

# Product data sheet

## Characteristics

# SH30701P0BA4100

SH3 OMC motor 70mm 1 st. IP65/65 smooth  
sh. DSL multi turn ang.conn.M23



### Main

|                           |             |
|---------------------------|-------------|
| Range compatibility       | PacDrive 3  |
| Device short name         | SH3.....P   |
| Product or component type | Servo motor |

### Complementary

|                                  |  |
|----------------------------------|--|
| Maximum mechanical speed         | 8000 rpm   |
| [Us] rated supply voltage        | 115...480 V  |
| Network number of phases         | Three phase  |
| Continuous stall current         | 1.8 A  |
| Continuous stall torque          | 1.25 N.m at 115...480 V three phase  |
| Continuous power                 | 690 W  |
| Peak stall torque                | 3.5 N.m at 115...480 V three phase   |
| Nominal output power             | 370 W at 230 V single phase<br>690 W at 400 V three phase<br>690 W at 480 V three phase          |
| Nominal torque                   | 1.4 N.M at 230 V single phase<br>1.1 N.M at 400 V three phase<br>1.1 N.m at 480 V three phase    |
| Nominal speed                    | 3000 rpm at 230 V single phase<br>6000 rpm at 400 V three phase<br>7200 rpm at 480 V three phase |
| Maximum current I <sub>rms</sub> | 5.7 A  |
| Shaft end                        | Smooth shaft   |
| Shaft diameter                   | 11 mm  |
| Shaft length                     | 23 mm  |
| IP degree of protection          | IP65 motor: conforming to EN/IEC 60034-5<br>IP65 shaft bushing: conforming to EN/IEC 60034-5     |
| Encoder type                     | Absolute multiturn Hiperface DSL   |
| Speed feedback resolution        | 262144 points/turn x 4096 turns  |
| Holding brake                    | Without  |
| Mounting support                 | International standard flange  |
| Motor flange size                | 70 mm  |
| Electrical connection            | Rotatable right angled connector   |
| Torque constant                  | 0.69 N.m/A at 120 °C   |
| Back emf constant                | 46 V/krpm at 20 °C   |
| Number of motor poles            | 3  |
| Rotor inertia                    | 0.250 kg.cm <sup>2</sup>   |
| Stator resistance                | 10.4 Ohm   |
| Stator inductance                | 42.6 mH  |
| Maximum radial force Fr          | 900 N at 1000 rpm  |

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|                                       |                    |
|---------------------------------------|--------------------|
| Maximum axial force Fa                | 160 N              |
| Type of cooling                       | Natural convection |
| Length                                | 154 mm             |
| Centring collar diameter              | 60 mm              |
| Centring collar depth                 | 2.5 mm             |
| Number of mounting holes              | 4                  |
| Mounting holes diameter               | 5.5 mm             |
| Circle diameter of the mounting holes | 82 mm              |
| Net weight                            | 2.1 kg             |

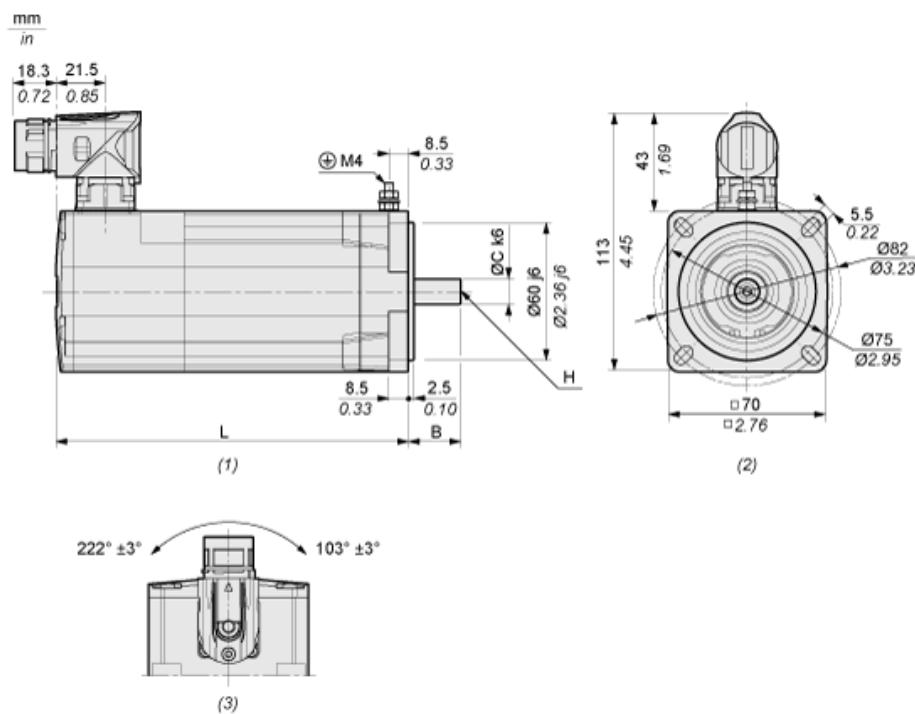
### Packing Units

|                              |         |
|------------------------------|---------|
| Unit Type of Package 1       | PCE     |
| Number of Units in Package 1 | 1       |
| Package 1 Height             | 11.5 cm |
| Package 1 Width              | 19.0 cm |
| Package 1 Length             | 39.5 cm |
| Package 1 Weight             | 2.7 kg  |

### Offer Sustainability

|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| REACH Regulation           |  <a href="#">REACH Declaration</a>               |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)  |
| Mercury free               | Yes   |
| China RoHS Regulation      |  <a href="#">China RoHS Declaration</a>          |
| RoHS exemption information |  Yes   |
| Environmental Disclosure   |  <a href="#">Product Environmental Profile</a> |
| Circularity Profile        | No need of specific recycling operations  |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins       |
| PVC free                   | Yes   |

Dimensions



(1) : Side view

(2) : Mounting

(3) : Rotating area

| Characteristic |                              | Unit    | Value        |
|----------------|------------------------------|---------|--------------|
| L              | Length without holding brake | mm (in) | 154 (6.06)   |
| B              | Shaft length                 | mm (in) | 23 (0.91)    |
| C              | Shaft diameter               | mm (in) | 11 (0.43)    |
| H              | Female thread of shaft       |         | DIN 332-D M4 |