



The B05 combines enviable dimension/torque and dimension/power ratios with extremely compact and attractive design. With a 55 mm squared frame size , depending on the length of the stator pack, this model covers torque values from 0.48 Nm to 1.1 Nm.

The B05 is a sinusoidal current brushless 6-pole motor, the ideal solution for industrial automation applications that require the highest axial control performance. Feedback is acquired by resolver for windings at 230V

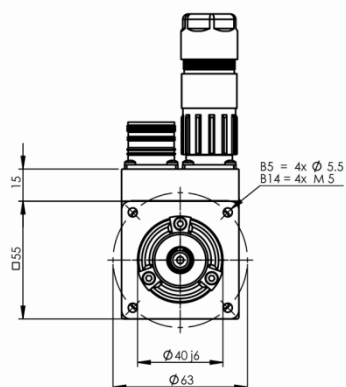
The B05 motor is controlled by drive supplied 3 x 380 ... 400VAC, 50 / 60Hz

Preset specific parameters for motors with winding at 230 V

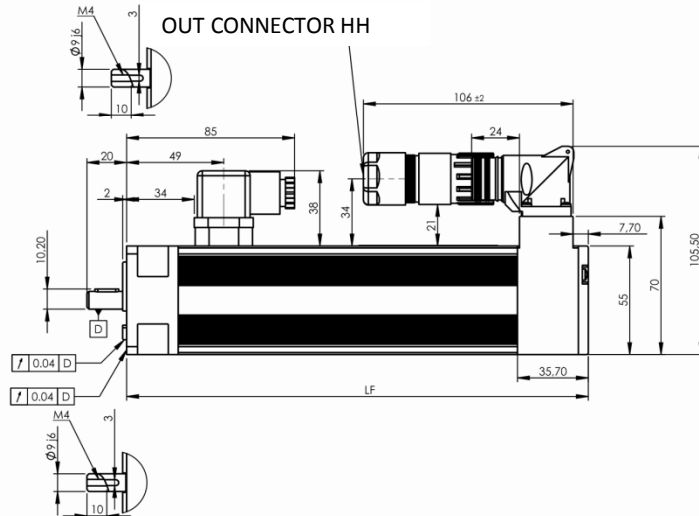
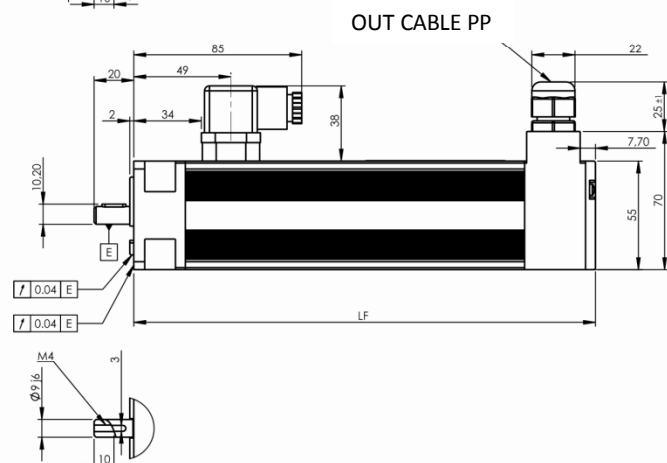
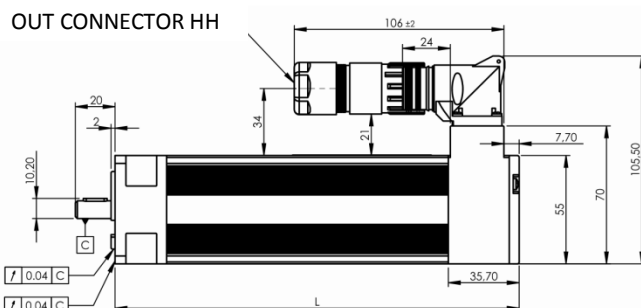
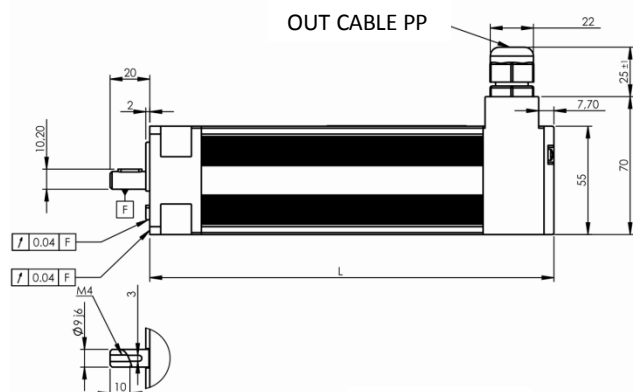
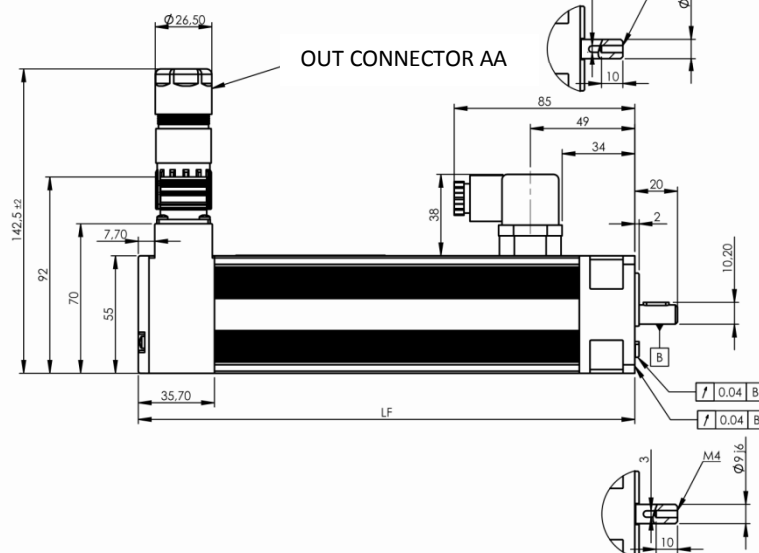
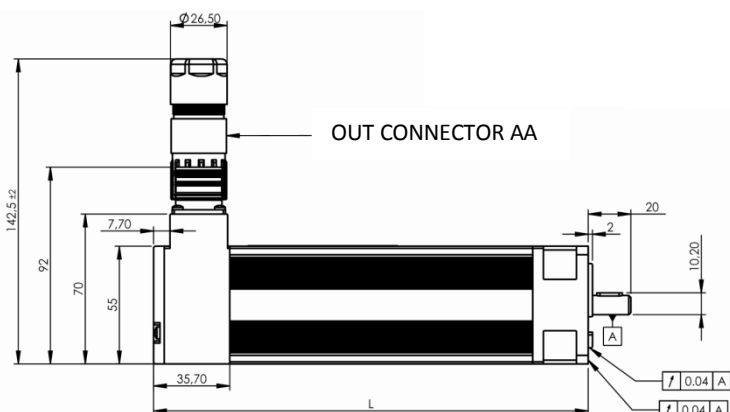
Brake: Also available in a version with permanent magnet emergency brake and without backlash.



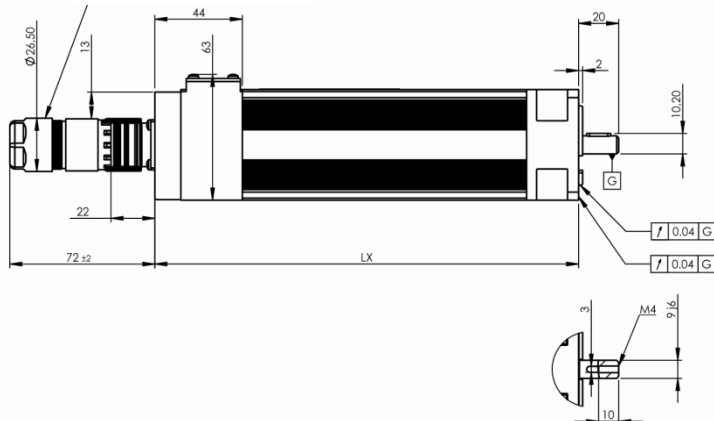
| Brushless Motor   |                                       | TYPE B05 |       |      |      |      |       |
|---|---------------------------------------|----------|-------|------|------|------|-------|
| Size  |                                       | B05S     |       | B05M |      | B05L |       |
| Drive operating voltage   |                                       |          | 230V  |      | 230V |      | 230V  |
| Continuous stall torque   | [Nm]                                  |          | 0.48  |      | 0.81 |      | 1.1   |
| Rated speed   | [RPM]                                 |          | 3000  |      | 3000 |      | 3000  |
| Power at rated speed  | [W]                                   |          | 153   |      | 266  |      | 367   |
| Peak torque with S.I.R.10% [Nm]   | [Nm]                                  |          | 1.30  |      | 2.19 |      | 2.97  |
| Rotor Inertia   | [kgm <sup>2</sup> x10 <sup>-4</sup> ] |          | 0.13  |      | 0.2  |      | 0.28  |
| Rotor Inertia with brake  | [kgm <sup>2</sup> x10 <sup>-4</sup> ] |          | 0.24  |      | 0.40 |      | 0.78  |
| Weight  | [kg]                                  |          | 1.27  |      | 1.69 |      | 2.05  |
| Weight with brake   | [kg]                                  |          | 1.42  |      | 1.84 |      | 2.2   |
| E.M.F. constant 20°C  | [Vrms/Krpm]                           |          | 57.6  |      | 57.6 |      | 56.5  |
| Torque constant   | [Nm/Arms]                             |          | 0.95  |      | 0.94 |      | 0.93  |
| Winding Resistance 20°C   | [Ohm]                                 |          | 145.5 |      | 51.8 |      | 27.07 |
| Phase/phase inductance 50Hz   | [mH]                                  |          | 51.8  |      | 60.0 |      | 33.5  |
| Rated voltage 100°C   | [V]                                   |          | 262   |      | 231  |      | 212   |
| Continuous stall current  | [A]                                   |          | 0.50  |      | 0.86 |      | 1.18  |
| Current at rated speed  | [A]                                   |          | 0.51  |      | 0.90 |      | 1.26  |
| Peak current  | [A]                                   |          | 1.36  |      | 2.31 |      | 3.19  |
| Demagnetising current   | [Apk]                                 |          | 4.72  |      | 9.00 |      | 13.43 |
| Length without brake  | mm                                    |          | 142   |      | 172  |      | 202   |
| Length with brake   | mm                                    |          | 171   |      | 201  |      | 230   |
| Brake parameters for B05  |                                       |          |       |      |      |      |       |
| Brake type  |                                       |          | 3     |      | 3    |      | 3     |
| Stat. braking torque 100°C  | [Nm]                                  |          | 2     |      | 2    |      | 2     |
| Stat. braking torque 100°C  | [W]                                   |          | 11    |      | 11   |      | 11    |
| The data refer to tests conducted with motors at 3000 rpm and a 100°C DT temperature ( 65°C DT for 60VDC motors with optical encoder) with an external temperature of 20°C.   |                                       |          |       |      |      |      |       |
| The B05 is a 6-pole motor with Class H winding insulation and Class F motor insulation, IP65 standard protection, IC0041 natural air cooling, and 130°C PTC trigger threshold |                                       |          |       |      |      |      |       |



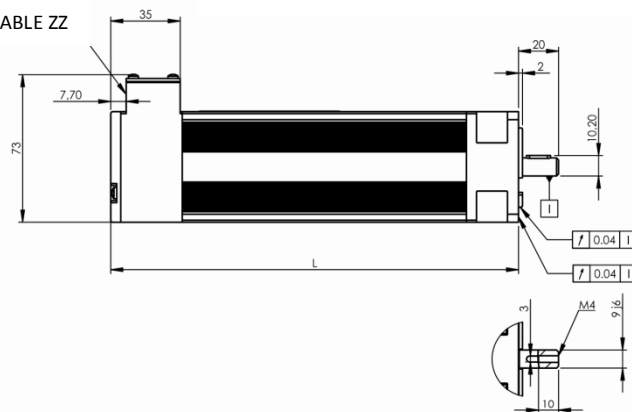
| SIZE | STANDARD | WITH BRAKE | CONNECT.X STANDARD | CONNECT. X WITH BRAKE |
|------|----------|------------|--------------------|-----------------------|
| S    | 144      | 174        | 152                | 182                   |
| M    | 174      | 204        | 182                | 212                   |
| L    | 204      | 233        | 212                | 241                   |
| REF. | L        | LF         | LX                 | LFX                   |



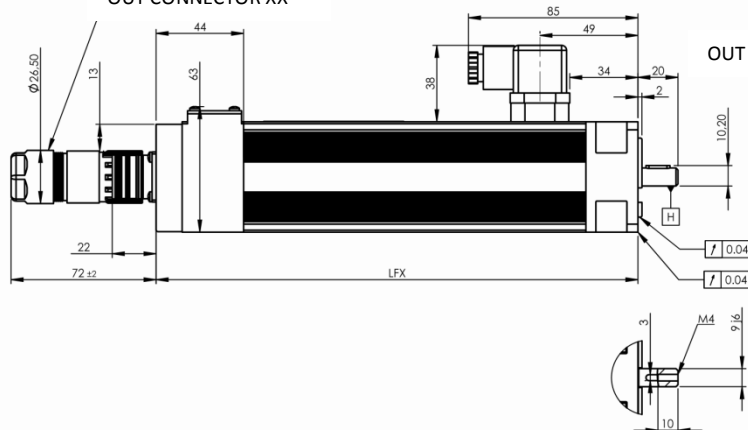
OUT CONNECTOR XX



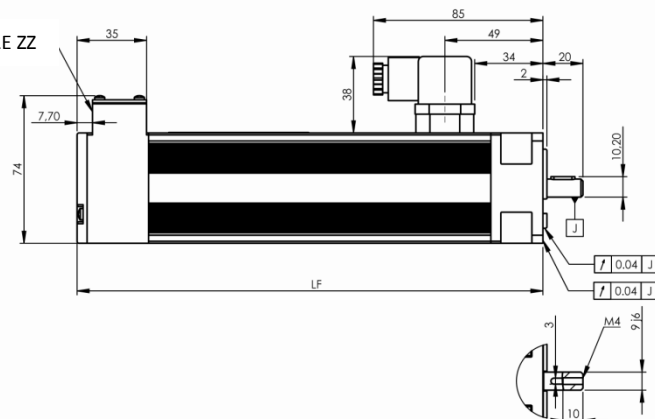
OUT CABLE ZZ



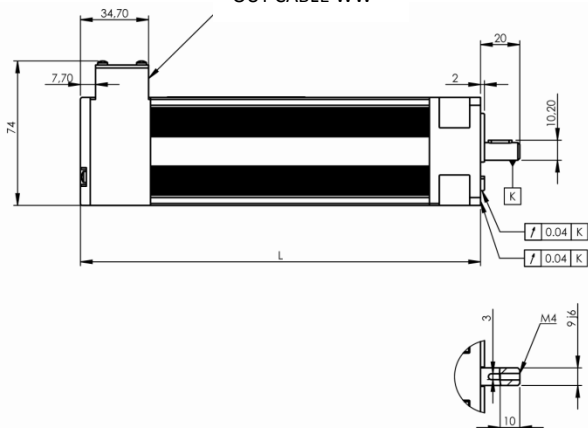
OUT CONNECTOR XX



OUT CABLE ZZ



OUT CABLE WW



OUT CABLE WW

