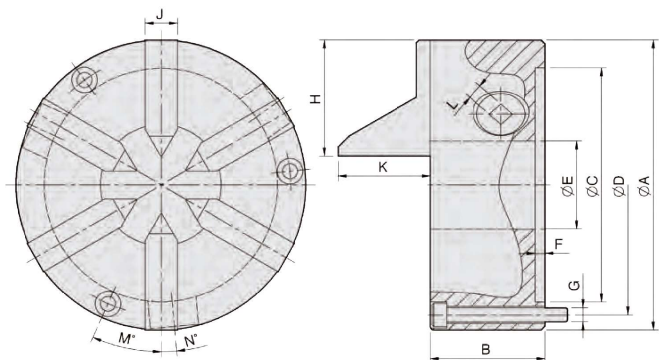




## SE

### 6-jaw scroll chuck plain back

1. SE types are specially meet 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 material.



UNIT : mm

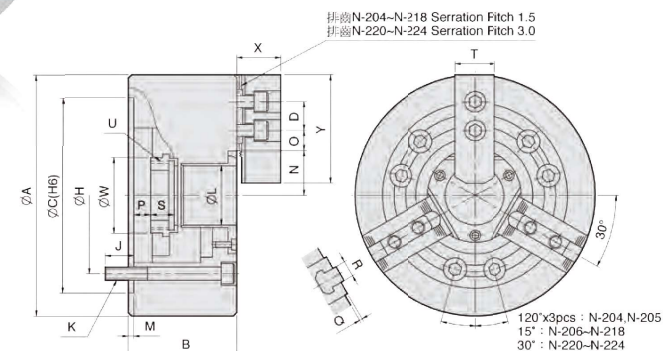
SPEC Model	A	B	C	D	E	F	G	H	J	K	L	M	N	Allowable Handle Torque (kgf·m)	Gripping Force (kgf)	Max. Speed (r.p.m.)	Weight (kg)	Moment Of Inertia I (kg·m <sup>2</sup> )	Gripping O.D. Range
SE-4	112	66	80	95	32	4.8	3-M8x65	45	14	39.7	8	30	6.5	1.6	440	1200	4	—	Ø2-Ø32
SE-6	165	67	130	147	51	5.5	3-M8x70	66.5	19	40.7	10	23.3	6.2	2.8	660	1200	9	0.03	Ø3-Ø51
SE-7	192	76.5	155	172	80	5.5	3-M10x75	77	21.5	61.5	11	24	5.3	3.6	850	1000	14	0.06	Ø3-Ø81



## N-200

### 3-jaw through-hole power chuck (adapter excluded)

- More large bore :  
The largest bore in wedge type power operated chucks.



UNIT : mm

SPEC Model	Through-Hole (mm)	Plunger Stroke (mm)	Jaw stroke (In Dia.) (mm)	Max. Pull Force (kgf)	Max. Gripping Force (kgf)	Max. Operating Pressure (kgf/cm <sup>2</sup> )	Max. Speed (r.p.m.)	Weight (kg)	Moment Of Inertia I (kg·m <sup>2</sup> )	Matching Cylinder	Matching Hard Jaw	Matching Soft Jaw	Gripping O.D. Range (mm)
N-204	Ø26	10	5.4	1428	2906	31.6	8000	4	0.007	M0928	HJ05	HC04	Ø4-Ø110
N-205	Ø33	10	5.4	1784	3671	28.5	7000	7	0.018	M1036	HJ05	HC05	Ø6-Ø135
N-206	Ø45	12	5.5	2243	5812	28.5	6000	13.5	0.057	M1246	HJ06	HC06	Ø15-Ø169
N-208	Ø52	16	7.4	3558	9075	26.5	5000	23	0.17	M1552	HJ08	HC08	Ø20-Ø210
N-210	Ø75	19	8.8	4385	11319	27.5	4200	35	0.315	M1875	HJ10	HC10	Ø25-Ø254
N-212	Ø91	23	10.6	5812	14990	27.5	3300	56.5	0.737	M2091	HJ12	HC12	Ø30-Ø304
N-215	Ø117.5	23	10.6	7240	18355	23.5	2500	111	2.27	M2511	HJ15	HC15	Ø50-Ø381
N-218	Ø117.5	23	10.6	7240	18355	23.5	2000	131	3.55	M2511	HJ15	HC15	Ø50-Ø450
N-220	Ø180	23	10.6	9177	23861	30.6	1800	190	6.5	ML2816	HJ24-1	HC24-1	Ø120-Ø510
N-224	Ø205	26	12	9177	23861	26.5	1400	270	14.8	ML3320	HJ24-1	HC24-1	Ø150-Ø610
N-232	Ø230	34	18	10197	24472	29.5	1200	470	41	ML3320	HJ24-1	HC24-1	Ø210-Ø800

UNIT : mm

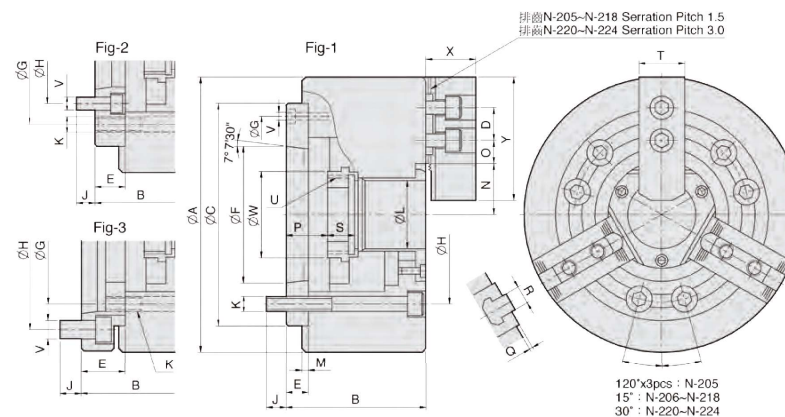
DIM Model	A	B	C (H6)	D	H	J	K	L	M	N max.	O max.	O min.	P max.	P min.	Q	R	S	T	U max.	W	X	Y
N-204	110	59	85	14	70.6	16	3-M10x60	26	4	23.2	13.75	6.75	3.5	-6.5	2	10	17.5	23	M32x1.5	38	24	49.5
N-205	135	60	110	14	82.55	15	3-M10x60	33	4	26.5	19.75	7.75	1	-9	2	10	20	25	M40x1.5	45	31	54
N-206	169	81	140	20	104.78	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	11.75	14.5	-1.5	2	14	20.5	35	M60x2	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	30	6-M20x135	117.5	6	82	45.25	15.25	7	-16	5	22	43	62	M130x2	139	66	165
N-218	450	133	300	43	235	30	6-M20x135	117.5	6	82	79.75	15.25	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	60.5	24.5	11	-12	5	25	38	64	M190x3	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	64	M215x3	230	73	180
N-232	800	150	520	60	463.6	35	6-M24x150	230	6	162	153.5	24.5	16	-18	5	25	38	64	M250x3	262	73	180



# N-200A

## 3-jaw through-hole power chuck (adapter included)

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



UNIT : mm

SPEC Model	Through-Hole (mm)	Plunger Stroke (mm)	Jaw Stroke (In Dia.) (mm)	Max. Pull Force (kgf)	Max. Gripping Force (kgf)	Max. Operating Pressure (kgf / cm <sup>2</sup> )	Max. Speed (r.p.m.)	Weight (kg)	Moment Of Inertia I (kg · m <sup>2</sup> )	Matching Cylinder	Matching Hard Jaw	Matching Soft Jaw	Gripping O.D. Range (mm)
N-205A4	Ø33	10	5.4	1784	3671	28.5	7000	7.8	0.020	M1036	HJ05	HC05	Ø6-Ø135
N-205A5	Ø33	10	5.4	1784	3671	28.5	7000	9	0.023	M1036	HJ05	HC05	Ø6-Ø135
N-206A4	Ø45	12	5.5	2243	5812	28.5	6000	15.5	0.065	M1246	HJ06	HC06	Ø15-Ø169
N-206A5	Ø45	12	5.5	2243	5812	28.5	6000	14.7	0.062	M1246	HJ06	HC06	Ø15-Ø169
N-206A6	Ø45	12	5.5	2243	5812	28.5	6000	17.3	0.073	M1246	HJ06	HC06	Ø15-Ø169
N-208A5	Ø52	16	7.4	3558	9075	26.5	5000	25.8	0.190	M1552	HJ08	HC08	Ø20-Ø210
N-208A6	Ø52	16	7.4	3558	9075	26.5	5000	25	0.184	M1552	HJ08	HC08	Ø20-Ø210
N-208A8	Ø52	16	7.4	3558	9075	26.5	5000	29.3	0.217	M1552	HJ08	HC08	Ø20-Ø210
N-210A6	Ø75	19	8.8	4385	11319	27.5	4200	41	0.370	M1875	HJ10	HC10	Ø25-Ø254
N-210A8	Ø75	19	8.8	4385	11319	27.5	4200	38	0.340	M1875	HJ10	HC10	Ø25-Ø254
N-210A11	Ø75	19	8.8	4385	11319	27.5	4200	48.4	0.436	M1875	HJ10	HC10	Ø25-Ø254
N-212A6	Ø91	23	10.6	5812	14990	27.5	3300	62.5	0.809	M2091	HJ12	HC12	Ø30-Ø304
N-212A8	Ø91	23	10.6	5812	14990	27.5	3300	59.5	0.770	M2091	HJ12	HC12	Ø30-Ø304
N-212A11	Ø91	23	10.6	5812	14990	27.5	3300	69.9	0.912	M2091	HJ12	HC12	Ø30-Ø304
N-215A8	Ø117.5	23	10.6	7240	18355	23.5	2500	125	2.255	M2511	HJ15	HC15	Ø50-Ø381
N-215A11	Ø117.5	23	10.6	7240	18355	23.5	2500	118	2.241	M2511	HJ15	HC15	Ø50-Ø381
N-215A15	Ø117.5	23	10.6	7240	18355	23.5	2500	138	2.822	M2511	HJ15	HC15	Ø50-Ø381
N-218A8	Ø117.5	23	10.6	7240	18355	23.5	2000	146	3.961	M2511	HJ15	HC15	Ø50-Ø450
N-218A11	Ø117.5	23	10.6	7240	18355	23.5	2000	138	3.744	M2511	HJ15	HC15	Ø50-Ø450
N-218A15	Ø117.5	23	10.6	7240	18355	23.5	2000	191	5.183	M2511	HJ15	HC15	Ø50-Ø450
N-220A11	Ø180	23	10.6	9177	23861	30.6	1800	215	7.355	ML2816	HJ24-1	HC24-1	Ø120-Ø510
N-220A15	Ø180	23	10.6	9177	23861	30.6	1800	202	6.910	ML2816	HJ24-1	HC24-1	Ø120-Ø510
N-224A11	Ø205	26	12	9177	23861	26.5	1400	332	18.199	ML3320	HJ24-1	HC24-1	Ø150-Ø610
N-224A15	Ø205	26	12	9177	23861	26.5	1400	317	17.376	ML3320	HJ24-1	HC24-1	Ø150-Ø610
N-224A20	Ø205	26	12	9177	23861	26.5	1400	286	15.677	ML3320	HJ24-1	HC24-1	Ø150-Ø610
N-232A11	Ø230	34	18	10197	24472	29.5	1200	530	43	ML3320	HJ24-1	HC24-1	Ø210-Ø800
N-232A15	Ø230	34	18	10197	24472	29.5	1200	515	43	ML3320	HJ24-1	HC24-1	Ø210-Ø800
N-232A20	Ø230	34	18	10197	24472	29.5	1200	485	42	ML3320	HJ24-1	HC24-1	Ø210-Ø800

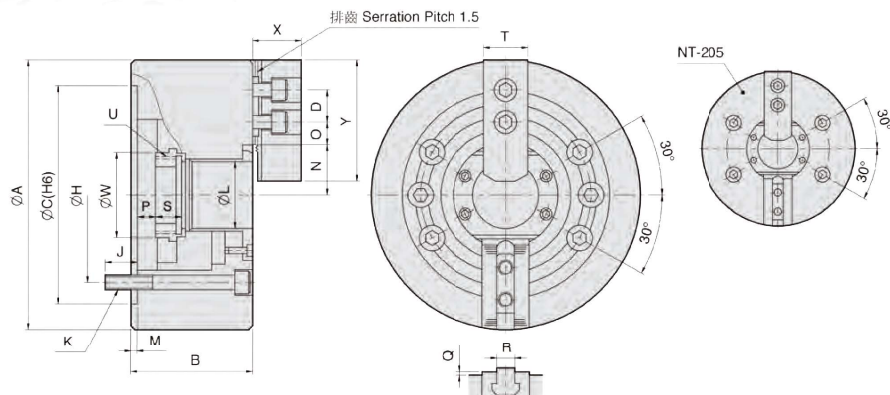
UNIT : mm

DIM Model	A	B	C (H6)	D	E	F	G	H	J	K	L	M	N max.	O max.	P min.	Q max.	R 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	16	6	2	10	20	25	M40x1.5	3-M6	45	31	54	Fig-1
N-205A5	135	88	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	Fig-3
N-206A4	169	96	140	20	20	63.513	104.78	82.55	16	6-M10	45	5	32	22.75	9.25	31	19	2	12	19	31	M55x2	6-M10	60	37	73	Fig-2
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-M6	60	37	73	Fig-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	Fig-3
N-208A5	210	109	170	25	23	82.563	133.35	104.78	14	6-M12	52	5	38.7	29.75	11.75	37.5	21.5	2	14	20.5	35	M60x2	6-M10	66	38	95	Fig-2
N-208A6	210	103	170	25	17	106.375	150	133.35	18	6-M12	52	5	38.7	29.75	11.75	31.5	15.5	2	14	20.5	35	M60x2	3-M6	66	38	95	Fig-1
N-208A8	210	126	170	25	40	139.719	133.35	171.45	24	6-M12	52	5	38.7	29.75	11.75	54.5	38.5	2	14	20.5	35	M60x2	6-M16	66	38	95	Fig-3
N-210A6	254	120	220	30	25	106.375	171.45	133.35	18	6-M16	75	5	51	33.75	14.25	33.5	14.5	2	16	25	40	M85x2	6-M12	94	43	110	Fig-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	Fig-1
N-210A11	254	145	220	30	50	196.869	171.45	235	28	6-M16	75	5	51	33.75	14.25	58.5	39.5	2	16	25	40	M85x2	6-M20	94	43	110	Fig-3
N-212A6	304	129	220	30	25	106.375	171.45	133.35	18	6-M16	91	6	61.3	45.75	15.75	33	10	2	21	28	50	M100x2	6-M12	108	51	130	Fig-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	Fig-1
N-212A11	304	154	220	30	50	196.869	171.45	235	28	6-M16	91	6	61.3	45.75	15.75	58	35	2	21	28	50	M100x2	6-M20	108	51	130	Fig-3
N-215A8	381	160	300	43	33	139.719	235	171.45	24	6-M20	117.5	6	82	45.25	15.25	40	17	5	22	43	62	M130x2	6-M16	139	66	165	Fig-2
N-215A11	381	149	300	43	22	196.869	260	235	28	6-M20	117.5	6	82	45.25	15.25	29	6	5	22	43	62	M130x2	3-M20	139	66	165	Fig-1
N-215A15	381	184	300	43	57	285.775	235	330.2	29	6-M20	117.5	6	82	45.25	15.25	64	41	5	22	43	62	M130x2	6-M24	139	66	165	Fig-3
N-218A8	450	160	300	43	33	139.719	235	171.45	24	6-M20	117.5	6	82	45.25	15.25	40	17	5	22	43	62	M130x2	6-M16	139	66	165	Fig-2
N-218A11	450	149	300	43	22	196.869	260	235	28	6-M20	117.5	6	82	45.25	15.25	29	6	5	22	43	62	M130x2	3-M10	139	66	165	Fig-1
N-218A15	450	184	300	43	57	285.775	235	330.2	29	6-M20	117.5	6	82	45.25	15.25	64	41	5	22	43	62	M130x2	6-M24	139	66	165	Fig-3
N-220A11	510	169	380	60	41	196.869	330.2	235	30	6-M24	180	6	112.5	60.5	24.5	52	29	5	25	38	64	M190x3	6-M20	206	73	180	Fig-2
N-220A15	510	155	380	60	27	285.775	330.2	330.2	33	6-M24	180	6	112.5	60.5	24.5	38	15	5	25	38	64	M190x3	3-M12	206	73	180	Fig-1
N-224A11	610	186	520	60	45	196.869	463.6	235	28	6-M24	205	6	139.9	87.5	24.5	61	35	5	25	38	64	M215x3	6-M20	230	73	180	Fig-2
N-224A15	610	183	520	60	42	285.775	463.6	330.2	32.5	6-M24	205	6	139.9	87.5	24.5	58	32	5	25	38	64	M215x3	6-M24	230	73	180	Fig-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	64	M215x3	3-M10	230	73	180	Fig-1
N-232A11	800	189	520	60	45	196.869	463.6	235	28	6-M24	230	6	162	153.5	24.5	61	27	5	25	38	64	M250x3	6-M20	262	73	180	Fig-2
N-232A15	800	186	520	60	42	285.775	463.6	330.2	32.5	6-M24	230	6	162	153.5	24.5	58	24	5	25	38	64	M250x3	6-M24	262	73	180	Fig-2
N-232A20	800	169	520	60	25	412.775	463.6	463.6	35	6-M24	230	6	162	153.5	24.5	41	7	5	25	38	64	M250x3	3-M10	262	73	180	Fig-1

## NT-200

### 2-jaw through-hole power chuck (adapter excluded)

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° serration.
3. Mounting : Adaptor mounting to fit with DIN, ISO, BS, ASA B5.9 type A spindles.



UNIT : mm

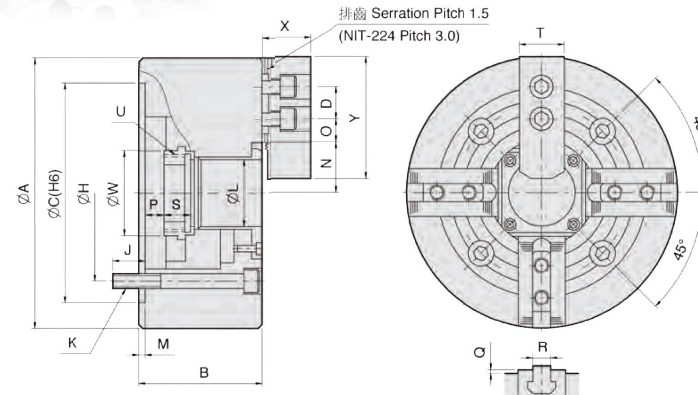
SPEC Model	Through-Hole (mm)	Plunger Stroke (mm)	Jaw Stroke (In Dia.) (mm)	Max. Pull Force (kgf)	Max. Gripping Force (kgf)	Max. Operating Pressure (kgf / cm²)	Max. Speed (r.p.m.)	Weight (kg)	Moment Of Inertia I (kg · m²)	Matching Cylinder	Matching Hard Jaw	Matching Soft Jaw	Gripping O.D. Range (mm)
NT-205	Ø33	10	5.4	1189	2447	19.5	7000	6.8	0.017	M1036	HJ05	HC05	Ø6-Ø135
NT-206	Ø45	12	5.5	1495	3875	18.9	6000	12.8	0.054	M1246	HJ06	HC06	Ø15-Ø169
NT-208	Ø52	16	7.4	2366	5975	18.4	5000	22	0.163	M1552	HJ08	HC08	Ø20-Ø210
NT-210	Ø75	19	8.8	2927	7546	18.4	4200	34	0.306	M1875	HJ10	HC10	Ø25-Ø254
NT-212	Ø91	23	10.6	3875	9993	18.4	3300	55	0.717	M2091	HJ12	HC12	Ø30-Ø304
NT-215	Ø117.5	23	10.6	4823	12236	15.3	2500	106	2.17	M2511	HJ15	HC15	Ø50-Ø381
NT-218	Ø117.5	23	10.6	4823	12236	15.3	2000	122	3.31	M2511	HJ15	HC15	Ø50-Ø450

DIM Model	A	B	C (H6)	D	H	J	K	L	M	N max.	O max.	P min.	P max.	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	11.75	14.5	-1.5	2	14	20.5	35	M60x2	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	30	6-M20x135	117.5	6	82	45.25	15.25	7	-16	5	22	43	62	M130x2	139	66	165
NT-218	450	133	300	43	235	30	6-M20x135	117.5	6	82	79.75	15.25	7	-16	5	22	43	62	M130x2	139	66	165

## NIT-200

### 4-jaw through-hole power chuck (adapter excluded)

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° serration.
3. Mounting : Adaptor mounting to fit with DIN, ISO, BS, ASA B5.9 type A spindles.



UNIT : mm

SPEC Model	Through-Hole (mm)	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)
NIT-206	Ø45	12	5.5	2243	5812	28.5	4500	13.7	0.058	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	Ø50-Ø381
NIT-218	Ø117.5	23	10.6	7240	18355	23.5	1500	140	3.798	M2511	HJ15	HC15	Ø50-Ø450
NIT-224	Ø205	26	12	9177	23861	26.5	1000	284	15.2	ML3320	HJ24-1	HC24-1	Ø150-Ø610

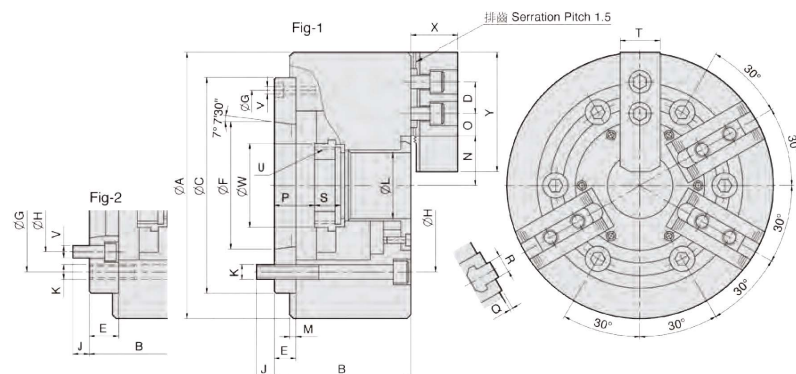
DIM Model	A	B	C (H6)	D	H	J	K	L	M	N max.	O max.	O min.	P max.	P min.	Q	R	S	T	U max.	W	X	Y
NIT-206	169	81	140	20	104.78	16	4-M10x80	45	5	32	22.75	9.25	11	-1	2	12	19	31	M55x2	60	37	73
NIT-208	210	91	170	25	133.35	20	4-M12x90	52	5	38.7	29.75	11.75	14.5	-1.5	2	14	20.5	35	M60x2	66	38	95
NIT-210	254	100	220	30	171.45	22	4-M16x100	75	5	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	30	4-M20x135	117.5	6	82	45.25	15.25	7	-16	5	22	43	62	M130x2	139	66	165
NIT-218	450	133	300	43	235	30	4-M20x135	117.5	6	82	79.75	15.25	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	64	M215x3	230	73	180



## NHT-200

2-jaw and 3-jaw through-hole power chuck (adapter included)

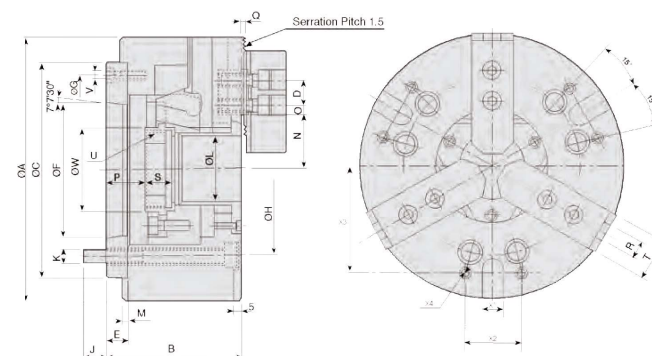
1. Gripping of round or irregular workpiece does not need to change the chuck.
2. The chucks are designed according to ASA B5.9 type A spindle.
3. The chucks are made from high grade alloy steel. All sliding surfaces are hardened and ground to increase running accuracy and longer service life.



## NB-200A

3-jaw extra large through-hole power chuck (adapter included)

1. More large bore:  
The largest bore in wedge type power operated chucks.
2. 20% large bore:  
Approximately 20% higher speed, higher gripping force and larger bore compared with regular chucks.
3. Model NB-200A chucks are assembled with adaptor for ASA B5.9 type A spindles.
4. Model NB-200A chucks are manufactured from high grade alloy steel. All sliding surfaces are hardened and ground for accurate actual running and long service repeatability.



UNIT : mm

SPEC Model	Through-Hole (mm)	Plunger Stroke (mm)	Jaw Stroke (In Dia.) (mm)	Max. Pull Force (kgf)	Max. Gripping Force (kgf)	Max. Operating Pressure (kgf / cm <sup>2</sup> )	Max. Speed (r.p.m.)	Weight (kg)	Matching Cylinder	Matching Hard Jaw	Matching Soft Jaw	Gripping O.D. Range (mm)
NHT-208A5	Ø52	16	7.4	2243 / 1495	5812 / 3875	17.2 / 12.1	3500	25.5	M1552	HJ06	HC08-1	
NHT-208A6	Ø52	16	7.4	2243 / 1495	5812 / 3875	17.2 / 12.1	3500	24.7	M1552	HJ06	HC08-1	

DIM Model	A	B	C (H6)	D	E	F	G	H	J	K	L	M	N	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	133.35	104.78	13	6xM12	52	5	41.8	34	7.5	37.5	21.5	2	12	20.5	35	M60x2	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	35	M60x2	3xM6	66	37	73	Fig-1

SPEC Model	Through-Hole (mm)	Plunger Stroke (mm)	Jaw Stroke (In Dia.) (mm)	Max. Pull Force (kgf)	Max. Gripping Force (kgf)	Max. Operating Pressure (kgf / cm <sup>2</sup> )	Max. Speed (r.p.m.)	Weight (kg)	Moment Of Inertia (kg · m <sup>2</sup> )	Matching Cylinder	Matching Hard Jaw	Matching Soft Jaw	Gripping O.D. Range (mm)
NB-306A5	Ø52	12	5.4	2243	5812	18.4	6000	14	0.06	M1552	HJ06	HC06	Ø16-Ø170
NB-208A6	Ø66	16	7.4	3558	9075	20.5	5000	24	0.14	M1868	HJ08	HC08	Ø20-Ø210
NB-210A8	Ø78	19	8.8	4385	11319	27.5	4200	37.4	0.4	M1878	HJ10	HC10	Ø25-Ø254
NB-310A8	Ø81	19	8.8	4976	12848	31.5	4500	36.4	0.33	MK1881	HJ10	HC10	Ø37-Ø254
NB-212A11	Ø122	23	10.6	5812	14990	20.5	3200	65	0.95	M2511	HJ12	HC12	Ø41-Ø315
NB-215A15	Ø142	23	10.6	7240	18355	25.5	2500	130	3.0	ML2816	HJ15	HC15	Ø60-Ø405
NB-218A15	Ø166.5	23	10.6	7240	18355	25.5	2000	161	4.77	ML2816	HJ15	HC15	Ø75-Ø457

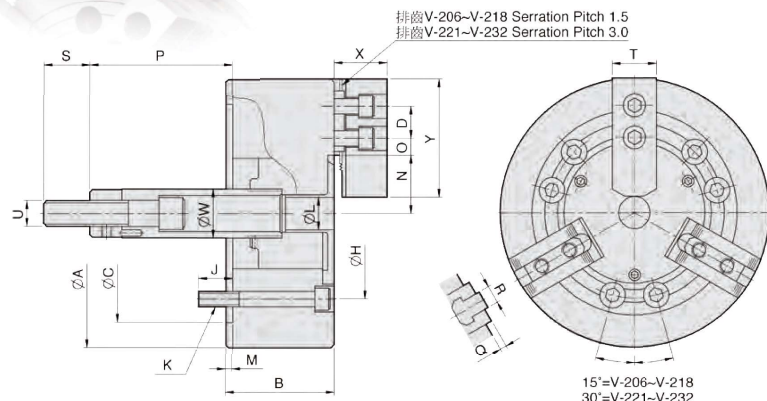
DIM Model	A	B	C (H6)	D	E	F	G	H	J	K	L	M	N max.	O max.	O min.	P max.	Q min.	R	S	T	U max.	V	W	X1 (H12)	X2	X3	X4	
NB-306A5	170	91	140	20	15	82.563	116	104.78	14.5	6xM10	52	5	34.3	18.25	9.25	26	14	2	12	20	31	M60x2	3xM6	65	16	36	65	M8
NB-208A6	210	103	170	25	17	106.375	150	133.35	19.5	6xM12	66	5	42	23.75	11.75	31.5	15.5	2	14	20	35	M75x2	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	40	M87x2	3xM8	94	16	60	102	M10
NB-310A8	254	113	220	30	18	139.719	190	171.45	24	6xM16	81	5	54	32.25	14.25	26.5	7.5	2	16	25	40	M90x2	3xM8	97	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	50	M135x2	3xM10	143	20	60	138	M10
NB-215A15	405	154	380	43	27	285.775	330.2	330.2	33	6xM24	142	6	93.5	45.25	15.25	34	11	5	22	43	62	M155x2	3xM12	164	20	80	160	M12
NB-218A15	457	154	380	43	27	285.775	330.2	330.2	33	6xM24	166.5	6	96.7	63.25	18.25	34	11	5	22	43	62	M180x3	3xM12	189	20	100	160	M12



## V

### 3-jaw wedge type non through-hole power chuck (adapter excluded)

1. High performance :  
Similar high performance with N series.
2. Chuck mounting screws :  
Metric or UNC socket head cap screws are supplied for installing the chuck to the spindle.



SPEC Model	Plunger Stroke (mm)	Jaw Stroke (In Dia.) (mm)	Max. Pull Force (kgf)	Max. Gripping Force (kgf)	Max. Operating Pressure (kgf / cm <sup>2</sup> )	Max. Speed (r.p.m.)	Weight (kg)	Moment Of Inertia I (kg · m <sup>2</sup> )	Matching Cylinder	Matching Hard Jaw	Matching Soft Jaw	Gripping O.D. Range (mm)
V-206	20	9.2	1835	5353	26.5	5200	12.7	0.048	MS105C	HJ06	HC06	Ø18-Ø165
V-208	21	9.7	2549	7648	25.5	4500	23.8	0.137	MS125C	HJ08	HC08	Ø26-Ø210
V-210	25	8.8	2957	11013	28.6	4000	36.4	0.3	MS125C	HJ10	HC10	Ø26-Ø254
V-212	30	10.5	4181	15907	27.5	3300	62.3	0.78	MS150C	HJ12-1	HC12-1	Ø26-Ø304
V-215	35	16	8362	25391	32.6	3000	106	1.94	MS200C	HJ15-1	HC15-1	Ø68-Ø381
V-218	35	16	8362	25391	32.6	2700	122	3.09	MS200C	HJ15-1	HC15-1	Ø98-Ø450

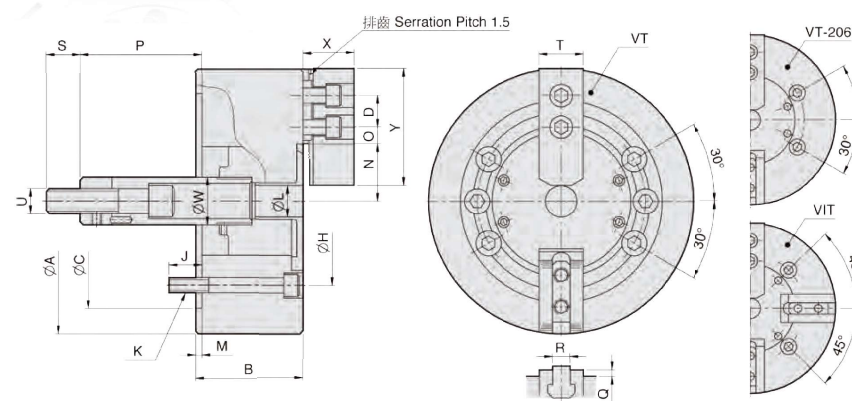
DIM Model	A	B	C	D	H	J	K	L	M	N max.	O max.	O min.	P max.	P min.	Q	R	S	T	U	W	X	Y
V-206	165	74	140	20	104.78	14	6-M10x70	21	5	38.7	15.25	7.75	104.6	84.6	4	12	36	31	M16x2.0	34	39	73
V-208	210	85	170	25	133.35	20	6-M12x85	25	5	46.75	22.25	8.75	132	111	5	14	36	35	M20x2.5	38	41	95
V-210	254	89	220	30	171.45	18	6-M16x85	34	5	51.1	30.75	9.75	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	9.75	163	133	5	18	36	50	M20x2.5	50	54	130
V-215	381	114	300	43	235	29	6-M20x115	—	6	77.5	49.75	21.25	104	69	2	25.5	55	62	M30x3.5	60	63	165
V-218	450	114	300	43	235	29	6-M20x115	—	6	108	49.75	21.25	92	57	2	25.5	55	62	M30x3.5	60	63	165



## VT&VIT

### 2-jaw and 4-jaw wedge type non through-hole power chuck (adapter excluded)

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



SPEC Model	Jaws	Plunger Stroke (mm)	Jaw Stroke (In Dia.) (mm)	Max. Pull Force (kgf)	Max. Gripping Force (kgf)	Max. Operating Pressure (kgf / cm <sup>2</sup> )	Max. Speed (r.p.m.)	Weight (kg)	Moment Of Inertia I (kg · m <sup>2</sup> )	Matching Cylinder	Matching Hard Jaw	Matching Soft Jaw	Gripping O.D. Range (mm)
VT-206	2	20	9.2	1224	3569	17.3	5200	12.3	0.045	MS105C	HJ06	HC06	Ø18-Ø165
VT-208	2	21	9.7	1683	5098	16.3	4500	23.1	0.13	MS125C	HJ08	HC08	Ø26-Ø210
VT-210	2	25	8.8	1988	7342	19.4	4000	35.1	0.29	MS125C	HJ10	HC10	Ø26-Ø254
VT-212	2	30	10.5	2804	10605	18.4	3300	60.3	0.7	MS150C	HJ12-1	HC12-1	Ø26-Ø304
VT-212	4	30	10.5	4181	15907	27.5	2800	64.3	0.77	MS150C	HJ12-1	HC12-1	Ø26-Ø304
VIT-215	2	35	16	5557	16927	21.7	3000	102.6	1.89	MS200C	HJ15-1	HC15-1	Ø68-Ø381
VIT-218	4	35	16	8362	25391	32.6	2300	127	3.21	MS200C	HJ15-1	HC15-1	Ø98-Ø450

DIM 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
VT-206	165	74	140	20	104.78	14	4-M10x70	21	5	38.7	15.25	7.75	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	46.75	22.25	8.75	132	111	5	14	36	35	M20x2.5	38	41	95
VT-210	254	89	220	30	171.45	18	6-M16x85	34	5	51.1	30.75	9.75	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	9.75	163	133	5	18	36	50	M20x2.5	50	54	130
VIT-212	304	106	220	30	171.45	23	4-M16x105	34	6	61	48.75	9.75	163	133	5	18	36	50	M20x2.5	50	54	130
VT-215	381	114	300	43	235	29	6-M20x115	—	6	77.5	49.75	21.25	104	69	2	25.5	55	62	M30x3.5	60	63	165
VIT-218	450	114	300	43	235	29	4-M20x115	—	6	108	49.75	21.25	92	57	2	25.5	55	62	M30x3.5	60	63	165

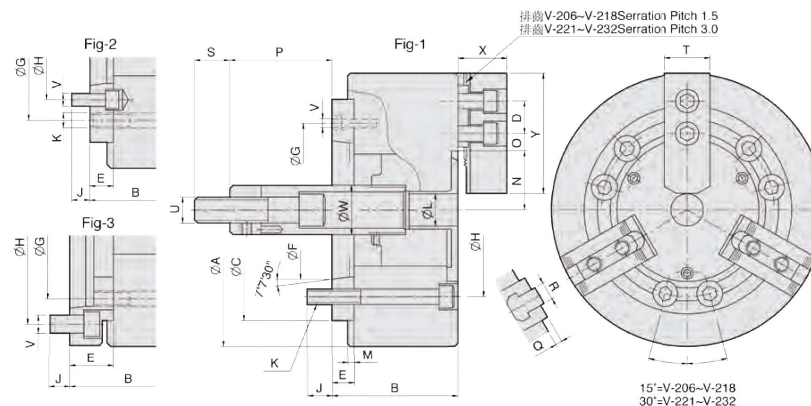
UNIT : mm



## VA

### 3-jaw wedge type non through-hole power chuck (adapter included)

1. High performance :  
Similar high performance with N series.
2. Chuck mounting screws :  
Metric or UNC socket head cap screws are supplied for installing the chuck to the spindle.
3. Alternative spindle adaptors :  
ASA or DIN adaptors can be supplied as requested.



UNIT : mm

SPEC Model	Plunger Stroke (mm)	Jaw Stroke (In Dia.) (mm)	Max. Pull Force (kgf)	Max. Gripping Force (kgf)	Max. Operating Pressure (kgf/cm <sup>2</sup> )	Max. Speed (r.p.m.)	Weight (kg)	Moment Of Inertia I (kg·m <sup>2</sup> )	Matching Cylinder	Matching Hard Jaw	Matching Soft Jaw	Gripping O.D. Range (mm)
V-206A4	20	9.2	1835	5353	26.5	5200	14.5	0.062	MS105C	HJ06	HC06	Ø18-Ø165
V-206A5	20	9.2	1835	5353	26.5	5200	13.9	0.056	MS105C	HJ06	HC06	Ø18-Ø165
V-206A6	20	9.2	1835	5353	26.5	5200	15.8	0.059	MS105C	HJ06	HC06	Ø18-Ø165
V-208A5	21	9.7	2549	7648	25.5	4500	26.8	0.154	MS125C	HJ08	HC08	Ø26-Ø210
V-208A6	21	9.7	2549	7648	25.5	4500	25.6	0.147	MS125C	HJ08	HC08	Ø26-Ø210
V-208A8	21	9.7	2549	7648	25.5	4500	30	0.172	MS125C	HJ08	HC08	Ø26-Ø210
V-210A6	25	8.8	2957	11013	28.6	4000	41.8	0.35	MS125C	HJ10	HC10	Ø26-Ø254
V-210A8	25	8.8	2957	11013	28.6	4000	39.6	0.33	MS125C	HJ10	HC10	Ø26-Ø254
V-210A11	25	8.8	2957	11013	28.6	4000	50	0.417	MS125C	HJ10	HC10	Ø26-Ø254
V-212A6	30	10.5	4181	15907	27.5	3300	67.6	0.76	MS150C	HJ12-1	HC12-1	Ø26-Ø304
V-212A8	30	10.5	4181	15907	27.5	3300	65.5	0.75	MS150C	HJ12-1	HC12-1	Ø26-Ø304
V-212A11	30	10.5	4181	15907	27.5	3300	75.9	0.888	MS150C	HJ12-1	HC12-1	Ø26-Ø304
V-215A8	35	16	8362	25391	32.6	3000	119	2.12	MS200C	HJ15-1	HC15-1	Ø68-Ø381
V-215A11	35	16	8362	25391	32.6	3000	113	2.05	MS200C	HJ15-1	HC15-1	Ø68-Ø381
V-215A15	35	16	8362	25391	32.6	3000	132	2.56	MS200C	HJ15-1	HC15-1	Ø68-Ø381
V-218A8	35	16	8362	25391	32.6	2700	136	3.28	MS200C	HJ15-1	HC15-1	Ø98-Ø450
V-218A11	35	16	8362	25391	32.6	2700	129	3.20	MS200C	HJ15-1	HC15-1	Ø98-Ø450
V-218A15	35	16	8362	25391	32.6	2700	148	3.71	MS200C	HJ15-1	HC15-1	Ø98-Ø450

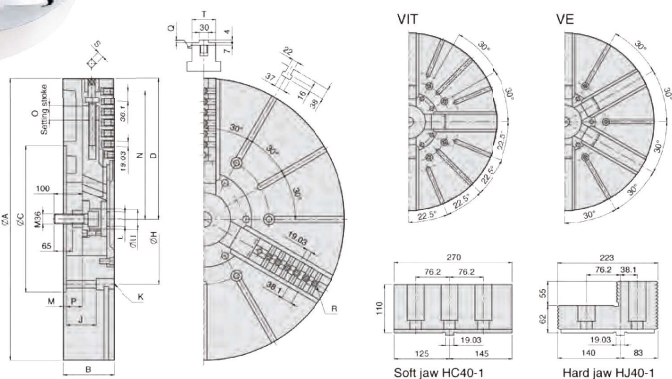
UNIT : mm

DIM Model	A	B	C (H6)	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-206A4	165	89	140	20	20	63.513	104.78	82.55	16	6-M10	21	5	38.7	15.25	7.75	84.6	64.6	4	12	36	31	M16x2.0	6-M10	34	39	73	Fig2
V-206A5	165	84	140	20	15	82.563	116	104.78	14	6-M10	21	5	38.7	15.25	7.75	89.6	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	7.75	69.6	49.6	4	12	36	31	M16x2.0	6-M12	34	39	73	Fig3
V-208A5	210	103	170	25	23	82.563	133.35	104.78	14	6-M12	25	5	46.75	22.25	8.75	109	88	5	14	36	35	M20x2.5	6-M10	38	41	95	Fig2
V-208A6	210	97	170	25	17	106.375	150	133.35	18	6-M12	25	5	46.75	22.25	8.75	115	94	5	14	36	35	M20x2.5	3-M6	38	41	95	Fig1
V-208A8	210	120	170	25	40	139.719	133.35	171.45	24	6-M12	25	5	46.75	22.25	8.75	92	71	5	14	36	35	M20x2.5	6-M16	38	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	9.75	133	108	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	9.75	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	28	6-M16	34	5	51.1	30.75	9.75	108	83	5	16	36	40	M20x2.5	6-M20	45	46	110	Fig2
V-212A6	304	125	220	30	25	106.375	171.45	133.35	18	6-M16	34	6	61	48.75	9.75	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	9.75	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	28	6-M16	34	6	61	48.75	9.75	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	49.75	21.25	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	32	6-M20	—	6	77.5	49.75	21.25	82	47	2	25.5	55	62	M30x3.5	3-M10	60	63	165	Fig1
V-215A15	381	165	300	43	57	285.775	235	330.2	29	6-M20	—	6	77.5	49.75	21.25	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	49.75	21.25	59	24	2	25.5	55	62	M30x3.5	6-M16	60	63	165	Fig2
V-218A11	450	130	300	43	22	196.869	260	235	32	6-M20	—	6	108	49.75	21.25	70	35	2	25.5	55	62	M30x3.5	3-M10	60	63	165	Fig1
V-218A15	450	165	300	43	57	285.775	235	330.2	29	6-M20	—	6	108	49.75	21.25	35	0	2	25.5	55	62	M30x3.5	6-M24	60	63	165	Fig3

## V(40"-79")

Large wedge type non through-hole power chuck (adapter excluded)

1. Chucking operations of very large components external or internal clamping.
2. Suitable for vertical lathe, due to the front protection of slide way.
3. Master jaw with manual radial setting function.



SPEC Model	Jaws	Plunger Stroke (mm)	Radial Jaw Stroke + (Manual setting) (mm)	Max. Pull Force (kN)	Max. Gripping Force (kN)	Max. Operating Pressure (kgf / cm <sup>2</sup> )	Max. Speed (r.p.m.)	Weight (kg)	Moment Of Inertia I (kg · m <sup>2</sup> )	Matching Cylinder	Matching Hard Jaw	Matching Soft Jaw	Gripping O.D. Range (mm)
40" V-240	3						630	645	82				
VIT-240	4	57	23 + (30)	180	320	42.8	550	700	89	MS250C	HJ40-1	HC40-1	Ø285-Ø1005
50" V-250	3						500	890	168				
VIT-250	4	57	23 + (30)	180	320	42.8	400	940	177	MS250C	HJ40-1	HC40-1	Ø270-Ø1250
VE-250	6						360	971	183				
63" V-263	3						400	1800	548				
VIT-263	4	60	24 + (40)	200	360	46.9	300	1700	518	MS250C	HJ40-1	HC40-1	Ø390-Ø1600
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	Ø440-Ø2000

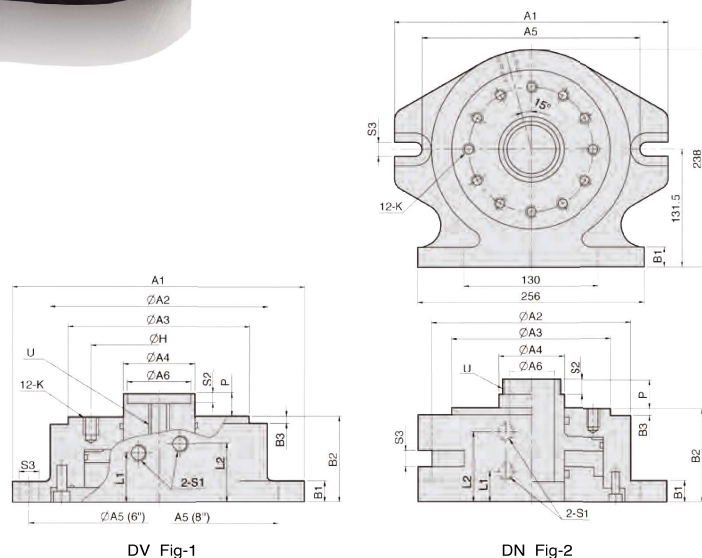
DIM Model	A	B	C	D max.	H	J	K	L	M	N max.	O	P max.	P min.	Q	R	S	T	U
40" V-240	1005	180	520	502	463.6	108	M24	M52x1.5	8	457	30	59	2	4	7-M24	19	85	72
VIT-240																		
50" V-250	1250	180	520	623	463.6	108	M24	M52x1.5	8	563	30	59	2	4	10-M24	19	85	72
VIT-250																		
VE-250															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



## DV/DN

Vertical and vertical horizontal stationary power chuck

1. Suitable for vertical milling and drilling operations.
2. With large through-hole, Vertical / horizontal power chucks does not only clamp the long workpiece but also the horizontal holding.



SPEC Model	Piston Dia. (mm)	Piston Area (cm <sup>2</sup> ) Push Side / Pull Side	Max. Draw Bar Force (kg) Push Side / Pull Side	Piston Stroke (mm)	Max. Operating Pressure (kgf / cm <sup>2</sup> )	Weight (kg)	Matching Chuck
DV-6	Ø115	104 / 78.5	1900 / 1400	20	20	12	V-206
DV-8	Ø155	187 / 148.6	3600 / 2800	21	20	21	V-208, V-210, V-212
DN-8	Ø155	148.6 / 148.6	2800 / 2800	17	20	28.5	N-208

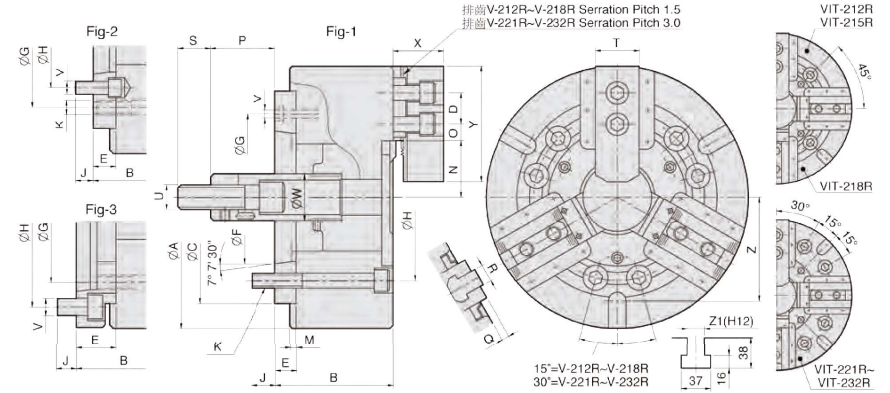
DIM Model	A1	A2	A3	A4	A5	A6	B1	B2	B3	H	K	L1	L2	P max.	P min.	S1	S2	S3	U	Reference
DV-6	Ø220	168	140	55	Ø200	49	16	65.5	5.5	104.78	12-M10x15L	38	45	18	-2	PT 1/4"	7.6	2-Ø15	M16xP2.0	Fig-1
DV-8	290	210	170	70	242	58	24	86	5.5	133.35	12-M12x16L	23	65	20	-1	PT 1/4"	5.5	2-16	M16xP2.0	Fig-1
DN-8	293	213	170	70	242	52	24	100	5.5	133.35	12-M12x18L	32.5	74.5	30.4	13.4	PT 1/4"	16	4-17	M60xP2.0	Fig-2



## VRA

Non through-hole power chuck for vertical lathe (adapter included)

1. The front protection of slide way.
2. Suitable for vertical lathe.



UNIT : mm

SPEC Model	Jaws	Plunger Stroke (mm)	Jaw Stroke (In Dia.) (mm)	Max. Pull Force (kgf)	Max. Gripping Force (kgf)	Max. Operating Pressure (kgf / cm <sup>2</sup> )	Max. Speed (r.p.m.)	Weight (kg)	Moment Of Inertia J (kg · m <sup>2</sup> )	Matching Cylinder	Matching Hard Jaw	Matching Soft Jaw	Gripping O.D. Range (mm)
V-212RA6	3	30	16	5302	14276	35.7	3000	67.7	0.774	MS150C	HJ12-1	HC12-1	Ø32-Ø304
V-212RA8	3	30	16	5302	14276	35.7	3000	65.6	0.764	MS150C	HJ12-1	HC12-1	Ø32-Ø304
V-212RA11	3	30	16	5302	14276	35.7	3000	74.1	0.902	MS150C	HJ12-1	HC12-1	Ø32-Ø304
V-215RA8	3	35	18.7	9585	25798	35.7	2800	120.4	2.146	MS200C	HJ15-1	HC15-1	Ø68-Ø381
V-215RA11	3	35	18.7	9585	25798	35.7	2800	113.4	2.016	MS200C	HJ15-1	HC15-1	Ø68-Ø381
V-215RA15	3	35	18.7	9585	25798	35.7	2800	133	2.572	MS200C	HJ15-1	HC15-1	Ø68-Ø381
V-218RA8	3	35	18.7	9585	25798	35.7	2300	144.5	3.507	MS200C	HJ15-1	HC15-1	Ø78-Ø450
V-218RA11	3	35	18.7	9585	25798	35.7	2300	137.5	3.43	MS200C	HJ15-1	HC15-1	Ø78-Ø450
V-218RA15	3	35	18.7	9585	25798	35.7	2300	157.5	3.945	MS200C	HJ15-1	HC15-1	Ø78-Ø450
V-221RA8	3	35	16	9075	28450	33.7	1940	198	6.46	MS200C	HJ24-1	HC24-1	Ø65-Ø530
V-221RA11	3	35	16	9075	28450	33.7	1940	190	6.35	MS200C	HJ24-1	HC24-1	Ø65-Ø530
V-221RA15	3	35	16	9075	28450	33.7	1940	184	6.28	MS200C	HJ24-1	HC24-1	Ø65-Ø530
V-224RA8	3	35	16	9075	28450	33.7	1760	240	10.54	MS200C	HJ24-1	HC24-1	Ø152-Ø610
V-224RA11	3	35	16	9075	28450	33.7	1760	233	10.44	MS200C	HJ24-1	HC24-1	Ø152-Ø610
V-224RA15	3	35	16	9075	28450	33.7	1760	227	10.36	MS200C	HJ24-1	HC24-1	Ø152-Ø610
V-232RA11	3	35	18.7	9585	25798	35.7	1060	390	30.9	MS200C	HJ24-1	HC32-1	Ø100-Ø810
V-232RA15	3	35	18.7	9585	25798	35.7	1060	383	30.82	MS200C	HJ24-1	HC32-1	Ø100-Ø810
V-232RA20	3	35	18.7	9585	25798	35.7	1060	419	32.69	MS200C	HJ24-1	HC32-1	Ø100-Ø810
VIT-212RA8	4	30	16	5302	14276	35.7	2500	68	0.792	MS150C	HJ12-1	HC12-1	Ø45-Ø304
VIT-218RA11	4	35	18.7	9585	25798	35.7	2000	141.5	3.522	MS200C	HJ15-1	HC15-1	Ø78-Ø450
VIT-224RA11	4	35	18.7	9075	28450	33.7	1520	255	11.3	MS200C	HJ24-1	HC24-1	Ø152-Ø610
VIT-224RA15	4	35	18.7	9075	28450	33.7	1520	240	11.02	MS200C	HJ24-1	HC24-1	Ø152-Ø610
VIT-232RA11	4	35	18.7	9585	25798	35.7	920	414	32.68	MS200C	HJ24-1	HC32-1	Ø100-Ø810
VIT-232RA15	4	35	18.7	9585	25798	35.7	920	399	32.4	MS200C	HJ24-1	HC32-1	Ø100-Ø810

UNIT : mm

DIM Model	A	B	C (H6)	D	E	F	G	H	J	K	M	N max.	O max.	P min.	Q max.	R min.	S	T	U	V	W	X	Y	Z	Z1	Reference		
V-212RA6	304	125	220	30	25	106.375	171.45	133.35	18	6-M16	6	64	45.75	12.75	138	108	5.5	18	36	50	M20x2.5	6-M12	50	54.5	130	—	—	Fig2
V-212RA8	304	118	220	30	18	139.719	190	171.45	24	6-M16	6	64	45.75	12.75	145	115	5.5	18	36	50	M20x2.5	3-M8	50	54.5	130	—	—	Fig1
V-212RA11	304	150	220	30	50	196.869	171.45	235	28	6-M16	6	64	45.75	12.75	113	83	5.5	18	36	50	M20x2.5	6-M20	50	54.5	130	—	—	Fig3
V-215RA8	381	141	300	43	33	139.719	235	171.45	24	6-M20	6	78	49.75	24.25	71	36	5.5	25.5	55	62	M30x3.5	6-M16	60	66.5	165	—	—	Fig2
V-215RA11	381	130	300	43	22	196.869	260	235	32	6-M20	6	78	49.75	24.25	82	47	5.5	25.5	55	62	M30x3.5	3-M10	60	66.5	165	—	—	Fig1
V-215RA15	381	165	300	43	57	285.775	235	330.2	29	6-M20	6	78	49.75	24.25	47	12	5.5	25.5	55	62	M30x3.5	6-M24	60	66.5	165	—	—	Fig3
V-218RA8	450	141	300	43	33	139.719	235	171.45	24	6-M20	6	92	70.75	24.25	59	24	5.5	25.5	55	62	M30x3.5	6-M16	60	66.5	165	158	22	Fig2
V-218RA11	450	130	300	43	22	196.869	260	235	32	6-M20	6	92	70.75	24.25	70	35	5.5	25.5	55	62	M30x3.5	3-M10	60	66.5	165	158	22	Fig1
V-218RA15	450	165	300	43	57	285.775	235	330.2	29	6-M20	6	92	70.75	24.25	35	0	5.5	25.5	55	62	M30x3.5	6-M24	60	66.5	165	158	22	Fig3
V-221RA8	530	154	380	60	33	139.719	330.2	171.45	24	6-M24	6	87	93.5	27.5	64	29	9	25	55	64	M30x3.5	9-M16	60	77	180	155	22	Fig2
V-221RA11	530	148	380	60	27	196.869	330.2	235	30	6-M24	6	87	93.5	27.5	70	35	9	25	55	64	M30x3.5	6-M20	60	77	180	155	22	Fig1
V-221RA15	530	148	380	60	27	285.775	330.2	330.2	33	6-M24	6	87	93.5	27.5	70	35	9	25	55	64	M30x3.5	3-M12	60	77	180	155	22	Fig1
V-224RA8	610	154	380	60	33	139.719	330.2	171.45	24	6-M24	6	126.5	93.5	27.5	64	29	9	25	55	64	M30x3.5	9-M16	60	77	180	165.1	22	Fig2
V-224RA11	610	148	380	60	27	196.869	330.2	235	30	6-M24	6	126.5	93.5	27.5	70	35	9	25	55	64	M30x3.5	6-M20	60	77	180	165.1	22	Fig2
V-224RA15	610	148	380	60	27	285.775	330.2	330.2	33	6-M24	6	126.5	93.5	27.5	70	35	9	25	55	64	M30x3.5	3-M12	60	77	180	165.1	22	Fig1
V-232RA11	810	156	380	80	27	196.869	330.2	235	30	6-M24	6	104.8	196.5	25.5	47	12	5	25	55	74	M30x3.5	6-M20	60	93	210	165.1	22	Fig2
V-232RA15	810	156	380	80	27	285.775	330.2	330.2	33	6-M24	6	104.8	196.5	25.5	47	12	5	25	55	74	M30x3.5	3-M12	60	93	210	165.1	22	Fig1
V-232RA20	810	187	520	80	58	412.775	330.2	463.6	35	6-M24	6	104.8	196.5	25.5	16	-19	5	25	55	74	M30x3.5	6-M24	60	93	210	165.1	22	Fig3
VIT-212RA8	304	118	220	30	18	139.719	190	171.45	24	4-M16	6	64	45.75	12.75	145	115	5.5	18	36	50	M20x2.5	4-M8	50	54.5	130	—	—	Fig1
VIT-218RA11	450	130	300	43	22	196.869	260	235	32	4-M20	6	92	70.75	24.25	70	35	5.5	25.5	55	62	M30x3.5	4-M10	60	66.5	165	158	22	Fig1
VIT-224RA11	610	162	380	60	41	196.869	330.2	235	30	8-M24	6	126.5	93.5	27.5	70	35	9	25	56	64	M30x3.5	6-M20	60	77	180	165.1	22	Fig2
VIT-224RA15	610	148	380	60	27	285.775	330.2	330.2	33	8-M24	6	126.5	93.5	27.5	70	35	9	25	55	64	M30x3.5	4-M12	60	77	180	165.1	22	Fig1
VIT-232RA11	810	170	380	80	41	196.869	330.2	235	30	8-M24	6	104.8	196.5	25.5	47	12	5	25	56	74	M30x3.5	6-M20	60	93	210	200	22	Fig2
VIT-232RA15	810	156	380	80	27	285.775	330.2	330.2	33	8-M24	6	104.8	196.5	25.5	47	12	5	25	55	74	M30x3.5	4-M12	60	93	210	200	22	Fig1

## T-NUTS

Suitable for power chuck



Fig. 1

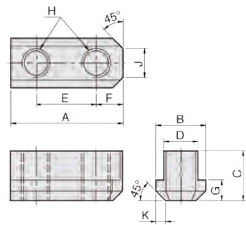


Fig. 2

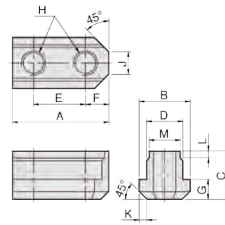
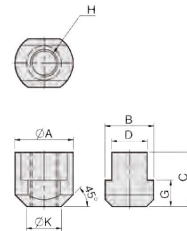
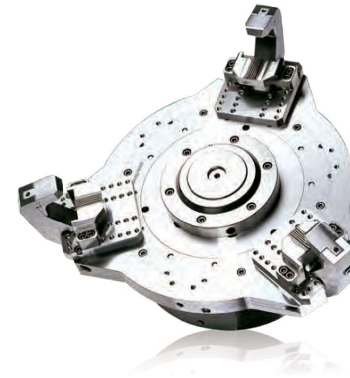


Fig. 3



UNIT : mm

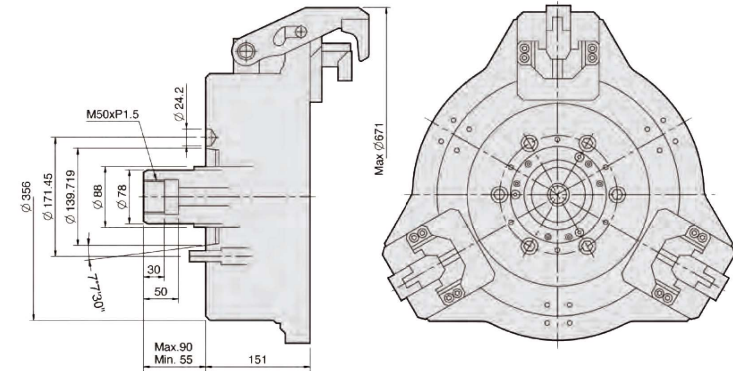
DIM Model	A	B	C	D	E	F	G	H	J	K	L	M	Fig	Matching Chuck
N-205	26	14.5	15	10	14	6	5.5	M8	5	2	—	—	1	N-204, N-205
N-206	36	17.5	18.5	12	20	8.2	7.5	M10	8	2.5	—	—	1	N-206, NB-306
N-208	46.5	20.5	20.5	14	25	10.5	8.5	M12	12	4	—	—	1	N-208, NB-208
N-210	51	22.5	21.5	16	30	11	8.5	M12	11	3	—	—	1	N-210, NB-210
N-212	55.5	29.5	27.8	21	30	12	11.5	M16	13	4.5	—	—	1	N-212, NB212
N-215	80	33.5	45.5	24	43	17	16.5	M20	11	5	8	22	2	N-215, N-218
V-206	36.5	17.5	22.5	12	20	7.5	7.5	M10	6	3	—	—	1	V-206, NHT-208
V-208	48	20.5	25.5	14	25	11	9.5	M12	8	4	—	—	1	V-208
V-210	55	22.5	25.5	16	30	11	9.5	M12	8	4	—	—	1	V-210
V-212	55.5	26.5	33.5	18	30	11.5	13.5	M14	11	5	—	—	1	V-212
V-215	42	35	39.2	25.5	—	—	19	M20	—	25	—	—	3	V-215, V-218
V-215 26 M20	42	35	41.2	26	—	—	19	M20	—	25	—	—	3	V-215P3.0
V-224	46	37.5	45	25	—	—	19	M20	—	26.5	—	—	3	N-220, N-224, V-221, V-224, V-232



## F52

High speed and light weight type strong finger chuck for aluminum wheel

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 type A spindles.



UNIT : mm

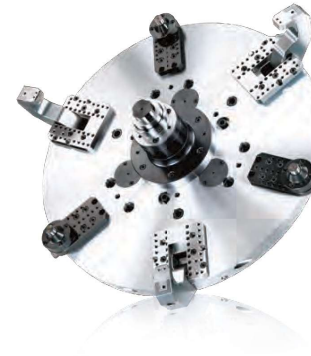
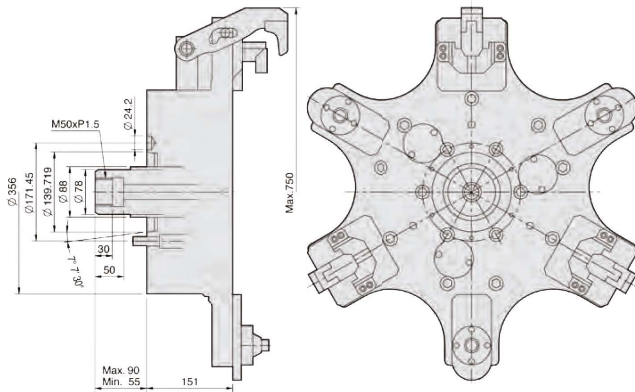
SPEC Model	Matching Wheel Size	Out. Dia. Of Chuck (mm)	Matching Spindle	Max. Pull Force (kN/kgf)	Max. Gripping Force (kN/kgf)	Max. Operating Pressure (MPa/kgf / cm <sup>2</sup> )	Max. Speed (r.p.m.)	Weight (Without Jigs) (kg)	Matching Cylinder
F52A8	12"-18"	521	A2-8	33.9(3456)	32.4(3303)	3.3(33.6)	2800(18"2200)	98	MS125C35



## F61

High speed and light weight type strong finger chuck for aluminum wheel

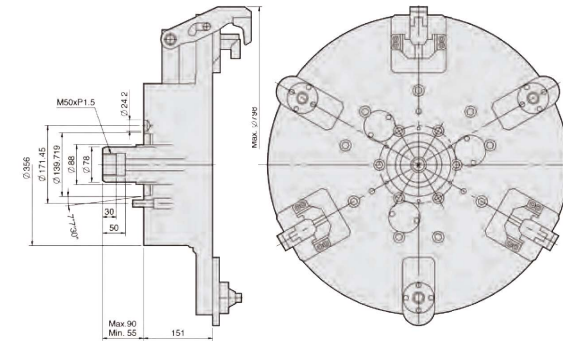
1. All sliding surfaces are hardened and ground for accurate actual running and long service repeatability.
2. Mounting : Adaptor mounting to fit with DIN, ISO, BS, ASA, B5-9 type A spindles.



## F66

High speed and light weight type strong finger chuck for aluminum wheel

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 type A spindles.



UNIT : mm

SPEC Model	Matching Wheel Size	Out Dai. Of Chuck (mm)	Matching Spindle	Max. Pull Force (kN/kgf)	Max. Gripping Force (kN/kgf)	Max. Operating Pressure (MPa/kgf/cm <sup>2</sup> )	Max. Speed (r.p.m.)	Weight (Without Jigs) (kg)	Matching Cylinder
F61A8	13"-22"	610	A2-8	33.9(3456)	32.4(3303)	3.3(33.6)	1500	145	MS125C35

UNIT : mm

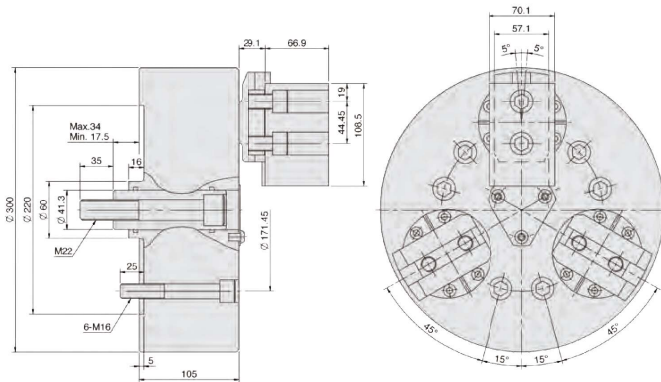
SPEC Model	Matching Wheel Size	Out Dai. Of Chuck (mm)	Matching Spindle	Max. Pull Force (kN/kgf)	Max. Gripping Force (kN/kgf)	Max. Operating Pressure (MPa/kgf/cm <sup>2</sup> )	Max. Speed (r.p.m.)	Weight (Without Jigs) (kg)	Matching Cylinder
F66A8	19"-24"	660	A2-8	33.9(3456)	32.4(3303)	3.3(33.6)	1500	182	MS125C35



## BL

### 3-jaw ball swing lock chuck

1. The chuck can attract the workpiece and hold it on.  
The jaw operates in two stages :  
Clamping pull back, so it can hold the workpiece exactly on the position in front of the chuck, and make it under the stabile situation.
2. The chuck can grasp the workpiece on both O.D. and I.D. clamping.  
The chuck can switch between O.D. and I.D. clamping 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 workpiece.(It can grasp up to a 20 degree taper when using a clipper.)
4. The jaw can equalize on the O.D. clamping, so it can grasp the workpiece steady. (Jaw self-equalizing to max 5°)
5. Dustproof performance is excellent. It is differ from regular general purpose chuck. It is structurally dustproof. Especially there is a dustproof seal in the part of lock arm to prevent the dust.

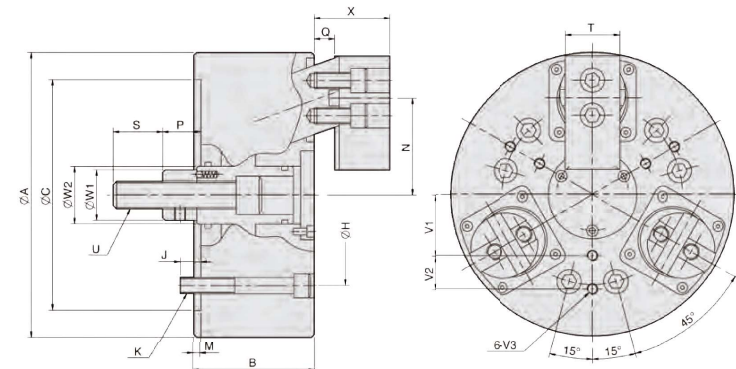


## DR

### 3-jaw draw down power chuck

Draw down power chuck feature of radial clamping will lead to almost no work piece uplifting displacement; for machining casting and forging part:

1. For the clamped work-piece is appressed to the surtace, chucks are suitable for heavy machining.
2. Chuck Actutors with cylindrical structure are durable and ensures high clamping repeatability.
3. Accurate self-centering and pull back features are adequate or precise length control machining requirements.



UNIT : mm

SPEC Model	Plunger Stroke (mm)	Jaw Stroke (In Dia.) (mm)	Max. Pull Force kN(kgf)	Max. Gripping Force kN(kgf)	Max. Operating Pressure MPa(kgf / cm <sup>2</sup> )	Max. Speed (r.p.m.)	Weight (kg)	Moment Of Inertia I (kg · m <sup>2</sup> )	Matching Cylinder	Matching Soft Jaw	Gripping O.D. Range (mm)
DR-06	10	7.2	15(1530)	25(2549)	2.1(21.4)	3500	15	0.05	MS105C	DR06-HC	Ø35-Ø165
DR-08	10	7.2	25(2590)	45(4589)	2.5(25.5)	3000	25	0.14	MS125C	DR08-HC	Ø40-Ø210

UNIT : mm

SPEC Model	Plunger Stroke (mm)	Jaw Stroke (In Dia.) (mm)	Max. Pull Force kN(kgf)	Max. Gripping Force kN(kgf)	Max. Operating Pressure MPa(kgf / cm <sup>2</sup> )	Max. Speed (r.p.m.)	Weight (kg)	Moment Of Inertia I (kg · m <sup>2</sup> )	Matching Cylinder	Matching Soft Jaw	Gripping Range O.D. Range / I.D. Range
BL-12	17.5	12.4	40.7(4152)	122(12440)	2.8(28.5)	2800	65	0.18	MS150C	BL-12	Ø63-Ø240 / Ø127-Ø305

DIM Model	A	B	C	H	J	K	M	N max.	N min.	P max.	P min.	Q max.	Q min.	S	T	U	W1	W2	X max.	X min.	V1	V2	V3
DR-06	165	85	140	104.78	16	6xM10	5	58	54.4	33	23	14	4	36	35	M16x2.0	32	33.5	45	35	35	20	M6x12
DR-08	210	90	170	133.35	15	6xM12	5	71.3	67.7	38	28	15	5	36	40	M20x2.5	37	42	56	46	45	25	M8x16



## P165

### Floating plate center chuck

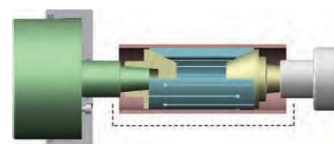
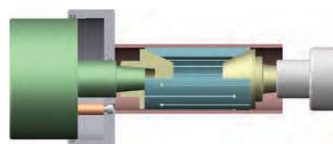
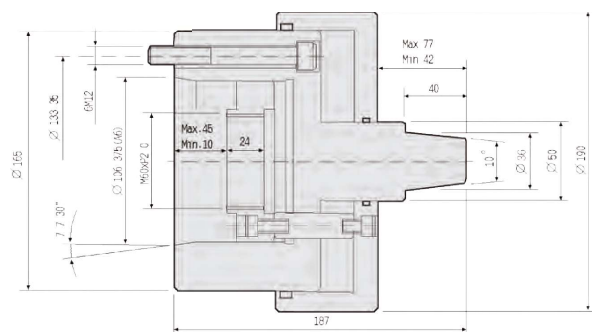
- Suitable for easy one step cutting of thin holes, plate and outside diameter.



## HN

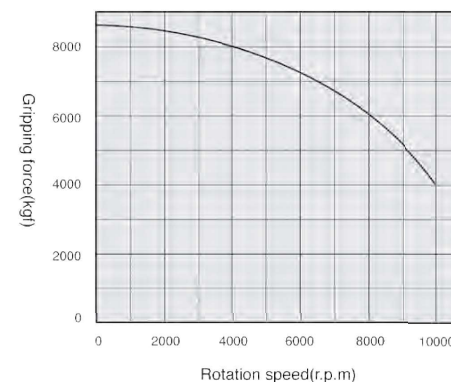
### 3-jaw extra high speed through-hole power chuck(adapter included)

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



Possible processing range

GRIPPING CHARACTERISTIC GRAPH



SPEC Model	Plunger Stroke (mm)	Max. Operating Pressure MPa(kgf / cm <sup>2</sup> )	Max. Speed (r.p.m.)	Weight (kg)	Moment Of Inertia I (kg · m <sup>2</sup> )	Matching Cylinder
P165	35	1.0(10)	6000	18.5	0.02	MS125C35

UNIT : mm

SPEC Model	Through-Hole (mm)	Plunger Stroke (mm)	Jaw Stroke (In Dia.) (mm)	Max. Pull Force kN(kgf)	Max. Gripping Force kN(kgf)	Max. Operating Pressure MPa(kgf / cm <sup>2</sup> )	Max. Speed (r.p.m.)	Weight (kg)	Moment Of Inertia I (kg · m <sup>2</sup> )	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	Ø14-Ø51

UNIT : mm