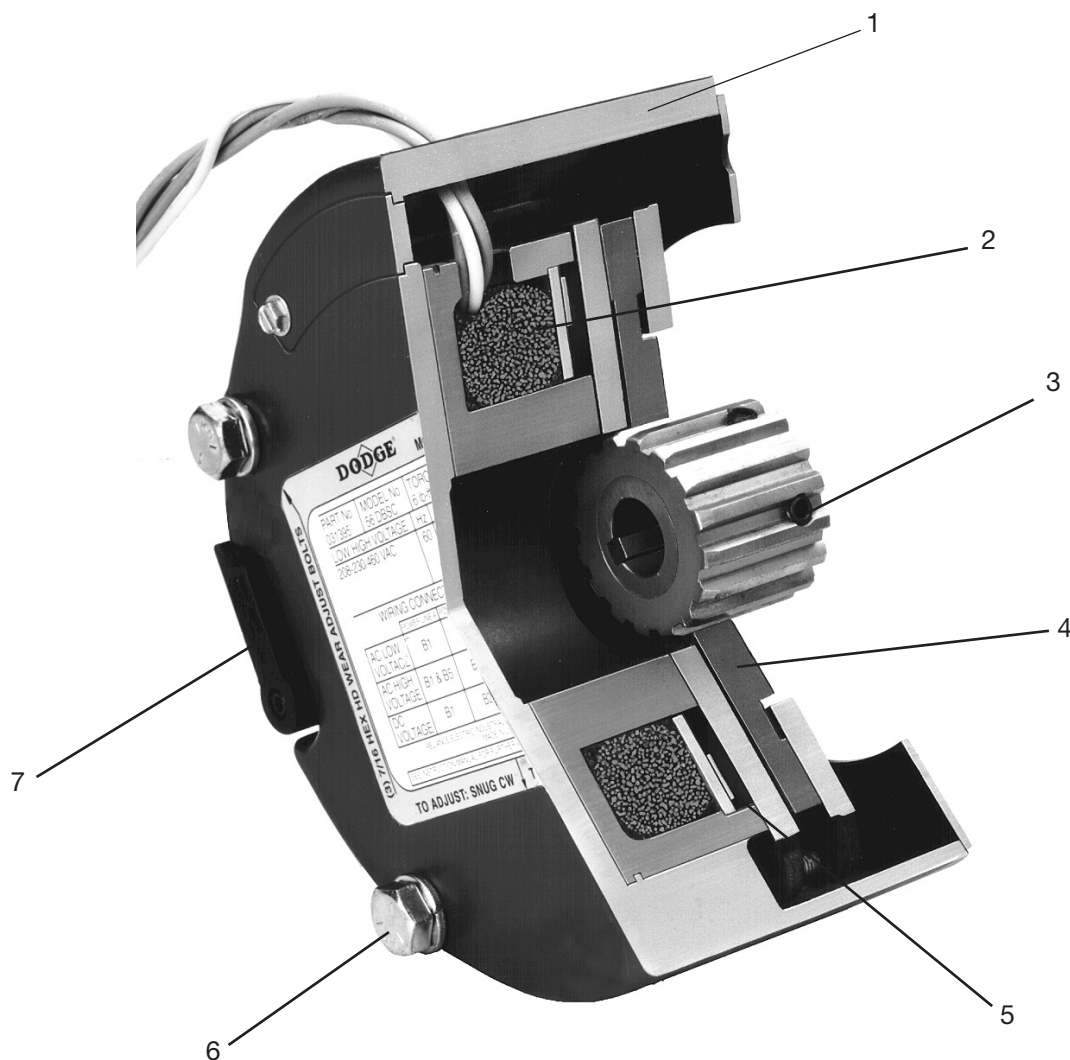




FEATURES/BENEFITS

Motor Brakes

1. Rugged, die-cast aluminum housing mounts at any angle without modification.
2. Internally rectified DC voltage coil operates on either AC or DC voltage. Class B insulation is standard.
3. Splined hub permits uniform load distribution. Integral key design simplifies installation - no loose parts.
4. Single, non-asbestos friction disc design extends life, reduces replacement parts and allows quiet operation (1)
5. Wave spring provides 360° of force when power is removed from the brake.
6. Industry standard NEMA C-face mounting. Interchanges easily with competitive units.
7. Easy-to-use, reliable manual release levers reset automatically.



- (1) 35 & 50 ft. lb. motor brakes employ two friction discs and can be mounted at any angle without modification



Underwriters
Laboratories Inc.
LISTED



Motor Brakes

SPECIFICATION

D-Series Motor Brakes are designed with a single* non-asbestos friction disc for fewer adjustments, reduced replacement parts, and extended life. They are released when power is applied to the brake coil. The friction disc hub assembly and ultimately the load are free to turn. However, when power is taken away, intentionally or accidentally, an internal wave spring clamps the friction disc to stop and hold the load. The single* disc design has significantly fewer parts than competitive brakes and provides a dramatic improvement in brake friction disc life. Just as dramatic is the quiet operation compared to solenoid type brakes. DODGE D-Series motor brakes are available as stock off-the-shelf units in 2 configurations. DBSC C-Face brakes mount on the fan end (non-driving end) of a motor. DBSS double C-Face brakes are generally used as a coupler between standard C-Face motors and C-Face gear reducers.

* 35/50 ft.-lb motor brakes employ two friction discs

HOW TO ORDER

Motor Brakes are ordered by specifying the unit size, the motor frame size, and the voltage. Part numbers are found on the selection pages for each type of unit. Refer to the part number when ordering.

NOMENCLATURE

NEMA C-Face Designation _____	56	DBSS	-	3	-	MA	-	115/230 VAC	60 HZ
56 = 56C (5/8" shaft)									
140 = 143TC/145TC (7/8" shaft)									
180 = 180TC/210TC (1-1/8" shaft)									
DODGE Brakes _____									
Housing Enclosure _____									
S = Standard Enclosure/Drip-Proof									
E = E-Z KLEEN (Food Duty/NEMA 4X)									
Mounting Configuration _____									
C = C-face (single)/Fan End Mounting									
S = Shaft-out (Double C-Face) Coupler									
Static Torque Rating (Ft.-Lbs) _____									
Wear Adjustment Method _____									
MA = Manually Adjusted									
Coil Voltage _____									
115/230 VAC									
230/460 VAC									
Others As Noted On Brake Label									
Frequency _____									
60 Hz									
50 Hz									
Blank If DC Voltage Only									



SELECTION/DIMENSIONS

Motor Brakes

Selection Procedure

1. Determine the motor frame size, horsepower and speed.
2. Use chart for brake static torque selection. Note that chart selections are based on a **1.4 service factor** and increased to the next highest standard brake torque rating. To select a brake using a different service factor, use the formula below to determine the required brake static torque.

$$T = \frac{HP \times 5252 \times SF}{RPM}$$

T = Brake Static Torque (Ft-Lbs)

HP = Motor Horsepower

SF = Service Factor Desired

RPM = Motor Speed

Once your torque requirement has been determined, select a brake with at least that capacity.

3. Consult Part Number charts on pages PT2-5 thru PT2-10 for appropriate part number. Brake voltage should be matched with motor voltage rating.
4. Verify mounting dimensions (C-face tenon, mounting bolt pattern, shaft size, etc.) from pages PT2-5 thru PT2-10.
5. In positioning applications, use of a fast response kit allows you to obtain faster stop times. To order see page PT2-10.
6. In positioning applications, use 2.0 SF

Note: DODGE D Series brakes are intended as holding brakes. Contact application engineering with inertia and application information for cycle rates exceeding 6 per minute.

Brake Static Torque Ratings* (Ft.-Lbs)

Motor HP	Motor Speed (RPM)							
	750	900	1200	1500	1800	3000	3600	5000
1/4	3	3	3	3	3	3	3	3
1/3	6	3	3	3	3	3	3	3
1/2	6	6	6	3	3	3	3	3
3/4	10	10	6	6	6	3	3	3
1	10	10	10	6	6	3	3	3
1-1/2	15	15	10	10	10	6	6	3
2	20	20	15	10	10	6	6	3
3	35	25	20	15	15	10	10	6
5	50	50	35	25	25	15	15	10
7-1/2	-	-	50	50	35	20	20	15
10	-	-	-	50	50	35	25	15

*Selections based on 1.4 service factor and increased to next highest standard brake torque rating.

Speed limit 5000 RPM maximum motor speed

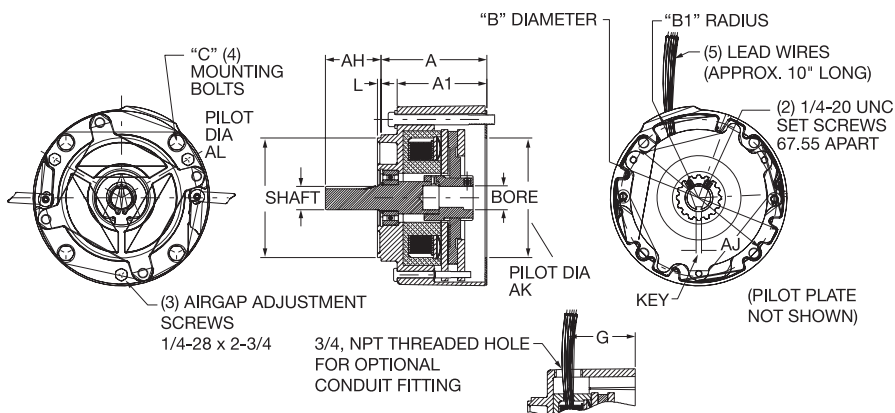
SELECTION/DIMENSIONS



Motor Brakes



DBSS Model



Complete Unit Part Numbers

Standard Enclosure		Unit Size --- Static Torque					
		3 Ft- Lbs	6 Ft- Lbs	10 Ft- Lbs	15 Ft- Lbs	20 Ft- Lbs	25 Ft- Lbs
DOUBLE C-FACE	DBSS Complete Units 56 Frame, 5/8" Bore						
	115/230 VAC 60 Hz (1)	031369	031411	031453	031342	031345	031348
	230/460 VAC 60 HZ (2)	031371	031413	031455	031343	031346	031349
	287/575 VAC 60 Hz (3)	031373	031415	031457	031344	031347	031350
	104/208 VAC 60 Hz (4)	031088	031100	031112	031124	031136	031148
	190/380 VAC 50 Hz (5)	031089	031101	031113	031125	031137	031149
	250/500 VAC 50 Hz	031090	031102	031114	031126	031138	031150
	48 VDC	031091	031103	031115	031127	031139	031151
	24 VDC	031092	031104	031116	031128	031140	031152
	12 VDC	031093	031105	031117	031129	031141	031153
	DBSS Complete Units 140 Frame, 7/8" Bore						
	115/230 VAC 60 Hz (1)	031375	031417	031459	031495	031525	031555
	230/460 VAC 60 HZ (2)	031377	031419	031461	031497	031527	031557
	287/575 VAC 60 Hz (3)	031379	031421	031463	031499	031529	031559
	104/208 VAC 60 Hz (4)	031094	031106	031118	031130	031142	031154
	190/380 VAC 50 Hz (5)	031095	031107	031119	031131	031143	031155
	250/500 VAC 50 Hz	031096	031108	031120	031132	031144	031156
	48 VDC	031097	031109	031121	031133	031145	031157
	24 VDC	031098	031110	031122	031134	031146	031158
	12 VDC	031099	031111	031123	031135	031147	031159

NOTES:

Coil will operate at the following voltages:

- (1) 115/208-230 VAC 50 or 60 Hz, 133/265 VAC 60 Hz, 110-125 VDC
 (2) 208-230/460 VAC 50 or 60 Hz, 240/480 VAC 60 Hz, 220/440 VAC 50 Hz, 230 VDC

- (3) 287/575 VAC 60 Hz, 300/600 VAC 60 Hz
 (4) 104/208 VAC 50 or 60 Hz, 100/200 VAC 60 Hz, 90-95 VDC
 (5) 190/380 VAC 50 Hz, 200/400 VAC 60 Hz, 206/416 VAC 50 Hz

Dimensions

Standard Enclosure Double C-Face Coupler

Unit Size	Inertia Friction Disc & Hub (Lb-In2)	Input Bore Output Shaft Dia.	Output Keyway & Input Key	A Max	A1 Nom	AK Pilot Dia.	AL Pilot Dia.	AH	AJ	B Dia. Max	B1 Radius Max.	C Mounting Bolts	G	L	Shipping Weight (Lbs)
56DBSS-3 56DBSS-6 56DBSS-10 56DBSS-15 56DBSS-20 56DBSS-25	1.73	5/8"	3/16 x 3/32	3.97	3.36	4.5	4.5	2.12	5.88	6.63	3.46	3/8 -16 UNC-2A (4) Equally Spaced on 5.875 Dia. Bolt Circle	2.57	0.13	13.2
140DBSS-3 140DBSS-6 140DBSS-10 140DBSS-15 140DBSS-20 140DBSS-25	1.74	7/8"	3/16 x 3/32	3.97	3.36	4.5	4.5	2.12	5.88	6.63	3.46		2.57	0.13	13.3

FEATURES/BENEFITS PAGE PT2-2	SPECIFICATION/HOW TO ORDER PAGE PT2-3	MODIFICATION/ACCESSORIES PAGE PT2-10	ENGINEERING/TECHNICAL PAGE PT2-38
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