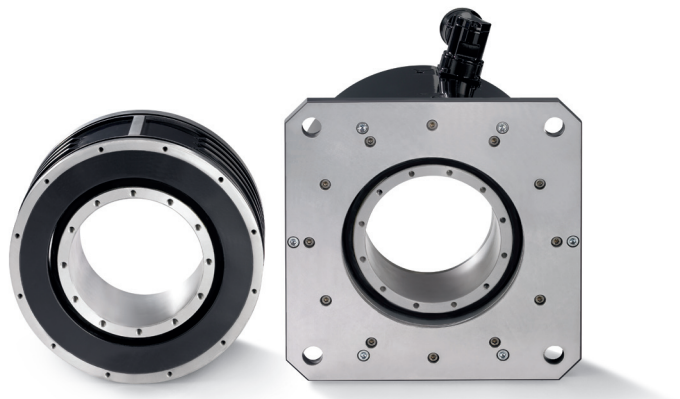


Motors and Gearboxes

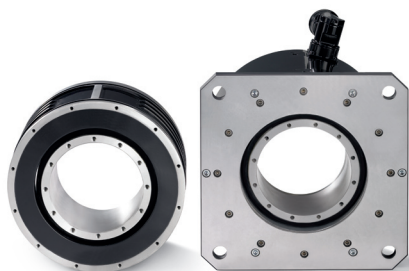
## Torque motors

# IndraDyn T - for maximum torque



**Torque motors ■ IndraDyn T - for maximum torque****Documentation**

- Project Planning Manual

**Powerful and direct**

- Maximum torques of up to 13,800 Nm
- Full torque even at standstill
- Extremely high overload capacity
- Liquid cooling with thermal encapsulation
- Easy to assemble

The IndraDyn T torque motors are liquid-cooled kit motors which have been optimized for high torques of up to 13,800 Nm. They consist of a stator with three-phase winding and a rotor with permanent magnets. Typical areas of application for these motors mainly include direct drives in rotary tables or swivel axes in machining centers.

However, they also offer innovative new approaches to solutions in mechanical engineering applications using robots, plastics processing machines, woodworking machines, lathes and special purpose machines. We can supply the motors with an optional preassembled assembly aid for quick and easy installation.

**Technical data****Electric data**

Type	Rated speed	Maximum speed	Rated torque	Maximum torque	Rated power	Rated current	Maximum current	Moment of inertia
	$n_N$	$n_{Max}$	$M_N$	$M_{Max}$	$P_N$	$I_N$	$I_{Max}$	J
	[1/min]	[1/min]	[Nm]	[Nm]	[kW]	[A]	[A]	[kgm <sup>2</sup> ]
MST130A-0200	2000	4000	9	15	1.88	7.5	16	0.0008
MST130C-0050	500	1200	25	40	1.31		12	0.0018
MST130C-0200	2000	3500			5.24	15.2	38	
MST130E-0020	200	700	42	65	0.88	7.5	12	0.0029
MST160A-0050	500	1000	35	90	1.83	6.5	20	0.0059
MST160C-0050			70	180	3.67	13	40	0.0108
MST160E-0050			105	270	5.5	19.5	60	0.0158
MST210A-0027	270	600	50	100	1.4	7	25	0.012
MST210C-0027			120	250	3.4	13	50	0.023
MST210C-0050	500	6.9			25	100		
MST210D-0070	700	1200	150	300	11	32	120	0.027
MST210E-0027	270	600	240	500	6.8	24	90	0.042
MST290B-0018	180	350	220	460	4.1	14.8	60	0.08
MST290D-0002	25	90	350	700	0.9	6.3	25	0.11
MST290D-0004	45	150			1.65	10.4	30	
MST290D-0018	180	350			6.6	26	100	

Motors and Gearboxes

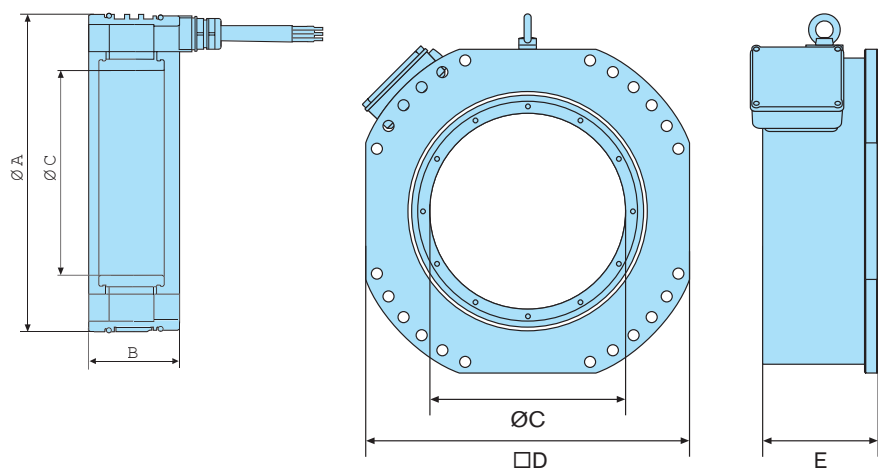
**Torque motors ■ IndraDyn T - for maximum torque****Electric data**

Type	Rated speed	Maximum speed	Rated torque	Maximum torque	Rated power	Rated current	Maximum current	Moment of inertia
	$n_N$	$n_{Max}$	$M_N$	$M_{Max}$	$P_N$	$I_N$	$I_{Max}$	$J$
	[1/min]	[1/min]	[Nm]	[Nm]	[kW]	[A]	[A]	[kgm <sup>2</sup> ]
MST290E-0004	40	130	575	1150	2.4	12.5	50	0.17
MST290E-0018	180	350			10.8	35	125	
MST360B-0018		330	375	900	7.1	20	70	0.19
MST360D-0012	120	250	525	1150	6.6	16.5	60	0.27
MST360D-0018	180	300			9.9	28	100	
MST360D-0045	450	800			24.7	71	165	
MST360E-0018	180	300	875	1900	16.5	42	141	0.44
MST450B-0012	120	250	540	1200	6.8	22	70	0.45
MST450D-0006	60	130	810	1800	5.1	18.8	50	0.64
MST450D-0012	120	250			10.2	33	100	
MST450E-0006	60	120	1400	3250	8.8	32	88	1.01
MST450E-0012	120	220			17.6	46	125	
MST530B-0010	100	200	800	1800	8.4	28.6	71	0.92
MST530C-0010		150	1200	2700	12.6	31.2	88	1.25
MST530E-0010		200	2100	4700	22	64	212	1.92
MST530G-0006	60	120	4200	9200	26.4	76	240	3.84
MST530G-0007	70	130			31	96	305	
MST530G-0010	100				44	116.8	350	
MST530L-0006	60	100	6300	13800	39.6	120	380	5.76
MST530L-0007	70				46.2	133	420	

All the specifications relate to operation with liquid cooling and 540 V DC bus voltage.

Mass values stator/rotor with open cooling jacket

Mass values depends on rotor version

**Dimensions**

Motors and Gearboxes

**Torque motors ■ IndraDyn T - for maximum torque**

Type	Ø A	B	Ø C	D	E	Weight							
	[mm]	[mm]	[mm]	[mm]	[mm]	Stator[kg]	Rotor[kg]						
MST130A-0200	150	63	60	0	0	2.4	0.65						
MST130C-0050		103				5.1	1.5						
MST130C-0200		143				7.7	2.21						
MST130E-0020		95				5.6	2.4						
MST160A-0050	180	145	80	0	0	9.6	4.3						
MST160C-0050		195				13.9	6.2						
MST160E-0050		75				7.2	3						
MST210A-0027	230	120	120	260	140	11.5	4.8						
MST210C-0027		150			185			13.8	5.8				
MST210C-0050		195			260	18.8	7.8						
MST210D-0070		105			200	385	172	20	9				
MST210E-0027		135					202			13.5	6.2		
MST290B-0018	310	195	200	385			262	25.1	11.6				
MST290D-0002		120					260	450	195	23	9.8		
MST290D-0004					150	225						28.8	13.5
MST290D-0018													
MST290E-0004					210	200						31	13
MST290E-0018		150			230	38.7	17.9						
MST360B-0018	480	210	350	570	290	54.2	27.7						
MST360D-0012		120			200	36	22						
MST360D-0018		150						230	45	27.5			
MST360D-0045		0									290	63	38.5
MST360E-0018		210											
MST450B-0012	565	120	410	645	605	205	115						
MST450D-0006		150						455	144	77			
MST450D-0012		210									200	36	22
MST450E-0006		0			230	45	27.5						
MST450E-0012		370						290	63	38.5			
MST530B-0010		120			455	144	77						
MST530C-0010		150						200	36	22			
MST530E-0010		210			230	45	27.5						
MST530G-0006	0	290	63	38.5									
MST530G-0007	370				455	144	77						
MST530G-0010	520	200	36	22									
MST530L-0006	565				410	645	605	205	115				
MST530L-0007		120	230	45						27.5			

**Bosch Rexroth AG**

Electric Drives and Controls

P.O. Box 13 57

97803 Lohr, Germany

Bgm.-Dr.-Nebel-Str. 2

97816 Lohr, Germany

Phone +49 9352-40-0

Fax +49 9352-40-4885

[www.boschrexroth.com/electrics](http://www.boschrexroth.com/electrics)

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