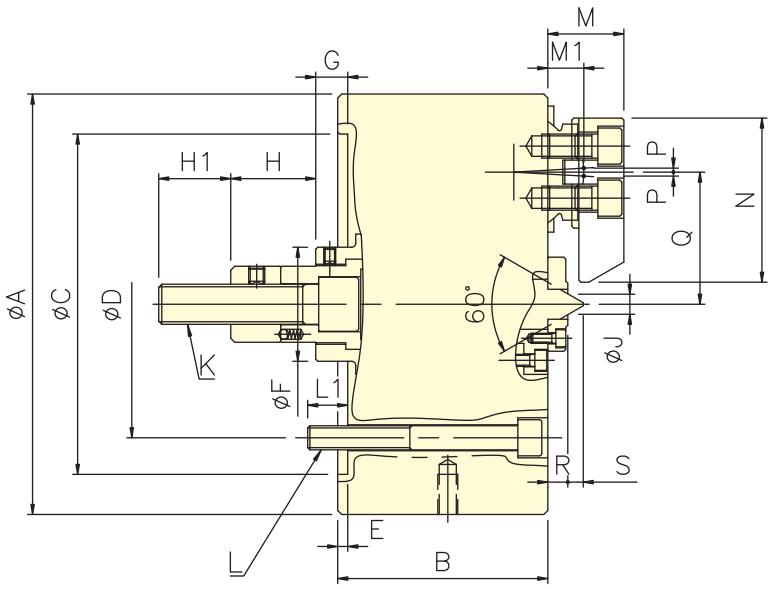
Model	Plunger stroke (mm)	Jaw stroke (Dia.) (mm)	Jaw's compensation (mm)	Chucking Dia. Max. (mm)	Chucking Dia. Min. (mm)	Max. D.B. pull kN (kgf)	Max. clamping force kN (kgf)	Max. speed min^{-1}(r.p.m.)	I kg • m^2	Weight (kg)	Matching cyl.	Max. pressure MPa (kgf/cm^2)
2J-05	12	8	2	53	25	5.0(510)	4.0(408)	4000	0.015	9	RK-100 OR RK-100(N)	0.7(7)
2J-06	12	8	2	79	55	6.0(612)	5.0(510)	4000	0.035	9.8	RK-100 OR RK-100(N)	0.8(8)
2J-08	12	8	2	106	75	12.0(1224)	11.0(1122)	3500	0.12	20.3	RK-100 OR RK-100(N)	1.7(17)
2J-10	12	8	2.5	150	119	12.0(1224)	11.0(1122)	3500	0.28	30.7	RK-100 OR RK-100(N)	1.7(17)
2J-12	12	8	2.5	200	169	12.0(1224)	11.0(1122)	3000	0.52	41.2	RK-100 OR RK-100(N)	1.7(17)

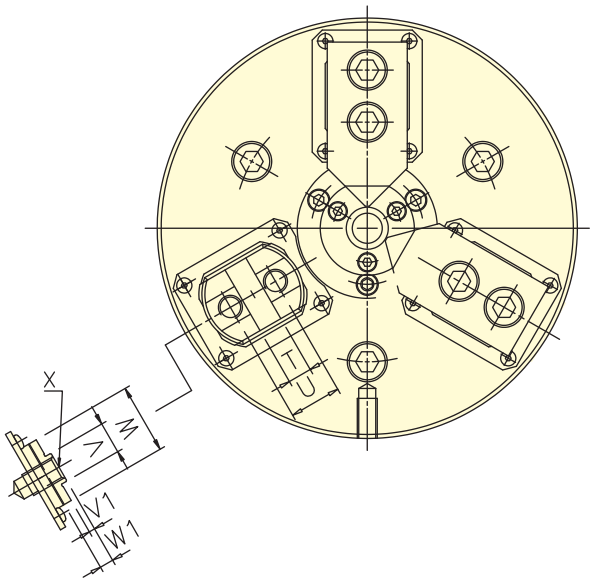
Dimensions

Model	A	B	C	D	F	G max.	G min.	J	J1	K	L	L1	M Max.	M Min.	N	P	Q	R	S	T	U
2J-05	135	86	110	82.6	40	75	55	25	9	M12X1.75	M10	15	56	36	20	M10	42.5	27	4~M6	50	30°
2J-06	165	86	140	104.8	45	75	55	28	12	M16X2	M10	15	56	36	20	M10	57.5	40	4~M8	64	30°
2J-08	210	90	170	133.4	56	80	60	38	16	M20X2.5	M12	18	71	51	25	M12	77.5	53.5	6~M8	104	50°
2J-10	254	95	220	171.4	56	75	55	38	16	M20X2.5	M16	24	71	51	25	M12	99.5	75.5	6~M8	140	50°
2J-12	304	95	220	171.4	56	75	55	38	16	M20X2.5	M16	24	71	51	25	M12	124.5	100.5	6~M8	190	50°

Application/customer benefits

- The workpieces compensation of eccentric is 2 mm, fixed position for the center thimble, swing and grasp the workpiece to three jaws.
- Suitable for such materials as the casting and forging to process.
- Special seal proof for dust and cutting fluid, it is more convenient when maintenance.
- Swing parts are to heat treatment hardened and ground for steel,in order to improve products service life.





* Subject to technical changes.

Specifications

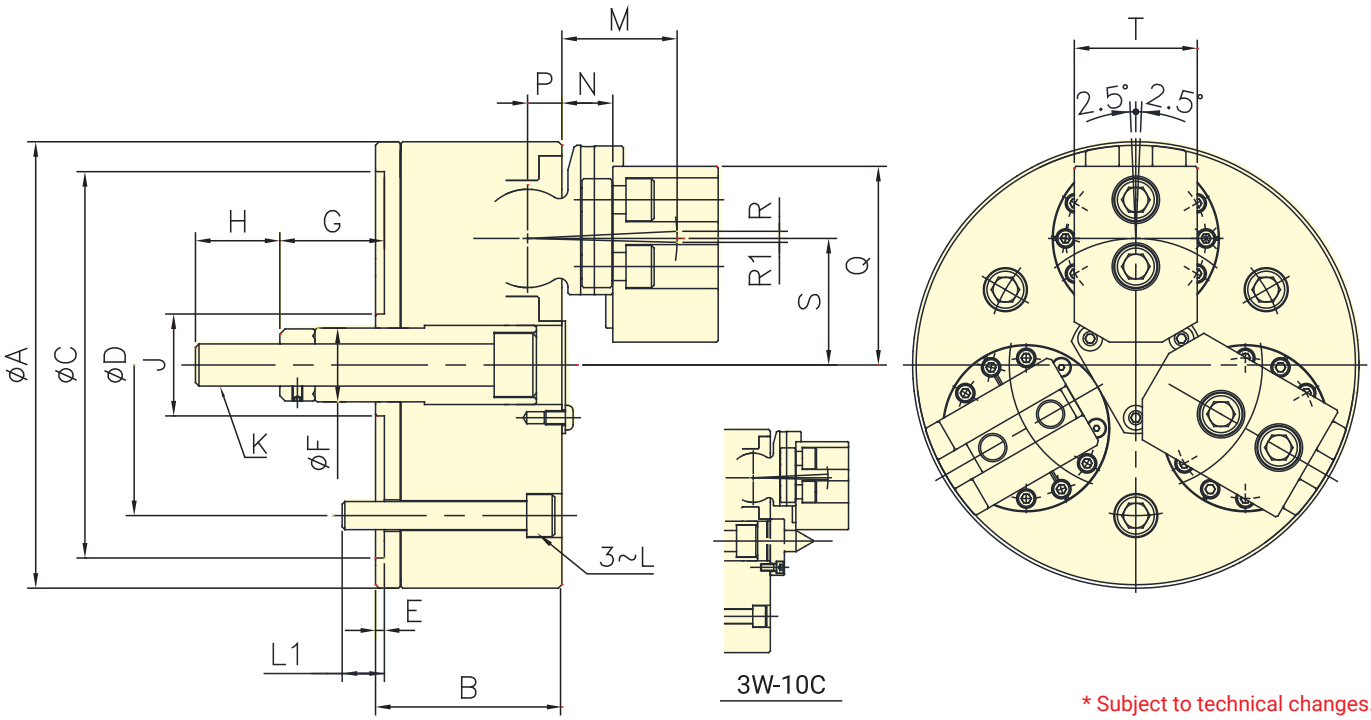
Model	Plunger stroke (mm)	Jaw stroke (Dia.) (mm)	Chucking Dia. Max. (mm)	Chucking Dia. Min. (mm)	Max. D.B. pull kN (kgf)	Max. clamping force kN (kgf)	Max. speed min^{-1}(r.p.m.)	I kg・m^2	Weight (kg)	Matching cyl.	Compensation (mm)
3R-08	20	8	65	18	19.6(1999)	53.0(5404)	2800	0.15	27	RK-100(N)	2
3R-10	25	10	90	22	29.4(2996)	67.7(6901)	2500	0.38	45	RK-125(N)	2

Dimensions

Model	A	B	C (H6)	D	E	F	Gmax.	Gmin.	H	H1	J	K	L	L1	M	M1	N	P	Q max.	Q min.	R	S	T (H7)	U	V	V1	W	W1	X
3R-08	210	105	170	133.4	5	57	26	6	42.5	36	10.4	M20x2.5	3~M12	20	38	18	82	2	68	64	10	7.7	12	26	16	3	35	7	M12
3R-10	254	115	220	171.4	5.5	64	36.5	11.5	25	39	15	M20x2.5	3~M16	22.5	40	19	102	2.6	82	78	10	11.3	15	32	18	3	40	7	M14

Application/customer benefits

- Swing and grasp the workpiece to three jaw.
  (3W is automatically positioned to the center type)
- Suitable for such materials as the casting and forging to process.
- Seal proof for dust and cutting fluid, it is more convenient when maintenance.
- Swing parts are to heat treatment hardened and ground for steel,in order to improve products service life.
- Swing and grasp the workpiece to three jaw.
  (3W-C is center compensation type)
- The workpieces compensation of eccentric is 2 mm, fixed position for the center thimble.



* Subject to technical changes.

Specifications

Model	Plunger stroke (mm)	Jaw stroke (Dia.) (mm)	Chucking Dia. Max. (mm)	Chucking Dia. Min. (mm)	Max. D.B. pull kN (kgf)	Max. clamping force kN (kgf)	Max. speed min^{-1}(r.p.m.)	I kg・m^2	Weight (kg)	Matching cyl.	Compensation (mm)
3W-10	17.5	12.5	205/235	50/85	35.3(3600)	105.9(10800)	2500	0.37	48.6	RK-125(N)	-
3W-10C	17.5	12.5	205/235	50/85	35.3(3600)	105.9(10800)	2500	0.37	48.6	RK-125(N)	2

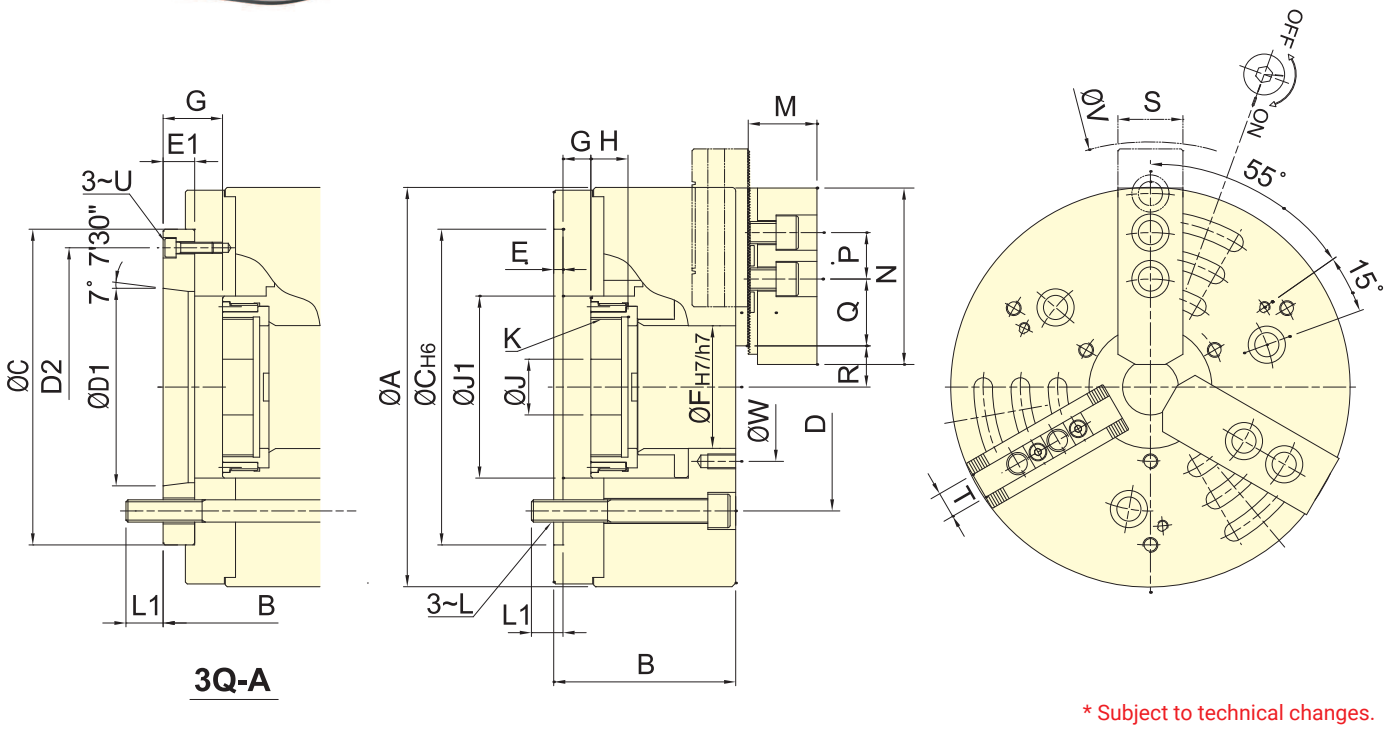
Dimensions

Model	A	B	C(H7)	D	E	F	Gmax.	Gmin.	H	J	K	L	L1	M	N	P	Q	R	R1	S	T
3W-10	254	106	220	171.4	5	42	67.5	50	48	58	M24x3	M16	24	65.6	29	19.5	113	4.03	2.26	72	70
3W-10C	254	106	220	171.4	5	42	67.5	50	48	58	M24x3	M16	24	65.6	29	19.5	113	4.03	2.26	72	70

SPECIAL PURPOSE

Application/customer benefits

- The shortest changes time for soft jaw, it is the high repeatability precision.
- Chuck of all parts hardened, ground and lubricated directly.
- Construction of high rigidity and high clamping accuracy.
- For safety system that master jaw will complete return when base jaw and serration match up properly.



* Subject to technical changes.

Specifications

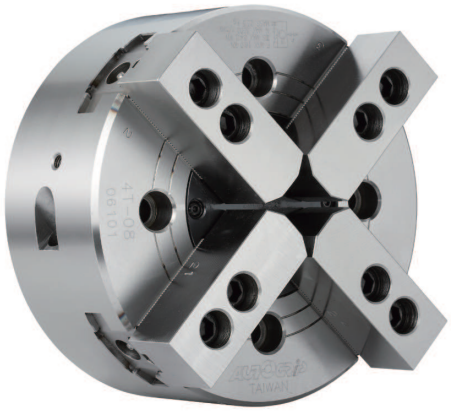
Model	Plunger stroke (mm)	Jaw stroke (Dia.) (mm)	Chucking Dia. Max. (mm)	Chucking Dia. Min. (mm)	Max. D.B. pull kN (kgf)	Max. clamping force kN (kgf)	Max. speed min^{-1}(r.p.m.)	I kg・m^2	Weight (kg)		Matching cyl.	Max. pressure MPa (kgf/cm^2)
* 3Q-08 A6	16	7.5	210	23	45.0(4590)	100.0(10200)	5000	0.15	24.5	26	TK-1068	3.1(31)
* 3Q-10 A8	19	8.8	254	41	60.0(6118)	135.0(13765)	4500	0.41	44	46	TK-1287	2.8(28)
* 3Q-12 A8	23	10.6	315	47	81.0(8259)	180.0(18354)	3500	0.96	73	75	TK-A1511	2.4(25)

Dimensions

Model	A	B	B	C	D	D1	D2	E	E1	F	G max.	G max.	G min.	G min.	H	J	J1	K	L	L1	L1	M	N	P	Q	R max.	R min.	S	T	U	V	W
* 3Q-08 A6	215	98	110	170	133.4	106.38	150	5	17	66	14.5	32	-1.5	15.5	20	30	98	M75x2	M12	17	20	37	95	25	36	20.8~44.8	17.1~41.1	35	14	M6	264	80
* 3Q-10 A8	254	119	132	220	171.4	139.72	190	5	18	81	8.5	26.5	-10.5	7.5	39	45	115	M90x2	M16	23	25	42	110	30	40.5	21.1~52.8	16.7~48.2	40	16	M8	312	100
* 3Q-12 A8	315	133	145	220	171.4	139.72	190	6	18	106	8.5	26.5	-14.5	3.5	42	50	140	M115x2	M16	22	24	50	111	30	57	34.1~70.1	28.8~64.8	50	21	M8	360	130

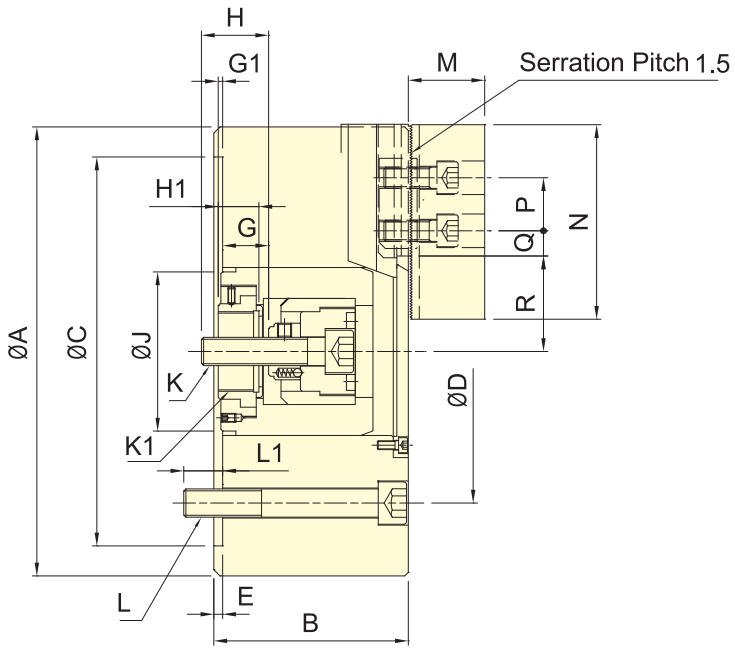
The dimensions and the specifications of 3Q-A type are in the red data.

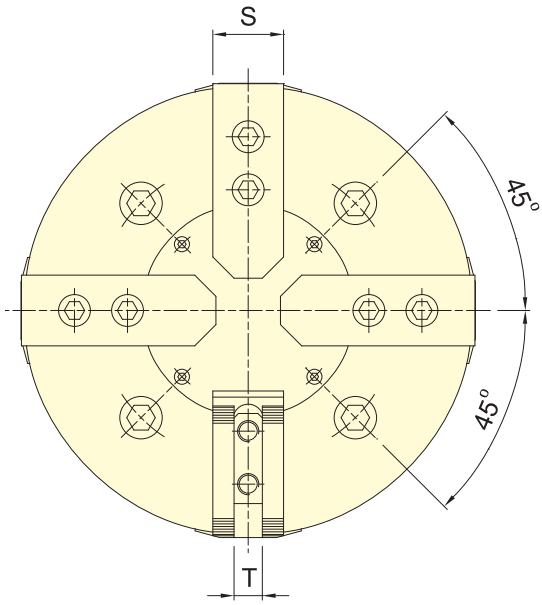
*model produced only by order.



Application/customer benefits

- It's a CRANK type with two pairs of 2 jaws self center independent of each other
- The 4T series is suitable for square bar and other nonuniform shaped workpieces.
- Patent numbers : Taiwan：PAT.M359385 / China：PAT.ZL2009.2.0009309.1





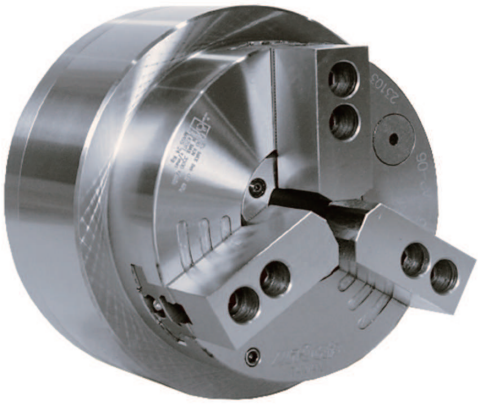
* Subject to technical changes.

Specifications

Model	Plunger stroke (mm)	Jaw stroke (Dia.) (mm)	Chucking Dia. Max. (mm)	Chucking Dia. Min. (mm)	Max. D.B. pull kN (kgf)	Max. clamping force kN (kgf)	Max. speed min^{-1}(r.p.m.)	I kg・m^2	Weight (kg)	Matching cyl.	Max. pressure MPa (kgf/cm^2)
4T-08	17	13.6	210	24	16.0(1630)	54.3(5540)	3000	0.15	23.2	RD-120(N)	1.7(17)
4T-10	20	16	254	50	21.6(2200)	79.4(8100)	2100	0.35	44.3	RD-125(N)	2.2(22)
4T-12	20	16	304	50	21.6(2200)	79.4(8100)	1500	0.66	57.6	RD-125(N)	2.2(22)
4T-15	25	19.6	381	60	27.2(2780)	105.3(10750)	1200	2.25	118.3	RD-125(N)	2.7(27)

Dimensions

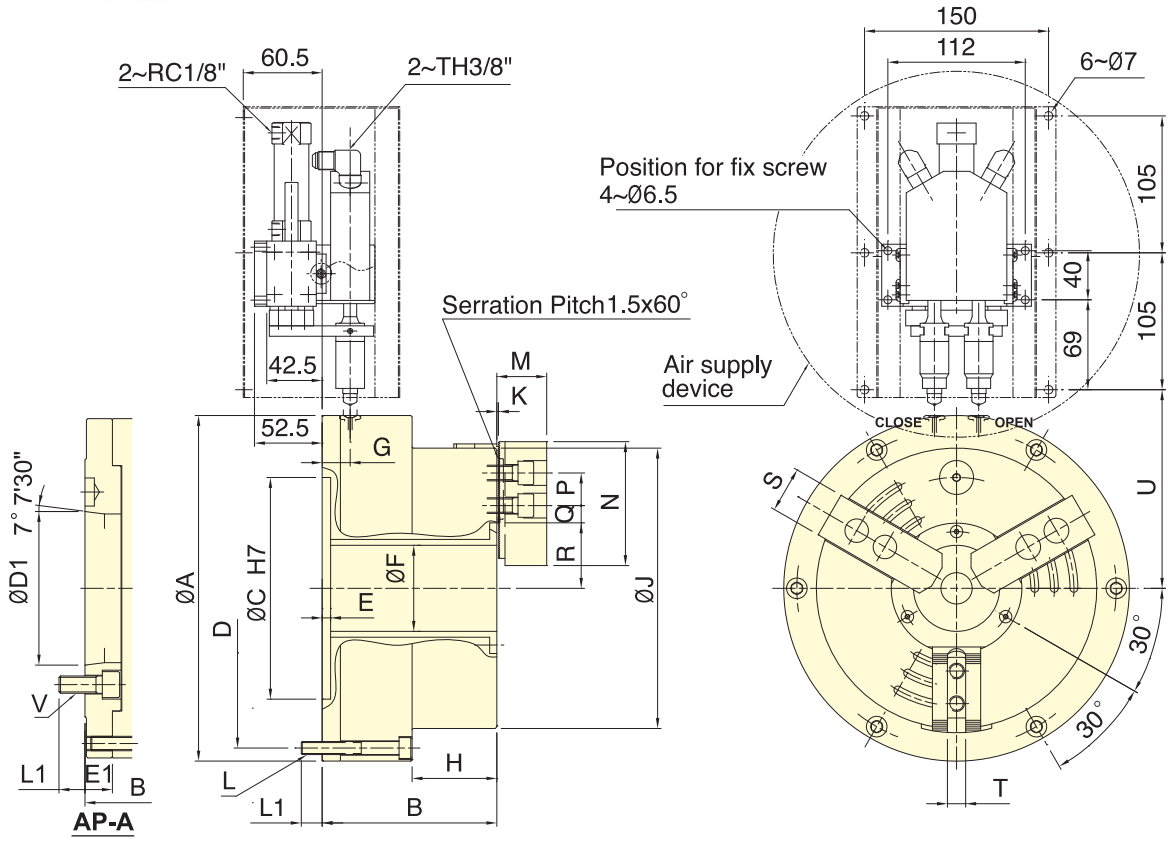
Model	A	B	C(H6)	D	E	G max.	G min.	G1 max.	G1 min.	H	H1	J	K	K1	L	L1	M	N	P	Q max.	Q min.	R max.	R min.	S	T
4T-08	210	91	170	133.4	5	32	15	2.5	-14.5	29	20	61	M14x2	M34x1.5	4~M2	20	38	95	25	25.25	13.25	46.1	39.3	35	14
4T-10	254	110	220	171.4	5	36.5	16.5	10	-10	36	23	90	M16x2	M45x1.5	4~M16	25	43	110	30	32.25	12.75	59	51	40	16
4T-12	304	110	220	171.4	5	36.5	16.5	10	-10	36	23	90	M16x2	M45x1.5	4~M16	25	43	110	30	54.75	15.75	59	51	40	16
4T-15	381	135	300	235	6	44.5	19.5	5	-20	45	28	125	M20x2.5	M55x2	4~M20	30	51	130	30	66.5	12.5	78.9	69.1	50	21



Application/customer benefits

- Large through-hole 3-jaw power chuck with build in air cylinder.
- The supply air system of the patent, it is easy to install fast, and without abrasion by traditional sealed ring, that could able to reduce maintenance and installation.
- Patent numbers :

Germany : 20.2011.101.818.4 / 20.2012.102.498.5
European Union : EP 2517822 B1
Taiwan : M440159 / M415011
Japan : 3169457 / 3178706
China : ZL 2011 2 0141324.9 / ZL 2012 2 0274549.6
US : US8770222 B2



Specifications

* Subject to technical changes.

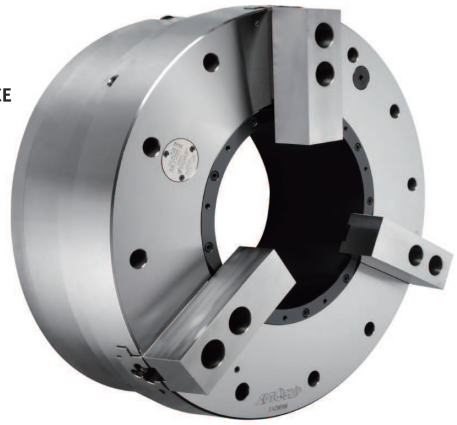
Model	Thru-hole Dia (mm)	Jaw stroke (Dia.) (mm)	Chucking Dia. Max. (mm)	Chucking Dia. Min. (mm)	Max. pressure MPa (kgf/cm²)	Max. clamping force kN (kgf)	Max. speed min⁻¹(r.p.m.)	I kg・m²	Weight (kg)		Air Consumption lit(at 6kgf/cm²)
AP-52 A6	52	5.9	170	15	0.6(6.1)	40.4(4118)	4200	0.2	26	27	3.1
AP-66 A6	66	7.6	215	24	0.6(6.1)	51.0(5185)	3500	0.4	38	39	5.1
AP-86 A8	86	8.9	268	43	0.6(6.1)	76.0(7723)	3200	0.7	58	60	8.7
AP-115 A8	115	10.6	330	55	0.6(6.1)	80.0(8155)	3000	1.7	92	95	12

Dimensions

Model	A	B		C	D	D1	E	E1	F	G	H	J	K	L	L1	L1	M	N	P	Q max.	Q min.	R max.	R min.	S	T	U	V
AP-52 A6	235	121	140	170	215	106.38	6.5	19	52	21.5	58.5	170	2	6~M10	15	18	37	73	20	21.2	9.2	38	35.1	31	12	145.5	6~M12
AP-66 A6	265	134	153	170	245	106.38	6.5	19	66	21.5	65	215	2	6~M10	16	18	38	95	25	23.7	8.7	50.2	46.4	35	14	159.5	6~M12
AP-86 A8	315	142	169	220	295	139.72	6.5	27	86	21.5	67	268	2	6~M10	16	24	43	110	30	32.2	12.7	62.2	57.8	40	16	184.5	6~M16
AP-115 A8	370	154	181	220	350	139.72	6.5	27	115	21.5	69	330	2	6~M10	16	24	51	130	30	44.7	14.7	77	71.7	50	21	212	6~M16

The dimensions and the specifications of AP-A type are in the red data.

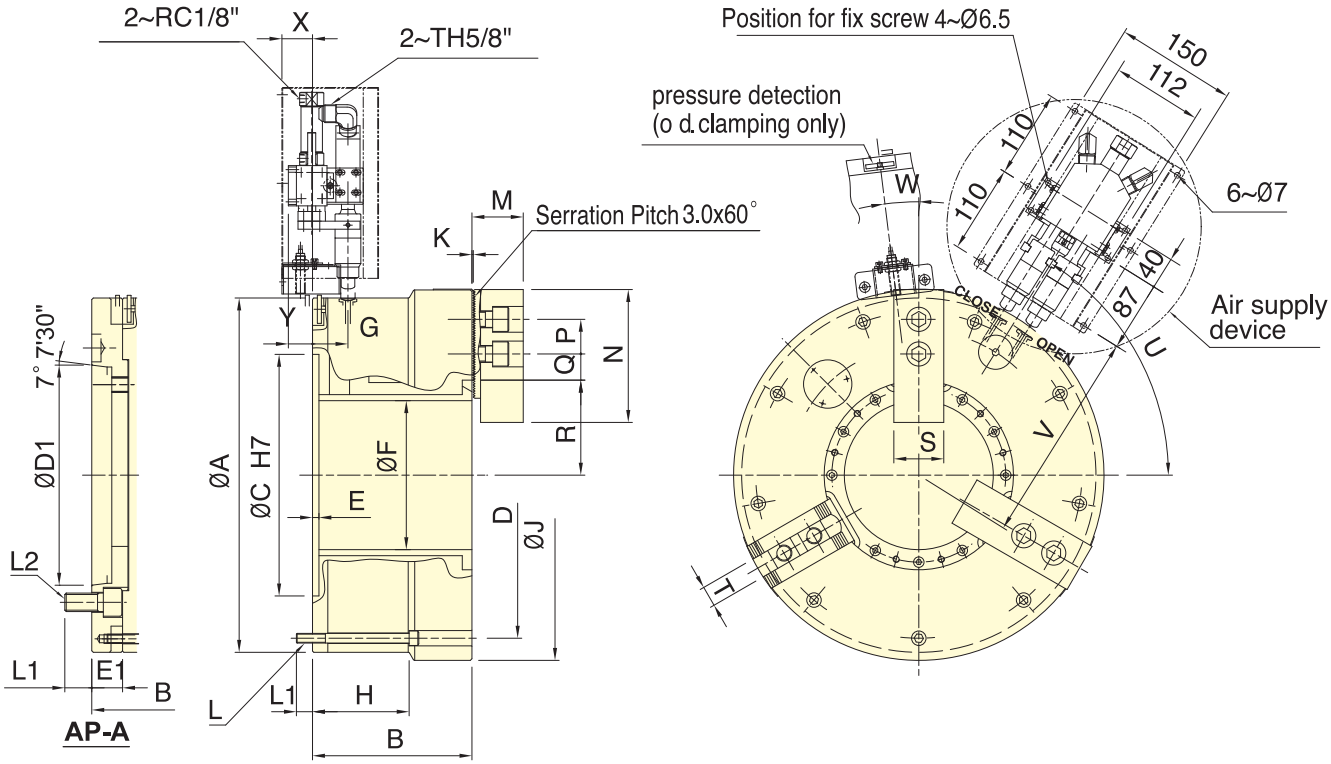
TAIWAN EXCELLENCE 2018



Application/customer benefits

- Large through-hole 3-jaw power chuck with build in air cylinder.
- With build-in “pressure detection” device in chuck which can check the pressure is lowered rapidly within the chuck, guarantee to the security of operating.
- The supply air system of the patent, it is easy to install fast, and without abrasion by traditional sealed ring, that could able to reduce maintenance and installation.
- Patent numbers :

Germany : 20.2011.101.818.4 / 20.2012.102.498.5
European Union : EP 2517822 B1
Taiwan : M440159 / M415011
Japan : 3169457 / 3178706
China : ZL 2011 2 0141324.9 / ZL 2012 2 0274549.6
US : US8770222 B2



SPECIAL PURPOSE

Specifications

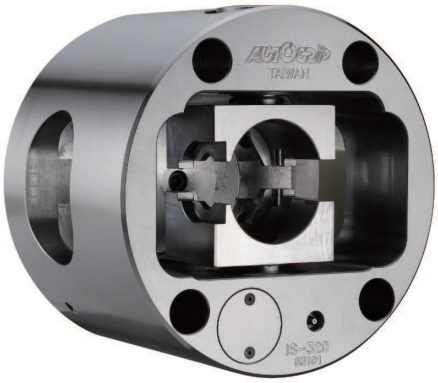
* Subject to technical changes.

Model	Thru-hole Dia (mm)	Jaw stroke (Dia.) (mm)	Chucking Dia. Max. (mm)	Chucking Dia. Min. (mm)	Max. pressure MPa (kgf/cm²)	Max. clamping force kN (kgf)	Max. speed min⁻¹(r.p.m.)	I kg・m²	Weight (kg)		Air Consumption lit(at 6kgf/cm²)
AP-145 A11	145	14	420	62	0.6(6.1)	85.0(8667)	1700	3.8	156	182	17.8
AP-185 A15	185	14	460	100	0.6(6.1)	110.0(11216)	1300	6	188	223	22
AP-230 A15	230	17	535	170	0.6(6.1)	125.0(12742)	1300	11.1	265	310	34
AP-275 A20	275	17	580	200	0.6(6.1)	140.0(14271)	1100	15.5	301	346	39
AP-320 A20	320	17	658	200	0.6(6.1)	184.0(18762)	1000	27.2	415	505	45
AP-375 A20	375	24	738	260	0.6(6.1)	188.0(19115)	850	44.2	530	545	55

Dimensions

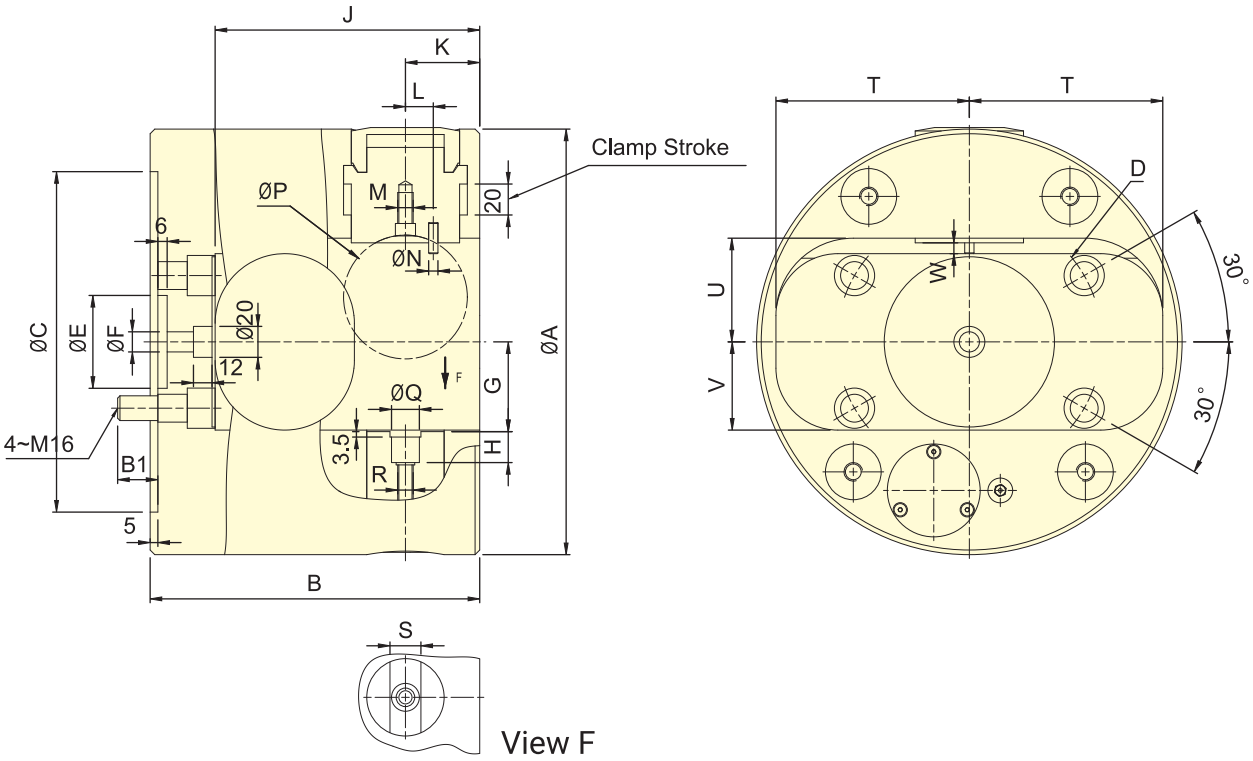
Model	A	B		C	D	D1	E	E1	F	G	H	J	K	L	L1		L2	M	N	P	Q max.	Q min.	R max.	R min.	S	T	U	V	W	X	Y
AP-145 A11	400	198	231	300	365	196.87	8	33	145	34	120	420	3.5	9~M12	20	31	6~M20	63.7	165	43	53.5	23.5	98	91	62	25.5	57°	242	0°	38	20
AP-185 A15	460	198	238	300	405	285.78	8	40	185	44	120	460	3.5	9~M12	20	35	6~M24	63.7	165	43	53.5	23.5	118	111	62	25.5	58°	272	7°	38	20
AP-230 A15	515	226	266	380	483	285.78	8	40	230	49	145	535	3.5	6~M16	24	35	6~M24	71.7	180	60	48.5	18.5	145	136.5	64	25.5	30°	300	7°	33	15
AP-275 A20	560	232	272	380	528	412.78	8	40	275	52	152	580	3.5	6~M16	24	35	6~M24	71.7	180	60	48.5	18.5	167.5	159	64	25.5	30°	322	7°	30	12
AP-320 A20	615	256	306	520	580	412.78	8	50	320	55	116.5	658	3.5	9~M16	25	33	6~M24	81.5	210	60	60.5	24.5	190	181.5	74	30	52°	350	7°	27	9
AP-375 A20	690	272	322	520	650	412.78	8	50	375	55	127	738	3.5	9~M16	28	33	6~M24	81.5	210	60	66.5	24.5	223.5	211.5	74	30	52°	387	7°	27	9

The dimensions and the specifications of AP-A type are in the red data.



Application/customer benefits

- Indexing operates during the spindle rotation, can a quick change between multiple working axles.
- Chuck of all parts hardened, ground and lubricated directly.
- Sealed against swarf, chips and coolant.
- Construction of high rigidity and high repeatability precision.
- Unique indexing system and of hydraulic system, with pressure detection device in chuck, high reliability.



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Specifications

Model	Index Angle Deg	Jaw stroke (Dia.)(mm)	Chucking Area Dia Max. (mm)	Chucking Area Len Max. (mm)	Max. pressure (kgf/cm^2)	Max. clamping force kN(kgf)	Max. speed min^{-1}(r.p.m.)	I kg・m^2	Weight (kg)	ROTATING JOINT	Main Spindle Bore (mm)
* IS-254	8x45,4x90	20	65	160	45	19.5(1990)	2400	0.41	41	IS-315	86+0.1
* IS-275	8x45,4x90	20	80	220	45	25.4(2590)	2000	0.61	52	IS-315	86+0.1
* IS-315	8x45,4x90	20	100	230	45	25.0(2550)	1800	1.13	76	IS-315	86+0.1

Dimensions

Model	A	B	B1	C(H6)	D	E	F	G	H	J	K	L	M	N	P	Q(H7)	R	S(H7)	T	U	V	W
* IS-254	254	190	23	220	171.4	60	13	47.5	18	155	48	13	M8	5	40	18	M10	20	106	57	46.5	5.5
* IS-275	275	213	26	220	171.4	60	13	58	20	171	48	18	M10	6	80	18	M10	20	125	67	57	7
* IS-315	315	232	22	220	171.4	60	13	71	18.5	187	50	18	M10	6	75	24	M12	25	125	85	70	7.5

*model produced only by order.