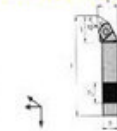


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PRECISION.



- Air Power Chuck ■
- Hydraulic Power Chuck ■
- Spindle Chuck ■
- Diaphragm Chuck ■
- Rotary Cylinder ■
- Design Chuck ■
- Special Workholders ■

2009-EN



P.2
Mini Spindle Diaphragm Chuck



P.3
Air Diaphragm Chuck



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Air Collet Chuck



P.5&P.8
Hydraulic Collet Chuck



P.9&P.10
Spindle Collet Chuck



P.10
Bi-Ends Spindle Diaphragm Chuck



P.11&P.12
BZI Type Spindle Collet Chuck



P.13
Diaphragm Power Chuck



P.15
Rotary Power Chuck



P.17
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DIN6343 Dead-Length Collet Chuck



P.20
Self-Contained Air Collet Chuck



P.21
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P.23
Open Center Air Cylinder



P.25&P.26
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P.27
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P.28
Bench Lathe Cylinders



P.29
Precision Stationary Chuck



P.30&P.32
Stationary Chuck



P.31
BZI Type Precision Stationary Chuck



P.33
Soft Jaws & Inserts
ATO Harden Jaws



P.35
Spring Collet / Mandrel / Guide Bush



P.37
Precision BZI Collet & Collet Changer



P.38
Jaws for Diaphragm Chucks

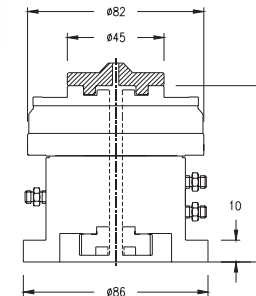
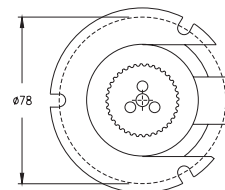
We Innovate The Way To Chuck



JAN-45V Mini Spindle Diaphragm Chuck



- Super high chucking accuracy: 0.002mm.
- Combination of precision spindle and diaphragm chuck.
- Specially designed for optical inspection of PCB drill bits.
- Extreme compact size: 86mm (3.58") in diameter, 92mm (3.62") in height, 2.5kgs (5.5lbs) in weight.
- Hydro-film bearing: super high spindle accuracy 0.001mm run-out.



JAN-45V Dimensions/Specifications

Model	JAN-45V
Operating Pressure	3-8kg/cm ² (43-113psi)
Through hole	6mm (0.24")
Max. Jaw Stroke	0.15mm (0.006")
Max. RPM	80
Net Weight	2.5kgs

Introduction

JAN-45V Mini Spindle Diaphragm Chuck is specially designed for micro machining/inspection applications. With JATO's advanced hydro-film bearing and diaphragm chuck technology, the chucking run-out is within 0.002mm.

JAN-45V is comprised of a diaphragm chuck, an air actuator, and a precise spindle. With these elements combined together, all the accumulated errors that may influence the chucking accuracy are largely eliminated. JAN-45V also has extreme compact size. It's only as big as your fist. With its mini size, JAN-45V is your ideal choice for designing special instruments that require extremely high chucking accuracy. Although general machining still occupies a large portion of today's manufacturing applications, the importance of micro machining has become notable. To meet with this trend, JAN-45V was therefore developed. JAN-45V was originally designed for optical inspection (laser) of PCB drill bits, now it is also applied for chucking of coronary stents, optical lens, and etc.



Chucking Run-out Examination

To examine the chucking accuracy of JAN-45V Spindle Chuck, we used a KEYENCE LS-7030 laser gauge to measure the run-out of a ground pin gauge that is chucked and rotated by JAN-45V Spindle Chuck. The examination shows JAN-45V has an excellent and stable chucking run-out of 0.002mm.

- The resolution of LS-7030 laser gauge is 0.0001mm.
- The rotating speed of JAN-45V is 15RPM.
- The diameter of the ground pin gauge is 3.175mm.





JAP100

Cylinder-Integrated Diaphragm Air Chuck



- ▶ Repeatability is within 0.002mm.
- ▶ Air cylinder is integrated: no cylinder or draw tube is needed.
- ▶ Real front-mounting design allows easy installation and operation.
- ▶ Highly-sealed chuck body helps protect cutting chips, dust or coolant fluid from entering.
- ▶ Gentle and precise clamping: suitable for fragile parts machining.
- ▶ O.D. chucking / I.D. expanding possible by changing jaw pads.
- ▶ Oil-mist air lubricated. Very low temperature rising under high RPM.
- ▶ Eccentric work-part chucking possible by custom making jaw pads.
- ▶ (Build to order) Eccentric Air Diaphragm Chuck: the eccentricity is manually adjustable.

Introduction

JATO JAP100 Cylinder-Integrated Diaphragm Air Chuck provides you with a high accuracy yet hassle-free diaphragm chucking solution, saving you from the trouble of installing cylinders, tailor making any draw tubes or air feeders. And with its real front-mounting design, the installation is revolutionarily easier than ever.

With its super precision clamping accuracy (repeatability 0.002mm) and gentle clamping force, the self-contained JAP100 Air Diaphragm Chuck is your ideal choice for any accuracy-critical and fragile material machining tasks. Plus the highly sealed chuck body, it helps prevent cutting chips, dust or any debris from entering, further ensuring a longer product life of the chuck and its accuracy.

JAP100 Air Diaphragm Chuck is a semi-tailor made product. Its jaw pad (full circle jaw) will be designed according to your part and your application. JAP100 has been widely used by our customers for years. It has been proven to be a reliable product and an excellent choice to increase value to your machines and your products, and bring you the unmatched advantages.

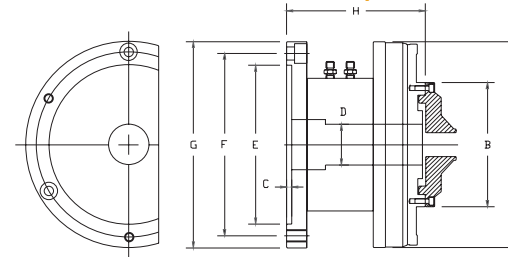
Applications

- Precision bushings.
- DVD spindle motor assembly.
- Bearing collars, bearing rings.
- Parts of cameras' lens module, thickness less than 0.7mm.
- PCB drill bits.
- Cylinder sleeve of air hand tools.
- Thin-wall parts. Fragile parts.
- Piston and cylinder of mini engines.

Refer to P38 for the reference of jaw designs of JAP100 chucks.

Air Diaphragm Chuck

JAP100 Dimensions and Specifications



Model	JAP104	JAP105	JAP106	JAP106 (42mm Through Hole)
A	100 (3.94")	136.5 (5.37")	166 (6.54")	166 (6.54")
B	60 (2.36")	70 (2.76")	100 (3.94")	100 (3.94")
C	4 (0.16")	4 (0.16")	5 (0.20")	5 (0.20")
D	10 (0.39")	14.5 (0.57")	28 (1.10")	42 (1.65")
E(H6)	70 (2.76")	100 (3.94")	130 (5.12")	130 (5.12")
F	82 (3.23")	115 (4.53")	147 (5.79")	147 (5.79")
G	97 (3.82")	136.5 (5.37")	167 (6.57")	167 (6.57")
H	73 (2.87")	88.8 (3.50")	101.5 (4.00")	101.5 (4.00")
Mounting Screw Hole	φ7.0x4	φ9.0x3+M8xP1.25x3	φ11.5x3+M10xP1.5x3	φ11.5x3+M10xP1.5x3
Max. RPM	5500	4750	3350	3350
Operating Pressure	0.5-7kg/cm ² (7-100psi)	0.5-7kg/cm ² (7-100psi)	0.5-7kg/cm ² (7-100psi)	0.5-7kg/cm ² (7-100psi)
Jaw Stroke	0.20mm (0.008")	0.25mm (0.010")	0.20mm (0.008")	0.20mm (0.008")
Chuck Through Hole	10mm (0.39")	14.5mm (0.57")	28mm (1.10")	42mm (1.65")
Max. Capacity (Non-Through)	45mm (1.77")	50mm (1.97")	80mm (3.15")	80mm (3.15")
Net Weight	2.8kgs (6.2lbs)	6.0kgs (13.2lbs)	9.5kgs (20.9lbs)	9.5kgs (20.9lbs)

Model	JAP107	JAP108	JHD110 (hydro actuated model)
A	197 (7.76")	207 (8.15")	186 (7.32")
B	118 (4.65")	146 (5.75")	117 (4.61")
C	5 (0.20")	4 (0.16")	5 (0.20")
D	38 (1.50")	60 (2.36")	42 (1.65")
E(H6)	155 (6.10")	160 (6.30")	155 (6.10")
F	172 (6.77")	172 (6.77")	172 (6.77")
G	197 (7.76")	197 (7.76")	192 (7.56")
H	105 (4.13")	120 (4.72")	125 (4.92")
Mounting Screw Hole	φ11.5x3+M10xP1.5x3	φ11.5x3+M10xP1.5x3	φ11.5x3+M10xP1.5x3
Max. RPM	3000	2500	900
Operating Pressure	0.5-7kg/cm ² (7-100psi)	0.5-7kg/cm ² (7-100psi)	0.5-7kg/cm ² (7-100psi)
Jaw Stroke	0.25mm (0.010")	0.25mm (0.010")	0.25mm (0.010")
Chuck Through Hole	38mm (1.50")	60mm (2.36")	42mm (1.65")
Max. Capacity (Non-Through)	95mm (3.74")	124mm (4.88")	94mm (3.70")
Net Weight	15.0kgs (33.0lbs)	18.0kgs (39.7lbs)	14.5kgs (31.9lbs)

*Jaw stroke is measured at height 15mm from H at ± 6kg/cm²

*Chuck with larger stroke is available upon request

*Chuck with larger through hole is available upon request



JAP200 Cylinder-Integrated Air Collet Chuck

- Precision collet chuck with built-in air cylinder.
- No need to install an extra cylinder, a draw tube or an air feeder.
- Work-part chucking repeatability up to 0.025mm.
- Works with standard 5C, 16C, B42, B60 or B80 collets.
- High speed up to 5000RPM (JAP206-5C).
- Large through hole up to 80mm (JAP210-B80).
- Self-lock design on close side offers high safety.
- High resistance to coolant fluid and chips penetration.
- I.D. chucking possible by installing a mandrel and a pushing nut. (JAP207-B42/JAP208-B60)



JAP200 Introduction

JATO JAP200 Cylinder Integrated Air Collet Chuck provides you with irreplaceable convenience to set up your power collet chuck system. With JATO's unique technology, JAP200 Collet Chuck integrates itself a high performance air cylinder, saving you from installing an extra cylinder, tailor making any draw tube or any air feeders. With its real front-mounting design, the installation for a power collet-chuck system is revolutionarily easier than ever.

CHP200 Cylinder-Integrated Hydraulic Collet Chuck Special for Rotary Tables and Index Tables

- Precision collet chuck with built-in hydraulic cylinder.
- No need to install an extra cylinder or a draw tube.
- High resistance to coolant fluid and chips penetration.
- Compact size. Large clamping force.

Applications

- Rotary table or index table power work-holding system.
- Gear hobbing, skiving, and shaping.
- 4-axis or 5-axis work-holding on machine centers.
- NC-controlled index drilling or tapping.



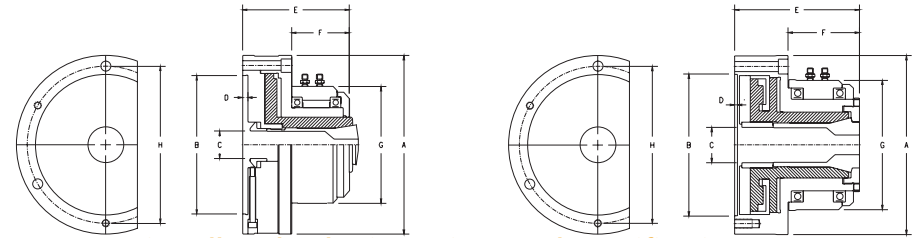
CHP200 Introduction

JATO CHP200 Cylinder Integrated Hydraulic Collet Chuck is specially designed to provide a hassle-free work-holding solution for rotary table applications. With built-in hydraulic actuator, CHP200 Collet Chuck can be front mounted onto a rotary table within minutes. CHP200 is resistant to cutting fluid and cutting chips, now is widely applied as machine centers' 4-axis or 5-axis work-holding system. It can also be installed onto NC tapping center for index drilling or tapping applications.

Cylinder-Integrated Collet Chuck

JAP206-5C/JAP207-16C/CHP206-5C

JAP207-B42/JAP208-B60/JAP210-B80
CHP206-B42/CHP207-C44/CHP207-B60



JAP200 Air Collet Chuck Dimensions and Specifications

Model	JAP206-5C	JAP207-16C	JAP207-B42	JAP208-B60	JAP210-B80
A	168 (6.61")	197 (7.76")	196 (7.72")	207 (8.15")	236 (9.32")
B	130 (5.12")	160 (6.30")	155 (6.10")	170 (6.69")	200 (7.87")
C	26 (1.02")	40 (1.57")	42 (1.65")	60 (2.36")	80 (3.15")
D	5 (0.20")	5 (0.20")	5 (0.20")	5 (0.20")	5 (0.20")
E	100 (3.94")	112 (4.41")	138 (5.43")	148 (5.83")	160 (6.30")
F	55 (2.17")	64 (2.52")	77 (3.03")	86 (3.39")	88 (3.46")
G	110 (4.33")	130 (5.12")	144 (5.67")	168 (6.61")	196 (7.72")
H	147 (5.79")	176 (6.93")	172 (6.77")	186 (7.32")	215 (8.46")
Mounting Screw Hole	φ9.0x4	φ11.0x3 M10xP1.5x3	φ11.0x3 M10xP1.5x3	φ11.0x3 M10xP1.5x3	φ11.0x6
Working Collet	5C Collet	16C Collet	B42 Collet (173E)	B60 Collet (185E)	B80 Collet (193E)
Max. RPM	5000	4000	3600	3000	2300
Operating Pressure	3-8kg/cm ² (43-114psi)	3-8kg/cm ² (43-114psi)	3-8kg/cm ² (43-114psi)	3-8kg/cm ² (43-114psi)	3-8kg/cm ² (43-114psi)
Chuck Through Hole	26mm (1.02")	40mm (1.57")	42mm (1.65")	60mm (2.36")	80mm (3.15")
Clamping Force	4825kgf@7kg/cm ² (10615lbf@100psi)	5600kgf@7kg/cm ² (12320lbf@100psi)	5960kgf@7kg/cm ² (13112lbf@100psi)	7250kgf@7kg/cm ² (15950lbf@100psi)	9060kgf@7kg/cm ² (19932lbf@100psi)
Net Weight	10kgs (22lbs)	14kgs (31lbs)	17kgs (37lbs)	21kgs (46lbs)	28kgs (62lbs)

CHP200 Hydro Collet Chuck Dimensions and Specifications

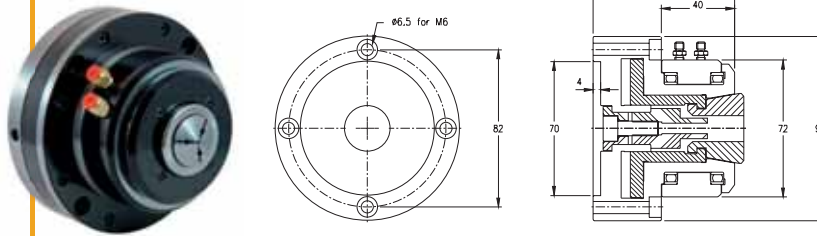
Model	CHP206-5C	CHP206-B42	CHP207-C44	CHP207-B60
A	168 (6.61")	168 (6.61")	194 (7.64")	188 (7.40")
B	130 (5.12")	130 (5.12")	155 (6.10")	155 (6.10")
C	26 (1.02")	42 (1.65")	44 (1.73")	60 (2.36")
D	5 (0.20")	5 (0.20")	5 (0.20")	6 (0.24")
E	100 (3.94")	133 (5.24")	128 (5.04")	127 (5.00")
F	55 (2.17")	89 (3.50")	83 (3.28")	85 (3.35")
G	110 (4.33")	132 (5.20")	146 (5.75")	137 (5.39")
H	147 (5.79")	147 (5.79")	172 (6.77")	170 (6.69")
Mounting Screw Hole	φ9.0x4	φ9.0x4	φ11.0x3+M10xP1.5x3	φ9.0x4
Working Collet	5C Collet	B42 Collet (173E)	C44 Collet	B60 Collet (185E)
Max. RPM	150	150	120	120
Operating Pressure	3-15kg/cm ² (43-215psi)	10-25kg/cm ² (143-357psi)	10-25kg/cm ² (143-357psi)	10-25kg/cm ² (143-357psi)
Chuck Through Hole	26mm (1.02")	42mm (1.65")	44mm (1.73")	60mm (2.36")
Clamping Force	9700kgf@15kg/cm ² (21340lbf@215psi)	5150kgf@15kg/cm ² (11330lbf@215psi)	5700kgf@15kg/cm ² (12540lbf@215psi)	6000kgf@15kg/cm ² (13200lbf@215psi)
Net Weight	10kgs (22.0lbs)	13kgs (28.6lbs)	15kgs (33.0lbs)	16kgs (35.2lbs)



Cylinder-Integrated Collet Chuck

JAP204-C12 Air Collet Chuck

High Precision 0.010mm Repeatability
Extreme Small Size 4" Chuck Diameter



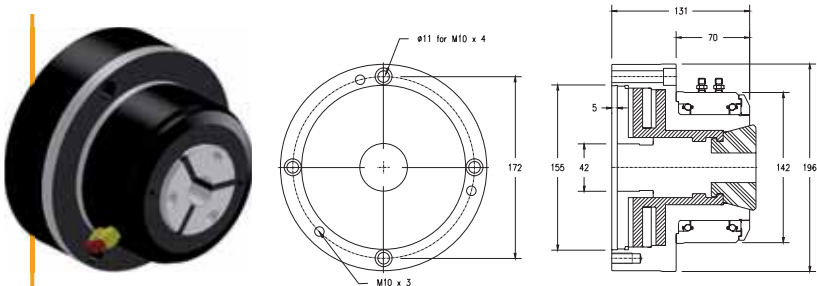
JAP204-C12 Product Features

- Extreme compact size: 97mm in diameter, 4kgs in weight.
- Precision pull-back air collet chuck: 0.010mm repeatability.
- Air cylinder is integrated. No need to install an extra cylinder.
- High speed up to 5500RPM.
- Max capacity is 12mm (0.5").
- Optional axial stopper to ensure high axial accuracy.

Model	JAP204-C12
Working Collet	C-12 Collet
Operating Pressure	3-8kg/cm ² (43-113psi)
Chuck Through Hole	12mm (0.5")
Max. RPM	5500
Net Weight	4.0kgs (8.8lbs)

JAP207-42BZI Air Collet Chuck

High Precision 42BZI Collet with 0.010mm Repeatability



JAP207-42BZI Product Features

- Precision pull-back air collet chuck: 0.010mm repeatability.
- Air cylinder is integrated. No need to install an extra cylinder.
- BZI type precision collets, compatible with Hainbuch/ROHM/Autoblok's clamping heads. See P37.
- High speed up to 3200RPM. Max capacity is 42mm (1.65").
- Optional axial stopper to ensure high axial accuracy.

Model	JAP207-42BZI
Working Collet	42BZI
Operating Pressure	3-8kg/cm ² (43-113psi)
Chuck Through Hole	42mm (1.65")
Max. RPM	3200
Net Weight	15.0kgs (33.0lbs)

Cylinder-Integrated Collet Chuck

CHP206-42BZI Hydraulic Collet Chuck for Index Tables

High Precision 42BZI Collet with 0.010mm Repeatability



Product Features

- Precision pull-back hydro collet chuck: 0.010mm repeatability.
- Specially designed for installing on index tables.
- Max capacity is 42mm (1.65").

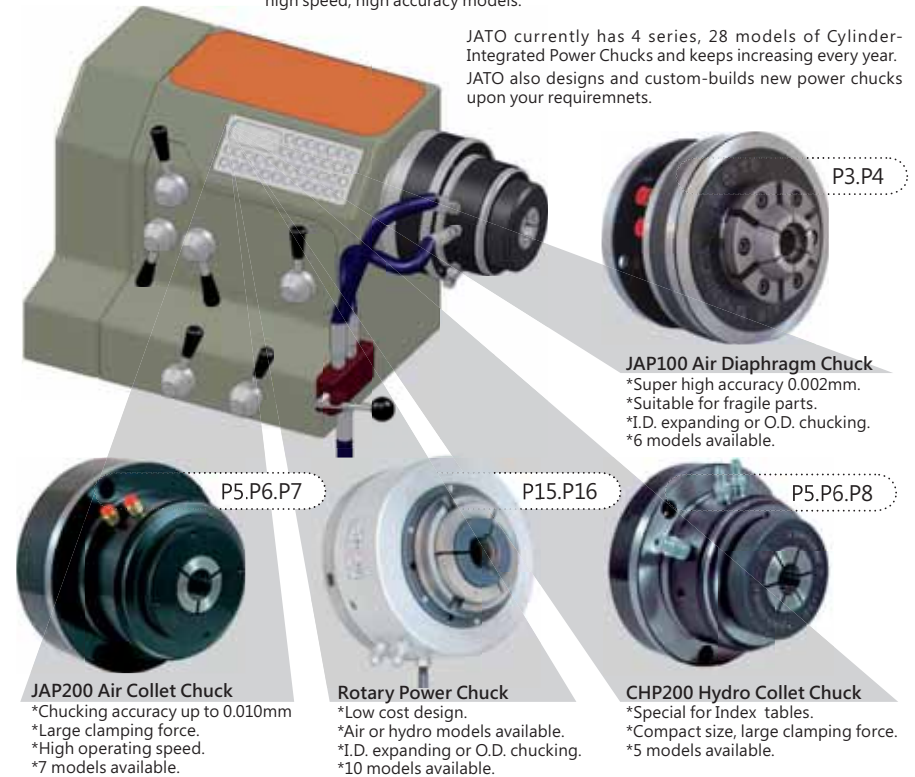
Model	CHP206-42BZI
Working Collet	42BZI
Operating Pressure	3-25kg/cm ² (43-358psi)
Chuck Through Hole	42mm (1.65")
Max. RPM	150
Net Weight	9.0kgs (19.8lbs)

Application Diagram: Cylinder-Integrated Power Chucks

The JATO Cylinder-Integrated Power Chuck features the simplest way to set up your power work-holding system. The JATO Cylinder-Integrated Power Chucks can be installed onto a machine spindle without an extra rotary actuator.

We offer a wide range of Cylinder-Integrated Power Chucks from low cost design to high speed, high accuracy models.

JATO currently has 4 series, 28 models of Cylinder-Integrated Power Chucks and keeps increasing every year. JATO also designs and custom-builds new power chucks upon your requirements.



P3.P4

JAP100 Air Diaphragm Chuck

- *Super high accuracy 0.002mm.
- *Suitable for fragile parts.
- *I.D. expanding or O.D. chucking.
- *6 models available.

P5.P6.P7

JAP200 Air Collet Chuck

- *Chucking accuracy up to 0.010mm
- *Large clamping force.
- *High operating speed.
- *7 models available.

P15.P16

Rotary Power Chuck

- *Low cost design.
- *Air or hydro models available.
- *I.D. expanding or O.D. chucking.
- *10 models available.

P5.P6.P8

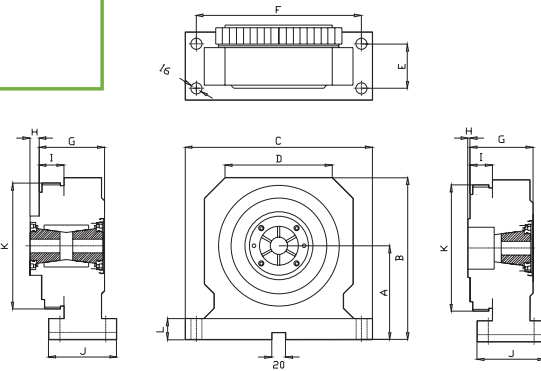
CHP200 Hydro Collet Chuck

- *Special for Index tables.
- *Compact size, large clamping force.
- *5 models available.



JAM/JHM Spindle Collet Chuck

- An integration of rotary spindle, power collet chuck, and air/hydro actuator.
- Specially designed for double-ended machining; saving setup, loading, and machining time.
- Accelerates the designing and building cycle for a new special purpose machine.
- Compact size.
- High clamping force. High rigidity.



Introduction

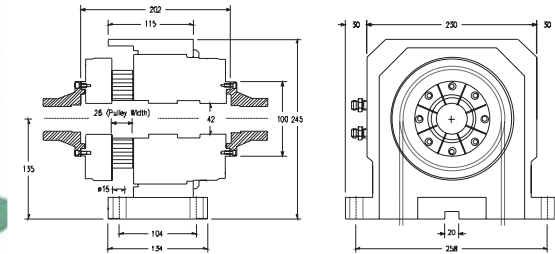
JATO JAM/JHM Series Spindle Collet Chuck is specially designed to provide users with the best solution to design and build their special purpose machines.

A traditional power work-holding system consists of a rotary spindle, a chuck, and a power actuator. JAM/JHM combines these three elements in one, making machine builders very easy to design and build special purpose machines with workpart auto-loading and NC controlled machining. Since we also longer the chucking length of the collet, JAM/JHM is mostly used to chuck double-ended work parts like hubs of bicycle wheels or piston rods of automobiles.

Model	JAM-25	JAM-25D	JAM-72	JHM65-A
A	135 (5.31")	135 (5.31")	145 (5.71")	135 (5.31")
B	232 (9.13")	232 (9.13")	265 (10.43")	232 (9.13")
C	270 (10.63")	270 (10.63")	288 (11.34")	270 (10.63")
D	210 (8.27")	210 (8.27")	240 (9.45")	210 (8.27")
E	64 (2.52")	64 (2.52")	105 (4.13")	64 (2.52")
F	238 (9.37")	238 (9.37")	256 (10.08")	238 (9.37")
G	88 (3.46")	98 (3.86")	105 (4.13")	96 (3.78")
H (Tapered Sleeve)	0-5.0 (0-0.20")	5.5-13.5 (0.22"-0.53")	2.0-7.0 (0.08"-0.28")	
I	29 (1.14")	34 (1.34")	30 (1.18")	33 (1.30")
J	98 (3.86")	98 (3.86")	135 (5.31")	98 (3.86")
K	174 (6.85")	182 (7.17")	202 (7.95")	167 (6.57")
L	30 (1.18")	30 (1.18")	34 (1.34")	30 (1.18")
Working Collet	ER-40 (Single Collet)	ER-40 (Double Collet)	JR-72 (Single Collet)	JR-65 (Single Collet)
Air/Hydro Actuated	Air	Air	Air	Hydro
Operating Pressure	2-8kg/cm ² (29-114psi)	2-8kg/cm ² (29-114psi)	2-8kg/cm ² (29-114psi)	10-25kg/cm ² (143-357psi)
Max. RPM	2000	2000	1400	1400
Chucking Capacity	4-26mm (0.16"-1.02")	4-26mm (0.16"-1.02")	25-70mm (0.98"-2.76")	25-60mm (0.98"-2.36")
Piston Area	138cm ² (21.4in ²)	138cm ² (21.4in ²)	124cm ² (19.2in ²)	70cm ² (10.85in ²)
Clamping Force	4750kgf@7kg/cm ² (10450lbf@100psi)	4750kgf@7kg/cm ² (10450lbf@100psi)	5550kgf@7kg/cm ² (12210lbf@100psi)	5250kgf@16kg/cm ² (11550lbf@229psi)
Net Weight	22.5kgs (49.5lbs)	25.5kgs (56.1lbs)	33.5kgs (73.7lbs)	23.0kgs (50.6lbs)

JAW-42 Spindle Diaphragm Chuck

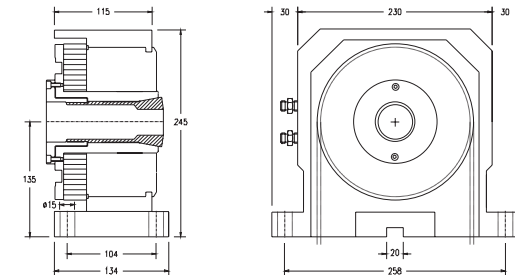
Bi-Ends Chucking for Simultaneous Machining of OPC Drums



JAW-42 Product Features

- Specially designed for chucking OPC Drums (optical photo conductor) of laser printers.
- Spindle run-out ≤ 0.003mm. Work-part chucking run-out ≤ 0.010mm.
- Adjustable chucking force. Suitable for chucking thin-tubes whose thickness is 0.7mm (or less).
- Compressed air actuated. High speed up to 3600 RPM.
- 42mm chucking capacity. Minimum chucking span is 210mm.

JAK-40 Spindle Collet Chuck- 16C Collet



JAK-40 Product Features

- Work with 16C spring collet. 40mm chucking capacity.
- Spindle run-out ≤ 0.010mm. Work-part chucking run-out ≤ 0.025mm.
- Compressed air actuated. High speed up to 3200 RPM.
- Large clamping force. 6000kgf@7kg/cm² (13200lbf@100psi).
- Variation models upon request: 5C, B42, B60, B80 Spindle Collet Chucks.



JHM Series Precision Spindle Collet Chuck (High Precision BZI Type Collet with 0.010mm Concentricity)



- Precision spindle collet chuck: 0.010mm chucking run-out.
- Specially designed for bi-ends simultaneously machining.
- Single-Collet and Double-Collet models available
- Work with BZI type precision collets, compatible with Hainbuch/ROHM/Autoblok's clamping heads. See P.37.
- Adjustable chucking length by mounting an extension taper sleeve (JHM-42D/JHM-42DL/JHM-65D/JHM-65DL).
- Quick collet change design: less than 30 seconds.

Introduction

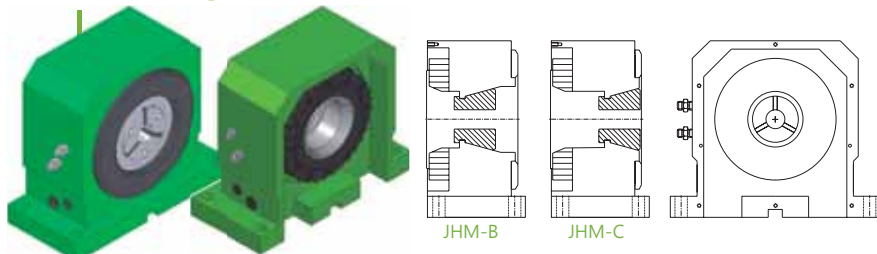
JHM Spindle Chuck is a combination of a precision spindle, a hydraulic actuator, and a collet chucking system with single or double collets. The JHM Spindle Chuck is sophisticatedly designed and built. The spindle set of JHM chuck is made of a pair of precision angular bearings, providing a 0.005mm accuracy. The JHM Spindle Chuck works with BZI type precision collets, and the repeatability is within 0.010mm.

JHM now has four major models to cope with work-part in varies length.

JHM-B/JHM-C Spindle Chuck is designed for chucking short work-parts. The work-part can be machined from front and rear of spindle chuck simultaneously. Long work-parts also can be chucked by 2 back-to-back JHM-B/JHM-C chucks.

JHM-D Spindle Chuck has double-collets design. The long work-parts can be chucked and machined on both ends simultaneously. **JHM-DL** is also a double-collets spindle chuck with an extra chucking span to cope with even longer work-parts. The chucking span of both JHM-D and JHM-DL chuck can be extended by adding an extended taper sleeve.

JHM-B Spindle Collet Chuck (Single Collet at Chuck Center) JHM-C Spindle Collet Chuck (Single Collet at Chuck Face)



Model	JHM-42B/JHM-42C	JHM-65B/JHM-65C	JHM-100B/JHM-100C
Actuated By	Hydro	Hydro	Hydro
Working Collet	42BZI x 1	65BZI x 1	100BZI x 1
Max. RPM (with/without oil cooling)	3000/2500	2500/2000	1800/1200
Chucking Capacity	42mm (1.65")	65mm (2.56")	100mm (3.94")
Regular Chucking Length	42mm (1.65")	53mm (2.09")	59mm (2.32")
Chucking Length Min. – Max. (reduced/increased collet length)	32mm-62mm (1.26" -2.44")	43mm-73mm (1.69" -2.87")	49mm-79mm (1.93" -3.11")
Chucking Run-Out (Measuring at height 25mm)	<0.010mm (0.0004")	<0.010mm (0.0004")	<0.020mm (0.0008")

*Specifications are subject to change without notification

*Build to order: Spindle Collet Chuck with 120mm/140mm/185mm Chucking Capacity

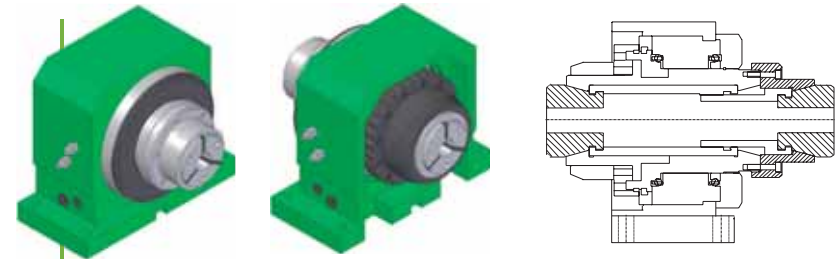
Precision Spindle Collet Chuck

JHM-42D / JHM-65D

Precision Spindle Collet Chuck – Double Collets
(Chucking Length Extended Possible)

JHM-42DL / JHM-65DL

Precision Spindle Collet Chuck – Double Collets with Extra Chucking Length
(Chucking Length Extended Possible)



Model	JHM-42D	JHM-65D	JHM-42DL	JHM-65DL
Actuated By	Hydro	Hydro	Hydro	Hydro
Working Collet	42BZI x 2	65BZI x 2	42BZI x 2	65BZI x 2
Max. RPM (with/without oil cooling)	3000/2500	2500/2000	3000/2500	2500/2000
Chucking Capacity	42mm (1.65")	65mm (2.56")	42mm (1.65")	65mm (2.56")
Regular Chucking Length	118mm (4.65")	128mm (5.04")	228mm (8.98")	238mm (9.37")
Chucking Length Min. – Max. (reduced/increased collet length)	98mm-158mm (3.86" -6.22")	108mm-168mm (4.25" -6.61")	208mm-258mm (8.19" -10.16")	218mm-268mm (8.58" -10.55")
Max. Length of Extended Taper Sleeve	60mm (2.36")	60mm (2.36")	60mm (2.36")	60mm (2.36")
Chucking Run-Out (Measuring at height 25mm)	<0.015mm (0.0006")	<0.015mm (0.0006")	<0.015mm (0.0006")	<0.015mm (0.0006")

*Specifications are subject to change without notification

Solutions for Work-parts in varies Lengths



2 Back-to-Back Single Collet JHM Chucks



Double Collet JHM Chuck with Extended Taper Sleeve



JTN300-H Diaphragm Power Chuck for NC Lathes

- Repeatability is within 0.002mm.
- High speed up to 8000 RPM.
- Compatible with Kitagawa B200 Chuck in installation.
- Anti centrifugal force design by incorporated weights. Clamping force remains high when high speed machining.
- Dynamic balancing weights are integrated for fine balance adjustment.
- No sliding part to wear out.
- No lubrication is needed.
- Clamping force and stroke is proportional to the cylinder pull force.
- Ideal for 2nd operation. Ideal for fragile parts, thin-wall parts chucking.



Introduction

JATO JTN300 Series 3 Jaw Diaphragm Chuck performs its clamping movement by material deformation which features high repeatability and low maintenance requirements. Compared to regular wedge type 3 jaw chucks, JTN300 diaphragm chuck owns high repeatability of 0.002mm, and longer product life because JTN300 has no clearance, no sliding parts to wear out.

JTN300 Series 3 Jaw Diaphragm Chuck now has two models:

- JTN300-H Diaphragm Power Chuck for NC Lathes
- JTN300-G Diaphragm Power Chuck for Grinders

JTN300-G Diaphragm Power Chuck for Grinders

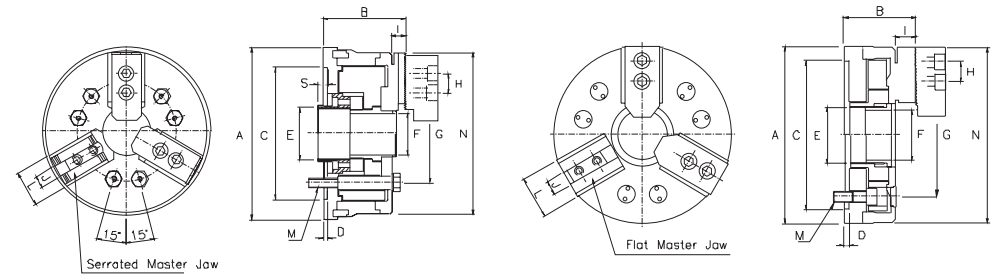
- Repeatability is within 0.002mm.
- Compatible with Kitagawa B200 Chuck in installation.
- Specially designed for high accuracy grinders.
- No sliding part to wear out.
- No lubrication is needed.
- Compact size, low profile design.
- Clamping force and stroke is proportional to the cylinder pull force.
- Ideal for fragile parts, thin-wall parts chucking.

JTN300-H is designed for high speed and high accuracy turning machines. JTN300-H incorporates weights to eliminate the centrifugal force. Dynamic balancing can be easily adjusted by integrated balancing weights. Clamping force remains high and stable when speed is up to 8000RPM. JTN300-H is widely used in high speed lathes or NC turning centers which require micro-meter chucking accuracy.

JTN300-G is specially designed for ID/OD grinders or NC grinding centers. This chuck is with low profile and has low weight design which can enable your machines to have high performance and micro-meter chucking accuracy.

3-Jaw Diaphragm Power Chuck

Dimensions and Specifications



Model	JTN305-H	JTN306-H	JTN308-H	JTN310-H	JTN306-G	JTN308-G
A	147mm (5.79")	182mm (7.17")	232mm (9.13")	267mm (10.51")	167mm (6.57")	197mm (7.76")
B	68mm (2.68")	88mm (3.46")	98mm (3.86")	105mm (4.13")	65.5mm (2.58")	71mm (2.80")
C (H6)	110mm (4.33")	140mm (5.51")	170mm (6.69")	220mm (8.66")	140mm (5.51")	170mm (6.69")
D	4mm (0.16")	5mm (0.20")	5mm (0.20")	5mm (0.20")	5mm (0.20")	5mm (0.20")
E	M40 x P1.5	M55 x P2.0	M60 x P2.0	M85 x P2.0	M55 x P2.0	M60 x P2.0
F	33mm (1.30")	44mm (1.73")	50mm (1.97")	75mm (2.95")	44mm (1.73")	53mm (2.09")
G	82.6mm (3.25")	104.8mm (4.13")	133.4mm (5.25")	171.4mm (6.75")	104.8mm (4.13")	133.4mm (5.25")
H	14mm (0.55")	20mm (0.79")	25mm (0.98")	30mm (1.18")	20mm (0.79")	25mm (0.98")
I	13mm (0.51")	15.5mm (0.61")	17mm (0.67")	17mm (0.67")	17.5mm (0.69")	19mm (0.75")
J	10mm (0.39")	12mm (0.47")	14mm (0.55")	16mm (0.63")	12mm (0.47")	14mm (0.55")
L	30mm (1.18")	38mm (1.50")	42mm (1.65")	47mm (1.85")	38mm (1.50")	42mm (1.65")
M	M10 x 3	M10 x 6	M12 x 6	M16 x 6	M10 x 6	M12 x 6
N	136mm (5.35")	171mm (6.73")	217mm (8.54")	256mm (10.08")	165mm (6.50")	197mm (7.76")
S	14mm (0.55")	10mm (0.39")	12mm (0.47")			
Max. RPM	8000	7500	6500	5500	600	600
Jaw Stroke @Cylinder Force	1.1mm@1400kgf (0.04"@3080lbf)	1.5mm@1800kgf (0.06"@3960lbf)	1.8mm@2800kgf (0.07"@6160lbf)	2.2mm@3800kgf (0.09"@8360lbf)	0.6mm@1800kgf (0.02"@3960lbf)	0.8mm@2800kgf (0.03"@6160lbf)
Clamping Force @Cylinder Force	1420kgf@1400kgf (3124lbf@3080lbf)	2140kgf@1800kgf (4708lbf@3960lbf)	3203kgf@2800kgf (7047lbf@6160lbf)	4590kgf@3800kgf (10098lbf@8360lbf)	1820kgf@1800kgf (4000lbf@3960lbf)	2723kgf@2800kgf (5990lbf@6160lbf)
Max. Allowable Cylinder Force	1750kgf (3850lbf)	2250kgf (4950lbf)	3500kgf (7700lbf)	4750kgf (10450lbf)	2250kgf (4950lbf)	3500kgf (7700lbf)
Installation Compatible With	Kitagawa B205	Kitagawa B206	Kitagawa B208	Kitagawa B210	Kitagawa B206	Kitagawa B208
Net Weight	5.5kgs (12.1lbs)	11.0kgs (24.2lbs)	20.0kgs (44.0lbs)	30.5kgs (67.1lbf)	5.5kgs (12.1lbs)	8.0kgs (17.6lbs)

Applications

- Bearing collars, bearing rings.
- Parts of cameras' lens module, thickness less than 0.5mm.
- Sleeve of air hand tools.
- Piston and cylinder of mini engines.



Air/Hydro Rotary Power Chuck

- Air/Hydro cylinder is built-in. No need for extra cylinders.
- Repeatability for collet type power chuck: 0.030mm-0.050mm.
- Repeatability for jaw type power chuck: 0.050mm-0.080mm.
- Aluminum alloy chuck body, light-weighted, good heat dispensation.
- Allows non-stop operation when loading parts.
- Widely applied to convert manual lathes into powered ones.
- Widely applied to build special purpose machines.
- **Do not spray cutting fluid to the chuck directly.**
- JA7-44/JH7-44 has special design to provide 2.5 times clamping force.
- **JA7-44/JH7-44: I.D. chucking possible by installing a mandrel and a pushing nut.**
- **New Function: JH7-70/JH9-90/JH9-120 can be actuated by pneumatic by installing an optional air booster.**



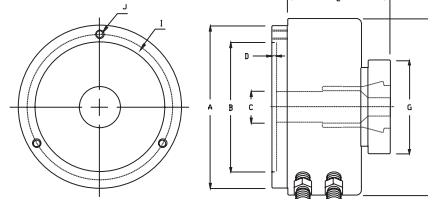
Introduction

It used to be complex for users to convert a manual chucking system to a power one, since setting up a hydraulic system not only is expensive, but also is troublesome. JATO Rotary Power Chuck is specially designed to help users to set up a power work-holding system in a low cost way. With a built-in cylinder, JATO's Rotary Power Chuck allows users to easily and quickly set up a power work-holding system, and saving cost on purchasing an additional rotary cylinder. JATO Rotary Power Chuck also has quick-change jaw/collet design, helping you to cope with parts of various dimensions.

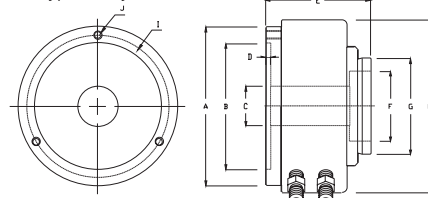
Rotary Power Chuck comes with both air and hydraulic models that range from small sizes to large ones, giving users more options to choose from. Rotary Power Chuck now is widely applied to convert manual lathes to semi-auto ones with power work-holding system, or is applied to build all kinds of special purpose machines.

Refer to P.34 for the reference of harden jaw designs of JATO Rotary Power Chucks.

Collet Type Rotary Power Chuck



Jaw Type Rotary Power Chuck



Rotary Power Chuck

Dimensions/Specifications

Collet Type Rotary Power Chuck

Model	JA7-44/JH7-44	JA5-YB25
A	192 (7.56")	135 (5.31")
B	155 (6.10")	100 (3.94")
C	44 (1.73")	26 (1.02")
D	5 (0.20")	4 (0.16")
E	135 (5.31")	96 (3.78")
F	-	-
G	110 (4.33")	108 (4.31")
H	212 (8.35")	170 (6.69")
I	172 (6.77")	115 (4.53")
J	M10 x P1.5 x 3	M8 x P1.25 x 3
Working Collet/Jaws	C-44 Collet/Expanding Kit	YB-25 Collet
Air/Hydro Actuated	Air/Hydro	Air
Operating Pressure	2-20kg/cm2 (28-286psi)	2-9kg/cm2 (28-130psi)
Max. RPM	1600	1800
Max. Capacity Through/Non-Through	44mm (1.73")	25mm (0.98")
Piston Area	116cm2 (18in2)	115cm2 (17.8in2)
Clamping Force	9150kgf@16kg/cm2 (20130lbf@229psi)	2680kgf@7kg/cm2 (5896lbf@100psi)
Net Weight	17kgs (37.4lbs)	8kgs (17.2lbs)

Jaw Type Rotary Power Chuck - Air Actuated

JA5-25	JA7-40	JA7-70
135 (5.31")	192 (7.56")	192 (7.56")
100 (3.94")	155 (6.10")	155 (6.10")
27 (1.06")	47 (1.85")	68 (2.68")
4 (0.16")	5 (0.20")	5 (0.20")
105 (4.13")	128 (5.04")	142 (5.60")
45 (1.77")	65 (2.56")	105 (4.13")
68 (2.68")	94 (3.70")	168 (6.61")
170 (6.69")	212 (8.35")	266 (10.47")
115 (4.53")	172 (6.77")	172 (6.77")
M8 x P1.25 x 3	M10 x P1.5 x 3	M10 x P1.5 x 3
C-25 Jaws	C-40 Jaws	C-70 Jaws
Air	Air	Air
2-9kg/cm2 (28-130psi)	2-9kg/cm2 (28-130psi)	2-9kg/cm2 (28-130psi)
1800	1600	1400
25mm/32mm (0.98"/1.26")	45mm/50mm (1.77"/1.97")	68mm/90mm (2.68"/3.54")
115cm2 (17.8in2)	182cm2 (28.2in2)	328cm2 (50.8in2)
2680kgf@7kg/cm2 (5896lbf@100psi)	4250kgf@7kg/cm2 (9350lbf@100psi)	7700kgf@7kg/cm2 (16940lbf@100psi)
7.5kgs (16.5lbs)	15.0kgs (33.0lbs)	22.5kgs (49.5lbs)

Jaw Type Rotary Power Chuck - Hydraulic Actuated

***New Function: JH7-70/JH9-90/JH9-120 can be actuated by pneumatic by installing an optional air booster.**

Model	JH5-25	JH7-40	JH7-70	JH9-90	JH9-120
A	135 (5.31")	192 (7.56")	192 (7.56")	230 (9.06")	230 (9.06")
B	100 (3.94")	155 (6.10")	155 (6.10")	190 (7.48")	190 (7.48")
C	26 (1.02")	45 (1.77")	68 (2.68")	88 (3.52")	120 (4.72")
D	4 (0.16")	5 (0.20")	5 (0.20")	6 (0.24")	6 (0.24")
E	105 (4.13")	128 (5.04")	142 (5.60")	150 (5.91")	160 (6.30")
F	45 (1.77")	65 (2.56")	105 (4.13")	105 (4.13")	140 (5.51")
G	68 (2.68")	94 (3.70")	136 (5.35")	136 (5.35")	168 (6.61")
H	138 (5.43")	192 (7.56")	211 (8.31")	232 (9.13")	275 (10.83")
I	115 (4.53")	172 (6.77")	172 (6.77")	210 (8.27")	210 (8.27")
J	M8 x P1.25 x 3	M10 x P1.5 x 3	M10 x P1.5 x 3	M12 x P1.75 x 3	M12 x P1.75 x 3
Working Collet/Jaws	C-25 Jaws	C-40 Jaws	C-70 Jaws	C-70 Jaws	C-120 Jaws
Air/Hydro Actuated	Hydro	Hydro	Hydro or Pressure Boosted Air	Hydro or Pressure Boosted Air	Hydro or Pressure Boosted Air
Operating Pressure	10-25kg/cm2 (143-357psi)	10-20kg/cm2 (143-286psi)	10-20kg/cm2 (143-286psi)	10-15kg/cm2 (143-214psi)	10-15kg/cm2 (143-214psi)
Max. RPM	1800	1600	1400	1100	900
Max. Capacity Through/Non-Through	25mm/32mm (0.98"/1.26")	45mm/50mm (1.77"/1.97")	68mm/90mm (2.68"/3.54")	88mm/88mm (3.52"/3.52")	118mm/118mm (4.65"/4.65")
Piston Area	56cm2 (8.68in2)	90cm2 (13.9in2)	116cm2 (18.0in2)	132cm2 (20.5in2)	183cm2 (28.4in2)
Clamping Force	3330kgf@16kg/cm2 (7326lbf@228psi)	5350kgf@16kg/cm2 (11770lbf@228psi)	6920kgf@16kg/cm2 (15524lbf@228psi)	7870kgf@16kg/cm2 (17314lbf@228psi)	8150kgf@12kg/cm2 (17930lbf@171psi)
Net Weight	6.0kgs (13.2lbs)	13.0kgs (28.6lbs)	18.0kgs (39.6lbs)	24.0kgs (52.8lbs)	30.0kgs (66.0lbs)



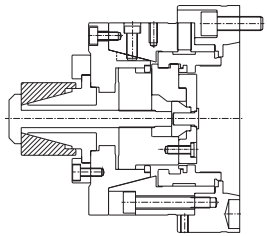
JPC Precision Collet Chuck JPCA Precision Collet Chuck with Axial Stop

(High Precision BZI Type Precision Collet with 0.010mm Repeatability)

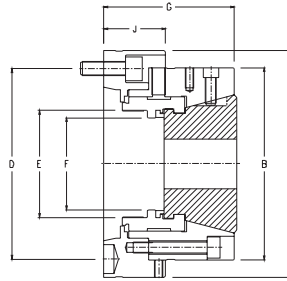
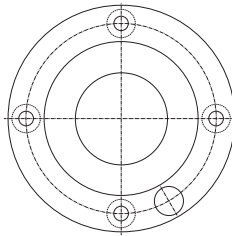


- Precision pull-back collet chuck: 0.010mm repeatability.
- Fast collet changing design: less than 30 seconds.
- BZI type precision rubber collets, compatible with Hainbuch/ROHM/Autoblok's clamping heads. See P.37.
- Large clamping force. Large clamping stroke: $\pm 0.50\text{mm}$.
- I.D. expanding possible by adding an expanding mandrel adaptor.

JPC Collet Chuck Dimensions/Specifications



I.D. Expanding with Mandrel Adaptor



O.D. Chucking with BZI Collet

Model	JPC-42A5	JPC-42A6	JPC-65A5	JPC-65A6	JPC-65A8
A	140 (5.51")	165 (6.50")	155 (6.10")	165 (6.50")	210 (8.27")
B	125 (4.92")	125 (4.92")	145 (5.70")	145 (5.70")	145 (5.70")
D	104.8 (4.13")	133.4 (5.25")	104.8 (4.13")	133.4 (5.25")	171.4 (6.75")
E	M78 x P1.5	M78 x P1.5	M78 x P1.5	M78 x P1.5	M78 x P1.5
F	42 (1.65")	42 (1.65")	65 (2.56")	65 (2.56")	65 (2.56")
G	104 (4.09")	104 (4.09")	114 (4.49")	114 (4.49")	114 (4.49")
J	70 (2.76")	70 (2.76")	72 (2.83")	72 (2.83")	72 (2.83")
Mounting Screws	M10 x 4	M12 x 4	M10 x 4	M12 x 4	M16 x 4
Working Collet	42BZI	42BZI	42BZI	65BZI	65BZI
Draw Bar Stroke	4.5mm (0.18")	4.5mm (0.18")	4.5mm (0.18")	4.5mm (0.18")	4.5mm (0.18")
Collet Opening/Closing Range	$\pm 0.5\text{mm}$ (0.02")	$\pm 0.5\text{mm}$ (0.02")	$\pm 0.5\text{mm}$ (0.02")	$\pm 0.5\text{mm}$ (0.02")	$\pm 0.5\text{mm}$ (0.02")
Chuck Through Hole	42mm (1.65")	42mm (1.65")	65mm (2.56")	65mm (2.56")	65mm (2.56")
Allowable Draw Bar Force	2680kgf (5896lbf)	2680kgf (5896lbf)	3440kgf (7568lbf)	3440kgf (7568lbf)	3440kgf (7568lbf)
Max. Clamping Force	6120kgf (13460lbf)	6120kgf (13460lbf)	8030kgf (17670lbf)	8030kgf (17670lbf)	8030kgf (17670lbf)
Max. RPM	6500	6500	5500	5500	5500
Net Weight	6.4kgs (14.1lbs)	7.6kgs (16.7lbs)	11.2kgs (24.6lbs)	13.2kgs (29.0lbs)	17.2kgs (37.8lbs)

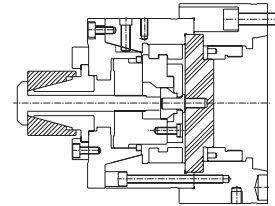
JPC Collet Chucks in flat back are available upon request

I.D. Expanding Mandrel Adaptor is designed according to dimension of your work-parts

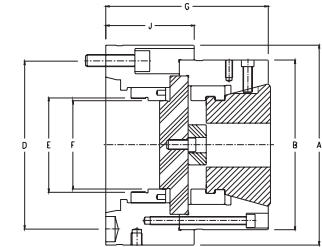
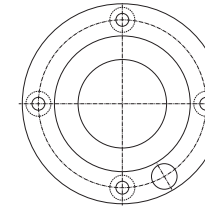
*Specifications are subject to change without notification.

Precision Collet Chuck

JPCA Collet Chuck with Axial Stop Dimensions and Specifications



I.D. Expanding with Mandrel Adaptor



O.D. Chucking with BZI Collet

Model	JPCA-42A5	JPCA-42A6	JPCA-65A5	JPCA-65A6	JPCA-65A8
A	140 (5.51")	165 (6.50")	155 (6.10")	165 (6.50")	210 (8.27")
B	125 (4.92")	125 (4.92")	145 (5.70")	145 (5.70")	145 (5.70")
D	104.8 (4.13")	133.4 (5.25")	104.8 (4.13")	133.4 (5.25")	171.4 (6.75")
E	M78 x P1.5	M78 x P1.5	M78 x P1.5	M78 x P1.5	M78 x P1.5
F	42 (1.65")	42 (1.65")	65 (2.56")	65 (2.56")	65 (2.56")
G	120 (4.72")	120 (4.72")	130 (5.12")	130 (5.12")	130 (5.12")
J	70 (2.76")	70 (2.76")	72 (2.83")	72 (2.83")	72 (2.83")
Mounting Screws	M10 x 4	M12 x 4	M10 x 4	M12 x 4	M16 x 4
Working Collet	42BZI	42BZI	42BZI	65BZI	65BZI
Draw Bar Stroke	4.5mm (0.18")	4.5mm (0.18")	4.5mm (0.18")	4.5mm (0.18")	4.5mm (0.18")
Collet Opening/Closing Range	$\pm 0.5\text{mm}$ (0.02")	$\pm 0.5\text{mm}$ (0.02")	$\pm 0.5\text{mm}$ (0.02")	$\pm 0.5\text{mm}$ (0.02")	$\pm 0.5\text{mm}$ (0.02")
Chuck Through Hole	42mm (1.65")	42mm (1.65")	65mm (2.56")	65mm (2.56")	65mm (2.56")
Allowable Draw Bar Force	2680kgf (5896lbf)	2680kgf (5896lbf)	3440kgf (7568lbf)	3440kgf (7568lbf)	3440kgf (7568lbf)
Max. Clamping Force	6120kgf (13460lbf)	6120kgf (13460lbf)	8030kgf (17670lbf)	8030kgf (17670lbf)	8030kgf (17670lbf)
Max. RPM	6500	6500	5500	5500	5500
Net Weight	7.4kgs (16.3lbs)	8.8kgs (19.4lbs)	13.0kgs (28.6lbs)	15.4kgs (33.9lbs)	20.4lbs (44.9lbs)

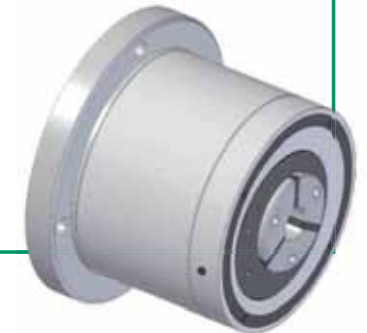
JPCA Collet Chucks in flat back are available upon request

I.D. Expanding Mandrel Adaptor is designed according to dimension of your work-parts

*Specifications are subject to change without notification.

Precision Eccentric Collet Chuck

- Adjustable eccentricity (manually).
- Eccentricity: 0-12mm (0-0.47").
- High accuracy: 0.015mm repeatability.
- BZI type precision rubber collet, compatible with Hainbuch/ROHM/Autoblok's clamping heads.
- Available models: 42BZI or 65BZI eccentric collet chuck.



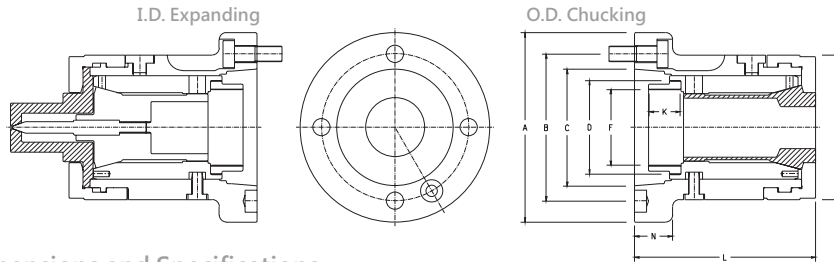


Precision Collet Chuck

CPC Series Dead-Length Collet Chuck (DIN6343 Spring Collets)



- ▲ Precision dead-length collet chuck: 0.025mm repeatability.
- ▲ Large clamping force.
- ▲ Working with DIN6343 collets: 163E(B30), 173E(B42), 185E(B60), 193E(B80).
- ▲ High speed up to 8000RPM (CPC-30A4).
- ▲ Large through hole up to 80mm (CPC-80A8).
- ▲ I.D. chucking possible by installing an expanding mandrel and a push nut.



Dimensions and Specifications

Model	CPC-30A4	CPC-42A5	CPC-42A6	CPC-60A6	CPC-60A8	CPC-80A8
A	112mm (4.41")	135mm (5.31")	170mm (6.69")	170mm (6.69")	220mm (8.66")	220mm (8.66")
B	82.6mm (3.25")	104.8mm (4.13")	133.4mm (5.25")	133.4mm (5.25")	171.4mm (6.75")	171.4mm (6.75")
C	63.5mm (2.50")	82.56mm (3.25")	106.36mm (4.19")	106.36mm (4.19")	139.7mm (5.50")	139.7mm (5.50")
D	M50 x P1.5	M66 x P1.5	M66 x P1.5	M90 x P1.5	M90 x P1.5	M114 x P2.0
F	M40 x P1.5	M55 x P2.0	M60 x P2.0	M60 x P2.0	M85 x P2.0	M100 x P2.0
K	23mm (0.91")	23mm (0.91")	23mm (0.91")	31mm (1.22")	31mm (1.22")	31mm (1.22")
M	87mm (3.43")	103mm (4.06")	103mm (4.06")	132mm (5.20")	132mm (5.20")	155mm (6.10")
N	30mm (1.18")	27mm (1.06")	32mm (1.26")	27mm (1.06")	37mm (1.46")	35mm (1.38")
L	110mm (4.33")	129mm (5.08")	133mm (5.24")	155mm (6.10")	155mm (6.10")	175mm (6.89")
Mounting Screws	M10 x 3	M10 x 4	M12 x 4	M12 x 4	M16 x 4	M16 x 6
Working Collet	B30 (163E)	B42 (173E)	B42 (173E)	B60 (185E)	B60 (185E)	B80 (193E)
Taper Stroke	4.5mm (0.18")	6.0mm (0.24")	6.0mm (0.24")	6.0mm (0.24")	6.0mm (0.24")	6.0mm (0.24")
Chuck Through Hole	30mm (1.18")	42mm (1.65")	42mm (1.65")	60mm (2.36")	60mm (2.36")	80mm (3.15")
Allowable Draw Bar Force	2000kgf (4400lbf)	2500kgf (5500lbf)	2500kgf (5500lbf)	3000kgf (6600lbf)	3000kgf (6600lbf)	3500kgf (7700lbf)
Max. Clamping Force	4300kgf (9460lbf)	5400kgf (11880lbf)	5400kgf (11880lbf)	6500kgf (14300lbf)	6500kgf (14300lbf)	7300kgf (16060lbf)
Max. RPM	8000	6000	6000	5000	5000	4000

CPC Collet Chucks in flat back are available upon request

Ordering Information for I.D. expanding mandrel of CPC Collet Chuck

The CPC Collet Chuck can also be converted to an I.D. expanding chuck by installing a pushing nut and an expanding mandrel. The conversion is very easy and takes only 60 seconds. Please specify JATO the dimension of the mandrel, or send us the drawing of your work-part. The mandrel will be quick shipped in 15 days.

Self-Contained Air Collet Chuck

CAP Series Self-Contained Air Collet Chuck High Precision BZI Type Collet with 0.010mm Repeatability



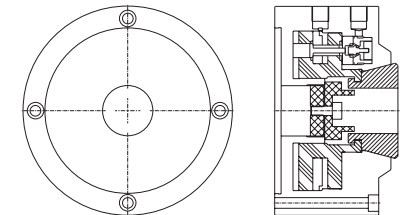
- ▲ Precision air collet chuck: 0.010mm repeatability.
- ▲ Double pistons design to provide large actuating force.
- ▲ Self-contained cylinder with check valve to contained high air pressure.
- ▲ No additional rotary cylinder is needed.
- ▲ Fast collet changing design: less than 30 secs.
- ▲ BZI type collets, compatible with Hainbuch/ROHM's clamping heads. See P37.
- ▲ Suitable for manual-loading/auto-chucking applications.
- ▲ Optional air booster to provide even larger chucking force.

CAP Air Collet Chuck Instruction

JATO CAP Series Self-Contained Air Collet Chuck is specially designed for semi-auto chucking applications (manually loading and pneumatically chucking). CAP Chuck has built-in piston and check valve. The operator injects compressed air into CAP chuck then remove the air off, the CAP chuck

will contain high chucking force through the whole machining process. The actuator is already contained in the CAP chuck, so there is no rear actuator is needed, simplifying you setting for a powered work-holding system.

CAP Air Collet Chuck works with BZI type precision rubber collet, providing a 0.010mm chucking repeatability. The CAP Chuck was originally designed as work-holder for turning or grinding process under regular air pressure (3-8kg/cm²). JATO now also supplies high quality air pressure booster to enhance the clamping force of CAP Chuck, making it also suitable for large clamping force required applications such as milling, drilling, tapping, and etc.



Dimensions and Specifications

Model	CAP-32BZI	CAP-42BZI	CAP-65BZI
Working Collet	32BZI	42BZI	65BZI
Operating Pressure	3-25kg/cm ² (43-358psi)	3-25kg/cm ² (43-358psi)	3-25kg/cm ² (43-358psi)
Piston Axial Stroke	4.5mm (0.18")	4.5mm (0.18")	4.5mm (0.18")
Collet Opening/Closing Range	+/- 0.5mm	+/- 0.5mm	+/- 0.5mm
Chuck Through Hole	32mm (1.26")	42mm (1.65")	65mm (2.56")
Max. RPM	7500	6500	5500

*Specifications are subject to change without notification.

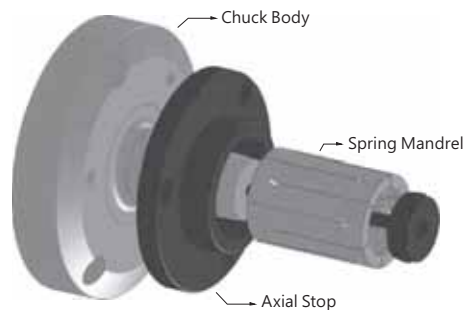
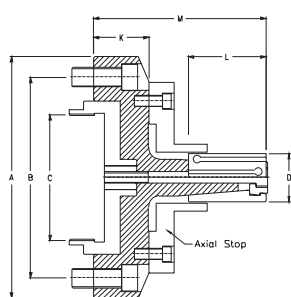
Precision Expanding Mandrel

CEM-A Precision Expanding Mandrel



- High precision expanding mandrel: 0.015mm repeatability.
- Axial pull down to expand.
- Large expansibility: 0.8mm.
- Axial stopper can be designed upon request.
- High rigidity design.
- Spring sleeve can be exchanged quickly.

CEM-A Dimensions and Specifications



Model	CEM-A-016	CEM-A-025	CEM-A-035	CEM-A-045
A	130 (5.12")	130 (5.12")	130 (5.12")	130 (5.12")
B	104.8 (4.13")	104.8 (4.13")	104.8 (4.13")	104.8 (4.13")
C	M66 x P1.5	M66 x P1.5	M66 x P1.5	M66 x P1.5
M	80 (3.15")	90 (3.54")	104 (4.10")	140 (5.51")
D - Mandrel Dia.	16mm-25mm (0.63"-0.98")	25mm-35mm (0.98"-1.38")	35mm-45mm (1.38"-1.77")	45mm-80mm (1.77"-3.15")
L - Mandrel Length	38mm (1.50")	48mm (1.89")	60mm (2.36")	90mm (3.54")
Mounting Screws	M10 x 3	M10 x 3	M10 x 3	M10 x 3
Draw Bar Stroke	4mm (0.16")	4mm (0.16")	4mm (0.16")	6mm (0.24")
Mandrel Expansion	0.8mm (0.03")	0.8mm (0.03")	0.8mm (0.03")	1.2mm (0.06")
Max. Allowable Draw Force	500kgf (1100lbf)	850kgf (1870lbf)	1150kgf (2530lbf)	1450kgf (3190lbf)

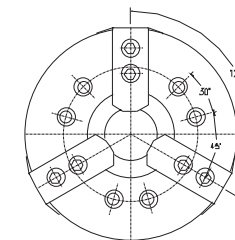
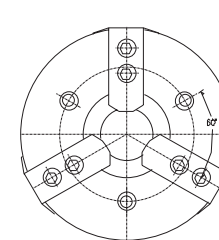
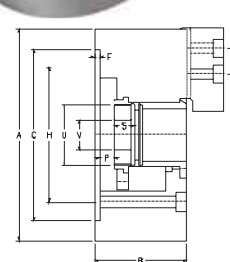
Flange adaptors in A5, A6, or A8 spindle nose are available upon request.

*Specifications are subject to change without notification.

Open Center 3 Jaw Power Chuck



- Wedge hook type 3 jaw power chuck.
- High speed and high clamping force.
- Large through hole for bar/shaft parts chucking.
- Made of high grade alloy steel. All sliding parts are harden and ground.
- Compatible with Kitagawa B200 chucks.



OP-204/OP-205

OP-206/OP-208/OP-210/OP-212

Dimensions/Specifications

Model	OP-204	OP-205	OP-206	OP-208	OP-210	OP-212
A	110mm (4.33")	135mm (5.31")	169mm (6.65")	210mm (8.27")	254mm (10.00")	304mm (11.97")
B	59mm (2.32")	60mm (2.36")	81mm (3.19")	91mm (3.58")	100mm (3.94")	110mm (4.33")
C	85mm (3.35")	110mm (4.33")	140mm (5.51")	170mm (6.69")	220mm (8.66")	220mm (8.66")
F	4mm (0.16")	4mm (0.16")	5mm (0.20")	5mm (0.20")	5mm (0.20")	6mm (0.24")
H	70.6mm (2.78")	82.6mm (3.25")	104.8mm (4.13")	133.4mm (5.25")	171.4mm (6.75")	171.4mm (6.75")
M	14mm (0.55")	14mm (0.55")	20mm (0.79")	25mm (0.98")	30mm (1.18")	30mm (1.18")
P (Min.-Max.)	-6.5mm/3.5mm (-0.26"/0.14")	-9mm/1mm (-0.35"/0.04")	-1mm/11mm (-0.04"/0.43")	-1.5mm/14.5mm (-0.06"/0.57")	-10.5mm/8.5mm (-0.41"/0.33")	-15mm/8mm (-0.59"/0.31")
S	17.5mm (0.69")	20mm (0.79")	19mm (0.75")	20.5mm (0.81")	25mm (0.98")	28mm (1.10")
U	M32 x P1.5	M40 x P1.5	M55 x P2.0	M60 x P2.0	M85 x P2.0	M100 x P2.0
V	12mm (0.47")	12mm (0.47")	20mm (0.75")	30mm (1.18")	40mm (1.57")	50mm (1.97")
Mounting Screws	M10 x P1.5 x 3	M10 x P1.5 x 3	M10 x P1.5 x 6	M12 x P1.75 x 6	M16 x P2.0 x 6	M16 x P2.0 x 6
Chuck Through Hole	26mm (1.02")	33mm (1.30")	45mm (1.77")	52mm (2.05")	75mm (2.95")	91mm (3.58")
Chucking Range	7-110mm (0.28"-4.33")	10-135mm (0.39"-5.31")	13-169mm (0.51"-6.65")	13-210mm (0.51"-8.27")	30-254mm (1.18"-10.00")	35-304mm (1.38"-11.97")
Plunge Stroke (Axial)	10mm (0.39")	10mm (0.39")	12mm (0.47")	16mm (0.63")	19mm (0.75")	23mm (0.91")
Jaw Stroke in Diameter	5.4mm (0.21")	5.4mm (0.21")	5.5mm (0.22")	7.4mm (0.29")	8.8mm (0.35")	10.6mm (0.42")
Allowable Draw Bar Force	1428kgf (3148lbf)	1730kgf (3806lbf)	2140kgf (4708lbf)	3360kgf (7392lbf)	4280kgf (9416lbf)	5500kgf (12100lbf)
Max. Clamping Force	2850kgf (6283lbf)	3570kgf (7854lbf)	5710kgf (12562lbf)	8360kgf (18392lbf)	11010kgf (24222lbf)	14380kgf (31636lbf)
Max. RPM	7000	6500	5500	4500	3800	3000
Net Weight	4.5kgs (9.9lbs)	6.1kgs (13.4lbs)	12.5kgs (27.5lbs)	21.9kgs (48.2lbs)	33.7kgs (74.1lbs)	55.3kgs (121.7lbs)



JAL846-D

Open Center Air Cylinder with Double Pistons

- 8" high speed air cylinder.
- 46mm (1.81") through hole.
- 15mm (0.59") stroke.
- Double-Piston design.
- Built-in safety check valve.
- Large output force up to 2300kgf (5060lbf) at 7kg/cm² (100psi).
- Very low temperature rising under high speed operation.
- Works with 8" jaw chucks or collet chucks.

JAL636/JAL636-PL

Open Center Air Cylinder

- 6" high speed air cylinder.
- 36mm (1.42") through hole.
- 12mm (0.47") stroke.
- Output force 775kgf (1705lbf) at 7kg/cm² (100psi).
- Very low temperature rising under high speed operation.
- Works with 5C or equivalent collets.
- JAL636-PL: pull force enhanced model, providing 935kgf (2057lbf) pulling force, 7mm (0.28") stroke.



JAL636-D

Open Center Air Cylinder with Double Pistons

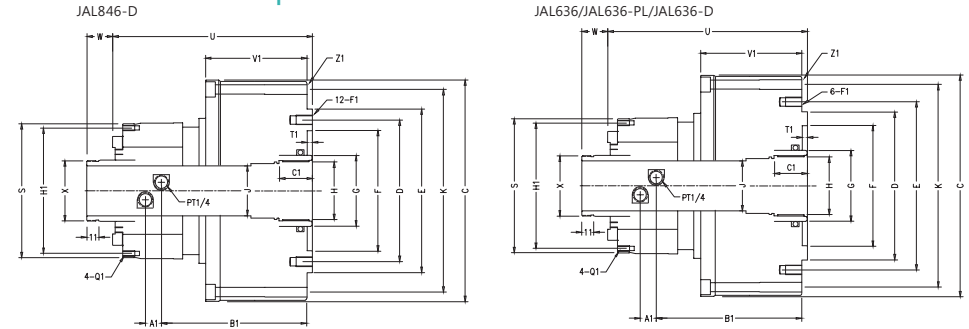
- 6" high speed air cylinder.
- 36mm (1.42") through hole.
- 12mm (0.47") stroke.
- Output force 1320kgf(2900lbf) at 7kg/cm² (100psi).
- Works with 6" jaw chucks or collet chucks.

Introduction

Air cylinder technology is the future. Compared to hydraulic cylinders which now are major option in the industry, air cylinders own more advantages such as higher performance and lower operating cost. Air cylinders are powered by compressed air which means saving cost on hydraulic pumps and tanks. Air cylinders also have extremely low temperature rising, making them a better solution of rear-actuators for high-speed NC machines since there won't be any thermal distortion problem to worry about, further reducing cost on any cooling equipment.

Open Center Air Cylinder

Dimensions and Specifications



Model	JAL846-D (double-pistons)	JAL636	JAL636-PL (pull force enhanced)	JAL636-D (double-pistons)
A1	15 (0.59")	13 (0.51")	13 (0.51")	13 (0.51")
B1	133 (5.24")	82 (3.23")	82 (3.23")	112 (4.41")
C	203 (7.99")	162 (6.38")	162 (6.38")	160 (6.30")
C1	30 (1.18")	25 (0.98")	25 (0.98")	25 (0.98")
D	130 (5.12")	100 (3.94")	100 (3.94")	110 (4.33")
E (h7)	150 (5.91")	115 (4.53")	115 (4.53")	N/A
F (H7)	110 (4.33")	65 (2.56")	65 (2.56")	N/A
F1	M10	M10	M10	N/A
G	65 (2.56")	55 (2.17")	55 (2.17")	45 (1.77")
H	M55xP2.0	M42xP1.5	M42xP1.5	M38xP1.5
H1	110 (4.33")	96 (3.78")	96 (3.78")	N/A
J (Through Hole)	46 (1.81")	36 (1.42")	36 (1.42")	36 (1.42")
K	186 (7.32")	147 (5.79")	147 (5.79")	143 (5.63")
Q1	M5	M5	M5	N/A
S	123 (4.84")	105 (4.13")	105 (4.13")	92 (3.62")
T1	4 (0.16")	4 (0.16")	4 (0.16")	4 (0.16")
U	183 (7.20")	123 (4.84")	123 (4.84")	160 (6.30")
V1	93 (3.66")	58 (2.28")	58 (2.28")	90 (3.54")
W	9-24 (0.35-0.94")	9-21 (0.35-0.83")	15-21 (0.59-0.83")	0-12 (0.00"-0.47")
X	M55xP1.5	M45xP1.5	M45xP1.5	M43xP1.5
Z1	M8 x 8	M6 x 8	M6 x 8	M8 x 6
Piston Area - Push Side	389cm ² (60.3in ²)	130cm ² (20.2in ²)	130cm ² (20.2in ²)	224cm ² (34.7in ²)
Piston Area - Pull Side	378cm ² (58.6in ²)	123cm ² (19.1in ²)	123cm ² (19.1in ²)	224cm ² (34.7in ²)
Operating Pressure	2-9kg/cm ² (28-128psi)	2-9kg/cm ² (28-128psi)	2-9kg/cm ² (28-128psi)	2-9kg/cm ² (28-128psi)
Piston Stroke	15 mm (0.59")	12mm (0.47")	7mm (0.28")	12mm (0.47")
Axial Push Force @7kg/cm ² (100psi)	2300kgf (5060lbf)	820kgf (1804lbf)	600kgf (1320lbf)	1320kgf (2900lbf)
Axial Pull Force @7kg/cm ² (100psi)	2250kgf (4950lbf)	775kgf (1705lbf)	935kgf (2057lbf)	1320kgf (2900lbf)
Check Valve	Push and Pull Side	None	Pull Side by Elastic Springs	None
Net Weight	14.5kgs (31.9lbs)	7.2kgs (15.8lbs)	7.2kgs (15.8lbs)	9.0kgf (19.8lbf)
Operating RPM	3000	3500	3500	3000
*Max. RPM	3500	4500	4500	3500

* Requires well cleaned, dehydrated, and oil-mist lubricated input air stream.



Close Center Hydraulic Cylinder

CHL Close Center Hydraulic Cylinder

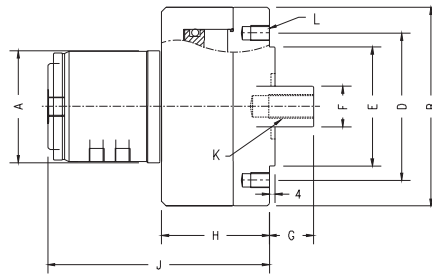
- High performance and low cost hydraulic rotary cylinder.
- Aluminum cylinder body, light-weighted, good heat dispensation.
- Advanced hydro bearing design, high RPM, low temperature rising, long product life.



Introduction

CHL Series Close Center Hydraulic Cylinder has compact size and is light weighted, providing large actuating force for jaw chucks or collet chucks. CHL is a cost-effective solution for setting up your work-holding system.

Dimensions and Specifications



Model	CHL-65	CHL-80	CHL-100	CHL-125	CHL-150
A	72 (2.83")	72 (2.83")	72 (2.83")	72 (2.83")	72 (2.83")
B	100 (3.94")	110 (4.33")	135 (5.31")	160 (6.30")	186 (7.32")
D	80 (3.15")	90 (3.54")	100 (3.94")	130 (5.12")	130 (5.12")
E (h7)	60 (2.36")	65 (2.56")	80 (3.15")	110 (4.33")	110 (4.33")
F	22 (0.87")	25 (0.98")	30 (1.18")	35 (1.38")	45 (1.77")
G	30-45 (1.18"-1.77")	25-40 (0.98"-1.57")	25-45 (0.98"-1.77")	25-50 (0.98"-1.97")	25-55 (0.98"-2.17")
H	70 (2.83")	62 (2.44")	76 (2.99")	82 (3.23")	108 (4.25")
J	168 (6.61")	136 (5.35")	152 (5.98")	158 (6.22")	206 (8.11")
K	M12x30L	M16x30L	M20x35L	M24x40L	M30x45L
L	6-M8x16L	6-M8x16L	6-M10x20L	6-M12x20L	12-M12x24L
Operating Pressure	35kg/cm ² (500psi)	35kg/cm ² (500psi)	35kg/cm ² (500psi)	35kg/cm ² (500psi)	35kg/cm ² (500psi)
Max. RPM	4500	4000	4000	3500	3500
Piston Stroke	15mm (0.59")	15mm (0.59")	20mm (0.79")	25mm (0.98")	30mm (1.18")
Piston Area - Push Side	32cm ² (5.0in ²)	44cm ² (6.8in ²)	75cm ² (11.6in ²)	119cm ² (18.4in ²)	174cm ² (27.0in ²)
Piston Area - Pull Side	28cm ² (4.3in ²)	41cm ² (6.4in ²)	69cm ² (10.7in ²)	111cm ² (17.2in ²)	158cm ² (25.0in ²)
Axial Push Force	912kgf@30kg/cm ² (2007lbf@428psi)	1254kgf@30kg/cm ² (2758lbf@428psi)	2130kgf@30kg/cm ² (4700lbf@428psi)	3390kgf@30kg/cm ² (7460lbf@428psi)	4950kgf@30kg/cm ² (10890lbf@428psi)
Axial Pull Force	798kgf@30kg/cm ² (1756lbf@428psi)	1168kgf@30kg/cm ² (2570lbf@428psi)	1960kgf@30kg/cm ² (4320lbf@428psi)	3160kgf@30kg/cm ² (6959lbf@428psi)	4490kgf@30kg/cm ² (9878lbf@428psi)
Net Weight	3.1kgs (6.8lbs)	4.5kgs (9.9lbs)	6.0kgs (13.2lbs)	7.5kgs (16.5lbs)	12.1kgs (26.4lbs)

Close Center Air Cylinder

CAL Close Center Air Cylinder

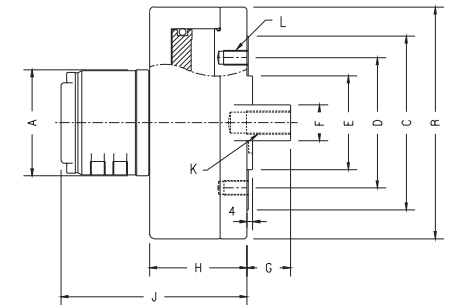
- High performance close center air cylinder. It saves cost on purchasing hydro systems which including oil pumps and tanks.
- Aluminum cylinder body, light-weighted.
- JATO's advanced air cylinder technology: large pushing/pulling force with very low air leakage.



Introduction

CAL Series Close Center Air Cylinder is powered by compressed air, saving cost on hydro pumps and tanks. With our advanced air cylinder technology, CAL Air Cylinder has extremely low air leakage. We also increase the piston area of CAL cylinder to enhance its actuating force. CAL Air Cylinder is a cost-effective solution for setting up your work-holding system.

Dimensions and Specifications



Model	CAL-130	CAL-170	CAL-170-DP (Double-Pistons Design)	CAL-220
A	73 (2.87")	73 (2.87")	73 (2.87")	73 (2.87")
B	160 (6.30")	200 (7.87")	200 (7.87")	255 (10.04")
C	120 (4.72")	140 (5.51")	140 (5.51")	170 (6.69")
D	90 (3.54")	100 (3.94")	100 (3.94")	130 (5.12")
E (h7)	65 (2.56")	80 (3.15")	80 (3.15")	110 (4.33")
F	25 (0.98")	25 (0.98")	30 (1.18")	30 (1.18")
G	30-45 (1.18"-1.77")	25-45 (0.98"-1.77")	25-45 (0.98"-1.77")	25-50 (0.98"-1.97")
H	65 (2.56")	81 (3.19")	118 (4.65")	86 (3.39")
J	128 (5.04")	150 (5.91")	214 (8.43")	156 (6.14")
K	M16x30L	M16x30L	M20x30L	M16x30L
L	6-M8x16L	6-M10x18L	6-M10x18L	6-M12x20L
Operating Pressure	2-8kg/cm ² (29-114psi)	2-8kg/cm ² (29-114psi)	2-8kg/cm ² (29-114psi)	2-8kg/cm ² (29-114psi)
Max. RPM	4000	3500	3000	2600
Piston Stroke	15mm (0.59")	20mm (0.79")	20mm (0.79")	25mm (0.98")
Piston Area - Push Side	132cm ² (20.5in ²)	225cm ² (34.9in ²)	442cm ² (68.5in ²)	378cm ² (58.6in ²)
Piston Area - Pull Side	125cm ² (19.4in ²)	219cm ² (33.9in ²)	437cm ² (67.7in ²)	369cm ² (57.2in ²)
Axial Push Force	831kgf@7kg/cm ² (1828lbf@100psi)	1417kgf@7kg/cm ² (3117lbf@100psi)	2780kgf@7kg/cm ² (6116lbf@100psi)	2381kgf@7kg/cm ² (5238lbf@100psi)
Axial Pull Force	787kgf@7kg/cm ² (1731lbf@100psi)	1379kgf@7kg/cm ² (3034lbf@100psi)	2730kgf@7kg/cm ² (6006lbf@100psi)	2324kgf@7kg/cm ² (5113lbf@100psi)
Net Weight	6.5kgs (14.3lbs)	7.7kgs (16.9lbs)	10.5kgs (23.1lbs)	12.8kgs (28.2lbs)



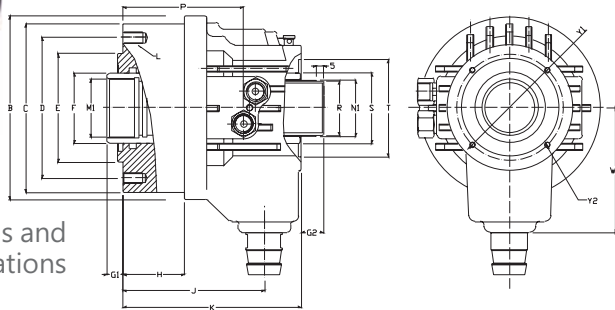
Open Center Hydraulic Cylinder

JHL Series Open Center Hydraulic Cylinder



- Aluminum cylinder body. Compact size design with low mass and low inertia.
- Built-in safety check valve provides high safety.
- With large through hole to work with bar feeder or cooler feeder.

Dimensions and Specifications

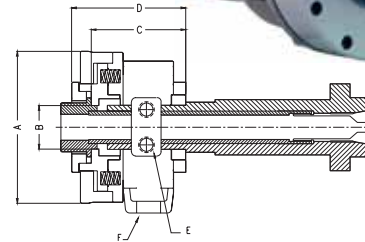
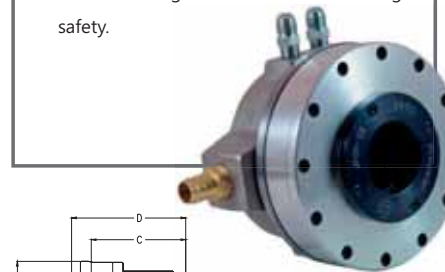


Model	JHL-50-28	JHL-65-36	JHL-85-46	JHL-135-52	JHL-182-75
B	130 (5.12")	150 (5.90")	180 (7.09")	198 (7.80")	225 (8.86")
C	120 (4.72")	135 (5.31")	156 (6.14")	188 (7.40")	213 (8.39")
D	100 (3.94")	115 (4.53")	130 (5.12")	170 (6.69")	190 (7.48")
E	80 (3.15")	100 (3.94")	100 (3.94")	130 (5.12")	160 (6.30")
F	40 (0.16")	48 (1.89")	65 (2.56")	70 (2.76")	95 (3.74")
G1 Min. - Max.	0-10 (0"-0.39")	0-15 (0"-0.59")	0-15 (0"-0.59")	0-20 (0"-0.79")	0-25 (0"-0.98")
G2 Min. - Max.	23-33 (0.91"-1.30")	22-37 (0.87"-1.46")	22-37 (0.87"-1.46")	22-42 (0.87"-1.65")	22-47 (0.87"-1.85")
H	45 (1.77")	47.5 (1.87")	61.5 (2.42")	66 (2.60")	62 (2.44")
J	127.5 (5.02")	125.5 (4.94")	132 (5.20")	145 (5.71")	166.5 (6.56")
K	162 (6.38")	175.5 (6.91")	195.5 (7.70")	200 (7.87")	233 (9.17")
L	6 - M8x15L	6 - M10x20L	12 - M10x20L	12 - M10x20L	12 - M10x22L
M1	M33xP1.5x25L	M42xP1.5x25L	M55xP2.0x30L	M60xP2.0X30L	M85xP2.0X35L
N1	M34xP1.5X26L	M44xP1.5x28L	M52xP1.5x34L	M58xP1.5x34L	M84xP2.0X40L
P	101.5 (4.00")	119 (4.69")	127.5 (5.02")	135.5 (5.33")	153.5 (6.04")
R	32 (1.26")	42 (1.65")	50 (1.97")	56 (2.20")	81 (3.19")
S	45 (1.77")	55 (2.17")	70 (2.76")	75 (2.95")	100 (3.94")
T	65(2.56")	80(3.15")	95(3.74")	105(4.13")	135(5.31")
W2	105(4.13")	110(4.33")	125(4.92")	130 (5.12")	160(6.30")
Y1	76(2.99")	90(3.54")	105(4.13")	115(4.53")	145(5.71")
Y2	4 - M4x7L	4 - M5x10L	4 - M5x11L	4 - M5x12L	4 - M6x10L
Piston Area - Push Side	53.2cm ² (8.25in ²)	69.8cm ² (10.82in ²)	97.3cm ² (15.08in ²)	146.8cm ² (22.75in ²)	196.2cm ² (30.41in ²)
Piston Area - Pull Side	50.5cm ² (7.53in ²)	67.5cm ² (10.46in ²)	87.9cm ² (13.62in ²)	136.6cm ² (21.17in ²)	182.0cm ² (28.21in ²)
Operating Pressure	35kg/cm ² (500psi)	35kg/cm ² (500psi)	35kg/cm ² (500psi)	35kg/cm ² (500psi)	35kg/cm ² (500psi)
Piston Stroke	10mm (0.40")	15mm (0.60")	15mm (0.60")	20mm (0.80")	25mm (0.98")
Axial Push Force @20kg/cm ² (286psi)	1064kgf (2341lbf)	1396kgf (3071lbf)	1946kgf (4281lbf)	2936kgf (6459lbf)	3924kgf (8632lbf)
Axial Pull Force @20kg/cm ² (286psi)	1010kgf (2222lbf)	1350kgf (2970lbf)	1758kgf (3868lbf)	2732kgf (6010lbf)	3640kgf (8008lbf)
Net Weight	5.8kgs (12.8lbs)	8.5kgs (18.7lbs)	13.5kgs (29.7lbs)	16.4kgs (36.1lbs)	25.8kgs (56.8lbs)
Max. RPM	7000	7000	6000	5000	4500

Bench Lathe Cylinder

JHR Series Bench Lathe Hydraulic Cylinder

- Advanced hydro-static-bearing design, long product life.
- Specially designed for converting traditional bench lathes into automatic ones.
- Directly mounted onto spindle-tail, no adaptor is needed. Easy installation.
- Very compact size and light weighted.
- Self-lock design on close side offers high safety.

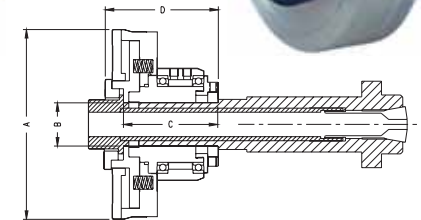


Dimensions and Specifications

Model	JHR-32	JHR-52
A	148 (5.83")	170 (6.69")
B (O.D. of spindle-tail)	40-52 (1.57"-2.05")	40-66 (1.57"-2.60")
C (Piston push - Piston pull)	87.0-90.5 (3.43"-3.56")	92.0-95.5 (3.62"-3.76")
D	105 (4.13")	112 (4.41")
E (Oil Connector)	PT 1/4"	PT 1/4"
F (Oil Drain)	PT 1/2"	PT 3/4"
Max. RPM - intermittently	3000	2000
Max. RPM - without oil cooler	2400	1600
Max. RPM - with oil cooler	3000	2000
Max. Input Pressure	20kg/cm ² (286psi)	20kg/cm ² (286psi)
Piston Stroke	3.5mm (0.14")	3.5mm (0.14")
Max. Pulling Force	1800kgf (3960lbf)	2700kgf (5940lbf)
Net Weight	7.0kgs (15.4lbs)	11.0kgs (24.2lbs)

JAR Series Bench Lathe Air Cylinder

- Specially designed for converting traditional bench lathes into automatic ones.
- Compressed air actuated, saving cost on hydro pumps and tanks.
- High speed up to 4500RPM.
- Directly mounted onto spindle-tail, no adaptor is needed. Easy installation.
- Very compact size and light weighted.



Dimensions and Specifications

Model	JAR-25	JAR-32
A	148 (5.83")	168 (6.61")
B (O.D. of spindle-tail)	40-52 (1.57"-2.05")	40-52 (1.57"-2.05")
C (Piston push - Piston Pull)	86-90 (3.39"-3.54")	86-90 (3.39"-3.54")
D	107 (4.21")	107 (4.21")
Max. RPM	4800	4200
Max. Input Pressure	10kg/cm ² (143psi)	10kg/cm ² (143psi)
Piston Stroke	4mm (0.16")	4mm (0.16")
Max. Pulling Force	710kgf (1562lbf)	960kgf (2112lbf)
Net Weight	5.0kgs (11.0lbs)	5.8kgs (12.8lbs)

Before Ordering

The size "B", the internal diameter of JAR/JHR cylinder should be equal to the outer diameter of your spindle-tail. Please check the dimension of your spindle and inform us before ordering.

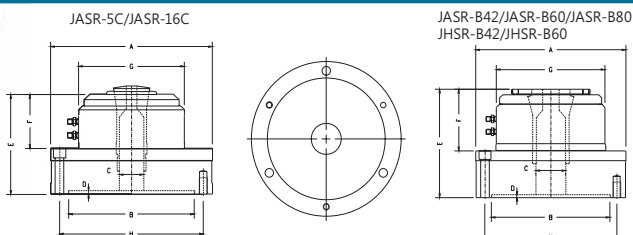
Precision Stationary Collet Chuck

Stationary Chuck

JASR/JHSR Series

Precision Stationary Collet Chuck - Push to Close (Dead Length)

- Precision Stationary Chuck: 0.015-0.030mm repeatability.
- Resistant to cutting fluid and dust.
- Air actuated or hydraulic actuated models available.
- Dead-length collet chuck: no work-part axial moving.
- 5C/16C/B42/B60/B80 models available.



Model	JASR-5C(Air)	JASR-16C(Air)	JASR-B42(Air)	JASR-B60(Air)
A	168 (6.61")	197 (7.76")	196 (7.72")	207 (8.15")
B	130 (5.12")	160 (6.30")	155 (6.10")	170 (6.69")
C	26 (1.02")	40 (1.57")	42 (1.65")	60 (2.36")
D	5 (0.20")	5 (0.20")	5 (0.20")	5 (0.20")
E	100 (3.94")	112 (4.41")	138 (5.43")	148 (5.83")
F	55 (2.17")	64 (2.52")	77 (3.03")	86 (3.39")
G	110 (4.33")	130 (5.12")	144 (5.67")	168 (6.61")
H	147 (5.79")	176 (6.93")	172 (6.77")	186 (7.32")
Mounting Screw Hole	φ9.0x4	φ11.0x3+M10xP1.5x3	φ11.0x3+M10xP1.5x3	φ11.0x3+M10xP1.5x3
Working Collet	5C Collet	16C Collet	B42 Collet (173E)	B60 Collet (185E)
Operating Pressure	3-8kg/cm ² (43-114psi)	3-8kg/cm ² (43-114psi)	3-8kg/cm ² (43-114psi)	3-8kg/cm ² (43-114psi)
Chuck Through Hole	26mm (1.02")	40mm (1.57")	42mm (1.65")	60mm (2.36")
Clamping Force	4825kgf@7kg/cm ² (10615lbf@100psi)	5600kgf@7kg/cm ² (12320lbf@100psi)	5960kgf@7kg/cm ² (13112lbf@100psi)	7250kgf@7kg/cm ² (15950lbf@100psi)
Net Weight	10kgs (22lbs)	14kgs (31lbs)	17kgs (37lbs)	21kgs (46lbs)

Model	JASR-B80(Air)	JHSR-B42(Hydro)	JHSR-B60(Hydro)
A	236 (9.32")	168 (6.61")	188 (7.40")
B	200 (7.87")	130 (5.12")	155 (6.10")
C	80 (3.15")	42 (1.65")	60 (2.36")
D	5 (0.20")	5 (0.20")	6 (0.24")
E	160 (6.30")	133 (5.24")	127 (5.00")
F	88 (3.46")	89 (3.50")	85 (3.35")
G	196 (7.72")	132 (5.20")	137 (5.39")
H	215 (8.46")	147 (5.79")	170 (6.69")
Mounting Screw Hole	φ11.0x6 for M10	φ9.0x4 for M8	φ9.0x4 for M8
Working Collet	B80 Collet (193E)	B42 Collet (173E)	B60 Collet (185E)
Operating Pressure	3-8kg/cm ² (43-114psi)	10-25kg/cm ² (143-357psi)	10-25kg/cm ² (143-357psi)
Chuck Through Hole	80mm (3.15")	42mm (1.65")	60mm (2.36")
Clamping Force	9060kgf@7kg/cm ² (19932lbf@100psi)	5150kgf@15kg/cm ² (11330lbf@215psi)	6000kgf@15kg/cm ² (13200lbf@215psi)
Net Weight	28kgs (62lbs)	13kgs (28lbs)	16kgs (35lbs)

JAS/JHS Stationary Chuck - Push to Close (Dead Length)

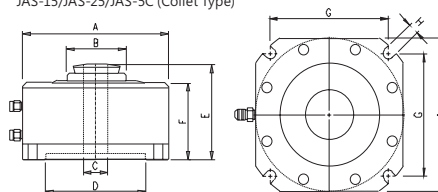
- Cost effective stationary chuck: 0.030-0.050mm repeatability.
- High accuracy. High rigidity. Long product life.
- High resistant to cutting chips, fluid or dust.
- Chuck force-opening design ensures no workpart jamming.



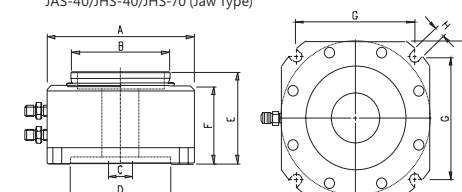
Introduction

JATO Stationary Chuck has served our customers for more than two decades, and owns the most advanced design and the lowest cost. This product answers the requirements of a stationary chuck from our demanding customers: reliable, low cost, high accuracy, long product life, high rigidity, resistant to fluid and dust, and force opening mechanism. Our engineers keep improving the product design for this simple chuck to achieve our goal for a flawless product.

JAS-15/JAS-25/JAS-5C (Collet Type)



JAS-40/JHS-40/JHS-70 (Jaw Type)



Model	JAS-15	JAS-25	JAS-5C	JAS-40	JHS-40	JHS-70
A	118 (4.65")	144 (5.67")	144 (5.67")	168 (6.61")	144 (5.67")	188 (7.40")
B	40 (1.57")	55 (2.17")	55 (2.17")	95 (3.74")	95 (3.74")	136 (5.35")
C	14 (0.55")	26 (1.02")	26 (1.02")	38 (1.50")	38 (1.50")	68 (2.68")
D	90 (3.54")	100 (3.94")	100 (3.94")	100 (3.94")	100 (3.94")	155 (6.10")
E	76 (2.99")	108 (4.25")	95 (3.74")	96 (3.78")	94 (3.70")	96 (3.78")
F	64 (2.52")	75 (2.95")	75 (2.95")	76 (2.99")	73 (2.87")	73 (2.87")
G	98 (3.86")	118 (4.65")	118 (4.65")	136 (5.35")	118 (4.65")	155 (6.10")
H	8.5 (0.33")	8.5 (0.33")	8.5 (0.33")	11 (0.43")	8.5 (0.33")	11 (0.43")
Working Collet/Jaws	YB-15 Collet	YB-25 Collet	5C Collet	C-40 Jaws	C-40 Jaws	C-70 Jaws
Air/Hydro Actuated	Air/Hydro	Air/Hydro	Air/Hydro	Air	Hydro	Hydro
Operating Pressure	3-15kg/cm ² (43-214psi)	3-15kg/cm ² (43-214psi)	3-15kg/cm ² (43-214psi)	3-8kg/cm ² (43-114psi)	3-20kg/cm ² (43-286psi)	3-20kg/cm ² (43-286psi)
Max. Capacity Through/Non-Through	14mm/16mm (0.55"/0.63")	26mm/28mm (1.02"/1.10")	26mm/28mm (1.02"/1.10")	38mm/50mm (1.50"/1.97")	38mm/50mm (1.50"/1.97")	68mm/90mm (2.68"/3.54")
Piston Area	79cm ² (12.2in ²)	112cm ² (17.4in ²)	112cm ² (17.4in ²)	216cm ² (33.5in ²)	82cm ² (12.7in ²)	106cm ² (16.4in ²)
Clamping Force	3750kgf@7kg/cm ² (8250lbf@100psi)	4950kgf@7kg/cm ² (10890lbf@100psi)	4950kgf@7kg/cm ² (10890lbf@100psi)	5550kgf@7kg/cm ² (12210lbf@100psi)	6100kgf@20kg/cm ² (13420lbf@286psi)	7800kgf@20kg/cm ² (17160lbf@286psi)
Net Weight	5.0kgs (11.0lbs)	9.0kgs (19.8lbs)	9.0kgs (19.8lbs)	12.5kgs (27.5lbs)	8.5kgs (18.7lbs)	13.5kgs (29.7lbs)

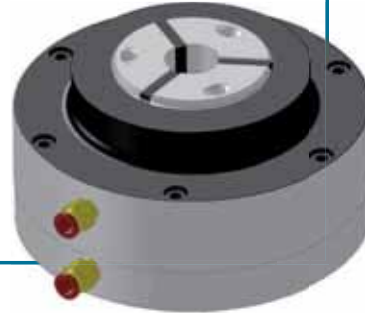


Precision Stationary Collet Chuck

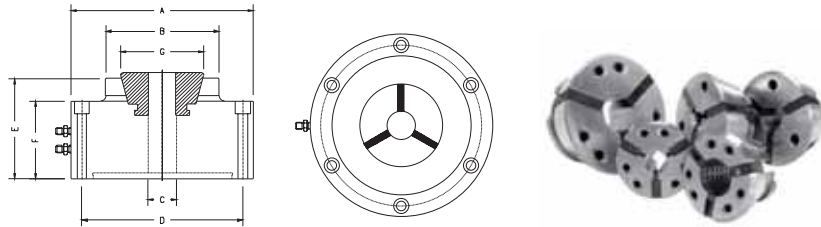
JHS-BZI Series

Precision Stationary Chuck with 0.010mm Repeatability

- Precision stationary chuck: 0.010mm repeatability.
- Air or hydro actuated. Pull down to close.
- Fast collet changing design: less than 30 secs.
- Resist to cutting fluid or dust, long product life.
- Suitable for installing on machine centers, tapping center, and etc.
- BZI type collets, compatible with Hainbuch/ROHM/Autoblok's clamping heads. See P.37.



Dimensions and Specifications



Model	JAS-42BZI	JAS-65BZI	JAS-100BZI
A	177 (6.95")	202 (7.95")	253 (9.95")
B	108 (4.25")	127 (5.00")	191 (7.50")
C	42 (1.65")	65 (2.60")	100 (3.94")
D	161 (6.34")	178 (7.00")	225 (8.86")
E	88 (3.45")	102 (4.00")	152 (6.00")
F	66 (2.58")	73 (2.88")	110 (4.35")
Mounting Screw	M8 x 6	M10 x 6	M12 x 6
Working Collet	42BZI	65BZI	100BZI
Clamping Range	Nominal Diameter plus/minus 0.5mm	Nominal Diameter plus/minus 0.5mm	Nominal Diameter plus/minus 0.5mm
Air/Hydro Actuated	Air/Hydro	Air/Hydro	Air/Hydro
Operating Pressure	3-25kg/cm ² (43-358psi)	3-25kg/cm ² (43-358psi)	3-25kg/cm ² (43-358psi)
Through Hole Capacity	42mm (1.65")	65mm (2.60")	100mm (3.94")
Max. Clamping Force	6400kgf (14080lbf)	8200kgf (18040 lbf)	11000kgf (24200lbf)
Net Weight	8kgs (17.6lbs)	11kgs (24.2lbs)	22kgs (48.4lbs)

Stationary Chuck

CAF Series

Stationary Chuck

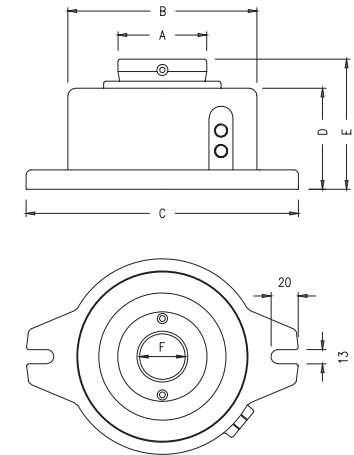
- Cast iron chuck body.
- High accuracy. High rigidity. Long product life.
- High resistant to cutting chips, fluid or dust.
- Chuck force-opening design ensures no work-part jamming.
- Double pistons design (CAF-40 and CAF-70) to enhance chucking force.



Introduction

CAF Stationary Chuck is designed for regular drilling machines and tapping machines. The CAF Stationary Chuck features low-cost design and is high resistance to cutting chips, fluid and dust. This chuck can be operated under harsh environment for long hours without any malfunction. CAF also is widely applied on multi-shaft or multi-way drilling/tapping machines in full-automatic or semi-automatic.

Dimensions/Specifications



Model	CAF-25	CAF-40	CAF-70
A	40 (1.57")	94 (3.70")	136 (5.35")
B	160 (6.30")	190 (7.48")	212 (8.35")
C	220 (8.66")	265 (10.43")	285 (11.22")
D	73 (2.87")	99 (3.90")	105 (4.13")
E	108 (4.25")	122 (4.80")	135 (5.31")
F	26 (1.02")	48 (1.89")	68 (2.68")
Working Collet/Jaws	YB-25 Collet	C-40 Jaws	C-70 Jaws
Actuated by	Air/Hydro	Air	Air
Operating Pressure	3-15kg/cm ² (43-214psi)	3-8kg/cm ² (43-114psi)	3-8kg/cm ² (43-114psi)
Chucking Capacity Through/Non-Through	26mm/28mm (1.02"/1.10")	45mm/50mm (1.77"/1.97")	68mm/90mm (2.68"/3.54")
Clamping Force (Torque)	6kgf-m (43lbf-ft)	6kgf-m (43lbf-ft)	7kgf-m (50lbf-ft)
Net Weight	9.0kgs (19.8lbs)	14.0kgs (30.8lbs)	23.0kgs (50.6lbs)

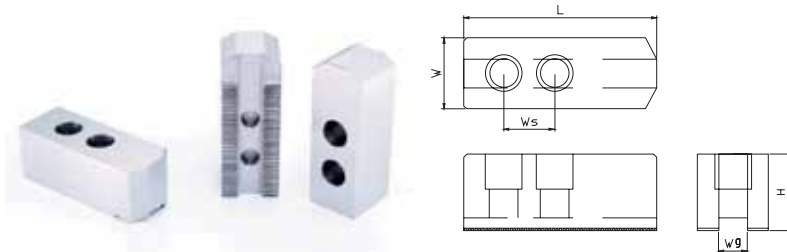


Soft Jaws / Harden Jaws

Standard Soft Jaws

For 2/3/4-Jaws Hydraulic Power Chucks

(Pie Jaws and Soft Jaws with Extra Height/Width/Length are available upon request)



	L	W	H	Wg	Mounting Screws	Serration Pitch	Ws
5"	62mm (2.44")	25mm (0.98")	35mm (1.38")	10mm (0.39")	M8	1.5x60deg	14mm (0.55")
6"	73mm (2.87")	31mm (1.22")	36mm (1.42")	12mm (0.47")	M10	1.5x60deg	20mm (0.79")
8"	95mm (3.74")	35mm (1.38")	38mm (1.50")	14mm (0.55")	M12	1.5x60deg	25mm (0.98")
10"	110mm (4.33")	40mm (1.57")	42mm (1.65")	16mm (0.63")	M12	1.5x60deg	30mm (1.18")
12"	129mm (5.08")	50mm (1.97")	50mm (1.97")	18mm (0.71")	M14	1.5x60deg	30mm (1.18")
15"	165mm (6.50")	62mm (2.44")	62mm (2.44")	22mm (0.87")	M20	1.5x60deg	43mm (1.69")
18"	165mm (6.50")	62mm (2.44")	62mm (2.44")	22mm (0.87")	M20	1.5x60deg	43mm (1.69")
21"	180mm (7.09")	62mm (2.44")	70mm (2.76")	25mm (0.98")	M20	3.0x60deg	60mm (2.36")
24"	180mm (7.09")	62mm (2.44")	70mm (2.76")	25mm (0.98")	M20	3.0x60deg	60mm (2.36")

Soft Jaws with Inserts

in Bronze, Aluminum, Acrylics, Phenolics, PE, and etc.

Special for 2nd operations, preventing any surface damage on your finishing.

Standard Soft Jaws with Inserts: size from 4" to 18"



Internal Diameter Chucking Soft Jaws with Inserts: size from 4" to 18"
Jaw Diameter and Height is Designed Upon Request



Pie Jaws with Inserts
Design and Build Upon Request

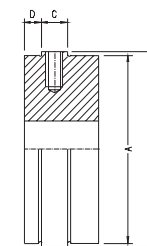


Extra Width/Height Jaws with Inserts
Design and Build Upon Request



Harden Jaws Pads

for JATO Rotary Power Chucks & JATO Stationary Chucks



Model	A	B	C	D	Mounting Screw	Suitable
C-25	45mm (1.77")	47.5mm (1.87")	3.5mm (0.14")	7mm (0.28")	M5x3	JA5-25, JH5-25
C-40	65mm (2.56")	67.5mm (2.66")	6.0mm (0.24")	9mm (0.35")	M6x3	JA7-40, JH7-40, JAS-40, JHS-40, CAF-40
C-70	105mm (4.13")	107.5mm (4.23")	6.0mm (0.24")	9mm (0.35")	M6x3	JA7-70, JH7-70, JHS-70, CAF-70
C-120	140mm (5.51")	143.5mm (5.65")	6.0mm (0.24")	9mm (0.35")	M6x4	JH9-120



Through Hole Jaws



Step Jaws



Serrated Jaws



Hexagon Jaws



Extra Long Jaws



Spring Collets / Mandrels / Guiding Bushes

JATO offers a wide range of High Quality Spring Collets and Guiding Bushes Including Dead-Length Collets, Pull-Type Collets, ER Collets, Auto-Lathe Collets, Multi-Bore Collets Tungsten Carbide Collets, Emergency Collets, Step Collets, Collets with Irregular Shape, and etc. We also design and build I.D. chucking mandrels/collets according to your applications. Please contact JATO for more information.



Dead-Length Collets (Push-to-Close Type)

DIN6343: 163E(B30), 171E(B36), 173E(B42), 177E(B52), 185E(B60), 193E(B80), and etc. C-32, C-44, C-46, and etc.



Spring Collets

Pull-to-Close Type Collets

American Standard: 5C, 16C, 20C, 25C, 2J, 3J, and etc. YB-15, YB-25, YB-32, YB-42, and etc.



ER Collets



I.D. Expanding Collets



Double-Angle Collets



Step Collets & Special Collets



Multi-bore Collets & Rubber Collets



Large Bore Collets





Precision Rubber Collets

BZI Type Quick Change Rubber Collets

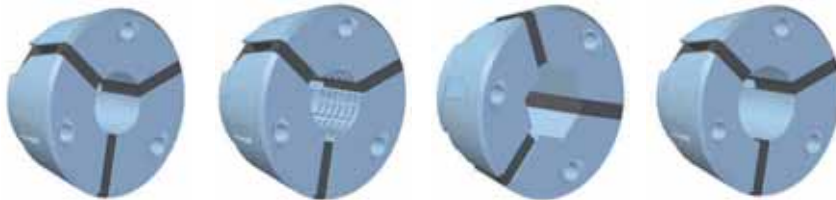
- ▲ Made of ground Chrome-Molybdenum steel.
- ▲ Very high accuracy: 0.010mm (0.0004") concentricity (after collet is changed-over).
- ▲ Compatible with Hainbuch/ROHM/Autoblok's clamping heads.
- ▲ JATO also repairs clamping heads (collets) in all brands by rejoining the collet pad with the new vulcanized rubber. Please contact us for more information.



JATO builds and stocks a wide range of BZI type rubber collets in hardened or pre-hardened.

To ensure you with the high standard of chucking accuracy, we supply our BZI rubber collets with steps in 0.1mm.

The collet will be ground to nominal dimension then splitted into parts and joined together with vulcanized rubber which is high resistant against erosion of cooling fluids.



Round - Through Hole

Serrated Groove
(build to order)

Hexagon or Irregular
(build to order)

Eccentric
(build to order)

Standard Round Collets

Model	Collet Segments	Capacity	Range
32BZI	3	32mm(1.26")	± 0.5mm(0.02")
42BZI	3	42mm(1.65")	± 0.5mm(0.02")
65BZI	3	65mm(2.56")	± 0.5mm(0.02")
80BZI	4	80mm(3.15")	± 0.5mm(0.02")
100BZI	6	100mm(3.94")	± 1.0mm(0.04")

Diaphragm Chuck Jaws

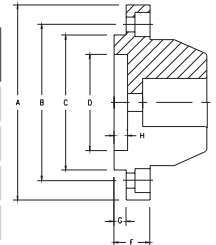
Hardened and Pre-Hardened Jaws for JATO Diaphragm Chucks

- ▲ Made of ground bearing steel, heat treated to HRC50 for hardened jaws, HRC40 for pre-hardened jaws.
- ▲ Very high accuracy: 0.010mm run-out after jaw pad is changed over (for JATO Diaphragm Chucks).
- ▲ Quick shipping in 5 days for semi-finished jaws, 15 days for custom-making jaws.



JD Jaw Pad Dimension Chart

Model	A	B	C	D	F	G	H	Segments	Suitable Diaphragm Chuck
JD-60	65mm (2.56")	52mm (2.05")	45mm (1.77")	32mm (1.26")	12mm (0.47")	4.0mm (0.16")	4.5mm (0.18")	6	JAP104
JD-70	75mm (2.95")	60mm (2.36")	50mm (1.97")	37mm (1.46")	14mm (0.55")	5.0mm (0.20")	5.0mm (0.20")	6	JAP105
JD-100	105mm (4.13")	90mm (3.54")	80.2mm (3.16")	65mm (2.56")	14mm (0.55")	5.5mm (0.22")	5.0mm (0.20")	8	JAP106
JD-150	147mm (5.79")	132mm (5.20")	120mm (4.72")	100mm (3.94")	18mm (0.71")	6mm (0.24")	6.5mm (0.26")	8	JAP108



O.D. Chucking

I.D. Expanding

Step

Eccentric

Extra Small Size

Custom-Making Jaws of Diaphragm Chuck in All Brands

Besides our own diaphragm chuck jaws, JATO also supplies hardened and pre-hardened jaws for all major brands of diaphragm chucks. The size and shape is designed and made according to your work-part and application. Quick shipping in 15 days.

