

PMB SERIES BRAKES

New Power-Off, DC , Spring Set Brakes provide a low-cost, multi-functional brake alternative.

APPLICATIONS

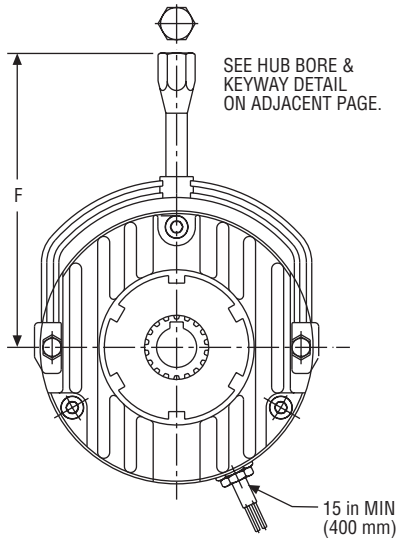
- Factory automation
- Medical equipment
- Pallet trucks
- Construction equipment
- Electric motor brakes
- Floor sweepers
- Semiconductor
- Elevators
- Electric vehicles
- Winches
- Conveyors
- Scissor lifts
- Military/aerospace
- Lift trucks
- Electric hoists
- Cranes
- Robotics
- Automated material handling equipment

FEATURES

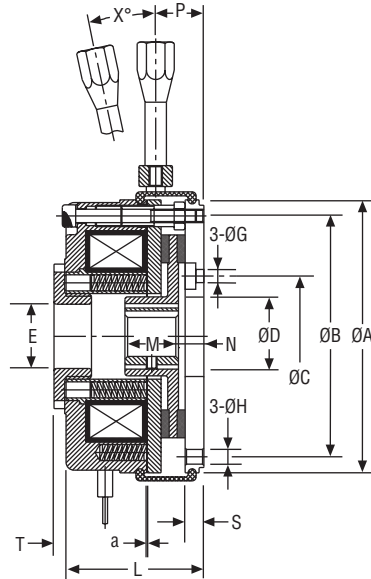
- 9 Frame sizes are available - PMB-30, 40, 50, 60, 65, 75, 85, 100, 120
- Superior torque to size ratio -
Torque range: 45 lb-in (5 Nm) to 4250 lb-in (480 Nm)
Diameter range: 3.30 in (84 mm) to 11.89 in (302 mm)
- Torque adjustment collar allows the torque to be varied depending on application.
- Engineered friction material on rotor assembly boosts maximum brake performance and extends life.
- Brake easily mounts to motor or frame. Mounting hardware included with brake. Simple splined hub attaches to shaft with set screw and keyway provided.
- Operating voltages 24 / 90 / 190 VDC standard. Other voltages available.
- Brake case design offers excellent heat dissipation.
- Fully potted coils meet minimum requirements for class "F" insulation.
- Splined hub with anti-rattle feature promotes quiet operation
- Brake leads can be customized (connectors, sleeving) to meet special requirements.
- Dust cover (option) keeps foreign materials from interfering with brake actuation.
- Manual release lever (option) provides override to release brakes in the absence of power.



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Dimensions are for reference only

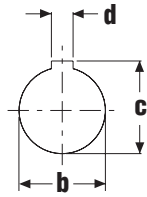


PMB model shown with optional manual release & dust cover.

DIMENSIONS																
Model	Static Torque lb-in (Nm)	A: OD in (mm)	B: Mtg Hole in (mm)	C in (mm)	D in (mm)	E in (mm)	F in (mm)	G, H in (mm)	L in (mm)	M in (mm)	N in (mm)	P in (mm)	S in (mm)	T in (mm)	X deg.	a: Air Gap in (mm)
PMB-30B	45 (5)	3.307 (84)	2.835 (72)	NA	1.220 (31)	0.748 (19)	3.799 (96.5)	0.157 (4)	1.614 (41)	0.701 (17.8)	0.157 (4)	0.697 (17.7)	0.236 (6)	0.118 (3)	10	0.006 (0.15)
PMB-40B	70 (8)	4.016 (102)	3.543 (90)	1.772 (45)	1.181 (30)	0.945 (24)	4.331 (110)	0.217 (5.5)	1.890 (48)	0.787 (20)	0.374 (9.5)	0.709 (18)	0.276 (7)	0.157 (4)	8	0.008 (0.2)
PMB-50B	177 (20)	5.000 (127)	4.409 (112)	2.205 (56)	1.575 (40)	1.378 (35)	5.512 (140)	0.260 (6.6)	2.323 (59)	0.787 (20)	0.492 (12.5)	0.984 (25)	0.354 (9)	0.157 (4)	8	0.008 (0.2)
PMB-60B	310 (35)	5.787 (147)	5.197 (132)	2.441 (62)	1.772 (45)	1.575 (40)	6.496 (165)	0.260 (6.6)	2.598 (66)	0.984 (25)	0.472 (12)	1.220 (31)	0.354 (9)	0.197 (5)	8	0.012 (0.3)
PMB-65B	530 (60)	6.378 (162)	5.709 (145)	2.913 (74)	2.165 (55)	1.890 (48)	7.283 (185)	0.354 (9)	2.992 (76)	1.181 (30)	0.551 (14)	1.417 (36)	0.433 (11)	0.197 (5)	8	0.012 (0.3)
PMB-75B	885 (100)	7.402 (188)	6.693 (170)	3.307 (84)	2.559 (65)	2.047 (52)	8.661 (220)	0.354 (9)	3.307 (84)	1.181 (30)	0.551 (14)	1.575 (40)	0.433 (11)	0.236 (6)	8	0.012 (0.3)
PMB-85B	1505 (170)	8.465 (215)	7.717 (196)	3.937 (100)	2.953 (75)	2.441 (62)	10.236 (260)	0.354 (9)	3.780 (96)	1.378 (35)	0.591 (15)	1.772 (45)	0.433 (11)	0.236 (6)	12	0.016 (0.4)
PMB-100B	2655 (300)	10.000 (254)	9.055 (230)	4.331 (110)	3.543 (90)	3.346 (85)	16.457 (418)	0.433 (11)	4.252 (108)	1.575 (40)	0.689 (17.5)	1.850 (47)	0.433 (11)	N/A	12	0.016 (0.4)
PMB-120B	4250 (480)	11.890 (302)	10.945 (278)	5.512 (140)	4.724 (120)	4.528 (115)	19.842 (504)	0.433 (11)	4.685 (119)	1.969 (50)	0.689 (17.5)	2.756 (70)	0.492 (12.5)	N/A	12	0.020 (0.5)

PERFORMANCE										
Model	Static Torque lb-in (Nm)	Coil Voltage* VDC	Resistance Ohms @ 20°C nom	Power Watts max	Speed RPM	Armature Engagement msec	Armature Disengagement msec	Rotor Inertia lb-in-sec ²	Weight lb (kg)	Energy Dissipation ft-lb/min
PMB-30B	45 (5)	24/90/190	30.4/405/1805	20	3000	15	55	1.15 X 10 ⁻⁴	3 (1.36)	.44
PMB-40B	70 (8)	24/90/190	24.5/324/1444	25	3000	20	60	3.98 X 10 ⁻⁴	4 (1.8)	1.62
PMB-50B	177 (20)	24/90/190	19.8/270/1203	30	3000	20	90	2.30 X 10 ⁻³	7.5 (3.4)	9.43
PMB-60B	310 (35)	24/90/190	15.2/202.3/903	40	3000	20	120	4.96 X 10 ⁻³	11 (4.8)	20.71
PMB-65B	530 (60)	24/90/190	14.7/162/722	50	3000	20	210	6.75 X 10 ⁻³	16 (7.3)	27.72
PMB-75B	885 (100)	24/90/190	10.6/124.6/555	65	3000	190	230	1.68 X 10 ⁻²	27 (12)	69.15
PMB-85B	1505 (170)	24/90/190	7.84/95.3/425	85	1500	300	260	3.28 X 10 ⁻²	40 (18)	33.69
PMB-100B	2655 (300)	24/90/190	5.2/73.6/328	110	1500	350	550	6.69 X 10 ⁻²	55 (25)	68.63
PMB-120B	4250 (480)	24/90/190	5.2/73.6/328	110	1500	500	650	1.95 X 10 ⁻¹	90 (41)	200.29

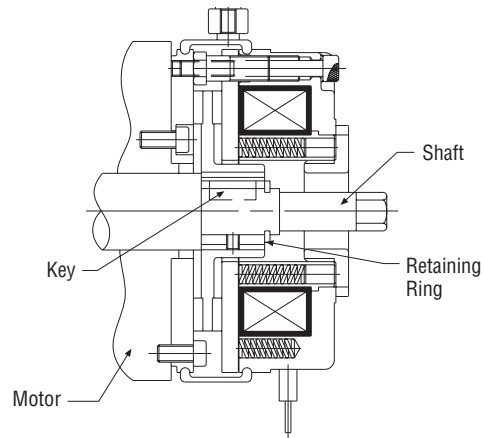
*Other voltages available upon request.



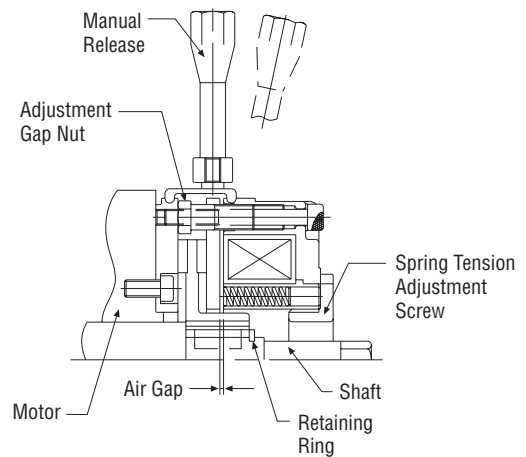
HUB BORE & KEYWAY DETAIL

BORE & KEYWAY DATA			
Model	b: Bore* in (mm)	c: Keyway Height in (mm)	d: Keyway Width in (mm)
PMB-30B-E06	0.375 (9.5)	0.425 (10.8)	0.094 (2.4)
PMB-30B-E08	0.500 (12.7)	0.564 (14.3)	0.125 (3.2)
PMB-30B-M11	0.433 (11.0)	0.512 (13.0)	0.157 (4)
PMB-40B-E08	0.500 (12.7)	0.564 (14.3)	0.125 (3.2)
PMB-40B-E10	0.625 (15.9)	0.709 (18.0)	0.188 (4.8)
PMB-40B-M15	0.591 (15.0)	0.669 (17.0)	0.197 (5)
PMB-50B-E10	0.625 (15.9)	0.709 (18.0)	0.188 (4.8)
PMB-50B-E12	0.750 (19.0)	0.837 (21.3)	0.188 (4.8)
PMB-50B-M15	0.591 (15.0)	0.669 (17.0)	0.197 (5)
PMB-50B-M20	0.787 (20.0)	0.866 (22.0)	0.197 (5)
PMB-60B-E12	0.750 (19.0)	0.837 (21.3)	0.188 (4.8)
PMB-60B-E16	1.000 (25.4)	1.114 (28.3)	0.250 (6.3)
PMB-60B-M20	0.787 (20.0)	0.866 (22.0)	0.197 (5)
PMB-60B-M25	0.984 (25.0)	1.103 (28.0)	0.276 (7)
PMB-65B-E16	1.000 (25.4)	1.114 (28.3)	0.250 (6.3)
PMB-65B-E18	1.125 (28.6)	1.251 (31.8)	0.250 (6.3)
PMB-65B-M25	0.984 (25.0)	1.103 (28.0)	0.276 (7)
PMB-65B-M30	1.181 (30.0)	1.299 (33.0)	0.276 (7)
PMB-75B-E16	1.000 (25.4)	1.114 (28.3)	0.250 (6.3)
PMB-75B-E18	1.125 (28.6)	1.251 (31.8)	0.250 (6.3)
PMB-75B-M25	0.984 (25.0)	1.103 (28.0)	0.276 (7)
PMB-75B-M30	1.181 (30.0)	1.299 (33.0)	0.276 (7)
PMB-85B-E22	1.375 (34.9)	1.517 (38.5)	0.313 (7.9)
PMB-85B-E24	1.500 (38.1)	1.669 (42.4)	0.375 (9.5)
PMB-85B-M35	1.378 (35.0)	1.516 (38.5)	0.394 (10)
PMB-85B-M40	1.575 (40.0)	1.713 (43.5)	0.394 (10)
PMB-100B-E22	1.375 (34.9)	1.517 (38.5)	0.313 (7.9)
PMB-100B-E24	1.500 (38.1)	1.669 (42.4)	0.375 (9.5)
PMB-100B-M35	1.378 (35.0)	1.516 (38.5)	0.394 (10)
PMB-100B-M40	1.575 (40.0)	1.713 (43.5)	0.394 (10)
PMB-120B-E24	1.500 (38.1)	1.669 (42.4)	0.375 (9.5)
PMB-120B-E26	1.625 (41.3)	1.795 (45.6)	0.375 (9.5)
PMB-120B-M40	1.575 (40.0)	1.713 (43.5)	0.394 (10)
PMB-120B-M45	1.77 (45.0)	1.929 (49.0)	0.551 (14)

*Other bore sizes available upon request.



Installation Diagram

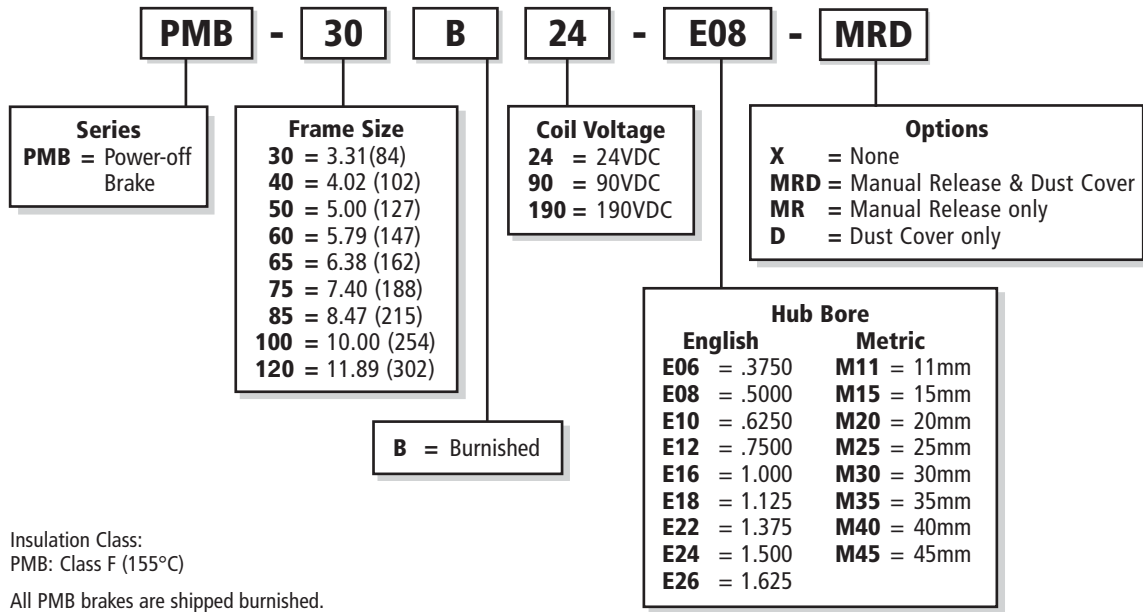


Gap Adjustment



Model shown at left is complete with all accessories. Model on right is shown with accessories removed. Accessories include: (A) manual release; (B) spline hub, (C) anti-rattle feature (o-ring) and (D) dust cover.

PMB Power-Off Brake Quick Reference Ordering Guide



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