



montalvo

HP Series*

HP 6, 8, 10, 14, 17 & 26 Brakes

Bulletin: 91BHP626-1EM

Engineering Data: Horsepower

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

Effective Cooling Speed

Effective Cooling Speed (n_{ECS}) is the speed at which a brake will dissipate a given heat horsepower load.

$$n_{ECS} = \frac{2 \times n_{min.} + n_{max.}}{3}$$

Test Conditions

The curves were generated under the following conditions:

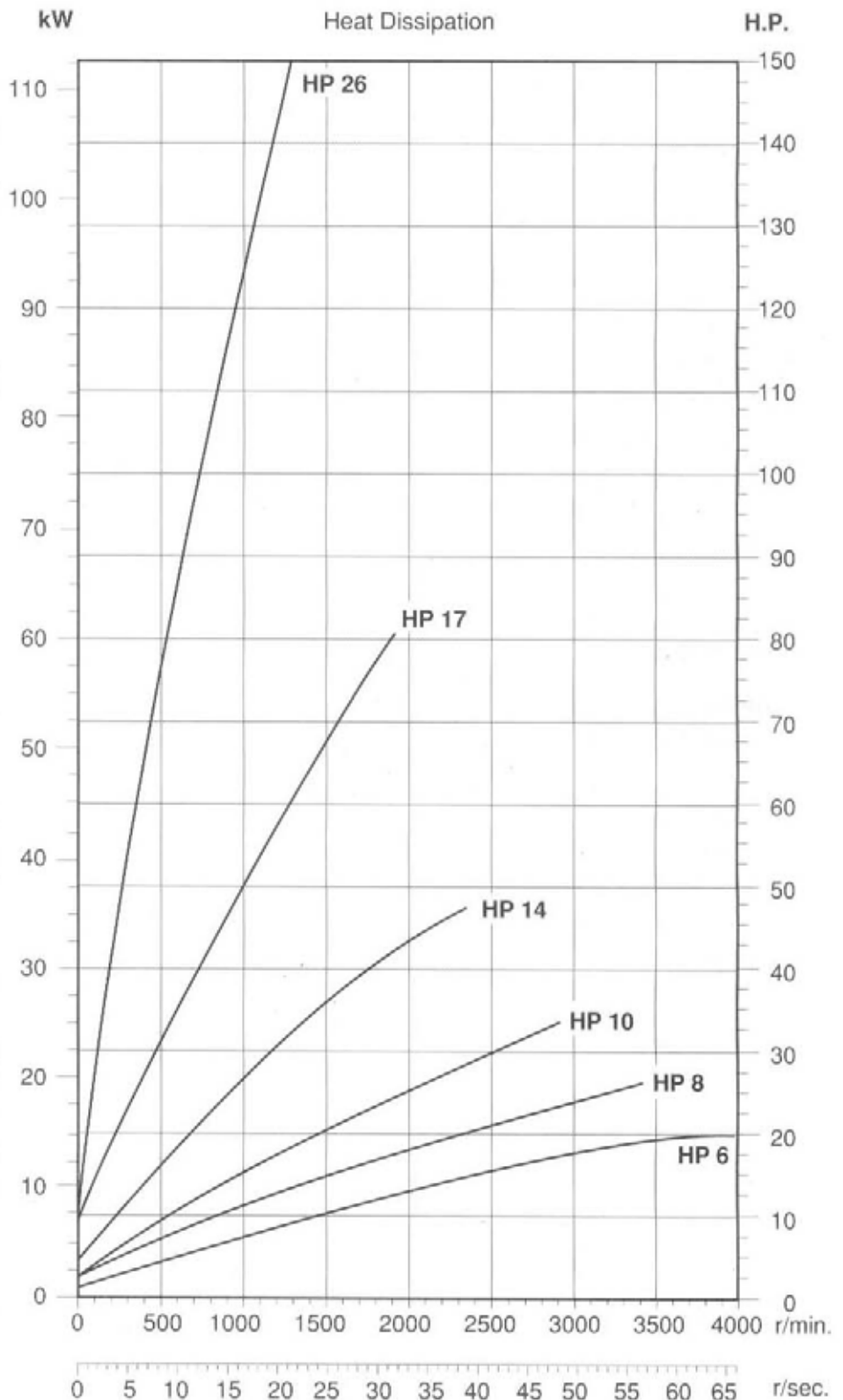
Ambient temp: 13° - 16° C
 Humidity: 65 - 70 %
 Cast iron bulk temp: 177° C

The brakes were mounted as recommended in Installation Bulletin No. 89 IBSH-1EM. No guard or cover was used during testing.

Addition of machine guarding, fan (or blower) cooling, differences in ambient conditions, location, mounting method, etc. will affect heat (kW/H.P.) dissipation capacity of any air cooled brake. Careful consideration should be given to all conditions surrounding installation. Please consult Montalvo for help in application sizing.

This brochure, printed Dec. 1991, supersedes all previous catalogs, data sheets and specification sheets.

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* Patent Pending

Engineering Data: Torque

All torque figures are based on continuous duty (slipping or tensioning).

Maximum torque figures are computed at 5.2 bar with all cylinders in operation. Minimum torque figures are computed at 0.07 bar with one cylinder in operation.

Friction Material coefficients are nominal.

Rated Torque may vary depending on operating temperature.

A copy of Montalvo Quotation Form No. 89ASQ-1EIM should be submitted to Montalvo with your order or prior to ordering.

HP Series brakes are designed for use in high power/high torque applications. If extremely low tensions are required (in combination with high thermal capacity), use of Standard Series Friction Modules is suggested. In this case, use the corresponding torque chart to the right of each HP Chart.

* Ventilated guards or covers over brakes are required according to safety regulations.

Specifications are subject to change without notice.

HP 6			0.45 Coef. Pads			HP 600			0.10 Coef. Pads		0.30 Coef. Pads		0.45 Coef. Pads		
Model	Nm	kg.m	Max		Min	Max		Min	Max		Min	Max		Min	
HP 61	226	23.0	Nm	kg.m	0.3	Nm	kg.m	0.8	Nm	kg.m	0.077	Nm	kg.m	1.1	
HP 62	452	46.1	19	1.9		57	5.8		85	8.6		170	17.3		254
					0.025			kg.m			kg.m			0.114	
						113	11.5		170	17.3		226	23.0		339

HP 8			0.45 Coef. Pads			HP 800			0.10 Coef. Pads		0.30 Coef. Pads		0.45 Coef. Pads		
Model	Nm	kg.m	Max		Min	Max		Min	Max		Min	Max		Min	
HP 81	339	34.6	Nm	kg.m	0.3	Nm	kg.m	1.0	Nm	kg.m	0.105	Nm	kg.m	1.6	
HP 82	678	69.1	26	2.6		78	7.8		117	11.9		234	23.8		351
HP 83	1017	103.7			0.035			kg.m			kg.m			0.159	
						156	15.6		156	15.6		234	23.4		312

HP 10			0.45 Coef. Pads			HP 1000			0.10 Coef. Pads		0.30 Coef. Pads		0.45 Coef. Pads		
Model	Nm	kg.m	Max		Min	Max		Min	Max		Min	Max		Min	
HP 101	393	40.1	Nm	kg.m	0.4	Nm	kg.m	1.2	Nm	kg.m	0.125	Nm	kg.m	1.9	
HP 102	786	80.2	31	3.1		93	9.4		139	14.0		278	28.3		417
HP 103	1182	120.5			0.041			kg.m			kg.m			0.186	
HP 104	1576	160.7				185	18.9		278	28.3		371	37.7		556

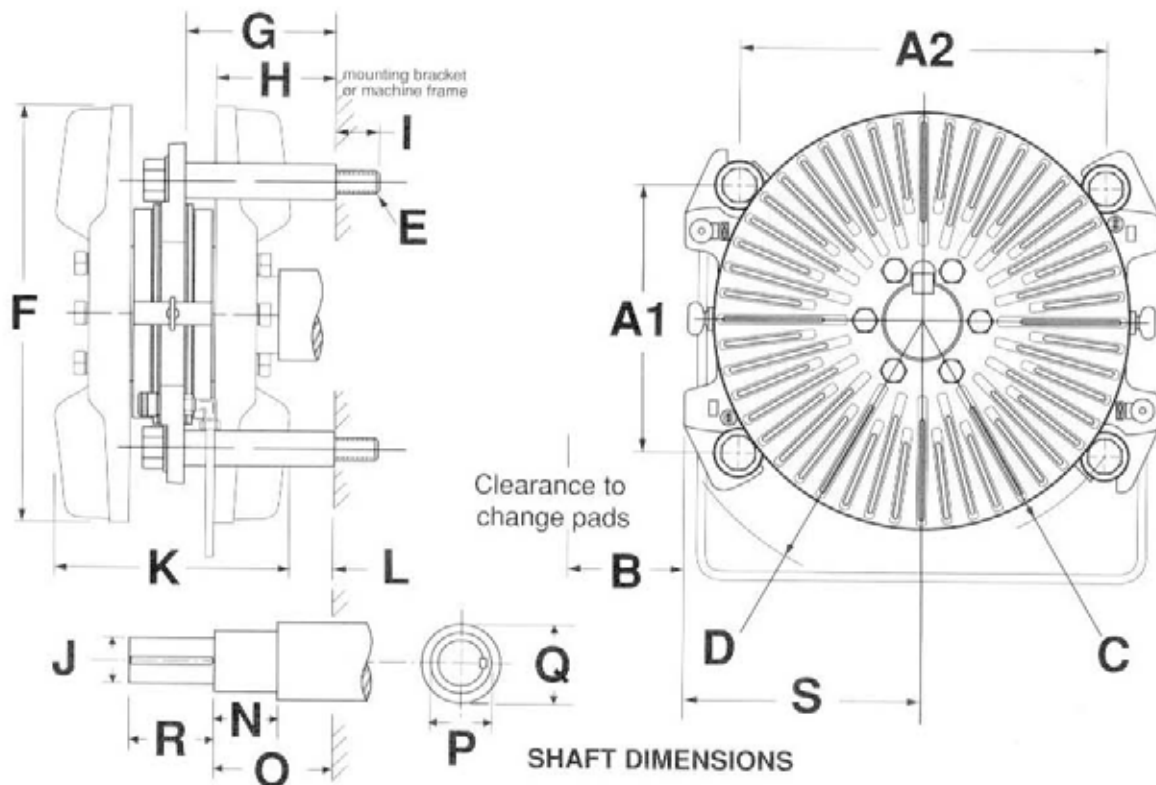
HP 14			0.45 Coef. Pads			HP 1400			0.10 Coef. Pads		0.30 Coef. Pads		0.45 Coef. Pads		
Model	Nm	kg.m	Max		Min	Max		Min	Max		Min	Max		Min	
HP 141	565	57.6	Nm	kg.m	0.6	Nm	kg.m	1.7	Nm	kg.m	0.176	Nm	kg.m	2.6	
HP 142	1130	115.3	43	4.4		130	13.2		195	19.8		390	39.7		585
HP 143	1695	172.8			0.058			kg.m			kg.m			0.246	
HP 144	2260	230.4				260	26.5		390	39.7		520	52.9		780
HP 145	2925	298.0													

HP 17			0.45 Coef. Pads			HP 1700			0.10 Coef. Pads		0.30 Coef. Pads		0.45 Coef. Pads		
Model	Nm	kg.m	Max		Min	Max		Min	Max		Min	Max		Min	
HP 171	697	70.0	Nm	kg.m	0.7	Nm	kg.m	2.1	Nm	kg.m	0.213	Nm	kg.m	3.2	
HP 172	1374	140.1	52	5.0		157	16.0		236	24.0		472	48.0		709
HP 173	2061	210.1			0.066			kg.m			kg.m			0.320	
HP 174	2748	280.2				105	11.0		157	16.0		210	21.0		288
HP 175	3435	350.2													

HP 26			0.45 Coef. Pads			HP 2600			0.10 Coef. Pads		0.30 Coef. Pads		0.45 Coef. Pads		
Model	Nm	kg.m	Max		Min	Max		Min	Max		Min	Max		Min	
HP 261	1046	106.7	Nm	kg.m	1.1	Nm	kg.m	3.2	Nm	kg.m	0.333	Nm	kg.m	4.8	
HP 262	2093	213.4	80	8.0		241	24.0		361	37.0		722	73.0		1074
HP 263	3139	320.0			0.106			kg.m			kg.m			0.493	
HP 264	4186	426.7				160	16.0		241	24.0		321	33.0		481
HP 265	5232	533.4													



**HP Brakes without Adapters: HP 61 & 62 (also HP 601 - 604) ,
HP 81 & 82 (also HP 801 - 804), HP 101 & 102 (also HP 1001 - 1004)**



Important Note: The brake shown in the drawing above is Model HP 102. It is used only as an illustration of brakes which are mounted without the use of adapters and is not intended to represent the appearance of all HP Brakes. The appearance, dimensions and particularly bolt patterns of the various models vary substantially. **Contact Montalvo or your local Montalvo Representative to obtain a dimensional sketch of the brake you require.**

Series	A1	A2	B	C	D	E	F	G
HP 6	218	183	130	R = 142	R = 190	M 20	ø 254	127
HP 81/82	218	254	130	R = 167	R = 216	M 20	ø 299	152
HP101/102	218	301	130	R = 185	R = 229	M 20	ø 340	178

Series	H	I	J max	J min.	K	L	N	O
HP 6	103	28	ø 45	ø 30	166	53	30	100
HP 81/82	128	28	ø 50	ø 30	184	69	37	125
HP 101/102	154	28	ø 70	ø 40	187	94	45	151

Series	P max.	Q max.	R	S
HP 6	ø 45	ø 65	72	140
HP 81/82	ø 52	ø 90	72	175
HP 101/102	ø 71	ø 110	72	219

The Montalvo Corporation's continuing commitment to product improvements make prices and specifications subject to change without notice.

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All dimensions are expressed in millimeters. Do not scale.

When installing a Montalvo Brake, careful consideration should be given to all conditions surrounding installation. Please consult Montalvo for help in application sizing.

* Open guarding (brake cover) is required in order to allow maximum cooling. Consult Montalvo for dimensional information on brake covers.

It is the customer's responsibility to provide ventilated guards or covers over brakes and clutches in order to comply with safety regulations.

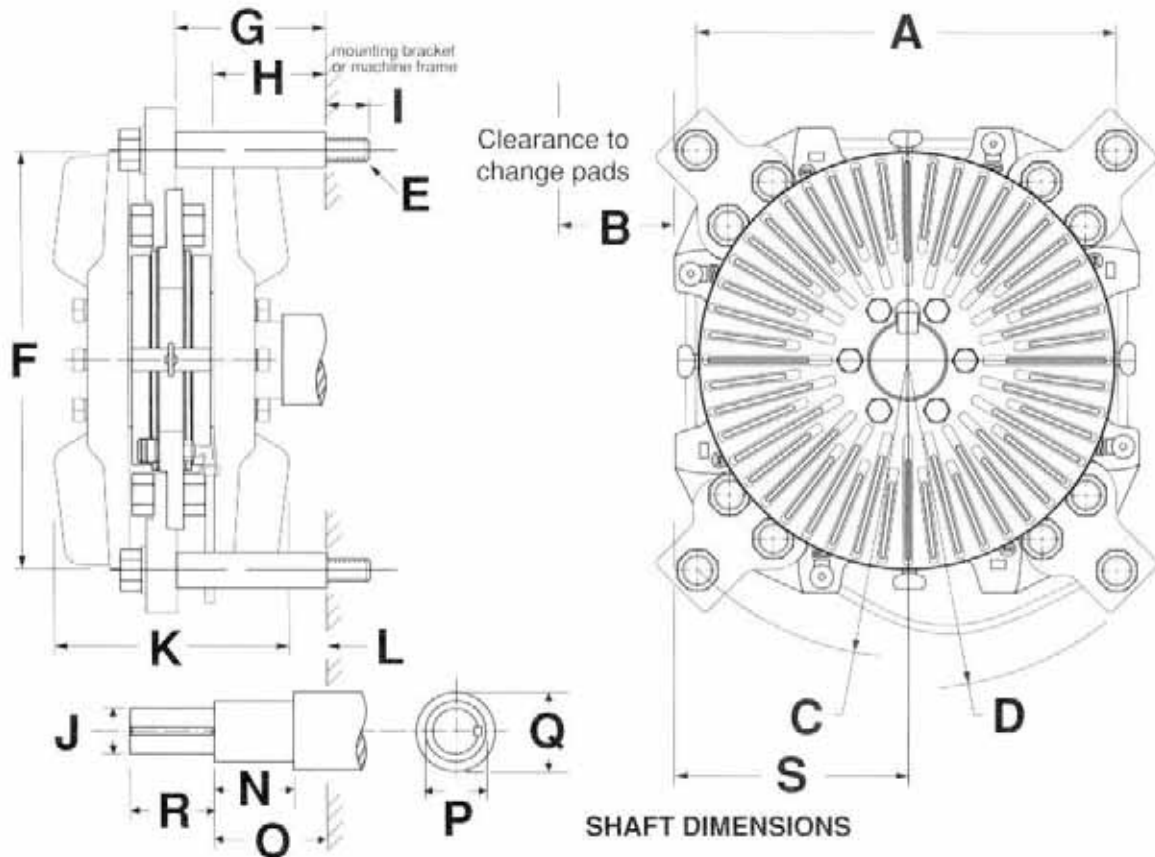
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HP Brakes with Adapters: HP 83 (HP 805 & 806), HP 103 & 104 (HP 1005 - 1008). All HP 14 & HP 1400, HP 17 & HP 1700, HP26 & HP2600



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Series	No. of Studs	of Separation
HP 83	3	120
HP 103/104	4	90
HP 14	5	72
HP17	5	72
HP26	8	45

Series	A	B	C	D	E	F	G	H	I	J max
HP 83	333	130	R = 192	R = 229	M 20	ø 299	152	122	28	ø 50
HP 103/104	341	130	R = 241	R = 267	M 20	ø 340	178	148	28	ø 70
HP 14	336	130	R = 286	R = 318	M 20	ø 438	214	184	28	ø 130
HP17	345	130	R = 294	R = 337	M 30	ø 530	254	224	43	ø 130
HP26	350	130	R = 457	R = 508	M 36	ø 762	356	327	41	ø 130

Series	J min.	K	L	N	O	P	Q	R	S
HP 83	ø 30	184	63	37	119	ø 52	ø 90	72	175
HP 103/104	ø 40	187	87	45	144	ø 71	ø 115	72	219
HP 14	ø 50	204	115	48	181	ø 139	ø 185	72	252
HP17	ø 60	233	141	57	221	ø 139	ø 215	72	300
HP26	ø 80	304	208	78	324	ø 139	ø 275	72	406

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