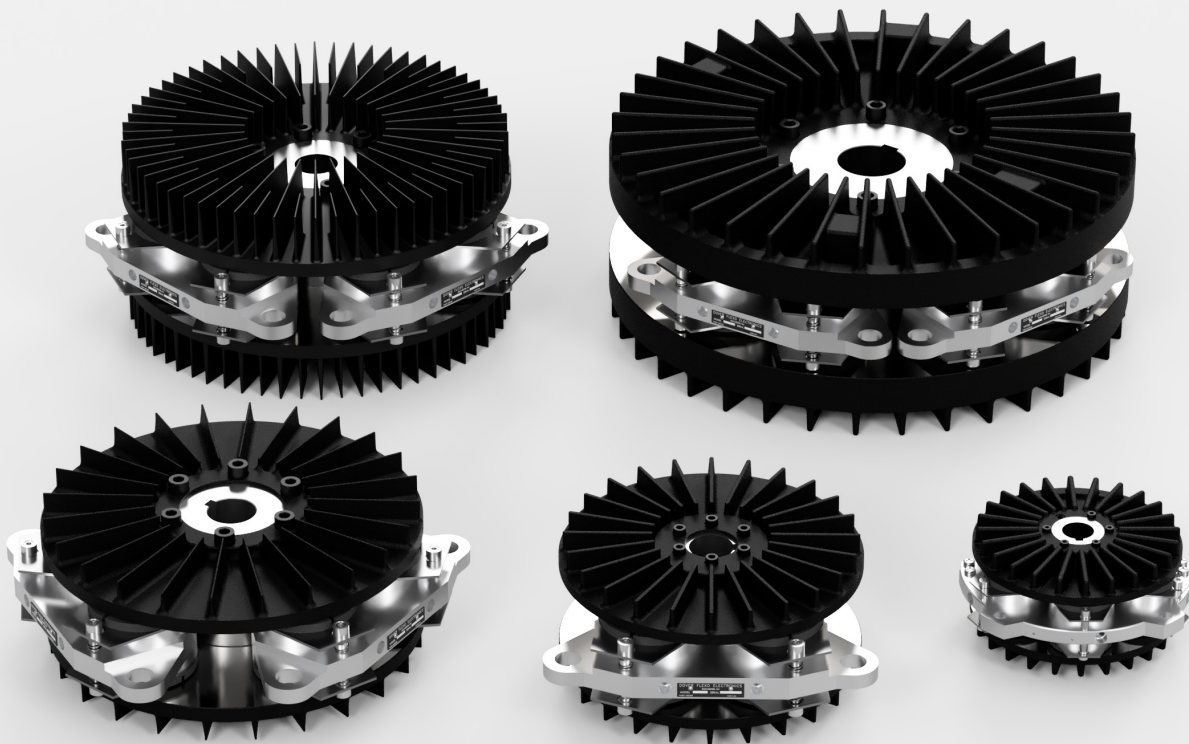




BRAKE CATALOG

THE TENSION CONTROL SPECIALISTS

DUAL DISC PNEUMATIC BRAKES

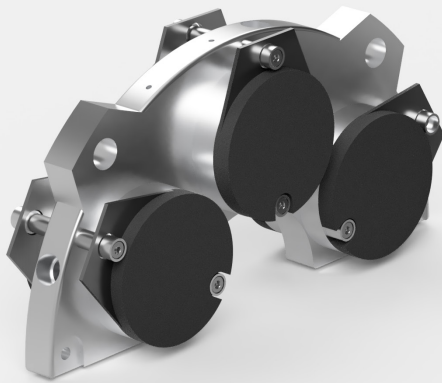


DFE dual disc pneumatic brakes are designed to be an integral component of a high-performance unwind system. Each brake is precision manufactured in the USA from quality materials including marine-grade billet aluminum, stainless steel and stress-relieved cast iron. Tight machining tolerances and methodical assembly processes help minimize disc runout, resulting in ultra-smooth torque engagement and even friction pad wear.

DFE brakes are available in a variety of sizes that deliver from 3 to 17,990 lb-inches of torque. Pneumatic actuator cylinders can be individually toggled to adjust torque multipliers or influence air pressure to maintain rapid control response. Tool-less friction pad replacement simplifies maintenance, while patented Silencer™ pads reduce incidents of brake squeal to near zero. Each DFE pneumatic brake is backed by a 5 year warranty.

INDUSTRY LEADING FIVE YEAR WARRANTY

60 SERIES DUAL DISC PNEUMATIC BRAKE



SPECIFICATIONS

Disc/Hub Inertia: 2.54 slug-in²

Max. Torque: Up to 1,010 lb-inches

Max. Heat Capacity: 5 hp @ 6400 rpm

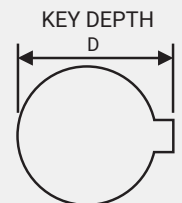
Disc/Hub Weight: 9.1 lbs

Max. Shipping Weight: 22.5 lbs

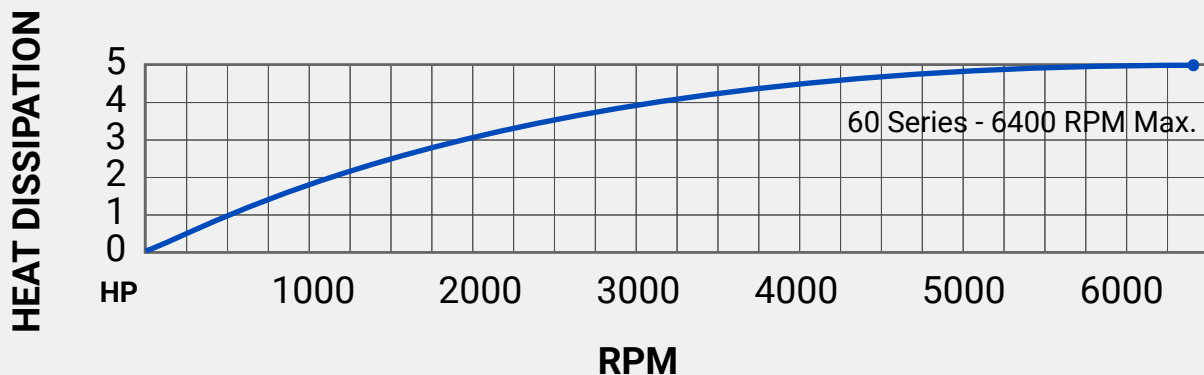
Min. Shaft Length: 4.6 inches

STANDARD HUB BORE AND KEY DIMENSIONS						
	ENGLISH			METRIC		
	BORE	KEY	DEPTH (D)	BORE	KEY	DEPTH (D)
60 S E R I E S	0.625	3/16	0.709	13	5	15.3
	0.688	3/16	0.773	14	5	16.3
	0.750	3/16	0.837	16	5	18.3
	0.813	3/16	0.900	18	6	20.8
	0.875	3/16	0.964	19	6	21.8
	0.938	1/4	1.051	20	6	22.8
	1.000	1/4	1.114	23	8	26.3
	1.063	1/4	1.178	25	8	28.3
	1.125	1/4	1.241	28	8	31.3
	1.188	1/4	1.304	30	8	33.3
	1.250	1/4	1.367	32	10	35.3
	1.313	5/16	1.455	35	10	38.3
	1.375	5/16	1.518			

TORQUE CAPACITY, LB-IN (N-M)			
Torque Capacity at 75psi (5.17 bar)			
BRAKE SIZE		PAD COEFFICIENT OF FRICTION	
SERIES	# OF CYLINDERS	0.10 (#1) LB-IN (N-M)	0.45 (#4) LB-IN (N-M)
60	1	40 (5)	170 (19)
	2	80 (9)	340 (38)
	3	110 (12)	500 (56)
	4	150 (17)	670 (76)
	5	190 (21)	840 (95)
	6	230 (26)	1010 (114)

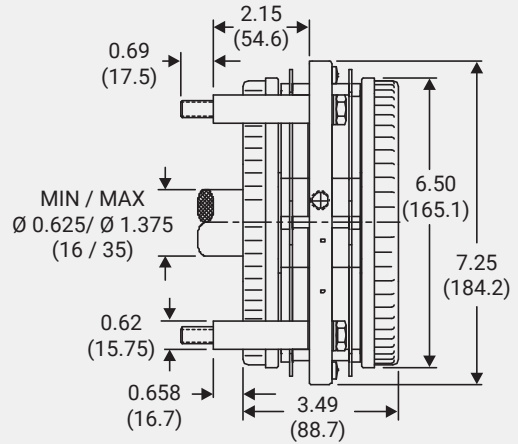
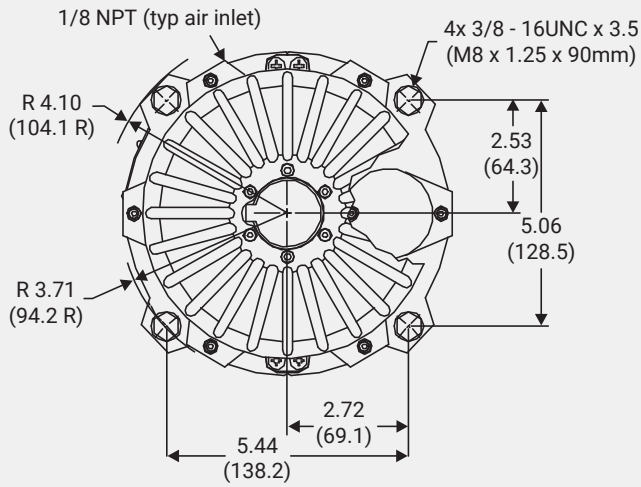


HEAT DISSIPATION vs. RPM



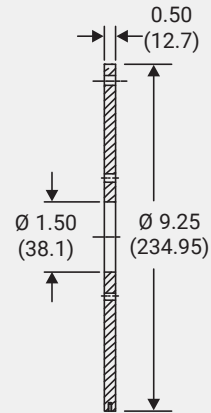
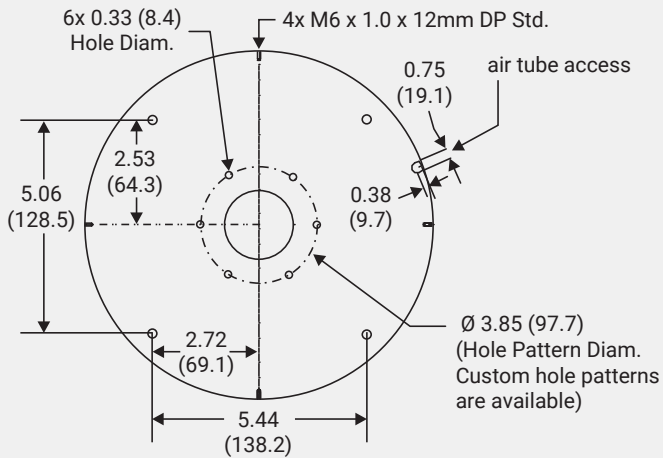
60 SERIES DIMENSIONS

inches (mm)



MOUNTING PLATE DIMENSIONS

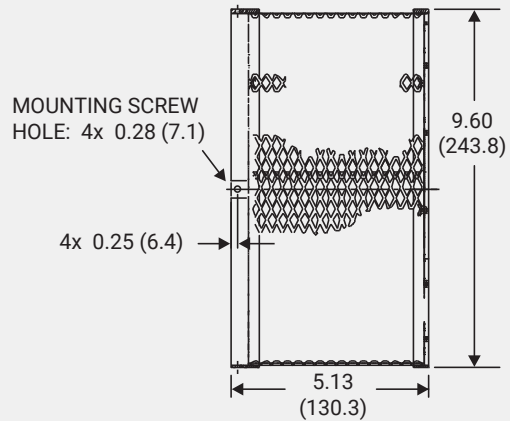
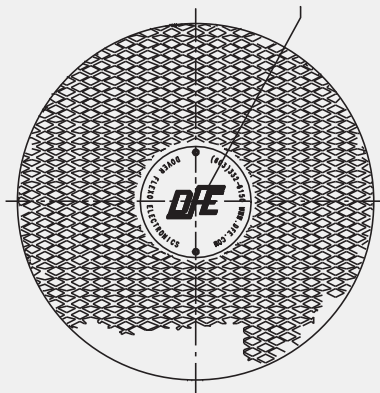
inches (mm)



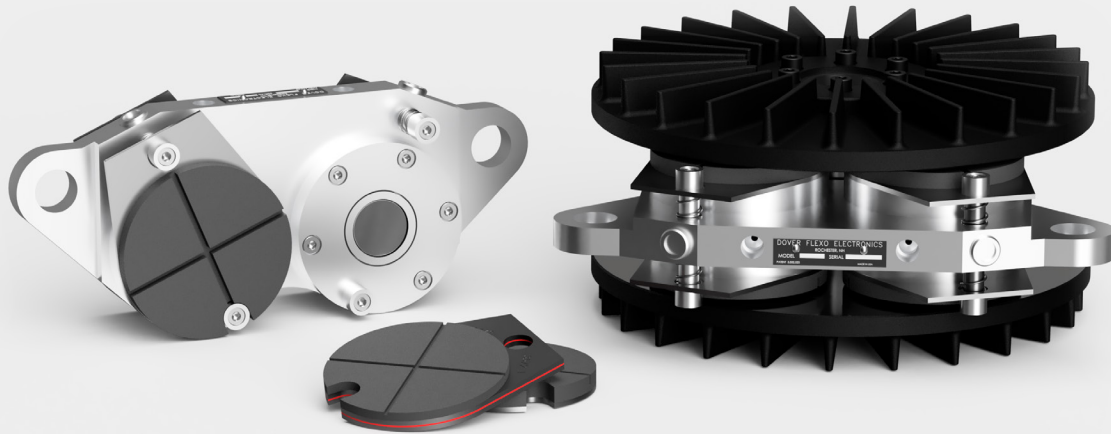
BRAKE GUARD DIMENSIONS

inches (mm)

THRU-SHAFT HOLE 2.00 (50.8) Diam.
REQUIRES REMOVAL OF NAME PLATE



90 SERIES DUAL DISC PNEUMATIC BRAKE



SPECIFICATIONS

Disk/Hub Inertia: 7.9 slug-in²

Max. Torque: 3,000 lb-inches

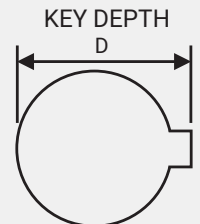
Max. Heat Capacity: 10 hp @ 4500 rpm

Disk/Hub Weight: 28.4 lbs

Max. Shipping Weight: 45 lbs

Min. Shaft Length: 7.1 inches

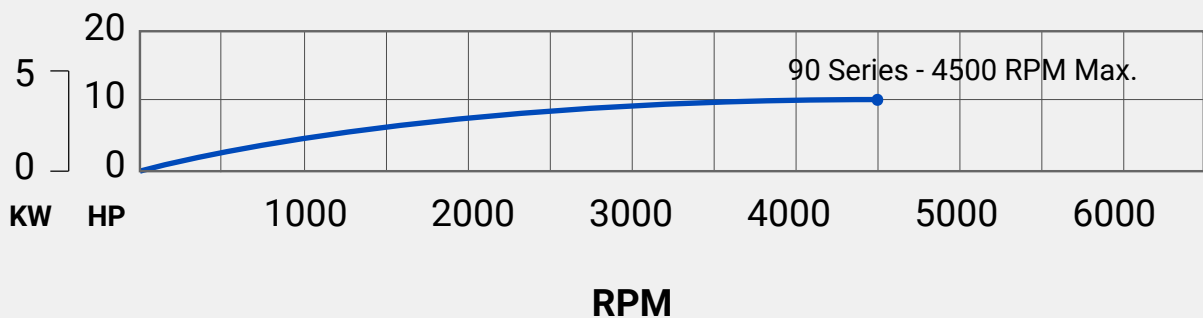
STANDARD HUB BORE AND KEY DIMENSIONS						
	ENGLISH			METRIC		
	BORE	KEY	DEPTH (D)	BORE	KEY	DEPTH (D)
90	0.750	3/16	0.837	19	6	21.8
	0.813	3/16	0.900	20	6	22.8
	0.875	3/16	0.964	23	8	26.3
S	0.938	1/4	1.051	25	8	28.3
	1.000	1/4	1.114	28	8	31.3
	1.063	1/4	1.178	30	8	33.3
E	1.125	1/4	1.241	32	10	35.3
	1.188	1/4	1.304	35	10	38.3
	1.250	1/4	1.367			
S	1.313	5/16	1.455			
	1.375	5/16	1.518			



TORQUE CAPACITY, LB-IN (N-M)			
Torque Capacity at 75psi (5.17 bar)			
BRAKE SIZE		PAD COEFFICIENT OF FRICTION	
SERIES	# OF CYLINDERS	0.10 (#1) LB-IN (N-M)	0.45 (#4) LB-IN (N-M)
90	1	170 (19)	750 (85)
	2	330 (37)	1500 (169)
	3	500 (56)	2250 (254)
	4	660 (74)	3000 (339)

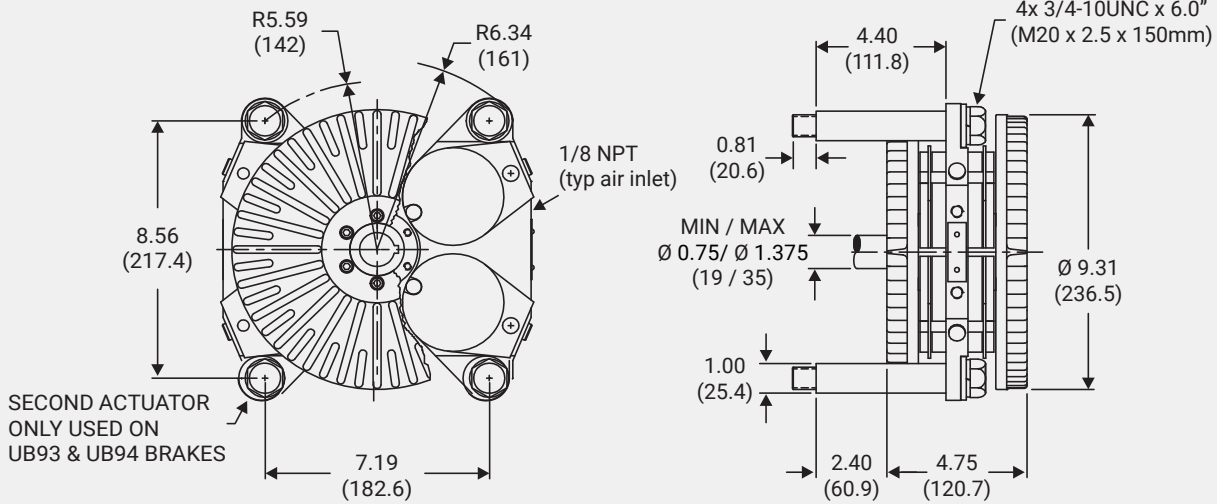
HEAT DISSIPATION vs. RPM

HEAT DISSIPATION



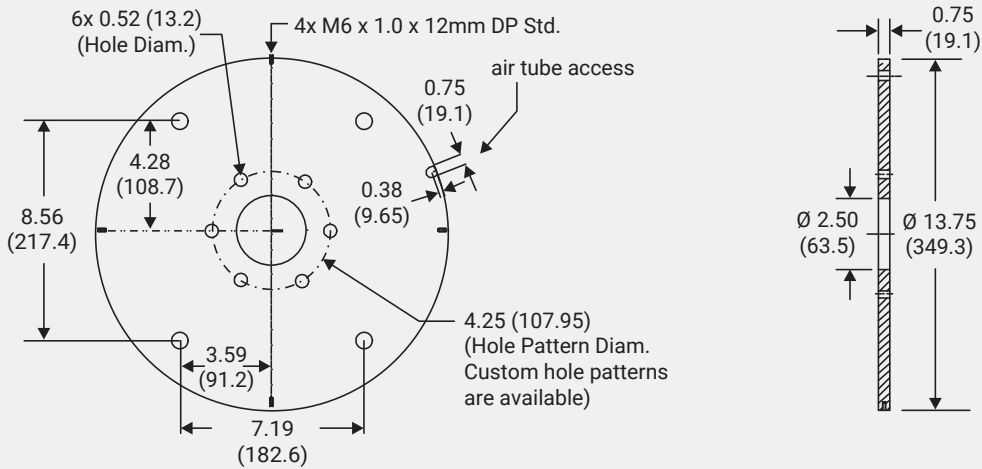
90 SERIES DIMENSIONS

inches (mm)



MOUNTING PLATE DIMENSIONS

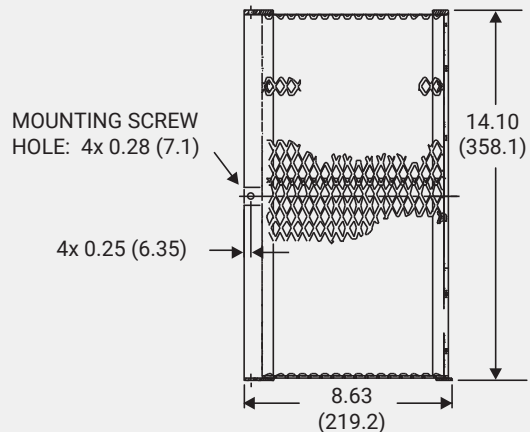
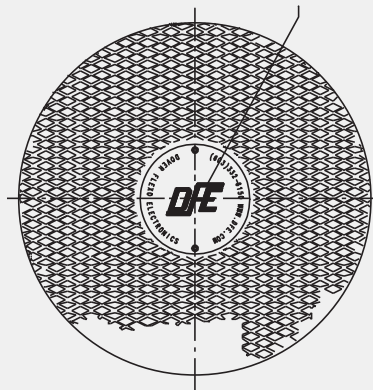
inches (mm)



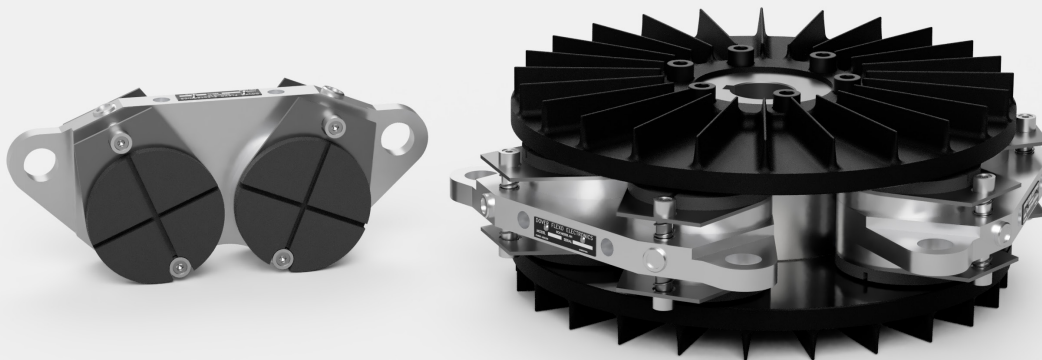
BRAKE GUARD DIMENSIONS

inches (mm)

THRU-SHAFT HOLE 1.50 (38.1) Diam.
REQUIRES REMOVAL OF NAME PLATE



110 SERIES DUAL DISC PNEUMATIC BRAKE



SPECIFICATIONS

Disc/Hub Inertia: 22.2 slug-in²

Max. Torque: 6,210 lb-inches

Max. Heat Capacity: 18 hp @ 3600 rpm

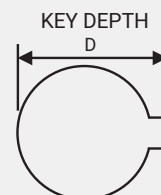
Disc/Hub Weight: 54.9 lbs

Max. Shipping Weight: 80 lbs

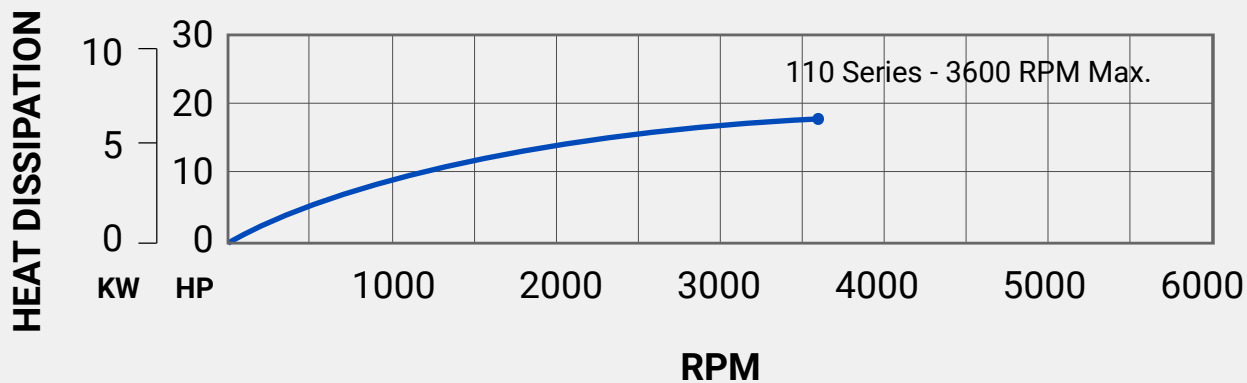
Min. Shaft Length: 7.3 inches

TORQUE CAPACITY, LB-IN (N-M)			
Torque Capacity at 75psi (5.17 bar)			
BRAKE SIZE		PAD COEFFICIENT OF FRICTION	
SERIES	# OF CYLINDERS	0.10 (#1)	0.45 (#4)
		LB-IN (N-M)	LB-IN (N-M)
110	1	230 (26)	1040 (117)
	2	460 (52)	2070 (234)
	3	690 (78)	3110 (351)
	4	920 (104)	4140 (468)
	5	1150 (130)	5180 (584)
	6	1380 (156)	6210 (702)

STANDARD HUB BORE AND KEY DIMENSIONS						
	ENGLISH			METRIC		
	BORE	KEY	DEPTH (D)	BORE	KEY	DEPTH (D)
110	1.250	1/4	1.367	32	10	35.3
	1.313	5/16	1.455	35	10	38.3
	1.375	5/16	1.518	38	10	41.3
	1.438	3/8	1.605	40	12	43.3
	1.500	3/8	1.669	42	12	45.3
	1.563	3/8	1.732	45	14	48.8
	1.625	3/8	1.796	48	14	51.8
	1.688	3/8	1.859	50	14	53.8
	1.750	3/8	1.922	52	16	56.3
	1.813	1/2	2.032	55	16	59.3
S E R I E S	1.875	1/2	2.096	58	16	62.3
	1.938	1/2	2.160	60	18	64.4
	2.000	1/2	2.223	62	18	66.4
	2.063	1/2	2.287			
	2.125	1/2	2.350			
	2.188	1/2	2.414			
	2.250	1/2	2.477			
	2.313	5/8	2.587			
2.375	5/8	2.651				
2.438	5/8	2.714				

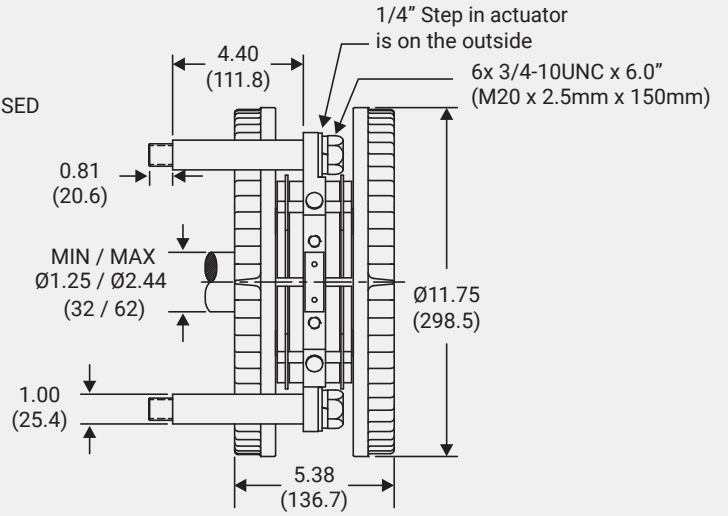
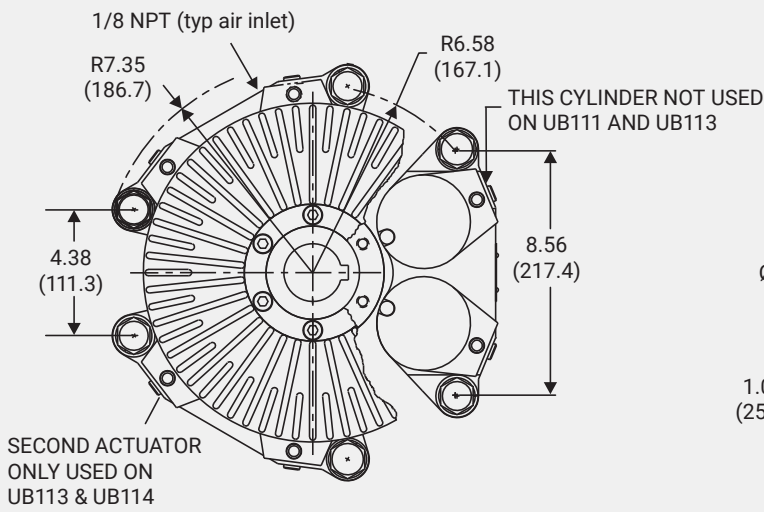


HEAT DISSIPATION vs. RPM



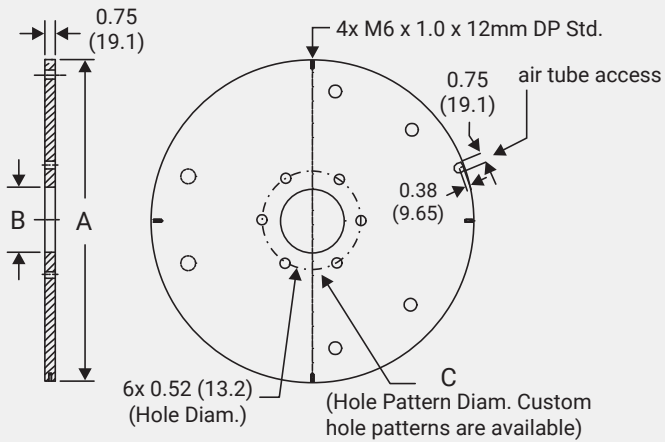
110 SERIES DIMENSIONS

inches (mm)



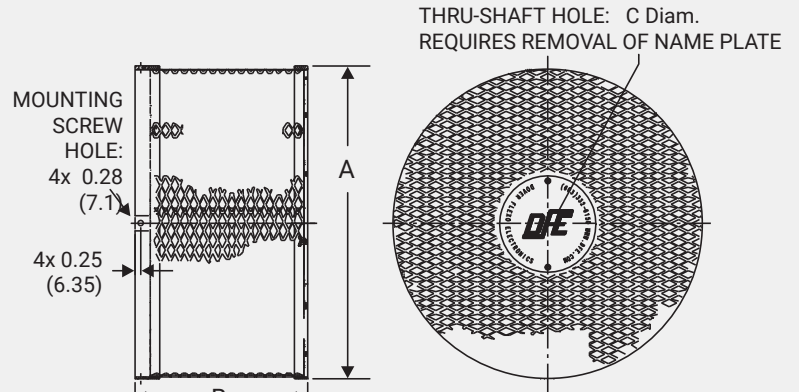
MOUNTING PLATE DIMENSIONS

inches (mm)



BRAKE GUARD DIMENSIONS

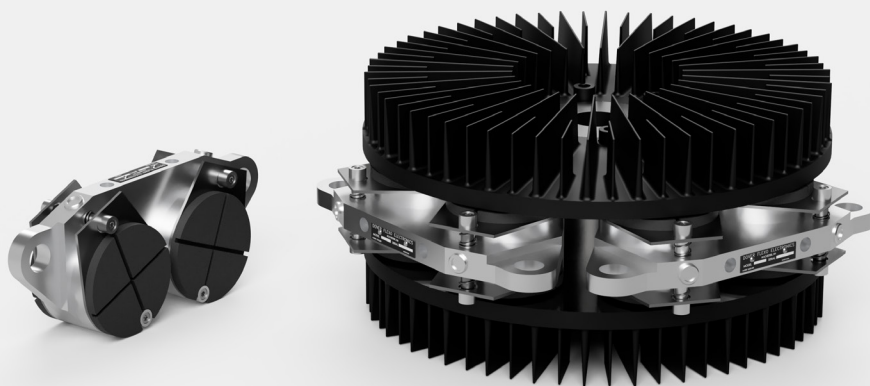
inches (mm)



MOUNTING PLATE DIMS. (110 Series)		A	B	C
Models 111-116	in	16.25	3.00	4.25
	mm	412.75	76.2	107.95

BRAKE GUARD DIMS. (110 Series)		A	B	C
Models 111-116	in	16.60	9.13	2.63
	mm	421.6	231.9	66.7

130 SERIES DUAL DISC PNEUMATIC BRAKE



SPECIFICATIONS

Disc/Hub Inertia: 56.9 slug-in²

Max. Torque: 9,840 lb-inches

Max. Heat Capacity: 32 hp @ 3100 rpm

Disc/Hub Weight: 94.6 lbs

Max. Shipping Weight: 130 lbs

Min. Shaft Length: 7.3 inches

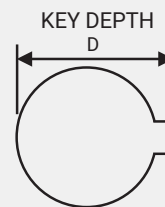
TORQUE CAPACITY, LB-IN (N-M)

Torque Capacity at 75psi (5.17 bar)

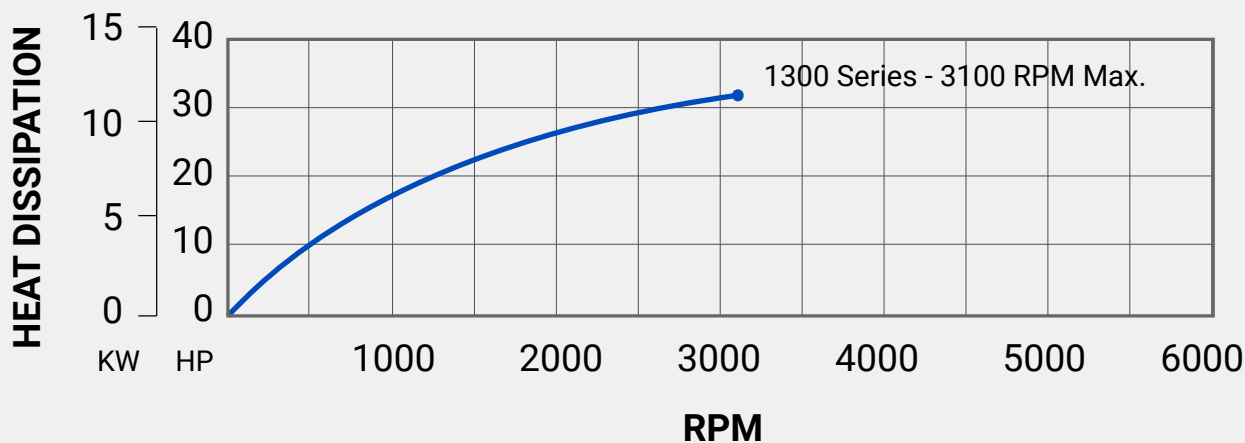
BRAKE SIZE		PAD COEFFICIENT OF FRICTION	
SERIES	# OF CYLINDERS	0.10 (#1) LB-IN (N-M)	0.45 (#4) LB-IN (N-M)
130	1	270 (30)	1230 (139)
	2	550 (62)	2460 (278)
	3	820 (93)	3690 (416)
	4	1090 (123)	4920 (555)
	5	1370 (155)	6150 (694)
	6	1640 (185)	7380 (833)
	7	1910 (216)	8610 (972)
	8	2190 (247)	9840 (1111)

STANDARD HUB BORE AND KEY DIMENSIONS

	ENGLISH			METRIC		
	BORE	KEY	DEPTH (D)	BORE	KEY	DEPTH (D)
1 3 0 S E R I E S	1.375	5/16	1.518	35	10	38.3
	1.438	3/8	1.605	38	10	41.3
	1.500	3/8	1.669	40	12	43.3
	1.563	3/8	1.732	42	12	45.3
	1.625	3/8	1.796	45	14	48.8
	1.688	3/8	1.859	48	14	51.8
	1.750	3/8	1.922	50	14	53.8
	1.813	1/2	2.032	52	16	56.3
	1.875	1/2	2.096	55	16	59.3
	1.938	1/2	2.160	58	16	62.3
	2.000	1/2	2.223	60	18	64.4
	2.063	1/2	2.287	62	18	66.4
	2.125	1/2	2.350	65	18	69.4
	2.188	1/2	2.414	68	20	72.9
	2.250	1/2	2.477	70	20	74.9
	2.313	5/8	2.587			
	2.375	5/8	2.651			
	2.438	5/8	2.714			
2.500	5/8	2.778				
2.563	5/8	2.841				
2.625	5/8	2.905				
2.688	5/8	2.968				
2.750	5/8	3.032				

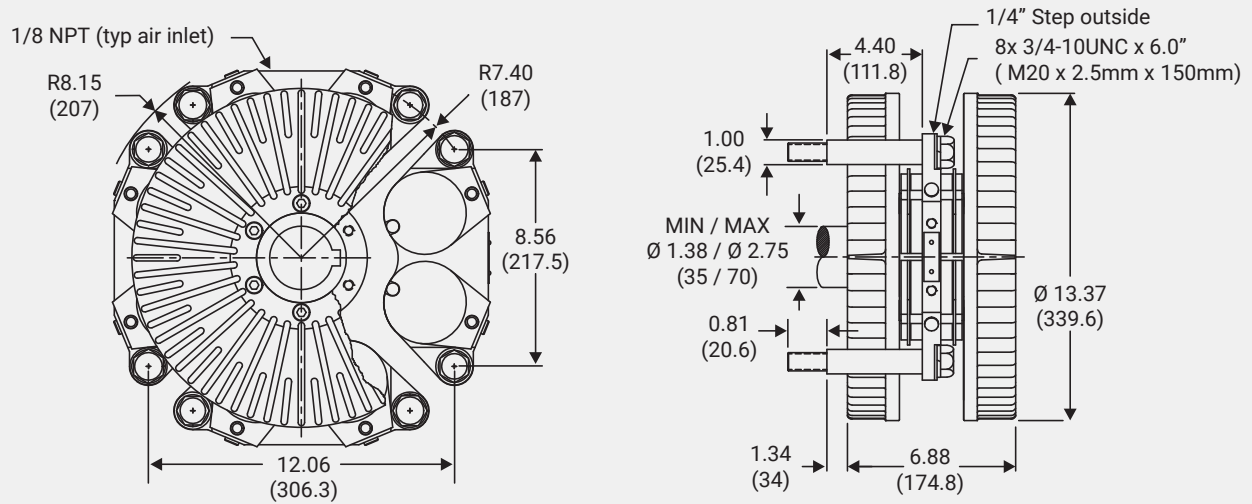


HEAT DISSIPATION vs. RPM



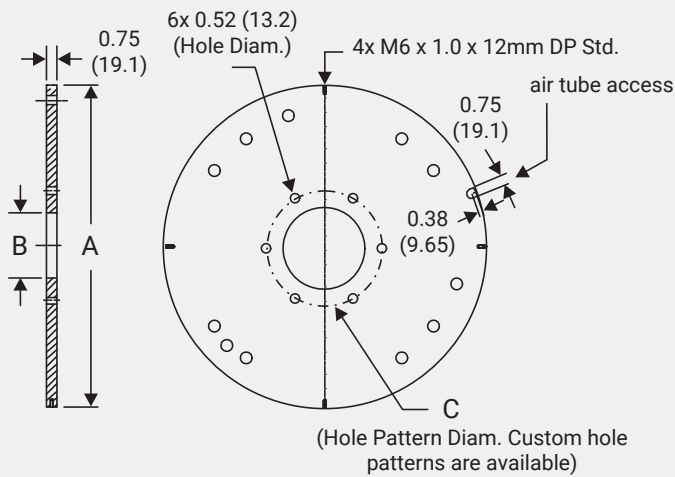
130 SERIES DIMENSIONS

inches (mm)



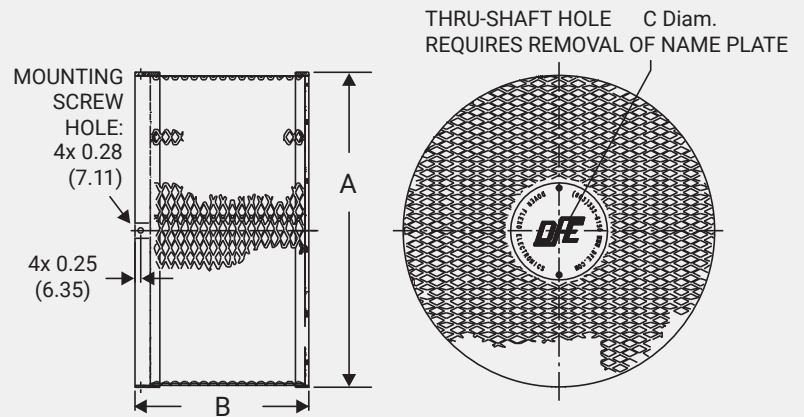
MOUNTING PLATE DIMENSIONS

inches (mm)



BRAKE GUARD DIMENSIONS

inches (mm)



MOUNTING PLATE DIMS. (130 Series)		A	B	C
Models 131-138	in	17.75	4.50	6.38
	mm	450.9	114.3	161.9

BRAKE GUARD DIMS. (130 Series)		A	B	C
Models 131-138	in	18.10	9.88	2.88
	mm	459.7	250.95	73.2
Models 135-138 with adapters (1800 Series Guard)	in	25.24	11.63	4.63
	mm	641.1	295.4	117.6

1800 SERIES DUAL DISC PNEUMATIC BRAKE



SPECIFICATIONS

Disc/Hub Inertia: 178.9 slug-in²

Max. Torque: 17,990 lb-inches

Max. Heat Capacity: 49 hp @ 2240 rpm

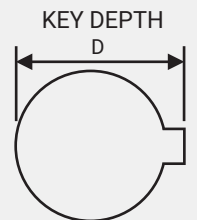
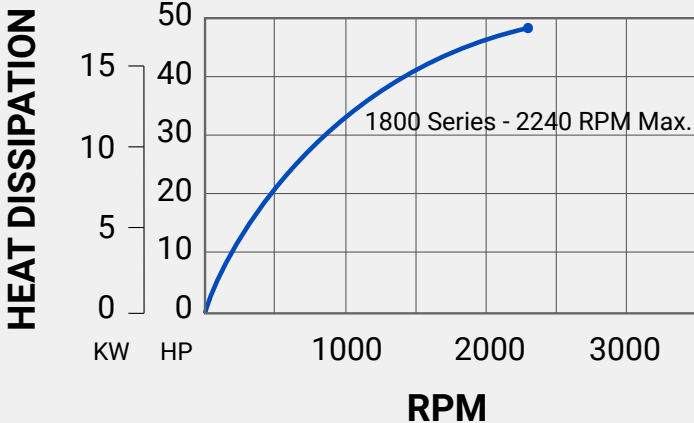
Disc/Hub Weight: 172.8 lbs

Max. Shipping Weight: 236 lbs

Min. Shaft Length: 9.2 inches

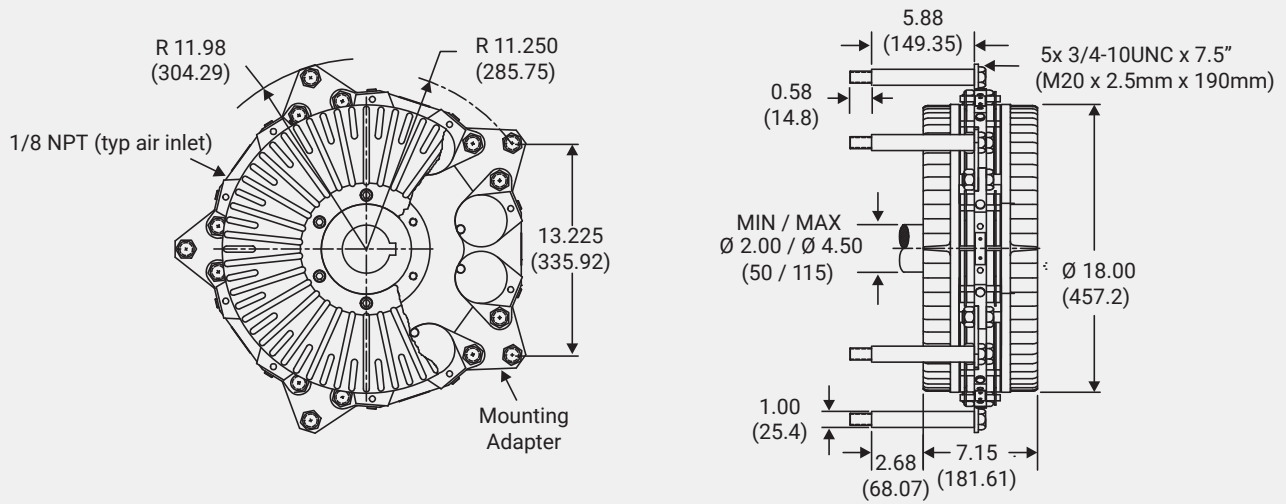
TORQUE CAPACITY, LB-IN (N-M)			
Torque Capacity at 75psi (5.17 bar)			
BRAKE SIZE		PAD COEFFICIENT OF FRICTION	
SERIES	# OF CYLINDERS	0.10 (#1) LB-IN (N-M)	0.45 (#4) LB-IN (N-M)
1800	1	400 (45)	1800 (203)
	2	800 (90)	3600 (407)
	3	1200 (136)	5400 (610)
	4	1600 (181)	7200 (813)
	5	2000 (226)	9000 (1016)
	6	2400 (271)	10800 (1220)
	7	2800 (316)	12590 (1422)
	8	3200 (361)	14390 (1626)
	9	3600 (407)	16190 (1829)
	10	3990 (451)	17990 (2033)

1800 S E R I E S	STANDARD HUB BORE AND KEY DIMENSIONS					
	ENGLISH			METRIC		
	BORE	KEY	DEPTH (D)	BORE	KEY	DEPTH (D)
	2.000	1/2	2.223	50	14	53.8
	2.063	1/2	2.287	52	16	56.3
	2.125	1/2	2.350	55	16	59.3
	2.188	1/2	2.414	58	16	62.3
	2.250	1/2	2.477	60	18	64.4
	2.313	5/8	2.587	62	18	66.4
	2.375	5/8	2.651	65	18	69.4
	2.438	5/8	2.714	68	20	72.9
	2.500	5/8	2.778	70	20	74.9
	2.563	5/8	2.841	72	20	76.9
	2.625	5/8	2.905	75	20	79.9
	2.688	5/8	2.968	78	22	83.4
	2.750	5/8	3.032	80	22	85.4
	2.813	3/4	3.142	82	22	87.4
	2.875	3/4	3.205	85	22	90.4
	2.938	3/4	3.269	88	25	93.4
	3.000	3/4	3.332	90	25	95.4
	3.063	3/4	3.396	92	25	97.4
	3.125	3/4	3.459	95	25	100.4
	3.188	3/4	3.523	98	28	104.4
	3.250	3/4	3.586	100	28	106.4
	3.313	7/8	3.696	102	28	108.4
	3.375	7/8	3.760	105	28	111.4
	3.438	7/8	3.823	108	28	114.4
	3.500	7/8	3.887	110	28	116.4
	3.563	7/8	3.950	115	32	122.4
	3.625	7/8	4.014			
	3.688	7/8	4.077			
	3.750	7/8	4.141			
	3.813	1	4.251			
	3.875	1	4.314			
	3.938	1	4.378			
	4.000	1	4.441			
	4.063	1	4.506			
	4.125	1	4.569			
	4.188	1	4.632			
	4.250	1	4.695			
	4.313	1	4.758			
	4.375	1	4.822			
	4.438	1	4.885			
	4.500	1	4.949			



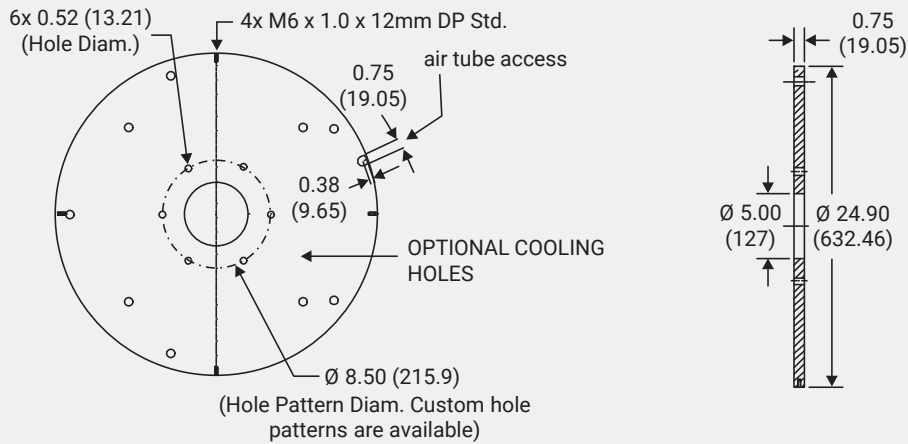
1800 SERIES DIMENSIONS

inches (mm)



MOUNTING PLATE DIMENSIONS

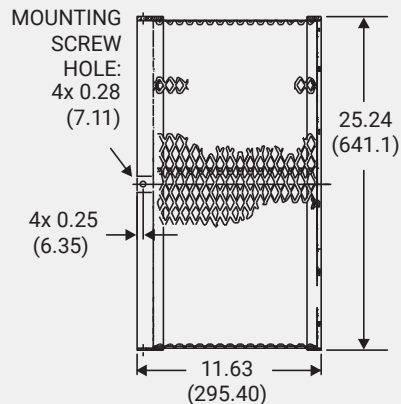
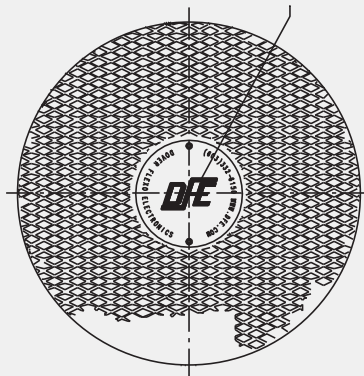
inches (mm)



BRAKE GUARD DIMENSIONS

inches (mm)

THRU-SHAFT HOLE 4.63 (117.60) Diam.
REQUIRES REMOVAL OF NAME PLATE



PRODUCT CODE / HOW TO ORDER

Order your brake using the product code format shown below.

1. Specify the brake series and the quantity of cylinders required.
2. Specify the bore size (standard key is assumed unless otherwise specified).
3. Specify options, if needed.

2D X X - XXXX - OPTIONS

DUAL DISK BRAKE	SERIES	# OF CYLINDERS	BORE	OPTIONS
	6 = 60 Series 9 = 90 Series 11 = 110 Series 13 = 130 Series 18 = 1800 Series	1-6 for 60 Series 1-4 for 90 Series 1-6 for 110 Series 1-8 for 130 Series 1-10 for 1800 Series	Sizes Listed On Model Page	NSK = Non-Standard Key Z = Specials

Visit www.dfe.com/brake-sizing-calculator to determine torque requirements for your application, or contact the DFE sales department for assistance.

FRICTION PADS

- 0.10 COF Standard Pad
- 0.10 COF Silencer™ Kit (2 Pads)
- 0.45 COF Standard Pad
- 0.45 COF Silencer™ Kit (2 Pads)

CAD CATALOG

Download brake models for free in over 60 native CAD formats. Visit:

www.dfe.com/support-resources/knowledge-base/pneumatic-brake-cad-files/

ACCESSORIES

- Installation Kits
- Mounting Plates
- Pneumatic Switch Valves
- Guards

