

# MAGNETEK 400D HEAVY DUTY DISC BRAKES



Magnetek, the industry leader in industrial braking systems, offers a complete line of Heavy Duty Disc Brakes designed for a variety of high speed, high performance applications. Our advanced design features, combined with our heavy duty steel construction and superior components, make this range of brakes your best choice for applications requiring optimal performance, reliability and durability. Magnetek Disc Brakes are designed to be easy to service and maintain and can be customized to meet your specific needs. Use our 400D as a drop-in replacement for existing disc brakes or, with modifications, as a replacement for your existing drum brakes in high duty cycle, high speed or high torque stopping applications.

## STANDARD FEATURES

- External torque spring — Allows user to fine-tune braking torque per application
- Auto-Adjustment — Compensates for lining wear automatically
- Auto-Equalization — Ensures equal pad clearance at all times
- Steel-backed anti-friction bronze bushings — Installed at all main pivot points; reduces maintenance and enhances brake performance
- Stainless steel pivot pins — Non-corrosive, low maintenance
- Hy-Thrust actuator — High performance, high duty cycle, waterproof thruster (IP65 standard, IP68 optional)
- Easily replaceable brake pads — Accessible brake pad mounting hardware reduces maintenance time
- Non-asbestos brake linings
- CSA approved

## OPTIONAL FEATURES

- Time delay on "Set" and "Release"
- Manual latching hand release
- Limit switches for release proving
- Braketronic™ Controller for variable torque control
- Nitride Corrosion Protection
- Dual disk brake mounting plate
- AIST mounting base

## APPLICATIONS

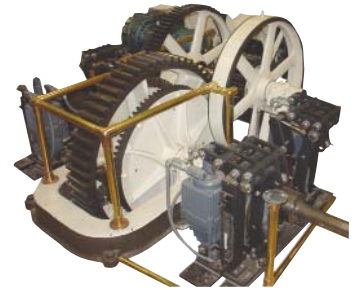
- Marine port terminals
- Steel mills
- Ship loaders
- Port cranes
- Shipyard cranes
- Offshore drilling rigs
- Large gantry cranes
- Swing span bridges
- Bascule bridges
- Vertical lift bridges
- Hoist winding drums

## BRAKE SELECTION GUIDE

Disc Diameter (Inches)		12.00	14.00	15.75	17.00	17.75	19.70	21.00	22.00	24.00	24.80	28.00	29.00	31.50	34.00	35.40	38.00	39.40	49.20	50.00	Single Brake Shaft Load (Lbs)		
		305	355	400	432	450	500	533	560	610	630	710	737	800	864	900	965	1000	1250	1270			
Brake Type	Standard Disc Thickness	Actuator Type	Maximum Torque (Lb. Ft.)																				
DT1	.050"	ED23	230	275	315																535		
DT2	0.75"	ED23				290	305	345	370	395	435	450	515	535	590							497	
		ED30				435	455	515	555	590	650	675	775	805	885							746	
		ED50				740	775	880	950	1005	1110	1150	1320	1375	1505								1272
		ED80				1205	1270	1440	1550	1640	1810	1880	2150	2245	2460								2075
DT3	1.18"	ED30				430	495	535	570	630	655	755	785	865	945	990	1070	1115				760	
		ED50				740	840	915	970	1075	1115	1285	1345	1475	1610	1690	1825	1900				1295	
		ED80				1200	1375	1490	1580	1750	1825	2100	2190	2410	2630	2755	2980	3100					2105
		ED121				1840	2100	2280	2420	2680	2790	3210	3350	3685	4020	4215	4560	4745					3220
DT5	1.18"	ED121				1880	2150	2330	2475	2745	2855	3285	3430	3770	4115	4310	4665	4850	6200	6310		3295	
		ED201				2980	3405	3690	3920	4345	4520	5200	5430	5970	6515	6825	7385	7680	9820	9990		5214	
		ED301				4235	4840	5250	5570	6175	6420	7395	7715	8485	9260	9700	10495	10920	13955	14200		7409	
MAX RPM Steel Disc			5635	4835	4290	3975	3815	3435	3215	3065	2815	2725	2415	2330	2145	1990	1900	1775	1715	1370	1350		

### MOUNTING BASE OPTIONS

- The 400D Series Disc Brake is designed to fit AISE-NEMA dimensional mounting parameters with the addition of optional mounting adapter plates.
- Disc brake mounting plates may be modified to match existing mounting requirements. Contact factory for details.



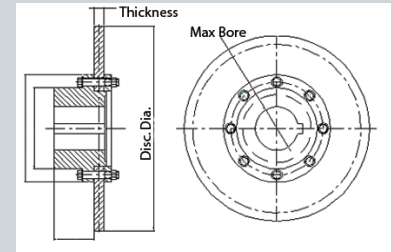
Dual Disc Brake Configuration

### BRAKE DISCS

Our stress relieved and ground steel discs are available as standard or can be custom designed to meet your specifications. Discs can be provided with integral hubs or machined to facilitate mounting via a coupling (finished or rough bored).

#### OPTIONS

- Plain Disc — Includes mounting holes
- One piece integral hub disc — Rough bore or finished bore with keyway
- Coupled — Disc mounted to appropriate coupling



Standard brake discs include a hub and disc assembly.

### ADVANTAGES OF MAGNETEK'S HY-THRUST™ ACTUATOR

CURRENT RATINGS OF STANDARD ACTUATORS	
Actuator	Current @460V/60Hz/3Ph
ED23	0.44
ED30	0.38
ED50	0.43
ED80	1.11
ED121	1.11
ED201	1.19
ED301	1.28

Our Hy-Thrust electro-hydraulic actuators are proven, high performance, reliable units that will provide years of trouble-free service in

tough operating conditions. Our mechanically isolated hydraulic pumping unit ensures no fluid contamination of the motor stator.

#### STANDARD FEATURES

- Fast response times
- High switching frequency—1,200 to 2,000 operations per hour
- Long service life—20 million switching cycles
- Working fluid operating range -13° F through 122° F (-25° C through 50° C)
- Available for 230 Vac, 460 Vac, 575 Vac/3ph/60Hz as standard

#### OPTIONAL FEATURES

- Stepless, externally adjustable time delays, setting, releasing or both
- Special hydraulic fluids for operating in extreme ambient temperatures
- Corrosion protection
- Stator completely encapsulated into motor housing under vacuum
- Explosion-proof and flame-proof units

Hy-Thrust Actuators are available as separate standard components. Consult Magnetek for more information.



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For more information, contact Magnetek Material Handling or your local Magnetek Sales Representative.