

BTBA Tension Control Brakes Sizes 10 & 12

Nexen's BTBA delivers consistent tensioning in web control applications including corrugating, labeling, and printing. This innovative tension control brake offers a finned rotor with an integral fan for maximum heat dissipation. Low rotating inertia ensures proper tensioning regardless of roll size – even at core.

Designed with ease of assembly and maintenance in mind, these brakes feature long-life friction facings to limit replacement costs. The quick change feature on each facing shoe reduces downtime and maintenance expense. Intended for mounting on shaftless unwind stands and other shaft-end applications, the BTBA comes fully assembled and has a straight bore for fast and easy installation.



HIGH THERMAL CAPACITY IN A SMALL PACKAGE

The BTBA features design improvements that ensure maximum heat capacity. An integral fan works with the finned rotor to cool the brake, while Nexen's open-design guard allows heat to dissipate away from the brake quickly. Cross-drilled holes in the rotor further increase air flow for optimal heat dissipation.

EASY INSTALLATION - NO FLANGE REQUIRED

With simple electrical and pneumatic connections, the BTBA retrofits shaft-mounted brakes with a straight bore for simple installation.

VERSATILE, PRECISE TENSION CONTROL

The BTBA utilizes multiple actuators to achieve different torque ranges across a wide range of applications.

DESIGN SIMPLICITY FOR EASY MAINTENANCE

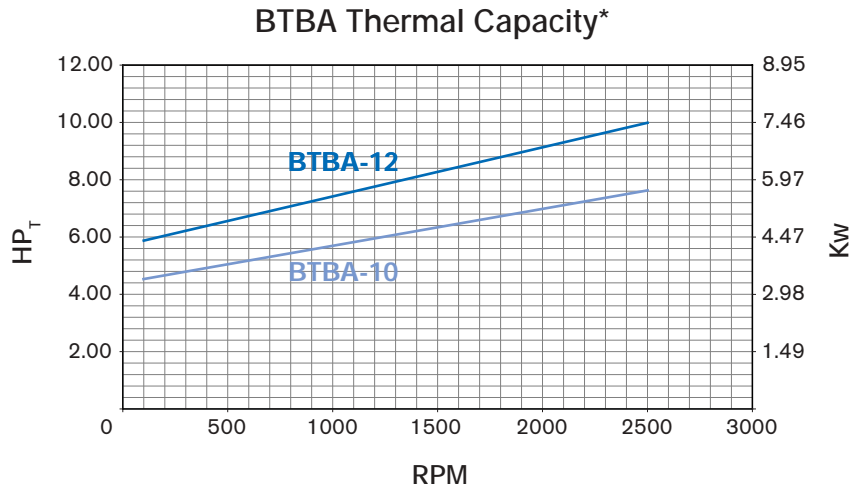
The BTBA is the model of simplicity. Effortlessly replace facings by pulling the spring-loaded locking pin and lifting the facing out.

THERMAL CAPACITY

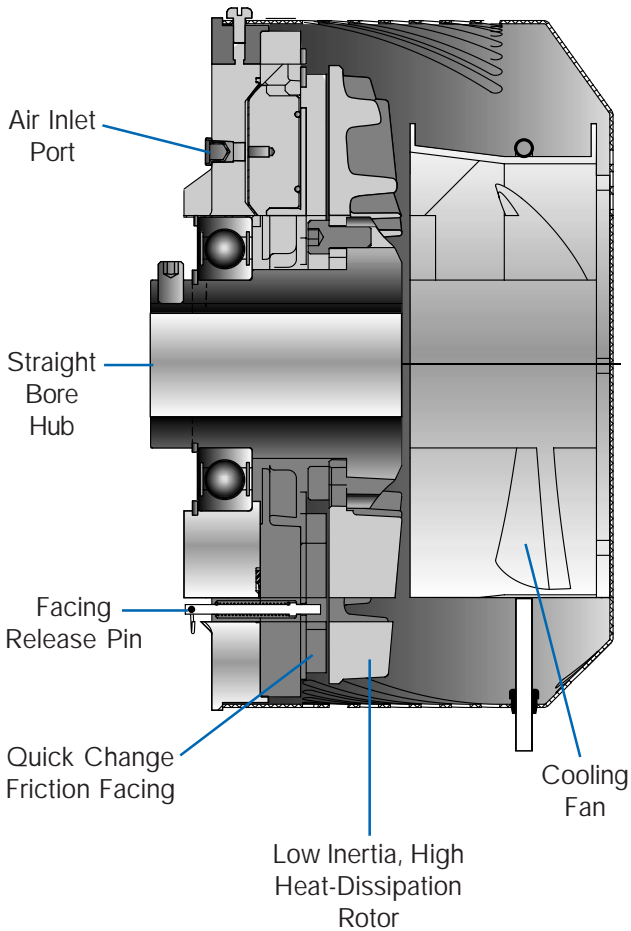
Utilizing a cross-drilled, finned rotor with an integral fan, the BTBA maximizes heat dissipation. Maximum ventilation holes in the guard allow heat to quickly dissipate away from the machine. This high thermal level helps ensure longer life and lower maintenance costs.



Cross-drilled rotor with heat dissipating fins.



(BTBA-12 Shown)



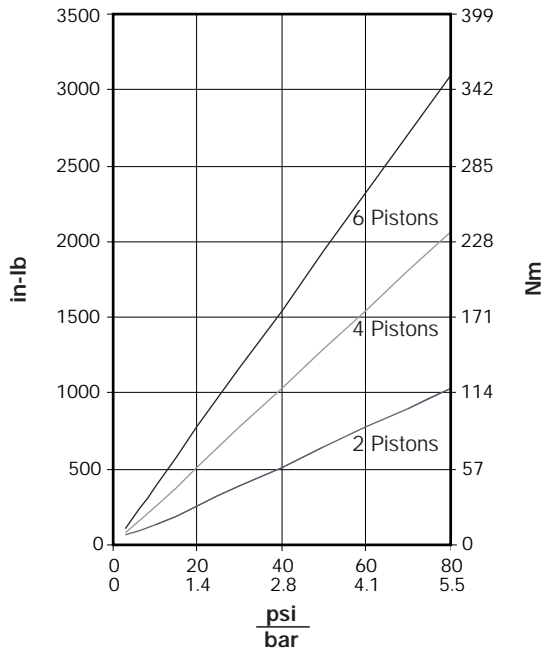
Additional Features

- High torque capacity: (Standard & LoCo Facings)
 - BTBA-10 (Standard): 349.4 Nm [3092 in-lb]
 - BTBA-10 (LoCo): 174.7 Nm [1546 in-lb]
 - BTBA-12 (Standard): 587.6 Nm [5200 in-lb]
 - BTBA-12 (LoCo): 356.0 Nm [3150 in-lb]
- Fan-cooled for maximum thermal capacity:
 - BTBA-10: 5.6 kW [7.6 HP_T]*
 - BTBA-12: 7.5 kW [10.0 HP_T]*
- Low inertia:
 - BTBA-10: 0.04 kgm² [0.94 lb-ft²]
 - BTBA-12: 0.08 kgm² [1.90 lb-ft²]
- Maximum speed:
 - BTBA-10: 2000 rpm
 - BTBA-12: 2500 rpm
- Pneumatically actuated, bidirectional rotation
- Compact outside diameter (OD)
- Shaft-mounted design - no precision flange required
- Diaphragm actuation - no seals to drag or o-rings to stick for improved low-end performance
- Torque control range of 50:1 using multiple actuators
- Simple connections: 120 VAC (optional 24 VDC) fan and 80 PSIG [5.5 bar] control air
- Thermal energy is dissipated into the atmosphere, not the machine frame, so your machine runs cooler.

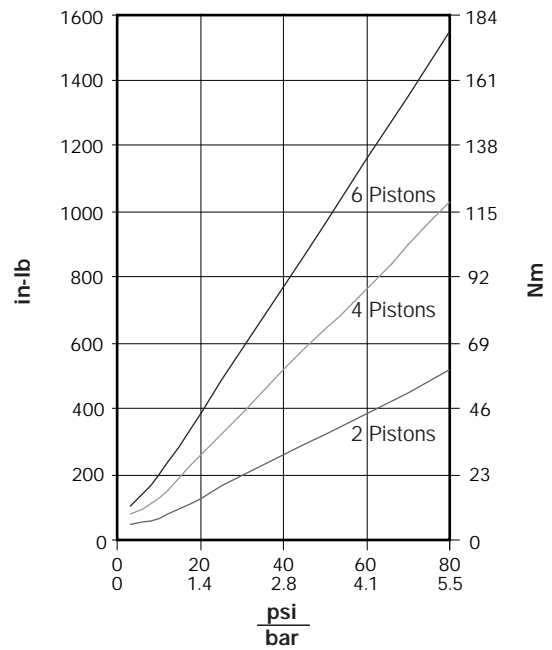
*Braking in the counterclockwise direction reduces thermals by 10–15%.

Torque Ratings [Standard, KEVLAR® and Low Coefficient (LoCo) Friction Facings]

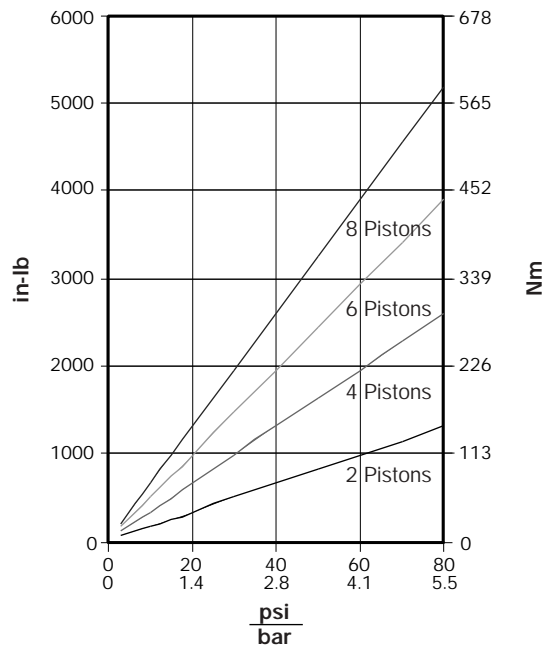
BTBA-10 with Standard or KEVLAR® Facings



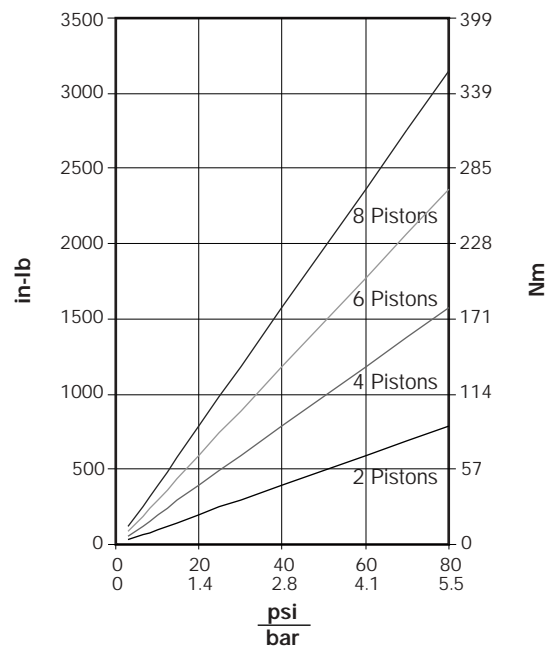
BTBA-10 with LoCo Facings



BTBA-12 with Standard or KEVLAR® Facings

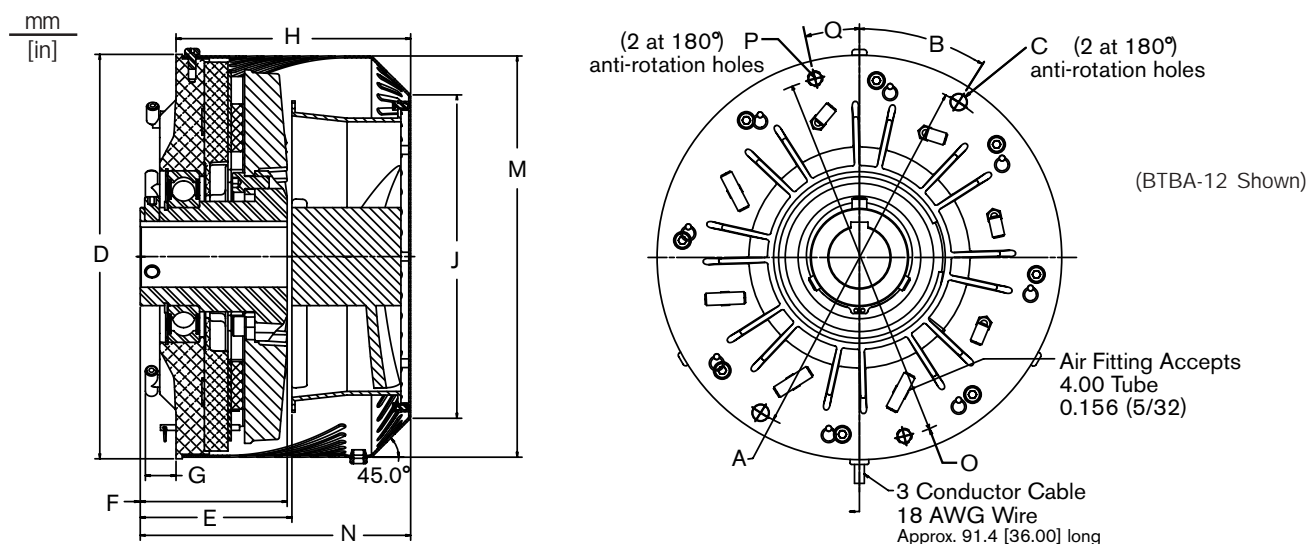


BTBA-12 with LoCo Facings



NOTE: Rated torque may vary depending on operating conditions. Friction coefficients are nominal.

BTBA-10 & -12, Approximate Dimensions



Model	A	B	C	D	E	F	G	H	J	M	N	O	P	Q
BTB-10	ø240.00 [9.449]	10°	13.49 [0.531]	ø277.0 [10.91]	124.95 [4.919]	109.75 [4.321]	24.49 [0.964]	163.03 [6.418]	210.8 [8.30]	275.0 [10.83]	187.9 [7.40]	240.00 [9.449]	M12-1.75	110°
BTB-12	ø300.00 [11.811]	42°	M12-1.75	ø330.00 [12.99]	123.69 [4.870]	119.81 [4.717]	25.0 [0.98]	191.3 [7.53]	ø263.9 [10.39]	ø327.4 [12.89]	220.5 [2.68]	300.00 [11.811]	13.49 [0.531]	4.5°

SPECIFICATIONS

	BTBA-10	BTBA-12
Inertia	0.04 kgm ² [0.94 lb-ft ²]	0.08 kgm ² [1.90 lb-ft ²]
Slip Torque (standard facings)	339 Nm [3000 in-lb]	588 Nm [5200 in-lb]
Thermal Capacity @ max rpm	5.6 kw [7.5 HP _r] @ 2000 rpm	7.5 kw [10.0 HP _r] @ 2500 rpm
Fan Power	41 W	61 W
Maximum Air Pressure	5.5 bar [80 psi]	5.5 bar [80 psi]

Part Numbers

Bore Sizes,* inch		1.250	1.375	1.500	1.625	1.750	1.875	1.938	2.000
Standard Facings*	BTBA-10	927408	927420	927422	927424	927426	927428	927430	927407
	BTBA-12	927523	927525	927527	927529	927531	927533	927535	927537
LoCo Facings*	BTBA-10	927409	927421	927423	927425	927427	927429	927431	927432
	BTBA-12	927524	927526	927528	927530	927532	927534	927536	927538

* Nexen also offers metric bore sizes and KEVLAR® friction facings for each model. Contact the Custom Business Unit at 800-843-7445 for more information on BTBA Brakes with metric bores or KEVLAR® Friction Facings.

In accordance with Nexen's established policy of constant product improvement, the specifications contained in this document are subject to change without notice. Technical data listed in this document are based on the latest information available at the time of printing and are also subject to change without notice. For current information, please consult www.nexengroup.com.

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