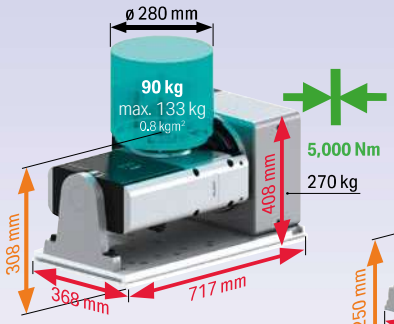
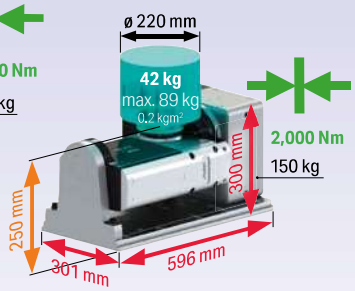


*optional



T1-520530.LL TAPc



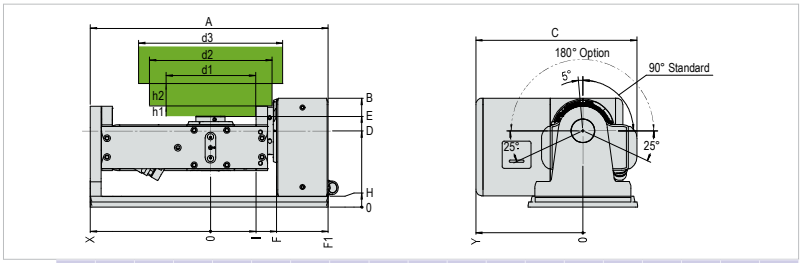
T1-510520.LL TAPc

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

					T1-507510 TAP1(c)	T1-508510 TAP1(c)s	T1-510520 TAP2(c)	T1-511520 TAP2(c)s	T1-520530 TAP3(c)	T1-521530 TAP3(c)s
Dimensions	Swivel ø			mm	180		220		195	
	Swiveling range			degrees	90° +5°/-25° (optional 180° ±25°)					
	Center height			mm	180		210 (235[3])		268 / 308	
	Total weight	with motor		kg	90 (85)		160 (150)		300 (270)	
	Center bore	Standard / increased		mm	30		34		46 / 64	
Bearing / Clamping	Max. clamping torque	4th axis		Nm	300	250	800	600	2,000	
		5th axis		Nm	800		2,000		5,000	
	Max. spindle load	0°–30°		kg	79		133		200	
		30°–90°		kg	53		89		133	
		Standard load [1]		kg	17	12	42	21	90	61
	Max. axial force	4th axis		kN	6		10		40	
	Max. pull-out torque	4th axis		Nm	1,200		2,000		3,900	
		5th axis		Nm	2,000		3,900		10,400	
Gear unit	Max. moment of inertia	Standard load [1]		kgm²	0.05	0.025	0.2	0.07	0.8	0.4
		J max		kgm²	0.5	0.25	2	0.7	8	4
	Feed torque max ****	4th axis		Nm	120	70	250	150	440	220
		5th axis		Nm	250		440		650	
	Limited torques due to eccentric loads [6]			Nm	40		110		280	
	Gear unit loading 5th Axis	without load		Nm	-12		-22		-44	
		with standard load		Nm	15	10	30	5	100	45
		M max		Nm	250		440		650	
	Indexing accuracy Pa	4th axis [2]		± arc sec	20/15		17/10		12/8	
		5th axis (90°) [5]		± arc sec	35/20	35/22	21/22	21/13	11/38	11/20
	Repeat accuracy Ps average	4th axis		± arc sec	2					
		5th axis		± arc sec	2					
	Max speed at standard load	4th axis [1]		min-1	111	210	80	160	50	100
		5th axis [1]		min-1	60		40		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. 72**, for optional angular position measuring systems, please refer to **p. 73**
[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°
[6] For torque calculation, see **p. 108**

Dimensions

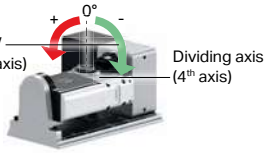


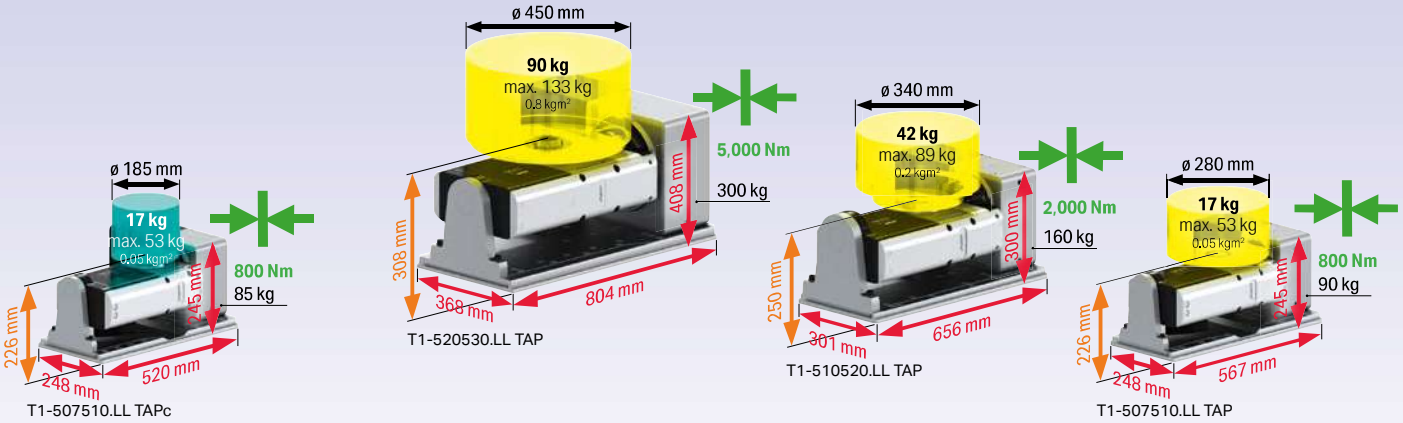
	A	B	C	C*	D	E	F	F1	H	I	R	X	Y	Y*	d1	d2	d3	h1	h2
TAP1	567	245	382	404	180	226	151	277	30	102	149	290	248	270		280	350		55
TAP1c	520	245	382	404	180	226	104	230	30	55	149	290	248	270		186	350		55
TAP2	656	300	444	469	210	250	182	324	30	125	173	332	295	320	248	340	400	30	95
TAP2c	596	300	444	469	210	250	122	264	30	65	173	332	295	320	128	220	400	30	95
TAP3	804	408	554		268	308	242	422	38	177	195	382	390		352	456	500	66	166
TAP3c	717	408	554		268	308	155	335	38	90	195	382	390		178	182	500	66	166

Dimensions with 508, 511 or. 521 identical to 507510, 510520 and 520530.
*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)





Drive data

(based on standard load cube shown on **pp. 106/107**)

			Feed* [Nm]		Speed [rpm]		Cycle time*** [sec] 90°		180°	
		Motors 4th/5th	4th	5th	4th	5th	4th	5th	4th	5th
MAVILOR / MOVINOR **	T1-507510 TAP1	BLS-072/BLS-072	120	230	111	70	0.26	0.43	0.39	0.64
	T1-508510 TAP1	BLS-072/BLS-072	70	230	210	70	0.23	0.43	0.29	0.64
	T1-510520 TAP2	BLS-072/BLS-073	250	425	80	45	0.30	0.50	0.49	0.83
	T1-510520 TAP2	BLS-072/LN-098	250	440	80	40	0.30	0.50	0.49	0.87
	T1-511520 TAP2	BLS-072/BLS-073	150	425	160	45	0.23	0.50	0.31	0.83
	T1-511520 TAP2	BLS-072/LN-098	150	440	160	40	0.23	0.50	0.31	0.87
	T1-520530 TAP3	BLS-073/LN-098	440	650	50	25	0.41	0.89	0.71	1.49
	T1-521530 TAP3	LN-098/ LN-098	220	650	90	25	0.27	0.74	0.43	1.34
FANUC	T1-507510 TAP1	β1 is/α2 (HV)is	80	110	66.7	45	0.30	0.49	0.53	0.83
	T1-508510 TAP1	β1 is/α2 (HV)is	55	110	130	45	0.25	0.49	0.36	0.83
	T1-510520 TAP2	α2 (HV)is/α2 (HV)is	120	195	55	29	0.36	0.66	0.63	1.18
	T1-510520 TAP2	α2 (HV)is/α4 (HV)is	120	335	55	30	0.36	0.64	0.63	1.14
	T1-511520 TAP2	α2 (HV)is/α2 (HV)is	85	195	100	29	0.24	0.66	0.39	1.18
	T1-511520 TAP2	α2 (HV)is/α4 (HV)is	85	335	100	30	0.24	0.64	0.39	1.14
	T1-520530 TAP3	α2 (HV)is/α4 (HV)is	210	395	33	20	0.54	0.94	0.99	1.69
	T1-520530 TAP3	α4 (HV)is/α8 (HV)is****	355	650	33	25	0.56	0.89	1.01	1.49
	T1-521530 TAP3	α4 (HV)is/ α4 (HV)is	220	355	60	22	0.37	0.84	0.62	1.52
YASKAWA SGM7J	T1-507510 TAP1	SGM7J 06/08	120	180	66	60	0.30	0.44	0.53	0.69
	T1-508510 TAP1	SGM7J 06/08	70	180	133	60	0.22	0.44	0.33	0.69
	T1-510520 TAP2	SGM7J 08/08	195	315	66.6	38	0.32	0.54	0.55	0.94
	T1-511520 TAP2	SGM7J 08/08	135	315	133	38	0.22	0.54	0.33	0.94
	T1-520530 TAP3	on request								
	T1-521530 TAP3	on request								
YASKAWA SGMJV	T1-507510 TAP1	SGMJV 04/08	115	180	66.7	60	0.30	0.44	0.53	0.69
	T1-508510 TAP1	SGMJV 04/08	70	180	130	60	0.22	0.44	0.33	0.69
	T1-510520 TAP2	SGMJV 08/08	195	315	66.7	38	0.32	0.54	0.55	0.94
	T1-511520 TAP2	SGMJV 08/08	140	315	133	38	0.21	0.54	0.32	0.94
	T1-520530 TAP3	SGMJV/EV 08/15	335	650	40	25	0.46	0.89	0.84	1.49
	T1-521530 TAP3	SGMJV/EV 08/15	220	650	80	25	0.28	0.34	0.46	1.34
MITSUBISHI	T1-507510 TAP1	HG56/75	120	170	60	45	0.32	0.49	0.57	0.83
	T1-508510 TAP1	HG56/75	70	170	110	45	0.22	0.49	0.36	0.83
	T1-510520 TAP2	HG-(H)75/(H)105	185	430	50	30	0.37	0.59	0.67	1.09
	T1-511520 TAP2	HG-(H)75/(H)105	130	430	100	30	0.24	0.59	0.39	1.09
	T1-520530 TAP3	HG-(H)105/(H)104	440	650	32	20	0.54	0.94	1.01	1.69
	T1-521530 TAP3	HG-(H)105/(H)104	220	650	60	22	0.34	0.82	0.59	1.50
SANYO	T1-507510 TAP1	R2Ax 06040/08075	120	185	66.7	60	0.30	0.44	0.52	0.69
	T1-508510 TAP1	R2Ax 06040/08075	70	185	130	60	0.22	0.44	0.33	0.69
	T1-510520 TAP2	R2Ax 08075/08075	210	245	66.7	40	0.32	0.54	0.55	0.92
	T1-511520 TAP2	R2Ax 08075/08075	145	245	130	40	0.22	0.54	0.34	0.92
SIEMENS	T1-510520 TAP2	1FK2204/1FK2205	150	425	65	30	0.33	0.59	0.56	1.09
	T1-511520 TAP2	1FK2204/1FK2205	105	425	130	30	0.22	0.59	0.33	1.09
	T1-520530 TAP3	1FK2205/1FK2206	425	650	33	25	0.53	0.74	0.98	1.34
	T1-520530 TAP3	1FK7042/1FK7062	435	650	50	25	0.44	0.89	0.74	1.49
	T1-521530 TAP3	1FK2205/1FK2206	220	650	65	25	0.30	0.74	0.53	1.34
	T1-521530 TAP3	1FK7042/1FK7062	220	650	90	25	0.27	0.74	0.43	1.34

* At 1 rpm; for more, please refer to **p. 112**
** for Siemens / Heidenhain
*** Without clamping; for times, please refer to **p. 126**
**** not with 35iB

For calculation of load, forces and torques, please see **p. 108**

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. 74**. Accessories starting at **p. 66**

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.510-180	Tilting range increase from 90° to 180° (with overshoot to max. 230°)
SWB.520-180	
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 TAP–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, S3=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

For **lineFIX**, refer to **p. 86**



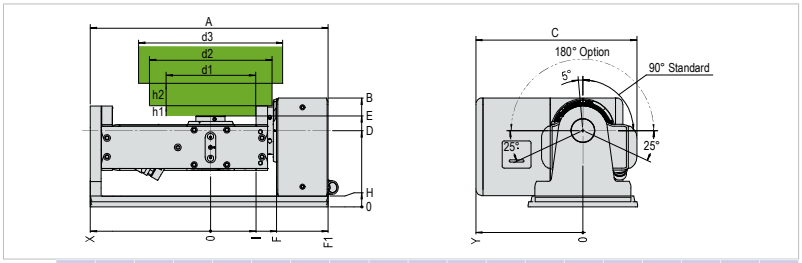
*optional

= High Series
(high speed, high resistance)

					T1-508511 TAP1(c)s	T1-511521 TAP2(c)s
Dimensions	Swivel ø			mm	180	220
	Swiveling range			degrees	90° +5°/-25° (optional 180° ±25°)	
	Center height			mm	180	210
	Total weight	with motor		kg	50	100
	Center bore	Standard / increased		mm	30	34
Bearing / Clamping	Max. clamping torque	4th axis		Nm	250	600
		5th axis		Nm	600	1'800
	Max. spindle load	0°–30°		kg	40	66
		30°–90°		kg	27	44
		Standard load [1]		kg	12	21
	Max. axial force	4th axis		kN	6	10
	Max. pull-out torque	4th axis		Nm	1,200	2,000
		5th axis		Nm	2,000	3,900
Gear unit	Max. moment of inertia	Standard load [1]		kgm²	0.025	0.07
		J max		kgm²	0.25	0.7
	Feed torque max ****	4th axis		Nm	70	150
		5th axis		Nm	130	210
	Limited torques due to eccentric loads [6]			Nm	30	45
	Gear unit loading 5th Axis	without load		Nm	-12	-22
		with standard load		Nm	10	5
		M max		Nm	150	230
	Indexing accuracy Pa	4th axis [2]		± arc sec	20/15	17/10
		5th axis (90°) [5]		± arc sec	35/22	21/13
	Repeat accuracy Ps average	4th axis		± arc sec	2	
		5th axis		± arc sec	2	
	Max speed at standard load	4th axis [1]		min⁻¹	210	160
		5th axis [1]		min⁻¹	80	50
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. 72**, for optional angular position measuring systems, please refer to **p. 73**
[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°
[6] For torque calculation, see **p. 108**

Dimensions

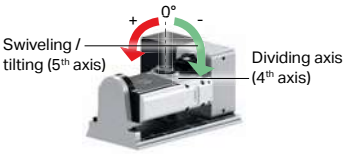


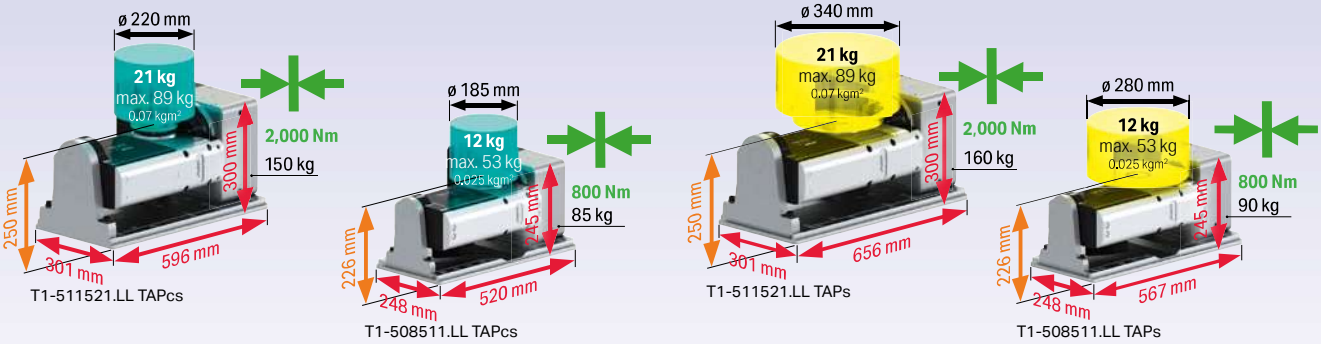
	A	B	C	C*	D	E	F	F1	H	I	R	X	Y	Y*	d1	d2	d3	h1	h2
TAP1	567	245	382	404	180	226	151	277	30	102	149	290	248	270		280	350		55
TAP1c	520	245	382	404	180	226	104	230	30	55	149	290	248	270		186	350		55
TAP2	656	300	444	469	210	250	182	324	30	125	173	332	295	320	248	340	400	30	95
TAP2c	596	300	444	469	210	250	122	264	30	65	173	332	295	320	128	220	400	30	95

Dimensions with 508, 511 or. 521 identical to 507510, 510520 and 520530.
*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)





Drive data

(based on standard load cube shown on **pp. 106/107**)

		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 **	T1-507511 TAP1	BLS-072/BLS-072	120	130	111	80	0.26	0.38	0.39	0.37
	T1-508511 TAP1	BLS-072/BLS-072	70	130	210	80	0.23	0.38	0.29	0.57
	T1-510521 TAP2	BLS-072/BLS-073	250	210	80	50	0.30	0.44	0.49	0.74
	T1-510521 TAP2	BLS-072/LN-098	250	210	80	50	0.30	0.44	0.49	0.74
	T1-511521 TAP2	BLS-072/BLS-073	150	210	160	50	0.23	0.44	0.31	0.74
	T1-511521 TAP2	BLS-072/LN-098	150	210	160	50	0.23	0.44	0.31	0.74
FANUC	T1-507511 TAP1	β1 is/α2 (HV)is	80	75	66.7	60	0.30	0.49	0.53	0.74
	T1-508511 TAP1	β1 is/α2 (HV)is	55	75	130	60	0.25	0.49	0.36	0.74
	T1-510521 TAP2	α2 (HV)is/α2 (HV)is	120	120	55	45	0.36	0.34	0.63	0.87
	T1-510521 TAP2	α2 (HV)is/α4 (HV)is	120	210	55	50	0.36	0.44	0.63	0.74
	T1-511521 TAP2	α2 (HV)is/α2 (HV)is	85	120	100	45	0.24	0.54	0.39	0.87
	T1-511521 TAP2	α2 (HV)is/α4 (HV)is	85	210	100	50	0.24	0.44	0.39	0.74
YASKAWA SGM7J	T1-507511 TAP1	SGM7J 06/08	120	120	66	70	0.30	0.30	0.53	0.61
	T1-508511 TAP1	SGM7J 06/08	70	120	133	70	0.22	0.30	0.33	0.61
	T1-510521 TAP2	SGM7J 08/08	195	205	66.6	50	0.32	0.44	0.55	0.74
	T1-511521 TAP2	SGM7J 08/08	135	205	133	50	0.22	0.44	0.33	0.74
YASKAWA SGMJV	T1-507511 TAP1	SGMJV 04/08	115	120	66.7	70	0.30	0.39	0.53	0.61
	T1-508511 TAP1	SGMJV 04/08	70	120	130	70	0.22	0.39	0.33	0.61
	T1-510521 TAP2	SGMJV 08/08	195	205	66.7	50	0.32	0.44	0.55	0.76
	T1-511521 TAP2	SGMJV 08/08	140	205	133	50	0.21	0.44	0.32	0.76
MITSUBISHI	T1-507511 TAP1	HG56/75	120	115	60	60	0.32	0.41	0.57	0.66
	T1-508511 TAP1	HG56/75	70	115	110	60	0.22	0.41	0.36	0.66
	T1-510521 TAP2	HG-(H)75/(H)105	185	210	50	50	0.37	0.44	0.67	0.74
	T1-511521 TAP2	HG-(H)75/(H)105	130	210	100	50	0.24	0.44	0.39	0.74
SANYO	T1-507511 TAP1	R2Ax 06040/08075	120	125	66.7	80	0.30	0.38	0.52	0.57
	T1-508511 TAP1	R2Ax 06040/08075	70	125	130	80	0.22	0.38	0.33	0.57
	T1-510521 TAP2	R2Ax 08075/08075	210	155	66.7	50	0.32	0.46	0.55	0.76
	T1-511521 TAP2	R2Ax 08075/08075	145	155	130	50	0.22	0.46	0.34	0.76
SIEMENS	T1-510521 TAP2	1FK2204/1FK2205	150	210	65	50	0.33	0.44	0.56	0.76
	T1-511521 TAP2	1FK2204/1FK2205	105	210	130	50	0.22	0.44	0.33	0.76

* At 1 rpm; for more, please refer to **p. 112**
** for Siemens / Heidenhain
*** Without clamping; for times, please refer to **p. 126**

For calculation of load, forces and torques, please see **p. 108**

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. 74**. Accessories starting at **p. 66**

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.510-180	Tilting range increase from 90° to 180° (with overshoot to max. 230°)
SWB.520-180	
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 TAP–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, S3=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

For **lineFIX**, refer to **p. 86**