

芳嘉天碟
TOPSDISK



NC

NC Rotary Table
NC Tilting Rotary Table
Hydraulic Index Table



芳嘉天碟 TOPSDISK

HIGH accuracy LOW maintenance

COMPANY PROFILE

Spintop Machinery has commenced production of the NC rotary table in year 1996 in cooperation with Industrial Technology Research Institute (ITRI) for related products and components; to begin with. With decades of experience behind us in the field of NC rotary table, we have developed several models of NC rotary table and the NC Indexing Table and we have received high appreciation from the industry and our valued customers.

In year 2005, we put our dual-axis NC rotary table (commonly known as 4-Axis, 5-Axis) in our production program and sold products around the world and gained a remarkably good response. Five-Axis machining has almost become a trend by then. The advanced countries have adopted Five-axis machining in order to reduce machining time and higher process accuracy (Simultaneously multi-angle processing) thus improving over all efficiency by installing Dual-Axis NC Rotary Table in the existing three-axis CNC machine.

Direct Drive (DD) motor or torque motor, will be the trend in the mechanical transmission for the future. It has advantage of high-speed, high-accuracy, no backlash etc. For this reason, in 2008, we have been actively involved in developing the rotary table with direct drive motor for 4-axis or 5-axis CNC machine. This research and development we could achieve with the able cooperation and support from PMC and could able to showcase the dual-axis NC rotary table in the Taipei International Machine Tool Show 2009 (TIMTOS 2009). This NC rotary table adopted direct drive motor and encoder, procured from Europe and integrated with Heidenhain controller. By incorporating appropriate cooling circuit it was possible to extract the max. Torque output from the DD motor torque characteristics.

Recently in the market, NC rotary table with DD motors are incorporated with existing controller available for the 4th-axis or 5th-axis on the machine. However, DD servomotors required high precision control system, so it become essential to get incorporate the higher level of controller such as HEIDENHAIN, Siemens, Fanuc 31iM and Mitsubishi M70 for the machine which in turn will increase the overall costs. Due to this reason, SPINTOP developed a model of external CNC controller that could be interfaced with the original controller or low-level CNC controller to meet the requirement of DD motor as well keep the cost reasonably low.

This type of controller can control the DD motor to rotate any angle with mi. increment of 0.001° with the help of midrange encoder. According to the requirement of accuracy from a customer such as ± 5 sec, ± 15 sec and ± 30 sec we choose to use multi-angle or multi-surface processing.

Due to this the DD motor have characteristics of high speed, zero backlash and ability to adapt a normal encoder we can offer a NC Rotary Table of stable performance with reduced fault or error. It is easy to interface and integrate DD motor NC Rotary table with in the existing machine with the help of spare M code available.

NC Tilting Rotary Table

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Standard series

Introduction

- TDE-125、170、200、255P/H are equipped with high-tech Cross Roller Bearing.
- Pneumatic clamping adopted patented disk-clamping system (Taiwan PAT. : 217736) to enlarge clamping force and ensure heavy-duty continuous cutting.
- Hydraulic clamping adopted wholly circular hydraulic clamping system . It can assure heavy and steady cutting without any deviation from the centre (TDE-255H、TD-255H~320).
- Adopted patented disk hydraulic clamping system . It can assure heavy and steady cutting without any deviation from the centre (TD-400~630).
- The feature of wear resistant alloy Dual-Lead Worm Gear is high mechanical efficiency of power transmission ,high indexing accuracy ,and easy adjusted on the backlash
- Driven by the servo Motor. Efficiently in position, high accuracy, Low noise and suitable for any angels working piece
- It can be connected with CNC machine as a 4th Axis or matched with Single Axis Controller as an additional Axis.



TDE-125



TD-170

Specification/Model	TDE-125	TD-170	TD-200	TDE-255H	TD-320	TD-400	TD-500	TD-630
Use Method	Vertical/Horizontal use or Vertical use only			Vertical/Horizontal use or Vertical use only				
Clamp Method	Pneumatic 5kg/cm ²			Hydraulic 35kg/cm ²				
Faceplate Dimension	Ø125mm	Ø170mm	Ø200mm	Ø255mm	Ø320mm	Ø400mm	Ø500mm	Ø630mm
Spindle Through Hole Diameter	Ø15mm	Ø45mm	Ø45mm	Ø45mm	Ø40mm	Ø40mm	Ø50mm	Ø110mm
Faceplate Centre Hole Diameter	Ø20H7mm	Ø50H7mm	Ø50H7mm	Ø80H7mm	Ø40H7mm	Ø40H7mm	Ø50H7mm	Ø110H7mm
Centre Height	110mm	135mm	160mm	160mm	210mm	255mm	310mm	400mm
Faceplate T-Slot Width	12H7mm	12H7mm	12H7mm	12H7mm	14H7mm	14H7mm	18H7mm	18H7mm
Position Key	14h7mm	14h7mm	18h7mm	18h7mm	18h7mm	18h7mm	18h7mm	18h7mm
Servo Motor	• FANUC	α2i/β2i	α4i/β8i	α4i/β8i	α8i/β12i	α12i	α12i	α12i
	• MELDAS	HF44S/HF105S/HF54T	HF54T	HF54T	HF104T/HF154T	HF204S	HF204S	HF204S
Total Speed Reduction Ratio	1/48	1/90	1/90	1/90	1/180	1/180	1/180	1/180
Min. Increment Unit	0.001°	0.001°	0.001°	0.001°	0.001°	0.001°	0.001°	0.001°
Indexing Accuracy	45(Arc. Sec.)	30(Arc. Sec.)	30(Arc. Sec.)	15(Arc. Sec.)	15(Arc. Sec.)	15(Arc. Sec.)	15(Arc. Sec.)	15(Arc. Sec.)
Repeatability	4(Arc. Sec.)	4(Arc. Sec.)	4(Arc. Sec.)	4(Arc. Sec.)	4(Arc. Sec.)	4(Arc. Sec.)	4(Arc. Sec.)	4(Arc. Sec.)
Clamp Force	8kgf/m	16kgf/m	16kgf/m	50kgf/m	85kgf/m	180kgf/m	250kgf/m	450kgf/m
Max. Torque Capacity of Worm Gear	15kgf/m	27kgf/m	27kgf/m	48kgf/m	78kgf/m	180kgf/m	250kgf/m	450kgf/m
Max. Workpiece of Capacity	• Workpiece Vertical (With Tailstock)	50(100)KGS	75(150)KGS	75(150)KGS	100(250)KGS	150(350)KGS	200(500)KGS	250(600)KGS
	• Horizontal	100KGS	150KGS	150KGS	250KGS	350KGS	500KGS	600KGS
Net Weight (Without motor)	25KGS	40KGS	60KGS	95KGS	170KGS	300KGS	470KGS	725KGS

- Standard Accessories: Clamping Blocks, Clamping Bolts, Position Key
- Faceplate for TDE-125、170、200 can be removed from spindle.
- Specification and Dimensions are subject to change without notice.
- Eccentric of workpiece will affect accuracy and reduce the allowance of Max. Load



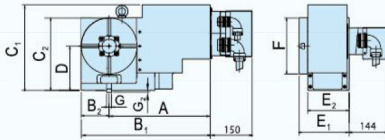
Model Description → The outline of dimension

TD-255P

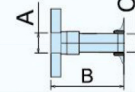
P: Pneumatic System
H: Hydraulic System
Faceplate Dimension

TD/TDE:
NC Rotary Table

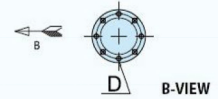
Vertical/Horizontal use



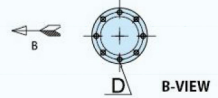
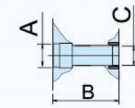
with Faceplate



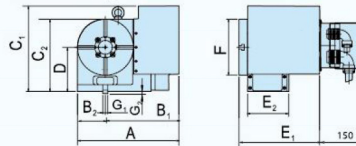
spindle



without Faceplate



Vertical use only



Standard series

Unit : mm

The Outline of Dimension

Spindle Dimension

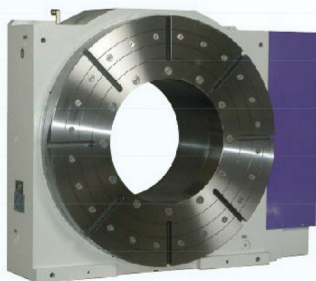
	Servomotor cover type	The Outline of Dimension											Spindle Dimension				
		A	B ₁	B ₂	C ₁	C ₂	D	E ₁	E ₂	F	G ₁	G ₂	Faceplate	A	B	C	D
TDE-125	Vertical & horizontal dual-use	381	295	86	244	175	110	151.5	132	∅125	M14	7	Yes	∅20X22L	151	∅15X20L	4-M4X12L, ∅23.5
													No	∅25X25L	129	∅15X20L	4-M4X12L, ∅23.5
TD-170	Vertical & horizontal dual-use	392	289	85	265	220	135	179	148	∅170	M14	7	Yes	∅50X24L	178	∅45X15L	8-M6X15L, ∅55
													No	∅55X15L	154	∅45X15L	8-M6X15L, ∅55
TD-200	Vertical & horizontal dual-use	363	263	100	260	260	160	311	148	∅200	M18	7	Yes	∅50X24L	178	∅45X15L	8-M6X15L, ∅55
		462	362	100	260	260	160	179	148								
TDE-255H	Vertical & horizontal dual-use	471	314	157	359	301	160	283	165	∅255	M18	7	Yes	∅80X15L	163.5	∅45X20L	4-M6X10L, ∅55
		559	402	157	359	301	160	171	165								
TD-320	Vertical & horizontal dual-use	614	409	185	386.6	380	210	322	215	∅320	M18	7	Yes	∅40X35L	191	∅50X30L	8-M6X15L, ∅68
		707	502	185	386.6	380	210	223	215								
TD-400	Vertical & horizontal dual-use	675.6	450.6	225	475	475	255	351	245	∅400	M18	7	Yes	∅40X20L	219	∅50X30L	8-M6X15L, ∅76.2
		796	571	225	475	475	255	255.5	245								
TD-500	Vertical & horizontal dual-use	885	605	260	565	565	310	308	295	∅500	M18	7	Yes	∅50X31L	262	∅50X30L	8-M6X15L, ∅76.2
TD-630	Vertical & horizontal dual-use	845	507	315	715	715	400	325	278	∅630	M18	7	Yes	∅110X45L	186	∅110X37.5L	-

- Max. Allowable load: The size of work piece or tool should not be larger than the diameter of the turntable.
- Cable plug ,Connector & Flexible are optional accessories
- If need more detail relative dimension ,please visit our Web-Site , <http://www.spintop.com.tw> or <http://www.topsdisk.com>

Large Pore Size Series

Introduction

- TD255P/H are equipped with high-tech Cross Roller Bearing.
- Pneumatic clamping adopted patented disk-clamping system (Taiwan PAT. : 217736) to enlarge clamping force and ensure heavy-duty continuous cutting (TD-255P).
- Hydraulic clamping adopted wholly circular hydraulic clamping system . It can assure heavy and steady cutting without any deviation from the centre (TD-255H).
- Adopted patented disk hydraulic clamping system . It can assure heavy and steady cutting without any deviation from the centre (TE-800).
- The feature of wear resistant alloy Dual-Lead Worm Gear is high mechanical efficiency of power transmission ,high indexing accuracy ,and easy adjusted on the backlash
- Driven by the servo Motor. Efficiently in position, high accuracy, Low noise and suitable for any angels working piece
- It can be connected with CNC machine as a 4th Axis or matched with Single Axis Controller as an additional Axis.

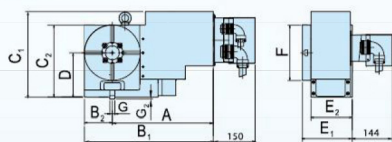


TE-800

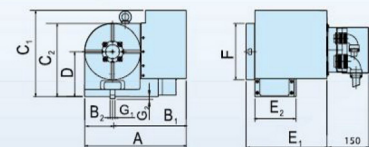
Specification/Model	TD-255P	TD-255H	TE-800	TD-255P	TD-255H	TE-800
Use Method	Vertical/Horizontal use or Vertical use only			Total Speed Reduction Ratio	1/180	1/180
Clamp Method	Pneumatic 5kg/cm ²	Hydraulic 35kg/cm ²		Min. Increment Unit	0.001°	0.001°
Faceplate Dimension	Ø255mm	Ø255mm	Ø800mm	Indexing Accuracy	15(Arc. Sec.)	15(Arc. Sec.)
Spindle Through Hole Diameter	Ø80mm	Ø80mm	Ø400mm	Repeatability	4(Arc. Sec.)	4(Arc. Sec.)
Faceplate Centre Hole Diameter	Ø80H7mm	Ø80H7mm	Ø400H7mm	Clamp Force	50kgf/m	50kgf/m
Centre Height	160mm	160mm	430mm	Max. Torque Capacity of Worm Gear	48kgf/m	48kgf/m
Faceplate T-Slot Width	12H7mm	12H7mm	18H7mm	Max. Workpiece Capacity • Workpiece Vertical (With Tailstock) • Horizontal	100(250)KGS	100(250)KGS
Position Key	18h7mm	18h7mm	18h7mm		250KGS	250KGS
Servo Motor	• FANUC • MELDAS	a8i / β12i HF104T/HF154T	a12i HF204S	Net Weight (Without motor)	120KGS	120KGS
					950KGS	

The outline of dimension

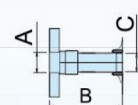
Vertical/Horizontal use



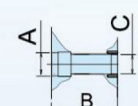
Vertical use only



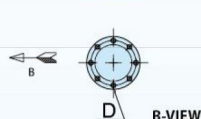
with Faceplate



without Faceplate

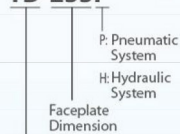


Spindle



Model Description

TD-255P



TD/TDE:
NC Rotary Table

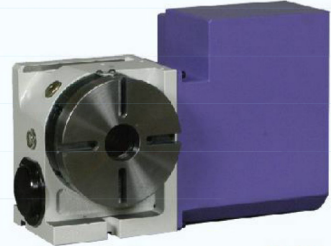
- Standard Accessories: Clamping Blocks, Clamping Bolts, Position Key
- Specification and Dimensions are subject to change without notice.
- Eccentric of workpiece will affect accuracy and reduce the allowance of Max. Load



Practical Series

Introduction

- The feature of wear resistant alloy Dual-Lead Worm Gear.
- Easy adjusted on the backlash.
- The faceplate can separate with the table to save the space.
- Including : Pneumatic clamping system or Hydraulic clamping system.
- It can be connected with CNC machine as a 4th Axis or matched with Single Axis Controller as an additional Axis.
- Minimum increment unit : 0.001°.



TE-170

Specification/Model

	TE-125	TE-170	TE-200P	TE-200H
Use Method	Vertical use only			
Clamp Method	Pneumatic 5kg/cm ²	Pneumatic 5kg/cm ²	Pneumatic 5kg/cm ²	Hydraulic 25kg/cm ²
Faceplate Dimension	Ø125mm	Ø170mm	Ø200mm	Ø200mm
Spindle Through Hole Diameter	Ø15mm	Ø45mm	Ø40mm	Ø40mm
Faceplate Centre Hole Diameter	Ø22H7mm	Ø50H7mm	Ø50H7mm	Ø50H7mm
Centre Height	110mm	135mm	160mm	160mm
Faceplate T-Slot Width	12H7mm	12H7mm	12H7mm	12H7mm
Position Key	14h7mm	14h7mm	18h7mm	18h7mm
Servo Motor	• FANUC • MELDAS	• FANUC • MELDAS	• FANUC • MELDAS	• FANUC • MELDAS
	HF44T/HF-75S	HF54T(S)	HF54T/HF104T(S)	HF54T/HF104T(S)
Total Speed Reduction Ratio	1/45	1/72	1/90	1/90
Min. Increment Unit	0.001°	0.001°	0.001°	0.001°
Indexing Accuracy	90(Arc. Sec.)	40(Arc. Sec.)	30(Arc. Sec.)	30(Arc. Sec.)
Repeatability	4(Arc. Sec.)	4(Arc. Sec.)	4(Arc. Sec.)	4(Arc. Sec.)
Clamp Force	8kgf/m	15kgf/m	25kgf/m	125kgf/m
Max. Torque Capacity of Worm Gear	15kgf/m	27kgf/m	27kgf/m	27kgf/m
Max. Workpiece of Capacity	• Workpiece Vertical (With Tailstock) • Horizontal	• Workpiece Vertical (With Tailstock) • Horizontal	• Workpiece Vertical (With Tailstock) • Horizontal	• Workpiece Vertical (With Tailstock) • Horizontal
	20(50)KGS 50KGS	50(100)KGS 100KGS	75(150)KGS 150KGS	75(150)KGS 150KGS
Net Weight (Without motor)	19KGS	38KGS	70KGS	70KGS

Large Pore Size Series

The outline of dimension													Spindle Dimension				Unit : mm
	Servomotor cover type	A	B ₁	B ₂	C ₁	C ₂	D	E ₁	E ₂	F	G ₁	G ₂	Faceplate				
TD-255P	Vertical	473	313	160	362	304	160	334	196	Ø255	M18	7		Ø80X15L	187	Ø80X15L	6-M6X15L, Ø90
TD-255H	Vertical & horizontal dual-use	560	400	160	362	304	160	212	196	Ø255	M18	7	Yes				
TE-800	Vertical & horizontal dual-use	1061	639	422	792.6	853	430	426.8	268	Ø800	M18	7	Yes	Ø400X92L	317	Ø400X92L	12-M5X15L, Ø425

Practical Type Series

TE-125	Vertical & horizontal dual-use	290	368	60	240	175	110	131	106	Ø125	M14	7	Yes	Ø22X18L	130	Ø15X20L	4-M4X10L, Ø23.5
														No	Ø26X23L	112	Ø15X20L
TE-170	Vertical & horizontal dual-use	328	428	60	285	220	135	179	148	Ø170	M14	7	Yes	Ø50X15L	178	Ø45X17L	8-M6X15L, Ø55
														No	Ø50X20L	154	Ø45X17L
TE-200	Vertical & horizontal dual-use	328	518	110	333	301	160	179	150	Ø200	M18	7	Yes	Ø50X24L	178	Ø40X20L	4-M6X15L, Ø50

- Max. Allowable load: The size of work piece or tool should not be larger than the diameter of the turntable.
- Cable plug ,Connector & Flexible are optional accessories
- If need more detail relative dimension ,please visit our Web-Site , <http://www.spintop.com.tw> or <http://www.topsdisk.com>

Left Hand Series

Introduction

- Adopted high-tech Cross Roller Bearing.
- Pneumatic clamping adopted patented disk-clamping system (Taiwan PAT. : 217736) to enlarge clamping force and ensure heavy-duty continuous cutting(TD-170L).
- Hydraulic clamping adopted wholly circular hydraulic clamping system . It can assure heavy and steady cutting without any deviation from the centre (TD-255L).
- The feature of wear resistant alloy Dual-Lead Worm Gear is high mechanical efficiency of power transmission ,high indexing accuracy ,and easy adjusted on the backlash
- Driven by the servo Motor. Efficiently in position, high accuracy, Low noise and suitable for any angels working piece
- It can be connected with CNC machine as a 4th Axis or matched with Single Axis Controller as an additional Axis.
- Left Hand Type :Change work piece fast and easy.



TD-170L

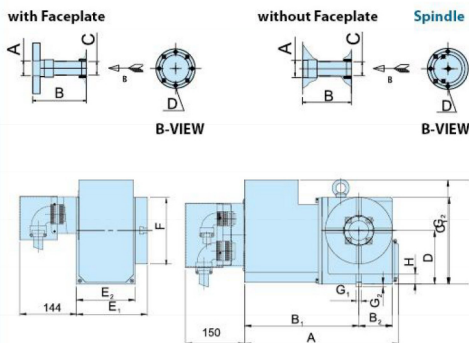
Model Description

TD-170L



Specification/Model	TD-170L	TD-255L
Use Method	Vertical/Horizontal use or Vertical use only	Vertical/Horizontal use or Vertical use only
Clamp Method	Pneumatic 5kg/cm ²	Hydraulic 35kg/cm ²
Faceplate Dimension	Ø170mm	Ø255mm
Spindle Through Hole Diameter	Ø45mm	Ø45mm
Faceplate Centre Hole Diameter	Ø50H7mm	Ø80H7mm
Centre Height	135mm	160mm
Faceplate T-Slot Width	12H7mm	12H7mm
Position Key	14h7mm	18h7mm
Servo Motor	<ul style="list-style-type: none"> • FANUC α4i/β8i • MELDAS HF54T 	<ul style="list-style-type: none"> α8i/β12i HF104T / HF154T
Total Speed Reduction Ratio	1/90	1/90
Min. Increment Unit	0.001°	0.001°
Indexing Accuracy	30(Arc. Sec.)	15(Arc. Sec.)
Repeatability	4(Arc. Sec.)	4(Arc. Sec.)
Clamp Force	16kgf/m	50kgf/m
Max. Torque Capacity of Worm Gear	27kgf/m	48kgf/m
Max. Workpiece of Capacity	<ul style="list-style-type: none"> • Workpiece Vertical (With Tailstock) 75(150)KGS • Horizontal 150KGS 	<ul style="list-style-type: none"> 100(250)KGS 250KGS
Net Weight (Without motor)	40KGS	80KGS

→ The outline of dimension



Left Hand Type

The outline of dimension

Spindle Dimension

Unit : mm

	Servomotor cover type	The outline of dimension											Spindle Dimension				
		A	B ₁	B ₂	C ₁	C ₂	D	E ₁	E ₂	F	G ₁	G ₂	Faceplate	A	B	C	D
TD-170L	Vertical & horizontal dual-use	289	390	85	284	220	135	179	148	Ø170	M14	7	Yes	Ø50X24L	178	Ø45X15L	8-M6X15L, Ø55
													No	Ø55X15L	154	Ø45X15L	8-M6X15L, Ø55
TD-255L	Vertical & horizontal dual-use	414	549	134	292	305	160	165	144	Ø255	M18	7	Yes	Ø50X24L	163.5	Ø45X20L	4-M6X10L, Ø55

- Standard Accessories: Clamping Blocks, Clamping Bolts, Position Key
- Specification and Dimensions are subject to change without notice.
- Eccentric of workpiece will affect accuracy and reduce the allowance of Max. Load



Multi-Spindle Series

Introduction

- Adopted high-tech Cross Roller Bearing.
- Pneumatic clamping adopted patented disk-clamping system (Taiwan PAT. : 217736) to enlarge clamping force and ensure heavy-duty continuous cutting(TD-125-3L).
- Hydraulic clamping adopted wholly circular hydraulic clamping system . It can assure heavy and steady cutting without any deviation from the centre (TE-200-2R).
- The feature of wear resistant alloy Dual-Lead Worm Gear is high mechanical efficiency of power transmission ,high indexing accuracy ,and easy adjusted on the backlash
- Driven by the servo Motor. Efficiently in position, high accuracy, Low noise and suitable for any angels working piece
- It can be connected with CNC machine as a 4th Axis or matched with Single Axis Controller as an additional Axis.

TE-200-2R



TD-125-3L

Specification/Model

	TD-125-3L	TE-200-2R
Use Method	Vertical/Horizontal use or Vertical use only	Vertical/Horizontal use or Vertical use only
Clamp Method	Pneumatic 5kg/cm ²	Hydraulic 35kg/cm ²
Faceplate Dimension	Ø125mm	Ø200mm
Spindle Through Hole Diameter	Ø22mm	Ø40mm
Faceplate Centre Hole Diameter	Ø22H7mm	Ø50H7mm
Centre Height	110mm	160mm
Faceplate T-Slot Width	12H7mm	12H7mm
Position Key	14h7mm	18h7mm
Servo Motor	• FANUC • MELDAS	α4i HF54T
Total Speed Reduction Ratio	1/90	1/90
Min. Increment Unit	0.001°	0.001°
Indexing Accuracy	45(Arc. Sec.)	30(Arc. Sec.)
Repeatability	4(Arc. Sec.)	4(Arc. Sec.)
Clamp Force	15kgf/m	125kgf/m
Max. Torque Capacity of Worm Gear	15kgf/m	27kgf/m
Max. Workpiece of Capacity	• Workpiece Vertical (With Tailstock) • Horizontal	50KGS 100KGS 250KGS
Net Weight (Without motor)	87KGS	140KGS

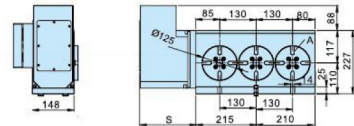
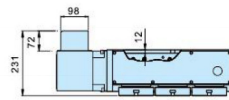
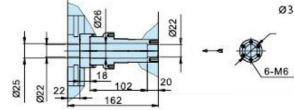
Model Description

TD-125-3L

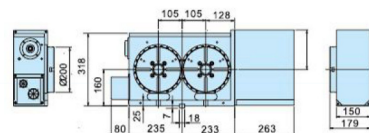
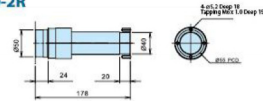
- L: Left Hand Type , R: Left Hand Type
- 3:3 Spindles , 2:2 Spindles
- Faceplate Dimension
- TD/TE : NC Rotary Table 125

↳ TD-125-3L

Unit : mm



↳ TE-200-2R



- Max. Allowable load: The size of work piece or tool should not be larger than the diameter of the turntable.
- Cable plug ,Connector & Flexible are optional accessories
- If need more detail relative dimension ,please visit our Web-Site , <http://www.spintop.com.tw> or <http://www.topsdisk.com>

Horizontal Type

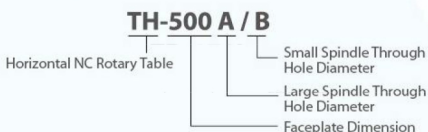
Introduction

- Adopted patented disk hydraulic clamping system . It can assure heavy and steady cutting without any deviation from the centre.
- The feature of wear resistant alloy Dual-Lead Worm Gear is high mechanical efficiency of power transmission, high indexing accuracy , and easy adjusted on the backlash
- Driven by the servo Motor. Efficiently in position, high accuracy, Low noise and suitable for any angels working piece
- It can be added with air booster or hydraulic unit.
- It can be connected with CNC machine as a 4th Axis or matched with Single Axis Controller as an additional Axis.



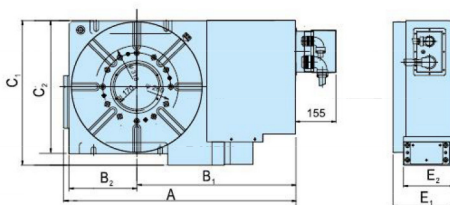
TH-500 A / B

Model Description

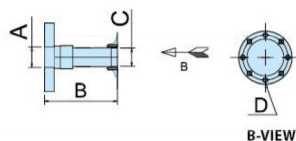


Specification/Model	TH-500A	TH-500B
Use Method	Horizontal use only	
Clamp Method	Hydraulic 35kg/cm ²	
Faceplate Dimension	Ø500mm	Ø500mm
Spindle Through Hole Diameter	Ø170mm	Ø50mm
Faceplate Centre Hole Diameter	Ø170H7mm	Ø50H7mm
Faceplate T-Slot Width	18H7mm	18H7mm
Position Key	18h7mm	18h7mm
Servo Motor	<ul style="list-style-type: none"> • FANUC α12i • MELDAS HA100/HF204S 	
Total Speed Reduction Ratio	1/180	1/180
Min. Increment Unit	0.001°	0.001°
Indexing Accuracy	15(Arc. Sec.)	15(Arc. Sec.)
Repeatability	4(Arc. Sec.)	4(Arc. Sec.)
Clamp Force	250kgf/m	250kgf/m
Max. Torque Capacity of Worm Gear	250kgf/m	250kgf/m
Max. Workpiece of Capacity	<ul style="list-style-type: none"> • Horizontal 600KGS 	600KGS
	358KGS	385KGS
Net Weight (Without motor)		

↳ The outline of dimension



Spindle



Horizontal Series

	Spindle Pore	The outline of dimension											Spindle Dimension				Unit : mm
		A	B ₁	B ₂	C ₁	C ₂	D	E ₁	E ₂	F	G ₁	G ₂	Faceplate	A	B	C	D
TH-500A	Large	887	607	260	544	554	-	235	195	Ø500	-	-	Yes	Ø200X30L	250	Ø230X29L	-
TH-500B	Small	887	607	260	544	554	-	250	195	Ø500	-	-	No	Ø50X31L	250	Ø50X30L	8-M6X15L, Ø76.2

- Standard Accessories: Clamping Blocks, Clamping Bolts, Position Key
- Specification and Dimensions are subject to change without notice.
- Eccentric of workpiece will affect accuracy and reduce the allowance of Max. Load



Manual Tilting NC Rotary table

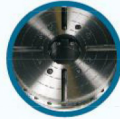
Introduction

- Enhanced highest clamping force, more suitable for heavy cutting.
- Tilting angle rotated by hand, rotary table controls by NC Controller.
- Can do any angle machining.

Model Description

TDM-255HB

Large Spindle
Hydraulic System
Faceplate Dimension
Manual Tilting NC Rotary Table



Large Spindle



TDM-255HB

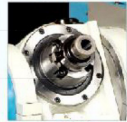


Tool Clamp Device(Special attachment)

- Able to attach collet Chuck with fixture and perform quick tool-change.
- Grip / Change work piece fast and easy.
- Excellent suit for tool machining.
- After TMD-170 to install additional tool clamp device, the tilting angle is 75°~105°



BT-50



BT-40

Specification/Model

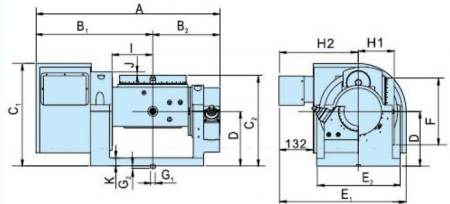
	TDM-170	TDM-255HB
Clamp Method	Pneumatic 5kg/cm ²	Hydraulic 35kg/cm ²
Faceplate Dimension	Ø170mm	Ø255mm
Spindle Through Hole Diameter	Ø45mm	Ø80mm
Faceplate Centre Hole Diameter	Ø50H7mm	Ø80H7mm
Centre Height	170mm	210mm
Faceplate T-Slot Width	12H7mm	12H7mm
Position Key	18h7mm	18h7mm
	Rotary	Rotary
Servo Motor	<ul style="list-style-type: none"> FANUC α4i / β8i MELDAS HF54T 	<ul style="list-style-type: none"> α8i / β12i HF104T / HF154T
Total Speed Reduction Ratio	1/90	1/120
Min. Increment Unit	0.001°	0.001°
Indexing Accuracy	30(Arc. Sec.)	15(Arc. Sec.)
Repeatability	4(Arc. Sec.)	4(Arc. Sec.)
Clamp Force	16kgf/m	50kgf/m
Max. Torque Capacity of Worm Gear	27kgf/m	48kgf/m
Tilting Range	0°~90°	0°~105°
Max. Workpiece of Capacity	<ul style="list-style-type: none"> Vertical (With Tailstock) 75(150)KGS Horizontal 150KGS 	<ul style="list-style-type: none"> Vertical (With Tailstock) 100(200)KGS Horizontal 200KGS
Tool Clamp Device	BT40	BT50
Net Weight (Without motor)	90KGS	210KGS

Digital Angle Display

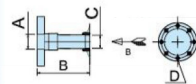
- Tilting Axis can be attached with Digital Angle Display.
- Resolution: 0.02 degree



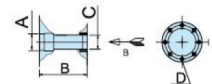
The outline of dimension



with Faceplate



without Faceplate



B-VIEW

B-VIEW

The outline of dimension

	The outline of dimension															Spindle Dimension					
	A	B ₁	B ₂	C ₁	C ₂	D	E ₁	E ₂	F	G ₁	G ₂	H ₁	H ₂	I	J	K	Faceplate	A	B	C	D
TDM-170	537.6	351	186.6	302.7	231.8	170	0	304.5	Ø170	M14	7	104	265	93	26	25	Yes	Ø50X15L	178	Ø45X15L	8-M6X15L, Ø55
TDM-255H	694	439	255	381	347	210	0	320	Ø255	M18	7	137	303	156	13	30	Yes	Ø80X15L	187	Ø80X15L	6-M6X15L, Ø90

Unit : mm

Max. Allowable load: The size of work piece or tool should not be larger than the diameter of the turntable.

Cable plug ,Connector & Flexible are optional accessories

If need more detail relative dimension ,please visit our Web-Site , <http://www.spintop.com.tw> or <http://www.topsdisk.com>

NC Tilting Rotary Table

NC Tilting Rotary Table

Introduction

- Pneumatic Clamping system, Adopted patented disk-clamping design (Taiwan PAT. : 217736) to enlarge clamping force and ensure heavy-duty continuous cutting(TTD-125)
- Hydraulic clamping adopted wholly circular hydraulic clamping system . (about other models' 1.2~1.4 Times),to enlarge clamping force and ensure heavy-duty continuous cutting(TTD-255H/TTD-255HB)
- The feature of wear resistant alloy Dual-Lead Worm Gear is high mechanical efficiency of power transmission, high indexing accuracy , and easy adjusted on the backlash
- Driven by the servo Motor. Efficiently in position, high accuracy, Low noise and suitable for any angels working piece
- It can be connected with CNC machine as a5th Axis (5th Axis or 4+1 Axis).
- It can be connected with single Axis controller to connect with CNC machine to perform tilting angle machining (4+1 axis).
- Minimum Indexing degree: 0.001 °
- Tilting range:±110°



TTD-255HB

Model Description



Specification/Model

	TTD-125		TTD-255H		TTD-255HB	
Clamp Method	Pneumatic 5kg/cm ²		Hydraulic 35kg/cm ²		Hydraulic 35kg/cm ²	
Tilt range	±110°		±110°		±110°	
Faceplate Dimension	None		Ø255mm		Ø255mm	
Spindle outer dia.	Ø60mm		None		None	
Table height at 0° position	233mm		334.5mm		357mm	
Center height at 90° position	160mm		220mm		220mm	
Center bore	• Nose dia: Ø25H7x18Lmm • Thru dia: Ø22mm		Ø30H7x20Lmm Ø30mm		Ø80H7x30Lmm Ø80mm	
Table T-slot width	None		12h7mm		12h7mm	
Position Key	14h7mm		18h7mm		18h7mm	
Servo Motor (Rotary axis)	• FANUC α2i/β2i • MELDAS HF75T		α8i / β12i HF104T / HF154T		α8i / β12i HF104T / HF154T	
Servo Motor (Tilting axis)	• FANUC α4i/β8i • MELDAS HF54T		α8i / β12i HF104T / HF154T		α8i / β12i HF104T / HF154T	
	Rotary axis	Tilting axis	Rotary axis	Tilting axis	Rotary axis	Tilting axis
Speed reduction ratio	1/90	1/90	1/120	1/180	1/120	1/180
Max. Table rotation speed (r.p.m., motor 3,000r.p.m.)	33.3r.p.m	33.3r.p.m	25r.p.m	16.7r.p.m.	25r.p.m	16.7r.p.m
Clamp torque	78N.m(8kgf/m)	157N.m(16kgf/m)	588N.m(60kgf/m)	686N.m(70kgf/m)	588N.m(60kgf/m)	686N.m(70kgf/m)
Indexing accuracy (cumulative)	45(Arc. Sec.)	60(Arc. Sec.)	15(Arc. Sec.)	45(Arc. Sec.)	15(Arc. Sec.)	45(Arc. Sec.)
Repeatability	4(Arc. Sec.)		4(Arc. Sec.)		4(Arc. Sec.)	
Net Weight (without motor)	95KGS		330KGS		300KGS	

Specification /Model		TTD-125	TTD-255H	TTD-255HB
Allowable wheel torque	Rotary axis	120N.m (12kgf/m)	490N.m (50kgf/m)	490N.m (50kgf/m)
Allowable work weight		156N.m (16kgf/m)	470N.m (48kgf/m)	470N.m (48kgf/m)
Allowable work moment		0° : 35KGS	0° : 120KGS	0° : 120KGS
		0-90° : 20KGS	0-90° : 70KGS	0-90° : 70KGS
Allowable load when table clamped		F: 343N.m (35kgf/m)	F: 1170N.m (120kgf/m)	F: 1170N.m (120kgf/m)
		FxL: 78.4N.m (8kgf/m)	FxL: 470N.m (48kgf/m)	FxL: 470N.m (48kgf/m)
Allowable work inertia		FxL: 156N.m (16kgf/m)	FxL: 470N.m (48kgf/m)	FxL: 470N.m (48kgf/m)
		$J = \frac{W \cdot D^2}{8}$: 0.18kgf/m ² (1.7Kg.cm.sec ²)	$J = \frac{W \cdot D^2}{8}$: 0.7kgf/m ² (6.9Kg.cm.sec ²)	$J = \frac{W \cdot D^2}{8}$: 0.7kgf/m ² (6.9Kg.cm.sec ²)

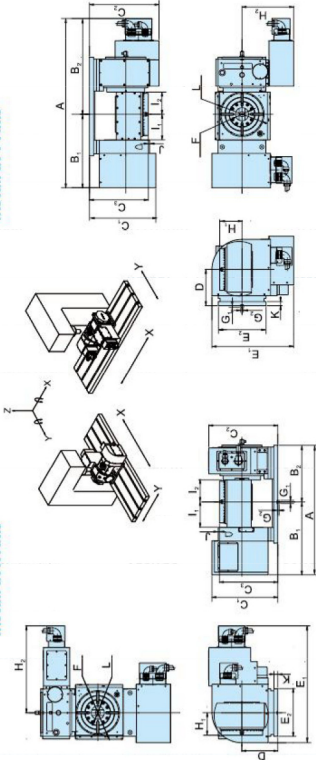
- Standard Accessories: Clamping Blocks, Clamping Bolts, Position Key
- Specification and Dimensions are subject to change without notice.
- Eccentric of workpiece will affect accuracy and reduce the allowance of Max. Load



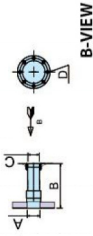
The outline of dimension

Install at X Axis

Install at Y Axis



with Faceplate



without Faceplate



The outline of dimension

Spindle Dimension

	The outline of dimension														Spindle Dimension										
	Install Dircc.	A	B ₁	B ₂	C ₁	C ₂	C ₃	D	E ₁	E ₂	F	G ₁	G ₂	H ₁	H ₂	I ₁	I ₂	J	K	Faceplate	A	B	C	D	
TTD-125	Install at Y Axis	560	298	227	291.6	290	255	160	576	220	Ø125	M14	7	95	291	81	79	5	25	Ø20	Yes	Ø22X18L	158	Ø22X20L	6-M6X15L, Ø31
TTD-125	Install at Y Axis	650	298	227	291.6	290	255	160	421	220	Ø125	M14	7	95	291	81	79	5	25	Ø20	No	Ø25X18L	140	Ø22X20L	6-M6X15L, Ø31
TTD-255H	Install at Y Axis	836	446	337	370	422	334.5	220	715	290	Ø255	M18	7	114.5	255	156	135	30.5	25	Ø30	Yes	Ø30X20L	171	Ø30X20L	4-M6X15L, Ø41
TTD-255H	Install at Y Axis	1042	446	609	370	422	334.5	220	473	290	Ø255	M18	7	114.5	313	156	135	30.5	25	Ø30					
TTD-255HB	Install at X Axis	849	447	349	403	422	357	220	716	290	Ø255	M18	7	137	533	156	135	8	25	Ø80	Yes	Ø80X15L	187	Ø80X15L	6-M6X15L, Ø90
TTD-255HB	Install at Y Axis	1029	447	583	403	422	357	220	496	290	Ø255	M18	7	137	313	156	135	8	25	Ø80					

- Max. Allowable load: The size of work piece or tool should not be larger than the diameter of the turntable.
- Cable plug ,Connector & Flexible are optional accessories
- If need more detail relative dimension ,please visit our Web-Site , <http://www.spintop.com.tw> or <http://www.topsdisk.com>

NC Rotary Indexing Table

NC Rotary Indexing Table for Waterwheel Type Special Purpose Machine

Introduction

- Minimum Indexing degree: 15 degree
- Driven by servo motor
- Suitable for Multi-division Vertical Special-Purpose Machine(Waterwheel Type).
- Fast Indexing time: within 2 Sec.
(Subject to number of division and controller type.)
- Hydraulic Clamping System.
- Adopted high-precision 3pcs HIRTH COUPLING to ensure position accuracy.

Model Description



CR3-520-24

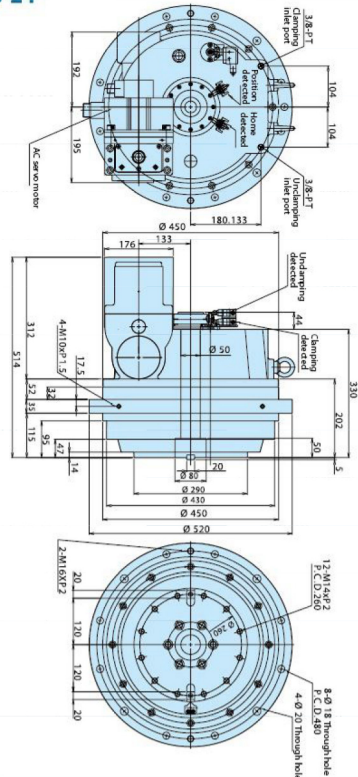
└ CR3-520-24



Specification/Model

CR3-520-24

Clamp Method	Hydraulic 35kg/cm ²
Faceplate Dimension	Ø520mm
Spindle Through Hole Diameter	Ø50mm
Faceplate Centre Hole Diameter	Ø80X50Deep
Position Key	20h7mm
Min. Indexing Degree	15°
Indexing Accuracy	±5(Arc. Sec.)
Repeatability	±1(Arc. Sec.)
Max. Workpiece of Capacity Vertical (With Tailstock)	400KGS
Net Weight (Without motor)	288KGS



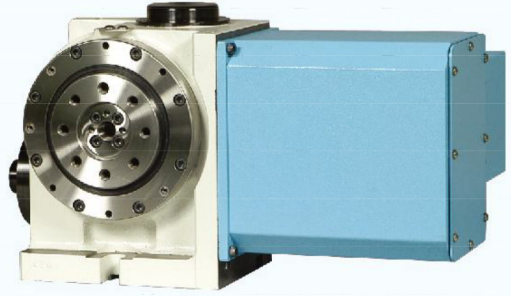
- Standard Accessories: Clamping Blocks, Clamping Bolts, Position Key
- Specification and Dimensions are subject to change without notice.
- Eccentric of workpiece will affect accuracy and reduce the allowance of Max. Load



NC Rotary Indexing Table

Introduction

- Adopted high precision 3pcs HIRTH COUPLING . It can ensure high position accuracy and unnecessary Lift faceplate .
- Pneumatic clamping system is convenient for the small size model to use .
- Adopted Servo Motor . It can ensure high position accuracy .
- Rack driving by the Dual worm Gear , so the size is smaller .
- It can be connected with the CNC machine to be the 4th axis , or matched with the single axis controller to be the additional axis .



NC3-170

Model Description

NC3-170

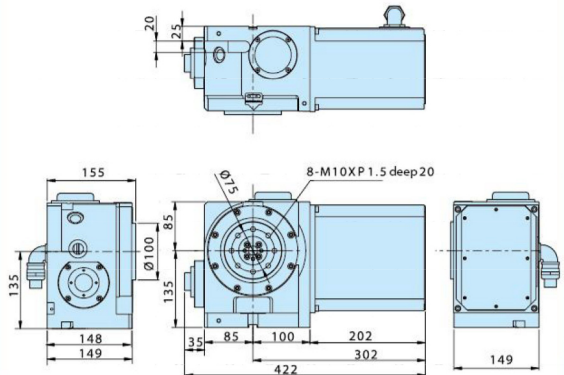
NC Rotary Indexing Table
3pcs HIRTH COUPLING
Faceplate Dimension

Specification/Model

NC3-170

Use Method	Vertical/Horizontal use or Vertical use only
Clamp Method	Pneumatic 5kg/cm ²
Faceplate Dimension	Ø170mm
Spindle Through Hole Diameter	Ø16mm
Faceplate Centre Hole Diameter	Ø16H7mm
Centre Height	135mm
Faceplate T-Slot Width	None
Position Key	14h7mm
Servo Motor	• FANUC α2i • MELDAS HF54T
Total Speed Reduction Ratio	1/90
Min. Increment Unit	15°
Indexing Accuracy	±10(Arc. Sec.)
Repeatability	±2(Arc. Sec.)
Clamp Force	600kgf/m
Max. Workpiece of Capacity	• Vertical :50KGS • Horizontal:100KGS
Net Weight (Without motor)	40KGS

→ NC3-170



- Max. Allowable load: The size of work piece or tool should not be larger than the diameter of the turntable.
- Cable plug ,Connector & Flexible are optional accessories
- If need more detail relative dimension ,please visit our Web-Site , <http://www.spintop.com.tw> or <http://www.topsdisk.com>

Hydraulic Index Table

Horizontal Series

Introduction

- Adopted high precision 3pcs HIRTH COUPLING. It can ensure high position accuracy and unnecessary lift faceplate.
- Rack driving can make high mechanical efficiency of power transmission.
- Hydraulic driving can cut down the cost.
- Hydraulic clamping system can assure the heavy and steady cutting without any deviation from the centre and can ensure accurate positioning.
- It can be attached with PLC controller or HIC-2010 as an additional Axis.
- It can be matched with Rotary Special Machine.
- It can be matched with boring and milling machine.

Model Description



CH3-470

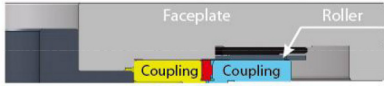
CH3-470 S-4



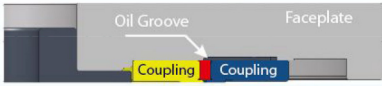
Specification/Model

	CH3-340	CH3-340C	CH3-470	CH3-470C	CH3-470S	CH3-600	CH3-600C	CH3-600S	CH3-800
Use Method	Horizontal use only								
Clamp Method	Hydraulic 35kg/cm ²								
Faceplate Dimension	○ Ø340mm		○ Ø470mm	□ 470mm	○ Ø470mm	○ Ø600mm	□ 600mm	○ Ø800mm	
Spindle Through Hole Diameter	Ø30mm		Ø40mm	Ø40mm	Ø40mm	Ø50mm	Ø50mm	Ø50mm	Ø45mm
Faceplate Centre Hole Diameter	Ø65mmX19Deep		Ø90mmX12Deep	Ø90mmX12Deep	Ø90mmX12Deep	Ø110mmX12Deep	Ø110mmX12Deep	Ø110mmX12Deep	Ø100mmX20Deep
Faceplate T-Slot Width	none		none	18H7mm	18H7mm	none	20H7mm	20H7mm	none
Division	Standard division: Each model has standard fixed division: 4D, 6D, 8D, 12D, 24D; it's customer's option to decide any one of it. Special division: 2D, 3D, 5D, 9D, 10D, 16D, and 20D, etc.								
Indexing Accuracy	±5(Arc. Sec.)	±5(Arc. Sec.)	±5(Arc. Sec.)	±5(Arc. Sec.)	±5(Arc. Sec.)	±5(Arc. Sec.)	±5(Arc. Sec.)	±5(Arc. Sec.)	±5(Arc. Sec.)
Repeatability	±1(Arc. Sec.)	±1(Arc. Sec.)	±1(Arc. Sec.)	±1(Arc. Sec.)	±1(Arc. Sec.)	±1(Arc. Sec.)	±1(Arc. Sec.)	±1(Arc. Sec.)	±1(Arc. Sec.)
Max. Workpiece of Capacity	600kgs	500kgs	800kgs	700kgs	800kgs	1350kgs	1250kgs	1350kgs	2100kgs
Net Weight	130kgs	130kgs	275kgs	275kgs	330kgs	450kgs	450kgs	560kgs	1000kgs

- Standard Accessories: Clamping Blocks, Clamping Bolts, Position Key
- Specification and Dimensions are subject to change without notice.
- Eccentric of workpiece will affect accuracy and reduce the allowance of Max. Load

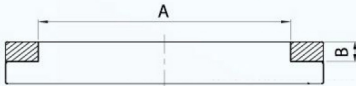


Standard (Roller Bearing)



C Series (Direct Contact)

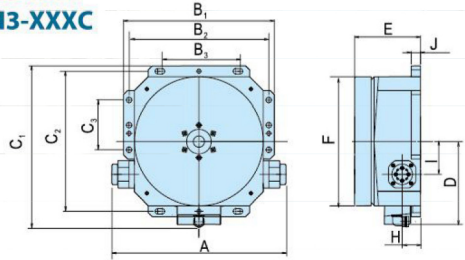
The faceplate allowable for arilling size



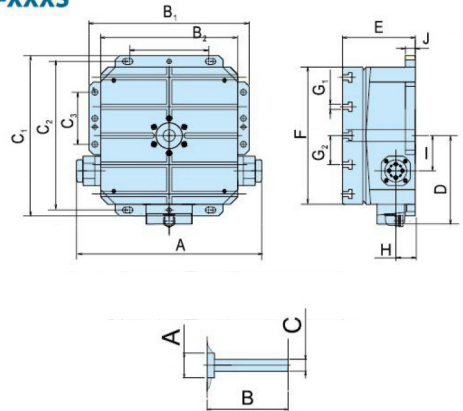
The Bias part can be re-worked

Model	A	B
CH3-340	Ø270	27
CH3-470	Ø350	33
CH3-600	Ø470	33
CH3-800	Ø680	45

CH3-XXX CH3-XXXC



CH3-XXXS



Unit : mm

	The outline of dimension															Spindle Dimension		
	A	B ₁	B ₂	B ₃	C ₁	C ₂	C ₃	D	E	F	G ₁	G ₂	H	I	J	A	B	C
CH3-340 CH3-340C	505	404	334	250	423	315	140	238	218	Ø340	-	-			30	Ø65X19L	216	Ø31
CH3-470 CH3-470C	635	550	470	270	578	510	165	303	240.3	Ø470	-	-	67	121	34	Ø90X12L	240	Ø41
CH3-470S	635	550	470	270	578	510	165	303	250	□470	M18	M22	67	121	34	Ø90X12L	240	Ø41
CH3-600 CH3-600C	600	600	600	420	708	640	-	368	260	Ø600	-	-	77	140	35	Ø110X12L	259	Ø53
CH3-600S	600	600	600	420	708	640	-	368		□600	100	100	77	140	35	Ø110X12L	259	Ø53
CH3-800	976	800	976	600	900	850	-	450	340	Ø800	-	-		260	40	Ø100X20L	339	Ø45

■ Max. Allowable load: The size of work piece or tool should not be larger than the diameter of the turntable.

■ Cable plug ,Connector & Flexible are optional accessories

■ If need more detail relative dimension ,please visit our Web-Site , <http://www.spintop.com.tw> or <http://www.topsdisk.com>

Hydraulic Index Table

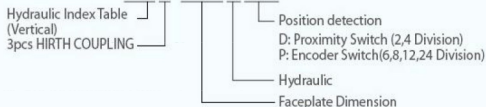
Vertical Series

Introduction

- Adopted high precision 3pcs HIRTH COUPLING. It can ensure high position accuracy and unnecessary lift faceplate.
- Rack driving can provide high mechanical efficiency of power transmission.
- Hydraulic driving can cut down the cost.
- Hydraulic clamping system can assure the heavy and steady cutting without any deviation from the center and can ensure accurate positioning.
- It can be attached with HIC2010 controller as an additional Axis.

Model Description

CV3-255HD/P



CV3-255

CV3-320

Specification/Model

	CV3-255HD	CV3-320HD
Use Method	Vertical use only	Vertical use only
Clamp Method	Hydraulic 35kg/cm ²	
Faceplate Dimension	Ø255mm	Ø320mm
Spindle Through Hole Diameter	none	none
Faceplate Centre Hole Diameter	Ø30mmX35Deep	Ø65mmX21Deep
Centre Height	160mm	255mm
Faceplate T-Slot Width	18h7mm	18h7mm
Position Key	12H7mm	14H7mm

Division Standard division: Each model has standard fixed division: 4D, 6D, 8D, 12D, 24D; it's customer's option to decide any one of it.

Special division: 2D, 3D, 5D, 9D, 10D, 16D, and 20D, etc.

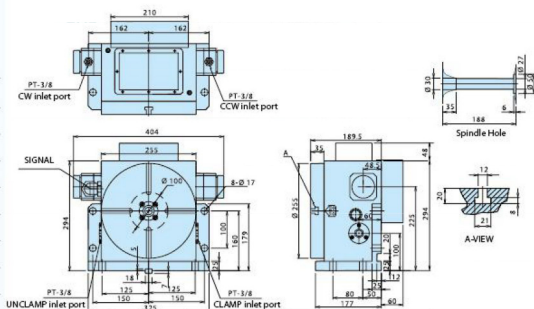
Indexing Accuracy	±5(Arc. Sec.)	±5(Arc. Sec.)
Repeatability	±1(Arc. Sec.)	±1(Arc. Sec.)
Max. Workpiece of Capacity		
Vertical (With Tailstock)	125(250)kgs	175(350)kgs
Horizontal)	250kgs	none
Net Weight	80kgs	140kgs



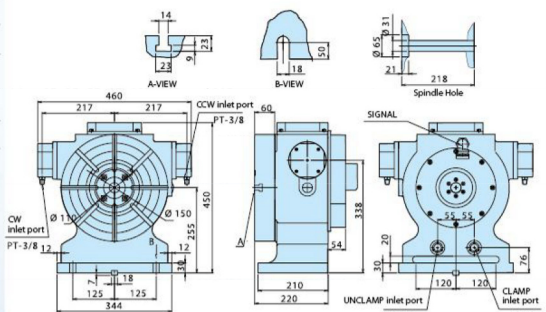
- Max. Allowable load: The size of workpiece or tool should not be larger than the diameter of the turntable.
- Standard Accessories: Clamping Blocks, Clamping Bolts, Position Key Connector, and External Shield Conduit.
- If need more detail relative dimension ,please visit our Web-Site , <http://www.spintop.com.tw> or <http://www.topdisk.com>
- Eccentric of workpiece will affect accuracy and reduce the allowance of Max. Load Specification and Dimensions are subject to change without notice.

Unit : mm

CV3-255HD



CV3-320HD





Horizontal Series

Introduction

- Adopted high precision 3pcs HIRTH COUPLING. It can ensure high position accuracy and avoid unnecessary lift of faceplate.
- Rack driving can provide high mechanical efficiency of power transmission.
- Pneumatic driving can cut down the cost.
- Pneumatic clamping system can assure the heavy and steady cutting without any deviation from the centre and can ensure accurate positioning.
- It can be attached with the controller of PIC-2005 as an additional axis of the CNC machine .
- It can be attached with the special purpose machine .



PH3-255

Model Description

PH3-255

Pneumatic Index Table
3pcs HIRTH COUPLING

Faceplate Dimension

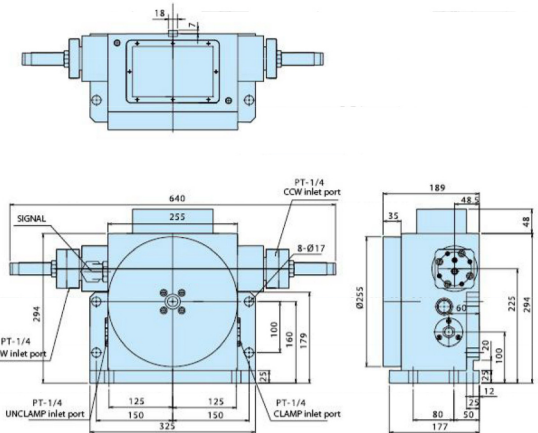
Specification/Model

PH3-255

Use Method	Horizontal use only
Clamp Method	Pneumatic 5kg/cm ²
Faceplate Dimension	Ø255mm
Spindle Through Hole Diameter	Ø27mm
Faceplate Centre Hole Diameter	Ø30mmX35Deep
Faceplate T-Slot Width	18h7mm
Position Key	none
Division	Standard division: Each model has standard fixed division: 4D, 6D, 8D, 12D, 24D; it's customer's option to decide any one of it. Special division: 2D, 3D, 5D, 9D, 10D, 16D, and 20D, etc.
Indexing Accuracy	±10(Arc. Sec.)
Repeatability	±2(Arc. Sec.)
Max. Workpiece of Capacity (Horizontal)	75kgs
Net Weight	80kgs

Unit : mm

PH3-255



- Standard Accessories: Clamping Blocks, Clamping Bolts, Position Key Connector, and External Shield Conduit.
- Max. Allowable load: The size of work piece or tool should not be larger than the diameter of the turntable.
- If need more detail relative dimension ,please visit our Web-Site , <http://www.spintop.com.tw> or <http://www.topsdisk.com>
- Eccentric of workpiece will affect accuracy and reduce the allowance of Max. Load ■ Specification and Dimensions are subject to change without notice.

Manual Precision Coupling Gear Index Table

Horizontal Series

Introduction

- Adopted 2pcs type HIRTH COUPLING, with high index accuracy.
- Powerful Pneumatic clamping, with heavy cutting endurance.
- Easy, Energy Saving Rotation. User-friendly operation.
- Suitable for Boring Machine, Milling Machine, Grinder, and Drilling Machine.
- Suitable for machining Jig at Traditional Milling Machine.

Model Description

CH2-201

Manual Index Table Model



CH2-201

Model Description

	CH2-201
Use Method	Horizontal use
Clamp Method	Pneumatic 5kg/cm ²
Faceplate Dimension	Ø200mm
Faceplate Centre Hole Diameter	Ø50mmX15Deep
Min. Indexing Degree	7.5°
Indexing Accuracy	±3(Arc. Sec.)
Max. Workpiece of Capacity(Horizontal)	100kgs
Net Weight	18kgs

Optional Accessory: 8" Manual 3-Jaw Chuck

This product is customized products need batch manufacture.

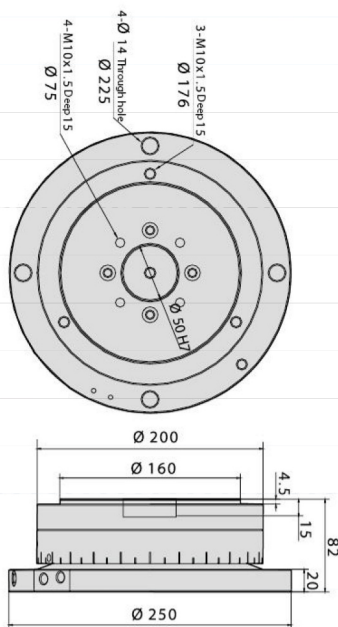


Application Example at Traditional Milling Machine



Manual Valve

CH2-201



- Standard Accessory: Manual Valve, Clamping Bolts.
- Standard round faceplate is with 8 Inch of 3-Jaw chuck directly fixed on the faceplate.
- Specification and Dimensions are subject to change without notice.
- Eccentric of workpiece will affect accuracy and reduce the allowance of Max. Load
- Max. Allowable load: The size of work piece or tool should not be larger than the diameter of the turntable.
- If need more detail relative dimension, please visit our Web-Site, <http://www.spintop.com.tw> or <http://www.topsdisk.com>



Vertical Series

Introduction

- Adopt 3pcs type HIRTH COUPLING, with high index accuracy.
- Powerful Pneumatic clamping, with heavy cutting endurance.
- Easy, Energy Saving Rotation. User-friendly operation.
- Suitable for Boring Machine, Milling Machine, Grinder, and Drilling Machine.
- Suitable for machining Jig at Traditional Milling Machine.

Model Description

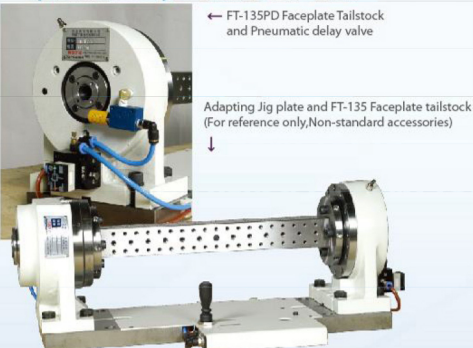


MV3-150

Specification/Model

	MV3-150
Use Method	Vertical use only
Clamp Method	Pneumatic 5kg/cm ²
Faceplate Dimension	Ø150mm
Faceplate Centre Hole Diameter	Ø16mm
Centre Height	135mm
Min. Indexing Degree	15°
Indexing Accuracy (Arc. Sec.)	±5(Arc. Sec.)
Max. Workpiece of Capacity(Horizontal)	50kgs
Net Weight	25kgs

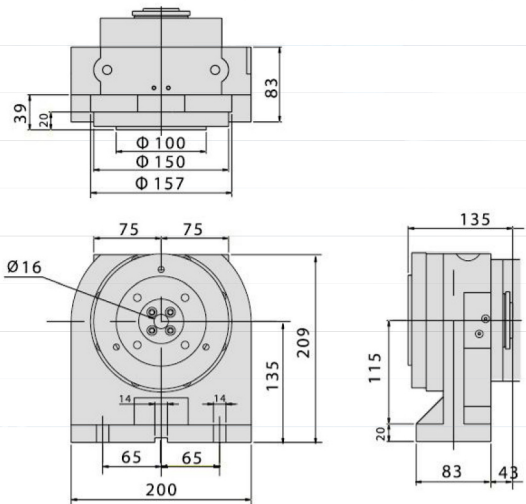
Optional Accessory: 5" Manual 3-Jaw Chuck



← FT-135PD Faceplate Tailstock and Pneumatic delay valve

Adapting Jig plate and FT-135 Faceplate tailstock (For reference only, Non-standard accessories)

↳ MV3-150



- Standard Accessories: Manual Valve, Clamping Bolts, ■ Standard round faceplate is with 5 Inch of 3-Jaw chuck directly fixed on the faceplate.
- Specification and Dimensions are subject to change without notice. ■ Eccentric of workpiece will affect accuracy and reduce the allowance of Max. Load
- Max. Allowable load: The size of work piece or tool should not be larger than the diameter of the turntable.
- If need more detail relative dimension ,please visit our Web-Site , <http://www.spintop.com.tw> or <http://www.topdisk.com>

Manual Tailstock

Introduction

- Spindle : Center Replaceable Type and Spindle with center Type.

Model Description

MT-160S

- Center Replaceable Type (Without "S": Spindle with Center Type)
- Central Height
- Manual Tailstock



MT-110



MT-110S



MT-135S



MT-160S



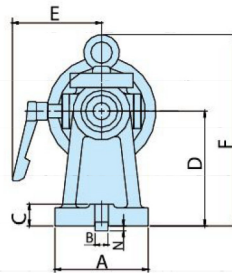
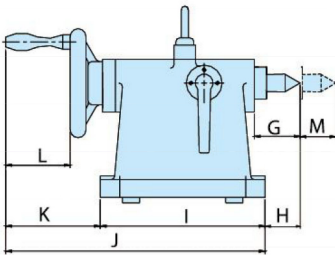
MT-210



MT-210S



MT-255S



Specification/Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Centre Taper	Net Weight (kg)
MT-110 / 110S	100	14	23	110	103	161	67	36	135	247	112	60	30	7	2#	10
MT-135 / 135S	100	14	23	135	103	186	67	36	135	247	112	60	30	7	2#	12
MT-160 / 160S	130	18	30	160	125	267	64	47	230	362	132	90	50	7	2#	19
MT-210 / 210S	146	18	30	210	125	317	64	47	230	362	132	90	50	7	2#	26
MT-255S	200	18	30	255	135	394	122	132	285	482	197	90	110	7	2#	53



Automatic Tailstock

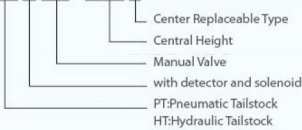
Introduction

- Spindle : All are Center Replaceable Type.
- Pneumatic or Hydraulic drine.
- "Solenoid type with detector" or " Manual Valve".

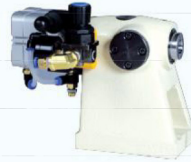
Model Description

PTC(M)-135S

HTC(M)-135S



PTC-135S



PTM-135S



PTM-160S



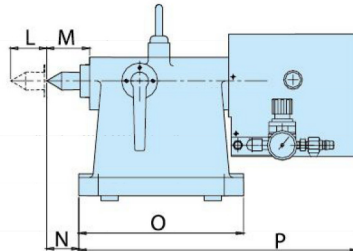
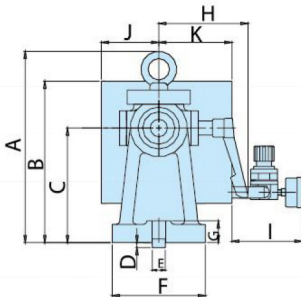
PTC-160S



HTM-160S



HTM-255S



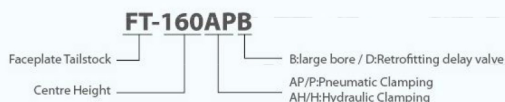
Specification/Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Centre Taper	Net Weight (kg)
PTC-135S	186	172	135	7	14	100	23	103	98	67.5	77.5	50	67	47	135	286	2#	15
PTM-135S	186	172	135	7	14	100	23	103	-	67.5	77.5	50	67	47	135	234	2#	15
PTC(M)-160S	267	225	160	7	18	130	30	125	98	80	102	100	64	45	230	389	3#	25
HTC(M)-160S	267	225	160	7	18	130	30	125	-	67.5	77.5	100	64	45	230	359	3#	25
HTC(M)-210S	317	246	210	7	18	146	30	125	-	67.5	77.5	100	64	45	230	359	3#	36
HTC(M)-255S	394	320	255	7	18	200	30	135	-	80	102	100	87	97	285	482	4#	66

Faceplate Tailstock

Introduction

- Pneumatic Clamping: adopt complete disc-clamping system to enhance clamping force and to ensure continuous heavy-duty cutting.
- Hydraulic Clamping: adopt complete encircle hydraulic clamping system.
- Able to be matched with TD, CV3, NC3 series.
- If tailstock match with NC3, CV3 series, please select have delay valve(D) one.

Model Description



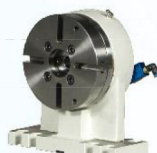
Pneumatic Clamping



FT-110P



FT-135P



FT-160AP



FT-135PD
(Retrofitting Pneumatic delay valve)



FT-160P

Specification/Model	FT-110P	FT-135P	FT-135PB	FT-160AP	FT-160P
Clamp Method	Pneumatic 5kg/cm ²				
Faceplate Dimension	none	Ø170mm	Ø170mm	Ø170mm	Ø255mm
Spindle Through Hole Diameter	Ø20mm	Ø20mm	Ø35mm	Ø20mm	Ø55mm
Centre Height	110mm	135mm	135mm	160mm	160mm
Clamp Force	16kgf/m	16kgf/m	16kgf/m	16kgf/m	45kgf/m
Net Weight	15KGS	22KGS	22KGS	25KGS	70KGS

Hydraulic Clamping



FT-160AH



FT-210H

	FT-160AH	FT-160H	FT-210H	FT-255AH	FT-310H
Clamp Method	Hydraulic 35kg/cm ²				
Faceplate Dimension	Ø170mm	Ø255mm	Ø320mm	Ø320mm	Ø500mm
Spindle Through Hole Diameter	Ø20mm	Ø55mm	Ø42mm	Ø42mm	Ø141mm
Centre Height	160mm	160mm	210mm	255mm	310mm
Clamp Force	30kgf/m	50kgf/m	85kgf/m	85kgf/m	250kgf/m
Net Weight	25KGS	70KGS	115KGS	130KGS	350KGS

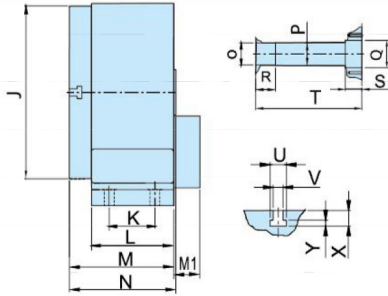
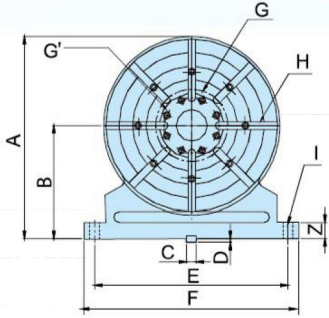


FT-255AH



FT-310H

- Standard Accessories: Clamping Blocks, Clamping Bolts, Position Key
- Specification and Dimensions are subject to change without notice.
- Eccentric of workpiece will affect accuracy and reduce the allowance of Max. Load



M1 : Retrofitting delay valve dimensions: Hydraulic delay valve 45 Pneumatic delay valve 80

Model size	A	B	C	D	E	F	G	G'	H
FT-110P	195	110	14	7	-	170	-	Ø75	-
FT-135P	220	135	14	7	200	245	Ø80	Ø75	4-12
FT-135PB	220	135	14	7	200	245	Ø80	Ø75	4-12
FT-160AP/AH	245	160	18	7	200	245	Ø80	Ø75	4-12
FT-160P/H	295	160	18	7	200	270	Ø111	-	4-14
FT-210H	375	210	18	7	360	400	Ø102	-	8-14
FT-255AH	420	255	18	7	360	400	Ø102	-	8-14
FT-310H	560	310	18	7	540	600	Ø218	-	8-18

Model size	I	J	K	L	M	N	O	P
FT-110P	3-Ø14	-	-	95	-	95	-	Ø20
FT-135P	4-Ø14	Ø170	69	95	101	-	Ø50	Ø20
FT-135PB	4-Ø14	Ø170	69	95	101	-	Ø50	Ø35
FT-160AP/A	4-Ø18	Ø170	69	95	101	-	Ø50	Ø20
FT-160P/H	4-Ø18	Ø255	84	124	171	175	Ø80	Ø55
FT-210H	4-Ø18	Ø320	85	153	194	-	Ø40	Ø42
FT-255AH	4-Ø18	Ø320	85	153	194	-	Ø40	Ø42
FT-310H	4-Ø18	Ø500	90	195	202	-	Ø140	Ø140

Model size	Q	R	S	T	U	V	X	Y	Z
FT-110P	Ø20	-	-	98	-	-	-	-	20
FT-135P	Ø20	24	-	101	19	12	19	8	25
FT-135PB	Ø35	24	-	104	19	12	19	8	25
FT-160AP/AH	Ø20	24	-	101	19	12	19	8	25
FT-160P/H	Ø55	65	-	175	19	12	19	8	25
FT-210H	Ø50	35	30	192	23	14	23	9	30
FT-255AH	Ø50	35	30	192	23	14	23	9	30
FT-310H	Ø140	-	15	156	30	18	30	12	40

- Max. Allowable load: The size of work piece or tool should not be larger than the diameter of the turntable.
- Cable plug ,Connector & Flexible are optional accessories
- If need more detail relative dimension ,please visit our Web-Site , <http://www.spintop.com.tw> or <http://www.topsdisk.com>



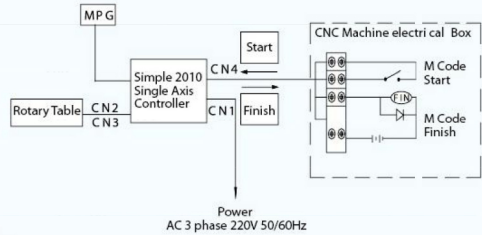
Single Axis Controller Simple 2010

- CNC machine can employ M-code.
- Can be connected with start , stop signal .
- Have built-in clamping system control ,no more input any command.
- Adopted AC servo motor that have high stability and anti-signal interference.
- High precision, high torque, and high speed.
- Easy operate.
- Hand wheel (MPG) is standard. It is for amend workpiece easier.
- Adopted newest touch panel screen. It can show the complete signal and operate easily.
- Exclusive angel's transferring function. It can connect with CNC machine. Un-necessarily learn program input.
- Drive with DD motor and rotary table



CNC Machine connect method

- From CNC machine send a M-code. (Example: M80)
- Simple 2010 Single Axis Controller start to make Rotary Table to Rotate.
- Execute finished, Simple 2010 Single Axis Controller send a finish signal to CNC machine.
- CNC machine continue to execute next step CNC Program.

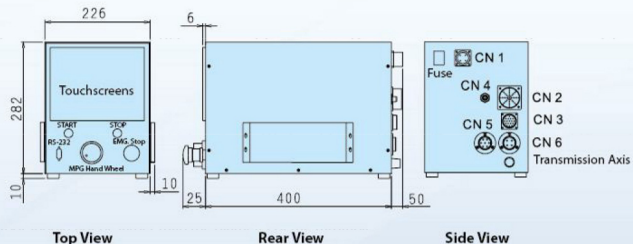


Applicable models

Model	4 th Axis		Tilting Axis		2 Axes	
	YASKAWA	PANASONIC	YASKAWA	PANASONIC	YASKAWA	PANASONIC
TDE-125,TE-125	SP10-YJV400					
TD-170,TE-170	SP10-YJV800	SP10-PDME1000				
TD-200,TE-200	SP10-YGV900	SP10-PDME1000				
TD-255,TDE-255	SP10-YGV1300	SP10-PDME1500				
TD-320,400	SP10-YGV2000	SP10-PHME2000				
TD-500	SP10-YGV3000	SP10-PHME3000				
TTD-125	SP10-YJV400	SP10-PHMD400	SP10-YJV800	SP10-PDME1000	SP10-YJV400-YJV800	SP10-PHMD400PDME1000
TTD-255	SP10-YGV900	SP10-PDME1000	SP10-YGV1300	SP10-PDME1500	SP10-YGV900-YGV1300	SP10-PDME1000PDME1500

The outline of dimension

Unit : mm

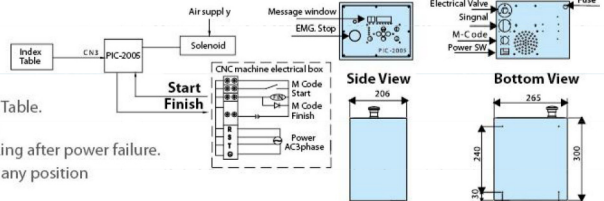


Controller And Display

Pneumatic Index Table Controller PIC-2005



- CNC machine can employ M-code.
- Can be connected with start , stop signal.
- Can set multiple of Min. Indexing degree and CW / CCW rotate.
- Can be matched with PH3 series,Pneumatic Index Table.
- Have memory function of power failure. It can let hydraulic/Pneumatic Index Table still normal working after power failure.
- On the available division angle condition , can set any position as a Zero position.
- Including pneumatic solenoid



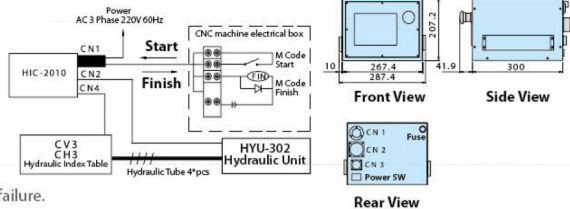
CNC Machine connect method

- From CNC machine send a M-code. (Example: M80)
- PIC-2005 start to make pneumatic Index Table to Rotate.
- Execute finished, PIC-2005 send a finish signal to CNC machine.
- CNC machine continue to execute next step CNC Program.

Hydraulic Index Table Controller HIC-2010



- CNC machine can employ M-code.
- Can be connected with start , stop signal.
- Can set multiple of Min. Indexing degree and CW / CCW rotate.
- Can be matched with CH3 \ CV3 \ series Hydraulic Index Table.
- Have memory function of power failure .It can let hydraulic Index Table still normal working after power failure.
- Exclusive angel's transferring function. It can connect with CNC machine. Un-necessarily learn program input.



CNC Machine connect method

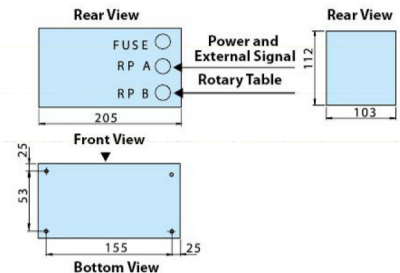
- From CNC machine send a M-code. (Example: M80)
- HIC-2010 start to make Hydraulic Index Table to Rotate.
- Execute finished, HIC-2010 send a finish signal to CNC machine.
- CNC machine continue to execute next step CNC Program.

Digital Angle Display TRO-2005



To be employed by Rotary Table

- Power-failure Memory
- Able to set any point as Zero point
- Easy operation
- Resolution:0.02 degree
- Angle Unit: can be decimal system (0.001) or sexagenary (degree, minute, or second)





Hydraulic Unit



Order No.	H3281D1NN1PN355	H6382D67N1PN355	H6382D67N1PN055	H8483D87N1PN055	Other Optional Specifications
Applicable models	NC Rotary Table Full Series (TD)	Hydraulic Indexing Table (CH3-340,470, CV3-255,320)	Hydraulic Indexing Table (CH3-600)	Hydraulic Indexing Table (CH3-800)	
Specifications / Detail					
Oil tank capacity	30L	60L	60L	80L	
Pump	20L/min	30L/min	30L/min	40L/min	
Servo Motor	Horsepower	1HP,3ph 50/60Hz	2HP,3ph 50/60Hz	3HP,3ph 50/60Hz	
	Voltage	220V	220V	220V	Voltage:380V,415V 50Hz
Solenoid Valve	Typ(1)	02-2B2	02-2D2+Check Valve	02-2D2+Check Valve	03-2D2+Counterbalance Valve +Reducing Valve
	Typ(2)	-	02-3C4+Inductive Anti-Reverser Valve	02-3C4+Inductive Anti-Reverser Valve	03-3C4+Inductive Anti-Reverser Valve
	Voltage	DC24V	DC24V	DC24V	DC24V
Length of Oil Pipe	3/8"X5M(4 Pieces)	3/8"X5M(4 Pieces)	1/2"X5M(4 Pieces)	1/2"X5M(4 Pieces)	Length of Oil Pipe : According to machine specifications.
Standard Equipment	Cooler		Cooler and Fan		
	Power Switch Box		None		

※ The Hydraulic unit model number is subject to change since specification of different selection.

Air Booster Specification (AB0650DDJ3)

- Output oil capacity:50cc
- Pressure Boost Multiplier : 6.25multiple
- Pneumatic Pressure : 5~8kg/cm2
- The Outline Dimension : 110x110x197cm
- Weight : 5kg

The Additional Parts

- 1/4" 5 ports / 2 positions Single Coil Solenoid (you can choose the voltage) :1 set
- 1/4" Quick Connector : 1 pc
- 1/4 Oil Tube x 5M : 1 pc
- Plumbing for Connector's Parts Pack : 1 set



Cylinder and Rotary Joint



RQ100P6@TD170



RR090P6@TD170

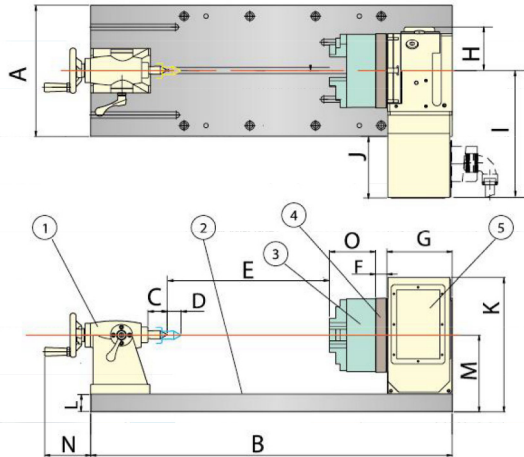
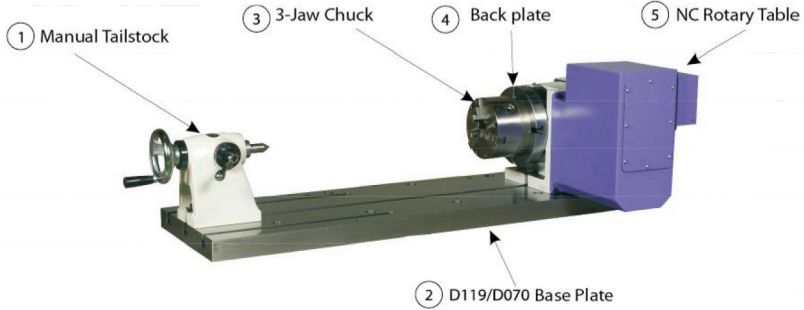


RO160P6@TD170

Base Plate and JIG Bracket

- If available you can select NC Rotary Table or Vertical Hydraulic Indexing Table and matching Tailstock, Base Plate, L Jig Bracket and 3-Jaw Chuck to increase production capacity
- It can match with Powerful Front-Lock 3-Jaw Chuck, Hydraulic 3-Jaw Chuck and Pneumatic 3-Jaw Chuck to grip the round shape work pieces.

RTB 4th Axis Spindle Tailstock Model

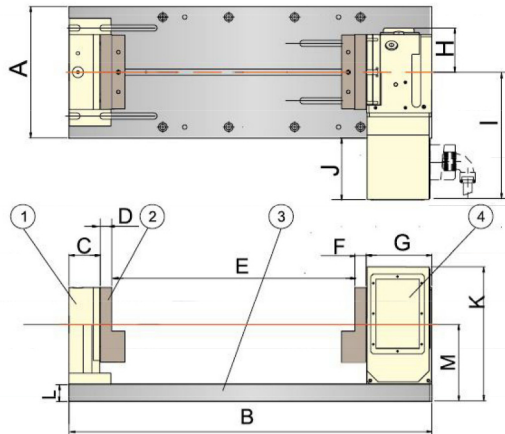
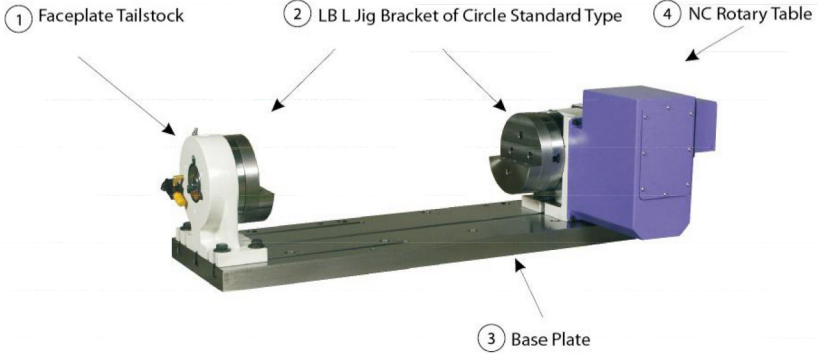


Mode/Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Suitable 3-Jaw Chuck Size
MIM6ND17+N51FBE	300	825	42	30	349	20	179	85	338	188	304	40	175	112	105	6"
MJM7ND20+N51FBE	300	825	47	50	230	20	179	85	362	212	347	40	200	132	119	7"
MJM8ND25+N5MKFG	450	1200	47	50	569	22	213	160	400	175	412	50	210	132	119	8"
MLM9ND32+N5MKFG	450	1200	47	50	540	26	223	205	502	277	430	50	260	132	134	9"

■ If need more detail relative dimension ,please visit our Web-Site ,<http://www.spintop.com.tw> or <http://www.topsdisk.com>



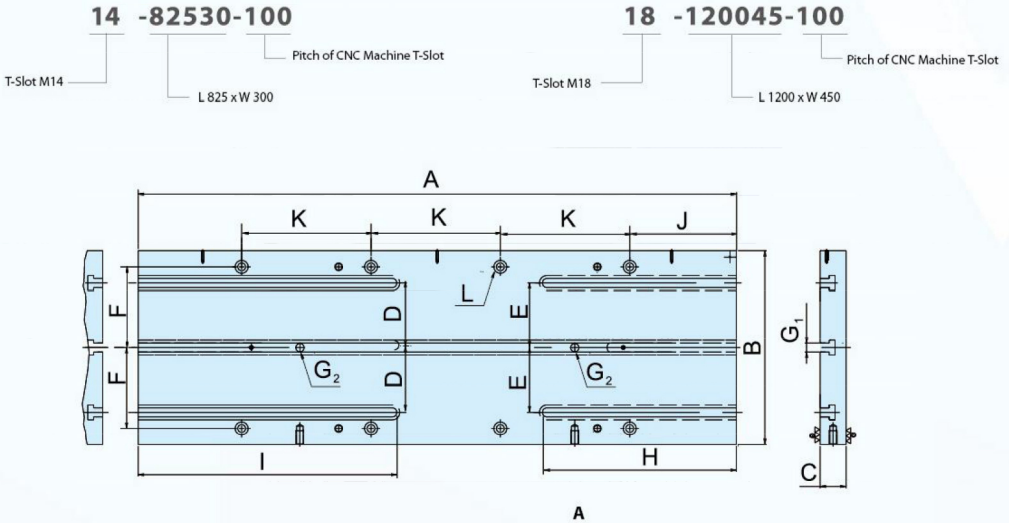
RFB 4th Axis Faceplate Tailstock Model



Mode/Size	A	B	C	D	E	F	G	H	I	J	K	L	M
F13+ND17+N5IFBE	300	825	101	25	495	25	179	85	338	188	304	40	175
F6A+ND20+N5IFBE	300	825	101	25	495	25	179	85	362	212	347	40	200
F16+ND25+N5MKFG	450	1200	171	25	724	25	213	160	400	175	412	50	210
F21+ND32+N5MKFG	450	1200	194	25	787	25	223	205	502	277	430	50	260
F6A+NV25+N5MKFG	450	1200	101	25	860	25	189	180	180	-	392	50	210
F5A+NV32+N5MKFG	450	1200	221	25	616	25	221	230	230	5	500	50	305

Base Plate

Base Plate



Pitch of CNC Machine T-Slot :100

Dimension	A	B	C	D	E	F	G	G ₂	H	I	J	K	L	Suitable Models
14-82530-100	825	300	40	100	65	100	M14	2xM14	250	200	162	150	8xM12	TD-170/TD-200
14-85030-100	850	300	40	100	65	100	M14	2xM14	250	200	172	150	8xM12	TD-170/TD-200
14-87540-100	875	400	40	100	65	100	M14	2xM14	250	200	172	150	8xM12	TD-170/TD-200
14-92530-100	925	300	40	100	65	100	M14	2xM14	250	200	165	200	8xM12	TD-170/TD-200
14-97530-100	975	300	40	100	65	100	M14	2xM14	250	200	165	200	8xM12	TD-170/TD-200
14-97540-100	975	400	40	100	65	100	M14	2xM14	250	200	165	200	8xM12	TD-170/TD-200
18-120045-100	1200	450	50	100	100	200	M18	2xM18	350	400	200	200	8xM16	TD-255/TDE-255/TD-255L
18-130065-100	1300	650	50	100	100	200	M18	2xM18	350	400	200	200	8xM16	TD-255/TDE-255/TD-255L

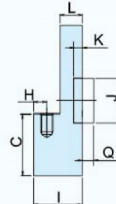
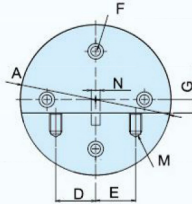
Pitch of CNC Machine T-Slot :125

Dimension	A	B	C	D	E	F	G ₁	G ₂	H	I	J	K	L	Suitable Models
14-82530-125	825	300	40	100	100	125	M14	2xM14	250	400	162	150	8xM12	TD-170/TD-200/DDR-260iB
14-85030-125	850	300	40	100	100	125	M14	2xM14	250	400	172	150	8xM12	TD-170/TD-200/DDR-260iB
14-87540-125	875	400	40	100	100	125	M14	2xM14	250	400	172	150	8xM12	TD-170/TD-200/DDR-260iB
14-92530-125	925	300	40	100	100	125	M14	2xM14	250	400	165	200	8xM12	TD-170/TD-200/DDR-260iB
14-97530-125	975	300	40	100	100	125	M14	2xM14	250	400	165	200	8xM12	TD-170/TD-200/DDR-260iB
14-97540-125	975	400	40	100	100	125	M14	2xM14	250	400	165	200	8xM12	TD-170/TD-200/DDR-260iB
18-120045-125	1200	450	50	100	100	125	M18	2xM18	350	400	200	200	8xM16	TD-255/TDE-255/TD-255L
18-130065-125	1300	650	50	100	100	125	M18	2xM18	350	400	200	200	8xM16	TD-255/TDE-255/TD-255L



Jig Bracket

LB/LD Circle Type L Jig Bracket



/LB*****TD170

Matching model of Indexing Table
Standard of Circle Type

/LD*****TD170

Matching model of Indexing Table
Direct-Lock of Circle Type

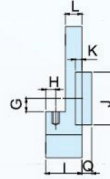
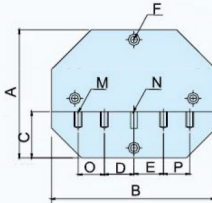
Standard of Circle Type

Dimension	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	Suitable Models
/LB050PN@TD170	Ø170	-	70	45	45	M10	15	15	55	Ø50	10	25	2 XM10	Ø10	-	-	15	TD-170
/LB050PN@TD200	Ø170	-	70	45	45	M10	15	15	55	Ø50	10	25	2 XM10	Ø10	-	-	15	TD-200

Direct-Lock of Circle Type

Dimension	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	Suitable Models
/LD100PN@TD170	Ø170	-	70	45	45	M10	15	15	56	Ø100	6	26	2 XM10	Ø10	-	-	-	TD-170
/LD090PN@DDR260IB	Ø170	-	70	45	45	M8	15	15	55	Ø90	4	25	2 XM10	Ø10	-	-	-	DDR-260IB

LA/LC Angle Type L Jig Bracket



/LA*****TD170

Matching model of Indexing Table
Standard of Angle Type

/LC*****TD170

Matching model of Indexing Table
Direct-Lock of Angle Type

Standard of Angle Type

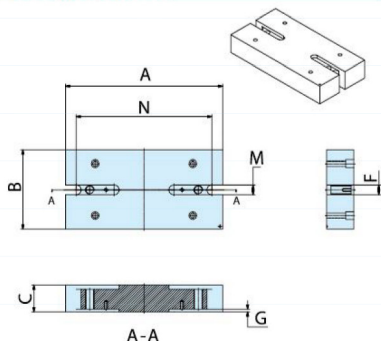
Mode/Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	Suitable Models
/LA050PN@TD170	135	170	55	45	45	M10	15	15	55	Ø50	10	25	2xM10	Ø10	-	-	15	TD-170
/LA050PN@TD200	135	170	55	45	45	M10	15	15	55	Ø50	10	25	2xM10	Ø10	-	-	15	TD-200
/LA080PN@TD255	195	250	70	85	85	M10	20	15	55	Ø80	10	25	2xM12	Ø10	-	-	25	TD-255
/LA040PN@TD320	185	300	70	35	35	M12	20	20	65	Ø40	10	25	4xM12	Ø12	65	65	25	TD-320
/LA040PN@TD400	276	380	48	50	50	M12	52	15	75	Ø40	-	40	4xM12	-	100	100	25	TD-400
/LA030PN@CV3255	195	250	70	85	85	M10	20	15	55	Ø30	10	25	2xM12	Ø10	-	-	25	CV3-255
/LA065PN@CV3320	185	300	70	35	35	M12	20	20	65	Ø65	10	25	4xM12	Ø12	65	65	15	CV3-320

Direct-Lock of Angle Type

Mode/Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	Suitable Models
/LC100PN@TD170	135	170	50	45	45	M10	15	15	55	Ø100	5	25	2XM10	Ø10	-	-	-	TD-170/TD-200

Raiser

Raiser:A type(for MT)

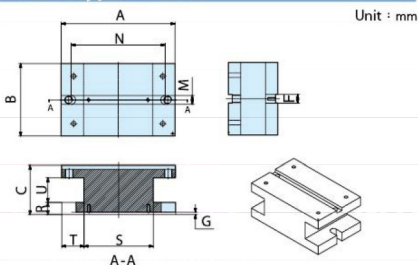


For model:MT-MODE PAD 25H & 50H

Unit : mm

Mode/Size	A	B	C	F	G	M	N&N'
BHA025@MT110	195	100	25	14H7	5	2 9.4	159
BHA050@MT110	195	100	50	14H7	5	2*14	159
BHA025@MT135	195	100	25	14H7	5	2*14	159
BHA050@MT135	195	100	50	14H7	5	2*14	159
BHA025@MT160	230	130	25	18H7	5	2*18	190
BHA050@MT160	230	130	50	18H7	5	2*18	190
BHA025@MT210	290	146	25	18H7	5	2*18	250
BHA050@MT210	290	146	50	18H7	5	2*18	250
BHA025@MT255	345	200	25	18H7	5	2*18	265
BHA050@MT255	345	200	50	18H7	5	2*18	265
BHA025@MT280	345	200	25	18H7	5	2*18	265
BHA050@MT280	345	200	50	18H7	5	2*18	265

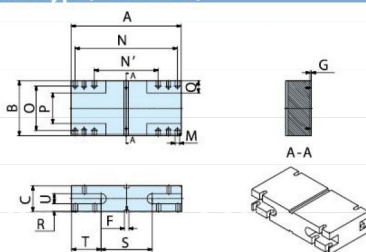
Raiser:B type(for MT)



For model:MT-MODE PAD

Unit : mm

Raiser:C type(for TD&FT)



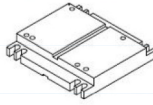
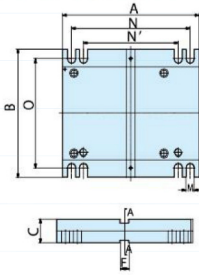
For model:TD-320 PAD 100H

Mode/Size	A	B	C	F	G	M	N&N'	O	P	Q	R	S	T	U
BHB100@MT110	135	100	100	14H7	5	2*14	95	-	-	-	25	75	30	50
BHB100@MT135	135	100	100	14H7	5	2*14	95	-	-	-	25	75	30	50
BHB100@MT160	230	130	100	18H7	5	2*18	190	-	-	-	25	140	45	50
BHB100@MT210	230	146	100	18H7	5	2*18	190	-	-	-	25	140	45	50
BHB100@MT255	285	200	100	18H7	5	2*18	205	-	-	-	25	160	62.5	50
BHB100@MT280	285	200	100	18H7	5	2*18	205	-	-	-	25	160	62.5	50
BHC100@TD170	230	148	100	14H7	5	4*14	200	108	68	40	30	100	65	40
BHC100@TD200	230	148	100	18H7	5	4*18	200	108	68	40	30	100	65	40
BHC100@TD255	288	196	100	18H7	5	8*18	250&200	156	-	-	30	128	34	40
BHC100@TDE255	300	144	100	18H7	5	8*18	250&200	104	64	40	25	70	115	50
BHC100@TD320	430	215	100	18H7	5	8*18	400&250	176	120	47.5	30	200	115	40
BHC100@FT135	288	95	100	14H7	5	8*14	250&200	55	30	32.5	30	160	64	40
BHC100@FT160A	288	95	100	18H7	5	8*18	250&200	55	30	32.5	30	160	64	40
BHC100@FT160	288	124	100	18H7	5	8*18	250&200	84	40	42	30	160	64	40
BHC100@FT210	400	153	100	18H7	5	8*18	250&200	113	60	46.5	30	140	80	40



Raiser:D type(for TD&FT)

Unit : mm

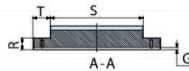


BHD050@TD170

Model of Raiser

Matching Model of Indexing Table

Height of Raiser

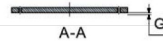
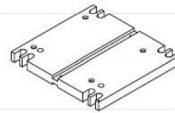
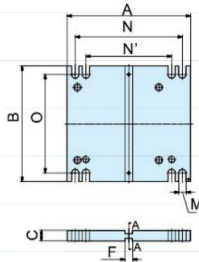


For model:TD-255 PAD 50H

Mode/Size	A	B	C	F	G	M	N&N'	O	R	S	T
BHD050@TD170	230	148	50	14H7	5	4*14	200	118	25	168	31
BHD050@TD200	230	208	50	18H7	5	4*18	200	178	25	148	30
BHD050@TD255	288	270	50	18H7	5	8*18	250&200	230	25	233	37
BHD050@TD320	430	350	50	18H7	5	8*17C Bore	400&250	310	0	0	0
BHD050@FT135	288	160	50	14H7	5	8*14	250&200	120	25	95	32.5
BHD050@FT160A	288	160	50	18H7	5	8*18	250&200	120	25	95	32.5
BHD050@FT160	288	189	50	18H7	5	8*18	250&200	149	25	124	32.5
BHD050@FT210	400	189	50	18H7	5	8*18	250&200	149	25	124	32.5

Raiser:E type(for TD&FT)

Unit : mm

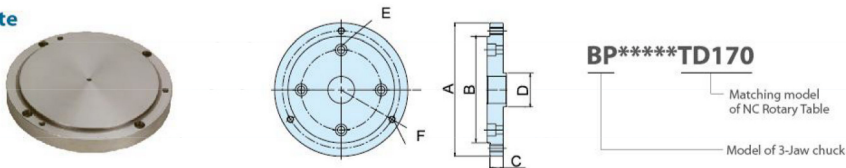


For model:TD-255 PAD 25H

Mode/Size	A	B	C	F	G	M	N&N'	O
BHE025@TD170	230	208	25	14H7	5	4*14	200	178
BHE025@TD200	230	208	25	18H7	5	4*18	200	178
BHE025@TD255	288	270	25	18H7	5	8*18	250&200	230
BHE025@TD320	430	350	25	18H7	5	8*18	400&250	310
BHE025@FT135	288	160	25	14H7	5	8*14	250&200	120
BHE025@FT160A	288	160	25	18H7	5	8*18	250&200	120
BHE025@FT160	288	189	25	18H7	5	8*18	250&200	149
BHE025@FT210	400	189	25	18H7	5	8*18	250&200	149

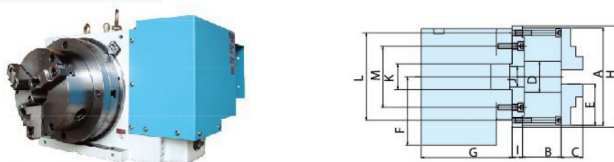
Adopt 3-Jaw Chuck and Back plate

Back plate



Model of 3-Jaw chuck	Powerful 3-Jaw Chuck	A	B	C	D	E	F
BP5050@TD170	S K-5	Ø 130	Ø 100	20	Ø 50	4-M10C bore, Ø 100	3-M8, Ø 115
BP6050@TD170	S K-6	Ø 170	Ø 130	20	Ø 50	4-M10C bore, Ø 105	3-M10, Ø 147
BP7050@TD200	S K-7	Ø 200	Ø 155	20	Ø 50	4-M10C bore, Ø 120	3-M10, Ø 172
BP8080@TD255	S K-8	Ø 255	Ø 160	22	Ø 80	4-M10C bore, Ø 220	3-M10, Ø 176
BP9080@TD255	S K-9	Ø 255	Ø 190	21	Ø 80	4-M10C bore, Ø 160	3-M12, Ø 210
BP0040@TD320	S K-10	Ø 270	Ø 230	25	Ø 40	4-M12C bore, Ø 180	3-M12, Ø 250
BPB040@TD400	S K-12	Ø 320	Ø 260	25	Ø 40	8-M12C bore, Ø 285	3-M12, Ø 285

Powerful Front-Lock 3-Jaw Chuck



Model/Size	Size of 3-Jaw Chuck	A	B	C	D	E	F	G	H	I	J	K	L	M
3M5@TD125	5"	130	60	20	32	50	110	165	132	20	30	40	115	85
3M6@TD170	6"	167	65	39	45	68	135	179	165	20	40	50	147	100
3M7@TD200	7"	192	76	43	58	82	135	179	192	20	40	50	172	100
3M8@TD255	8"	202	76	43	58	82	160	213.5	255	22	70	80	176	
3M9@TD320	9"	232	84	50	70	94	210	223	290	21	30	40	210	
3MB@TD400	12"	310	96	56	105	118	255	255.5	370	25	30	40	285	
3M9@CV3255	9"	232	84	50	70	94	210	189.5	290	21	30	40	210	
3MB@CV3320	12"	310	96	56	105	118	255	220	370	25	30	40	285	

Hydraulic 3-Jaw Chuck and Pneumatic 3-Jaw Chuck

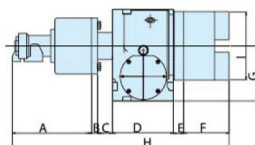


Hydraulic 3-Jaw Chuck

Model/Size	Size of 3-Jaw Chuck	A	B	C	D	E	F	G	H	I
3H6@TD170	6"	170	15	36	148	23	109	135	501	169
3H8@TD200	8"	170	15	36	148	23	127	135	519	210
3H8@TD255	8"	170	15	36	196	25	127	160	569	210
3H0@TD320	10"	178	15	40	215	25	135	210	608	254
3H8@TD3255	8"	170	15	36	208	23	120	160	572	210
3H0@TD3320	10"	178	15	40	249	25	135	210	642	254

Pneumatic 3-Jaw Chuck

Model/Size	Size of 3-Jaw Chuck	A	B	C	D	E	F	G	H	I
3P6@TD170	6"	118	-	-	148	25	109	135	400	165
3P8@TD200	8"	118	-	-	148	25	127	135	418	210
3P8@TD255	8"	118	-	-	196	25	127	160	466	210

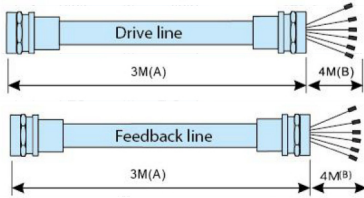




Interlocking Cable

Interlocking Cable (Standard length, 3M / 4M)

CBS-A Single-ended Type



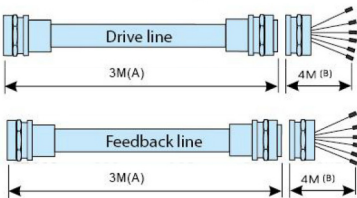
CBSA-3040-0/L

- 0: Straight end, L: 90° Curved end
- P: CNC machine cable internal line length(B)
- External line length(A)
- Model No of single-ended type external tube

CBSA-3040B-0/L

- 0: Straight end, L: 90° Curved end
- External clad steel wire
- P: CNC machine cable internal line length(B)
- External line length(A)
- Model No of single-ended type external tube

CBS-B Double-ended Type



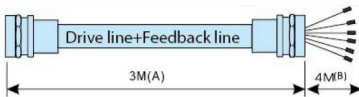
CBSB-3040-0PLS

- 4th Axis MS connector specification
- CNC Machine MS connector specification
- 0: Straight end, L: 90° Curved end
- P: Male receptacle, S: Female receptacle
- P: CNC machine cable internal line length(B)
- External line length(A)
- Model No of double-ended type external tube

CBSB-3040B-0PLS

- 4th Axis MS connector specification
- CNC Machine MS connector specification
- 0: Straight end, L: 90° Curved end
- P: Male receptacle, S: Female receptacle
- External clad steel wire
- P: CNC machine cable internal line length(B)
- External line length(A)
- Model No of double-ended type external tube

CBS-C Combo Single-ended Type



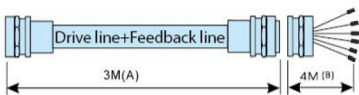
CBSC-3040-0/L

- 0: Straight end, L: 90° Curved end
- P: CNC machine cable internal line length(B)
- External line length(A)
- Model No of combo single-ended type external tube

CBSC-3040B-0/L

- 0: Straight end, L: 90° Curved end
- External clad steel wire
- P: CNC machine cable internal line length(B)
- External line length(A)
- Model No of combo single-ended type external tube

CBS-D Combo Double-ended Type



CBSD-3040-0PLS

- 4th Axis MS connector specification
- CNC Machine MS connector specification
- 0: Straight end, L: 90° Curved end
- P: Male receptacle, S: Female receptacle
- P: CNC machine cable internal line length(B)
- External line length(A)
- Model No of combo double-ended type external tube
- 4th Axis MS connector specification
- CNC Machine MS connector specification

CBSD-3040B-0PLS

- 0: Straight end, L: 90° Curved end
- P: Male receptacle, S: Female receptacle
- External clad steel wire
- P: CNC machine cable internal line length(B)
- External line length(A)
- Model No of combo double-ended type external tube

NC Rotary table match with servo motor configuration reference table

CNC Machine System : Mitsubishi M70, HF series

Servo motor	Amplifier	Can be equipped with NC Rotary table
HF75T(S)-A48	MDS-D-SVJ3-07	TD-170/TTD-125(Rotary Axis)/TDE-125/TE-125
HF54T(S)-A48	MDS-D-SVJ3-07	TD-170/TD-170L/TD-200/TTD-125(Tilting Axis) TDM-170/TE-170/TE-200/TD-125-3L
HF104T-A48	MDS-D-SVJ3-10	TD-255/TD-255L/TDE-255/TTD-255 TDM-255
HF154T-A48	MDS-D-SVJ3-20	TD-255/TD-255L/TDE-255/TTD-255 TDM-255
HF204S-A48	MDS-D-SVJ3-20	TD-320/TD-400/TD-500/TD-630

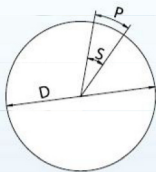
CNC Machine System : FANUC Oi, ai series

Servo motor	Amplifier	Can be equipped with NC Rotary table
A2/5000i(ABS) A06B-0205-B000	SVM1-20i A06B-6114-H103	TDE-125/TTD-125(Rotary Axis) TE-125
A4/4000i(ABS) A06B-0223-B000	SVM1-40i A06B-6117-H104	TD-170/TD-170L/TD-200/TTD-125(Tilting Axis) TD-125-3L/TDM-170/TE-170/TE-200
A8/3000i(ABS) A06B-0227-B000	SVM1-40i A06B-6117-H104	TD-255/TD-255L/TDE-255/TTD-255 TDM-255
A12/3000i(ABS) A06B-0243-B000	SVM1-80i A06B-6114-H105	TD-320/TD-400/TD-500/TD-630

CNC Machine System : FANUC Oi, βi series

Servo motor	Amplifier	Can be equipped with NC Rotary table
β2/4000iS A06B-0061-B003	βSVM1-20i A06B-6130-H002	TDE-125/TTD-125(Rotary Axis) TE-125
β4/4000iS A06B-0063-B003	βSVM1-20i A06B-6130-H002	TDE-125
β8/3000iS A06B-0075-B003	βSVM1-20i A06B-6130-H002	TD-170/TD-170L/TD-200/TTD-125(Tilting Axis) TDM-170/TE-170/TE-200
β12/3000iS A06B-0078-B003	βSVM1-40i A06B-6130-H003	TD-255/TD-255L/TDE-255/TTD-255 TDM-255
β22/3000iS A06B-0085-B103	βSVM1-40i A06B-6130-H003	TD-320/TD-400/TD-500/TD-630

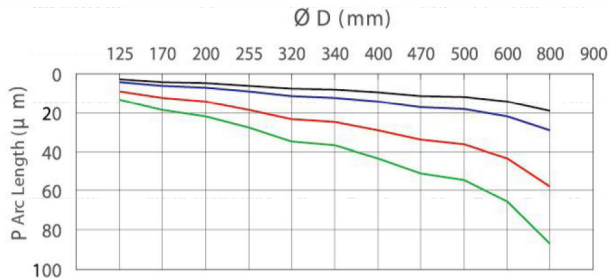
Formula of Angle error



$P = \text{Arc Length } (\mu)$
 $S = \text{Formula of Angle error(Arc. Sec.)}$
 $D = \text{Diameter (MM)}$

$$P = \frac{S \cdot D}{413} (\mu\text{m})$$

±5(10)Arc. Sec. ±7.5(15)Arc. Sec. ±15(30)Arc. Sec. ±22.5(45)Arc. Sec. ±30(60)Arc. Sec.





Applications of Product

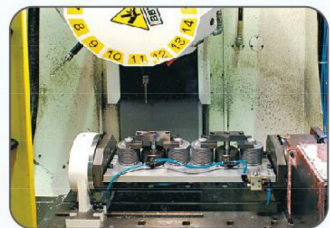
▶ Example of Application with Fixture



▶ Application of Hydraulic Index Table



▶ Application of CNC Machinery



▼ Application of Laser Engraving Machine



▼ Application of NC Tilting Rotary Table with Single Axis Controller



▼ Application of testing instruments



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