

# Size 16 hybrid stepper motor

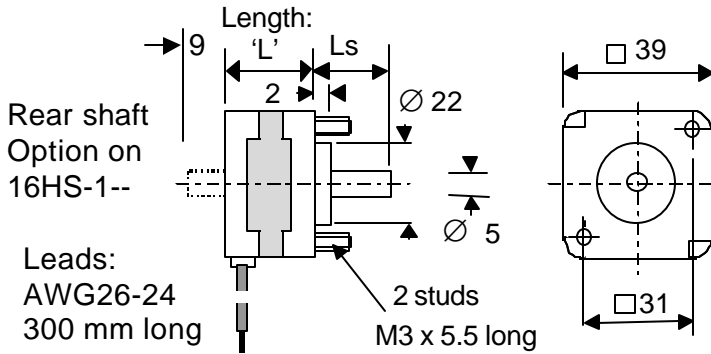
# 16 HS series

The 16 HS hybrid stepper motor provides 200 steps / revolution ( 400 steps /rev when operated in 1/2step mode ) and is ideal for instrumentation drives requiring a combination of compact dimensions, high dynamic performance and accuracy. The motor is physically interchangeable with the larger 17HS model but it's reduced overall frame size and the reduced length of the 16HS-0 series makes it ideal for use in applications where space is at a premium.



The motor is available with a choice of windings to permit operation using either Uni-polar or Bi-polar drive circuits and offers an excellent combination of performance, reliability, and quality at economic prices ideally suited to OEM manufacturers of quality instrumentation products..

## Dimensions: mm



Shaft Length: mm	
Motor	Shaft length
16HS-006	24 mm
16HS-012	12 mm
16HS-110	13 mm
16HS-115	
16HS-132	

Alternative shaft lengths are available to special order

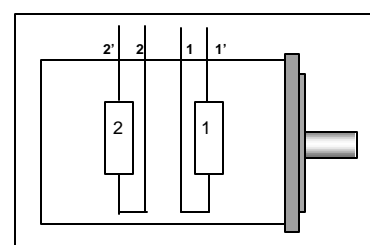
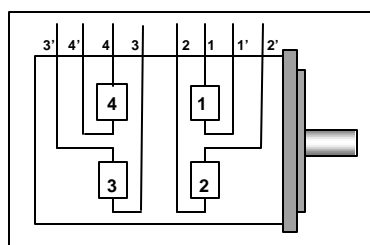
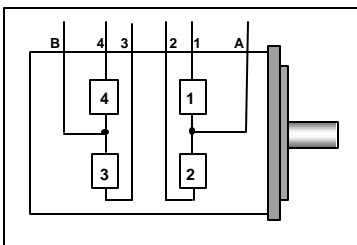
## Specification

motor type	length 'L' mm	holding torque Ncm	rotor inertia Kgcm <sup>2</sup>	resistance per phase ohms	current per phase amps	inductance per phase mH	number of leads	mass Kg
<b>Uni-polar types</b>								
16HS-006	20.5	5	0.011	24	0.26	12.5	6	0.15
16HS-110	34	9	0.016	7.2	0.5	5.8	8	0.20
<b>Bi-polar types</b>								
16HS-012	20.5	8.7	0.011	6.6	0.6	8.5	4	0.15
16HS-115	34	11.5	0.016	4.4	0.75	5.6	4	0.20
16HS-132	34	12.0	0.016	1.2	1.6	1.4	4	0.20

## Lead colours

### Uni-polar types

### Bi-polar types



## Lead colour identity:

### Uni-polar types

### Bi-polar types

#### 6 lead versions

- A Black
- 1 Red
- 2 Red / White
- B White
- 3 Green
- 4 Green/White

#### 8 lead versions

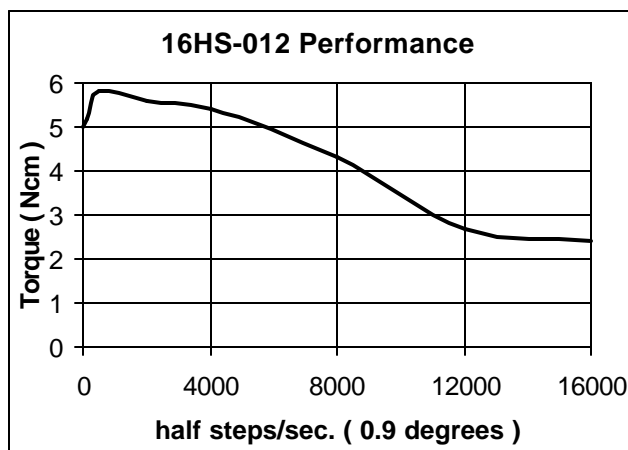
- 1' Red/White
- 1 Red
- 2' Yellow/white
- 2 Yellow
- 3' Black/white
- 3 Black
- 4' Orange/white
- 4 Orange

#### 4 lead versions

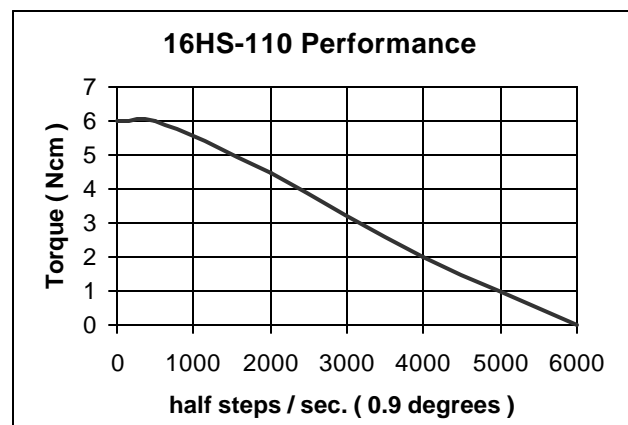
- 1 Red
- 1' Yellow
- 2 Black
- 2' Orange

# Typical 16HS Performance

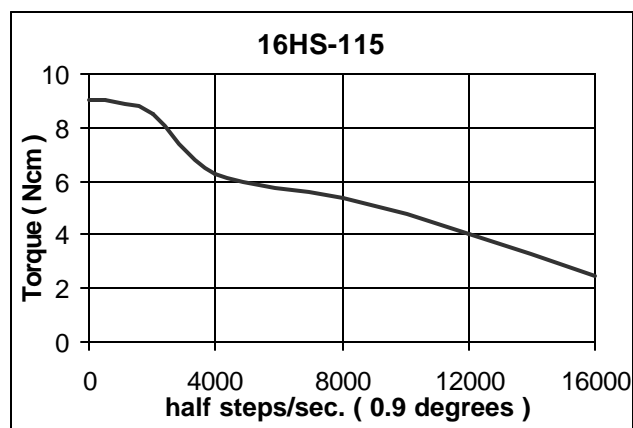
Bi-polar drive with 36 Vdc supply  
0.6 Amps/phase



Uni-polar drive with 24Vdc supply  
0.5 Amps /phase



Bi-polar drive with 36Vdc supply  
0.75 Amps/phase



Bi-polar drive with 36Vdc supply  
1.6 Amps/phase

