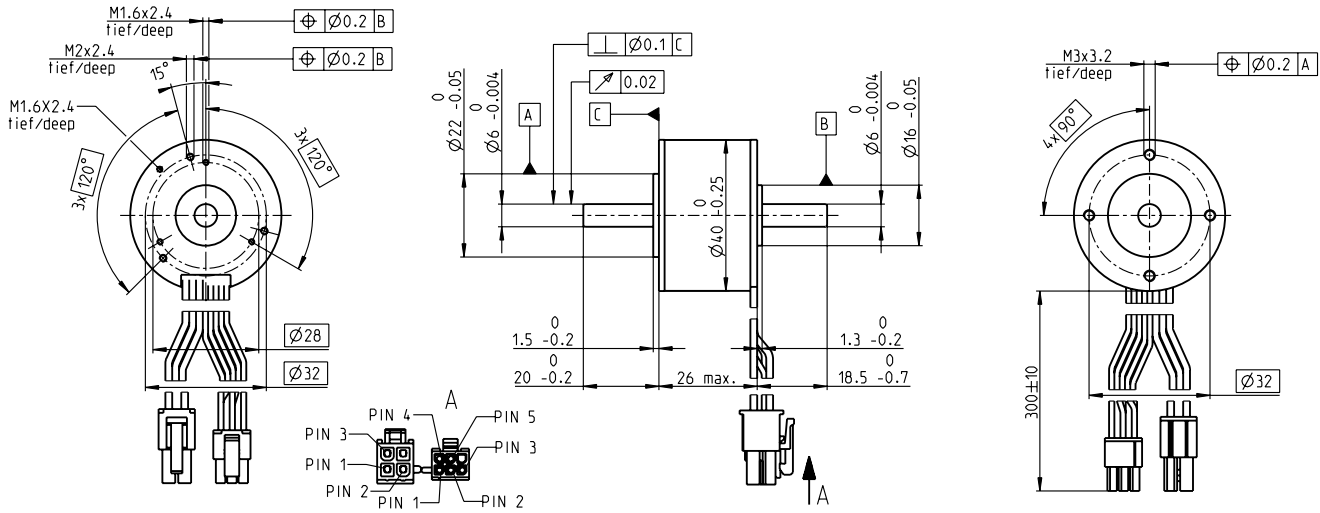


EC-i 40 Ø40 mm, brushless, 50 watt

EC-i

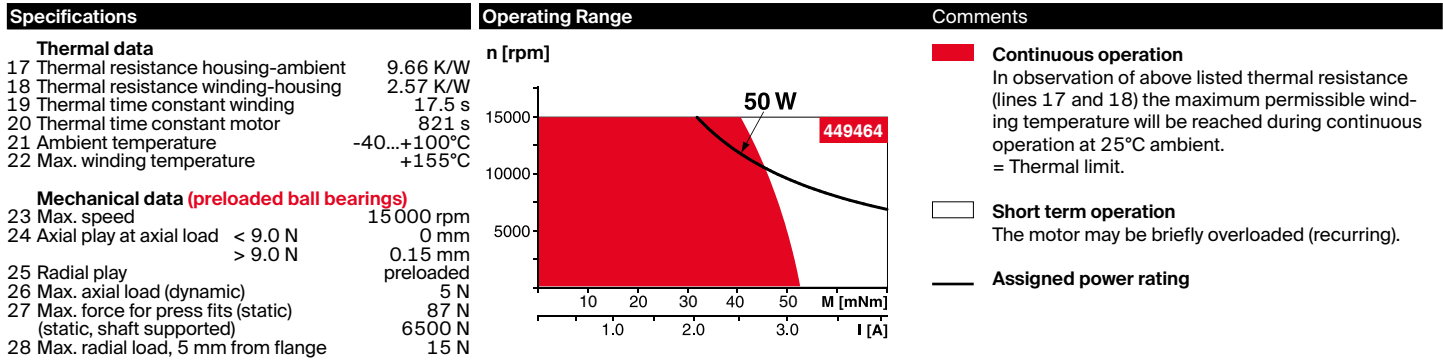


M 1:2

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

Part Numbers	
with Hall sensors	449463 449464

Motor Data			
Values at nominal voltage			
1 Nominal voltage	V	12	24
2 No load speed	rpm	12400	13200
3 No load current	mA	522	285
4 Nominal speed	rpm	9660	10300
5 Nominal torque (max. continuous torque)	mNm	43.3	52.8
6 Nominal current (max. continuous current)	A	4.53	2.8
7 Stall torque ¹	mNm	473	810
8 Stall current	A	52.9	47.9
9 Max. efficiency	%	81	85
Characteristics			
10 Terminal resistance phase to phase	Ω	0.227	0.501
11 Terminal inductance phase to phase	mH	0.109	0.39
12 Torque constant	mNm/A	8.95	16.9
13 Speed constant	rpm/V	1070	565
14 Speed/torque gradient	rpm/mNm	271	16.7
15 Mechanical time constant	ms	2.98	1.84
16 Rotor inertia	gcm ²	10.5	10.5



- Other specifications**
- 29 Number of pole pairs 7
 - 30 Number of phases 3
 - 31 Weight of motor 170 g
- Values listed in the table are nominal.
- Connection motor (Cable AWG 20)**
- | | | |
|-------|-----------------|-------|
| red | Motor winding 1 | Pin 1 |
| black | Motor winding 2 | Pin 2 |
| white | Motor winding 3 | Pin 3 |
| | N.C. | Pin 4 |
- Connector Article number**
- | | |
|-------|------------|
| Molex | 39-01-2040 |
|-------|------------|
- Connection sensor (Cable AWG 26)**
- | | | |
|--------|--------------------------------|-------|
| yellow | Hall sensor 1 | Pin 1 |
| brown | Hall sensor 2 | Pin 2 |
| grey | Hall sensor 3 | Pin 3 |
| blue | GND | Pin 4 |
| green | V _{Hall} 4.5...24 VDC | Pin 5 |
| | N.C. | Pin 6 |
- Connector Article number**
- | | |
|-------|-------------|
| Molex | 430-25-0600 |
|-------|-------------|
- Wiring diagram for Hall sensors see p. 59
¹Calculation does not include saturation effect (p. 71/178)

maxon Modular System Details on catalog page 42

<ul style="list-style-type: none"> Planetary Gearhead Ø32 mm 1.0-6.0 Nm Page 398 Planetary Gearhead Ø42 mm 3-15 Nm Page 407 Screw Drive Ø32 mm Page 426-434 		<p>Recommended Electronics:</p> <table border="0"> <tr> <td>Notes</td> <td>Page 42</td> </tr> <tr> <td>ESCON 36/3 EC</td> <td>501</td> </tr> <tr> <td>ESCON Mod. 50/4 EC-S</td> <td>501</td> </tr> <tr> <td>ESCON Module 50/5</td> <td>501</td> </tr> <tr> <td>ESCON 50/5</td> <td>503</td> </tr> <tr> <td>DEC Module 50/5</td> <td>505</td> </tr> <tr> <td>EPOS4 Micro 24/5</td> <td>509</td> </tr> <tr> <td>EPOS4 Mod./Comp. 50/5</td> <td>510</td> </tr> <tr> <td>EPOS4 Comp. 24/5 3-axes</td> <td>511</td> </tr> <tr> <td>EPOS4 50/5</td> <td>515</td> </tr> <tr> <td>EPOS2 P 24/5</td> <td>520</td> </tr> </table>	Notes	Page 42	ESCON 36/3 EC	501	ESCON Mod. 50/4 EC-S	501	ESCON Module 50/5	501	ESCON 50/5	503	DEC Module 50/5	505	EPOS4 Micro 24/5	509	EPOS4 Mod./Comp. 50/5	510	EPOS4 Comp. 24/5 3-axes	511	EPOS4 50/5	515	EPOS2 P 24/5	520	<ul style="list-style-type: none"> Encoder 16 EASY/XT 128-1024 CPT, 3 channels Page 465/467 Encoder 16 EASY Absolute/XT 4096 steps Page 469/471 Encoder 16 RIO 1024-32768 CPT, 3 channels Page 482 Encoder AEDL 5810 1024-5000 CPT, 3 channels Page 485 Encoder HEDL 5540 500 CPT, 3 channels Page 492
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