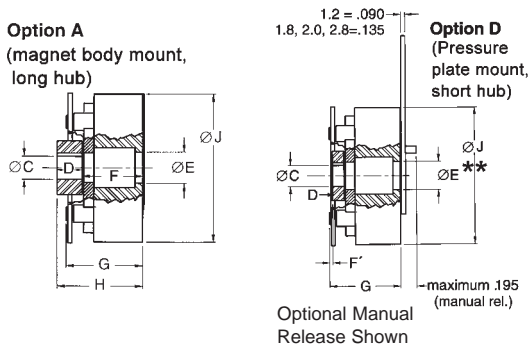
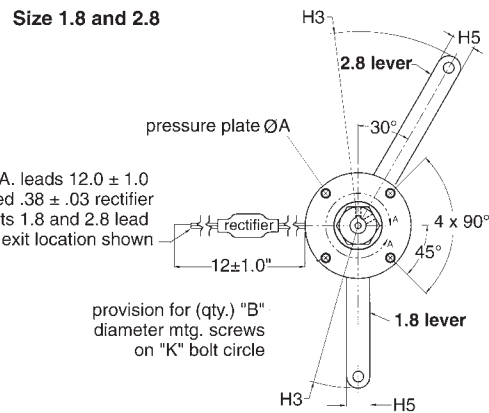
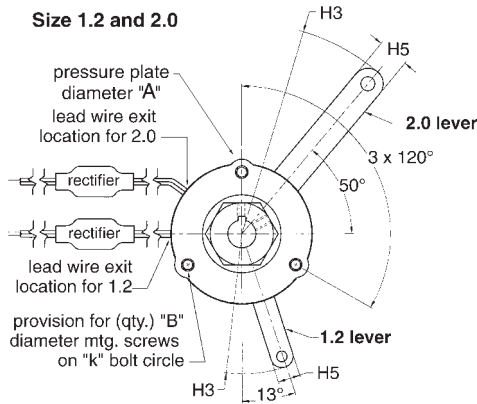




- Torque rating 3 to 50 lb-in / (.34 to 5.6 NM)
- UR and CUR Recognized insulation system, E-125303 and sizes 1.8, 2.8 brakes with internal power supply File E-71115
- Class B temperature rise with Class H mag wire
- Available for holding (H) or dynamic (D) stopping applications
- Corrosion resistance
- Optional "double D" friction discs are available in 3-7 lb-in dynamic and 3-15 lb-in holding brakes. DD shafts fit the brake directly without a brake hub, no shaft keyway cost and simplify assembly
- Optional maintained manual release
- Optional mounting plates to make conversion over to the superior Stearns product easy
- Optional AC Rectifiers - internal or external in-line
- Optional band seal (not available for 1.2 size)
- **Installation and Service Instructions:**  
P/N 8-078-889-00



Double D Option: flat shaft, no hub break shaft edge .01-.03"

Brake Size	Shaft		DD Disc		
	A	B	C	D	E
1.2	.25 + .05/-00	.075 max.	5/16	.105 / .103	.3135 / .3115
1.8	.30 + .13/-00	.075 max.	3/8	.126 / .124	.376 / .374

## Dimensional Data

Size	Model Number	Mounting Screw			Maximum Shaft Length (Manual Release Units)	Hub Location		E**	G	H Long Hub	H3	H5	J	D Hub Lengths		A	
		Qty.	B	K		F	F'							Long	Short		
1.2D 1.2H	3-20-2401G	3	Ø.140 #4, (M3)	Ø1.545 (39.243)	.300	(7.62)	.685 (17.40)	.015 (.381)	.410 (10.41)	.890 (22.60)	1.065 (27.05)	2.5 (63.5)	.40 (10.16)	1.77 (44.96)	.38 (9.65)	.19 (4.83)	1.925 (48.90)
	.860 (21.84)						1.065 (27.05)										
1.8D 1.8H	3-20-4401G	4	Ø.177 #6 (M3.5)	Ø2.125 (53.975)	.430	(10.92)	.995 (25.27)	.015 (.381)	.450 (11.43)	1.260 (32.00)	1.405 (35.69)	3.775 (95.885)	.55 (10.16)	2.43 (61.72)	.410 (10.41)	.25 (6.35)	2.55 (64.77)
	.933 (23.70)						.530 (13.46)										
2.0D 2.0H	3-20-5401G	3	Ø.145 #6 (M3)	Ø2.220 (56.388)	.430	(10.92)	.933 (23.70)	.015 (.381)	.530 (13.46)	1.190 (30.23)	1.623 (41.22)	3.775 (95.885)	.55 (10.16)	2.50 (63.5)	.69 (17.53)	.31 (7.87)	2.50 (63.50)
	.954 (24.23)						.050* (1.27)										
2.8D 2.8H	3-20-7401G	4	Ø.188 #8 (M4)	Ø2.844 (72.738)	.490	(12.45)	.954 (24.23)	.050* (1.27)	1.10 (27.94)	1.415 (35.94)	1.364 (34.64)	4.5 (95.885)	.55 (10.16)	3.25 (82.55)	.410 (10.41)	*	3.32 (84.33)

\*Size 2.8 can be pressure plate mounted using the long hub. The F' dimension shown for size 2.8 is for pressure plate mount using the long hub.

\*\* No thru bore with manual release option.

Engineering Specifications

Size	Part Number	Nominal Static Torque		Friction Material	Approx Weight		Electric Power	Hub and Disc Inertia	Thermal Capacity	Maximum Bore	
		lb-in	Nm		Type	lbs				kg	(watts)
1.2D	3-20-2401G-XX-XX	3	.34	Dynamic	.4	.181	7	7.02 x 10 <sup>5</sup>	Consult Factory	3/8	9
1.2H <sup>①</sup>	3-20-2501G-XX-XX	5 <sup>①</sup>	.56	Holding <sup>①</sup>	.4	.181	9	7.02 x 10 <sup>5</sup>		3/8	9
1.8D	3-20-4401G-XX-XX	7	.79	Dynamic	1.1	.499	10	4.8 x 10 <sup>4</sup>	.26	1/2 <sup>②</sup>	12
1.8H <sup>①</sup>	3-20-4501G-XX-XX	15 <sup>①</sup>	1.69	Holding <sup>①</sup>	1.1	.499	10	4.8 x 10 <sup>4</sup>		1/2 <sup>②</sup>	12
1.8D	3-20-4601G-XX-XX	15	1.69	Dynamic	1.1	.499	10	4.8 x 10 <sup>4</sup>		1/2 <sup>②</sup>	12
2.0D	3-20-5401G-XX-XX	18	2.03	Dynamic	1.2	.544	12.5	2.23 x 10 <sup>3</sup>	.32	1/2	12
2.0H <sup>①</sup>	3-20-5501G-XX-XX	30 <sup>①</sup>	3.39	Holding <sup>①</sup>	1.2	.544	12.5	2.23 x 10 <sup>3</sup>		1/2	12
2.8D	3-20-7401G-XX-XX	35	3.95	Dynamic	2.0	.91	17	2.3 x 10 <sup>3</sup>	.17	1/2 <sup>②</sup>	12
2.8H <sup>①</sup>	3-20-7501G-XX-XX	50 <sup>①</sup>	5.65	Holding <sup>①</sup>	2.0	.91	17	2.3 x 10 <sup>3</sup>		1/2 <sup>②</sup>	12

① For holding applications only. ② Set Screws located 120° from keyway.

Ordering Information

Group "3" Armature Acting Brake. — 320-4401G-0H-JD — Options — Table 3

320 = For AAB-R Models

AAB-R Unit Sizes	Part Number
1.2	2
1.8	4
2.0	5
2.8	7

Voltages — Table 2

Hub bore and Keyway — Table 1  
For Double "D" Bores See Table 1A

Character	Nominal Static Torque (lb-in)	List Adder
Size 1.2	4	3 Dynamic
	5	5 Holding
Size 1.8	4	7 Dynamic
	6	15 Dynamic
	9	9 Dynamic
Size 2.0	5	15 Holding
	4	18 Dynamic
	5	30 Holding
	3	15 Dynamic
Size 2.8	6	25 Holding
	7	7 Dynamic
	4	35 Dynamic
	5	50 Holding

Characters to insert	Modification
E	Brake release indicator (NC)
F	Brake release indicator (NO)
G	Standard - GGA Friction Material
J	CCW manual release rotation
S	Carrier ring friction disc

Numeral or Letter	Options
1	Standard Unit
A-Z	Reserved for Mounting Plates

Numeral	Enclosure type
0	None
2	Band seal

Table 2: 320-44010-0H-<sup>Ⓜ</sup>D Standard Coil Voltage

Character to Insert	Voltage	List Adder*	Current Rating in Amps			
			Size 1.2	Size 1.8	Size 2.0	Size 2.8
C	12 Vdc	-	.632	.826	1.04	1.37
E	24 Vdc	-	.307	.421	.53	.70
G	48 Vdc	-	.158	.216	.27	.36
J	90 Vdc	-	.076	.123	.13	.17
K	103 Vdc	-	.085	.115	.121	.140
L	180 Vdc	-	.039	.060	.069	.09
N	115 Vac	\$50.00	.085	.115	.140	.140
P	230 Vac	\$50.00	.044	.059	.075	.097
Z	115/230 Vac	\$50.00	.085/.044	.115/.059	.140/.075	.140/.097

\*For external in-line rectifier (for internal rectifier, add \$30.00 list)

NOTE: 65°C maximum ambient temperature for all external in-line rectifiers

Table 1: 320-44010 - <sup>Ⓜ</sup><sup>Ⓜ</sup>-JD

Characters to insert	Bore	Keyway Size*		Bores Available			
		Width (in.) x Depth (in.)	Mag Body Size	Mag Body Size			
				1.2	1.8	2.0	2.8
0A	3/16	N/A	N/A	X			
0B	3/16	1/16	1/32		X		
0C	1/4	N/A	N/A	X			
0D	1/4	1/16	1/32		X	X	X
0E	5/16	N/A	N/A	X			
0F	5/16	1/16	1/32		X	X	X
0G	3/8	N/A	N/A	X			
0H	3/8	3/32	3/64		X	X	X
0J	1/2	1/8	1/16		①	①	①
05	5	2 mm	1 mm	②	X	X	X
06	6	2 mm	1 mm	②	X	X	X
07	7	2 mm	1 mm	②	X	X	X
08	8	2 mm	1 mm	②	X	X	X
09	9	3 mm	1.4 mm	②	X	X	X
10	10	3 mm	1.4 mm		X	X	X
11	11	4 mm	1.8 mm		X	X	X
12	12	4 mm	1.8 mm		X	X	X

① Set screws located 120° from keyway.  
② Hubs are provided without keyway.  
\*Keyseats made to ANSI B17.1 standard.

Table 1A: 320-44010 - <sup>Ⓜ</sup><sup>Ⓜ</sup>-JX (Double "D" Bores)

Characters to insert	Bore	Bores Available	
		Mag Body Size	
		1.2	1.8H
0F	5/16	X	X
0H	3/8	X	X

NOTE: Can be used up to 15 lb-in for holding.

Table 3: Options 320-44010-0H-J<sup>Ⓜ</sup>

Characters	Options
A	Basic Brake, Magnet Body Mounted, Long Hub
D*	Basic Brake, Pressure Plate Mounted, Short Hub*
G*	Short Hub, Pressure Plate Mounted with Maintained Manual Release*
H	Long Hub with Maintained Manual Release, Size 2.8 Only
X	Double "D" Friction Disc, 1.2H, 1.2D, 1.8H
Y	Option X with Maintained Manual Release Pressure Plate Mounted

\*Short hub not required for size 2.8 pressure plate mount.

NOTE: Final part number may change due to specifications or options selected or other product design considerations. A number such as a 2, 3, 4 etc., in the 12<sup>th</sup> position is used to designate a unique brake (custom) and can only be assigned by Stearns Design Engineering Department.

Modifications are available - see AAB Modification Section.