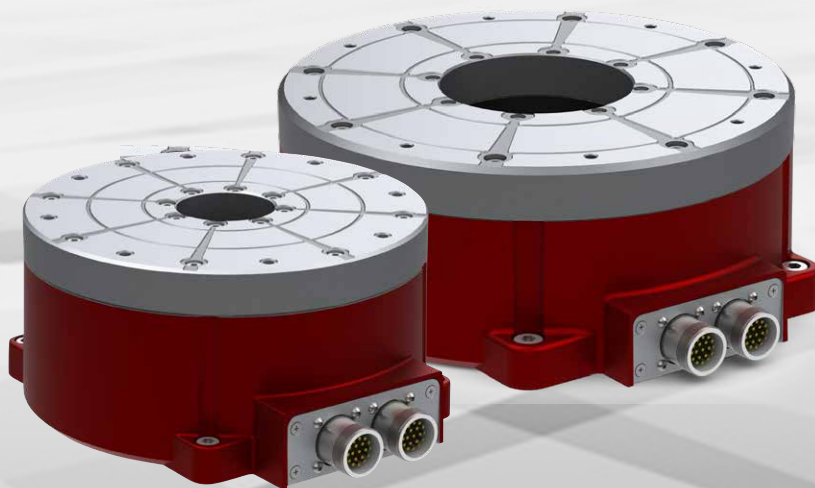


Torquemotors iTM 180 and iTM 240



Features

- energy efficient due to low losses
- ready to use in a ready-to-install housing
- hollow shafts for feed through
- convection cooling
- integrated measuring system
- tested in accordance to EC 73/23 / EEC, EN50178 and EN60204

Advantages of the torque motor

- high torques from zero speed
- small mounting space, due to „no gear required“
- play-free, robust, maintenance-free and quiet

Options

- absolute measuring system with BISS-C protocol
- clamping plate made of aluminium die-casting, Ø 250 mm and Ø 500 mm

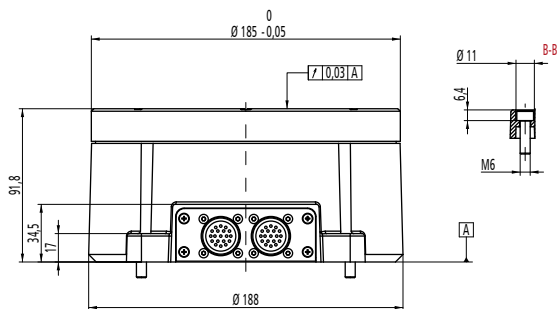
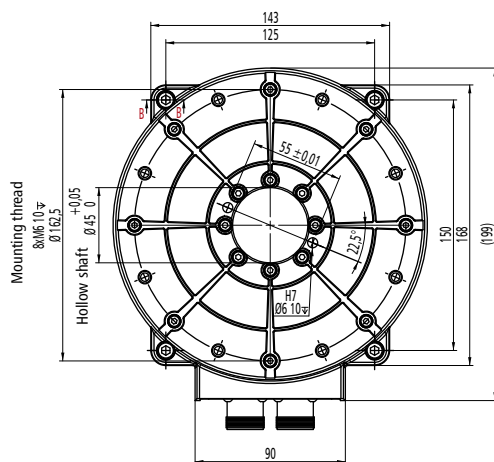
Application range

- Swiveling axes
- Rotary indexing plate
- Measurement technique
- Positioning

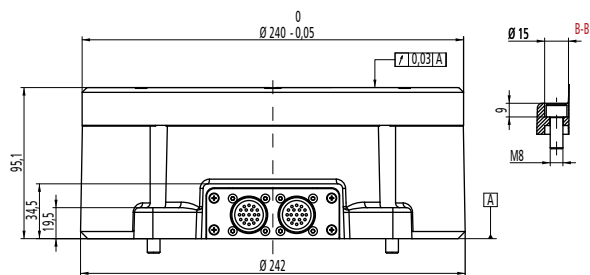
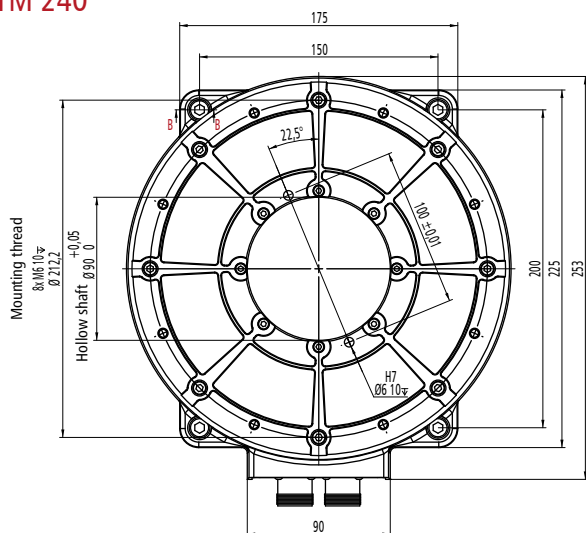
Technical Data

	iTM180-48V	iTM180-320V	iTM240-48V	iTM240-320V
rated voltage	48 VDC	320 VDC	48 VDC	320 VDC
rated current	7.4 A	1.3 A	8.8 A	1.8 A
rated power	350 W	350 W	425 W	475 W
rated torque	15 Nm	13 Nm	25 Nm	27 Nm
peak current	18.5 A	3.2 A	26.5 A	5.4 A
peak torque	38 Nm	32 Nm	75 Nm	75 Nm
rated speed	220 U/min	220 U/min	130 U/min	160 U/min
max. speed	260 U/min	250 U/min	155 U/min	200 U/min
coil resistance (phase-phase)	1.1 Ohm	21 Ohm	0.8 Ohm	14.8 Ohm
motor inductivity (phase-phase)	1.4 mH	66 mH	2 mH	60.6 mH
voltage constant	0.128 V/min ⁻¹	0.77 V/min ⁻¹	0.123 V/min ⁻¹	1.15 V/min ⁻¹
torque constant	2.11 Nm/A	10 Nm/A	2.83 Nm/A	15 Nm/A
poles	40	40	46	40
thermal protection	optional			
torque of inertia (rotational parts)	0.0085 kg/m ²	0.0085 kg/m ²	0.0114 kg/m ²	0.0114 kg/m ²
weight	8 kg		13 kg	
max. axle load / max. radial load	3100 N		4000 N	
IP protection class			IP40	
hollow shaft diameter	45 mm		90 mm	
axial run-out accuracy			0,05 mm	
length / width / height	199 / 188 / 92 mm		242 / 253 / 95 mm	

Dimensioned drawing iTM 180



iTM 240



integrated: incremental measurement / RS422

Type	RS422
channels	A, /A, B, /B, Z, /Z
rated voltage	5 VDC
hall channels	< 100 mA
Current consumption	0.4 - 0.7 mm
max. resolution (after quadrature)	iTM 180: standard 276,000 optional 2,260,000
increments/rev	iTM 240: standard 420,000 optional 3,440,000
Repeatability	± 1 Inkrement(e)
Positioning accuracy	270 arc/sec
Working temperature range	-5 up to +80 °C
Storage temperature range	-20 up to +100 °C

optional: absolute measuring system

interface	SSI, BiSS, SPI
rated voltage	5 VDC
resolution	max. 38 bit (1.048.576)

Ordering Data (Part No.)

	iTM180-48V	iTM180-320V	iTM240-48V	iTM240-320V
Torquemotor	267402 0048i	267401 0320i	267400 0048i	267400 0320i
Controller (MC1-20 / EC-Servo)	381518 0020	-	381518 0020	-
Controller (MC1-40 / EC-Servo)	-	381518 0040	-	381518 0040
Motor cable (M23 6-pol Stift / cable end sleeve)	392303 0x00	-	392303 0x00	-
Motor cable (M23 8 pin / M23 8 pin female)	-	392307 0x00	-	392307 0x00
Encoder cable (M23-17 pin connector / SubD15)	392325 0x00			