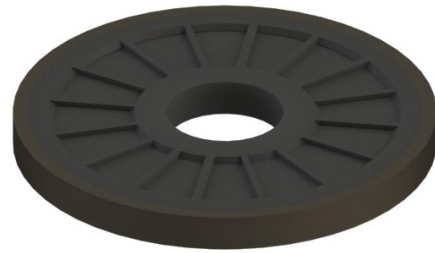


Features and Benefits

- Four grades of magnetic materials
- Cost effective design
- High resistance to demagnetization
- Operation from -40°C to 125°C
- Tough environmental endurance
- Very resistant to chipping



Molded Target Magnet

Physical Properties of Magnetic Material

Table 1.1

| Characteristic | Value | Units |
|--------------------------------|-----------------------|-------|
| Tensile Strength | 6500 | PSI |
| Flexural Strength | 9750 | PSI |
| Flexural Modulus | 1.3 X 10 ⁶ | PSI |
| Continuous Service Temperature | 100 | °C |

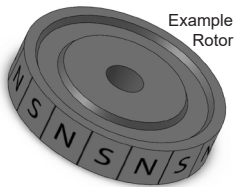
Magnetic Properties

Table 1.2

| Characteristic | Magnalox 300 | Neobond 12M | Neobond 30M | Neobond 32P | Units |
|---|--------------|-------------|-------------|-------------|---------|
| Remanence (B _r) | 1370 | 2500 | 4000 | 4300 | Gauss |
| Coercive Force (H _c) | 1180 | 2400 | 3250 | 2500 | Oersted |
| Energy Product (BH _{MAX}) | 0.40 | 1.3 | 3.1 | 3.2 | MGOe |
| Intrinsic Coercive Force (H _{ci}) | 2300 | 7500 | 7000 | 6900 | Oersted |
| Reversible Temperature Coefficient (B _r) | -0.2 | -0.35 | -0.4 | -0.4 | %/degC |
| Reversible Temperature Coefficient (H _{ci}) | +0.5 | -0.25 | -0.36 | -0.40 | %/degC |
| Peak Magnetizing Force (>95% Saturation) | 596 | 1100 | 1600 | 1600 | kA/m |
| Specific Gravity | 3.5 | 4.0 | 4.7 | 4.45 | --- |

Pole Counts

Alternating north and south magnetic poles are symmetrically located on the outer diameter for radial sensing.



Note: (N)orth/(S)outh markings are for illustration and do not appear on the actual product.

| | |
|-----------------------|---------------------|
| Available Pole Counts | 32, 36, 50, 64, 120 |
|-----------------------|---------------------|

Target Rotor Physical Outline - Engineered Polymer Hub (Mounting Style H)

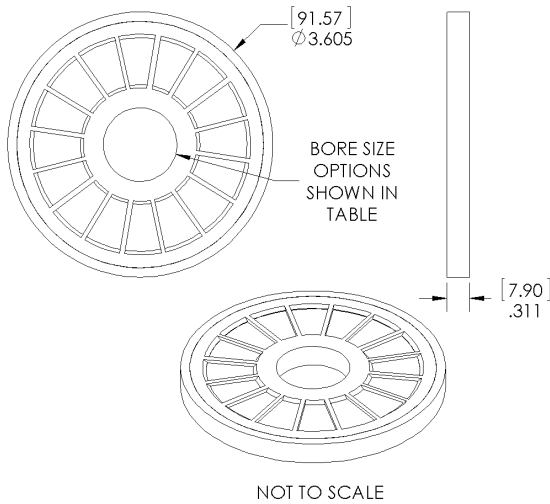


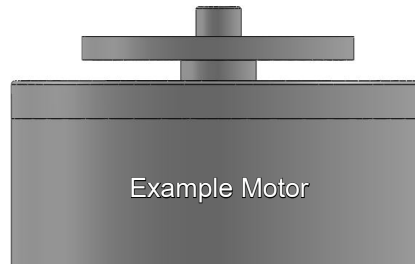
Table 2.1

| Bore Size (.inch) | Motor Shaft OD Size (nominal) | NEMA Guide Shaft Tolerance | Magnet Bore MIN. (inch) | Magnet Bore MAX. (inch) |
|-------------------|-------------------------------|----------------------------|-------------------------|-------------------------|
| 1000 | 1 in (1.000") | +0.0000"/-0.0005" | 0.994 | 0.997 |
| 1182 | 30 mm (1.182") | | 1.119 | 1.122 |
| 1125 | 1 1/8 in (1.125") | | 1.176 | 1.179 |
| 1375 | 1 3/8 in (1.375") | | 1.369 | 1.372 |

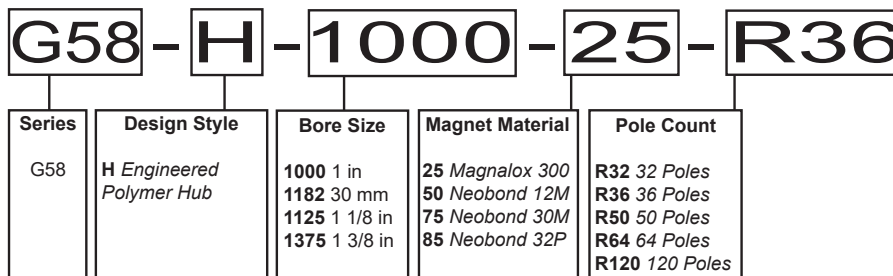
Other bore sizes available upon request.
Contact sales@phoenixamerica.com.

Target Rotor Mounting Guidelines - Engineered Polymer Hub (Mounting Style H) For Press Fit Application

- Proper alignment of the target rotor is critical for optimal performance.
- A machined step on the motor shaft provides a quick and repeatable method for positioning the target rotor. Spacers or other fixturing should be used if no mechanical locating features are on the shaft.
- A chamfered lead in on the shaft will aid in aligning the rotor.
- Prior to insertion, the motor shaft should be clean and free of any oils, lubricants, or solvents.
- Proper fixtures and support must be used to ensure the magnet is pressed on straight and aligned with the motor shaft.
- Opposite end of motor shaft should be supported to avoid undue stress on motor bearings during the pressing operation.
- In applications with high torque or environmental extremes, a retaining compound can be used to enhance the strength of the press fit.



Part Number Description



Example: G58-H-1000-25-R36