

CNC Tilting Rotary Tables
Min. indexing angle -0.001°

FAR Series

Dual-axis single-arm type
(Pneumatic Brake)

FAR(s)-160SN

Dual-axis dual-arm type
(Powerful Pneumatic Brake)

FAR(s)-210/210B/210L

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FEATURES



Rotary axis Dual-lead
Alloy steel worm gear
(Optional)

1 Both the tilting axis and rotary axis use radial & axial bearings.

2 Because the tilting axis normally needs to bear heavy load, Japanese-made worm and worm gear are employed to improve wear resistance and precision of tilting axis. **standard component**
(It's wear life is 2.6 times longer than aluminum bronze PBC3.)

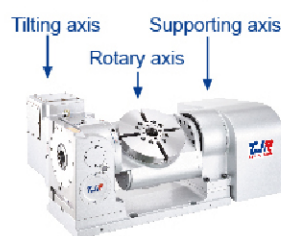
3 Anti-wear alloy steel worm gear is optional

4 A hydraulic brake for tilting axis is optional.



▲ FAR(s)-160SN
(single-arm type)

Alloy steel worm gear
(Optional)



▲ FAR(s)-210 (Standard type)



▲ FAR(s)-210B
(Back side motor type)



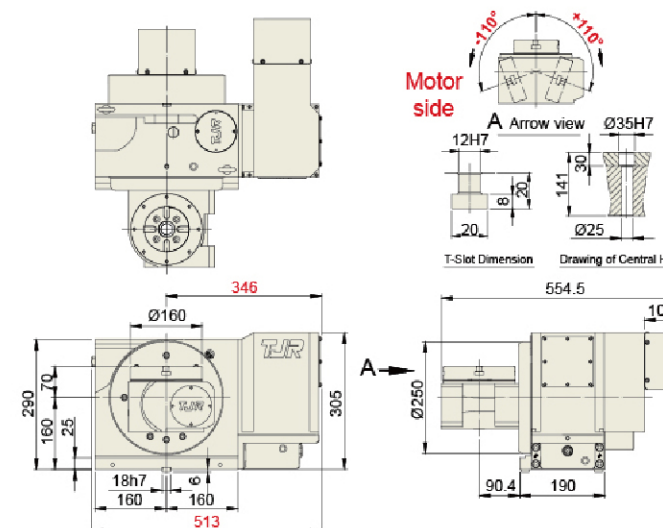
▲ Optional

Item / Model	Unit	FAR(s)-160SN(single-arm type)		FAR(s)-210 (Standard type)		FAR(s)-210B (Back side motor type)	
Table Diameter	mm	Ø160		Ø210		Ø210	
Diameter of Table Central Hole	mm	Ø35H7x30 deep		Ø67		Ø67	
Inner Diameter of Mandrel Sleeve	mm	-		Ø40H7		Ø40H7	
Diameter of Center Through Hole	mm	Ø25		Ø40		Ø40	
Table Height (Horizontal)	mm	230		270		270	
Table T-slot Width	mm	12H7		12H7		12H7	
Guide Block Width	mm	18h7		18h7		18h7	
Axis	-	Rotation	Tilt $\pm 110^\circ$	Rotation	Tilt $\pm 100^\circ$	Rotation	Tilt $\pm 100^\circ$
Min. Increment	deg.	0.001	0.001	0.001	0.001	0.001	0.001
Indexing Precision (while tilt $0^\circ \sim 90^\circ$)	sec.	40	60	20	60^{*1}	20	60^{*1}
Repeatability	sec.	6	8	6	8	6	8
Clamping System (Pneumatic)	kgf/cm ²	Pne.5	35	6	6 / Hyd.35 (optional)	6	6 / Hyd.35 (optional)
Clamping Torque	kgf-m	13	70	31	31 / Hyd.55	31	31 / Hyd.55
Servo Motor Model	FANUC	Taper/Straight shaft	ais4 / Bis4	aiF8 / Bis8	aiF4 / Bis8	aiF8 / ais12 / Bis12	aiF8 / ais12 / Bis12
	MITSUBISHI	Taper/Straight shaft	HF-KP43JW04-S6 / HG-56	HF/HG-154	HG/HF-54/104	HG/HF-104	HG/HF-104
Speed Reduction Ratio	-	1 : 60	1 : 120	1 : 90	1 : 90	1 : 90	1 : 90
Max. Rotation Rate of Table (Calculate with Fanuc Motor)	r.p.m	44.4 *(33.3)	16.6 *(11.1)	33.3 *(33.3)	33.3 *(16.6)	33.3 *(33.3)	33.3 *(16.6)
Allowable Inertia Load Capacity (Horizontal)	kg.cm.sec ²	0.8		4.13		4.13	
Allowable Workpiece Load	0° Horizontal	kg	25	75	75	75	75
	0°~90° Tilt	kg	20	50	50	50	50
Allowable Thrust Load (with Rotary Table Clamping)	F	kgf	600	750	750	750	750
	FxL	kgf-m	25	Pne.31 / Hyd.55	Pne.31 / Hyd.55	Pne.31 / Hyd.55	Pne.31 / Hyd.55
	FxL	kgf-m	13	31	31	31	31
Driving Torque (Rotary axis)	kgf-m	9(3.7)		18 *(14.6)		18 *(14.6)	
Net Weight (servo motor excluded)	kg	116		160		163	

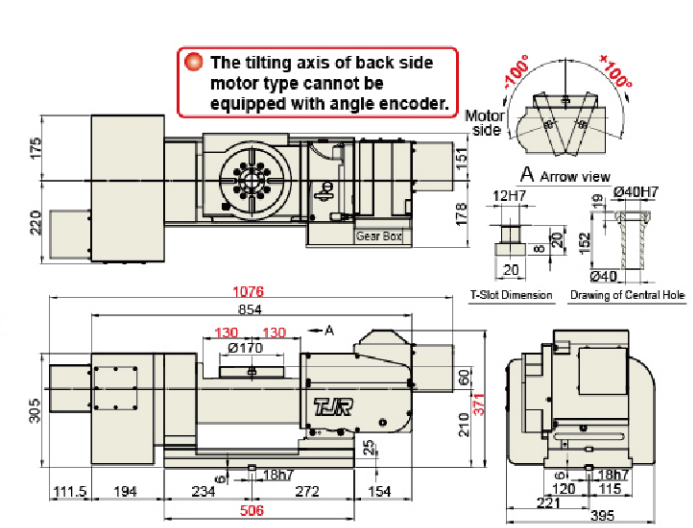
33 ★*() Alloy Steel worm & gear series

★*1. Indexing precision can be better after installing an additional angle encoder.
Please refer to the table on page 70 for more details.

FAR(s)-160SN (Single-arm type)

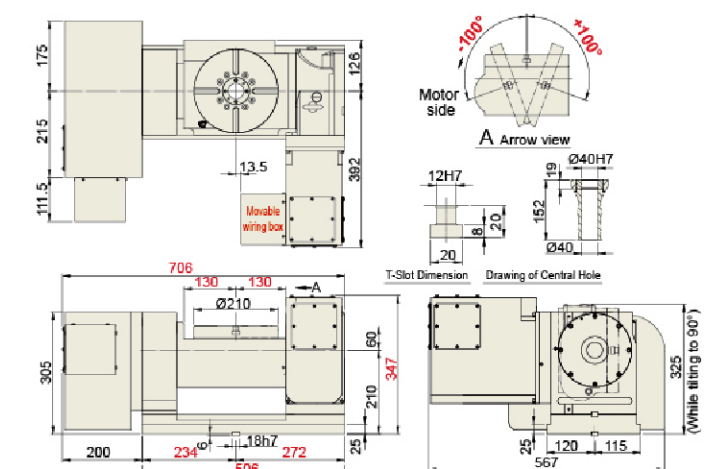


FAR(s)-170B (Back side motor type)

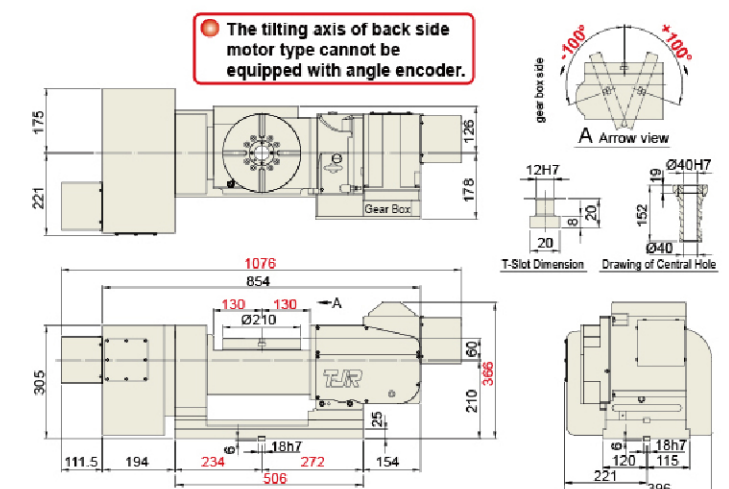


Remark: Please refer to Page 32 for the specification of FAR-170B

FAR(s)-210 (Standard type)



FAR(s)-210B (Back side motor type)



★ The shown dimensional drawings of FAR-160SN are not suitable for Fanuc but most of servo control.
Another dimensional drawing can be given when Fanuc motors are employed.