# SMH40-SMB40 Series

Low Inertia Servo Motors Size 40



# High performances in smaller size

The SMH/SMB series of highly dynamic brushless servo motors now has a new size; 40mm. In common with the rest of the SMH/SMB family, the main benefit of this smaller frame size is the stall torque delivered by such a compact motor.

Thanks to the high quality of Neodymium-Iron-Boron magnets, the SMH40/SMB40 motor, in a short length of 100 mm, can achive 0.38 Nm stall torque.

Available as standard with resolver feedback, the motor can also have different types of feedback sensors including the new DSL® Hiperface.

Typical applications include a wide variety of packaging machines, robots and handling machines.



# **Contact Information**

EMEA Product Information Centre Free phone: 00 800 27 27 5374 (from AT, BE, CH, CZ, DE, DK, EE, ES, FI, FR, IE, IL, IS, IT, LU, MT, NL, NO, PL, PT, RU, SE, SK, UK, ZA) US Product Information Centre

Toll-free number: 1-800-27 27 537 www.parker.com

### **Product Features**

- Standard shaft size of 8 x 25mm
- Standard flange size 40 for all gearboxes available on the market
- Compactness
- Standard Y-Tech connectors
- 8 pole motor
- 0.19 0.38Nm torque range
- Integrated PTC

- · Customised winding/voltage
- Multiple connection option: flying leads, I-Tech connector, ...
- Different type of feedback sensor: resolver, DSL, ...
- Special customisation available: shaft, flange, mounting type, ...
- Compatible with most popular servo drives



# Brushless Servo Motor - SMH40-SMB40 Series

#### **Application**

- Food, pharma & beverage
- Packaging machines
- · Material handling
- · Factory automation
- · Life science diagnostic
- · Automotive industry / In-plant
- Printing industry
- Textile machines
- Robotics

#### **Standards**

In compliance with: 2006/95 EC

- EN60034-1
- EN60034-5
- EN60034-5/A1

#### **Technical Characteristics**

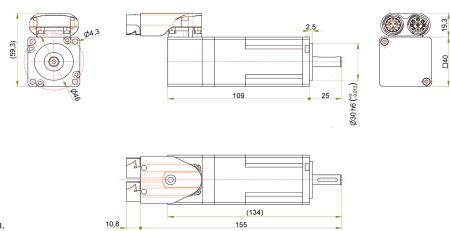
Motor Type	Permanent magnets synchronous servomotor
Rotor Design	Rotor with surface rare earth magnets
Number of poles	8 pole motor
Power Range	0.1 kW
Torque Range	0.19 – 0.38 Nm
Speed Range	0 – 6000 min <sup>-1</sup>
Mounting	Flange with smooth holes
Shaft End	Plain keyed shaft - Plain smooth shaft (option)
Cooling	Natural ventilation
Protection Level (IEC60034-5)	IP64 - IP65 (option)
Feedback sensor	Resolver - DSL - Absolute Endat or Hiperface Incremental Encoder
Thermal protection	PTC (SMB or SME) or PT1000 (SMH)
Other options	Brake
Marking	CE
Voltage Supply	230 VAC - other voltage under request
<b>Temperature Class</b>	Class F
Connections	Y-Tech / I-Tech Connectors - Flying cables

#### 230 VAC supply voltage

Model (4)	Size T	Sta	all <sup>(1)</sup>	ı	Nominal (1)		Peak (1)	Inertia		(0.00	
		Torque	Current	Torque	Speed	Current	Torque	No brake	With brake	Ke <sup>(2) (3)</sup>	Kt <sup>(2) (3)</sup>
		T [Nm]	I [A]	T <sub>n</sub> [Nm]	n [min <sup>-1</sup> ]	I <sub>n</sub> [A]	T <sub>max</sub> [Nm]	J [kgmm²]	J [kgmm²]	Ke [V/Krpm]	Kt [Nm/A <sub>rms</sub> ]
SMx40 60 0.19 2	40	0.19	0.78	0.16	6000	0.66	0.75	3.7	6.0	14.7	0.242
SMx40 60 0.38 2	40	0.38	1.2	0.27	6000	0.86	1.3	6.1	8.0	19	0.31

<sup>(1)</sup> Data referred to motor mounted on a steel flange in horizontal position with resolver and without brake. Stall torques refer to motor turning at 100 min<sup>-1</sup> - (2) Data measured at 20 °C. When "hot" consider -0.09 %/K derating - (3)Manufacturing tolerance ±10 %

#### **Dimensions**



All dimensions are in mm.

