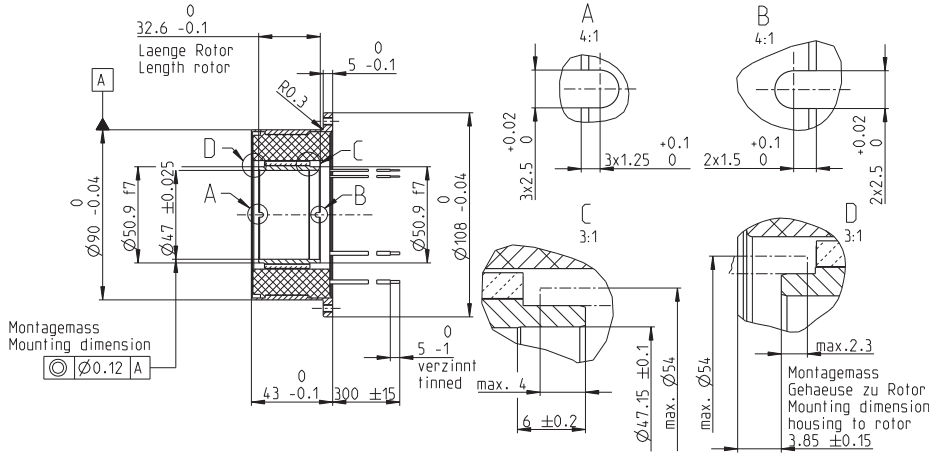
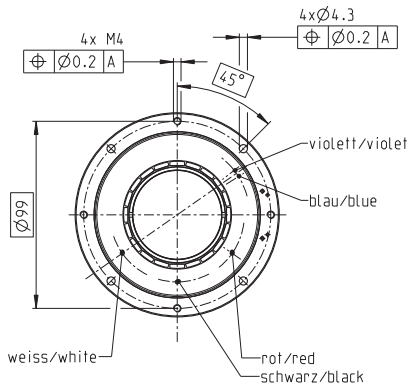


EC frameless DT 85 L Ø90 mm, brushless, 680 watt

Dynamic Torque



M 1:4

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

Part numbers									

	sensorless	759875							
--	------------	--------	--	--	--	--	--	--	--

Motor data									
Values at nominal voltage									
1 Nominal voltage	V	48							
2 No load speed	rpm	1920							
3 No load current	mA	204							
4 Nominal speed	rpm	1580							
5 Nominal torque	mNm	2840							
6 Nominal current (max. continuous current)	A	10.8							
Continuous torque with heat sink	mNm	3423							
7 Stall torque	mNm	18600							
8 Stall current	A	220							
9 Max. efficiency	%	93.9							
Characteristics									
10 Terminal resistance phase to phase	Ω	0.218							
11 Terminal inductance phase to phase	mH	0.586							
12 Torque constant	mNm/A	238							
13 Speed constant	rpm/V	40.2							
14 Speed/torque gradient	rpm/mNm	0.037							
15 Mechanical time constant	ms	0.398							
16 Rotor inertia	gcm ²	1030							

Specifications	Operating range	Comments
Thermal data		
17 Thermal resistance housing-ambient		2.20 K/W
18 Thermal resistance winding-housing		0.205 K/W
19 Thermal time constant winding		20 s
20 Thermal time constant motor		760 s
21 Ambient temperature		-40...+100°C
22 Max. winding temperature		+155°C
Mechanical data		
23 Max. speed		3000 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)		1040 g
Weight for integration (without mounting flange)		765 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)
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.

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