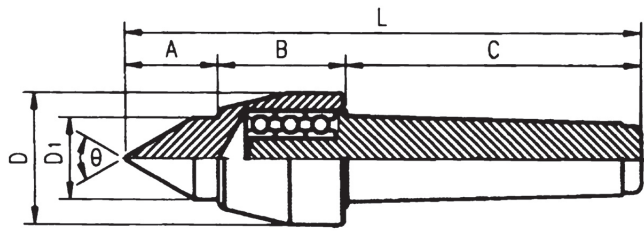




Light Duty Live Center



VERTEX



- Center is made of alloy steel under heating treatment to provide higher rigidity (HRC60°±2°) and satisfied wear-resistance.
- Center is constituted by ball bearings assembly.
- Applicable to middle-speed & high-speed lathe with light load.

Unit:mm

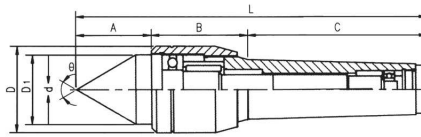
ORDER NO.	A	B	C	D	D1	L	Accuracy	Speed Max R.P.M.	θ	G.W. weight kgs	PACKING LxWxH	CODE NO.
VPC-MT1	21	31	56	32	16	108	0.005	3200	60°	0.3	115 x 136 x 38	5001-001
VPC-MT2	26	37	69	40	22	132	0.005	2800	60°	0.5	140 x 45 x 45	5001-002
VPC-MT3	32	46	86	45	26	164	0.005	2000	60°	0.9	170 x 50 x 52	5001-003
VPC-MT4	34	46	108	48	30	188	0.005	1800	60°	1.3	195 x 58 x 56	5001-004
VPC-MT5	50	62	136	68	45	248	0.005	1500	60°	3.2	268 x 86 x 77	5001-005



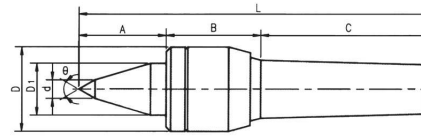
Live Lathe Center



A TYPE



B TYPE

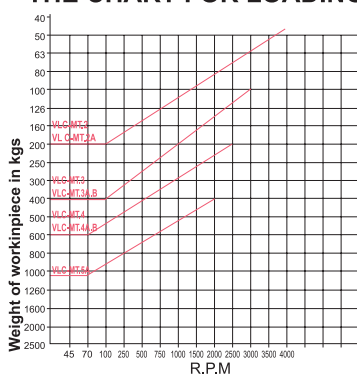


- Center shaft & main body are made of alloy steel under heating treatment to provide higher rigidity (HRC60°±2°) and satisfied wear-resistance.
- Center is constituted by thrust ball bearing, needle roller bearings & ball bearings assembly.
- Applicable to middle-speed & high-speed lathe with heavy load.
- ※ B TYPE SUITABLE FOR SMALL -WORKPIECE MACHINING.

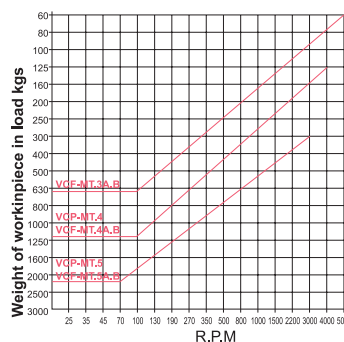
Unit:mm

ORDER NO.	TYPE	A	B	C	D	D1	b	L	d1	Accuracy	Speed Max R.P.M.	θ	G.W. weight kgs	PACKING LxWxH	CODE NO.
VLC-212	MT2A	28	35	69	32	23	-	132	-	0.005	4000	60°	0.3	173 x 43 x 40	5001-010
VLC-213	MT3A	36	44	86	41	35	-	166	-	0.005	3000	60°	0.9	198 x 67 x 51	5001-011
VLC-214	MT4A	41	51	108	47	40	-	200	12	0.005	2500	60°	1.5	240 x 70 x 61	5001-012
VLC-215	MT5A	54	72	136	65	52	-	262	18	0.005	2000	60°	3.8	290 x 92 x 80	5001-013
VLC-213B	MT3B	46	44	86	41	25	10	176	-	0.005	3000	60°	0.9	198 x 67 x 51	5001-014
VLC-214B	MT4B	55	51	108	47	32	12	214	12	0.005	2500	60°	1.5	240 x 70 x 61	5001-015

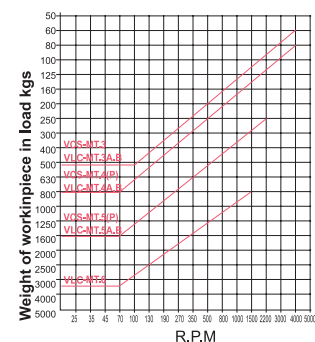
THE CHART FOR LOADING WEIGHT WITH R.P.M.



FOR VLC-TYPE



FOR VCF/VCP-TYPE



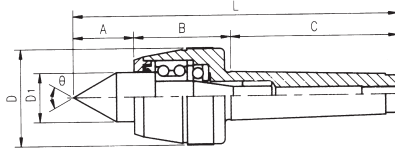
FOR VCS-TYPE



High-Speed NC Live Center



A TYPE



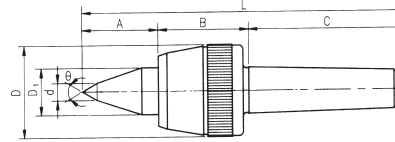
WATER-PROOF TYPE

- Center shaft is made of SKS3 material under vacuum heating tretment to provide higher rigidity (HRC60°±2°) and satisfied wear-resistance.
- Center is constituted by dual ball bearing. Thrust bearing & needle roller bearing assembly.
- Applicable to high-speed lathe & NC lathe with heavy load water-proof.

※ B Type is applicable in the metal workings on small workpieces.



B TYPE



Unit:mm

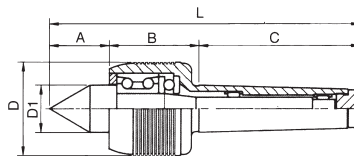
ORDER NO.	TYPE	A	B	C	D	D1	b	L	d1	Accuracy	Speed Max R.P.M.	θ	G.W. weight kgs	PACKING LxWxH	CODE NO.
VLC-MT3A	MT3A	39	55	86	53	30	-	180	12	0.005	4000	60°	1.3	240 x 70 x 61	5001-020
VLC-MT4A	MT4A	42	62	108	63	32	-	212	12	0.005	3000	60°	2.2	253 x 92 x 80	5001-021
VLC-MT5A	MT5A	57	71	136	83	40	-	264	18	0.005	2500	60°	4.5	303 x 108 x 101	5001-022
VLC-MT6A	MT6A	80	115	139	128	70	-	384	-	0.008	1500	60°	15.6	410 x 177 x 168	5001-023
VLC-MT3B	MT3B	45	55	86	53	30	10	186	12	0.005	4000	60°	1.4	240 x 70 x 61	5001-024
VLC-MT4B	MT4B	52	62	108	63	32	12	222	12	0.005	3000	60°	2.2	253 x 92 x 80	5001-025
VLC-MT5B	MT5B	67	71	136	83	40	14	274	18	0.005	2500	60°	4.5	303 x 108 x 101	5001-026



High-Load NC Live Center



A TYPE

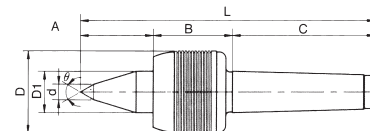


- Shaft uses material SKD11: through vacuum heat treatment, it is even more dural, hardness is as high as (HRC60°±2°) and satisfied wear-resistance. Main body is made of SCM21 material.
- Front end is constituted by SKF angular contact ball bearing & thrust ball bearing. middle & rear ends are comprised of needle roller bearing assembly.
- These centers are suitable for NC lathe at high-speed & heavy-load operation, water-proof.

※ B Type is applicable in the metal workings on small workpieces.



B TYPE



Unit:mm

ORDER NO.	A	B	C	D	D1	b	L	d1	Accuracy	Speed Max R.P.M.	θ	G.W. weight kgs	PACKING LxWxH	CODE NO.
VCF-MT3A	38	50	86	53	30	-	174	12	0.003	5000	60°	1.3	240 x 70 x 61	5001-030
VCF-MT4A	45	60	108	68	32	-	213	12	0.003	4500	60°	2.4	253 x 92 x 80	5001-031
VCF-MT5A	52	70	136	87	40	-	258	18	0.003	3000	60°	5	303 x 108 x 101	5001-032
VCF-MT3B	52	50	86	53	25	10	188	12	0.003	5000	60°	1.3	240 x 70 x 61	5001-033
VCF-MT4B	55	60	108	68	32	12	223	12	0.003	4500	60°	2.4	253 x 92 x 80	5001-034
VCF-MT5B	67	70	136	87	40	14	273	18	0.003	3000	60°	5	303 x 108 x 101	5001-035



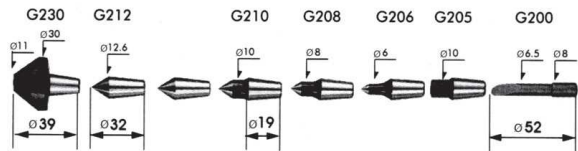
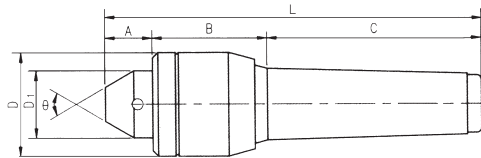
Inter-changeable Points Live Center



VERTEX[®]



- Complete set with 7 Interchangeable Points for various processing.
- Packed in plastic case.
- Accurating high accuracy and durability as well as complete rust-proof performance
- Body mabe of SCM-4 special tool steel hardened and ground can be used for heavy duty work.



Unit:mm

ORDER NO.	TYPE	A	B	C	D	D1	b	L	d1	Accuracy	Speed Max R.P.M.	θ	G.W. weight kgs	PACKING LxWxH	CODE NO.
VLC-312	MT2	22	36	69	32	25	-	127	-	0.008	4000	60°	0.9	166 x 105 x 63	5001-040
VLC-313	MT3	23	44	86	41	30	-	153	-	0.008	3000	60°	1.4	255 x 138 x 100	5001-041
VLC-314	MT4	23	51	108	47	32	-	182	-	0.008	2500	60°	2	255 x 138 x 100	5001-042

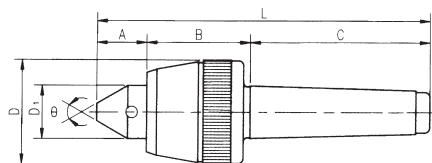


High Speed NC Interchangeable Points Live Center

Water-Proof Type



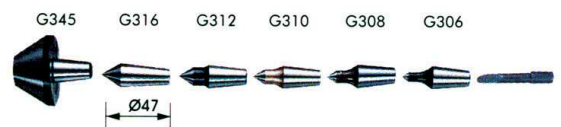
- Center shaft is made of SKS3 material under vacuum heating treatment to provide higher rigidity (HRC60°±2°) and satisfied wear-resistance.
- Center is constituted by dual ball bearing. Thrust bearing & needle roller bearing assembly.
- Applicable to high-speed lathe & NC leathe with heavy load, water-proof.



VCS-MT3, MT4

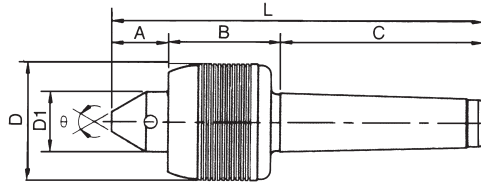


VCS-MT4P, MT5P

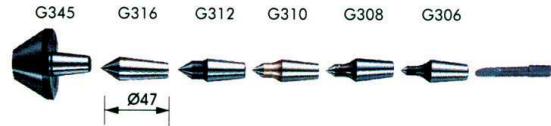


Unit:mm

ORDER NO.	A	B	C	D	D1	b	L	d1	Accuracy	Speed Max R.P.M.	θ	G.W. weight kgs	PACKING LxWxH	CODE NO.
VCS-MT3	28	55	86	53	30	-	167	-	0.008	4000	60°	1.8	255 x 138 x 100	5001-050
VCS-MT4	30	62	108	63	32	-	196	-	0.008	3500	60°	2.5	255 x 138 x 100	5001-051
VCS-MT4P	30	62	108	63	32	-	196	-	0.008	3500	60°	2.7	235 x 130 x 80	5001-052
VCS-MT5P	34	71	136	83	40	-	237	-	0.008	2500	60°	5.1	275 x 147 x 97	5001-053



- Shaft uses material SKD11:through vacuum heat treatment, it is even more durable, hardness is as high as (HRC60°±2°) and satisfied wear-resistance. Main body is made of SCM21 material.
- Front end is constituted by skf angular contact ball bearing & thrust ball bearing. middle & rear ends are comprised of needle roller bearing assembly.
- These centers are suitable for NC lathe at high-speed & heavy-load operation, water-proof.

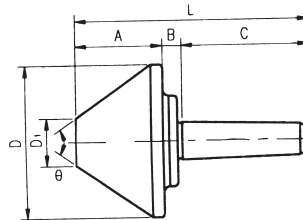


Unit:mm

ORDER NO.	A	B	C	D	D1	b	L	d1	Accuracy	Speed Max R.P.M.	θ	G.W. weight kgs	PACKING LxWxH	CODE NO.
VCP-MT4	35	60	108	68	32	-	203	-	0.005	4500	60°	3	253 x 130 x 80	5001-060
VCP-MT5	37	70	136	87	40	-	243	-	0.005	3000	60°	5.5	275 x 147 x 97	5001-061



Bull Nose Center



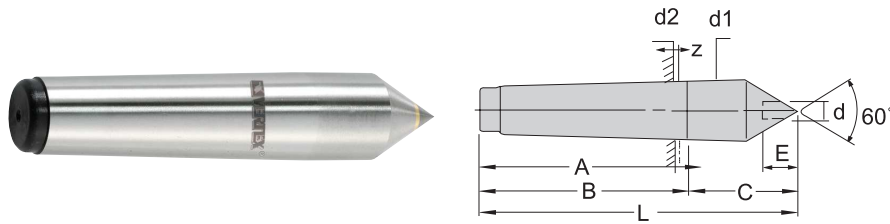
HARDEN PROCESS : HRC50°
 CONCENTRICITY : 0.005mm
 ROUNDNESS : 0.005mm
 MATERIAL : STEEL

Unit:mm

ORDER NO.	SIZE	A	C	D	D1	L	Speed Max R.P.M.	R.P.M.100 LOAD WEIGHT (KGS)	G.W. weight (KGS)	CODE NO.
VLC-433	MT3x3"	52	86	78	15	156	3300	400	1.6	5001-070
VLC-434	MT3x4"	59	86	106	25	161	3000	500	2.8	5001-071
VLC-443	MT4x3"	52	108	78	15	178	3300	400	1.8	5001-072
VLC-444	MT4x4"	59	108	106	25	183	3000	500	3.1	5001-073
VLC-445	MT4x5"	73	108	128	40	193	2000	650	4.9	5001-074

Unit:mm

ORDER NO.	SIZE	A	C	D	D1	L	Speed Max R.P.M.	R.P.M.100 LOAD WEIGHT (KGS)	G.W. weight (KGS)	CODE NO.
VLC-446	MT4x6"	88	108	156	45	208	1900	800	7.7	5001-075
VLC-448	MT4x8"	98	108	206	81	218	1500	1300	15.4	5001-076
VLC-455	MT5x5"	73	136	128	40	221	2000	650	5.8	5001-077
VLC-456	MT5x6"	88	136	156	45	236	1900	800	8.6	5001-078
VLC-458	MT5x8"	98	136	206	81	246	1500	1600	15.7	5001-079



- Carbide tipped-HRC 70°
- Hardened & precision ground.
- Concentricity within.0002"(0.005mm)

Unit:mm

ORDER NO.	SIZE	L	A	B	C	E	d2	d1	d	WEIGHT (KGS)	CODE NO.
VLC-112	MT-2	100	69	67	31	8	17.780	18.0	6	0.2	5001-090
VLC-113	MT-3	125	89	81	39	10	23.825	24.1	8	0.4	5001-091
VLC-114	MT-4	155	109	102.5	46	14	31.267	31.6	10	0.8	5001-092
VLC-115	MT-5	200	136	129.5	64	18	44.399	44.7	14	2.1	5001-093
VLC-116	MT-6	270	190	182	80	30	63.648	63.8	18	5.7	5001-094



Work-Driving Center



VDK-15



VDK-23



VDK-32

- This Clamp-free center is comprised of excellent mechanical structure, nearly free of breakdown. main body & center shaft are made of SLD material under heating treatment(HRC62°).
- Driving is required for traditional lathe machining to prevent workpiece from stop. This clamp-free center with 6 T & 8T design on end surface is able to securely support workpiece surface to fulfill easy and rapid machining.

Unit:mm

ORDER NO.	Center Shaft Size	Outer Dia	Working Range	Weight (KGS)	CODE NO.
VDK-15-MT4	6ø	16ø	16ø-25ø	0.6	5001-100
VDK-23-MT4	8ø	23ø	23ø-32ø	0.7	5001-101
VDK-32-MT4	8ø	32ø	32ø-45ø	0.7	5001-102



Work-Driving Center-Changable Tips

SET STYLE



TAPER SLEEVE



STOPPER



CENTER

Unit:mm

ORDER NO.	Center Shaft Size	Stopper Outer Dia	Working Range	Weight (KGS)	CODE NO.
VDC-30-MT4	6ø, 8ø, 10ø	16ø, 23ø, 30ø	15ø-45ø	0.23	5001-106

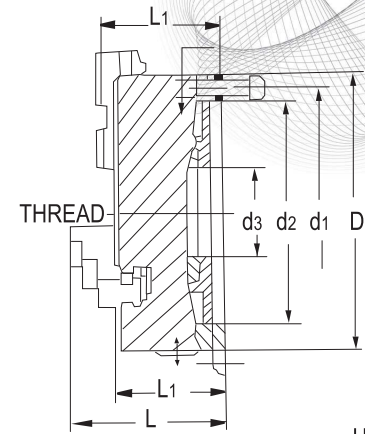


3 Jaw Self Centering Chuck

2 Set of Solid Jaw. Plain Back



VERTEX®



Unit:mm

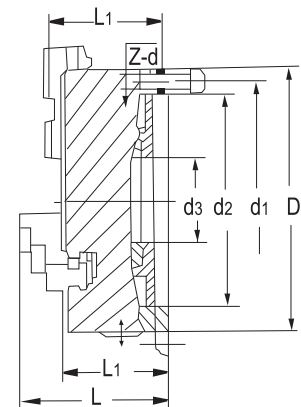
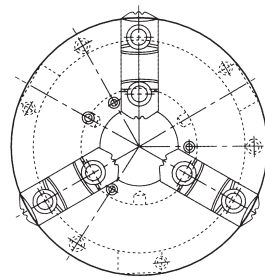
SPECIFICATIONS

ORDER NO.	D-Size	d1	d2	d3	L	L1	h	THREAD	WEIGHT (kgs)	CODE NO.
VSC-3A	80mm(3")	66	55	16	66	50	3.5	3-M6	2	5002-020A
VSC-4A	100mm(4")	84	72	22	74.5	55	3.5	3-M8	3.3	5002-021A
VSC-5A	130mm(5")	115	100	33	78	55	3.5	3-M8	5.8	5002-022A
VSC-6A	160mm(6")	145	130	40	95	65	5	3-M8	9	5002-023A
VSC-7A	190mm(7 1/2")	172	155	55	105	75	5	3-M10	15.1	5002-024A
VSC-8A	200mm(8")	180	165	70	109	75	5	3-M10	15.6	5002-025A
VSC-9A	240mm(9 1/2")	215	195	70	122.5	80	10	3-M12	26	5002-026A
VSC-10A	250mm(10")	225	206	80	120	80	5	3-M12	26.5	5002-027A
VSC-12A	315mm(12")	285	260	100	147.5	90	6	3-M16	47	5002-028A
VSC-16A	400mm(16")	368	340	130	173.5	100	6	3-M16	73	5002-029A
VSC-20A	500mm(20")	465	440	210	202	115	6	6-M16	121	5002-030A
VSC-25A	630mm(25")	586	545	252	220.5	135	7	6-M16	200	5002-031A



3 Jaw Powerful Self Centering Chuck

Reversible Top Jaws. Plain Back



Unit:mm

3 JAW SELF CENTERING CHUCK REVERSIBLE TOP JAWS. PLAIN BACK

SPECIFICATIONS

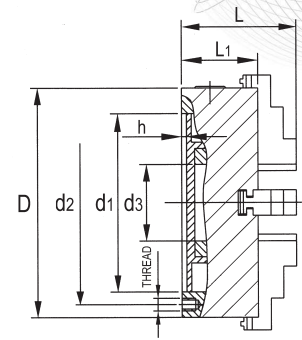
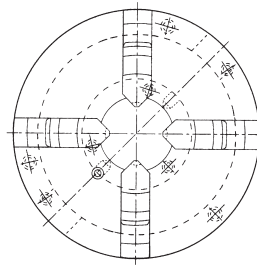
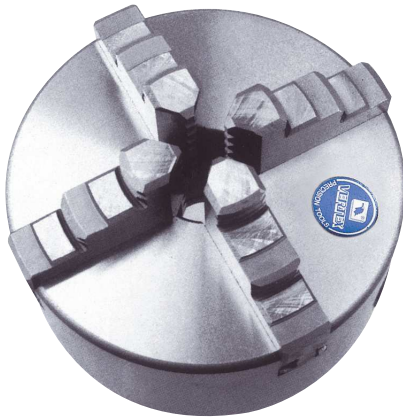
ORDER NO.	D-Size	d1	d2	d3	L	L1	THREAD	WEIGHT (kgs)	CODE NO.
VSK-6A	160mm(6")	142	130	45	95	71	3-M8	8.3	5002-040A
VSK-7A	190mm(7 1/2")	172	155	55	105	75	3-M10	10	5002-041A
VSK-8A	200mm(8")	180	165	65	109	78	3-M12	16	5002-042A
VSK-10A	250mm(10")	226	206	80	120	84	3-M12	21.7	5002-043A
VSK-12A	315mm(12")	285	260	100	156.5	90	3-M16	41	5002-043B
VSK-13A	325mm(13")	296	272	100	154.5	102.5	3-M16	45.8	5002-044A
VSK-15A	380mm(15")	350	325	130	156.5	104.5	3-M16	64.7	5002-045A
VSK-16A	400mm(16")	368	340	130	181.5	129.5	3-M16	75.5	5002-046A



4 Jaw Self Centering Chucks



VERTEX



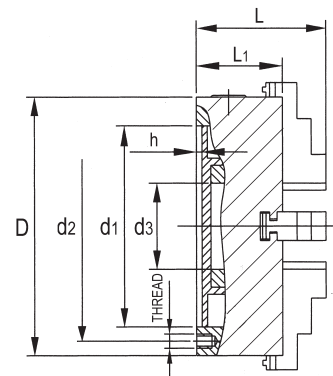
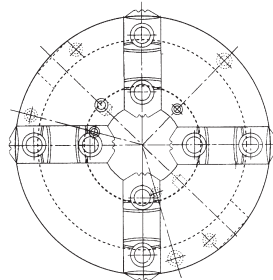
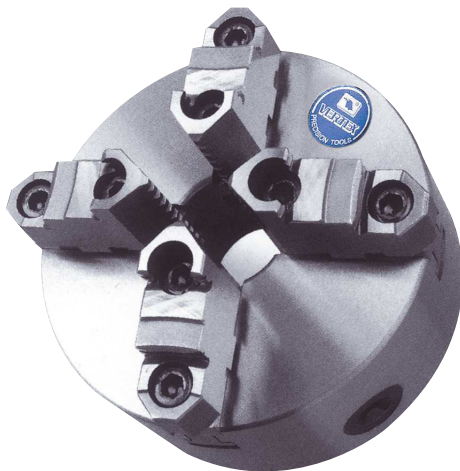
SPECIFICATIONS

Unit:mm

ORDER NO.	D	d1	d2	d3	L	L1	h	THREAD	WEIGHT (kgs)	CODE NO.
VPS-6A	165	130	145	45	94	65	5	3-M8	9.3	5002-050
VPS-7A	190	155	172	55	105	75	5	3-M10	13.8	5002-051
VPS-8A	200	165	180	65	109	75	5	3-M10	16.6	5002-052
VPS-10A	250	206	226	80	120	80	5	3-M12	28	5002-053
VPS-12A	315	260	285	100	147.5	90	6	3-M16	54	5002-054



4 Jaw Self Centering Chucks (2-Pices Jaw)



SPECIFICATIONS

Unit:mm

ORDER NO.	D	d1	d2	d3	L	L1	h	THREAD	WEIGHT (kgs)	CODE NO.
VPS-6AK	165	130	145	45	109	65	5	3-M8	9.5	5002-055
VPS-8AK	200	165	180	65	122	75	5	3-M10	14.8	5002-057
VPS-10AK	250	206	226	80	136	80	5	3-M12	24.7	5002-058
VPS-12AK	315	260	285	100	156.5	90	6	3-M16	45.7	5002-059

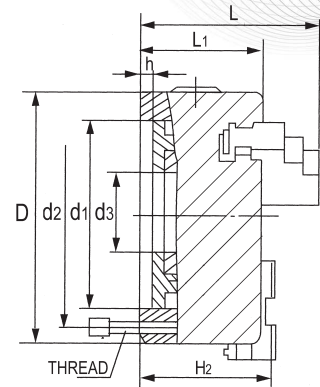
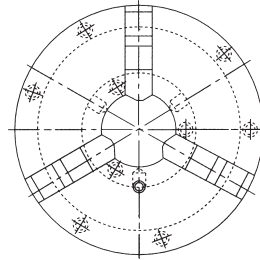
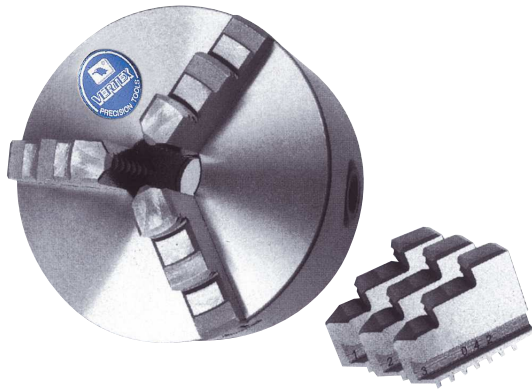


DIN-Type 3-Jaw Self-Centering Chucks



VERTEX®

DIN 6350 Standard



It have front mounting type as well.

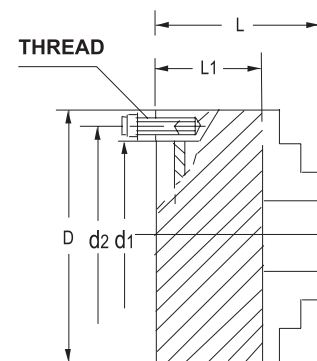
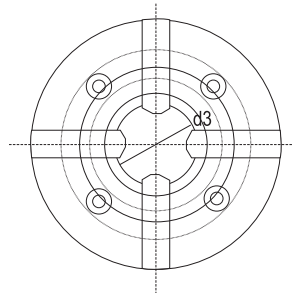
SPECIFICATIONS

Unit:mm

ORDER NO.	D	d1	d2	d3	L	L1	h	THREAD	R.P.M. MAX SPEED	WEIGHT (kgs)	CODE NO.
VSC-3D	80	56	67	16	66.5	50	4	3-M6	4000	1.9	5002-215
VSC-4D	100	70	83	22	74.5	55	3	3-M8	3500	3.3	5002-216
VSC-5D	125	95	108	30	84.5	58	4	3-M8	3000	5.2	5002-217
VSC-6D	160	125	140	45	94	65	5	6-M10	2500	9.1	5002-218
VSC-8D	200	160	176	65	109	75	5	6-M10	2500	16	5002-219
VSC-10D	250	200	224	80	120	80	5	6-M12	1600	27.5	5002-219A



4-Jaw Independent Chuck Plain Back



SPECIFICATIONS

Unit:mm

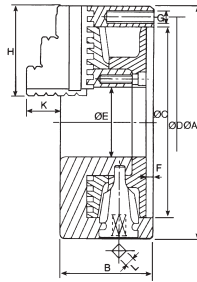
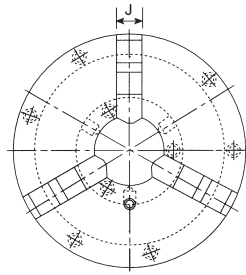
ORDER NO.	D-size	d1	d2	d3	L	L1	h	THREAD	WEIGHT (kgs)	CODE NO.
VKC-4	100mm(4")	72	84	25	74	54	4.5	4-M8	4	5002-220
VKC-5	125mm(5")	95	108	30	78	56			5.1	5002-221
VKC-6	160mm(6")	65	95	45	93	65	5	4-M10	8.3	5002-222
VKC-8	200mm(8")	75		56	107	75	6		4-M12	15.9
VKC-10	250mm(10")	110	130	65	120	80		4-M16		21.8
VKC-12B	320mm(12")	140	165	95	134	90	43.8		5002-226	
VKC-14	350mm(14")	130	168				53.6	5002-227		
VKC-16	400mm(16")	160	185	125	143	95	8	65	5002-228	
VKC-20	500mm(21")	200	236	160	161	106		4-M20	105	5002-229
VKC-25	630mm(25")	220	258	180	180	118	10		175	5002-230
VKC-32	800mm(32")	250	300	210	202	132	12	8-M20	300	5002-231



3-Jaw Scroll Chuck



VERTEX



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

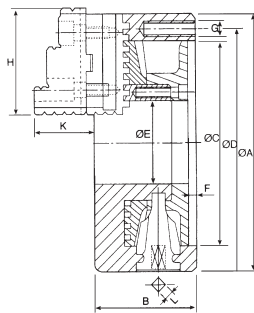
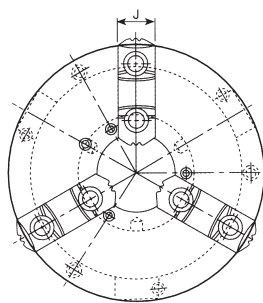
SPECIFICATIONS

Unit:mm

ORDER NO.	Dim											Allowable Handle Torque (kgf.m)	Gripping Force (kgf)	I (kgf.m ²)	Weight (kgs)	Max. Speed (r.p.m.)	Gripping Range		CODE NO.
	A	B	C	D	E	F	G	H	J	K	L						O.D. Range	I.D. Range	
VSC-3	85	46	60	73	16	4	3-M6	36	11	15	7	3.0	900	—	1.9	2500	Ø2-Ø70	Ø24-Ø64	5002-001
VSC-4	112	59	80	95	24	4.5	3-M8	42	14	18	8	4.5	1200	—	3.9	2500	Ø3-Ø90	Ø32-Ø84	5002-002
VSC-5	132	60	100	115	32	4.5	3-M8	50	16	20	8	6.5	1500	0.01	3.9	2500	Ø3-Ø110	Ø35-Ø100	5002-003
VSC-6	165	67	130	147	45	5	3-M10	63	19	27	10	9.0	3300	0.03	9.6	2000	Ø3-Ø160	Ø48-Ø150	5002-004
VSC-7	192	76.5	155	172	58	5	3-M10	77	21.5	28	11	11.0	3600	0.06	14.2	2000	Ø4-Ø180	Ø56-Ø170	5002-005
VSC-8	200	76.5	160	176	58	5	3-M10	77	21.5	38	11	11.0	3600	0.07	15.2	2000	Ø4-Ø180	Ø56-Ø170	5002-006
VSC-9	232	84	190	210	70	6	3-M12	87	24	33	12	15.0	3900	0.15	22.8	2000	Ø5-Ø220	Ø62-Ø210	5002-007
VSC-10	273	87	230	250	87	8.5	3-M12	98	28	37	12	19.5	4800	0.25	30.8	1800	Ø6-Ø260	Ø70-Ø250	5002-008
VSC-12	310	96	260	285	105	7	3-M12	110	30	44	14	21.0	5700	0.58	44.6	1800	Ø10-Ø300	Ø86-Ø290	5002-009
VSC-16	405	122	345	375	145	8.5	6-M14	146	42	56	15	23.0	4500	1.75	102	1500	Ø14-Ø400	Ø100-Ø380	5002-010



3-Jaw Powerful Scroll Chuck



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

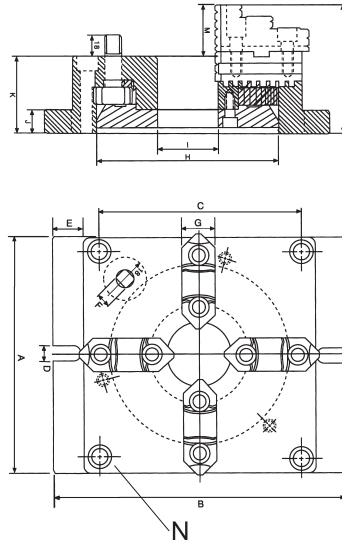
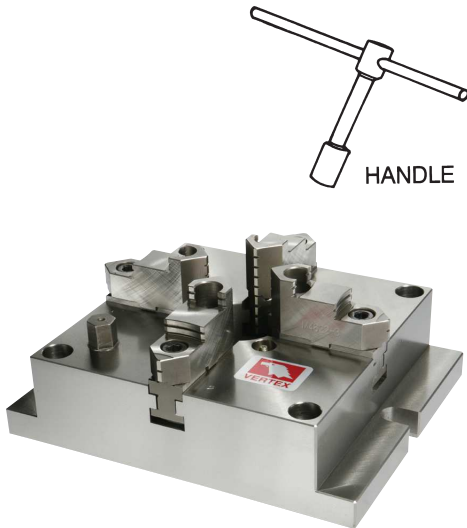
SPECIFICATIONS

Unit:mm

ORDER NO.	Dim											Allowable Handle Torque (kgf.m)	Gripping Force (kgf)	I (kgf.m ²)	Weight (kgs)	Max. Speed (r.p.m.)	Gripping Range		CODE NO.
	A	B	C	D	E	F	G	H	J	K	L						O.D. Range	I.D. Range	
VSK-6	165	67	130	147	45	5	3-M10	72	26	39	10	9.0	3300	0.03	9.5	2000	Ø8-Ø160	Ø55-Ø150	5002-030
VSK-7	192	76.5	155	172	58	5	3-M10	82	28	43	11	11.0	3600	0.06	13.8	2000	Ø8-Ø180	Ø62-Ø170	5002-031
VSK-8	200	76.5	160	176	58	5	3-M10	82	28	43	11	11.0	3600	0.07	14.7	2000	Ø8-Ø180	Ø62-Ø170	5002-032
VSK-9	232	84	190	210	70	6	3-M12	96	32	50	12	15.0	3900	0.16	22.1	2000	Ø11-Ø220	Ø70-Ø210	5002-033
VSK-10	273	87	230	250	87	8.5	3-M12	100	35	50	12	19.5	4800	0.26	29.5	1800	Ø12-Ø260	Ø80-Ø250	5002-034
VSK-12	310	96	260	285	105	7	3-M12	114	40	56	14	21.0	5700	0.58	41.8	1800	Ø15-Ø300	Ø90-Ø290	5002-035
VSK-16	405	122	345	375	145	8.5	6-M14	150	50	75	15	23.0	4500	1.72	98	1500	Ø30-Ø470	Ø110-Ø380	5002-037



Machining Jaw Chuck



- Works are gripped firmly by the formed jaws, ensuring high precision. (Deviation: within 0.03mm)
- * Use forming rings (jaw locks) to form the soft-jaws.
- Large workpieces can be held tight with the low profile vise body.
- Able to grip square works by using this chuck as a two-way jaw unit
- * The fixed jaw(optional)is necessary. Longitudinal works can also be gripped by using the bore of this chuck.
- A dust cover is provided and this keeps the shavings from entering the machine.
- The handle is set on the face and does not interfere with the table. A number of chucks can be used together.

SPECIFICATIONS

Unit:mm

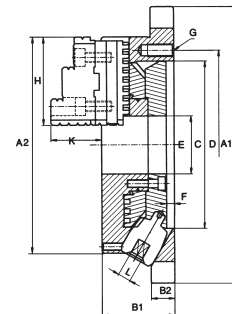
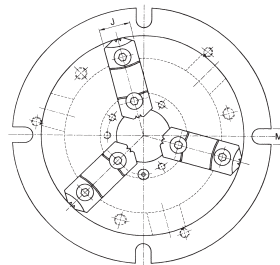
ORDER NO.	A	B	C	D	E	G	H	I	J	K	L	M	N	MAX. GRIPPING DIAMETER		WEIGHT (kgs)	CODE NO.
														CLAMPING DIA	PROPING DIA		
VMJ-6	165	215	144	18	50	26	130	40	18	57	96	39	4-M10	Ø4-Ø128	Ø55-Ø128	13.5	5002-240
VMJ-8	200	250	174	18	50	28	160	55	20	65	108	43	4-M12	Ø5-Ø162	Ø62-Ø162	21.5	5002-241
VMJ-10	250	310	218	18	60	32	200	70	22	72	122	50	4-M14	Ø6-Ø200	Ø72-Ø200	36.1	5002-242
VMJ-12	310	380	274	22	70	40	260	100	25	85	141	56	4-M16	Ø10-Ø265	Ø90-Ø265	61.7	5002-243



Super Thin Chucks



- The angle between "HANDLE" AND "BASE OF CHUCK" is 30° degree, There Fore, it is much more convenient for "HANDLE" rotation.
- This "POWER SUPER THIN" design of chuck may increase the "allowable length" of machining operation.
- The flanged type design make it easily for loading and unloading operation.
- "POWERFUL TYPE" design, may be used with hard jaws or soft jaws alternatively.



SPECIFICATIONS

Unit:mm

ORDER NO.	Dim														Weight (kgs)	Gripping Range		CODE NO.
	A1	A2	B1	B2	C	D	E	F	G	H	J	K	L	M		O.D. Range	I.D. Range	
VNBK-6	220	170	58	18	130	147	45	6	3-M10	68	26	40	10	13	12.4	Ø8-160	Ø48-150	5002-070
VNBK-8	270	210	65	20	155	172	60	6	3-M10	85	28	45	11	13	20.2	Ø11-200	Ø62-190	5002-071
VNBK-10	315	255	73	20	190	210	80	6	3-M12	93	32	52	12	16	29.5	Ø12-250	Ø72-240	5002-072
VNBK-12	370	305	80	22	250	285	105	6	3-M12	117	40	59	14	18	46.7	Ø15-300	Ø86-290	5002-073



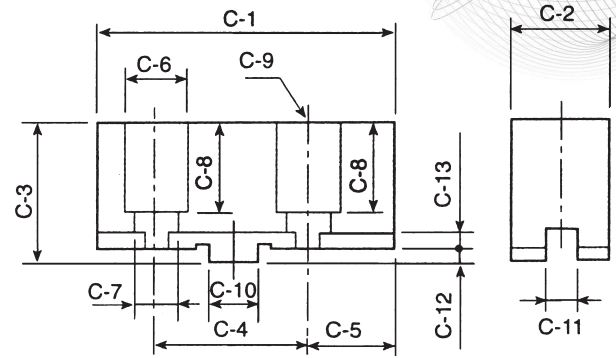
Soft Jaw For SK-Type Chuck



1. Soft jaw for SK-type chuck. 2. Manufactured in specification



3 PCS/SET



Unit:mm

Dim ORDER NO.	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	Weight (kgs)	CODE NO.
VSJ-6	75	26	38	38.1	18	14	8.5	27	M8	12.68	7.94	3	3.5	1.3	5002-300
VSJ-7	95	31	48	44.45	25	17	11	35	M10	12.68	7.94	3	3.5	3.4	5002-301
VSJ-8	95	31	48	44.45	25	17	11	35	M10	12.68	7.94	3	3.5	2.7	5002-302
VSJ-9	110	37	50	53.98	28	19	13	36	M12	19.03	12.7	3	3.5	3.7	5002-303
VSJ-10	110	37	50	53.98	28	19	13	36	M12	19.03	12.7	3	3.5	3.7	5002-304
VSJ-12	125	40	54	63.5	32	19	13	40.5	M12	19.03	12.7	3	3.5	5.3	5002-305
VSJ-16	160	50	70	76.2	42	25	17	48	M16	19.03	12.7	6	5.5	10.6	5002-306

THE SPECIAL OF HEIGHT (C-3) FOR VSJ-TYPE IS AVAILABLE

ORDER NO.	MODEL	HEIGHT	CODE NO.
VSJ-6-5	VSJ-6	50H	5002-3005
VSJ-6-6	VSJ-6	60H	5002-3006
VSJ-6-7	VSJ-6	70H	5002-3007
VSJ-6-8	VSJ-6	80H	5002-3008
VSJ-8-5	VSJ-7 VSJ-8	50H	5002-3025
VSJ-8-6	VSJ-7 VSJ-8	60H	5002-3026
VSJ-8-7	VSJ-7 VSJ-8	70H	5002-3027
VSJ-8-8	VSJ-7 VSJ-8	80H	5002-3028
VSJ-9-5	VSJ-9	50H	5002-3035
VSJ-9-6	VSJ-9	60H	5002-3036
VSJ-9-7	VSJ-9	70H	5002-3037
VSJ-9-8	VSJ-9	80H	5002-3038
VSJ-9-9	VSJ-9	90H	5002-3039

ORDER NO.	MODEL	HEIGHT	CODE NO.
VSJ-9-10	VSJ-9	100H	5002-30310
VSJ-10-5	VSJ-10	50H	5002-3045
VSJ-10-6	VSJ-10	60H	5002-3046
VSJ-10-7	VSJ-10	70H	5002-3047
VSJ-10-8	VSJ-10	80H	5002-3048
VSJ-10-9	VSJ-10	90H	5002-3049
VSJ-10-10	VSJ-10	100H	5002-30410
VSJ-12-6	VSJ-12	60H	5002-3056
VSJ-12-7	VSJ-12	70H	5002-3057
VSJ-12-8	VSJ-12	80H	5002-3058
VSJ-12-9	VSJ-12	90H	5002-3059
VSJ-12-10	VSJ-12	100H	5002-30510



Soft Jaw Hydraulic Power Chucks

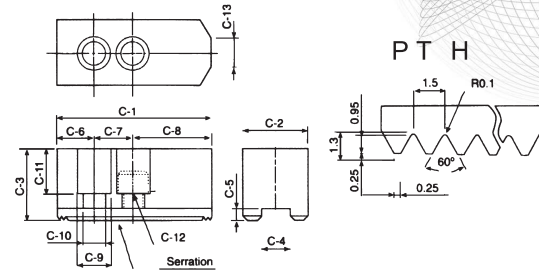
Soft jaw for CNC lathe.



STANDARD
3 PCS/SET



ALUMINIUM



MATERIAL: ALUMINIUM

ORDER NO.	SIZE	CODE NO.
VHC-8A	SAME VHC-8	5002-250
VHC-10A	SAME VHC-10	5002-251

MATERIAL: STEEL

Unit:mm

Dim ORDER NO.	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	Weight (kgs)	CODE NO.
VHC-05	62	25	30	10	5	9	14	39	13.5	9	21	M8	5	0.9	5002-330
VHC-06	73	31	36	12	5	15	20	38	17	11	23	M10	14	1.6	5002-331
VHC-08	95	35	37	14	5	24	25	46	19	13	22	M12	16	2.4	5002-332
VHC-10	110	40	42	16	5	30	30	50	19	13	27	M12	18	3.7	5002-333
VHC-12	130	50	50	21	5	39	30	61	25	17	30	M16	23	6.4	5002-334
VHC-15	165	62	62	22	8	37	43	85	32	21	38	M20	-	12.7	5002-335
VHC-12-1	130	50	50	18	5	39	30	61	23	15	30	M14	23	6.25	5002-336
VHC-15-1	165	62	62	25.5	5	37	43	85	32	21	38	M20	-	7.5	5002-337

THE SPECIAL OF HEIGHT (C-3) FOR VHC-TYPE IS AVAILABLE

ORDER NO.	MODEL	HEIGHT	CODE NO.
VHC-05-5	VHC-05	50H	5002-3305
VHC-05-6	VHC-05	60H	5002-3306
VHC-05-7	VHC-05	70H	5002-3307
VHC-05-8	VHC-05	80H	5002-3308
VHC-06-5	VHC-06	50H	5002-3315
VHC-06-6	VHC-06	60H	5002-3316
VHC-06-7	VHC-06	70H	5002-3317
VHC-06-8	VHC-06	80H	5002-3318
VHC-08-5	VHC-08	50H	5002-3325
VHC-08-6	VHC-08	60H	5002-3326
VHC-08-7	VHC-08	70H	5002-3327
VHC-08-8	VHC-08	80H	5002-3328
VHC-10-5	VHC-10	50H	5002-3335
VHC-10-6	VHC-10	60H	5002-3336
VHC-10-7	VHC-10	70H	5002-3337
VHC-10-8	VHC-10	80H	5002-3338

ORDER NO.	MODEL	HEIGHT	CODE NO.
VHC-10-9	VHC-10	90H	5002-3339
VHC-10-10	VHC-10	100H	5002-33310
VHC-12-6A	VHC-12 18SLOT	60H	5002-33366
VHC-12-7A	VHC-12 18SLOT	70H	5002-33367
VHC-12-8A	VHC-12 18SLOT	80H	5002-33368
VHC-12-9A	VHC-12 18SLOT	90H	5002-33369
VHC-12-10A	VHC-12 18SLOT	100H	5002-333610
VHC-12-6	VHC-12 21SLOT	60H	5002-33346
VHC-12-7	VHC-12 21SLOT	70H	5002-33347
VHC-12-8	VHC-12 21SLOT	80H	5002-33348
VHC-12-9	VHC-12 21SLOT	90H	5002-33349
VHC-12-10	VHC-12 21SLOT	100H	5002-333410
VHC-15-7	VHC-15	70H	5002-33357
VHC-15-8	VHC-15	80H	5002-33358
VHC-15-9	VHC-15	90H	5002-33359
VHC-15-10	VHC-15	100H	5002-333510



Soft Jaw Forming Ring



The size can be adjusted against the helical slot.

Bias pin can be rotated 180 degree for different size to extend a clamping range.

Don't need to drill new hole. The hole on the soft jaws can be used directly for bias pin.

The material, which is hardened and ground, can last for a long time.

FAETURES

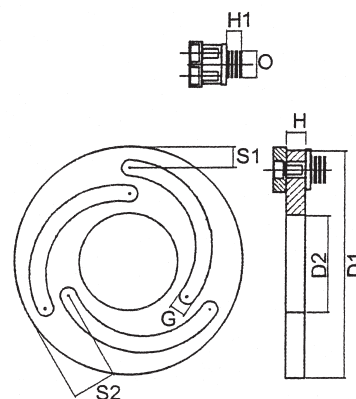
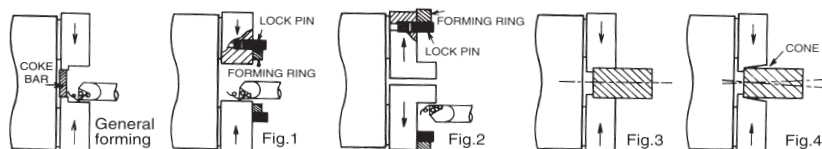
THE CHUCK NOT INCLUDING

- Forming ring is available for 5", 6", 8", 10" & 12" power chuck.
- The clamping force is increasing. the roundness and vibration caused by eccentricity can be improved. The cutting accuracy is much better because of no taper hole (as fig.3) and less vibration.
- Both Clamping (as fig.1) and extension (as fig. 2) are available. Meanwhile, the size adjusting is at will, the operation is easy and durable.
- More improvement for used chuck to have high accuracy & strong clamping force .

INSTRUCTION

Because the forming ring is used for cutting soft jaws by clamping and with extending. through-hole could increase the accuracy of clamping work piece. (please refer to fig.1.2&3)

As fig.4, the soft jaw is made without forming ring. So that the cone has created, moreover, the Bad accuracy, run-out, vibration occur when clamping force is not stable.

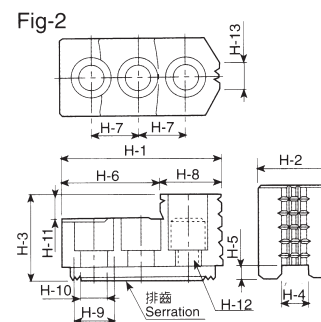
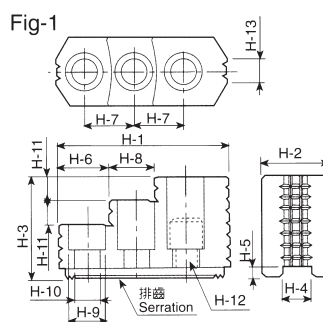


ORDER NO.	SUIT TO SK-CHUCK SIZE	H	D1	D2	S1	S2	G	H1	O	KGS	CODE NO.
VFR-05	5"	12	140	60	12	28	10	9	13.5	1	5002-360
VFR-06	6"	12	168	80	12	32	10	9	16.5	1.5	5002-361
VFR-08	8"	12	218	115	17	36	10	9	18.5	2.4	5002-362
VFR-10	10"	12	258	150	15	40	10	9	18.5	3	5002-363
VFR-12	12"	15	316	188	21	50	10	9	21.5	5	5002-364



Hard Jaws For Hydraulic Power Chucks

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



DIMENSIONS

Unit:mm

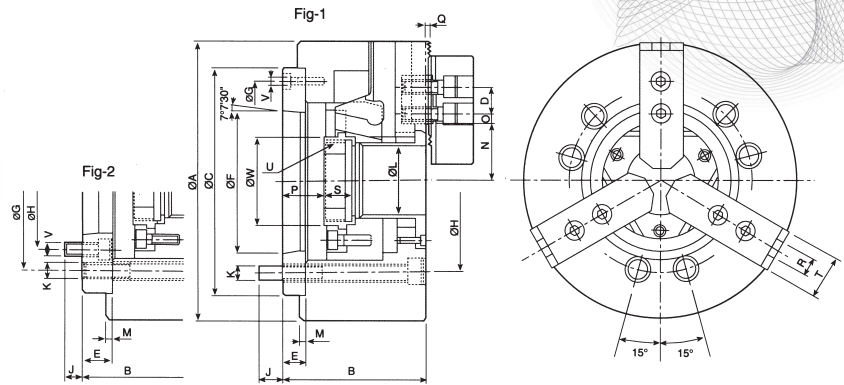
ORDER NO.	Dim	H-1	H-2	H-3	H-4	H-5	H-6	H-7	H-8	H-9	H-10	H-11	H-12	H-13	Serration Pitch	Matching Chuck	3-Jaw Weight (kgs)	CODE NO.
HJ05	53	23	27.5	10	4	30.5	14	22.5	13.5	8.5	10	M8	6	1.5x60°	Fig-2	N-205	0.4	5002-401
HJ06	67.5	31	35	12	5	13	20	46	17	11	12	M10	16	1.5x60°	Fig-2	N-206.V-206	1.0	5002-402
HJ08	86	35	51	14	5	31	25	18	19	13	12	M12	12	1.5x60°	Fig-1	N-208.V-208	1.9	5002-403
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	5002-404
HJ12	103	50	52	21	4	62.5	30	40.5	25	17	17	M16	30	1.5x60°	Fig-2	N-212	2.65	5002-405
HJ12-1	103	50	52	18	5	62.5	30	40.5	22	15	17	M14	30	1.5x60°	Fig-2	V-212	2.7	5002-406
HJ15	149	62	86	22	8	63	43	34	32	21	20	M20	40	1.5x60°	Fig-1	N-215	9.6	5002-407
HJ15-1	149	62	86	25.5	5	63	43	34	32	21	20	M20	40	1.5x60°	Fig-1	V-215	9.5	5002-408



3-Jaw Wedge Type Through-hole Power Chuck (Without Adaptor)



VERTEX®



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

SPECIFICATIONS

Unit:mm

Dim	ORDER NO.	N-205A4	N-206A5	N-208A5	N-208A6	N-210A6	N-210A8	N-212A8	N-215A8	N-215A11
Through-Hole (mm)		ø33	ø45	ø52	ø52	ø75	ø75	ø91	ø117.5	ø117.5
Plunger Stroke (mm)		10	12	16	16	19	19	23	23	23
Jaw Stroke (mm)		5.4	5.5	7.4	7.4	8.8	8.8	10.6	10.6	10.6
Max. Draw Bar Pull Force (kgf)		1700	2200	3400	3400	4300	4300	5500	7240	7240
Max. Gripping Force (kgf)		3600	5700	8800	8800	11000	11000	14300	18355	18355
Max. Operating Pressure (kgf/cm ²)		29.6	28.5	26.5	26.5	27.5	27.5	27.5	23.5	23.5
Max. Speed (r.p.m.)		7000	6000	4900	4900	4200	4200	3300	2500	2500
Weight (kgs)		6.9	14.2	25.8	24.05	40.9	37.4	63.2	134	127
Matching Cylinder		M1036	M1246	M1552	M1552	M1875	M1875	M2091	M2511	M2511
Matching Soft Jaw		VHC05	VHC06	VHC08	VHC08	VHC10	VHC10	VHC12	VHC15	VHC15
Matching Hard Jaw		HJ05	HJ06	HJ08	HJ08	HJ10	HJ10	HJ12	HJ15	HJ15
CODE NO.		5002-080	5002-081	5002-082	5002-083	5002-084	5002-085	5002-086	5002-087	5002-088

DIMENSIONS

Unit:mm

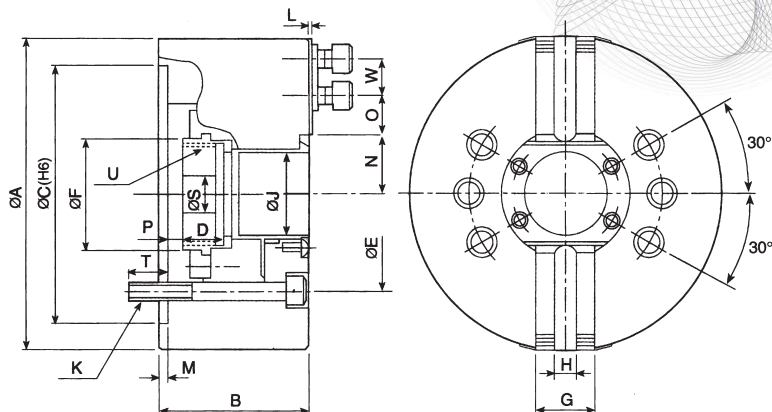
Dim	ORDER NO.	N-205A4	N-206A5	N-208A5	N-208A6	N-210A6	N-210A8	N-212A8	N-215A8	N-215A11
A		135	169	210	201	254	254	304	381	381
B		71	91	109	103	120	113	122	160	149
G		96	116	133.35	150	171.45	190	190	235	260
D		14	20	25	25	30	30	30	43	43
E		15	15	23	17	25	18	18	33	22
F		65.513	82.563	82.563	106.375	106.375	139.719	139.719	139.719	196.869
C		110	140	170	170	220	220	220	300	300
H		82.55	104.78	104.78	133.35	133.35	171.45	171.45	171.45	235
J		15.5	16	13	18	18	24	25	24	28
K		3xM10	6xM10	6xM12	6xM12	6xM16	6xM16	6xM16	6xM20	6xM20
L		33	45	52	52	75	75	91	117.5	117.5
M		4	5	5	5	5	5	6	6	6
N max.		26.5	32	38.7	38.7	51	51	61.3	82	82
N min.		23.8	29.25	35	35	46.6	46.6	56	76.7	76.7
O max.		19.75	22.75	29.75	29.75	33.75	33.75	45.75	46.75	46.75
O min.		7.75	9.25	14.75	14.75	14.25	14.25	15.75	13.75	13.75
P max.		16	26	37.5	31.5	33.5	26.5	26	40	29
P min.		6	14	21.5	15.5	14.5	7.5	3	17	6
Q		2	2	2	2	2	2	2	5	5
R		10	12	14	14	16	16	21	24	24
S		20	19	20.5	20.5	25	25	28	43	43
T		23	32	37	37	42	42	52	62	62
U max.		M40x1.5	M55x2.0	M60x2.0	M60x2.0	M85x2.0	M85x2.0	M100x2.0	M130x2.0	M130x2.0
V		3xM6	3xM6	6xM10	3xM6	6xM12	6xM8	6xM8	6xM16	3xM10
W		45	60	66	66	94	94	108	139	139
REFER FIG.		Fig-1	Fig-1	Fig-2	Fig-1	Fig-2	Fig-1	Fig-1	Fig-2	Fig-1



2-Jaw Wedge Type Through-hole Power Chuck (Without Adaptor)



VERTEX®



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

SPECIFICATIONS

Unit:mm

Dim	ORDER NO.	NT205	NT206	NT208	NT210	NT212	NT215
Through-Hole (mm)		Ø33	Ø45	Ø52	Ø75	Ø91	Ø117.5
Plunger Stroke (mm)		10	12	16	19	23	23
Jaw Stroke (mm)		5.4	5.5	7.4	8.8	10.6	10.6
Max. Draw Bar Pull Force (kgf)		1189	1479	2294	2906	3739	4793
Max. Gripping Force (kgf)		2447	3875	5710	7546	9789	12236
Max. Speed (r.p.m.)		7000	6000	4800	4200	3300	2500
Weight (kgs)		5.9	13	22.1	33.2	61.9	115
Matching Cylinder		M1036	M1246	M1552	M1875	M2091	M2511
Max. Operating Pressure (kgf/cm ²)		19.5	18.9	17.3	18.4	18.4	15.3
Matching Soft Jaw		VHC05	VHC06	VHC08	VHC10	VHC12	VHC15
Matching Hard Jaw		HJ05	HJ06	HJ08	HJ10	HJ12	HJ15
CODE NO.		5002-250	5002-251	5002-252	5002-253	5002-254	5002-255

DIMENSIONS

Unit:mm

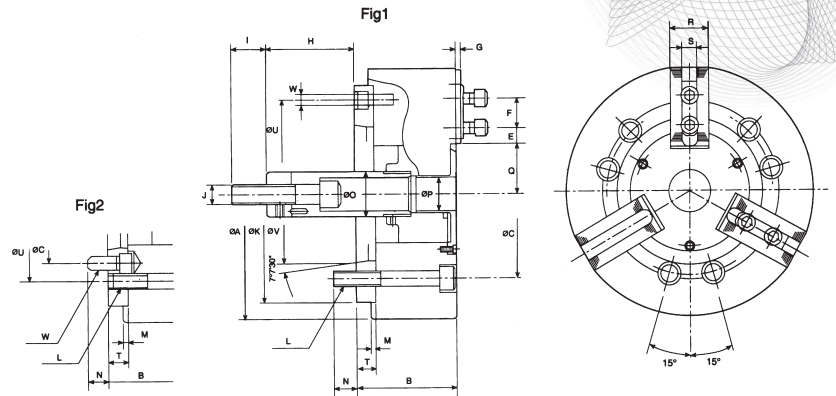
Dim	ORDER NO.	NT205	NT206	NT208	NT210	NT212	NT215
A		135	169	210	254	304	381
B		60	81	91	100	110	133
C (H6)		110	140	170	220	220	300
D		20	19	20.5	25	28	43
E		82.55	104.78	133.35	171.45	171.45	235
M		4	5	5	5	6	6
G		23	32	37	42	52	62
H		10	12	14	16	21	24
J		33	45	52	75	91	117.5
K		3-M10	6-M10	6-M12	6-M16	6-M16	6-M20
L		2	2	2	2	2	5
F		45	60	66	94	108	139
N max.		26.5	32	38.7	51	61.3	82
N min.		23.8	29.25	35	46.6	56	76.7
O max.		19.75	22.75	29.75	33.75	45.75	46.75
O min.		7.75	9.25	14.75	14.25	15.75	13.75
P max.		1	11	14.5	8.5	8	7
P min.		-9	-1	-1.5	-10.5	-15	-16
S		12	20	30	45	50	60
T		15.5	16	20	22	23	30
U max.		M40x1.5	M55x2	M60x2	M85x2	M100x2	M130x2
W		14	20	25	30	30	43



3-Jaw Wedge Type Non Through-hole Power Chuck (Without Adaptor)



VERTEX®



- Direct mounting: Direct mount for VA series chucks onto short taper spindle of ASA and JIS standards.
- High performance: Similar high performance to V series.
- Chuck mounting screws: Metric or UNC socket head cap screws are supplied for bolting the chuck to the spindle.
- Alternative spindle adaptors: ASA or DIN adaptors can be supplied to fit machine spindle.

SPECIFICATIONS

Unit:mm

Dim	ORDER NO.	V-206A5	V-208A6	V-210A6	V-210A8	V-212A8	V-215A8	V-215A11
Jaw Stroke (mm)		9.2	9.7	8.8	8.8	10.5	16	16
Plunger Stroke (mm)		20	21	25	25	30	35	35
Max. Pull Force (kgf)		1835	2549	2957	2957	4181	8362	8362
Max. Gripping Force (kgf)		5253	7548	10013	10013	15807	25391	25391
Max. Operating Pressure (kgf/cm ²)		25.5	24.5	28.6	28.6	27.5	30.6	30.6
Max. Speed (r.p.m.)		5000	4000	3500	3500	3000	2800	2800
Weight (kgs)		12.5	24.4	40.65	37.15	61.75	105	103
Moment of Inertia I (kgf.m ²)		0.045	0.317	0.3	0.3	0.725	1.8	1.8
Matching Cylinder		MS105 MH100	MS125 MH125	MS125 MH125	MS125 MH125	MS150 MH150	MS150 MH150	MS200 MH200
Matching Soft Jaw		VHC06	VHC08	VHC10	VHC10	VHC12-1	VHC15-1	VHC15-1
Matching Hard Jaw		HJ06	HJ08	HJ10	HJ10	HJ12-1	HJ15-1	HJ15-1
CODE NO.		5002-090	5002-091	5002-092	5002-093	5002-094	5002-095	5002-096

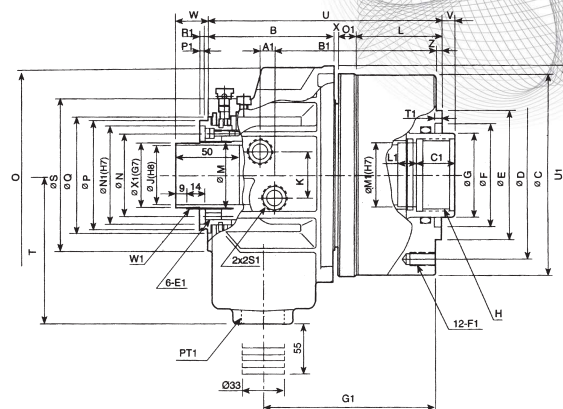
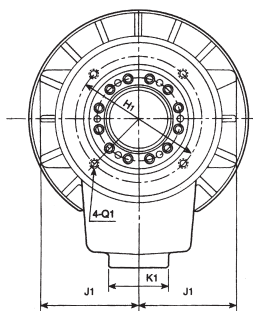
DIMENSIONS

Unit:mm

Dim	ORDER NO.	V-206A5	V-208A5	V-208A6	V-210A6	V-210A8	V-212A8	V-215A8	V-215A11
A		165	210	210	254	254	304	381	381
B		84	103	97	109	102	118	141	130
C		104.78	104.78	133.35	133.35	171.45	171.45	171.45	235
F		20	25	25	30	30	30	43	43
K		140	170	170	220	220	220	300	300
L		6-M10	6-M12	6-M12	6-M16	6-M16	6-M16	6-M16	6-M20
M		5	5	5	5	5	6	6	6
N		14	13	18	18	25	25	24	32
P		21	21	25	34	34	34	-	-
T		15	23	17	25	18	18	33	22
V		82.563	82.563	106.375	106.375	139.719	139.719	139.719	196.869
U		116	133.35	150	171.45	190	190	235	260
E max.		15.25	22.25	22.25	30.75	30.75	48.75	50.25	50.25
E min.		9.25	11.75	11.75	11.25	11.25	12.75	23.25	23.25
G		4	5	5	5	5	5	2	2
H max.		89.6	109	115	133	140	145	71	82
H min.		69.6	88	94	108	115	115	36	47
I		36	36	36	36	36	36	55	55
J		M16x2.0	M20x2.5	M20x2.5	M20x2.5	M20x2.5	M20x2.5	M30x3.5	M30x3.5
O		34	38	38	45	45	50	60	60
Q max.		38.7	46.75	46.3	51.1	51.1	61	77.5	77.5
Q min.		34.1	41.9	41.9	46.7	46.7	55.75	69.5	69.5
R		31	35	35	40	40	50	50	50
S		12	14	14	16	16	18	25.5	25.5
W		3-M6	6-M10	3-M6	6-M12	6-M8	6-M8	6-M16	3-M10
REFER FIG.		Fig-1	Fig-2	Fig-1	Fig-2	Fig-1	Fig-1	Fig-2	Fig-1



Super High Speed Through Hole Rotary Hydraulic Cylinder



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

SPECIFICATIONS

ORDER NO.	Dim Piston Dia. (mm)	Piston Area		Piston Stroke (mm)	Max. Draw Bar Pull Force		Max. Operating Pressure (kgf/cm ²)	Max. Speed (r.p.m.)	Moment Inertia (kgf.m ²)	Weight (kgs)	Total Leakage (l/min)	CODE NO.
		Push Side (cm ²)	Pull Side (cm ²)		Push Side KN (kgs)	Pull Side KN (kgs)						
M1036	105	71	68.5	15	24.8(2529)	24(2447)	40.8	8000	0.011	8.6	3.0	5003-001
M1236	125	100	89	15	38(3875)	33(3365)	40.8	7000	0.019	13.0	3.0	5003-002
M1246	125	100	89	15	38(3875)	33(3365)	40.8	7000	0.019	12.0	3.0	5003-003
M1546	155	161	150	22	60(6118)	56(5710)	40.8	6200	0.052	18	3.9	5003-004
M1552	155	161	150	22	60(6118)	56(5710)	40.8	6200	0.052	16.8	3.9	5003-005
M1868	180	198	183	25	75(7546)	69(7036)	40.8	4700	0.095	28.0	4.2	5003-006
M1875	180	198	183	25	75(7546)	69(7036)	40.8	4700	0.095	26.0	4.2	5003-007
M2091	205	252	234	30	94(9585)	88(8973)	40.8	3800	0.15	37.0	4.5	5003-008
M2511	250	348	336	23	124(12644)	120(12236)	40.8	2800	0.45	57	7.0	5003-009

DIMENSIONS

ORDER NO.	Dim																				
	C1	E1	F1	G1	H1	J1	K1	L1	M1	N1	O1	P1	Q1	R1	S1	T1	U1	W1	X1	B	C
M1036	25	M5x0.8	M10x1.5	126	88	68	53	15	38	64	14	4	M5x0.8	4	PT3/8"	6	136	M44x1.5	42	101	136
M1236	30	M6x1.0	M10x1.5	135	98	76	47	15	38	76	14	4	M5x0.8	6	PT1/2"	6	169	M52x1.5	50	99	154.5
M1246	30	M6x1.0	M10x1.5	135	98	76	47	15	50	76	14	4	M5x0.8	6	PT1/2"	6	169	M52x1.5	50	99	154.5
M1546	30	M6x1.0	M10x1.5	145	110	86	47	15	50	85	14	4	M6x1.0	7	PT1/2"	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	PT1/2"	6	187.5	M58x1.5	56	103	190
M1868	35	M6x1.0	M10x1.5	166.5	155	101	47	15	70	108	16	4	M6x1.0	7	PT1/2"	6	220	M84x2	81	126	215
M1875	35	M6x1.0	M10x1.5	166.5	155	101	47	15	80	108	16	4	M6x1.0	7	PT1/2"	6	220	M84x2	81	126	215
M2091	35	M6x1.0	M12x1.75	183	165	110	47	15	95	120	16	4	M6x1.0	7	PT1/2"	6	267	M99x2	96	141	240
M2511	45	M6x1.0	M16x2.0	197	206	129	55	20	123	160	18	4	M6x1.0	7	PT1/2"	6	294		134.6	186	310

ORDER NO.	Dim	D	E	F	G	H	J	K	L	M	N	O	P	Q	S	T	U	V _{max}	V _{mix}	W _{max}	W _{mix}	X	Z	A1	B1
M1036		115	100	65	48	M42x1.5	36	32	62	44.6	54	126	73	80	104	115	179.5	10	-5	39	24	2.5	5	11	120.5
M1236		130	100	80	65	M42x1.5	36	36	67	52.6	64	166	85	90	118	114	184	10	-5	40	25	4	5	11	126.5
M1246		130	100	80	65	M55x2	46	36	67	52.6	64	166	85	90	118	114	184	10	-5	40	25	4	5	11	126.5
M1546		170	130	85	70	M55x2	46	36	75	59.6	73	184	96	102	137	130	196	17	-5	47	25	4	5	11	136
M1552		170	130	85	70	M60x2	52	36	75	59.6	73	184	96	102	137	130	196	17	-5	47	25	4	5	11	136
M1868		190	160	120	95	M75x2	68	36	84	84.6	98	215	121	131	166	160	230	20	-5	50	25	4	5	17.5	153.5
M1875		190	160	120	95	M85x2	75	36	84	84.6	98	215	121	131	166	160	230	20	-5	50	25	4	5	17.5	153.5
M2091		215	180	140	110	M100x2	91	36	93	99.6	108	264	138	148	182	185	253	25	-5	55	25	3	5	21	168
M2511		275	230	166	140	M130x2	117.5	36	89	134.6	148	362	178		232	215	296	18	-5	38	15	3	6	27	184.5

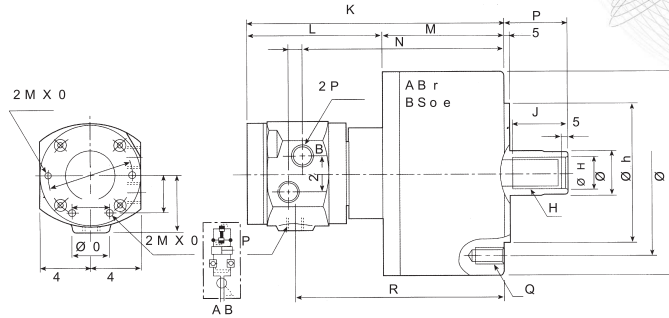


Non Through Hole Rotary Hydraulic Cylinder (With Valves)



VERTEX

- Built-in safety check valves.



DIMENSIONS

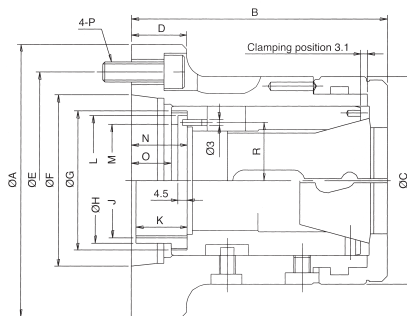
ORDER NO.	Dim	A	B	C	D	E	F	G	H	J	K	L	M	N	P Max.	P Min.	Q	R	CODE NO.
MS105		105	20	135	100	80	30	21	M20x2.5	35	197	108	89	152	45	25	6-M10x20	158	5003-030
MS125		125	25	160	130	110	35	25	M24x3.0	44	205	108	97	160	51	26	6-M12x24	166	5003-031
MS150		150	30	190	130	110	45	31	M30x3.5	45	214	108	106	169	56	26	12-M12x24	175	5003-032
MS200		200	35	245	145	120	55	37	M36x4.0	60	228	108	122	183	69	34	12-M16x30	189	5003-033

SPECIFICATIONS

ORDER NO.	Dim	Piston Area		Max. Draw Bar Pull Pull Side KN (kgf)	Piston Stroke (mm)	Max.Speed (r.p.m.)	Max. Operating Pressure (kgf/cm ²)	Total Leakage (l/min)	Moment Inertia I (kgf.m ²)	Weight (kgs)
		Push Side (cm ²)	Pull Side (cm ²)							
MS105		86	79	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



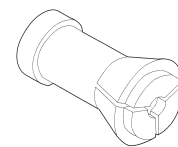
Collet Chucks



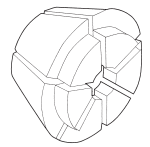
Please use

DIN6343 collets

collet illustration



Spring Collet



Multi-Bore Collet

Holding Range

CHUCK	MULTIBORE			SPRING COLLET		
NO.	CAT NO.	○	□	CAT NO.	○	□
CR42	M-673	42	36	173E/4728	42	36
CR60	M-677	60	52	185E/4291	60	52

DIMENSIONS

ORDER NO.	A	B	C	D	E	F	G	H	J Max.	K	L	M	N	O	P	R
CR42A5	135	124	100	27	104.78	82.563	M66xP1.5	60	M55xP20	25	62.5	54	27.4	19.4	M10	28
CR42A6	170	124	100	32	133.35	106.375	M66xP1.5	66	M60xP20	25	62.5	54	27.4	19.4	M12	28
CR60A6	170	145	130	27	133.35	106.375	M90xP1.5	67.5	M60xP20	30	83	77	29.9	21.9	M12	39.5

SPECIFICATIONS

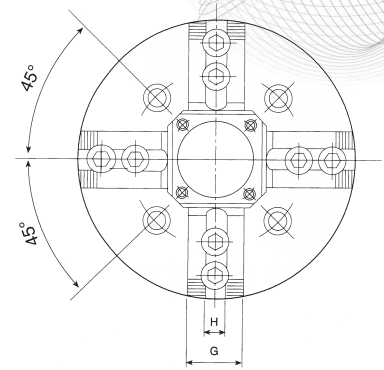
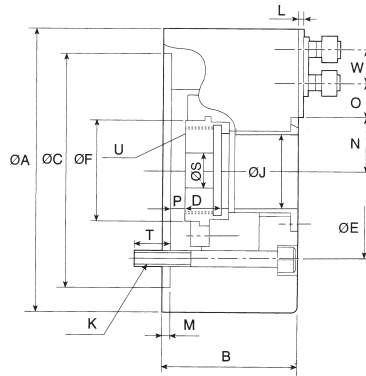
ORDER NO.	Diameter of Shant	Material Diameter (mm)	Collet Travel Distance (mm)	Weight (kgs)	Maximum Bearing KN (kgf)	Maximum Holding Power KN (kgf)	Maximum Speed (r.p.m.)	CODE NO.
CR42A5	A2-5	42	7	6.2	25(2549)	55(5608)	6,000	5003-040
CR42A6	A2-6	42	7	8.2	25(2549)	55(5608)	6,000	5003-041
CR60A6	A2-6	60	7	13	33(3365)	59(6016)	5,000	5003-042



4-Jaw Wedge Type Trough Hole Power Chuck (Without Adaptor)



VERTEX®



DIMENSIONS

ORDER NO.	A	B	C (H6)	D	E	M	G	H	J	K	L	F	N Max.	N Min.	O Max.	O Min.	P Max.	P Min.	S	T	U	W
VNIT-208	210	91	170	20.5	133.35	5	37	14	52	4-M12	2	66	38.7	35	29.75	14.75	14.5	1.5	30	20	M60x2	25
VNIT-210	254	100	220	25	171.45	5	42	16	75	4-M16	2	94	51	46.6	33.75	14.75	8.5	-10.5	45	22	M85x2	30
VNIT-212	304	110	220	28	171.45	6	52	21	91	4-M16	2	108	61.3	56	45.75	15.75	8	-15	50	23	M100x2	30
VNIT-215	381	133	300	43	235	6	62	24	117.5	4-M20	5	139	82	76.7	46.75	13.75	7	-16	60	30	M130x2	43

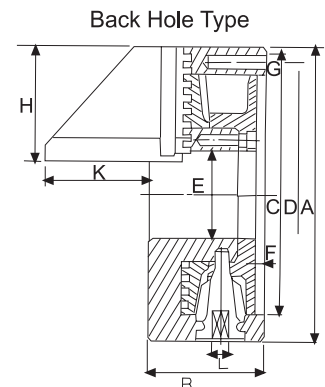
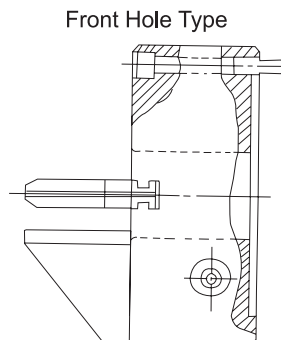
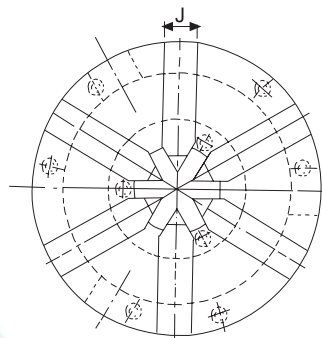
SPECIFICATIONS

ORDER NO.	Through-Hole (mm)	Plunger Stroke (mm)	Jaw Stroke (mm)	Max. Draw Bar Pull Force (kgf)	Max. Gripping Force (kgf)	Max. Speed (r.p.m.)	Weight (kgs)	Matching Cylinder	Max. Operating Pressure (kgf/cm ²)	CODE NO.
VNIT-208	Ø52	16	7.4	2294	5716	4900	24	M1552	17.3	5003-050
VNIT-210	Ø75	19	8.8	2906	7546	4200	36	M1875	18.4	5003-051
VNIT-212	Ø91	23	10.6	3739	9789	3300	58.5	M2091	18.4	5003-052
VNIT-215	Ø117.5	23	10.6	6828	12236	2500	114	M2511	15.3	5003-053



6-Jaw Awl Type Chucks

Scroll Chucks Series



SPECIFICATIONS

Unit:mm

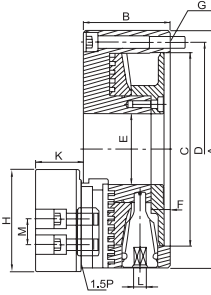
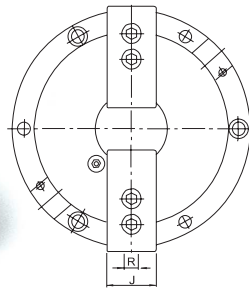
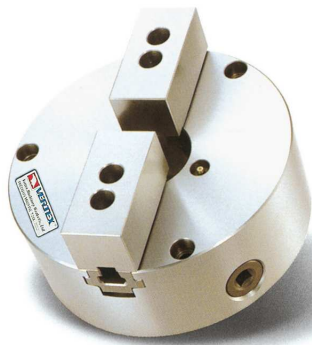
ORDER NO.	A	B	C	D	E	F	G	H	J	K	L	Gross Weight (kgs)	Max. Speed (r.p.m.)	Max. Gripping Diameter O.D. Clamping	CODE NO.
VAS-4	112	58	80	95	32	4.5	3-M8	45	14	46	8	4.2	1200	Ø2-32	5005-011
VAS-6	167	65	130	147	60	5	3-M10	66	19	43	10	9.2	1200	Ø3-60	5005-012



2-Jaw Steel Body Chucks



Steel Body Chucks Series



Steel Body Chucks:

- Hard jaws and soft jaws can be adjusted just like on a Hydraulic power Chuck to increase the gripping range.
- Hard jaws as well as Soft jaws are interchangeable with those of CNC Lathes.
- Can be used as a "Forming plate" for machining soft Jaws.
- The Chuck Handle can be operated easily and smoothly.
- Chuck Body is made by steel to enhance safety operations for high speed machining.

SPECIFICATIONS

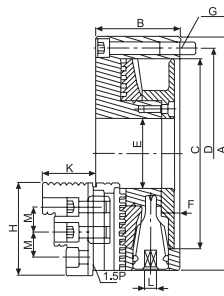
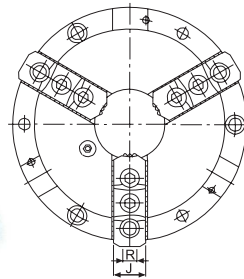
Unit:mm

ORDER NO.	A	B	C	D	E	F	G	H	J	K	L	M	R	Gross Weight (kgs)	Max. Speed (r.p.m.)	Max. Gripping Diameter		CODE NO.
																O.D. Clamping	I.D. Clamping	
VTNT-07	193	78	155	172	58	5	3-M10	90	42	44	11	20	12	15.8	3200	Ø8~Ø235	Ø66~Ø235	5005-031
VTNT-09	233	85	190	210	70	6	3-M12	100	48	47	12	25	14	24.5	2800	Ø11~Ø280	Ø85~Ø280	5005-032



3-Jaw Steel Body Chucks

Steel Body Chucks Series



Steel Body Chucks:

- Chuck Body is made by steel to enhance safety operations for high speed machining.
- Hard jaws as well as Soft jaws are interchangeable with those of CNC Lathes.
- The Chuck Handle can be operated easily and smoothly.
- Can be used as a "Forming plate" for machining soft jaws.
- Hard jaws and soft jaws can be adjusted just like on a Hydraulic power Chuck to increase the gripping range.

SPECIFICATIONS

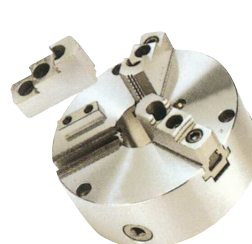
Unit:mm

ORDER NO.	A	B	C	D	E	F	G	H	J	K	L	M	R	Gross Weight (kgs)	Max. Speed (r.p.m.)	Max. Gripping Diameter		CODE NO.
																O.D. Clamping	I.D. Clamping	
VNT-07	193	78	155	172	58	5	3-M10	78	28	46	11	20	12	14.8	3200	Ø8~Ø235	Ø66~Ø235	5005-040
VNT-09	233	85	190	210	70	6	3-M12	92	32	53	12	25	14	23.4	2800	Ø11~Ø280	Ø85~Ø280	5005-041
VNT-10	273	91	230	250	89	6	3-M12	104	37	56	12	30	16	32	2400	Ø12~Ø330	Ø92~Ø330	5005-042
VNT-12	310	104	260	285	105	7	3-M12	118	47	67	14	30	21	46	2100	Ø15~Ø370	Ø104~Ø370	5005-043

ILLUSTRATE:

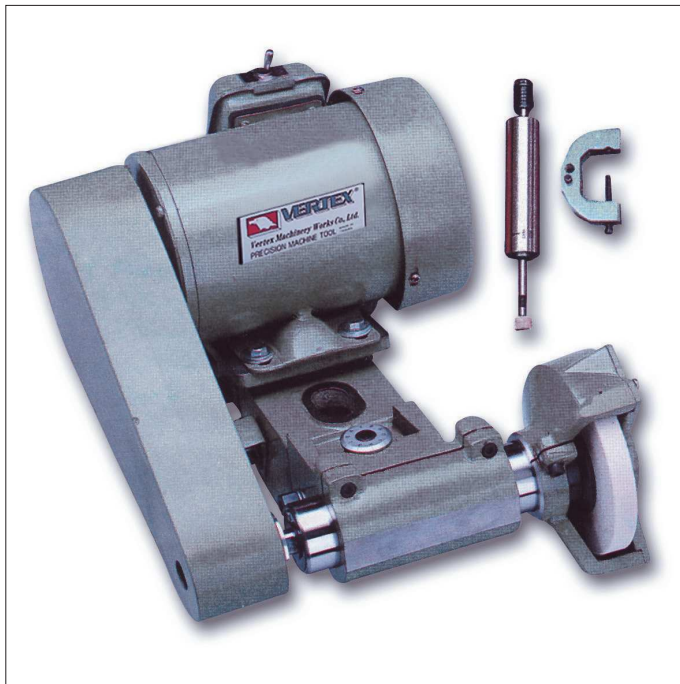


Can for more large capacity.

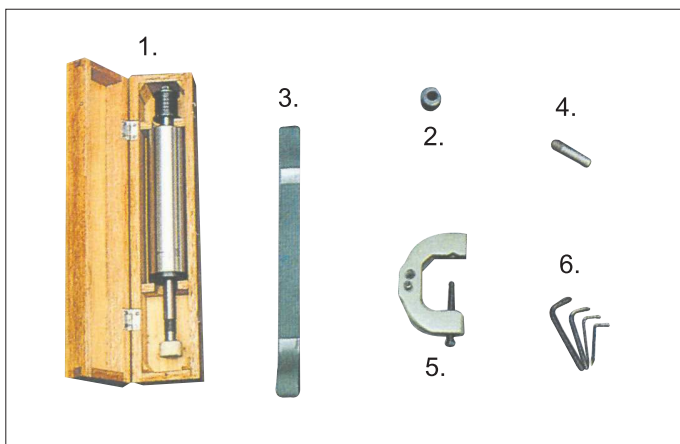


The hard jaw & soft jaw is same as hydraulic power chuck





For Internal Grinding



Standard Accessories

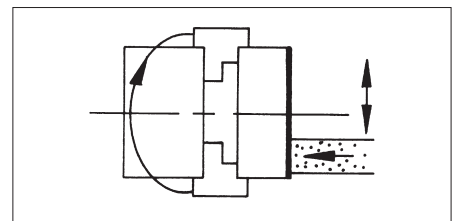
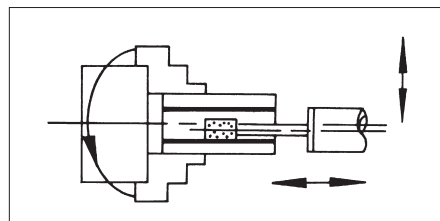
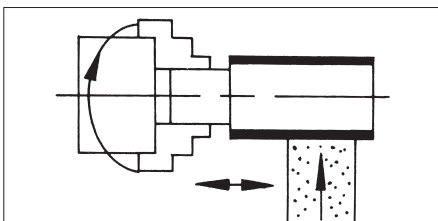
1. Internal Spindle	1
2. Pulley for Internal Grinding	2
3. Flat Belt	1
4. Diamond tool	1
5. Holder for Diamond Tool	1
6. Key Folds (8, 5, 3, 2mm)	4

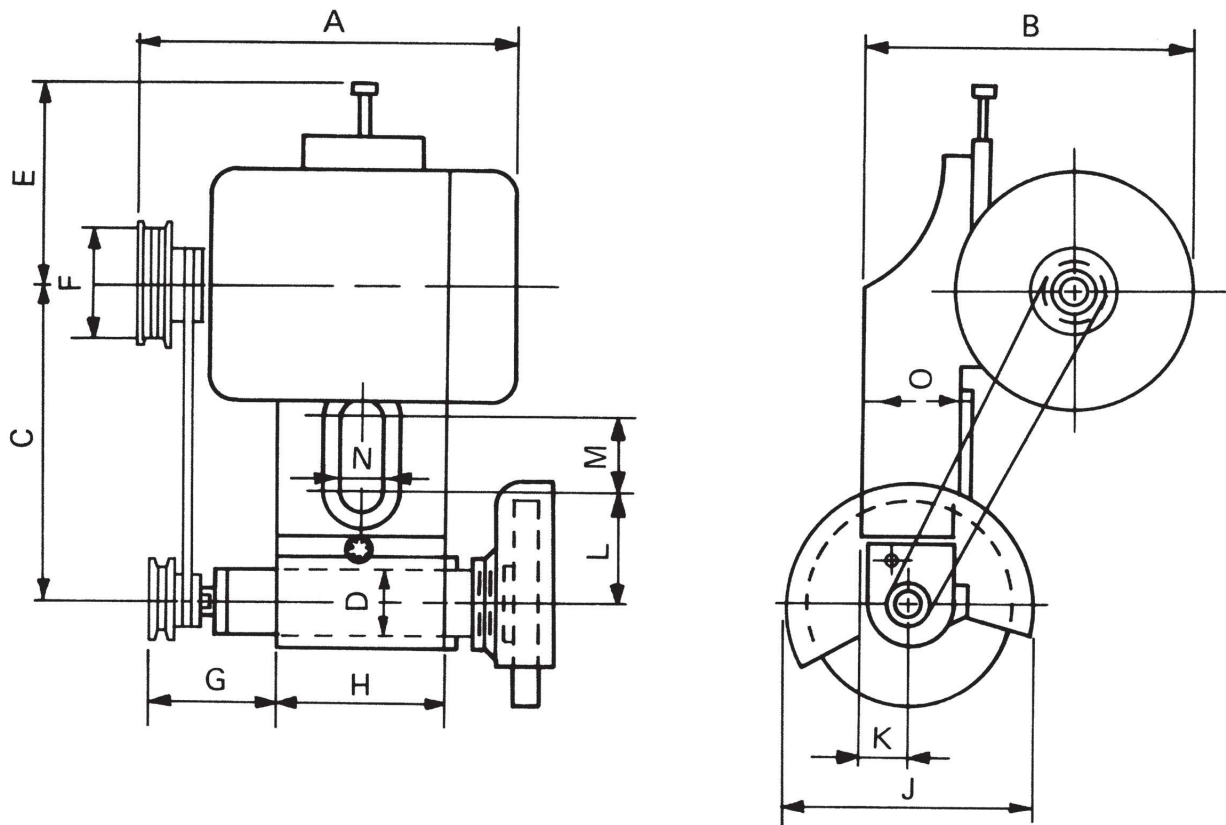
Characteristic Features

- Both the main shafts have been specially designed, and the world-wide precision bearing is used to fit the main shafts which are made of alloy steel heat-treated for high wear resistance, precision, as well as maintaining to the lowest temperature for durability and stability.
- The motor base and the spindle bushing are adjustable.
- The motor is well designed with a special and nice appearance, The R.P.M. of this motor varied depending on the size of the workpiece.
- This grinder is capable of grinding the work piece to a minimum of 3 mm in outer diameter and from 2mm up in inner diameter (bore) with the accuracy within 0.003mm and a well finished surface. (supplied with special attachments).
- The spindle bushing is made of cast iron, and supported by three surfaces. Therefore, it is durable and elastic.
- Materials such as steel, iron, copper (brass), aluminum, cast iron, plastics, procelain, marble, regardless of being heat treated or not, can be ground on this machine which functions lie a cylindrical grinder. So it may lower the cost of the production.

We assure you of high quality products.

※ Types of Grinding For Work Pieces





ORDER NO.	Main Dimension. (mm)														Net Weight (kgs)	Packing Size (mm)
	A	B	C	D	E	F	G	H	J	K	L	M	N	O		
VGR-185	352	350	300-340	80	180	138	85	190	330	45-70	140	40	32	120	80	700x500x520
VGR-175	315	300	260-320	60	170	138	120	104	280	45-70	135	40	30	92	75	650x460x460
VGR-165	280	275	260-310	50	160	110	65	102	230	40-65	105	40	30	85	48	520x430x350
VGR-150	280	275	250-300	48	160	110	65	102	150	40-65	105	40	30	85	38	520x430x350
VGR-125	270	230	230-280	48	-	110	65	92	150	34-58	90	15	25	75	35	520x430x350
VGR-100	235	200	170	40	-	110	50	80	150	28	45	10	25	64	24	450x320x340

ORDER NO.	HP	External Spindle		Internal Spindle					Grinder on Lather (Length of Bed of Lather) Ft.	Swing m/m	CODE NO.	
		Size of Wheel dia x width- hole	(R.P.M.) Non-load Speed	Diameter to be ground	Size of Wheel dia x width x hole	(R.P.M.) Non-load Speed	Grinding Depth (mm)					
VGR-185	3	12"x1"x1"	60 cycle 1930	50 cycle 1600	-	-	-	-	-	over 12	800-1800	5004-001
VGR-175	2	10"x1"x1"	2300	1930	-	-	-	-	-	10-12	700-1700	5004-002
VGR-165	1	8"x3/4"x3/4"	3000 3700	2490 3070	25-50	1"x3/8"x1/4"	20000 13500	16800 11500	70	8-10	650-1600	5004-003
VGR-150	1	5"x5/8"x5/8"	4500 6000	3750 5000	19-40	1"x3/8"x1/4"	20000 13500	16800 11500	70	6-8	550-900	5004-004
VGR-125	1½	5"x5/8"x5/8"	4500 6000	3750 5000	19-40	1"x3/8"x1/4"	20000 13500	16800 11500	70	4-6	430-850	5004-005
VGR-100	¼	5"x5/8"x5/8"	4500 6000	3750 5000	19-40	1"x3/8"x1/4"	20000 13500	16800 11500	50	under 4	320-400	5004-006