

16BHS 2-wire

2-wire

Conductor size: AWG24
Insulation: UL1061

2x M 1.6 at 180°
2.0 min. depth

0.1 A

10

300⁺²⁰₀

32.3 ±0.2

7 ±0.4

1 ±0.1

∅ 2 -0.006
0

∅ 6 -0.02

A

40°

R 0.9

R 0.57 ±0.1

∅ 16 ±0.1

16BHS 2A CW ☉☉ • 01
16BHS 2A CCW ☉☉ • 01

2-wire

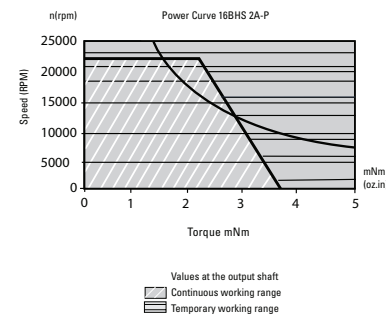
Color	Designation
Red	VCC
Black	GND

dimensions in mm
mass: 33 g

Winding Type	☉☉	-E	-L	-P	-T
Coil Dependent Parameters					
Phase/phase resistance	ohm	29.3	16.5	7.9	2.10
Phase/phase inductance	mH	1.17	0.66	0.32	0.08
Back-EMF constant	V/1000 rpm	1.19	0.84	0.65	0.34
Torque Constant	mNm/A (oz.-in/A)	11.4	8.1	6.2	3.3
Dynamic Parameters					
Rated Voltage	V	12	12	12	12
No-load Current	mA	55	75	112	235
No-load Speed	rpm	8'740	12'740	17'100	33'770
Max. continuous stall torque	mNm (oz-in)	3.8	3.6	4	4
Max. continuous stall current	A	0.33	0.44	0.64	1.24
Max. continuous torque at 10 krpm	mNm (oz-in)	2.8	2.9	3.3	3.7
Max. continuous current at 10 krpm	A	-	0.42	0.61	1.21
Max. continuous power at 10 krpm	W	2.9	3.0	3.5	3.8
Intrinsic Parameters					
Motor constant	mNm/W ^{1/2} (oz-in/W ^{1/2})	2.1	2.0	2.2	2.2
Rotor inertia	kgm ² 10 ⁻⁷	0.5	0.5	0.5	0.5
Mechanical time constant	ms	11.8	13.2	10.7	10.3
Electrical time constant	ms	0.04	0.04	0.04	0.04
Thermal resistance	°C/W	22	22	22	22

- Motor with preloaded ball bearings
- Typical preload = 2 N
- Maximum external load:
 - axial static 15 N (without shaft support)
 - axial dynamic 2 N
 - radial dynamic 5 N
- Operating temperature range -30°C to 80°C
- Max. rated coil temperature 125°C

- Minimum supply voltage: 3.5 volts
- Maximum supply voltage:
 - Windings -E, -L, -P: 15 volts
 - Winding -T: 5 volts
- Max continuous current before electronic damage: 2.6 amps
- Wrong polarity will destroy the electronic



Recommended planetary gearhead: R16 (see page 238)