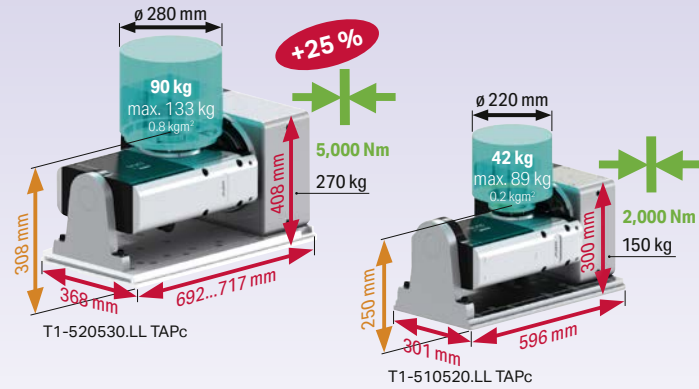


T1-Type Rotary Tables TAP (unclamped supporting bearing)



*optional



				T1-507510 TAP1(c)	T1-508510 TAP1(c)s	T1-510520 TAP2(c)	T1-511520 TAP2(c)s	T1-520530 TAP3(c)
Dimensions	Swivel ø	mm		180		220		280
	Swiveling range	degrees		90° +5°/-25° (optional 180° ±25°)				
	Center height	mm		180		210 (235 ³⁾)		218 (258 ³⁾)
	Total weight	kg	with motor	90 (85)		160 (150)		300 (270)
	Center bore	mm	Standard / increased	30		34		46 / 64
Bearing / Clamping	Max. clamping torque	Nm	4th axis	300	250	800	600	2,000
		Nm	5th axis	800		2,000		5,000
	Max. spindle load	kg	0°-30°	79		133		200
		kg	30°-90°	53		89		133
		kg	Standard load ¹⁾	17	12	42	21	90
	Max. axial force	kN	4th axis	6		10		40
Gear unit	Max. pull-out torque	Nm	4th axis	1,200		2,000		3,900
		Nm	5th axis	2,000		3,900		10,400
	Max. moment of inertia	kgm ²	Standard load ¹⁾	0.05	0.025	0.2	0.07	0.8
		kgm ²	J max	0.5	0.25	2	0.7	8
	Feed torque max ****	Nm	4th axis	120	70	250	150	440
		Nm	5th axis	250		440		650 opt. 850
	Gear unit loading	Nm	without load	-12		-22		-5
		Nm	with standard load	15	10	30	5	190
		Nm	M max	250		440		650
	Indexing accuracy Pa	± arc sec	4th axis ²⁾	20/12		17/10		12/8
Precision		± arc sec	5th axis (90°) ⁵⁾	35/20	35/22	21/22	21/13	11/38
	Repeat accuracy Ps average	± arc sec	4th axis			2		
		± arc sec	5th axis			2		
	Max speed at standard load	rpm	4th axis ¹⁾	111	210	80	160	50
		rpm	5th axis ¹⁾	60		40		30
Precision	Radial run-out ²⁾	µm	on spindle ø			6 / 3		
	Axial run-out ²⁾	µm	at spindle end face			6 / 3		
	Parallelism ²⁾	µm/100mm	Spindle to base			10 / 5		

¹⁾ Mutually dependent; for individual drive motor data, see right side

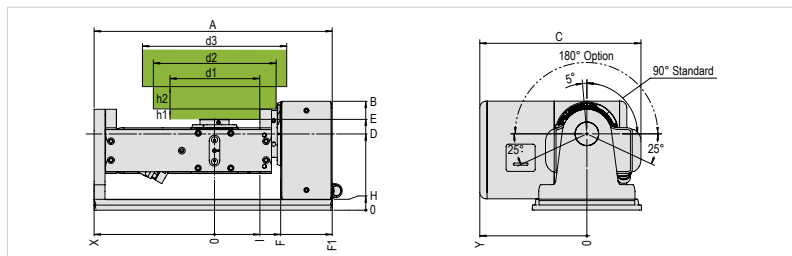
²⁾ Standard / increased; for measuring method and validity of the values, please refer to p. 50; for optional angular position measuring system please refer to p. 51

³⁾ In relation to dividing axis when in the horizontal position

⁴⁾ Limit value for gear unit, at 1 rpm

⁵⁾ Without load / with standard load 0°-90°

Dimensions



	A	A*	B	C	D	E	F	F1	H	I	R	X	Y	Y*	d1	d2	d3	h1	h2
TAP1	567		245	382	180	226	151	277	30	102	149	290	248	270	280	280	350	55	55
TAP1c	520		245	382	180	226	104	230	30	55	149	290	248	270	186	186	350	55	55
TAP2	656		300	469	210	250	182	324	30	125	173	332	295	320	248	340	400	34	69
TAP2c	596		300	469	210	250	122	264	30	65	173	332	295	320	128	220	400	34	69
TAP3	779	804	408	554	268	308	242	422	38	177	168	357	390		354	460	500	6	80
TAP3c	692	717	408	554	268	308	155	335	38	90	168	357	390		180	286	500	6	80

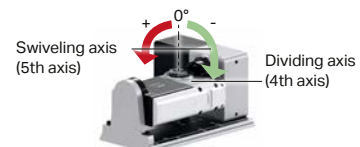
Dimensions with 508 or 511 identical to 507510 and 510520.

*With large motor (option)

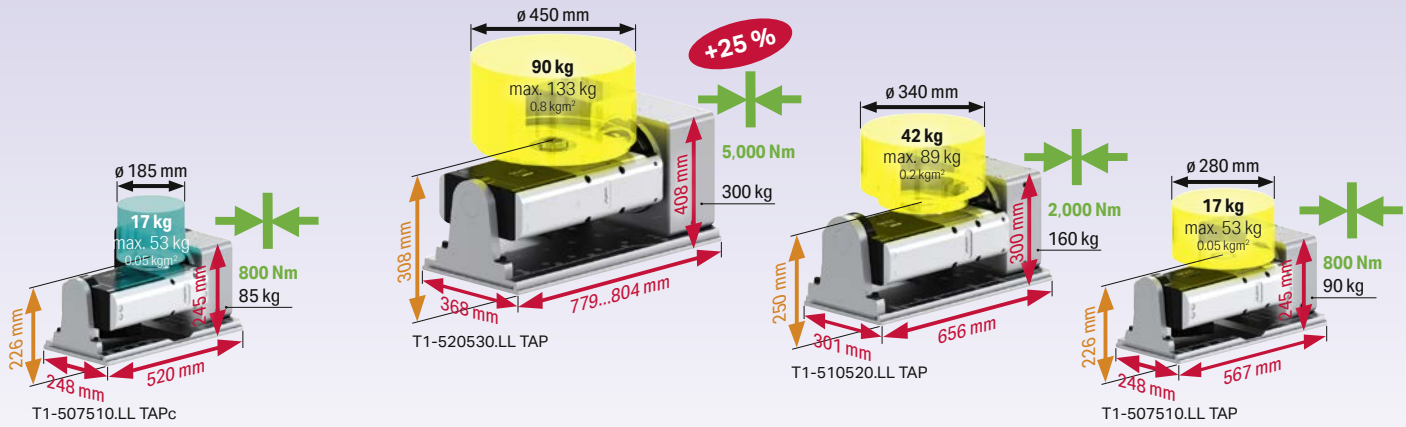
Important information

Center height increase (option)

Depending on the accessories involved (clamping cylinder, rotary union, angular position measuring system...), a center height increase (dimension D) is required. (See page for respective accessory)



T1-Type Rotary Tables TAP (unclamped supporting bearing)



Drive data

(based on standard load cube shown on pp. 102/103)

		Motors 4th/5th	Feed* [N/m]		Speed [rpm]		Cycle time*** [sec]		
			4.	5.	4.	5.	4.	5.	5.
MAVILOR / MOVINOR **	T1-507510 TAP1	BLS-072/BLS-072	120	230	111	70	0.26	0.43	0.39
	T1-508510 TAP1	BLS-072/BLS-072	70	230	210	70	0.23	0.43	0.29
	T1-510520 TAP2	BLS-072/BLS-073	250	425	80	45	0.30	0.50	0.49
	T1-510520 TAP2	BLS-072/LN-098	250	440	80	40	0.30	0.50	0.49
	T1-511520 TAP2	BLS-072/BLS-073	150	425	160	45	0.23	0.50	0.31
	T1-511520 TAP2	BLS-072/LN-098	150	440	160	40	0.23	0.50	0.31
FANUC	T1-520530 TAP3	BLS-073/LN-098	440	650	50	25	0.41	0.89	0.71
	T1-507510 TAP1	β1 is/α2 (HV)is	80	110	66.7	45	0.30	0.49	0.53
	T1-508510 TAP1	β1 is/α2 (HV)is	55	110	130	45	0.25	0.49	0.36
	T1-510520 TAP2	α2 (HV)is/α2 (HV)is	120	195	55	29	0.36	0.66	0.63
	T1-510520 TAP2	α2 (HV)is/α4 (HV)is	120	335	55	30	0.36	0.64	0.63
	T1-511520 TAP2	α2 (HV)is/α2 (HV)is	85	195	100	29	0.24	0.66	0.39
YASKAWA SGM7J	T1-511520 TAP2	α2 (HV)is/α4 (HV)is	85	335	100	30	0.24	0.64	0.39
	T1-520530 TAP3	α2 (HV)is/α4 (HV)is	210	395	33	20	0.54	0.94	0.99
	T1-520530 TAP3	α4 (HV)is/α8 (HV)is****	355	650	33	25	0.56	0.89	1.01
	T1-507510 TAP1	SGM7J 06/08	120	180	66	60	0.30	0.44	0.53
	T1-508510 TAP1	SGM7J 06/08	70	180	133	60	0.22	0.44	0.33
	T1-510520 TAP2	SGM7J 08/08	195	315	66.6	38	0.32	0.54	0.55
YASKAWA SGMJV	T1-511520 TAP2	SGM7J 08/08	135	315	133	38	0.22	0.54	0.33
	T1-520530 TAP3	on request							
	T1-507510 TAP1	SGMJV 04/08	115	180	66.7	60	0.30	0.44	0.53
	T1-508510 TAP1	SGMJV 04/08	70	180	130	60	0.22	0.44	0.33
	T1-510520 TAP2	SGMJV 08/08	195	315	66.7	38	0.32	0.54	0.55
	T1-511520 TAP2	SGMJV 08/08	140	315	133	38	0.21	0.54	0.32
MITSUBISHI 200V	T1-520530 TAP3	SGMJV/EV 08/15	335	650	40	25	0.46	0.89	0.84
	T1-507510 TAP1	HG56/75	120	170	60	45	0.32	0.49	0.57
	T1-508510 TAP1	HG56/75	70	170	110	45	0.22	0.49	0.36
	T1-510520 TAP2	HG75/105	185	430	50	30	0.37	0.59	0.67
	T1-511520 TAP2	HG75/105	130	430	100	30	0.24	0.59	0.39
	T1-520530 TAP3	HG105/104	440	650	32	20	0.54	0.94	1.01
MITSUB. 400 V	T1-510520 TAP2	HG-H75/H105	185	430	50	30	0.37	0.59	0.67
	T1-511520 TAP2	HG-H75/H105	130	430	100	30	0.24	0.59	0.39
	T1-520530 TAP3	HG-H105/H104	440	650	32	20	0.54	0.94	1.01
	T1-507510 TAP1	R2Ax 06040/08075	120	185	66.7	60	0.30	0.44	0.52
	T1-508510 TAP1	R2Ax 06040/08075	70	185	130	60	0.22	0.44	0.33
	T1-510520 TAP2	R2Ax 08075/08075	210	245	66.7	40	0.32	0.54	0.55
SANYO	T1-511520 TAP2	R2Ax 08075/08075	145	245	130	40	0.22	0.54	0.34
	T1-520530 TAP3	BL-ME24J-50SN/ BL-ME80J-40SN	300	650	27.5	25	0.61	0.89	1.15
	T1-507510 TAP1	1FK7042/ 1FK7062	435	650	50	25	0.44	0.89	0.74
	T1-508510 TAP1								
	T1-510520 TAP2								
	T1-511520 TAP2								

* At 1 rpm; for more, please refer to p. 108

*** Without clamping; for times, please refer to p. 118

** for Siemens / Heidenhain

**** not with 35iB

Item no.

T1-510520.LL TAP-F1	
Motor	F1=Fanuc is (200V), F2=Fanuc HV is (400V), M1=Movinor/Mavilor ERN, M2=Movinor/Mavilor EQN 1125, M3= Movinor/Mavilor EQN 1135, M13= Mitsubishi 200V, M14 Mitsubishi 400V, S2=Sanyo, Y2=Yaskawa SGMJV/SGMEV, Y4=Yaskawa SGM7J
Divider add-on version	
Swiveling axis motor position	L=left, R=right
Dividing axis motor position	L=left, R=right
Swiveling axis size	510, 520
Dividing axis size	507, 510, 520
Rotary table model	

For calculation of load, forces and torques, please see p. 104

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-dependent data are optimum values at operating temperature
- Further details are available at www.lehmann-rotary-tables.com, under Download / Commissioning



Labyrinth seal (cutaway view)

Recommended for:
+ grinding operations
+ high coolant pressures
+ extremely fine abrasive particles

Accessories

Motor, cable, angular position measuring system and pL CNC starting at p. 52.
Accessories starting at p. 44

Options

Item no.	Description
GET.5xx-GEN	Increased gear precision ¹⁾
GEO.5xx-GEN	Incr. geometric precision, 1/2 standard tolerance
SPI.5xx-Lab ²⁾	Spindle seal with labyrinth, integrated sealing air pressure control
MOT.520-LNG	long motor housing
SWB.510-180	Tilting range max. 230°; set to 180° (SWB.530 center height increase required)
SWB.520-180	
SWB.530-180	

1) incl. lower radial and axial run-out 0.003 mm

2) for 507/510: HSK and ripas clamping not possible manually, GET.5xx-GEN and GEO.5xx-GEN only partly possible (increased radial and axial run-out cannot always be reached)

Suitable alignment elements

Item no.	Designation	Slot width
AUR.IX-12		12g6
AUR.IX-14	Alignment pin lineFIX, 1 pair	14g6
AUR.IX-16		16g6
AUR.IX-18		18g6

For lineFIX, refer to p. 64