HEAVY DUTY SPRING ENGAGED BRAKE ELEMENTS DFB & QFB SERIES

This **16 Model** Series of spring engaged, air released **Dual Faced** and **Quad Faced Elements** are designed for heavy duty industrial applications requiring high torque and low inertia:

- Static Torque ratings up to 164,800 In. Lbs.
- Speeds up to 2200 rpm
- Thermal Horsepower values up to 14.7
- **Bore range** of 6.500 inches
- Brake can be **Thru-Shaft** or **Shaft-End** mounted. Units are inteded for horizontal shaft mounting only
- Dual Faced Elements have two interface surfaces, Quad Faced Elements have four interface surfaces
- Available with either Standard or High coefficient friction Facings
- Single or Double Disc Assemblies available in disc sizes from 11.500 to 25.000 inches
- Rugged design ensures long product life
- O-ring sealed piston & cylinder design reduces maintenance costs
- Air is supplied directly at the cylinder air inlets

With this Heavy Duty Series, tough applications are made easy. Each of the 16 Models are detailed on the next few pages.

Peak Input Rate

The DFB and QFB Series of Brakes are designed for applications requiring high torque and low inertia. The peak input rate may be the limiting factor in high inertia starts or stops, even though the Heat Sink Capacity is efficient.

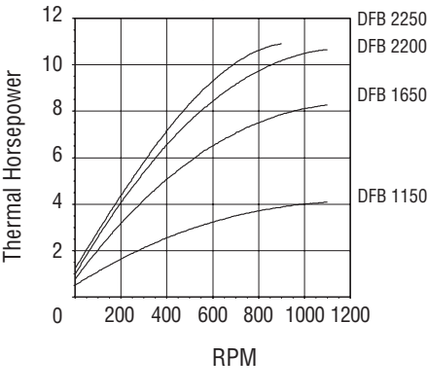
The peak input rate capacity is the rate at which the brake absorbs heat at the friction interface during the deceleration period while interfaces are slipping, or until the load and the clutch are operating at the same speed. See page 368 in the Engineering Data Section for information explaining how to calculate the Peak Input Rate and how to avoid potential problems.

Heat Sink Capacities & Peak Input Rate

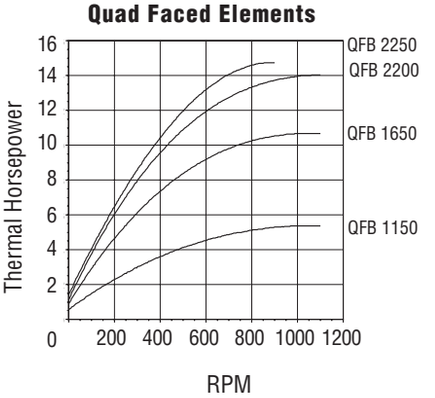
Model	Heat Sink Capacity (Ft Lbs)	Peak Input Rate(HP)	Effective Interface Areas
DFB 1150-S/H	390,000	105	117 in^2
DFB 1650-S/H	870,000	204	227 in^2
DFB 2200-S/H	1,187,000	297	330 in^2
DFB 2500-S/H	1,146,000	363	404 in^2
QFB 1150-S/H	780,000	210	234 in^2
QFB 1650-S/H	1,740,000	408	454 in^2
QFB 2200-S/H	2,374,000	594	660 in^2
QFB 2500-S/H	2,920,000	727	808 in^2

Continuous Rated Thermal Horsepower Dissipation vs RPM

Dual Faced Elements



Quad Faced Elements



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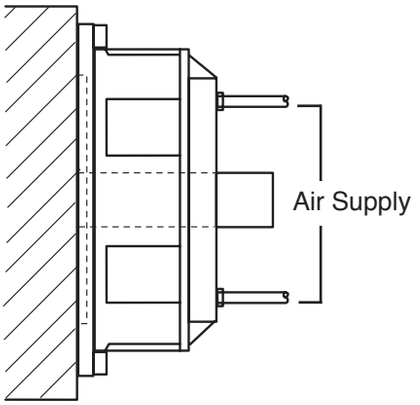
Shaft-End Mounted Brake Element



To Apply DFB & QFB Brakes

Element can be Shaft-End or Thru-Shaft Mounted, but must be in a horizontal position.

The housing is flange mounted to the machine frame.

The Hub is keyed to the shaft.

Air is supplied directly at the cylinder air inlets.

Brake Air Connection:

Connect the air supply directly to the two air ports, located 180 degrees apart in the cylinder.

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