

Product datasheet

Specifications



synchronous motor - BMP - 230 VAC - 1.5 kW - IP65 - IEC

BMP1002R3NA2A

Main

product or component type	Synchronous motor
Device short name	BMP
Maximum mechanical speed	3600 rpm
Nominal output power	1100 W with drive ATV32 at 1.1 kW 200 V single phase 1500 W with drive ATV32 at 1.5 kW 200 V single phase 1100 W with drive ATV320 at 1.1 kW 200 V single phase 1500 W with drive ATV320 at 1.5 kW 200 V single phase
Nominal torque	3.5 N.m with drive ATV32 at 1.1 kW 200 V single phase 4.77 N.m with drive ATV32 at 1.5 kW 200 V single phase 3.5 N.m with drive ATV320 at 1.1 kW 200 V single phase 4.77 N.m with drive ATV320 at 1.5 kW 200 V single phase
Nominal speed	3000 rpm with drive ATV32 at 1.1 kW 200 V single phase 3000 rpm with drive ATV32 at 1.5 kW 200 V single phase 3000 rpm with drive ATV320 at 1.1 kW 200 V single phase 3000 rpm with drive ATV320 at 1.5 kW 200 V single phase
Product compatibility	Variable speed drive ATV32 at 1.1 kW 200 V single phase Variable speed drive ATV32 at 1.5 kW 200 V single phase Variable speed drive ATV320 at 1.1 kW 200...240 V single phase Variable speed drive ATV320 at 1.5 kW 200...240 V single phase
Shaft end	Keyed
IP degree of protection	IP65 standard IP67 with IP67 kit
Holding brake	Without
mounting support	International standard flange
Electrical connection	Rotatable right-angled connector

Complementary

Range compatibility	Altivar 32 Altivar Machine ATV320
[Us] rated supply voltage	230 V
Network number of phases	Single phase
Maximum current Irms	10.4 A with drive ATV32 at 1.1 kW 200 V single phase 12 A with drive ATV32 at 1.5 kW 200 V single phase 10.4 A with drive ATV320 at 1.1 kW 200 V single phase 12 A with drive ATV320 at 1.5 kW 200 V single phase
Nominal operating frequency	250 Hz with drive ATV32 at 1.1 kW 200 V single phase 250 Hz with drive ATV32 at 1.5 kW 200 V single phase 250 Hz with drive ATV320 at 1.1 kW 200 V single phase 250 Hz with drive ATV320 at 1.5 kW 200 V single phase
Minimum operating frequency	25 Hz with drive ATV32 at 1.1 kW 200 V single phase 25 Hz with drive ATV32 at 1.5 kW 200 V single phase 25 Hz with drive ATV320 at 1.1 kW 200 V single phase 25 Hz with drive ATV320 at 1.5 kW 200 V single phase

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Maximum operating frequency	300 Hz with drive ATV32 at 1.1 kW 200 V single phase 300 Hz with drive ATV32 at 1.5 kW 200 V single phase 300 Hz with drive ATV320 at 1.1 kW 200 V single phase 300 Hz with drive ATV320 at 1.5 kW 200 V single phase
Shaft diameter	19 mm
Shaft length	40 mm
Key width	6 mm
Motor flange size	100 mm
Torque constant	0.83 N.m/A at 40 °C
Number of motor poles	5
Number of motor stacks	2
Rotor inertia	6.28 kg.cm²
Stator resistance	0.53 Ohm at 40 °C
Stator inductance	2.18 mH for q-axis winding at 40 °C 1.89 mH for d-axis winding at 40 °C
Maximum radial force Fr	990 N at 1000 rpm 790 N at 2000 rpm 690 N at 3000 rpm 620 N at 4000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	160.6 mm
Centring collar diameter	95 mm
Centring collar depth	3.5 mm
Number of mounting holes	4
Mounting holes diameter	9 mm
Circle diameter of the mounting holes	115 mm
net weight	4.92 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	22.0 cm
Package 1 Width	19.5 cm
Package 1 Length	39.5 cm
Package 1 Weight	5.86 kg
Unit Type of Package 2	P06
Number of Units in Package 2	6
Package 2 Height	77.0 cm
Package 2 Width	80.0 cm
Package 2 Length	60.0 cm
Package 2 Weight	43.66 kg

Contractual warranty

Warranty

18 months

Sustainability

Green Premium™ label is Schneider Electric’s commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

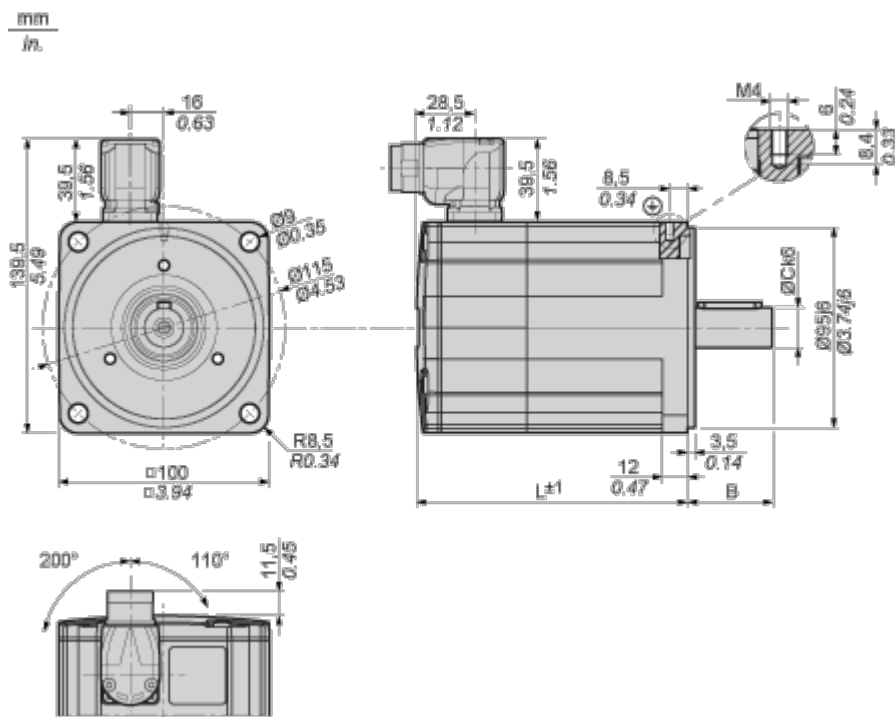
[Guide to assess a product’s sustainability >](#)

Well-being performance

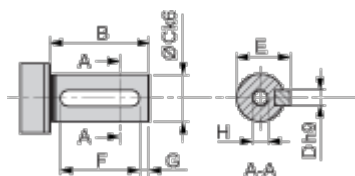
✓	Mercury Free	
✓	Rohs Exemption Information	Yes
✓	Pvc Free	
Reach Regulation	REACH Declaration	
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)	
China Rohs Regulation	China RoHS declaration	
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins	

Dimensions Drawings

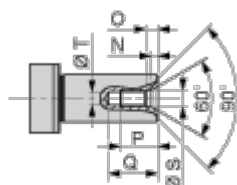
Dimensions



Parallel Key According to DIN 6885 A



Female Thread of Shaft According to DIN 332-D

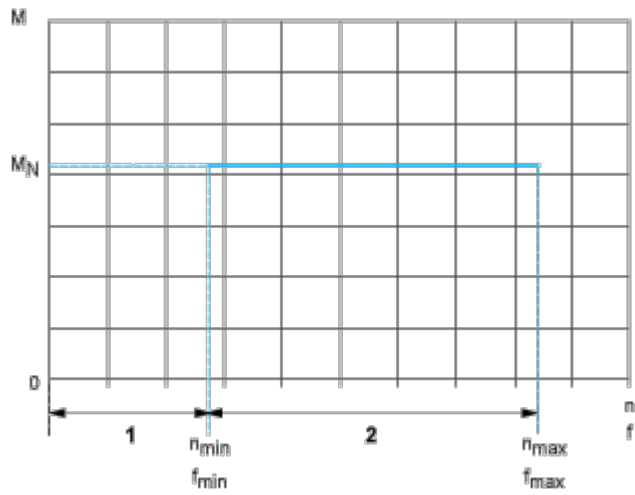


L	mm	160.6
	in.	6.32
B	mm	40
	in.	1.57
C	mm	19
	in.	0.75

	in.	0.75
D	mm	6
	in.	0.24
E	mm	21.5
	in.	0.85
F	mm	30
	in.	1.18
G	mm	5
	in.	0.20
H		M6
N	mm	2.8
	in.	0.11
O	mm	5
	in.	0.20
P	mm	16
	in.	0.63
Q	mm	21
	in.	0.83
S	mm	6.4
	in.	0.25
T	mm	5
	in.	0.20

Performance Curves

Performance curves



- M : Torque in Nm
- n : Speed in rpm
- f : frequency in Hz
- 1 : Only permissible during acceleration and deceleration phases.
- 2 : Continuous operation with the default values from the configuration file.