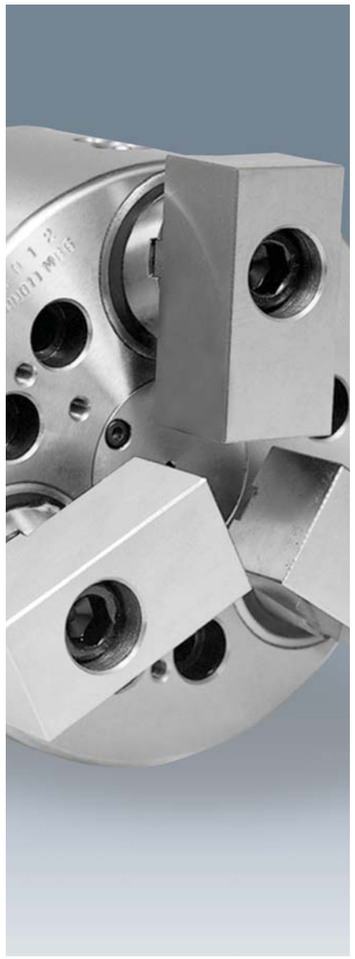
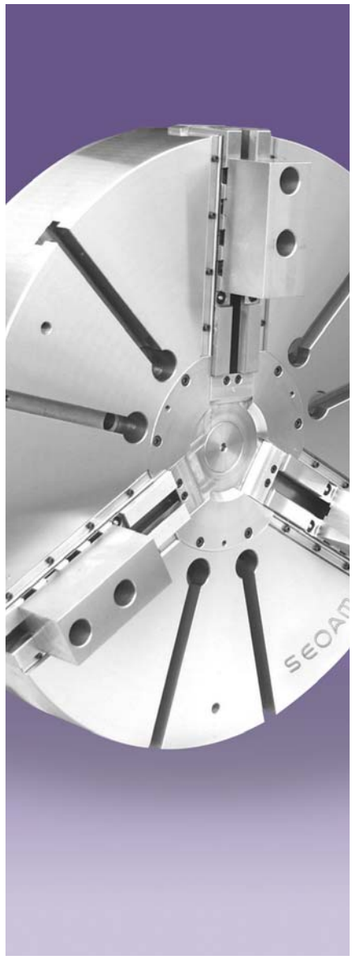
SBCR
KS-ABS 9001:2000 CERTIFIED

KAB

SINGLE PPM

CHUCK





SEOAM MACHINERY INDUSTRY

SEOAM
서암기계공업주식회사
SEOAM MACHINERY INDUSTRY CO.,LTD.

SEOAM MACHINERY INDUSTRY

MAIN PRODUCT INTRODUCE

Seoam Machinery boasts the highest quality and precision product.
瑞岩机械引以为荣的是拥有"最高品质"和"最高精度"的产品.
SEOAMは“最高品質”と“高精密度製品”を誇っております.
서암기계는 “최고의 품질”과 “고정밀도 제품”을 자랑합니다.

We will make a great effort to satisfy customers with self-confidence of the best.
By manufactured high quality Gears, Power Chuck & Hydraulic Cylinder, Curvic Couplings, and Gear Reducers, The SEOAM continually make effort for customers that they will look for SEOAM to be believed our reliable capability from customers again and sincerely promise with customers to support products or services.

以最大的自信，尽最大的努力.
瑞岩机械生产超精密齿轮，动力卡盘，油压油缸，端面齿盘，减速器等，瑞岩机械通过不断的努力和卓越的技术制造一流品质的产品，出口国际市场，为成为世界水平的公司而不懈努力.

最高という自負心で最善を尽くします.
超精密ギア，パワーチャック，油圧シリンダー，カービックカップリング，減速機等を生産しているSEOAMは絶え間ない努力と優秀な技術力を元にお客様が信じて使えられる製品とサービスを提供することをお約束します.

최고라는 자부심으로 최선을 다합니다.
초정밀기어, 파워척과 유압실린더, 커빅커플링, 감속기등을 생산하고 있는 서암기계는 끊임없는 노력과 우수한 기술력을 바탕으로 고객이 믿고 찾을 수 있는 제품과 서비스를 제공하여 드릴것을 약속하겠습니다.

POWER CHUCK

HYDRAULIC CYLINDER

DRAW DOWN CHUCK

SPECIAL CHUCK

SEOAM

HISTORY OF SEOAM

1978. 02.
Establishment of Hwacheon Gear Works Co.,Ltd.
货泉齿轮株式会社成立
貨泉ギア工業株式会社設立
화천기어공업주식회사 설립

1980. 04.
Merged with Hwacheon Chuck Co., Ltd.
与货泉卡盘株式会社合并
貨泉チャック工業(株)吸収合併
화천Chuck 공업(주)흡수 합병

1986. 07.
Made a contract of technical cooperation with Howa machinery.,Ltd.
与日本HOWA机械签定技术合作合同
日本 HOWA(株)と技術導入契約
일본HOWA공업(주) 와 기술도입 계약

1992 02.
Exported Power Chuck to Howa machinery Ltd.
动力卡盘出口至日本HOWA机械
パワーチャックを日本 HOWAへ輸出
Power Chuck 일본 HOWA 수출

1995. 01.
Moved to new factory in Hanam Industrial Complex.
搬迁至河南工业复合区的新工厂
ハナン工業団地に工場新築移転
하남공단으로 공장신축 이전

1996. 12.
Achieved C.E Mark.
获得欧洲C.E认证
ヨーロッパ安全規格 C.E マーク取得
Europe 안전규격 C. E Mark 획득

1997. 12.
Appointed as an excellent company for the cooperation of labor & employer.
获得最具协作精神的杰出企业称号(劳动部长官)
労使協力優良企業選定(労働大臣)
노사협력 우량기업 선정(노동부장관)

1998. 09.
Achieved ISO 9001 certificate.
获得ISO 9001国际质量认证
ISO 9001認証取得
ISO 9001 인증 획득

1998. 11.
R&D center established.
R&D中心成立
企業付設研究所設立
기업부설연구소 설립

1999. 01.
Exported Power Chuck to germany.
动力卡盘出口至德国
Power Chuckをドイツへ輸出
Power Chuck 독일수출

2000. 10.
Changed company name into "SEOAM"
公司更名为瑞岩机械工业株式会社
貨泉ギアから SEOAMに社名を変更
회천기어에서 서암기계공업(주)로 상호명 변경

2001. 04.
Exported Power Chuck & Cylinder to USA.
动力卡盘和回转油缸出口至美国
Power Chuck & Cylinderを米国へ輸出
Power chuck & Cylinder 미국수출

2001. 05.
Appointed as an excellent medium & smallsized company by Prime Minister.
荣获总理亲自授予的杰出中小型企业奖
模範中小企業人賞受賞(国務総理大臣)
모범 중소기업인상 수상(국무총리)

2001. 11.
Awarded a prize by president in commemoration of TRADE day.
在贸贸节上荣获总统颁发奖项
貿易の日大統領賞受賞
무역의날 대통령상 수상

2003. 05.
Exported Powerchuck & Cylinder to China.
动力卡盘和回转油缸出口至中国
Power Chuck & Cylinderを中国へ輸出
Powerchuck & Cylinder 중국수출

2004. 01.
Exported Powerchuck & Cylinder to South Africa.
动力卡盘和回转油缸出口至南非共和国
Power Chuck & Cylinderを南アフリカ共和国へ輸出
Powerchuck & Cylinder 남아프리공화국수출

2004. 11.
Awarded trophy for exports over US $3Millions and
awarded recognition from Korea president
荣获总统为出口总值超过300万美元的企业颁发的奖项
代表理事大統領賞受賞及び300万ドル輸出達成賞
대표이사 대통령상 수상 및 300만불 수출탑 수상

2004. 12.
Awarded Materials and Components Technology prize by Minister of Commerce, Industry and Energy.
荣获工商业部 能源部部长颁发的材料及元件科技奖
産業資源大臣賞(部品素材技術)受賞
산업자원부 장관상(부품소재 기술상)수상

2005. 11.
Awarded trophy for exports over US $5Millions and
by Minister of Commerce, Industry and Energy
荣获"贸易之日500万美元出口杯"奖, 产业资源部长官奖
貿易の日500万ドル輸出達成賞及び産業資源大臣賞受賞
무역의 날 500만불 수출탑 수상 및 산자부장관상 수상

2006. 01.
Developed high speed Compensating Chuck & Hydraulic Cylinder(8,000 rpm)
开发离心力补偿型高速夹头和高速气缸 (8,000rpm)
遠心力補償型高速チャック&高速シリンダー開発(8,000rpm)
원심력 보상형 고속척 & 고속실린더 개발(8,000rpm)

2006. 03.
Awarded a model taxpayer prize by Minister of Finance and Economy
荣获模范纳税奖项 (财政经济部长官)
模範納税者賞受賞(財政経済大臣)
모범납세자상 수상(재정경제부장관)

2006. 12.
5patentsregisterdfor Compensating Chuck etc.(Korean Intelectual PropertyOffice)
取得车床离心力补偿型动力卡盘等5项专利 (专利厅)
旋盤の遠心力補償型パワーチャック他5件の特許取得(特許庁)
선반의 원심력보상형 파워척 外 5건 특허획득(특허청)

2007. 04.
Approval components & material company certificate byMinister of Commerce, Industry and Energy
被指定为部品材料专门企业 (产业资源部长官)
部品素材専門企業指定(産業資源大臣)
부품소재 전문기업 지정(산자부장관)

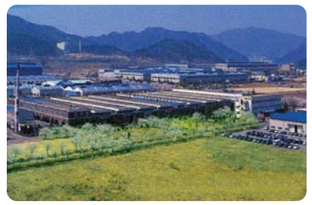
2008. 11.
Achived Single PPM certificate for Power Chuck and Hydraulic Cylinder
取得单个PPM品质认证(油压卡盘 & 油压油缸)
シングルPPM品質認証取得(パワーチャック&油圧シリンダー)
싱글PPM 품질인증 획득(유압척 & 유압실린더)

CONTENTS

AFFILIATE 関連会社 관 계 사

화천기공주식회사
HWACHEON MACHINE TOOL CO,LTD 貨泉機械工業株式会社

화천기계주식회사
HWACHEON MACHINERY CO.,LTD. 貨泉機械株式会社



티피에스코리아주식회사
TPS KOREA CO.,LTD. TPS KOREA株式会社

POWER CHUCK & HYDRAULIC CYLINDER

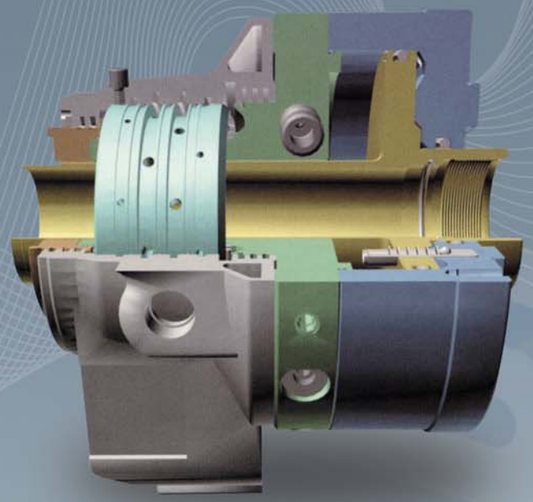
Based on the technical cooperation with HOWA in Japan, we developed power chucks and hydraulic cylinders for the first time in Korea. On top of that, finally, we achieved technology independence by developing world-class SEOAM SERIES, which brings us significant improvement in technology and paves the way for the world-class company.

在与日本HOWA进行技术合作的基础上,制了动力卡盘和回转油缸。瑞岩机械研制出了世界领先的SEOAM系列产品,这标志着瑞岩机械在科技上的独立以及在科学技术上的显著提高,并为瑞岩机械成为世界领先的企业奠定基础

日本HOWAとの技術提携で弊社はパワーチャックと油圧シリンダーを韓国で最初に開発しました。蓄積した技術力と絶えない努力の結果世界最高水準のエースシリーズパワーチャック、油圧シリンダーを独自開発しました。

일본 HOWA 社와의 기술 제휴로 파워척과 유압실린더를 국내 최초로 개발하였고, 이러한 축적된 기술력과 끊임없는 노력의 결과로 세계최고 수준의 SEOAM SERIES 파워척, 유압실린더를 독자개발하였습니다.

■ HYDRAULIC CYLINDER



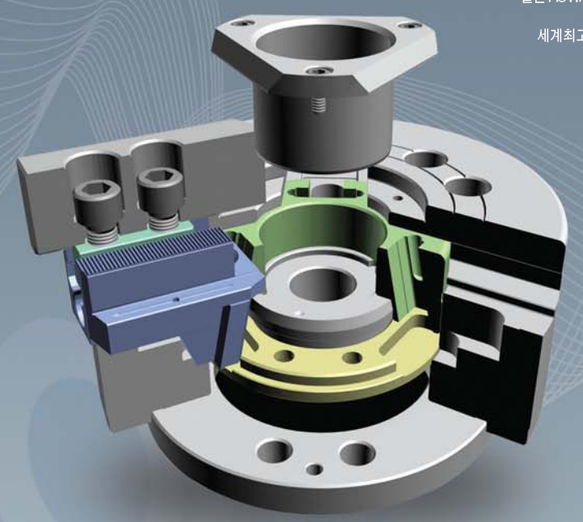
Small but powerful! Elaboration to go with that power.
The greatest work created
with the know-how of 30 year's history
SEOAM CYLINDER SERIES!
It will give you the best satisfaction

结构紧凑，动力强劲，这是苦心研究带来的成果。
30年的专业生产技术造就了最伟大的生产工业。
瑞岩 回转油缸系列会最大化的满足您的需求。

小さくても強い！この強さに似合う精巧さ
30年の歴史の精粋を盛って産んだ最高の傑作 SEOAM エースシリンダーシリーズ！お客様に確実な満足を提供します。

작지만 큰 힘, 큰 힘과 어울리는 정교함
30년 역사의 정수를 담아 탄생시킨 최고의 걸작
SEOAM CYLINDER SERIES!
고객여러분께 확실한 만족을 드립니다.

■ POWER CHUCK



We created *SEOAM CHUCK SERIES*
to be the best in the world
with our skills and experience built
during a quarter century!
You can check its quality yourself.

瑞岩机械以先进的技术，丰富的经验，
生产出世界一流的SEOAM卡盘系列。在过去
30年的生产过程中，瑞岩机械一直为客户提供优质产品。
您可以亲自验证本公司
产品的优良品质。

30年間蓄えた技術力と経験を元に世界最高を目指して産んだ SEOAM エースチャックシリーズ！この品質をご自身でご確認ください

30년 동안 쌓아온 기술과 경험을 바탕으로
세계 최고를 목표로 탄생시킨
SEOAM CHUCK SERIES!
그 품질을 직접 확인해 주십시오.

CAH

BIG BORE POWER CHUCK
大通孔动力卡盘/高速中空型パワーチャック/고속중공형 파워척

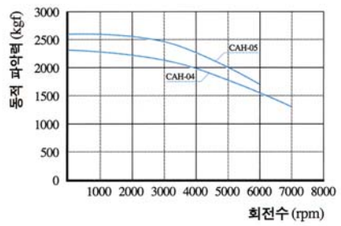
1 • High Gripping Force By sharply increasing dynamic gripping force, work efficiency and safety have been greatly improved. **2 • High Speed** Strong gripping force and safety of performance are secured by optimal design, and high speed rotation is achieved. **3 • Light Weight** Equipment load has been reduced by weight reduction, and efficiency has been increased for fitful work and for both forward and reverse operations. **4 • Durability** Heat treatment is performed to alloy steel, and high accuracy, high strength and high durability are realized by improving lubrication system.

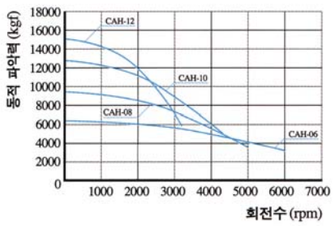
1 • 夹紧力强：借助瞬间增强动态夹紧力的方式使工作效率和安全性得到加强. **2 •** 速度快：最佳设计确保了强有力的夹紧和安全快速的运转. **3 •** 重量轻：卡盘的重量减轻，因此卡盘频繁起动和正反运转的效率大大提高. **4 •** 耐磨损：此卡盘采用经过特殊热处理的合金钢为材质，通过改善润滑条件，使其具备高精度，高强度和高耐磨的特点.

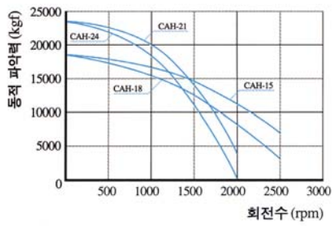
1 • 高い把握力 **2 •** 高速化実現 **3 •** 軽量化実現 **4 •** 耐久性確保

1 • 높은 파악력 2 • 고속화 실현 3 • 경량화 실현 4 • 내구성 확보

Dynamic Gripping Force/动夹紧力/動的把握力グラフ/동적파악력 선도





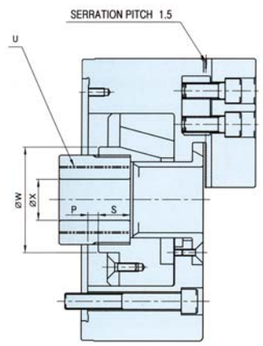


Specifications/规格/仕様表/사양표

Spec.사양 / Model형식	Order NO. 오더번호	Spindle nose NO. 주축규격	Thru-hole (Diameter) 관통경(직경) mm	Jaw stroke (Diameter) 죠 스트로크(직경) mm	Plunger stroke 플런져 스트로크 mm	Gripping Dia(Extend gripping) 파악경(외경파악)mm		Max. permissible input force 허용 실린더력 KN(kgf)
						Max 최대	Min 최소	
CAH-05	1AH05	-	33	5.4	10	135	10	17.5(1784)
CAH-06	1AH06	A2-5	46	5.5	13	169	13	25(2500)
CAH-08	1AH08	A2-6	52	7.6	18	210	11	40(4080)
CAH-10	1AH10	A2-8	77	8.5	20	254	31	50(5100)
CAH-12	1AH12	A2-8	91	10.2	24	304	34	58(5916)
CAH-15	1AH15	A2-11	118	10.6	23	381	30	71(7240)
CAH-18	1AH18	A2-11	118	10.6	23	450	30	71(7240)
CAH-21	1AH21	A2-11, 15	140	10.6	23	530	87	90(9177)
CAH-24	1AH24	A2-11, 15	165	10.4	23	610	110	90(9177)

Spec.사양 / Model형식	Max. static gripping force 최대 정적파악력 KN(kgf)	Max.permissible speed 최고 사용회전수 r.p.m(min^{-1})	Weight (With standard soft jaws) 중량(표준소프트 죠포함) kg	GD^2 Moment of inertia N·m^2 (kgf.m^2)	Matching cylinder 적용실린더	Matching hard jaw 적용하드죠	Matching soft jaw 적용소프트죠
CAH-05	36(3671)	7000	6.7	0.7(0.071)	YAH-05	HJ-04A1	SJ-05T1
CAH-06	63(6426)	6000	12.5	2.26(0.23)	YAH-06	HJ-06T1	SJ-06T1
CAH-08	94(9597)	5000	22.3	6.67(0.68)	YAH-08	HJ-08T1	SJ-08T1
CAH-10	125(12740)	4200	34.5	12.84(1.31)	YAH-10	HJ-10T1	SJ-10T1
CAH-12	147(15000)	3300	55.3	28.71(2.93)	YAH-12	HJ-12A1	SJ-12A1
CAH-15	180(18355)	2500	120	89.14(9.09)	YAH-15	HJ-15T1	SJ-15A1
CAH-18	180(18355)	2000	164	174.6(17.8)	YAH-15	HJ-15T1	SJ-15A1
CAH-21	234(23861)	1700	235	351.1(35.8)	YAH-15	HJ-21B1	SJ-21A1
CAH-24	234(23861)	1400	293	651.2(66.4)	YAH-15	HJ-21B1	SJ-21A1

Outward Drawing/外型图/外形図/외형도



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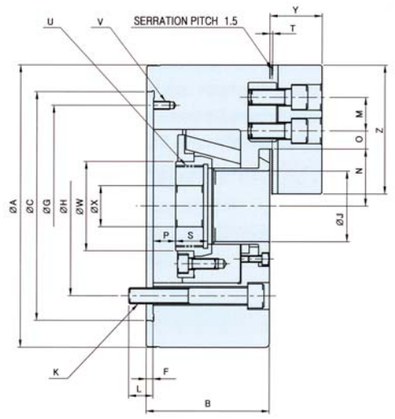

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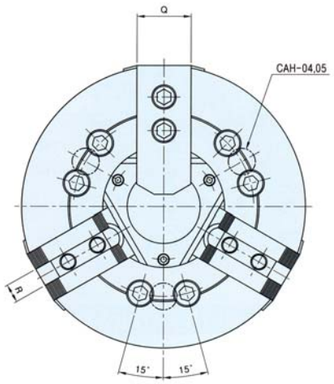


Dimension/尺寸/寸法表/치수표

Item항목 / Model형식	A	B	C	F	G	H	J	K	L	M	N max	N min
CAH-05	135	60	110	4	96	82.6	33	3-M10	15	14	26.5	23.8
CAH-06	169	80	140	5	116	104.8	46	6-M10	12	20	33.5	30.7
CAH-08	210	91	170	5	150	133.4	52	6-M12	15	25	41.7	37.9
CAH-10	254	100	220	5	190	171.4	77	6-M16	17	30	54.5	50.3
CAH-12	304	115	220	6	190	171.4	91	6-M16	18	30	67.4	62.3
CAH-15	381	133	300	6	260	235	118	6-M20	30	43	82	76.7
CAH-18	450	133	380	6	320	235	118	6-M20	30	43	82	76.7
CAH-21	530	140	380	6	330.2	330.2	140	6-M22	34	60	98.5	93.2
CAH-24	610	149	380	6	330.2	330.2	165	6-M22	32	60	108.4	103.2

Item항목 / Model형식	O max	O min	P max	P min	Q	R	S	T	U max	V	W	X	Y	Z
CAH-05	19.75	7.75	1	-9	23	10	20	2	M40X1.5	3-M6	45	20	26	54
CAH-06	23	10	12	-1	31	12	19	2	M55X2.0	3-M6	60	20	33	72
CAH-08	27	10	16.5	-1.5	39	14	20.5	2	M60X2.0	3-M6	66	30	39	95
CAH-10	31	12	9.5	-10.5	44	16	27	2	M85X2.0	3-M8	94	30	46	110
CAH-12	42	12	10	-14	50	21	28	2.5	M100X2.0	3-M8	108	30	51.8	111
CAH-15	43.8	18.3	11	-12	62	22	39	5	M130X2.0	3-M10	139	60	70	165
CAH-18	73.8	18.3	11	-12	62	22	39	5	M130X2.0	3-M10	139	60	70	165
CAH-21	87.5	21.5	11	-12	65	25	39	5	M155X3.0	3-M12	170	80	73	180
CAH-24	117.5	21.5	20	-3	65	25	40	5	M175X3.0	3-M12	187	80	73	180

Model Description/型号说明/型式番号表示/형식번호 표시

CAH □ - □□
Chuck Size
Blank | Standard
A | adapter type
T | 2-jaw type

CGH □ - □□
Chuck Size
Blank | Standard
A | adapter type
T | 2-jaw type

CAS □ - □□ A□
Chuck Size / Spindle Nose
Blank | Standard
A | adapter type
T | 2-jaw type

CAHA

BIG BORE POWER CHUCK (SHORT TAPER)
大通孔动力卡盘(短锥型)/高速中空型パワーチャック(アダプター付)/고속중공형 파워척(아답터 부착형)

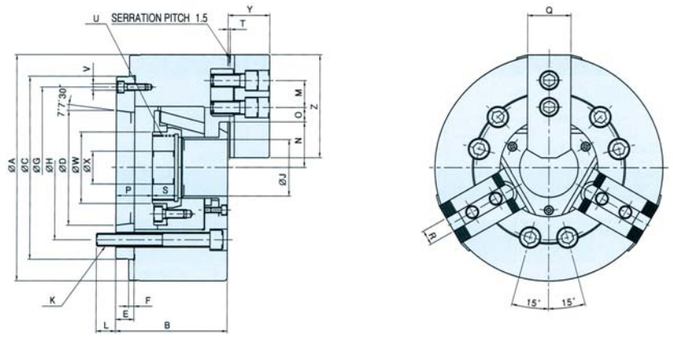
1 • High Performance and High Accuracy Adapter is attached to CAH power chuck. Performance and quality are identical CAH and its parts are compatible each other.
2 • Spindle Direct-Mounting Type International standard A-type spindle specification is applied to the mounting face, so it is possible to directly attach to short taper spindle. **3 • Shortening of changing time** Time of changing chuck can be minimized as run-out accuracy is kept upon attachment. **4 • Convenient Attachment Option** Because adapters suitable to various spindle specifications can be manufactured and attached, the scope of application is extensive.

1 • 性能好，精度高：CAH型卡盘是在CAH型卡盘上附带转接法兰以实现直接安装，因此其性能，质量与CAH卡盘一致，且配件具有兼容性. **2 •** 直接安装型：可直接安装在符合国际标准A型主轴的短锥安装面上. **3 •** 换装方便：若更换附件可在最短的时间内，达到其运行的精度要求. **4 •** 便于安装选择：可通过转接法兰与各种不同规格的主轴连接,扩大了其使用范围.

1 • 高性能，高精度 **2 •** スピンドル直装型 **3 •** 取替え時間短縮 **4 •** 便利な取付けオプション

1 • 고성능· 고정도 2 • 스핀들 직장형 3 • 교체시간 단축 4 • 부착옵션 용이

Outward Drawing/外型图/外形図/외형도



Dimension/尺寸/寸法表/치수표

Item항목 / Model형식	A	B	C	D	E	F	G	H	J	K	L	M	Nmax	Nmin	O max	O min	P max	P min	Q	R	S	T	U max	V	W	X	Y	Z
CAHA-06	169	90	140	82.563	15	5	116	104.8	46	6-M10	16	20	33.5	30.7	23	10	27	14	31	12	19	2	M55X2.0	3-M6	60	20	33	66
CAHA-08	210	103	170	106.375	17	5	150	133.4	52	6-M12	18	25	41.7	37.9	27	10	33.5	15.5	39	14	20.5	2	M60X2.0	3-M6	66	30	39	86
CAHA-10	254	113	220	139.719	18	5	190	171.4	77	6-M16	24	30	54.5	50.3	31	12	27.5	7.5	44	16	27	2	M85X2.0	3-M8	94	30	45	108
CAHA-12	304	127	220	139.719	18	6	190	171.4	91	6-M16	25	30	62.1	56.7	45	15	28	4	50	21	28	2	M100X2.0	3-M8	108	30	51	111
CAHA-15	381	149	300	196.869	22	6	260	235	118	6-M20	28	43	82	76.7	43.8	18.3	33	10	62	22	39	5	M130X2.0	3-M10	139	60	70	165
CAHA-18	450	149	380	196.869	22	6	320	235	118	6-M20	28	43	82	76.7	73.8	18.3	33	10	62	22	39	5	M130X2.0	3-M10	139	60	70	165
CAHA-21	530	161	380	285.775	27	6	330.2	330.2	140	6-M22	34	60	98.5	93.2	87.5	21.5	38	15	65	25	39	5	M155X3.0	3-M12	166	80	73	180
CAHA-24	610	170	380	285.775	27	6	330.2	330.2	165	6-M22	35	60	108.4	103.2	117.5	21.5	47	24	65	25	40	5	M175X3.0	3-M12	187	80	73	180

Specifications/规格/仕様表/사양표

Spec.사양 / Model형식	Order NO. 오더번호	Spindle nose NO. 주축규격	Thru-hole (Diameter) 관통경(직경)mm	Jaw stroke (Diameter) 죠스트로크(직경)mm	Plunger stroke 플런저 스트로크 mm	Gripping Dia(Extend gripping) 파악경(외경파악)mm		Max. permissible input force/허용 실린더력 KN(kgf)
						Max 최대	Min 최소	
CAHA-06	1AHA06	A2-5	46	5.5	13	169	13	25(2500)
CAHA-08	1AHA08	A2-6	52	7.6	18	210	11	40(4080)
CAHA-10	1AHA10	A2-8	77	8.5	20	254	31	50(5100)
CAHA-12	1AHA12	A2-8	91	10.2	24	304	34	58(5916)
CAHA-15	1AHA15	A2-11	118	10.6	23	381	30	71(7240)
CAHA-18	1AHA18	A2-11	118	10.6	23	450	30	71(7240)
CAHA-21	1AHA21	A2-11, 15	140	10.6	23	530	87	90(9177)
CAHA-24	1AHA24	A2-11, 15	165	10.4	23	610	110	90(9177)

Spec.사양 / Model형식	Max. static gripping force/최대 정적파악력 KN(kgf)	Max permissible speed 최고 사용회전수 r.p.m(min⁻¹)	Weight (With standard soft jaws)/중량(표준 소프트 죠포함) kg	GD² Moment of inertia N·m²(kgf.m²)	Matching cylinder 적용실린더	Matching hard jaw 적용하드 죠	Matching soft jaw 적용소프 죠포
CAHA-06	63(6426)	6000	13.7	2.45(0.25)	YAH-06	HJ-06T1	SJ-06T1
CAHA-08	94(9597)	5000	23.6	6.90(0.71)	YAH-08	HJ-08T1	SJ-08T1
CAHA-10	125(12740)	4200	40	12.65(1.29)	YAH-10	HJ-10T1	SJ-10T1
CAHA-12	147(15000)	3300	64	30.00(3.06)	YAH-12	HJ-12A1	SJ-12A1
CAHA-15	180(18355)	2500	127	93.55(9.54)	YAH-15	HJ-15T1	SJ-15A1
CAHA-18	180(18355)	2000	178	187.30(19.1)	YAH-15	HJ-15T1	SJ-15A1
CAHA-21	234(23861)	1700	246	362.83(37.0)	YAH-15	HJ-21B1	SJ-21A1
CAHA-24	234(23861)	1400	304	660.94(66.4)	YAH-15	HJ-21B1	SJ-21A1

CAHT

2-JAW BIG BORE POWER CHUCK
大通孔两爪动力卡盘/2つ爪高速中空型パワーチャック/ 2-죠오 고속중공형 파워척

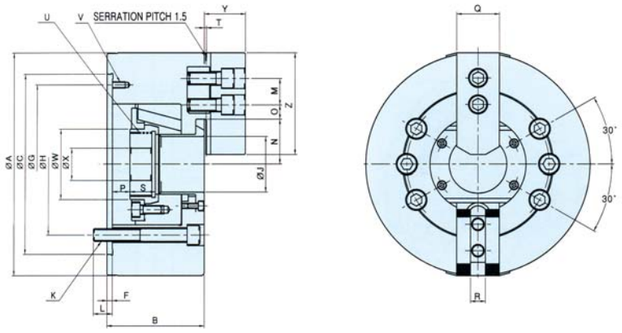
1 • Clamping of Irregular Work It shows excellent performance for irregular work such as square bar, especially, for manufacturing irregular materials using a bar feeder. **2 • High Performance and High Accuracy** It has the same structure as CAH power chuck, and guarantees excellent performance and quality. Attachment part and changable parts are compatible each other.
3 • Spindle Direct-Mounting Type International standard A-type spindle specification is applied to CAHTA type, so it is possible to directly attach to short taper spindle.

1 • 夹紧不规则工件：此卡盘在不规则工件夹紧时，显示出其优越性. 尤其适用于方杆加工和使用棒料输送机对不规则工件进行夹紧. **2 •** 性能好，精度高：此卡盘与CAH型卡盘结构相同，因此确保其优越的性能和质量，且附件和连接部件具有兼容性. **3 •** 直接安装型：可直接安装在符合国际标准A型主轴的短锥安装面上.

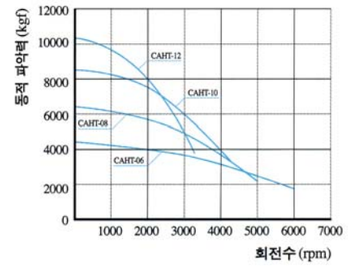
1 • 異型工作物把握 **2 •** 高性能，高精度 **3 •** スピンドル直装型

1 • 이형공작물 파악 2 • 고성능· 고정도 3 • 스핀들 직장형

Outward Drawing/外型图/外形図/외형도



Dynamic Gripping Force/动夹紧力/動的 把握力グラフ/동적 파워력 선도



Dimension/尺寸/寸法表/치수표

Item항목 / Model형식	A	B	C	F	G	H	J	K	L	M	Nmax	Nmin	Omax	Omin	Pmax	Pmin	Q	R	S	T	U max	V	W	X	Y	Z
CAHT-06	169	80	140	5	116	104.8	46	3-M10	12	20	33.5	30.7	23	10	12	-1	31	12	19	2	M55X2.0	3-M6	60	20	33	66
CAHT-08	210	91	170	5	150	133.4	52	3-M12	15	25	41.7	37.9	27	10	16.5	-1.5	39	14	20.5	2	M60X2.0	3-M6	66	30	39	86
CAHT-10	254	100	220	5	190	171.4	77	3-M16	17	30	54.5	50.3	31	12	9.5	-10.5	44	16	27	2	M85X2.0	3-M8	94	30	45	108
CAHT-12	304	115	220	6	190	171.4	91	3-M16	18	30	62.1	56.7	45	15	10	-14	50	21	28	2	M100X20	3-M8	108	30	51	111

Specifications/规格/仕様表/사양표

Spec.사양 / Model형식	Order NO. 오더번호	Spindle nose NO. 주축규격	Thru-hole (Diameter) 관통경(직경)mm	Jaw stroke (Diameter) 죠스트로크(직경)mm	Plunger stroke 플런저 스트로크 mm	Gripping Dia(Extend gripping) 파악경(외경파악)mm		Max. permissible input force/ 허용 실린더력 KN(kgf)
						Max 최대	Min 최소	
CAHT-06	1AHT06	A2-5	46	5.5	13	169	13	16.6(1700)
CAHT-08	1AHT08	A2-6	52	7.6	18	210	11	26.6(2720)
CAHT-10	1AHT10	A2-8	77	8.5	20	254	31	33.3(3400)
CAHT-12	1AHT12	A2-8	91	10.2	24	304	34	39(3995)

Spec.사양 / Model형식	Max. static gripping force 최대 정적파악력 KN(kgf)	Max permissible speed 최고 사용회전수 r.p.m(min⁻¹)	Weight (With standard soft jaws) 중량(표준소프트 죠포함) kg	GD² Moment of inertia N·m²(kgf.m²)	Matching cylinder 적용실린더	Matching soft jaw 적용소프 죠포
CAHT-06	42(4284)	6000	12.3	2.20(0.22)	YAH-06	SJ-06T1
CAHT-08	63(6398)	5000	21.7	6.86(0.70)	YAH-08	SJ-08T1
CAHT-10	83.3(8493)	4200	33.7	12.55(1.28)	YAH-10	SJ-10T1
CAHT-12	100(10200)	3300	51	26.47(2.7)	YAH-12	SJ-12A1

CGH

GREAT BORE POWER CHUCK
超大通孔动力卡盘/大貫通径中空型パワーチャック/대관통경 중공형 파워척

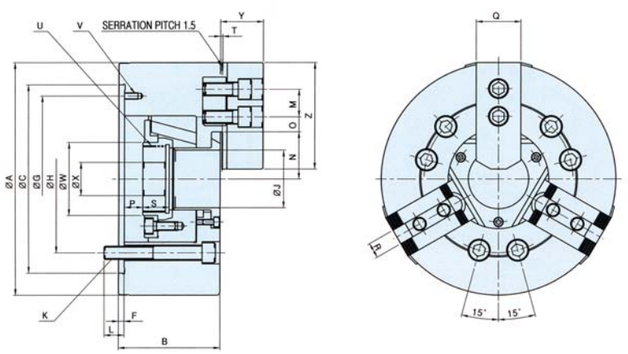
1 • Enlargement of Through Hole Much larger Through Hole is the biggest size in the same grade, which enables broader manufacturing such as bar feeder work. **2 • Light Weight** Equipment load has been reduced by weight reduction, and efficiency has been increased for fitful work and for both forward and reverse operations. **3 • Hight Performance and High Accuracy** It has the same structure as CAH power chuck, and has excellent performance and quality. Attachment part and changable parts are compatible each other. **4 • Spindle Direct-Mounting Type** International standard A-type spindle specification is applied to CGHA type, so that it can be directly attached to short taper spindle.

1 • 超大通孔：此卡盘具有比同类卡盘大的通孔，因此使用范围更加广泛．如棒料 输送机进给加工. **2 •** 重量轻：卡盘的重量减轻，因此卡盘频繁起动和正反向运转的效率大大提高. **3 •** 性能好，精度高:此卡盘与CAH型卡盘结构相同，因此确保其优越的性能和质量，且附件和连接部件具有兼容性. **4 •** 直接安装型：可直接安装在符合国际标准A型主轴的短锥安装面上.

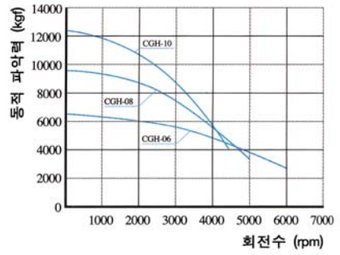
1 • 貫通径拡大 **2 •** 軽量化実現 **3 •** 高性能,高精度 **4 •** スピンドル直装型

1 • 관통경 확대 2 • 경량화 실현 3 • 고성능 · 고정도 4 • 스핀들 직장형

Outward Drawing/外型图/外形図/외형도



Dynamic Gripping Force/动夹紧力/動的把握力グラフ/동적 파악력 선도



Dimension/尺寸/寸法表/치수표

Model형식 \ Item항목	A	B	C	F	H	J	K	L	M	Nmax	Nmin	Omax	Omin	Pmax	Pmin	Q	R	S	T	U max	V	W	X	Y	Z
CGH-06	170	81	140	5	104.8	53	6-M10	16	20	37	34.24	21	8	12	-1	31	12	19	2	M60X2.0	3-M6	66	20	33.5	72
CGH-08	210	91	170	5	133.4	66	6-M12	20	25	46.2	42.4	23.25	10.25	7	-11	39	14	27	2	M75X2.0	6-M6	80	30	39	95
CGH-10	254	100	220	5	171.4	82	6-M16	17	30	56.27	52.2	31	12	9.5	-10.5	44	16	27	2	M90X2.0	3-M8	98	30	45	110

Specifications/规格/仕様表/사양표

Spec.사양 / Model형식	Order NO. 오더번호	Spindle nose NO. 주축규격	Thru-hole (Diameter) 관통경(직경)mm	Jaw stroke (Diameter) 죠스트로크(직경)mm	Plunger stroke 플런저 스트로크 mm	Gripping Dia(Extend gripping) 파악경(외경파악)mm		Max. permissible input force/허용 실린더력 KN(kgf)
						Max 최대	Min 최소	
CGH-06	1GH06	A2-5	53	5.5	13	169	13	25(2550)
CGH-08	1GH08	A2-6	66	7.6	18	210	11	38(3900)
CGH-10	1GH10	A2-8	82	8.5	20	254	31	50(5100)

Spec.사양 / Model형식	Max. static gripping force 최대 정적파악력 KN(kgf)	Max.permissible speed 최고 사용회전수 r.p.m(min⁻¹)	Weight (With standard soft jaws) / 중량 (표준 소프트 죠포함) kg	GD² Moment of inertia N·m² (kgf.m²)	Matching cylinder 적용실린더	Matching hard jaw 적용하드 죠	Matching soft jaw 적용소프 프죠
CGH-06	60(6120)	6000	11.9	2.26(0.23)	YSGH-06	HJ-06T1	SJ-06T1
CGH-08	94(9597)	5000	23	5.59(0.57)	YSGH-08	HJ-08T1	SJ-08T1
CGH-10	120(12240)	4500	32	12.83(1.31)	YGH-10	HJ-10T1	SJ-10T1

CGHA

GREAT BORE POWER CHUCK (SHORT TAPER)
超大通孔动力卡盘 (短锥型)/大貫通径中空型パワーチャック(アダプター付)/대관통경 중공형 파워척(아답터 부착형)

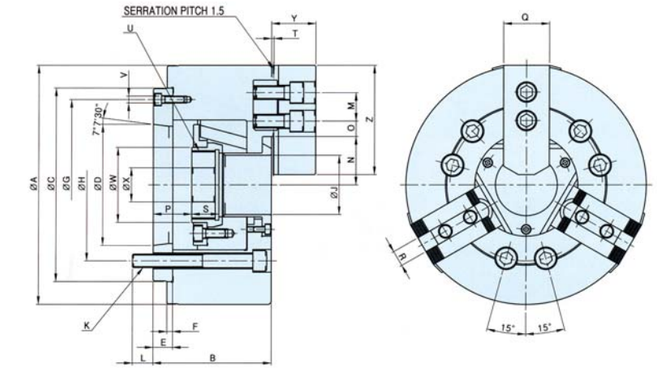
1 • High Performance and High Accuracy It has the same structure as CGH power chuck, and has excellent performance and quality. Mounting face and changable parts are compatible each other. **2 • Spindle Direct-Mounting Type** International standard A-type spindle specification is applied to Mounting face, so that it can be directly attached to short taper spindle. **3 • Shortening of changing time** Chuck-changing-time can be minimized as run-out accuracy is kept upon attachment. **4 • Convenient Attachment Option** Because adapters suitable to various spindle specifications can be manufactured and attached, the scope of application is extensive.

1 • 性能好，精度高：此卡盘与CGH型卡盘结构相同，因此确保其优越的性能和质量，且附件和连接部件具有兼容性. **2 •** 直接安装型：可直接安装在符合国际标准A型主轴的短锥安装面上. **3 •** 换装方便：若更换附件可在最短的时间内，达到其运行的精度要求. **4 •** 便于安装选择：可通过转接法兰与各种不同规格的主轴连接，扩大了其使用范围.

1 • 高性能 高精度 **2 •** スピンドル直装型 **3 •** 取替え時間短縮 **4 •** 便利な取付けオプション

1 • 고성능 · 고정도 2 • 스핀들 직장형 3 • 교체시간 단축 4 • 부착옵션 용이

Outward Drawing/外型图/外形図/외형도



CGHA-10

Dimension/尺寸/寸法表/치수표

Model형식 \ Item 항목	A	B	C	D	E	F	G	H	J	K	L	M	Nmax	Nmin	Omax	Omin	Pmax	Pmin	Q	R	S	T	U max	V	W	X	Y	Z
CGHA-06	170	91	140	82.5	63	15	5	116	104.8	53	6-M10	16	20	37	34.24	21	8	27	14	31	12	19	2	M60X2.0	3-M6	66	20	33.5	72
CGHA-08	210	111	170	106.3	75	26	5	150	133.4	66	6-M12	21	25	46.2	42.4	23.25	10.25	33	15	39	14	20.5	2	M75X2.0	6-M12	88	30	39	95
CGHA-10	254	113	220	139.7	119	18	5	190	171.4	82	6-M16	24	30	56.27	52.2	31	12	27.5	7.5	44	16	27	2	M90X2.0	3-M8	98	30	45	110

Specifications/规格/仕様表/사양표

Spec.사양 / Model형식	Order NO. 오더번호	Spindle nose NO. 주축규격	Thru-hole (Diameter) 관통경(직경)mm	Jawstroke(Diameter) 죠스트로크 (직경)mm	Plunger stroke 플런저 스트로크 mm	Gripping Dia(Extend gripping) 파악경(외경파악)mm		Max. permissible input force/허용 실린더력 KN(kgf)
						Max 최대	Min 최소	
CGHA-06	1GHA06	A2-5	53	5.5	13	169	13	25(2550)
CGHA-08	1GHA08	A2-6	66	7.6	18	210	11	38(3900)
CGHA-10	1GHA10	A2-8	82	8.5	20	254	31	50(5100)

Spec.사양 / Model형식	Max. static gripping force 최대 정적파악력 KN(kgf)	Max.permissible speed 최고 사용회전수 r.p.m(min⁻¹)	Weight (With standard soft jaws) /중량 (표준 소프트 죠포함) kg	GD² Moment of inertia N·m² (kgf.m²)	Matching cylinder 적용실린더	Matching hard jaw 적용하드 죠	Matching soft jaw 적용소프 프죠
CGHA-06	63(6426)	6000	13.7	2.45(0.25)	YSGH-06	HJ-06T1	SJ-06T1
CGHA-08	94(9597)	5000	23.6	6.90(0.71)	YSGH-08	HJ-08T1	SJ-08T1
CGHA-10	120(12240)	4500	40	12.65(1.29)	YGH-10	HJ-10T1	SJ-10T1

CAS

CLOSED CENTER POWER CHUCK
中实动力卡盘/高速中実型パワーチャック/고속중실형 파워척

1 • Economical Model It is the most economical model without through-hole in the chuck, and used when not passing a bar work. **2 • High Speed** Strong gripping force and safely of performance are secured by optimal design, and high speed rotation is achieved. **3 • Durability** Heat treatmemt is performed to alloy steel, and high accuracy, strength and durability are realized by improving lubrication system. **4 • Compatibility** The same soft jaws and hard jaws as those of big bore chuck are applied in order to secure mutual compatibility.

1 • 经济型：此型号卡盘没有通孔，可在加工工件无须穿入卡盘的情况下使用，是 最经济的型号. **2 •** 速度快：其最佳设计确保了强大的夹紧力及高速运转的安全性. **3 •** 耐磨损：此卡盘以经过特殊热处理的合金钢为材质，通过改善润滑条件， 使其具备高精度，高强度和高耐磨的特性. **4 •** 兼容性：此卡盘具有与大通孔卡盘相同的软爪和硬爪，因此具有兼容性.

1 • 経済的なモデル **2 •** 高速化実現 **3 •** 耐久性確保 **4 •** 互換性確保

1 • 경제적인 모델 2 • 고속화 실현 3 • 내구성 확보 4 • 호환성 확보

Specifications/规格/仕様表/사양표

Spec.사양 / Model형식	Order NO. 오더번호	Spindle nose NO. 주축규격	Jaw stroke (Diameter) 죠스트로크(직경)mm	Plunger stroke 플런저 스트로크 mm	Gripping Dia(Extend gripping) 파악경(외경파악)mm		Max. permissible input force / 허용 실린더력 KN(kgf)
					Max 최대	Min 최소	
CAS-04	10104	-	5	15	110	6	4.4(445)
CAS-05	10105	-	5	15	135	15	6.4(647)
CAS-06	1AS06	A2-5	9.2	20	165	19	19(1938)
CAS-08	1AS08	A2-6	8.8	21	210	23	28(2856)
CAS-10	1AS10	A2-8	8.8	25	254	24	32.5(3315)
CAS-12	1AS12	A2-8	10.5	30	304	26	41.5(4233)
CAS-15	1AS15	A2-8, 11	16	35	381	60	81.9(8362)
CAS-18	1AS18	A2-8, 11	16	35	450	140	81.9(8362)
CAS-21	1AS21	A2-11, 15	16	35	530	82	81.9(8362)
CAS-24	1AS24	A2-11, 15	16	35	610	170	81.9(8362)
CAS-32	1AS32	-	20.6	38	800	211	100(10200)
CAS-32 HC	1AS32 HC	-	30+(30)	38	800	296	119(12232)
CAS-40	1AS40	-	30.5	57	1000	330	161(16450)
CAS-40 HC	1AS40 HC	-	46+(30)	60	1000	187	161(16450)
CAS-50	1AS50	-	30.5	57	1250	330	161(16450)
CAS-50 HC	1AS50 HC	-	46+(30)	60	1250	187	180(18367)
CAS-63	1AS63	-	48	60	1600	-	180(18367)

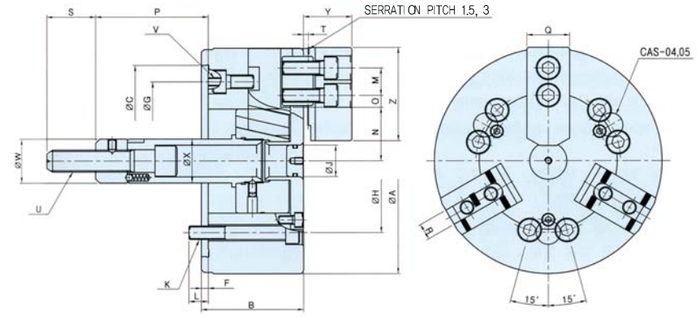
Spec.사양 / Model형식	Max. static gripping force 최대 정적파악력 KN(kgf)	Max.permissible speed 최고 사용회전수 r.p.m(min⁻¹)	Weight (With standard soft jaws) / 중량 (표준 소프트 죠포함) kg	GD² Moment of inertia N·m²(kgf.m²)	Matching cylinder 적용실린더	Matching hard jaw 적용하드 죠	Matching soft jaw 적용소트 프죠
CAS-04	12.1(1224)	5000	4	0.196(0.02)	YAS-65	-	SJ-04T2
CAS-05	17.7(1791)	5000	6	0.56(0.06)	YAS,C,P,T-80	-	SJ-05A1
CAS-06	63(6426)	6000	13	1.77(0.18)	YAS,C,P,T-100	HJ-06T1	SJ-06T1
CAS-08	80(8160)	4800	25	5.39(0.55)	YAS,C,P,T-125	HJ-08T1	SJ-08T1
CAS-10	115(11730)	4100	37	11.17(1.20)	YAS,C,P,T-125	HJ-10T1	SJ-10T1
CAS-12	156(16014)	3400	57.3	28.44(2.90)	YAS,C,P,T-150	HJ-12A1	SJ-12T1
CAS-15	248(35391)	3040	96	70.5(7.2)	YAS,C,P,T-200	HJ-15A3	SJ-15A3
CAS-18	248(35391)	2710	131	95(9.7)	YAS,C,P,T-200	HJ-15A3	SJ-15A3
CAS-21	272(27838)	1940	198	188.2(19.2)	YAS,C,P,T-200	HJ-21B1	SJ-21A1
CAS-24	272(27838)	1760	223	67.8(6.92)	YAS,C,P,T-200	HJ-21B1	SJ-21A1
CAS-32	240(24490)	900	341	23.8(2.43)	YASTL-200	HJ-32A1	SJ-32A1
CAS-32 HC	214(21916)	800	350	23.8(2.43)	YASTL-200	HJ-32A1	SJ-32A1
CAS-40	361(36836)	630	670	68(7.03)	YAST-245	HJ-40A1	SJ-40A1
CAS-40 HC	320(32653)	630	670	68(7.03)	YAST-245	HJ-40A2	SJ-40A2
CAS-50	361(36836)	500	800	145(14.78)	YAST-245	HJ-40A1	SJ-40A1
CAS-50 HC	320(32653)	500	800	145(14.78)	YAST-245	HJ-40A2	SJ-40A2
CAS-63	320(32653)	280	1600	500(50.97)	YAST-245	-	-

▶Short taper mount

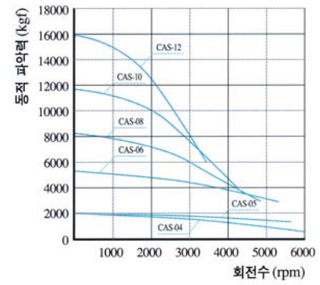
Spec.사양 / Model형식	Order NO. 오더번호	Spindle nose NO. 주축규격	Jaw stroke (Diameter) 죠스트로크(직경)mm	Plunger stroke 플런저 스트로크 mm	Gripping Dia(Extend gripping) 파악경(외경파악)mm		Max. permissible input force / 허용 실린더력 KN(kgf)
					Max 최대	Min 최소	
CAS-15 A8	1AS15 A8	A2-8	18.6	35	381	60	73.5(7438)
CAS-15 A11	1AS15 A11	A2-11	18.6	35	381	60	73.5(7438)
CAS-18 A8	1AS18 A8	A2-8	18.6	35	457	60	73.5(7438)
CAS-18 A11	1AS18 A11	A2-11	18.6	35	457	60	73.5(7438)
CAS-21 A11	1AS21 A11	A2-11	18.6	35	530	110	98.1(9927)
CAS-21 A15	1AS21 A15	A2-15	18.6	35	530	110	98.1(9927)
CAS-24 A11	1AS24 A11	A2-11	18.6	35	610	110	98.1(9927)
CAS-24 A15	1AS24 A15	A2-15	18.6	35	610	110	98.1(9927)

Spec. 사양 / Model형식	Max. static gripping force 최대 정적파악력 KN(kgf)	Max.permissible speed 최고 사용회전수 r.p.m(min⁻¹)	Weight (With standard soft jaws) / 중량 (표준 소프트 죠포함) kg	GD² Moment of inertia N·m²(kgf.m²)	Matching cylinder 적용실린더	Matching hard jaw 적용하드죠	Matching soft jaw 적용소트프죠
CAS-15 A8	147(14876)	2100	98	69.6(7.12)	YAS,C,P,T-200	HJ-15A1	SJ-15A2
CAS-15 A11	147(14876)	2100	98	69.8(7.12)	YAS,C,P,T-200	HJ-15A1	SJ-15A2
CAS-18 A8	147(14876)	1700	132	135.32(13.8)	YAS,C,P,T-200	HJ-15A1	SJ-15A2
CAS-18 A11	147(14876)	1700	132	135.32(13.8)	YAS,C,P,T-200	HJ-15A1	SJ-15A2
CAS-21 A11	194(19632)	1500	195	268.68(27.4)	YAS,C,P,T-200	-	SJ-21A2
CAS-21 A15	194(19632)	1500	195	268.68(27.4)	YAS,C,P,T-200	-	SJ-21A2
CAS-24 A11	194(19632)	1200	250	456.2(46.52)	YAS,C,P,T-200	-	SJ-21A2
CAS-24 A15	194(19632)	1200	250	456.2(46.52)	YAS,C,P,T-200	-	SJ-21A2

Outward Drawing/外型图/外形図/외형도



Dynamic Gripping Force/动夹紧力/動的把握力/ダイナミック把握力/동적 파악력 선도



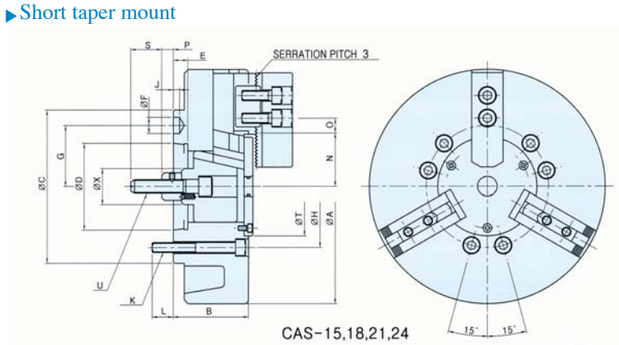
Dimension/尺寸/寸法表/치수표

Item항목 / Model형식	A	B	C	F	G	H	J	K	L	M	N max	N min	O max	O min	P max	P min	Q	R	S	T	U	V	W	X	Y	Z
CAS-04	110	52	60	6	-	80	-	3-M8	16.5	14	26	23.5	10	7	5	-10	25	10	25	3	M10X1.5	-	25	-	27	54
CAS-05	135	52	80	7	-	100	-	3-M8	16.5	19	32	29.5	11.5	7	9	-6	25	10	36	3	M12X1.75	-	28	-	27	58.5
CAS-06	169	74	140	5	116	104.8	23	6-M10	14	20	41	36.7	13	7	10.5	8.5	31	12	36	4	M16X2.0	3-M6	32	32	35	72
CAS-08	210	85	170	5	150	133.4	28	6-M12	15	25	46.3	41.9	22.5	9	12.7	10.6	39	14	36	5	M20X2.5	3-M6	38	38	43	95
CAS-10	254	89	220	5	190	171.4	34	6-M16	18	30	51.1	46.7	30.7	11.2	15.8	13.3	44	16	36	5	M20X2.5	3-M8	38	44	50	110
CAS-12	304	106	220	6	190	171.4	39	6-M16	18	30	61	55.7	48.7	12.7	16.3	13.3	50	18	36	5	M20X2.5	3-M8	38	50	54	111
CAS-15	381	114	300	6	260	235	27	6-M20	20	43	73	65	54.7	15.7	10.4	6.9	50	25.5	55	6	M30X3.5	3-M10	55	60	60	135
CAS-18	450	114	300	6	260	235	27	6-M20	20	43	106.5	98.5	48.5	23.2	9.2	5.7	50	25.5	55	6	M30X3.5	3-M10	55	60	60.3	135
CAS-21	530	125	380	6	330	330	27	6-M20	30	60	86	78	93.5	27.5	9.7	6.2	65	25	55	6	M30X3.5	3-M12	55	60	71	180
CAS-24	610	125	380	6	330	330	27	6-M20	30	60	124.5	116.5	93.5	27.5	9.7	6.2	65	25	55	6	M30X3.5	3-M12	55	60	71	180
CAS-32	800	150	380	6	-	330	-	6-M24	31	76	88	77.7	-	-	3.5	-3	75	25.5	60	8	M30X3.5	-	55	114	83	165
CAS-32HC	800	150	380	6	-	330.2	-	6-M24	30	76.2	172	125.5	-	-	3.5	-3	75	25.5	65	11	M30X3.5	-	55	114	83	165
CAS-40	1000	180	520	8	-	510	-	6-M24	34	100	145	129.8	-	-	5.3	-3	98	30	65	-4	M36X4.0	-	60	-	106	200
CAS-40HC	1000	180	460	8	-	463.6	-	6-M24	32	152.4	207	154	-	-	3.5	-25	110	30	68	0	M36X4.0	-	60	-	110	270
CAS-50	1250	180	520	8	-	464	-	6-M24	32	100	145	129.8	-	-	3.5	-22	98	30	68	-4	M36X4.0	-	60	-	106	200
CAS-50HC	1250	180	520	8	-	163.6	-	6-M24	32	152.4	207	154	-	-	3.5	-25	110	30	68	-4	M36X4.0	-	60	-	106	270
CAS-63	1600	220	720	8	-	648	-	6-M30	46	-	-	-	-	-	13	-47	-	-			M36X4.0	-	-	-	-	-

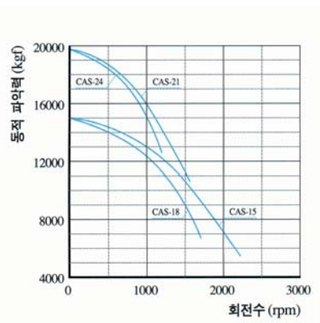
- CAS-32인치 이상은 Soft Jaw 체결부가 Key-Type입니다.
- Soft jaw for larger size than CAS-32 : Key mount type.
- CAS-32インチ以上は生爪の締結部がKey-Typeです。
- CAS-32寸以上软爪的连接部是Key类型.
- CAS-□HC는 미세 조정형 Type입니다.
- CAS-□HC : Combination Type.
- CAS-□HCは微細調整型です。
- CAS-□HC是微细调整型.

Outward Drawing/外型图/外形図/외형도

▶Short taper mount



Dynamic Gripping Force/动夹紧力/動的把握力/ダイナミック把握力/동적 파악력 선도



Dimension/尺寸/寸法表/치수표

Item항목 / Model형식	A	B	C	D	E	F	G	H	J	K(ANSI)	K(JIS)	L(ANSI)	L(JIS)	N max	N min	O max	O min	P max	P min	S	T	U	V	X
CAS-15 A8	381	125	225	139714	20	24.21	85725	171.45	8	5/8-11UNC	6-M16	24	22.5	74.5	65.2	54.5	21.5	35	0	50	175	M27X3.0	85	63
CAS-15 A11	381	125	280	196864	20	29.36	117.5	235	10	3/4-10UNC	6-M20	23	26	74.5	65.2	54.5	21.5	35	0	50	175	M27X3.0	65	63
CAS-18 A8	457	125	225	139714	20	24.21	85725	171.45	8	5/8-11UNC	6-M16	24	22.5	74.5	65.2	90.5	21.5	35	0	50	175	M27X3.0	120	63
CAS-18 A11	457	125	280	196864	20	29.36	117.5	235	10	3/4-10UNC	6-M20	23	26	74.5	65.2	90.5	21.5	35	0	50	175	M27X3.0	100	63
CAS-21 A11	530	140	280	196864	20	29.36	117.5	235	10	3/4-10UNC	6-M20	33.4	31	101.5	92.2	100.5	21.5	35	0	55	220	M30X3.5	110	75
CAS-21 A15	530	140	380	265763	22	35.71	165.1	330.2	10	7/8-9UNC	6-M22	35.4	32	101.5	92.2	100.5	21.5	35	0	55	220	M30X3.5	110	75
CAS-24 A11	610	140	280	196864	20	29.36	117.5	235	10	3/4-10UNC	6-M20	33.4	31	101.5	92.2	136.5	21.5	35	0	55	220	M30X3.5	145	75
CAS-24 A15	610	140	380	265763	22	35.71	165.1	330.2	10	7/8-9UNC	6-M22	35.4	32	101.5	92.2	136.5	21.5	35	0	55	220	M30X3.5	145	75

CASA
CLOSED CENTER POWER CHUCK (SHORT TAPER)
中实动力卡盘(短锥型)/高速中実型パワーチャック(アダプター付)/고속중실형 파워척(아답터 부착형)

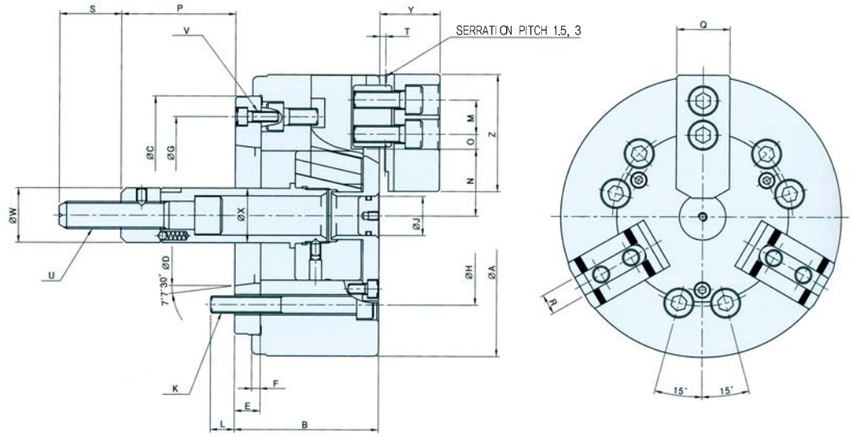
1 • Spindle Direct-Mounting Type International standard A-type spindle specification is applied to mounting face, so it is possible to directly attach to short taper spindle. **2 • Shortening of changing time** Chuck-changing-time can be minimized as run-out accuracy is kept upon attachment. **3 • High Performance and High Quality** It has same structure as CAS power chuck, and gurantees excellent performance and quality. Mounting face and changable parts are compatible with CAS. **4 • Convenient Attachment Option** Because adapters suitable to various spindle specifications can be manufactured and attached, the scope of application is extensive.

1 • 直接安装型：可直接安装在符合国际标准A型主轴的短锥安装面上. **2 •** 换装方便：若更换附件可在最短的时间内，达到其运行的精度要求. **3 •** 性能优，质量好：此卡盘与CAS型卡盘结构相同，因此确保其优越的性能和质量，且附件和安装面具有兼容性. **4 •** 便于安装选择：可通过转接法兰与各种不同规格的主轴连接，扩大了其使用范围.

1 • スピンドル直装型 **2 •** 取替え時間短縮 **3 •** 高性能，高品質 **4 •** 便利な取付けオプション

1 • 스핀들 직장형 2 • 교체시간 단축 3 • 고성능 · 고품질 4 • 부착옵션 용이

Outward Drawing/外型图/外形図/외형도



Dimension/尺寸/寸法表/치수표

Item항목 / Model형식	A	B	C	D	E	F	G	H	J	K	L	M	Nmax	Nmin	Omax	Omin	Pmax	Pmin	Q	R	S	T	U	V	W	X	Y	Z
CASA-06	169	84	140	82.5 63	15	5	116	104.8	23	6-M10	14	20	41	36.7	13	7	86.5	66.5	31	12	36	4	M16X2.0	3-M6	32	32	35	72
CASA-08	210	97	170	106.375	17	5	150	133.4	28	6-M12	18	25	46.3	41.9	22.5	9	110	89	39	14	36	5	M20X2.5	3-M6	38	38	43	95
CASA-10	254	102	220	139.719	18	5	190	171.4	34	6-M16	25	30	51.1	46.7	30.7	11.2	140	115	44	16	36	5	M20X2.5	3-M8	38	44	50	110
CASA-12	304	118	220	139.719	18	6	190	171.4	39	6-M16	25	30	61	55.7	48.7	12.7	145	115	50	18	36	5	M20X2.5	3-M8	38	50	54	111
CASA-15	381	130	300	196.869	22	6	260	235	27	6-M20	23	43	73	65	54.7	15.7	82	47	50	25.5	55	5	M30X3.5	3-M10	55	60	60	135
CASA-18	450	130	300	196.869	22	6	260	235	27	6-M20	23	43	106.5	98.5	48.5	23.2	70	35	50	25.5	55	5	M30X3.5	3-M10	55	60	60.3	135
CASA-21	530	146	380	196.869	27	6	330.2	330.2	27	6-M22	28	60	86	78	93.5	27.5	70	35	65	25	55	6	M30X3.5	3-M12	55	60	71	180
CASA-24	610	146	380	196.869	27	6	330.2	330.2	27	6-M22	28	60	124.5	117	93.5	27.5	70	35	65	25	55	6	M30X3.5	3-M12	55	60	71	180

Specifications/规格/仕様表/사양표

Spec.사양 / Model형식	Order NO. 오더번호	Spindle nose NO. 주축규격	Jaw stroke (Diameter) 죠 스트로크(직경)mm	Plunger stroke 플런져 스트로크 mm	Gripping Dia(Extend gripping) 파악경(외경파악)mm Max.최대	Gripping Dia(Extend gripping) 파악경(외경파악)mm Min.최소	Max. permissible input force/허용 실린더력 KN(kgf)
CASA-06	1ASA06	A2-5	9.2	20	165	19	19(1938)
CASA-08	1ASA08	A2-6	8.8	21	210	23	28(2856)
CASA-10	1ASA10	A2-8	8.8	25	254	24	32.5(3315)
CASA-12	1ASA12	A2-8	10.5	30	304	26	41.5(4233)
CASA-15	1ASA15	A2-11	16	35	381	60	836.2
CASA-18	1ASA18	A2-11	16	35	450	140	836.2
CASA-21	1ASA21	A2-11, 15	16	35	530	82	836.2
CASA-24	1ASA24	A2-11, 15	16	35	610	170	836.2

Spec.사양 / Model형식	Max.static gripping force 최대 정적 파악력 KN(kgf)	Max.permissible speed 최고 사용회전수 r.p.m(min⁻¹)	Weight (With standard soft jaws) / 중량 (표준 소프트 죠포함) kg	GD² Moment of inertia N·m²(kg f.m²)	Matching cylinder 적용실린더	Matching hard jaw 적용하드죠	Matching soft jaw 적용소프트죠
CASA-06	63(6426)	6000	14	1.96(0.20)	YAS, C, P, T-100	HJ-06T1	SJ-06T1
CASA-08	80(8160)	4800	27	5.79(0.59)	YAS, C, P, T-125	HJ-08T1	SJ-08T1
CASA-10	115(11730)	4100	40	12.84(1.31)	YAS, C, P, T-125	HJ-10T1	SJ-10T1
CASA-12	156(16014)	3400	66	29.52(3.01)	YAS, C, P, T-150	HJ-12A1	SJ-12A2
CASA-15	248(35391)	3040	96	70.5(7.2)	YAS, C, P, T-200	HJ-15A3	SJ-15A3
CASA-18	248(35391)	2710	131	95(9.7)	YAS, C, P, T-200	HJ-15A3	SJ-15A3
CASA-21	272(27838)	1940	198	188.2(19.2)	YAS, C, P, T-200	HJ-21B1	SJ-21A1
CASA-24	272(27838)	1760	223	67.8(6.92)	YAS, C, P, T-200	HJ-21B1	SJ-21A1

CAST
2-JAW CLOSED CENTER POWER CHUCK
中实两爪动力卡盘/2つ爪高速中実型パワーチャック/2-죠오 고속중실형 파워척

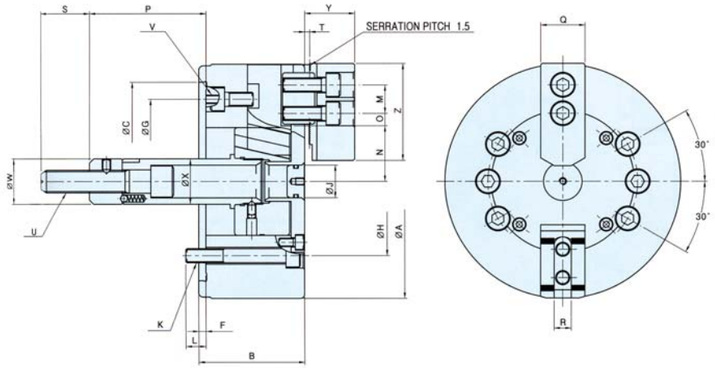
1 • Clamping of Irregular Work It shows excellent performance for machining irregular works such as square bars. **2 • High Performance and High Accuracy** It has the same structure as CAS power chuck, and guarantees excellent performance and quality. Mounting face and changable parts are compatible with CAS. **3 • Spindle Direct-Mounting Type** International standard A-type spindle specification is applied to CASTA type, so that it can be directly attcahed to short taper spindles.

1 • 夹紧不规则工件：此卡盘在夹紧不规则工件时，显示出其优越的性能. 例如方杆的夹紧. **2 •** 性能好，精度高：此卡盘与CAS型卡盘结构相同，因此确保其优越的性能和质量，且附件和安装面具有兼容性. **3 •** 直接安装型：可直接安装在符合国际标准A型主轴的短锥安装面上.

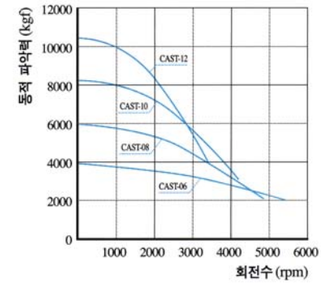
1 • 異刑工作物把握 **2 •** 高性能，高精度 **3 •** スピンドル直装型

1 • 이형공작물 파악 2 • 고성능 · 고정도 3 • 스핀들 직장형

Outward Drawing/外型图/外形図/외형도



Dynamic Gripping Force/动夹紧力/動的把握力/ダイナミック把握力/동적 파악력 선도



Dimension/尺寸/寸法表/치수표

Item항목 / Model형식	A	B	C	F	G	H	J	K	L	M	Nmax	Nmin	Omax	Omin	Pmax	Pmin	Q	R	S	T	U max	V	W	X	Y	Z
CAST-06	169	74	140	5	116	104.8	23	6-M10	14	20	41	36.7	13	7	101.5	81.5	31	12	36	4	M16X2.0	3-M6	32	32	36	72
CAST-08	210	85	170	5	150	133.4	28	6-M12	15	25	46.3	41.9	22.5	9	127	106	39	14	36	5	M20X2.5	3-M6	38	38	43	95
CAST-10	254	89	220	5	190	171.4	34	6-M16	18	30	51.1	46.7	30.7	11.2	158	133	44	16	36	5	M20X2.5	3-M8	38	44	50	110
CAST-12	304	106	220	6	190	171.4	39	6-M16	18	30	61	55.7	48.7	12.7	163	133	50	18	36	5	M20X2.5	3-M8	38	50	54	111

Specifications/规格/仕様表/사양표

Spec.사양 / Model형식	Order NO. 오더번호	Spindle nose NO. 주축규격	Jaw stroke (Diameter) 죠스트로크(직경)mm	Plunger stroke 플런져 스트로크 mm	Gripping Dia(Extend gripping) 파악경(외경파악)mm Max.최대	Gripping Dia(Extend gripping) 파악경(외경파악)mm Min.최소	Max. permissible input force/허용 실린더력 KN(kgf)
CAST-06	1AST06	A2-5	9.2	20	165	19	12.6(1279)
CAST-08	1AST08	A2-6	8.8	21	210	23	18.6(1885)
CAST-10	1AST10	A2-8	8.8	25	254	24	21.6(2187)
CAST-12	1AST12	A2-8	10.5	30	304	26	27.6(2793)

Spec.사양 / Model형식	Max.static gripping force 최대 정적 파악력 KN(kgf)	Max.permissible speed 최고 사용 회전수 r.p.m(min⁻¹)	Weight (With standardsoft jaws) 중량(표준소프트 죠포함) kg	GD² Moment of inertia N·m²(kgf.m²)	Matching cylinder 적용실린더	Matching soft jaw 적용소프트죠
CAST-06	41.9(4241)	4300	12.5	1.67(0.17)	YAS, C, P, T-100	SJ-06T1
CAST-08	53.2(5385)	3600	24	5.20(0.53)	YAS, C, P, T-125	SJ-08T1
CAST-10	76.5(7742)	3100	35.5	11.47(1.17)	YAS, C, P, T-125	SJ-10T1
CAST-12	104.4(10569)	2500	60.5	27.75(2.83)	YAS, C, P, T-150	SJ-12A2

C11MB·C13M

3-JAW DRAW DOWN CHUCK
圆柱式外径用三爪动力卡盘/3つ爪ドローダウンチャック/3-죠오드로우 다운 척

1・Stable Clamping As a work piece is pulled to datum plane for clamping it gurantees excellent stability and gripping force. **2・Multiple Utilities** It shows excellent performance in clamping diverse work piece such as flange, shaft, gear, crank and taper type.
★**C11MB** chuck is to clamp outer diameter of work piece, and C13M chuck is to clamp inner diameter.

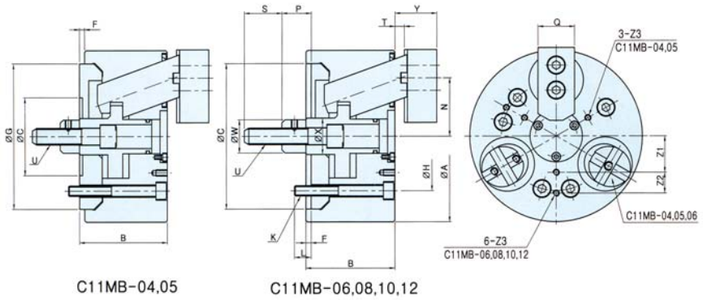
1・夹紧平稳：当加工工件被拉至基准面进行夹紧时，保证夹紧牢固，精确有力. **2・用途广泛**：此卡盘可牢固夹紧多种工件，如凸缘轴，齿轮，曲柄以及锥形，楔形等工作.

★**C11MB**卡盘用于对工件外径的夹紧，C13M卡盘用于对工件内径的夹紧.

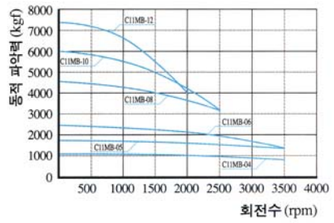
1・安全な把握 2・多目的な用途
★**C11MB**チャックは工作物の外径を把握する構造で、C13Mチャックは内径を把握する構造です.

1・안정된 파악 2・다목적 용도
★**C11MB**척은 공작물의 외경을 파악하는 구조이며,C13M 척은 내경을 파악하는 구조입니다.

Outward Drawing/外型图/外形図/외형도



Dynamic Gripping Force/动夹紧力/動的把握力グラフ/동적파악력 선도



Dimension/尺寸/寸法表/치수표

Item항목 / Model형식	A	B	C	F	G	H	K	L	Nmax	Nmin	Pmax	Pmin	Q	S	Tmax	Tmin	U	W	X	Ymax	Ymin	Z1	Z2	Z3
C11MB-04	110	60	60	5	98	80	3-M8	14	37	34.5	19	12	25	20	10.5	3.5	M10X1.5	25	28	30	23	25	-	M6XDP11
C11MB-05	130	70	80	5	118	100	3-M8	9	44	41.5	19	12	30	25	10.5	3.5	M12X1.75	28	30	35	28	30	-	M6XDP11
C11MB-06	165	85	140	5	-	104.77	6-M10	11	58	54.4	33	23	35	36	14	4	M16X2.0	32	35	45	35	35	20	M8XDP13
C11MB-08	210	95	190	5	-	133.35	6-M12	23	71	67.4	38	28	40	36	14	4	M20X2.5	38	42	55	45	45	25	M8XDP13
C11MB-10	254	110	230	5	-	171.45	6-M12	22	85	79.6	47	32	50	46	19	4	M24X3.0	50	52	65	50	55	30	M10XDP17
C11MB-12	304	125	230	5	-	171.45	6-M16	27	102	96.6	47	32	60	50	19	4	M27X3.0	52	55	75	55	70	35	M10XDP17

Specifications/规格/仕様表/사양표

Spec.사양 / Model형식	Order NO. 오더 번호	Jaw stroke(Diameter) 죠 스트로크(직경) mm	Plunger stroke 플런져 스트로크 mm	Gripping Dia(Extend gripping) 파악경(외경파악)mm		Max. permissible input force/허용 실린더력 KN(kgf)
				Max 최대	Min 최소	
C11MB-04	11904	5	7	110	18	5.9(601.8)
C11MB-05	11905	5	7	130	25	9.8(999.6)
C11MB-06	11906	7.2	10	165	35	14.7(1499)
C11MB-08	11908	7.2	10	210	40	24.5(2499)
C11MB-10	11910	10.8	15	254	50	34.3(3499)
C11MB-12	11912	10.8	15	304	50	44.1(4498)

Spec.사양 / Model형식	Max. static gripping force 최대 정적 파악력 KN(kgf)	Max.permissible speed 최고 사용 회전수 r.p.m(min^{-1})	Weight (With standard soft jaws) 중량 (표준소프트 죠포함) kg	GD^2 Moment of inertia $N{\cdot}m^2$ ($kgf.m^2$)	Matching cylinder 적용실린더	Matching soft jaw 적용소프트죠
C11MB-04	10.3(1051)	7000	4.5	0.312(0.032)	YAS, C, P, T-65	SJ-04D1
C11MB-05	16.8(1714)	6000	7.3	0.704(0.072)	YAS, C, P, T-80	SJ-04D1
C11MB-06	24.7(2519)	6000	13.8	1.764(0.18)	YAS, C, P, T-100	SJ-06D1
C11MB-08	44.1(4498)	5000	27	6.64(0.68)	YAS, C, P, T-125	SJ-08D1
C11MB-10	58.8(5998)	4200	45.8	14.908(1.52)	YAS, C, P, T-150	SJ-10D1
C11MB-12	73.5(7497)	3300	68	31.388(3.20)	YAS, C, P, T-150	SJ-12D1

C63M·C64M

SWING LOCK CHUCK
摆动锁紧卡盘/強力揺動チャック/강력요동형 척

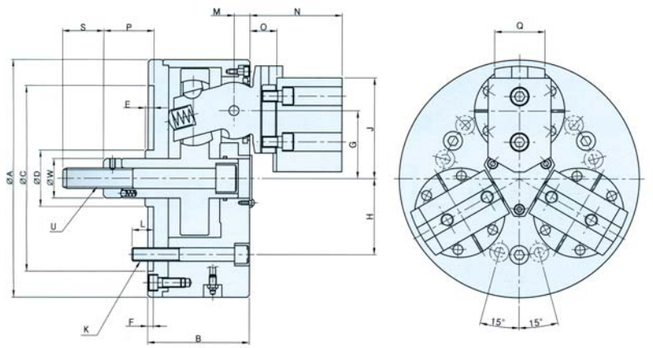
1・Strong Gripping Force It is the chuck that jaws pull materials and stick them to the chuck base plate for stable clamping. **2・Clamping Taper Part** It can accurately clamp (within 20°)the rough face of casting and forging parts of taper face and clamp inner and outer diameter. **3・Swing Type Jaw** As jaw is balanced and swung (within 5°)in line with configuration of clamping face of materials, it performs the most stable clamping. **4・Excellent Dust-proof Performance** It prevents foreign substances and chips with a dust seal installed in the locker arm.
5・C63M : 3 JAW Type, **C64M :** 2 JAW Type

1・夹紧力强：此卡盘的卡当能拉住加工工件，将其卡在至卡盘基准面，牢固卡紧. **2・夹紧锥形件**：此卡盘能牢固卡紧锥度在20°以内表面凹凸不平的铸件和锻件的锥面，还可夹紧工件的内，外径. **3・摆动型卡爪**：当卡爪处于平衡状态下，在加工工件的表面直线摆动5°以内，夹紧最牢固. **4・防尘性能好**：为了防止外界物质和碎屑进入卡盘，我们在锁柄上罩上了防尘罩.
5・C63M：三爪型，**C64M**・两爪型

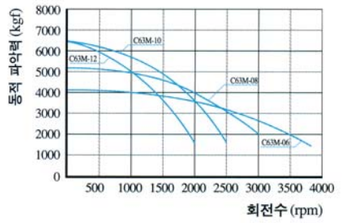
1・強い把握力 2・テーパ部把握 3・揺動型の爪 4・防塵性能優秀
5・ C63M : 3 JAW Type, C64M : 2 JAW Type

1・강력한 파악력 2・테이퍼부 파악 3・요동형의 죠오 4・방진성능 우수
5・C63M : 3 JAW Type, C64M : 2 JAW Type

Outward Drawing/外型图/外形図/외형도



Dynamic Gripping Force/动夹紧力/動的把握力グラフ/동적파악력 선도



Dimension/尺寸/寸法表/치수표

Item항목 / Model형식	A	B	C	D	E	F	G	H	J	K	L	M	N	O	Pmin	Pmax	Q	S	U	W
C63M-06	175	77	140	42	5	5	51	104.8	73.1	3-M10X1.5	14	13.5	44.2	19.3	32.5	43.9	38.1	38	M16X2	32
C63M-08	210	89	190	50	5	5	60	133.4	88.9	3-M12X1.75	19	16.5	52.7	23.3	37.5	51.9	44.4	38	M18X2.5	35
C63M-10	254	106	230	58	5	5	72	171.4	112.7	3-M16X2	20	19.5	65.6	29.1	50	67.5	57.1	46	M24X3	45
C63M-12	304	108	280	66	5	5	92.5	171.4	133.2	6-M16X2	20	19.5	65.6	29.1	57	74.5	57.1	50	M27X3	53

Specifications/规格/仕様表/사양표

Spec.사양 / Model형식	Order NO. 오더번호	Jaw stroke(Diameter) 죠 스트로크(직경) mm	Plunger stroke 플런져 스트로크 mm	Gripping Dia(Extend gripping) 파악경(외경파악)mm		Max. permissible input force/허용 실린더력 KN(kgf)
				Max 최대	Min 최소	
C63M-06	1C6306	7.4	11.4	120.0	12	21.6(2200)
C63M-08	1C6308	9.2	14.4	150.0	16	28.4(2900)
C63M-10	1C6310	11.8	17.5	205.0	50	35.3(3600)
C63M-12	1C6312	11.8	17.5	240.0	63	35.3(3600)

Spec.사양 / Model형식	Max. static gripping force 최대 정적 파악력 KN(kgf)	Max.permissible speed 최고 사용회전수 r.p.m(min^{-1})	Weight (With standard soft jaws) 중량(표준소프트 죠포함) kg	GD^2 Moment of inertia $N{\cdot}m^2$($kgf.m^2$)	Matching cylinder 적용실린더
C63M-06	64.7(6600)	3800	14	0.49(0.05)	YAS, C, P, T-100
C63M-08	85.3(8700)	3000	23	1.08(0.11)	YAS, C, P, T-125
C63M-10	106(10800)	2500	40	2.64(0.27)	YAS, C, P, T-150
C63M-12	106(10800)	2000	59	5.88(0.60)	YAS, C, P, T-150

SOFT JAW

SOFT JAW
软爪 / 生爪 /소프트 죠오

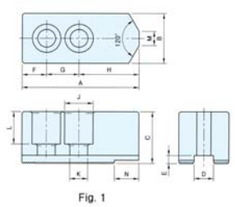


Fig. 1

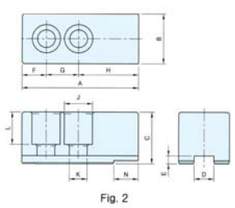
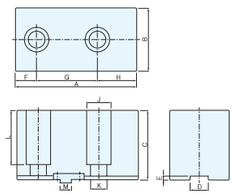


Fig. 2



Dimension/尺寸/寸法表/치수표

Type	Fig	Serration	A	B	C	D	E	F	G	H	J	K	L	M	N	Matching Chuck 적용척
SJ-04T1	1	1.5X60°	47.5	25	25	11	4	9.5	16	22	14	9/8.2	16	4	5.5	27M/37M-4,5
SJ-04T2	1	1.5X60°	54	25	25	10	5	10	14	30	13.5	9	14	8	3	1MA-4
SJ-05T1	1	1.5X60°	54	23	25	10	4	11.5	14	28	13.5	8.5	16.5	5	-	CAH-5
SJ-05A1	2	1.5X60°	58.5	25	25	10	5	8	19	31.5	14	9	14	-	-	1MA-5
SJ-06T1	1	1.5X60°	72	31	31.5	12	5	15	20	37	17.5	11	19.5	12	15	CAH/CAS/CGH-6
SJ-06A1	2	1.5X60°	66	35	35	12	5	14.5	20	31.5	17.5	11	22	-	-	27M/37M-6
SJ-08T1	1	1.5X60°	95	37	37.5	14	5	20	25	50	20	14	22.5	12	20	CAH/CAS/CGH-8
SJ-08A1	2	1.5X60°	85.5	40	40	16	5	20	25	40.5	20	13.5	26	-	-	27M/37M-8
SJ-10T1	1	1.5X60°	110	44	44.5	16	5	30	30	50	20	14	28.5	15	20	CAH/CAS/CGH-10
SJ-10T2	1	1.5X60°	108	45	45	18	5	24	30	54	23	16	30	8	-	27M/37M-10
SJ-12T1	2	1.5X60°	129	49	49	18	6	39	30	60	23	16	31	-	-	CAS/1MA12
SJ-12A1	2	1.5X60°	111	49	49.5	21	5	21	30	60	25	17	31.5	-	-	CAH-12
SJ-12A3	2	1.5X60°	111	50	60	21	5	25	35	51	26	18	42	-	-	27M/37M-12
SJ-15A1	2	1.5X60°	165	59	59.5	22	8	47	43	75	32	22	36	-	-	CAH-15,18
SJ-15A2	2	3.0X60°	156	65	70	26	8	34	50	72	32	22	50	-	-	1MA-15,18,21
SJ-15A3	2	1.5X60°	135	50	59	25.5	5	26	43	66	32	21	39	-	-	CAS-15,18
SJ-21A1	2	3.0X60°	180	59	59.5	25	9.5	40	60	80	32	22	36	-	-	CAH/CAS-21,24
SJ-21A2	2	3.0X60°	180	65	70	26	8	34	50	96	32	22	50	-	-	1MA-21,24
SJ-32A1	3	-	165	75	83	12.7	12.5	21.9	76.2	66.9	32	22	54	19.03	-	CAS-32, 32HC
SJ-40A1	3	-	200	98	110	30	6	35	100	65	40	27	86	19.03	-	CAS-40, 50
SJ-40A2	3	-	270	110	110	30	8.5	48.8	2-76.2	68.8	40	27	85	19.03	-	CAS-40HC, 50HC

HARD JAW

HARD JAW
硬爪 / 硬爪 / 하드 죠오

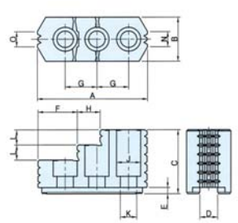


Fig. 1

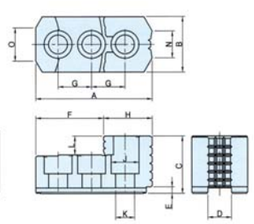
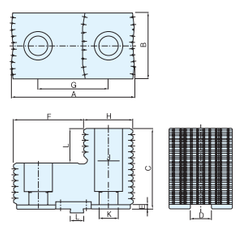


Fig. 2



Dimension/尺寸/寸法表/치수표

Type	Fig	Serration	A	B	C	D	E	F	G	H	J	K	L	N	O	Matching Chuck 적용척
HJ-04A1	2	1.5X60°	54.3	28	30	11	5	23.7	16	30.6	14	9	8	-	-	27M/37M-4,5
HJ-06T1	1	1.5X60°	75.5	31	41	12	5	30	20	12	17.5	11	10	10	15	CAH/CAS/1MA-6
HJ-06A1	2	1.5X60°	65.8	35	35	12	5	32.7	20	33.1	17.5	11	11	9	13	27M-6/37M-6
HJ-08T1	1	1.5X60°	87	39	51	14	5	27	25	22	19	13	12	12	12	CAH/CGH/CAS-8
HJ-08A2	2	1.5X60°	83.1	40	40	16	5	42.8	25	40.3	20	14	13	12	11	27M-8/37M-8
HJ-10T1	1	1.5X60°	101	40	54	16	5	43	30	17	19	13	13	15	15	CAH/CGH/CAS-10
HJ-10A1	2	1.5X60°	98.3	45	45	18	5	54.3	30	44	23	16	15	17	24	27M/37M-10
HJ-12A1	2	1.5X60°	105.8	50	52	21	5	60.5	30	45.3	25	17	17	30	30	CAH-12
HJ-12A2	2	1.5X60°	114.2	50	55	21	5	68.1	35	46.1	26	18	20	18	18	27M/37M-12
HJ-12T1	1	1.5X60°	104.4	50	62	18	6	29.6	30	30.3	23	16	15	25	25	CAS/1MA-12
HJ-15T1	1	1.5X60°	159.2	62	86	22	8	66	43	35	32	21	20	40	40	CAH-15,18
HJ-15A1	2	3.0X60°	153.5	65	75	26	8	83	50	70.5	32	22	30	44	44	1MA-15,18,21
HJ-15A3	1	1.5X60°	149	62	86	25.5	5	69	43	27	32	21	20	43	38	CAS-15,18
HJ-21B1	2	3.0X60°	159.5	80	90	25	12	103.48	50	56.2	32	22	40	55	-	CAH/CAS-21,24
HJ-32A1	3	-	145	70	75	12.7	5	66	76.2	79	32	22	32	19.03	-	CAS-32,32HC
HJ-40A1	3	-	170	90	110	30	6	110	100	70	40	27	47	19.03	-	CAS-40,50
HJ-40A2	3	-	222.5	80	117	30	8.5	133	114.3	89.5	40	27	55	19.03	-	CAS-40HC,50HC

ADAPTER

ADAPTER
法兰 / アダプタ /아답터

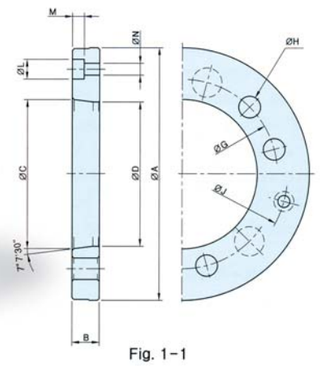


Fig. 1-1

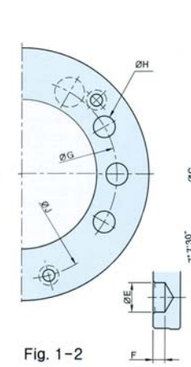


Fig. 1-2

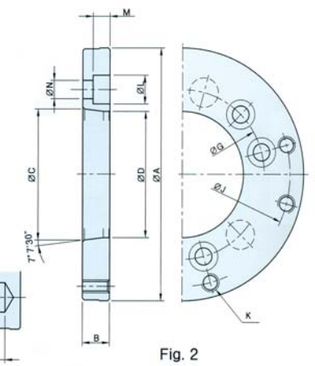


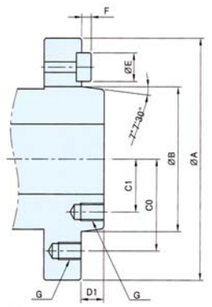
Fig. 2

Outward Drawing/外型图/外形図/외형도

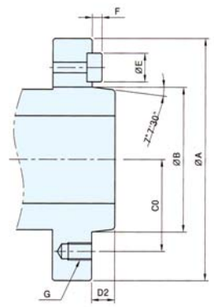
Model형식 \ Item항목	spindle nose	Fig	A	B	C	D	E	F	G	H	J	K	L	M	N	Matching Chuck적용척
AD-06A05	A2-5	1-1	140	15	82.563	79.7	16.3	6.5	104.78	12	116	-	11	6.5	6.6	CAH, CAS
AD-08A05	A2-5	2	170	25	82.563	79.7	16.3	6.5	104.78	-	133.35	M12	17.5	11.5	11	CAH, CAS
AD-08A06	A2-6	1-1	170	17	106.375	103	19.45	6.5	133.35	13.5	150	-	11	6.5	6.6	CAH, CAS
AD-10A06 AD-12A06	A2-6	2	220	25	106.375	103	19.45	6.5	133.35	-	171.45	M16	20	13.5	14	CAH, CAS
AD-10A08 AD-12A08	A2-8	1-1	220	18	139.719	136	24.2	8	171.45	18	190	-	14	10	9	CAH, CAS
AD-15A11	A2-11	1-1	300	22	196.87	192.1	29.36	10	235	21	260	-	17	11	11	CAH
ADT-06A05	A2-5	1-2	140	15	82.563	79.7	16.3	6.5	104.78	12	116	-	11	6.5	6.6	CAHT, CAST
ADT-08A06	A2-6	1-2	170	17	106.375	103	19.45	6.5	133.35	13.5	150	-	11	6.5	6.6	CAHT, CAST
ADT-10A08	A2-8	1-2	220	18	139.719	136	24.2	8	171.45	18	190	-	14	10	9	CAHT, CAST

Short taper Spindle Nose

Short taper Spindle Nose
主轴端规格/主軸テーパ規格/주축단 규격



SPINDLE A1 - Type



SPINDLE A2 - Type

Dimension/尺寸/寸法表/치수표

spindle nose	A	B	C0	C1	A1-Type D1	A2-Type D2	E	F	G
3	92	53.975	35.3	-	-	11	-	-	M10
4	108	63.513	41.3	-	-	11	14.15	5	M10
5	133	82.563	52.4	30.95	14.29	13	15.9	5	M10
6	165	106.375	66.7	41.3	15.88	14	19.05	5	M12
8	210	139.719	85.7	55.55	17.46	16	23.8	6	M16
11	280	196.869	117.5	82.55	19.55	18	28.6	8	M20
15	380	285.77	165.1	123.8	20.64	19	34.9	8	M22

Model Description/型号说明/型式番号表示/형식번호 표시

▶Soft Jaw

SJ - □□ □ □
- □□: Chuck Size
- □: Option
  - Shape A | Flat(각형)
  - B | Protrude(山형)

▶Hard Jaw

HJ - □□ □ □
- □□: Chuck Size
- □: Option
  - Shape A | 2 Step(2단)
  - B | 3 Step(3단)

▶Adapter

AD □ - □□ A□□
- □: Blank | Standard; T | 2-jaw type
- □□: Chuck Size
- A□□: Spindle Nose

YAH

BIG BORE HYDRAULIC CYLINDER
大通孔回转油缸/高速中空型回転油圧シリンダー/고속중공형 회전유압실린더

1 • Safety Guaranteed It contains check valves so that pulling force is kept for a certain time upon power failure, securing safety. **2 • Easy Repair & Check** Thanks to easy access of chuck valves from outside, it is possible to repair and check them, while cylinder is attached to the equipment. **3 • Leakage Prevention Design(Patent Registation:0172805)** Cylinder body is designed with a leakage prevention structure to totally eliminate the possibility of leaking. **4 • Highest Draw Pull** As weight is reduced and draw pull is increased, it gurantees the best machining efficiency and stronger power.

1 • 保障安全：此回转油缸带有单向阀，当断电时，压力仍可保持一段时间，因此确保安全. **2 •** 便于检测和维修：由于从外部便于操控逆止阀，当回转油缸安装到设备上后仍便于修理和检测. **3 •** 防泄漏设计(专利注册:0172805)：回转油缸主体采取防泄漏设计，完全消除漏的可能性. **4 •** 动力强大：当回转油缸重量减轻及拉力加大时，仍可保证最高的机械效率和强大的动力.

1 • 安全確保 **2 •** 補修点検が容易 **3 •** 漏油防止設計(特許登録) **4 •** 同クラス最大推力

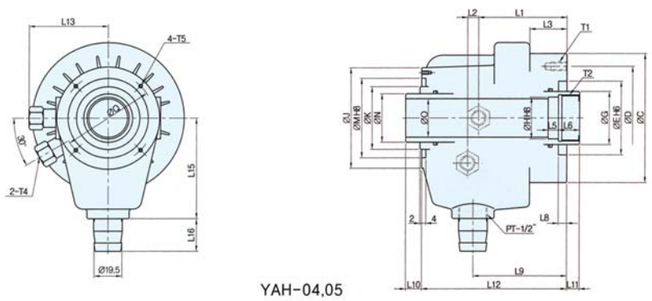
1 • 안전 확보 2 • 보수점검이 용이 3 • 누유방지 설계(특허등록 : 0172805) 4 • 동급 최대 추력

Specifications/规格/仕様表/사양표

Spec.사양 / Model형식	Order NO. 오더번호	Cylinder Dia 실린더내경 mm	Piston stroke 피스톤스트로크 mm	Thru hole Dia 실린더관통경 mm	Piston surface area 피스톤 단면적 ㎠		Max. Draw bar pull 실린더 추력 KN(kgf)	
					Extend 압측	Retract 인측	Extend 압측	Retract 인측
YAH-04	21404	75	10	21	36.5	34.0	11.8(1201)	11.0(1119)
YAH-05	21405	85	10	31	43.2	39.8	13.9(1421)41	12.8(1309)
YAH-06	2AH06	130	15	46	110.6	99.5	41.6(4242)	37.4(3816)
YAH-08	2AH08	160	20	52	172.8	162.6	65.0(6627)	61.2(6236)
YAH-10	2AH10	185	25	77	213.3	197.9	80.2(8180)	74.5(7590)
YGH-10	2GH10	185	25	82	205.1	190.2	77.2(7866)	71.6(7295)
YAH-12	2AH12	205	30	91	251.5	235.0	94.6(9646)	88.4(9013)
YAH-15	2AH15	255	23	117.5	367.5	356.7	129.6(13230)	125.8(12841)

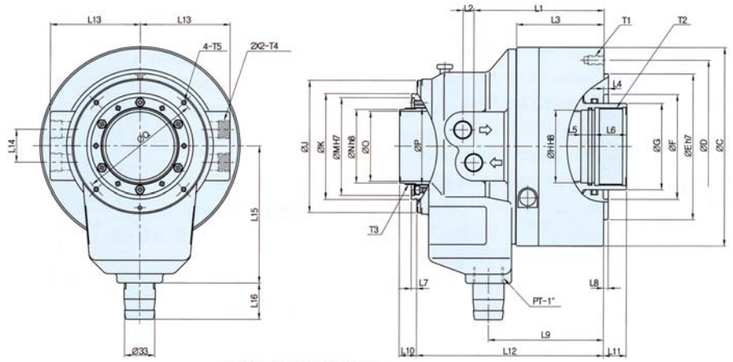
Spec.사양 / Model형식	Max. operating pressure 최고 사용 유압력 kgf/㎠	Max.permissible speed 최고사용회전수 r.p.m(min⁻¹)	Total leakage 총드레인량 ℓ/min	Weight 중량 kg	GD² Moment of inertia N·m²(kgf.m²)	Matching chuck 적용척
YAH-04	35	8000	1.6	5.7	0.16(0.016)	CAH-04
YAH-05	35	7000	1.6	6.7	0.24(0.024)	CAH-05
YAH-06	40.8	7000	3.0	12.0	0.74(0.075)	CAH-06
YAH-08	40.8	6200	3.5	15.5	1.96(0.20)	CAH-08
YAH-10	40.8	4700	4.2	23.0	3.43(0.35)	CAH-10
YGH-10	40.8	4500	4.5	29.2	4.80(0.49)	CGH-10
YAH-12	40.8	3800	4.5	31.0	5.69(0.58)	CAH-12
YAH-15	40.8	2800	7.0	52	14.7(1.5)	CAH-15,18,21,24

Outward Drawing/外型图/外形図/외형도



YAH-04,05

Outward Drawing/外型图/外形図/외형도



YAH-06,08,10,12,15

Dimension/尺寸/寸法表/치수표

Item항목 / Model형식	C	D	E	F	G	H	J	K	M	N	O	P	Q
YAH-04	100	85	60	-	35	25	85	45	65	30	21	-	76
YAH-05	110	95	65	-	45	36	90	55	65	40	31	-	76
YAH-06	163	130	100	80	65	50	108	82.2	74	50	46	53	98
YAH-08	195	170	130	90	70	55	120	91.2	82	56	52	60	110
YAH-10	218	190	160	120	95	80	145	116.2	107	81	77	85	135
YGH-10	223	190	160	125	100	86	167	121.2	112	87	82	90	154
YAH-12	247	215	180	135	110	95	167	131.2	122	96	91	100	154
YAH-15	307	275	230	170	140	123	212	167	160	134.6	117.5	135	198

Item항목 / Model형식	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10 max	L10 min	L11 max	L11 min
YAH-04	72	13	16	-	9	18	-	5	78	22	12	13	3
YAH-05	77	14	16	-	5	25	-	5	84	22	12	13	3
YAH-06	123.5	11	82.5	5.5	15	30	6	5	113.5	34	19	15	0
YAH-08	130	12	88.5	5.5	15	30	6	5	119.5	39	19	20	0
YAH-10	143	12	95.5	5.5	15	35	6	5	126.5	44	19	25	0
YGH-10	149.5	14	95.5	5.5	15	35	6	5	128.5	44	19	25	0
YAH-12	162.5	14	108.5	5.5	15	35	6	5	141.5	49	19	30	0
YAH-15	165	20	99	6	20	45	9.5	6	173.7	40.5	17.5	24	1

Item항목 / Model형식	L12	L13	L14	L15	L16	T1	T2	T3	T4	T5
YAH-04	130	73	-	95	50	6-M6X14	M28XP1.5	-	PT-1/4	M4X7
YAH-05	137	76	-	100	50	6-M6X14	M38XP1.5	-	PT-1/4	M4X7
YAH-06	178	75	36	120	40	6-M10X18	M55XP2.0	M52XP1.5	PT-1/2	M5X10
YAH-08	186	81	36	130	40	6-M10X18	M60XP2.0	M58XP1.5	PT-1/2	M5X10
YAH-10	205	95	36	150	40	12-M10X18	M85XP2.0	M84XP2.0	PT-1/2	M5X10
YGH-10	217	107	36	166	40	12-M10X18	M90XP2.0	M89XP2.0	PT-1/2	M6X10
YAH-12	230	107	36	166	40	12-M12X22	M100XP2.0	M99XP2.0	PT-1/2	M5X10
YAH-15	252.5	134	20	215	40	12-M16X32	M130XP2.0	-	PT-1/2	6-M6X10

Model Description/型号说明/型式番号表示/형식번호 표시

Y□H □□ - □□

- Cylinder Size
- Cylinder Model A | Big Bore(표준형)
  G | Great Bore(대관통경)
- Blank | Standard
  CA | Coolant Collector
  CB | Coolant Collector + Proximity Switch

YAS □ - □□□

- Cylinder Size
- Blank | Standard
  C | Check Valve Type
  P | Proximity Switch Type
  T | Check Valve + Proximity Switch Type

YSH

SUPER HIGH SPEED BIG BORE HYDRAULIC CYLINDER
超大通孔油缸/超高速中空スリム型シリンダー/초고속 중공슬림형 실린더

1 • Compatibility The mounting face and major parts are mutually compatible with YAH type cylinder. **2 • Small Size & Light Weight** It is 30% shorter than YAH type cylinder so that it is small in size, light in weight and high speed rotation. **3 • Safety Guaranteed** It contains check valves so that pulling force is kept for a certain time upon power failure, securing safety. **4 • Leakage Prevention Design(Patent Registration:0172805)** Cylinder body is designed with a leakage prevention structure to totally eliminate the possibility of leaking. **5 • Highest Draw Pull** As weight is reduced and draw pull is increased, it gurantees the best machining efficiency and stronger power.

1 • 实现兼容性：实现YAH型油缸与连接部的兼容性. **2 •** 体积小，重量轻：与YAH型油缸相比长度缩短了30%，达到体积小，重量轻，高速化的效果. **3 •** 保障安全：此回转油缸带有单向阀 当断电时，压力仍可保持一段时间，因此确保安全. **4 •** 防泄漏设计(专利注册:0172805)：回转油缸主体采取防泄漏设计，完全消除漏的可能性. **5 •** 动力强大：当回转油缸重量减轻及拉力加大时，仍可保证最高的机械效率和强大的动力.

1 • 互換性実現 **2 •** 小型化，軽量化 **3 •** 安全確保 **4 •** 漏油防止設計(特許登錄) **5 •** 同クラス最大推力

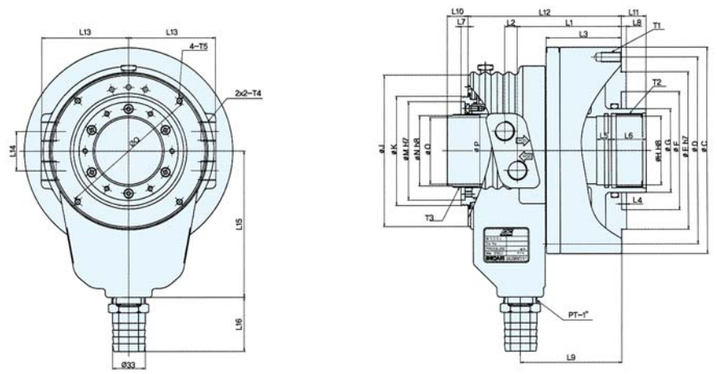
1 • 호환성 실현 2 • 소형화 경량화 3 • 안전 확보 4 • 누유방지 설계(특허등록0172805) 5 • 동급 최대 추력

Specifications/规格/仕様表/사양표

Spec.사양 / Model형식	Order NO. 오더번호	Cylinder Dia 실린더내경 mm	Piston stroke 피스톤스트로크 mm	Thru hole Dia 실린더관통경 mm	Piston surface area 피스톤 단면적 ㎠		Max. Draw bar pull 실린더 추력 KN(kgf)	
					Extend 압측	Retract 인측	Extend 압측	Retract 인측
YSH-05	2SH05	105	15	36	67.15	64.47	25(2549)	24(2447)
YSH-06	2SH06	130	16	46	107.29	95.53	39(4025)	35(3586)
YSH-08	2SH08	156	22	52	159.77	148.62	57.6(5879)	53.6(5469)
YSGH-08	2SGH08	170	25	68	179.6	166.2	66.8(6814)	61.8(6306)
YSH-10	2SH10	185	25	77	209	193.9	77.9(7944)	72.1(7357)
YSH-15	2SH15	255	23	117.5	384.3	351.7	136.8(13953.5)	125.2(12770.1)

Spec.사양 / Model형식	Max. operating pressure 최고사용유압력 kgf/㎠	Max.permissible speed 최고사용회전수 r.p.m(min⁻¹)	Total leakage 총드레인량 ℓ/min	Weight 중량 kg	GD² Moment of inertia N·m²(kgf.m²)	Matching chuck 적용척
YSH-05	40.8	8000	3	7.3	0.09(0.010)	CAH-05
YSH-06	40.8	7000	3	9.5	0.20(0.021)	CAH-06
YSH-08	40.8	6200	3.9	13.5	0.39(0.040)	CAH-08
YSGH-08	40.8	5600	4	16.5	0.63(0.065)	CGH-08
YSH-10	40.8	5000	4.2	16.8	0.81(0.083)	CAH-10
YSH-15	40.8	3000	7	52	18.6(1.9)	CAH-15, 18, 21, 24

Outward Drawing/外型图/外形図/외형도



YSH-05,06,08,10,15 YSGH-08

Dimension/尺寸/寸法表/치수표

Item항목 / Model형식	C	D	E	F	G	H	J	K	M	N	O	P	Q
YSH-05	137	115	100	65	48	38	108	76	64	42	36	45	98
YSH-06	165	130	100	80	65	50	108	82.5	74	50	46	53	98
YSH-08	190	170	130	90	70	55	126	90	81	56	52	60	113
YSGH-08	210	190	160	120	85	70	154	111	100	71.5	68	75	145
YSH-10	222	190	160	120	95	80	164	121	110	81	77	85	155
YSH-15	307	275	230	170	140	123	216	167	152	122	117.5	125	198

Item항목 / Model형식	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10 max	L10 min	L11 max	L11 min
YSH-05	94.2	8.9	69	6	15	25	7	5	99.5	36	21	15	0
YSH-06	97.3	7.4	72.5	6	15	30	7	5	102	37	21	16	0
YSH-08	100.1	8.9	74	6	15	30	7	5	105.2	43	21	22	0
YSGH-08	105.2	12.7	76	5	15	35	7	5	102.5	46	21	25	0
YSH-10	115.2	12.7	86	5	15	35	7	5	112.5	46	21	25	0
YSH-15	141.5	18.5	102	6	20	45	9.5	6	163	46.3	23.3	24	1

Item항목 / Model형식	L12	L13	L14	L15	L16	T1	T2	T3	T4	T5
YSH-05	134.1	66.5	34	115	55	6-M10X18	M42XP1.5	M44XP1.5	PT-3/8	4-M5X10
YSH-06	135.6	78	42	120	55	6-M10X18	M55XP1.5	M52XP1.5	PT-1/2	4-M5X10
YSH-08	140	80	36	130	55	6-M10X18	M60XP2.0	M58XP1.5	PT-1/2	4-M5X10
YSGH-08	155	88	40	149	55	6-M10X18	M75XP2.0	M74XP1.5	PT-1/2	4-M5X10
YSH-10	165	92.5	40	165	55	6-M10X18	M85XP2.0	M84XP2.0	PT-1/2	4-M5X10
YSH-15	214	140	40	215	55	12-M16X32	M130XP2.0	M124XP2.0	PT-1/2	4-M6X15

CA

COOLANT COLLECTOR
冷却液收集器/クーラントコレクター/쿨란트 콜렉터

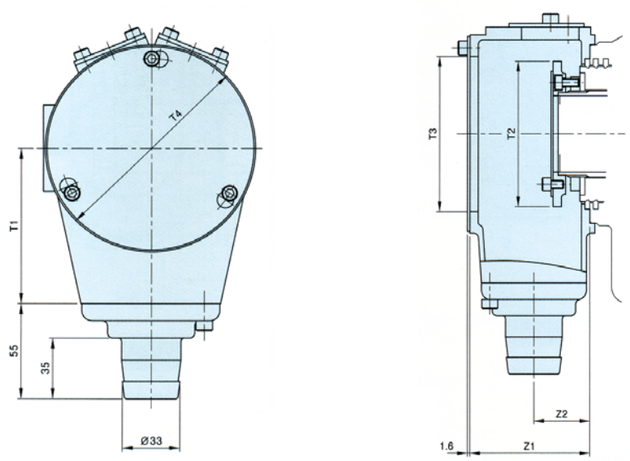
1 • Coolant Collection Attached to the rear part of the great bore cylinder, it performs the role of collecting and circulating coolant used during machining. **2 • Checking Cylinder operation** As proximity switchs(2EA) in non-contact method detect the location of detection ring assembled to the end of piston and check whether cylinder is operating, it can be used for interface of automated devices as well as prevention of danger.

1 • 收集冷却液：将其安装在大通孔回转油缸的后部，用来收集和循环加工过程中使用的冷却液
2 • 检测回转油缸的运行：由于带有接近开关以非接触的方式来检测安装在活塞末端检测圈的置，并检测回转油缸是否正常运行，它可与自动控制装置连接组成自动控制系统，可以防止危险情况的发生.

1 • 切削油回収 2 • シリンダー作動有無確認

1 • 절삭유 회수 2 • 실린더 작동유무 확인

Outward Drawing/外型图/外形図/외형도



CA | Coolant Collector / 冷却液收集器/クーラントコレクター/ 쿨란트 콜렉터

Dimension/尺寸/寸法表/치수표

Item항목 / Model형식	T1	T2	T3	T4	T5	Z1	Z2	Matching Cylinder/적용실린더
CA-06	90	ø88	ø94	ø121	61	72.5	34	YSH/YAH-06
CA-08	100	ø100	ø106	ø132	67	78.5	34	YSH/YAH-08
CA-10	125	ø125	ø132	ø158	80	82.5	34	YSH/YAH-10
CA-12	140	ø145	ø155	ø185	95	87.5	34	YSH/YAH-12
CSG-08	142	ø143	ø154	ø177	92.5	88.5	37.5	YSGH-08
CG-10	142	ø143	ø154	ø177	92.5	88	37	YGH-10

Model Description/型号说明/型式番号表示/형식번호 표시

CA - □□

Cylinder Size

YAS

CLOSED CENTER HYDRAULIC CYLINDER
中实回转油缸/高速中実型回転油圧シリンダー/고속중실형 회전유압실린더

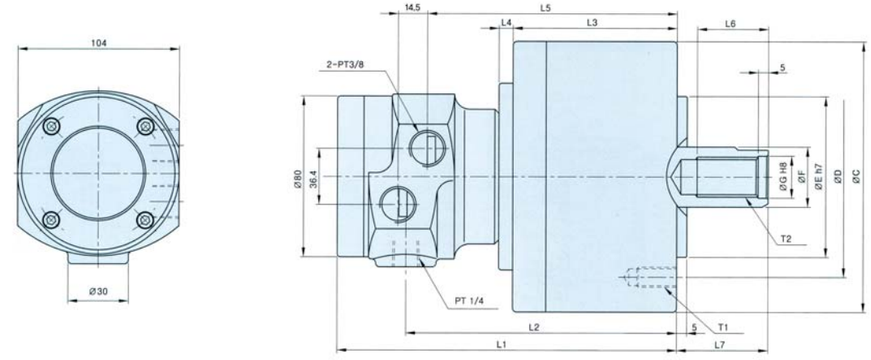
1 • Economical Model It is the most economical model and when a bar workpiecs is not passed through headstock. **2 • Horizontal-Vertical Type Available** As it can be installed horizontally and vertically, it is mainly used for a vertical lathe. **3 • Small size & Light weight** By using aluminum alloy of mold casting method, it is simple, small in size, and light in weight. **4 • High Speed Rotation** Safety is ensured at high-speed rotation by thorough balance management.

1 • 经济型：此产品是一种最经济型的回转油缸，在工件不穿过主轴箱的情况下使用. 2 • 水平与垂直安装均可：此型号的回转油缸既可水平安装也可垂直安装. 因此，可安装在立式车床上. 3 • 体积小，重量轻：此型号的回转油缸采用铝合金铸模的方式生产. 因此具有结构简单，体积小，重量轻的特点. 4 • 高速旋转：经过动平衡处理的回转油缸在高速旋转的情况下也能确保其安全性.

1 • 経済的なモデル 2 • 水平垂直使用可能 3 • 小型軽量化 4 • 高速回転

1 • 경제적인 모델 2 • 수평·수직형 사용가능 3 • 소형 경량화 4 • 고속회전

Outward Drawing/外型图/外形図/외형도



Dimension/尺寸/寸法表/치수표

Item항목 / Model형식	C	D	E	F	G	L1	L2	L3	L4	L5	L6	L7 max	L7 min	T1	T2
YAS-65	100	80	60	20	13	145	111	65	-	100.5	30	45	30	6-M8X16	M12XP1.75
YAS-80	110	90	65	25	17	145	111	65	-	100.5	30	45	30	6-M8X16	M16XP2.0
YAS-100	135	100	80	30	21	168	134	81.5	6.5	123.5	35	45	25	6-M10X19	M20XP2.5
YAS-125	160	130	110	35	25	178	144	91.5	6.5	133.5	40	50	25	6-M12X22	M24XP3.0
YAS-150	185	130	110	45	30.5	185	151	98.5	6.5	140.5	45	55	25	6-M12X20	M30XP3.5
YAS-200	245	145	120	55	37	208.5	174.5	122	6.5	164	60	69	34	6-M16X29	M36XP4.0

Specifications/规格/仕様表/사양표

Spec.사양 / Model형식	Order NO. 주문번호	Cylinder Dia 실린더내경 mm	Piston stroke 피스톤스트로크 mm	Piston surface area 피스톤 단면적 ㎠		Max. Drawbar pull 실린더 추력 KN(kgf)	
				Extend 압측	Retract 인측	Extend 압측	Retract 인측
YAS-65	2AS06	65	15	33.0	30.0	12.2(1245)	11.2(1443)
YAS-80	2AS08	80	15	50.0	45.0	18.4(1877)	16.5(1684)
YAS-100	2AS10	105	20	86.5	79.5	31.8(3244)	29.3(2989)
YAS-125	2AS12	130	25	132.5	123.0	48.8(4978)	45.3(4621)
YAS-150	2AS15	150	30	176.0	160.0	64.8(6610)	60.0(6120)
YAS-200	2AS20	205	35	330.0	306.0	121.6(12404)	112.8(11505)

Spec.사양 / Model형식	Max. operating pressure 최고사용유압력 kgf/㎠	Max.permissible speed 최고사용회전수 r.p.m(min⁻¹)	Total leakage 총드레인량 ℓ/min	Weight 중량 kg	GD² Moment of inertia N·m²(kgf.m²)	Matching chuck 적용척
YAS-65	40.8	6000	1.0	3.2	0.11(0.011)	CAS-04
YAS-80	40.8	6000	1.0	4.3	0.29(0.03)	CAS-05
YAS-100	40.8	6000	1.0	5.3	0.49(0.05)	CAS-06
YAS-125	40.8	6000	1.0	7.4	0.88(0.09)	CAS-08, CAS-10
YAS-150	40.8	5500	1.0	10.3	1.47(0.15)	CAS-10, CAS-12
YAS-200	40.8	5500	1.0	19.5	3.62(0.37)	CAS-15 이상

YASC CLOSED CENTER HYDRAULIC CYLINDER(CHECK VALVE Type)

中实时缸(带单向阀)/高速中实型回转油压シリンダー(チェックバルブ内蔵型)고속중실형 회전유압실린더 (체크밸브 내장형)

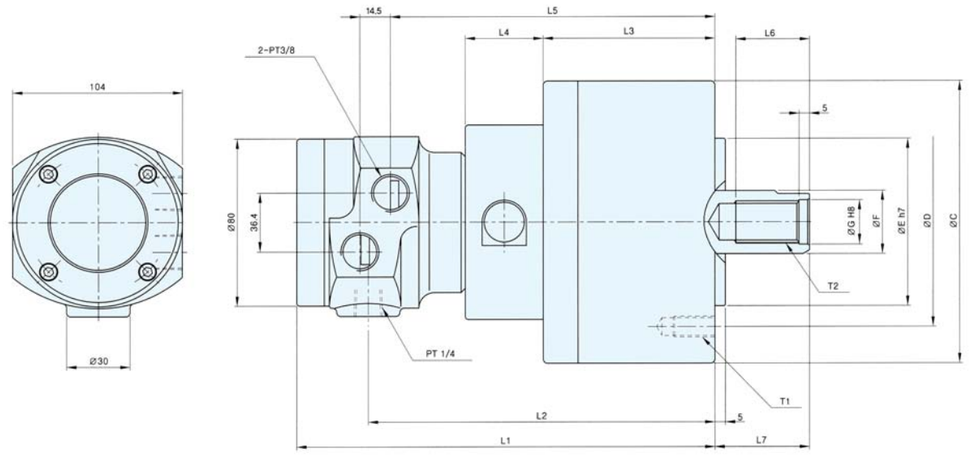
1 • Safety Guaranteed It contains check valves so that pulling force is kept for a certain time upon power failure, securing safety. **2 • Easy Repair & Check** Thanks to easy access of chuck valves from outside, it is possible to repair and check them while cylinder is attached to the equipment. **3 • High Performance and High Quality** It contains check valves in YAS cylinder, having excellent performance and quality, and its parts are compatible with YAS.

1 • 保障安全：此回转油缸带有单向阀，当断电时，压力仍可保持一段时间，因此确保安全。**2 •** 便于检测和维修：由于从外部便于操控单向阀，当回转油缸安装到设备上后仍便于修理和检测。**3 •** 性能优，质量好：此型号的回转油缸是带单向阀的YAS型回转油缸。此回转油缸性能和质量出色，它的附件与YAS型兼容。

1 • 安全確保 **2 •** 補修点検が容易 **3 •** 高性能 高品質

1 • 안전 확보 **2 •** 보수점검이 용이 **3 •** 고성능 · 고품질

Outward Drawing/外型图/外形図/외형도



Dimension/尺寸/寸法表/치수표

Item항목 / Model형식	C	D	E	F	G	L1	L2	L3	L4	L5	L6	L7 max	L7 min	T1	T2
YASC-100	135	100	80	30	21	198.5	164.5	81.5	37	154	35	45	25	6-M10X19	M20XP2.5
YASC-125	160	130	110	35	25	208.5	174.5	91.5	37	164	40	50	25	6-M12X22	M24XP3.0
YASC-150	185	130	110	45	30.5	215.5	181.5	98.5	37	171	45	55	25	6-M12X20	M30XP3.5
YASC-200	245	145	120	55	37	239	205	122	37	194.5	60	69	34	6-M16X29	M36XP4.0

Specifications/规格/仕様表/사양표

Spec.사양 / Mode형식	Order NO. 주문번호	Cylinder Dia 실린더내경 mm	Piston stroke 피스톤스트로크 mm	Piston surface area 피스톤 단면적 ㎠		Max. Draw bar pull 실린더 추력 KN(kgf)	
				Extend 압측	Retract 인측	Extend 압측	Retract 인측
YASC-100	2ASC10	105	20	86.5	79.5	31.8(3244)	29.3(2989)
YASC-125	2ASC12	130	25	132.5	123.0	48.8(4978)	45.3(4621)
YASC-150	2ASC15	150	30	176.0	160.0	64.8(6610)	60.0(6120)
YASC-200	2ASC20	205	35	330.0	306.0	121.6(12404)	112.8(11505)

Spec.사양 / Model형식	Max. operating pressure 최고사용유압력 kgf/㎠	Max.permissible speed 최고사용회전수 r.p.m(min⁻¹)	Total leakage 총드레인량 ℓ/min	Weight 중량 kg	GD² Moment of inertia N·m²(kgf.m²)	Matching chuck 적용척
YASC-100	40.8	6000	1.0	7.0	0.49(0.05)	CAS-06
YASC-125	40.8	6000	1.0	9.8	0.88(0.09)	CAS-08, CAS-10
YASC-150	40.8	5500	1.0	13.3	1.47(0.15)	CAS-10, CAS-12
YASC-200	40.8	5500	1.0	21.7	3.62(0.37)	CAS-15 이상

YASP CLOSED CENTER HYDRAULIC CYLINDER(PROXIMITY SWITCH Type)

中实时缸(带接近开关)高速中实型回转油压シリンダー(近接スイッチ取付可能型)고속중실형 회전유압실린더 (근접스위치 부착 가능형)

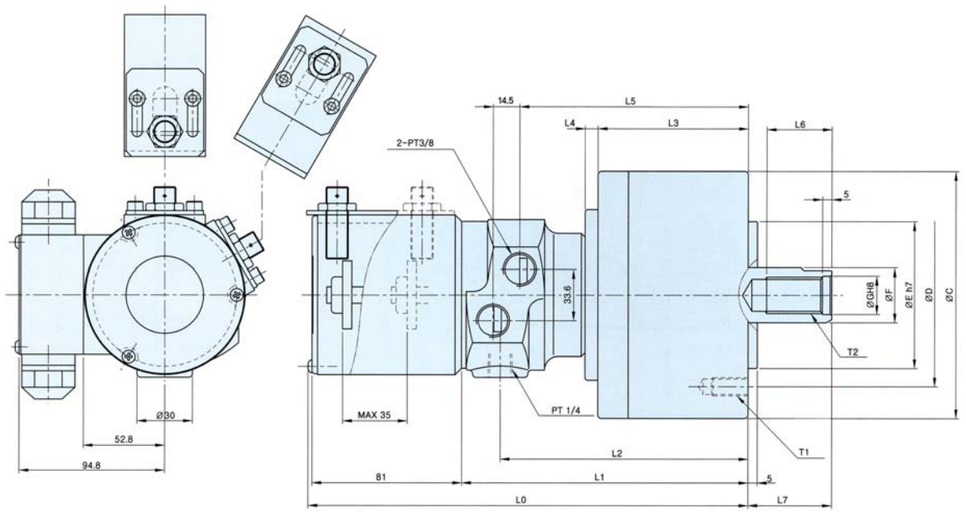
1 • Detection of Operating Location With attached proximity switch, it can be used for interface of automated devices because it is able to detect the movement of cylinder pistons. **2 • Miniaturization & Lightness** As it adopts non-contact method of small detection rings, it is hardly defective and has excellent safety at high speed rotation. **3 • High Performance and High Quality** With a proximity switch attached to YAS cylinder, it guarantees excellent performance and quality.

1 • 检测运行情况：由于此型号回转油缸带接近开关，可与自动控制装置连接，来检测回转油缸活塞的运行情况。**2 •** 体积小，重量轻：此回转油缸采用非接触式小检金测环，因此确保其具高速旋转的安全性。**3 •** 性能优，质量好：此型号的回转油缸是带单向阀的YAS型回转油缸。因此可保 证优良的性能和质量。

1 • 作動位置検出 **2 •** 小型軽量化 **3 •** 高性能，高品質

1 • 작동 위치 검출 **2 •** 소형 경량화 **3 •** 고성능 · 고품질

Outward Drawing/外型图/外形図/외형도



Dimension/尺寸/寸法表/치수표

Item항목 / Model형식	C	D	E	F	G	L0	L1	L2	L3	L4	L5	L6	L7 max	L7 min	T1	T2
YASP-100	135	100	80	30	21	236	155	134	81.5	6.5	123.5	35	45	25	6-M10X19	M20XP2.5
YASP-125	160	130	110	35	25	246	165	144	91.5	6.5	133.5	40	50	25	6-M12X22	M24XP3.0
YASP-150	185	130	110	45	30.5	253	172	151	98.5	6.5	140.5	45	55	25	6-M12X20	M30XP3.5
YASP-200	245	145	120	55	37	276.5	195.5	174.5	122	6.5	164	60	69	34	6-M16X29	M36XP4.0

Specifications/规格/仕様表/사양표

Spec.사양 / Mode형식	Order NO. 주문번호	Cylinder Dia 실린더내경 mm	Piston stroke 피스톤스트로크 mm	Piston surface area 피스톤 단면적 ㎠		Max. Draw bar pull 실린더 추력 KN(kgf)	
				Extend 압측	Retract 인측	Extend 압측	Retract 인측
YASP-100	2ASP10	105	20	86.5	79.5	31.8(3244)	29.3(2989)
YASP-125	2ASP12	130	25	132.5	123.0	48.8(4978)	45.3(4621)
YASP-150	2ASP15	150	30	176.0	160.0	64.8(6610)	60.0(6120)
YASP-200	2ASP20	205	35	330.0	306.0	121.6(12404)	112.8(11505)

Spec.사양 / Model형식	Max. operating pressure 최고사용유압력 kgf/㎠	Max.permissible speed 최고사용회전수 r.p.m(min⁻¹)	Total leakage 총드레인량 ℓ/min	Weight 중량 kg	GD² Moment of inertia N·m²(kgf.m²)	Matching chuck 적용척
YASP-100	40.8	6000	1.0	5.8	0.49(0.05)	CAS-06
YASP-125	40.8	6000	1.0	7.9	0.88(0.09)	CAS-08, CAS-10
YASP-150	40.8	5500	1.0	10.8	1.47(0.15)	CAS-10, CAS-12
YASP-200	40.8	5500	1.0	20.0	3.62(0.37)	CAS-150이상

YAST

CLOSED CENTER HYDRAULIC CYLINDER(CHECK VALVE+PROXIMITY SWITCH Type)

中实回转油缸(带单向阀接近开关)/高速中实型回转油压シリンダー(チェックバルブ内蔵型+近接スイッチ取付け可能型)/고속중실형 회전유압 실린더 (체크밸브 내장 +근접스위치 부착 가능형)

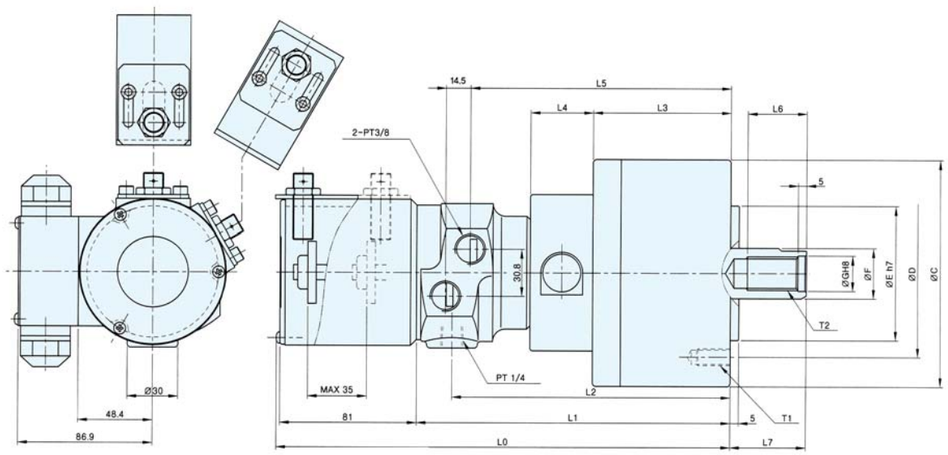
1 • Combined Structures It has a combined structure (YASC+YASP Type)with built-in check valves and attached proximity switch in YAS-type cylinder. **2 • Small size & Light Weight** With YAS-type cylinder as a basic specification, it is hardly defective and guarantees excellent safety at high-speed rotation. **3 • High Performance and High Quality** With check valves and proximity switchs, it guarantees excellent performance and quality.

1 • 复合结构：将内置单向阀和接近开关安装在YAS型回转油缸上，构成具有复合结构的(YASC+YASP型)回转油缸. **2 •** 体积小，重量轻：此型号回转油缸以YAS回转油缸的规格为基础，故障小，确保高速旋转的安全性. **3 •** 性能优，质量好：此型号的回转油缸带单向阀和接近开关，因此保证出色的性 能和质量.

1 • 複合的な構造 **2 •** 小型軽量化 **3 •** 高性能，高品質

1 • 복합적인 구조 **2 •** 소형 경량화 **3 •** 고성능 · 고품질

Outward Drawing/外型图/外形図/외형도



Dimension/尺寸/寸法表/치수표

Model형식 \ Item항목	C	D	E	F	G	L0	L1	L2	L3	L4	L5	L6	L7 max	L7 min	T1	T2
YAST-100	135	100	80	30	21	266.6	185.5	164.5	81.5	37	154	35	45	25	6-M10X19	M20XP2.5
YAST-125	160	130	110	35	25	276.5	195.5	174.5	91.5	37	164	40	50	25	6-M12X22	M24XP3.0
YAST-150	185	130	110	45	30.5	283.5	202.5	181.5	98.5	37	171	45	55	25	6-M12X20	M30XP3.5
YAST-200	245	145	120	55	37	307	226	205	122	37	194.5	60	69	34	6-M16X29	M36XP4.0
YAST-200S	245	222	120	55	37	289.5	206	187.5	104.5	37	177	60	69	34	12-M16	M36XP4.0
YASTL-200	245	145	120	55	37	336.5	238.5	220	137	37	209.5	60	80	30	6-M16	M36XP4.0
YAST-245	305	220	160	65	50	397	302	256	166	45	249	67	85	25	6-M20X30	M42XP3.0
YAST-250	314	282	160	65	46	397	302	256	166	46	249	67	85	25	6-φ18THRU	M42XP3.0
YAST-250S	305	275	160	65	50	328.5	207	178	145	-	174.5	60	85	25	12-M20	M42XP3.0

Specifications/规格/仕様表/사양표

Spec.사양 / Model형식	Order NO. 주문번호	Cylinder Dia 실린더내경 mm	Piston stroke 피스톤스트로크 mm	Piston surface area 피스톤 단면적 ㎠		Max. Draw bar pull 실린더 추력 KN(kgf)	
				Extend 압측	Retract 인측	Extend 압측	Retract 인측
YAST-100	2AST10	105	20	86.5	79.5	31.8(3244)	29.3(2989)
YAST-125	2AST12	130	25	132.5	123.0	48.8(4978)	45.3(4621)
YAST-150	2AST15	150	30	176.0	160.0	64.8(6610)	60.0(6120)
YAST-200	2AST20	205	35	330.0	306.0	121.6(12404)	112.8(11505)
YAST-200S	2AST20S	200	35	330	306	121.6(12404)	112.8(11505)
YASTL-200	2ASTL20	200	50	330	306	121.6(12404)	112.8(11505)
YAST-245	2AST24	245	60	470.8	438.2	173.2(17671.9)	161.2(16450.2)
YAST-250	2AST25	250	60	490.2	457.7	179(18400)	169(17200)
YAST-250S	2AST25S	250	60	481.5	450	180(18270)	167.3(17078)

Spec. 사양 / Model형식	Max. operating pressure 최고사용유압력 kgf/㎠	Max.permissible speed 최고사용회전수 r.p.m(min⁻¹)	Total leak age 총드레인량 ℓ /min	Weight 중량 kg	GD² Moment of inertia N·m²(kgf.m²)	Matching chuck 적용척
YAST-100	40.8	6000	1.0	7.5	0.49(0.05)	CAS-06
YAST-125	40.8	6000	1.0	10.3	0.88(0.09)	CAS-08, CAS-10
YAST-150	40.8	5500	1.0	13.8	1.47(0.15)	CAS-10, CAS-12
YAST-200	40.8	5500	1.0	22.2	3.62(0.37)	CAS-15이상
YAST-200S	40.8	5500	1.0	24	0.42(0.05)	CAS-15이상
YASTL-200	40.8	5500	1.0	24	0.42(0.05)	CAS-15이상
YAST-245	40.8	2000	1.0	38	-	CAS-40,50,63
YAST-250	40.8	2000	1.0	38	-	CAS-40,50,63
YAST-250S	40.8	2000	1.0	38	-	CAS-40,50,63

YMS

CLOSED CENTER HYDRAULIC CYLINDER(PROXIMITY SWITCH Type)

中实回转油缸(带接近开关)/高速中实スリム型シリンダー(近接スイッチ取付け可能型)/고속중실형 박형실린더 (근접스위치 부착형)

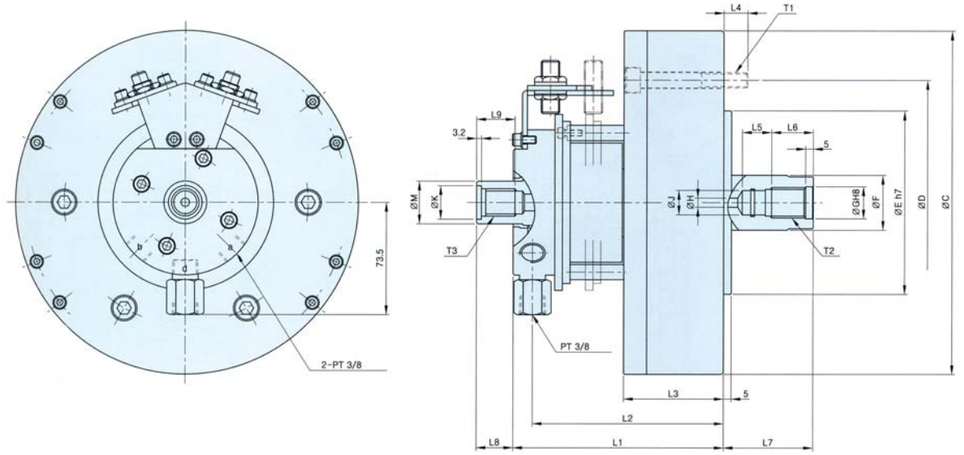
1 • Short Length(Flat Type) As the length of the cylinder is short, the length of equipment is short. Thus efficiency rate is high. **2 • Center Through Hole Secured** The through hole at the center axis of the cylinder can be utilized for coolant or air spray. **3 • High Operation Speed** By minimizing the oil path length and enlarging the oil path diameter, high operation speed of the cylinder is achieved. **4 • Safety Guaranteed** With built-in check valves, pull force is kept for a certain time upon power failure. Thus safety is secured. **5 • Detection of Operating Location** With a proximity switch attached, it can be used for automation interface by detecting the movement of the piston.

1 • 油缸的长度较短，使设备的长度也相应的缩短，从而提高其效能性. **2 •** 在油缸的中心轴处形成贯通径，在切削油及空 的喷射上得到活用 (Ø6). **3 •** 油缸内部油路长度达到最小化，扩大油路径，从而使油缸的运转速度加快. **4 •** 此回转油缸带有单向阀，当断电时，压力仍可保持一段时间，因此确保安全. **5 •** 由于此型号回转油缸带接近开关，与自动控制装置连接，来检测回转油缸活塞的运行情况.

1 • 長さが短い(スリム) **2 •** センター貫通穴確保 **3 •** 高速運転 **4 •** 安全確保 **5 •** 作動位置検出

1 • 길이가 짧음 (박형) **2 •** 중심 관통경 확보 **3 •** 작동속도의 증가 **4 •** 안전 확보 **5 •** 작동 위치 검출

Outward Drawing/外型图/外形図/외형도



Dimension/尺寸/寸法表/치수표

Model형식 \ Item항목	C	D	E	F	G	H	J	K	M	L1	L2	L3	L4	L5	L6	L7max	L7min	L8	L9	T1	T2	T3
YMS-105-15	180	128	85	36	21	6	16	18	28	130	117.5	57	13.5	46	28	53	38	23	25	6-M10	M20XP2.5	PF3/8
YMS-120-20	192	150	120	36	21	6	16	18	28	139	126.5	65	15.5	46	28	53	33	23	25	6-M10	M20XP2.5	PF3/8
YMS-135-20	225	160	120	36	21	6	16	18	28	139	126.5	65	15.5	46	28	58	38	23	25	6-M10	M20XP2.5	PF3/8
YMS-140-25	225	160	120	36	21	6	16	18	28	144	131.5	70	15.5	46	28	58	33	23	25	6-M10	M20XP2.5	PF3/8
YMS-150-35	250	175	120	40	25	6	20	18	28	164	151.5	90	22.5	46	28	63	28	23	25	6-M12	M24XP3.0	PF3/8

Specifications/规格/仕様表/사양표

Spec.사양 / Model형식	Order NO. 주문번호	Cylinder Dia 실린더내경 mm	Piston stroke 피스톤스트로크 mm	Piston surface area 피스톤 단면적 ㎠		Max. Draw bar pull 실린더 추력 KN(kgf)	
				Extend 압측	Retract 인측	Extend 압측	Retract 인측
YMS-105-15	2MS10	105	15	83.0	76.4	31.2(3183)	28.7(2930)
YMS-120-20	2MS12	120	20	109.5	102.9	41.2(4200)	38.7(3946)
YMS-135-20	2MS13	135	20	141.9	132.9	53.4(5442)	50.0(5097)
YMS-140-25	2MS14	140	25	153.9	143.7	57.9(5902)	54.1(5511)
YMS-150-35	2MS15	155	35	188.6	176.1	70.9(7233)	66.3(6754)

Spec.사양 / Model형식	Max. operating pressure 최고사용유압력 kgf/㎠	Maxpermissible speed 최고사용회전수 r.p.m(min⁻¹)	Total leakage 총드레인량 ℓ /min	Weight 중량 kg	GD² Moment of inertia N·m²(kgf.m²)	Matching chuck 적용척
YMS-105-15	40.8	6000	1.0	11.0	1.52(0.16)	CAS-06
YMS-120-20	40.8	5000	1.0	11.8	2.11(0.22)	CAS-08
YMS-135-20	40.8	5000	1.0	13.2	3.20(0.33)	CAS-08, CAS-10
YMS-140-25	40.8	5000	1.0	14.5	3.92(0.40)	CAS-10, CAS-12
YMS-150-35	40.8	4200	1.0	17.5	4.60(0.47)	CAS-12

MS

3-JAW SCROLL CHUCK
三爪自定心卡盘/3つ爪連動チャック/3-죠오 연동척

1 • General Model This chuck, with both KS and JIS Standard, is most widely used for general purpose lathes. A separate adapter is used when attached to a lathe. **2 • High Quality & Long Durability** Internal stress and deformation have been precluded by using high quality cast body. The major parts are made of heat-treated alloy steel. Good durability has been achieved due to extended abrasion resistance and improved quality. **3 • Compatibility** Compatibility of major parts such as a jaw has been enabled thank to quality standardization and precise dimension management. **4 • Parts** External jaws are attached to the chuck and internal jaws, fastening handles and mounting screws are included as standard parts.

1 • 普通型：此卡盘符合KS和JIS标准, 广泛用于普通用途的车床上. 用单独的转接法兰连接. **2 •** 质量好, 使用寿命长：此卡盘盘体采用高质量铸铁材料, 因此, 可防止内应力产生的变形. 其他附件采用经过严格热处理的合金钢材质, 因此具有质量高, 耐磨损, 使用寿命长的特点. **3 •** 兼容性：由于质量, 规格和尺寸等符合统一规定的标准, 因此卡盘的主要附件如卡爪等具有兼容性. **4 •** 随机附件：随机附件包括紧固搬手和安装螺栓, 硬爪安装在卡盘体上. 若需其他类型附件, 请另行订购.

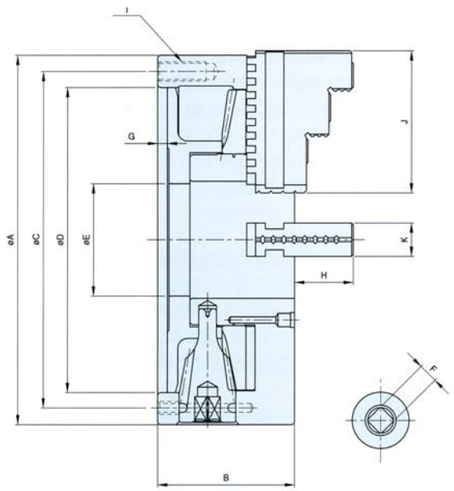
1 • 最も一般的なモデル **2 •** 高品質, 長い寿命 **3 •** 互換性 **4 •** 付属品

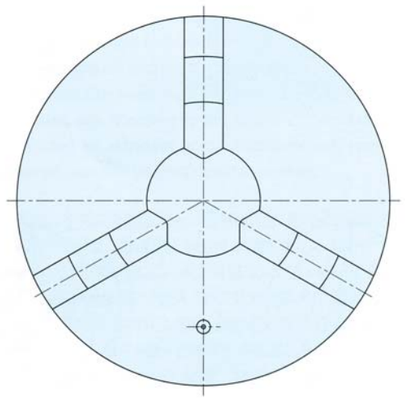
1 • 가장 일반적 모델 2 • 고품질, 긴 수명 3 • 호환성 4 • 부속품

Specifications/规格/仕様表/사양표

Mode형식 \ Spec.사양	Order NO. 오더번호	Chuck size 척외경 mm	Thru-hole Dia 관통경 mm	Gripping Force 파악력 kgf	Gripping Dia 파악경 External(Ø) MAX.mm	Gripping Dia 파악경 External(Ø) MIN.mm	Gripping Dia 파악경 Internal(Ø) MAX.mm	Gripping Dia 파악경 Internal(Ø) MIN.mm	Weight 중량 kg	Max.permissible speed 최고사용회전수 r.p.m(min⁻¹)
MS-3	00103E	85	16	900	70	2	64	24	1.5	2500
MS-4	00104E	110	24	1200	95	3	84	29	3.5	2500
MS-5	00105E	130	32	1500	110	3	100	33	4.5	2500
MS-6	00106E	165	45	3000	160	3	150	48	7.5	4000
MS-7	00107E	190	55	3600	180	4	170	56	11.5	3500
MS-9	00109E	230	70	3900	220	5	210	62	19	2900
MS-10	00110E	273	85	4500	260	5	250	70	26	2500
MS-12	00112E	310	96	5400	300	10	290	86	38	2200
MS-14	00114E	355	100	4050	315	25	290	107	54	1500

Outward Drawing/外型图/外形図/외형도





Dimension/尺寸/寸法表/치수표

Model형식 \ Item항목	A	B	C	D	E	F	G	H	I	J	K
MS-3	85	45	73	60	16	7	3.5	14.6	3-M6	35	11
MS-4	110	58	95	80	24	8	4.5	17.6	3-M8	42	14
MS-5	130	60	115	100	32	8	4.5	20	3-M8	50	16
MS-6	165	65	147	130	45	10	5	25	3-M10	65	19
MS-7	190	75	172	155	55	11	5	30	3-M10	75	22
MS-9	230	84	210	190	70	12	6	35	3-M12	85	24
MS-10	273	86	250	230	85	12	6	40	3-M12	98	28
MS-12	310	96	285	260	96	14	7	45	3-M12	110	30
MS-14	355	110	328	300	100	14	7	63	6-M12	133	35

Model Description/型号说明/型式番号表示/형식번호 표시

MS□ - □□

Chuck Size

Blank | Standard
T | 2-jaw type
F | 4-jaw type
S | 6-jaw type
U | Two piece jaw type

MST · MSF · MSS

2-JAW, 4-JAW, 6-JAW SCROLL CHUCK
两爪,四爪,六爪自定心卡盘/2つ爪 4つ爪 6つ爪連動チャック/2-죠오,4-죠오,6-죠오 연동척

• **Clamping Irregular Works** Diverse scroll chucks suitable for all shape of works are available, which can give you the improved precision and productivity. Since it is manufactured and managed the same as the standard MS type scroll chuck, it gurantees high quality, long durability and compatibility. It is classified into 2Jaw (MST), 4Jaw(MSF) and 6Jaw(MSS) in accordance with the number of attached jaws.

夹紧不规则工件：不同种类的自定心卡盘可夹紧各种形状的工件，且夹紧精度高，工作效率更高. 此卡盘与MS型卡盘具有同样的生产加工标准，因此具有质量高，使用寿命长和兼容性强的特点. 根据卡盘上卡爪数目的不同，可分为两爪(MST)，四爪(MSF)，和六爪(MSS)自定心卡盘.

異形工作物把握－工作物の各形状に合う連動チャックを選定するので，加工精度と生産性が向上します. 標準型MS型連動チャックと同じように製作し管理されているので高品質，長寿命，互換性等が良好です. 取付けできる爪の数により2つ爪(MST)，4つ爪(MSF)，6つ爪(MSS)に区分されます.

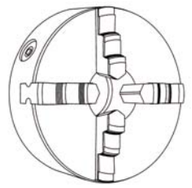
이형공작물 파악 • 공작물의 각 형상에 맞는 연동척을 선정하므로 가공정밀도의 향상 및 생산성이 향상됩니다. 표준형 MS형 연동척과 동일하게 제작되고 관리되므로 고품질,긴 수명, 호환성 등이 양호합니다. 부착되는 죠오의 수량에 따라 2죠오(MST),4죠오(MSF),6죠오(MSS)로 구분됩니다.

2 Jaw Scroll Chuck (MST-Type)
• Good for machining irregular workpieces such as valve parts, pipe connection parts, etc.

2爪联动卡盘：加工阀门零件类，管子接头零件类等异型加工物时，发挥其卓越的性能.

2 つ爪連動チャック

2 죠오 연동척 (MST-Type)

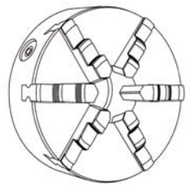


4 Jaw Scroll Chuck (MSF-Type)
• It is convenient for machining square workpieces. It minimizes the deformation of thin circular wokpieces such as pipes.

4爪联动卡盘：为了方便的加工正四角型的材料而制作的．并具备在加工管子等较薄的圆形加工品时，变形率达到最小化的优点.

4 つ爪連動チャック

4 죠오 연동척 (MSF-Type)



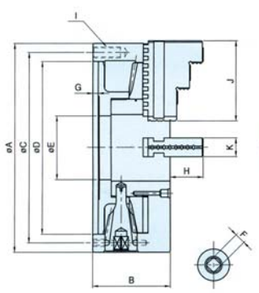
6 Jaw Scroll Chuck (MSS-Type) • It is convenient for machining hexagonal workpieces and suitable for heavy duty machining that requires strong gripping force, It minimizes the deformation of thin circular workpieces such as pipes.

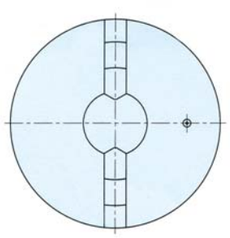
6爪联动卡盘：6角形材料加工简易，在要求中切削等强烈的掌握力时使用的型号．并具备在加工管子等较薄的圆形加工品时，变形率达到最小化的优点.

6 つ爪連動チャック

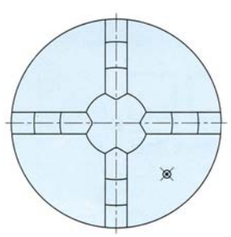
6 죠오 연동척 (MSS-Type)

Outward Drawing/外型图/外形図/외형도

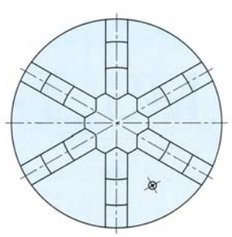




MST-7,9,10,12,14



MSF-7,9,10,12,14



MSS-10,12

Dimension/尺寸/寸法表/치수표

Model형식 \ Item항목	A	B	C	D	E	F	G	H	I	J	K
MST-7 MSF-7	190	75	172	155	55	11	5	30	3-M10	75	22
MST-9 MSF-9	230	84	210	190	70	12	6	35	3-M12	85	24
MST-10 MSF-10 MSS-10	273	86	250	230	85	12	6	40	3-M12	98	28
MST-12 MSF-12 MSS-12	310	96	285	260	96	14	7	45	3-M12	110	30
MST-14 MSF-14	355	110	328	300	100	14	7	63	6-M12	133	35

MSU

TWO PIECE JAW SCROLL CHUCK
分体卡爪式平面螺旋自定心卡盘/爪分離型連動チャック/죠오 분리형 연동척

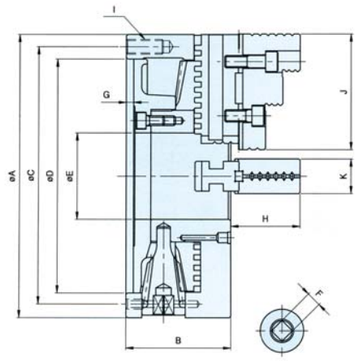
1 • Jaw Detachable Scroll Chuck It has an improved structure from standard scroll chuck model so that jaws can be detached, and thus the scope of has been enlarged.
2 • Easy in Precise Processing It is good in exchanging preciseness by grinding serration part, and is very easy in precise processing since it use formed soft jaws.
3 • Contribution for Increasing Performance With hard jaws attached to the entity, you can perform internal/external clamping(circular sticks and ring type) without replacing jaws so that the performance is improved. **4 • High Quality, Long Durability** High quality casting body prevents the stress and deformation, and since the major parts are made of heat-treated alloy steel, the abrasion resistance, quality and the durability are improved and extended. **5 • Compatibility** Attached parts, specification and size are the same with MS Type, and the Jaw configuration is improved to increase the work performance. Jaws are easy to replace, and the major parts of scroll chuck and jaws are compatible with MS's so that the work scope is wide. Uniformity in quality and the exact size management make the exchange of major parts possible. **6 • Parts** Hard jaws are attached to the chuck and soft jaws, fastening handles and mounting screws are included as standard parts. Additional soft jaws, hard jaws, handles and MS Type internal and external jaws can be purchased separately.

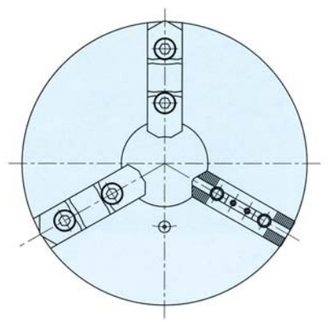
1 • 卡爪可拆开：此卡盘的结构在标准型自定心卡盘的基础上加以改进，卡爪可拆开．这样应用的范围更广泛. **2 •** 易于精加工：此卡盘借助研磨的细齿部分来改变精度．由于使用了成形的软爪，因此易于精加工. **3 •** 性能提高：卡盘的硬爪与卡盘体相连（在加工圆棒和环形工件时)不用重新更换卡爪，便可实现内夹紧或外夹紧，因此其性能大大提高. **4 •** 质量好，使用寿命长：此卡盘盘体采用高质量铸铁材料，因此，可防止内应力产生的变形．其他附件采用经过严格热处理的合金钢材质，因此具有质量高，耐磨损，使用寿命长的特点. **5 •** 兼容性：此卡盘的连接部件，规格，尺寸与MS型一致，且卡爪的结构得到改进，因此性能大大提高，卡爪易于更换．且此卡盘的主要附件和卡爪与MS型一致，具有统一的质量和精确的连接尺寸，因此具有兼容性. **6 •** 随机附件：随机附件包括紧固撅手和安装螺栓，硬爪安装在卡盘体上．若需其他类型附件，请另行订购.

1 • 爪分離型連動チャック **2 •** 精密加工容易 **3 •** 生産性向上に寄与 **4 •** 高品質，長寿命 **5 •** 互換性 **6 •** 付属品

1 • 죠오 분리형 연동척 2 • 정밀가공 용이 3 • 생산성 향상에 기여 4 • 고품질, 긴수명 5 • 호환성 6 • 부속품

Outward Drawing/外型图/外形図/외형도





Specifications/规格/仕様表/사양표

Spec.사양 / Model형식	Order NO. 오더번호	Chuck size 척외경 mm	Thru-hole Dia 관통경 mm	Gripping Force 파악력 kgf	Gripping Dia 파악경 External (Ø) MAX. mm	Gripping Dia 파악경 External (Ø) MIN. mm	Gripping Dia 파악경 Internal (Ø) MAX. mm	Gripping Dia 파악경 Internal (Ø) MIN. mm	Weight 중량 kg	Max.permissible speed 최고사용회전수 r.p.m(min⁻¹)
MSU-7	01507E	190	55	3600	180	4	62	170	13	3500
MSU-9	01509E	232	70	3900	220	5	70	210	22	2900
MSU-10	01510E	273	85	4500	260	5	80	250	29	2500
MSU-12	01512E	310	96	5400	300	10	90	290	38	3200

Dimension/尺寸/寸法表/치수표

Model형식 \ Item항목	A	B	C	D	E	F	G	H	I	J	K
MSU-7	190	76	172	155	55	11	5	38.3	3-M10	88	28
MSU-9	232	84	210	190	70	12	6	48.9	3-M12	100	31.5
MSU-10	273	87	250	230	85	12	6	52.2	3-M12	110	35
MSU-12	310	96	285	260	96	14	7	52.8	3-M12	125	40

MI

4-JAW INDEPENDENT CHUCK
四爪单动卡盘 / 4 つ爪単動チャック/4-죠오 단동척

1 • General model It is the general KS and JIS Standard type chuck used to attach to lathe for general use. To attach it to lathe a additional adapter is needed. **2 • High Quality & Long Durability** Internal stress and deformation have been preduded by using high quality cast body. The major parts are made of heat-treated alloy steel, and good durability has been achieved due to extended abrasion resistance and improved quality. Also, strong power and big jaw width enhance the safety. **3 • Compatibility** Uniformity in quality and the exact size management make the exchange of major parts possible. **4 • Parts** A fastening handle and mounting screws are included as standard parts.
5 • Customization For the large scale over 40″, customized manufacturing is available.

1 • 普通型：此卡盘符合KS和JIS标准，广泛用于普通用途的车床上．当与车床连接时，需要附加转接法兰．**2 •** 质量好，使用寿命长：此卡盘盘体采用高质量铸铁材料，因此，可防止内应力产生的变形．其他附件采用经过严格热处理的合金钢材质，因此具有质量高，耐磨损，使用寿命长的特点．此卡盘还具有强大的夹紧力和宽大的卡爪，因此确保夹紧牢固．
3 • 兼容性：由于质量统一，规格标准，尺寸精确，因此卡盘的主要附件具有兼容性．
4 • 随机附件：随机附件包括紧固搬手和安装螺栓．**5 •** 可特殊订货：规格大于40″的，可按照客户的要求订制．

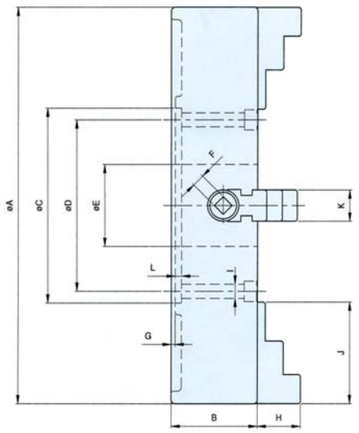
1 • 最も一般的なモデル **2 •** 高品質，長寿命 **3 •** 互換性 **4 •** 付属品 **5 •** お客様方々によるサービス

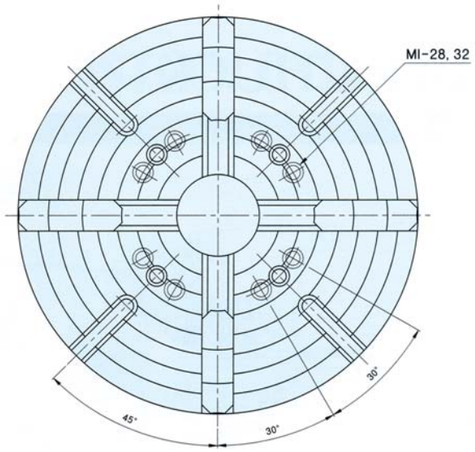
1 • 가장 일반적 모델 2 • 고품질, 긴 수명 3 • 호환성 4 • 부속품 5 • 맞춤서비스

Specifications/规格/仕様表/사양표

Spec.사양 / Model형식	Order NO. 오더번호	Chuck size 척외경 mm	Thru-hole Dia 관통경 mm	Gripping Force 파악력 kgf	Max. Gripping Dia 최대파악경 mm	Weight 중량 kg	Max.permissible speed 최고사용회전수 r.p.m(min⁻¹)
MI-6	00706	150	40	600	140	6.1	1600
MI-8	00708	200	50	1000	185	14.8	1600
MI-10	00710	250	55	1400	220	21	1600
MI-12	00712	300	65	1600	265	29.5	1400
MI-14	00714	350	75	1700	310	40	1400
MI-16	00716	400	90	2000	360	56.5	1200
MI-18	00718	450	100	2000	405	70	1200
MI-20	00720	500	110	2200	450	90	900
MI-24	00724	600	120	2300	550	150	900
MI-28	00728	710	140	2350	650	220	700
MI-32	00732	813	140	2400	755	270	600
MI-40	00740	1000	190	3100	910	550	500

Outward Drawing/外型图/外形図/외형도





Dimension/尺寸/寸法表/치수표

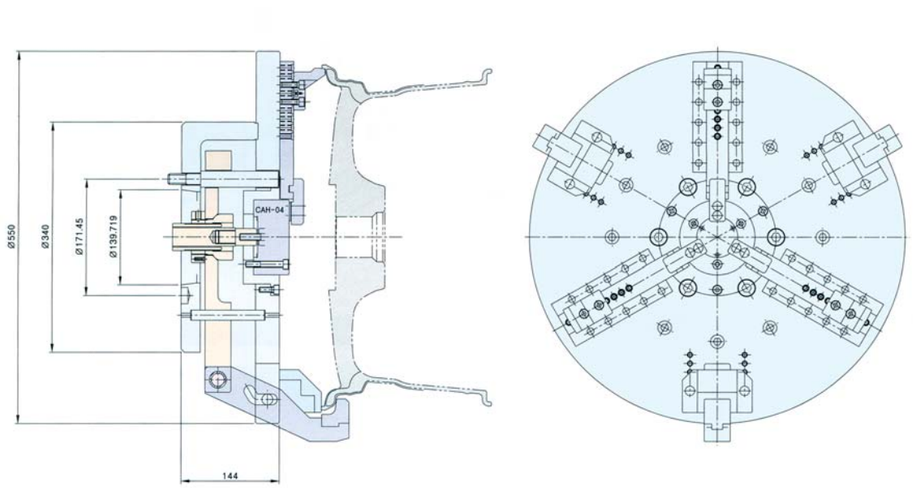
Model형식 / Item항목	A	B	C	D	E	F	G	H	I	J	K	L
MI-6	150	60	130	115	40	8	-	25	4-M10	55	25	5
MI-8	200	75	175	155	50	10	-	30	4-M12	75	30	6
MI-10	250	80	150	125	55	10	2.5	35	4-M12	90	30	6
MI-12	300	90	170	140	65	12	3	40	4-M12	100	35	6
MI-14	350	90	190	160	75	12	3	45	4-M12	110	35	8
MI-16	400	100	210	180	90	14	5	50	4-M16	120	40	8
MI-18	450	105	230	200	100	14	5	55	4-M16	130	40	8
MI-20	500	110	250	220	110	14	5	60	4-M16	140	45	8
MI-24	600	120	300	260	120	15	10	70	4-M20	160	50	10
MI-28	710	120	350	300	140	14	8	70	8-M20X2.5	180	50	12
MI-32	813	120	400	350	140	14	8	70	8-M20X2.5	180	50	12
MI-40	1000	175	460	510	190	17	1	88	6-M24X3.0	196	55	14

Model Description/型号说明/型式番号表示/형식번호 표시

MI - □□
Chuck Size

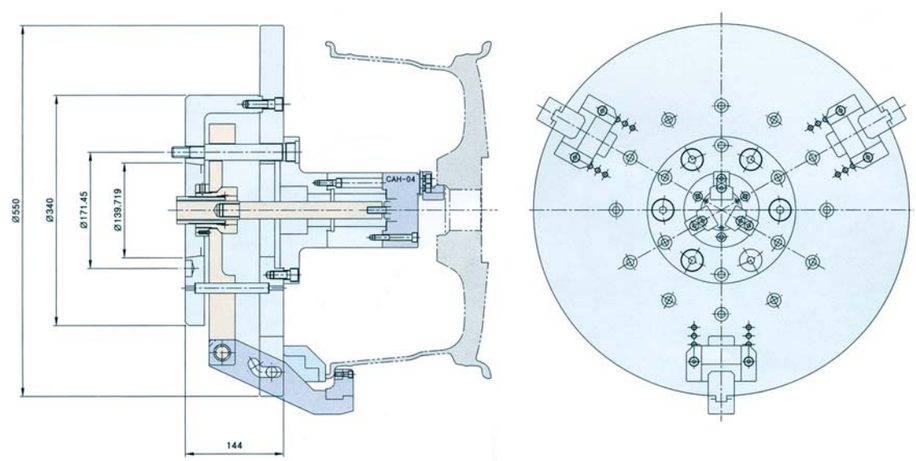
FINGER CHUCK

Work : AL-Wheel(op-10)



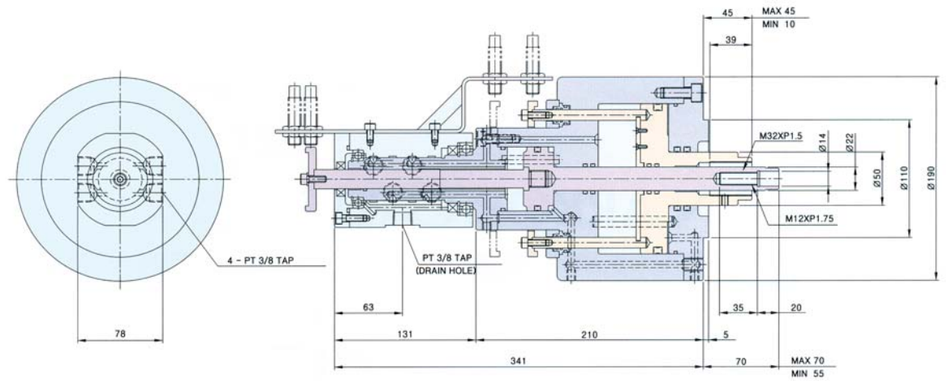
FINGER CHUCK

Work : AL-Wheel(op-20)



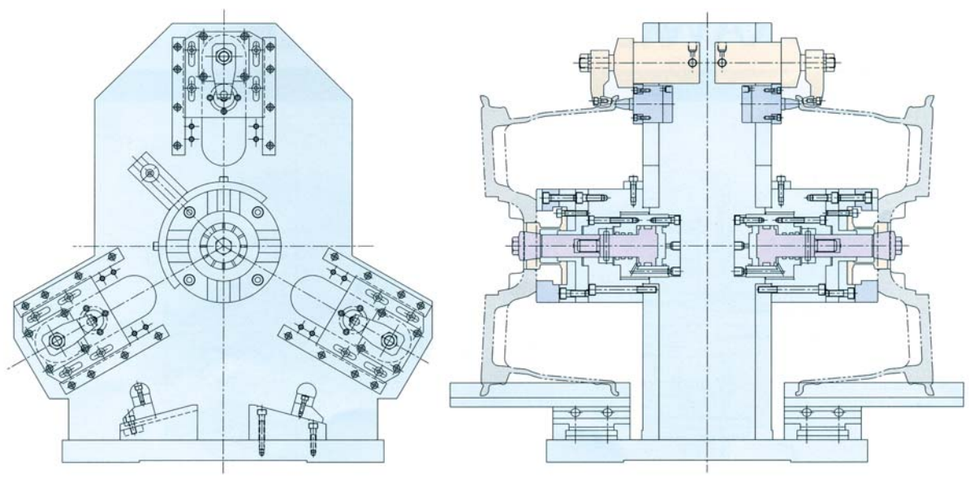
HYDRAULIC DOUBLE PISTON CYLINDER

Standard



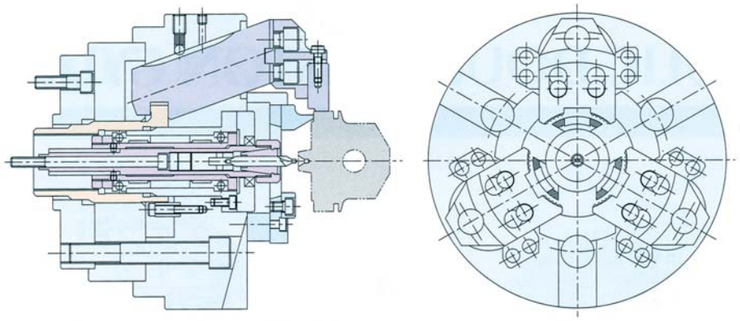
COLLET & FINGER FIXTURE

Work : AL-Wheel



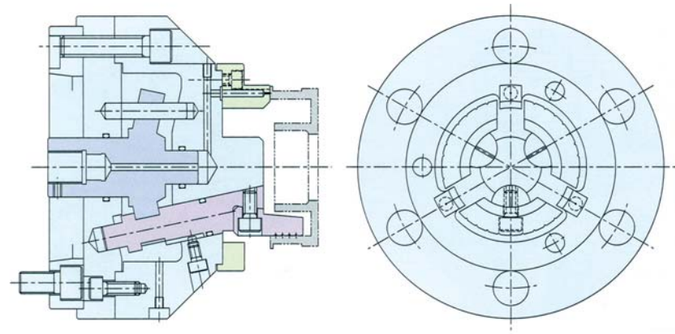
DRAW DOWN CHUCK & CENTERING

Work : Pistion



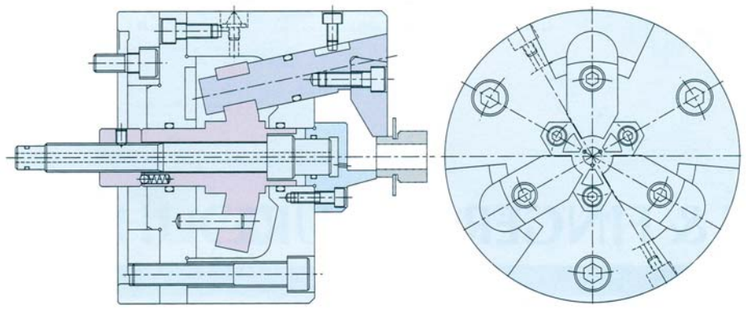
INSIDE PIN ARBOR CHUCK

Work : Pully



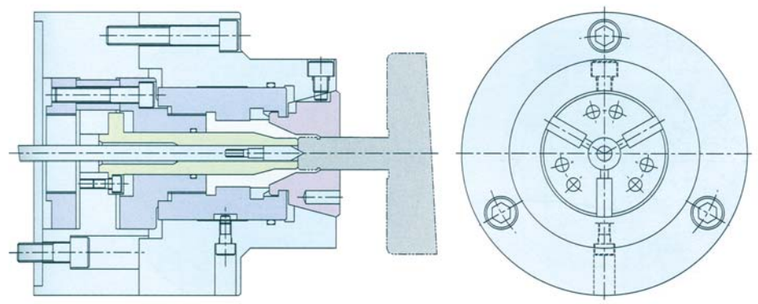
OUTSIDE PIN ARBOR CHUCK

Work : Pinion gear



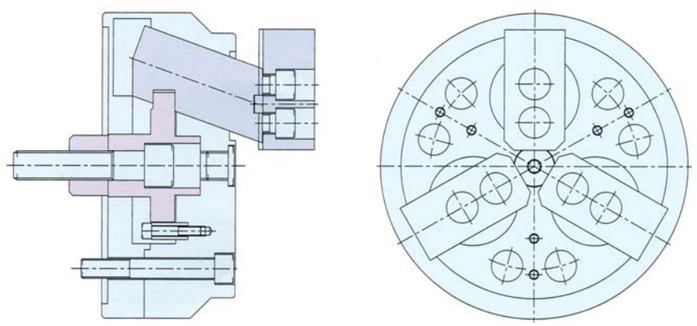
RUBBER COLLET CHUCK

Work : Motor Rotor ASS'Y



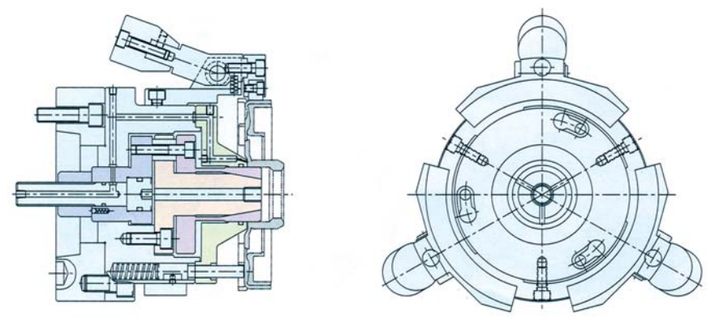
INSIDE DRAW DOWN CHUCK

Work : Inside Chucking Standard(C13M)



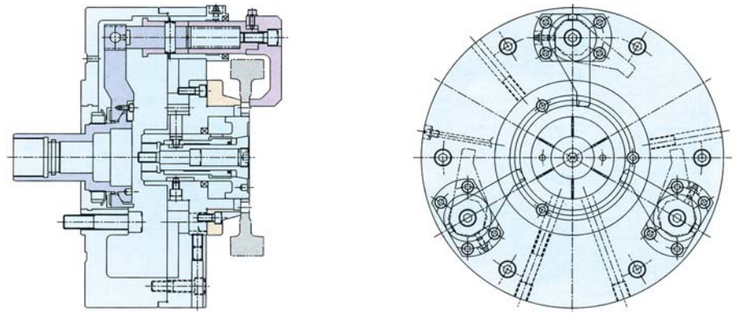
COLLET & SUB JAW CHUCK

Work : Hub



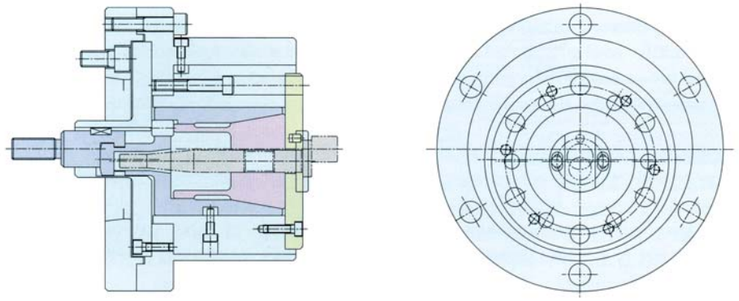
FINGER & COLLET CHUCK

Work : Driving gear



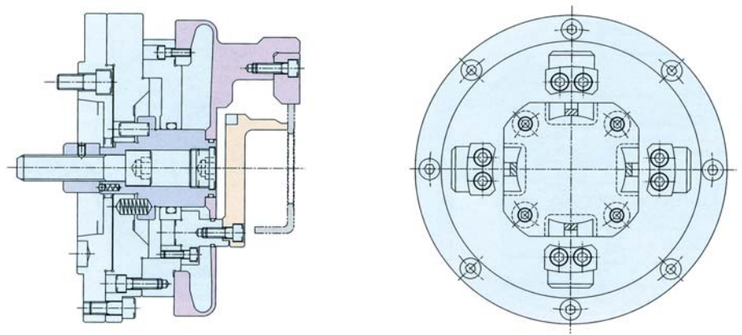
ECCENTRIC & COLLET CHUCK

Work : Compressor shaft



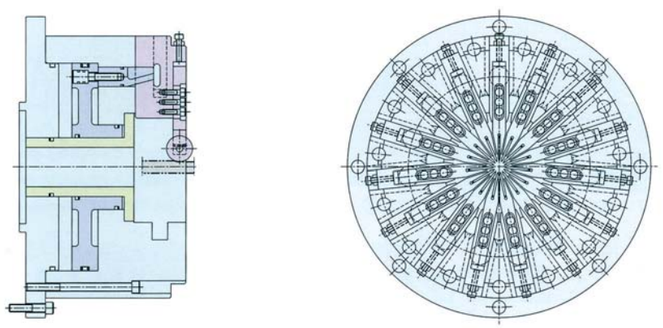
DIAPHRAGM CHUCK

Work : Cup planet carrier



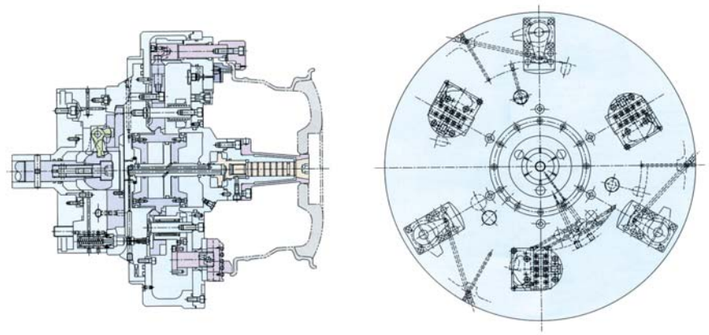
WEDGE BAR CHUCK

Work : Copper pipe



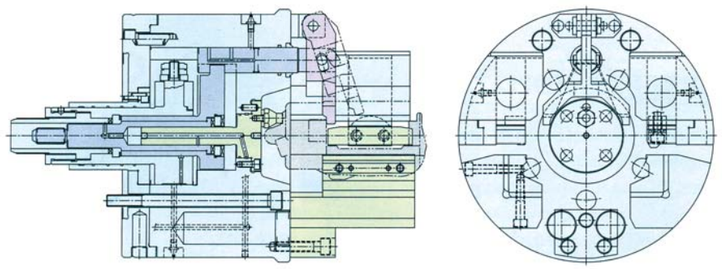
FINGER & COLLET CHUCK (AIR CHUCK)

Work : AL-Wheel



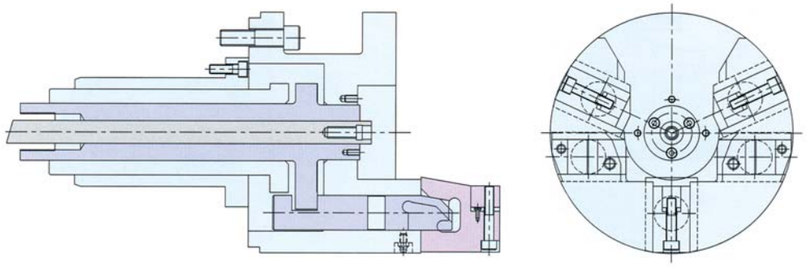
LEVER CHUCK

Work : Caliper housing



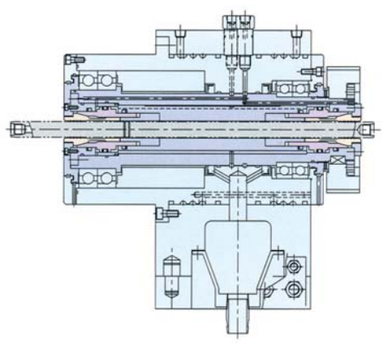
WEDGE BAR CHUCK

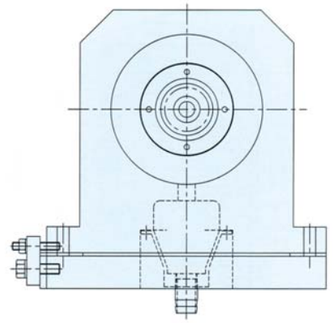
Work : Crank shaft



SPINDLE & COLLET CHUCK

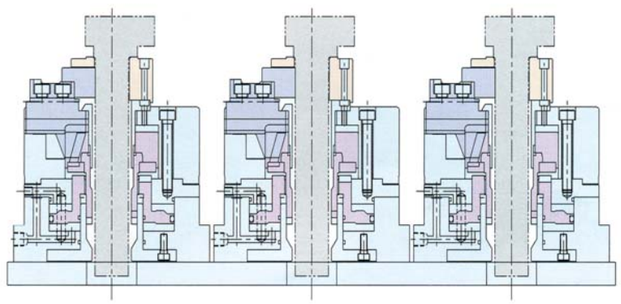
Work : Shaft





STATIONARY CHUCK

Work : Brake cam shaft



C5M·C55M·C56M COMPENSATING CHUCK
补偿型卡盘/遠心力補償型チャック/원심력 보상형 척

1・Center Hole Base It is optimal when clamping outer diameter of long materials based on center hole.
2・Self-Centering Even when clamping face is unequal or eccentric, strong and accurate chucking is ensured by automatically centering 3 jaws based on center hole. (It is easy to chuck workpieces with unequal outer diameter such as cast and forged parts.) **3・Compensation of Centrifugal Force** Considering effect of centrifugal force acting on jaws, balance equipment is built in so that it maintains high gripping force.
4・Strong Gripping With built-in face driver, **C56M** performs the entire machining without inverting the workpiece, so that set-up time is sharply shortened. While **C55M** chuck is pulled to the center shaft and gripped firmly, it is optimal for making long bar workpieces.

1・带有定心顶尖：此卡盘适合于夹紧带有中心孔的长工件. 2・自定中心：即使夹紧表面不对称或者不回心，三个卡爪也能以中心孔为基准，自动定中心，对加工工件进行牢固，有力，精确的夹紧.（适合对外径不对称的工件夹紧，如铸件和锻造工件）3・补偿离心力：考虑到作用在卡爪上的离心力的影响，此卡盘没有平衡装置， 因此确保夹紧稳固. 4・强大的夹紧力：C56M卡盘内置驱动装置，不用翻转加工工件，即可完成全部加工，因此装夹工件的时间大大缩短. 而C55M卡盘能拖住加工工件的中心轴，并牢牢将其夹紧，因此易于对长杆形工件的夹紧.

1・センターホール基準 2・自動求心 3・遠心力補償 4・強把握

1・센터 홀 기준 2・자동중심보정 3・원심력 보상 4・강력한 파악

C18M QUICK CHANGE CHUCK
快换卡盘/クイックチェンジチャック/퀵 체인지 척

1・Quick Change Quick change of top jaws is possible because exchange, location change and reverse of the jaw are all achieved only with 180° one-touch rotation of the master jaw eccentric cam.
2・Excellent Repetition As clamping accuracy is not changed even when reattaching jaws, it is not necessary to reform jaws.

1・快换：由于顶部卡爪的更换，改变位置和翻转仅通过触发盘体上的偏心180°即可实现，使其快换成为可能.
2・重复定位精度高：即使重新固定卡爪，也可确保夹紧精度，因此不必修正卡爪.

1・迅速な交換 2・優れた繰返し

1・신속한 교체 2・반복성 우수

C22M·C24M LONG STROKE CHUCK
长行程卡盘/ロングストロークチャック/롱 스트로크 척

1・Long Stroke It is a wedge-hook type chuck with large jaw stroke, and easy to clamp workpieces with wide work scope and large deviation of outer diameter. **2・Excellent Compatibility** It is possible to directly be attached to A-type spindle nose with separated standard adapter. **3・C22M** 3JAW TYPE, **C24M**・2JAW TYPE

1・长行程：它是一种长行程，大楔形卡爪卡盘，易于夹紧大型工件和外径偏差大的工件. 2・兼容性强：此卡盘可通过标准转接法兰直接如A型主轴端部相连. 3・C22M：三爪型，C24M：两爪型

1・ロングストローク 2・優れた互換性

1・롱 스트로크 2・호환성 우수

C23M 2 & 3 JAW CHUCK
两和三爪卡盘/多能チャック/다기능 척

1・Various Clamping Functions of 2-jaw chuck for irreguiar materials and 3-jae chuck for original materials are combined together. **2・Multiple Utilites** It uses standard soft jaws and it is a big bore power chuck to machining long bars.

1・多种夹紧：结合了两爪卡盘对不规则工件夹紧和三爪卡盘对普通工件夹紧的特点. 2・用途广泛：此卡盘是大通孔动力盘，使用标准的软爪来夹紧长杆工件.

1・多様な把握 2・多目的用途

1・다양한 파악 2・다목적 용도

C10D·C12D·C24D·C27D STATIONARY CHUCK
固定卡盘/固定用のチャック/고정용 척

1・Station-type Mounting It is a stationary chuck used for drilling machine, milling machine and various jigs and is possible to use both hydraulic pressure and pneumatic pressure. **2・Diverse Features C10D** chuck, 3-jaw type, due to low height from attachment side, has an extensive scope of work and is used for general purposes. **C24D** chuck, 2-jaw type, can accuately determine locations regardless of clamping deviations of irregular workpieces. **C10D** chuck, 3-jaw type, is a big bore power chuck and easy to machine long bar workpieces and to discharge chips.

1・固定型安装：此卡盘可安装在钻床，磨床以及多种夹紧装置上. 具有液压和气动两种驱动方式. 2・多种特征：C10D三爪卡盘：距安装面的高度较低，因此适用于普通的夹紧，用途广泛. C24D两爪卡盘：尽管不规则工件有夹紧偏差，此卡盘也要将其精确定位. C10D三爪卡盘：此卡盘是大通孔动力卡盘，易于对长杆形工件进夹紧，且易清除碎屑.

1・固定式装置 2・多様な特徴

1・고정식 장착 2・다양한 특징

Introduction of Measuring Instrument /测定器保有现况/保有測定機/측정기 보유현황

NO	Measuring Tool	Capacity & Model	Maker
1	Universal Performance testing Machine for Chuck & Cylinder	Max. 10,000RPM	SEOAM-HWACHEON
2	Cylinder Rotation performance tester	Max. 7,000RPM	SEOAM
3	Load Indicator Unit	DN-10(5~20,000kgf)	SEOAM
4	Chuck Performance Testing Machine	-	SEOAM
5	Electro-Dynamical Gripping Force Measuring Equipement	0~100KN	Röhm
6	Chuck & Cylinder Durability Tester	Max. 2 Million times	SEOAM
7	3D Coordinate Measuring Machine	RS-150DCC(1200×1200×1000)	SHEFFIELD
8	Roundness Measuring tool	EMD-3200	Federal Formascan
9	Precision Balancing test Machine	H1BK/H30NB	NAGAHAMA-SCHENCK
10	Matallurgical Stereo Microcope	GX-51(MAX.1,000X)	OLYMPUS
11	Autocollimetor	6D(Min.0.5 arc second)	NIKON
12	Surface Roughness Tester	Perthometer M1	MAHR
13	Micro Height Guage	MICRO HITE(0~500mm)	TESA
14	Hybrid temperature recoder (Multi Point Type)	AH3000	CHINO
15	Sound level Meter	CENTER 320(30~130dB)	CENTER
16	Relief Valve Tester	Max 60kgf/㎠	SEOAM
17	Check Valve Tester	Max 60kgf/㎠	SEOAM
18	Chuck & Cylinder Rotation Performance Tester(Horizontal)	Max 3,000RPM(24″Chuck)	SEOAM
19	Chuck & Cylinder Rotation Performance Tester(vertical)	Max 1,300RPM(50″Chuck)	SEOAM

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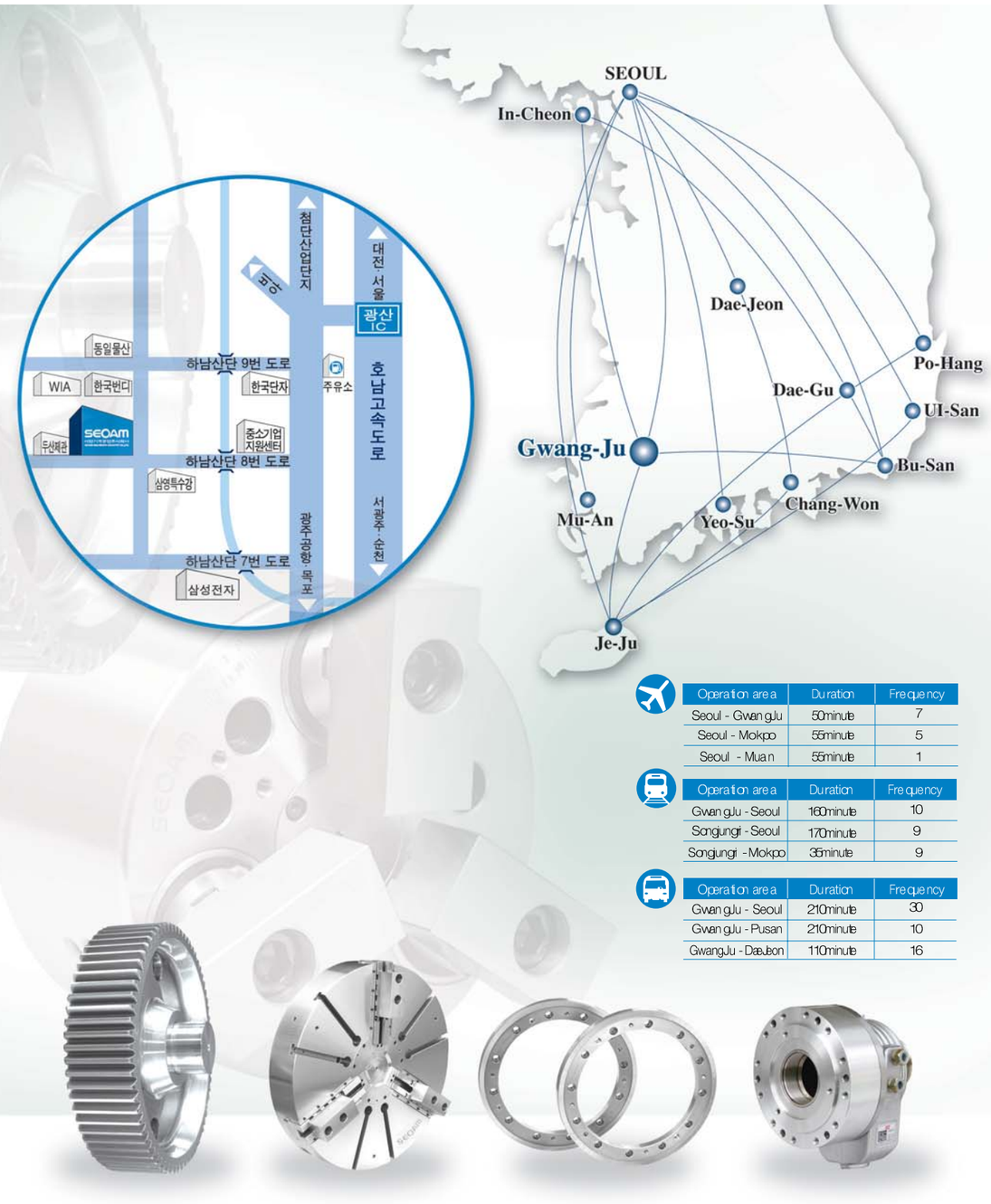

Operation area	Duration	Frequency
Seoul - Gwangju	50minute	7
Seoul - Mokpo	55minute	5
Seoul - Muan	55minute	1

Operation area	Duration	Frequency
Gwangju - Seoul	160minute	10
Songjungi - Seoul	170minute	9
Songjungi - Mokpo	35minute	9

Operation area	Duration	Frequency
Gwangju - Seoul	210minute	30
Gwangju - Pusan	210minute	10
GwangJu - DaeJeon	110minute	16

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