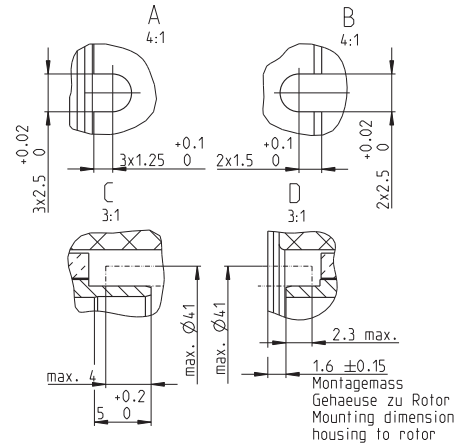
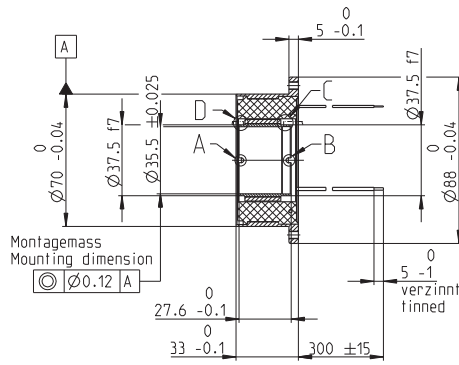
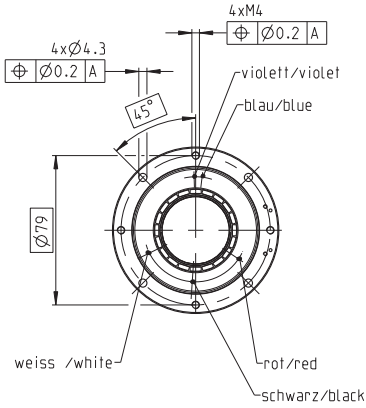


# EC frameless DT 65 M Ø70 mm, brushless, 210 watt

Dynamic Torque



EC frameless DT



M 1:4

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

## Part Numbers

without Hall sensors 783332

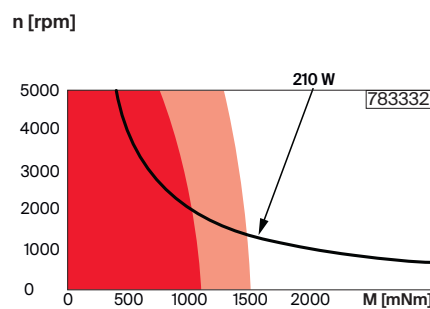
## Motor Data

Values at nominal voltage		
1	Nominal voltage	V 48
2	No load speed	rpm 2630
3	No load current	mA 151
4	Nominal speed	rpm 2200
5	Nominal torque	mNm 1120
6	Nominal current (max. continuous current)	A 5.91
7	Stall torque	mNm 7510
8	Stall current	A 104
9	Max. efficiency	% 92.4
Characteristics		
10	Terminal resistance phase to phase	Ω 0.463
11	Terminal inductance phase to phase	mH 0.774
12	Torque constant	mNm/A 173
13	Speed constant	rpm/V 55.1
14	Speed/torque gradient	rpm/mNm 0.147
15	Mechanical time constant	ms 0.43
16	Rotor inertia	gcm <sup>2</sup> 275

## Specifications

Thermal data		
17	Thermal resistance housing-ambient	3.42 K/W
18	Thermal resistance winding-housing	0.207 K/W
19	Thermal time constant winding	9.1 s
20	Thermal time constant motor	1250 s
21	Ambient temperature	-40...+100°C
22	Max. winding temperature	+155°C
Mechanical data		
23	Max. speed	5000 rpm
Other specifications		
29	Number of pole pairs	10
30	Number of phases	3
31	Weight of motor	524 g
	Weight of rotor	71 g
	Weight of stator (stainless steel flange)	453 g

## Operating Range



- Continuous operation
- Continuous operation with reduced thermal resistance  $R_{th2}$  50%
- Intermittent operation
- Assigned power rating

Values listed in the table are nominal.

### 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.

## Modular System

Sensor  
522\_TSX 65 MAG with Hall sensors

Motor Control  
552\_ES CON Module 50/8  
553\_ES CON 70/10  
563\_EPO S4 Module 50/8  
566\_EPO S4 Compact 50/8  
567\_EPO S4 70/15  
568\_EPO S4 Disk 60/8 C AN  
568\_EPO S4 Disk 60/8 EtherCAT

## Variants

- Aluminum flange (-121 g) on request
- Without flange: maxon integration on request