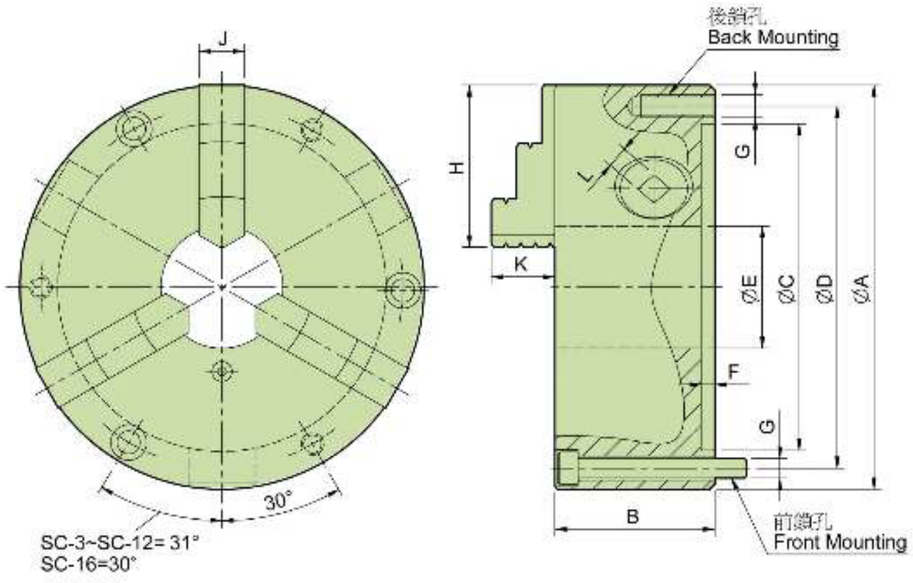
SC SERIES

SPECIFICATIONS:

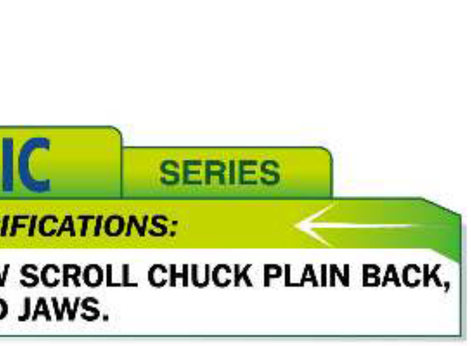
3-JAW SCROLL CHUCK PLAIN BACK, SOLID JAWS.

1.Interchangable utilization of internal and external hard jaws.
2.SC types feature economical and durable, suitable for mass production.
3.Gripping accuracy of 0.03mm (0.012inch) T.I.R..
4.The body is made of MEEHANITE. It is suitably used for high speed revolution and 3 times more durable than regular chucks.



SPECIFICATIONS: UNIT:mm

Dim / Model	A	B	C	D	E	F	G Back	G Front	H	J	K	L	Allowable Handle Torque (kgf·m)	Gripping Force (kgf)	Moment of Inertia I (kg·m²)	Weight (kg)	Max. Speed (r.p.m.)	Gripping Range O.D. range	Gripping Range I.D. range
SC-3	86	46	60	73	16	4	3-M6	3-M6x50	36	11	15	7	3.0	900	—	1.7	3500	ø 2-ø70	ø24.-ø 64
SC-4	112	60	80	95	24	4.8	3-M8	3-M8x70	42	14	16.6	8	4.5	1200	—	3.7	2500	ø 3-ø95	ø 29.-ø 64
SC-5	132	60	100	115	32	4.8	3-M8	3-M8x70	53	16	20.3	8	6.5	1500	0.01	5.2	2500	ø 3-ø110	ø 33-ø100
SC-6	167	87	130	147	45	5.5	3-M10	3-M10x70	63	19	23.7	10	9.0	3300	0.03	9.5	4000	ø 4-ø160	ø 48-ø150
SC-7	182	76.5	155	172	58	5.5	3-M10	3-M10x60	77	21.5	29.4	11	11.0	3600	0.06	14.2	3500	ø 4-ø180	ø 56-ø170
SC-8	200	76.5	160	176	58	5.5	3-M10	3-M10x60	77	21.5	29.4	11	11.0	3600	0.07	16	3200	ø 4-ø190	ø 62-ø180
SC-9	232	84	190	210	70	6	3-M12	3-M12x90	87	24	35.6	12	15.0	3900	0.15	22.7	2900	ø 5-ø220	ø 62-ø210
SC-10	273	87	230	250	69	8	3-M12	3-M12x90	99	28	39.5	12	19.5	4800	0.25	31.8	2500	ø 6-ø260	ø 79-ø250
SC-12	310	96	260	285	105	7	3-M12	3-M12x110	110	30	45.6	14	21.0	5100	0.58	44.8	2200	ø10-ø300	ø 86-ø290
SC-16	405	122	345	375	160	8.7	—	6-M14x130	146	42	56.9	15	23.0	4500	1.75	102	1500	ø30-ø360	ø110-ø360

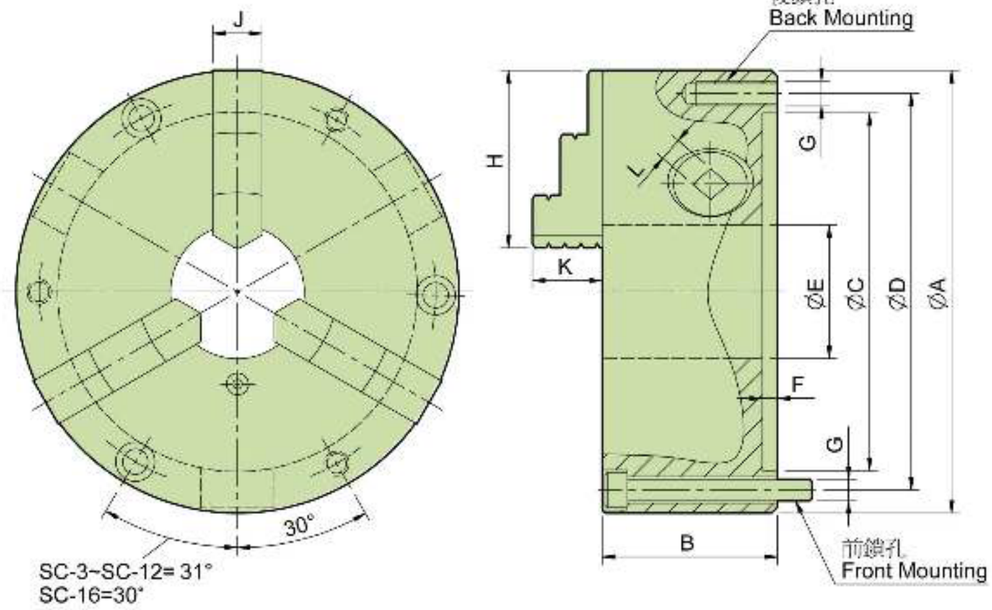


SIC SERIES

SPECIFICATIONS:

4-JAW SCROLL CHUCK PLAIN BACK, SOLID JAWS.

1.Gripping of square or octagonal workpieces could fit into central line automatically.
2.SIC have high stability in gripping thin tube work piece.
3.The specification is the same as SC type.
4.The body is made of MEEHANITE. It is suitably used for high speed revolution and 3 times more durable than regular chucks.



SPECIFICATIONS: UNIT:mm

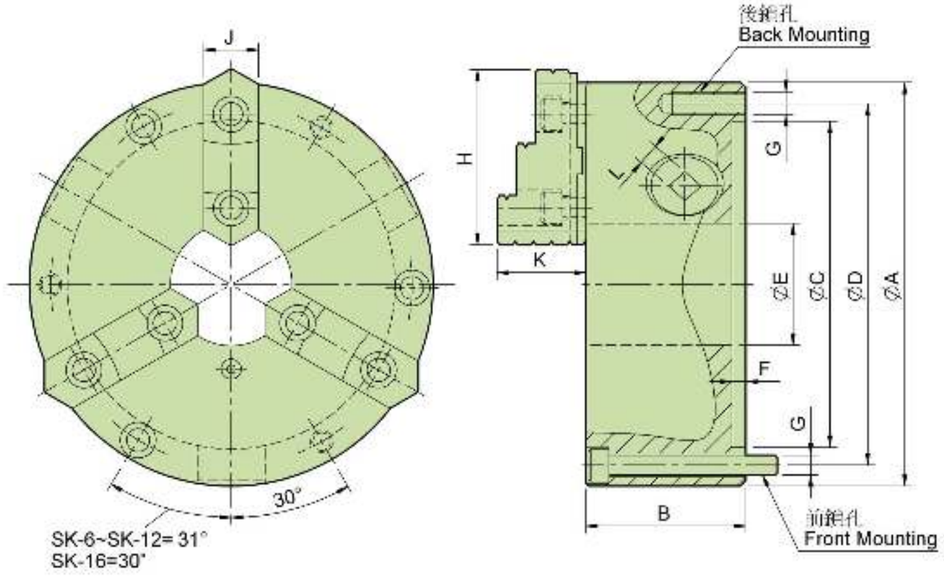
Dim / Model	A	B	C	D	E	F	G Back	G Front	H	J	K	L	Allowable Handle Torque (kgf·m)	Gripping Force (kgf)	Moment of Inertia I (kg·m²)	Weight (kg)	Max. Speed (r.p.m.)	Gripping Range O.D. range	Gripping Range I.D. range
SIC-7	192	76.5	155	172	58	5.5	3-M10	—	77	21.5	29.4	11	11.0	3600	0.06	14.8	3500	ø 4-ø180	ø56-ø 170
SIC-9	232	84	190	210	70	6	3-M12	—	87	24	35.6	12	15.0	3900	0.16	23.2	2900	ø 5-ø220	ø62-ø 210
SIC-12	310	96	260	285	105	7	3-M12	—	110	30	45.6	14	21.0	5100	0.58	47	2200	ø10-ø300	ø86-ø290
SIC-16	405	122	345	375	160	8.7	—	6-M14x130	146	42	56.9	15	23.0	4500	1.72	107	1500	ø30-ø390	ø110-ø360

SK SERIES

SPECIFICATIONS:

3-JAW STRONG SCROLL CHUCK PLAIN BACK, 2-PIECE JAWS.

1.SK types chucks have wider unilization range; hard jaws suitable for heavy cutting; soft jaws suitable for light and precision cutting.
2.Hard jaws could be used as internal jaws and external jaws.
3.Gripping accuracy of 0.03mm (0.012 inch) T.I.R.
4.The body is made of MEEHANITE. It is suitably used for high speed revolution and 3 times more durable than regular chucks.



SPECIFICATIONS:

UNIT:mm

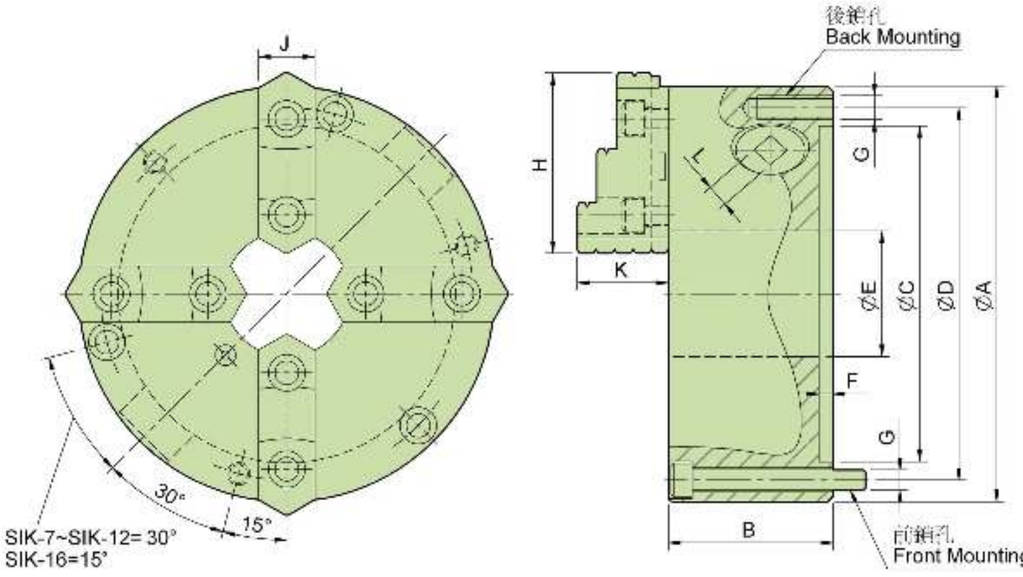
Dim / Model	A	B	C	D	E	F	G Back	G Front	H	J	K	L	Allowable Handle Torque (kgf·m)	Gripping Force (kgf)	Moment of Inertia I (kg·m²)	Weight (kg)	Max. Speed (r.p.m.)	Gripping Range O.D. range	Gripping Range I.D. range
SK-6	167	67	130	147	45	5.5	3-M10	3-M10	72	26	40.2	10	9.0	3300	0.03	9	4000	ø4-ø150	ø55-ø150
SK-7	192	76.5	155	172	58	5.5	3-M10	3-M10	81.2	28	42	11	11.0	3600	0.06	13.8	3500	ø8-ø180	ø62-ø170
SK-8	200	76.5	180	176	58	5.5	3-M10	3-M10	82	28	42	11	11.0	3600	0.07	16.5	3200	ø8-ø190	ø68-ø180
SK-9	232	84	190	210	70	6	3-M12	3-M12	90.9	32	51.2	12	15.0	3900	0.16	22	2900	ø11-ø220	ø70-ø210
SK-10	273	87	230	250	89	8	3-M12	3-M12	100.5	35	56.7	12	19.5	4800	0.26	29.7	2500	ø12-ø260	ø80-ø250
SK-12	310	96	280	285	105	7	3-M12	3-M12	114.5	40	56.8	14	21.0	5100	0.58	43.5	2200	ø15-ø300	ø90-ø290
SK-16	405	122	345	375	160	8.7	—	6-M14	148.6	50	76.1	15	23.0	4500	1.72	98	1500	ø30-ø380	ø110-ø360

SIK SERIES

SPECIFICATIONS:

4-JAW STRONG SCROLL CHUCK PLAIN BACK, 2-PIECE JAWS.

1.Hard jaws are adopted for square for square or octagonal thin tube workpieces machining.
2.Soft jaws could grip rectangular workpiece after being unisotropic machined.
3.The specification is the same as SK type.
4.The body is made of MEEHANITE. It is suitably used for high speed revolution and 3 times more durable than regular chucks.



SPECIFICATIONS:

UNIT:mm

Dim / Model	A	B	C	D	E	F	G Back	G Front	H	J	K	L	Allowable Handle Torque (kgf·m)	Gripping Force (kgf)	Moment of Inertia I (kg·m²)	Weight (kg)	Max. Speed (r.p.m.)	Gripping Range O.D. range	Gripping Range I.D. range
SIK-7	192	76.5	155	172	58	5.5	3-M10	—	82	28	42	11	11.0	3600	0.06	14.1	3500	ø8-ø180	ø62-ø170
SIK-9	232	84	190	210	70	6	3-M12	—	96	32	51.2	12	15.0	3900	0.16	22.2	2900	ø11-ø220	ø70-ø210
SIK-12	310	96	280	285	105	7	3-M12	—	114.5	40	56.8	14	21.0	5100	0.58	45	2200	ø15-ø300	ø90-ø290
SIK-16	405	122	345	375	160	8.7		6-M14x1.5	148.6	50	76.1	15	23.0	4500	1.72	106	1500	ø30-ø380	ø110-ø360

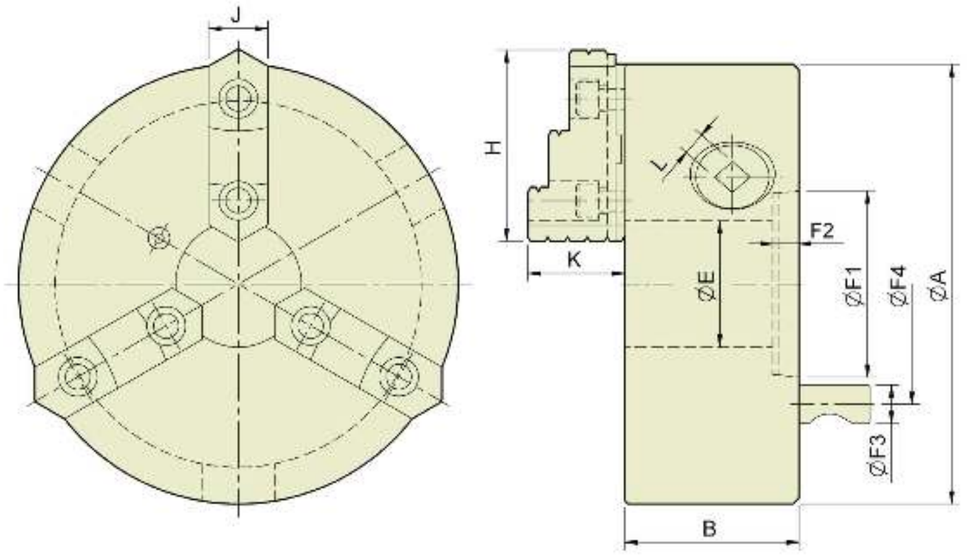
KD SERIES

SPECIFICATIONS:

3-JAW STRONG SCROLL CHUCKS D1 CAMLOCK DIRECT MOUNTING, 2-PIECE JAWS

(ASA spindle nose D1-4, D1-5, D1-6, D1-8)
American standard camlock type with 2-piece reversible hard top jaws.

1.Gripping accuracy of 0.03mm(0.0012inch)T.I.R.
2.Standard accessories A chuck wrench and hex. key. One set of mounting bolts.(UNC-bolts)
3.The body is made of MEEHANITE.It is suitably used for high speed revolution and 3 times more durable than regular chucks.



SPECIFICATIONS:

UNIT:mm

Model \ Dim	Spindle Size	A	B	E	L	H	J	K	Mounting Dimensions F1	F2	F3	F4	Allowable Handle Torque (kgf·m)	Gripping Force (kgf)	Moment of Inertia I (kg·m²)	Weight (kg)	Max. Speed (r.p.m.)	Gripping Range O.D. range	Gripping Range I.D. range
KD4-6"	D1-4	165	72	46	10	72	26	39	63.513	13	15.8	82.55	9.0	3300	0.04	11	4000	ø8- ø160	ø55- ø150
KD4-8"	D1-4	200	77.2	53	11	82	28	42.2	63.513	13	15.8	82.55	11.5	3600	0.07	18.5	3200	ø8- ø180	ø62- ø170
KD5-8"	D1-5	200	77.2	55	11	82	28	42.2	82.563	16	19	104.78	11.5	3600	0.07	18	3200	ø8- ø180	ø62- ø170
KD6-8"	D1-6	200	77.2	58	11	82	28	42.2	106.375	17	22.2	133.35	11.5	3600	0.07	17	3200	ø8- ø180	ø62- ø170
KD6-10"	D1-6	250	86	76	12	90.9	32	50.8	106.375	17	22.2	133.35	19.5	4800	0.2	29.5	2500	ø11- ø220	ø70- ø210
KD6-12"	D1-6	306	107.5	103	14	114.5	40	57.8	106.375	13.5	22.2	133.35	21.0	5100	0.5	47	2200	ø15- ø300	ø90- ø290
KD8-10"	D1-8	250	86	80	12	90.9	32	50.8	139.719	19	25.4	171.45	13.5	4800	0.2	27	2500	ø11- ø220	ø70- ø210
KD8-12"	D1-8	306	107.5	103	14	114.5	40	57.8	139.719	18	25.4	171.45	21.0	5100	0.5	47	2200	ø15- ø300	ø90- ø290

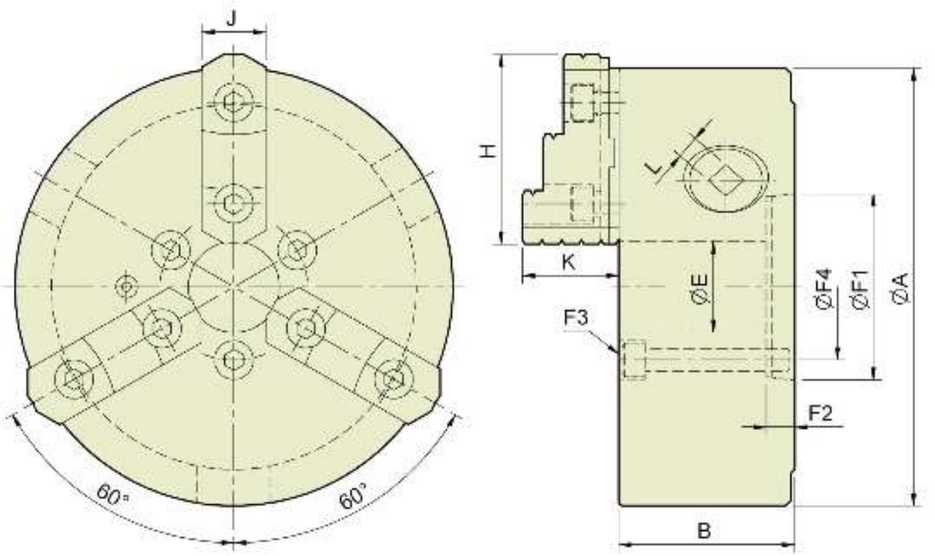
KA SERIES

SPECIFICATIONS:

3-JAW STRONG SCROLL CHUCKS A1 DIRECT MOUNTING, 2-PIECE JAWS

(ASA spindle nose A1-5, A1-6)
American standard camlock type with 2-piece reversible hard top jaws.

1.Gripping accuracy of 0.03mm(0.0012inch)T.I.R.
2.Standard accessories A chuck wrench and hex. key. One set of mounting bolts.(UNC-bolts)
3.The body is made of MEEHANITE.It is suitably used for high speed revolution and 3 times more durable than regular chucks.



SPECIFICATIONS:

UNIT:mm

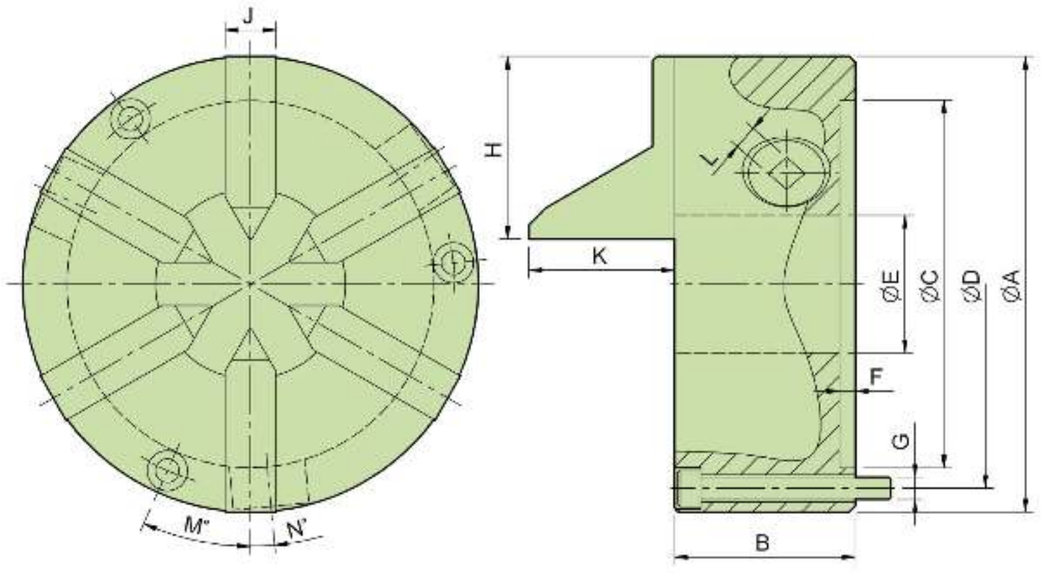
Model \ Dim	Spindle Size	A	B	E	L	H	J	K	Mounting Dimensions F1	F2	F3	F4	Allowable Handle Torque (kgf·m)	Gripping Force (kgf)	Moment of Inertia I (kg·m²)	Weight (kg)	Max. Speed (r.p.m.)	Gripping Range O.D. range	Gripping Range I.D. range
KA5-8"	A-1-5	200	77.2	40	11	81.2	28	42.2	82.563	4.265	3-M10	61.9	11.0	3600	0.07	18	3200	ø8- ø180	ø62- ø170
KA6-8"	A-1-6	200	77.2	53	11	81.2	28	42.2	106.375	5.875	3-M12	82.5	11.0	3600	0.07	18	3200	ø8- ø180	ø62- ø170
KA6-10"	A-1-6	250	86	53	12	90.9	32	50.8	106.375	5.875	3-M12	82.5	19.0	4800	0.2	29.5	2500	ø11- ø220	ø70- ø210
KA6-12"	A-1-6	306	107.5	53	14	114.5	40	57.8	106.375	5.875	3-M12	82.5	21.0	5100	0.5	47	2200	ø15- ø300	ø90- ø290
KA8-12"	A-1-8	306	107.5	77	14	114.5	40	57.8	139.719	17.46	3-M16	111.1	21.0	5100	0.5	47	2200	ø15- ø300	ø90- ø290

SE SERIES

SPECIFICATIONS:

6-JAW SCROLL CHUCK PLAIN BANK

1.SE types are specially suit for drilling*endmilling*tapping or grinding in tool grinders.
2.Huge bore diameter design for wider application of bar workpieces.
3.SE type feature gripping for thin tube and high roundness accuracy.
4.The body is made of MEEHANITE.It is suitably used for high speed revolution and 3 times more durable than regular chucks.



SPECIFICATIONS: UNIT:mm

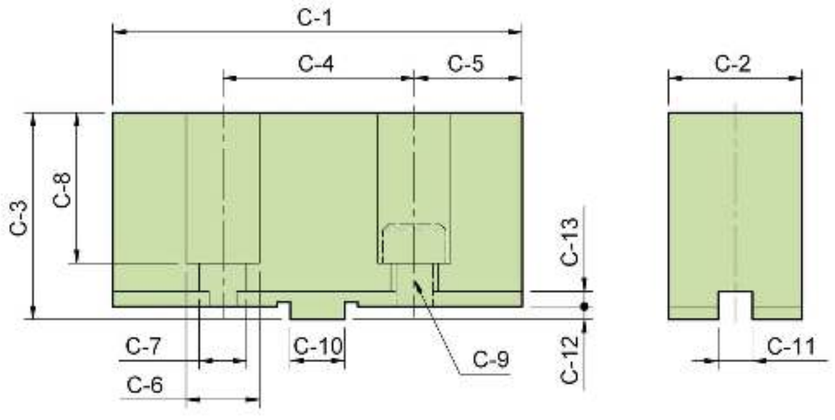
Dim / Model	A	B	C	D	E	F	G	H	J	K	L	M	N	Weight (kg)	Max. Speed (r.p.m.)	Gripping O.D. Range
SE-4	112	66	80	95	32	4.8	3-M8	45	14	39.7	8	30	6.5	4	2500	ø2-ø32
SE-6	165	67	130	147	51	5.5	3-M8	66.5	19	40.7	10	23.3	6.2	9	2000	ø3-ø51
SE-7	192	76.5	155	172	80	5.5	3-M10	77	21.5	61.5	11	24	5.3	14	2000	ø3-ø81

SKC SERIES

SPECIFICATIONS:

SOFT JAWS FOR STRONG SCROLL CHUCKS

1.Soft jaws for strong scroll chuck.
2.Manufactured in special specification.



SPECIFICATIONS: UNIT:mm

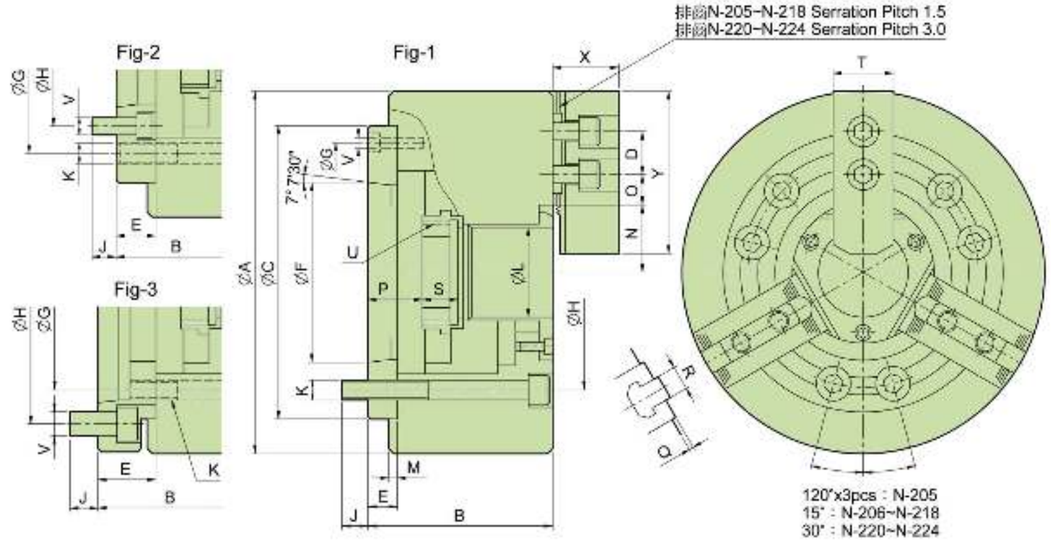
Dim / Model	C-1	C-2	C-3	C-4	C-5	C-6	C-7	C-8	C-9	C-10	C-11	C-12	C-13	Matching Chuck	3 Jaw Weight (kg)
SKC06	73	26	37	38	17.5	14	8.5	27	M8	12.68	7.94	3	3.5	SK-6, KD-6"	1.5
SKC07	95	31	48	44.5	25.25	17	11	35	M10	12.68	7.94	3	3.5	SK-7, SK-8, KD-8", KA-8"	2.7
SKC09	110	37	48	54	28	19	13	34	M12	19.03	12.7	3	3.5	SK-9, SK-10, KD-10",KA-10"	3.7
SKC12	125	40	54	63.5	30.75	19	13	40.5	M12	19.03	12.7	3	3.5	SK-12, KD-12", KA-12"	4.9
SKC16	160	50	70	76.2	41.9	25	17	48	M16	19.03	12.7	6	3.5	SK-16	11

N-200A SERIES

SPECIFICATIONS:

3-JAW WEDGE TYPE THROUGH-HOLE POWER CHUCK (WITH ADAPTOR)

1.More large bore: Having the largest bore in wede type power operated chucks.
2.Model N-200A chucks are assembled with adaptor for ASA B5.9 type A spindles.



SPECIFICATIONS:

Model	Through-Hole (mm)	Plunger Stroke (mm)	Jaw Stroke (in dia) (mm)	Max. Pull Force (kgf)	Max. Gripping Force (kgf)	Max. Operating Pressure (kg/cm²)	Max. Speed (r.p.m.)	Weight (kg)	Moment of Inertia I (kg-m²)	Matching Cylinder	Matching Hard Jaw	Matching Soft Jaw	Gripping O.D. Range (mm)
N-205A4	N33	10	5.4	1784	3671	28.5	7000	7.8	0.020	M1036	HJ05	HC05	ø 6~ ø135
N-205A5	N33	10	5.4	1784	3671	28.5	7000	9	0.023	M1036	HJ05	HC05	ø 6~ ø135
N-206A5	N45	12	5.5	2243	5812	28.5	6000	14.7	0.062	M1246	HJ06	HC06	ø15~ø169
N-206A6	N45	12	5.5	2243	5812	28.5	6000	17.3	0.073	M1246	HJ06	HC06	ø15~ø169
N-208A5	N52	16	7.4	3556	9075	26.5	5000	25.6	0.190	M1552	HJ08	HC08	ø20~ø210
N-208A6	N52	16	7.4	3556	9075	26.5	5000	25	0.164	M1552	HJ08	HC08	ø20~ø210
N-208A8	N52	16	7.4	3556	9075	26.5	5000	29.3	0.217	M1552	HJ08	HC08	ø20~ø210
N-210A6	N75	19	8.8	4385	11319	27.5	4200	41	0.370	M1875	HJ10	HC10	ø25~ø254
N-210A8	N75	19	8.8	4385	11319	27.5	4200	38	0.340	M1875	HJ10	HC10	ø25~ø254
N-210A11	N75	19	8.8	4385	11319	27.5	4200	48.4	0.436	M1875	HJ10	HC10	ø25~ø254
N-212A6	N91	23	10.6	5812	14990	27.5	3300	62.5	0.809	M2091	HJ12	HC12	ø30~ø304
N-212A8	N91	23	10.6	5812	14990	27.5	3300	59.5	0.770	M2091	HJ12	HC12	ø30~ø304
N-212A11	N91	23	10.6	5812	14990	27.5	3300	69.9	0.912	M2091	HJ12	HC12	ø30~ø304
N-215A8	N117.5	23	10.6	7240	18355	23.5	2500	125	2.255	M2511	HJ15	HC15	ø60~ø381
N-215A11	N117.5	23	10.6	7240	18355	23.5	2500	118	2.241	M2511	HJ15	HC15	ø60~ø381
N-215A15	N117.5	23	10.6	7240	18355	23.5	2500	136	2.822	M2511	HJ15	HC15	ø60~ø381
N-218A8	N117.5	23	10.6	7240	18355	23.5	2000	178	4.830	M2511	HJ15	HC15	ø60~ø450
N-218A11	N117.5	23	10.6	7240	18355	23.5	2000	171	4.464	M2511	HJ15	HC15	ø60~ø450
N-218A15	N117.5	23	10.6	7240	18355	23.5	2000	191	5.183	M2511	HJ15	HC15	ø60~ø450
N-220A11	N160	23	10.6	9177	23861	30.5	1800	215	7.355	ML2516	HJ24-1	HC24-1	ø120~ø510
N-220A15	N160	23	10.6	9177	23861	30.5	1800	202	6.910	ML2516	HJ24-1	HC24-1	ø120~ø510
N-224A11	N205	26	12	9177	23861	30.5	1400	332	18.199	ML3320	HJ24-1	HC24-1	ø150~ø610
N-224A15	N205	26	12	9177	23861	30.5	1400	317	17.376	ML3320	HJ24-1	HC24-1	ø150~ø610
N-224A20	N205	26	12	9177	23861	30.5	1400	286	15.677	ML3320	HJ24-1	HC24-1	ø150~ø610

DIMENSIONS:

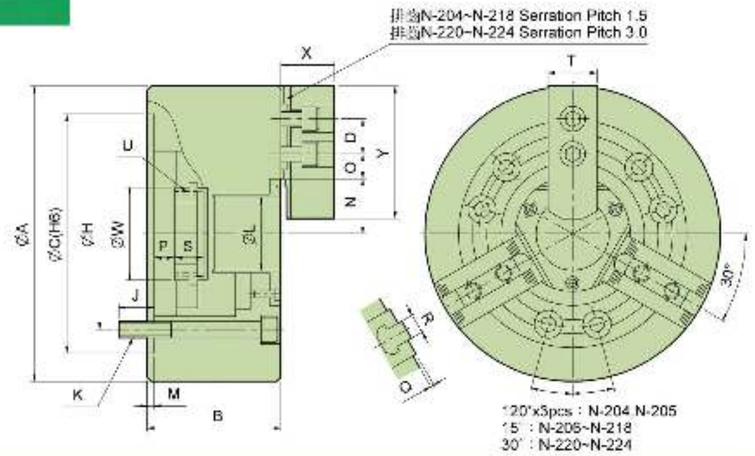
Model	A	B	C	D	E	F	G	H	J	K	L	M	N max.	O max.	O min.	P max.	P min.	Q	R	S	T	U max.	V	W	X	Y	Reference
N-205A4	135	71	110	14	15	63.513	96	82.55	15.5	3-M10	33	4	26.5	19.75	7.75	15	6	2	10	20	25	M40x1.5	3-M6	45	31	54	Fg-1
N-205A5	135	68	110	14	32	82.563	82.55	104.78	14	3-M10	33	4	26.5	19.75	7.75	33	23	2	10	20	25	M40x1.5	6-M10	45	31	54	Fg-3
N-206A5	169	91	140	20	15	82.563	116	104.78	16	6-M10	45	5	32	22.75	9.25	26	14	2	12	19	31	M55x2	3-M8	60	37	73	Fg-1
N-206A6	169	111	140	20	35	106.375	104.78	133.35	16	6-M10	45	5	32	22.75	9.25	46	34	2	12	19	31	M55x2	6-M12	60	37	73	Fg-3
N-208A5	210	109	170	25	23	82.563	133.35	104.78	13	6-M12	52	5	38.7	29.75	14.75	37.5	21.5	2	14	20.5	35	M60x2	6-M10	66	38	95	Fg-2
N-208A6	210	103	170	25	17	106.375	150	133.35	16	6-M12	52	5	38.7	29.75	14.75	31.5	15.5	2	14	20.5	35	M60x2	3-M8	66	38	95	Fg-1
N-208A8	210	126	170	25	40	139.719	133.35	171.45	16	6-M12	52	5	38.7	29.75	14.75	54.5	38.5	2	14	20.5	35	M60x2	6-M16	66	38	95	Fg-3
N-210A6	254	120	220	30	25	106.375	171.45	133.35	16	6-M16	75	5	51	33.75	14.25	33.5	14.5	2	16	25	40	M85x2	6-M12	94	43	110	Fg-2
N-210A8	254	113	220	30	18	139.719	190	171.45	24	6-M16	75	5	51	33.75	14.25	26.5	7.5	2	16	25	40	M85x2	3-M8	94	43	110	Fg-1
N-210A11	254	145	220	30	50	196.869	171.45	235	22	6-M16	75	5	51	33.75	14.25	58.5	39.5	2	16	25	40	M85x2	6-M20	94	43	110	Fg-3
N-212A6	304	129	220	30	25	106.375	171.45	133.35	16	6-M16	91	6	61.3	45.75	15.75	33	10	2	21	28	50	M100x2	6-M12	108	51	130	Fg-2
N-212A8	304	122	220	30	18	139.719	190	171.45	25	6-M16	91	6	61.3	45.75	15.75	26	3	2	21	28	50	M100x2	3-M8	108	51	130	Fg-1
N-212A11	304	154	220	30	50	196.869	171.45	235	22	6-M16	91	6	61.3	45.75	15.75	58	35	2	21	28	50	M100x2	6-M20	108	51	130	Fg-3
N-215A8	381	160	300	43	33	139.719	235	171.45	24	6-M20	117.5	6	82	45.25	16.75	40	17	5	22	43	62	M130x2	6-M16	139	66	165	Fg-2
N-215A11	381	149	300	43	22	196.869	260	235	26	6-M20	117.5	6	82	45.25	16.75	29	6	5	22	43	62	M130x2	3-M10	139	66	165	Fg-1
N-215A15	381	184	300	43	57	285.775	235	330.2	24	6-M20	117.5	6	82	45.25	16.75	64	41	5	22	43	62	M130x2	6-M24	139	66	165	Fg-3
N-218A8	450	160	300	43	33	139.719	235	171.45	24	6-M20	117.5	6	82	79.75	16.75	40	6	5	22	43	62	M130x2	6-M16	139	66	165	Fg-2
N-218A11	450	149	300	43	22	196.869	260	235	26	6-M20	117.5	6	82	79.75	16.75	29	6	5	22	43	62	M130x2	3-M10	139	66	165	Fg-1
N-218A15	450	184	300	43	57	285.775	235	330.2	24	6-M20	117.5	6	82	79.75	16.75	64	41	5	22	43	62	M130x2	6-M24	139	66	165	Fg-3
N-220A11	510	169	380	60	41	196.869	330.2	235	30	6-M24	180	6	112.5	69	23	52	29	5	25	38	65	M190x2	6-M20	206	73	180	Fg-2
N-220A15	510	155	380	60	27	285.775	330.2	330.2	35	6-M24	180	6	112.5	69	23	38	15	5	25	38	65	M190x2	3-M12	206	73	180	Fg-1
N-224A11	610	186	520	60	45	196.869	463.6	235	26	6-M24	205	6	139.9	87.5	24.5	61	35	5	25	38	65	M215x3	6-M20	230	73	180	Fg-2
N-224A15	610	163	520	60	42	285.775	463.6	330.2	33	6-M24	205	6	139.9	87.5	24.5	58	32	5	25	38	65	M215x3	6-M24	230	73	180	Fg-2
N-224A20	610	166	520	60	25	412.775	463.6	463.6	35	6-M24	205	6	139.9	87.5	24.5	41	15	5	25	38	65	M215x3	3-M10	230	73	180	Fg-1

N-200 SERIES

SPECIFICATIONS:

3-JAW WEDGE TYPE THROUGH-HOLE POWER CHUCK (WITHOUT ADAPTOR)

1.More large bore
2.Highest revolution



SPECIFICATIONS:

Model	Through-Hole (mm)	Plunger Stroke (mm)	Jaw Stroke (mm)	Max. Draw Bar Pull Force (kgf)	Max. Gripping Force (kgf)	Max. Operating Pressure (kgf/cm²)	Max. Speed (r.p.m.)	Weight (kg)	Moment of Inertial I (kg·m²)	Matching Cylinder	Matching Soft Jaw	Matching Hard Jaw	Gripping O.D Range (mm)
N-204	N26	10	5.4	1428	2906	31.6	8000	4	0.007	M0928	HC04	HJ05	ø 4~ ø110
N-205	N33	10	5.4	1784	3671	28.5	7000	7	0.018	M1036	HC05	HJ05	ø 6~ ø135
N-206	N45	12	5.5	2243	5812	28.5	6000	13.5	0.057	M1246	HC06	HJ06	ø15~ø169
N-208	N52	16	7.4	3558	9075	26.5	5000	23	0.17	M1552	HC08	HJ08	ø20~ø210
N-210	N75	19	8.8	4385	11319	27.5	4200	35	0.315	M1875	HC10	HJ10	ø25~ø254
N-212	N91	23	10.6	5812	14990	27.5	3300	56.5	0.737	M2091	HC12	HJ12	ø30~ø304
N-215	N117.5	23	10.6	7240	18355	23.5	2500	111	2.27	M2511	HC15	HJ15	ø60~ø381
N-218	N117.5	23	10.6	7240	18355	23.5	2000	164	4.45	M2511	HC15	HJ15	ø60~ø450
N-220	N180	23	10.6	9177	23861	30.5	1800	190	6.5	ML2816	HC24-1	HJ24-1	ø120~ø510
N-224	N205	26	12	9177	23861	30.5	1400	270	14.8	ML3320	HC24-1	HJ24-1	ø150~ø610

DIMENSIONS:

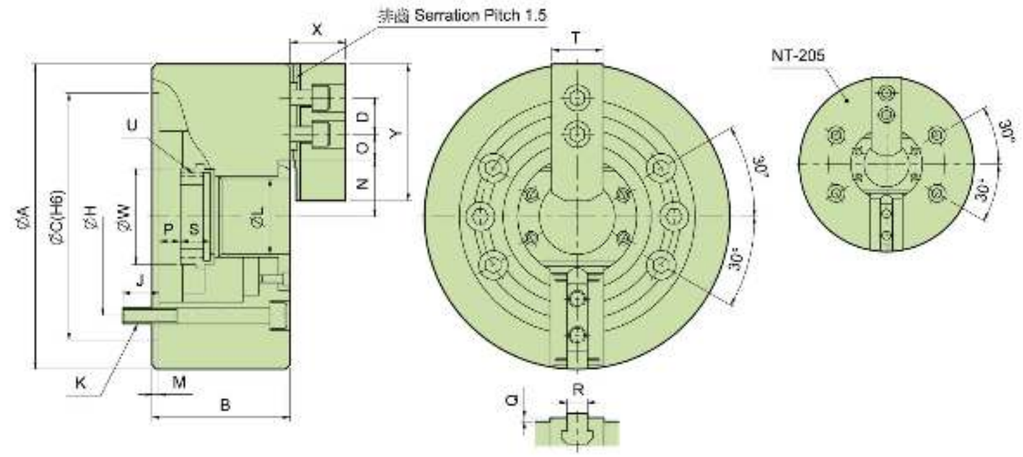
Model	A	B	C (H6)	D	H	J	K	L	M	N max.	O max.	O min.	P max.	P min.	Q	R	S	T	U max.	W	X	Y
N-204	110	59	85	14	70.6	16	3-M10x60	26	4	23.2	13.75	6.75	3.5	-6.5	2	10	17.5	23	M32x1.5	38	24	49.5
N-205	135	60	110	14	82.55	15	3-M10x80	33	4	26.5	19.75	7.75	1	-9	2	10	20	25	M40x1.5	45	31	54
N-206	169	81	140	20	104.78	16	6-M10x80	45	5	32	22.75	9.25	11	-1	2	12	19	31	M55x2	60	37	73
N-208	210	91	170	25	133.35	20	6-M12x90	52	5	38.7	29.75	14.75	14.5	-1.5	2	14	20.5	35	M80x2	66	38	95
N-210	254	100	220	30	171.45	22	6-M16x100	75	5	51	33.75	14.25	8.5	-10.5	2	16	25	40	M85x2	94	43	110
N-212	304	110	220	30	171.45	23	6-M16x110	91	6	61.3	45.75	15.75	8	-15	2	21	28	50	M100x2	108	51	130
N-215	381	133	300	43	235	35	6-M20x135	117.5	6	82	45.25	16.75	7	-16	5	22	43	62	M130x2	139	66	165
N-218	450	133	300	43	235	35	6-M20x135	117.5	6	82	79.75	16.75	7	-16	5	22	43	62	M130x2	139	66	165
N-220	510	134	380	60	330.2	35	6-M24x135	180	6	112.5	69	23	11	-12	5	25	38	65	M190x2	206	73	180
N-224	610	147	520	60	463.6	35	6-M24x150	205	6	139.9	87.5	24.5	16	-10	5	25	38	65	M215x3	230	73	180

NT-200 SERIES

SPECIFICATIONS:

2-JAW WEDGE TYPE THROUGH-HOLE POWER CHUCK (WITHOUT ADAPTOR)

1.All sliding surfaces are hardened and ground for accurate actual running and long service repeatability. Lubrication nipple in each base jaw.
2.Base jaw:1.5mmx60° serrtion.
3.Mounting:Adaptor mounting to fit with DIN, ISO, BS, ASA B5.9 type A spindles.



SPECIFICATIONS:

Model / Dim	Through-Hole (mm)	Plunger Stroke (mm)	Jaw Stroke (in dia) (mm)	Max. Draw Bar Pull Force (kgf)	Max. Gripping Force (kgf)	Max. Operating Pressure (kgf/cm²)	Max. Speed (r.p.m.)	Weight (kg)	Moment of Inertia I (kg·m²)	Matching Cylinder	Matching Hard Jaw	Matching Soft Jaw	Gripping O.D Range (mm)
NT-205	N33	10	5.4	1189	2447	19.5	7000	6.8	0.017	M1036	HJ05	HC05	ø 6~ ø135
NT-206	N45	12	5.5	1495	3875	18.9	6000	12.8	0.054	M1246	HJ06	HC06	ø15~ø169
NT-208	N52	16	7.4	2366	5975	18.4	5000	22	0.163	M1552	HJ08	HC08	ø20~ø210
NT-210	N75	19	8.8	2927	7546	18.4	4200	34	0.306	M1875	HJ10	HC10	ø25~ø254
NT-212	N91	23	10.6	3875	9789	18.4	3300	55	0.717	M2091	HJ12	HC12	ø30~ø304
NT-215	N117.5	23	10.6	4823	12236	15.3	2500	106	2.17	M2511	HJ15	HC15	ø60~ø381

DIMENSIONS:

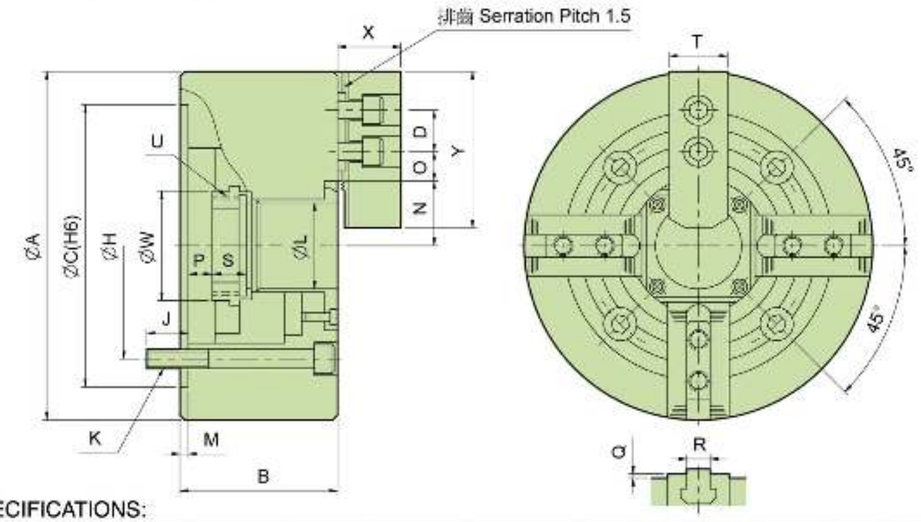
Model / Dim	A	B	C (H6)	D	H	J	K	L	M	N max.	O max.	O min.	P max.	P min.	Q	R	S	T	U max.	W	X	Y
NT-205	135	60	110	14	82.55	15	4-M10x60	33	4	26.5	19.75	7.75	1	-9	2	10	20	23	M40x1.5	45	31	54
NT-206	169	81	140	20	104.78	16	6-M10x80	45	5	32	22.75	9.25	11	-1	2	12	19	31	M55x2	60	37	73
NT-208	210	91	170	25	133.35	20	6-M12x90	52	5	38.7	29.75	14.75	14.5	-1.5	2	14	20.5	35	M80x2	66	38	95
NT-210	254	100	220	30	171.45	22	6-M16x100	75	5	51	33.75	14.25	8.5	-10.5	2	16	25	40	M85x2	94	43	110
NT-212	304	110	220	30	171.45	23	6-M16x110	91	6	61.3	45.75	15.75	8	-15	2	21	28	50	M100x2	108	51	130
NT-215	381	133	300	43	235	35	6-M20x135	117.5	6	82	45.25	16.75	7	-16	5	22	43	62	M130x2	139	66	165

NIT-200 SERIES

SPECIFICATIONS:

4-JAW WEDGE TYPE THROUGH HOLE POWER CHUCK (WITHOUT ADAPTOR)

1.All sliding surfaces are hardened and ground for accurate actual running and long service repeatability. Lubrication nipple in each master jaw.
2.Master jaw:1.5mmx60° serrtion.
3.Mounting:Adaptor mounting to fit with DIN, ISO, BS, ASA B5.9 type A spindles.



SPECIFICATIONS:

Model / Dim	Through-Hole (mm)	Plunger Stroke (mm)	Jaw Stroke (in dia) (mm)	Max. Draw Bar Pull Force (kgf)	Max. Gripping Force (kgf)	Max. Operating Pressure (kgf/cm²)	Max. Speed (r.p.m.)	Weight (kg)	Moment of Inertia I(kg·m²)	Malching Cylinder	Matching Hard Jaw	Matching Soft Jaw	Gripping O.D Range (mm)
NIT-206	ø45	12	5.5	2243	5812	28.5	4500	13.7	0.051	M1246	HJ06	HC06	ø15~ø169
NIT-208	ø52	16	7.4	3558	9075	26.5	3600	24	0.177	M1552	HJ08	HC08	ø20~ø210
NIT-210	ø75	19	8.8	4385	11319	27.5	3200	36	0.324	M1875	HJ10	HC10	ø25~ø254
NIT-212	ø91	23	10.6	5812	14990	27.5	2700	58.5	0.763	M2091	HJ12	HC12	ø30~ø304
NIT-215	ø117.5	23	10.6	7240	18355	23.5	1900	114	2.331	M2511	HJ15	HC15	ø60~ø381
NIT-218	ø117.5	23	10.6	7240	18355	23.5	1500	122	3.2	M2511	HJ15	HC15	ø60~ø450
NIT-224	ø205	26	12	9177	23661	30.5	1000	264	14.5	M3320	HJ24-1	HC24-1	ø150~ø610

DIMENSIONS:

Model / Dim	A	B	C (H6)	D	H	J	K	L	M	N max.	O max.	O min.	P max.	P min.	Q	R	S	T	U max.	W	X	Y
NIT-206	169	81	140	20	104.78	16	4-M10x80	45	5	32	22.75	9.25	11	-1	2	12	19	31	M55x2	60	37	73
NIT-208	210	91	170	25	133.35	20	4-M12x90	52	5	38.7	29.75	14.75	14.5	-1.5	2	14	20.5	35	M60x2	66	38	95
NIT-210	254	100	220	30	171.45	22	4-M16x100	75	6	51	33.75	14.25	8.5	-10.5	2	16	25	40	M85x2	94	43	110
NIT-212	304	110	220	30	171.45	23	4-M16x110	91	6	61.3	45.75	15.75	8	-15	2	21	28	50	M100x2	108	51	130
NIT-215	381	133	300	43	235	35	4-M20x135	117.5	6	82	45.25	16.75	7	-18	5	22	43	62	M130x2	139	66	165
NIT-218	450	133	300	43	235	35	4-M20x135	117.5	6	82	79.75	16.75	7	-16	5	22	43	62	M130x2	139	66	165
NIT-224	610	147	520	60	463.6	35	8-M24x150	205	6	139.9	87.5	24.5	16	-10	5	25	38	65	M215x3	230	73	180

NHT SERIES

SPECIFICATIONS:

2 JAWS AND 3 JAWS THROUGH HOLE POWER CHUCKS (WITH ADAPTOR)

1.Gripping of round or irregular workpiece does not need to change the chuck.
2.The chucks are designed according to ASA B5.9 type A spindle.
3.The chucks are made from hight grade alloy steel. All siding surfaces are hardened and ground for increased running accuracy and longer service life.

Fig-1

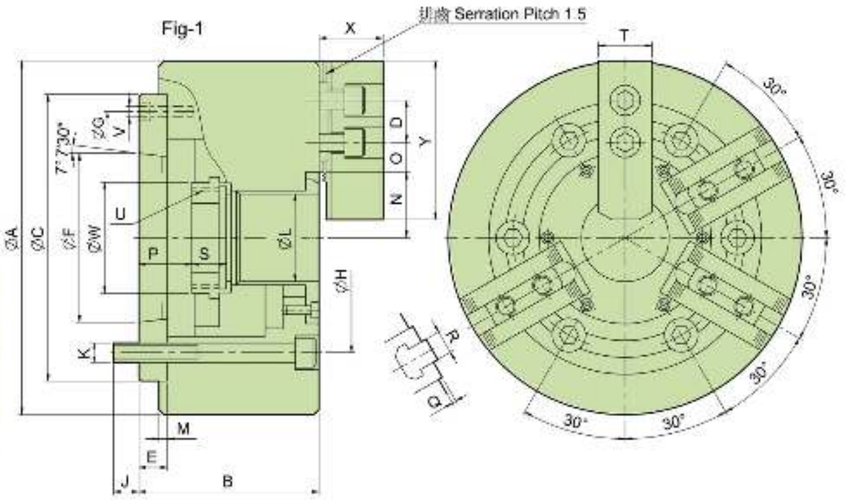
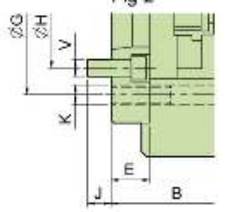


Fig-2



SPECIFICATIONS:

Model / Dim	Through-Hole (mm)	Plunger Stroke (mm)	Jaw Stroke (in dia) (mm)	Max. Draw Bar Pull Force (kgf)		Max. Gripping Force (kgf)		Max. Operating Pressure (kgf/cm²)		Max. Speed (r.p.m.)	Weight (kg)	Malching Cylinder	Malching Soft Jaw	Malching Hard Jaw
				3 Jaw	2 Jaw	3 Jaw	2 Jaw	3 Jaw	2 Jaw					
NHT208A5	52	16	7.4	2243	1495	5812	3875	17.2	12.1	3500	25.5	M1552	HC06	HJ06
NHT208A6	52	16	7.4	2243	1495	5812	3875	17.2	12.1	3500	24.7	M1552	HC06	HJ06

DIMENSIONS:

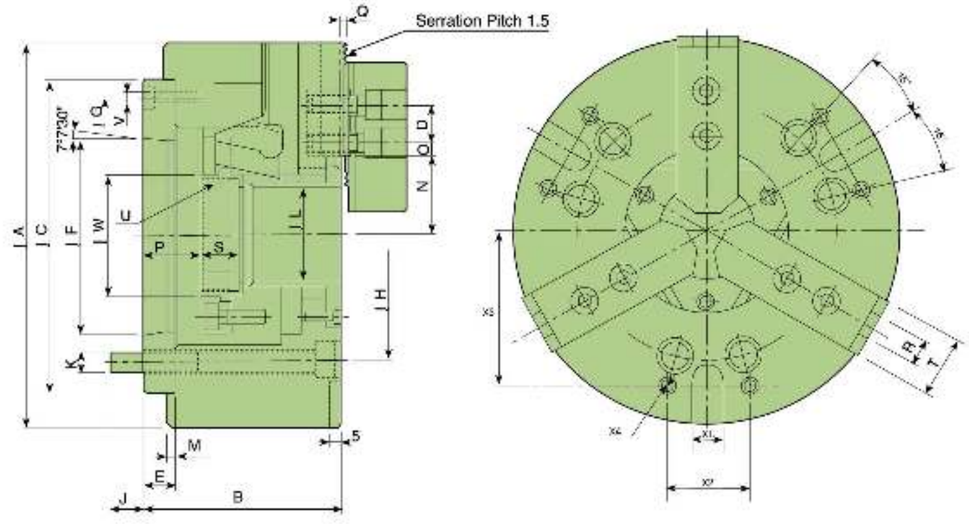
Model / Dim	A	B	C	D	E	F	G	H	J	K	L	M	N max.	O max.	O min.	P max.	P min.	Q	R	S	T	U max.	V	W	X	Y	Reference
NHT-208A5	210	113	170	20	23	82.563	133.5	104.78	13	6xM12	52	5	41.8	34	7.5	37.5	21.5	2	12	20.5	32	M60xP2.0	6xM10	66	37	73	Fig-2
NHT-208A6	210	107	170	20	17	106.375	150	133.35	17	6xM12	52	5	41.8	34	7.5	31.5	15.5	2	12	20.5	32	M60xP2.0	3xM6	66	37	73	Fig-1

NB-200A SERIES

SPECIFICATIONS:

3-JAW WEDGE TYPE EXTRA LARGE THROUGH-HOLE POWER CHUCK (WITH ADAPTOR)

1.More large bore:Having the largest bore in wede type power operated chucks.
2.20% large bore:Approximately 20% higher speed, higher gripping force and larger bore comparedwith usual chucks.
3.Model N-200A chucks are assembled with adaptor for ASA B5.9 type A spindles.
4.Model N-200A chucks are manufactured form high grade alloy steel, All slidingsurfaces are hardened and ground for accurate actu al running and long service repeatability.



SPECIFICATIONS:

Model / Dim	Through-Hole (mm)	Plunger Stroke (mm)	Jaw Stroke (mm)	Max. Draw Bar Pull Force (kgf)	Max. Gripping Force (kgf)	Max. Operating Pressure (kgf/cm²)	Max. Speed (r.p.m.)	Weight (kg)	Moment of Inertia I (kg·m²)	Matching Cylinder	Matching Soft Jaw	Matching Hard Jaw
NB-306A5	ø52	12	5.4	2200	5700	18.4	6000	14	0.06	M1552	HC06	HJ06
NB-208A6	ø66	16	7.4	3500	8973	20.5	4600	24	0.14	M1868	HC08	HJ08
NB-210A8	ø78	19	8.8	4300	11000	27.5	4200	37.4	0.4	M1878	HC10	HJ10
NB-212A11	ø122	23	10.6	5800	15000	20.5	3200	65	0.95	M2511	HC12	HJ12

DIMENSIONS:

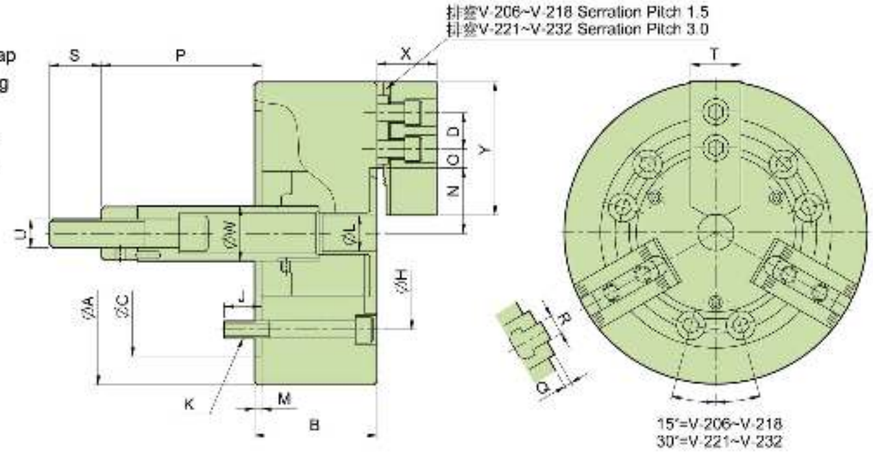
Model / Dim	A	B	C (H6)	D	E	F	G	H	J	K	L	M	N min	O max	O min	P max	P min	Q	R	S	T	U max	V	W	X1 (H12)	X2	X3	X4
NB-306A5	170	91	140	20	15	82.563	116	104.78	14.5	6xM10	52	5	34.3	18.25	9.25	26	14	2	12	20	32	M60x2.0	3xM6	65	16	36	65	M8
NB-208A6	210	103	170	25	17	106.375	150	133.35	19.5	6xM12	66	5	42	23.75	11.75	31.5	15.5	2	14	20	37	M74x2.0	3xM6	80	16	45	80	M8
NB-210A8	254	113	220	30	18	139.719	190	171.45	24	6xM16	78	5	53	33.75	14.25	26.5	7.5	2	16	25	42	M67x2.0	6xM8	94	16	60	102	M10
NB-212A11	315	134	300	30	22	196.869	260	235	28	6xM20	122	6	74.2	36.25	12.75	42	19	2	21	28	52	M135x2.0	3xM10	143	20	60	138	M10

V SERIES

SPECIFICATIONS:

3-JAW WEDGE TYPE NON THROUGH HOLE POWER CHUCK (WITHOUT ADAPTOR)

1.High performance:Similar high performance to N serles.
2.Chuck mounting screws: Metric or UNC socket head cap screws are supplied for bolting the chuck to the spindle.
3.Alternative spindle adaptors: ASA or DIN adaptors can be suppllied to fit machine spindle.



SPECIFICATIONS:

Model	Jaw Stroke (In dia) (mm)	Plunger Stroke (mm)	Max. Pull Force (kgf)	Max. Gripping Force (kgf)	Max. Operating Pressure (kgf/cm²)	Max. Speed (r.p.m.)	Weight (kg)	Moment of Inertia I (kg·m²)	Matching Cylinder	Matching Hard Jaw	Matching Soft Jaw	Gripping O.D. Range (mm)
V-206	9.2	20	1835	5353	26.5	5200	12	0.045	MS105C	HJ06	HC06	ø18~ø165
V-208	9.7	21	2549	7648	25.5	4500	23	0.137	MS125C	HJ08	HC08	ø26~ø210
V-210	8.8	25	2957	11013	28.6	4000	34.5	0.3	MS125C	HJ10	HC10	ø26~ø254
V-212	10.5	30	4181	15907	27.5	3300	59.5	0.725	MS150C	HJ12-1	HC12-1	ø26~ø304
V-215	16	35	8362	25391	32.6	3000	101	1.8	MS200C	HJ15-1	HC15-1	ø68~ø381
V-218	16	35	8362	25391	32.6	2700	116	2.9	MS200C	HJ15-1	HC15-1	ø130~ø450
V-221	16	35	8362	27838	32.6	1940	181	6.2	MS200C	HJ24-1	HC24-1	ø65~ø530
V-224	16	35	8362	27838	32.6	1760	216	7	MS200C	HJ24-1	HC24-1	ø152~ø610
V-232	18.6	35	8362	27838	32.6	600	365	27.3	MS200C	HJ24-1	HC32-1	ø100~ø810

DIMENSIONS:

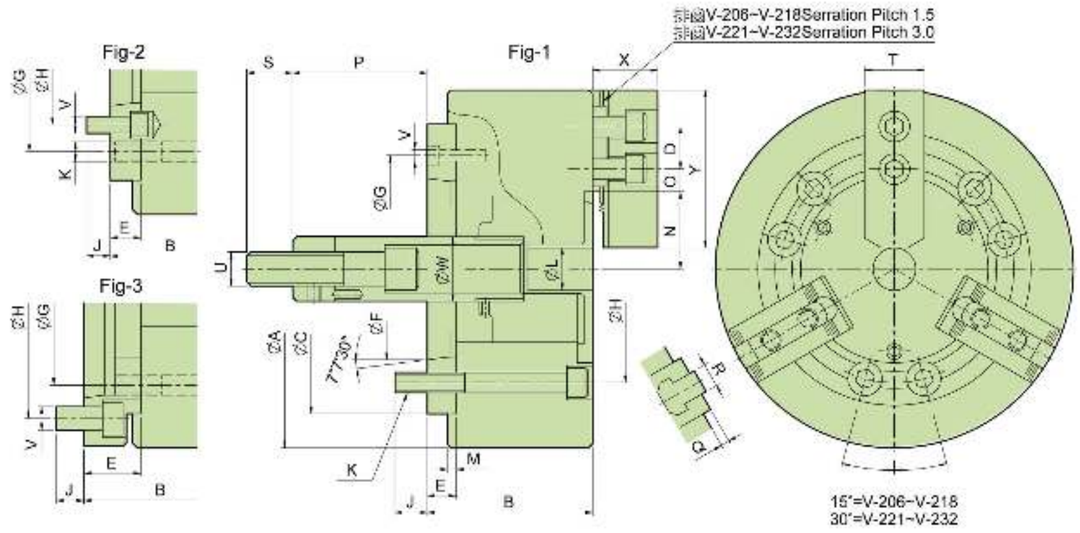
Model	A	B	C	D	H	J	K	L	M	N max.	O max.	O min.	P max.	P min.	Q	R	S	T	U	W	X	Y
V-206	165	74	140	20	104.78	14	6-M10x70	21	5	38.7	15.25	9.25	104.6	84.6	4	12	36	31	M16x2.0	34	39	73
V-208	210	85	170	25	133.35	20	6-M12x85	25	5	46.85	22.25	11.75	132	111	5	14	36	35	M20x2.5	38	41	95
V-210	254	89	220	30	171.45	23	6-M16x85	34	5	51.1	30.75	11.25	158	133	5	16	36	40	M20x2.5	45	46	110
V-212	304	106	220	30	171.45	23	6-M16x105	34	6	61	48.75	12.75	163	133	5	18	36	50	M20x2.5	50	54	130
V-215	381	114	300	43	235	29	6-M20x115	—	6	77.5	50.25	23.25	104	69	2	25.5	55	50	M30x3.5	60	63	165
V-218	450	114	300	43	235	29	6-M20x115	—	6	108	50.25	23.25	92	57	2	25.5	55	50	M30x3.5	60	63	165
V-221	530	125	380	60	330.2	31	6-M24x115	—	6	86	93.5	24.5	97	62	7.5	25	55	65	M30x3.5	60	76	180
V-224	610	125	380	60	330.2	31	6-M24x115	—	6	125	93.5	24.5	97	62	7.5	25	55	65	M30x3.5	60	76	180
V-232	810	135	380	80	330.2	26	6-M24x115	—	6	104.9	196.5	25.5	74	39	9	25	60	74	M30x3.5	60	97	210

Alternative spindle adaptors:
ASA or DIN adaptors can be supplied
to fit machine spindle.

VA SERIES

SPECIFICATIONS:

3-JAW WEDGE TYPE NON THROUGH HOLE POWER CHUCK (WITH ADAPTOR)



SPECIFICATIONS:

Model	Plunger Stroke (mm)	Jaw Stroke (in dia) (mm)	Max. Pull Force (kgf)	Max. Gripping Force (kgf)	Max. Operating Pressure (kgf/cm²)	Max. Speed (r.p.m.)	Weight (kg)	Moment of Inertia I (kg·m²)	Matching Cylinder	Matching Hard Jaw	Matching Soft Jaw	Gripping O.D. Range (mm)
V-206A5	20	9.2	1835	5253	26.5	5200	13.2	0.05	MS105C	HJ06	HC06	ø18~ 165
V-206A6	20	9.2	1835	5253	26.5	5200	15.8	0.059	MS105C	HJ06	HC06	ø18~ 165
V-208A5	21	9.7	2549	7648	25.5	4500	25.8	0.154	MS125C	HJ08	HC08	ø26~ 210
V-208A6	21	9.7	2549	7648	25.5	4500	25	0.149	MS125C	HJ08	HC08	ø26~ 210
V-208A8	21	9.7	2549	7648	25.5	4500	23.3	0.175	MS125C	HJ08	HC08	ø26~ 210
V-210A6	25	8.8	2957	11013	28.6	4000	40.5	0.35	MS125C	HJ10	HC10	ø26~ 254
V-210A8	25	8.8	2957	11013	28.6	4000	37.5	0.33	MS125C	HJ10	HC10	ø26~ 254
V-210A11	25	8.8	2957	11013	28.6	4000	47.9	0.417	MS125C	HJ10	HC10	ø26~ 254
V-212A6	30	10.5	4181	15907	27.5	3300	65.5	0.796	MS150C	HJ12-1	HC12-1	ø26~ ø304
V-212A8	30	10.5	4181	15907	27.5	3300	62.5	0.762	MS150C	HJ12-1	HC12-1	ø26~ ø304
V-212A11	30	10.5	4181	15907	27.5	3300	72.9	0.888	MS150C	HJ12-1	HC12-1	ø26~ ø304
V-215A8	35	16	8362	25391	32.6	3000	115	2.05	MS200C	HJ15-1	HC15-1	ø68~ ø381
V-215A11	35	16	8362	25391	32.6	3000	106	1.92	MS200C	HJ15-1	HC15-1	ø68~ ø381
V-215A15	35	16	8362	25391	32.6	3000	128	2.281	MS200C	HJ15-1	HC15-1	ø68~ ø381
V-218A8	35	16	8362	25391	32.6	2700	134	3.35	MS200C	HJ15-1	HC15-1	ø130~ø450
V-218A11	35	16	8362	25391	32.6	2700	122	3.05	MS200C	HJ15-1	HC15-1	ø130~ø450
V-218A15	35	16	8362	25391	32.6	2700	143	3.575	MS200C	HJ15-1	HC15-1	ø130~ø450
V-221A11	35	16	8362	27638	32.6	1940	200	6.58	MS200C	HJ24-1	HC24-1	ø 65~ ø 530
V-221A15	35	16	8362	27638	32.6	1940	193	6.37	MS200C	HJ24-1	HC24-1	ø 65~ ø 530
V-224A11	35	16	8362	27638	32.6	1760	239	7.6	MS200C	HJ24-1	HC24-1	ø152~ø610
V-224A15	35	16	8362	27638	32.6	1760	232	7.36	MS200C	HJ24-1	HC24-1	ø152~ø610
V-232A11	35	18.6	8362	27638	32.6	600	382	30	MS200C	HJ24-1	HC32-1	ø100~ø810
V-232A15	35	18.6	8362	27638	32.6	600	375	28	MS200C	HJ24-1	HC32-1	ø100~ø810

DIMENSIONS:

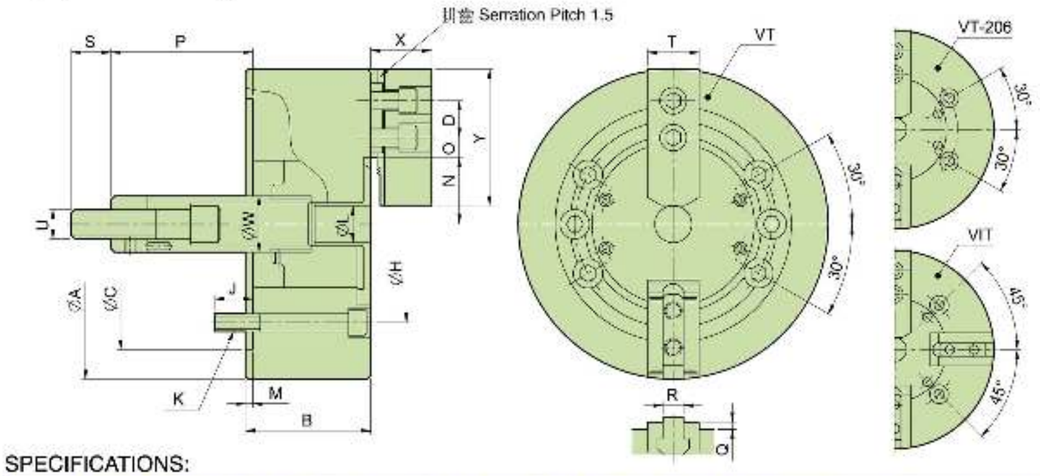
Model	A	B	C	D	E	F	G	H	J	K	L	M	N max.	O max.	O min.	P max.	P min.	Q	R	S	T	U	V	W	X	Y	Reference
V-206A5	165	84	140	20	15	82.563	116	104.78	14	6-M10	21	5	38.7	15.25	9.25	69.6	69.6	4	12	36	31	M16x2.0	3-M6	34	39	73	Fig1
V-206A6	165	104	140	20	35	106.375	104.78	133.35	16	6-M10	21	5	38.7	15.25	9.25	69.6	49.6	4	12	36	31	M16x2.0	6-M12	34	39	73	Fig3
V-206A5	210	103	170	25	23	82.563	133.35	104.78	13	6-M12	25	5	46.85	22.25	11.75	109	88	5	14	36	35	M20x2.5	6-M10	36	41	95	Fig2
V-206A6	210	97	170	25	17	106.375	150	133.35	18	6-M12	25	5	46.85	22.25	11.75	115	94	5	14	36	35	M20x2.5	3-M6	36	41	95	Fig1
V-206A8	210	120	170	25	40	139.719	133.35	171.45	16	6-M12	25	5	46.85	22.25	11.75	92	71	5	14	36	35	M20x2.5	6-M18	36	41	95	Fig3
V-210A6	254	109	220	30	25	106.375	171.45	133.35	18	6-M16	34	5	51.1	30.75	11.25	133	109	5	16	36	40	M20x2.5	6-M12	45	46	110	Fig2
V-210A8	254	102	220	30	18	139.719	190	171.45	25	6-M16	34	5	51.1	30.75	11.25	140	115	5	16	36	40	M20x2.5	3-M8	45	46	110	Fig1
V-210A11	254	134	220	30	50	196.869	171.45	235	22	6-M16	34	5	51.1	30.75	11.25	108	83	5	16	36	40	M20x2.5	6-M20	45	46	110	Fig3
V-212A6	304	125	220	30	25	106.375	171.45	133.35	18	6-M16	34	6	61	48.75	12.75	138	108	5	18	36	50	M20x2.5	6-M12	50	54	130	Fig2
V-212A8	304	118	220	30	18	139.719	190	171.45	25	6-M16	34	6	61	48.75	12.75	145	115	5	18	36	50	M20x2.5	3-M8	50	54	130	Fig1
V-212A11	304	150	220	30	50	196.869	171.45	235	22	6-M16	34	6	61	48.75	12.75	113	83	5	18	36	50	M20x2.5	6-M20	50	54	130	Fig3
V-215A8	381	141	300	43	33	139.719	235	171.45	24	6-M20	-	6	77.5	50.25	23.25	71	36	2	25.5	55	62	M30x3.5	6-M16	60	63	165	Fig2
V-215A11	381	130	300	43	22	196.869	260	235	28	6-M20	-	6	77.5	50.25	23.25	82	47	2	25.5	55	62	M30x3.5	3-M10	60	63	165	Fig1
V-215A15	381	185	300	43	57	265.775	235	330.2	24	6-M20	-	6	77.5	50.25	23.25	47	12	2	25.5	55	62	M30x3.5	6-M24	60	63	165	Fig3
V-218A8	450	141	300	43	33	139..719	235	171.45	24	6-M20	-	6	108	50.25	23.25	59	24	2	25.5	55	62	M30x3.5	6-M18	60	63	165	Fig2
V-218A11	450	130	300	43	22	196.869	260	235	28	6-M20	-	6	108	50.25	23.25	70	35	2	25.5	55	62	M30x3.5	3-M10	60	63	165	Fig1
V-218A15	450	185	300	43	57	265.775	235	330.2	24	6-M20	-	6	108	50.25	23.25	105	70	2	25.5	55	62	M30x3.5	6-M24	60	63	165	Fig3
V-221A11	530	146	380	60	27	196.869	330.2	235	30	6-M24	-	6	85	93.5	24.5	70	35	8	25	55	65	M30x3.5	6-M20	60	76	180	Fig2
V-221A15	530	146	380	60	27	265.775	330.2	330.2	34	6-M24	-	6	85	93.5	24.5	70	35	8	25	55	65	M30x3.5	3-M12	60	76	180	Fig1
V-224A11	610	146	380	60	27	196.869	330.2	235	30	6-M24	-	6	125	93.5	24.5	70	35	8	25	55	65	M30x3.5	6-M20	60	76	180	Fig2
V-224A15	610	146	380	60	27	265.775	330.2	330.2	34	6-M24	-	6	125	93.5	24.5	70	35	8	25	55	65	M30x3.5	3-M12	60	76	180	Fig1
V-232A11	810	156	380	80	27	196.869	330.2	235	30	6-M24	-	6	104.8	196.5	25.5	47	12	9	25	60	74	M30x3.5	6-M20	60	97	210	Fig2
V-232A15	810	156	380	80	27	265.775	330.2	330.2	38	6-M24	-	6	104.8	196.5	25.5	47	12	9	25	60	74	M30x3.5	3-M12	60	97	210	Fig1

VT&VIT SERIES

SPECIFICATIONS:

2-JAW AND 4-JAW WEDGE TYPE NON THROUGH HOLE POWER CHUCK (WITHOUT ADAPTOR)

1.Suitable for special applications:
Used to hold special shape work pieces such as square bar or flanges which is not possible with 3 jaw chucks.
2.Interchangable with V or VA series.
3.Basic dimensions are the same as V type.
4.High performance as V type.



SPECIFICATIONS:

Model / Dim	Plunger Stroke (mm)	Jaw Stroke (in dia) (mm)	Max. Pull Force (kgf)	Max. Gripping Force (kgf)	Max. Operating Pressure (kgf/cm²)	Max. Speed (r.p.m.)	Weight (kg)	Moment of Inertia I (kg·m²)	Matching Cylinder	Matching Hard Jaw	Matching Soft Jaw	Gripping O.D Range (mm)
VT-206	20	9.2	1224	3569	17.3	5200	12	0.045	MS100C MH100	HJ06	HC06	ø18~ ø165
VT-208	21	9.7	1663	5098	16.3	4500	22	0.13	MS125C MH125	HJ08	HC08	ø28~ ø210
VT-210	25	8.8	1988	7342	19.4	4000	33.5	0.29	MS125C MH125	HJ10	HC10	ø24~ ø254
VT-212	30	10.5	2804	10805	18.4	3300	58	0.7	MS150C MH150	HJ12-1	HC12-1	ø18~ ø304
VIT-212	30	10.5	4181	15907	27.5	2800	64	0.78	MS150C MH150	HJ12-1	HC12-1	ø18~ ø304
VT-215	35	16	5557	16927	21.7	3000	100.6	1.7	MS200C	HJ15-1	HC15-1	ø68~ ø381
VIT-218	35	16	8362	25391	32.6	2300	119	2.975	MS200C	HJ15-1	HC15-1	ø130~ø450
VIT-224	35	16	8362	27838	32.6	1520	228	7.3	MS200C	HJ24-1	HC24-1	ø152~ø610
VIT-232	35	18.7	8362	21924	32.6	920	400	30	MS200C	HJ24-1	HC32-1	ø100~ø810

DIMENSIONS:

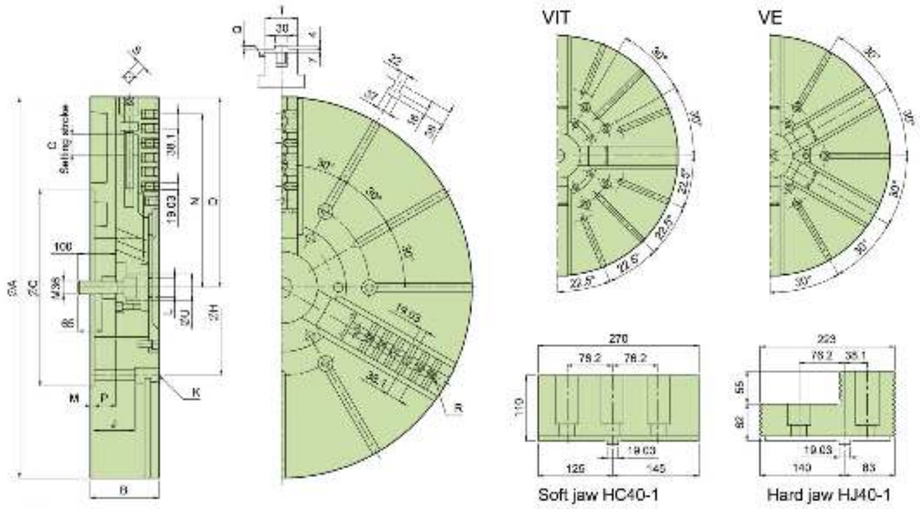
Model / Dim	A	B	C	D	H	J	K	L	M	N max.	O max.	O min.	P max.	P min.	Q	R	S	T	U	W	X	Y
VT-206	165	74	140	20	104.78	14	4-M10x70	21	5	38.7	15.25	9.25	104.6	84.6	4	12	36	31	M16x2.0	34	39	73
VT-208	210	85	170	25	133.35	20	6-M12x85	25	5	46.85	22.25	11.75	132	111	5	14	36	35	M20x2.5	38	41	95
VT-210	254	89	220	30	171.45	23	6-M16x85	34	5	51.1	30.75	11.25	158	133	5	16	36	40	M20x2.5	45	46	110
VT-212	304	106	220	30	171.45	23	6-M16x105	34	6	61	48.75	12.75	163	133	5	18	36	50	M20x2.5	50	54	130
VIT-212	304	106	220	30	171.45	23	6-M16x105	34	6	61	48.75	12.75	163	133	5	18	36	50	M20x2.5	50	54	130
VT-215	381	114	300	43	235	29	6-M20x115	—	6	77.5	50.25	23.25	104	69	2	25.5	55	50	M30x3.5	60	63	165
VIT-218	450	114	300	43	235	29	6-M20x115	—	6	108	50.25	23.25	92	57	2	25.5	55	50	M30x3.5	60	63	165
VIT-224	610	125	380	60	330.2	31	8-M24x115	—	6	125	93.5	24.5	97	62	7.5	25	55	65	M30x3.5	60	76	180
VIT-232	810	135	380	80	330.2	26	8-M24x115	—	6	104.9	196.5	25.5	74	39	9	25	60	74	M30x3.5	60	97	210

V(40"-79") SERIES

SPECIFICATIONS:

3-JAW WEDGE TYPE NON THROUGH HOLE POWER CHUCK (WITHOUT ADAPTOR)

1.Chucking operations of very large components external or internal clamping.
2.Suitable for vertical machines thanks to the front protection of the slide ways.
3.Chuck with manual radial setting of master jaw for the workpiece.



SPECIFICATIONS:

Model		Jaws	Plunger Stroke (mm)	Radial Jaw Stroke +(Manual setting)	Max. Pull Force (KN)	Max. Gripping Force (KN)	Max. Operating Pressure (kgf/cm²)	Max. Speed (r.p.m.)	Weight (kg)	Moment of Inertia I (kg·m²)	Matching Cylinder	Matching Hard Jaw	Matching Soft Jaw
40"	V-240	3	57	23 + (30)	180	320	42.8	630	645	82	MS250C	HJ40-1	HC40-1
	VIT-240	4						550	700	89			
50"	V-250	3	57	23 + (30)	180	320	42.8	500	890	168	MS250C	HJ40-1	HC40-1
	VIT-250	4						400	940	177			
	VE-250	6						360	971	183			
63"	VIT-263	4	60	24 + (40)	200	360	46.9	300	1700	518	MS250C	HJ40-1	HC40-1
	VE-263	6						280	1800	548			
79"	VE-279	6	60	24 + (40)	200	360	46.9	230	2850	1350	MS250C	HJ40-1	HC40-1

DIMENSIONS:

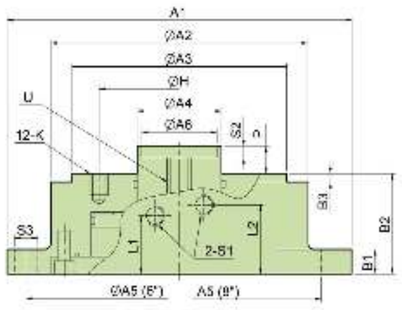
Model		A	B	C	D max.	H	J	K	L	M	N max.	O	P max.	P min.	Q	R	S	T	U
40"	V-240	1005	180	520	502	463.6	108	M24	M52x1.5	8	457	30	59	2	4	7-M24	19	85	72
	VIT-240																		
50"	V-250	1250	180	520	623	463.6	108	M24	M52x1.5	8	563	30	59	2	4	10-M24	19	85	72
	VIT-250																		
	VE-250																		
63"	VIT-263	1600	220	720	796	647.6	144	M30	M52x1.5	8	738	40	82	22	6	13-M24	22	110	72
	VE-263																		
79"	VE-279	2000	238	720	996	647.6	159	M30	M52x1.5	8	914	40	100	40	6	17-M24	22	110	72

DOV / DON SERIES

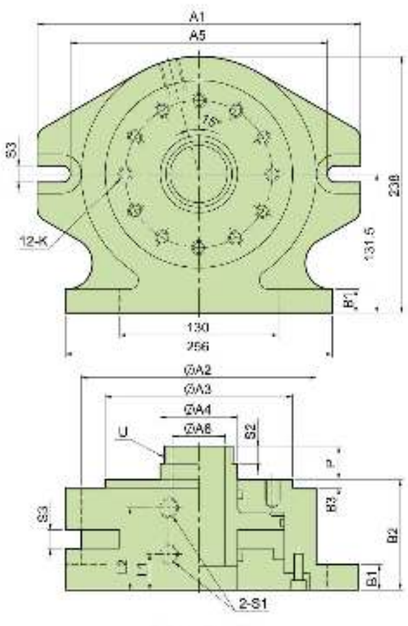
SPECIFICATIONS:

VERTICAL AND VERTICAL / HORIZONTAL STATIONARY POWER CHUCKS

1.Suitable for vertical milling and dritting operations.
2.With large through-hole, Vertical/horizontal power chucks not only can glip the long workpiece bat also can do horizontal holding.



DOV Fig-1



DON Fig-2

SPECIFICATIONS:

Model / Dim	Piston Dia (mm)	Piston Area		Piston Stroke (mm)	Max. Draw Bar Pull		Weight (kg)	Max. Operating Pressure (kgf/cm²)	Matching Chuck
		Push Side(cm²)	Pull Side(cm²)		Push Side(kgf)	Pull Side (kgf)			
6" DOV	ø115	104	78.5	20	1900	1400	12	20	V-206
8" DOV	ø155	187	148.6	21	3600	2800	21	20	V-208 V-210 V-212
8" DON	ø155	148.6	148.6	17	2800	2800	28.5	20	N-208

DIMENSION:

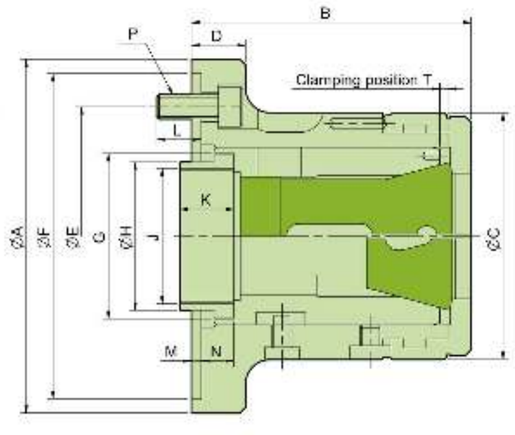
Model	A1	A2	A3	A4	A5	A6	B1	B2	B3	L1	L2	H	K	P Max.	P Min.	S1	S2	S3	U	Reference
6" DOV	ø220	168	140	55	ø200	49	16	65.5	5.5	38	45	104.78	12-M10X16L	18	-2	PT1/4"	7.6	2-ø15	M16XP2.0	Fig-1
8" DOV	290	210	170	70	242	58	24	86	5.5	23	65	133.35	12-M12X18L	20	-1	PT1/4"	5.5	2-16	M16XP2.0	Fig-1
8" DON	293	213	170	70	242	52	24	100	5.5	32.5	74.5	133.35	12-M12X18L	30.4	13.4	PT1/4"	16	4-17	M60XP2.0	Fig-2

CR SERIES

SPECIFICATIONS:

COLLET CHUCKS FOR CYLINDRICAL CENTER MOUNT

1.Collet chucks with bayonet catch are mainly used for chucking bar work on NC/CNC lathes.
2.The bar stock can be fed in through the chuck.
3.Profiles can also be chucked with the appropriate collets.



SPECIFICATIONS:

UNIT:mm

Model / Dim	Matching adapter	Bar Capacity (mm)	Sleeve Stroke (mm)	Weight (kg)	Max. operating force KN (kgf)	Max. gripping force KN (kgf)	Max. speed (r.p.m.)
CR42-140	140	42	7	6.2	25(2549)	55(5608)	6,000
CR60-170	170	60	7	11.5	30(3059)	65(6628)	5,000
CR60-220	220	60	7	15.5	30(3059)	65(6628)	5,000

DIMENSION:

Model / Dim	A(h6)	B	C	D	E	F(H6)	G	H	J max.	K	L	M	N	P	T
CR42-140	155	114	100	23	133.35	140	M66xP1.5	66	M55xP2.0	25	18	6	11.9	3-M10	3.1
CR60-170	185	139	130	30	133.35	170	M90xP1.5	80	M74xP2.0	30	18	6	17.9	6-M12	3.1
CR60-220	235	141	130	32	171.45	220	M90xP1.5	80	M74xP2.0	30	20	6	19.9	6-M16	3.1

CAPACITIES:

CHUCK NO.	MULTIBORE				SPRING COLLET			
	CAT.NO.	○	○	□	CAT.NO.	○	○	□
CR42	M-673	42	36	30	175E/4728	42	36	30
CR60	M-677	60	52	42	185E/4291	60	52	42

Uses the collet to DIN 6343 specification

Collet Drawings:

Spring Collet

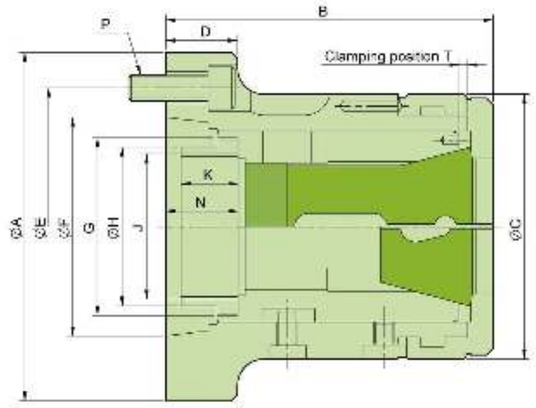
Multi-Bore Collet

CRA SERIES

SPECIFICATIONS:

COLLET CHUCKS FOR SHORT TAPER MOUNT

1.Collet chucks with bayonet catch are mainly used for chucking bar work on NC/CNC lathes.
2.The bar stock can be fed in through the chuck.
3.Profiles can also be chucked with the appropriate collets.



SPECIFICATIONS:

UNIT:mm

Model \ Dim	Matching Spindle	Bar Capacity (mm)	Sleeve Stroke (mm)	Weight (kg)	Max. operating force KN (kgf)	Max. gripping force KN (kgf)	Max. speed (r.p.m.)
CR26A4	A2-4	26	5	4.5	20(2039)	44(4486)	7,000
CR30A4	A2-4	30	5	4.1	20(2039)	44(4486)	7,000
CR42A5	A2-5	42	7	6.2	25(2549)	55(5608)	6,000
CR42A6	A2-6	42	7	8.2	25(2549)	55(5608)	6,000
CR60A6	A2-6	60	7	13	30(3059)	65(6628)	5,000
CR80A8	A2-8	80	7	21	35(3568)	73(7443)	4,000

DIMENSION:

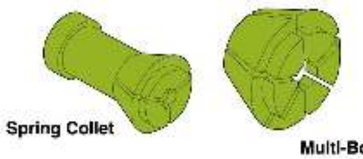
Model \ Dim	A	B	C	D	E	F	G	H	J max.	K	N	P	T
CR26A4	112	103.5	85	30	82.55	63.513	M50xP1.5	45	M40xP1.5	15	21.7	3-M10	2.3
CR30A4	112	103.5	85	30	82.55	63.513	M50xP1.5	45	M40xP1.5	15	21.7	3-M10	2.3
CR42A5	135	124	100	27	104.78	82.563	M66xP1.5	60	M56xP2.0	25	27.4	4-M10	3.1
CR42A6	170	124	100	32	133.35	106.375	M66xP1.5	66	M60xP2.0	22	27.4	4-M12	3.1
CR60A6	170	145	130	27	133.35	106.375	M90xP1.5	80	M74xP2.0	30	29.9	4-M12	3.1
CR80A8	220	170	156	35	171.45	139.719	M114xP2.0	99	M90xP2.0	27.5	32.4	6-M16	6.1

CAPACITIES:

CHUCK	MULTIBORE				SPRING COLLET			
NO.	CAT.NO.	○	○	□	CAT.NO.	○	○	□
CR26	M-667	26	22	16	161E/6744	30	26	18
CR30	M-669	30	26	21	163E/4249	30	26	21
CR42	M-673	42	36	30	173E/4728	42	36	30
CR60	M-677	60	52	42	185E/4291	60	52	42
CR80	J-660	80	69	56	193E/H-47	80	69	56

Uses the collet to DIN 6343 specification

Collet Drawings:



Spring Collet

Multi-Bore Collet

HJ SERIES

SPECIFICATIONS:

HARD JAWS FOR HYDRAULIC POWER CHUCKS

1.Hard jaw for hydraulic power chucks.
2.Hard jaw for CNC lathe.

Fig-1

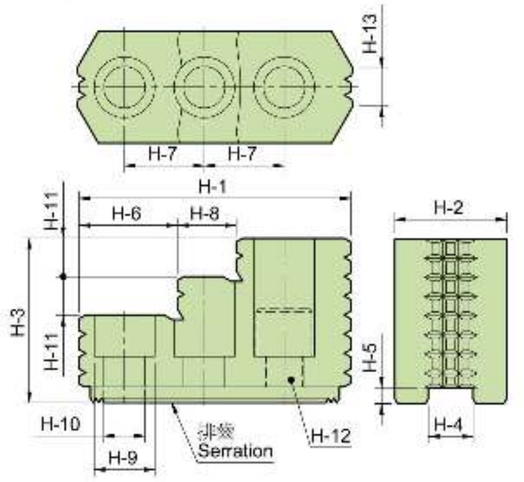
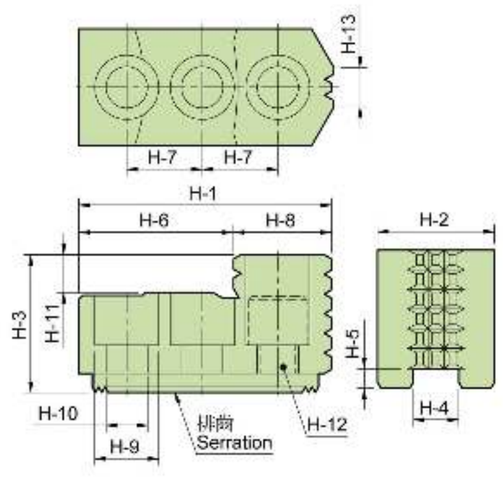


Fig-2



SPECIFICATIONS:

UNIT:mm

Model \ Dim	H-1	H-2	H-3	H-4	H-5	H-6	H-7	H-8	H-9	H-10	H-11	H-12	H-13	Serration Pitch	Reference	Matching Chuck	3 Jaw Weight (kg)
HJ05	53	23	27.5	10	4	30.5	14	22.5	13.5	8.5	10	M8	6	1.5x60°	Fig-2	N-204.N-205	0.4
HJ06	67	31	36	12	5	39.5	20	27.5	17	11	10	M10	11	1.5x60°	Fig-2	N-206.V-206	1.0
HJ08	86	35	51	14	5	31	25	18	19	13	12	M12	12	1.5x60°	Fig-1	N-208.V-208	1.9
HJ10	99.5	40	54	16	5	43	30	17	19	13	13	M12	15	1.5x60°	Fig-1	N-210.V-210	2.9
HJ12	103	50	52	21	4	62.5	30	40.5	25	17	17	M16	30	1.5x60°	Fig-2	N-212	3.5
HJ12-1	103	50	52	18	5	62.5	30	40.5	22	15	17	M14	30	1.5x60°	Fig-2	V-212	3.6
HJ15	149	62	86	22	8	63	43	34	32	21	20	M20	40	1.5x60°	Fig-1	N-215.N-218	9.6
HJ15-1	149	62	86	25.5	5	63	43	34	32	21	20	M20	40	1.5x60°	Fig-1	V-215	9.5
HJ24-1	159.5	80	90	25	9	104.5	50	55	32	21	40	M20	55	3.0x60°	Fig-2	N-224.V-224	14.3

HC SERIES

SPECIFICATIONS:

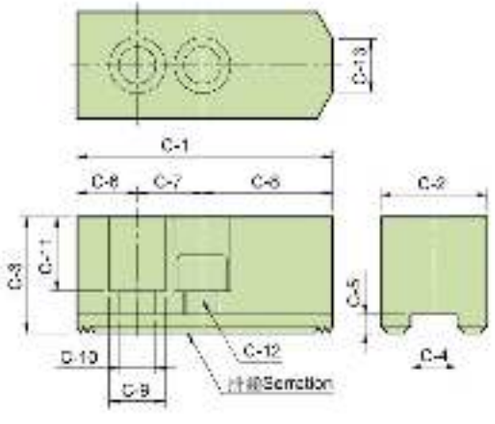
SOFT JAWS FOR HYDRAULIC POWER CHUCKS

1.Soft jaws for hydraulic power chucks.
2.Soft jaw for CNC lathe.

T-NUTS SERIES

SPECIFICATIONS:

SUITABLE FOR POWER CHUCK



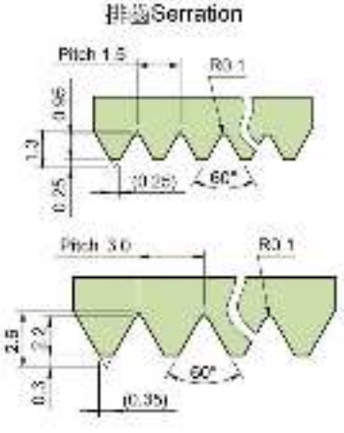


Fig. 1

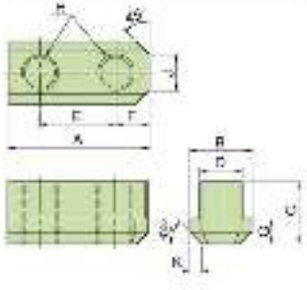


Fig. 2

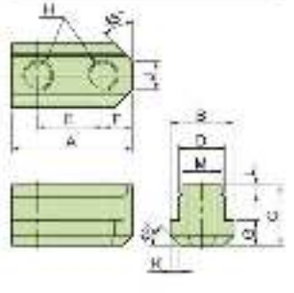
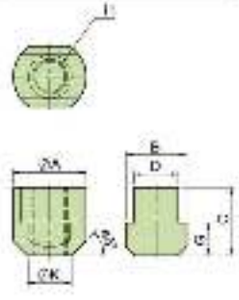


Fig. 3



SPECIFICATIONS: UNIT:mm

Dim / Model	D1	D2	D3	C-4	C-5	D-1	D-2	D-3	C-6	C-10	C-11	C-12	C-13	Serration Pitch	Matching Chuck	S-Jaw Weight (kg)
HC04	58	28	28	10	5	9	14	30	13.5	9	14	M5	8	1.5x60°	N-204	0.45
HC05	62	25	30	10	5	9	14	33	13.5	9	21	M5	5	1.5x60°	N-205	0.7
HC06	73	31	36	12	5	15	20	33	17	1	21	M10	4	1.5x60°	N-206,V-206	1.3
HC08	86	35	37	14	6	24	25	46	19	13	22	M12	16	1.5x60°	N-208,V-208	2.1
HC10	110	40	42	16	5	30	30	61	19	13	27	M12	16	1.5x60°	N-210,V-210	3.7
HC12	130	50	50	21	5	39	30	61	25	17	30	M16	22	1.5x60°	N-212	5.5
HC15	155	62	62	22	8	37	43	65	32	21	36	M20	-	1.5x60°	N-215,N-216	12.5
HC12-1	130	50	50	16	5	39	30	61	23	15	30	M14	33	1.5x60°	V-212	5.5
HC15-1	155	62	62	22.5	5	37	43	65	32	21	36	M20	-	1.5x60°	V-215,V-216	12.5
HC24-1	180	64	70	25	9	40	60	93	32	21	45	M20	-	3.0x60°	V-221,V-224,V-228,V-232	15.8
HC32-1	210	74	80	25	9	40	80	93	32	21	55	M20	-	3.0x60°	V-232	20.2

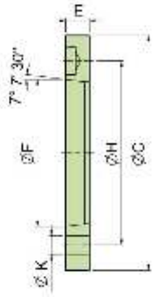
SPECIFICATIONS:

Model	A	B	C	D	E	F	G	H	J	K	L	M	Fig	Matching Chuck
N0305-0H	28	14.5	15	10	14	8	5.5	M8	8	2	-	-	1	N-204, N-205
N0608-0H	38	17.5	18.5	12	20	8.2	7.5	M10	8	2.5	-	-	1	N-206, NB-208
N0808-0H	46.5	20.5	20.5	14	25	10.5	8.5	M12	12	4	-	-	1	N-208, NB-208
N0210-0H	61	22.5	21.5	16	30	11	8.5	M12	11	3	-	-	1	N-210, NB-210
N0212-0H	65.5	29.5	27.8	21	30	12	11.5	M16	13	4.5	-	-	1	N-212, NB-212
N0215-0H	80	33.5	45.5	34	45	17	13.5	M20	11	5	6	22	2	N-215, N-216
V0206-CH	36.6	17.5	22.6	12	20	7.5	7.5	M10	6	3	-	-	1	V-206, NI-T-206
V0208-CH	46	20.5	25.5	14	25	11	9.5	M12	8	4	-	-	1	V-208
V0210-CH	55	22.5	25.5	16	30	11	9.5	M12	8	4	-	-	1	V-210
V0212-CH	63.6	26.5	33.6	18	30	11.5	13.5	M14	12	5	-	-	1	V-212
V0215 CH	42	36	39.2	25.5			10	M20		25			3	V-215, V-216
V0215-CH1	42	35	41.2	36	-	-	19	M20	-	25	-	-	3	V-215 TS.6
V0224-CH	45	37.5	45	35	-	-	18	M20	-	26.6	-	-	3	N-220, N-224,V-220, V-224,N-232

ADAPTERS SERIES

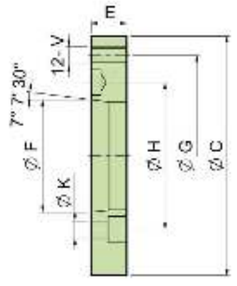
SPECIFICATIONS:

Mounting adapters on short taper spindle noses DIN 55026



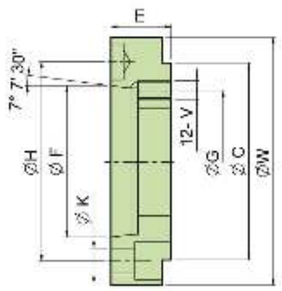
Adapters Type1:

Model	Spindle nose	C	F	H	K	E	Matching Chuck
N0205-0J4	A4	110	63.513	82.55	3-11	15	N-205
N0205-0J42	A4	110	63.513	82.55	4-11	15	NT-205
N0206-0J5	A5	140	82.563	104.78	6-11	15	N-206, NB-206, V-206
N0206-0J52	A5	140	82.563	104.78	6-11	15	NT-206, VT-206
N0208-0J6	A6	170	106.375	133.35	6-13	17	N-208, NB-208, V-208
N0208-0J62	A6	170	106.375	133.35	6-13	17	NT-208, VT-208
N0208-0J64	A6	170	106.375	133.35	4-13	17	NIT-208
NHT0208-0J6	A6	170	106.375	133.35	6-13	17	NHT-208
N0210-0J8	A8	220	139.719	171.45	6-17	18	N-210, N-212, NB-210, V-210, V-212
N0210-0J82	A8	220	139.719	171.45	6-17	18	NT-210, NT-212, VT-210, VT-212
N0210-0J84	A8	220	139.719	171.45	4-17	18	NIT-210, NIT-212, VIT-212
N0215-0J11	A11	300	196.869	235	6-21	22	N-215, N-218, NB-212, V-215, V-218
N0215-0J112	A11	300	196.869	235	6-21	22	NT-215, VT-215
N0215-0J114	A11	300	196.869	235	4-21	22	NIT-215, VIT-218
V0224-0J15	A15	380	285.775	330.2	6-25	27	N-220, V-221, V-224, V-232
N0224-0J20	A20	520	412.775	463.6	6-25	25	N-224, N-232, V-240, V-260



Adapters Type2:

Model	Spindle nose	C	F	H	K	G	V	E	Matching Chuck
N0208-0J5	A5	170	82.563	104.78	11	133.35	M12	23	N-208,NT-208, NIT-208, NHT-208 NB-208, V-208, VT-208
N0210-0J6	A6	220	106.375	133.35	13	171.45	M16	25	N-210, NT-210, NIT-210, N-212, NT-212 NIT-212, V-210, VT-210,V-212, VT-212, VIT-212
N0215-0J8	A8	300	139.719	171.45	17	235	M20	33	N-215, NT-215, NIT-215, N-218, NB-212 V-215, VT-215, V-218, VIT-218
N0220-0J11	A11	380	196.869	235	21	330.2	M24	41	N-220
N0224-0J11	A11	520	196.869	235	21	463.6	M24	45	N-224, N-232, V-240, V-260
N0224-0J15	A15	520	285.775	330.2	25	463.6	M24	42	N-224, N-232, V-240, V-260
V0224-0J8	A8	380	139.719	171.45	17	330.2	M24	33	N-221, V-224, V-232
V0224-0J11	A11	380	196.869	235	21	463.6	M24	27	N-221, V-224, V-232
V0263-0J20	A20	720	412.775	463.6	27	647.6	M30	50	VIT-263, VE-263, VE-270



Adapters Type3:

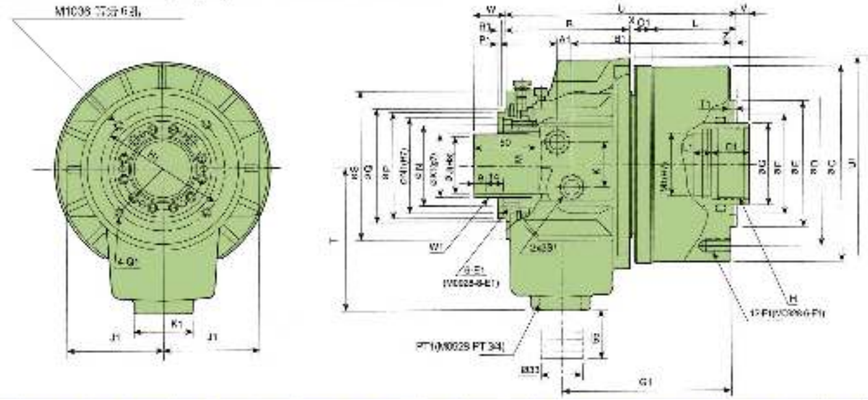
Model	Spindle nose	C	F	H	K	G	V	W	E	Matching Chuck
N0205-0J5	A5	110	82.563	104.78	11	82.55	M10	128	32	N-205,NT-205
N0206-0J6	A6	140	106.375	133.35	13	104.78	M10	168	35	N-206, NT-206, NB-206, V-206, VT-206
N0208-0J8	A8	170	139.719	171.45	17	133.35	M12	208	40	N-208, NT-208, NT-208, NB-208 V-208, VT-208
N0212-0J11	A11	220	196.869	235	21	171.45	M16	278	50	N-210, NT-210, NIT-210, N-212, NT-212, NIT-212 NB-210, V-210, VT-210, V-212, VT-212 VIT-212
N0215-0J15	A15	300	285.775	330.2	25	235	M20	378	57	N-215, NT-215, NIT-215, N-218, NB-212 V-215, VT-215, V-218, VIT-218
V0224-0J20	A20	380	412.775	463.6	26	330.2	M24	520	58	N-220,V-221,V-224,V-232

M SERIES

SPECIFICATIONS:

SUPER HIGH SPEED THROUGH HOLE ROTARY HYDRAULIC CYLINDER

1.Small-sized light weight:Comparing with the traditional product, it is small-sized (reduced to MAX 95mm)and a light weight (weighted MAX 4.5kg). Make its capacity more slable to reduce the burden of the machinery at high speed turning.
2.The most largest bore:Comparing with the old product, it has about 20% more bore full diameter forutilizing the capacity of machinery.
3.The safety mechansim: It can retain the gripping force with a check valve.



DIMENSIONS:

Model \ Dim	C1	E1	F1	G1	H1	J1	K1	L1	M1	N1	O1	P1	Q1	R1	S1	T1	U1	W1	X1	B	C
M0928	25	M8x1.0	M8x1.25	110	76	58	44	15	34	53	14	4	M4x0.7	5	PT 1/4"	5	116	M34x1.5	32	86	120
M1036	25	M5x0.8	M10x1.5	126	88	68	53	15	38	64	14	4	M5x0.8	4	PT 3/8"	6	136	M44x1.5	42	101	135
M1236	25	M6x1.0	M10x1.5	135	98	76	47	15	38	76	14	4	M5x0.8	6	PT 1/2"	6	169	M52x1.5	50	98	154.5
M1246	30	M6x1.0	M10x1.5	135	98	76	47	15	50	76	14	4	M5x0.8	6	PT 1/2"	6	169	M52x1.5	50	98	154.5
M1546	30	M6x1.0	M10x1.5	145	110	86	47	15	50	85	14	4	M6x1.0	7	PT 1/2"	6	187.5	M58x1.5	56	103	190
M1552	30	M6x1.0	M10x1.5	145	110	86	47	15	55	85	14	4	M6x1.0	7	PT 1/2"	6	187.5	M58x1.5	56	103	190
M1868	35	M6x1.0	M10x1.5	166	155	101	47	15	70	108	16	4	M6x1.0	7.5	PT 1/2"	6	220	M84x2	81	126	215
M1870	35	M6x1.0	M10x1.5	166	155	101	47	15	75	108	16	4	M6x1.0	7.5	PT 1/2"	6	220	M84x2	81	126	215
M1875	35	M6x1.0	M10x1.5	166	155	101	47	15	80	108	16	4	M6x1.0	7.5	PT 1/2"	6	220	M84x2	81	126	215
M1878	35	M6x1.0	M10x1.5	166	155	101	47	20	82	108	16	4	M6x1.0	7.5	PT 1/2"	6	220	M84x2	81	126	215
M2065	35	M6x1.0	M12x1.75	182	165	110	47	20	89	120	16	4	M6x1.0	7	PT 1/2"	6	267	M99x2	96	141	240
M2091	35	M6x1.0	M12x1.75	182	165	110	47	15	95	120	16	4	M6x1.0	7	PT 1/2"	6	267	M99x2	96	141	240
M2511	45	M6x1.0	M16x2.0	197	206	129	55	20	123	160	18	5	M6x1.0	7	PT 1/2"	6	294		134.6	186	310

Model \ Dim	D	E	F	G	H	J	K	L	N	P	Q	S	T	U	V max	V min	W max	W min	x	z	A1	B1
M0928	100	80	65	44	M38x1.5	28	25	54	44	59	66	90	105	158	9	-1	35	25	3	5	9	108
M1036	115	100	65	48	M42x1.5	36	32	62	54	73	80	104	115	179.5	10	-5	39	24	2.5	5	11	120.5
M1236	130	100	80	66	M42x1.5	36	36	67	64	85	90	118	114	184	10	-5	40	25	4	5	11	126.5
M1246	130	100	80	66	M55x2	46	36	67	64	85	90	118	114	184	10	-5	40	25	4	5	11	126.5
M1546	170	130	85	66	M55x2	46	36	75	73	96	102	137	130	196	17	-5	47	25	4	5	11	136
M1552	170	130	85	70	M60x2	52	36	75	73	96	102	137	130	196	17	-5	47	25	4	5	11	136
M1868	190	160	120	86	M75x2	68	36	84	98	121	131	166	160	230	20	-5	50	25	4	5	17.5	152.5
M1870	190	160	120	96	M78x2	70	36	84	98	121	131	166	160	230	20	-5	50	25	4	5	17.5	152.5
M1875	190	160	120	96	M85x2	75	36	84	98	121	131	166	160	230	20	-5	50	25	4	5	17.5	152.5
M1878	190	160	120	96	M87x2	78	36	84	98	121	131	166	160	230	20	-5	50	25	4	5	17.5	152.5
M2065	215	180	140	110	M99x2	85	36	93	108	138	148	182	185	253	25	-5	55	25	3	5	21	186.5
M2091	215	180	140	110	M100x2	91	36	93	108	138	148	182	185	253	25	-5	55	25	3	5	21	186.5
M2511	275	220	166	140	M130x2	117.5	36	86	148	178		232	215	296	18	-5	38	15	3	6	27	184.5

● M SERIES showing two centres

SPECIFICATIONS:

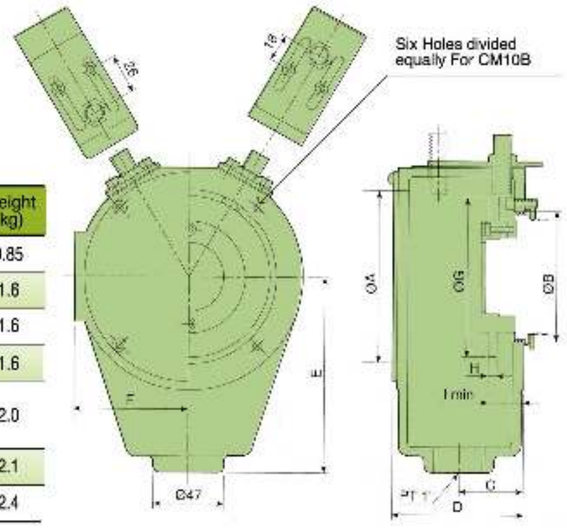
Dim / Model	Piston Dia. (mm)	Piston Area Push Side (cm²)	Piston Area Pull Side (cm²)	Piston Stroke (mm)	Mar. Draw Bar Pull Force Push Side KN(kgf)	Mar. Draw Bar Pull Force Pull Side KN(kgf)	Max. Operating Pressure (kgf/cm²)	Max.Speed (r.p.m.)	Moment Inertia I(kg·m²)	Weight (kg)	Total Leakage (L/min)
M0928	90	63.2	48.3	10	19.9(2029)	16(1635)	40.8	8000	0.006	5.5	3.0
M1036	105	71	69.5	15	24.8(2529)	24(2447)	40.8	8000	0.011	8.6	3.0
M1236	125	100	89	15	38(3875)	33(3365)	40.8	7000	0.019	13.0	3.0
M1246	125	100	89	15	38(3875)	33(3365)	40.8	7000	0.019	12.0	3.0
M1546	155	161	154	22	60(6116)	57.8(3894)	40.8	6200	0.056	18	3.9
M1552	155	161	150	22	60(6116)	56(57"0)	40.8	6200	0.052	16.8	3.9
M1868	180	198	197	25	74(7546)	73.5(7495)	40.8	4700	0.098	28.0	4.2
M1870	180	198	183	25	74(7546)	69(7036)	40.8	4700	0.095	26.5	4.2
M1875	180	198	183	25	74(7546)	69(7036)	40.8	4700	0.095	26.0	4.2
M1878	180	198	183	25	74(7546)	69(7036)	40.8	4700	0.095	25.5	4.2
M2085	205	252	234	30	94(9585)	88(8973)	40.8	3800	0.15	37.5	4.5
M2091	205	252	234	30	94(9585)	88(8973)	40.8	3800	0.15	37.0	4.5
M2511	250	348	336	23	124(12644)	120(12236)	40.8	2800	0.45	57	7.0

CM.B SERIES

SPECIFICATIONS:

HYDRAULIC CYLINDERS COOLANT COLLECTORS

1. Hydraulic Cylinders coolant collectors.
   Compact and light weight, they feature bore sizes up to 20% large than Conventional Cylinders. Precision finished piston bores and cool running rotary unions are included for years of trouble-free performance.
2. The sensors are extra ordered.



DIMENSIONS:

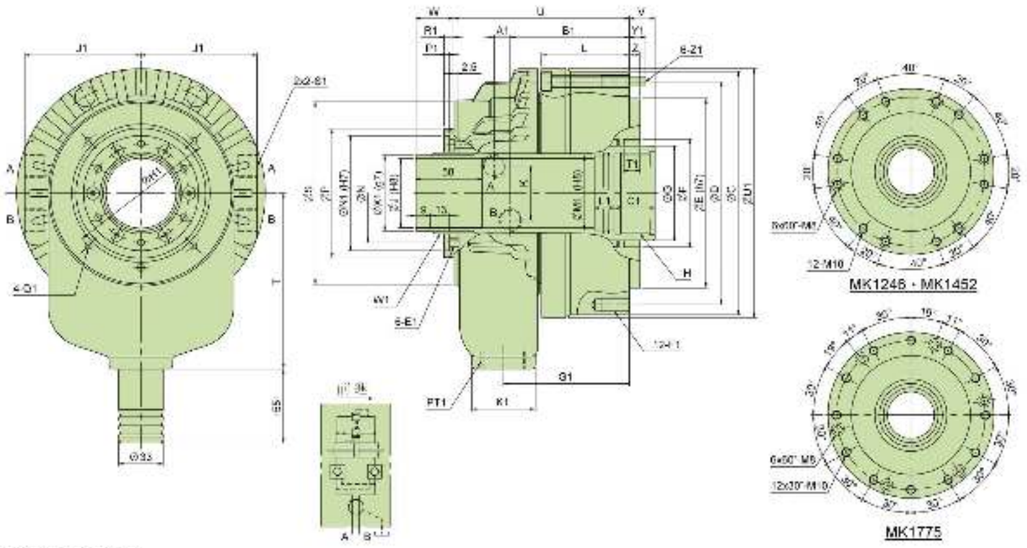
Dim / Model	A	B	C	D	E	F	G	H	I min.	Matching cylinder	Weight (kg)
CM09B	85	67	33	70	105	55.5	77	5	24	M0928	0.85
CM10B	118	75	42	84	131	76	107	5	22	M1036	1.6
CM12B	118	87	42	84	131	76	107	5	23	M1236 M1246	1.6
CM15B8	118	98	42	84	131	76	107	5	25.5	M1546 M1552	1.6
CM18B	158	123	44	88.5	151	96	147	5	23	M1868 M1870 M1875 M1878	2.0
CM20B	158	140	44	88.5	151	96	147	5	23	M2085 M2091	2.1
CM25B	198	177	45	90	180	118	192	12	35	M2511	2.4

MK SERIES

SPECIFICATIONS:

HIGH SPEED AND SHORT THROUGH HOLE ROTARY HYDRAULIC CYLINDER

1.The thin hydraulic cylinder which is short in length about 30% and eiht light weight can reduce the spindle load while running in high speed.
2.Built-in check valve in safety auto lock and pressure relief valve in case of power faiure occurs.
3.New model developed and rear and locking installation.



SPECIFICATIONS:

Model	Piston Dia (mm)	Piston Area Push Side(cm²)	Piston Area Pull Side(cm²)	Piston Stroke	Max. Draw Bar Pull Push Side KN(kgf)	Max. Draw Bar Pull Pull Side KN(kgf)	Max. Operating Pressure (kgf/cm²)	Max Speed (r.p.m.)	Moment of Inertia I (kg·m²)	Weight (kg)	Total Leakage (L/min)
MK-1246	128	102.6	91.4	16	43.6(4466)	38.9(3967)	4.5(45.9)	8000	0.017	8.6	3.1
MK-1452	145	133	122.6	22	26.5(5761)	52.1(5313)	4.5(45.9)	6500	0.028	12	3.9
MK-1775	170	166	152	25	70.7(7209)	64.7(6587)	4.5(45.9)	5500	0.060	17.8	4.5

DIMENSIONS:

Model	C	D	E	F	G	H	J	K	L	N	P	S	T	U	V Max.	V MIN.	W Max.	W MIN.	Z
MK-1246	162	147	130	75	65	M 5 5 x 2 . 0	48	40	56	64	85	116	120	120	13	-3	44	28	8
MK-1452	184	165	140	80	70	M 6 0 x 2 . 0	52	40	66	73	96	135	130	130	19	-3	47	25	8
MK-1775	212	195	160	105	90	M 8 5 x 2 . 0	75	46	71	98	121	164	160	157	22	-3	50	25	8

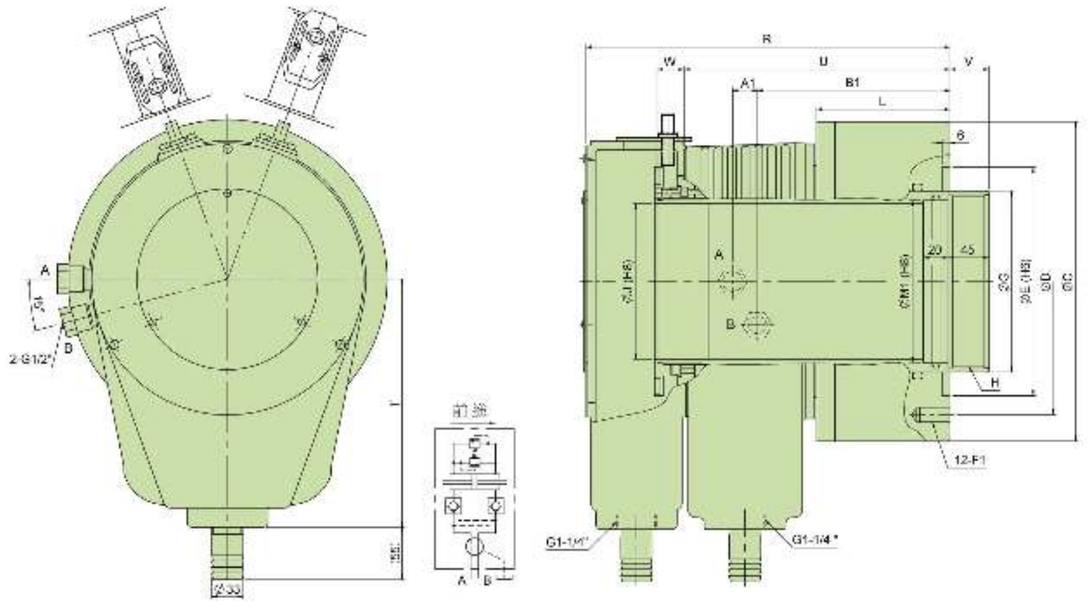
Model	A1	B1	C1	E1	F1	G1	H1	J1	K1	L1	M1	M1	N1	P1	Q1	R1	S1	T1	U1	W1	X1	Y1	Z1
MK-1246	8.5	79.5	25	M6x10L	M10x20L	84	98	76	47	15	50	50	76	4	M5x8L	9	PT3/8	12	165	M52x1.5	50	15	M8
MK-1452	9	88	30	M8x7L	M10x20L	93	110	86	47	15	55	55	85	4	M8x8L	7	PT3/8	12	184	M58x1.5	56	12	M8
MK-1775	17.5	99	30	M6x13L	M10x20L	110	155	100	47	15	80	80	108	4	M8x10L	7	PT1/2	12	216	M84x2.0	81	18	M10

ML-CM.B SERIES

SPECIFICATIONS:

EXTRA LARGE THROGH HOLE ROTAY HYDRAULIC CYLINDER

1.Matching for large bore power chucks.
2.Special aluminum alloy ateel body, light weight for reducing he spindle load.
3.Vales inside to maintain the power of pushing.
4.Extra large bore design, euipped with coolant collector and detective plate.
5.Sensors and mounting bolts are extra order.



SPECIFICATIONS:

Model	Piston Dia (mm)	Piston Area		Piston Stroke	Max. Draw Bar Pull		Max. Operating Pressure (kgf/cm²)	Max Speed (r.p.m.)	Moment of Inertia I (kg·m²)	Weight (kg)	Total Leakage (L/min)
		Push Side(cm²)	Pull Side(cm²)		Push Side KN(kgf)	Pull Side KN(kgf)					
ML2816CM28B	285	394	350	42	116.8(11910)	106.8(10584)	3.3(33.6)	2000	0.85	68	9
ML3320CM33B	335	515.7	416.9	42	152.9(15591)	136.9(13960)	3.3(33.6)	1600	1.09	103	10

DIMENSIONS:

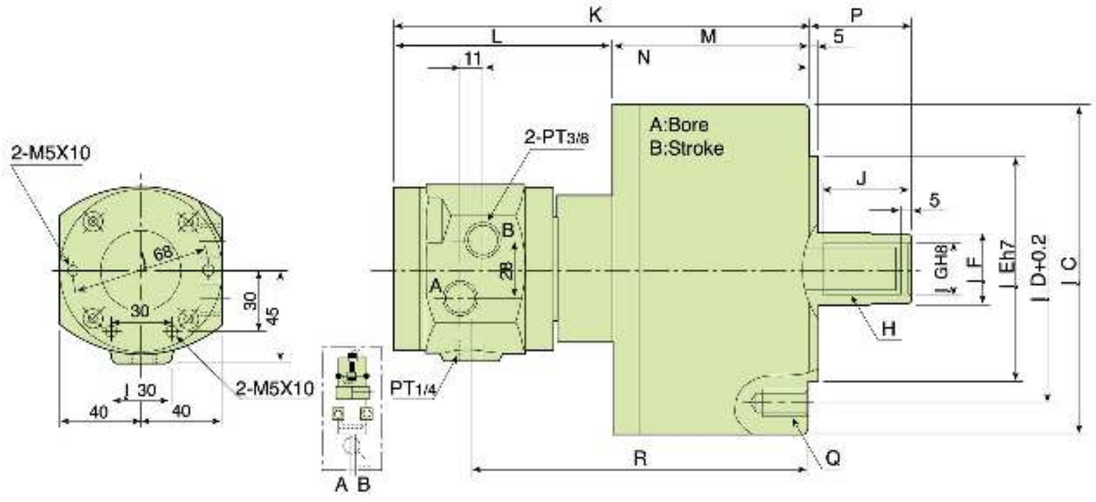
Model	C	D	E	G	H	J	L	R	T	U	V max.	V min.	W max.	W min.	A1	B1	F1	M1
ML2816CM28B	335	280	240	190	M180x3.0	166.5	140	362	280	279	41	-1	67	25	18	202	M16x32L	170
ML3320CM33B	390	320	280	230	M215x3.0	205	147	392	280	292	41	-1	67	25	18	210	M20x32L	210

MS SERIES

SPECIFICATIONS:

NON THROUGH HOLE ROTARY HYDRAULIC CYLINDER (WITH VALVES)

Built-in safty check valves.



DIMENSIONS:

Model \ Dim	A	B	C	D	E	F	G	H	J	K	L	M	N	P max.	P min.	Q	R
MS105	105	20	135	100	80	30	21	M20x2.5	35	197	108	89	152	45	25	6-M10x20	158
MS125	125	25	160	130	110	35	25	M24x3.0	44	205	108	97	160	51	26	6-M12x24	166
MS150	150	30	190	130	110	45	31	M30x3.5	45	214	108	106	169	56	26	12-M12x24	175
MS200	200	35	245	145	120	55	37	M36x4.0	60	228	108	120	183	69	34	12-M16x30	189

SPECIFICATIONS:

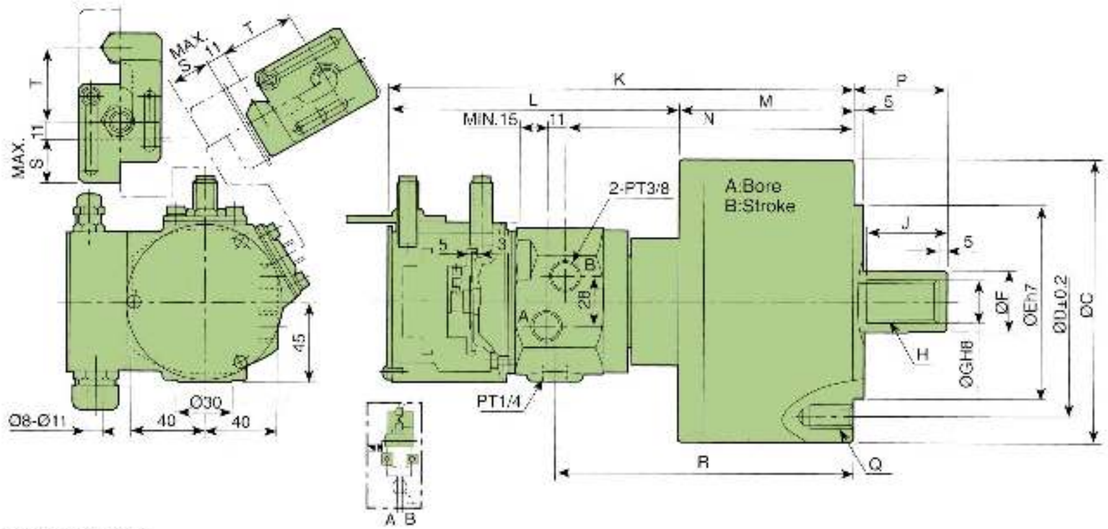
Model \ Dim	Piston Area		Mar. Draw Bar Pull Pull Side KN (kgf)	Piston Stroke (mm)	Max.Speed (r.p.m.)	Max. Operating Pressure (kgf/cm²)	Total Leakage (L/min)	Moment Inertia I (kg·m²)	Weight (kg)
	Push Side (cm²)	Pull Side (cm²)							
MS105	86	78	29 (2957)	20	6000	4.0(40.8)	0.8	0.0125	7.1
MS125	122	113	42 (4283)	25	6000	4.0(40.8)	0.8	0.0225	10
MS150	176	160	60 (6118)	30	5500	4.0(40.8)	0.8	0.0475	13.5
MS200	314	290	108 (11013)	35	5500	4.0(40.8)	0.8	0.0975	22

MF-C / MS-C SERIES

SPECIFICATIONS:

NON THROUGH HOLE ROTARY HYDRAULIC CYLINDER (WITH VALVES AND SWITCHES)

1.Built-in safty check valves.
2.Pressure relief valves and sensor switches.
3.The sensors are extra ordered.



DIMENSIONS:

Dim / Model	A	B	C	D	E	F	G	H	J	K	L	M	N	P max.	P min.	Q	R	S	T
MS105C	105	20	135	100	80	30	21	M20x2.5	35	257	168	89	152	45	25	6-M10x20	158	23	46
MS125C	125	25	160	130	110	35	25	M24x3.0	44	265	168	97	160	51	26	6-M12x24	166	23	46
MF125C	125	35	160	130	110	35	25	M24x3.0	44	269	168	101	164	57	22	6-M12x24	170	23	46
MS150C	150	30	190	130	110	45	31	M30x3.5	45	274	168	106	169	56	26	12-M12x24	175	23	46
MS200C	200	35	245	145	120	55	37	M36x4.0	60	288	166	120	183	69	34	12-M16x30	189	28	46

SPECIFICATIONS:

Dim / Model	Piston Area Push Side (cm²)	Piston Area Pull Side (cm²)	Max. Draw Bar Pull Pull Side KN (kgf)	Piston Stroke (mm)	Max.Speed (r.p.m.)	Max. Operating Pressure (kgf/cm²)	Total Leakage (L/min)	Moment Inertia I (kg·m²)	Weight (kg)
MS105C	84	79	29 (2957)	20	6000	4.0(40.8)	0.8	0.0125	7.6
MS125C	120	113	42 (4283)	25	6000	4.0(40.8)	0.8	0.022	10.5
MF125C	120	113	42 (4283)	35	6000	4.0(40.8)	0.8	0.022	10.5
MS150C	174	160	60 (6118)	30	5500	4.0(40.8)	0.8	0.047	14
MS200C	312	290	108 (11013)	35	5500	4.0(40.8)	0.8	0.097	22.5

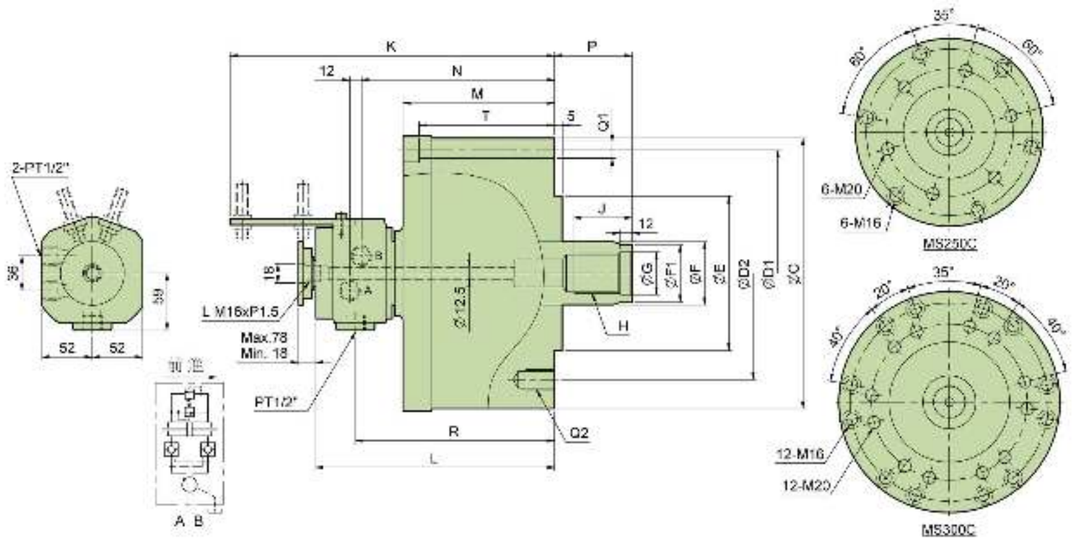
- Draw bar pull force: Pressure 4.0 MPa(40.8kgf / cm²)
- Total leakage: Pressure 3.0 Mpa (30.6 kgf /cm²) and oil temperature 50°C
- Proximity switch: Model BESS 16-329-E4-Y (BALLUFF) DC 12/24V 200mA NPN

MS250C/MS300C SERIES

SPECIFICATIONS:

NON THROUGH HOLE ROTARY HYDRAULIC CYLINDER (WITH VALVES AND SWITCHES)

1.Through-hole for coolant, oil or air with thread for rotary union.
2.Mounting from the rear or from the front side.
3.Built-in safety check valves and bracket for proximity switch.
(The proximity switches are extra ordered.)



DIMENSIONS:

Dim / Model	C	D1	D2	E (h7)	F	F1	G	H	J	K	L	M	N	P max.	P min.	Q1	Q2	R	T
MS250C	300	275	220	160	65	62	44	M42x3.0	60	356	267	177	220	85	25	6-⌀17	6-M20	226	160
MS300C	355	330	270	210	75	70	50	M48x3.0	70	359	270	182	223	85	25	12-⌀17	12-M20	229	165

SPECIFICATIONS:

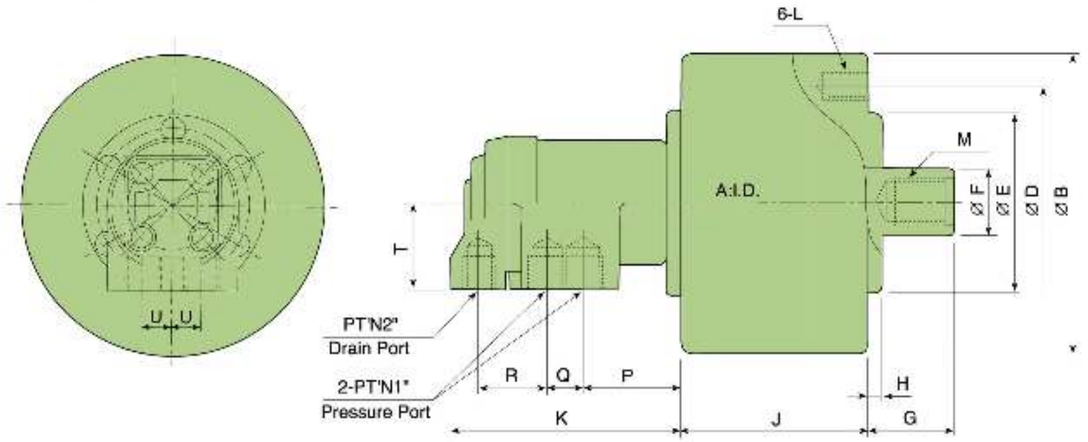
Model	Piston Dia (mm)	Piston Area Push Side(cm²)	Piston Area Pull Side(cm²)	Max. Draw Bar Pull Push Side KN(kgf)	Max. Draw Bar Pull Pull Side KN(kgf)	Piston Stroke (mm)	Max Speed (r.p.m.)	Max. Operating Pressure (kgf/cm²)	Total Leakage (L/min)	Moment of Inertia I (kg·m²)	Weight (kg)
MS250C	250	481.5	453.6	227(23147)	214(21822)	60	2000	50	2	0.67	78
MS300C	300	697.5	658.6	282(26716)	247(25186)	60	1500	40.8	3	1.60	106

MH SERIES

SPECIFICATIONS:

NON THROUGH HOLE ROTARY HYDRAULIC CYLINDER

1.Compact,low inertla,light weight cylinder:
Manufuctured aluminium alloy,this cylinder is lightweight design and reduce the weight on the machine spindle.
2.High speed:
This balanced design cylinder is light weight and compact and maintains outstanding stability during high speed operation.
3.Long life:
High quality cylinder seals and high accuracy surface finish on parts ensure the long life of these cylinders.



DIMENSIONS:

Model \ Dim	A I.D.	B	D	E (h7)	F	G Max.	G Min.	H	J	K	L	M	N1	N2	P	Q	R	T	U
MH80	80	115	90	65	25	45	30	6	73.5	103	M8x1.25 16	M16x2.0x32	3/8"	1/4"	45	15.5	30.5	38	13
MH100	100	135	100	80	25	45	25	6	88.5	103	M10x1.5 18	M16x2.0x32	3/8"	1/4"	45	15.5	30.5	38	13
MH125	125	160	130	110	30	51	26	6	95.5	103	M12x1.75 18	M20x2.5x32	3/8"	1/4"	45	15.5	30.5	38	13
MH150	150	190	130	110	45	50	20	6	107	103	M12x1.75 20	M30x3.5x35	3/8"	1/4"	45	15.5	30.5	38	13

SPECIFICATIONS:

Model \ Dim	Piston Ares Push Side (cm^2)	Piston Ares Pull Side (cm^2)	Mar. Draw Bar Pull Pull Side KN (kgf)	Piston Stroke (mm)	Max.Speed (r.p.m.)	Max. Operating Pressure (kgf/cm^2)	Moment Inertia I ($kg \cdot m^2$)	Weight (kg)
MH80	47.7	42.8	13.9 (1417)	15	6000	35	0.005	5.1
MH100	75.4	70.5	22.9 (2335)	20	5500	35	0.0125	6.6
MH125	121.1	114	37 (3773)	25	5500	35	0.02	8.4
MH150	176	160	60 (6118)	30	4000	40	0.047	10.4

HB4 SERIES

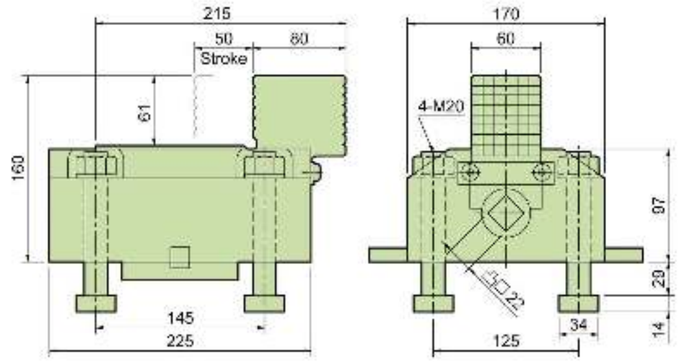
SPECIFICATIONS:

BORING MILL JAWS

1.Clamping of workpiece for larger size lathe,vertical lathe,die set with jig.
2.One set of 4-piece bolts with T-bolt.

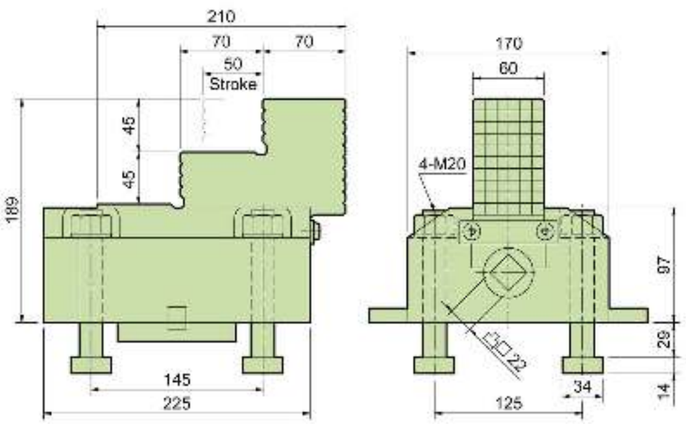
HB4-160
SPECIFICATIONS:

Jaw stroke	(mm)	50
Max. gripping force	(KN)	39.2
weight	(kg)	29



HB4-189
SPECIFICATIONS:

Jaw stroke	(mm)	50
Max. gripping force	(KN)	39.2
weight	(kg)	31

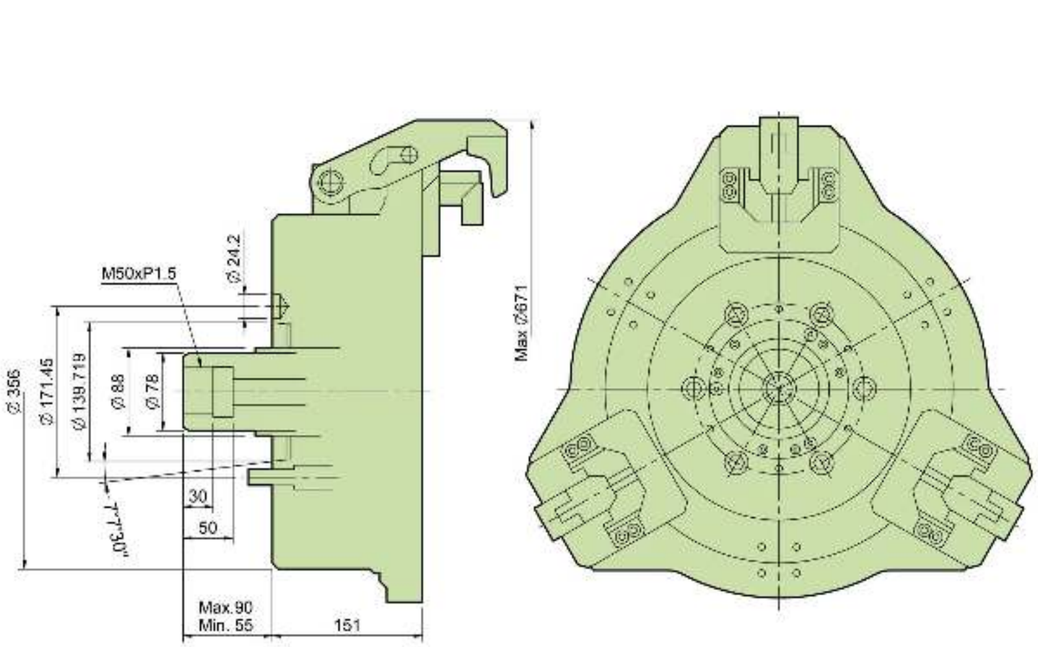


F52 SERIES

SPECIFICATIONS:

HIGH SPEED AND LIGHT WEIGHT TYPE STRONG FINGER CHUCK FOR ALUMINUM WHEELS

1.All sliding surfaces are hardened and ground and ground for accurate actual running and long service repeatability.
2.Mounting:
Adaptor mounting to fit with DIN, ISO, BS, ASA, B5-9 typa A spindles.



SPECIFICATIONS:

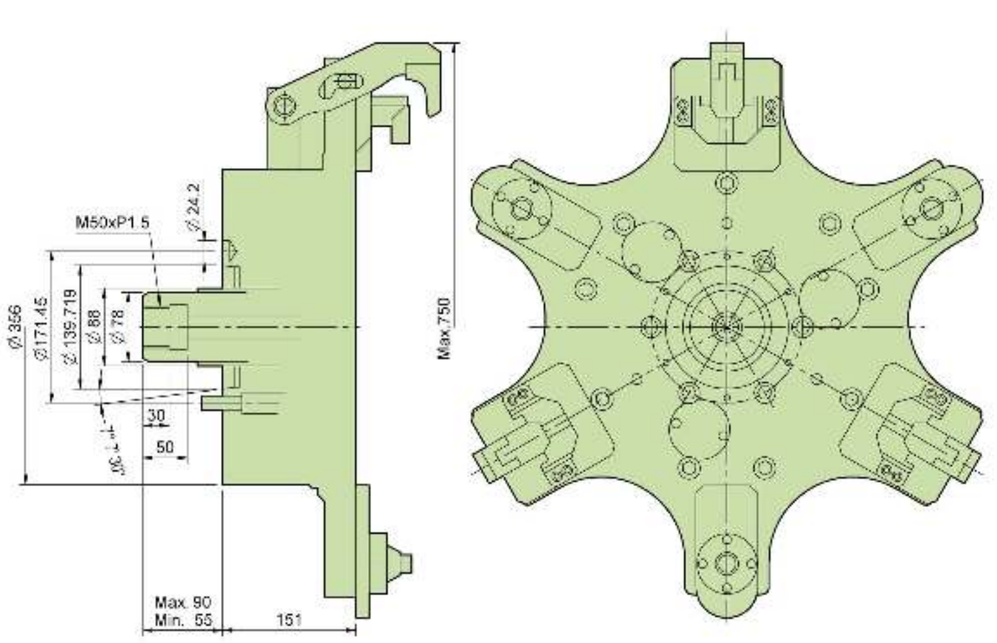
Model \ Dim	Applicable Wheel Size	Out Dai Of Chuck(mm)	Available Spindle Nose	Gripping Force (kgf)	Max. Speed (r.p.m.)	Weight (Without Jigs)(kg)	Matching Cylinder
F52A8	12"~18"	521	A2-8	3300	2800(18"2200)	98	MS200C

F61 SERIES

SPECIFICATIONS:

HIGH SPEED AND LIGHT WEIGHT TYPE STRONG FINGER CHUCK FOR ALUMINUM WHEELS

1.All sliding surfaces are hardened and ground and ground for accurate actual running and long service repeatability.
2.Mounting:
Adaptor mounting to fit with DIN, ISO, BS, ASA, B5-9 typa A spindles.



SPECIFICATIONS:

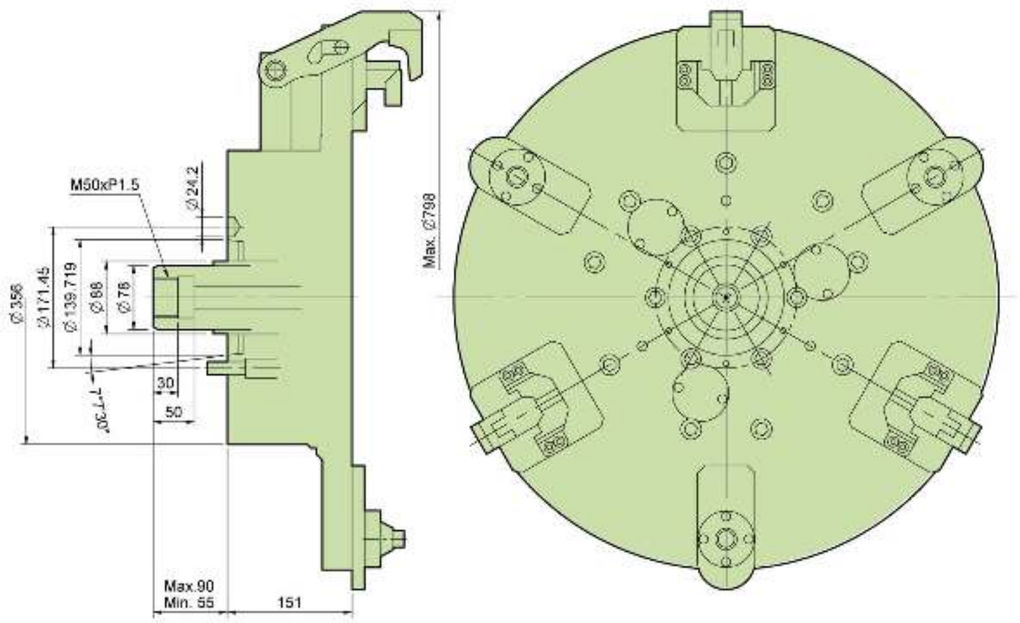
Model \ Dim	Applicable Wheel Size	Out Dai Of Chuc(mm)	Available Spindle Nose	Gripping Force (kgf)	Max Rpm Speed (r.p.m.)	Weight (Without Jigs)(kg)	Matching Cylinder
F61A8	13"~22"	610	A2-8	3300	1500	145	MS200C

F66 SERIES

SPECIFICATIONS:

HIGH SPEED AND LIGHT WEIGHT TYPE STRONG FINGER CHUCK FOR ALUMINUM WHEELS

1.All sliding surfaces are hardened and ground for accurate actual running and long service repeatability.
2.Mounting:
Adaptor mounting to fit with DIN, ISO, BS, ASA, B5-9 typa A spindles.



SPECIFICATIONS:

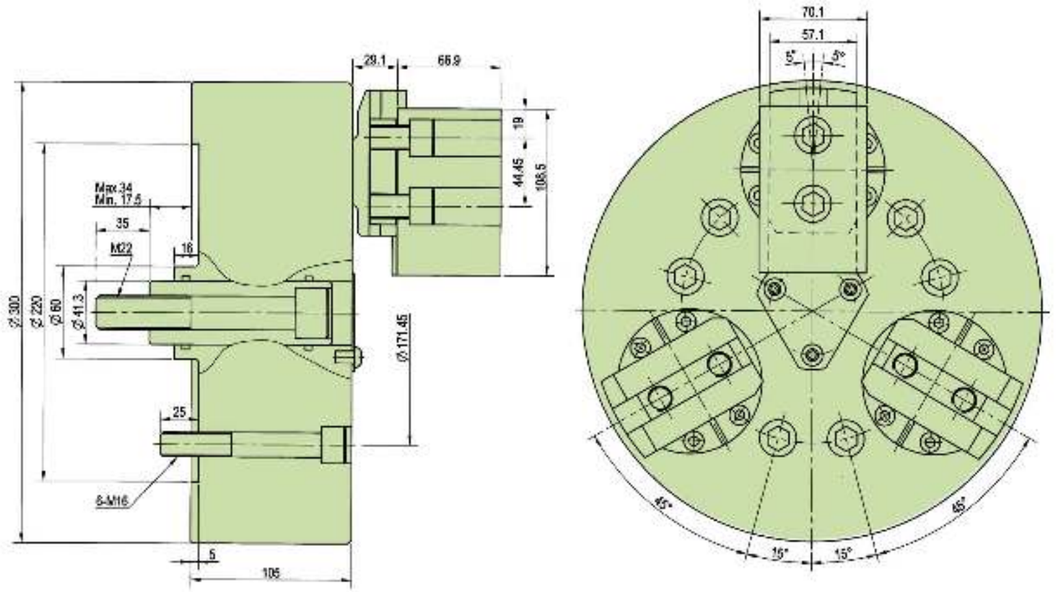
Model \ Dim	Applicable Wheel Size	Out Dai Of Chuck(mm)	Available Spindle Nose	Gripping Force (kgf)	Max Speed (r.p.m.)	Weight (Without Jigs)(kg)	Matching Cylinder
F66A8	19"~24"	660	A2-8	3300	1500	182	MS200C

BL SERIES

SPECIFICATIONS:

3-JAW BALL SWING LOCK CHUCK

1.The chuck can attract the work and hold it on.
The jaw operates in two stages: fastening →drawing in, so it can hold the work exactly on the locator in front of the chuck, and make it under the stabile situation.
2.The chuck can grasp the work on both outside diameter and inside diameter.The chuck can switch between outside diameter mode and inside diameter mode by a simple operation.
3.The chuck can grasp the part of the taper.The chuck can exactly grasp the black surface of the cast irons, which has draft. So the discard process can be ignored on the chucking part of the work.(It can grasp up to a 20 degree taper when using a clipper.)
4.The jaw can equalize.The jaw can equalize on the outside diameter, so it can grasp the work steadily.(Jaw self-equalizing to max 5°)
5.Dustproof performance is excellent.It is different from a past general purpose chuck. It is structurally dustproof. Especially there is a dustproof seal in the part of lock arm to prevent the dust.



SPECIFICATIONS:

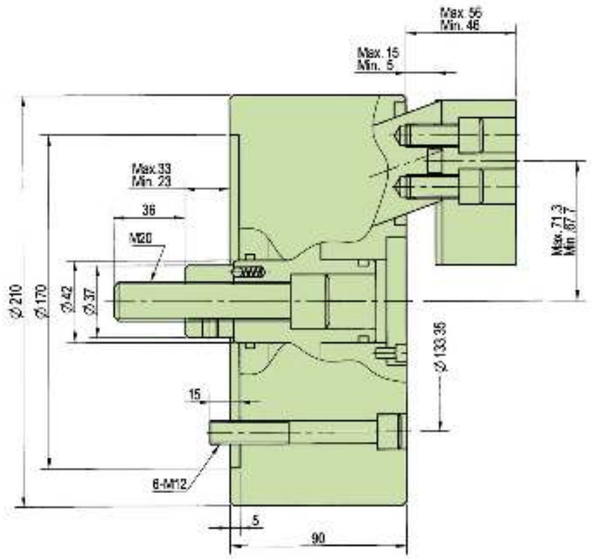
Model	Plunger Stroke (mm)	Jaw Stroke Diameter (mm)	Max. Draw Bar Pull Force KN (kgf)	Max. Gripping Force KN (kgf)	Max. Operating Pressure MPa (kgf/cm²)	Max. Speed (r.p.m.)	Weight (with jaw) (kg)	Moment of Inertia I (kg·m²)	Matching Cylinder
BL-12	17.5	12.4	40.7(4152)	122(12440)	2.8(28.5)	2800	65	0.18	MS150C

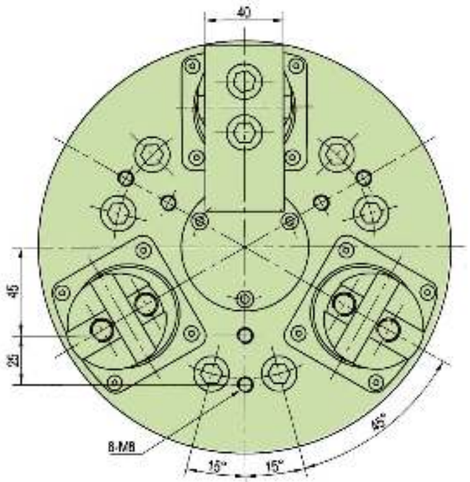
DR SERIES

SPECIFICATIONS:

3-JAW DRAW DOWN POWER CHUCK

Draw Down power chuck feature of radjal gripping will lead to almost no work piece upliftling displacement; for machining casting and forging parst:
1.For the gripped work piece is appressed to the surtace, chucks are suitable for heavy machining.
2.Chuck Actutors with cylindrical structure are durable and ensures high gripping repeatability.
3.Accurate self-centering and pull back features are adequate for precise length control machining requirements.





SPECIFICATIONS:

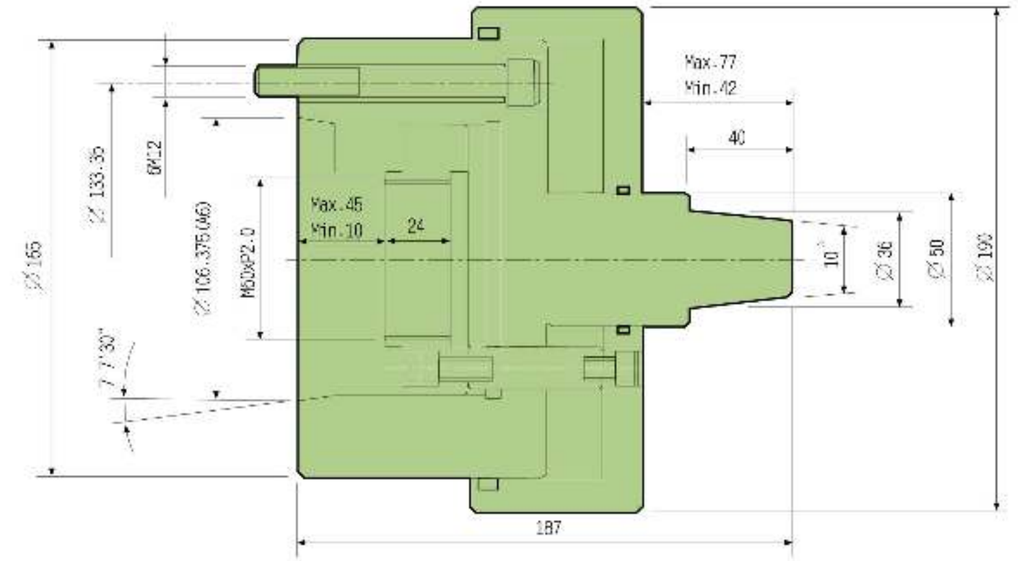
Model	Plunger Stroke (mm)	Jaw Stroke Diameter (mm)	Max. Draw Bar Pull Force KN (kgf)	Max. Gripping Force KN (kgf)	Max. Operating Pressure MPa (kgf/cm²)	Max. Speed (r.p.m.)	Weight (with jaw) (kg)	Moment of Inertia I (kg·m²)	Matching Cylinder
DR-08	10	7.2	25.4(2593)	45.4(4630)	2.5(2.5)	3000	25	0.035	MS125C

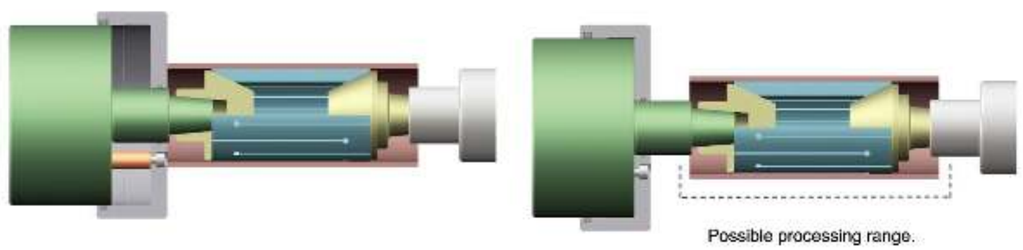
P165 SERIES

SPECIFICATIONS:

FLOATING PLATE CENTER CHUCK

Suitable for easy one step cutting of thin hores, plate and outside diameter.





Possible processing range.

SPECIFICATIONS:

Model	Floating Plate stroke (mm)	Max. Operating Pressure MPa (kgf/cm²)	Max. Speed (r.p.m.)	Weight (with jaw) (kg)	Moment of Inertia I (kg·m²)	Matching Cylinder
P165	35	1.0(10)	6000	18.5	0.02	MF125C

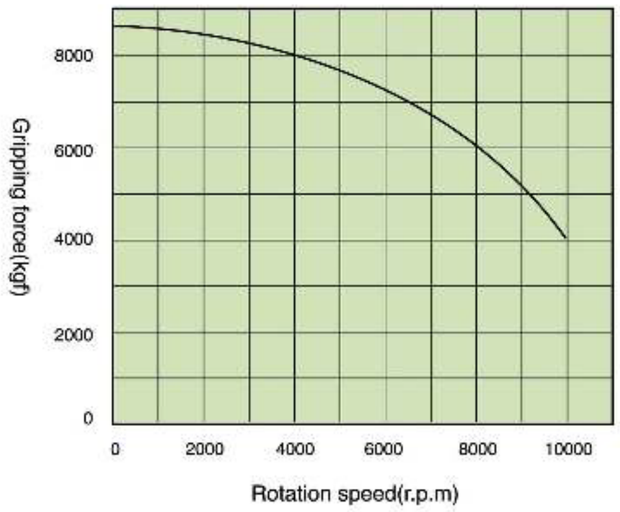
HN SERIES

SPECIFICATIONS:

3-JAW EXTRA HIGH SPEED THROUGH - HOLE POWER CHUCK (WITH ADAPTOR)

1.Possible 10,000 r.p.m.highest speed chcuk.
2.Model HN chucks are assembled with adaptor for ASA B5.9 type A spindles.
3.Model HN chucks are manufactured form high grade alloy steel, All sliding surfaces are hardened and ground for accurate actual running and long service repeatability.

GRIPPING CHARACTERISTIC GRAPH



SPECIFICATIONS:

Model	Through-Hole(mm)	Plunger Stroke (mm)	Jaw Stroke (in dia) (mm)	Max.Draw Bar Pull Force KN (kgf)	Max.Gripping Force KN (kgf)	Max.Operating Pressure KN (kgf/cm²)	Max. Speed (r.p.m.)	Weight (Kg)	Moment of Inertia I (kg·m²)	Matching Cylinder	Matching Soft Jaw	Gripping O.D.Range (mm)
HN-06	Ø36	12	5.5	30(3050)	79.4(8100)	2.9(30)	10000	11.5	0.035	HG-1336	Model-A	⌀14-⌀51