



Main

Range compatibility	Lexium SD3
Product or component type	Motion control motor
Device short name	BRS3
Maximum mechanical speed	3000 rpm
Motor type	3-phase stepper motor
Number of motor poles	6
Supply voltage limits	48 V DC 34 V DC
Mounting support	Flange
Motor flange size	57.2 mm
Length	79 mm
Centring collar diameter	38 mm

Complementary


Centring collar depth	1.6 mm
Number of mounting holes	4
Mounting holes diameter	5.2 mm
Circle diameter of the mounting holes	66.6 mm
Electrical connection	Flying leads
Holding brake	Without
Shaft end	Smooth shaft
Second shaft	Without second shaft end
Shaft diameter	8 mm
Shaft length	21 mm
Nominal torque	1.5 N.m
Holding torque	1.7 N.m
Rotor inertia	0.38 kg.cm ²
Resolution	1.8 °, 0.9 °, 0.72 °, 0.36 °, 0.18 °, 0.09 °, 0.072 °, 0.036 ° step angle

	200, 400, 500, 1000, 2000, 4000, 5000, 10000 steps number of full steps per revolution
Accuracy error	+/- 6 arc min
Maximum starting frequency	6 kHz
[In] rated current	5.8 A
Resistance	0.7 Ohm (winding)
Time constant	4.6 ms
Maximum radial force Fr	40 N (second shaft end) 50 N (first shaft end)
Maximum axial force Fa	100 N (tensile force) 8.4 N (force pressure)
Service life in hours	20000 h (bearing)
Angular acceleration	200000 rad/s²
Product weight	2 kg

Environment

Standards	IEC 60072-1 EN 50347
Type of cooling	Natural convection
Ambient air temperature for operation	-25...40 °C
Ambient air temperature for storage	-25...70 °C
Operating altitude	<= 1000 m without power derating
Relative humidity	15...85 % without condensation
Vibration resistance	20 m/s² maximum A conforming to EN/IEC 60034-14
IP degree of protection	IP41 for shaft bushing without shaft seal ring conforming to EN/IEC 60034-5 IP56 for total except shaft bushing conforming to EN/IEC 60034-5
Temperature class	F class winding conforming to IEC/EN 60034-1

Offer Sustainability

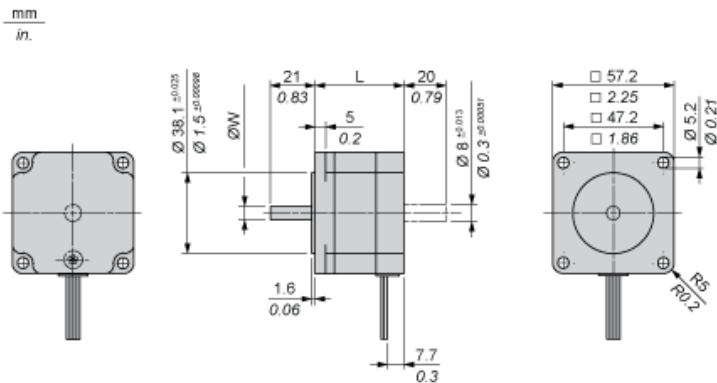
Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0623 - Schneider Electric declaration of conformity  Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Need no specific recycling operations

Contractual warranty

Warranty period	18 months
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Dimensions

3-Phase Stepper Motor in Wire Version



Dimensions in mm

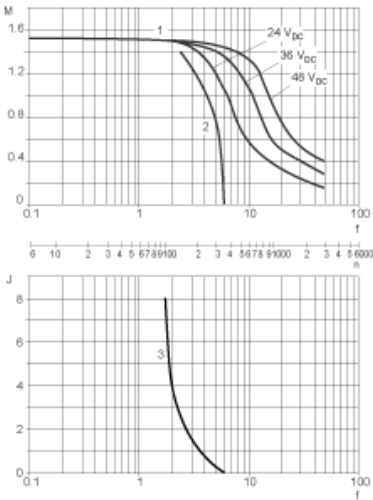
L	Shaft diameter ØW
79 ±0.5	8 ±0.013

Dimensions in in.

L	Shaft diameter ØW
3.11 ±0.020	0.31 ±0.00051

Torque Characteristics

Measurement at 1000 Steps/Revolution, Nominal Voltage DC Bus U_N and Phase Current I_N



- M : Torque in Nm
n : Speed in rpm
f : Frequency in kHz
J : Rotor inertia in kg.cm²
1 : Pull-out torque
2 : Pull-in torque
3 : Maximum load inertia