www.jtlrotary.com

JTL
rotation | motion | precision

Driving Innovation with Precision in Every Rotation

JTL
rotation | motion | precision

About Us

Established in **1997, JTL** has grown into a trusted name in **precision engineering solutions** for the machining industry. With decades of expertise, we specialize in the design and manufacture of **CNC Rotary Tables (4th and 5th Axis), Hydraulic and Manual Tailstocks, Drawbars, Equalizers, and Hydraulic Cylinders (Link, Swing, and Pusher types).** Every product we deliver is built on a foundation of **accuracy, durability, and innovation,** ensuring superior performance in demanding machining environments.

Our journey has always been guided by strong **core values- commitment, integrity, accountability, and innovation.** These principles not only shape the way we engineer our products but also define the long-lasting relationships we build with our clients. At JTL, we don't just deliver products; we deliver **confidence and trust.**

Our dedication to quality and innovation has earned us notable recognition, including:

- Lalit Doshi Memorial Award (M.I.D.C.) Government of Maharashtra
- District Industries Centre Award Government of Maharashtra

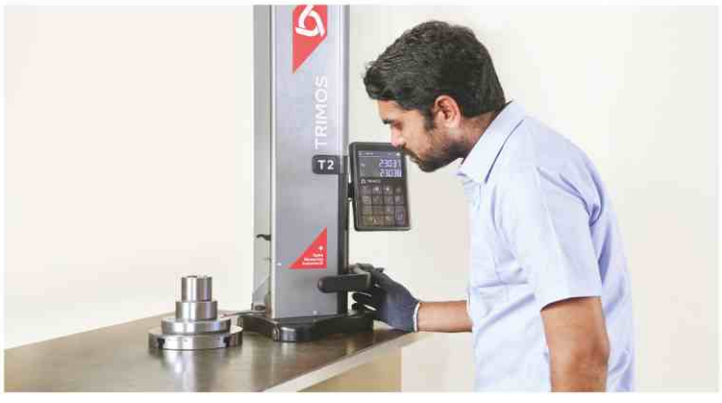
These honors reflect our continuous drive to exceed industry standards and set new benchmarks in precision manufacturing.

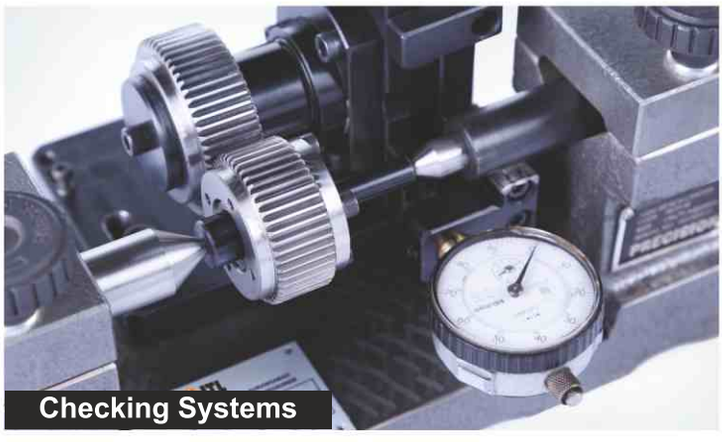
Today, JTL serves industries across diverse sectors, providing solutions that combine **state-of-the-art technology, rigorous quality standards, and robust engineering expertise.** We remain committed to helping our clients maximize productivity while shaping the future of modern machining.

At **JTL,** we don't just manufacture components–we engineer **solutions that inspire confidence, deliver performance, and define reliability.**

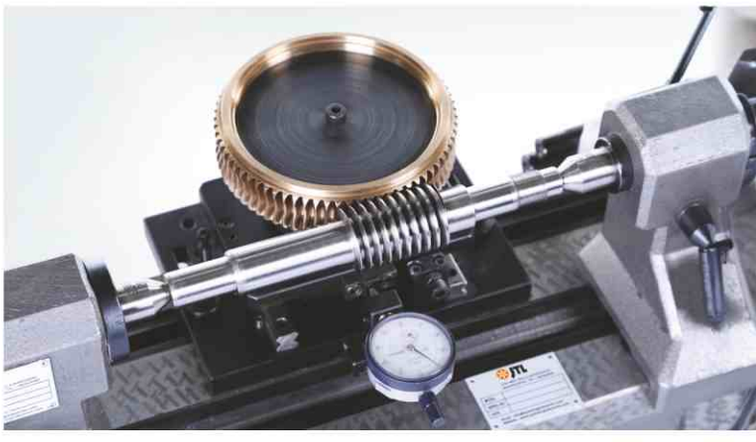
JTL – Rotation. Motion. Precision.

Infrastructure





Checking Systems



Assembly Section

JTL has independent Design and R & D departments dedicated to continuous innovation and the development of cost-effective, technologically advanced products. Our R&D team leverages modern engineering tools such as Solid Modeling, FEM Analysis, and advanced CAD/CAM software to ensure optimized design and performance.

We are supported by state-of-the-art manufacturing facilities equipped with HMCs, VMCs, CNC Turning Centers, Universal Jig Boring, Jig Grinding, Surface Grinding, and Cylindrical Grinding machines. To ensure the highest quality standards, JTL employs advanced inspection and testing equipment, including:

- Coordinate Measuring Machines (CMM)
- Hardness testing equipment
- Laser calibration systems
- Gear runout checking systems
- Rotary encoder verification facilities

Design Department

PRODUCT RANGE OVERVIEW

ROTARY TABLES

CNC Rotary Table 4th Axis

CNC Rotary Table 5th Axis

CYLINDERS

Link Cylinder

Swing Cylinder

Pusher Cylinder

JTL – Rotation Motion Precision.

We are a trusted name in delivering advanced machine tool solutions built on accuracy, innovation, and reliability. Our range includes high-performance **Rotary Tables (4th & 5th Axis), durable Tailstocks (Face Plate, Manual & Hydraulic),** and precision-engineered **Cylinders (Link, Swing & Pusher).** To complement these, we provide a wide array of Accessories including **Drawbars, Equalizers, VMC Cradles, and Hydraulic Fixtures.** Each product is designed to optimize machining operations, ensuring maximum productivity and consistency. With a commitment to excellence, JTL continues to power precision engineering across industries.

TAILSTOCKS

Face Plate Tailstock

Manual Tailstock

Hydraulic Tailstock

ACCESSORIES

Drawbar

Equalizer

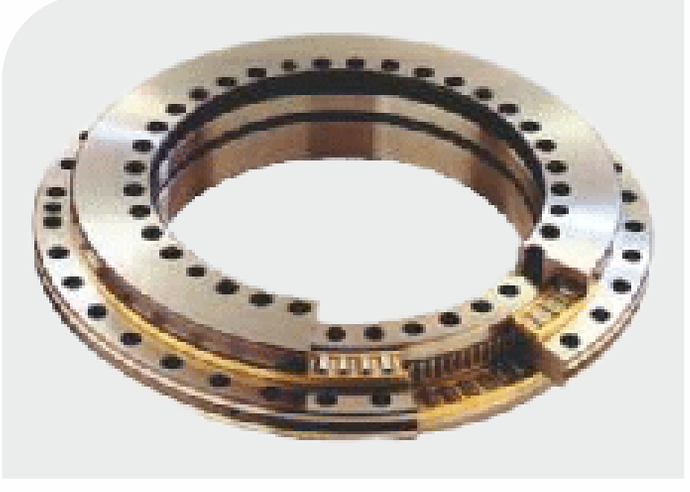
VMC Cradle

Hydraulic Fixtures

TECHNOLOGY

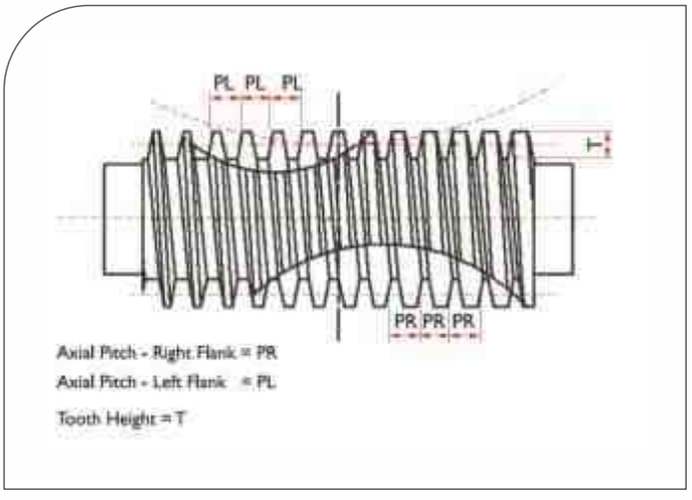
JRH CNC Rotary 4TH Axis Achieve through High Stiffness and rigidity.Use of Axial Radial Roller Bearing (NRT) & form corrected dual lead Worm Shaft and Worm wheel system ensure high precision & Accuracy.

AXIAL RADIAL ROLLER BEARING (NRT)



- Standard Concept of Bearing Rotary Tables.
- Specially Designed for CNC Rotary 4th Axis.
- Optimum Axial & Radial Preload for high Rigidity.
- Noiseless Operation, with play less than 3micron.

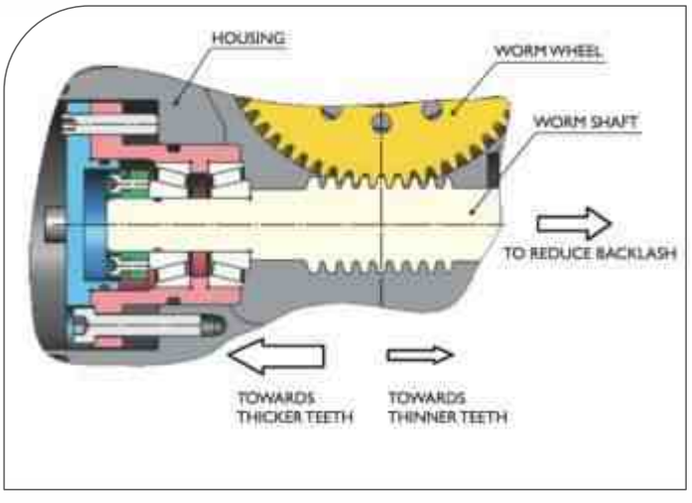
DUEL LEAD WORM (DUPLEX)



Two flanks of the worm shafts are ground with different Lead as a result of which worm shaft have thicker teeth on One end and thin teeth on another Side.

Worm shaft is form corrected for low pressure angle and Higher tooth height (t) provide high recess action, Longer life and less noise.

BACKLASH ADJUSTMENT WITH DUAL LEAD WORM



Backlash can be removed easily by axial Movement of the worm without disturbing the Crucial Centre distance & Axial movement of Worm and worm wheel.

CNC ROTARY TABLE 4TH AXIS

JRT SERIES

High Precision ▸ High Torque ▸ Reliable Performance

The **JRT Series CNC Rotary 4th Axis Tables** are designed for **precision machining, durability, and automation efficiency.** With **high clamping torque, robust construction, and superior indexing accuracy,** the JRT Series is the ideal solution for **VMCs, CNC machining centers, and SPM machines.**

Engineered for both **horizontal and vertical mounting,** these rotary tables deliver **consistent performance across a wide range of machining applications.** From **compact models like JRT-105 to heavy-duty solutions like JRT-260,** the series covers all machining needs with **reliability and precision.**

CNC ROTARY TABLE 4TH AXIS

JRT – 200 R

1 2 3

1. Product Standard

JRT → CNC Rotary Table 4th Axis

2. Turn Table Diameter (∅D)

105 → ∅105 mm **200** → ∅200 mm
180 → ∅180 mm **260** → ∅260 mm

3. Motor Mounting

R → Right Hand
L → Left Hand

Key Highlights of JRT Series

- High Clamping Torque for vibration-free machining
- Dual Lead Worm Gear Set for enhanced indexing accuracy
- Axial-Radial Roller Bearings ensure rigidity & durability
- Hydraulic or Pneumatic Clamping options available
- Horizontal & Vertical Mounting for flexible applications
- SPM Machine Compatible, can be integrated with PLC
- Low Maintenance, long service life

Model	JRT-105	JRT-180	JRT-200	JRT-260
Turn Table Diameter (mm)	105	180	200	260
Spindle Hole Diameter (mm)	Ø60	Ø60	Ø60	Ø80
Center Height (mm)	105	135	140	170
Width of T Slot (mm) (H7)	14	14	14	18
Clamping Torque (Nm)	205	300	900	1560
Table Inertia at Motor Shaft	0.06	0.08	0.09	0.33
Fanuc Servo Motor	Bisc 4/4000-B (4000)	Bisc 4/4000-B (4000)	Bisc 8/3000-B (3000)	Bisc 8/3000-B (3000)
Mitsubishi Motor	HG105S-D48 (4000)	HG105S-D48 (4000)	HG123T-D40 (2000)	HG123T-D40 (2000)
Min Increment (Deg)	0.001	0.001	0.001	0.001
Rotation Speed (per min)	33.3	33.3	33.3	25
Total Reduction Ratio	1/90	1/90	1/90	1/120
Indexing Accuracy (sec)	±30"	±20"	±15"	±20"
Indexing Repeatability (arc sec)	4"	4"	4"	4"
Net Weight (Kg)	31	50	65	96
Max Work Load Horizontal (Kg)	60	200	300	350
Max Work Load Vertical (Kg)	30	100	150	175
Max Thrust Load Horizontal (N)	7500	13000	14000	21000
Max Thrust Load Vertical (N)	3800	4500	5000	7500
Driving Torque (Nm)	36	72	250	192

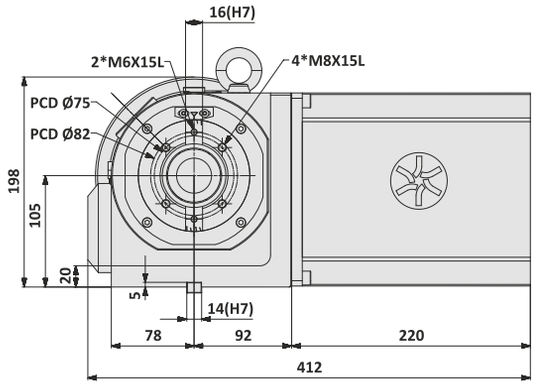
JRT-105 Rotary Table

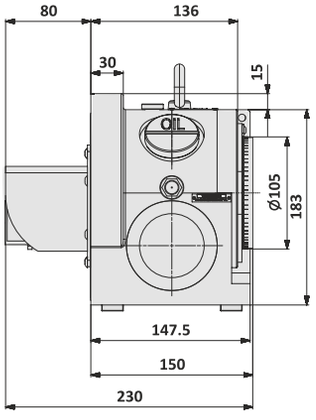
The **JRT-105 Rotary Table is a compact, high-precision indexing solution** designed for CNC machining centers and SPM applications. Its **rigid construction, high clamping torque, and accurate indexing** make it ideal for demanding machining operations, providing **consistent performance and reliability.**

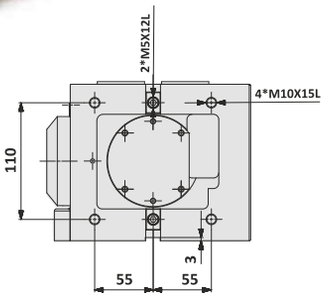
FEATURES

- **Compact and rigid design** suitable for high-precision machining
- **Pneumatic clamping**
- **High clamping torque** ensures stable and vibration-free cutting
- **Excellent indexing accuracy and repeatability**
- **Hardened & ground worm gear set** for durability and long service life
- **Compatible with CNC and manual operations**
- **High load-carrying capacity** in a compact size

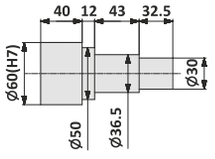
JRT-105 R





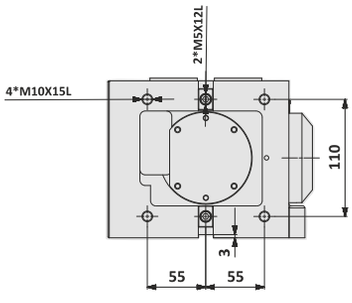


BOTTOM MOUNTING HOLE DETAILS

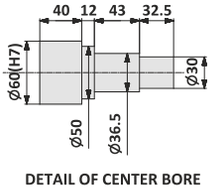


DETAIL OF CENTER BORE

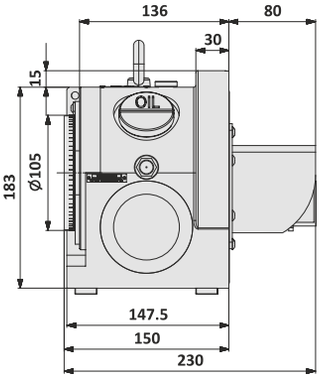
JRT-105 L

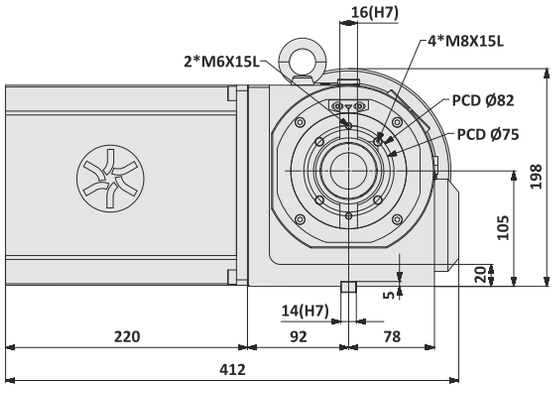


BOTTOM MOUNTING HOLE DETILS



DETAIL OF CENTER BORE





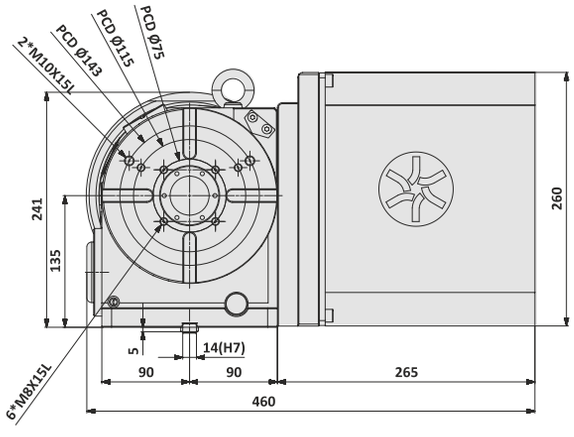
JRT-180 Rotary Table

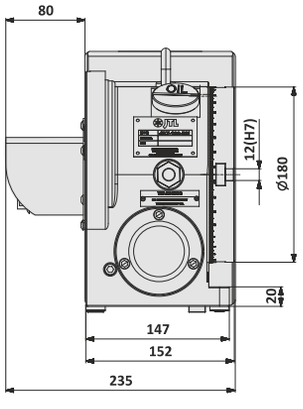
The **JRT-180 Rotary Table is a heavy-duty, precision indexing solution** designed for **medium to large CNC machining centers and SPM applications.** With its **robust construction, high load capacity, and superior clamping torque,** it delivers **stable performance for demanding machining operations** while ensuring **long service life.**

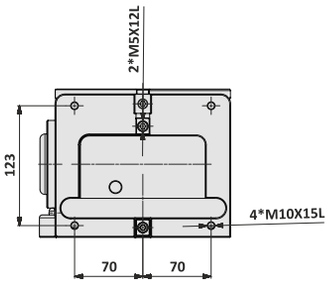
FEATURES

- **Robust and rigid design** for heavy-duty machining applications
- **Pneumatic clamping**
- **High clamping torque** ensures vibration-free and accurate cutting
- **Excellent indexing accuracy and repeatability** for precision operations
- **Hardened & ground worm gear set** for durability and wear resistance
- **Suitable for CNC machining centers and manual setups**
- **High load-carrying capacity** to handle larger components

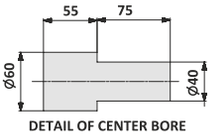
JRT-180 R





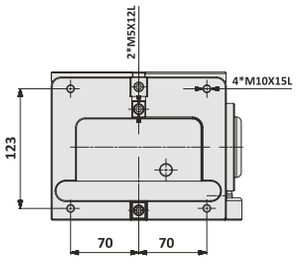


BOTTOM MOUNTING HOLE DETILS

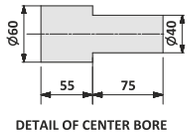


DETAIL OF CENTER BORE

JRT-180 L



BOTTOM MOUNTING HOLE DETAILS



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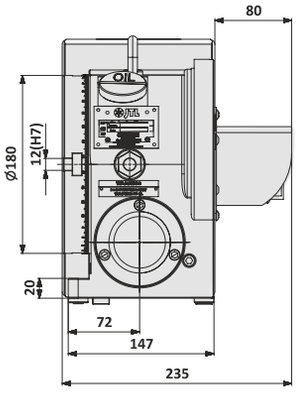
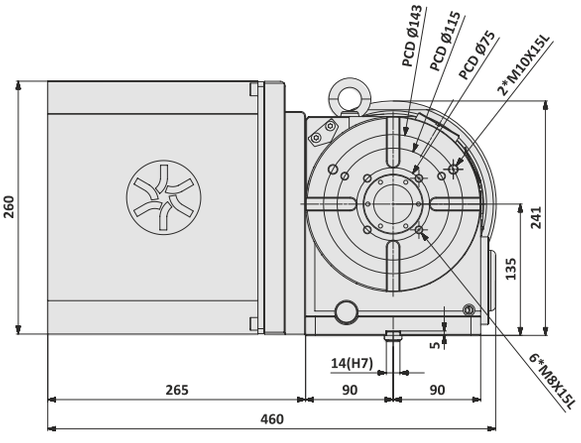




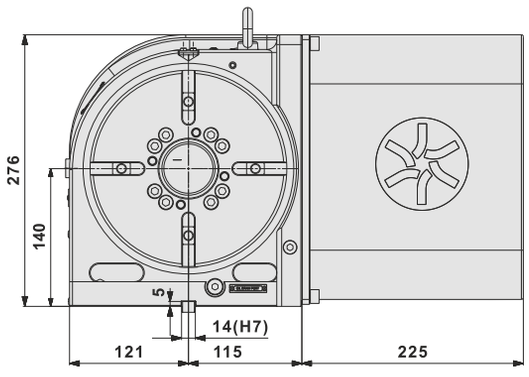
JRT-200 Rotary Table

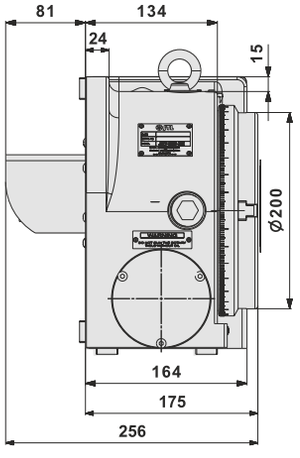
The **JRT-200 Rotary Table** is engineered for **large-scale, precision machining applications** where **high accuracy and strength** are critical. Designed for **CNC machining centers and SPM machines,** it combines **robust construction, powerful clamping torque, and reliable indexing** to handle **heavy components with ease.**

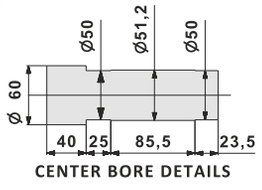
FEATURES

- **Strong and rigid design** suitable for large and heavy components
- **Available with pneumatic or hydraulic clamping** (recommended)
- **High clamping torque** provides stable and vibration-free cutting
- **Excellent indexing accuracy and repeatability** for precision machining
- **Hardened & ground worm gear set** ensures durability and long service life
- **Suitable for CNC machining centers and manual operations**
- **Very high load-carrying capacity** in a durable structure

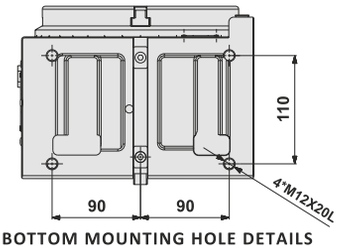
JRT-200 R





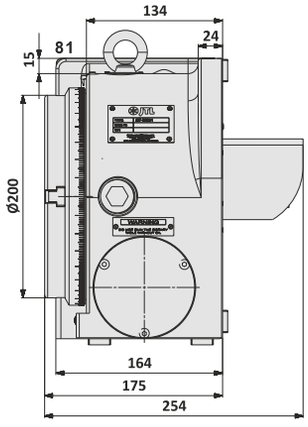


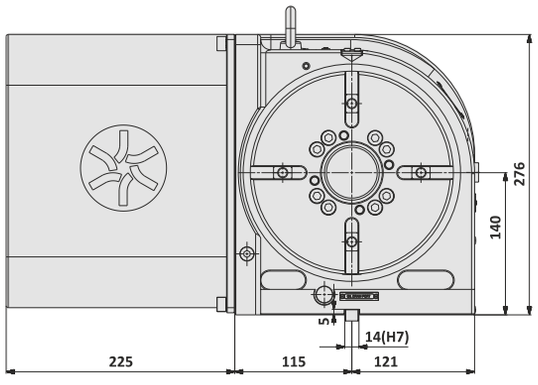
CENTER BORE DETAILS

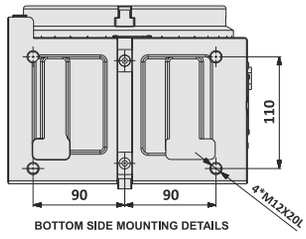


BOTTOM MOUNTING HOLE DETAILS

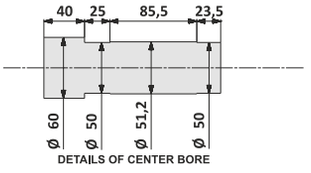
JRT-200 L







BOTTOM SIDE MOUNTING DETAILS



DETAILS OF CENTER BORE

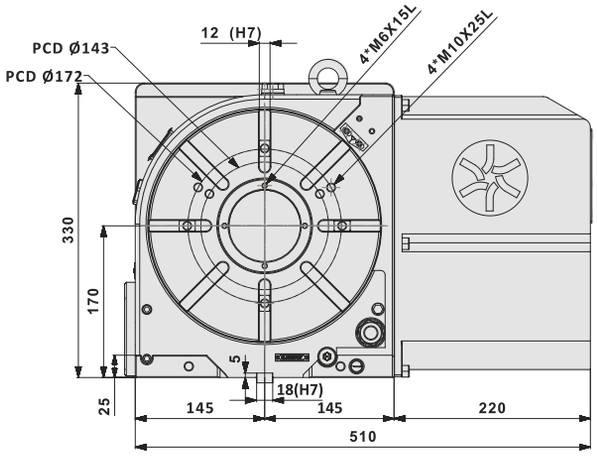
JRT-260 Rotary Table

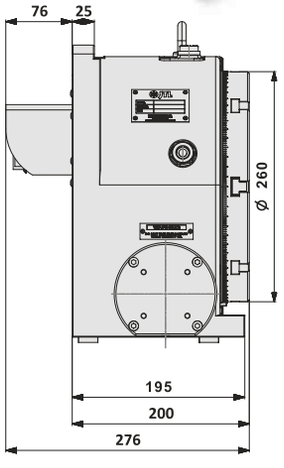
The **JRT-260 Rotary Table is a high-capacity, precision indexing solution** engineered for **extra-large components and demanding machining applications.** With its **heavy-duty structure, powerful hydraulic clamping, and reliable indexing,** it ensures stable and consistent performance on CNC machining centers and SPM machines.

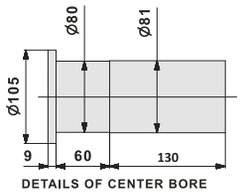
FEATURES

- **Heavy-duty and rigid construction** for extra-large machining tasks
- **Hydraulic clamping** for superior holding power
- **High clamping torque** guarantees stability and vibration-free cutting
- **Superior indexing accuracy and repeatability** for precision operations
- **Hardened & ground worm gear** set designed for long-lasting performance
- **Suitable for CNC machining centers and manual applications**
- **Extra high load-carrying capacity** for oversized workpieces

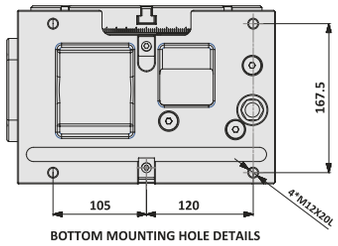
JRT-260 R





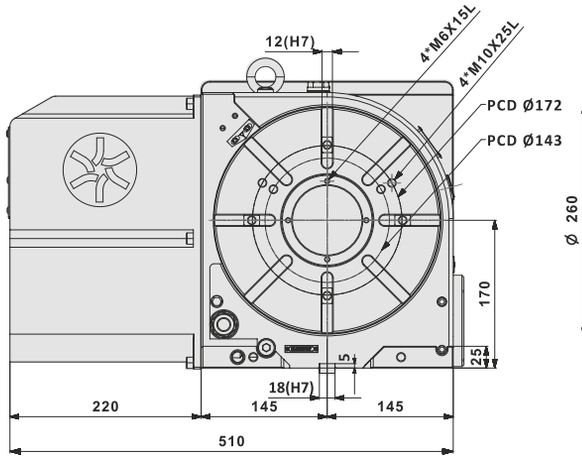


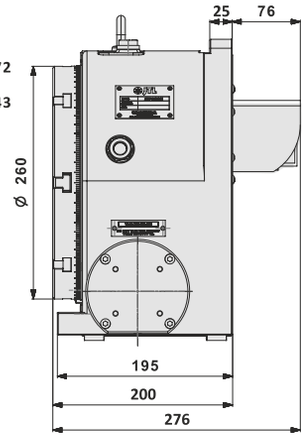
DETAILS OF CENTER BORE

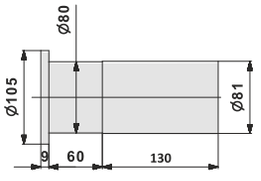


BOTTOM MOUNTING HOLE DETAILS

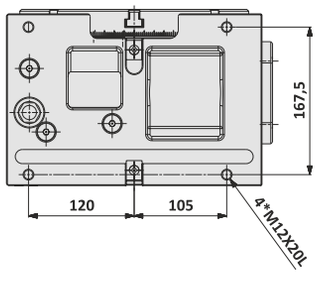
JRT-260 L







DETAIL OF CENTER BORE



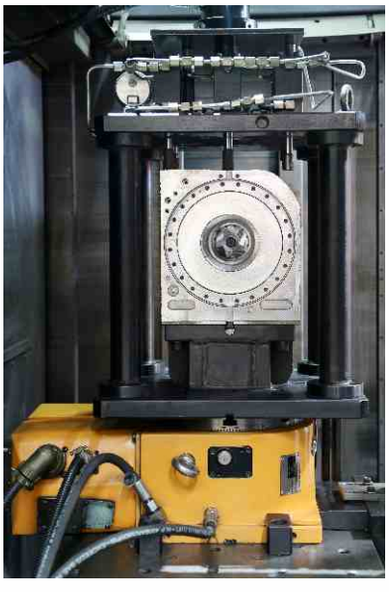
BOTTOM MOUNTING HOLE DETAILS

4TH AXIS ROTARY TABLE APPLICATION

Rotary table controlled via PLC panel.

Our PLC-driven rotary delivers precision, smooth motion, and reliable automation — perfect for SPM applications

Supports horizontal installation



Horizontal rotary setup designed for versatile use — ideal for SPM, HMC, and customized automation systems

Suitable for peripheral fixture setup.

Front Housing
Peripheral Fixture

4TH AXIS ROTARY TABLE APPLICATION

Manual Operated Chuck

Hydrulic Operated Chuck

Collet Chuck For JRT100
Collet Dia 3-25 mm

Collet Chuck For JRT180/200
Collet Dia 3-42 mm

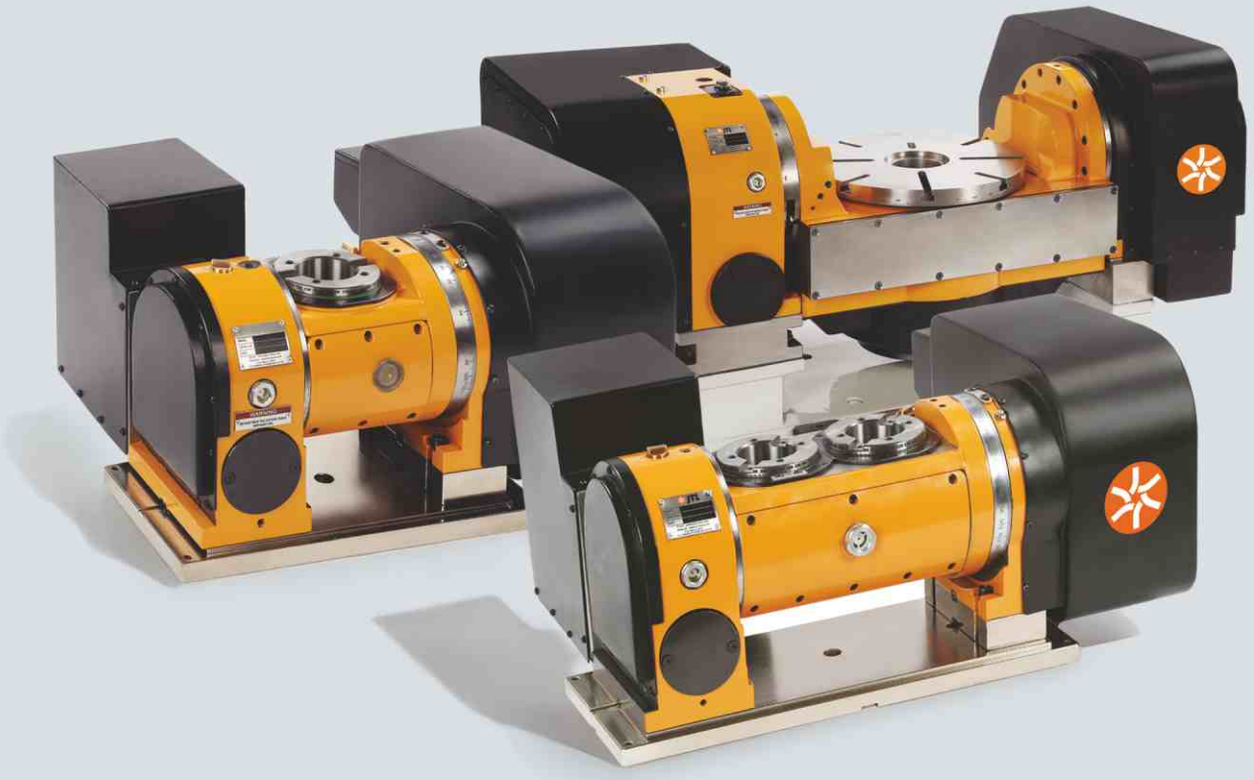
Double Yoke Modular
VMC Fixture

Oil Pump VMC Fixture

CNC ROTARY TABLE 5TH AXIS

JRT-5AX SERIES

High Precision ▸ High Torque ▸ Reliable Performance



The **JRT-5AX Series unlocks the power of true 5-axis machining for complex and high-precision applications.**
Designed to overcome the limitations of traditional setups, these rotary tables enable **multi-sided machining, intricate geometries, and faster cycle times**-all in a single setup.

With exceptional accuracy, rigidity, and efficiency, the JRT-5AX Series empowers manufacturers to **push boundaries, reduce costs, and achieve exceptional results** across industries including **aerospace, medical, automotive, electronics, and die-Mold engineering.**

CNC ROTARY TABLE 5TH AXIS

JRT-5AX – 105 2MT

1 2 3

1. Product Standard

JRT-5AX → CNC Rotary Table 5th Axis

2. Turn Table Diameter (∅D)

105 → ∅105 mm
350 → ∅350 mm

3. No. of Spindle

2MT → Twin Spindle
(no letter) → Single Spindle

Key Highlights of JRT Series

- **Precision Redefined –** Sub-micron accuracy for machining highly complex parts.
- **Multi-Sided Machining –** Machine multiple faces in one setup, saving time and operations.
- **Optimized Productivity –** Streamlined workflow ensures shorter cycle times and higher output.
- **Cost Advantage –** Fewer tool changes, minimal material waste, and leaner processes cut production costs.
- **Rigid & Durable Design –** High stability under heavy cutting loads with superior clamping torque.
- **Configurable Options –** Available in single spindle, twin spindle, and large-diameter models.
- **Industry Versatility –** Perfect for aerospace, medical devices, automotive, electronics, and precision engineering.

Specification/Model Number			JRT-5AX-105		JRT-5AX-105-2MT		JRT-5AX-350	
Turn Table Diameter		φ mm	105		105		350	
Spindle Hole Diameter (H7)		φ mm	60		60		80	
Number of Spindles (Pitch)			1		2 Spindles (120)		1	
Center Height		mm	135		175		300	
Table Height in Horizontal Position		mm	190		250		300	
Width of T-Slot (H7)		mm	16		16		12	
Axis			Rotary	Tilting (0 ~105)	Rotary	Tilting (0 ~105)	Rotary	Tilting (0 ~105)
Clamping System			Pneumatic	Pneumatic	Pneumatic	Pneumatic	Hydraulic	Hydraulic
Clamping Torque		N.m	200	605	144	144	1565	1565
Table Inertia at Motor Shaft		kg.m2x10-3	0.09	0.12	0.13	0.13	0.8	1.35
Servo Motor		r/min	α iF1.2000	α iF1.2000	α iF2.3000	α iF2.2000	α iF8.2000	α iF12.2000
Min Increment		deg	0.001	0.001	0.001	0.001	0.001	0.001
Rotation Speed		r/min	44.4	22.2	33.3	11.1	22.2	22.2
Total Reduction Ratio			1:45	1:90	1:90	1:180	1:90	1:90
Indexing Accuracy		Sec	+/- 30	60	+/- 30	60	20	60
Net Weight		kg	86.8		106		485	
	0 to 30	kg	40		15		200	
	30 to 90	kg	20		10		200	
MAX Work Load on the Table	Tilting Angle=0	N	5295		3935		19580	
	Tilting Angle=0	N	L=45mm F= 3840N		L=60mm F= 780N		L=175mm F= 4890N	
	Tilting Angle=90	N	L1=0mm F1= 2959N		L1=0mm F1= 650N		L1=0mm F1= 17150N	
	Tilting Angle=90	N	96		50		855	
Max Work Inertia		kg.m2	0.03		0.014		3.2	
Driving Torque		N.m	18		36		288	

5th Axis Rotary Table – JRT-5AX-105

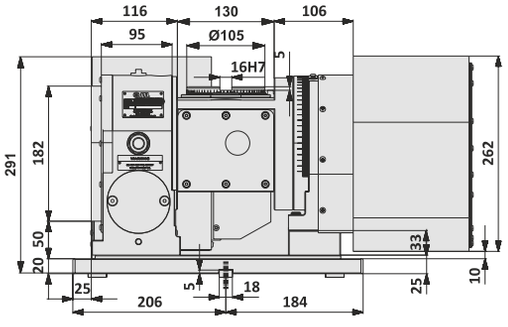
Compact ▸Powerful ▸Precision Driven

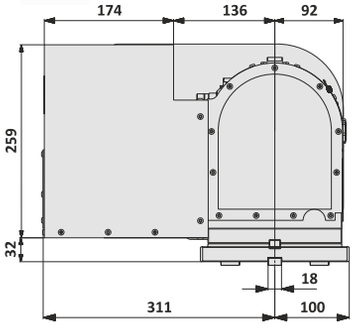
The JRT-5AX-105 is a compact tilting CNC Rotary Table designed for space efficiency, enabling precise machining of intricate parts and complex geometries with high accuracy and rigidity.

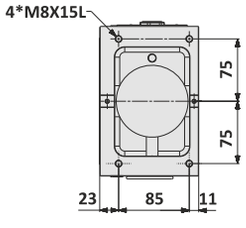
FEATURES

- **Compact Marvel** – Designed for compact machines
- **Optimized Workspace** – Creates more machining room despite its small footprint
- **Air-Hydraulic Clamping (Standard)** – Ensures stable machining under heavy loads
- **Versatile Attachments** – Supports jig plates, scroll chucks, and center sockets
- **Industry Ready** – Ideal for electronics, automotive, and precision component manufacturing

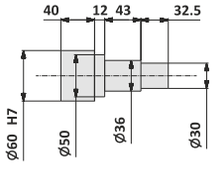
JRT-5AX-105



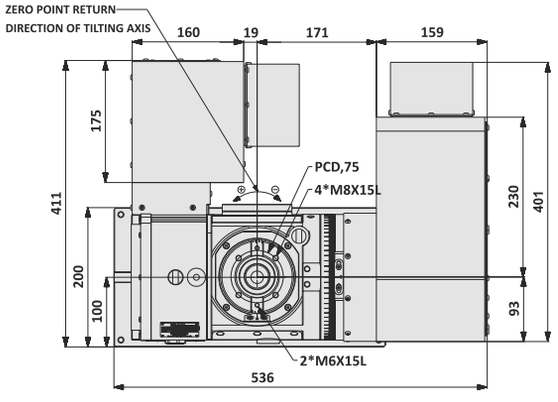


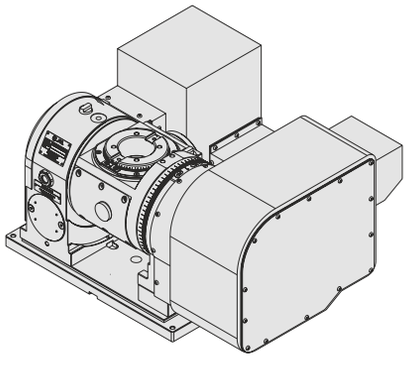


BOTTOM SIDE MTG. VIEW



CENTER BORE DETAIL





5th Axis Rotary Table – JRT-5AX-105-2MT

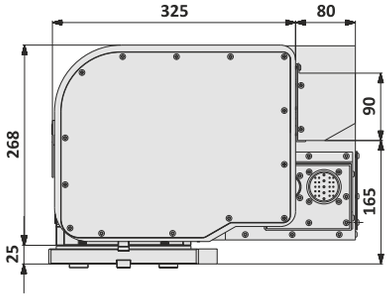
Multi-Spindle ▸ High Productivity ▸ Precision Engineering

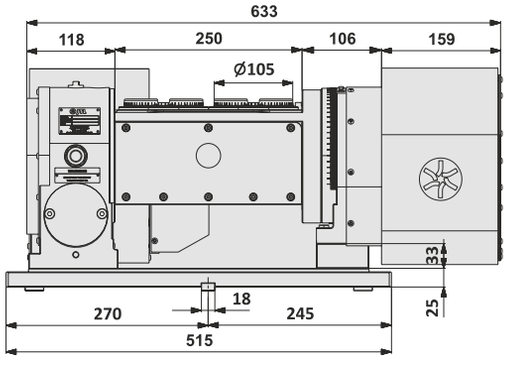
The JRT-5AX-105-2MT is a twin-spindle tilting CNC Rotary Table built for high-volume production, minimizing setup times while delivering precise machining of complex geometries and angular operations across industries.

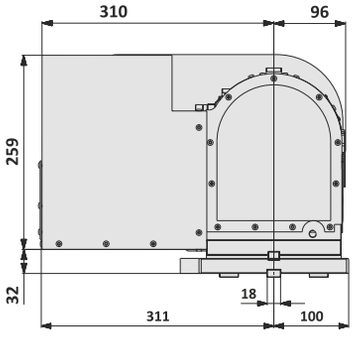
FEATURES

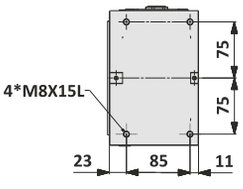
- **Mass Production Ready –** High-volume output of intricate parts with angular features
- **Twin Spindle Advantage –** Minimizes setup time while doubling machining potential
- **High Precision –** Rigid design and accurate clamping ensure consistency
- **Flexible Workholding –** Compatible with jig plates, chucks, and sockets
- **Durable Design –** Easy maintenance with long-lasting performance
- **Efficiency Focused –** Optimized for setups where preparation time exceeds machining time

JRT-5AX-105-2MT

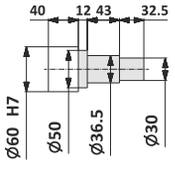




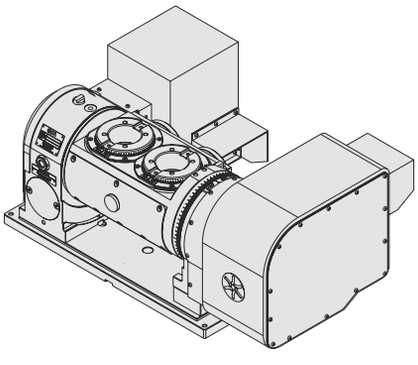


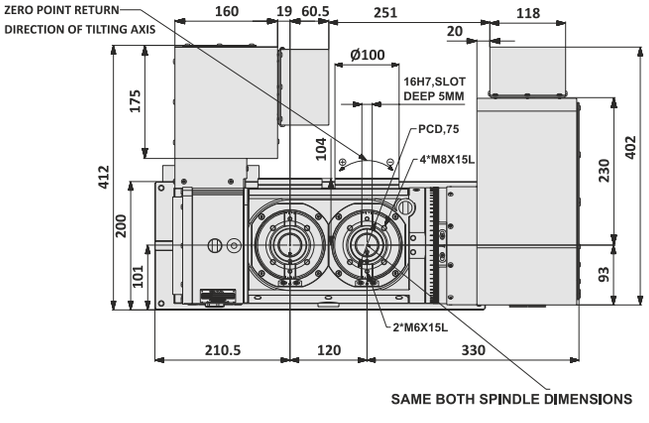


BOTTOM SIDE MTG.VIEW



DETAIL OF CENTER BORE





SAME BOTH SPINDLE DIMENSIONS

5th Axis Rotary Table – JRT-5AX-350

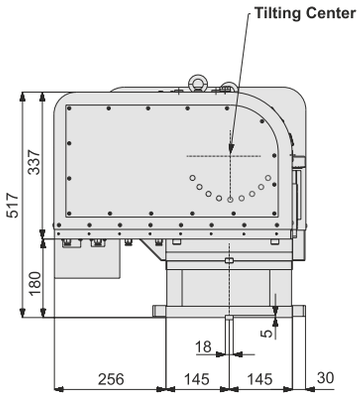
Hydraulic Power ▸ High Rigidity ▸ Large-Scale Precision

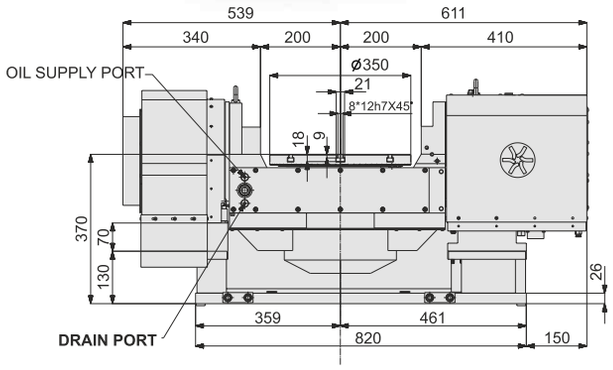
The JRT-5AX-350 is a heavy-duty tilting CNC Rotary Table for medium to large machining centers, combining hydraulic power, rigidity, and precision for demanding applications

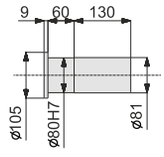
FEATURES

- **Hydraulic Power –** Strong clamping ensures stability and accuracy under heavy loads
- **VMC/HMC Compatible –** Fits both vertical and horizontal machining centers
- **Boosted Productivity –** Optional 6-port rotary joint supports hydraulic fixtures
- **Large-Scale Precision –** Built for machining larger components with accuracy
- **Durable Build –** Reliable performance with minimal maintenance

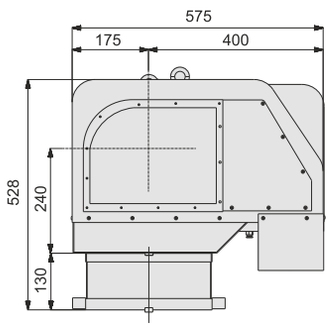
JRT-5AX-350

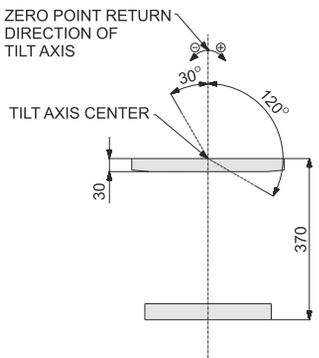


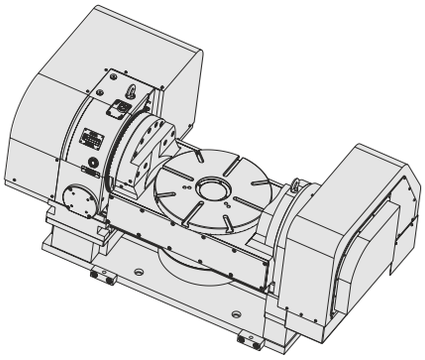


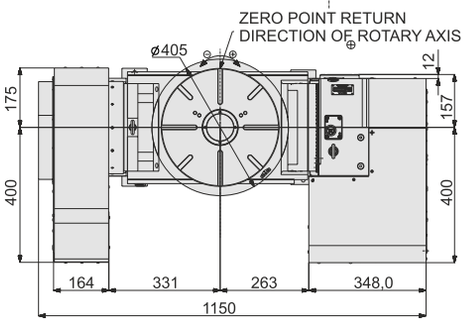


CENTER BORE DETAILS









5TH AXIS ROTARY TABLE APPLICATION

With extensive attachment options, machining different types of workpieces becomes effortless

Jig Plate

Chuck

Center Socket

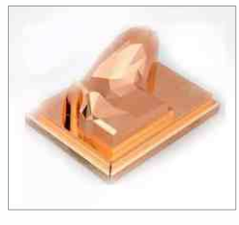
Component mounting on chuck

JTL 5th Axis enables efficient, high-precision machining of complex components such as electronic device parts, automotive components, and other precision-engineered products.








FACE PLATE TAILSTOCK
JFT SERIES

The JFT Series Face Plate Tailstocks are designed to provide rigid and reliable support for long components during machining. These tailstocks are specially engineered for use with CNC rotary tables, ensuring precision and stability.

We offer both brake and without brake tailstocks to suit your application requirements.

- Use without brake models for standard supporting applications.
- Use with brake (B) model when additional holding stability is required, especially during
- heavy machining, interrupted cutting, or when higher cutting forces are involved.

FACEPLATE TAILSTOCK

JFT – 140 B 6P

1 2 3 4

1. Product Standard

JFT → Faceplate Tailstock

2. Center Height

100 → 100 mm
140 → 140 mm
160 → 160 mm

3. Brake Option

B → With Brake
(no letter) → Without Brake

4. Number of Ports

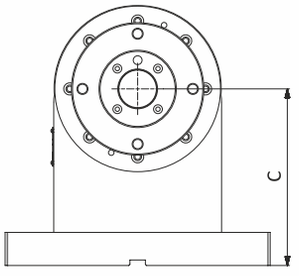
6P → 6 Ports
(no letter) → 4 Ports

Key Highlights of JFT Series

- Rigid and compact body design for stable clamping
- Available in **with brake** and **without brake** versions
- Brake model (JFT-140-B) provides enhanced holding strength under heavy load
- Multiple **center height options** for different applications
- **4-port standard configuration,** 6-port available in brake model
- Easy integration with **CNC rotary tables**

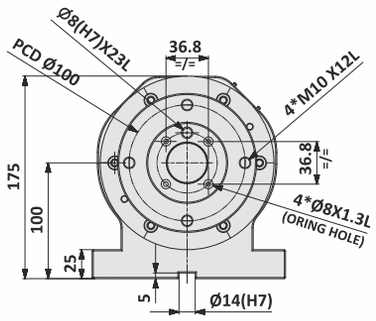
Models & Specifications

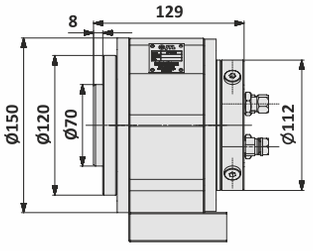
Model	Center Height (mm) (C)	Port Options	Weight (Kg)
JFT 100	100	4 Port	16
JFT 140	140	4 Port	25
JFT 160	160	4 Port	26.5
JFT 140 B	140	4 Port	34
JFT 140 B - 6P	140	6 Port	34

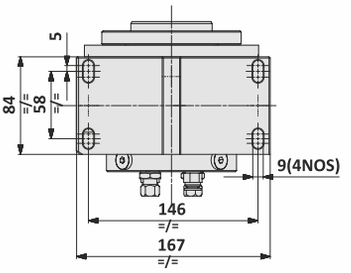


FACE PLATE TAILSTOCK
JFT SERIES

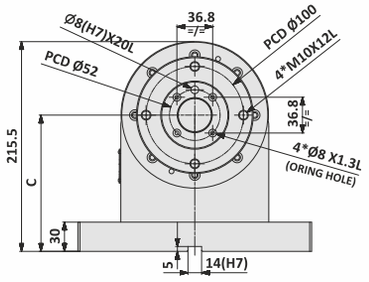
JFT-100

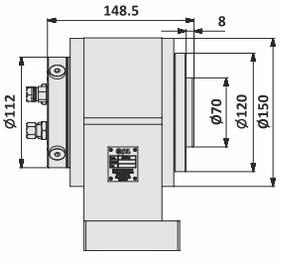


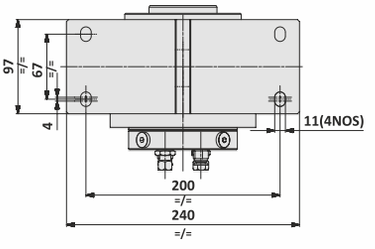




JFT-140/160

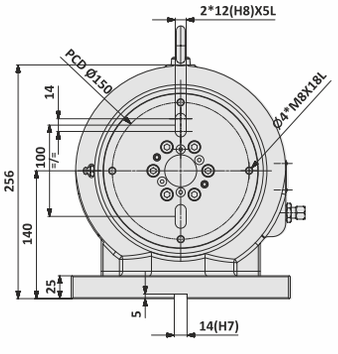


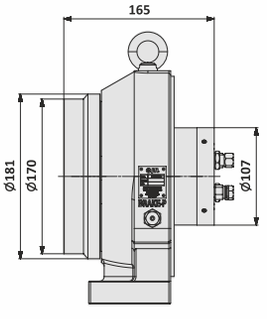


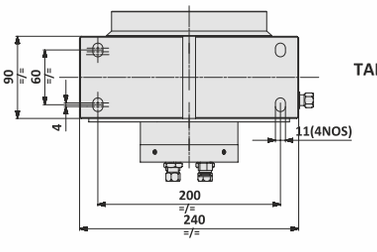


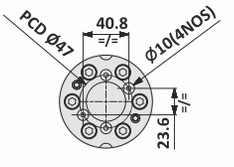
MODEL	Center Height (mm) (C)
JFT 140	140
JFT 160	160

JFT-140 B 4P/6P

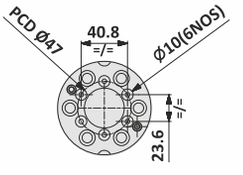








TAILSTOCK 140 4 PORT WITH BREAK



TAILSTOCK 140 6 PORT WITH BREAK

FACE PLATE TAILSTOCK APPLICATION

CNC Rotary Table with supporting Tailstock (non-brake type), L-Bracket, and Fix Cradle Assembly for fixture integration.

CNC Rotary Table with supporting Tailstock (brake type), L-Bracket, and Adjustable Cradle Assembly for fixture integration.

MANUAL TAILSTOCK
JMT SERIES

Tailstocks are used alongside a CNC rotary table to provide stable support for long workpieces during machining. They allow the machine to accurately and safely handle **shaft-type components.** By securing the workpiece with a **dead centre** or **live centre,** the tailstock ensures precise alignment, stability, and smooth cutting operations.

Our **JMT Series Manual Tailstocks** are engineered for reliability and precision. With the integration of the **Elesa gantry hand wheel** and **adjustable lever,** our manual tailstock is further enhanced to provide **unparalleled rigidity and ease of use,** making setup and adjustments smooth and efficient.

MANUAL TAILSTOCK

JMT – 100

1 2

1. Product Standard

JMT → Manual Tailstock

2. Center Height

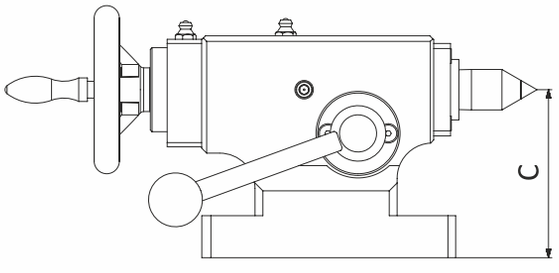
100 → 100 mm
135 → 135 mm
140 → 140 mm
160 → 160 mm
170 → 170 mm

Key Highlights of JHT Series

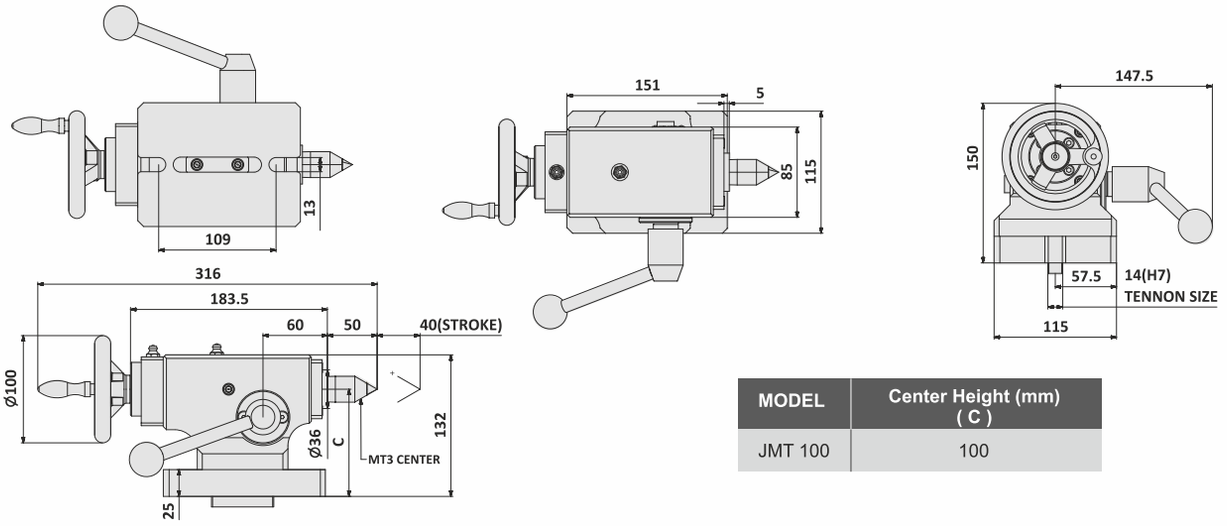
- **Simple and reliable manual operation**
- **Rigid body construction for stable clamping**
- **Enhanced with Elesa gantry hand wheel and adjustable lever for superior rigidity and usability**
- **Easy Adjustment:** Move center forward/backward via rear handle
- **Auto Alignment:** TENON slots align within 0.01mm
- **Radial Play Control:** Radial play within 0.01mm for accuracy
- Multiple **center height options**
- **Easy integration with CNC rotary tables**
- High accuracy and repeatability

Models & Specifications

Model	Center Height (mm) (C)	Center Taper	Stroke (mm)	Weight (Kg)
JMT 100	100	MT3	40	12.7
JMT 135	135	MT4	50	27
JMT 140	140	MT4	50	28
JMT 160	160	MT4	50	31.5
JMT 170	170	MT4	50	32.5

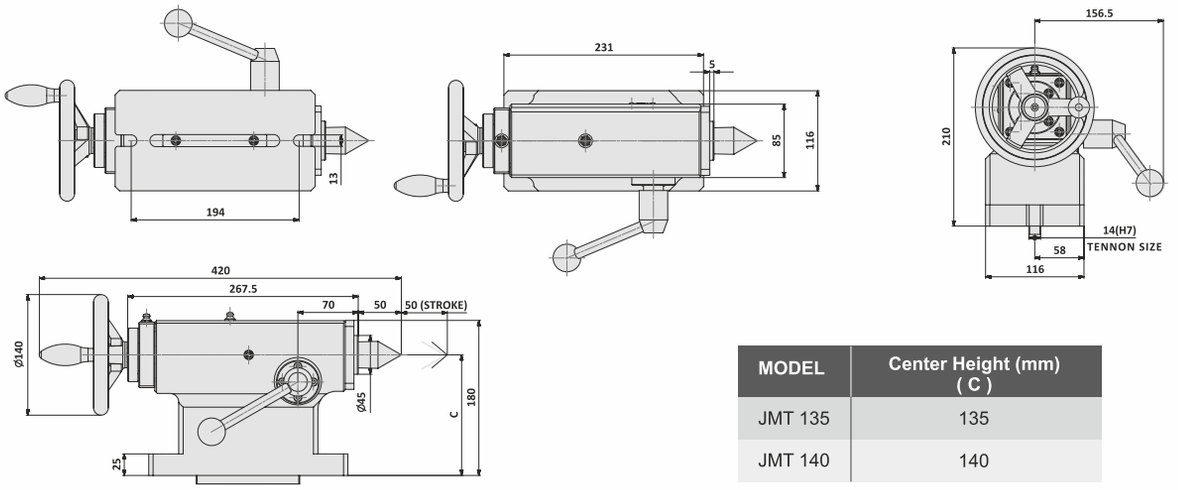


JMT-100



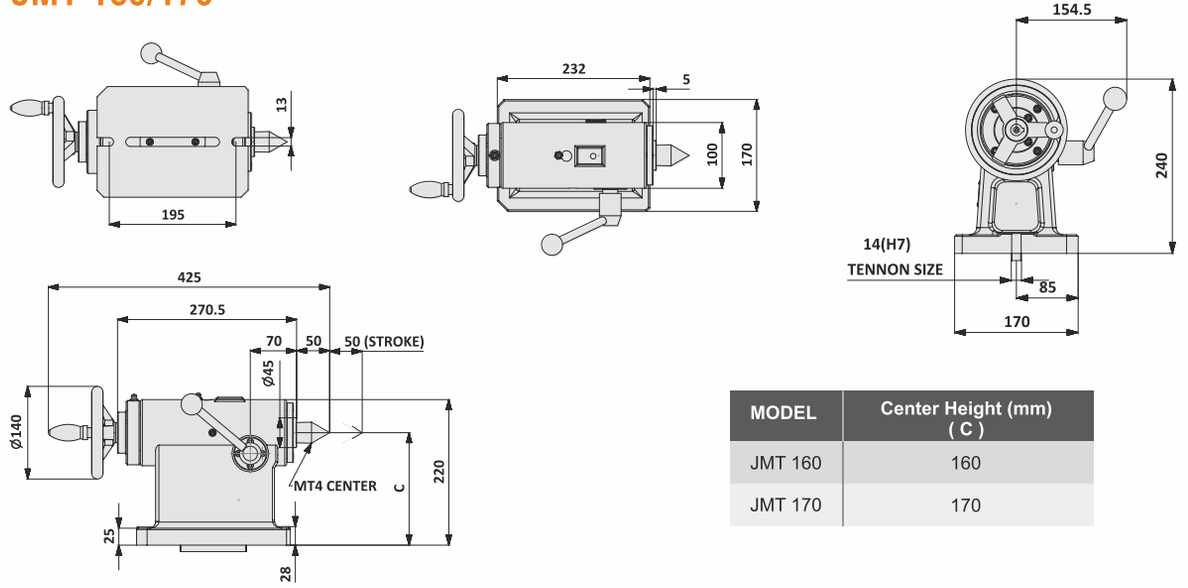
MODEL	Center Height (mm) (C)
JMT 100	100

JMT-135/140



MODEL	Center Height (mm) (C)
JMT 135	135
JMT 140	140

JMT-160/170



MODEL	Center Height (mm) (C)
JMT 160	160
JMT 170	170

MANUAL TAILSTOCK APPLICATION

Rotary table with Manual Tailstock,
workpiece clamped in chuck jaw.

Rotary table with Hydraulic Tailstock,
workpiece clamped in hydraulic jaw
operated by drawbar

HYDRAULIC TAILSTOCK
JHT SERIES

Hydraulic tailstocks provide **high-precision support** for long workpieces during heavy machining. They reduce vibration and deflection while ensuring **stable and accurate machining.**

The JHT Series Hydraulic Tailstock is designed for **adaptability and precision.** The standard center height is **140 mm,** but it can be customized as per customer requirements. With hydraulic operation, the tailstock delivers **smooth, precise, and repeatable performance** for demanding applications.

HYDRAULIC TAILSTOCK

JHT – 140

1 2

1. Product Standard

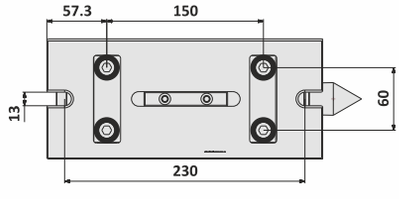
JHT → Hydraulic Tailstock

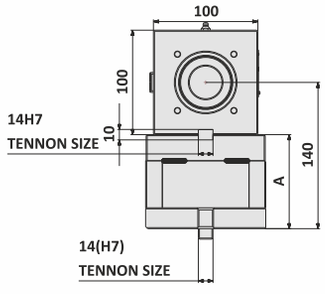
2. Center Height

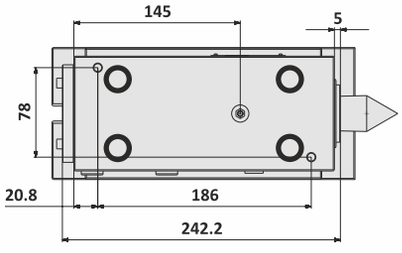
140 → 140 mm
XXX → As per requirement

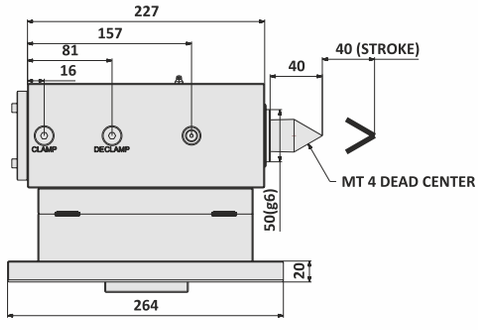
Key Highlights of JHT Series

- **Secure Workpiece Holding:** MT4 taper ensures firm and precise center engagement
- **CNC Integration:** Operable with relative "M" codes for CNC operations
- **Height Adjustability:** Easily customize tailstock height with suitable raisers
- **Auto Alignment:** TENON slots ensure alignment within 0.01 mm
- **Rigid Mounting:** Secure mounting with M10 bolts
- **Consistent Stability:** Maintains constant pressure between centers for precise machining
- **Quick Center Applications:** Optimized for rapid center use
- **Easy integration** with CNC rotary tables









MODEL	CENTER HEIGHT (MM)	STRUCTURE HEIGHT (MM) A	CENTER TAPER	STROKE (MM)	WEIGHT (KG)
JHT 140	140	90	MT-4	50	35
JHT XXX	XXX	XXX	MT4	50	XX

Note : For customized center heights, the model name will reflect the height (e.g., JHT-XXX for center height XXX mm)

DRAWBAR
JHD / JPD SERIES

The **JHD / JPD Series Drawbars** are precision-engineered clamping devices designed for use with rotary tables.
They connect directly with **collets, chucks, or fixtures** to provide secure clamping of workpieces, ensuring **machining accuracy, rigidity, and operational safety.**
These drawbars ensure **reliable clamping, quick changeovers, and long service life.**

DRAWBAR

JHD / JPD – 105

1 2

1. Product Standard

JHD → Hydraulic Drawbar
JPD → Pneumatic Drawbar

2. Suitable Rotary Table Model

105 → JRT-105
180 → JRT-180
200 → JRT-200
260 → JRT-260

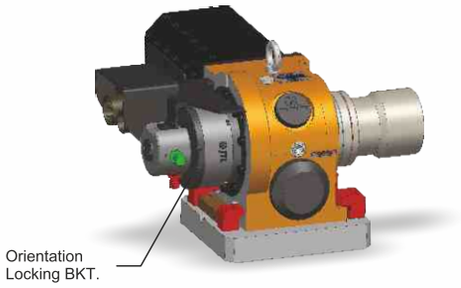
Key Highlights of JHT Series

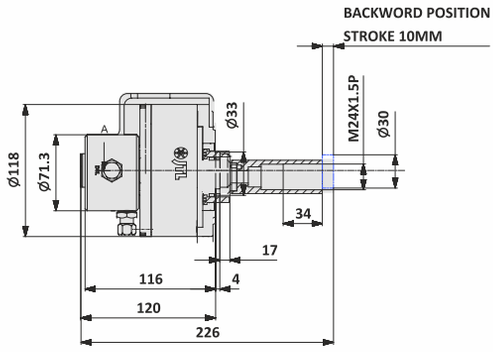
- Connects with **collets, chucks, and fixtures** for secure clamping
- Available in **Hydraulic and Pneumatic** models
- Provides **high clamping force** for machining accuracy
- Ensures **quick clamping/unclamping** to minimize downtime
- Built with **hardened components** for extended service life
- Compact design allows easy integration with rotary tables
- Enhances **rigidity, safety, and productivity** in machining operations

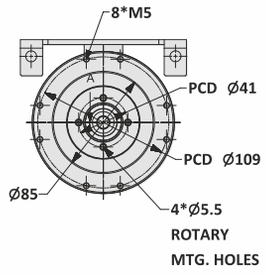
Models & Specifications

Model	Stroke (mm)	Suitable Rotary Table	Type	Approx Weight (Kg)
JPD-105	10	JRT 105	Pneumatic	5
JHD-105	10	JRT 105	Hydraulic	5
JHD 180	25	JRT 180	Hydraulic	14
JHD 200	25	JRT 200	Hydraulic	16
JHD 260	25	JRT 260	Hydraulic	20

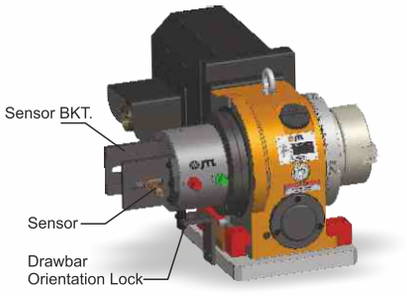
JHD-105

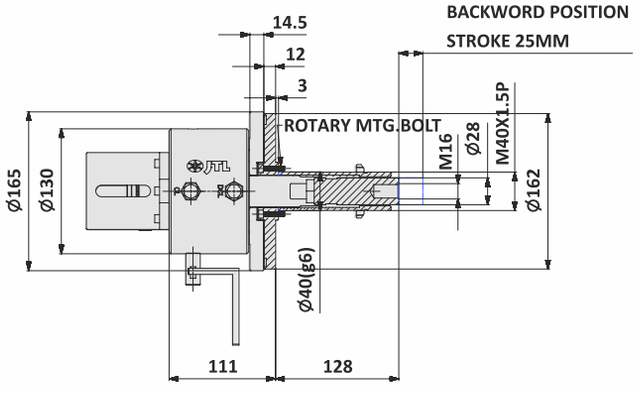


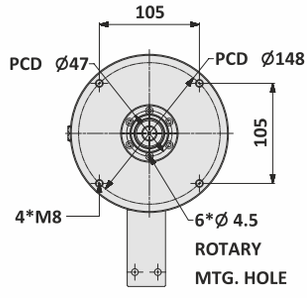




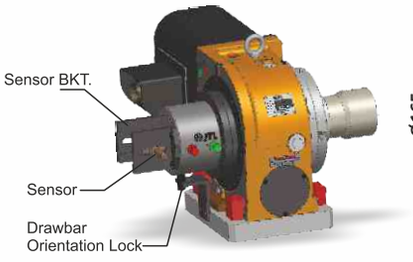
JHD-180

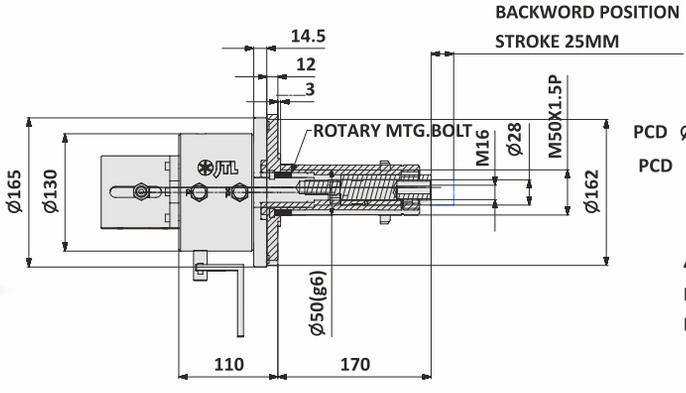


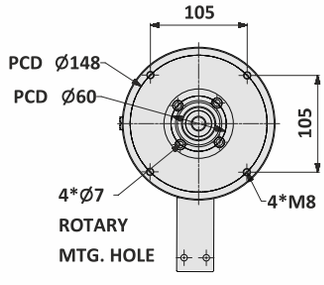




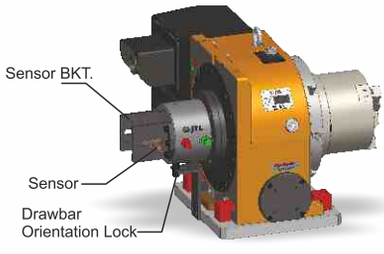
JHD-200

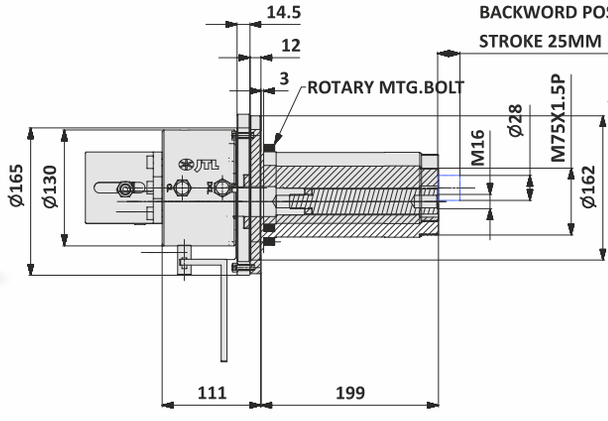


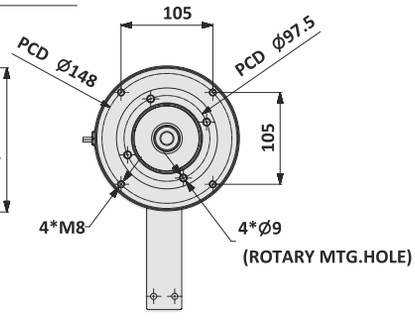




JHD-260







DRAWBAR APPLICATION

Drawbar-operated hydraulic chuck with tailstock support for precise workholding

Drawbar-operated hydraulic collet with tailstock support for precise workholding.

EQUALIZER
JHE / JPE SERIES

High Accuracy ▸ Reliable Performance ▸ Compact Design

The **JPE / JHE Series Equalizers** are designed to ensure **uniform clamping pressure distribution** across multi-point clamping fixtures. These equalizers enhance **machining stability, accuracy, and productivity,** making them an essential accessory for **CNC machining centers, SPM machines, and custom fixtures.**

Available in **pneumatic and hydraulic variants,** the equalizers are compact, durable, and easy to integrate with different fixture setups

EQUALIZER

JHE / JPE – 12

1 2

1. Product Standard

JHE → Hydraulic Equalizer
JPE → Pneumatic Equalizer

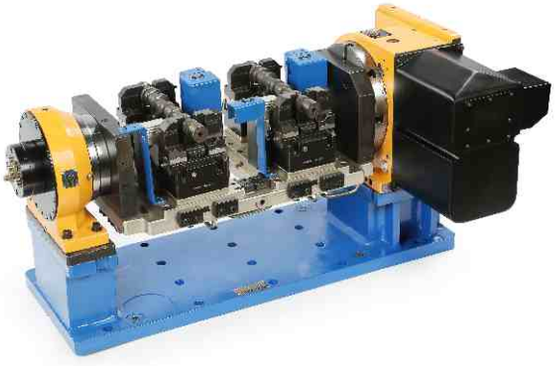
2. Stroke

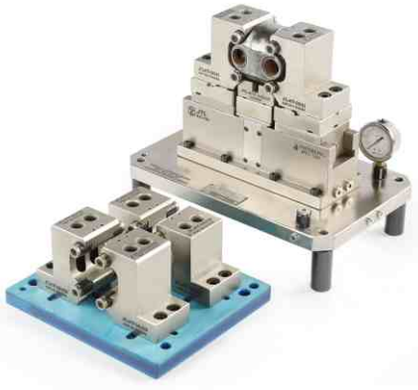
05 → 05 mm
12 → 12 mm
32 → 32 mm
40 → 40 mm

Key Highlights of JPE / JHE Series

- Ensures **uniform pressure distribution** in multi-point clamping
- Available in **Hydraulic (JHE) and Pneumatic (JPE)** versions
- **Compact and durable construction** for long service life
- Improves **machining accuracy and surface finish**
- Easy to integrate into **CNC fixtures and SPM machines**
- Reduces fixture complexity and increases efficiency

Equalizer Application

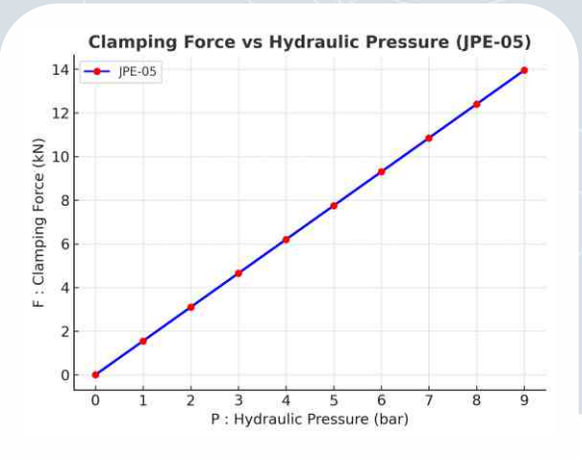


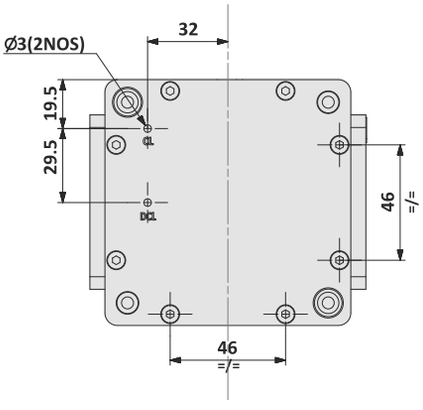


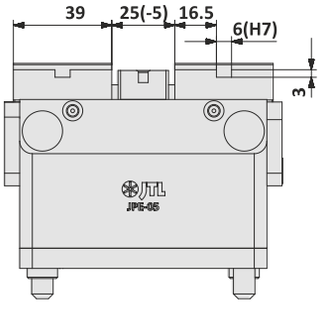
Hydraulic fixture designed with equalizer concept for uniform clamping pressure

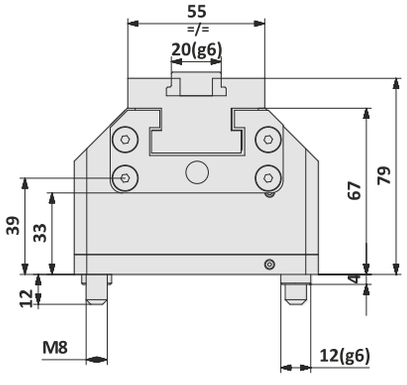
JPE-05

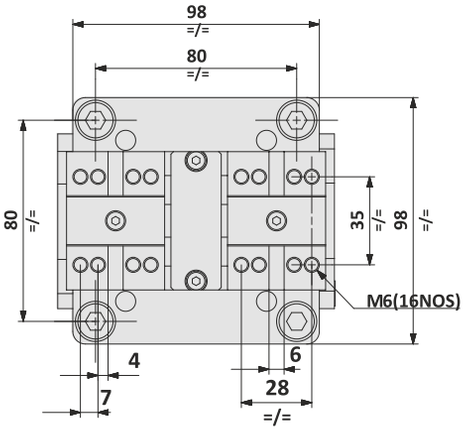
Clamping Force vs. Pressure











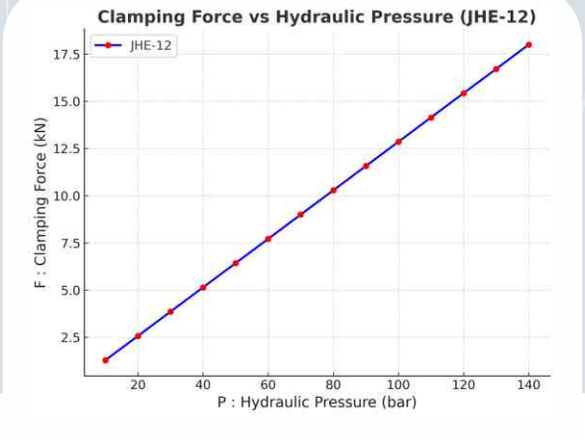
JPE-05

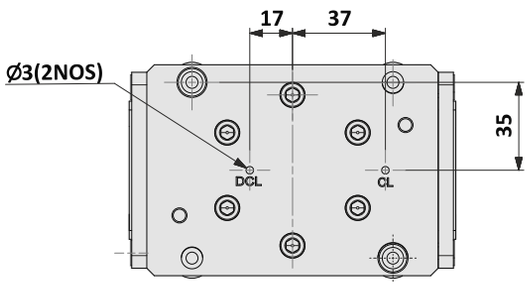
Specification	Value	Specification	Value
Dimension (L x W x H)	98 x 98 x 75 mm	Min Acutating Pressure	1 Bar
Weight	4 kg	Max Clamping Force	14 kN at 9 Bar
Clamping Range	0-90 mm	Air Consumption (6 bar)	701 cm3 per double stroke
Stroke Per Jaw	2.5 mm	Jaw Connection	Tongue and Groove
Max. Actuating Pressure	9 Bar	Air Connection	On the side & underside

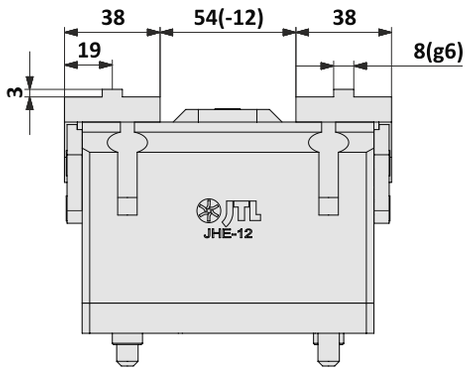
NOTE ∗ ALL DIMENSION ARE SHOWNIN DECLAMP CONDITION

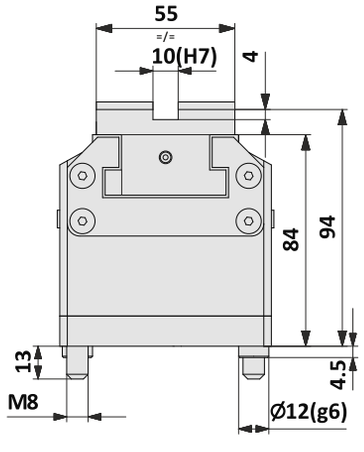
JHE-12

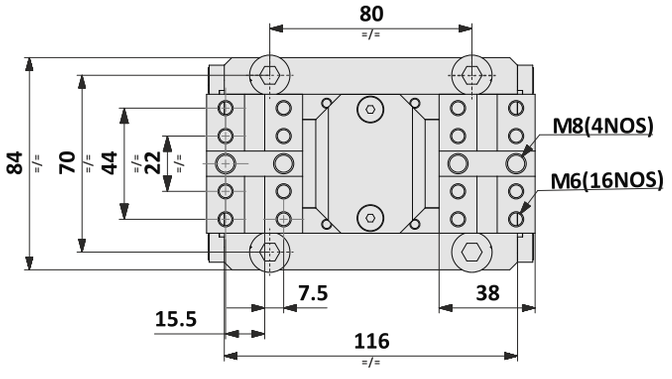
Clamping Force vs. Pressure











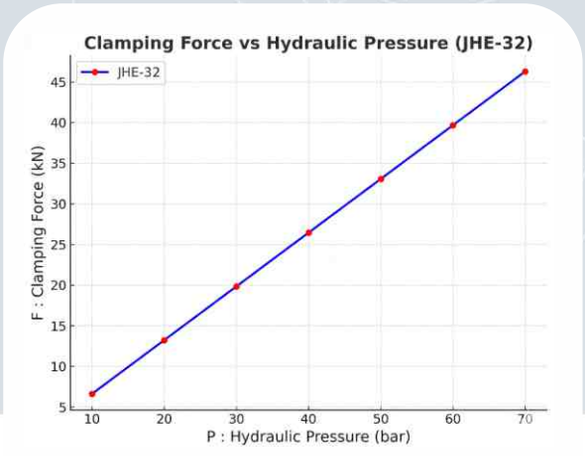
JHE-12

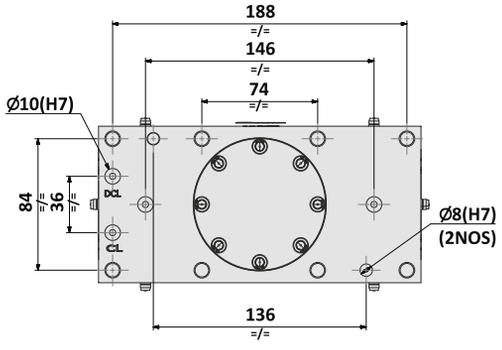
Specification	Value	Specification	Value
Dimension (L x W x H)	116 x 84 x 94 mm	Min Acutating Pressure	5 Bar
Weight	6 kg	Max Clamping Force	17.5 kN at 140 Bar
Clamping Range	0-100 mm	Stroke Volume	13 cm^3 per double stroke
Strokes Per Jaw	6 mm	Jaw Connection	Tongue and groove
Max Actuating Pressure	140 Bar	Hydraulic Connections	On the underside

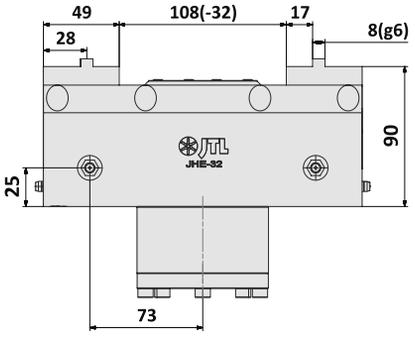
NOTE ∗ ALL DIMENSION ARE SHOWNIN DECLAMP CONDITION

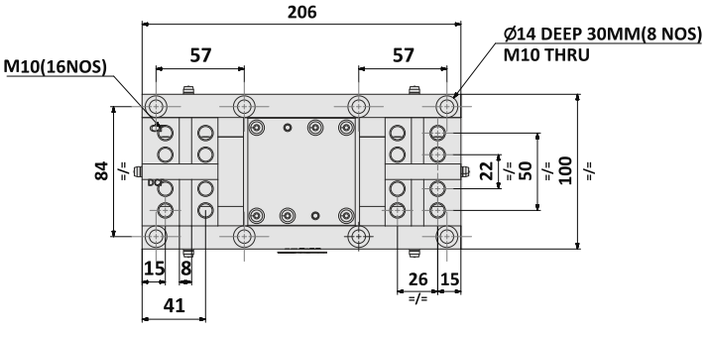
JHE-32

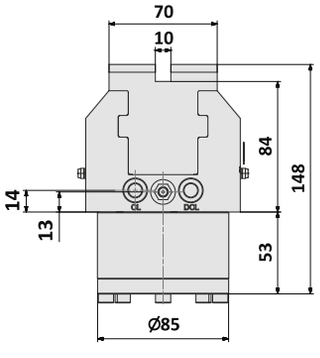
Clamping Force vs. Pressure











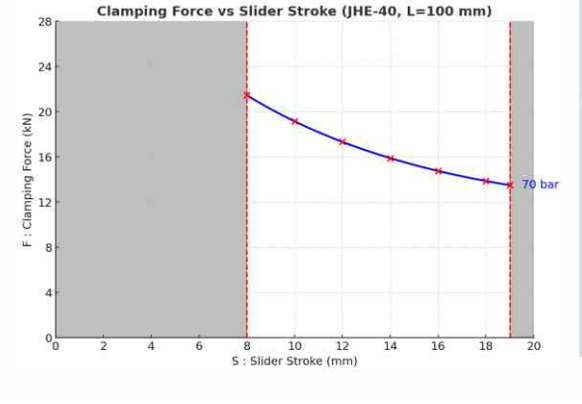
JHE-32

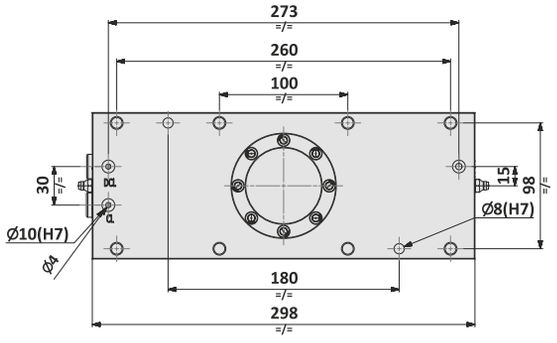
Specification	Value	Specification	Value
Slide Stroke (One Side)	16 mm	Locating Repeatablity (X-axis direction)	105 bar
Max. Clamping Height (at 70 bar)	65 mm	Operating Temperature	0~70°C
Max. Operating Pressure	70 bar	Usable Fluid	Hydraulic Oil ISO-VG32
Min. Operating Pressure	15 bar	Weight	13 kg

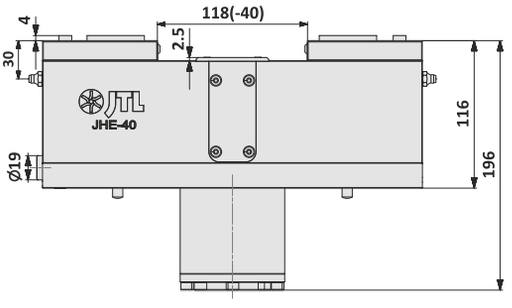
NOTE ∗ ALL DIMENSION ARE SHOWNIN DECLAMP CONDITION

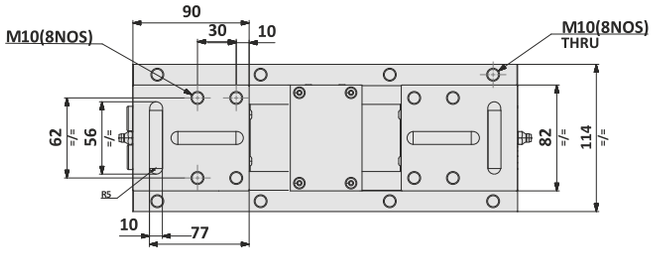
JHE-40

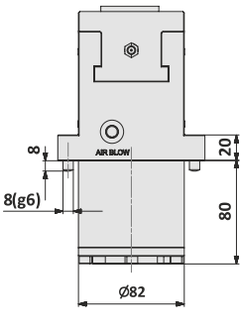
Clamping Force vs. Pressure











JHE-40

Specification	Value	Specification	Value
Slide Stroke (One Side)	20 ±1 mm	Air Blow Operating Pressure	0.4 MPa
Max. Clamping Height	100 mm	Locating Repeatablity (X-axis direction)	±0.03 mm
Max. Operating Pressure	7 MPa (70 bar)	Operating Temperature	0~70°C
Min. Operating Pressure	1.5 MPa (15 bar)	Usable Fluid	General Hydraulic Oil ISO-VG32
Withstanding Pressure	10.5 MPa (105 bar)	Weight	21.2 kg

NOTE ＊ALL DIMENSION ARE SHOWNIN DECLAMP CONDITION

SWING CYLINDER

Model No. Indication

JSC–48 C F G

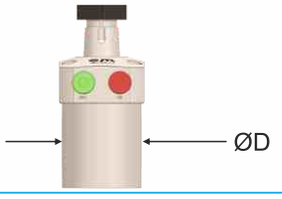
1 2 3 4 5

1. Product Standard

JSC : Swing Cylinder

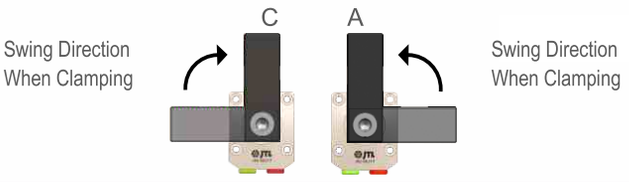
2. Body Size

040: ØD=40mm **065:** ØD=65mm
048: ØD=48mm **075:** ØD=75mm
055: ØD=55mm



3. Swing Direction When Clamping

C : Clockwise
A : Anti-Clockwise

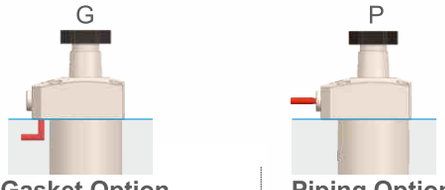


4. Head Option

F : Flat Head
R : Round-Taper Head

5. Piping Method

G : Gasket Option
P : Piping Option



Gasket Option
With G Thread Plug
Able to attach Speed control valve

Piping Option
Rc Thread Port
No Gasket Port

Specification Table

Model No.	Unit	Ø40	Ø48	Ø55	Ø65	Ø75
Cylinder Area For Locking	cm²	5.00	6.95	10.3	13.4	20.3
Clamping Force (F) (Calculation Formula)	kN	P(1-0.0016XL) 2.0920+0.0040XL	P(1-0.0009XL) 1.489+0.0018XL	P(1-0.0011XL) 1.0039+0.0011XL	P(1-0.0009XL) 1.0039+00.0011XL	P(1-0.0007XL) 0.5175+0.0006XL
Cylinder Inner Diameter	mm	31	37	44	51	62
Rod Diameter	mm	18	22	25	30	35.5
Full Stroke	mm	14.5	15.5	18.5	20	24
Swing Stroke	mm	6.5	7.5	8.5	10	12
Vertical Stroke	mm	8	8	10	10	12
Mix. Operating Pressure	MPa	7				
Min. Operating Pressure	MPa	1.5				
Withstanding Pressure	MPa	10.5				
Operating Temperature	°C	0 ~ 70				
Mass	kg	0.8	1.2	1.8	2.6	3.9
Usable Fluid	General Hydraulic Oil Equivalent to ISO-VG-32					

SWING CYLINDER BOTTOM MOUNTING

Model No. Indication

JSC_B – 40 C F G

1 2 3 4 5

1. Product Standard

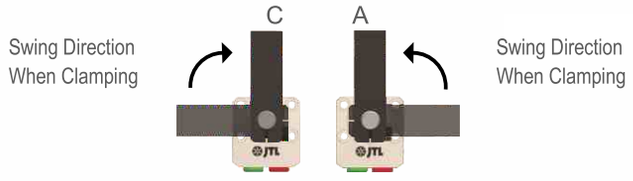
JSC_B : Swing Cylinder Bottom Mounting

2. Body Size

040: ØD=32mm
060: ØD=36mm
080: ØD=39mm
100: ØD=46.5mm
160: ØD=53mm
200: ØD=63.5mm
250: ØD=71mm
400: ØD=90mm

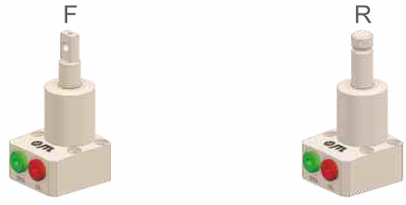
3. Lever Direction when clamping

C : Clockwise
A : Anti-Clockwise



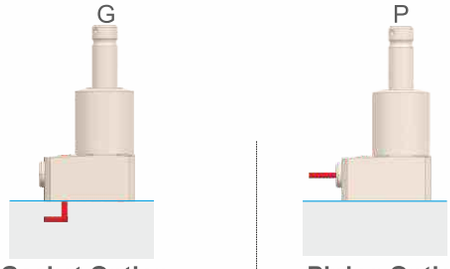
4. Head Option

F : Flat Head
R : Round Head



5. Piping Method

G : Gasket Option
P : Piping Option



Gasket Option
With G Thread Plug
Able to attach Speed control valve

Piping Option
Rc Thread Port
No Gasket Port

Specification Table

Model	JSC B040	JSC B060	JSC B080	JSC B100	JSC B160	JSC B200	JSC B250	JSC B400
Cylinder Area for Locking (cm²)	1.005	1.453	1.979	2.804	4.17	6.134	8.198	12.37
Clamping Force (Calculation Formula)	F= P/10.94+ 0.036×L	F=P/7.57+ 0.024×L	F=P/5.53+ 0.0147×L	F=P/3.91 +0.0094×L	F=P/2.59+ 0.0046×L	F=P/1.76+ 0.0028×L	F=P/1.32+ 0.0018×L	F=P/0.87+ 0.0011×L
Full Stroke (mm)	14	15	18	19.5	24	26.5	32	35.5
Swing Stroke (90°) (mm)	6	7	8	9.5	11	13.5	16	19.5
Vertical Stroke (mm)	8	8	10	10	13	13	16	16
Swing Angle Accuracy	90° ±3°							
Swing Completion Position Repeatability	±0.5°							
Max. Operating Pressure (MPa)	35							
Min. Operating Pressure (MPa)	7							
Withstanding Pressure (MPa)	42							
Operating Temperature (°C)	0 ~ 70							
Usable Fluid	General Hydraulic Oil Equivalent to ISO-VG-32							

LINK CYLINDER

Model No. Indication

JLC – 48 R P

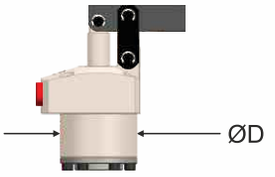
1 2 3 4

1. Product Standard

JLC : Link Cylinder

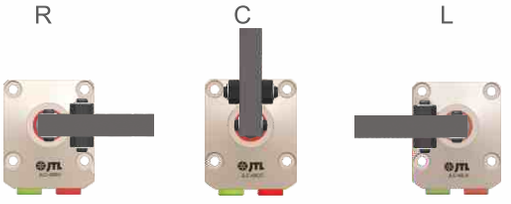
2. Body Size

040: ØD=40mm
048: ØD=48mm
055: ØD=55mm
065: ØD=65mm
075: ØD=75mm
090: ØD=90mm
105: ØD=105mm



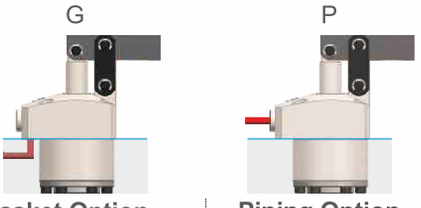
3. Lever Direction

R : Right
C : Center
L : Left



4. Piping Method

G : Gasket Option
P : Piping Option



Gasket Option
With G Thread Plug Able
to attach Speed control valve

Piping Option
Rc Thread Port
No Gasket Port

Specification Table

Model No.	Unit	Ø40	Ø48	Ø55	Ø65	Ø75	Ø90	Ø105
Cylinder Area For Locking	cm^2	5.31	7.07	9.62	15.9	23.8	36.3	50.3
Clamping Force (F)	kN	7.64 X P / L-16	11.76 X P/ L-18.5	18.18 X P/ L-21	35.06 X P/ L-24.5	64.14 X P/ L-30	117.66× P/ L-36	199.05× P/ L-44
Cylinder Lock	cm^3	10.9	16.6	25	46.9	83.2	148.9	246.3
Capacity Release	cm^3	8.6	13	19.8	37.7	69.8	123.7	197.8
Cylinder Inner Diameter	mm	26	30	35	45	55	68	80
Rod Diameter mm	mm	12	14	16	20	22	28	35.5
Full Stroke	mm	20.5	23.5	26	29.5	35	41	49
Lock Stroke	mm	17.5	20.5	23	26.5	32	38	46
Extra Stroke	mm	3	3	3	3	3	3	3
Mass	kg	0.7	1.1	1.4	2.2	3.2	5.3	8.6
Mix. Operating Pressure	MPa	7						
Min. Operating Pressure	MPa	0.5						
Withstanding Pressure	MPa	10.5						
Operating Temp°C		0 ~ 70						

PUSHER CYLINDER

Model No. Indication

JPC – 022 S

1 2 3

1. Product Standard

JPC : Pusher Cylinder

2. Body Size (External Thread)

16 : M16x1.5 **30 :** M30x1.5 **55 :** M55x1.5
22 : M22x1.5 **36 :** M36x1.5 **65 :** M65x1.5
24 : M24x1.5 **45 :** M45x1.5 **80 :** M80x1.5

3. Stroke

S : Small
M : Medium
L : Large

Specification Table

MODEL NO.	JPC-16			JPC-22			JPC-24			JPC-30			JPC-36			JPC-45			JPC-55			JPC-65			JPC-80		
Stroke Code	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L
Stroke (mm)	6	10	16	6	10	16	8	12	20	8	12	20	10	16	25	10	16	25	12	20	32	16	25	40	16	25	40
Cylinder Force Formula (kN)	F=(0.050×P)-0.024			F=(0.113×P)-0.049			F=(0.154×P)-0.068			F=(0.254×P)-0.099			F=(0.319×P)-0.150			F=(0.707×P)-0.319			F=(0.999×P)-0.452			F=(1.59×P)-0.657			F=(2.38×P)-1.04		
Cylinder Area (cm^2)	0.5			1.1			1.5			2.5			3.9			7.1			9.9			15.9			23.8		
Cylinder Capacity (cm^3)	0.3	0.5	0.8	0.7	1.1	1.8	1.2	1.8	3.1	2	3.1	5.1	3.9	6.3	8.1	7.1	11.3	17.7	11.9	19.8	31.7	25.4	39.8	63.6	38	59.4	95
Release Spring Force (N)	12.5~23.5			25.7~41.2			32.6~59.7			50.1~99.1			79.4~150			157~319			236~452			353~657			564~1040		
Max. Operating Pressure (MPa)	25																										
Min. Operating Pressure (MPa)	0.8																										
Withstanding Pressure (MPa)	37.5																										
Operating Temperature (°C)	0~70																										
Weight (kg)	0.03	0.04	0.05	0.06	0.08	0.1	0.08	0.1	0.15	0.15	0.2	0.3	0.3	0.4	0.5	0.5	0.6	0.8	0.8	1	1.3	1.4	1.7	2.2	2.2	2.7	3.6

OUR VALUED CONNECTION

CERTIFICATE

Jyotirling Industries is officially certified under **ISO 9001:2015** for quality management systems.We remain committed to delivering reliable, high-precision solutions across every project.

Achievements today, inspiration for tomorrow.

Our unwavering commitment to quality, precision, and innovation has earned us prestigious recognition over the years.

We are honored to receive:

- **Lalit Doshi Memorial Award (M.I.D.C.) - Government of Maharashtra**
- **District Industries Centre Award - Government of Maharashtra**

These esteemed accolades inspire us to continue setting new benchmarks, exceeding industry expectations, and delivering excellence without compromise.

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