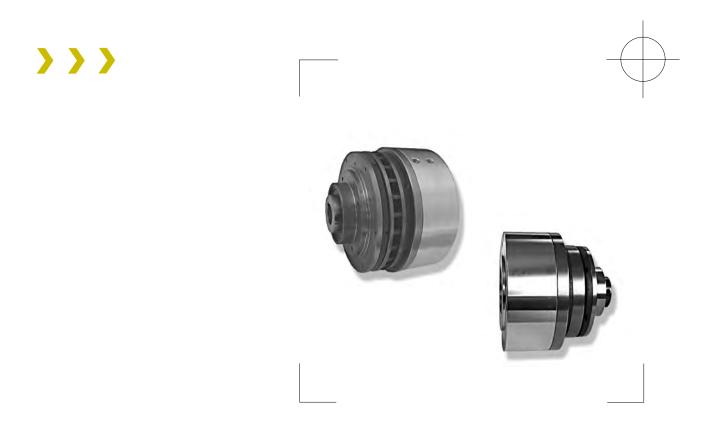
nexen.

AIR CHAMP® PRODUCTS

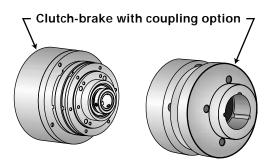
TECHNICAL DATA SHEET



Through-Shaft Clutch-Brakes BCB-275, FCB-450, LCB-600, MCB-800

THROUGH-SHAFT CLUTCH-BRAKE SERIES

Nexen redesigned the through-shaft clutch-brake series, improving performance and lowering costs. With fewer parts and more torque, this line of clutch-brakes offers single piston engagement to eliminate clutch and brake overlap. The clutch-brake pilot accommodates pulleys, sprocket mounting or coupling attachments. Versatility and ease of use make these products ideal for numerous industrial applications in the packaging, material handling, food processing, automotive, wood products, printing, and converting industries.



A coupling half is used for in-line shaft applications. Before specifying it is important to review the maximum misalignment allowable. For FCB, LCB and MCB models, choose one of the couplings listed below:

COUPLING HALF OPTIONS

Model	Maximum Misalignment mm [in]			Product	Max Bore	Shipping Weight	Taper Lock	
Model	Parallel	Angular	Axial Numb		mm [in]	kg [lb]	Bushing ¹	
FCB-450	0.38 [0.015]	1.02 [0.040]	3.18 [0.125]	802700	25.4 [1.000]	1.4 [3]	#1008	
LCB-600	0.38 [0.015]	1.63 [0.064]	3.18 [0.125]	804900	28.6 [1.125]	2.7 [6]	#1008	
MCB-800	0.38 [0.015]	2.84 [0.112]	3.18 [0.125]	807400	63.5 [2.500]	10.4 [23]	#2517	

¹Use Dodge Taper Lock® bushings.

NOTE: Refer to pages 27 and 29 of the Nexen Air Champ® Catalog for coupling dimensions.



FEATURES & BENEFITS

- Single piston design— eliminates possibility of simultaneous clutch and brake engagement
- Small air chamber volumes for high cycle rates and low air consumption
- Torque capabilities to fit up to 10 HP drive motors
- Laboratory proven thermal capacities for fast cycle rates and large load handling capability
- Drive flange accepts components for right angle or in-line drive applications
- Simple design with few parts for easy installation and maintenance
- Involute splines for axial motion
- · Low cost
- Easy retrofitting of existing Nexen clutch-brakes; pilot dimensions are identical to the original Nexen clutch-brake series
- Designed for mounting on the driven shaft only; brake stops the hub

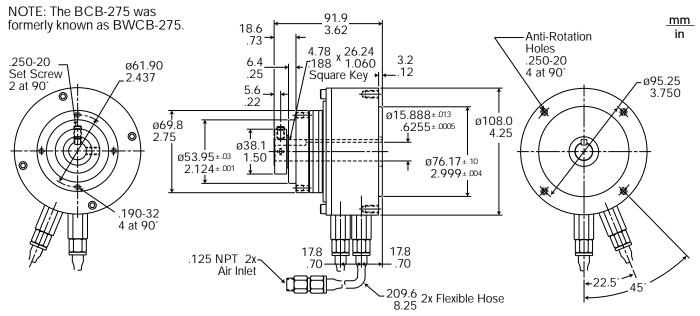
Specifications

Model	Product	Bore ²	Clutch Torque ³	Brake Torque ³	Thermal Capacity	Inertia	Speed	Shipping
Model	Number	mm [in]	Nm [in-lb]	Nm [in-lb]	kW [HP _⊤]	kg-m² [in-lb²]	max rpm	kg [lbs]
BCB-275	826051	12.7 [0.500]	9 [80]	9 [80]	0.10 [0.13]	0.70 [1.7]	3600	3 [5]
BCB-275	826050	15.9 [0.625]	9 [80]	9 [80]	0.10 [0.13]	0.70 [1.7]	3600	3 [5]
FCB-450	827150	22.2 [0.875]	40 [350]	40 [350]	0.22 [0.30]	0.28 [6.6]	3600	7 [15]
LCB-600	828950	25.4 [1.000]	51 [450]	51 [450]	0.23 [0.31]	0.68 [16.2]	2000	9 [19]
MCB-800	830850	38.1[1.500]	124 [1100]	124 [1100]	0.45 [0.60]	2.38 [56.4]	1800	17 [30]

² Accepts same bore reduction bushings as F-450, L-600 and M-800 bushings. ³ Torque measured at 80 psi.



BCB-275 Clutch-Brake, Approximate Dimensions



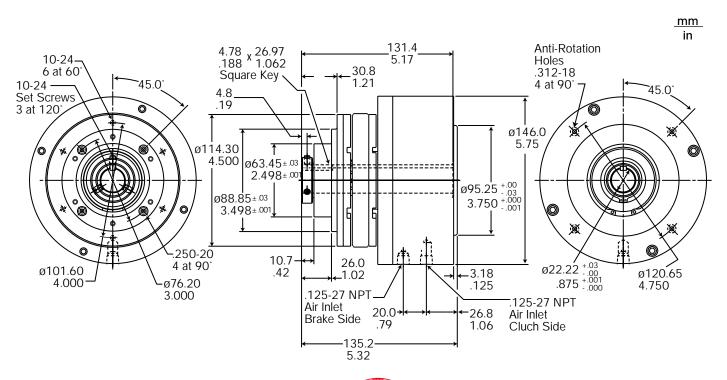
COUPLING HALF OPTIONS

For the BCB-275, choose one of the couplings listed below:

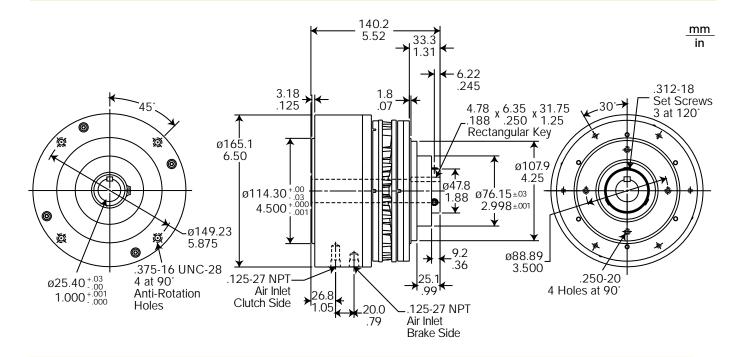
Product	Bore	Key Size (sq.)	Shipping Weight	
Number	mm [in]	mm [in]	kg [lb]	
826030	12.70 [0.500]	3.18 [0.125]	0.5 [1]	
826031	15.88 [0.625]	4.78 [0.188]	0.5 [1]	
826032	19.05 [0.750]	4.78 [0.188]	0.5 [1]	

NOTE: Refer to page 25 of the Air Champ® Catalog for coupling dimensions.

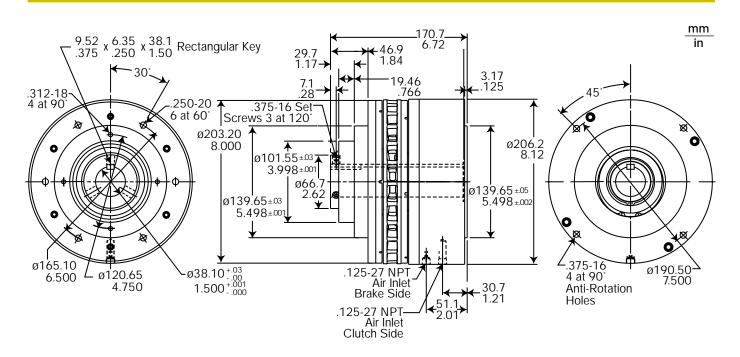
FCB-450 Clutch-Brake, Approximate Dimensions



LCB-600 Clutch-Brake, Approximate Dimensions



MCB-800 Clutch-Brake, Approximate Dimensions



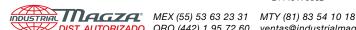
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