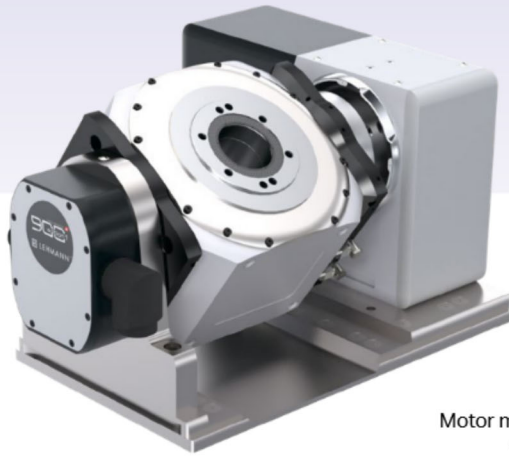


TPD32-300M and TPD52-300M



LOZ.CleanJET

Motor mounted
on right

Indexing axis DD. Swive- ling/tilting axis with PGD

- extremely resilient swiveling/tilting axis for high loads
- high weights easier to control

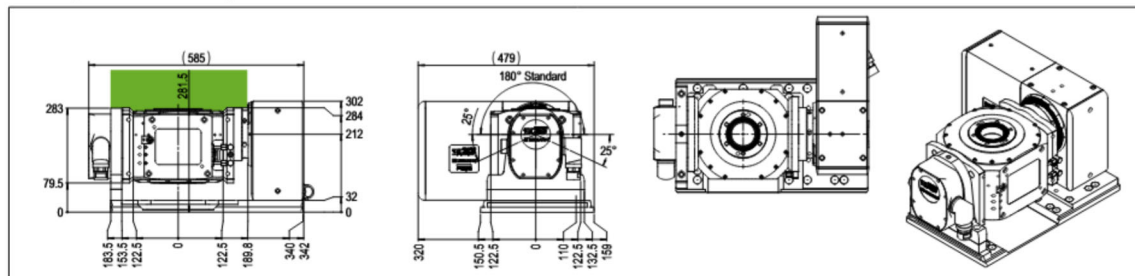
General technical data

For drive data of dividing/indexing axis (rotation) see **p. 25**, for swiveling/tilting axis see **p. 29**

		TPD32-300M		TPD52-300M		TPD32-240V		TPD52-240V	
Weight (aluminum base plate)		kg		181/184 (155)		206/209			
Spindle through-bore		mm		64					
Clamping torque at max. 5 bar air pressure	4th axis		Nm	max. 800					
	5th axis		Nm	2,000					
Spindle load (max. permissible)			kg	40		90			
Axial force (max. permissible)			kN			20			
Pull-out torque	clamped		Nm			1,000			
	unclamped					400			
Moment of inertia	Standard load		kgm²	0.07		0.07		0.2	
	J max			0.7*		0.7*		2*	
Feed torque max ***			Nm			440			
Limited torques due to eccentric loads ****			Nm			110			
Positioning accuracy +/- (unloaded, -90 to +90°)	4th axis Fanuc		± arc sec			8			
	4th axis Siemens 1-head					20			
	4th axis Siemens 2-head					5			
	4th axis Mitsubishi					20			
	5th axis – all motors			28 / 10**	28 / 31**	63 / 53**	63 / 40**		
Repeat accuracy +/- (unloaded)	4th axis		arc sec			±1			
	5th axis					±2			
Cycle time with standard load (without clamping)	4th axis	90°	sec	0.19	0.24	0.19	0.24		
	5th axis			0.48		0.46			
	4th axis			0.24	0.3	0.24	0.3		
	5th axis			see p. 29					
Radial run-out		on spindle ø	µm	6 / 3		6 / 3		6 / 3	
Axial run-out		on spindle end face	µm	6 / 3		6 / 3		6 / 3	
Parallelism		Spindle to base	µm/100mm	10 / 5		10 / 5		10 / 5	

* Speed reduction required ** with standard load *** Limited gear unit pitch diameter, at 1 rpm 5th axis optional with WMS, see p. 38

**** For calculation of the torque, see p. 57



TPD32-240V and TPD52-240V



Eccentric version for shorter travel

Labyrinth seal



Labyrinth seal
(cutaway view)

- Recommended for:
- Grinding operations
 - High coolant pressures
 - Extremely fine abrasive particles

Note: Simultaneous machining with the w/tilting axis must be avoided because of eccentricity.

Available combinations

	Dividing/indexing axis motor*	Swiveling/tilting axis motor
TPD32-300M	MOT.HW-A (MOT.ET-A)	See table below
TPD52-300M	MOT.HW-B (MOT.ET-B)	
TPD32-240V	MOT.HW-A (MOT.ET-A)	
TPD52-240V	MOT.HW-B (MOT.ET-B)	

* Motor data: see p. 25, motorization is confirmed whenever placing an order

Drive data of tilting axis

(based on standard load, see p. 56)

		Motors	Feed* [Nm]	Speed [rpm]	Cycle time*** [sec]	
					90°	180°
MAVILOR / MOVINOR **	TPD32-300M	MOT.MO-098EQN25.1	400	30	0.61	1.11
	TPD32-240V			25	0.73	1.33
FANUC	TPD32-300M	MOT.FA-4/5(HV)is(B,D).1	315	28	0.68	1.22
	TPD32-240V			25	0.76	1.36
MITSUBISHI 200V	TPD32-300M	MOT.MI-HG-105S	320	28	0.65	1.19
	TPD32-240V			25	0.73	1.33
MITSUBISHI 400V	TPD32-300M	MOT.MI-HG-H105S	320	28	0.65	1.19
	TPD32-240V			25	0.73	1.33
SIEMENS	TPD32-300M	MOT.SI-1FK2205-2A	400	30	0.62	1.12
	TPD32-240V			28	0.69	1.23

* at 1 rpm

** for Siemens / Heidenhain

*** without clamping

Important information

- The limit values as set out in the corresponding parameter list take precedence over the data and information provided in the main catalog (due to motor, drive enhancement and the respective machine CNC)
- Motor-independent data are optimum values at operating temperature
- Further details are available at www.lehmann-rotary-tables.com, under Download / Commissioning

Options (tilting axis)

Item no.	Description
GET.520-GEN	Increased gear precision *
SPL5xx-Lab	Spindle seal with labyrinth, integrated sealing air pressure control

* incl. increased radial and axial run-out 0.003 mm

Item no.

TPD32-240V-AB
Gear
Rotary axis position
Swing diameter
Size
Rotary table model* TPD

* Definition of terms, see p. 22/23

