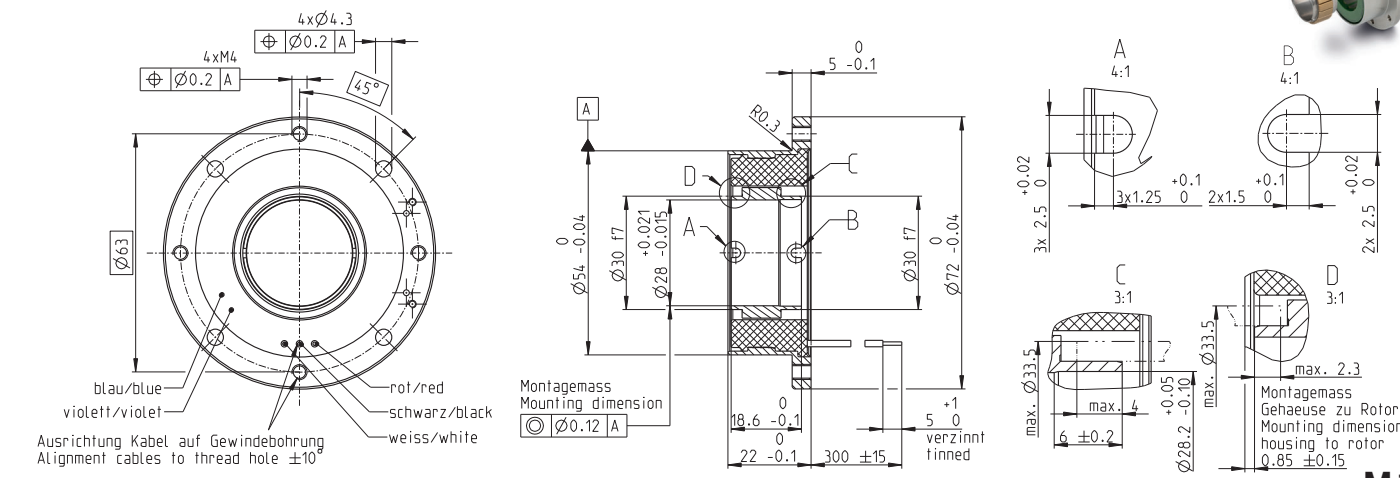


EC frameless DT 50 S Ø54 mm, brushless, 220 watt

Dynamic Torque



EC frameless DT



M 1:2

- Stock program
- Standard program
- Special program (on request)

Part numbers									

sensorless		734439						
Motor data								
Values at nominal voltage								
1	Nominal voltage	V	48					
2	No load speed	rpm	6650					
3	No load current	mA	150					
4	Nominal speed	rpm	5630					
5	Nominal torque	mNm	322					
6	Nominal current (max. continuous current)	A	4.35					
	Continuous torque with heat sink	mNm	379					
7	Stall torque	mNm	1890					
8	Stall current	A	81.2					
9	Max. efficiency	%	91.6					
Characteristics								
10	Terminal resistance phase to phase	Ω	0.591					
11	Terminal inductance phase to phase	mH	0.384					
12	Torque constant	mNm/A	68.5					
13	Speed constant	rpm/V	139					
14	Speed/torque gradient	rpm/mNm	1.2					
15	Mechanical time constant	ms	0.881					
16	Rotor inertia	gcm²	70					

Specifications	Operating range	Comments
Thermal data	220 W 734439	- Continuous operation - Continuous operation with reduced thermal resistance R_{th2} 50% - Intermittent operation - Assigned power rating
17 Thermal resistance housing-ambient		
18 Thermal resistance winding-housing		
19 Thermal time constant winding		
20 Thermal time constant motor		
21 Ambient temperature		
22 Max. winding temperature		
Mechanical data		
23 Max. speed		
Other specifications		
29 Number of pole pairs	10	
30 Number of phases	3	
31 Weight of motor (with mounting flange made of stainless steel)	218 g	
Weight for integration (without mounting flange)	116 g	

Values listed in the table are nominal.	Sensor 523_TSX 50 MAG with commutation signals	Motor Control 551_ESCON Module 50/5 553_ESCON 50/5 557_ESCON2 Micro 60/5 563_EPOS4 Micro 24/5 CAN 563_EPOS4 Micro 24/5 EtherCAT 564_EPOS4 Module 50/5 567_EPOS4 Compact 50/5 569_EPOS4 50/5 570_EPOS4 Disk 60/8 CAN 570_EPOS4 Disk 60/8 EtherCAT
Connection motor (Cable AWG 18) red Motor winding 1 black Motor winding 2 white Motor winding 3		
Connection NTC (Cable AWG 24) purple NTC blue NTC Resistance 25°C: 5 kΩ ±1%, beta (25–85°C): 3490 K		
Comment For Torque control data, refer to "Installation Manual" available on maxon online shop.	Variants maxon integration into customer housing on request Other coil designs on request	