

CLUTCH/BRAKES

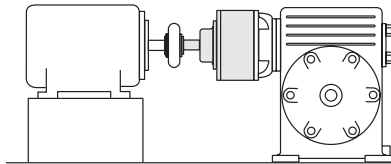
DESIGNING YOUR MODULAR SYSTEM

Designing your system is easily accomplished in 5 steps:

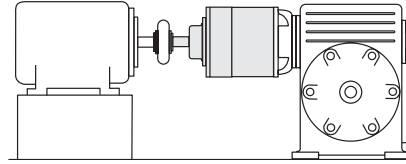
1. Determine the functions your system must perform -
 - Starting (Clutch configuration)
 - Stopping (Brake configuration)
 - Starting & Stopping (Clutch-Brake configuration)
2. Determine your application configuration using the Typical Application drawings on below.
3. A Modular Assembly is designated for each Application (i.e. MIB, MIDO, etc.) Modular Assemblies consist of one or more Module Units. The various Module Assemblies and the Units which comprise them are shown on page 243.

TYPICAL APPLICATIONS

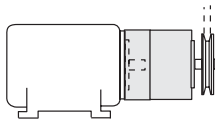
INPUT BRAKE MOUNTED TO A REDUCER AND COUPLED TO A MOTOR (MIB)



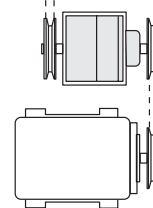
INPUT CLUTCH OR INPUT CLUTCH-BRAKE MOUNTED TO A REDUCER AND COUPLED TO A MOTOR (MIDO OR MIDB)



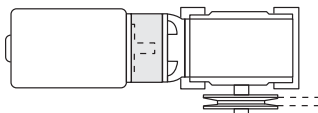
CLUTCH-BRAKE ON C-FACED MOTOR (MDB)



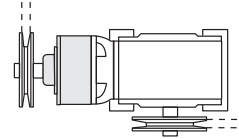
INPUT CLUTCH OR INPUT CLUTCH-BRAKE WITH FOOT MOUNT (MIDO OR MIDB W/FOOT)



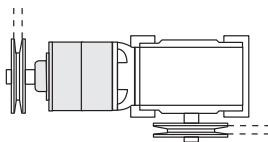
BRAKE MOUNTED BETWEEN MOTOR AND REDUCER (MBU)



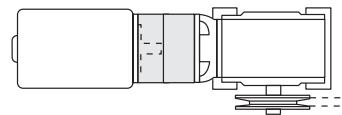
INPUT BRAKE UNIT MOUNTED DIRECTLY TO A REDUCER (MIB)



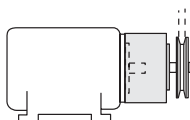
INPUT CLUTCH OR INPUT CLUTCH-BRAKE MOUNTED DIRECTLY TO A REDUCER (MIDO OR MIDB)



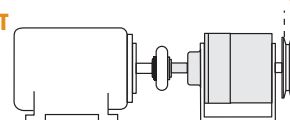
CLUTCH OR CLUTCH-BRAKE UNIT MOUNTED TO A MOTOR AND REDUCER (MDO OR MDB)



BRAKE UNIT MOUNTED ON A C-FACE MOTOR (MBU)



INPUT CLUTCH OR INPUT CLUTCH-BRAKE WITH FOOT COUPLED TO A FOOT MOUNTED MOTOR (MIDO OR MIDB W/FOOT)



▶ **NEMA MOTOR/FRAME SELECTION CHART**[Ⓢ]

Use this chart as specification and operational criteria for your application.

| HP of Motor | RPM | Frame Number | Motor Shaft (IN) | Modular System |
|-------------|------|--------------|------------------|----------------|
| 1/2 | 1800 | 56C | 0.625 | 625 |
| 1/2 | 1200 | 56C | 0.625 | 625 |
| 1/2 | 900 | 143TC | 0.875 | 875 |
| 3/4 | 1800 | 56C | 0.625 | 625 |
| 3/4 | 1200 | 143TC | 0.875 | 875 |
| 3/4 | 900 | 145TC | 0.875 | 875 |
| 1 | 1800 | 56C | 0.625 | 625 |
| 1 | 1800 | 143TC | 0.875 | 875 |
| 1 | 1200 | 145TC | 0.875 | 875 |
| 1 | 900 | 182TC | 1.125 | 1125 |
| 1-1/2 | 1800 | 145TC | 0.875 | 875 |
| 1-1/2 | 1200 | 182TC | 1.125 | 1125 |
| 1-1/2 | 900 | 184TC | 1.125 | 1125 |
| 2 | 1800 | 145TC | 0.875 | 875 |
| 2 | 1200 | 184TC | 1.125 | 1125 |
| 2 | 900 | 213TC | 1.375 | 1375 |
| 3 | 1800 | 182TC | 1.125 | 1125 |
| 3 | 1200 | 213TC | 1.375 | 1375 |
| 3 | 900 | 215TC | 1.375 | 1375 |
| 5 | 1800 | 184TC | 1.125 | 1125 |
| 5 | 1200 | 215TC | 1.375 | 1375 |
| 7-1/2 | 1800 | 213TC | 1.375 | 1375 |
| 10 | 1800 | 215TC | 1.375 | 1375 |

Ⓢ Models FMCBE - 625 & 875, Shown on pages 229 - 237 are recommended for Single Phase Motors.

▶ **OVERHUNG LOAD DATA**

Values are based upon 10,000 hours of bearing life with the load one inch from pilot face.

| Modular System | Module | Lbs. @ 1200 RPM | Lbs. @ 1800 RPM |
|----------------|-------------|-----------------|-----------------|
| 625 | Brake, MBU | 321 | 281 |
| | Output, MOU | 321 | 281 |
| | Input, MIU | 279 | 244 |
| 875 | Brake, MBU | 321 | 281 |
| | Output, MOU | 321 | 281 |
| | Input, MIU | 279 | 244 |
| 1125 | Brake, MBU | 636 | 554 |
| | Output, MOU | 636 | 554 |
| | Input, MIU | 655 | 570 |
| 1375 | Brake, MBU | 700 | 610 |
| | Output, MOU | 700 | 610 |
| | Input, MIU | 655 | 570 |

▶ **THERMAL CAPACITY DATA (HP_T)**

Standard Modular Systems (Open Design)

| Modular Assembly | RPM | 625 | 875 | 1125 | 1375 |
|--------------------|------|------|------|------|------|
| Brake | 1800 | 0.23 | 0.23 | 0.33 | 0.50 |
| MBU | 1200 | 0.20 | 0.20 | 0.30 | 0.46 |
| Clutch | 1800 | 0.44 | 0.44 | 0.53 | 0.77 |
| MDO | 1200 | 0.40 | 0.40 | 0.50 | 0.71 |
| Clutch-Brake | 1800 | 0.40 | 0.40 | 0.50 | 0.75 |
| MDB | 1200 | 0.35 | 0.35 | 0.45 | 0.70 |
| Input Brake | 1800 | 0.23 | 0.23 | 0.33 | 0.50 |
| MIB | 1200 | 0.20 | 0.20 | 0.30 | 0.46 |
| Input Clutch | 1800 | 0.44 | 0.44 | 0.53 | 0.77 |
| MIDO | 1200 | 0.40 | 0.40 | 0.50 | 0.71 |
| Input Clutch-Brake | 1800 | 0.40 | 0.40 | 0.50 | 0.75 |
| MIDB | 1200 | 0.35 | 0.35 | 0.45 | 0.70 |

▶ **DESIGNING YOUR MODULAR SYSTEM, CONT.**

4. Select the correct Modular Assembly System size.

- Using the NEMA Motor/Frame Selection Chart, find the frame size, horsepower and output rpm of the motor you will be using. The size of the compatible Modular System is shown in the right hand column. Make a note of this number.
- If your chosen Modular Assembly calls for a Brake (B), an Output Unit (O), an Input Unit (I) or a combination of these, consult the Overhung Load Data chart to know the limits of the Modular System Size chosen.
- Review the Thermal Capacity chart to familiarize yourself with the rating of your chosen Modular Assembly by Size.
- Review the Torque charts to ensure your selected System Size falls within your guidelines.

NOTE: Whenever Modular System Product values are less than your operational values, move up to a System Size to meet your specifications. Moving to a higher System Size may affect motor and frame size requirements.

CLUTCH/BRAKES

“Air Champ”

DESIGNING YOUR MODULAR SYSTEM, CONT.

5. Find your chosen System Size on the following pages. Locate your chosen Modular Assembly on the right hand column. The Product Numbers listed in the column are those components required to construct your Modular System. Order each separately.

Dimensional characteristics of each Modular Assembly can be found on the following pages.

625 MODULAR SYSTEM COMPONENTS (0.625 INCH BORE/SHAFT):

To achieve the Modular Assemblies shown for the Typical Applications:

1. Find the applicable component Model designation in the table below;
2. Order one of each of the product numbers shown in the column.

| Module Component | Model Number | Product Number | Module Shipping Wt. (Lbs) | Model MBU Brake Only | Model MDO Clutch Only | Model MDB Clutch-Brake | Model MIB Input Brake | Model MIDO Input Clutch | Model MIDO-WF Input Clutch w/Foot | Model MIDB Input Clutch-Brake | Model MIDB-WF Input Clutch-Brake w/Foot |
|------------------|--------------|----------------|---------------------------|----------------------|-----------------------|------------------------|-----------------------|-------------------------|-----------------------------------|-------------------------------|---|
| Brake Unit | MBU625 | 928500 | 18 | 928500 | -- | 928500 | 928500 | -- | -- | 928500 | 928500 |
| Drive Unit | MDU625 | 928600 | 13 | -- | 928600 | 928600 | -- | 928600 | 928600 | 928600 | 928600 |
| Input Unit | MIU625 | 929600 | 7 | -- | -- | -- | 929600 | 929600 | 929600 | 929600 | 929600 |
| Output Unit | MOU625 | 928800 | 12 | -- | 928800 | -- | -- | 928800 | 928800 | -- | -- |
| Foot, U Shape | | 929300 | 3 | -- | -- | -- | -- | -- | 929300 | -- | 929300 |

OPTIONS FOR 625 MODULAR SYSTEM:

| Optional Component | Model Number | Product Number | Shipping Wt. (Lbs) | Comments |
|--------------------|--------------|----------------|--------------------|---|
| Foot, L Shape | MDU-625 | 931000 | 3 | Use in place of “U” Shaped Foot Mount. |
| Drip Proof Guard | MDU-625 | 929501 | 1 | Product Thermal Capacity reduced to .20 HP _t |
| Drip Proof Guard | MBU-625 | 929502 | 1 | Product Thermal Capacity reduced to .20 HP _t |

875 MODULAR SYSTEM COMPONENTS (0.875 INCH BORE/SHAFT):

To achieve the Modular Assemblies shown for the Typical Applications:

1. Find the applicable component Model designation in the table below;
2. Order one of each of the product numbers shown in the column.

| Module Component | Model Number | Product Number | Module Shipping Wt. (Lbs) | Model MBU Brake Only | Model MDO Clutch Only | Model MDB Clutch-Brake | Model MIB Input Brake | Model MIDO Input Clutch | Model MIDO-WF Input Clutch w/Foot | Model MIDB Input Clutch-Brake | Model MIDB-WF Input Clutch-Brake w/Foot |
|------------------|--------------|----------------|---------------------------|----------------------|-----------------------|------------------------|-----------------------|-------------------------|-----------------------------------|-------------------------------|---|
| Brake Unit | MBU875 | 928000 | 18 | 928000 | -- | 928000 | 928000 | -- | -- | 928000 | 928000 |
| Drive Unit | MDU875 | 928100 | 13 | -- | 928100 | 928100 | -- | 928100 | 928100 | 928100 | 928100 |
| Input Unit | MIU875 | 928400 | 7 | -- | -- | -- | 928400 | 928400 | 928400 | 928400 | 928400 |
| Output Unit | MOU875 | 928700 | 12 | -- | 928700 | -- | -- | 928700 | 928700 | -- | -- |
| Foot, U Shape | | 929300 | 3 | -- | -- | -- | -- | -- | 929300 | -- | 929300 |

OPTIONS FOR 875 MODULAR SYSTEM:

| Optional Component | Model Number | Product Number | Shipping Wt. (Lbs) | Comments |
|--------------------|--------------|----------------|--------------------|---|
| Foot, L Shape | MDU-875 | 931000 | 3 | Use in place of “U” Shaped Foot Mount. |
| Drip Proof Guard | MDU-875 | 929501 | 1 | Product Thermal Capacity reduced to .20 HP _t |
| Drip Proof Guard | MBU-875 | 929502 | 1 | Product Thermal Capacity reduced to .20 HP _t |

► **1125 MODULAR SYSTEM COMPONENTS (1.125 INCH BORE/SHAFT):**

To achieve the Modular Assemblies shown for the Typical Applications:

1. Find the applicable component Model designation in the table below;
2. Order one of each of the product numbers shown in the column.

| Module Component | Model Number | Product Number | Module Shipping Wt. (Lbs) | Model MBU Brake Only | Model MDO Clutch Only | Model MDB Clutch-Brake | Model MIB Input Brake | Model MIDO Input Clutch | Model MIDO-WF Input Clutch w/Foot | Model MIDB Input Clutch-Brake | Model MIDB-WF Input Clutch-Brake w/Foot |
|------------------|--------------|----------------|---------------------------|----------------------|-----------------------|------------------------|-----------------------|-------------------------|-----------------------------------|-------------------------------|---|
| Brake Unit | MBU1125 | 935200 | 38 | 935200 | -- | 935200 | 935200 | -- | -- | 935200 | 935200 |
| Drive Unit | MDU1125 | 935100 | 21 | -- | 935100 | 935100 | -- | 935100 | 935100 | 935100 | 935100 |
| Input Unit | MIU1125 | 935000 | 12 | -- | -- | -- | 935000 | 935000 | 935000 | 935000 | 935000 |
| Output Unit | MOU1125 | 935300 | 35 | -- | 935300 | -- | -- | 935300 | 935300 | -- | -- |
| Foot | | 936900 | 4 | -- | -- | -- | -- | -- | 936900 | -- | 936900 |
| Motor Adapter | MBU1125 | 937000 | 1 | 937000 | -- | -- | 937000 | -- | -- | -- | -- |

► **OPTIONS FOR 1125 MODULAR SYSTEM:**

| Optional Component | Model Number | Product Number | Shipping Wt. (Lbs) | Comments |
|--------------------|--------------|----------------|--------------------|--|
| Motor Adapter | MBU-1125 | 937000 | 1 | Use when MBU Model configuration is mounted on a C Face motor alone. |
| Drip Proof Guard | MDU-1125 | 935901 | 1.5 | Product Thermal Capacity reduced to .23 HP _t |
| Drip Proof Guard | MBU-1125 | 935902 | 1.5 | Product Thermal Capacity reduced to .30 HP _t |

► **1375 MODULAR SYSTEM COMPONENTS (1.375 INCH BORE/SHAFT):**

To achieve the Modular Assemblies shown for the Typical Applications:

1. Find the applicable component Model designation in the table below;
2. Order one of each of the product numbers shown in the column.

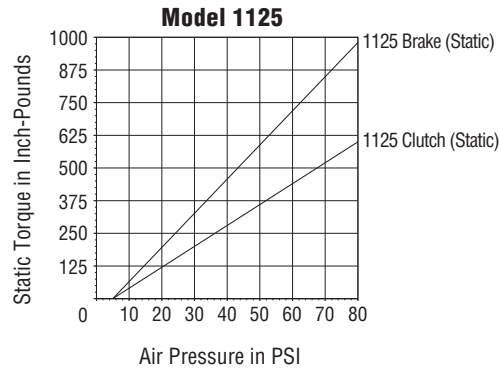
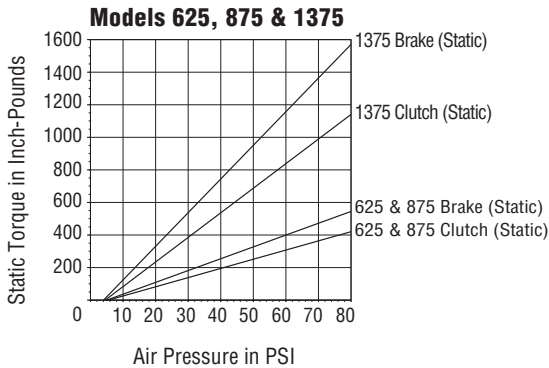
| Module Component | Model Number | Product Number | Module Shipping Wt. (Lbs) | Model MBU Brake Only | Model MDO Clutch Only | Model MDB Clutch-Brake | Model MIB Input Brake | Model MIDO Input Clutch | Model MIDO-WF Input Clutch w/Foot | Model MIDB Input Clutch-Brake | Model MIDB-WF Input Clutch-Brake w/Foot |
|------------------|--------------|----------------|---------------------------|----------------------|-----------------------|------------------------|-----------------------|-------------------------|-----------------------------------|-------------------------------|---|
| Brake Unit | MBU1375 | 936200 | 45 | 936200 | -- | 936200 | 936200 | -- | -- | 936200 | 936200 |
| Drive Unit | MDU1375 | 936100 | 30 | -- | 936100 | 936100 | -- | 936100 | 936100 | 936100 | 936100 |
| Input Unit | MIU1375 | 936000 | 13 | -- | -- | -- | 936000 | 936000 | 936000 | 936000 | 936000 |
| Output Unit | MOU1375 | 936300 | 35 | -- | 936300 | -- | -- | 936300 | 936300 | -- | -- |
| Foot | | 936900 | 4 | -- | -- | -- | -- | -- | 936900 | -- | 936900 |
| Motor Adapter | MBU1125 | 937000 | 1 | 937000 | -- | -- | 937000 | -- | -- | -- | -- |

► **OPTIONS FOR 1375 MODULAR SYSTEM:**

| Optional Component | Model Number | Product Number | Shipping Wt. (Lbs) | Comments |
|--------------------|--------------|----------------|--------------------|--|
| Motor Adapter | MBU-1375 | 937000 | 1 | Use when MBU Model configuration is mounted on a C Face motor alone. |
| Drip Proof Guard | MDU-1375 | 935901 | 1.5 | Product Thermal Capacity reduced to .23 HP _t |
| Drip Proof Guard | MBU-1375 | 935902 | 1.5 | Product Thermal Capacity reduced to .30 HP _t |

CLUTCH/BRAKES

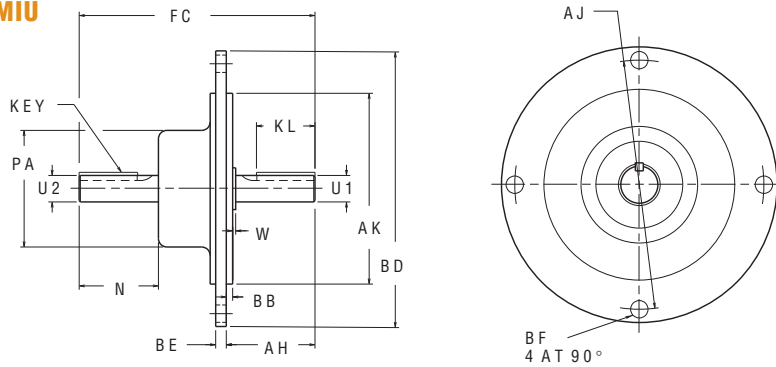
TORQUE VS. AIR PRESSURE



NOTE: Dynamic torque is approximately 85% of static torque.

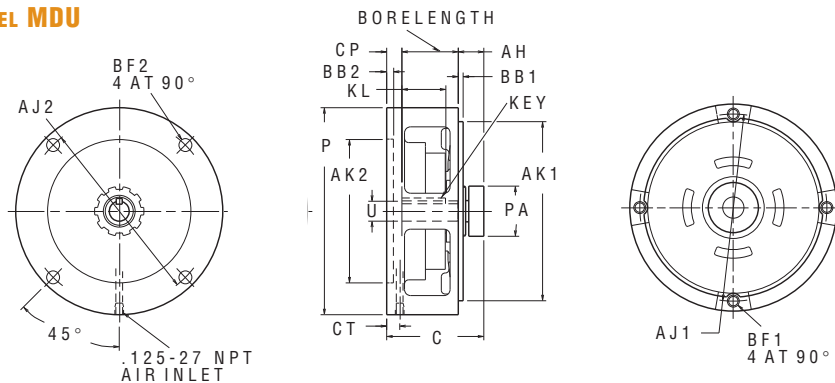
MODULAR CLUTCH-BRAKES - APPROXIMATE DIMENSIONS (INCHES)

MODEL MIU



| MODEL | PRODUCT NUMBER | AH | AJ | AK ^{±.001} | BB | BD | BE | BF | FC | KEY (SQ) | KL | N | PA | U1 ^{+0.001/-0.001} | U2 ^{+0.001/-0.001} | W |
|-------|----------------|------|-------|---------------------|------|------------------------|------|------|------|----------|------|------|------|-----------------------------|-----------------------------|------|
| 625 | 929600 | 2.09 | 5.875 | 4.499 | 0.15 | 6.50 | 0.25 | .410 | 5.56 | 0.188 | 1.38 | 1.87 | 2.75 | 0.625 | 0.875 | 0.07 |
| 875 | 928400 | 2.09 | 5.875 | 4.499 | 0.15 | 6.50 | 0.25 | .410 | 5.56 | 0.188 | 1.38 | 1.87 | 2.75 | 0.875 | 0.875 | 0.06 |
| 1125 | 935000 | 2.66 | 7.250 | -- | -- | 8.500 ^{±.001} | 0.41 | .530 | 7.50 | 0.250 | 1.62 | 2.62 | 3.75 | 1.125 | 1.125 | 0.03 |
| 1375 | 936000 | 3.15 | 7.250 | -- | -- | 8.500 ^{±.001} | 0.41 | .530 | 8.50 | 0.250 | 2.25 | 3.13 | 3.75 | 1.375 | 1.375 | 0.03 |

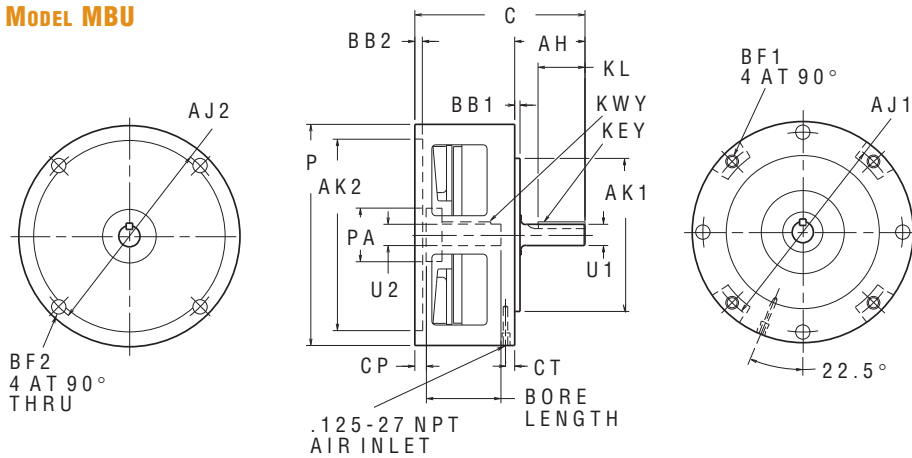
MODEL MDU



| MODEL | PRODUCT NUMBER | AH | AJ1 | AJ2 | AK ^{±.001} | AK ^{±.001} | BB1 | BB2 | BF1 | BF2 | C | CP | CT | KEY (SQ) | KL | P | PA | U1 ^{+0.001/-0.001} | BORE LENGTH |
|-------|----------------|------|-------|-------|---------------------|---------------------|------|------|---------|-------|------|------|------|----------|------|------|------|-----------------------------|-------------|
| 625 | 928600 | 0.80 | 5.875 | 5.875 | 5.624 | 4.502 | 0.15 | 0.22 | .375-16 | 0.406 | 3.05 | 0.48 | 0.41 | 0.188 | 1.38 | 6.50 | 1.58 | 0.625 | 1.75 |
| 875 | 928100 | 0.80 | 5.875 | 5.875 | 5.624 | 4.502 | 0.15 | 0.22 | .375-16 | 0.406 | 3.05 | 0.48 | 0.41 | 0.188 | 1.38 | 6.50 | 1.58 | 0.875 | 1.75 |
| 1125 | 935100 | 0.82 | 9.000 | 7.250 | 8.499 | 8.502 | 0.25 | 0.21 | .375-16 | 0.530 | 4.03 | 0.45 | 0.53 | 0.250 | 1.62 | 9.56 | 1.58 | 1.125 | 2.74 |
| 1375 | 936100 | 0.93 | 9.000 | 7.250 | 8.499 | 8.502 | 0.25 | 0.21 | .375-16 | 0.530 | 4.14 | 0.39 | 0.53 | 0.312 | 2.25 | 9.56 | 2.68 | 1.375 | 3.75 |

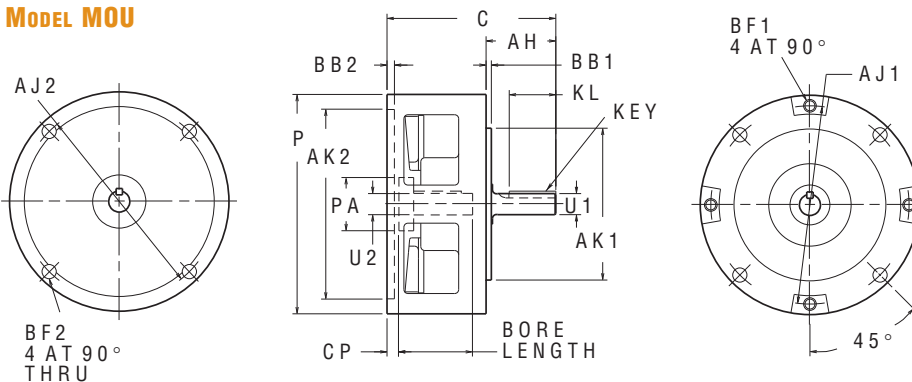
MODULAR CLUTCH-BRAKES - APPROXIMATE DIMENSIONS (INCHES)

► MODEL MBU



| MODEL | PRODUCT NUMBER | AH | AJ1 | AJ2 | AK ₁ ^{±.001} | AK ₂ ^{±.001} | BB1 | BB2 | BF1 | BF2 | C | CP | CT | KEY (SQ) | KL | P | PA | U1 ^{+0.000} U1 ^{-0.001} | U2 ^{+0.001} U2 ^{-0.000} | BORE LENGTH |
|-------|----------------|------|-------|-------|----------------------------------|----------------------------------|------|------|---------|-------|------|------|------|----------|------|------|------|--|--|-------------|
| 625 | 928500 | 2.06 | 5.875 | 5.875 | 4.499 | 5.627 | 0.16 | 0.22 | .375-16 | 0.422 | 5.00 | 0.34 | 0.25 | 0.188 | 1.38 | 6.50 | 1.58 | 0.625 | 0.625 | 2.19 |
| 875 | 928000 | 2.13 | 5.875 | 5.875 | 4.499 | 5.627 | 0.16 | 0.22 | .375-16 | 0.422 | 5.06 | 0.34 | 0.25 | 0.188 | 1.38 | 6.50 | 1.58 | 0.875 | 0.875 | 2.19 |
| 1125 | 935200 | 2.90 | 7.250 | 9.000 | 8.499 | 8.502 | 0.25 | 0.31 | .500-13 | 0.422 | 7.02 | 0.36 | 0.62 | 0.250 | 1.62 | 9.56 | 1.58 | 1.125 | 1.125 | 2.50 |
| 1375 | 936200 | 3.34 | 7.250 | 9.000 | 8.499 | 8.502 | 0.25 | 0.31 | .500-13 | 0.422 | 7.46 | 0.35 | 0.25 | 0.312 | 2.25 | 9.56 | 2.68 | 1.375 | 1.375 | 2.75 |

► MODEL MOU



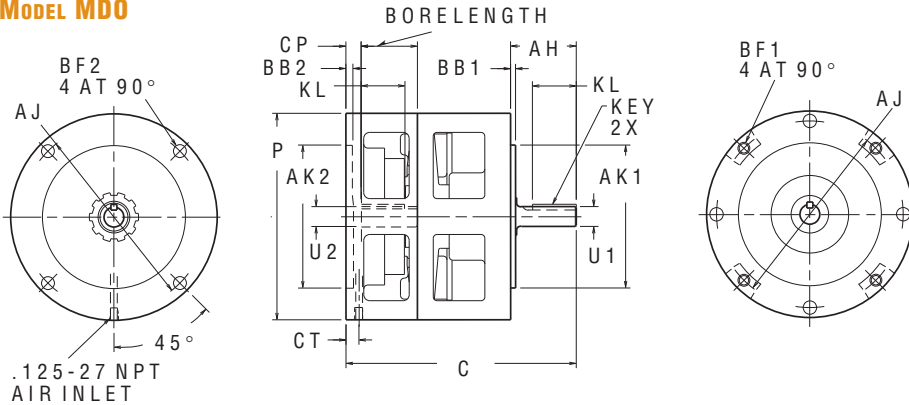
| MODEL | PRODUCT NUMBER | AH | AJ1 | AJ2 | AK ₁ ^{±.001} | AK ₂ ^{±.001} | BB1 | BB2 | BF1 | BF2 | C | CP | CT | KEY (SQ) | KL | P | PA | U1 ^{+0.000} U1 ^{-0.001} | U2 ^{+0.001} U2 ^{-0.000} | BORE LENGTH |
|-------|----------------|------|-------|-------|----------------------------------|----------------------------------|------|------|---------|-------|------|------|-------|----------|------|------|-------|--|--|-------------|
| 625 | 928800 | 2.07 | 5.875 | 5.875 | 4.499 | 5.627 | 0.16 | 0.22 | .375-16 | 0.422 | 5.00 | 0.34 | 0.188 | 1.38 | 6.50 | 1.58 | 0.625 | 0.625 | 2.19 | |
| 875 | 928700 | 2.13 | 5.875 | 5.875 | 4.499 | 5.627 | 0.16 | 0.22 | .375-16 | 0.422 | 5.06 | 0.34 | 0.188 | 1.38 | 6.50 | 1.58 | 0.875 | 0.875 | 2.19 | |
| 1125 | 935300 | 2.90 | 7.250 | 9.000 | 8.499 | 8.502 | 0.25 | 0.31 | .500-13 | 0.422 | 7.02 | 0.36 | 0.250 | 1.62 | 9.56 | 1.58 | 1.125 | 1.125 | 2.50 | |
| 1375 | 936300 | 3.34 | 7.250 | 9.000 | 8.499 | 8.502 | 0.25 | 0.31 | .500-13 | 0.422 | 7.46 | 0.35 | 0.312 | 2.25 | 9.56 | 2.68 | 1.375 | 1.375 | 2.75 | |

CLUTCH/BRAKES

"Air Champ"

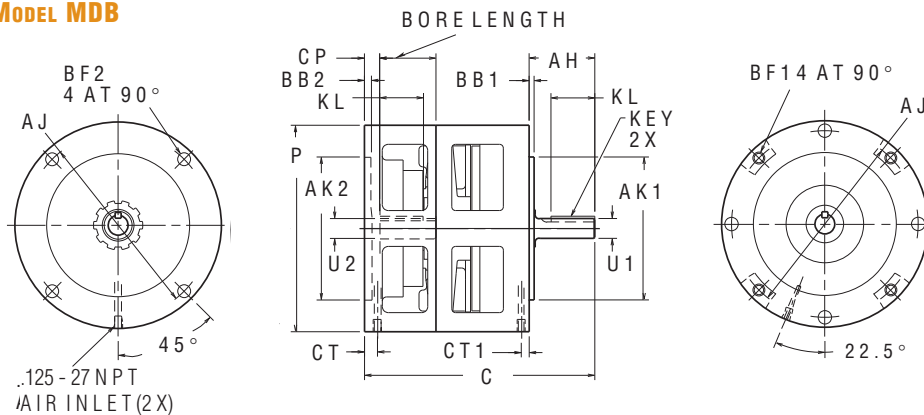
MODULAR CLUTCH-BRAKES - APPROXIMATE DIMENSIONS (INCHES)

MODEL MDO



| MODEL | PRODUCT NUMBER | AH | AJ1 | AK1 ^{±.001} | AK2 ^{±.001} | BB1 | BB2 | BF1 | BF2 | C | CP | CT | KEY (SQ) | KL | P | U1 ^{+0.001} | U2 ^{+0.001} | BORE LENGTH |
|-------|----------------|------|-------|----------------------|----------------------|------|------|---------|-------|-------|------|------|----------|------|------|----------------------|----------------------|-------------|
| 625 | see tables | 2.07 | 5.875 | 4.499 | 4.502 | 0.16 | 0.22 | .375-16 | 0.406 | 7.25 | 0.43 | 0.41 | 0.188 | 1.38 | 6.50 | 0.625 | 0.625 | 1.75 |
| 875 | p. 250 | 2.13 | 5.875 | 4.499 | 4.502 | 0.16 | 0.22 | .375-16 | 0.406 | 7.31 | 0.43 | 0.41 | 0.188 | 1.38 | 6.50 | 0.875 | 0.875 | 1.75 |
| 1125 | and | 2.90 | 7.250 | 8.499 | 8.502 | 0.25 | 0.21 | .500-13 | 0.530 | 10.24 | 0.45 | 0.53 | 0.250 | 1.62 | 9.56 | 1.125 | 1.125 | 2.74 |
| 1375 | p. 251 | 3.34 | 7.250 | 8.499 | 8.502 | 0.25 | 0.21 | .500-13 | 0.530 | 10.68 | 0.39 | 0.53 | 0.312 | 2.25 | 9.56 | 1.375 | 1.375 | 3.75 |

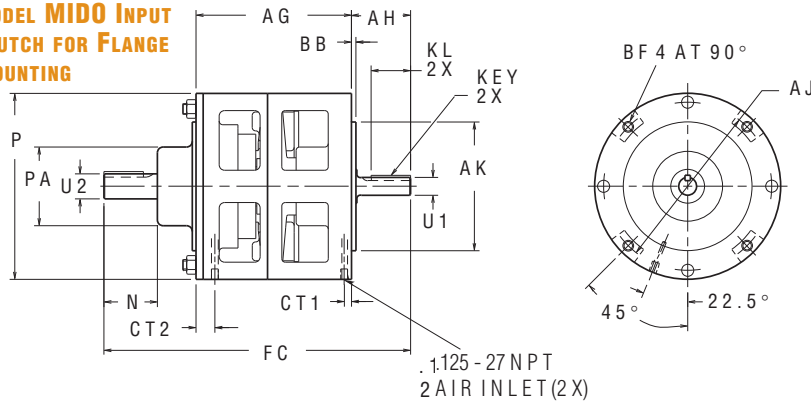
MODEL MDB



| MODEL | PRODUCT NUMBER | AH | AJ1 | AK1 ^{±.001} | AK2 ^{±.001} | BB1 | BB2 | BF1 | BF2 | C | CP | CT1 | CT2 | KEY (SQ) | KL | P | U1 ^{+0.001} | U2 ^{+0.001} | BORE LENGTH |
|-------|----------------|------|-------|----------------------|----------------------|------|------|---------|-------|-------|------|------|------|----------|------|------|----------------------|----------------------|-------------|
| 625 | see tables | 2.06 | 5.875 | 4.499 | 4.502 | 0.16 | 0.22 | .375-16 | 0.406 | 7.25 | 0.48 | 0.25 | 0.41 | 0.188 | 1.38 | 6.50 | 0.625 | 0.625 | 1.75 |
| 875 | p. 250 | 2.13 | 5.875 | 4.499 | 4.502 | 0.16 | 0.22 | .375-16 | 0.406 | 7.31 | 0.48 | 0.25 | 0.41 | 0.188 | 1.38 | 6.50 | 0.875 | 0.875 | 1.75 |
| 1125 | and | 2.90 | 7.250 | 8.499 | 8.502 | 0.25 | 0.21 | .500-13 | 0.530 | 10.24 | 0.45 | 0.62 | 0.53 | 0.250 | 1.62 | 9.56 | 1.125 | 1.125 | 2.74 |
| 1375 | p. 251 | 3.34 | 7.250 | 8.499 | 8.502 | 0.25 | 0.21 | .500-13 | 0.530 | 10.68 | 0.39 | 0.25 | 0.53 | 0.312 | 2.25 | 9.56 | 1.375 | 1.375 | 3.75 |

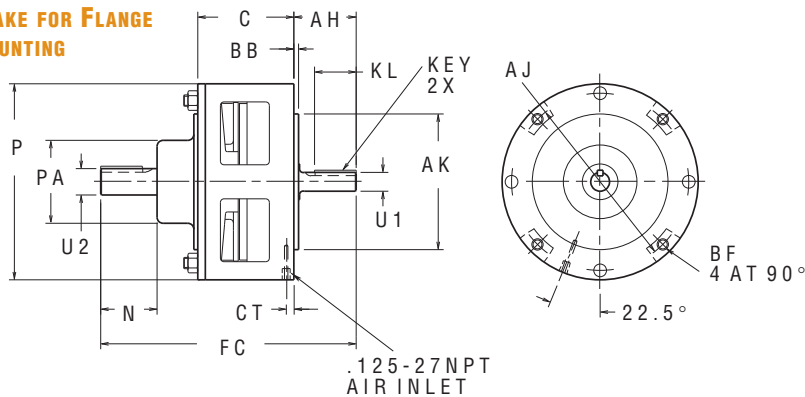
MODULAR CLUTCH-BRAKES - APPROXIMATE DIMENSIONS (INCHES)

MODEL MIDO INPUT CLUTCH FOR FLANGE MOUNTING



| MODEL | PRODUCT NUMBER | AG | AH | AJ | AK | BB | BF | CT1 | CT2 | FC | KEY (SQ) | KL | N | P | PA | U1 ^{+0.000} _{-0.001} | U2 ^{+0.000} _{-0.001} |
|-------|----------------|------|------|-------|-------|------|---------|------|------|-------|----------|------|------|------|------|--|--|
| 625 | see tables | 5.43 | 2.07 | 5.875 | 4.499 | 0.16 | .375-16 | 0.25 | 0.66 | 10.72 | 0.188 | 1.38 | 1.87 | 6.50 | 2.75 | 0.625 | 0.875 |
| 875 | p. 250 | 5.43 | 2.13 | 5.875 | 4.499 | 0.16 | .375-16 | 0.25 | 0.66 | 10.78 | 0.188 | 1.38 | 1.87 | 6.50 | 2.75 | 0.875 | 0.875 |
| 1125 | and | 7.54 | 2.90 | 7.250 | 8.499 | 0.25 | .500-13 | 0.62 | 0.73 | 14.87 | 0.250 | 1.62 | 2.62 | 9.56 | 3.75 | 1.125 | 1.125 |
| 1375 | p. 251 | 7.54 | 3.34 | 7.250 | 8.499 | 0.25 | .500-13 | 0.25 | 0.73 | 15.82 | 0.312 | 2.25 | 3.13 | 9.56 | 3.75 | 1.375 | 1.375 |

MODEL MIB INPUT BRAKE FOR FLANGE MOUNTING



| MODEL | PRODUCT NUMBER | AH | AJ | AK | BB | BF | C | CT | FC | KEY (SQ) | KL | N | P | PA | U1 ^{+0.000} _{-0.001} | U2 ^{+0.000} _{-0.001} |
|-------|----------------|------|-------|-------|------|---------|------|------|-------|----------|------|------|------|------|--|--|
| 625 | see tables | 2.06 | 5.875 | 4.499 | 0.16 | .375-16 | 3.18 | 0.25 | 8.47 | 0.188 | 1.38 | 1.87 | 6.50 | 2.75 | 0.625 | 0.875 |
| 875 | p. 250 | 2.13 | 5.875 | 4.499 | 0.16 | .375-16 | 3.18 | 0.25 | 8.53 | 0.188 | 1.38 | 1.87 | 6.50 | 2.75 | 0.875 | 0.875 |
| 1125 | and | 2.90 | 7.250 | 8.499 | 0.25 | .500-13 | 4.90 | 0.62 | 12.23 | 0.250 | 1.62 | 2.62 | 9.56 | 3.75 | 1.125 | 1.125 |
| 1375 | p. 251 | 3.34 | 7.250 | 8.499 | 0.25 | .500-13 | 4.90 | 0.25 | 13.18 | 0.312 | 2.25 | 3.13 | 9.56 | 3.75 | 1.375 | 1.375 |

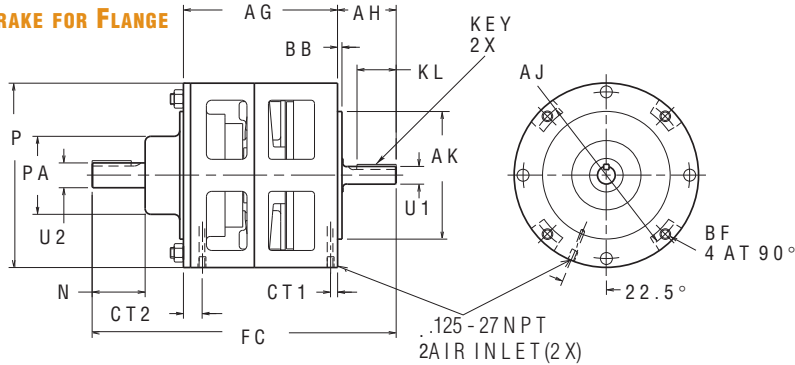
NOTE: Models 1125 and 1375 use Motor Adapter, Product Number 937000.

CLUTCH/BRAKES

"Air Champ"

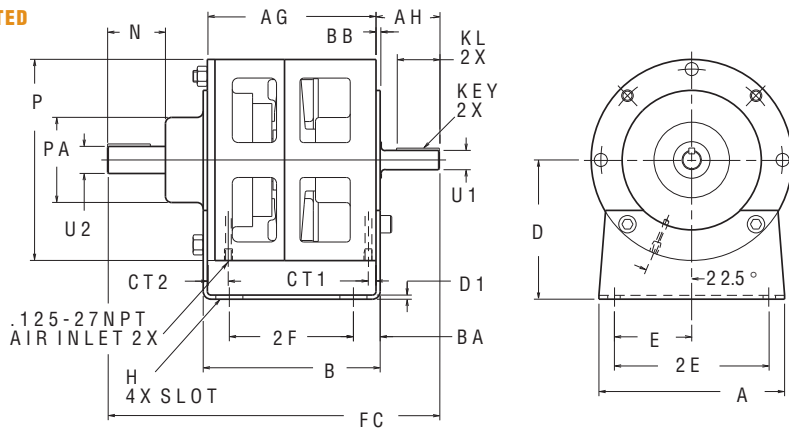
MODULAR CLUTCH-BRAKES - APPROXIMATE DIMENSIONS (INCHES)

**MODEL MIDB INPUT
CLUTCH-BRAKE FOR FLANGE
MOUNTING**



| MODEL | PRODUCT NUMBER | AG | AH | AJ | AK ⁺⁰⁰¹ | BB | BF | CT1 | CT2 | FC | KEY (SQ) | KL | N | P | PA | U1 ⁺⁰⁰⁰ U2 ⁻⁰⁰¹ | U2 ⁺⁰⁰⁰ |
|-------|----------------|------|------|-------|--------------------|------|---------|------|------|-------|----------|------|------|------|------|--|--------------------|
| 625 | see tables | 5.43 | 2.06 | 5.875 | 4.499 | 0.16 | .375-16 | 0.25 | 0.66 | 10.72 | 0.188 | 1.38 | 1.87 | 6.50 | 2.75 | 0.625 | 0.875 |
| 875 | p. 250 | 5.43 | 2.13 | 5.875 | 4.499 | 0.16 | .375-16 | 0.25 | 0.66 | 10.78 | 0.188 | 1.38 | 1.87 | 6.50 | 2.75 | 0.875 | 0.875 |
| 1125 | and | 7.54 | 2.90 | 7.250 | 8.499 | 0.25 | .500-13 | 0.62 | 0.73 | 14.87 | 0.250 | 1.62 | 2.62 | 9.56 | 3.75 | 1.125 | 1.125 |
| 1375 | p. 251 | 7.54 | 3.34 | 7.250 | 8.499 | 0.25 | .500-13 | 0.25 | 0.73 | 15.82 | 0.312 | 2.25 | 3.13 | 9.56 | 3.75 | 1.375 | 1.375 |

**MIDO-WF INPUT CLUTCH
FOOT MOUNTED**

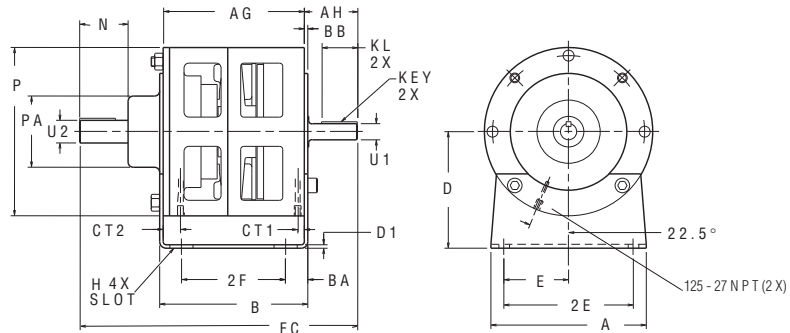


| MODEL | PRODUCT NUMBER | A | AG | AH | B | BA | BB | CT1 | CT2 | D | D1 | E | FC | H | KEY (SQ) | KL | N | P | PA | U1 ⁺⁰⁰⁰ |
|-------|----------------|------|------|------|------|------|------|------|------|------|------|------|-------|-----------|----------|------|------|------|------|--------------------|
| 625 | see tables | 6.00 | 5.43 | 2.07 | 5.74 | 0.87 | 0.16 | 0.25 | 0.66 | 4.50 | 0.13 | 2.50 | 10.72 | .88 x.41 | 0.188 | 1.38 | 1.87 | 6.50 | 2.75 | 0.625 |
| 875 | p. 250 | 6.00 | 5.43 | 2.13 | 5.74 | 0.87 | 0.16 | 0.25 | 0.66 | 4.50 | 0.13 | 2.50 | 10.78 | .88 x.41 | 0.188 | 1.38 | 1.87 | 6.50 | 2.75 | 0.875 |
| 1125 | and | 9.00 | 7.54 | 2.90 | 8.02 | 1.01 | 0.25 | 0.62 | 0.73 | 5.25 | 0.12 | 3.88 | 14.87 | 1.00 x.56 | 0.250 | 1.62 | 2.62 | 9.56 | 3.75 | 1.125 |
| 1375 | p. 251 | 9.00 | 7.54 | 3.34 | 8.02 | 1.01 | 0.25 | 0.25 | 0.73 | 5.25 | 0.12 | 3.88 | 15.82 | 1.00 x.56 | 0.312 | 2.25 | 3.13 | 9.56 | 3.75 | 1.375 |

| MODEL | PRODUCT NUMBER | U2 ⁺⁰⁰⁰ U2 ⁻⁰⁰¹ | 2E | 2F |
|-------|----------------|--|------|------|
| 625 | see tables | 0.875 | 5.00 | 4.00 |
| 875 | p. 250 | 0.875 | 5.00 | 4.00 |
| 1125 | and | 1.125 | 7.75 | 6.00 |
| 1375 | p. 251 | 1.375 | 7.75 | 6.00 |

MODULAR CLUTCH-BRAKES - APPROXIMATE DIMENSIONS (INCHES)

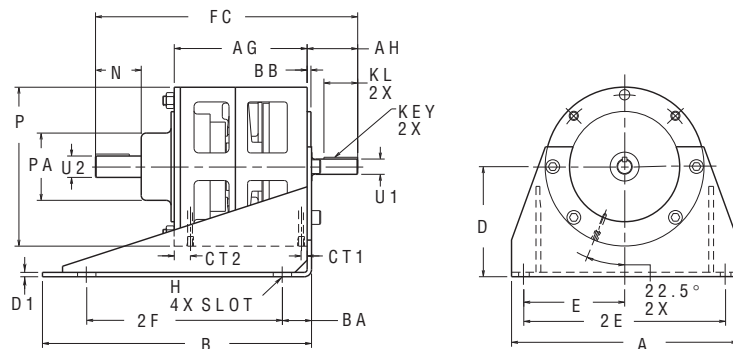
**► MIDB-WF INPUT CLUTCH-BRAKE
FOOT MOUNTED**



| MODEL | PRODUCT NUMBER | A | AG | AH | B | BA | BB | CT1 | CT2 | D | D1 | E | FC | H | KEY (SQ) | KL | N | P | PA | U1 ^{+0.000} U2 ^{-0.001} |
|-------|----------------|------|------|------|------|------|------|------|------|------|------|------|-------|------------|----------|------|------|------|------|--|
| 625 | see tables | 6.00 | 5.43 | 2.06 | 5.74 | 0.87 | 0.16 | 0.25 | 0.66 | 4.50 | 0.13 | 2.50 | 10.72 | .88 x .41 | 0.188 | 1.38 | 1.87 | 6.50 | 2.75 | 0.625 |
| 875 | p. 250 | 6.00 | 5.43 | 2.13 | 5.74 | 0.87 | 0.16 | 0.25 | 0.66 | 4.50 | 0.13 | 2.50 | 10.78 | .88 x .41 | 0.188 | 1.38 | 1.87 | 6.50 | 2.75 | 0.875 |
| 1125 | and | 9.00 | 7.54 | 2.90 | 8.02 | 1.01 | 0.25 | 0.62 | 0.73 | 5.25 | 0.12 | 3.88 | 14.87 | 1.00 x .56 | 0.252 | 1.62 | 2.62 | 9.56 | 3.75 | 1.125 |
| 1375 | p. 251 | 9.00 | 7.54 | 3.34 | 8.02 | 1.01 | 0.25 | 0.25 | 0.73 | 5.25 | 0.12 | 3.88 | 15.82 | 1.00 x .56 | 0.312 | 2.25 | 3.13 | 9.56 | 3.75 | 1.375 |

| MODEL | PRODUCT NUMBER | U2 ^{+0.000} U1 ^{-0.001} | 2E | 2F |
|-------|----------------|--|------|------|
| 625 | see tables | 0.875 | 5.00 | 4.00 |
| 875 | p. 250 | 0.875 | 5.00 | 4.00 |
| 1125 | and | 1.125 | 7.75 | 6.00 |
| 1375 | p. 251 | 1.375 | 7.75 | 6.00 |

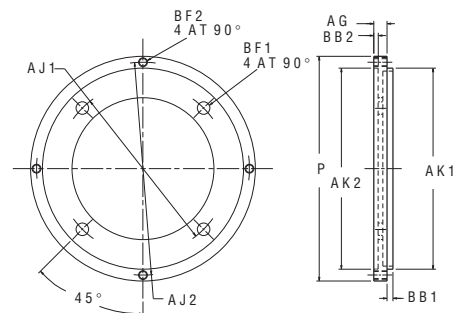
► MIDB/MIDO-W/L FOOT MOUNTED



| MODEL | PRODUCT NUMBER | A | AG | AH | B | BA | BB | CT1 | CT2 | D | D1 | E | FC | H | KEY (SQ) | KL | N | P | PA | U1 ^{+0.000} U2 ^{-0.001} |
|-------|----------------|------|------|------|-------|------|------|------|------|------|------|------|-------|-------------|----------|------|------|------|------|--|
| 625 | See tables | 9.25 | 5.43 | 2.07 | 11.00 | 1.19 | 0.16 | 0.25 | 0.66 | 4.50 | 0.18 | 4.12 | 10.72 | 0.75 x 0.50 | 0.188 | 1.38 | 1.87 | 6.50 | 2.75 | 0.625 |
| 875 | p. 250 & 251 | 9.25 | 5.43 | 2.13 | 11.00 | 1.19 | 0.16 | 0.25 | 0.66 | 4.50 | 0.18 | 4.12 | 10.78 | 0.75 x 0.50 | 0.188 | 1.38 | 1.87 | 6.50 | 2.75 | 0.875 |

| MODEL | PRODUCT NUMBER | U2 ^{+0.000} U1 ^{-0.001} | 2E | 2F |
|-------|----------------|--|------|------|
| 625 | See tables | 0.875 | 8.25 | 8.00 |
| 875 | p. 250 & 251 | 0.875 | 8.25 | 8.00 |

► MOTOR ADAPTER



| PRODUCT NUMBER | AG | AJ1 | AJ2 | AK1 ^{±0.001} | AK2 ^{±0.001} | BB1 | BB2 | BF1 | BF2 | P |
|----------------|------|------|------|-----------------------|-----------------------|------|------|------|---------|------|
| 937000 | 0.56 | 7.25 | 9.00 | 8.501 | 8.502 | 0.25 | 0.19 | .531 | .375-16 | 9.50 |