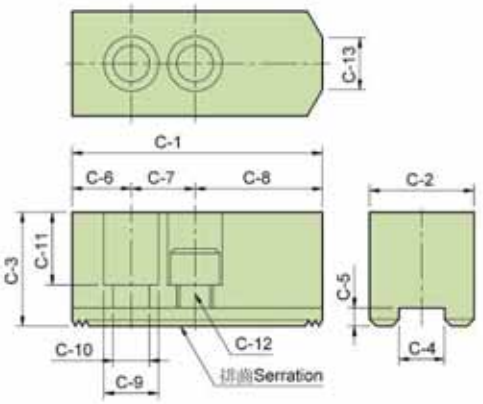
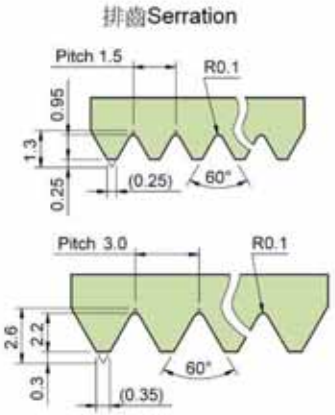
HC SERIES

SPECIFICATIONS:

SOFT JAWS FOR HYDRAULIC POWER CHUCKS

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





SPECIFICATIONS:

UNIT:mm

Dim / Model	C-1	C-2	C-3	C-4	C-5	C-6	C-7	C-8	C-9	C-10	C-11	C-12	C-13	Serration Pitch	Matching Chuck	3 Jaw Weight (kg)
HC04	53	23	23	10	5	9	14	30	13.5	9	14	M8	3	1.5x60°	N-204	0.45
HC05	62	25	30	10	5	9	14	39	13.5	9	21	M8	5	1.5x60°	N-205	0.7
HC06	73	31	36	12	5	15	20	38	17	11	21	M10	14	1.5x60°	N-206.V-206	1.5
HC08	95	35	37	14	5	24	25	46	19	13	22	M12	16	1.5x60°	N-208.V-208	2.4
HC10	110	40	42	16	5	30	30	50	19	13	27	M12	18	1.5x60°	N-210.V-210	3.7
HC12	130	50	50	21	5	39	30	61	25	17	30	M16	23	1.5x60°	N-212	6.5
HC15	165	62	62	22	8	37	43	85	32	21	38	M20	-	1.5x60°	N-215.N-218	12.5
HC12-1	130	50	50	18	5	39	30	61	23	15	30	M14	23	1.5x60°	V-212	6.6
HC15-1	165	62	62	25.5	5	37	43	85	32	21	38	M20	-	1.5x60°	V-215.V-218	12.5
HC24-1	180	64	70	25	9	40	60	80	32	21	45	M20	-	3.0x60°	N-220.N-224.V-221.V-224	15.8
HC32-1	210	74	90	25	9	40	80	90	32	21	65	M20	-	3.0x60°	V-232	29.2

T-NUTS SERIES

SPECIFICATIONS:

SUITABLE FOR POWER CHUCK

Fig. 1

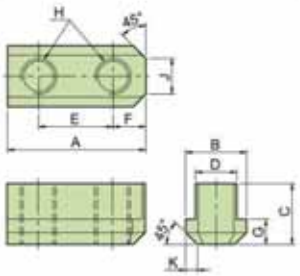


Fig. 2

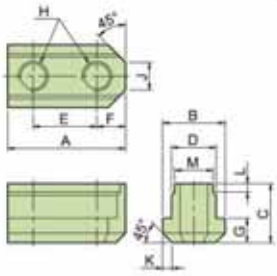
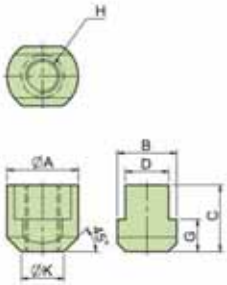


Fig. 3



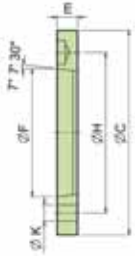
SPECIFICATIONS:

Model	A	B	C	D	E	F	G	H	J	K	L	M	Fig	Matching Chuck
N0205-0H	26	14.5	15	10	14	6	5.5	M8	5	2	-	-	1	N-204, N-205
N0206-0H	36	17.5	18.5	12	20	8.2	7.5	M10	8	2.5	-	-	1	N-206, NB-306
N0208-0H	46.5	20.5	20.5	14	25	10.5	8.5	M12	12	4	-	-	1	N-208, NB-208
N0210-0H	51	22.5	21.5	16	30	11	8.5	M12	11	3	-	-	1	N-210, NB-210
N0212-0H	55.5	29.5	27.8	21	30	12	11.5	M16	13	4.5	-	-	1	N-212, NB-212
N0215-0H	80	33.5	45.5	24	43	17	16.5	M20	11	5	8	22	2	N-215, N-218
V0206-0H	36.5	17.5	22.5	12	20	7.5	7.5	M10	6	3	-	-	1	V-206, NHT-208
V0208-0H	48	20.5	25.5	14	25	11	9.5	M12	8	4	-	-	1	V-208
V0210-0H	55	22.5	25.5	16	30	11	9.5	M12	8	4	-	-	1	V-210
V0212-0H	55.5	26.5	33.5	18	30	11.5	13.5	M14	12	5	-	-	1	V-212
V0215-0H	42	35	39.2	25.5	-	-	19	M20	-	25	-	-	3	V-215, V-218
V0215-0H1	42	35	41.2	26	-	-	19	M20	-	25	-	-	3	V-215P3.0
V0224-0H	46	37.5	45	25	-	-	19	M20	-	26.5	-	-	3	N-220, N-224,V-221, V-224,V-232

ADAPTERS SERIES

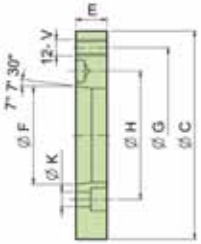
SPECIFICATIONS:

Mounting adapters on short taper spindle noses DIN 55026



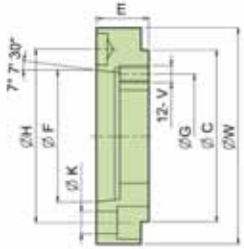
Adapters Type1:

Model	Spindle nose	C	F	H	K	E	Matching Chuck
N0205-0J4	A4	110	63.513	82.55	3-11	15	N-205
N0205-0J42	A4	110	63.513	82.55	4-11	15	NT-205
N0206-0J5	A5	140	82.563	104.78	6-11	15	N-206, NB-306, V-206
N0206-0J52	A5	140	82.563	104.78	6-11	15	NT-206, VT-206
N0208-0J6	A6	170	106.375	133.35	6-13	17	N-208, NB-208, V-208
N0208-0J62	A6	170	106.375	133.35	6-13	17	NT-208, VT-208
N0208-0J64	A6	170	106.375	133.35	4-13	17	NIT-208
NHT0208-0J6	A6	170	106.375	133.35	6-13	17	NHT-208
N0210-0J8	A8	220	139.719	171.45	6-17	18	N-210, N-212, NB-210, V-210, V-212
N0210-0J82	A8	220	139.719	171.45	6-17	18	NT-210, NT-212, VT-210, VT-212
N0210-0J84	A8	220	139.719	171.45	4-17	18	NIT-210, NIT-212, VIT-212
N0215-0J11	A11	300	196.869	235	6-21	22	N-215, N-218, NB-212, V-215, V-218
N0215-0J112	A11	300	196.869	235	6-21	22	NT-215, VT-215
N0215-0J114	A11	300	196.869	235	4-21	22	NIT-215, VIT-218
V0224-0J15	A15	380	285.775	330.2	6-25	27	N-220, V-221, V-224, V-232
N0224-0J20	A20	520	412.775	463.6	6-25	25	N-224, N-232, V-240, V-250



Adapters Type2:

Model	Spindle nose	C	F	H	K	G	V	E	Matching Chuck
N0208-0J5	A5	170	82.563	104.78	11	133.35	M12	23	N-208,NT-208, NIT-208, NHT-208 NB-208, V-208, VT-208
N0210-0J6	A6	220	106.375	133.35	13	171.45	M16	25	N-210, NT-210, NIT-210, N-212, NT-212 NIT-212, V-210, VT-210,V-212, VT-212, VIT-212
N0215-0J8	A8	300	139.719	171.45	17	235	M20	33	N-215, NT-215, NIT-215, N-218, NB-212 V-215, VT-215, V-218, VIT-218
N0220-0J11	A11	380	196.869	235	21	330.2	M24	41	N-220
N0224-0J11	A11	520	196.869	235	21	463.6	M24	45	N-224, N-232, V-240, V-250
N0224-0J15	A15	520	285.775	330.2	25	463.6	M24	42	N-224, N-232, V-240, V-250
V0224-0J8	A8	380	139.719	171.45	17	330.2	M24	33	V-221, V-224, V-232
V0224-0J11	A11	380	196.869	235	21	463.6	M24	27	V-221, V-224, V-232
V0263-0J20	A20	720	412.775	463.6	27	647.6	M30	50	VIT-263, VE-263, VE-279



Adapters Type3:

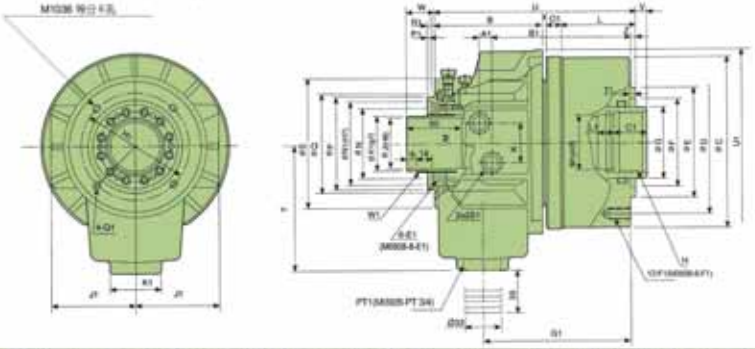
Model	Spindle nose	C	F	H	K	G	V	W	E	Matching Chuck
N0205-0J5	A5	110	82.563	104.78	11	82.55	M10	128	32	N-205,NT-205
N0206-0J6	A6	140	106.375	133.35	13	104.78	M10	168	35	N-206, NT-206, NB-306, V-206, VT-206
N0208-0J8	A8	170	139.719	171.45	17	133.35	M12	208	40	N-208, NT-208, NIT-208, NB-208 V-208, VT-208
N0212-0J11	A11	220	196.869	235	21	171.45	M16	278	50	N-210, NT-210, NIT-210, N-212, NT-212, NIT-212 NB-210, V-210, VT-210, V-212, VT-212,VIT-212
N0215-0J15	A15	300	285.775	330.2	25	235	M20	378	57	N-215, NT-215, NIT-215, N-218, NB-212 V-215, VT-215, V-218, VIT-218
V0224-0J20	A20	380	412.775	463.6	26	330.2	M24	520	58	N-220,V-221,V-224,V-232

M SERIES

SPECIFICATIONS:

SUPER HIGH SPEED THROUGH HOLE ROTARY HYDRAULIC CYLINDER

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



DIMENSIONS:

Model \ Dim	C1	E1	F1	G1	H1	J1	K1	L1	M1	N1	O1	P1	Q1	R1	S1	T1	U1	W1	X1	B	C
M0928	25	M6x1.0	M8x1.25	110	76	58	44	15	34	53	14	4	M4x0.7	5	PT 1/4"	5	116	M34x1.5	32	85	120
M1036	25	M5x0.8	M10x1.5	126	88	68	53	15	38	64	14	4	M5x0.8	4	PT 3/8"	6	136	M44x1.5	42	101	136
M1236	25	M6x1.0	M10x1.5	135	98	76	47	15	38	76	14	4	M5x0.8	6	PT 1/2"	6	169	M52x1.5	50	99	154.5
M1246	30	M6x1.0	M10x1.5	135	98	76	47	15	50	76	14	4	M5x0.8	6	PT 1/2"	6	169	M52x1.5	50	99	154.5
M1546	30	M6x1.0	M10x1.5	145	110	86	47	15	50	85	14	4	M6x1.0	7	PT 1/2"	6	187.5	M58x1.5	56	103	190
M1552	30	M6x1.0	M10x1.5	145	110	86	47	15	55	85	14	4	M6x1.0	7	PT 1/2"	6	187.5	M58x1.5	56	103	190
M1868	35	M6x1.0	M10x1.5	166	155	101	47	15	70	108	16	4	M6x1.0	7.5	PT 1/2"	6	220	M84x2	81	126	215
M1870	35	M6x1.0	M10x1.5	166	155	101	47	15	75	108	16	4	M6x1.0	7.5	PT 1/2"	6	220	M84x2	81	126	215
M1875	35	M6x1.0	M10x1.5	166	155	101	47	15	80	108	16	4	M6x1.0	7.5	PT 1/2"	6	220	M84x2	81	126	215
M1878	35	M6x1.0	M10x1.5	166	155	101	47	20	82	108	16	4	M6x1.0	7.5	PT 1/2"	6	220	M84x2	81	126	215
M2085	35	M6x1.0	M12x1.75	182	165	110	47	20	89	120	16	4	M6x1.0	7	PT 1/2"	6	267	M99x2	96	141	240
M2091	35	M6x1.0	M12x1.75	182	165	110	47	15	95	120	16	4	M6x1.0	7	PT 1/2"	6	267	M99x2	96	141	240
M2511	45	M8x1.0	M16x2.0	197	206	129	55	20	123	160	18	5	M8x1.0	7	PT 1/2"	6	294		134.6	186	310

Model \ Dim	D	E	F	G	H	J	K	L	N	P	Q	S	T	U	V max	V min	W max	W min	X	Z	A1	B1
M0928	100	80	65	44	M38x1.5	28	25	54	44	59	65	90	105	156	9	-1	35	25	3	5	9	108
M1036	115	100	65	48	M42x1.5	36	32	62	54	73	80	104	115	179.5	10	-5	39	24	2.5	5	11	120.5
M1236	130	100	80	65	M42x1.5	36	36	67	64	85	90	118	114	184	10	-5	40	25	4	5	11	126.5
M1246	130	100	80	65	M55x2	46	36	67	64	85	90	118	114	184	10	-5	40	25	4	5	11	126.5
M1546	170	130	85	65	M55x2	46	36	75	73	96	102	137	130	196	17	-5	47	25	4	5	11	136
M1552	170	130	85	70	M60x2	52	36	75	73	96	102	137	130	196	17	-5	47	25	4	5	11	136
M1868	190	160	120	85	M75x2	68	36	84	98	121	131	166	160	230	20	-5	50	25	4	5	17.5	152.5
M1870	190	160	120	95	M78x2	70	36	84	98	121	131	166	160	230	20	-5	50	25	4	5	17.5	152.5
M1875	190	160	120	95	M85x2	75	36	84	98	121	131	166	160	230	20	-5	50	25	4	5	17.5	152.5
M1878	190	160	120	95	M87x2	78	36	84	98	121	131	166	160	230	20	-5	50	25	4	5	17.5	152.5
M2085	215	180	140	110	M93x2	85	36	93	108	138	148	182	185	253	25	-5	55	25	3	5	21	166.5
M2091	215	180	140	110	M100x2	91	36	93	108	138	148	182	185	253	25	-5	55	25	3	5	21	166.5
M2511	275	230	166	140	M130x2	117.5	36	89	148	178		232	215	296	18	-5	38	15	3	6	27	184.5

● M SERIES showing back continue.

SPECIFICATIONS:

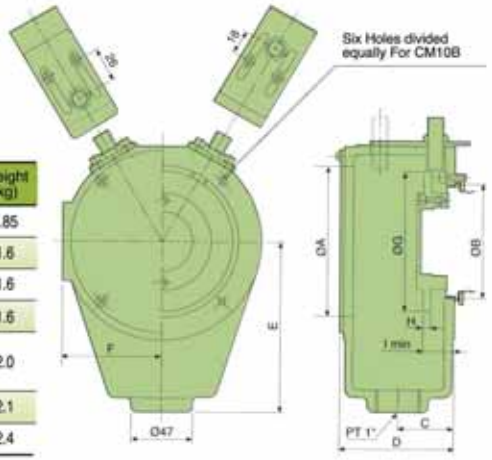
Dim / Model	Piston Dia (mm)	Piston Area		Piston Stroke (mm)	Max. Draw Bar Pull Force		Max. Operating Pressure (kgf/cm²)	Max.Speed (r.p.m.)	Moment Inertia I(kg·m²)	Weight (kg)	Total Leakage (L/min)
		Push Side (cm²)	Pull Side (cm²)		Push Side KN(kgf)	Pull Side KN(kgf)					
M0928	90	53.2	48.3	10	19.9(2029)	18(1835)	40.8	8000	0.006	5.5	3.0
M1036	105	71	68.5	15	24.8(2529)	24(2447)	40.8	8000	0.011	8.6	3.0
M1236	125	100	89	15	38(3875)	33(3365)	40.8	7000	0.019	13.0	3.0
M1246	125	100	89	15	38(3875)	33(3365)	40.8	7000	0.019	12.0	3.0
M1546	155	161	154	22	60(6118)	57.8(5894)	40.8	6200	0.056	18	3.9
M1552	155	161	150	22	60(6118)	56(5710)	40.8	6200	0.052	16.8	3.9
M1868	180	198	197	25	74(7546)	73.5(7495)	40.8	4700	0.098	28.0	4.2
M1870	180	198	183	25	74(7546)	69(7036)	40.8	4700	0.095	26.5	4.2
M1875	180	198	183	25	74(7546)	69(7036)	40.8	4700	0.095	26.0	4.2
M1878	180	198	183	25	74(7546)	69(7036)	40.8	4700	0.095	25.5	4.2
M2085	205	252	234	30	94(9585)	88(8973)	40.8	3800	0.15	37.5	4.5
M2091	205	252	234	30	94(9585)	88(8973)	40.8	3800	0.15	37.0	4.5
M2511	250	348	336	23	124(12644)	120(12236)	40.8	2800	0.45	57	7.0

CM.B SERIES

SPECIFICATIONS:

HYDRAULIC CYLINDERS COOLANT COLLECTORS

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



DIMENSIONS:

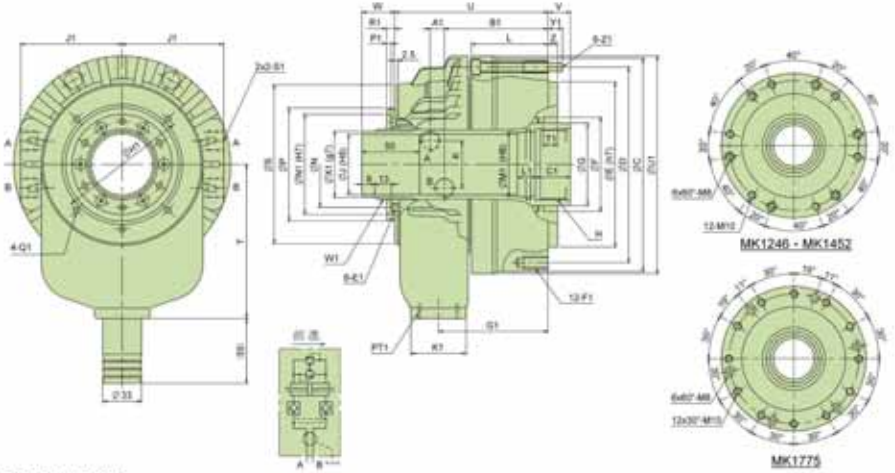
Dim / Model	A	B	C	D	E	F	G	H	Imin.	Matching cylinder	Weight (kg)
CM09B	85	67	33	70	105	55.5	77	5	24	M0928	0.85
CM10B	118	75	42	84	131	76	107	5	22	M1036	1.6
CM12B	118	87	42	84	131	76	107	5	23	M1236 M1246	1.6
CM15B8	118	98	42	84	131	76	107	5	25.5	M1546 M1552	1.6
CM18B	158	123	44	88.5	151	96	147	5	23	M1868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

MK SERIES

SPECIFICATIONS:

HIGH SPEED AND SHORT THROUGH HOLE ROTARY HYDRAULIC CYLINDER

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



SPECIFICATIONS:

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

DIMENSIONS:

Model	C	D	E	F	G	H	J	K	L	N	P	S	T	U	V Max.	V MIN.	W Max.	W MIN.	Z
MK-1246	162	147	130	75	65	M55x2.0	46	40	58	64	85	116	120	120	13	-3	44	28	8
MK-1452	184	165	140	80	70	M60x2.0	52	40	66	73	96	135	130	130	19	-3	47	25	8
MK-1775	212	195	160	105	90	M85x2.0	75	46	71	98	121	164	160	157	22	-3	50	25	8

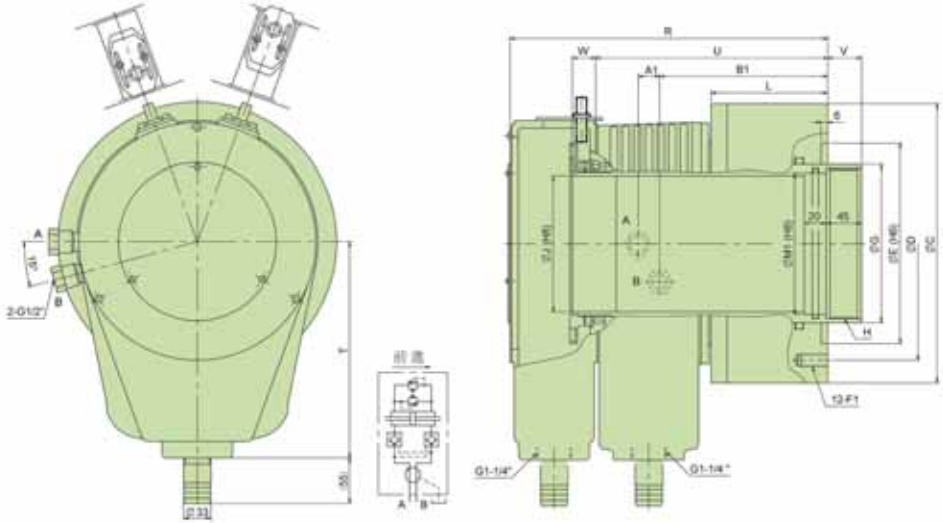
Model	A1	B1	C1	E1	F1	G1	H1	J1	K1	L1	M1	M1	N1	P1	Q1	R1	S1	T1	U1	W1	X1	Y1	Z1
MK-1246	8.5	79.5	25	M6x10L	M10x20L	84	98	76	47	15	50	50	76	4	M5x6L	9	PT3/8	12	165	M52x1.5	50	15	M8
MK-1452	9	88	30	M6x7L	M10x20L	93	110	86	47	15	55	55	85	4	M6x6L	7	PT3/8	12	184	M58x1.5	56	12	M8
MK-1775	17.5	99	30	M6x13L	M10x20L	110	155	100	47	15	80	80	108	4	M6x10L	7	PT1/2	12	216	M84x2.0	81	18	M10

ML-CM.B SERIES

SPECIFICATIONS:

EXTRA LARGE THROGH HOLE ROTAY HYDRAULIC CYLINDER

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



SPECIFICATIONS:

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

DIMENSIONS:

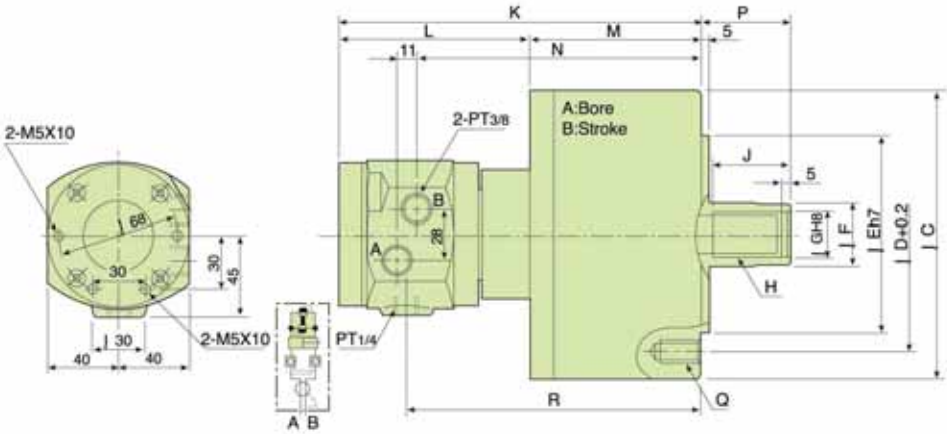
Model	C	D	E	G	H	J	L	R	T	U	V max.	V min.	W max.	W min.	A1	B1	F1	M1
ML2816CM28B	335	280	240	190	M180x3.0	166.5	140	382	260	279	41	-1	67	25	18	202	M16x3DL	170
ML3320CM33B	390	320	280	230	M215x3.0	205	147	392	260	292	41	-1	67	25	18	210	M20x3DL	210

MS SERIES

SPECIFICATIONS:

NON THROUGH HOLE ROTARY HYDRAULIC CYLINDER (WITH VALVES)

Built-in safty check valves.



DIMENSIONS:

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

SPECIFICATIONS:

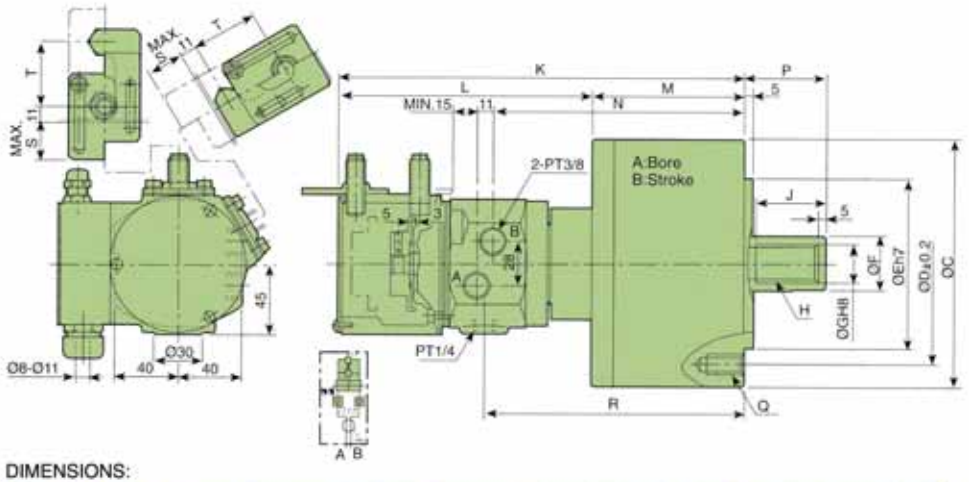
Model \ Dim	Piston Area		Max. Draw Bar Pull Pull Side KN (kgf)	Piston Stroke (mm)	Max.Speed (r.p.m.)	Max. Operating Pressure (kgf/cm²)	Total Leakage (L/min)	Moment Inertia I (kg·m²)	Weight (kg)
	Push Side (cm²)	Pull Side (cm²)							
MS105	86	79	29 (2957)	20	6000	4.0(40.8)	0.8	0.0125	7.1
MS125	122	113	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

MF-C / MS-C SERIES

SPECIFICATIONS:

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

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



DIMENSIONS:

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

SPECIFICATIONS:

Model \ Dim	Piston Area Push Side (cm^2)	Piston Area Pull Side (cm^2)	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 (kg·m^2)	Weight (kg)
MS105C	84	79	29 (2957)	20	6000	4.0(40.8)	0.8	0.0125	7.6
MS125C	120	113	42 (4283)	25	6000	4.0(40.8)	0.8	0.022	10.5
MF125C	120	113	42 (4283)	35	6000	4.0(40.8)	0.8	0.022	10.5
MS150C	174	160	60 (6118)	30	5500	4.0(40.8)	0.8	0.047	14
MS200C	312	290	108 (11013)	35	5500	4.0(40.8)	0.8	0.097	22.5

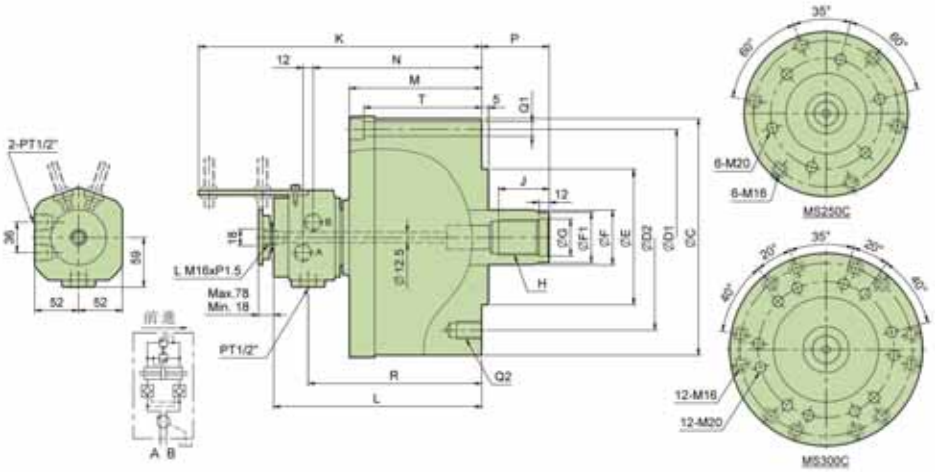
- Draw bar pull force: Pressure 4.0 MPa(40.8kgf / cm^2)
- Total leakage: Pressure 3.0 Mpa (30.6 kgf /cm^2) and oil temperature 50°C
- Proximity switch: Model BESS 16-329-E4-Y (BALLUFF) DC 12/24V 200mA NPN

MS250C/MS300C SERIES

SPECIFICATIONS:

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

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



DIMENSIONS:

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

SPECIFICATIONS:

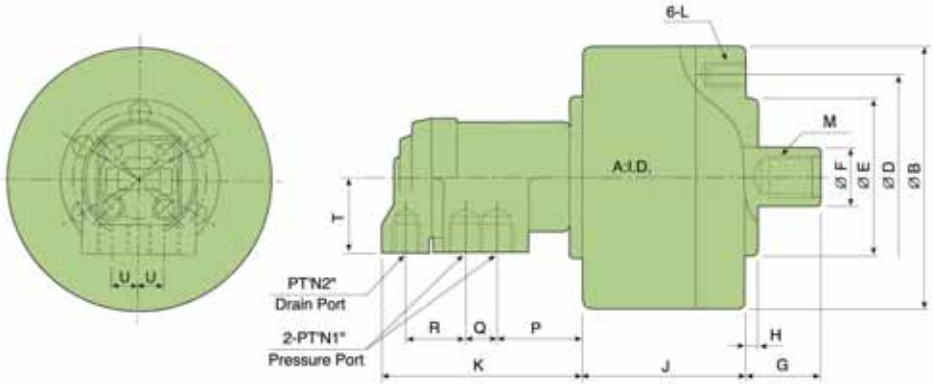
Model	Piston Dia (mm)	Piston Area Push Side(cm^2)	Piston Area Pull Side(cm^2)	Max. Draw Bar Pull Push Side KN(kgf)	Max. Draw Bar Pull Pul Side KN(kgf)	Piston Stroke (mm)	Max Speed (r.p.m.)	Max. Operating Pressure (kgf/cm^2)	Total Leakage (L/min)	Moment of Inertia I (kg·m^2)	Weight (kg)
MS250C	250	481.5	453.6	227(23147)	214(21822)	60	2000	50	2	0.87	78
MS300C	300	697.5	656.6	262(26716)	247(25186)	60	1500	40.8	3	1.60	106

MH SERIES

SPECIFICATIONS:

NON THROUGH HOLE ROTARY HYDRAULIC CYLINDER

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



DIMENSIONS:

Model \ Dim	A I.D.	B	D	E (h7)	F	G Max.	G Min.	H	J	K	L	M	N1	N2	P	Q	R	T	U
MH80	80	115	90	65	25	45	30	6	73.5	103	M8x1.25 16	M16x2.0x32	3/8"	1/4"	45	15.5	30.5	38	13
MH100	100	135	100	80	25	45	25	6	88.5	103	M10x1.5 19	M16x2.0x32	3/8"	1/4"	45	15.5	30.5	38	13
MH125	125	160	130	110	30	51	26	6	95.5	103	M12x1.75 18	M20x2.5x32	3/8"	1/4"	45	15.5	30.5	38	13
MH150	150	190	130	110	45	50	20	6	107	103	M12x1.75 20	M30x3.5x35	3/8"	1/4"	45	15.5	30.5	38	13

SPECIFICATIONS:

Model \ Dim	Piston Area Push Side (cm²)	Piston Area Pull Side (cm²)	Max. Draw Bar Pull Pull Side KN (kgf)	Piston Stroke (mm)	Max.Speed (r.p.m.)	Max. Operating Pressure (kgf/cm²)	Moment Inertia I (kg-m²)	Weight (kg)
MH80	47.7	42.8	13.9 (1417)	15	6000	35	0.005	5.1
MH100	75.4	70.5	22.9 (2335)	20	5500	35	0.0125	6.6
MH125	121.1	114	37 (3773)	25	5500	35	0.02	8.4
MH150	176	160	60 (6116)	30	4000	40	0.047	10.4

HB4 SERIES

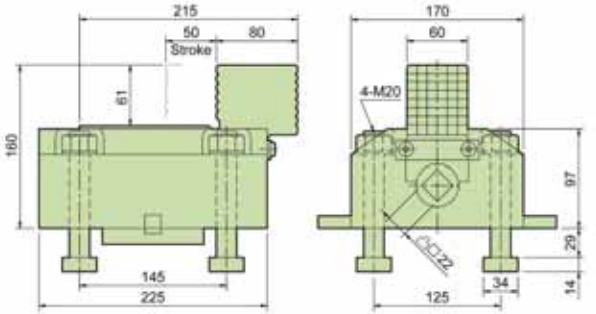
SPECIFICATIONS:

BORING MILL JAWS

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

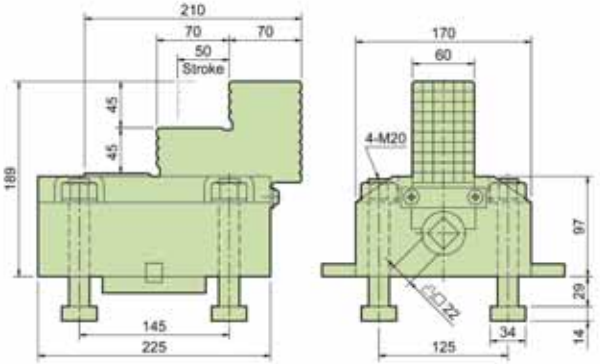
HB4-160
SPECIFICATIONS:

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



HB4-189
SPECIFICATIONS:

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

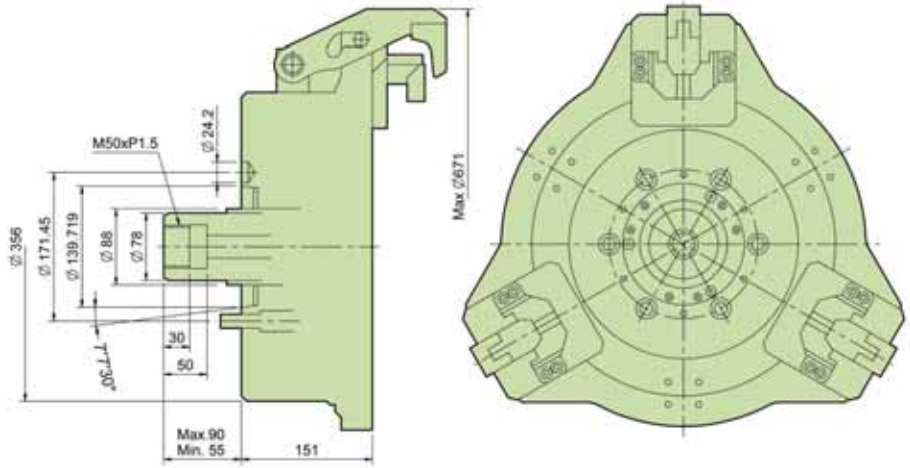


F52 SERIES

SPECIFICATIONS:

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

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



SPECIFICATIONS:

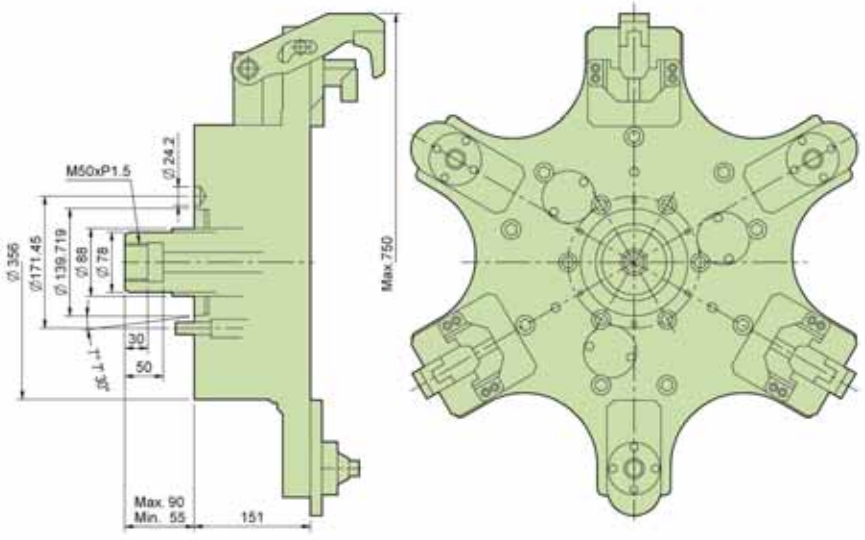
Model \ Dim	Applicable Wheel Size	Out Dai Of Chuck(mm)	Available Spindle Nose	Gripping Force (kgf)	Max. Speed (r.p.m.)	Weight (Without Jigs)(kg)	Matching Cylinder
F52A8	12"~18"	521	A2-8	3300	2800(18"2200)	98	MS200C

F61 SERIES

SPECIFICATIONS:

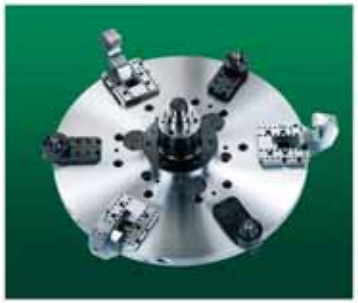
HIGH SPEED AND LIGHT WEIGHT TYPE STRONG FINGER CHUCK FOR ALUMINUM WHEELS

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



SPECIFICATIONS:

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

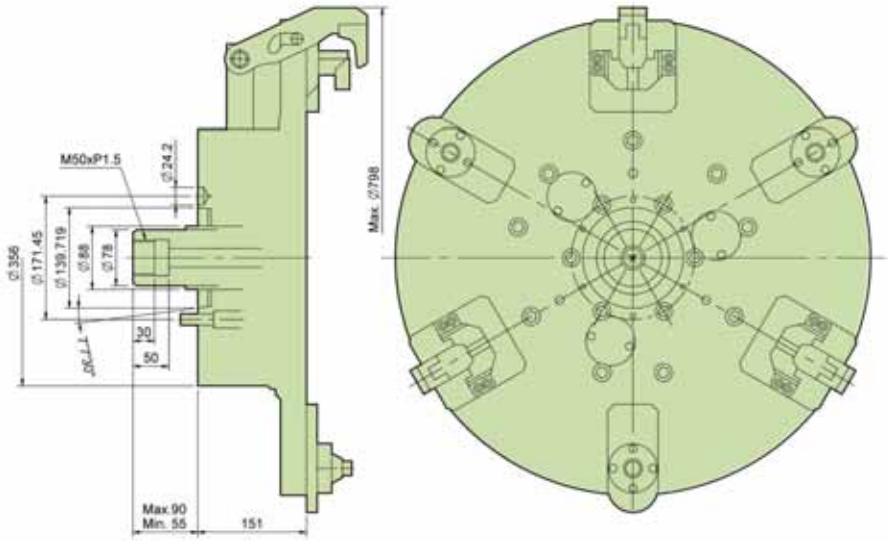


F66 SERIES

SPECIFICATIONS:

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

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



SPECIFICATIONS:

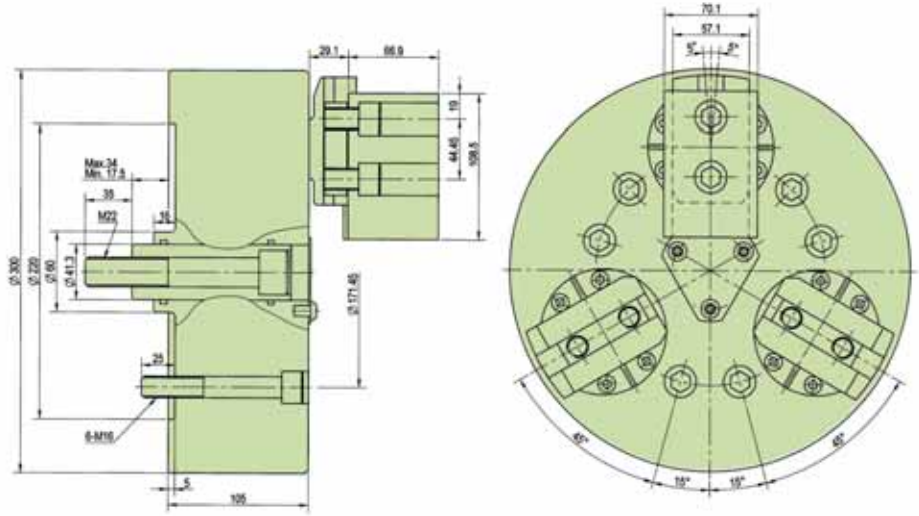
Model \ Dim	Applicable Wheel Size	Out Dai Of Chuck(mm)	Available Spindle Nose	Gripping Force (kgf)	Max Speed (r.p.m.)	Weight (Without Jigs)(kg)	Matching Cylinder
F66A8	19"~24"	660	A2-8	3300	1500	182	MS200C

BL SERIES

SPECIFICATIONS:

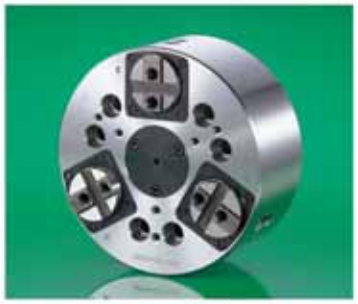
3-JAW BALL SWING LOCK CHUCK

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



SPECIFICATIONS:

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

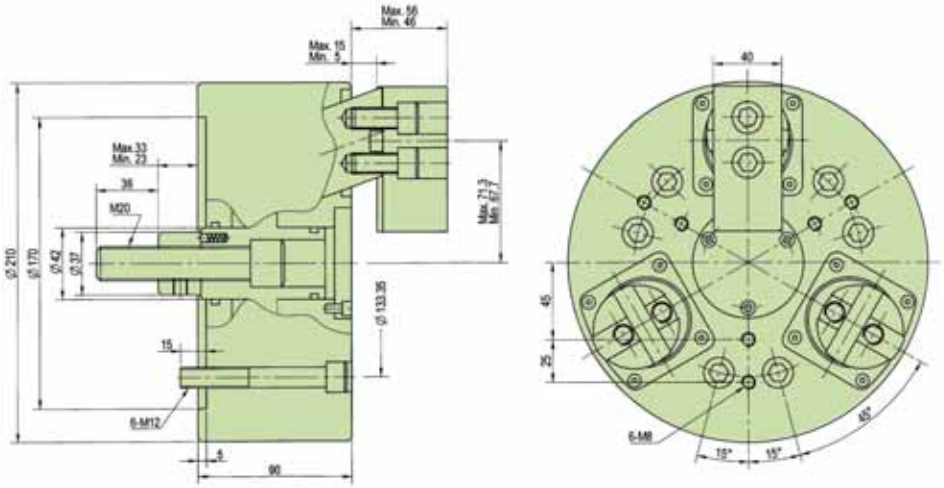


DR SERIES

SPECIFICATIONS:

3-JAW DRAW DOWN POWER CHUCK

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



SPECIFICATIONS:

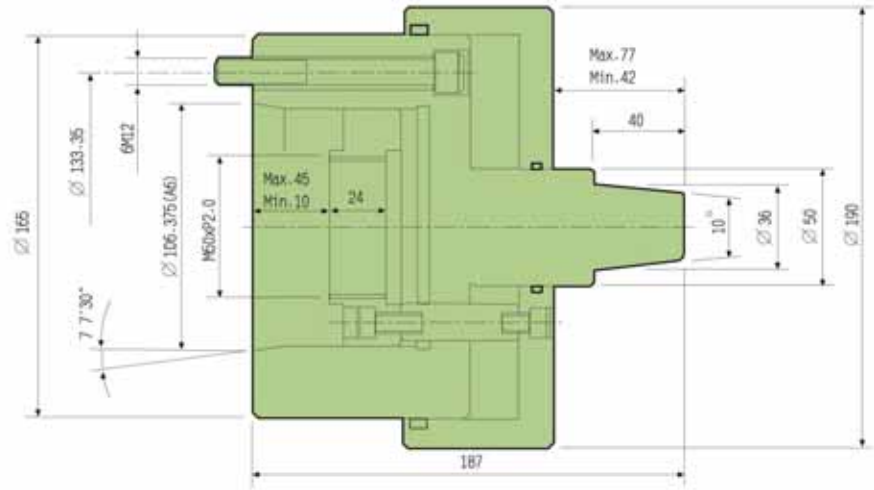
Model	Plunger Stroke (mm)	Jaw Stroke Diameter (mm)	Max. Draw Bar Pull Force KN (kgf)	Max. Gripping Force KN (kgf)	Max. Operating Pressure MPa (kgf/cm²)	Max. Speed (r.p.m.)	Weight (with jaw) (kg)	Moment of Inertia I (kg·m²)	Matching Cylinder
DR-08	10	7.2	25.4(2593)	45.4(4630)	2.5(2.5)	3000	25	0.035	MS125C

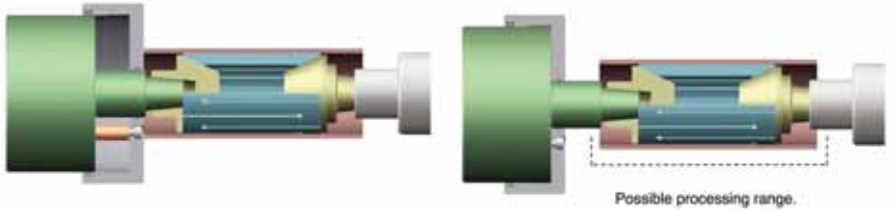
P165 SERIES

SPECIFICATIONS:

FLOATING PLATE CENTER CHUCK

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

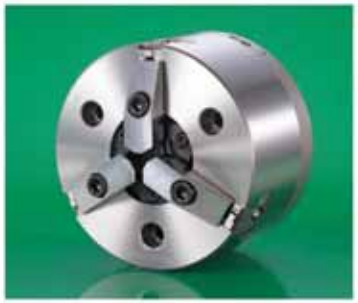




Possible processing range.

SPECIFICATIONS:

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



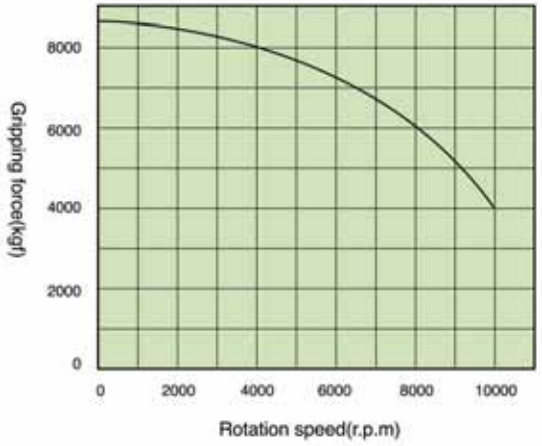
HN SERIES

SPECIFICATIONS:

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

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

GRIPPING CHARACTERISTIC GRAPH



SPECIFICATIONS:

Model	Through-Hole(mm)	Plunger Stroke (mm)	Jaw Stroke (in dia) (mm)	Max.Draw Bar Pull Force KN (kgf)	Max.Gripping Force KN (kgf)	Max.Operating Pressure KN (kgf/cm²)	Max. Speed (r.p.m.)	Weight (Kg)	Moment of Inertia I (kg·m²)	Matching Cylinder	Matching Soft Jaw	Gripping O.D.Range (mm)
HN-06	Ø36	12	5.5	30(3050)	79.4(8100)	2.9(30)	10000	11.5	0.035	HG-1336	Model-A	ø14- ø51