

Electric Brakes

TB Series – Basic Tension Brakes

System Features

- Full roll to core control
- Consistent tension, even during flying splices, rapid starts and emergency stops
- Eliminates web flutter to allow better registration control
- Electronic System responds in milliseconds
- Dramatically reduces material waste, downtime and maintenance
- Total systems capability—worldwide distribution—local professional service.

Features – Basic Tension Brakes

- Ideal for light duty, light load unwind tension applications
- Cost effective
- Compact package size
- Eight models
- Small sizes, from 1.7" dia. to 15.25" dia.
- .025 to 1.09 thermal horsepower capacity



Complete Control Capability

Warner Electric offers two functionally different controls and a companion power supply for all models of TB Series 24 VDC tension brakes. All three units offer compact dimensions and modular design for easy, low cost maintenance. Both controls (MCS-203/MCS-204) and the power supply are furnished with either a panel mount or wall/shelf mount enclosure at no added cost. Controls information starts on page 40.



MCS-203
Dancer Control



MCS-204
Remote/Analog
Control

Unit Size	Energy Rate		Maximum RPM	Minimum ² Torque (lb.ft.)	Maximum ³ Dynamic Torque (lb.ft.)	Amps	Ohms	Watts
	Continuous	Alternate ¹						
TB-170	0.02 HP	0.03 HP	5000	0.000	0.500	.215	111.2	5.16
TB-260	0.04 HP	0.06 HP	5000	0.060	1.700	.400	60	9.6
TB-425	0.08 HP	0.13 HP	5000	0.120	5.200	.317	76	7.6
TB-500	0.13 HP	0.24 HP	5000	0.150	18.500	1.0	24	24
TB-825	0.27 HP	0.48 HP	3000	0.360	43.200	1.18	20	28
TB-1000	0.48 HP	0.88 HP	2400	0.790	88.000	1.22	20	29
TB-1225	0.70 HP	1.27 HP	2000	1.430	172.000	1.08	22	26
TB-1525	1.09 HP	2.12 HP	1600	2.130	256.000	1.21	20	29

Notes

1. Alternate duty operation is defined as 30 minutes run-time with 30 minutes off-time
2. Minimum torque is with Warner Electric tension control providing anti-residual current to brake in off state. Minimum torques will be higher when controls without anti-residual current are used.
3. Dynamic torques are based on 30 RPM slip speed

Electric Brakes

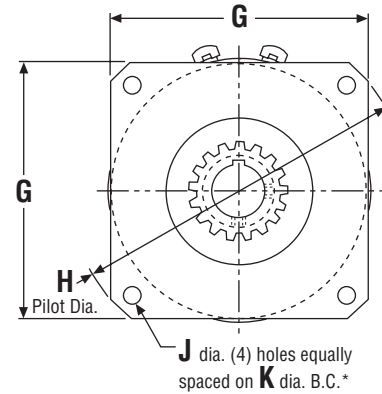
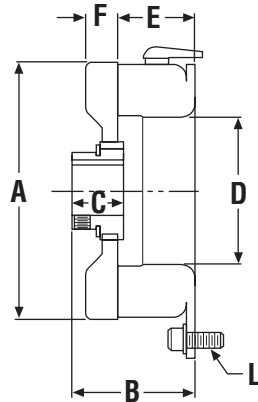
TB Series – Basic Tension Brakes

Dimensions

TB-170

TB-260

TB-425



() denotes millimeters
All Dimensions Nominal unless specified

* Mounting holes are within .010" (.254) of true position relative to pilot diameter.

Model	A Max.	B Max.	C	D	E	F	G Max.	H	J	K	L
TB-170	1.813 (46.05)	1.203 (30.55)	.404 (10.26)	.750 (19.05)	.812 (20.64)	.281 (7.14)	1.828 (46.43)	2.437/2.435 (61.90/61.85)	.204/.187 (5.18/4.75)	2.125 (53.98)	#8-32 UNC-3A
TB-260	2.719 (69.06)	1.906 (48.42)	.6875 (17.46)	1.375 (34.93)	1.250 (31.75)	.4688 (11.91)	2.641 (67.08)	3.500/3.498 (88.90/88.85)	.204/.187 (5.18/4.75)	3.125 (79.38)	#8-32 UNC-3A
TB-425	4.375 (111.13)	2.047 (51.99)	.875 (22.23)	2.437 (61.91)	1.250 (31.75)	.5625 (14.29)	4.266 (108.36)	5.625/5.623 (142.88/142.82)	.296/.280 (7.52/7.11)	5.000 (12.70)	#1/4-20 UNC-3A

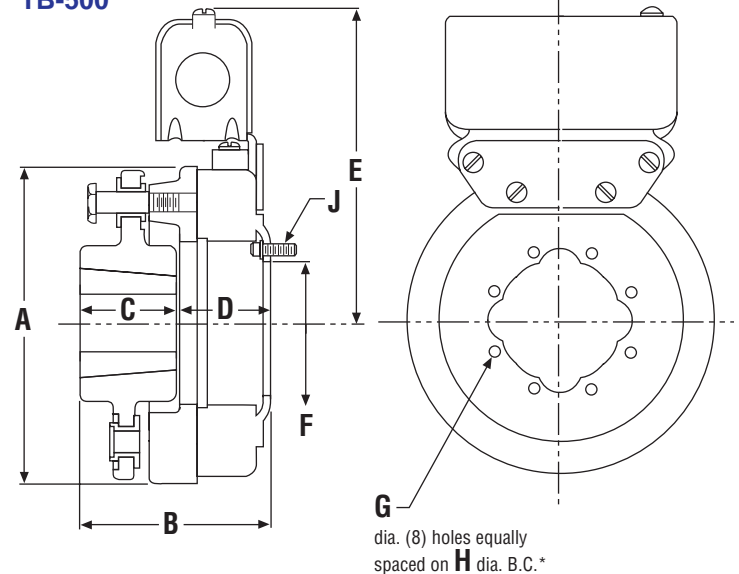
Bore and Keyway Data

Model No.	Part No.	Voltage	Bore	Keyway	
TB-170	5375-1	6V	1/4"	none	
	5375-4	24V	1/4"	none	
	5375-2	6V	5/16"	none	
	5375-5	24V	5/16"	none	
	5375-3	6V	3/8"	none	
	5375-6	24V	3/8"	none	
TB-260	5365-2	6V	3/8"	3/32" x 3/64"	
	5365-8	24V	3/8"	3/32" x 3/64"	
	5365-3	6V	7/16"	1/8" x 1/16"	
	5365-9	24V	7/16"	1/8" x 1/16"	
	5365-4	6V	1/2"	3/16" x 3/32"	
	5365-10	24V	1/2"	3/16" x 3/32"	
	5365-5	6V	5/8"	3/16" x 3/32"	
	5365-11	24V	5/8"	3/16" x 3/32"	
	5365-6	6V	3/4"	3/16" x 3/32"	
	5365-12	24V	3/4"	3/16" x 3/32"	
	TB-425	5367-5	6V	1/2"	1/8" x 1/16"
		5367-9	24V	1/2"	1/8" x 1/16"
5367-6		6V	5/8"	3/16" x 3/32"	
5367-10		24V	5/8"	3/16" x 3/32"	
5367-7		6V	3/4"	3/16" x 3/32"	
5367-11		24V	3/4"	3/16" x 3/32"	
5367-8		6V	7/8"	3/16" x 3/32"	
5367-12		24V	7/8"	3/16" x 3/32"	

Model No.	Part No.	Voltage	Bushing	Bore	Keyway
TB-500	5310-2	6V	Dodge 1215	1/2–9/16	1/8" x 1/16"
	5310-24	24V	(see pg 159 for for specific P/N)	5/8–7/8 15/16–1-1/4	3/16" x 3/32" 1/4" x 1/8"

Dimensions

TB-500



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* Mounting holes are within .010" (.254) of true position relative to pilot diameter.

Model	A Max.	B Max.	C	D	E Max.	F	G	H	J
TB-500	5.125 (130.18)	3.140 (79.77)	1.500 (38.10)	1.594 (40.48)	5.062 (128.59)	2.062 (52.39)	.208/.201 (5.28/5.11)	2.375 (60.33)	#8-32 UNC-3A

For replacement parts list and exploded view drawing, see page 158.

Electric Brakes

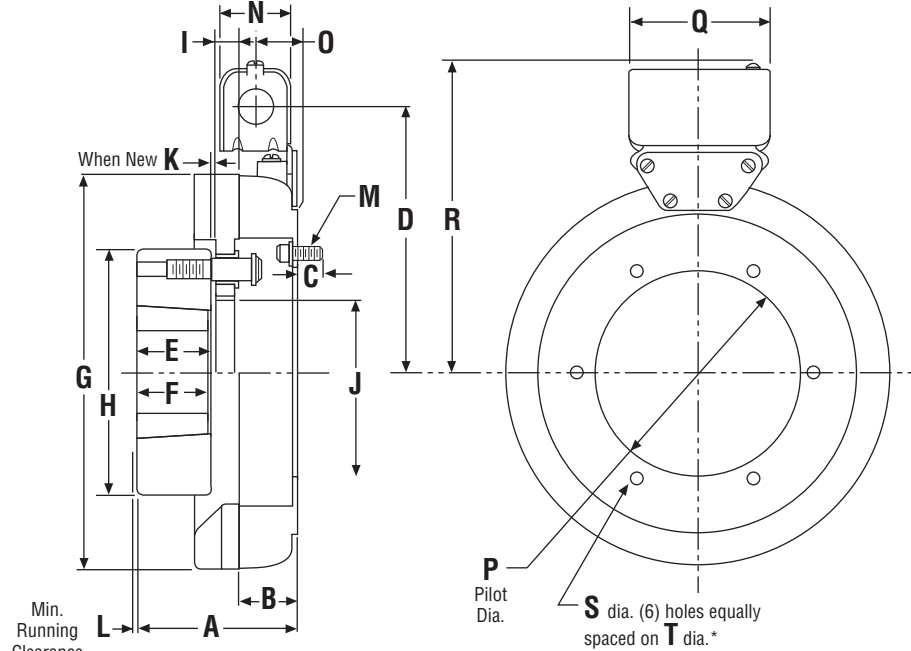
TB Series – Basic Tension Brakes

Dimensions

TB-825

TB-1000

TB-1225



() denotes millimeters

All Dimensions Nominal unless specified

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Model	A Max.	B	C Max.	D	E	F	G Max.	H Dia.	I	J Dia.
TB-825	3.671 (93.24)	1.312 (33.32)	.562 (14.27)	5.656 (143.66)	1.593 (40.46)	1.500 (38.10)	8.468 (215.09)	4.625 (117.48)	.609 (15.47)	2.187 (55.55)
TB-1000	4.109 (104.37)	1.453 (36.91)	.562 (14.27)	6.531 (165.89)	1.906 (48.41)	1.750 (44.45)	10.187 (258.75)	6.250 (158.75)	.609 (15.47)	3.875 (94.83)
TB-1225	5.390 (136.91)	1.6740 (41.66)	.562 (14.27)	7.531 (191.29)	3.000 (76.20)	3.000 (76.20)	12.437 (315.90)	6.875 (174.63)	.609 (15.47)	4.500 (114.30)

Model	K Min.	L	M	N	O	P Max.	Q	R	S	T
TB-825	.093 (2.36)	.062 (12.57)	5/16-18 UNC-3A	1.546 (39.27)	.921 (23.39)	3.503/3.501 (88.98/88.93)	3.750 (95.25)	6.406 (162.71)	.358/.338 (9.09/8.59)	4.250 (107.95)
TB-1000	.093 (2.36)	.062 (1.57)	5/16-18 UNC-3A	1.546 (39.27)	.921 (23.39)	5.378/5.376 (136.60/136.55)	3.750 (95.25)	7.687 (195.25)	.358/.338 (9.09/8.59)	6.125 (155.58)
TB-1225	.093 (2.36)	.062 (1.57)	5/16-18 UNC-3A	1.546 (39.27)	.921 (23.39)	6.378/6.376 (162.00/161.95)	3.750 (95.25)	8.687 (220.65)	.358/.338 (9.09/8.59)	7.250 (184.15)

See page 159 for specific bushing part numbers.

Bore and Keyway Data

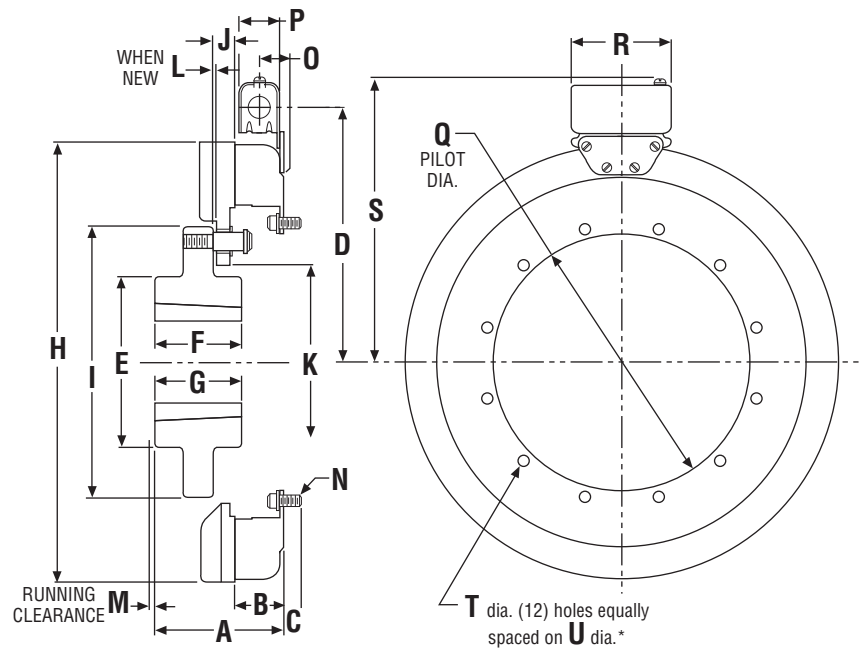
Model #	Part #	Voltage	Bushing	Bore	Keyway
TB-825	5311-2	6V	Dodge 1615	1/2-9/16	1/8" x 1/16"
	5311-24	24V	(see pg 159 for for specific P/N)	5/8-7/8	3/16" x 3/32"
				15/16-1-1/4	1/4" x 1/8"
				1-5/16-1-3/8	5/16" x 5/32"
				1-7/16-1-1/2	3/8" x 3/16"
1-9/16-1-5/8	3/8" x 3/16"				
TB-1000	5312-1	6V	Dodge 2517	1/2-9/16	1/8" x 1/16"
	5311-24	24V	(see pg 159 for for specific P/N)	5/8-7/8	3/16" x 3/32"
				15/16-1-1/4	1/4" x 1/8"
				1-5/16-1-3/8	5/16" x 5/32"
				1-7/16-1-3/4	3/8" x 3/16"
				1-13/16-2-1/4	1/2" x 1/4"
2-5/16-2-1/2	5/8" x 5/16"				

Model #	Part #	Voltage	Bushing	Bore	Keyway
TB-1225	5313-1	6V	Dodge 3030	15/16-1-1/4	1/4" x 1/8"
	5313-24	24V	(see pg 159 for for specific P/N)	1-5/16-1-3/8	5/16" x 5/32"
1-7/16-1-3/4				3/8" x 3/16"	
1-13/16-2-1/4				1/2" x 1/4"	
2-5/16-2-3/4				5/8" x 5/16"	
2-13/16-3				3/4" x 3/8"	
TB-1525	5314-1	6V	Dodge 3030	15/16-1-1/4	1/4" x 1/8"
	5314-24	24V	(see pg 159 for for specific P/N)	1-5/16-1-3/8	5/16" x 5/32"
				1-7/16-1-3/4	3/8" x 3/16"
				1-13/16-2-1/4	1/2" x 1/4"
				2-5/16-2-3/4	5/8" x 5/16"
2-13/16-3	3/4" x 3/8"				

For replacement parts list and exploded view drawing, see page 159.

Dimensions

TB-1525



() denotes millimeters
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Model	A Max.	B	C Max.	D	E Dia.	F	G	H Dia.	I Dia.	J Dia.	K Dia.
TB-1525	4.531 (115.09)	1.750 (44.45)	.562 (14.27)	9.187 (233.35)	6.000 (152.40)	3.000 (76.2)	3.000 (76.2)	15.562 (395.27)	9.500 (241.30)	.609 (15.47)	7.125 (180.98)

Model	L	M Min.	N	O	P Max.	Q	R	S	T	U	
TB-1525	4.531 (115.09)	1.750 (44.45)	.562 (14.27)	9.187 (233.35)	6.000 (152.40)	3.000 (76.2)	3.000 (76.2)	15.562 (395.27)	9.500 (241.30)	.609 (15.47)	7.125 (180.98)

See page 159 for specific bushing part numbers.

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