



# KCM

MADE IN USA

## Hydraulic Rotating Cylinders

KCM offers hydraulic rotating cylinders to complement your power chuck applications. In collaboration with Grip Tite Tooling and Engineering, we also can provide expert technical service, engineering, and onsite machine support. The robust design of the KH and KHT cylinders has stationary port connections and do not contribute to high vibration or excess wear. The design also provides a versatile through port which can be used for coolant or part detection, as well as stroke detection features.

Some of the design features of our rotating hydraulic cylinders include:

**High speed**—Standard rotating hydraulic cylinders are rated to 7000 rpm rotation speeds for all available bore sizes.

**Balanced Cylinder Design**—Each cylinder is symmetrically balanced, providing smooth operation in vertical, horizontal, or even inverted orientation applications.

**Integrated Trapping System**—Internal trapping system provides safety and reliability by maintaining operating pressure inside the cylinder in the event of a power loss or hydraulic system failure.

**Compact Design**—The efficient design allows the cylinder to install and operate in constrained areas. The KH's and KHT's shorter length fit applications where clearance is limited, such as vertical installations.

**Interchangeability**—With Standard mountings, consult KCM for mounting information

**Stroke Rod Option**—The KHS and KHST models can be equipped with a stroke rod to sense piston location.

**Excellent Repairability**—In collaboration with Grip Tite Tooling and Engineering, KCM supports the repair of any cylinder.



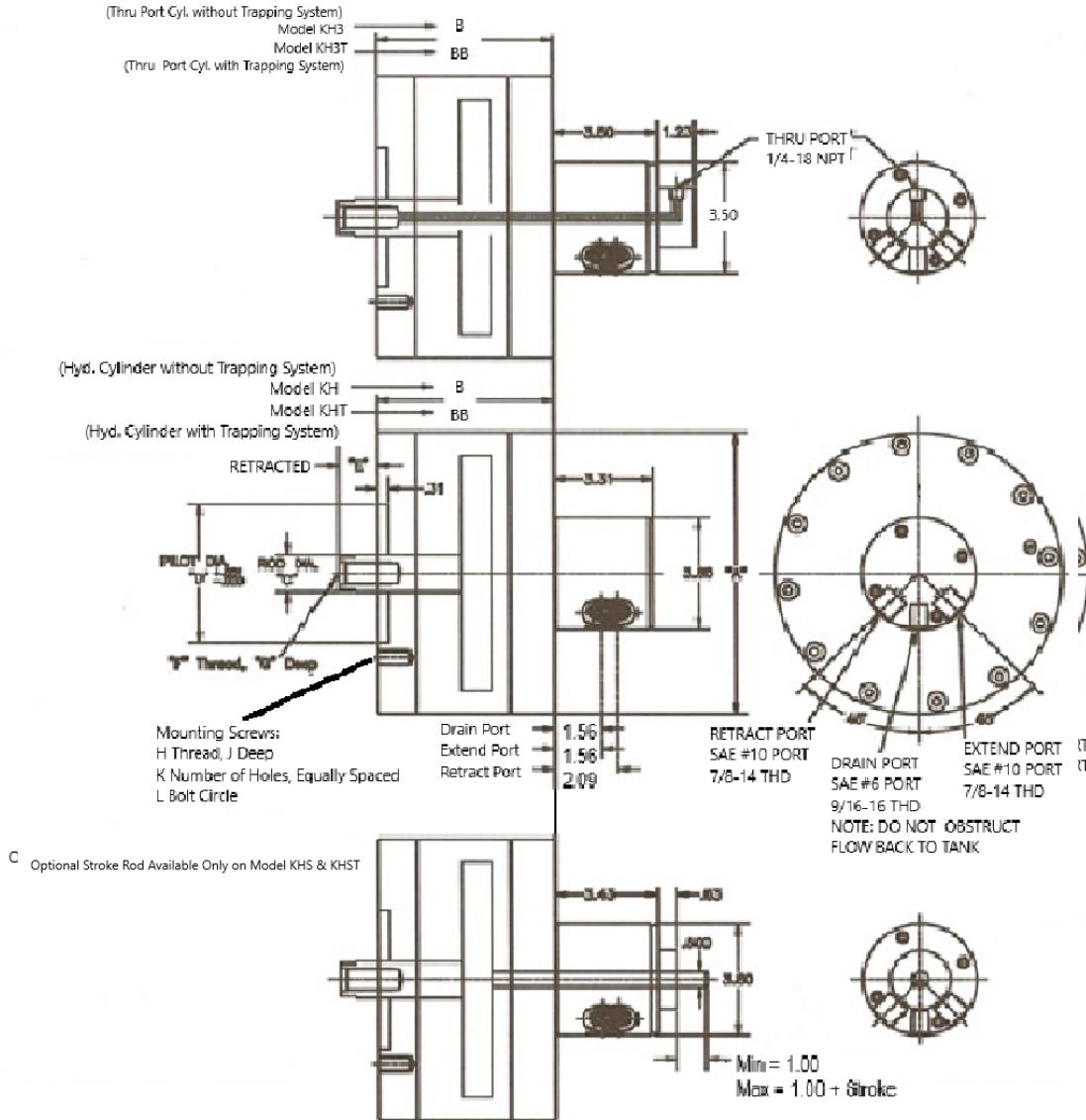


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## Standard Rotating Hydraulic Cylinders

**Notice: 10 micron Filtration Required on Hydraulic Supply**



Add "S" for Stroke Rod Option  
Add "3" to Model for Thru Port Cylinder  
Add "T" to Model for Trapping System

| Model         | Bore Dia (in) | Retract Area (sq in) | Extend Area (sq in) | Speed (rpm) | Press (psi) | Stroke (in) | Dimensions |     |      |      |       |     |          |     |        |     |   |      |
|---------------|---------------|----------------------|---------------------|-------------|-------------|-------------|------------|-----|------|------|-------|-----|----------|-----|--------|-----|---|------|
|               |               |                      |                     |             |             |             | A          | B   | BB   | C    | D     | E   | F        | G   | H      | J   | K | L    |
| <b>KH300</b>  | 3.0           | 6.1                  | 6.8                 | 7000        | 1000        | 1.0         | 5.75       | 5.4 | 5.75 | 1.00 | 3.000 | 1.0 | 3/4-16   | 1.8 | 1/2-13 | 1.0 | 4 | 3.75 |
| <b>KH450</b>  | 4.5           | 14.3                 | 15.5                | 7000        | 1000        | 1.5         | 5.75       | 5.9 | 6.25 | 1.25 | 3.000 | 1.0 | 3/4-16   | 1.8 | 1/-13  | 1.0 | 4 | 3.75 |
| <b>KH600</b>  | 6.0           | 25.9                 | 27.7                | 7000        | 1000        | 2.0         | 7.4        | 6.4 | 6.75 | 1.50 | 4.500 | 1.0 | 1-14     | 2.0 | 1/2-13 | 1.0 | 4 | 5.50 |
| <b>KH800</b>  | 8.0           | 47.3                 | 49.6                | 7000        | 1000        | 2.0         | 9.4        | 6.4 | 6.75 | 1.75 | 4.500 | 1.0 | 1-1/4-12 | 2.3 | 1/2-13 | 1.0 | 8 | 5.50 |
| <b>KH1000</b> | 10.0          | 74.8                 | 77.9                | 7000        | 1000        | 2.0         | 11.4       | 6.4 | 6.75 | 2.00 | 6.000 | 1.0 | 1-1/2-14 | 2.3 | 5/8-11 | 1.1 | 8 | 9.50 |



# KCM

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## Pneumatic Rotating Cylinders

KCM offers pneumatic rotating cylinders to complement your power chuck applications. In collaboration with Grip Tite Tooling and Engineering, we also can provide expert technical service, engineering, and onsite machine support. The robust design of the KA and KAT cylinders has stationary port connections and do not contribute to high vibration or excess wear. The design also provides a versatile through port which can be used for coolant or part detection, as well as stroke detection features.

Some of the design features of our rotating pneumatic cylinders include:

**High speed**—Standard rotating pneumatic cylinders are rated to 7000 rpm rotation speeds for all available bore sizes.



**Balanced Cylinder Design**—Each cylinder is symmetrically balanced, providing smooth operation in vertical, horizontal, or even inverted orientation applications.

**Integrated Trapping System**—Internal trapping system provides safety and reliability by maintaining operating pressure inside the cylinder in the event of a power loss or hydraulic system failure.

**Compact Design**—The efficient design allows the cylinder to install and operate in constrained areas. The KA's and KAT's shorter length fit applications where clearance is limited, such as vertical installations.

**Interchangeability**—With Standard mountings, consult KCM for mounting information.

**Easily Serviced Rotary Coupling**—KCM's cylinder design has no seals which allow it to reach higher speeds and temperatures. Double, sealed bearings reduce maintenance needs. The four-screw assembly design provides easy removal of the cylinder without needing to disassemble the rotary coupling.

**Stroke Rod Option**—The KAS and KAST models can be equipped with a stroke rod to sense piston location.

**Excellent Repairability**—In collaboration with Grip Tite Tooling and Engineering, KCM supports the repair of any cylinder.



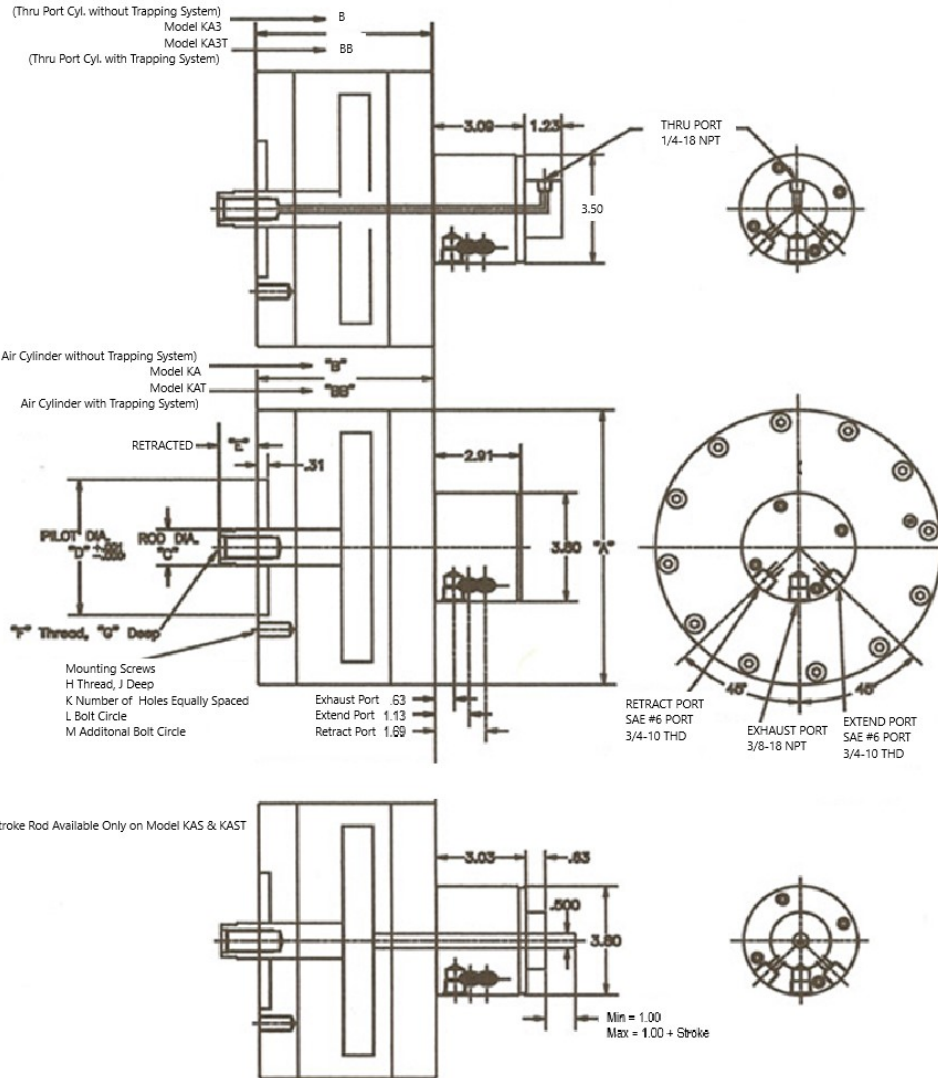


# KCM

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## Standard Rotating Air Cylinders

**Notice: 5 micron Filtration Required on Air Supply**



Add "S" to Model for Option Stroke Rod  
Add "3" to Model for Thru Port Cylinder  
Add "T" to Model for Trapping System

| Model  | Bore Dia (in) | Retract Area (sq in) | Extend Area (sq in) | Speed (rpm) | Press (psi) | Stroke (in) | Dimensions |     |      |      |       |     |        |      |        |      |   |      |     |
|--------|---------------|----------------------|---------------------|-------------|-------------|-------------|------------|-----|------|------|-------|-----|--------|------|--------|------|---|------|-----|
|        |               |                      |                     |             |             |             | A          | B   | BB   | C    | D     | E   | F      | G    | H      | J    | K | L    | M   |
| KA300  | 3.0           | 6.3                  | 7.1                 | 7000        | 150         | 1.0         | 4.6        | 5.4 | —    | 1.00 | 3.000 | 1.0 | 3/4-16 | 1.75 | 3/8-16 | 0.75 | 4 | 3.75 | N/A |
| KA450  | 4.5           | 15.1                 | 15.9                | 7000        | 150         | 1.0         | 5.8        | 5.4 | 5.78 | 1.00 | 3.000 | 1.0 | 3/4-16 | 1.75 | 3/8-16 | 0.75 | 4 | 3.75 | N/A |
| KA600  | 6.0           | 27.0                 | 28.3                | 7000        | 150         | 1.5         | 7.4        | 5.9 | 6.1  | 1.25 | 4.500 | 1.0 | 3/4-16 | 1.75 | 1/2-13 | 1.00 | 4 | 5.50 | N/A |
| KA800  | 8.0           | 49.0                 | 50.3                | 7000        | 150         | 1.5         | 9.6        | 5.9 | 6.1  | 1.25 | 4.500 | 1.0 | 3/4-16 | 1.75 | 1/2-13 | 1.00 | 4 | 5.50 | N/A |
| KA1000 | 10.0          | 76.8                 | 78.5                | 7000        | 150         | 1.5         | 11.6       | 5.9 | 6.1  | 1.5  | 6.000 | 1.0 | 1-14   | 2.00 | 5/8-11 | 1.00 | 8 | 7.00 | 9.5 |
| KA1200 | 12.0          | 111.3                | 113.1               | 7000        | 150         | 1.5         | 13.5       | 5.9 | 6.1  | 1.5  | 6.000 | 1.0 | 1-14   | 2.00 | 5/8-11 | 1.12 | 8 | 7.00 | 9.5 |