

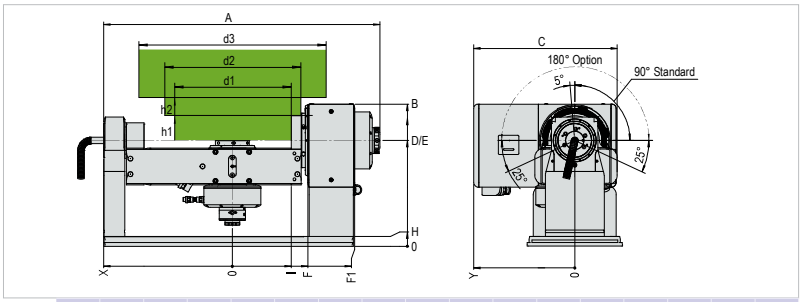
*optional

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

					T1-510520 TGR2	T1-511520 TGR2s (on request)	T1-520530 TGR3	T1-521530 TGR3s
Dimensions	Swivel ø			mm	305		335	
	Swiveling range			degrees	90° +5°/-25° (optional 180° ±25°)			
	Center height			mm	348		408	
	Total weight	with motor		kg	300		520	
	Center bore	Standard / increased		mm	34		46 / 64	
Bearing / Clamping	Max. clamping torque	4th axis		Nm	800	600	2,000	1,800
		5th axis		Nm	4,000		7,000	
	Max. spindle load	0°–30°		kg	135		200	
		30°–90°		kg	90		160	
		Standard load [1]		kg	90	22	160	61
	Max. axial force	4th axis		kN	10		40	
	Max. pull-out torque	4th axis		Nm	2,000		3,900	
		5th axis		Nm	3,900		10,400	
Gear unit	Max. moment of inertia	Standard load [1]		kgm²	0.8	0.07	2.0	0.4
		J max		kgm²	2	0.7	8	4
	Feed torque max [3]	4th axis		Nm	250	150	440	220
		5th axis		Nm	440		650	
	Limited torques due to eccentric loads [5]			Nm	110		280	
	Gear unit loading 5th axis	without load		Nm	-105		-160	
		with standard load		Nm	-86	-15	100	-60
		M max		Nm	440		650	
	Indexing accuracy Pa	4th axis [2]		± arc sec	17/10		12/8	
		5th axis (90°) [4]		± arc sec	49/18	49/42	31/25	31/22
	Repeat accuracy Ps average	4th axis		± arc sec	2			
		5th axis		± arc sec	2			
	Max speed at standard load	4th axis [1]		min⁻¹	80	160	50	100
		5th axis [1]		min⁻¹	35		25	
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. 74**, for optional angular position measuring systems, please refer to **p. 76/77**
[3] Limit value for gear unit, at 1 rpm
[4] Without load / with standard load 0°–90°
[5] For torque calculation, see **p. 112**

Dimensions

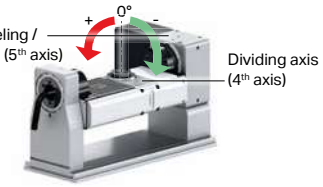


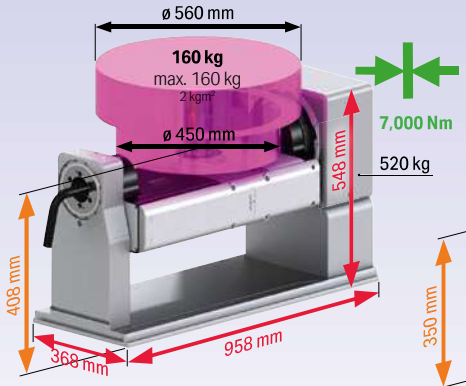
	A	B	C	D	E	F	F1	H	I	R	X	Y	d1	d2	d3	h1	h2
TGR2	928	440	469	350	350	232	374	38	175	196	437	320	352	456	680	56	206
with WMS7:	458																
TGR3	1056	548	554	408	408	292	472	38	227	226	487	390	452	556	800	96	206

Dimensions with 511 or 521 identical to 510520 and 520530.

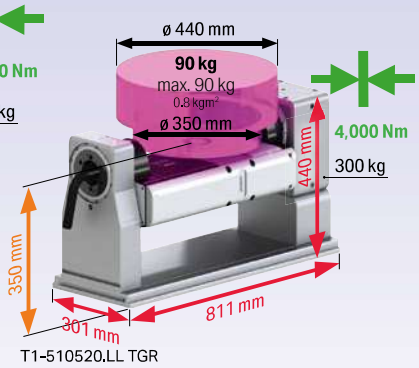
Important information

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)





T1-520530.LL TGR



T1-510520.LL TGR

Drive data

(based on standard load cube shown on **pp. 110/111**)

		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
M AVILOR MOVINOR**	T1-510520 TGR2	BLS-072/LN-098	250	440	65	35	0.45	0.71	0.68	1.14
	T1-511520 TGR2	BLS-072/LN-098	150	440	160	35	0.23	0.71	0.31	1.14
	T1-520530 TGR3	BLS-073/LN-098	425	650	45	25	0.50	0.89	0.83	1.49
	T1-520530 TGR3	BLS-098/LN-098	440	650	40	25	0.53	0.89	0.91	1.49
	T1-521530 TGR3	LN-098/ LN-098	220	650	90	25	0.27	0.89	0.43	1.49
FANUC	T1-510520 TGR2	α2 (HV)is/α4 (HV)is	120	335	45	27	0.51	0.86	0.84	1.41
	T1-511520 TGR2	α2 (HV)is/α4 (HV)is	85	335	100	27	0.24	0.86	0.39	1.41
	T1-520530 TGR3	α2 (HV)is/α4 (HV)is	210	395	28	22	0.66	0.97	1.19	1.65
	T1-520530 TGR3	α4 (HV)is/α8 (HV)is****	355	650	30	25	0.64	0.89	1.14	1.49
	T1-521530 TGR3	α4 (HV)is/α4 (HV)is	220	395	60	22	0.37	0.97	0.62	1.65
YASKAWA SGM7J	T1-510520 TGR2	SGM7J 08/08	195	315	60	30	0.46	0.81	0.71	1.31
	T1-511520 TGR2	SGM7J 08/08	135	315	133	30	0.22	0.81	0.33	1.31
	T1-520530 TGR3	on request								
	T1-521530 TGR3									
YASKAWA SGMJV	T1-510520 TGR2	SGMJV 08/08	195	315	60	30	0.46	0.81	0.71	1.31
	T1-511520 TGR2	SGMJV 08/08	140	315	133	30	0.21	0.81	0.32	1.31
	T1-520530 TGR3	SGMJV/EV 08/15	315	650	40	25	0.53	0.89	0.91	1.49
	T1-521530 TGR3	SGMJV/EV 08/15	220	650	80	25	0.28	0.89	0.46	1.49
MITSUBISHI	T1-510520 TGR2	HG-(H)75/(H)105	185	430	50	28	0.48	0.74	0.78	1.28
	T1-511520 TGR2	HG-(H)75/(H)105	130	430	100	28	0.24	0.74	0.39	1.28
	T1-520530 TGR3	HG-(H)105/(H)104	430	650	30	22	0.63	0.94	1.13	1.62
	T1-521530 TGR3	HG-(H)105/(H)104	220	650	60	22	0.43	0.94	0.59	1.62
SA-NYO	T1-510520 TGR2	R2Ax 08075/08075	210	245	60	25	0.46	0.97	0.71	1.57
	T1-511520 TGR2	R2Ax 08075/08075	145	245	130	25	0.22	0.97	0.34	1.57
SIEMENS	T1-510520 TGR2	1FK2204/1FK2205	150	425	60	25	0.46	0.79	0.71	1.39
	T1-511520 TGR2	1FK2204/1FK2205	105	425	90	25	0.44	0.79	0.61	1.39
	T1-520530 TGR3	1FK2205/FK2206	425	650	33	25	0.60	0.88	1.05	1.48
	T1-520530 TGR3	1FK7042/1FK7062	410	650	45	25	0.50	0.89	0.83	1.49
	T1-521530 TGR3	1FK2205/1FK2206	220	650	65	25	0.44	0.88	0.67	1.48
	T1-521530 TGR3	1FK7042/1FK7062	220	650	90	25	0.27	0.89	0.43	1.49

* At 1 rpm; for more, please refer to **p. 116**
** for Siemens / Heidenhain
*** Without clamping; for times, please refer to **p. 130**
**** not with 35iB

For calculation of load, forces and torques, please see **p. 112**

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. 76**. Accessories starting at **p. 68**

Options

Item no.	Description
GET.5xx-GEN	Increased gear precision [1]
GEO.5xx-GEN	Incr. geometric precision, ½ standard tolerance
SPI.5xx-Lab [2]	Spindle seal with labyrinth, integrated sealing air pressure control
SWB.520-180	Tilting range increase from 90° to 180° (with overshoot to max. 230°)
SWB.530-180	

[1] incl. lower radial and axial run-out of 0.003 mm
[2] for 507/510: HSK and ripas clamping not possible manually, GET.5xx-GEN and GEO.5xx-GEN only partly possible (lower radial and axial run-out cannot always be achieved)

Item no.

T1–510520.LL TGR–F1

Motor	F1=Fanuc is (200 V), F2=Fanuc HVis (400 V), M1=Movinor/Mavilor ERN, M2=Movinor/Mavilor EQN 1125, M3= Movinor/Mavilor EQN 1135, MI3= Mitsubishi 200V, MI4 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		

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

Included in the standard scope of delivery.
For **lineFIX**, refer to **p. 90**