

# Pneumatic Rotary Indexing Tables

## Features and Applications

**Rotary indexing tables provide a space-saving solution for performing multiple sequential operations on up to twenty-four stations.**

**The compact design can be easily synchronized with standard production equipment.**

**Precision Indexing Accuracy** Festo rotary indexing tables feature precision indexing accuracy up to 0.0011 inch. The positive, mechanical index locking feature assures improved reliability.

### Built-in Economy

More features are included as standard with Festo indexing tables:

- \* Built-in control valves
- \* Built-in adjustable hydraulic cushioning
- \* Heavy-duty cast-iron housing
- \* Center hole in plate for supplying compressed air or coolant

### Rugged Construction

The heavy duty, 0.87 inch thick, 270 mm (10-1/2") diameter steel turntable, and integral hydraulic cushioning provide increased load handling capability and smooth, long-life performance, even at higher speeds.

### Easy to Install and Maintain

Simply mount the unit at any angle, connect supply air and provide a start signal. Few internal moving parts means fewer repairs. All moving parts are hardened steel for extra durability.

Housing is completely enclosed, for protection against swarf and coolant.

The number of indexing stations can be easily changed by exchanging a stop pin and index plate.

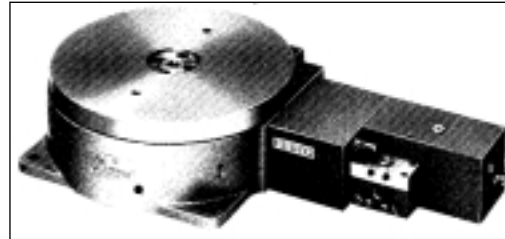
Up to 0.0011" indexing accuracy

Multiple stations, up to 24 standard

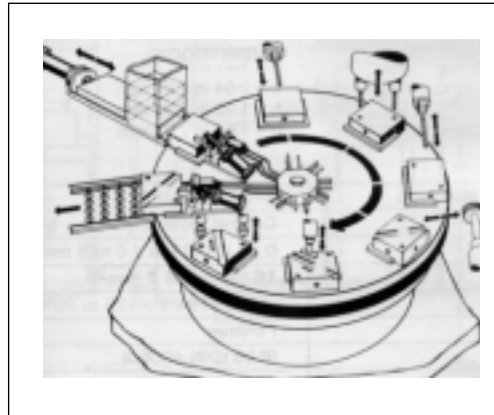
Built-in adjustable hydraulic cushioning

Center hole for supply of compressed air or coolant

Easy mounting at any angle



Integral speed control



Integral valve

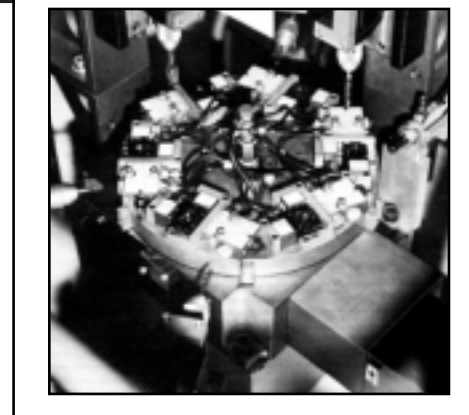
Heavy-duty cast-iron housing

**Compact multi-station, multi-function rotary indexing applications**



**ST-270 mounted vertically on a drill press**

**Indexing station performing multiple functions in sequence**



## Pneumatic Rotary Indexing Table

With integral Control Valve,  
Clockwise Rotation

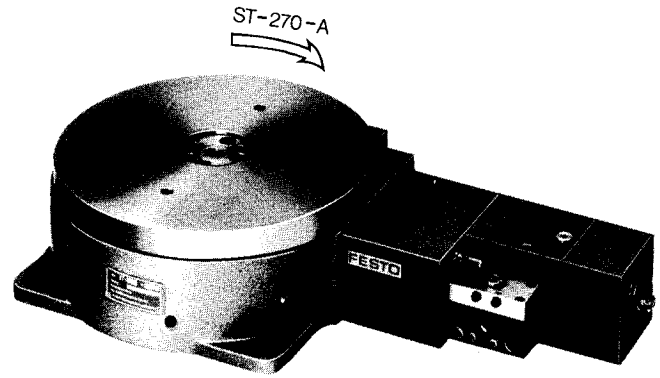
### Type ST-270-A

This indexing table is suited for rotary-cycle operations, for automatic assembly and packaging equipment, drilling and boring stations and other applications in which the workpiece or tool must rotate.

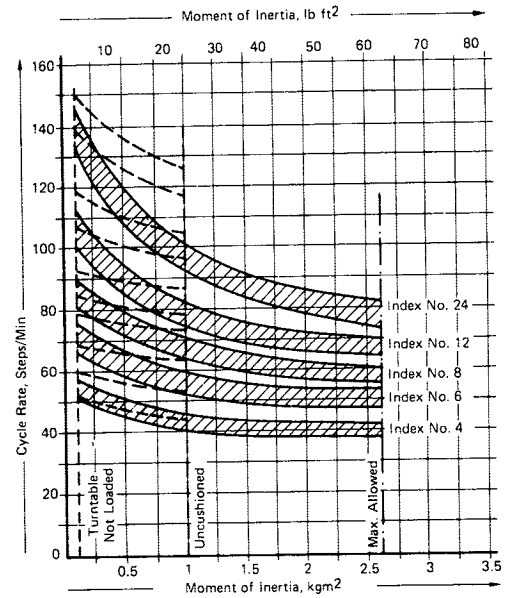
Indexing is initiated by a pneumatic pilot impulse, from a pneumatic or electric 3 way, 2 position valve. The adjustable indexing speed allows synchronization with other equipment. Additional pilot signals during indexing have no effect.

The central axis of the turntable is hollow for a supply of coolant or air for clamping of parts or chip ejection. The integral hydraulic cushioning can be adjusted to coincide with turntable loading, and reduces the degree of impact at the end of indexing.

The number of index stations can be changed by exchanging a stop pin and index plate on the bottom of the unit.



Cycle rate vs. moment of inertia\* and index number at 90 psi / 6 bar supply and control pressure.



\*Preset moment of inertia = 4 x moment of inertia

--- Uncushioned  
 // Cushioned

### Air Consumption at 90 psi / 6 bar

Index Number	4	6	8	12	24
Air Consumption SCF / ℓ per Step	0.099 / 2.8	0.085 / 2.4	0.074 / 2.1	0.064 / 1.8	0.053 / 1.5

Order Number (See Table on Reverse Side)	ST-270-A + Index No.
Medium	Compressed air (filtered, lubricated)
Mounting	Holes through housing
Mounting Position	Any angle
Connection	G 1/8 ISO
Operating Pressure Range*	70 to 100 psi / 5 to 7 bar
Control Pressure Range	30 to 150 psi / 2 to 10 bar
Turntable Diameter	10.62 in / 270 mm
Standard Index Stations**	4, 6, 8, 12, 24 as requested
Custom Index Stations	10, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 26, 30
Accuracy of Index	± 0.0011 in at 10.62 in / 0.03 mm at 270 mm diameter
Torque at 90 psi / 6 bar	35 lbf / 47 Nm
Clamping Load	Max. 113 lbf / 500 N
Working Load, Axial	Max. 675 lbf / 3000 N
Materials	Housing: Gray cast iron, steel. Turntable: Steel. Seals: Buna N
Weight	84.2 lb / 38.2 kg

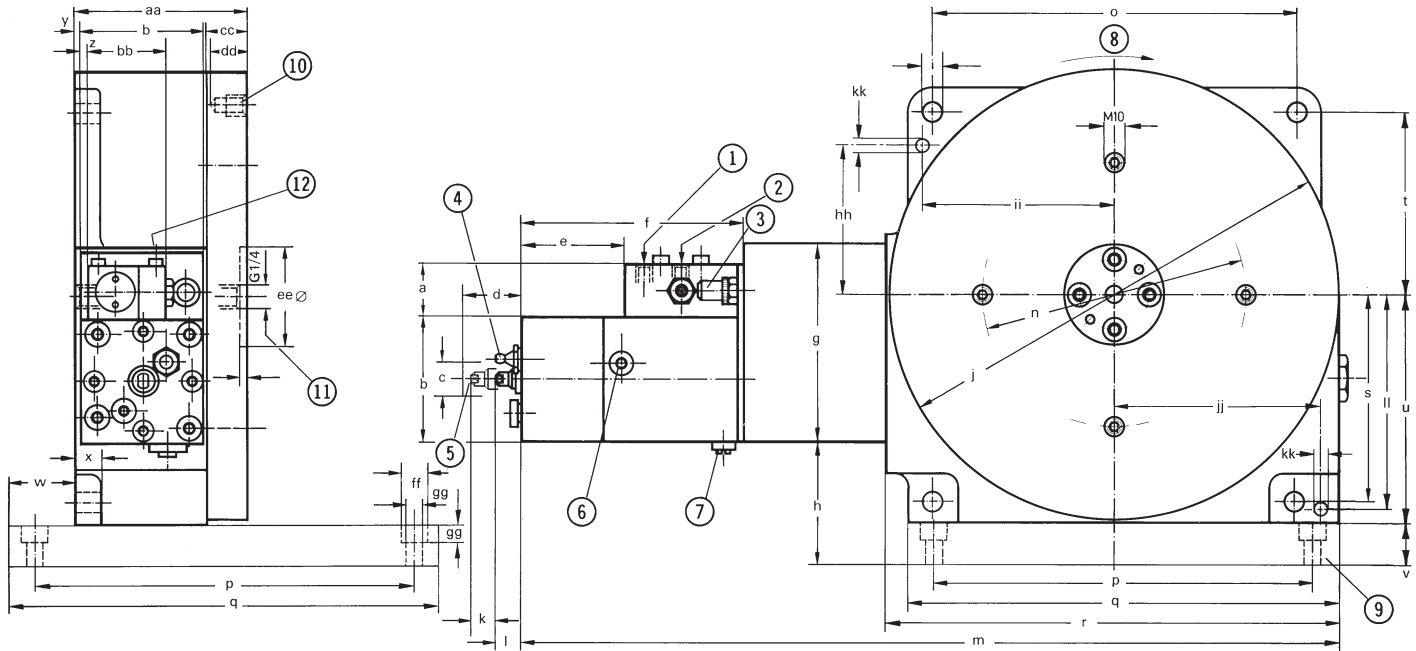
\* 14 to 140°F / -10 to 60°C

\*\* Each combination of index stations can be set by exchanging a stop pin and index plate.

# Pneumatic Rotary Indexing Tables

## Dimensions, Accessories

Type ST-270-A



### Dimensions

a	1.26 in / 32 mm	n	6.30 in / 160 mm	aa	4.09 in / 104 mm
b	2.95 in / 75 mm	o	8.66 in / 220 mm	bb	1.81 in / 46 mm
c	0.79 in / 20 mm	p	9.06 in / 230 mm	cc	0.94 in / 24 mm
d	1.38 in / 35 mm	q	10.24 in / 260 mm	dd	0.87 in / 22 mm
e	2.64 in / 67 mm	r	10.75 in / 273 mm	ee	2.36 in / 60 mm
f	5.31 in / 135 mm	s	4.92 in / 125 mm	ff	0.65 in / 16.5 mm
g	4.72 in / 120 mm	t	4.33 in / 110 mm	gg	0.41 in / 10.5 mm
h	2.91 in / 74 mm	u	5.39 in / 137 mm	hh	3.54 in / 90 mm
i	0.47 in / 12 mm	v	0.98 in / 25 mm	ii	4.49 in / 114 mm
j	10.63 in / 270 mm	w	1.57 in / 40 mm	jj	4.96 in / 126 mm
k	0.63 in / 16 mm	x	0.59 in / 15 mm	kk	0.23 in / 6 mm
l	0.55 in / 14 mm	y	0.12 in / 3 mm	ll	5.08 in / 129 mm
m	19.49 in / 495 mm	z	0.16 in / 4 mm		

- ① Connection for Pilot Signal impulse (G 1/8 ISO)
  - ② Compressed air supply connection (G 1/8 ISO)
  - ③ Speed control valve
  - ④ Oil-filler nipple for hydraulic shock absorber
  - ⑤ Cover
  - ⑥ Venting screw
  - ⑦ Adjustment screw for hydraulic shock absorber
  - ⑧ Direction of rotation
  - ⑨ Mounting plate (customer-fabricated)
- Scale drawing available
- ⑩ Holes max. 0.87 in / 22 mm deep
  - ⑪ Through-hole to supply coolant or compressed air
  - ⑫ Connection for Emergency Stop Pilot Signal

Indexing table			
ST-270-A		Index	Nomenclature
Order Number		Number	
Part No.	Type		
3727	ST-270-A-4	4	Standard index stations
3728	ST-270-A-6	6	
3729	ST-270-A-8	8	
3730	ST-270-A-12	12	
3731	ST-270-A-24	24	
	ST-270-A-...		Custom index stations
Accessories			
Part No.	Type		Nomenclature
4567	STB-4-270	For index No. 4	Index station
4568	STB-6-270	6	Stop pin and index plate
4569	STB-8-270	8	
4570	STB-12-270	12	
106000	STB-24-270	24	Stop pin only required
2212	YD		Oil gun
207 873	OFSB-1	1 liter container	FESTO Special Oil for hydraulic shock absorbers