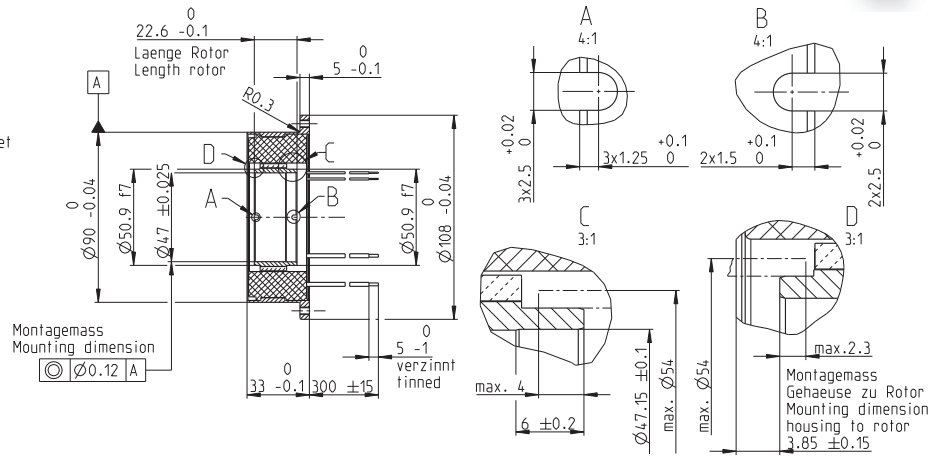
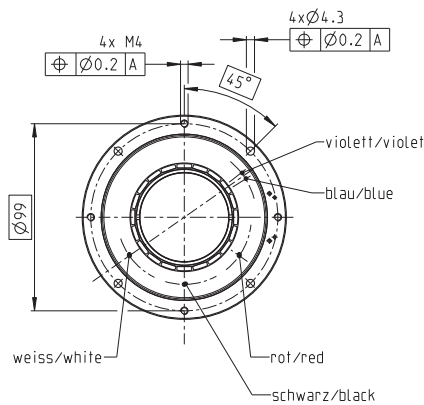


Dynamic Torque



EC frameless DT



M 1:4

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

Part numbers

sensorless	740953
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Motor data

Values at nominal voltage

1	Nominal voltage	V	48
2	No load speed	rpm	3410
3	No load current	mA	283
4	Nominal speed	rpm	2850
5	Nominal torque	mNm	1710
6	Nominal current (max. continuous current)	A	11.4
	Continuous torque with heat sink	mNm	2106
7	Stall torque	mNm	11500
8	Stall current	A	306
9	Max. efficiency	%	93.9
	Characteristics		
10	Terminal resistance phase to phase	Ω	0.16
11	Terminal inductance phase to phase	mH	0.367
12	Torque constant	mNm/A	134
13	Speed constant	rpm/V	71.4
14	Speed/torque gradient	rpm/mNm	0.084
15	Mechanical time constant	ms	0.57
16	Rotor inertia	gcm ²	650

Specifications

Thermal data

17 Thermal resistance housing-ambient	2.35 K/W
18 Thermal resistance winding-housing	0.3 K/W
19 Thermal time constant winding	21 s
20 Thermal time constant motor	810 s
21 Ambient temperature	-40...+100°C
22 Max. winding temperature	+155°C

Mechanical data

23 Max. speed 4000 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)	741 g
	Weight for integration (without mounting flange)	517 g

Values listed in the table are nominal.

Connection motor (Cable AWG 16)

red	Motor winding 1
black	Motor winding 2
white	Motor winding 3

Connection NTC (Cable AWG 24)

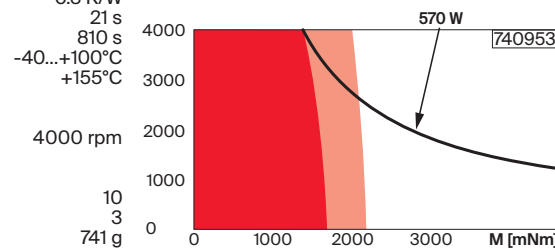
Connection NTC (Cable AWG 24)
purple NTC
blue NTC
Resistance 25°C: 5 kΩ ±1%, beta (25–85°C):
3490 K

Comment

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_{thz} 50%
 Intermittent operation
 Assigned power rating

Modular system

Sensor
525_TSX 85 MAG with
commutation signals

Motor Control

553_ESCON 70/10
557_ESCON2 Micro 60/5
558_ESCON2 Module 60/30
559_ESCON2 Compact 60/12
559_ESCON2 Compact 60/30
565_EPOS4 Module 50/15
569_EPOS4 Compact 50/15
569_EPOS4 70/15
570_EPOS4 Disk 60/8 CAN
570_EPOS4 Disk 60/8 EtherCAT
571_EPOS4 Disk 60/12 CAN
571_EPOS4 Disk 60/12 EtherCAT

Variants

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