

PART NUMBER **5718M-02P-HP20**

### MOTOR SPECIFICATIONS

|                      |                        |
|----------------------|------------------------|
| Part Number          | <b>5718M-02P</b>       |
| Step Angle           | 1.8°                   |
| Frame Size           | NEMA 23                |
| Body Length (Dim. A) | 2.22 in. (56.4 mm)     |
| Current              | 4.2 Amps/Phase         |
| Holding Torque       | 173 oz-in (1.22 Nm)    |
| Resistance           | 0.5 Ohms/Phase         |
| Rotor Inertia        | 1.5 oz-in <sup>2</sup> |
| Number of Leads      | 4                      |
| Lead length          | 24 in. (609.6 mm)      |
| Connection           | Parallel               |
| Weight               | 1.5 lbs (0.68 kg)      |

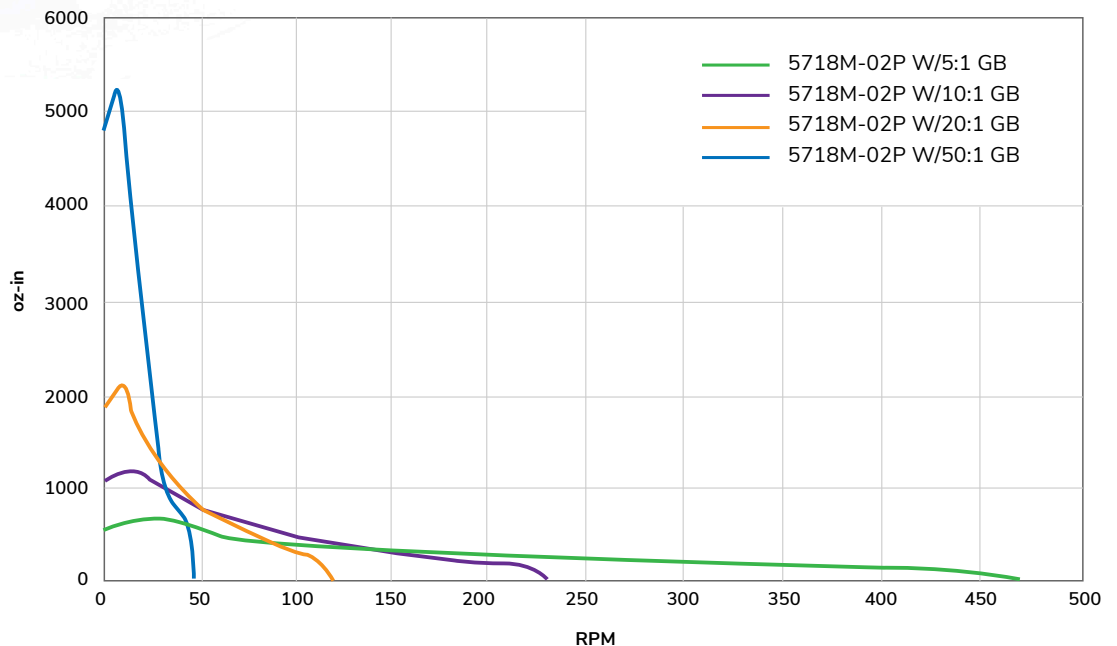
### GEARBOX SPECIFICATIONS

|  |                               |
|--|-------------------------------|
| Part Number                                    | <b>HP20</b>                   |
| Ratio  | 20:1                          |
| Nominal Output Torque (Nm)                     | 50                            |
| Emergency Stop Torque (Nm)                     | 3 times nominal output torque |
| Nominal Input Speed (RPM)                      | 5000                          |
| Max Input Speed (RPM)                          | 10000                         |
| Max Radial Load (N)                            | 1377                          |
| Max Axial Load (N)                             | 765                           |
| Efficiency $\eta$ (%)                          | 85                            |
| Backlash (arcmin)                              | <7                            |
| Protection Class                               | IP65 (gearbox), IP40 (motor)  |
| Service Life (hr)                              | 20000                         |
| Weight (kg)                                    | 1.6                           |
| Operating Temperature (°C)                     | -20 to 90                     |
| Lubrication                                    | Grease                        |
| Noise (n=3000 rpm) dB(A)                       | 58                            |
| Mass Movement of Inertia (kg-cm <sup>2</sup> ) | 0.03                          |

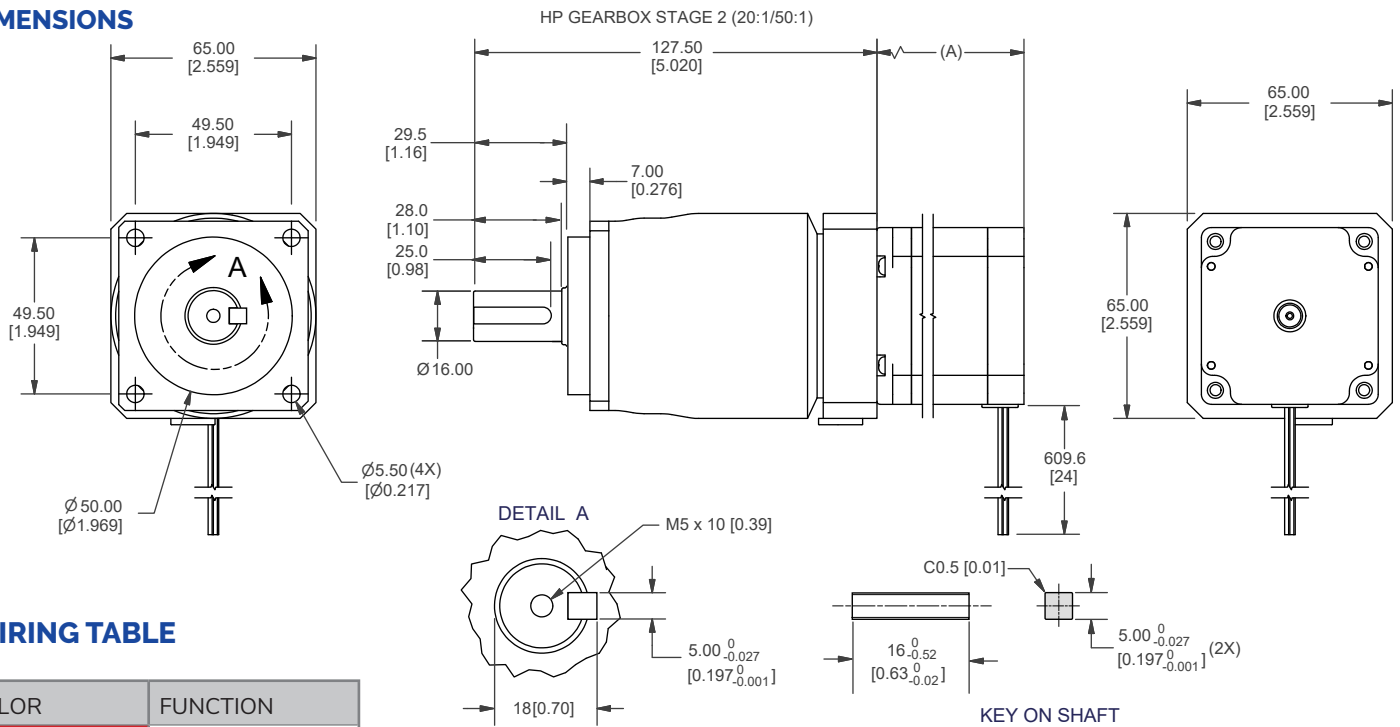


### PERFORMANCE CURVE

5718M-02P GEARMOTOR TORQUE CURVES



## DIMENSIONS



## WIRING TABLE

| COLOR | FUNCTION  |
|-------|-----------|
| Red   | A+ Phase  |
| Blue  | A- Phase  |
| Green | B + Phase |
| Black | B- Phase  |

## RECOMMENDED PRODUCTS

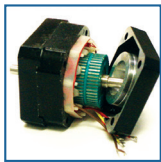


MICROSTEPPING DRIVER  
R701P-RO

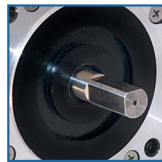


HIGH RESOLUTION  
STEPPER DRIVER  
R725-RO

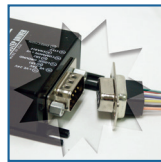
## OPERATION & USAGE TIPS



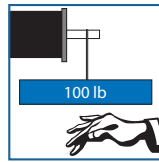
**Do not** disassemble motors; a significant reduction in motor performance will occur.



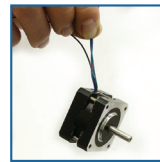
**Do not** machine shafts; this will have a negative effect on shaft run out and perpendicularity.



**Do not** disconnect motor from drive while in operation.



**Do not** use holding torque/detent torque of motor as a fail safe brake.



**Do not** hold motor by lead wires.



**Do not** exceed the rated current; this will damage the motor.

FAILURE TO COMPLY WITH THESE RECOMMENDATIONS WILL VOID ALL WARRANTY TERMS

# Motion Control, Solved.

## MOTOR ENGINEERING & MANUFACTURING



Optimized  
For Your  
Application



Quick  
Prototype  
Turnaround



Small Batch  
to OEM Volume  
Production



US Based  
Support &  
Manufacturing