

GAST[®] MVP

AIR MOTOR CATALOG



WHY CHOOSE GAST?

NEARLY A CENTURY OF QUALITY AIR-MOVING HISTORY

Since 1921, Gast Manufacturing, Inc. has been a leader in the design and manufacturing of quality air-moving products. We specialize in offering cost-effective solutions for a wide variety of industries including industrial manufacturing, healthcare, and environmental cleanup applications.

COMPREHENSIVE PRODUCT PORTFOLIO

We set the standard in the pneumatic industry. With our comprehensive product portfolio, in-house design, and prototyping capabilities, we're continually committed to providing customers with a truly unforgettable experience. Our products are tailored to meet the many challenging applications of OEMs and end users worldwide. Our products are trusted to operate in critical applications due to their advanced performance and durability. To virtually eliminate downtime, they're also designed for ease of serviceability.

LEADING THE INDUSTRY

Gast has extensive knowledge of the pneumatic industry and our customers' needs continually drive the development of new and innovative products. With the expertise of our engineers and designers, we're able to help identify and implement optimal products for each of our customers' specific applications.

COMMITTED TO CUSTOMER SERVICE

Gast and its global distribution network provide the support and service our customers can count on. From initial inquiry through dedicated after-sales support, Gast can be counted on to be there when needed. Additionally, OEM customers are assigned dedicated customer service and account managers, along with product and service training.

STATE-OF-THE-ART PNEUMATICS LAB

Our industry-leading pneumatics lab provides a full range of onsite product testing capabilities. Our engineering group has access to state-of-the-art data acquisition tools, enabling them to solve the most difficult customer problems. We use our capabilities not only to continually improve our own products, but also to actively work with our customers to provide assistance as they develop their own new products.



GAST MVP and AM Series Motors



GAST®

MVP Rotary Vane Air Motors

MVP rotary vane air motors make Gast dependability available to manufacturers powering the next generation of rotating equipment. Rely on MVP's modular air motor technology to make your innovative engineered products lighter, quieter, more efficient and easier to manufacture and service.

Variable Speed and Power Output

Precisely control speed and power output by simply throttling inlet air pressure or restricting exhaust air. This is a cost-effective way over electric motor speed controls.

Efficient

Machined to the highest tolerances. MVP air motors generate more power while consuming less energy. This also gives MVP improved power density, providing more torque output in a lighter-weight air motor.

Modular

MVP's modular design makes it easy to maintain MVP air motors. Simply remove the back plate of any MVP air motor to swap out the internal cartridge.

Universal Vanes

MVP air motors use a proprietary engineered vane material rated for operation with or without lubrication so operating conditions for the same motor can be varied.

ATEX Approved and Non-Electrical Sparking

Most MVP models meet the requirements of ATEX Directive 2014-34-EU and applicable standards: EN80079-36, EN 80079-37, IEC 60079-0. MVP air motors can be used in ambient temperatures up to 250°F (120°C) in non-hazardous atmospheres.

Considerations When Selecting an Air Motor

Air motors have some general advantages when compared to other power sources, such as electric motors.

Control

Adjust speed and power output by simply throttling inlet air pressure or restricting exhaust air.

Non-Sparking

As non-electrical devices, air motors greatly reduce the possibility of igniting flammable gases.

Cool Running

An air motor can be stalled or overloaded indefinitely without damage. Plus, expanding compressed air cools the motor.



Output Power

The output power of an air motor is relative to speed and to air-line pressure.

Torque vs. Speed

An air motor slows down when load increases. At the same time, its torque increases to the point where it matches the load. It will continue to provide increased torque all the way to the stalled condition, and it can maintain the stalled condition without any harm to the motor.

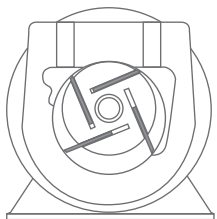
As the load is reduced, an air motor will increase speed and the torque will decrease to match the reduced load.

When the load on the air motor is either increased or decreased, speed can be controlled by increasing or decreasing air pressure or by restricting exhaust air.

Starting torque of an air motor is lower than running torque.

Air Consumption

Air consumption increases as speed and air pressure are increased.



While low starting torque provides smooth, low-shock starting, additional air-line pressure is needed for starting under heavy loads. The rule of thumb for selecting an air motor is to choose one that will provide the horsepower and torque needed using only two-thirds (2/3) of the line pressure available.

Markets and Applications

MVP air motors' lightweight construction, high power-to-weight ratios, operating efficiency and reasonable pricing make them ideal for a wide range of applications.



MATERIAL HANDLING



PIPELINE CONSTRUCTION & MACHINE TOOLS



INDUSTRIAL & SANITARY MIXING PUMPING



MVP02 & MVP03 Series

1.0 to 1.6 Horsepower



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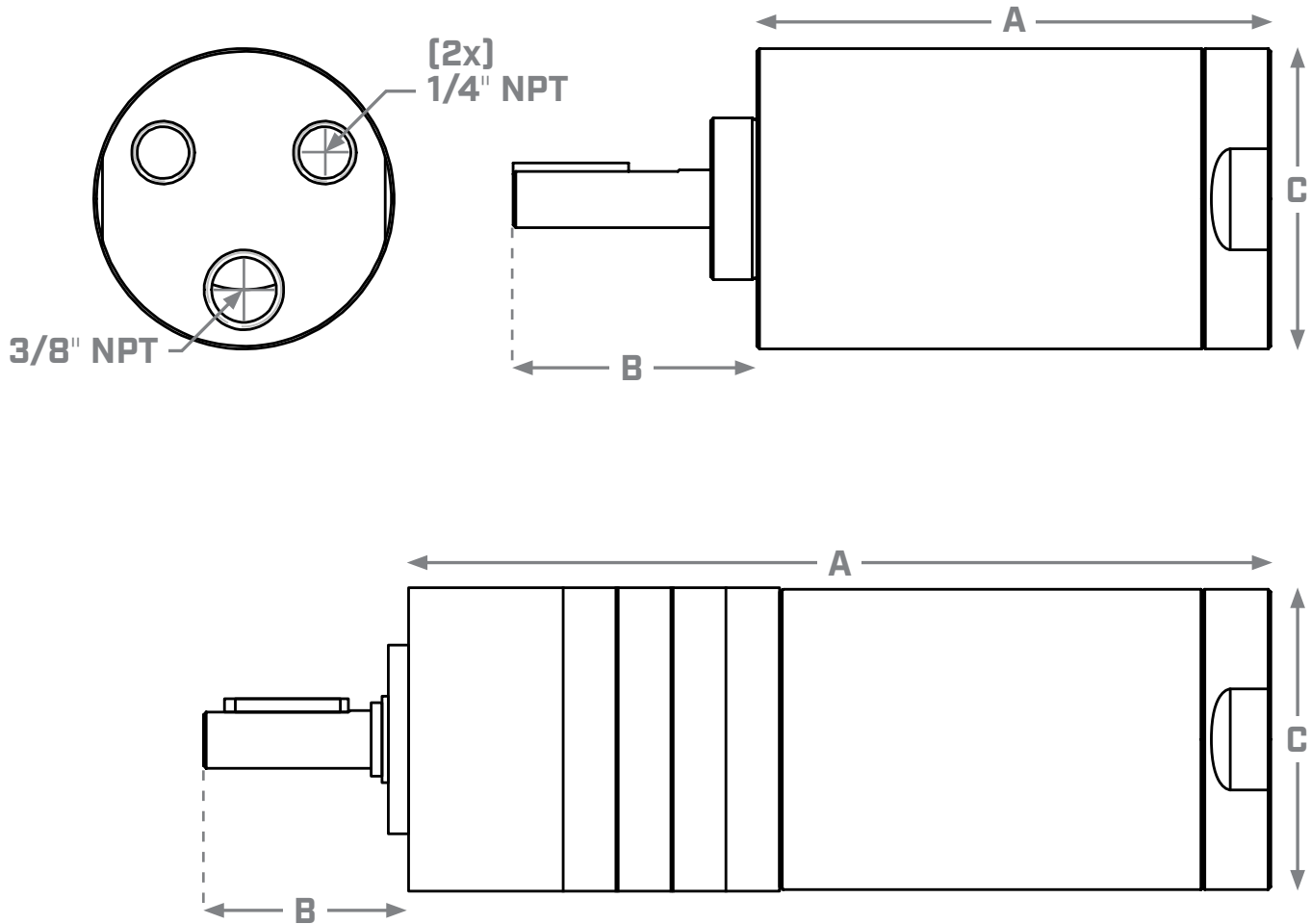
*Model Specific
Technical Data Sheets*

www.gastmfg.com

| Model | Max Power | | Speed @ Max Power | Torque @ Max Power | | | Max Torque Output [Near Stall] | | |
|-------------------------|-----------|------|----------------------|-----------------------|---------|-------|-----------------------------------|---------|--------|
| | HP | kW | RPM | In. Lb. | Ft. Lb. | Nm | In. Lb. | Ft. Lb. | Nm |
| MVP02DS-ANC-NXXA-01 | 1.00 | 0,75 | 3500.00 | 23.00 | - | 2.60 | 26.00 | - | 3.00 |
| MVP02DS-ANC-IXXA-01 | 1.00 | 0,75 | 3500.00 | 23.00 | - | 2.60 | 26.00 | - | 3.00 |
| MVP02DS-ANC-HXXA-01 | 1.00 | 0,75 | 3500.00 | 23.00 | - | 2.60 | 26.00 | - | 3.00 |
| MVP02DS-ANC-NXSA-01 | 1.00 | 0,75 | 3500.00 | 23.00 | - | 2.60 | 26.00 | - | 3.00 |
| MVP02DS-ANC-IXSA-01 | 1.00 | 0,75 | 3500.00 | 23.00 | - | 2.60 | 26.00 | - | 3.00 |
| MVP02DS-ANC-HXSA-01 | 1.00 | 0,75 | 3500.00 | 23.00 | - | 2.60 | 26.00 | - | 3.00 |
| MVP02GS-ANC-HXXR-01-P10 | 1.00 | 0,75 | 350.00 | - | 14.00 | 19.00 | - | 15.00 | 20.00 |
| MVP02GS-ANC-HXXA-01-P20 | 1.00 | 0,75 | 175.00 | - | 28.00 | 38.00 | - | 30.00 | 41.00 |
| MVP02GS-ALC-HXXA-01-P50 | 1.00 | 0,75 | 70.00 | - | 71.00 | 96.00 | - | 79.00 | 107.00 |
| MVP03DS-ANC-NXSA-01 | 1.60 | 1,20 | 3500.00 | 29.00 | - | 3.30 | 36.00 | - | 4.15 |
| MVP03DS-ANC-HXSA-01 | 1.60 | 1,20 | 3500.00 | 29.00 | - | 3.30 | 36.00 | - | 4.15 |

MODEL DIMENSIONS

MVP02 & MVP03



| Model | Inches | | | Mounting |
|-------------------------|--------------------|---------------------|--------------|------------|
| | [A] Body Length | [B] Shaft Length | [C] Width | |
| MVP02DS-ANC-NXXA-01 | 5.15 | 2.10 | 2.75 | Nema 56C |
| MVP02DS-ANC-IXXA-01 | 5.15 | 1.18 | 2.75 | IEC 071-B5 |
| MVP02DS-ANC-HXXA-01 | 4.65 | 2.60 | 2.75 | Hub Mount |
| MVP02DS-ANC-NXSA-01 | 5.15 | 2.10 | 2.75 | Nema 56C |
| MVP02DS-ANC-IXSA-01 | 5.15 | 2.60 | 2.75 | IEC 071-B5 |
| MVP02DS-ANC-HXSA-01 | 4.65 | 2.60 | 2.75 | Hub Mount |
| MVP02GS-ANC-HXXR-01-P10 | 7.35 | 2.18 | 2.75 | Hub Mount |
| MVP02GS-ANC-HXXA-01-P20 | 8.11 | 1.93 | 2.83 | Hub Mount |
| MVP02GS-ALC-HXXA-01-P50 | 8.43 | 1.92 | 3.15 | Hub Mount |
| MVP03DS-ANC-NXSA-01 | 5.75 | 2.10 | 2.75 | Nema 56C |
| MVP03DS-ANC-HXSA-01 | 5.25 | 2.60 | 2.75 | Hub Mount |

MVP05 Series

3.0 Horsepower



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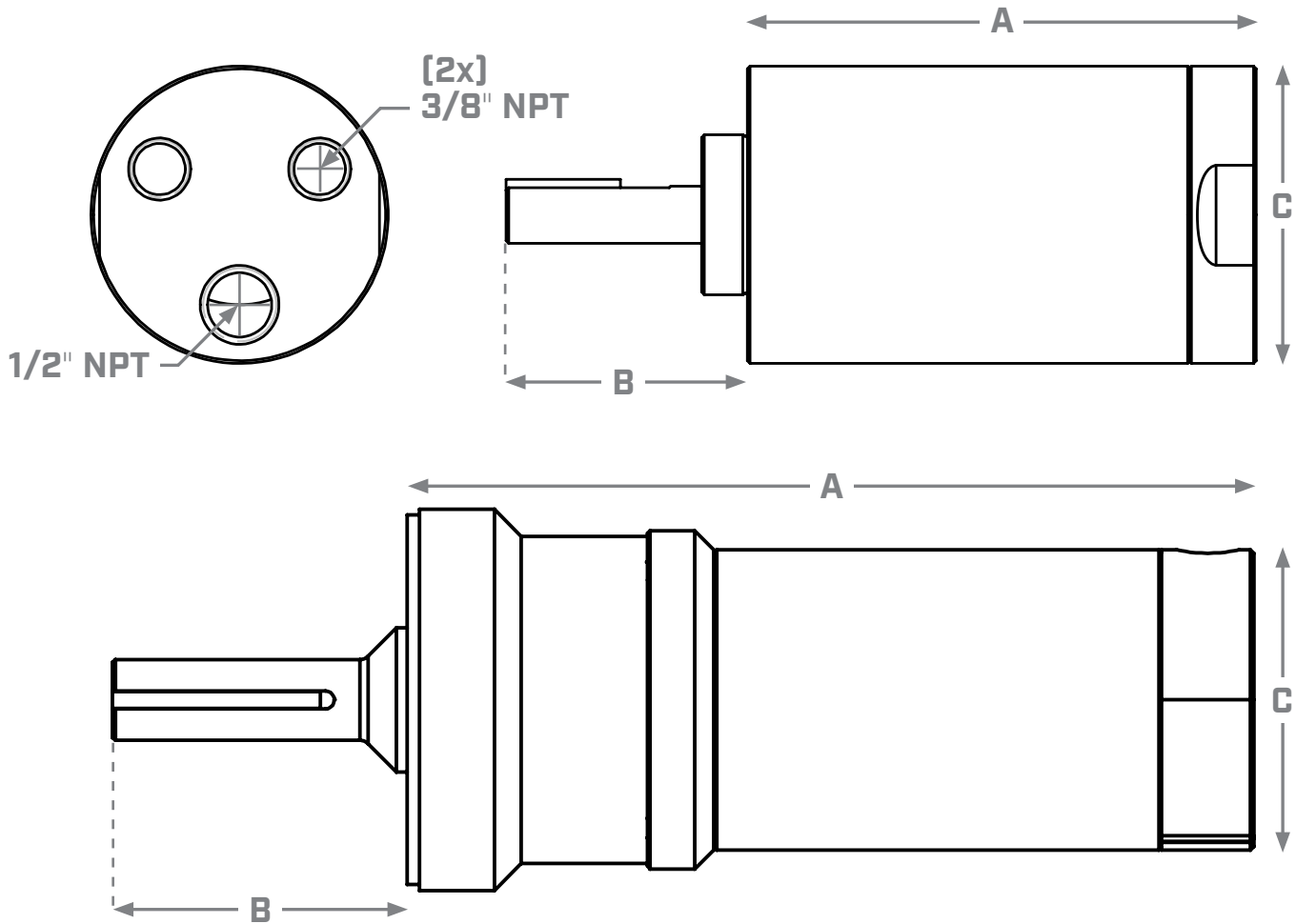
*Model Specific
Technical Data Sheets*

www.gastmfg.com

| Model | Max Power | | Speed @ Max Power | Torque @ Max Power | | | Max Torque Output [Near Stall] | | |
|-------------------------|-----------|------|----------------------|-----------------------|---------|--------|-----------------------------------|---------|--------|
| | HP | kW | RPM | In. Lb. | Ft. Lb. | Nm | In. Lb. | Ft. Lb. | Nm |
| MVP05DS-ANC-NXXA-01 | 3.00 | 2,24 | 3500.00 | 50.00 | – | 5.50 | 70.00 | – | 8.00 |
| MVP05DS-ANC-IXXA-01 | 3.00 | 2,24 | 3500.00 | 50.00 | – | 5.50 | 70.00 | – | 8.00 |
| MVP05DS-ANC-HXXA-01 | 3.00 | 2,24 | 3500.00 | 50.00 | – | 5.50 | 70.00 | – | 8.00 |
| MVP05DS-ANC-NXSA-01 | 3.00 | 2,24 | 3500.00 | 50.00 | – | 5.50 | 70.00 | – | 8.00 |
| MVP05DS-ANC-IXSA-01 | 3.00 | 2,24 | 3500.00 | 50.00 | – | 5.50 | 70.00 | – | 8.00 |
| MVP05DS-ANC-HXSA-01 | 3.00 | 2,24 | 3500.00 | 50.00 | – | 5.50 | 70.00 | – | 8.00 |
| MVP05GC-ANC-ZXXR-01-P09 | 3.00 | 2,24 | 400.00 | – | 34.00 | 46.00 | – | 50.00 | 68.00 |
| MVP05GC-ALC-ZXXR-01-P12 | 3.00 | 2,24 | 375.00 | – | 43.00 | 58.00 | – | 60.00 | 81.00 |
| MVP05GC-ALC-ZXXR-01-P15 | 3.00 | 2,24 | 300.00 | – | 47.00 | 64.00 | – | 79.00 | 107.00 |
| MVP05GC-ALC-ZXXR-02-P15 | 3.00 | 2,24 | 300.00 | – | 47.00 | 64.00 | – | 79.00 | 107.00 |
| MVP05GC-ALC-ZXXR-02-P25 | 3.00 | 2,24 | 140.00 | – | 78.00 | 100.00 | – | 110.00 | 150.00 |
| MVP05GC-ALC-ZXXR-02-P30 | 3.00 | 2,24 | 117.00 | – | 95.00 | 129.00 | – | 132.00 | 179.00 |
| MVP05GC-ALC-ZXXR-02-P40 | 3.00 | 2,24 | 88.00 | – | 120.00 | 163.00 | – | 175.00 | 237.00 |

MODEL DIMENSIONS

MVP05



| Model | Inches | | | Mounting |
|-------------------------|--------------------|---------------------|--------------|------------|
| | [A] Body Length | [B] Shaft Length | [C] Width | |
| MVP05DS-ANC-NXXA-01 | 6.06 | 2.14 | 3.25 | Nema 56C |
| MVP05DS-ANC-IXXA-01 | 6.05 | 1.59 | 3.25 | IEC 080-B5 |
| MVP05DS-ANC-HXXA-01 | 5.56 | 2.64 | 3.25 | Hub Mount |
| MVP05DS-ANC-NXSA-01 | 6.06 | 2.14 | 3.25 | Nema 56C |
| MVP05DS-ANC-IXSA-01 | 6.05 | 1.59 | 3.25 | IEC 080-B5 |
| MVP05DS-ANC-HXSA-01 | 5.56 | 2.64 | 3.25 | Hub Mount |
| MVP05GC-ANC-ZXXR-01-P09 | 9.03 | 3.32 | 4.13 | Hub Mount |
| MVP05GC-ALC-ZXXR-01-P12 | 9.89 | 3.88 | 6.00 | Hub Mount |
| MVP05GC-ALC-ZXXR-01-P15 | 9.89 | 3.88 | 5.50 | Hub Mount |
| MVP05GC-ALC-ZXXR-02-P15 | 9.49 | 2.19 | 3.25 | Hub Mount |
| MVP05GC-ALC-ZXXR-02-P25 | 9.69 | 2.18 | 3.25 | Hub Mount |
| MVP05GC-ALC-ZXXR-02-P30 | 9.69 | 2.18 | 3.25 | Hub Mount |
| MVP05GC-ALC-ZXXR-02-P40 | 9.64 | 2.18 | 3.25 | Hub Mount |

MVP06 Series

4.0 Horsepower



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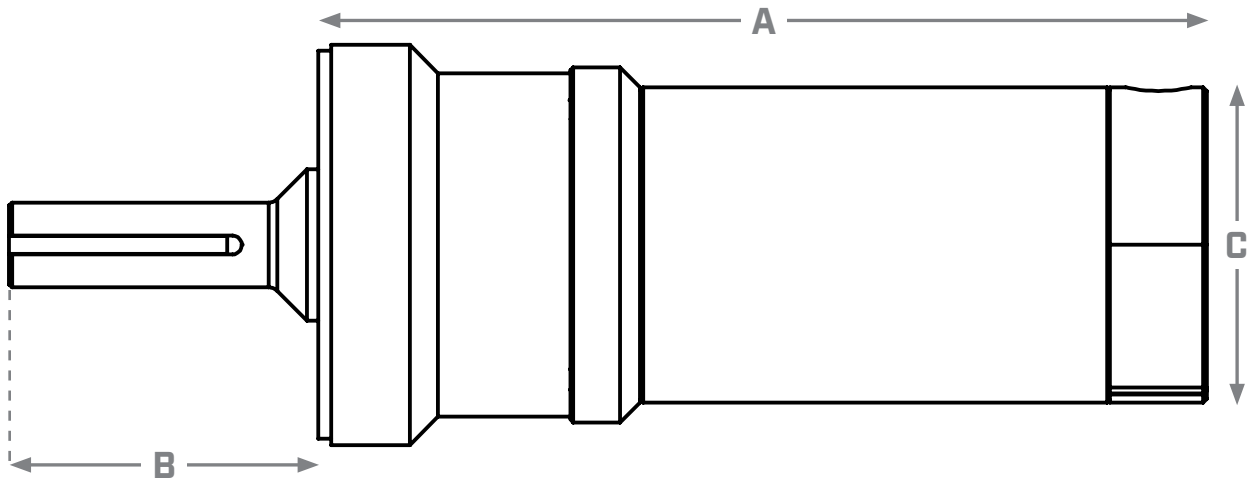
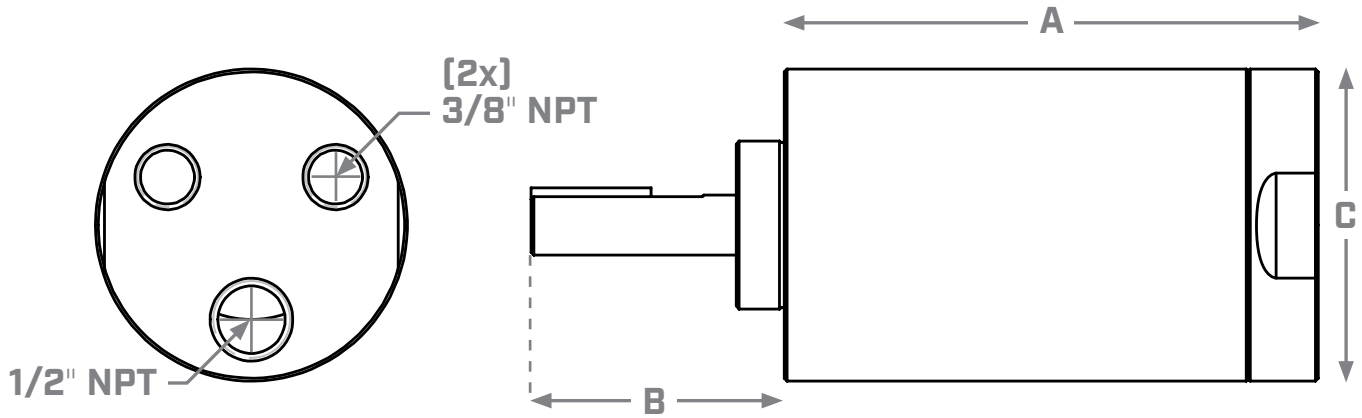
*Model Specific
Technical Data Sheets*

www.gastmfg.com

| Model | Max Power | | Speed @ Max Power | Torque @ Max Power | | | Max Torque Output [Near Stall] | | |
|--------------------------|-----------|------|----------------------|-----------------------|---------|--------|-----------------------------------|---------|--------|
| | HP | kW | RPM | In. Lb. | Ft. Lb. | Nm | In. Lb. | Ft. Lb. | Nm |
| MVP06DS-ANC-NXXA-01 | 4.00 | 3.00 | 3500.00 | 67.00 | – | 7.60 | 97.00 | – | 10.20 |
| MVP06DS-ANC-IXXA-01 | 4.00 | 3.00 | 3500.00 | 67.00 | – | 7.60 | 97.00 | – | 10.20 |
| MVP06DS-ANC-HXXA-01 | 4.00 | 3.00 | 3500.00 | 67.00 | – | 7.60 | 97.00 | – | 10.20 |
| MVP06GC-ALC-ZXXR-01-P20 | 4.00 | 3.00 | 350.00 | – | 75.00 | 102.00 | – | 145.00 | 197.00 |
| MVP06GC-ALC-ZXXR-02-P20 | 4.00 | 3.00 | 350.00 | – | 75.00 | 102.00 | – | 145.00 | 197.00 |
| MVP06GC-ALC-ZXXR-02-P25 | 4.00 | 3.00 | 140.00 | – | 105.00 | 145.00 | – | 150.00 | 200.00 |
| MVP06GC-ALC-ZXXR-02-P40 | 4.00 | 3.00 | 88.00 | – | 170.00 | 225.00 | – | 240.00 | 325.00 |
| MVP06GC-ALC-ZXXR-02-P50 | 4.00 | 3.00 | 70.00 | – | 210.00 | 285.00 | – | 300.00 | 407.00 |
| MVP06GC-ALC-ZXXA-01-P100 | 4.00 | 3.00 | 45.00 | – | 415.00 | 563.00 | – | 710.00 | 962.00 |

MODEL DIMENSIONS

MVP06



| Model | Inches | | | Mounting |
|--------------------------|--------------------|---------------------|--------------|------------|
| | [A] Body Length | [B] Shaft Length | [C] Width | |
| MVP06DS-ANC-NXXA-01 | 6.78 | 2.11 | 3.25 | Nema 56C |
| MVP06DS-ANC-IXXA-01 | 6.77 | 1.59 | 3.25 | IEC 080-B5 |
| MVP06DS-ANC-HXXA-01 | 6.28 | 2.61 | 3.25 | Hub Mount |
| MVP06GC-ALC-ZXXR-01-P20 | 12.12 | 3.88 | 5.50 | Hub Mount |
| MVP06GC-ALC-ZXXR-02-P20 | 10.43 | 2.25 | 3.54 | Hub Mount |
| MVP06GC-ALC-ZXXR-02-P25 | 10.50 | 2.25 | 3.54 | Hub Mount |
| MVP06GC-ALC-ZXXR-02-P40 | 10.50 | 2.25 | 3.54 | Hub Mount |
| MVP06GC-ALC-ZXXR-02-P50 | 10.45 | 2.25 | 3.40 | Hub Mount |
| MVP06GC-ALC-ZXXA-01-P100 | 12.72 | 3.95 | 6.00 | Hub Mount |

GAST®

GENUINE PARTS & SERVICE

Our genuine parts and service provide you the quality, durability, and dependability you have come to expect from Gast. Simplify repairs, maximize life and performance, and tailor your products with our proven aftermarket solutions.

MVP Power Module Kits

Universal replacement power module cartridges get you back on line in just minutes and do not require any special tools or fixtures!

KMVP02DD-1 (All MVP02 direct drive models)

KMVP03DD-1 (All MVP02 direct drive models)

KMVP05DD-1 (All MVP05 direct drive models)

KMVP06DD-1 (All MVP06 direct drive models)

KMVP02GR-1 (All MVP02 gear reduced models)

KMVP03GR-1 (All MVP02 gear reduced models)

KMVP05GR-1 (All MVP05 gear reduced models)

KMVP06GR-1 (All MVP06 gear reduced models)

Visit the [Gast YouTube channel](#) to view all of our service videos:



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Model Specific Technical Data Sheets

GAST/JUN-AIR PART NUMBER: **XB7785** REV. **A**

PRODUCT SPECIFICATIONS

| MODEL NO. | MAX. PRESS. bar | MAX. SPEED PSI | HP | KW | NET WT. lbs. / kg |
|---------------------|--------------------|-------------------|-----------|-----|----------------------|
| MVPS05-ANC-HXXXA-01 | 6.9 | 100 | 3,500 RPM | 3.0 | 2.24 / 6.5 / 2.9 |

NOTES:
1. CONFORMS TO EUROPEAN STANDARD EN13463-1 NON-ELECTRICAL EQUIPMENT FOR EXPLOSIVE ATMOSPHERES GROUP I, CAT 2 (GAS & DUST), PROTECTED BY CONSTRUCTION F4 (TEMP. RATED 135C)
2. TECHNICAL DATA SUBJECT TO CHANGE WITHOUT NOTICE.

SOUND LEVEL 87 dB(A)

NORMAL AMBIENT 1°C - 40°C

RELATIVE HUMIDITY 0% - 100%

ENVIRONMENT HAZARDOUS AMBIENT COMBUSTIBLE GAS AND DUST

OUTPUT PERFORMANCE:

PRODUCT DIMENSIONS:

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Pictorial and dimensional data is subject to change without notice. The information presented is based on technical data and test results of nominal units. It is believed to be accurate and is offered as an aid in the selection of Gast products. It is the user's responsibility to determine suitability of the product for intended use and the user assumes all risk and liability whatsoever in connection therewith. Environmental and application conditions may affect advertised life.

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