

Brushless Motor EC-i52HT 8p



The advantages :
 Servo motor - Reduced dimensions -
 lightweight - focused torque - fast
 acceleration. - long service life.

Associated products :

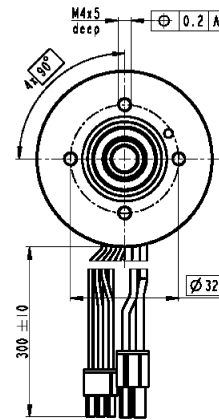
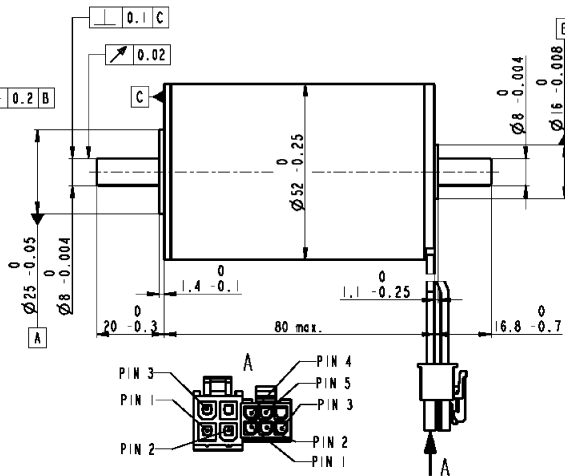
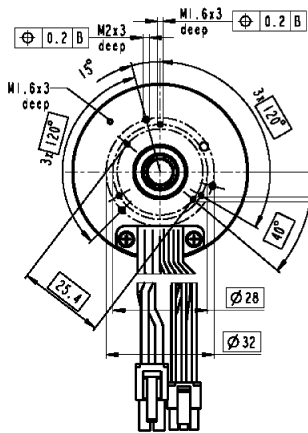
- > **Brake**
WR220
- > **Encoder**
HEDL 5540
HEDS 5540
- > **Power supply**
DRP-240-24
DRP-240-48
SP-320-24
- > **Controller**
EPOS4 70/15
ESCON 50/5
ESCON 70/10

maxon motor

188 W - 269 W

| | | | |
|------------------------------------|------------------|--------|--------|
| Power supply voltage (Ua) | V | 24 | 48 |
| Speed at current In | tr/mn | 4200 | 4450 |
| Torque at current In | mNm | 428 | 412 |
| Maximum permanent current In | mA | 8810 | 4470 |
| Ua no-load speed +/- 10% | tr/mn | 4680 | 4900 |
| No-load current +/- 50% | mA | 726 | 390 |
| Ua stall current | mA | 268000 | 169000 |
| Ua stall torque | mNm | 13000 | 15700 |
| Torque constant | mNm/A | 48.6 | 92.7 |
| Speed constant | tr/mn/V | 197 | 103 |
| Speed/torque gradient | tr/mn/mN | 0.362 | 0.316 |
| Limit speed | tr/mn | 6000 | 6000 |
| Maximum Ua operating power | W | 1595 | 2016 |
| Maximum efficiency | % | 90 | 90.7 |
| Electromechanical time constant | ms | 0.645 | 0.562 |
| Inertia | gcm ² | 170 | 170 |
| Terminal resistance phase to phase | Ohm | 0.0894 | 0.284 |
| Inductance | mH | 0.122 | 0.443 |
| Ambient/Housing thermal | K/W | 4.32 | 4.32 |
| Coil/Housing thermal resistance | K/W | 0.63 | 0.63 |
| Coil thermal time constant | s | 10.2 | 10.2 |
| Housing thermal time constant | s | 1780 | 1780 |
| Test voltage | V | 24 | 48 |
| Nominal operating power output | W | 188 | 192 |
| Max permanent operating power | W | 269 | 259 |

| | |
|---------------------------------------|-----------------------|
| Commutation | brushless |
| Number of phases | 3 |
| Bearings | Roulements préchargés |
| Maximum axial load (dynamic) | 12 N |
| Minimum axial play | 0 mm |
| Maximum axial play | 0.14 mm |
| Maximum radial load | 110 N |
| at a distance from the face of: | 5 mm |
| Radial play | preloaded mm |
| Maximum slip force (static) | 150 N |
| If fixed rear axis | 6000 N |
| Minimum ambient operating temperature | -40 °C |
| Maximum ambient operating temperature | +100 °C |
| Maximum coil temperature | +155 °C |
| Weight | 823 g |



- ion (Cable AWG 16)
- Motor winding 1 Pin 1
- Motor winding 2 Pin 2
- Motor winding 3 Pin 3
- N.C. Pin 4
- or Article number
- 39-01-2040
- ion (Cable AWG 26)
- Hall sensor 1 Pin 1
- Hall sensor 2 Pin 2
- Hall sensor 3 Pin 3
- GND Pin 4
- V_{bat} 4.5...24 VDC Pin 5
- N.C. Pin 6
- Connector Article number
- Molex 430-25-0600

Edition: Juli 2022 / subject to modification

Version of 06/07/2022