montalvo
Better Web Control®

Compact

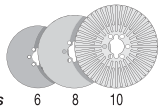
Low inertia

Modular design

High thermal capacity

Wide torque range & capacity

Easy installation & maintenance

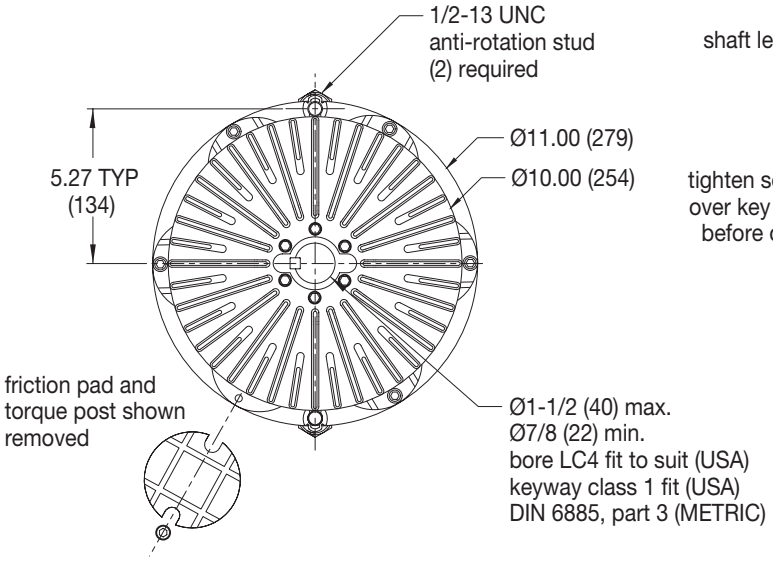


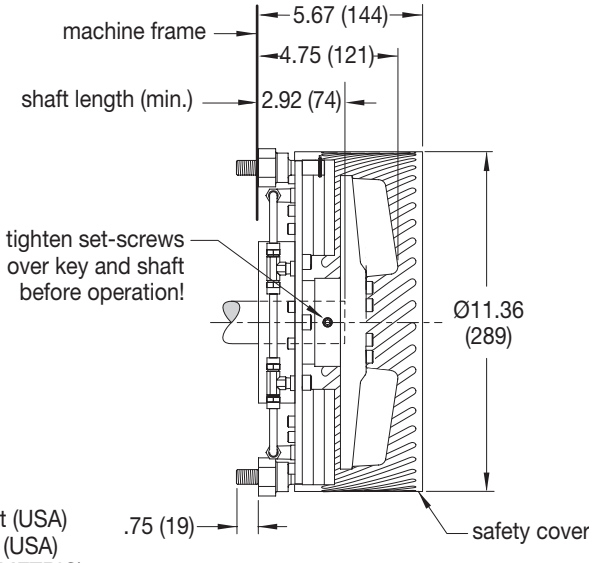
Montalvo Brakes

HPS-Series High Performance Single Disc Brakes

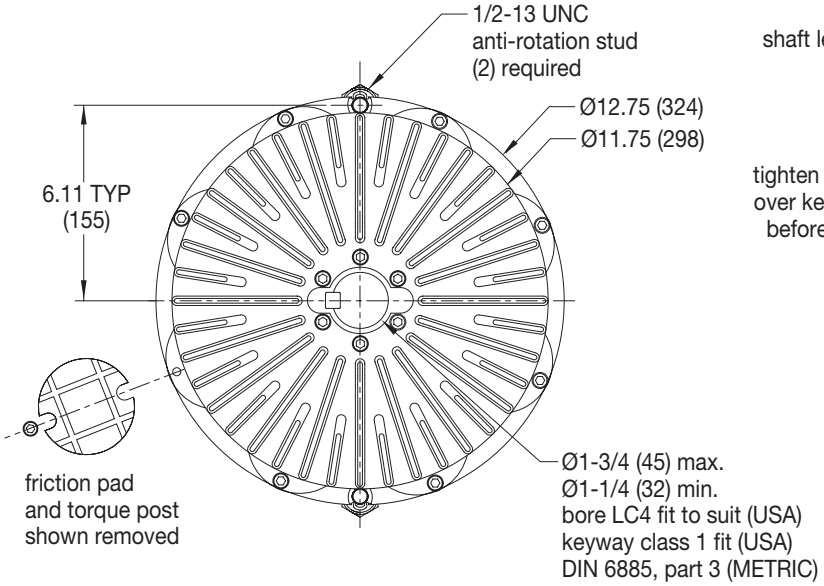
The HPS-Series brake uses a single HP-Series disc to control tension (torque) in limited space applications. The major design criteria in the development of the HP-Series was that each size in the new series should have the heat dissipating capacity of the next larger size in the Standard Series. Montalvo 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.

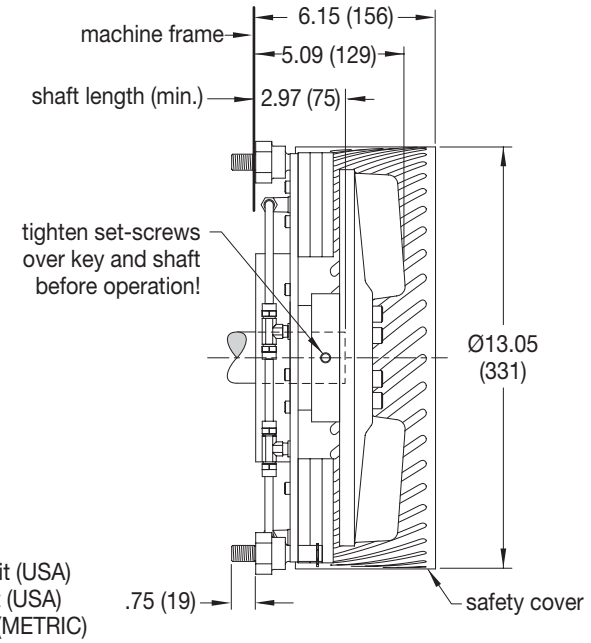
HPS 6


1/2-13 UNC
anti-rotation stud
(2) required
Ø11.00 (279)
Ø10.00 (254)
5.27 TYP
(134)
friction pad and
torque post shown
removed
Ø1-1/2 (40) max.
Ø7/8 (22) min.
bore LC4 fit to suit (USA)
keyway class 1 fit (USA)
DIN 6885, part 3 (METRIC)

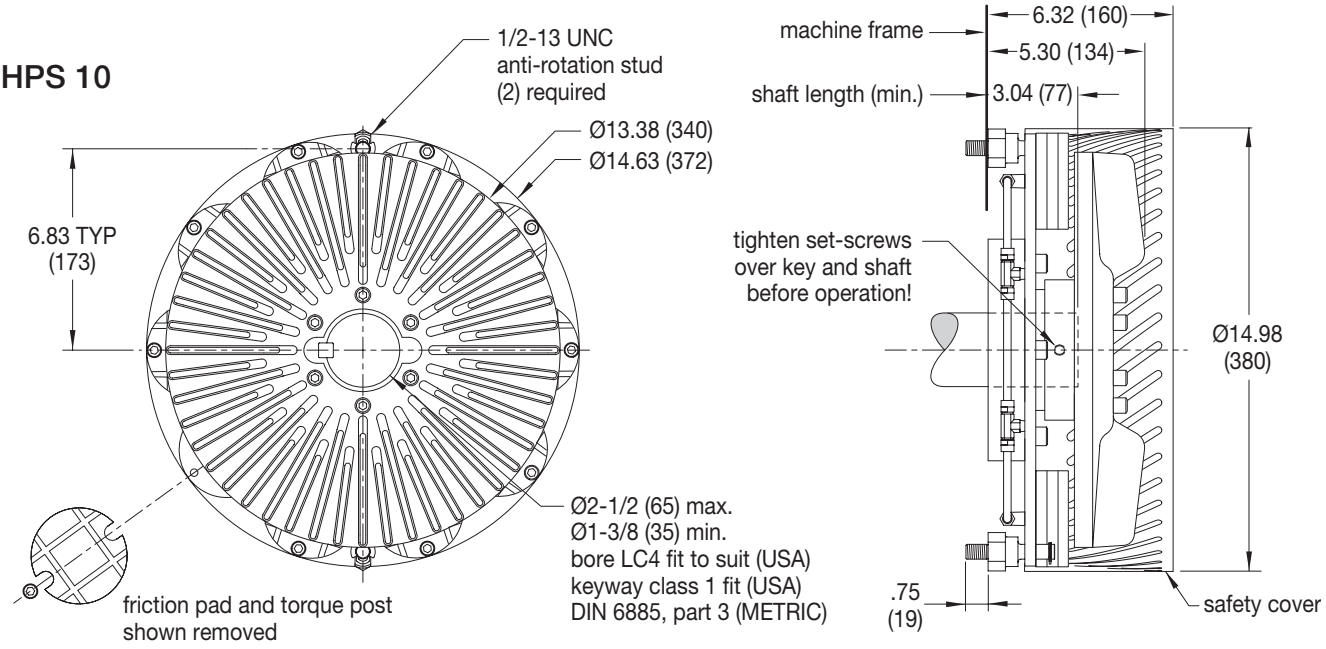

machine frame
5.67 (144)
4.75 (121)
shaft length (min.)
2.92 (74)
tighten set-screws
over key and shaft
before operation!
Ø11.36
(289)
.75 (19)
safety cover

HPS 8


1/2-13 UNC
anti-rotation stud
(2) required
Ø12.75 (324)
Ø11.75 (298)
6.11 TYP
(155)
friction pad
and torque post
shown removed
Ø1-3/4 (45) max.
Ø1-1/4 (32) min.
bore LC4 fit to suit (USA)
keyway class 1 fit (USA)
DIN 6885, part 3 (METRIC)


machine frame
6.15 (156)
5.09 (129)
shaft length (min.)
2.97 (75)
tighten set-screws
over key and shaft
before operation!
Ø13.05
(331)
.75 (19)
safety cover

HPS 10



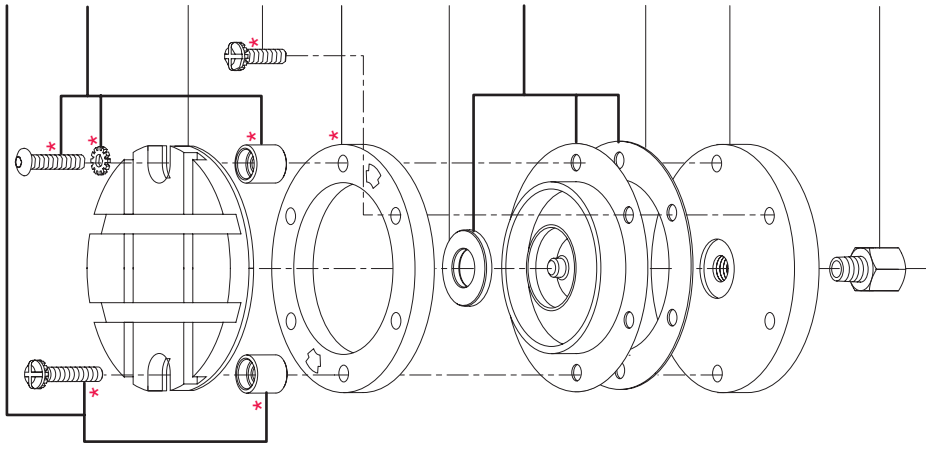
PROJECTION

dimensions in inches (mm)

HPS Friction Module

Parts Description	1	2	3	4	5	6	7	8	9	10

1 *Standard Torque Post Kit* (w/ screw)
2 *HPS Torque Post Kit* (w/ screw & washer)
3 *Friction Pad* (many types available)
4 *10-24 x 3/4" SEM Screw*
5 *HPS Torque Collar Kit* (includes all parts w/ *)
6 *Standard Magnet*
7 *Standard Piston Kit* (incl. magnet & gasket)
8 *Standard Gasket*
9 *HPS Friction Module Casting*
10 *NPT Male to Female Adapter*



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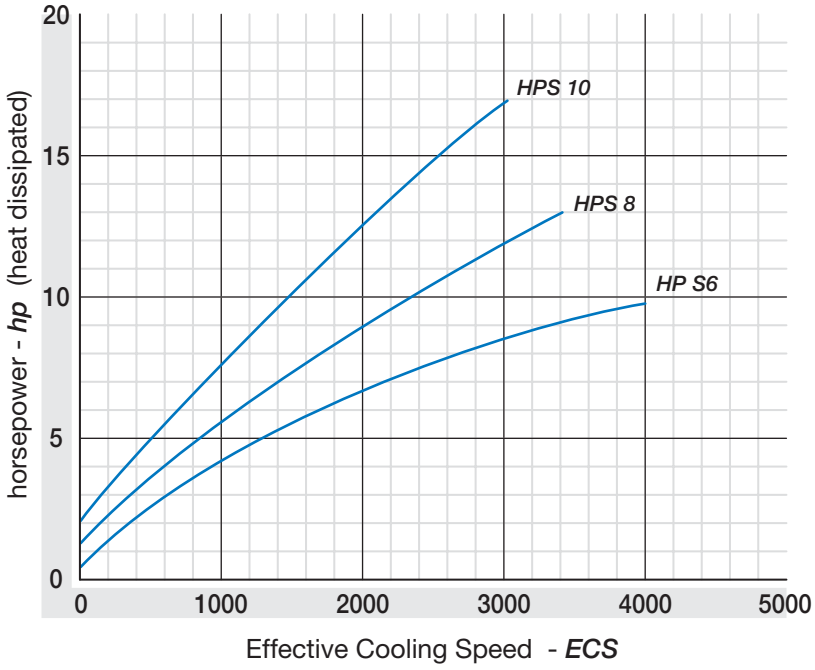
Better Web Control®

Torque

Size	Max. - Min. Torque† (in-lb) Max. @ 75 psi - Min. @ 1 psi					
	0.10 Fric. Coef.		0.30 Fric. Coef.		0.45 Fric. Coef.	
HPS 6						
HPS601	107		320		480	
HPS602	213		640		960	
HPS603	320	1.4	960	4.3	1440	6.4
HPS604	427		1280		1920	
HPS605	533		1600		2400	
HPS606	640		1920		2880	
HPS 8						
HPS801	131		391		587	
HPS802	260		783		1174	
HPS803	391		1174		1761	
HPS804	522	1.7	1564	5.2	2348	7.8
HPS805	652		1957		2935	
HPS806	783		2348		3522	
HPS807	913		2740		4109	
HPS808	1044		3131		4696	
HPS 10						
HPS1001	156		468		702	
HPS1002	312		936		1404	
HPS1003	468		1404		2106	
HPS1004	624		1872		2808	
HPS1005	780	2.1	2340	6.2	3510	9.4
HPS1006	936		2808		4212	
HPS1007	1092		3276		4915	
HPS1008	1248		3744		5617	
HPS1009	1404		4212		6319	
HPS1010	1560		4681		7021	

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

Horsepower



Effective Cooling Speed

The speed at which a brake will dissipate a given heat horsepower.

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

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 (Wr^2) (disc-hub) lb/ft^2	Weight (disc-hub) lb	Bal. in-oz
HPS 6	4300	2.2	38	.16
HPS 8	3400	5.4	59	.41
HPS 10	2900	10.5	98	.90

* Do not use to calculate horsepower.

The Montalvo Corporation • 50 Hutcherson Drive • Gorham, Maine 04038 USA
Tel: 800-226-8710 or 207-856-2501 Fax: 800-644-5097 or 207-856-2509
Email: info@montalvo.com Web Site: www.montalvo.com