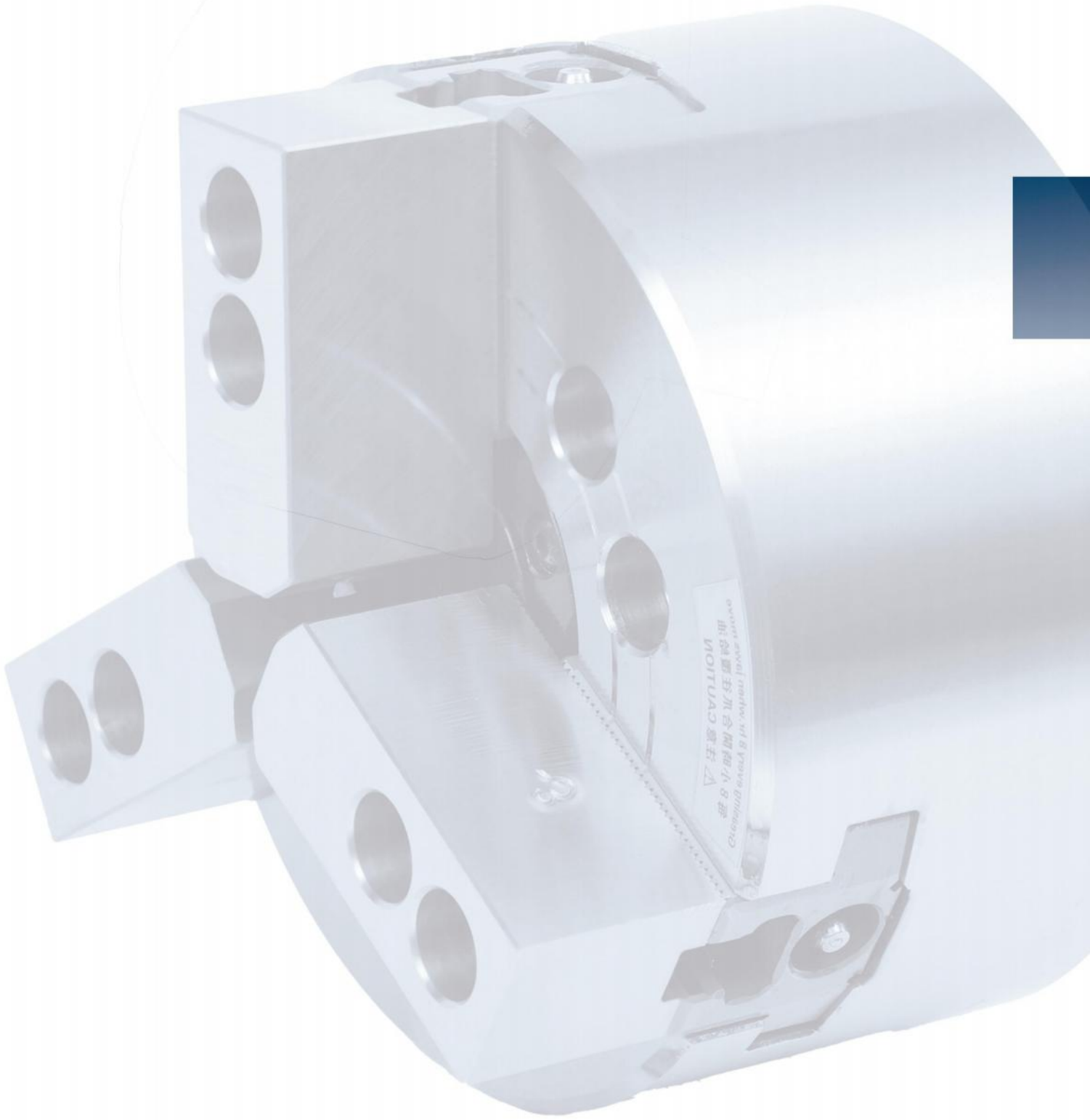
TOP-TOOL
CANADA

Indexing chuck
Power Chuck
Special Chuck
Rotating Hydraulic

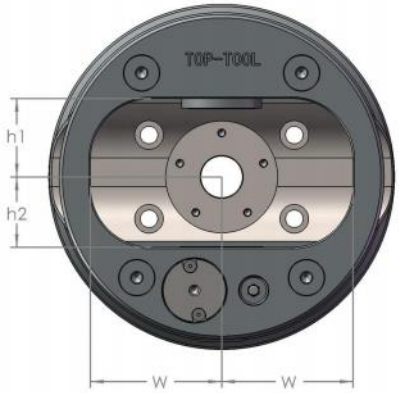


Precision in Every Hold

CONTENTS

Indexing Chuck

- Used for machining workpieces with intersecting shafts, allowing all shafts to be processed in a single setup.
  Examples: cross shafts, universal joints.
- During spindle rotation, simple program control is sufficient for the chuck to automatically index and position each shaft in sequence.
  The hydraulic valve in the hydraulic system controls the chuck via
- a distributor installed at the tail end of the lathe bed.

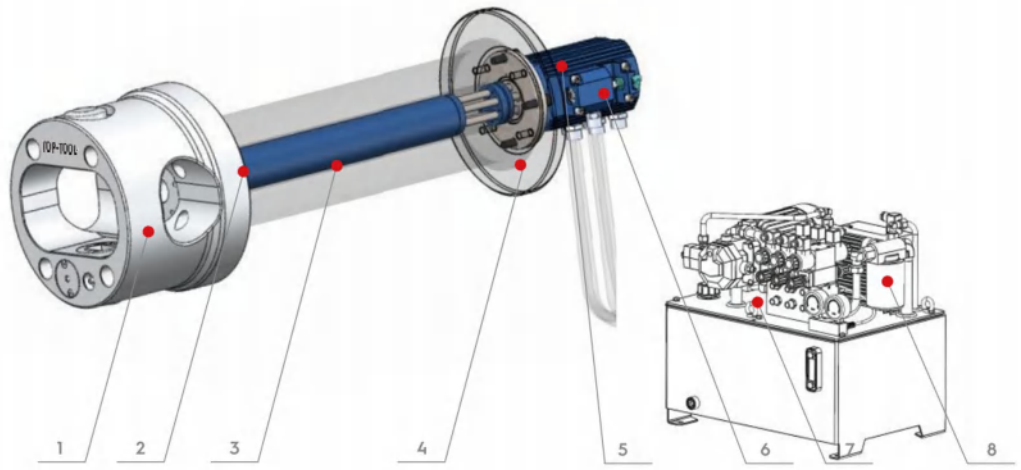


[mm]

Model	D	D1	L	L1	L2	W
TK-168	190	168	142	70	35	68
TK-203	216	203	158	82	36	36
TK-225	240	225	170	95	37	37
TK-256	276	256	187	105	42	42
TK-305	330	305	212	130	45	45
TK-400	416	400	278	175	58	58
TK-460	490	460	308	205	58	58
TK-570		570	429	193.5	105	250
TK-680		680	484	239	310	300
TK-850		850	617	299	380	375
TK-1000		1000	748	339	450	420
TK-1200		1200	948	439	650	530

Indexing Chuck

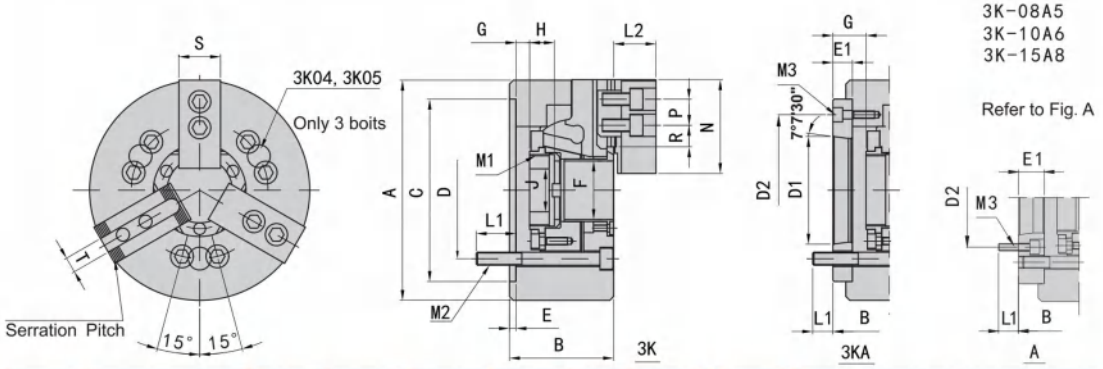
Model	Max. Workpiece Size [mm]	Clamping Force [kn]	Clamping Stroke[mm]	Max. RPM	Net Weight[kg]
TK-168	136	10.6	9	70	15
TK-203	164	11.3	15.2	82	24
TK-225	190	11.3	15.2	95	30
TK-256	210	14.5	19.1	105	42
TK-305	260	14.5	19.1	130	61
TK-400	350	31.4	30	175	120
TK-460	410	31.4	30	205	161
TK-570	460	56.5	42	1200	306
TK-680	560	56.5	42	1000	412.6
TK-850	720	66.3	55	800	660.6
TK-1000	860	80.0	65	500	1298
TK-1200	1060	80.0	65	500	1558



NO.	Name	Function Description
1	Indexing Chuck	Provides workpiece support and indexing.
2	Front Flange	Connects the spindle nose to the indexing chuck.
3	Telescopic Connecting Rod	Connects the chuck and distributor oil channels.
4	Rear Flange	Connects the distributor to the rear end of the lathe bed.
5	Distributor	Distributes and supplies oil flow during rotation.
6	Chuck Lock Alarm Mechanism	Provides position detection signals at 45° and 90°.
7	Oil Pipe Assembly	Connects the distributor and hydraulic station oil channels.
8	Hydraulic Station (Optional)	Supplies clamping support force and indexing pressure.

3-Jaw Through-Hole Power Chuck

- High speed stability,Strong and durable.
- High accuracy of repeat positioning,Clamping force is big, Suitable for automatic production.



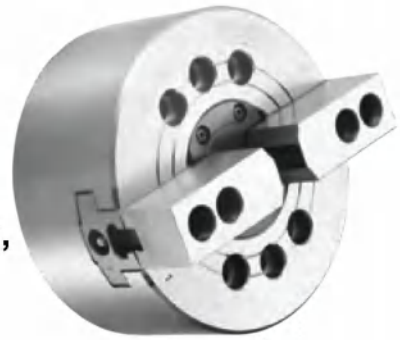
Model	Spindle Nose	A	B		C (H6)	D	D1	D2	E	E1	F	G				H	J
												max		min			
3K-04		110	59		85	70.6			4		26	3.5		-6.5		17.5	12
3K-05	A4	135	60	71	110	82.6	63.51	96		15	45	11	26	-1	14	20	
3K-06	A5	169	81	91	140	104.8	82.56	116	5		23	1	16	-9	6	19	20
3K-08	A5	210	91	109	170	133.4		104.8		23	52	14.5	37.5	-1.5	21.5	20.5	30
	A6			103			106.38	150		17			31.5		15.5		
3K-10	A6	254	100	120	220	171.4		133.4		25	75	8.5	33.5	-10.5	14.5	25	45
	A8			113			139.72	190		18			26.5		7.5		
3K-12	A8	304	110	122					6	18	91	8	26	-15	3	28	50
3K-15	A8	381	133	160	300	235		171.4		33	120	11	44	-12	21	39	60
	A11			149			196.87	260		22		110	33		10		
3K-18	A11	450															

Model	Spindle Nose	L1		L2	M1	M2	M3	N	P	R		S	T
										max	min		
3K-04		16		24	M32*1.5	3-M10		52	14	11.3	6.8	25	10
3K-05	A4	15	15	31	M40*1.5		3-M6	62		19.8	7.8		
3K-06	A5	16	16	37	M55*2	6-M10		73	20	22.8	9.3	31	12
3K-08	A5	20	17	38	M60*2	6-M12	6-M10	95	25	29.8	14.8	35	14
	A6		18				3-M6						
3K-10	A6	22		43	M85*2	6-M16	6-M12	110	30	33.8	14.3	40	16
	A8		24				3-M8						
3K-12	A8	23	25	51	M100*2		3-M8	130	30	45.8	15.8	50	21
3K-15	A8	30	24	63	M130*2	6-M20	6-M16	165	43	47.3	18.2	62	25.5/22
	A11		28				3-M10						
3K-18	A8									79.2			

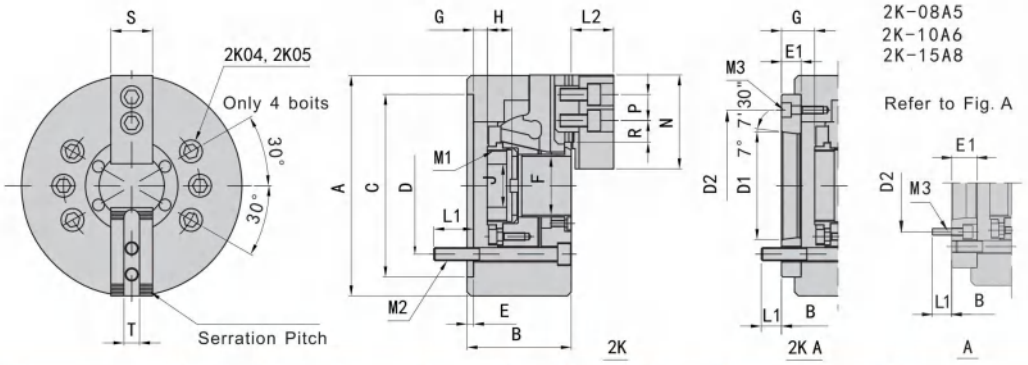
Model	Spindle Nose	Piunger Stroke [mm]	Jaw Stroke [mm]	Max.pull KN[kgf]	Max.Clamping KN[kgf]	Max.Speed [r/min]	Clamping Range[mm]	Moment of inertial [kg.m^2]	Weight [kg]		Matching Cylinder	Max.Pressure Mpa(kgf/cm^2)
3K-04		10	5.4	13.7(1400)	28.4(2900)	8000	7-110	0.01	4		428	2.1 (21)
3K-05	A4			17.1(1750)	35.8(3650)	7000	12-135	0.02	6.7	7.5	536	2.6 (26)
3K-06	A5	12	5.5	21.5(2200)	56.8(5800)	6000	15-168	0.06	11.9	13.7	646	2.5 (25)
3K-08	A5	16	7.4	34.3(3500)	85.8(8750)	5000	13-210	0.18	22.5	25.4	852	2.8 (28)
	A6									23.6		
3K-10	A6	19	8.8	42.6(4380)	110.7 (11300)	4200	31-254	0.33	34.5	41.65	1075	2.6 (26)
	A8									40		
3K-12	A8	23	10.6	54.9(5600)	143.6	3300	34-304	0.77	56.6	59.5	1291	2.6 (26)
3K-15	A8			71(7250)	179.8 (18350)	2500	50-381	2.47	120	134	1512	2.4 (24)
	A11							2.39		127		
3K-18	A11					2000	50-450	4.78	164	178		

The dimensions and the specification of 3KA type are in the red data.

2-Jaw Through-Hole Power Chuck



- High speed stability,Strong and durable.
- High accuracy of repeat positioning,Clamping force is big, Suitable for automatic production.



Model	Spindle Nose	A	B		C (H6)	D	D1	D2	E	E1	F	G max		G min		H	J
2K-04		110	59		85	70.6			4		26	3.5		-6.5		17.5	12
2K-05	A4	135	60	71	110	82.6	63.51	96		15	45	11	26	-1	14	20	
2K-06	A5	169	81	91	140	104.8	82.56	116	5		23	1	16	-9	6	19	20
2K-08	A5	210	91	109	170	133.4		104.8		23	52	14.5	37.5	-1.5	21.5	20.5	30
	A6			103			106.38	150		17			31.5		15.5		
2K-10	A6	254	100	120	220	171.4		133.4		25	75	8.5	33.5	-10.5	14.5	25	45
	A8			113			139.72	190		18			26.5		7.5		
2K-12	A8	304	110	122					6	18	91	8	26	-15	3	28	50
2K-15	A8	381	133	160	300	235		171.4		33	120	11	44	-12	21	39	60
	A11			149			196.87	260		22		110	33		10		
2K-18	A11	450															

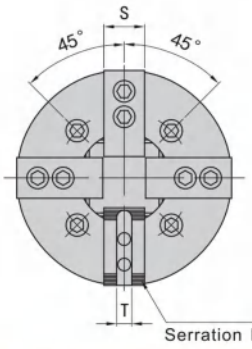
Model	Spindle Nose	L1		L2	M1	M2	M3	N	P	R max	R min	S	T
2K-04		16		24	M32*1.5	3-M10		52	14	11.3	6.8	25	10
2K-05	A4	15	15	31	M40*1.5		3-M6	62		19.8	7.8		
2K-06	A5	16	16	37	M55*2	6-M10		73	20	22.8	9.3	31	12
2K-08	A5	20	17	38	M60*2	6-M12	6-M10	95	25	29.8	14.8	35	14
	A6		18				3-M6						
2K-10	A6	22		43	M85*2	6-M16	6-M12	110	30	33.8	14.3	40	16
	A8		24				3-M8						
2K-12	A8	23	25	51	M100*2		3-M8	130	30	45.8	15.8	50	21
2K-15	A8	30	24	63	M130*2	6-M20	6-M16	165	43	47.3	18.2	62	25.5/22
	A11		28				3-M10						
2K-18	A8									79.2			

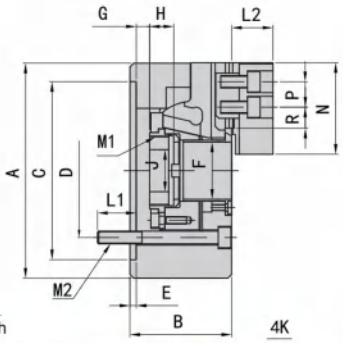
Model	Spindle Nose	Piunger Stroke [mm]	Jaw Stroke [mm]	Max.pull KN[kgf]	Max.Clamping KN[kgf]	Max.Speed [r/min]	Clamping Range[mm]	Moment of inertial [kg.m²]	Weight [kg]		Matching Cylinder	Max.Pressure Mpa(kgf/cm²)
2K-04		10	5.4	13.7(1400)	28.4(2900)	8000	7-110	0.01	4		428	2.1（21）
2K-05	A4			17.1(1750)	35.8(3650)	7000	12-135	0.02	6.7	7.5	536	2.6（26）
2K-06	A5	12	5.5	21.5(2200)	56.8(5800)	6000	15-168	0.06	11.9	13.7	646	2.5（25）
2K-08	A5	16	7.4	34.3(3500)	85.8(8750)	5000	13-210	0.18	22.5	25.4	852	2.8（28）
	A6									23.6		
2K-10	A6	19	8.8	42.6(4380)	110.7 (11300)	4200	31-254	0.33	34.5	41.65	1075	2.6（26）
	A8									40		
2K-12	A8	23	10.6	54.9(5600)	143.6	3300	34-304	0.77	56.6	59.5	1291	2.6（26）
2K-15	A8			71(7250)	179.8 (18350)	2500	50-381	2.47	120	134	1512	2.4（24）
	A11							2.39		127		
2K-18	A11					2000	50-450	4.78	164	178		

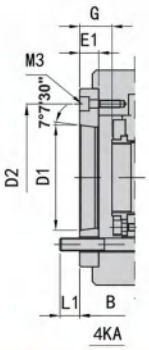
The dimensions and the specification of 2KA type are in the red data.

4-Jaw Through-Hole Power Chuck

- High speed stability,Strong and durable.
- High accuracy of repeat positioning,Clamping force is big, Suitable for automatic production.

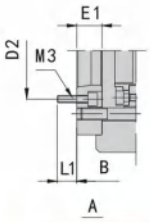






4K-08A5
4K-10A6
4K-15A8

Refer to Fig. A



Model	Spindle Nose	A	B		C (H6)	D	D1	D2	E	E1	F	G				H	J
												max		min			
4K-04		110	59		85	70.6			4		26	3.5		-6.5		17.5	12
4K-05	A4	135	60	71	110	82.6	63.51	96		15	45	11	26	-1	14	20	
4K-06	A5	169	81	91	140	104.8	82.56	116	5		23	1	16	-9	6	19	20
4K-08	A5	210	91	109	170	133.4		104.8		23	52	14.5	37.5	-1.5	21.5	20.5	30
	A6			103			106.38	150		17			31.5		15.5		
4K-10	A6	254	100	120	220	171.4		133.4		25	75	8.5	33.5	-10.5	14.5	25	45
	A8			113			139.72	190		18			26.5		7.5		
4K-12	A8	304	110	122					6	18	91	8	26	-15	3	28	50
4K-15	A8	381	133	160	300	235		171.4		33	120	11	44	-12	21	39	60
	A11			149			196.87	260		22		110	33		10		
4K-18	A11	450															

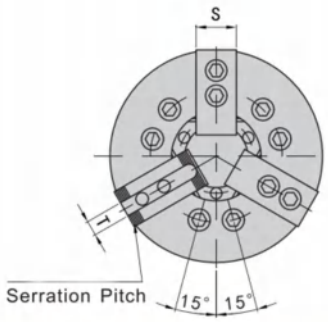
Model	Spindle Nose	L1		L2	M1	M2	M3	N	P	R		S	T
										max	min		
4K-04		16		24	M32*1.5	3-M10		52	14	11.3	6.8	25	10
4K-05	A4	15	15	31	M40*1.5		3-M6	62		19.8	7.8		
4K-06	A5	16	16	37	M55*2	6-M10		73	20	22.8	9.3	31	12
4K-08	A5	20	17	38	M60*2	6-M12	6-M10	95	25	29.8	14.8	35	14
	A6		18				3-M6						
4K-10	A6	22		43	M85*2	6-M16	6-M12	110	30	33.8	14.3	40	16
	A8		24				3-M8						
4K-12	A8	23	25	51	M100*2		3-M8	130	30	45.8	15.8	50	21
4K-15	A8	30	24	63	M130*2	6-M20	6-M16	165	43	47.3	18.2	62	25.5/22
	A11		28				3-M10						
4K-18	A8									79.2			

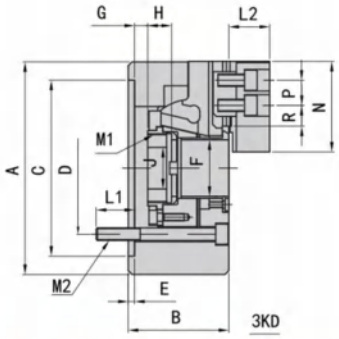
Model	Spindle Nose	Piunger Stroke [mm]	Jaw Stroke [mm]	Max.pull KN[kgf]	Max.Clamping KN[kgf]	Max.Speed [r/min]	Clamping Range[mm]	Moment of inertial [kg.m²]	Weight [kg]		Matching Cylinder	Max.Pressure Mpa(kgf/cm²)
4K-04		10	5.4	13.7(1400)	28.4(2900)	8000	7-110	0.01	4		428	2.1（21）
4K-05	A4			17.1(1750)	35.8(3650)	7000	12-135	0.02	6.7	7.5	536	2.6（26）
4K-06	A5	12	5.5	21.5(2200)	56.8(5800)	6000	15-168	0.06	11.9	13.7	646	2.5（25）
4K-08	A5	16	7.4	34.3(3500)	85.8(8750)	5000	13-210	0.18	22.5	25.4	852	2.8（28）
	A6									23.6		
4K-10	A6	19	8.8	42.6(4380)	110.7(11300)	4200	31-254	0.33	34.5	41.65	1075	2.6（26）
	A8									40		
4K-12	A8	23	10.6	54.9(5600)	143.6(14650)	3300	34-304	0.77	56.6	59.5	1291	2.6（26）
4K-15	A8			71(7250)	179.8(18350)	2500	50-381	2.47	120	134	1512	2.4（24）
	A11							2.39		127		
4K-18	A11					2000	50-450	4.78	164	178		

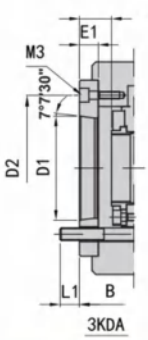
The dimensions and the specification of 4KA type are in the red data.

3-Jaw Large Through-Hole Power Chuck

- High speed stability,Strong and durable.
- High accuracy of repeat positioning,Clamping force is big, Suitable for automatic production.

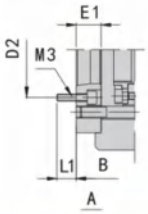






3KD-18A11
3KD-24A15

Refer to Fig. A



Model	Spindle Nose	A	B		C (H6)	D	D1	D2	E	E1	F	G				H	J
												max		min			
3KD-06	A5	170	81	91	140	104.8	82.56	116	5	15	53	11	26	-1	14	19	20
3KD-08	A6	210	91	103	170	133.4	106.38	150		17	66	14.5	31.5	-1.5	15.5	20	30
3KD-10	A8	260	100	113	220	171.4	139.72	190		18	86	8.5	26.5	-10.5	7.5	25	45
3KD-12	A11	315	110	126	300	235	196.87	260	6	22	106	8	30	-15	7	28	50
3KD-15	A15	405	133	154	380	330.2	285.78	330.2		27	140	11	38	-12	15	39	60
3KD-18	A11	455	133	161			196.87	260		33	166.5	11.5	44.5	-13	20	38	
	A15						285.78	330.2		27		11.5	39	-13	14.5		
3KD-21	A15	530	140							27	180	11	38	-12	15	39	
3KD-24	A15	610	147	181	520	463.6				40	205	18	58	-8	32	40	120
	A20			168			412.78	463.6		27			45		19		

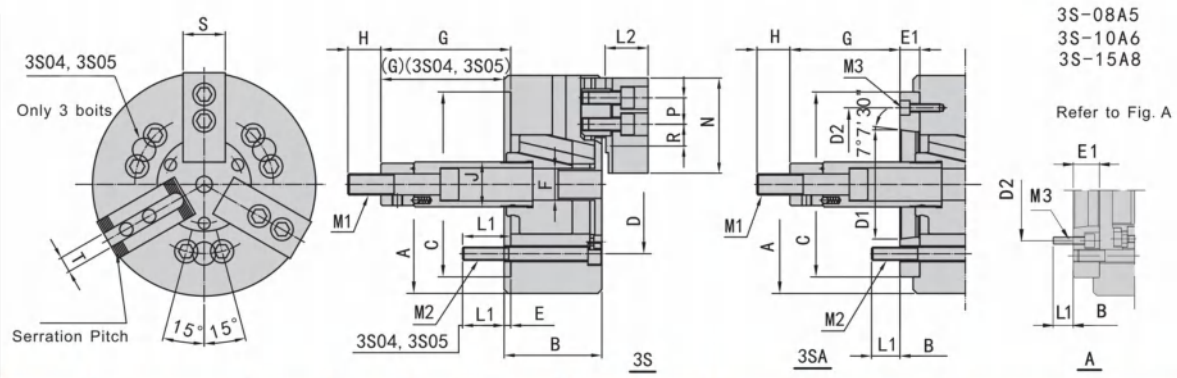
Model	Spindle Nose	L1		L2	M1	M2	M3	N	P	R		S	T
										max	min		
3KD-06	A5	16	16	37	M60*2	6-M10	3-M6	73	20	22.8	9.3	31	12
3KD-08	A6	20	18	38	M75*2	6-M12	3-M6	95	25	23.8	11.3	35	14
3KD-10	A8	22	24	43	M95*2	6-M16	3-M8	110	30	32.3	14.3	40	16
3KD-12	A11	30	28	51	M115*2	6-M20	3-M10	130	30	45.8	15.8	50	21
3KD-15	A15	35	38	63	M155*3	6-M24	3-M12	165	43	43.8	18.2	62	25.5
3KD-18	A11	30	28	66	M180*3		3-M10			79.2			22
	A15						3-M12						25.5
3KD-21	A15	35	38	73	M190*3	6-M24	3-M12	180	60	69.5	21.5	65	25
3KD-24	A15		35		M215*3		3-M24			93.5			
	A20		38				3-M12						

Model	Spindle Nose	Piunger Stroke [mm]	Jaw Stroke	Max.pull KN[kgf]	Max.Clamping KN[kgf]	Max.Speed [r/min]	Clamping Range[mm]	Moment of inertial [kg.m^2]	Weight [kg]		Matching Cylinder	Max.Pressure Mpa(kgf/cm^2)
3KD-06	A5	12	5.5	22(2250)	58.3(5950)	6000	18-170	0.06	11	12.8	852	1.9(19)
3KD-08	A6	16	7.4	39.4(4020)	98.5(10050)	5000	23-210	0.15	23	24.1	1068	2.2(22)
3KD-10	A8	19	8.8	49.1(5010)	126.9(12950)	4500	46-260	0.32	33.2	38.7	1287	2.6(26)
3KD-12	A11	23	10.6	58.8(6000)	152.9(15600)	3500	47-315	0.73	51	58	1511	2.0(20)
3KD-15	A15			71(7240)	179.8(18350)	2500	60-405	2.3	128	139	2114	2.4(24)
3KD-18	A11	24.5	11.3			2000	80-455	4.78	156	175	2416	2.3(23)
	A15									177		
3KD-21	A15			90(9180)	233.8(23860)	1700	104-530	7.5	223	234	2820	2.1(21)
3KD-24	A15	26	12			1400	128-610		270	315		
	A20									284		

The dimensions and the specification of 3KDA type are in the red data.

3-Jaw Power Chuck

- High speed stability,Strong and durable.
- High accuracy of repeat positioning,Clamping force is big, Suitable for automatic production.



Model	Spindle Nose	A	B		C (H6)	D	D1	D2	E	E1	F	G max	G min		H	J
3S-04		110	52		60	80			4			18	3		25	26
3S-05		135	55		80	100						9	-6		35	28
3S-06	A5	169	74	84	140	104.8	82.56	116	5	15	21	101.5	86.5	81.5	66.5	34
3S-08	A5	210	85	103	170	133.4		104.8		23	25	127	104	106	83	38
	A6			97			106.38	150		17			110		89	
3S-10	A6	254	89	109	220	171.4		133.4		25	34	158	133	133	108	45
	A8			118			139.72	190		18			140		115	
3S-12	A8	304	106	118					6			163	145			50
3S-15	A8	381	114	141	300	235		171.4		33		104	71	69	36	60
	A11			130			196.87	260		22			82		47	

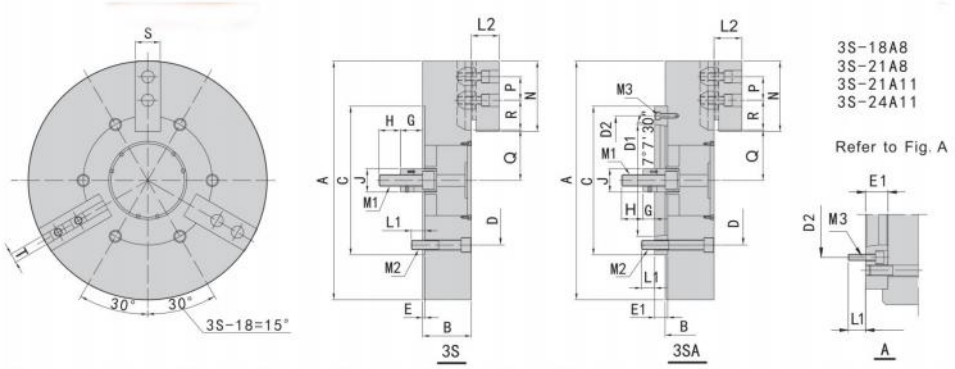
Model	Spindle Nose	L1		L2	M1	M2	M3	N	P	R max	R min	S	T
3S-04		12		25	M10*1.5	3-M8		52	14	11.3	8.3	25	10
3S-05		14		32	M12*1.75			62		13.5	6		
3S-06	A5	14	14	39	M16*2	6-M10	3-M6	73	20	18	7.5	31	12
3S-08	A5	20	17	41	M20*2.5	6-M12	6-M10	95	25	22.3	11.8	35	14
	A6		18				3-M6						
3S-10	A6	18		46		6-M16	6-M12	110	30	30.8	11.3	40	16
	A8		25				3-M8						
3S-12	A8	22		54				130	30	48.8	12.3	50	18
3S-15	A8	30	29	63	M30*3.5	6-M20	6-M16	165	43	48.8	23.3	62	25.5
	A11		33				3-M10						

Model	Spindle Nose	Piunger Stroke [mm]	Jaw Stroke [mm]	Max.pull KN[kgf]	Max.Clamping KN[kgf]	Max.Speed [r/min]	Clamping Range[mm]	Moment of inertial [kg.m²]	Weight [kg]		Matching Cylinder	Max.Pressure Mpa(kgf/cm²)
3S-04		15	6.9	8.1(830)	22.5(2300)	6000	5-110	0.01	4.1		80	1.9(19)
3S-05					25(2550)	5500	14-135	0.02	6.2			
3S-06	A5	20	9.2	17.9(1830)	52.4(5350)	5250	14-165	0.05	13	14	100	2.5(25)
3S-08	A5	21	9.7	25(2550)	74.5(7600)	4750	17-210	0.14	24	28	125/170	2.3(23)
	A6									27		
3S-10	A6	25	8.8	28.9(2950)	107.8 (11000)	4000	22-254	0.30	35	42		2.6(26)
	A8									40		
3S-12	A8	30	10.5	41(4180)	155.8(15900)	3360	22-304	0.73	59	63	150	2.6(26)
3S-15	A8	35	16	82(8360)	248.4(25350)	3000	50-381	1.95	100	114	200	3.2(32)
	A11									107		

The dimensions and the specification of 3SA type are in the red data.

3-Jaw Power Chuck(18-40)

- High speed stability,Strong and durable.
- High accuracy of repeat positioning,Clamping force is big, Suitable for automatic production.



Model	Spindle Nose	A	B		C (H6)	D	D1	D2	E	E1	G max	G min		H	J
3S-18	A8	450	114	141	300	235	139.72	171.4	6	33	92	59	57	24	55	60
	A11			130			196.87	260		22		70		35	
3S-21	A8	530	125	146	380	330.2	139.72	171.4		27	97		62		
	A11						196.87	235							
	A15						285.78	330.2							
3S-24	A11	610					196.87	235							
	A15						285.78	330.2							
3S-32	A15	800	127	148											
3S-40	A15	1000													

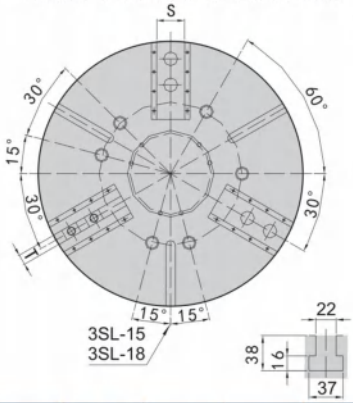
Model	Spindle Nose	L1		L2	M1	M2	M3	N	P	Q max	Q min	R max	R min	S	T
3S-18	A8	30	29	63	M30	6-M20	6-M16	165	43	108	100	48.8	23.3	62	25.5
	A11		33				3-M10								
3S-21	A8	31	23	74		6-M24	6-M16	180	60	89	81	90.5	24.5	65	25
	A11		28				6-M20								
	A15		34				3-M12								
3S-24	A11		28				6-M20			128	120				
	A15		34				3-M12								
3S-32	A15											189.5			
3S-40	A15											288.5			

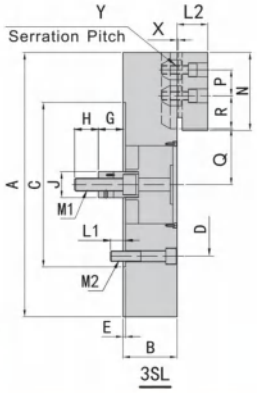
Model	Spindle Nose	Piunger Stroke [mm]	Jaw Stroke [mm]	Max.pull KN[kgf]	Max.Clamping KN[kgf]	Max.Speed [r/min]	Clamping Range[mm]	Moment of inertial [kg.m²]	Weight [kg]		Matching Cylinder	Max.Pressure Mpa(kgf/cm²)
3S-18	A8	35	16	82(8360)	248.4(25350)	2700	60-450	2.47	131	154	200	3.2(32)
	A11									138		
3S-21	A8				272.6(27800)	1900	62-530	4.9	175	196		
	A11									193		
	A15									186		
3S-24	A11					1750	152-610	7	216	234		
	A15									227		
3S-32	A15					1100	152-800	36.2	426	440		
3S-40	A15					800	158-1000	98.5	776	790		

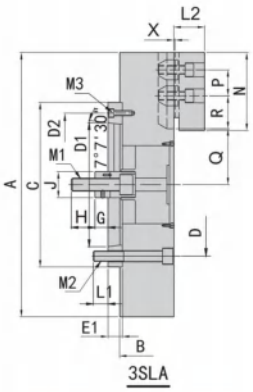
The dimensions and the specification of 3SA type are in the red data.

3-Jaw Waterproof And Dustproof Power Chuck

- **Designed to be waterproof and dustproof, suitable for use with vertical lathes**

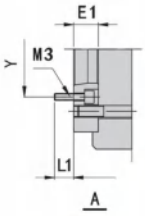






3SL-15A8
3SL-15A15
3SL-18A8
3SL-18A15
3SL-21A11
3SL-24A11

Refer to Fig. A



Model	Spindle Nose	A	B	C (H6)	D	D1	D2	E	E1	G max	G min	H	J	L1	L2
3SL-25	A8	381	116	300	235	139.719	171.4	6	54	68	33	55	60	24	63
	A11					196.869	260		58	64	29			32	
	A15					285.775	330.2		62	60	25			26	
3SL-18	A8	450				139.719	171.4		54	68	33			24	
	A11					196.869	260		58	64	29			32	
	A15					285.775	330.2		62	60	25			26	
3SL-21	A11	530	127	380	330.2	196.869	235		46					34	71
	A15					285.775	330.2								
3SL-24	A11	630				196.869	235								
	A15					285.775	330.2								
3SL-32	A15	800								78	43			33	75
3SL-40	A20	1005	184	520	463.6	412.775	463.6	8	50	34	-26	65		35	110
3SL-50	A20	1250												33	

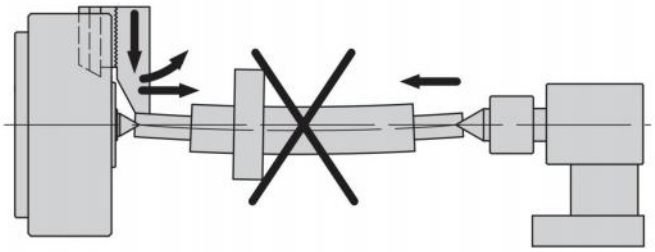
Model	Spindle Nose	M1	M2	M3	N	P	Q max	Q min	R max	R min	S	T	X	Y
3SL-25	A8	M30	6-M20	6-M16	165	43	77.5	69.5	50.25	23.25	62	25.5	2	1.5
	A11			3-M10										
	A15			6-M24										
3SL-18	A8			6-M16			108	100	49.5	25.5				
	A11			3-M10										
	A15			6-M24										
3SL-21	A11		6-M24	6-M20	180	60	86	78	93.5	27.5			3	3
	A15			3-M12										
3SL-24	A11			6-M20			125	117						
	A15			3-M12										
3SL-32	A15						119.5	111.5	197.8	41.8	75			
3SL-40	A20	M36			200	100	149.5	132.5	215	48	85	30	-4	
3SL-50	A20								337.5					

Model	Spindle Nose	Piunger Stroke [mm]	Jaw Stroke [mm]	Max.pull KN[kgf]	Max.Clamping KN[kgf]	Max.Speed [r/min]	Clamping Range[mm]	Moment of inertial [kg.m²]	Weight [kg]		Matching Cylinder	Max.Pressure Mpa(kgf/cm²)
3SL-25	A8	35	16	81(8260)	248(25290)	2800	68-381	2.3	100	115	200	3.2(32)
	A11									107		
	A15							2.7		106		
3SL-18	A8					2500	85-450	3.3	134	148		
	A11									141		
	A15							3.7		140		
3SL-21	A11			82(8360)	273(27838)	1940	110-530	5.3	190	208		
	A15							5.2		201		
3SL-24	A11					1760	155-610	7.6	234	252		
	A15							7.3		245		
3SL-32	A15			85(8650)	265(27000)	1100	265-800	36.2	430	444	250	4.0(40)
3SL-40	A20	60	32	180(18356)	300(30593)	800	265-1005	72	744	831		
3SL-50	A20					630	265-1250	148	940	1009		

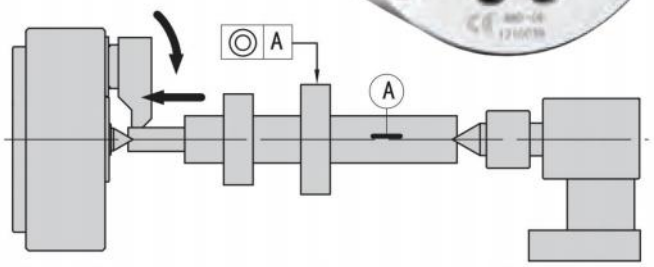
The dimensions and the specification of 3SLA type are in the red data.

Pull Compensating Power Chuck

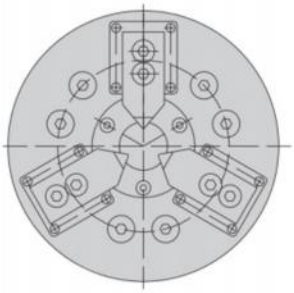
- Special chuck for shaft machining, featuring pull-back and compensating clamping functions. Offers a centering compensation range of 5 mm.

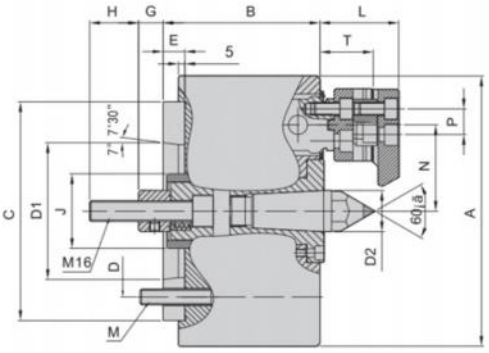


When a chuck without pull-back and compensation functions clamps a workpiece, the jaws tend to lift it, pushing the shaft away from the center position.
If the tailstock force cannot overcome this lifting force, it may cause the workpiece to bend.



The tailstock only needs to support the workpiece, while the chuck pulls the workpiece toward the center point, preventing deformation. As a result, the machined shaft has excellent concentricity.
When the shaft' s outer diameter is not coaxial with the center hole, the compensating function of the chuck jaws becomes especially apparent.



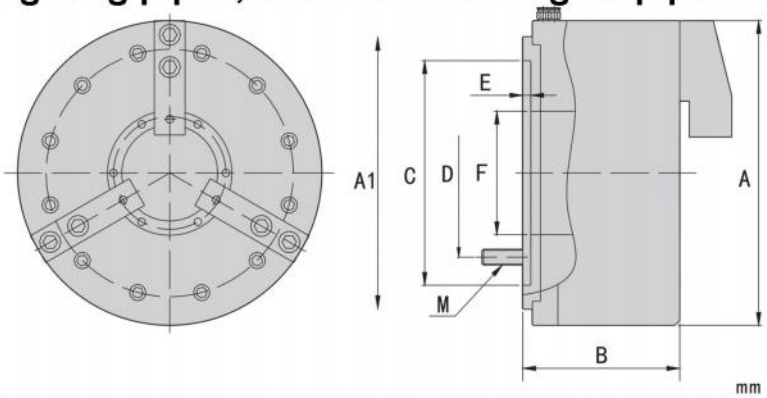


Model	Spindle Nose	A	B	C (H6)	D	D1	D2	E	G	H	J	L	M	N	P	T
3BD-06	A5	168	116	140	104.8	82.56	24	15	4-20	38	50	52	M10*120	55	14	34
3BD-08	A6	210	127	170	133.4	106.38	32	17	9-29	38	58	61	M12*125	67	20	41.5

Model	Spindle Nose	Piunger Stroke[mm]	Jaw Stroke [mm]	Max.pull KN[kgf]	Max.Clamping KN[kgf]	Max.Speed [r/min]	Clamping Range[mm]	Corrected the amount mm(Dia)	Moment of inertial [kg.m^2]	Weight [kg]	Matching Cylinder	Max.Pressure Mpa(kgf/cm^2)
3BD-06	A5	16	13	14.7(1500)	25.0(2550)	3500	6-35	5	0.2	13	100	2.1（21）
3BD-08	A6	20	18	19.6(2000)	34.3(3500)	3000	16-65	6	0.5	22	100	2.8（28）

3-Jaw Pneumatic Chuck With Cylinder

- **Featuring a built-in cylinder design, this setup is ideal for machining long pipes, such as threading oil pipeline tubes**



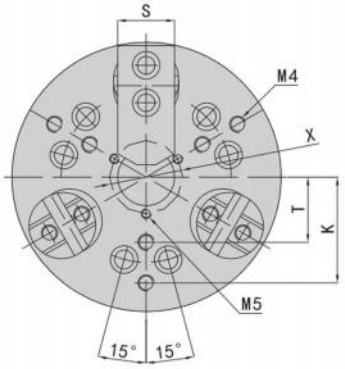
mm

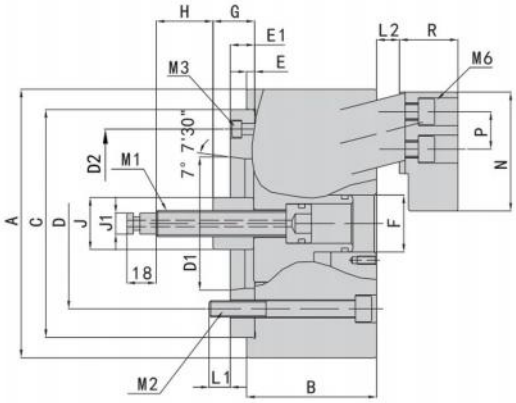
Model	A	A1	B	C(H6)	D	E	F	M
K53-350	380	315	192	235	275	7	115	6-M12
3KQ-400S	467	400	194	310	374	8	152	9-M12
K53-400			223				150	
K53-460			238				181	
K53-500	510		313（338）	325（300）	360（330）	10.5	205	12-M16
K53-570	570	500	280	425	415	8		12-M12
K53-570A							230	
K53-600	605	535		450	450		280	
K53-630	685	610	305.5	510	510		325	
K53-730	730	658	301.5	560	560	10.5	355	12-M16
K53-850	850	775	352	700	700	8	375	
K53-900	900						440	
K53-1000	1000	850	330			10	560	
K53-1150	1050	1060	352	800	800		660	

Model	Single Jaw Stroke[mm]	Clamping Froce(Air0.5Mpa) KN(kgf)	Max.speed [r.min]	Moment of inertial [kg.m2]	Weight [kg]	Pressure Mpa(kgf/cm^2)
K53-350	13+7	62(6326)	3000	1.62	110	0.2-1(2-10)
3KQ-400S	7	130(13265)	1700	5.6	154	
K53-400	13+7		1300	6.5	200	
K53-460		110(11220)		9.8	190	
K53-500	17+7	140(14286)		15.5	298	
K53-570	17+8.5	160(16326)		16.4	340	
K53-570A		140(14286)		16.1	325	
K53-600		160(16326)	1100	19	360	
K53-630		180(18367)	900	28	520	
K53-730	15+10	190(19388)	800	44.2	583	
K53-850	13.4+12	200(20408)	750	71.2	970	0.3-1(3-10)
K53-900		190(19388)	700	105	980	
K53-1000	15+10.4	170(17347)	450	150	960	
K53-1150		230(23470)	400	194	1890	

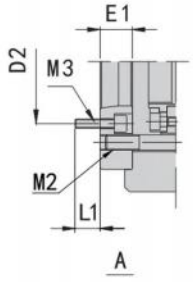
3-Jaw Pull Down Power Chuck

- Capable of simultaneously clamping the workpiece radially and pulling it axially backward. The workpiece remains stable without lifting.
- Optional air-tightness testing can be added.





3XM-08A5
3XM-10A6
参考图A
Refer to Fig. A



Model	Spindle Nose	A	B	C (H6)	D	D1	D2	E	E1	F max		F min		J	J1	K	L1
3PB-06	A5	165	85	140	104.8	82.56	116	5	15	35	30	15	35	32	13	55	13
3PB-08	A5	210	100	170	133.4		104.8		23	45	27	7	38	37	16	75	17
	A6					106.38	150		17								
3PB-10	A6	254	110	220	171.4		133.4		25	55	31	11	41	48	20	85	19
	A8					139.72	190		18								

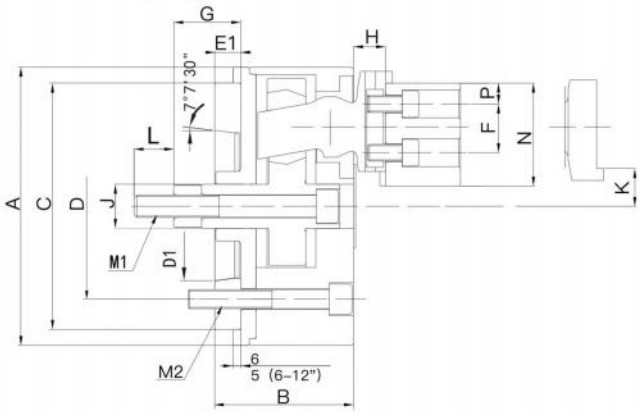
Model	Flage	Piunger Stroke (mm)	Jaw Stroke (Dia.) mm	MaxPull force KN(kgf)	Max.Gripping forceKN(kgf)	Max Speed r/min	Clamping range (mm)	Moment of inertialkg.m^2	Weight kg	Maching Cylinder	Max.preessure Mpa(kgf/cm^2)
3PB-06	A5	15	7.8	9(910)	25(2550)	3500	22-165	0.05	16.8	75Q	2.5 (25)
3PB-08	A5	20	10.3	16 (1630)	45 (4590)	3000	28-210	0.14	28.9	100Q	2.2 (22)
	A6								27.1		
3PB-10	A6	20	10.3	21 (2140)	60 (6120)	2500	35-254	0.36	53.5	125Q	1.9 (19)
	A8								51.5		

We also offer 2-jaw (2PB), 4-jaw (4PB), and 6-jaw (6PB) pull-back chucks. For more details, please consult our customer service.

3-Jaw Ball Lock Power Chuck

- **Workpieces be clamped and pull back, large gripping force.**

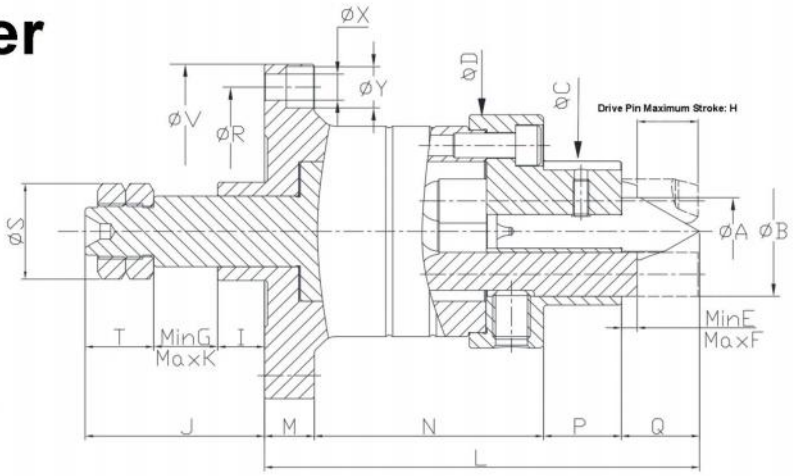
  Can clamp the taper body of 10° the jaw can pendulum 5° freely.Suitable for processing castings and forgings.



Model	A	B	C	D	D1	E1	F	Gmin	Gmax	H	J	K	J	M1	M2	N	P	Q	T
UBL-06	162	77	140	104.8	82.56	15	30	49	60.3	19.3	32	22.2	36	M16	3-M10	67.5	15	51	38
UBL-08	200	88	170	133.4	106.38	17	34	49	63.3	23.3	32	25.4	36	M16	3-M12	74	15	57	44.5
UBL-010	254	106	220	171.4	139.72	18	45	49	66.5	29.1	42	30.3	36	M20	3-M16	89.5	19	70	57
UBL-12	300	106	220	171.4	139.72	18	45	49	66.5	29.1	42	50.8	36	M20	3-M16	108.5	19	70	57

Model	Piunger Stroke[mm]	Jaw Stroke [mm]	Max.pull [KN]	Max.Clamping [KN]	Max.Speed [r/min]	Clamping Range[mm]		Moment of inertial [kg.m2]	Weight [kg]	Matching Cylinder	Max.Pressure Mpa(kgf/cm2)
						OD	ID				
UBL-06	11.3	7.9	26.5	79.4	4000	12.7-120	70-152	0.15	18	100	2.4(24)
UBL-08	14.3	9.5	35.3	105.8	3500	16-152	76-203	0.48	27	100	3.1(31)
UBL-010	17.5	12.7	44.1	132.3	3000	50-203	85-235	1.23	45	150	2.8(28)
UBL-12	17.5	12.7	44.1	132.3	2500	63-241	127-305	2.42	67.5	150	2.8(28)

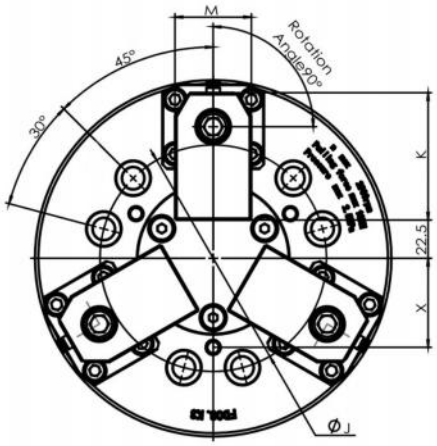
Hydraulic Face Driver

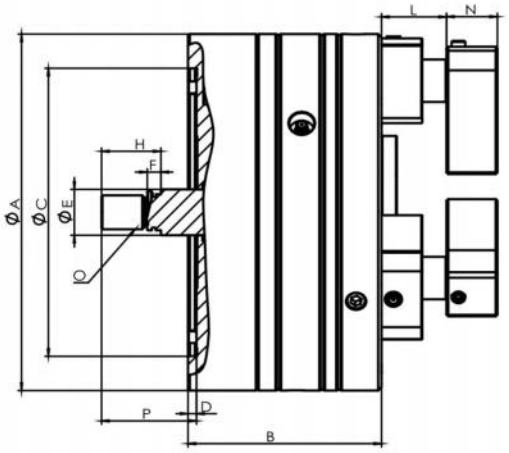


Working Range[mm]	12-50	15-55	20-60	20-70	45-120	100-220	180-300
Left-hand model L	LD12/50	LD15/55	LD20/60	LD20/70	LD45/12	LD100/220	LD180/300
Right-hand model R	RD12/50	RD15/55	RD20/60	RD20/70	RD45/12	RD100/220	RD180/300
A	18	18	18	22	20	32	35
Q	19.5	19.5	19.5	25	28	36	49
B	28.3	31.3	35.3	42.3	75	112.3	152.3
H	19.5	19.5	19.5	19.5	19	26	26.5
E	1	1	1	5	9	9	17.5
F	20.5	20.5	20.5	24.5	28	35	46.5
C	35	40	43	48	80	117.5	160
D	63	63	63	74	116	157	207
L	133.5	133.5	133.5	139.5	157	203	242
N	68	68	68	73.5	77	104	133
P	30	30	30	25	32	35	25
J	61	61	61	57.5	65	77	90.5
G	1	1	1	1	1	1	1
K	20.5	20.5	20.5	20.5	20	27	27.5
T	22	22	22	22	25	25	38
I	18.5	18.5	18.5	15	20	25	25
V	109	109	109	109	153	195	245
M	16	16	16	16	20	28	35
S	31	31	31	31	34.6	34.6	53
R	94	94	94	94	131	170	223
X	8.5	8.5	8.5	8.5	11	13	12
Y	13.5	13.5	13.5	13.5	17	19	19

Finger Chuck

- Axial clamping without radial force
- Built-in clamping compensation mechanism enables automatic adjustment for clamping irregular surfaces





Model	A	B	C	D	E	F	H	I	N	O	P
FK-08	210	110	170	5	30	8	35	38.3-58.3	30	M20*2.5	56-76
FK-10	254	120	220	5	30	8	35	38.3-58.3	30	M20*2.5	56-76

Model	Jaw Rotation Stroke [mm]	Jaw Vertical Stroke [mm]	Jaw Compensation (mm)	Max Clamping Force [kN]	Max Speed [rpm]	Net Weight[kg]
FK-08	12	8	2	21	2900	28
FK-10	12	8	2	26	2400	37

Standard Hardened Jaw

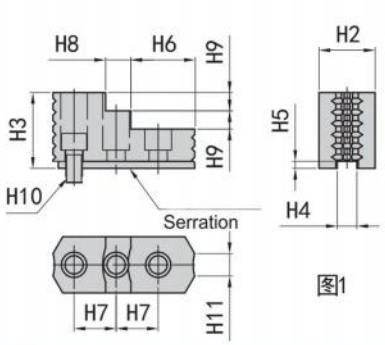


图1

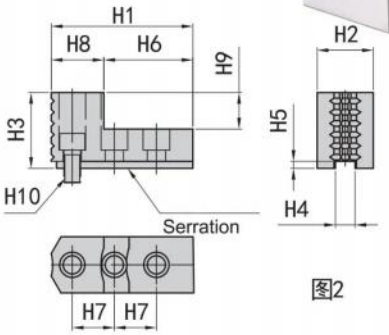
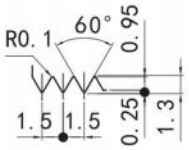
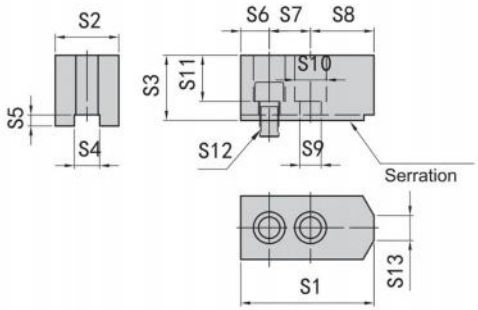


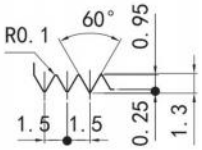
图2



Model	H-1	H-2	H-3	H-4	H-5	H-6	H-7	H-8	H-9	H-10	S-11	Maching Chuck	Weight KG	Reference Drawing
HJ-05	53	23	28	10	4	30.5	14	22.5	10	M8	6	3K-04 3K-05 3S-05	0.4	Fig2
HJ-06	67	31	35	12		40	20	26.6	12	M10	10	3K-06 3S-06	1	
HJ-08	88	35	51	14		31	25	18		M12	12	3K-08 3S-08	1.95	Fig1
HJ-10	101	40	54	16	5	43	30	17	13		13	3K-10 3S-10	1.95	
HJ-12	103	50	52	21		62.5		40.5	17	M16	30	3K-12	2.65	Fig2
HJ-12-1				18						M14		3S-12	2.7	
HJ-15	149	62	86	25.5	8	63	43	34	20	M20	43	3K-15	9.4	Fig1
HJ-15-1				22								3S-15	9.5	

Standard Soft Jaw

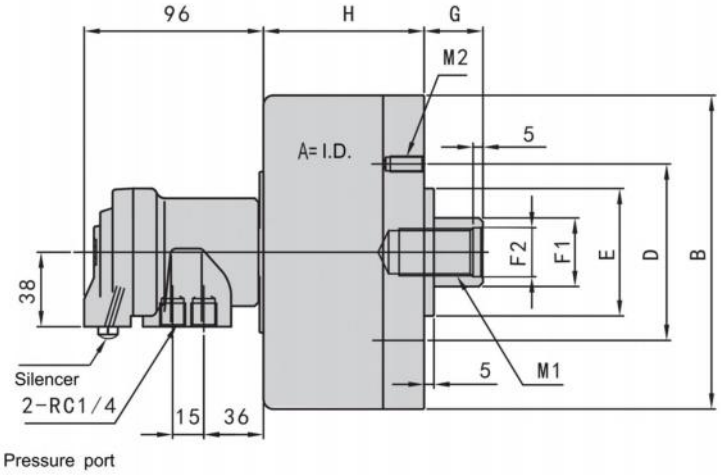


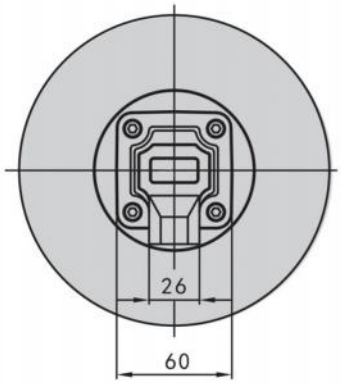


Model	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	S-9	S-10	S-11	S-12	S-13	Maching Chuck	Weight KG
SJ-04	52	23	23	10	4	10	14	28	9	14	13	M8	3	3K-04 3S-04	0.5
SJ-05	62	25	30		5			38			16		3.5	3K-05 3S-05	0.7
SJ-06	73	31	36	12		15	20		11	17	20	M10	14	3K-06 3S-06	1.5
SJ-08	95	35	37	14		24	25	46	13	19	22	M12	16	3K-08 3S-08	2.5
SJ-10	110	40	42	16		30	30	50			27		18	3K-10 3S-10	3.7
SJ-12	130	50	50	21		49		61	18	26	30	M16		3K-12	6.2
SJ-12-1				18					16	23		M14		3S-12	6.3
SJ-15	165	62	62	25.5		37	43	85	21	32	38	M20		3K-15	12.6
SJ-15-1				22	8									3S-15	12.7

Rotating Air Cylinder

- The cylinder body is made of high quality aluminum alloy,lightweight,small and durable.



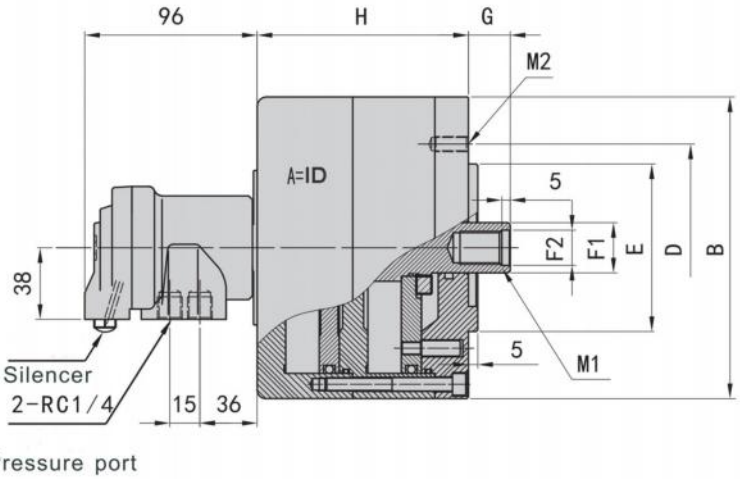


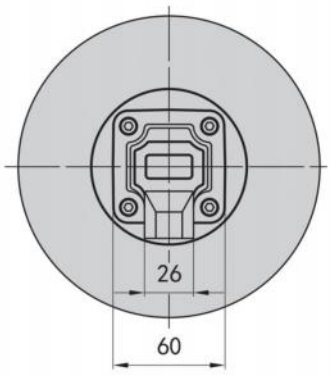
Model	A	B	D	E (H7)	F1	F2 (H8)	G		H	M1	M2
							max	min			
SQ-130	130	160	90	65	25	17	45	30	70	M16X25	6-M8X18
SQ-150	150	180	100	80						M16X30	6-M10X18
SQ-170	170	200					40	20	77		

Model	Eff piston area [cm²]		Piston stroke[mm]	Max.speed[r/min]	Max.pressure kgf/cm²(Mpa)	Max.pull force kgf(KN)		Moment of inertial [kg.m2]	Weight [kg]
	Extend	Retract				Extend	Retract		
SQ-130	131.12	127.76	15	5000	8(0.8)	944(9.25)	920(9)	0.05	5.3
SQ-150	174	170.7				1253(12.3)	1231(12)	0.09	6.6
SQ-170	225.3	219.8	20			1622(15.9)	1582(15.5)	0.13	8.5

Double Piston Rotation Air Cylinder

- **The cylinder body is made of high quality aluminum alloy,lightweight,small and durable.**



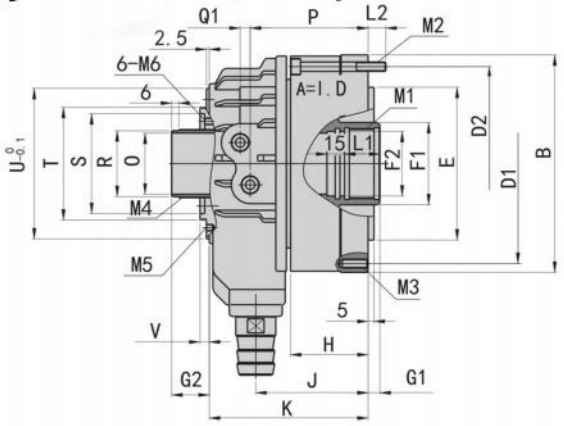


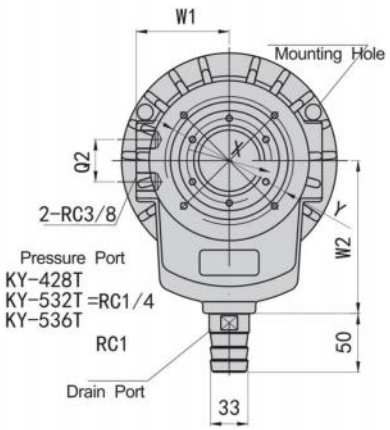
Model	A	B	D	E (H7)	F1	F2 (H8)	G		H	M1	M2
							max	min			
SQ-130B	130	160	90	65	25	17	45	30	113	M16X25	6-M8X18
SQ-150B	150	180	125	100	30	21	31	11	126	M20X30	6-M10X18
SQ-170B	170	200	100	80			40	20	126		
SQ-200B	200	236	160	125	44	23	35	5	162	M22X30	8-M12X20

Model	Eff piston area [cm²]		Piston stroke[mm]	Max.speed [r/min]	Max.pressure kgf/cm²(Mpa)	Max.pull force kgf(KN)		Moment of inertial [kg.m2]	Weight [kg]
	Extend	Retract				Extend	Retract		
SQ-130B	254.23	250.87	15	4000	**8(0.8)**	**1830(17.9)**	**1806(17.7)**	0.11	8.0
SQ-150B	339	332.0				**2440(23.9)**	**2390(23.4)**	0.19	9.3
SQ-170B	442.0	436.4				**3182(31.1)**	**3142(30.8)**	0.27	10.5
SQ-200B	603.50	590.00	30			**4345(42.58)**	**4248(41.63)**	0.45	13.0

Rotating Hydraulic Cylinder With Through-Hole-1

- High speed short form,large through-hole
- Easy instauation,the optional front end or back end screw it



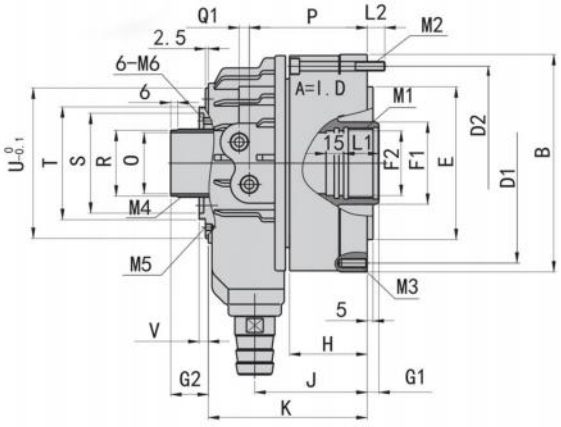


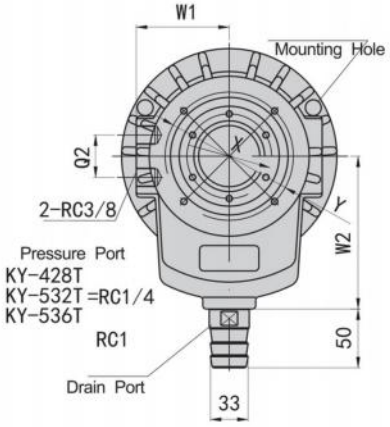
Model	A	B	D1	D2	E (H7)	F1	F2 (H8)	G1 max	G1 min	G2 max	G2 min	H	J	K	L1	L2	M1	M2
KY-428T	90	124	100	108	80	40	30	10		35		61	94.5	139			M33X1.5	6-M8X65
KY-532T	105	141	115	125	100	48	35	15	0	40	25	70	107.5	148	25	13	M38X1.5	
KY-536T							38										M42X1.5	6-M8X75
KY-642T	125	156	130	140		65	45										M50×2	
KY-646T							50										M55X2	
KY-846T	145	185	170	165	130	70		20		45		72		150	30	12		
KY-852T							55										M60X2	

Model	M3	M4	M5	0	P	Q1	Q2	R	S	T	U	V	W1	W2	X	Y
KY-428T	6-M8X16	M34X1.5	4-M5	28	99	9	24	32	52	60	88	6	56.5	100	44	76
KY-532T	6-M10X16	M44X1.5	4-M5X6	32	108		30	42	62	70	98		62	110	54	83
KY-536T				36												
KY-642T	12-M10X20	M52X1.5		42			32	50	76	85	116		70	120	64	98
KY-646T				46												
KY-846T		M58X1.5	4-M6X6		110		36	56	85	96	128	7	79	130	73	110
KY-852T				52												

Model	Eff.piston area [cm²] Extend	Eff.piston area [cm²] Retract	piston stroke[mm]	Max speed [r/min]	Max.pressure [Kgf/cm²]	Max.pull Force kgf(KN) Extend	Max.pull Force kgf(KN) Retract	Moment of inertia[Kg.m²]	Weight [kg]	Total oil leakage [L/min]
KY-428T	51.9	51	10	7000	40(4.0)	1868(18.2)	1836(18)	0.01	5.8	2.6
KY-532T	70.8	68.5	15	6000		2548(25)	2466(24.2)	0.012	6.1	3
KY-536T										
KY-642T	99.1	88				3567(35)	3168(31)	0.018	8.5	
KY-646T										
KY-846T	135.3	125	20	5500		4870(47.7)	4500(44.1)	0.035	11.8	**3.9**
KY-852T										

Rotating Hydraulic Cylinder With Through-Hole-2





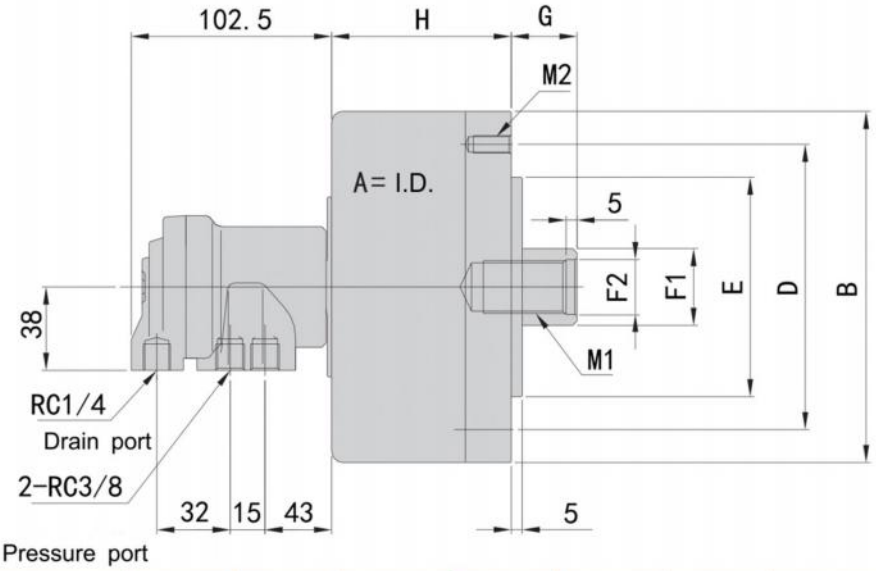
Model	A	B	D1	D2	E (H7)	F1	F2 (H8)	G1 max	G1 min	G2 max	G2 min	H	J	K	L1	L2	M1	M2
KY-1068T	175	215	190	190	160	95	70	25	0	50	25	94	136	188	35	16	M75X2	6-M10X100
KY-1075T							80										M85X2	
KY-1287T	205	240	215	220	180	110	90	30		55		100	145	205			M95X2	6-M10X105
KY-1291T							95										M100X2	
KY-1511T	250	305	275	280	230	140	115					113	156	245	35		M120X2	6-M12X120
KY-1512T							125										M130X2	

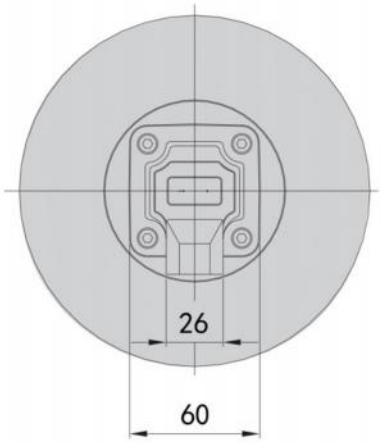
Model	M3	M4	M5	O	P	Q1	Q2	R	S	T	U	V	W1	W2	X	Y
KY-1068T	12-M10X20	M84X2	4-M6X8	68	139	12	36	81	108	121	164	7	98	160	98	155
KY-1075T				75												
KY-1287T	12-M12X24	M99X2		87	148	14	40	96	125	135	180		110	185	110	165
KY-1291T				91												
KY-1511T	12-M16X32	M129X2	4-M6X10	110	172	17	50	126	150	170	227		134	210	138	210
KY-1512T				120												

Model	Eff.piston area [cm²] Extend	Eff.piston area [cm²] Retract	piston stroke[mm]	Max speed [r/min]	Max.pressure [Kgf/cm²]	Max.pull Force kgf(KN) Extend	Max.pull Force kgf(KN) Retract	Moment of inertia[Kg.m²]	Weight [kg]	Total oil leakage [L/min]
KY-1068T	182.7	169.5	25	4500	40(4.0)	6577(64.5)	6102(59.8)	0.08	17.8	4.2
KY-1075T									17	
KY-1287T	249.3	232.8	30	3800		8975(87.9)	8380(82.1)	0.11	26.5	4.5
KY-1291T									24.8	
KY-1511T	356.5	335.3		3000		12830(125.7)	12070 (118.3)	0.38	53.6	7.0
KY-1512T									49.5	

Rotating Hydraulic Cylinder

- **The cylinder body is made of high quality aluminum alloy,lightweight,small and durable.**





Model	A	B	D	E (H7)	F1	F2 (H8)			H	M1	M2
							max	min			
SY-65	65	98	80	60	22	13	45	30	71	M12X25	6-M8X16
SY-80	80	112	90	65	25	17			73	M16X30	
SY-100	100	135	100	80	28			25	82		6-M10X16
SY-100K						21				M20X35	
SY-125	125	160	130	110	35		50		91		6-M12X18
SY-125K						25				M24X40	
SY-150	150	190			45	31	55		101	M30X45	12-M12X20
SY-200	200	245	145	120	55	37	57	22	126	M36X55	12-M16X28
SY-250	250	296	200	160	60		100	40	156		6-M20X30

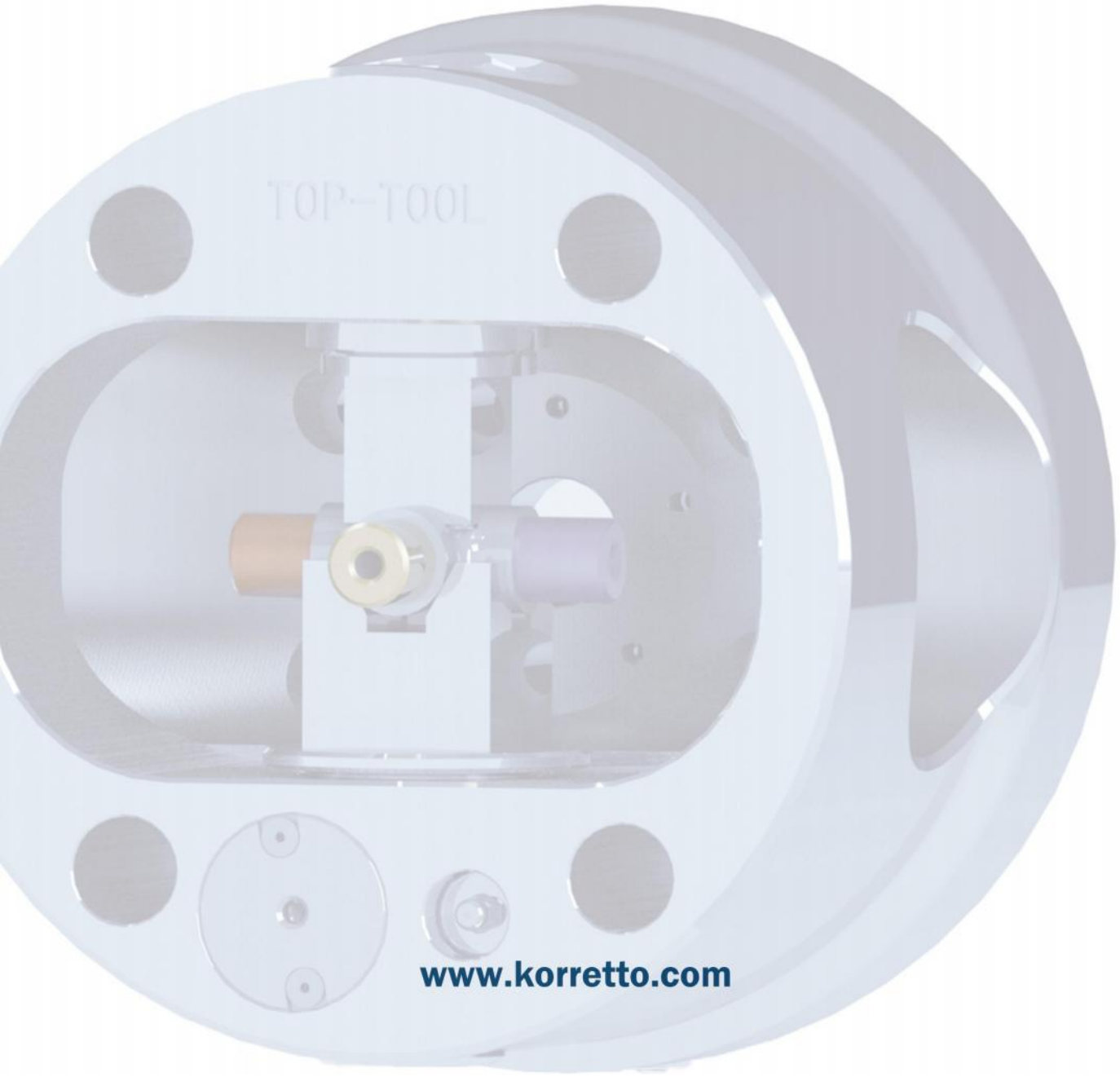
Model	Eff.piston area cm²		Piston stroke[mm]	Max.speed [r/min]	Max pressure Kgf/cm²[Mpa]	Max.pull force kgf(KN)		Moment of inertia[Kg.m²]	Weight[k g]
	Extend	Retract				Extend	Retract		
SY-65	31.64	29.38	15	6000	35(3.5)	997(9.8)	925(9.1)	0.01	2.65
SY-80	48.67	45.33				1530(15)	1428(14)		3.6
SY-100	76.93	73.6	20	5500		2770(27.1)	2650(25.9)	0.04	4.8
SY-100K		71.4					2570(25.2)		
SY-125	120.9	115.55	25	5000	40(4.0)	4360(42.7)	4160(40.7)	0.08	6.5
SY-125K		113					4060(39.8)		
SY-150	176.7	160.7	30			6300(61.7)	5730(56.2)	0.18	10.5
SY-200	314.1	290.4	35	4000		11300(110.8)	10454(102.4)	0.38	18.7
SY-250	485.7	462.3	60	2000	35(3.5)	15300(150)	14560(142.7)	0.96	35

The rotary cylinder also offers models with center water outlet, center air outlet, stroke control, and double piston rods.

TOP-TOOL

CANADA

Note:



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