

Side Drive

OS69-120-215-210-12168

Permanent Magnet Direct-Drive

Stainless Steel
NEMA 56C Mount
IP69k Washdown Safe

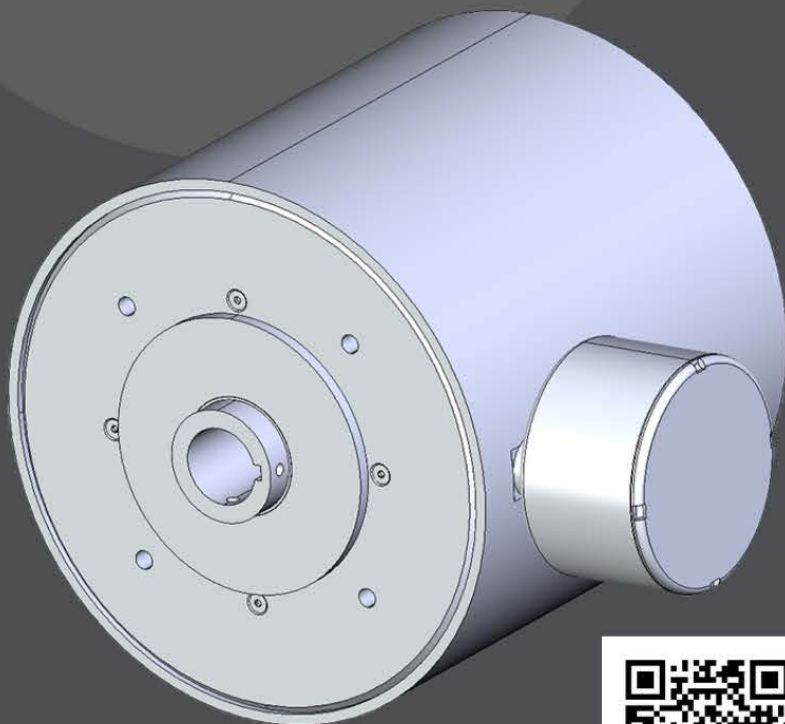
Torque: 40Nm (29.5 ft-lbs)

Peak: 120Nm (88.6 ft-lbs)

Speed Range: 0-300 rpm

Built For Hygienic Washdown Applications
Highly Efficient Permanent Magnetic Arrays
Synchronous Motion Control

Backed by a 3-Year Warranty



Learn More



Designed to Replace
1HP AC Motor + Gearbox Systems
Servo Motor + Gearbox Systems

Perfect Drop-In Retrofit

- Uses existing 56C face / torque arm mount
- Works with any VFD supporting PM motors
- 40 Nm continuous / 120 Nm peak torque
- Ideal for start / stop / timing precision
- No encoder / servo drive required

Key Benefits

- True IP69K
- 100% Oil-free
- 3-year warranty
- Proven 6 year+ service life
- Reduction in spare parts
- 56C Face Mount
- Wide speed range

Annual Savings Per Unit

- Up to 55% less energy
- Half-Ton CO₂ emission savings
- 62% less cost of ownership
(Compared to AC Motor + Gearbox)

\$3,846 MSRP

Oil-Free
Gearbox-Free
Zero Maintenance

 **One MOTION**

Side Drive

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3-Year Cost Comparison

1 HP AC Motor + Gearbox vs. Side Drive

| | Stainless Washdown Motor + Gearbox | One Motion Side Drive | 3-year Savings with Side Drive |
|---|------------------------------------|-----------------------|--------------------------------|
| Initial Purchase Price | \$4,500 | \$3,846 | \$654 |
| 3 Yr. Energy Cost (@ \$0.14 /kWh) | \$1,311 | \$591 | \$720 |
| Routine Maintenance (seals, bearings) | \$900 | \$0 | \$900 |
| Motor Replacement (avg. 1 failure /yr) | \$5,000 | \$0 | \$5,000 |
| 3-Year Total Cost | \$11,711 | \$4,437 | \$7,274 |

Numbers based on average stainless steel AC Motor + Gearbox setups

Gearbox Ratios Replaced

| Inverter Rated Washdown AC Motor | Gearbox Ratio | Peak Torque | Min Speed | Max Speed |
|----------------------------------|---------------|---------------------|-----------|-----------|
| 1 HP | 10:1 | 40 Nm / 29.5 ft-lb | 90 rpm | 270 rpm |
| 1 HP | 15:1 | 60 Nm / 44.3 ft-lb | 60 rpm | 180 rpm |
| 1 HP | 20:1 | 80 Nm / 59.0 ft-lb | 45 rpm | 135 rpm |
| 1 HP | 25:1 | 100 Nm / 73.8 ft-lb | 36 rpm | 108 rpm |
| 1 HP | 30:1 | 120 Nm / 88.5 ft-lb | 30 rpm | 90 rpm |

Variable speed control from 0Hz - 120Hz+

Consistant torque output at low and high speed

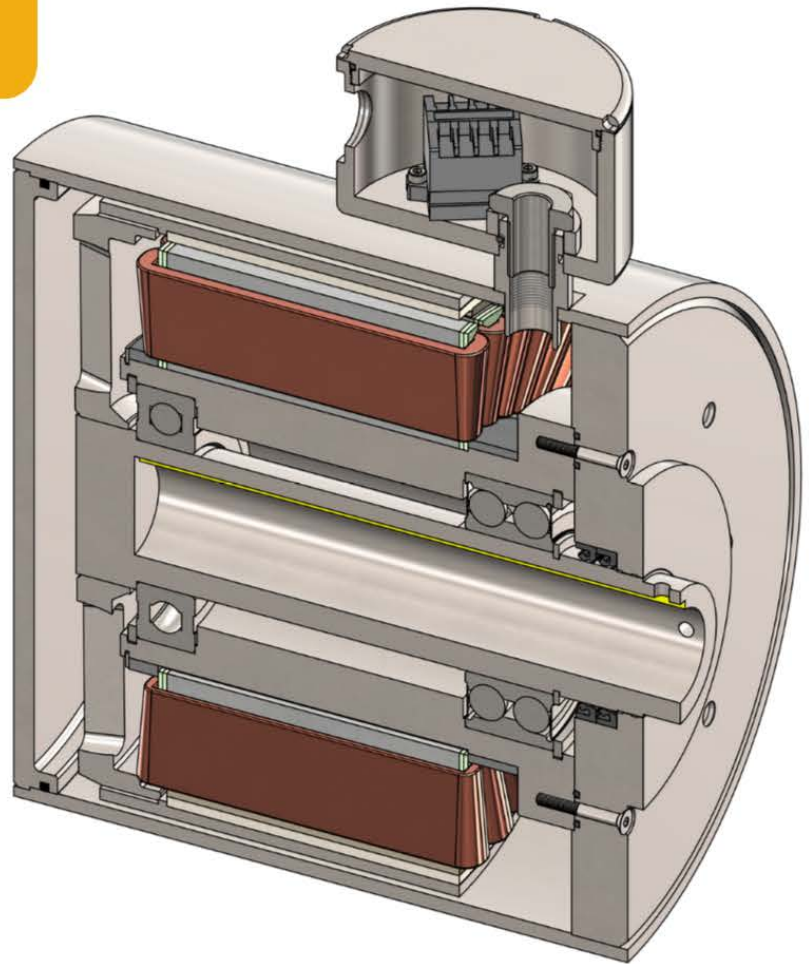
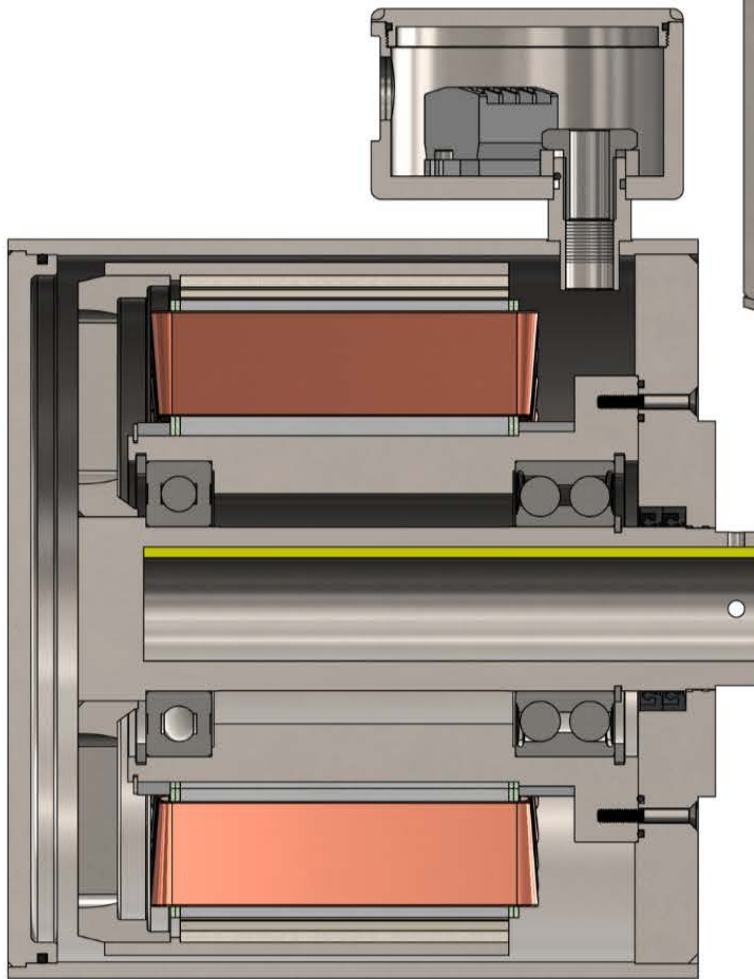
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Outrunner Design

Oil-Free / Gear-Free / Zero Maintenance

Permanent Magnet Direct-Drive



Fully Sealed IP69k
316 Stainless Steel Shell
NEMA 56C Mount

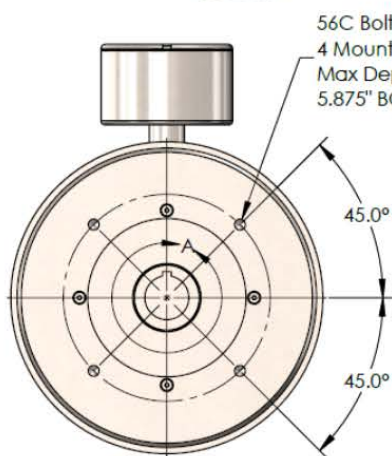
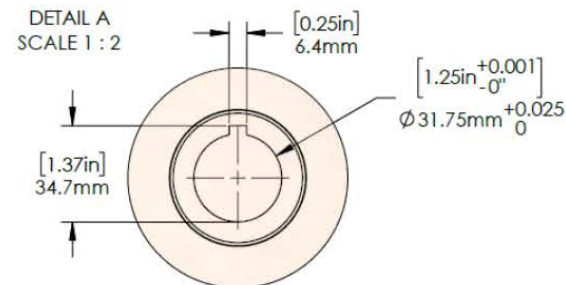
No contamination risk due to oil leakage.

No maintenance required.

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DETAIL A
SCALE 1:2



Mounting Distances

56C Bolt Pattern, 4 Mounting Holes 3/8-16 2B
Maximum Depth of Screw: 5/8"
5.875" BCD

Electrical

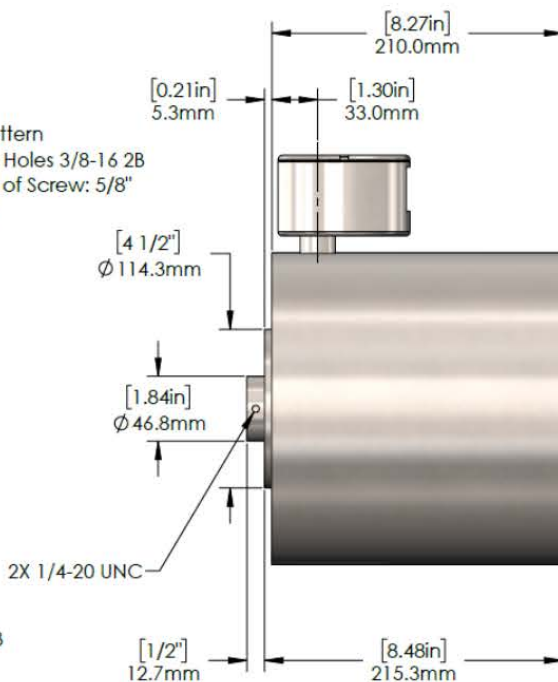
IP69k - Junction Box, Conduit Threads: 1/2" NPT
36N/40P, G3.1.2.55

Face

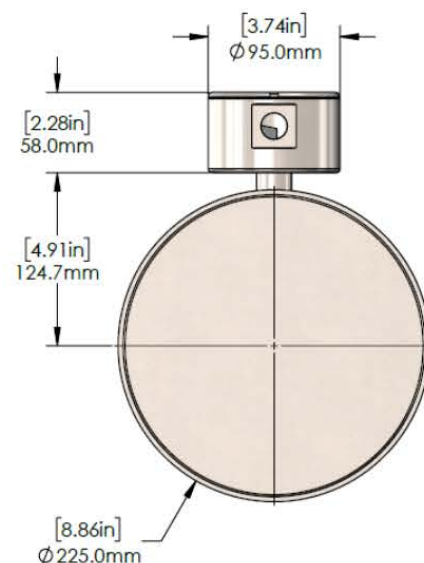
C Face Mounted / Hollow Core

IP Rating

IP69k



| | |
|-----------------------------|--------|
| UNLESS OTHERWISE SPECIFIED: | |
| DIMENSIONS ARE IN mm | |
| TOLERANCES: | |
| 0-6: | ±0.1 |
| >6-30: | ±0.2 |
| >30-120: | ±0.3 |
| >120-400: | ±0.4 |
| >400-1000: | ±0.5 |
| MATERIAL | SS 316 |
| FINISH | N/A |
| DO NOT SCALE DRAWING | |



PART NO. OS69-120-215-210-12168

TITLE:

Powered Shaft, IP69k, 120Nm (88.6 ft/lbs), Single Core:
100mm (3.94"), 36N/40P, G3.1.2.55, 215mm (8.5"), 210mm
(8.3"), C Face Mounted / Hollow Core, IP69k-Junction Box,
Conduit Threads: 1/2 NPT, Bolt Mount, Mounting Distance:
0mm (0") Offset #1: 5.3mm (0.21") | Offset #2: 0mm (0")

SIZE

A

ONE MOTION

SCALE: 1:4 Weight(kg): 48.85 SHEET 1 OF 1

Peak Torque: 120Nm (88.6 ft/lbs)

Torque: 40Nm (29.5 ft/lbs)

Belt Pull: N/A

Synchronous Speed: 180 RPM

IP Rating: 69

- Power: 0.75 / 2.26 / 0.45 kw
- Current: 2.93 / 8.79 amps
- Averages: 98.66 Nm / 45.47 RPM / 7.34 amps v
- BEMF @ 60hz: 229.5 V
- Name Plate Volts: 460 v