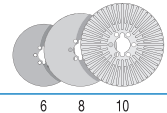


## HPS-Series

High Performance Single Disc Brakes



### HPS-Series High Performance Single Disc Brakes

The HPS-Series brake uses a single HP-Series disc to control tension (torque) in limited space applications. The major design criteria in the development of the HP-Series was that each size in the new series should have the heat dissipating capacity of the next larger size in the Standard Series. Montalvo met and exceeded its goal with the HP Series. Having developed the dual disc HP-Series to such a high standard resulted in further development. The reasoning: if an HP will dissipate the same heat horsepower as the next size in the Standard Series, it makes sense that a single HP disc will handle approximately the same heat load as a dual disc unit of the same size in the Standard Series. This proved true. And it gave birth to the compact, easy to install and set up, HPS-Series. Another standard from Montalvo.

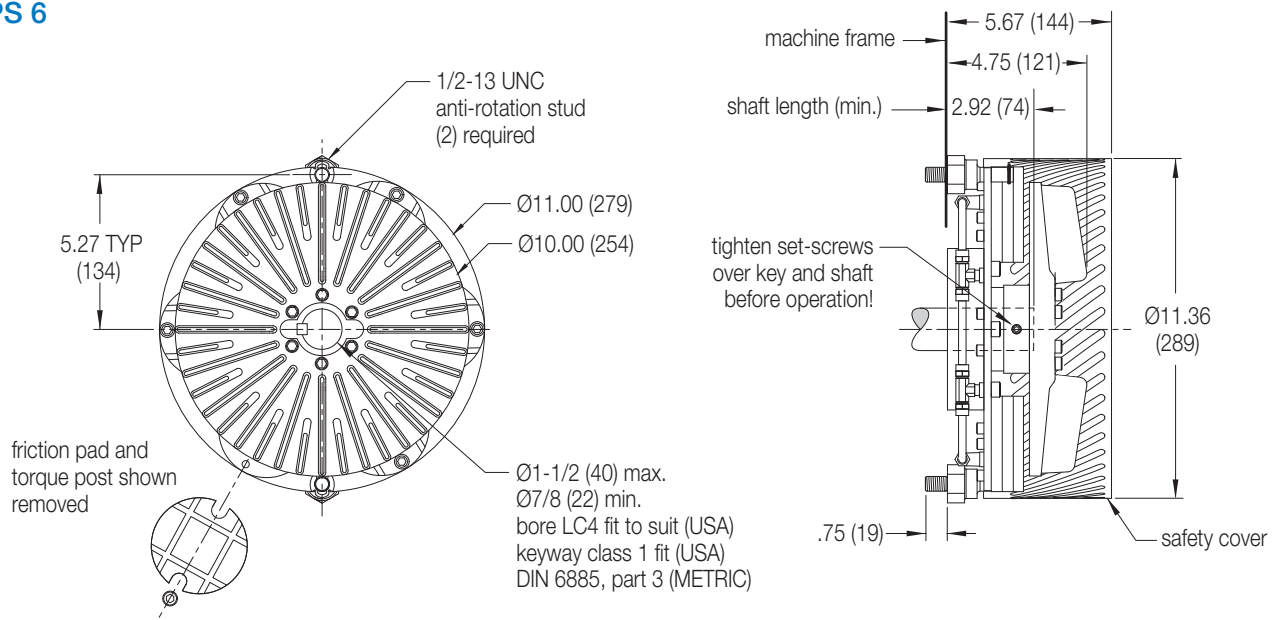
#### Features

- ▶ Compact
- ▶ Low inertia
- ▶ Modular design
- ▶ High thermal capacity
- ▶ Wide torque range & capacity
- ▶ Easy installation & maintenance

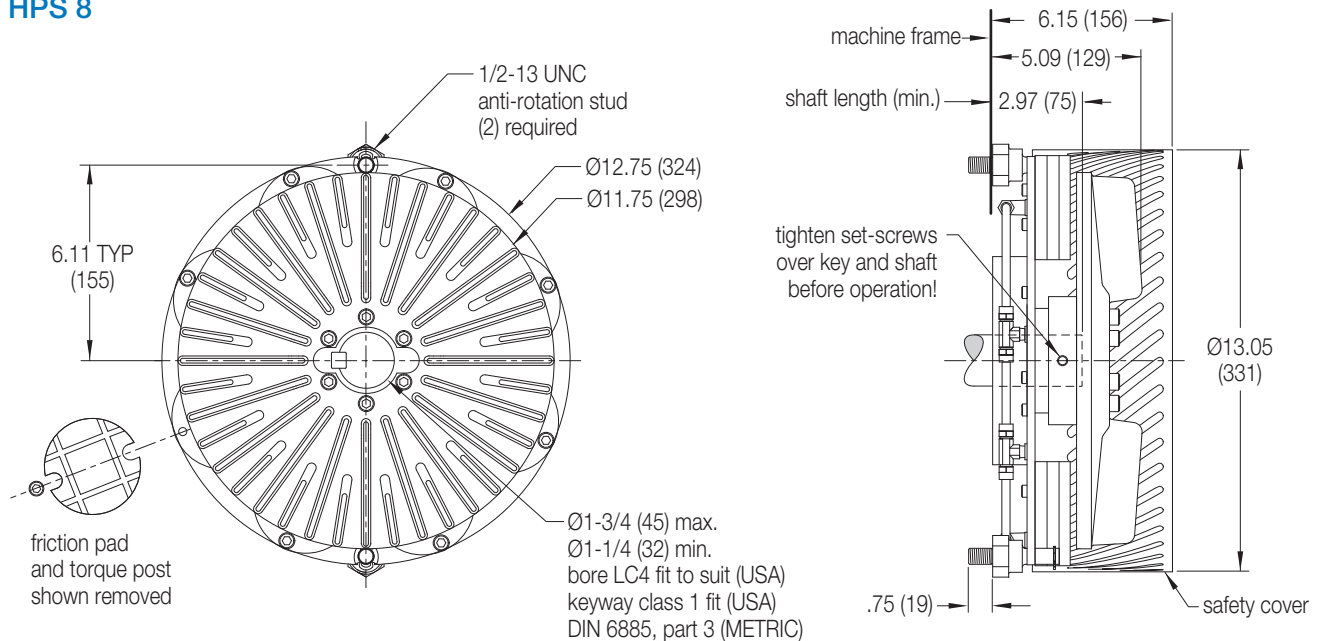
# HPS-Series

High Performance Single Disc Brakes

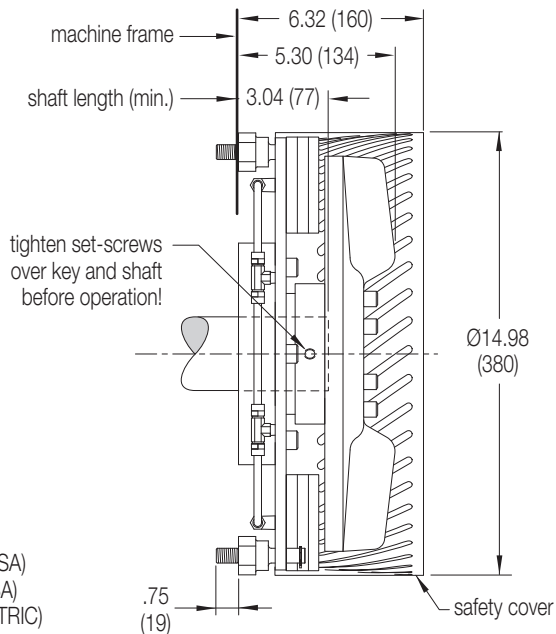
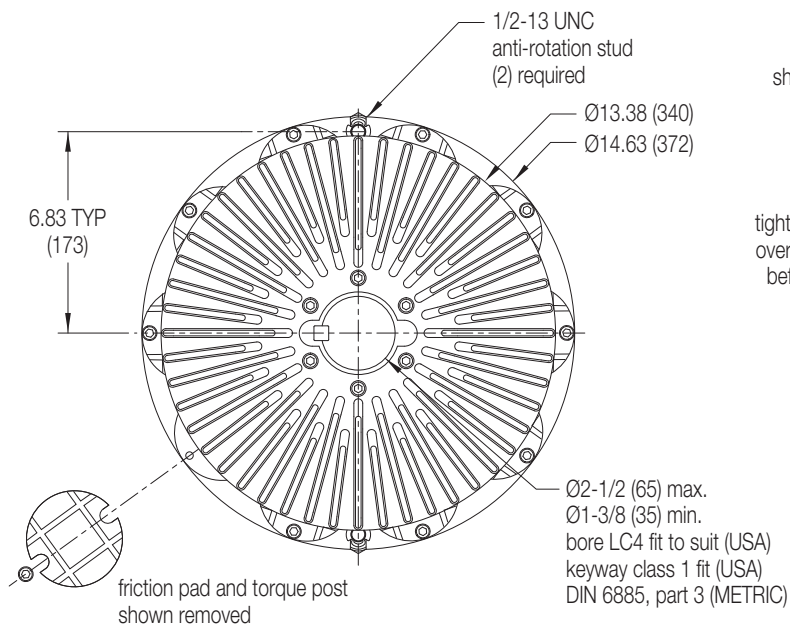
## HPS 6



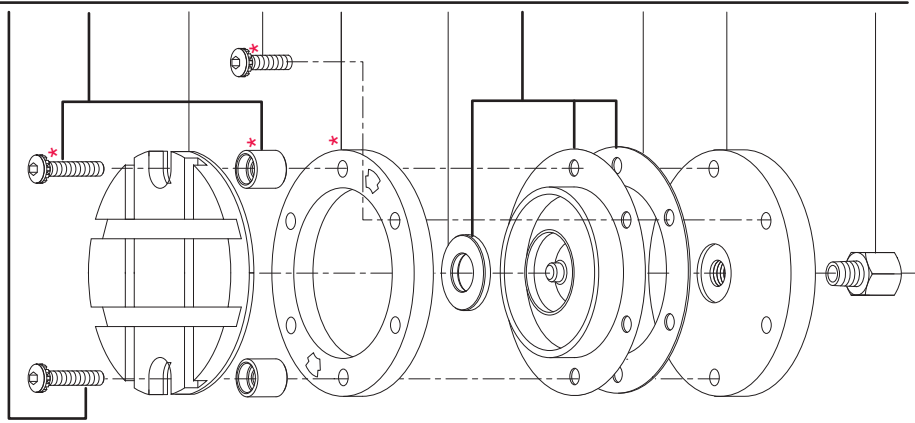
## HPS 8



## HPS 10



| Parts Description                             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|----|
| 1 Torque Post SEM Screw                       |   |   |   |   |   |   |   |   |   |    |
| 2 Torque Post Kit (incl. post & screw)        |   |   |   |   |   |   |   |   |   |    |
| 3 Friction Pad (many types available)         |   |   |   |   |   |   |   |   |   |    |
| 4 Torque Collar SEM Screw                     |   |   |   |   |   |   |   |   |   |    |
| 5 Torque Collar Kit (incl. all parts w/ *)    |   |   |   |   |   |   |   |   |   |    |
| 6 Standard Magnet                             |   |   |   |   |   |   |   |   |   |    |
| 7 Standard Piston Kit (incl. magnet & gasket) |   |   |   |   |   |   |   |   |   |    |
| 8 Standard Gasket                             |   |   |   |   |   |   |   |   |   |    |
| 9 HPS Base Plate                              |   |   |   |   |   |   |   |   |   |    |
| 10 NPT Male to Female Adapter                 |   |   |   |   |   |   |   |   |   |    |



# HPS-Series

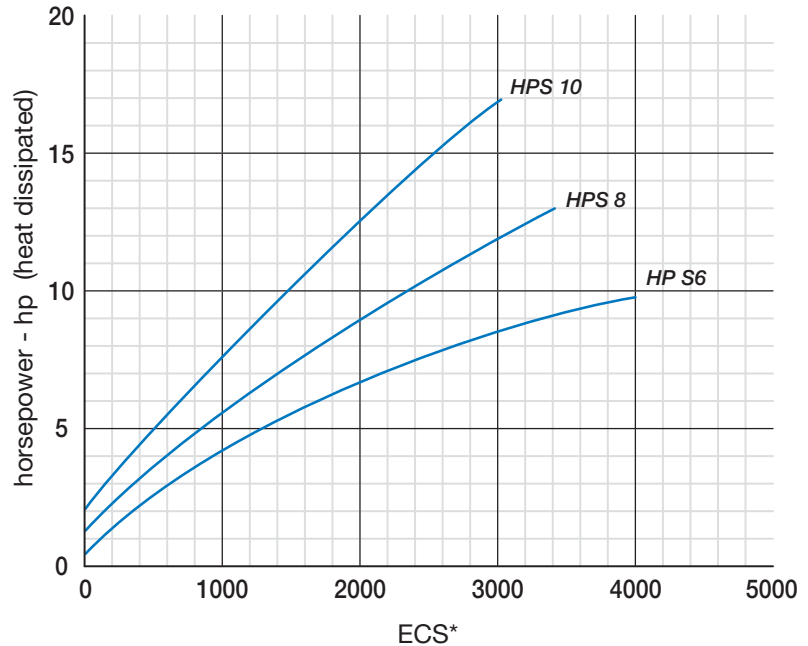
High Performance Single Disc Brakes

## Torque†

|               | Max. - Min. (in-lb) |                 |               |     |     |
|---------------|---------------------|-----------------|---------------|-----|-----|
|               | LOW Friction        | MEDIUM Friction | HIGH Friction |     |     |
| <b>HPS 6</b>  |                     |                 |               |     |     |
| HPS601        | 107                 | 320             | 480           |     |     |
| HPS602        | 213                 | 640             | 960           |     |     |
| HPS603        | 320                 | 960             | 1440          | 1.4 | 4.3 |
| HPS604        | 427                 | 1280            | 1920          |     | 6.4 |
| HPS605        | 533                 | 1600            | 2400          |     |     |
| HPS606        | 640                 | 1920            | 2880          |     |     |
| <b>HPS 8</b>  |                     |                 |               |     |     |
| HPS801        | 130                 | 391             | 587           |     |     |
| HPS802        | 261                 | 783             | 1174          |     |     |
| HPS803        | 391                 | 1174            | 1761          |     |     |
| HPS804        | 522                 | 1565            | 2348          | 1.7 | 5.2 |
| HPS805        | 652                 | 1957            | 2935          |     | 7.8 |
| HPS806        | 783                 | 2348            | 3522          |     |     |
| HPS807        | 913                 | 2740            | 4109          |     |     |
| HPS808        | 1044                | 3131            | 4696          |     |     |
| <b>HPS 10</b> |                     |                 |               |     |     |
| HPS1001       | 156                 | 468             | 702           |     |     |
| HPS1002       | 312                 | 936             | 1404          |     |     |
| HPS1003       | 468                 | 1404            | 2106          |     |     |
| HPS1004       | 624                 | 1872            | 2808          |     |     |
| HPS1005       | 780                 | 2340            | 3510          | 2.1 | 6.2 |
| HPS1006       | 936                 | 2808            | 4212          |     | 9.4 |
| HPS1007       | 1092                | 3276            | 4915          |     |     |
| HPS1008       | 1248                | 3744            | 5617          |     |     |
| HPS1009       | 1404                | 4212            | 6319          |     |     |
| HPS1010       | 1560                | 4681            | 7021          |     |     |

† Friction values are nominal. Rated torque may vary depending on operating temperature.

## Effective Cooling Speed\*



**Effective Cooling Speed**  
The speed at which a brake will dissipate a given heat horsepower.

$$ECS = \frac{2 (rpm \text{ min.}) + rpm \text{ max.}}{3}$$

### Testing

The brakes were mounted as recommended in the Brakes Installation Instruction Manual. No guard or cover was used. Addition of machine guarding, fan or blower cooling, differences in ambient conditions, location, mounting method, etc. will affect heat (hp) dissipation capacity of any air cooled brake. Careful consideration should be given to all conditions surrounding installation. Please consult The Montalvo Corporation for help in application sizing.

### Temperature

Ambient . . . . . 55 - 60°F (13 -16°C)  
Cast Iron Bulk . . . . 350°F (177°C)  
(humidity) . . . . . .65 - 70%

### Note

Montalvo Brakes are called upon to operate within a wide speed range when used in converting applications They do not carry “nominal” ratings.

| Size          | Max. Speed (rpm) | Inertia W <sup>2</sup> of discs-hub (lb-ft <sup>2</sup> ) | Weight disc-hub (lb) |
|---------------|------------------|---|----------------------|
| <b>HPS 6</b>  | 4300             | 2.2   | 38                   |
| <b>HPS 8</b>  | 3400             | 5.4   | 59                   |
| <b>HPS 10</b> | 2900             | 10.5  | 98                   |

\* Do not use to calculate horsepower.

|  |                             |
|--|-----------------------------|
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|  | +45 75 57 27 11             |
|  | +49 (0)511 760 691 41       |