

# NEMA17 GEAR STEPPER MOTOR

NEMA17-08GM



Our NEMA 17 series are very small high torque stepper motors that can reach speeds of up to 3000 rpm.

This compact stepper motor with a 4:1 transmission gearing is suitable for applications in which you require a precise and powerful working stepper motor.

## MAIN FEATURES

Shaft	Ø 5 x 19 mm (4.5 mm flat spot)
Interface connection	6 JST pin connector
Dimensions	43 x 43 x 75 mm
Items delivered	NEMA17 planetary gear stepper, connection cable

## PERFORMANCE SPECIFICATIONS

### Gear box

Efficiency	96%
Gear reduction ratio	4 : 1
Max permiss torque	3.5 Nm
Moment max. perm. torque	6 Nm
Arc minutes	15
Rated input rotation rate	3000 RPM
Max. Input Speed	5000 RPM

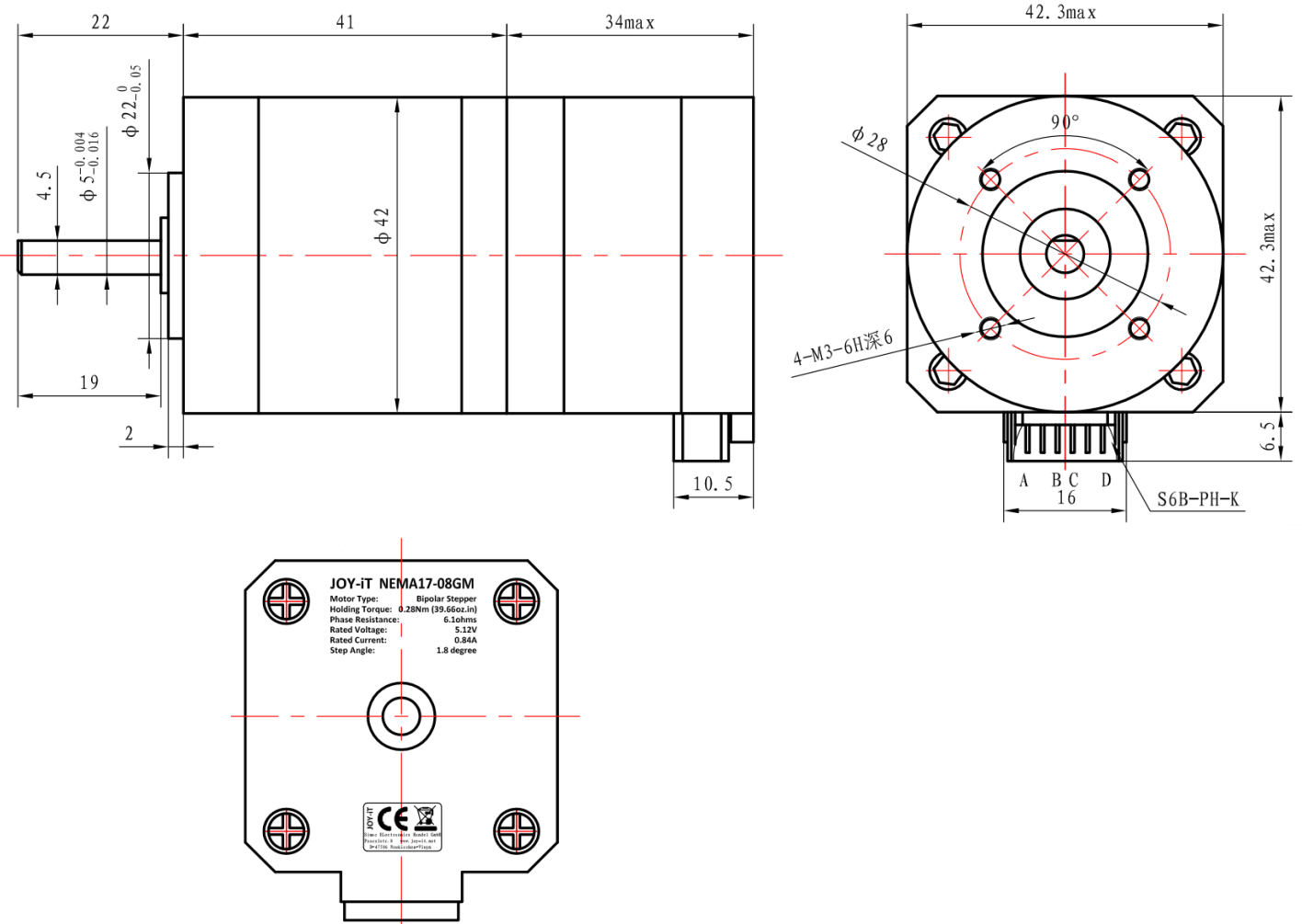
### Stepper motor

Holding torque	0.28 Nm
Rated Voltage	5.12 V
Rated Current	0.84 A
Step Angle	1.8 ° ±5 %
No. of Phases	2
Phase Resistance	6.1 Ω
Phase inductivity	8.9 mH
Isolation resistance	100 MΩ min. @500 V DC
Isolation class	B (130 °C)
Rotational inertia	38 g·cm <sup>2</sup>
Detent torque	0.012 Nm
Operating temperature	-10 °C - 50 °C

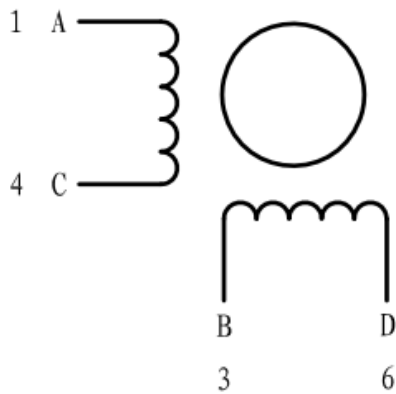
## FURTHER DETAILS

Article No.	NEMA17-08GM
EAN:	4250236821757
Customs Tariff No.	8501109990

## DRAWING



## WIRING



## TORQUE DIAGRAM

### 2H-422 DRIVER SETTINGS

Voltage 23,90 V

max. current 1 A

T(mN.m)

350

315

280

245

210

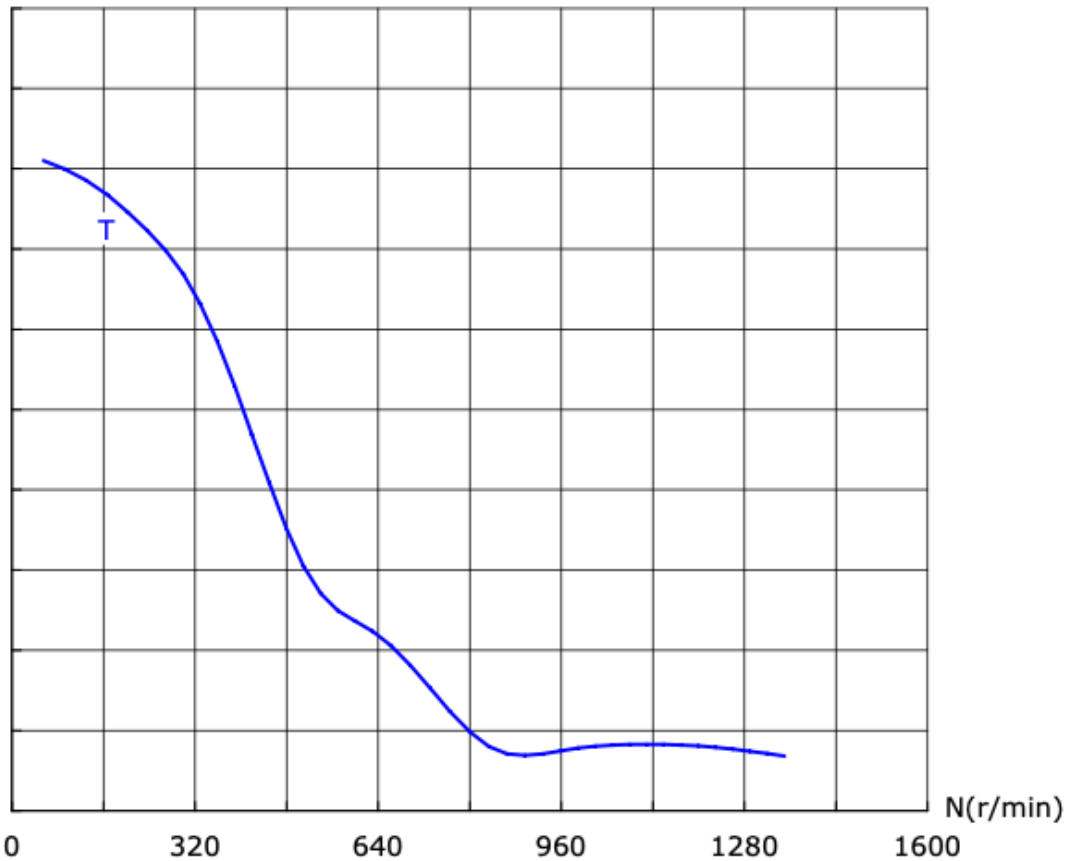
175

140

105

70

35



#### MAX. EFFICIENCY

Efficiency 70,0 %

Torque 78,4 mNm

Current 0,355A

Speed 631 min<sup>-1</sup>

Output power 5,119 W

#### MAX. TORQUE

Torque 283,6 mNm

Current 0,476 A

Speed 55 min<sup>-1</sup>

Output power 1,633 W

#### MAX. POWER

Torque 204,7 mNm

Current 0,568 A

Speed 359 min<sup>-1</sup>

Output power 7,502 W