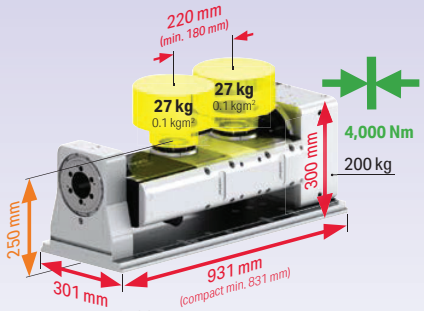
T2

T3

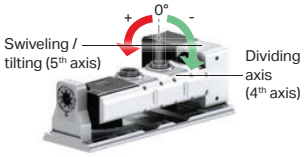


T2-510520.LL TOP(c)

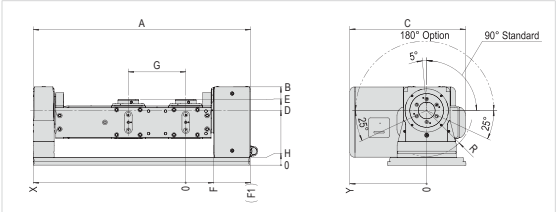
= Dividing axis for High Series (high speed, high resistance)

					T2-507510 (508510) TOP1.2(s)	T2-510520 (511520) TOP2.2(s)	T3-507510 (508510) TOP1.3(s)	T3-510520 (511520) TOP2.3(s)
Dimensions	Swivel ø			mm	160	220	160	220
	Spindle distance			mm	160	220	160	220
	Center height			mm	190	220	190	220
	Total weight	with motor		kg	115	200	137	245
	Center bore			mm	31	34	31	34
Bearing / Clamping	Max. clamping torque	4th axis		Nm	300 (250)	800 (600)	300 (250)	800 (600)
		5th axis		Nm	1,100	4,000	1,100	4,000
	Max spindle load per spindle	0°–30°		kg	2x40	2x67	3x27	3x44
		30°–90°		kg	2x27	2x45	3x18	3x30
		Standard load [1]		kg	2x12 (2x7.5)	2x27 (2x14)	3x9 (3x6)	3x21 (3x11)
	Max. axial force	4th axis per spindle		kN	12	20	12	20
	Max. pull-out torque	4th axis		Nm	1,200	2,000	1,200	2,000
		5th axis		Nm	2,000	3,900	2,000	3,900
Gear unit	Max. moment of inertia	Standard load [1]		kgm²	0.05 (0.025)	0.2 (0.07)	0.05 (0.025)	0.21 (0.07)
		J max		kgm²	0.5 (0.25)	2 (0.7)	0.5 (0.25)	2 (0.7)
	Feed torque max [3]	4th axis		Nm	120 (70)	190 (140)	120 (70)	150 (120)
		5th axis		Nm	230	440	230	440
	Limited torques due to eccentric loads (acting on the tilting axis) [5]			Nm	40	110	40	110
	Gear unit loading 5th Axis	without load		Nm	-20	-33	-22	-45
		with standard load		Nm	18 (16)	30 (8)	22 (20)	25 (13)
		M max		Nm	250	440	250	440
	Indexing accuracy Pa	4th axis [2]		± arc sec	20	17	20	17
		5th axis (90°) [4]		± arc sec	45/20 (45/29)	26/22 (26/15)	56/28 (56/30)	30/20 (30/18)
	Repeat accuracy Ps average	4th axis		± arc sec	2			
		5th axis		± arc sec	2			
	Max speed at standard load	4th axis [1]		min⁻¹	90 (170)	70 (105)	70 (120)	40 (50)
		5th axis [1]		min⁻¹	60	40	60	40
Precision	Radial run-out [2]	on spindle ø		µm	6 / 3			
	Axial run-out [2]	at spindle end face		µm	6 / 3			
	Parallelism [2]	Spindle to base		µm/100 mm	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. 80**, for optional angular position measuring systems, please refer to **p. 82/83**
[3] Limit value for gear unit, at 1 rpm
[4] Without load / with standard load 0°–90°
[5] For torque calculation, see **p. 120**



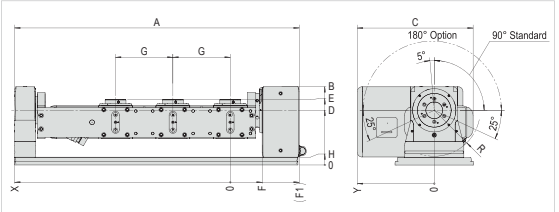
Dimensions



	A	B	C	D	E	F	F1	G	G2*	H	R	X	Y
T2-507510	766	245	382	180	226	151	230	160	130	30	136	489	248
T2-510520	931	300	469	210	250	182	264	220	180	30	177	571	295

Dimensions with 508 or 511 identical to 507510 and 510520.
* Minimum possible spindle distance (option)

Compact Versions: Dimension A, F and X
507510: 47 mm shorter, 510520: 60 mm shorter



	A	B	C	D	E	F	F1	G	G2*	H	R	X	Y
T3-507510	896	245	382	180	226	151	230	160	130	30	136	658	248
T3-510520	1111	300	469	210	250	182	264	220	180	30	177	791	295

Raised center height (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)

Item no. as on TOP. Instead of «T1», however, «T2» or «T3».

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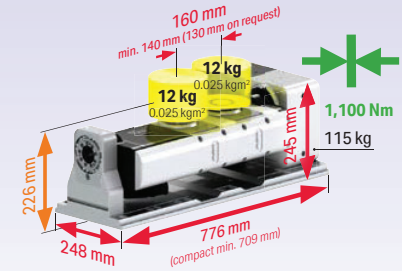
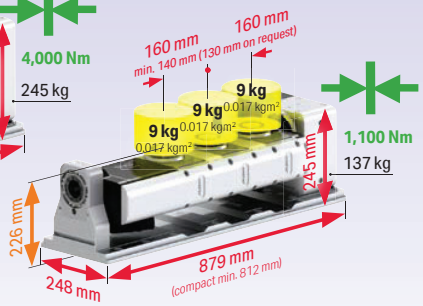


T2-507510.LL TOP(c)

T3-510520.LL TOP(c)



T3-507510.LL TOP(c)

Drive data

(based on standard load cube shown on **pp. 118/119**)

		Motors 4th/5th	Feed* [Nm] 4th	Feed* [Nm] 5th	Speed [rpm] 4th	Speed [rpm] 5th	Cycle time*** [sec] 90° 4th	Cycle time*** [sec] 90° 5th	Cycle time*** [sec] 180° 4th	Cycle time*** [sec] 180° 5th
MAVILOR / MOVINOR **	T2-507510 TOP1.2	BLS-072/BLS-072	120	230	90	60	0.32	0.44	0.48	0.69
	T2-508510 TOP1.2(s)	BLS-072/BLS-072	70	230	170	60	0.27	0.44	0.35	0.69
	T2-510520 TOP2.2	BLS-072/BLS-073	190	425	80	45	0.32	0.54	0.54	0.87
	T2-510520 TOP2.2	BLS-072/LN-098	190	440	80	40	0.32	0.52	0.54	0.89
	T2-511520 TOP2.2(s)	BLS-072/BLS-073	140	425	105	45	0.25	0.54	0.40	0.87
	T2-511520 TOP2.2(s)	BLS-072/LN-098	140	440	105	40	0.25	0.52	0.40	0.89
	T3-507510 TOP1.3	BLS-072/BLS-072	120	230	70	60	0.34	0.50	0.55	0.75
	T3-508510 TOP1.3(s)	BLS-072/BLS-072	70	230	120	60	0.27	0.50	0.39	0.75
	T3-510520 TOP2.3	BLS-072/BLS-073	150	425	40	40	0.48	0.57	0.85	0.94
	T3-510520 TOP2.3	BLS-072/LN-098	150	440	40	40	0.48	0.54	0.85	0.92
	T3-511520 TOP2.3(s)	BLS-072/BLS-073	120	425	50	40	0.36	0.57	0.66	0.94
	T3-511520 TOP2.3(s)	BLS-072/LN-098	120	440	50	40	0.36	0.54	0.66	0.92
FANUC	T2-507510 TOP1.2	β1 is/α2 (HV)is	65	110	60	40	0.37	0.61	0.62	0.98
	T2-508510 TOP1.2(s)	β1 is/α2 (HV)is	40	110	90	40	0.34	0.61	0.50	0.98
	T2-510520 TOP2.2	α2 (HV)is/α2 (HV)is	95	195	45	28	0.45	0.69	0.78	1.23
	T2-510520 TOP2.2	α2 (HV)is/α4 (HV)is	95	335	45	30	0.45	0.66	0.78	1.16
	T2-511520 TOP2.2(s)	α2 (HV)is/α2 (HV)is	80	195	70	28	0.33	0.69	0.55	1.23
	T2-511520 TOP2.2(s)	α2 (HV)is/α4 (HV)is	80	335	70	30	0.33	0.66	0.55	1.16
	T3-507510 TOP1.3	β1 is/α2 (HV)is	30	110	30	40	0.57	0.69	1.07	1.06
	T3-510520 TOP2.3	α4 (HV)is/α4 (HV)is	195	335	35	29	0.58	0.68	1.01	1.19
YASKAWA SGM7J	T2-507510 TOP1.2	SGM7J 06/08	120	180	65	55	0.35	0.48	0.58	0.75
	T2-508510 TOP1.2(s)	SGM7J 06/08	70	180	120	55	0.23	0.48	0.36	0.75
	T2-510520 TOP2.2	SGM7J 08/08	145	315	50	38	0.40	0.56	0.70	0.95
	T2-511520 TOP2.2(s)	SGM7J 08/08	110	315	90	38	0.28	0.56	0.45	0.95
	T3-507510 TOP1.3	SGM7J 06/08	120	180	50	50	0.39	0.52	0.69	0.82
	T3-508510 TOP1.3(s)	SGM7J 06/08	70	180	95	50	0.28	0.52	0.43	0.82
	T3-510520 TOP2.3	SGM7J 08/08	105	315	35	35	0.54	0.61	0.97	1.03
	T3-511520 TOP2.3(s)	SGM7J 08/08	85	315	60	35	0.38	0.61	0.63	1.03
YASKAWA SGMJV	T2-507510 TOP1.2	SGMJV 04/08	85	180	50	55	0.41	0.48	0.71	0.75
	T2-508510 TOP1.2(s)	SGMJV 04/08	65	180	85	55	0.31	0.48	0.49	0.75
	T2-510520 TOP2.2	SGMJV 08/08	145	315	50	38	0.40	0.56	0.70	0.95
	T2-511520 TOP2.2(s)	SGMJV 08/08	110	315	90	38	0.28	0.56	0.45	0.95
	T3-507510 TOP1.3	SGMJV 04/08	60	50	35	50	0.54	0.52	0.97	0.82
	T3-508510 TOP1.3(s)	SGMJV 04/08	50	180	55	50	0.39	0.52	0.66	0.82
	T3-510520 TOP2.3	SGMJV 08/08	105	315	35	35	0.54	0.61	0.97	1.03
	T3-511520 TOP2.3(s)	SGMJV 08/08	85	315	60	35	0.38	0.61	0.63	1.03
MITSUBISHI	T2-507510 TOP1.2	HG56/75	100	170	40	45	0.43	0.51	0.81	0.85
	T2-508510 TOP1.2(s)	HG56/75	70	170	80	45	0.29	0.51	0.48	0.85
	T2-510520 TOP2.2	HG-(H)75/(H)105	135	430	45	30	0.40	0.63	0.73	1.13
	T2-511520 TOP2.2(s)	HG-(H)75/ (H)105	100	430	80	30	0.30	0.63	0.49	1.13
	T3-507510 TOP1.3	HG56/75	75	170	35	40	0.48	0.57	0.91	0.94
	T3-508510 TOP1.3(s)	HG56/75	65	170	65	40	0.37	0.57	0.60	0.94
	T3-510520 TOP2.3	HG-(H)75/(H)105	95	430	25	30	0.64	0.64	1.24	1.14
	T3-511520 TOP2.3(s)	HG-(H)75/(H)105	80	430	35	30	0.48	0.64	0.91	1.14
SANYO	T2-507510 TOP1.2	R2Ax 06040/08075	95	185	55	55	0.37	0.48	0.64	0.75
	T2-508510 TOP1.2(s)	R2Ax 06040/08075	70	185	100	55	0.30	0.48	0.45	0.75
	T2-510520 TOP2.2	R2Ax 08075/08075	145	245	50	40	0.39	0.57	0.69	0.94
	T2-511520 TOP2.2(s)	R2Ax 08075/08075	135	245	90	40	0.28	0.57	0.45	0.94
	T3-507510 TOP1.3	R2Ax 06040/08075	70	185	40	50	0.48	0.52	0.85	0.82
	T3-508510 TOP1.3(s)	R2Ax 06040/08075	60	185	65	50	0.35	0.52	0.58	0.85
	T3-510520 TOP2.3	R2Ax 08075/08075	110	245	35	35	0.54	0.61	0.97	1.03
	T3-511520 TOP2.3(s)	R2Ax 08075/08075	120	245	60	35	0.35	0.61	0.60	1.03
SIEMENS	T2-507510 TOP1.2	1FK2203/1FK2204	60	150	45	45	0.43	0.51	0.77	0.85
	T2-508510 TOP1.2(s)	1FK2203/1FK2204	50	150	80	45	0.34	0.51	0.53	0.85
	T2-510520 TOP2.2	1FK2204/1FK2205	110	425	50	30	0.42	0.61	0.72	1.11
	T2-511520 TOP2.2(s)	1FK2204/1FK2205	85	425	90	30	0.28	0.61	0.45	1.11
	T3-507510 TOP1.3	1FK2203/1FK2204	40	150	30	40	0.62	0.61	1.12	0.98
	T3-508510 TOP1.3(s)	1FK2203/1FK2204	40	150	50	40	0.48	0.61	0.78	0.98
	T3-510520 TOP2.3	1FK2204/1FK2205	70	425	35	30	0.57	0.64	1.00	1.14
	T3-511520 TOP2.3(s)	1FK2204/1FK2205	65	425	55	30	0.41	0.64	0.68	1.14

* At 1 rpm; for more, please refer to **p. 124**
** for Siemens / Heidenhain
*** Without clamping; for times, please refer to **p. 138**

For calculation of load, forces and torques, please see **p. 120**

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

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. 82**.
Accessories starting at **p. 72**

Options

Item no.	Description
GEO.5xx-GEN	Incr. geometric precision, ½ standard tolerance
SPI.5xx-Lab [1] (for 5th axis)	Spindle seal with labyrinth, integrated sealing air pressure control
SPI.5xx-Lab-x2 [1] (for 4th axis)	Spindle seal with labyrinth, integrated sealing air pressure control, for 2 spindles
SPI.5xx-Lab-x3 [1] (for 4th axis)	Spindle seal with labyrinth, integrated sealing air pressure control, for 3 spindles
SWB.510-180	Tilting range increase from 90° to 180° (with overshoot to max. 230°)
SWB.520-180	

[1] 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 achieved)

Suitable alignment elements

Item no.	Designation	Slot width	Weight [kg]
AUR.iX-12	**lineFIX** alignment pin, 1 pair	12g6	
AUR.iX-14		14g6	0.03
AUR.iX-16		16g6	0.03
AUR.iX-18		18g6	0.03

For **lineFIX**, refer to **p. 96**