

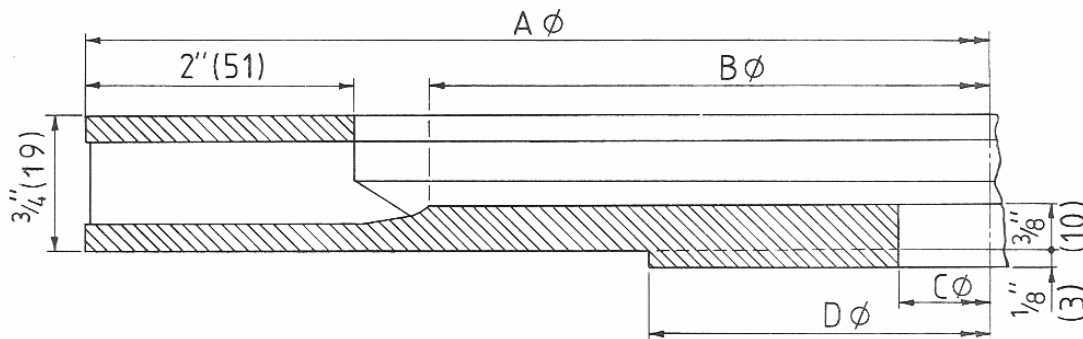
## 3/4" x 2" SERIES MEDIUM DUTY BRAKE DISC

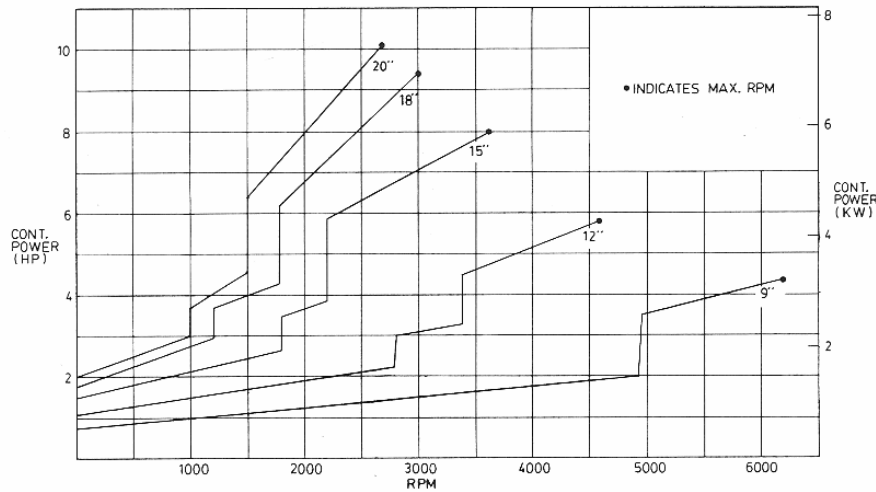
These discs are designed to fit our 5019 brake calipers, (fluid or spring applied). They are manufactured in ductile iron. These discs are designed for medium duty applications, because of their internal ventilated design.

### SPECIFICATIONS

A diam		B max diam		C min diam		D max diam		Max RPM	Weight		Act. Rad.		WR <sup>2</sup>		Single Stop Energy Absorb.	
inch	mm	inch	mm	inch	mm	inch	mm		lbs	Kgs	ft.	m	lb-ft <sup>2</sup>	Kg-m <sup>2</sup>	hp-sec	KJ
9	229	5	127	2	51	3.75	95	6150	8	4	0.29	0.09	0.6	0.03	660	490
12	305	8	203	2	51	5	127	4550	15	7	0.42	0.13	2.0	0.08	980	730
15	381	11	279	2	51	6	152	3600	21	10	0.54	0.17	4.6	0.19	1230	920
18	457	14	356	2	51	7	178	3000	29	13	0.67	0.20	9.7	0.41	1560	1160
20	508	16	406	2	51	8	203	2680	36	16	0.75	0.23	14.9	0.63	1800	1340

Note: WR<sup>2</sup> and Weight may vary due to machining.





The graph above indicates the horsepower handling capacity of the brake discs in relation to various RPMs. Please note that the horsepower capacity drastically increases when the disc goes from laminar to turbulent flow. The energy indicated is based on a continuous input with a maximum disc temperature of 600°F (315°C) and does not require any stopping or brake release time. It is important to remember that disc brake installations running on a continuous power input should not exceed 700°F (370°C) disc temperature.

MAXIMUM ENERGY CAPACITY FOR A SINGLE STOP FROM CRITICAL RPM (LAMINAR FLOW)																			
Maximum Temperature 700°F (370°C)																			
Disc	Critical rpm	1 sec		2 sec		5 sec		10sec		30sec		1min		2 min		5 min		10 min	
		hp-sec	kJ	hp-sec	kJ	hp-sec	kJ	hp-sec	kJ	hp-sec	kJ	hp-sec	kJ	hp-sec	kJ	hp-sec	kJ	hp-sec	kJ
.75 x 2 x 9	4968	586	440	663	490	666	500	671	500	693	520	726	540	797	590	993	740	1349	1010
.75 x 2 x 12	3338	837	620	982	730	986	740	993	740	1021	760	1064	790	1156	860	1408	1050	1884	1400
.75 x 2 x 15	2257	1088	810	1229	920	1235	920	1244	930	1279	950	1334	990	1451	1080	1769	1320	2343	1750
.75 x 2 x 18	1735	1339	1000	1555	1160	1561	1160	1571	1170	1612	1200	1673	1250	1807	1350	2164	1610	2823	2100
.75 x 2 x 20	1474	1506	1120	1789	1330	1796	1340	1807	1350	1852	1380	1921	1430	2070	1540	2475	1850	3249	2420

The calculations indicating disc temperature or energy capability are based on the rubbing face and the fins of the disc only. The mounting flange of the disc and the rotating element that the disc is attached to are not considered in our calculations. Also in air flow we have allowed for some restrictions because normally guards and obstructions are imposed to the air flow in most instances. Because of this, in many cases up to three times more energy can be absorbed by the disc, but since all of these items are unknown to us, we feel that we must offer the utmost in security, as far as brake performance is concerned. If specific details are available of your brake installation, we will be pleased to do a computer run and give you precise performance criterias.

If a brake disc and brake caliper are properly selected, many years of trouble-free service can be expected. Early disc failure can occur if for example a disc cycles continuously, and goes from extremely hot to cold conditions constantly, (metal fatigue). Because of these constant thermo-stresses, heat checks will occur and major cracks will appear after some time of operation. If a brake disc and brake caliper are properly selected, this can all be avoided.