



## Brakes

AMETEK offers power off, fail safe holding brakes to compliment its motor product line. When voltage is applied, the friction disc is released and the brake is free of torque. This power-off brake is best suited for parking brake applications used to hold a load in position, and is ideal for creating brake motor packages for small servo & stepper frame motors.

To insure a reliable, quick, and hassle-free startup AMETEK offers a selection of factory installed Feed-back devices, Brakes, and Gearboxes at no extra cost to you.



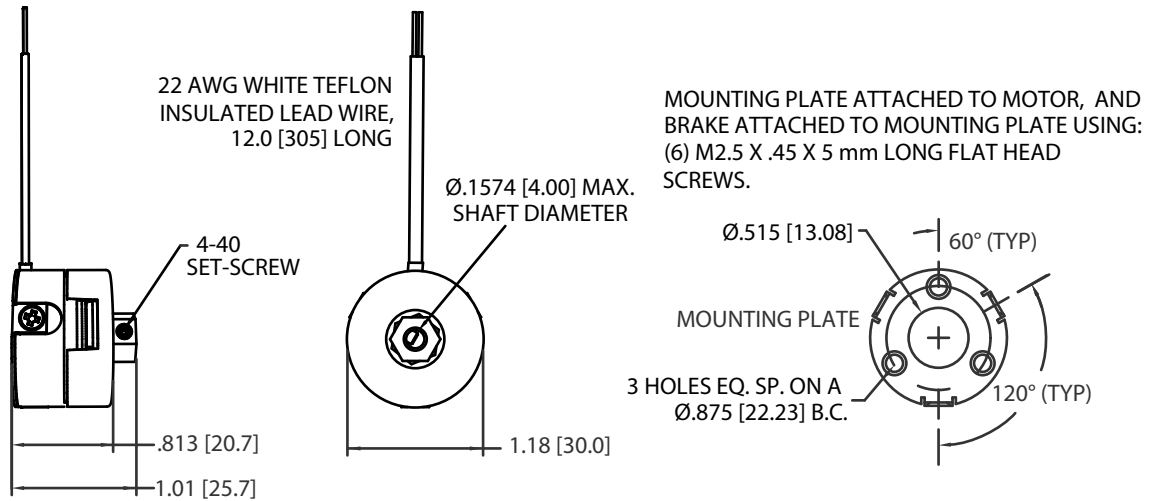
# PITTMAN<sup>®</sup>

#### PITTMAN PRODUCTS

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**AMETEK<sup>®</sup>**  
PRECISION MOTION CONTROL

Power Off Brake



Specification	Units	Part/Model Number			
		12V	19V	24V	30V
Applied Voltage	VDC	12	19	24	30
Static Holding Torque	lb-in	12	19	24	30
	Nm	1.356	2.147	2.712	3.39
Current	Amps (A)	16	16	16	16
Resistance	Ohms	16	16	16	16
Hub and Disc Inertia	oz-in-sec <sup>2</sup>	0.33	0.21	0.17	0.13
	kg-m <sup>2</sup>	2.33E-3	1.48E-3	1.20E-3	9.18E-4
Weight (Mass)	oz	0.33	0.21	0.17	0.13
	g	9.4	6	4.8	3.7

**Standard Features**

- Factory-Set Precision Air Gap
- Rigid Molded Friction Disc
- High Rate Compression Spring
- MIL-W-22759/34D Lead Wires
- Hexagonal Drive Nut with Set Screw
- Low Profile Mounting Plate

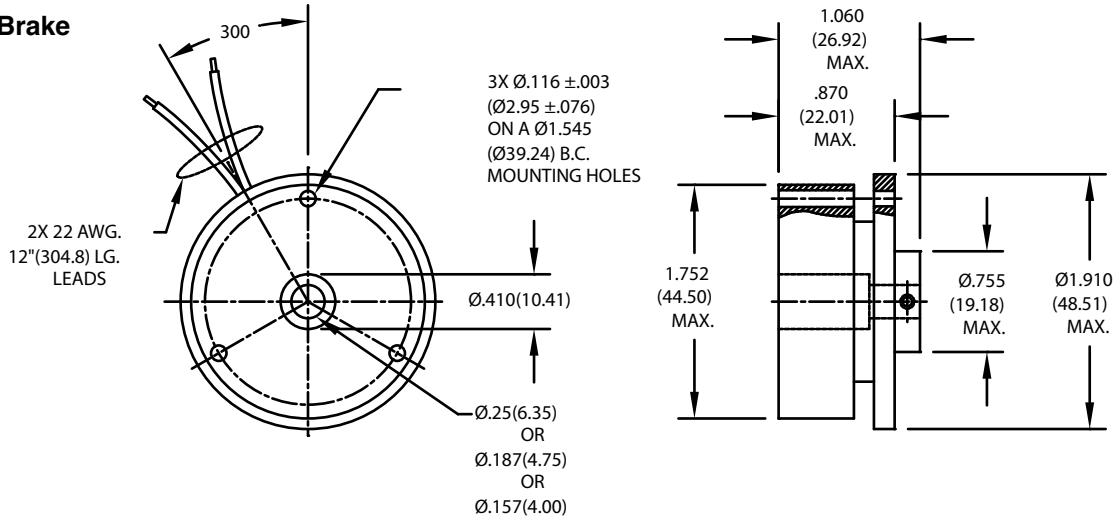
Notes:

<sup>1</sup> B30A is a power off brake intended to decelerate and hold a load when power is deactivated.

<sup>2</sup> All values specified at 25°C ambient temperature.

*This document is for informational purposes only and should not be considered as a binding description of the products or their performance in all applications. The performance data on this page depicts typical performance under controlled laboratory conditions. Actual performance will vary depending on the operating environment and application. AMETEK reserves the right to revise its products without notification. The above characteristics represent standard products. For products designed to meet specific applications, contact PITTMAN Motor Sales Department.*

Power Off Brake



Specification	Units	Part/Model Number	
		12V	24V
Applied Voltage	VDC	12	24
Static Holding Torque	lb-in	12	24
	Nm	1.356	2.712
Current	Amps (A)	48	48
Resistance	Ohms	48	48
Hub and Disc Inertia	oz-in-sec <sup>2</sup>	0.353	0.190
	kg-m <sup>2</sup>	2.49E-3	1.34E-3
Weight (Mass)	oz	0.353	0.190
	g	10	5.4

**Standard Features**

- Factory-Set Precision Air Gap
- Multiple Compression Springs
- Rigid Molded Friction Disc
- Square Drive Nut with Set Screw

Notes:

- <sup>1</sup> B49A is a power off brake intended to decelerate and hold a load when power is deactivated.
- <sup>2</sup> All values specified at 25°C ambient temperature.

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# Brakes

## B7, B3, B6, B5



### Holding Brake

- NEMA 17, 23 and 34 Sizes
- "Fail-Safe" Type (Apply power to release)
- 24 Vdc Supply Voltage
- Clamp On Collar Requires no motor modifications
- Simplifies Stocking - Not requiring custom Brake Motor
- Available with Heavy Duty shaft inputs
- NEMA Output Flanges couple to NEMA Gear reducers



Specification	Units	Part/Model Number			
		B7	B3	B6	B5
Input Flange	-	N17	N23	HD Shaft	HD Shaft
Output Flange	-	N17	N23	HD Shaft	HD Shaft
Torque	lb-in	1.00	3.00	3.00	15.00
	Nm	0.113	0.339	0.339	1.695
Shaft Input Dia.	Inches	.197	.25	.5	.5
	mm	5	6.4	12.7	12.7
Shaft Output Dia.	Inches	.197	.25	.5	.5
	mm	5	6.4	12.7	12.7
Max Motor Shaft Length	Inches	.97	.94	1.60	1.30
	mm	24.6	23.9	40.6	33
Voltage	VDC	24	24	24	24
Current	Amps (A)	.220	.181	.181	.369
Resistance	Ohms	117	132	132	65
Inertia	oz-in-sec <sup>2</sup>	.0001	.00051	.00051	.0045
	kg-m <sup>2</sup>	7.06E-7	3.60E-6	3.60E-6	3.18E-5
Weight	Lbs	.44	1.06	1.06	2.88
	Kg	0.2	0.5	0.5	1.3

### DIMENSIONS - inches (mm)

All Brake Data is at 20 degrees C

Model	B7	B3	B6	B5
<b>A</b> (3)	1.650 (41.91)	2.250 (57.15)	2.250 (57.15)	3.250 (82.55)
<b>B</b> (4x)	#4-40 UNC-2B	0.205 (5.21)	0.205 (5.21)	0.222 (5.64)
<b>C</b> (2)	11.5 (292.0)	16.75 (425.0)	16.75 (425.0)	18.0 (457.0)
<b>H</b> (3)	0.82 (20.83)	1.18 (29.97)	1.18 (29.97)	1.58 (40.13)
<b>L</b> (1)	1.51 (38.35)	1.78 (45.2)	3.031 (76.99)	2.58 (65.53)
<b>U</b> (1)	0.197 (5.00)	0.250 (6.35)	0.4997 (12.69)	0.4997 (12.69)
<b>U2</b> (3)	0.100 (2.54)	0.145 (3.68)	0.145 (3.68)	0.145 (3.68)
<b>AH</b> (3)	0.71 (18.03)	0.70 (17.78)	0.70 (17.78)	1.16 (29.46)
<b>AJ</b> (3)	1.725 (43.82)	2.625 (66.68)	2.625 (66.68)	3.875 (98.43)
<b>AK</b> (1)	0.8662 (22.00)	1.500 (38.1)	1.500 (38.1)	2.875 (73.03)
<b>BB</b> (3)	0.08 (2.03)	0.10 (2.54)	0.10 (2.54)	0.10 (2.54)

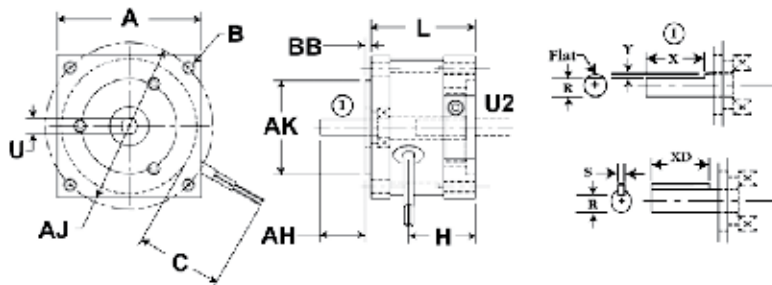
(1) Maximum Values (2) Minimum Values (3) Nominal (4x) 4 places

Output Shaft Dimensions			
Model	X	Y	R
<b>B7</b>	0.59	0.02	0.177
<b>B3</b>	0.63	0.015	0.235

Model	S	XD	R
<b>B6</b>	1/8 sq.	0.63	0.375
<b>B5</b>	1/8 sq.	1.00	0.375

Note: These brakes are not IP65 rated and should not be used in an environment that could affect brake performance.

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