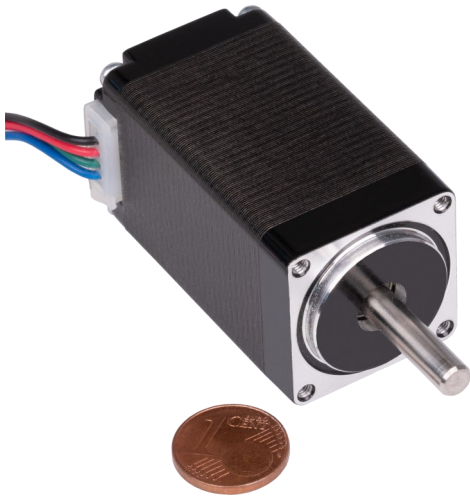


NEMA11-02

Bipolar Stepper Motor



Our NEMA 11 series are very small high torque stepper motors that can reach speeds of up to 3000 rpm.

These motors are used in model making and maker scene as well as in the industrial environment (e.g. positioning of optics, dosing pumps, interlocks, etc.).

KEY FEATURES

Shaft dimensions	Ø 5 x 18 mm (single shaft)
Specification	28SHD4501-20
Connection	4 connection cables with open ends
Steps per Revolution	200
Dimensions	28 x 29 x 52 mm
Items delivered	NEMA11-02 Stepper Motor

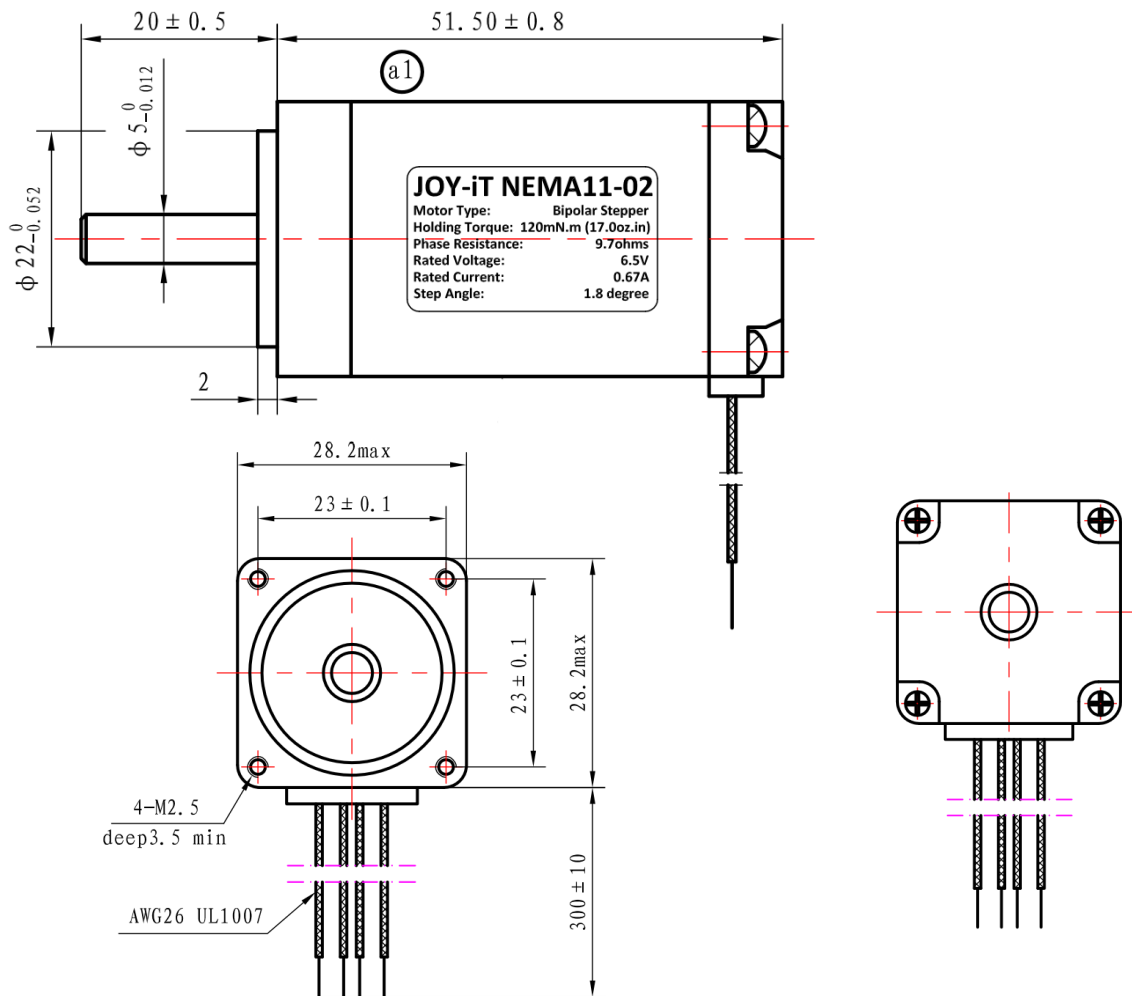
PERFORMANCE CHARACTERISTICS

Holding torque	0.12 Nm
Step angle	1.8 ° ±5 %
Rated voltage	6.16 V
Rated current	0.67 A
Amount of Phases	2
Phase resistance	9.2 Ω
Phase inductivity	7.2 mH
Isolation resistance	min. 100MΩ at 500 V
Isolation class	B (130°C)
Rotational inertia	18 g·cm ²
Detent torque	0.008 Nm
Operating temperature	-10°C - 50°C

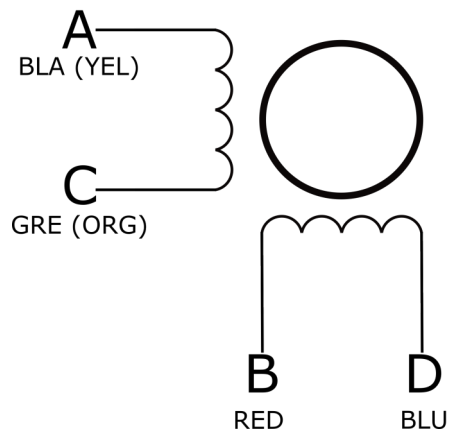
FURTHER DETAILS

Article No.	NEMA11-02
EAN	4250236821726
Customs Tariff No.	8501109990

DRAWING



WIRING



TORQUE DIAGRAM

DRIVER SETTINGS

Voltage 23.95 V

T(mN.m)

180

162

144

126

108

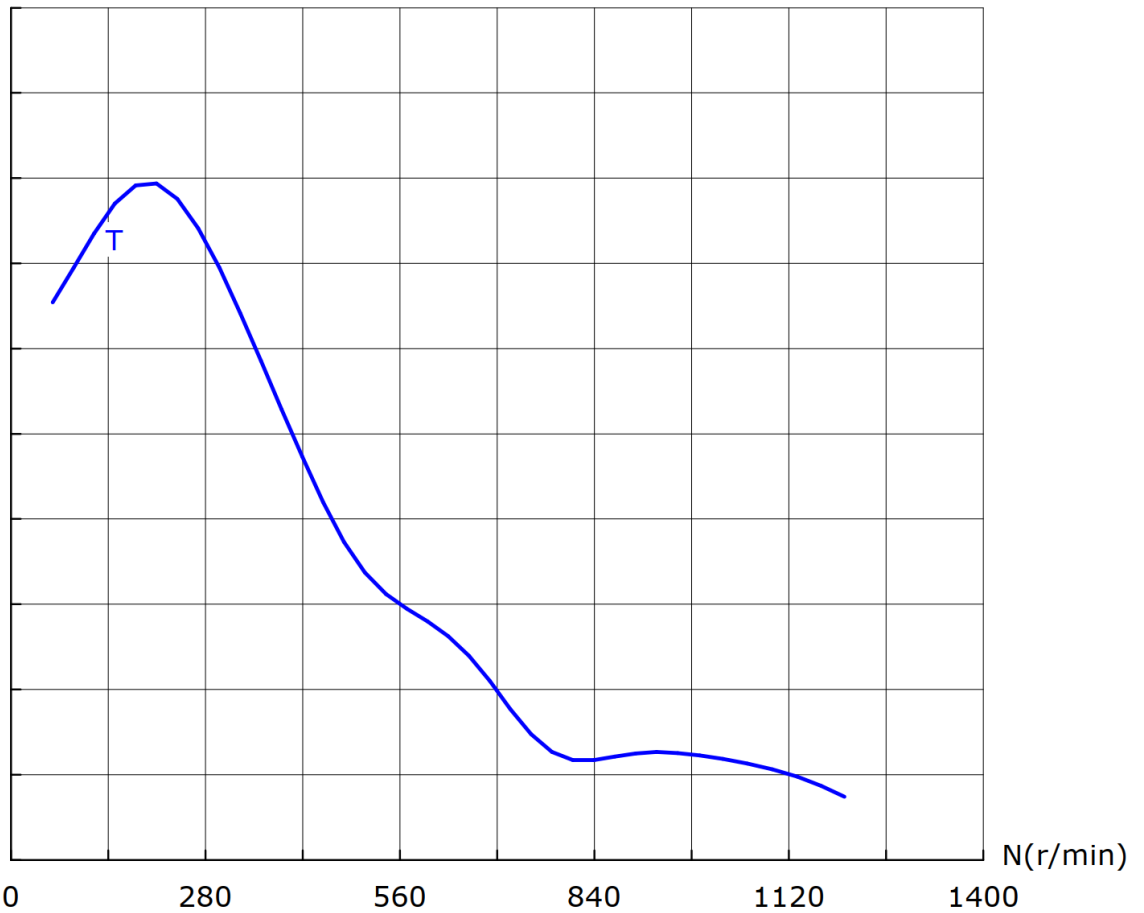
90

72

54

36

18



MAX. EFFICIENCY

Efficiency 46.1 %

Torque 20.4 mNm

Current 0.25 A

Speed 1060 min⁻¹

Output power 2.255 W

MAX. TORQUE

Torque 142.9 mNm

Current 0.941 A

Speed 210 min⁻¹

Output power 3.119 W

MAX. POWER

Torque 115.5 mNm

Current 0.822 A

Speed 330 min⁻¹

Output power 3.884 W

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