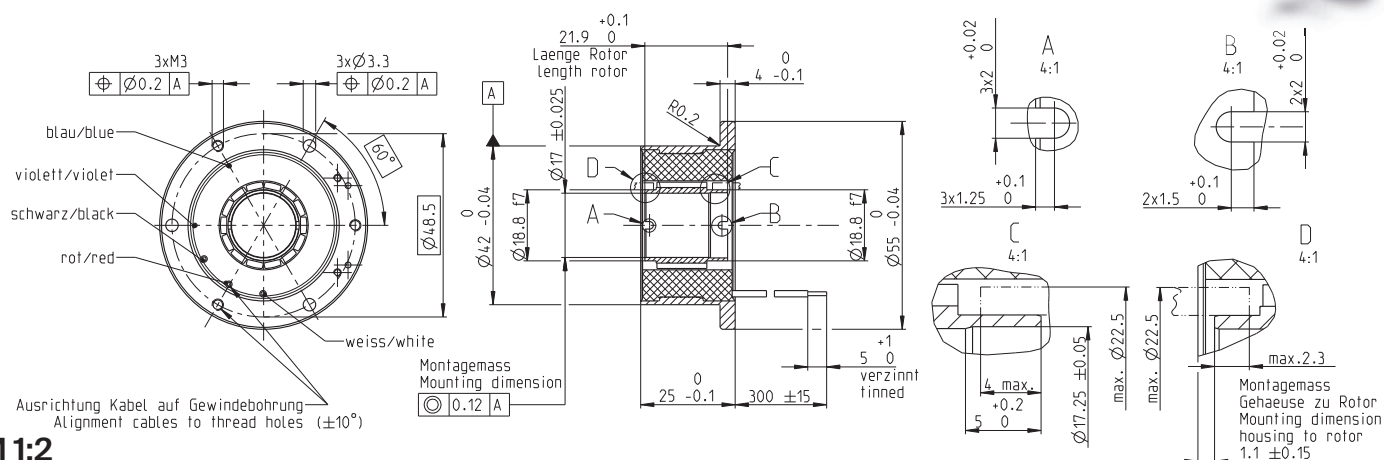


Dynamic Torque



EC frameless DT



M 1:2

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

Part numbers

[illegible]

Motor data

Values at nominal voltage			
1	Nominal voltage	V	24
2	No load speed	rpm	6290
3	No load current	mA	147
4	Nominal speed	rpm	5110
5	Nominal torque	mNm	186
6	Nominal current (max. continuous current)	A	4.7
	Continuous torque with heat sink	mNm	222
7	Stall torque	mNm	1150
8	Stall current	A	63.8
9	Max. efficiency	%	90.6
Characteristics			
10	Terminal resistance phase to phase	Ω	0.376
11	Terminal inductance phase to phase	mH	0.312
12	Torque constant	mNm/A	36.2
13	Speed constant	rpm/V	264
14	Speed/torque gradient	rpm/mNm	2.740
15	Mechanical time constant	ms	0.583
16	Rotor inertia	gcm ²	20.3

Specifications

Thermal data	
17 Thermal resistance housing-ambient	6.87 K/W
18 Thermal resistance winding-housing	0.33 K/W
19 Thermal time constant winding	3.38 s
20 Thermal time constant motor	574 s
21 Ambient temperature	-40...+100°C
22 Max. winding temperature	+155°C

The speed-torque diagram on the right shows a power limit of 240 W. A specific operating point is marked with a speed of 800948 rpm.

Mechanical data

23 Max. speed 15 000 rpm

Other specifications

29 Number of pole pairs 7

30 Number of phases 3

31 Weight of motor 169 g
(with mounting flange made of stainless steel)

Weight for integration 97 g
(without mounting flange)

5000
0

0 100 200 300 M [mNm]

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

Modular system Details on catalog page 5

Other specifications

29 Number of pole pairs	7	0 0 100 200 300 M [mNm] — Assigned power rating
30 Number of phases	3	
31 Weight of motor (with mounting flange made of stainless steel)	169 g	
Weight for integration (without mounting flange)	97 g	

Modular system

Details on catalog page 56

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)

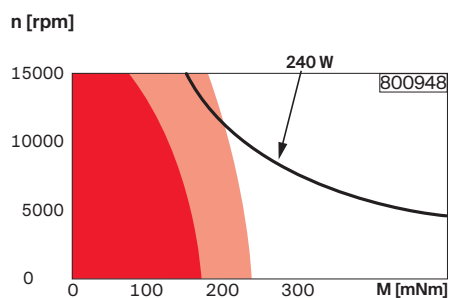
Resistance 25°C: 5 kΩ ±1%, beta (25–85°C): 3490 K

Comment

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

Operating range

Comments



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

Modular system

Details on catalog page 56

Sensor

522_TSX 38 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

Variants

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