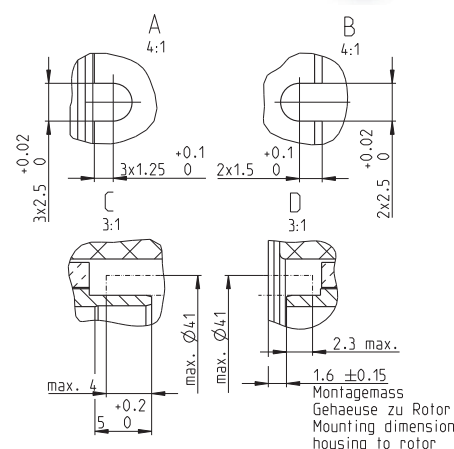
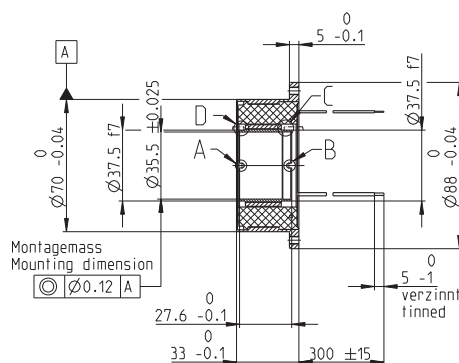
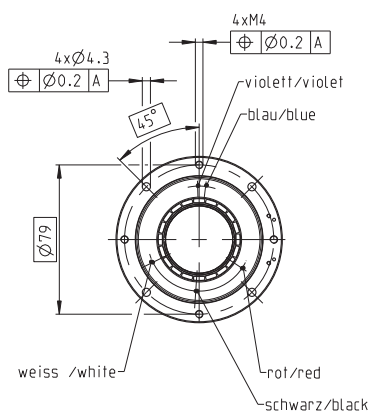


Dynamic Torque



EC frameless DT



M 1:4

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

Part numbers

[illegible]

Motor data

Values at nominal voltage									
1	Nominal voltage	V	48						
2	No load speed	rpm	2590						
3	No load current	mA	150						
4	Nominal speed	rpm	2170						
5	Nominal torque	mNm	1130						
6	Nominal current (max. continuous current)	A	5.87						
	Continuous torque with heat sink	mNm	1395						
7	Stall torque	mNm	5660						
8	Stall current	A	103						
9	Max. efficiency	%	92.4						
Characteristics									
10	Terminal resistance phase to phase	Ω	0.466						
11	Terminal inductance phase to phase	mH	0.779						
12	Torque constant	mNm/A	176						
13	Speed constant	rpm/V	54.2						
14	Speed/torque gradient	rpm/mNm	0.143						
15	Mechanical time constant	ms	0.41						
16	Rotor inertia	acm ²	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 (with mounting flange made of stainless steel)	524 g
	Weight for integration (without mounting flange)	332 g

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)

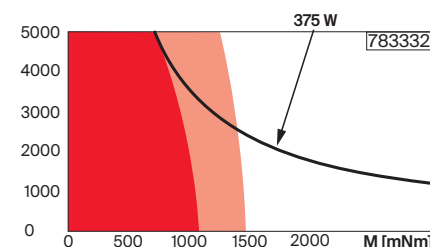
Resistance 25°C: 5 k Ω $\pm$ 1%, beta (25–85°C): 3490 K

Comment

For Torque control data, refer to "Installation Manual" available on maxon online shop.

Operating range

n [rpm]



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

Modular system

Sensor
524_TSX 65 MAG with
commutation signals

Motor Control

552_ESCON Module 50/8
553_ESCON 70/10
557_ESCON2 Micro 60/5
558_ESCON2 Module 60/12
559_ESCON2 Compact 60/12
565_EPOS4 Module 50/8
568_EPOS4 Compact 50/8
569_EPOS4 70/15
570_EPOS4 Disk 60/8 CAN
570_EPOS4 Disk 60/8 EtherCAT

Variants

maxon integration into customer housing on request
Other coil designs on request