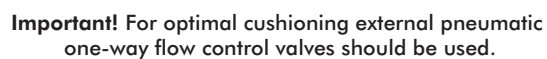
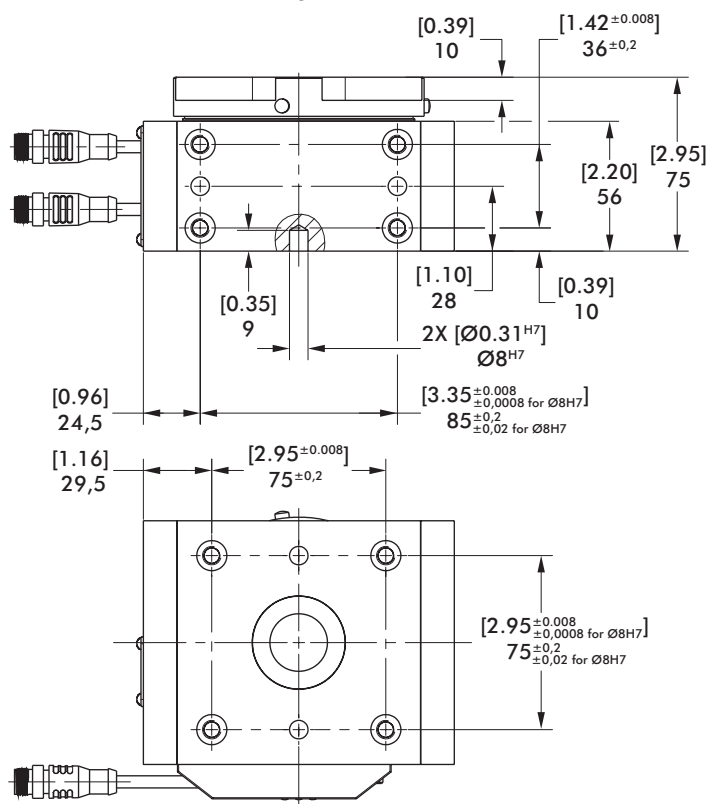
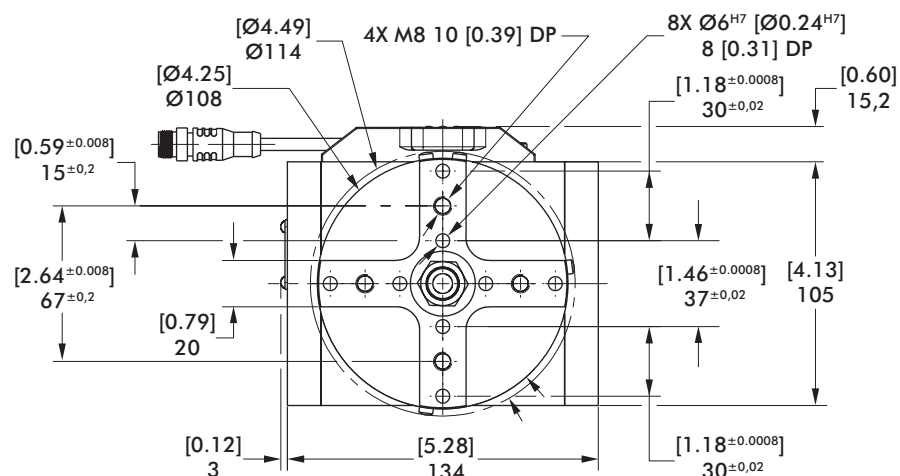


Precision Rotates, Guides & Lifters | Compact Rotary Indexing Table | Dimensions

A red industrial motor with a black cable and a silver mounting plate. The motor is shown from a three-quarter perspective, highlighting its compact design and the mounting plate on the front.

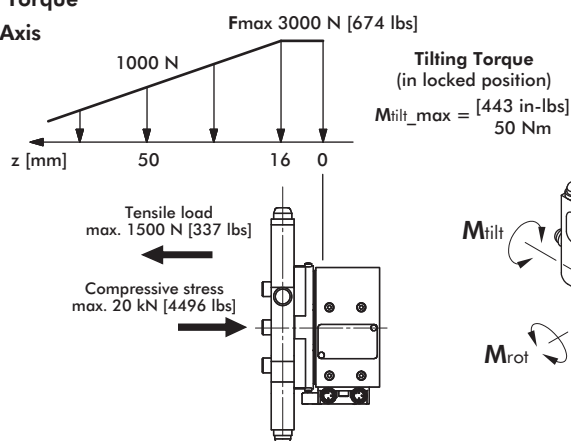
Precision Rotates, Guides & Lifters | Compact Rotary Indexing Table | Technical Specifications

Specifications	Units	87R-1
Connection		G1/8
Air consumption per cycle @ 6 bar [87 psi]	liter [in ³]	0,15 [9.15]
Partial precision (unloaded) @ Ø120 mm	mm [in]	+/-0.03 [0.001]
Weight	kg [lb]	3,3 [7.28]
Load max.	Nm [in-lb]	14 [124]
Torque @ 6 bar [87 psi]	Nm [in-lb]	3,5 [31]
Torque absorption max. (locked)	kg [lb]	100 [220]
Radial force centric max.	N [lbs]	3000 [674]
Mass moment of inertia max.	kg-cm ² [lb-in ²]	175 [2489]
Tilting torque max.	Nm [in-lb]	50 [443]

Specifications	Units	87R-1
Mounting position		Optional
Direction of rotation		Clockwise
Division		90°
Control: Directional control valve bistable		4/2 5/2
Stop position detection		Sensor M12
Rotary plate position		Sensor M12 (Binary 00/01/10/11)
Time to turn and lock	sec/90°	1.2
Bearing of the rotary plate		Grooved ball bearing
Manual twisting		Not possible

Tilting Torque

"Z" Axis



$$F_{max} = M_{max} / z$$

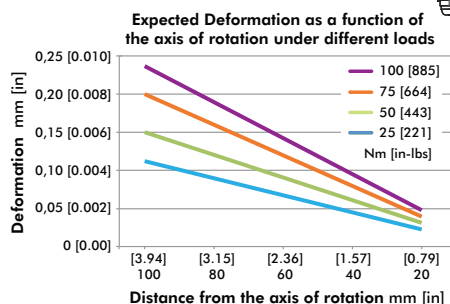
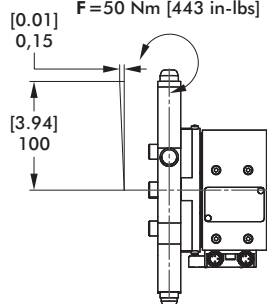
z	[0.04]	[0.63]	[0.79]	[1.18]	[1.57]	[1.97]	[2.36]	[2.76]	[in]
	1	16	20	30	40	50	60	70	mm
F	[11240] 50000 3000	[674] 2999	[562] 2500	[375] 1667	[281] 1250	[225] 1000	[187] 833	[161] 714	[lbs] N
Permissible									

$$M_{tilt_max} = 50 \text{ Nm}$$

Example Values

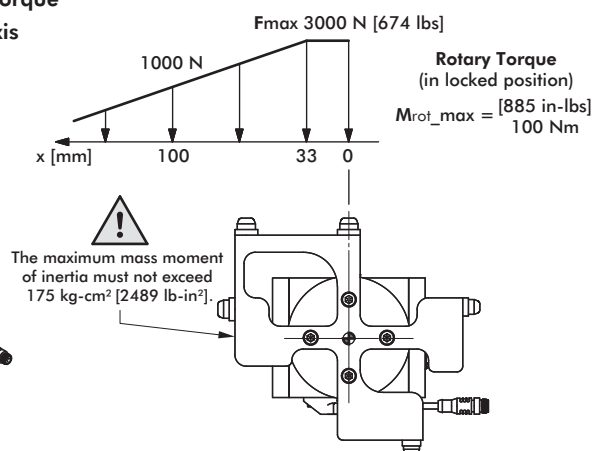
$$F = 50 \text{ Nm} [443 \text{ in-lbs}]$$

It is recommended to apply the force as close as possible to the turntable towards the housing in order to obtain the lowest possible deformation.



Rotary Torque

"X" Axis



$$F_{max} = M_{max} / z$$

z	[0.04]	[0.63]	[0.79]	[1.18]	[1.57]	[2.36]	[2.76]	[in]
	1	16	20	30	40	60	70	mm
F	[22481] 100000 3000	[674] 2999	[562] 2500	[375] 1667	[225] 1000	[152] 677	[112] 500	[lbs] N
Permissible								

$$M_{rot_max} = 100 \text{ Nm}$$

Example Values

$$F = 100 \text{ Nm} [225 \text{ lbs}]$$

It is recommended to apply the force as centrally as possible as this is the lowest form of deformation.

Expected deformation in the locked state under a load of 100 Nm at a distance of 100mm to the rotation axis.

Attention!
Due to an excessively large support impulse the expected measured values could be worse!

