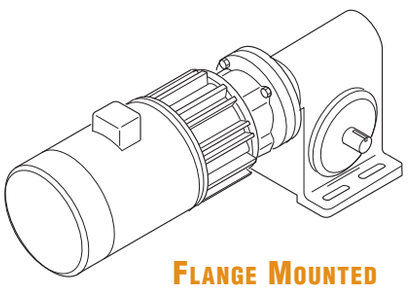
Product Function/Selection Chart

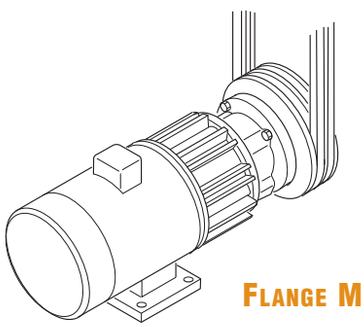
Product Group	Thru-Shaft Mounted Clutch-Brake	NEMA "C" Flange Open Design Clutch-Brake	NEMA "C" Flange Enclosed Design Clutch-Brake	NEMA "C" Flange Enclosed Design Clutch	NEMA "C" Flange Enclosed Design BISSC Approved	NEMA "C" Flange Modular System Clutch Brakes
General Features						
Number of Model Options	9 Standard 0 Metric	0 Standard 6 Metric	8 Standard 14 Metric	1 Standard 0 Metric	4 Standard 0 Metric	4 Standard 0 Metric
Functions						
Controlled Acceleration	Yes	Yes	Yes	Yes	Yes	Yes
Controlled Deceleration	Yes	Yes	Yes		Yes	Yes
Inching/Jogging	Yes	Yes	Yes	Yes	Yes	Yes
Rapid Cycling	Yes	Yes	Yes	Yes	Yes	Yes
Stopping/Holding	Yes	Yes	Yes		Yes	Yes
Overload Protection	Yes	Yes	Yes	Yes	Yes	Yes
Disconnect	Yes	Yes	Yes	Yes	Yes	Yes

Typical Applications

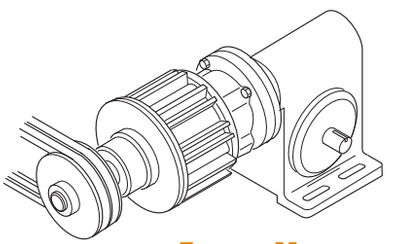
Shown below are four typical mounting applications for these clutch-brakes. Any of the three design options (FMCBE, FMCBES or FMCE) can be mounted in any one of these configurations. You will find the specific product requirements listed on the catalog page for each design style.



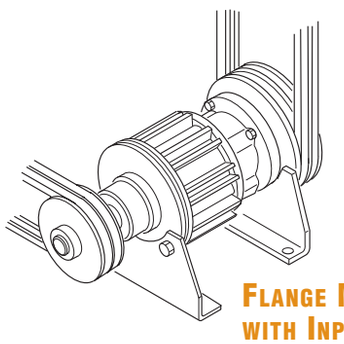
Flange Mounted



Flange Mounted



Flange Mounted with Input Unit



Flange Mounted with Input Unit

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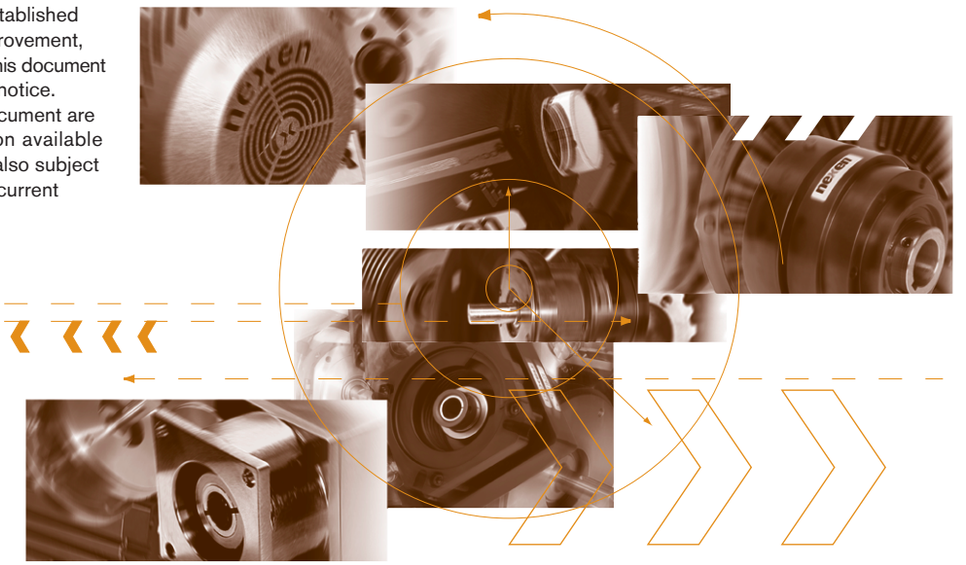
In accordance with Nexen's established policy of constant product improvement, the specifications contained in this document are subject to change without notice. Technical data listed in this document are based on the latest information available at the time of printing and are also subject to change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



CLUTCH/BRAKES

This Section Contains: . . . . .Page

NEMA "C" FLANGE

Overview 224
FMCBE Model 500 224-225
FMCBE BISSC Certified Models 225
FMCBE Models 625 & 875, Enclosed, Integral Valve/Locking Key, Air Engaged 226--227
FMCBE Models 1125 & 1375, Enclosed, Integral Valve/Locking Key, Air Engaged 228-229
FMCBE Models 625 & 875, Enclosed, Air Engaged 230-231
FMCBE with Locking Key, Models 625 & 875, Enclosed, Air Engaged . . .232-233
FMCB & FMCBE Models 1125, 1375 & 1625 Enclosed, Air Engaged . .234-235
FMCBES Models 625 & 875, Enclosed, Spring Engaged 236-237
FMCBES Models 1125 & 1375, Enclosed, Spring Engaged 238-239
FMCE Model 625, 825, 1125 & 1375 Enclosed, Air Engaged 240-241

This Section Contains: . . . . .Page

MODULAR NEMA "C" FLANGE

Overview 242-243
Designing 625, 875, 1125 & 1375 Modular Systems 244-253

THRU-SHAFT MOUNTED

BCB-275 & FCB-450 Models, Clutch-Brakes-Sheave 254-255
LSCB-44HT & 54HT Straight Bore Conveyor Brakes 256-257
LCB-600 & MCB-800 Models Clutch-Brakes-Sheave 258-259
FWCB & LWCB Models, Clutch-Brakes-Sheave 260-261
MWCB & HWCB Models, Clutch-Brakes-Sheave 262-263
FCDB Models, Clutch-Disc Caliper . . .264-265
LCDB Models, Clutch-Disc Caliper . . .265-267
MCDB Models, Clutch-Disc Caliper . .268-269
HCDB Models, Clutch-Disc Caliper . . .270-271

This Section Contains: . . . . .Page

METRIC CLUTCH-BRAKES

Overview 272-273
FMCB Models, Open, Air Engaged
130-19 & 130-24 Models 274-275
7-28 & 7-38 Models 276-277
8-38 & 8-42 Models 278-279
FMCBE Models, Enclosed, Air Engaged
110-14, 130-19 & 130-24 280-281
7-28 & 7-38 Models 282-283
8-38 & 8-42 Models 284-285
FMCBES Models, Enclosed, Spring Engaged
110-14 & 130-19 & 130-24 286-287
7-28 & 7-38 Models 288-289
8-38 & 8-42 Models 290-291

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FMCBE FLANGE MOUNTED CLUTCH-BRAKES

- Available in either aluminum, electroless nickel plating or black oxide coating
- Flange or Foot mount capability
- Optional Input Unit available
- Double acting piston design prevents overlap of clutch and brake functions

Choose from **3 design options**:

FMCBE basic enclosed clutch-brake:

- **Bore/Shaft** sizes from 0.500 to 1.375 inches
- BISSC (Baking Industry) certified models, in 0.625 and 0.875 bores, available for use in "cleanroom" applications

FMCBES enclosed, spring engaged clutch-brake:

- Spring engaged brake combined with air engaged clutch

FMCE enclosed clutch:

- For clutch only applications
- Available in black oxide and nickle coating
- **Bore sizes** of 0.625 and 0.875 inches
- For additional corrosion protection, contact the factory

FMCBE Flange mounted Clutch-Brakes, Totally Enclosed

All FMCBE clutch-brakes are totally enclosed for operation in environments where dirt, dust, moisture or other contaminants could cause power transmission components to fail. Enclosed design also prohibits worn friction material from escaping the clutch-brake and entering the process area.

FMCBEs mount directly to C-Face motors and reducers, and provide absolute control. These units fit NEMA frame sizes 48 to 215TC.

FMCBE CLUTCH-BRAKE, DESIGN STYLE COMPARISONS

The tables below show performance comparisons between the design styles. This is an overview, to aid in selection. Please refer to the product specific catalog pages prior to final determination, to ensure all features and benefits match your application.

Thermal Capacities

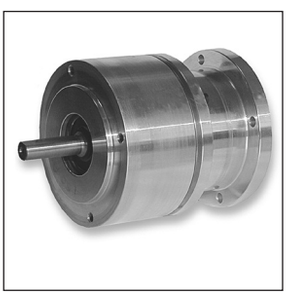
Thermal capacity is based upon 50% clutch and 50% brake usage. Operating speed is 1800 rpm for all data.

Model/Design Style	HP_T rating by Model Size					
	500	625	875	1125	1375	1625
FMCBE	0.10	0.14	0.18	0.33	0.44	–
FMCBES	–	0.14	0.18	0.33	0.44	–
FMCE	–	0.14	0.18	0.33	0.44	–
FMCB	–	0.14	0.18	0.33	0.44	1.19

Overhung Load Data

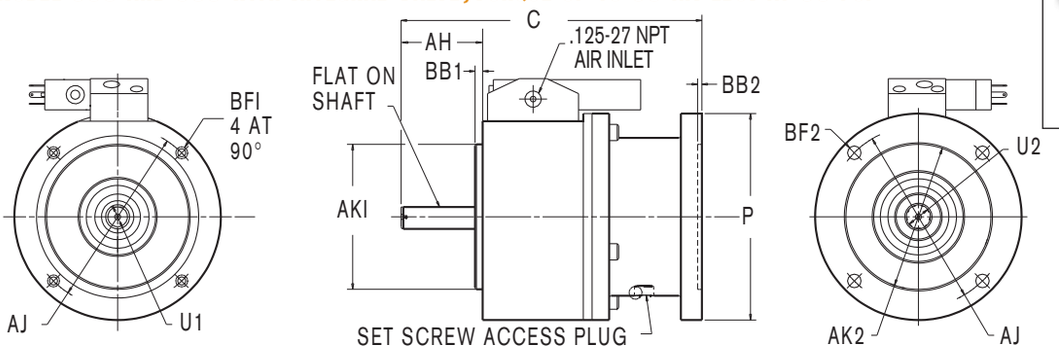
Data is based upon 50% clutch and 50% brake usage. Operating speed is 1800 rpm for all data.

Model/Design Style	Weight (Lbs) rating by Model Size					
	500	625	875	1125	1375	1625
FMCBE	70	92	195	240	350	–
FMCBES	–	92	195	240	350	–
FMCE	–	92	195	240	350	–
FMCB	–	92	195	240	350	600



FMCBE 500 MODEL CLUTCH-BRAKES - APPROXIMATE DIMENSIONS (INCHES)

Model 500 and 500 with Integral Valve, Torque up to 89 in. lbs. at 80 psi



MODEL	PRODUCT NUMBER	AH	AJ	AK1 $^{+.000}_{-.002}$	AK2 $^{+.002}_{-.000}$	BB1	BB2	BF1	BF2	C	P	KEY (SQ)	KEYWAY WD	KEYWAY DP	U1 $^{+.000}_{-.001}$	U2 $^{+.001}_{-.000}$
500	801364	1.69	3.750	3.000	3.000	0.16	0.087	.54	.280	6.22	4.27	0.125	0.125	.063	.500	.500
500 with Keyed Bore & Shaft	801369	1.69	3.750	3.000	3.000	0.16	0.087	.54	.280	6.22	4.27	0.125	0.125	.063	.500	.500
500 with Integral Valve	801365	1.69	3.750	3.000	3.000	0.16	0.087	.54	.280	6.22	4.27	0.125	0.125	.063	.500	.500

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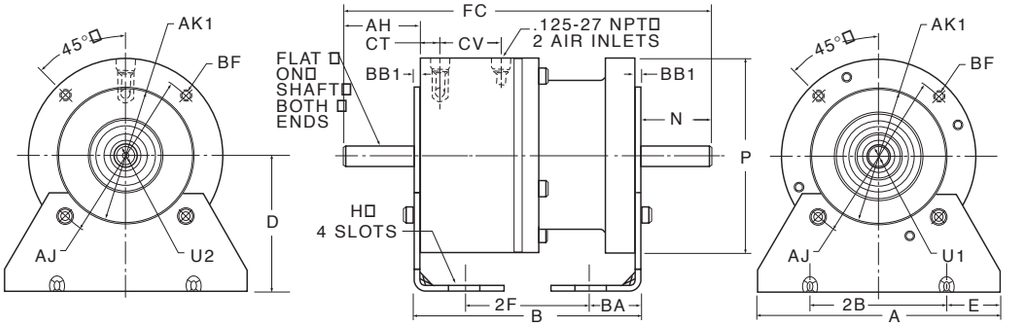
FMCBE 500 MODEL CLUTCH-BRAKES - APPROXIMATE DIMENSIONS (INCHES)

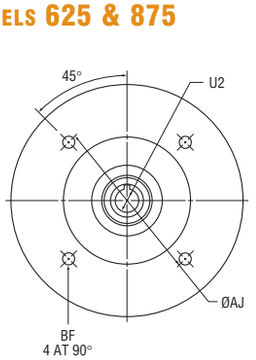
Models 500 With Feet and Input Shaft. Torque up to 88 in. lbs. at 80 psi

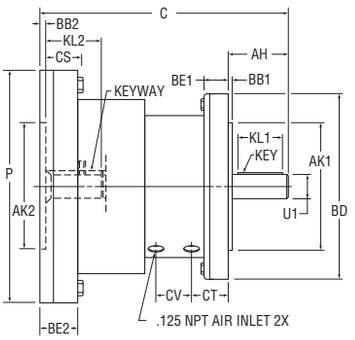


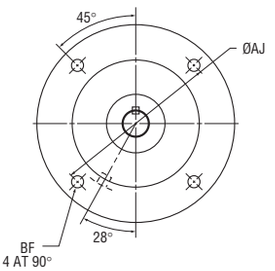
MODEL	PRODUCT NUMBER	A	AH	AJ	AK1 +.000 -.002	B	BA	BB1	2B	BF	CT	CV	D	E	FC	2F	H	N	U1 +.000 -.001	U2 +.001 -.000
500 with Feet & Input Shaft	801368	5.36	1.69	3.75	3.000	5.00	1.28	0.16	4.24	0.25	0.45	1.33	3.00	0.56	8.13	2.52	0.34 X 0.35	1.53	.500	.500

FMCBE BISSC MODEL CLUTCH-BRAKES - APPROXIMATE DIMENSIONS (INCHES)

Models 625 & 875

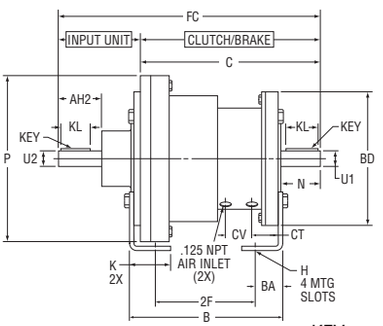


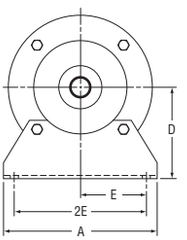




MODEL	PRODUCT NUMBER	AH	AJ	AK1 +.000 -.002	AK2 +.002 -.000	BB1	BB2	BD	BE1	BE2	BF	C	CS	CT	CV	KL1	KL2	P	KEY (SQ)	KWY WD	KWY DP	U1 +.000 -.001	U2 +.001 -.000
625	827250	2.06	5.875	4.499	4.501	0.12	0.16	6.50	0.83	1.12	.406	7.61	1.28	0.91	1.19	1.50	1.97	6.50	0.19	.188	.093	.625	.625
875	827260	2.12	5.875	4.499	4.501	0.12	0.19	6.60	0.85	1.34	.406	8.82	1.28	1.10	1.47	1.50	2.02	8.20	0.19	.188	.093	.875	.875

Models 625 & 875 with Input & Foot





MODEL	PRODUCT NUMBER	N	FC	BD	C	CT	CV	KL	KEY (SQ)	P	U1 +.000 -.001	INPUT NUMBER	U2 +.000 -.001	AH2	FC
625	827250	1.93	11.62	6.50	7.61	0.91	1.19	1.50	.188	6.50	.625	827270	.625	2.12	11.09
875	827260	1.99	12.84	6.60	8.82	1.30	1.27	1.50	.188	8.20	.875	827280	.875	2.12	12.30

MODEL	FOOT NUMBER	A	B	BA	D	E	2E	2F	H	K
625	827251	7.50	6.21	1.25	4.51	3.19	6.38	3.71	.41 x .88	2.00
875	827261	7.50	7.37	1.25	4.51	3.19	6.38	4.87	.41 x .88	2.00

See next page for more information.

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FMCBE WITH INTEGRAL VALVE /LOCKING KEY CLUTCH-BRAKES – MODELS FMCBE 625 & 875

The FMCBE with Integral Valve combines a Nexen Flange mounted, totally-enclosed clutch/brake with a single solenoid 4-way spool valve mounted directly to the clutch/brake air chamber. Air pressure is directed to the piston to perform either clutch or brake functions. The FMCBE/I.V. is equipped with Nexen's Locking Key feature. Choose from **2 Models**:

- **Bore sizes** of 0.625 and 0.875 in.
- Black oxide coating, Cooling fins
- Simplified; one product number for a clutch-brake combination, control valve and locking key feature
- Reduced number of air line connections for quicker install
- Shorter air lines for better air pressure
- Eliminates need for quick exhaust valves.
- 115 Volt is standard on FMCBE.
- The Integral Valve is available for 12, 24 and 115 volt systems
- Static Torque up to 325 In. Lbs. (brake) and 290 In. Lbs. (clutch)
- Overhung Load Cap. up to 292 Lbs.
- Design Speed up to 1800 rpm. Consult factory for higher speed
- Flange mounts directly to motors and reducers
- Compatible with C-face motors up to 2 HP
- Optional Foot Mount is available for belt drive applications
- Optional Input Unit allows you to incorporate pulleys or couplings into your application
- Single, double acting piston makes overlap impossible

FMCBE Flange Mounted Clutch-Brakes, Totally Enclosed, Integral Valve/ Locking Key

Standard Clutch-Brake is Flange Mounted. Order Foot Mount set separately for belt drive applications. Order Input Unit to incorporate pulleys into your application.

Model Number	Product Number	Valve Voltage	Bore (In)	HP_T Up To	Overhung Load Capacity (lbs) 1200 RPM	Overhung Load Capacity (lbs) 1800 RPM	Shipping Wt. (Lbs)
FMCBE -625	801705 801713	115V 24V	0.625	0.14	138	92	24
FMCBE -875	801706 801714	115V 24V	0.875	0.18	292	195	40

NOTE: Thermal Capacity (HP_T) and Overhung Load data is based upon 50% clutch and 50% brake usage.

Model Number	Clutch/Brake Product Number	Foot Mount Set of 2 Product Number	Foot Mount Shipping Wt. (Lbs)	Input Unit Product Number	Input Unit Overhung Load Capacity (lbs) 1200 RPM	Input Unit Overhung Load Capacity (lbs) 1800 RPM	Input Unit Shipping Wt. (Lbs)
FMCBE -625	801705	801431	4	929600	279	244	7
FMCBE -875	801706	801431	4	928400	279	244	7

Valve Electrical Specifications

Valves are "normally open" to engage the brake element of the clutch/brake when the solenoid is de-energized.

The valve solenoid voltage is DC. All voltages can be used on AC or DC service. Use the lead wire supplied with the clutch/brake.

Voltage (volts)	Power (watts)	Resistance (ohms)	Current (amps)	Product Number
24	.6	1100	.027	4961
115①	2.5	5500	.021	4919

① Standard Coil - Contact Nexen for other coil options

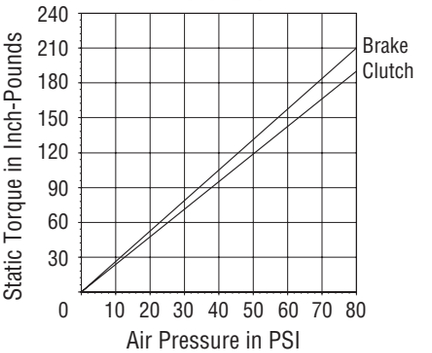
NEMA Motor/Frame Selection Chart

Use this chart as specification and operational criteria for your application.

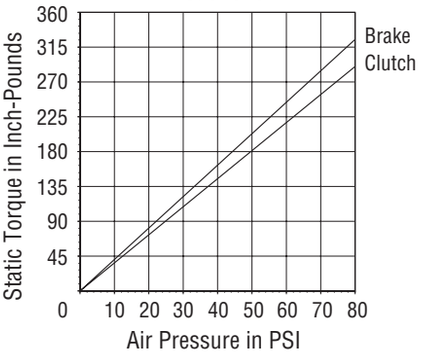
HP of Motor	RPM	Frame Number	Motor Shaft (IN)	Clutch Brake Model Number
1/4	1800	56C	0.625	FMCBE I.V.-625
1/4	1200	56C	0.625	FMCBE I.V.-625
1/3	1800	56C	0.625	FMCBE I.V.-625
1/3	1200	56C	0.625	FMCBE I.V.-625
1/2	1800	56C	0.625	FMCBE I.V.-625
1/2	1200	56C	0.625	FMCBE I.V.-625
1/2	900	143TC	0.875	FMCBE I.V.-875
3/4	1800	56C	0.625	FMCBE I.V.-625
3/4	1200	143TC	0.875	FMCBE I.V.-875
3/4	900	145TC	0.875	FMCBE I.V.-875
1	1800	56TC	0.625	FMCBE I.V.-625
1	1800	143TC	0.875	FMCBE I.V.-875
1	1200	145TC	0.875	FMCBE I.V.-875
1-1/2	1800	145TC	0.875	FMCBE I.V.-875
2	1800	145TC	0.875	FMCBE I.V.-875

Torque Vs. Air Pressure

Model 625



Model 875



NOTE: Dynamic torque is approximately 85% of static torque.

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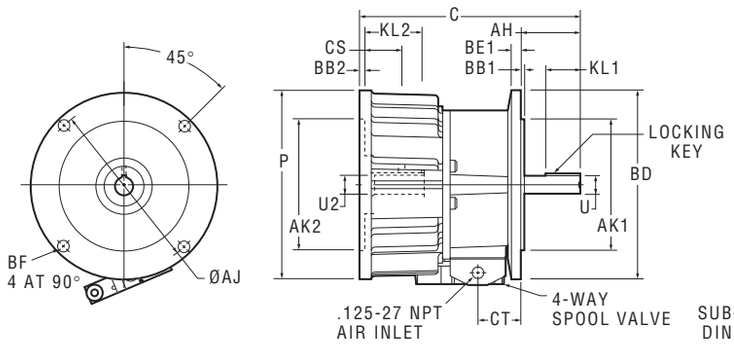
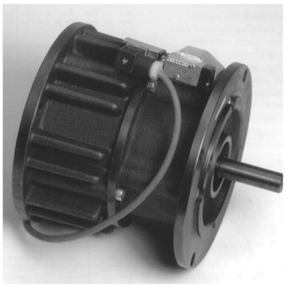
FMCBE INTEGRAL VALVE/LOCKING KEY MODEL CLUTCH-BRAKES - APPROXIMATE DIMENSIONS (INCHES)

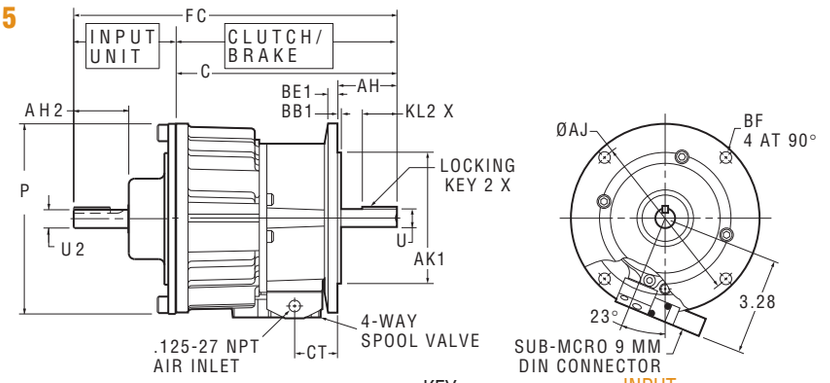
Models 625 & 875





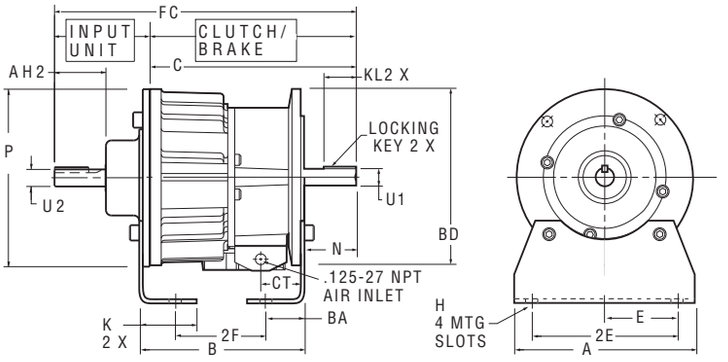
MODEL	PRODUCT NUMBER	AH	AJ	AK1 +.000 -.002	AK2 +.002 -.000	BB1	BB2	BD	BE1	BE2	BF	C	CS	CT	KL1	KL2	P	KEY (SQ)	KWY WD	KWY DP	U1 +.000 -.001	U2 +.001 -.000
625	801705 801713	2.06	5.875	4.499	4.501	0.12	0.16	6.50	0.31	0.38	.406	7.61	1.28	1.50	1.21	1.97	6.50	0.188	0.188	0.094	.625	.625
875	801706 801714	2.11	5.875	4.499	4.501	0.12	0.19	7.00	0.39	0.56	.406	8.81	1.25	1.83	1.31	2.02	7.81	0.188	0.188	0.094	.875	.875

Models 625 & 875 with Input



MODEL	PRODUCT NUMBER	AH	AJ	AK1 +.000 -.002	BB1	BE1	C	CT	KL	KEY (SQ)	P	U1 +.000 -.001	INPUT NUMBER	U2 +.000 -.001	AH2	FC
625	801705	2.06	5.875	4.499	0.12	0.31	7.60	1.50	1.38	0.188	6.50	.625	929600	.875	1.89	11.09
875	801706	2.11	5.875	4.499	0.12	0.39	8.81	1.83	1.38	0.188	7.81	.875	928400	.875	1.89	12.30

Models 625 & 875 with Input & Foot



MODEL	PRODUCT NUMBER	BD	C	CT	CV	KL	KEY (SQ)	P	U1 +.000 -.001	INPUT NUMBER	U2 +.000 -.001	AH2	FC
625	801705	6.50	7.60	0.91	1.19	1.38	0.188	6.50	.625	929600	.875	1.89	11.09
875	801706	7.00	8.81	1.10	1.47	1.38	0.188	7.81	.875	928400	.875	1.89	12.30

MODEL	FOOT NUMBER	A	B	BA	D	E	2E	2F	H	K	N
625	801431	7.50	6.10	1.25	4.51	3.19	6.38	3.60	.41 x .88	2.00	1.87
875	801431	7.50	7.25	1.25	4.51	3.19	6.38	4.25	.41 x .88	2.00	1.96

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FMCBE WITH INTEGRAL VALVE /LOCKING KEY CLUTCH-BRAKES – MODELS FMCBE 1125 & 1375

The FMCBE with Integral Valve combines a Nexen Flange mounted, totally-enclosed clutch/brake with a single solenoid 4-way spool valve mounted directly to the clutch/brake air chamber. Air pressure is directed to the piston to perform either clutch or brake functions. The FMCBE/I.V. is equipped with Nexen's Locking Key feature. Choose from **2 Models**:

- **Bore sizes** of 1.125 and 1.375 in.
- Black oxide coating, Cooling fins
- Simplified; one product number for a clutch-brake combination, control valve and locking key feature
- Reduced number of air line connections for quicker install
- Shorter air lines for better air pressure
- Eliminates need for quick exhaust valves.
- 115 Volt is standard on FMCBE.
- The Integral Valve is available for 12, 24 and 115 volt systems
- Static Torque up to 1200 In. Lbs. (brake) and 1050 In. Lbs. (clutch)
- Overhung Load Cap. up to 535 Lbs.
- Design Speed up to 1800 rpm. Consult factory for higher speed
- Flange mounts directly to motors and reducers
- Compatible with C-face motors up to 10 HP
- Optional Foot Mount is available for belt drive applications
- Optional Input Unit allows you to incorporate pulleys or couplings into your application
- Single, double acting piston makes overlap impossible

FMCBE Flange Mounted Clutch-Brakes with Integral Valve/Locking Key, Totally Enclosed

Standard Clutch-Brake is Flange Mounted. Order Foot Mount set separately for belt drive applications. Order Input Unit to incorporate pulleys into your application.

Model Number	Product Number	Valve Voltage	Bore (In)	HP_T Up To	Overhung Load Capacity (lbs) 1200 RPM	Overhung Load Capacity (lbs) 1800 RPM	Shipping Wt. Wt (Lbs)
FMCBE -1125	801709 801715	115V 24V	1.125	0.33	360	240	68
FMCBE -1375	801711 801716	115V 24V	1.375	0.44	525	350	89

NOTE: Thermal Capacity (HP_T) and Overhung Load data is based upon 50% clutch and 50% brake usage.

Model Number	Clutch/Brake Product Number	Foot Mount Set of 2 Product Number	Foot Mount Shipping Wt. (Lbs)	Input Unit Product Number	Input Unit Overhung Load Capacity (lbs) 1200 RPM	Input Unit Overhung Load Capacity (lbs) 1800 RPM	Input Unit Shipping Wt. (Lbs)
FMCBE -1125	801709	801603	6	935000	655	570	12
FMCBE -1375	801711	801603	6	936000	655	570	13

Valve Electrical Specifications

Valves are "normally open" to engage the brake element of the clutch/brake when the solenoid is de-energized.

* The valve solenoid voltage is DC. All voltages can be used on AC or DC service. Use the lead wire supplied with the clutch/brake.

Din Conn.	Voltage* (volts)	Power (watts)	Resistance (ohms)	Current (amps)	Prod. #
-	12	.6	260	.050	-
4962	24	.6	1100	.027	4961
4922	115 [1]	2.5	5500	.021	4919

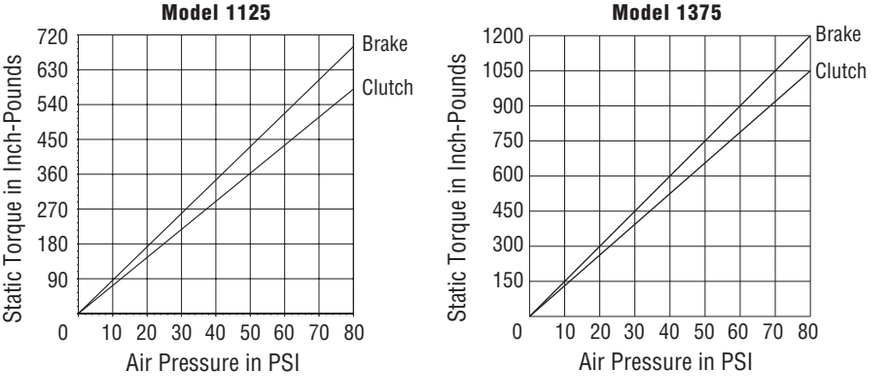
1. Standard Coil - Contact Nexen for other coil options

NEMA Motor/Frame Selection Chart

Use this chart as specification and operational criteria for your application.

HP of Motor	RPM	Frame Number	Motor Shaft (In)	Clutch Brake Model Number
1	900	182TC	1.125	FMCBE I.V.-1125
1-1/2	1200	182TC	1.125	FMCBE I.V.-1125
1-1/2	900	184TC	1.125	FMCBE I.V.-1125
2	1200	184TC	1.125	FMCBE I.V.-1125
2	900	213TC	1.375	FMCBE I.V.-1375
3	1800	182TC	1.125	FMCBE I.V.-1125
3	1200	213TC	1.375	FMCBE I.V.-1375
3	900	215TC	1.375	FMCBE I.V.-1375
5	1800	184TC	1.125	FMCBE I.V.-1125
5	1200	215TC	1.375	FMCBE I.V.-1375
7-1/2	1800	213TC	1.375	FMCBE I.V.-1375
10	1800	215TC	1.375	FMCBE I.V.-1375

Torque Vs. Air Pressure

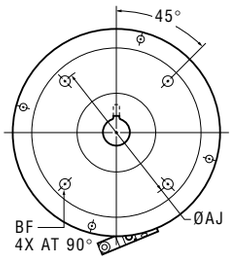


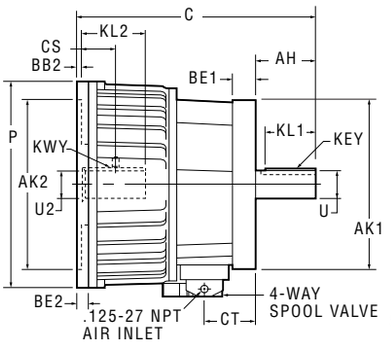
NOTE: Dynamic torque is approximately 85% of static torque.

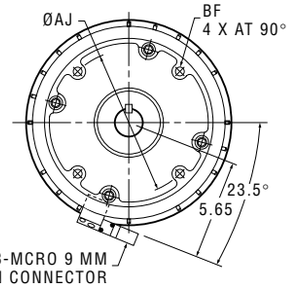
ARTEN Freios e Embreagens - Fone: 11 5594-8333

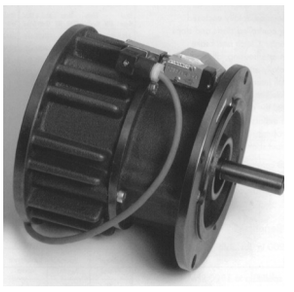
FMCBE INTEGRAL VALVE/LOCKING KEY MODEL CLUTCH-BRAKES - APPROXIMATE DIMENSIONS (INCHES)

Models 1125 & 1375



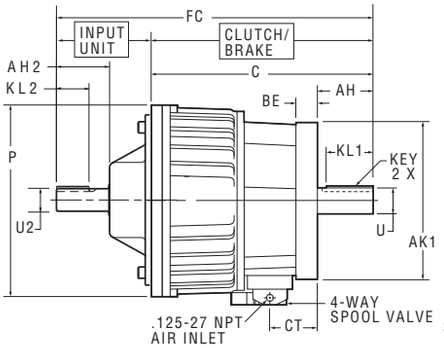


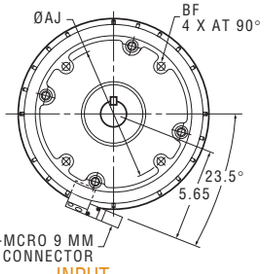




MODEL	PRODUCT NUMBER	AH	AJ	AK1 +.000 -.002	AK2 +.002 -.000	BB2	BE1	BE2	BF	C	CS	CT	KL1	KL2	P	KEY (SQ)	KWY WD	KWY DP	U1 +.000 -.001	U2 +.001 -.000
1125	801709 801715	2.58	7.250	8.499	8.501	0.19	0.54	0.37	.531	10.59	1.75	2.15	1.97	2.90	9.62	0.250	0.250	0.125	1.125	1.125
1375	801711 801716	3.08	7.250	8.499	8.501	0.19	1.12	0.37	.500-13	12.12	1.96	2.58	2.56	3.37	10.38	0.312	0.312	0.156	1.375	1.375

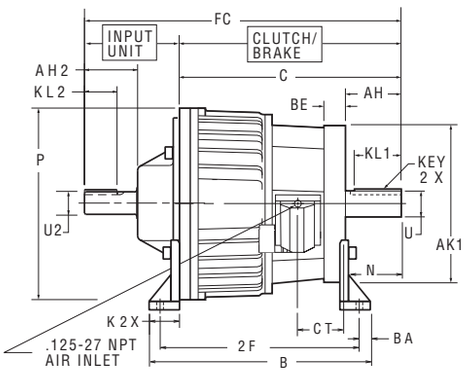
Models 1125 & 1375 with Input

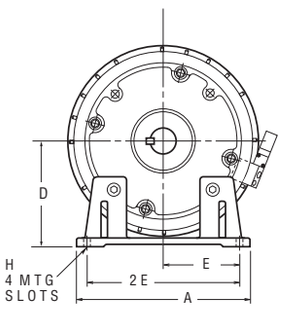




MODEL	PRODUCT NUMBER	AH	AJ	AK1 +.000 -.002	BE	C	CT	KL1	KEY (SQ)	P	U1 +.000 -.001	INPUT NUMBER	U2 +.000 -.001	AH2	FC	KL2
1125	801709	2.58	7.250	8.499	0.54	10.59	2.15	1.97	0.250	9.62	1.125	935000	1.125	2.62	15.22	1.62
1375	801711	3.08	7.250	8.499	1.12	12.12	2.58	2.58	0.312	10.38	1.375	936000	1.375	3.14	17.26	2.25

Models 1125 & 1375 with Input & Foot





MODEL	PRODUCT NUMBER	AK +.000 -.002	C	CT	CV	KL1	KEY (SQ)	P	U +.000 -.001	INPUT NUMBER	AH2	FC	KL2
1125	801709	8.499	10.59	1.24	1.65	2.00	0.250	9.62	1.125	935000	2.62	15.22	1.62
1375	801711	8.499	12.12	1.60	1.91	2.56	0.312	10.38	1.375	936000	3.14	17.26	2.25

MODEL	FOOT NUMBER	A	B	BA	D	E	2E	2F	H	K	N
1125	801603	9.50	11.48	.62	5.25	4.00	8.00	10.23	.56 x 1.00	1.75	2.21
1375	801603	9.50	12.51	.62	5.25	4.00	8.00	11.26	.56 x 1.00	1.75	2.71

ARTEN Freios e Embreagens - Fone: 11 5594-8333

FMCBE CLUTCH-BRAKES – MODELS FMCBE 625 & 875

FMCBE Flange Mounted Clutch-Brakes are designed for controlled starts and stops in hostile, dirty environments. Totally enclosed design prevents contaminants from interfering with operation of the units while keeping worn friction material from escaping into the environment. Choose from **2 Models**:

- **Bore sizes** of 0.625 and 0.875 in.
- Static Torque up to 325 In. Lbs. (brake) and 290 In. Lbs. (clutch)
- Overhung Load Cap. up to 292 Lbs.
- Design Speed up to 1800 rpm. Consult factory for higher speed
- Flange mounts directly to motors and reducers
- Compatible with C-face motors up to 2 HP
- Optional Foot Mount is available for belt drive applications
- Optional Input Unit allows you to incorporate pulleys or couplings into your application
- Single, double acting piston makes overlap impossible

FMCBE Flange Mounted Clutch-Brakes, Totally Enclosed

Standard Clutch-Brake is Flange Mounted. Order Foot Mount set separately for belt drive applications. Order Input Unit to incorporate pulleys into your application.

Model Number	Product Number	Bore (In)	HP_T Up To	Overhung Load Capacity (lbs) 1200 RPM	Overhung Load Capacity (lbs) 1800 RPM	Shipping Wt. (Lbs)
Black Coating:						
FMCBE-625	801440	0.625	0.14	138	92	24
FMCBE-875	801480	0.875	0.18	292	195	40

NOTE: Thermal Capacity (HP_T) and Overhung Load data is based upon 50% clutch and 50% brake usage.

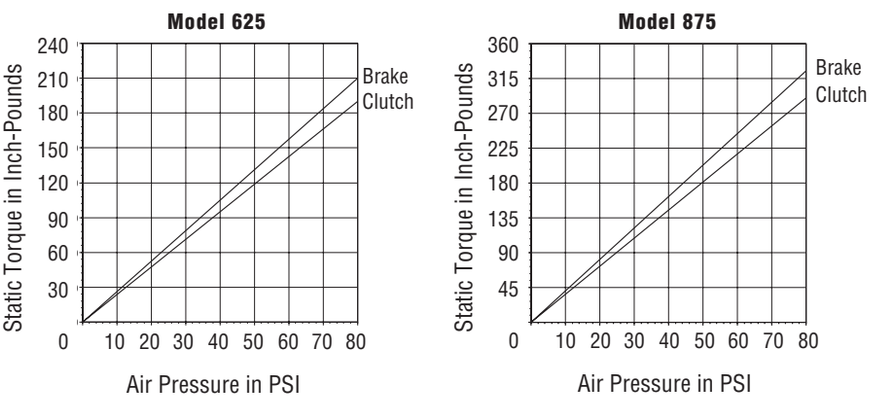
Model Number	Product Number	Foot Mount Set (2 Mounts) Product Number	Shipping Wt. (Lbs)	Input Unit Product Number	Shipping Wt. (Lbs)
Black Coating:					
FMCBE-625	801440	801431	4	929600	7
FMCBE-875	801480	801431	4	928400	7

NEMA Motor/Frame Selection Chart

Use this chart as specification and operational criteria for your application.

HP of Motor	RPM	Frame Number	Motor Shaft (IN)	Clutch Brake Model Number
1/4	1800	56C	0.625	FMCBE-625 Black & BISSC
1/4	1200	56C	0.625	FMCBE-625 Black & BISSC
1/3	1800	56C	0.625	FMCBE-625 Black & BISSC
1/3	1200	56C	0.625	FMCBE-625 Black & BISSC
1/2	1800	56C	0.625	FMCBE-625 Black & BISSC
1/2	1200	56C	0.625	FMCBE-625 Black & BISSC
1/2	900	143TC	0.875	FMCBE-875 Black & BISSC
3/4	1800	56C	0.625	FMCBE-625 Black & BISSC
3/4	1200	143TC	0.875	FMCBE-875 Black & BISSC
3/4	900	145TC	0.875	FMCBE-875 Black & BISSC
1	1800	56TC	0.625	FMCBE-625 Black & BISSC
1	1800	143TC	0.875	FMCBE-875 Black & BISSC
1	1200	145TC	0.875	FMCBE-875 Black & BISSC
1-1/2	1800	145TC	0.875	FMCBE-875 Black & BISSC
2	1800	145TC	0.875	FMCBE-875 Black & BISSC

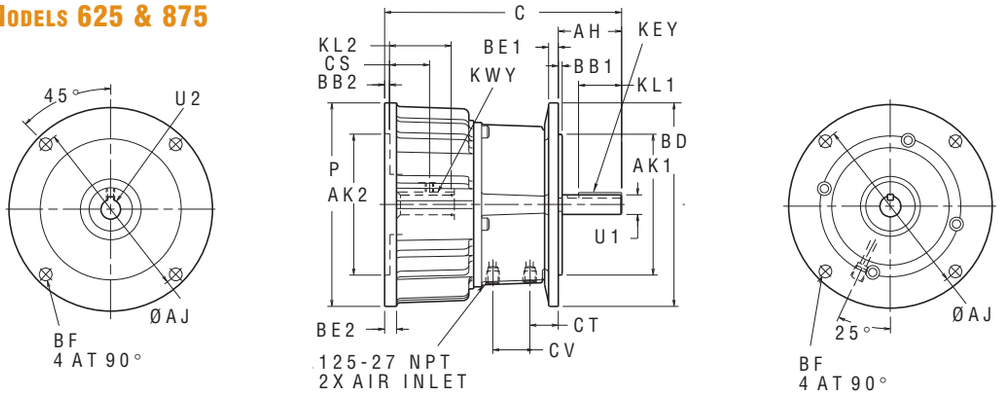
Torque Vs. Air Pressure



NOTE: Dynamic torque is approximately 85% of static torque.

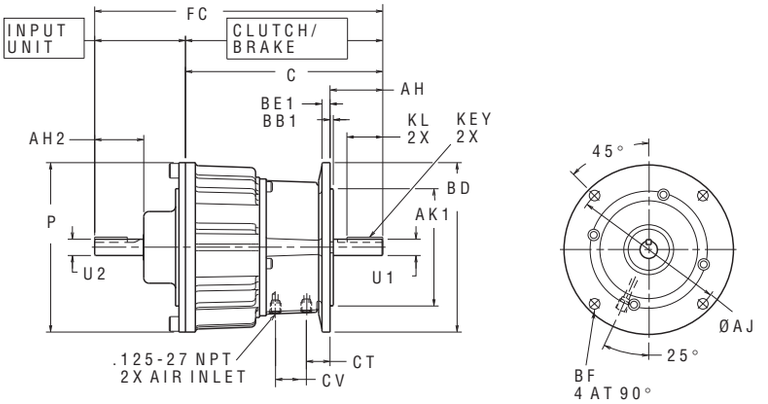
FMCBE MODEL CLUTCH-BRAKES - APPROXIMATE DIMENSIONS (INCHES)

MODELS 625 & 875



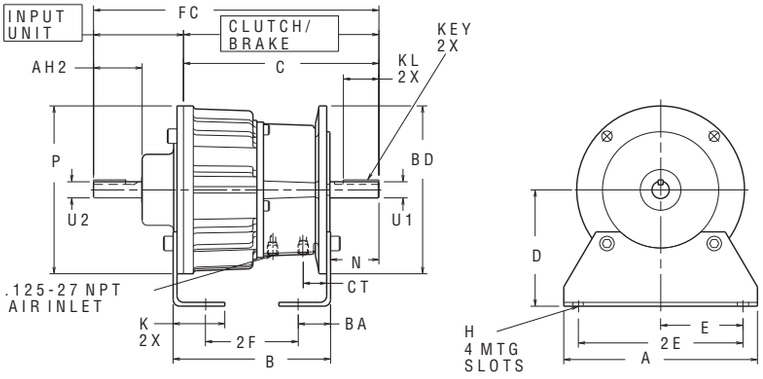
MODEL	PRODUCT NUMBER	AH	AJ	AK1 $^{+.000}_{-.002}$	AK2 $^{+.002}_{-.000}$	BB1	BB2	BD	BE1	BE2	BF	C	CS	CT	CV	KL1	KL2	P	KEY (SQ)	KWY WD	KWY DP	U1 $^{+.000}_{-.001}$	U2 $^{+.001}_{-.000}$
625	801440	2.06	5.875	4.499	4.501	0.12	0.16	6.50	0.31	0.38	.406	7.60	1.28	0.91	1.19	1.38	2.05	6.50	0.188	0.188	0.094	.625	.625
875	801480	2.11	5.875	4.499	4.501	0.12	0.19	7.00	0.39	0.56	.406	8.81	1.28	1.10	1.47	1.38	2.04	7.81	0.188	0.188	0.094	.875	.875

MODELS 625 & 875 WITH INPUT



MODEL	PRODUCT NUMBER	AH	AJ	AK1 $^{+.000}_{-.002}$	BB1	BE1	C	CT	CV	KL	KEY (SQ)	P	U1 $^{+.000}_{-.001}$	INPUT NUMBER	U2 $^{+.000}_{-.001}$	AH2	FC
625	801440	2.06	5.875	4.499	0.12	0.31	7.60	0.91	1.19	1.38	0.188	6.50	.625	929600	.875	1.89	11.09
875	801480	2.11	5.875	4.499	0.12	0.39	8.81	1.10	1.47	1.38	0.188	7.81	.875	928400	.875	1.89	12.30

MODELS 625 & 875 WITH INPUT & FOOT



MODEL	PRODUCT NUMBER	BD	C	CT	CV	KL	KEY (SQ)	P	U1 $^{+.000}_{-.001}$	INPUT NUMBER	U2 $^{+.000}_{-.001}$	AH2	FC
625	801440	6.50	7.60	0.91	1.19	1.38	0.188	6.50	.625	929600	.875	1.89	11.09
875	801480	7.00	8.81	1.10	1.47	1.38	0.188	7.81	.875	928400	.875	1.89	12.30

MODEL	FOOT NUMBER	A	B	BA	D	E	2E	2F	H	K	N
625	801431	7.50	6.10	1.25	4.51	3.19	6.38	3.60	.41 x .88	2.00	1.87
875	801431	7.50	7.25	1.25	4.51	3.19	6.38	4.25	.41 x .88	2.00	1.96

FMCBE CLUTCH-BRAKES WITH LOCKING KEY FEATURE – MODELS FMCBE 625 & 875

FMCBE Flange Mounted Clutch-Brakes are designed for controlled starts and stops in hostile, dirty environments. Totally enclosed design prevents contaminants from interfering with operation of the units while keeping worn friction material from escaping into the environment. Fitted with a locking key system designed to eliminate keyway damage while providing positive connection for maximum torque in blind bore applications. The Locking Key system is an integral part of the Clutch/Brake output shaft. There is no extra installation required. Choose from **4 Models**:

- **Bore sizes** of 0.625 and 0.875 in.
- Both units available in either electroless nickel plating or black oxide coating
- Meets NEMA standard 1.26.5 for waterproof machines
- BISSC (Baking Industry) certified
- Static Torque up to 325 In. Lbs. (brake) and 290 In. Lbs. (clutch)
- Flange mounts directly to motors and reducers
- Compatible with C-face motors up to 2 HP
- Design Speed up to 1800 rpm. Consult factory for higher speed
- Optional Input Unit allows you to incorporate pulleys or couplings into your application

Special BISSC certified unit features:

- Smooth surface design prohibits bacteria buildup
- Single, double acting piston makes overlap impossible
- For additional corrosion protection, contact the factory

LOCKING KEY FEATURE FMCBE

Flange Mounted Clutch-Brakes, Totally Enclosed

Standard Clutch-Brake is Flange Mounted. Order Foot Mount set separately for belt drive applications. Order Input Unit to incorporate pulleys into your application.

Model Number	Product Number	Bore (In)	HP_T Up To	Overhung Load Capacity (lbs) 1200 RPM	Overhung Load Capacity (lbs) 1800 RPM	Shipping Wt. (Lbs)
Black Coating:						
FMCBE-625	801677	0.625	0.14	138	92	24
FMCBE-875	801680	0.875	0.18	292	195	40
Nickel Coating:						
FMCBE-625, BISSC*	827272	0.625	0.14	138	92	24
FMCBE-875, BISSC*	827282	0.875	0.18	292	195	40

NOTE: Thermal Capacity (HP_T) and Overhung Load data is based upon 50% clutch and 50% brake usage.

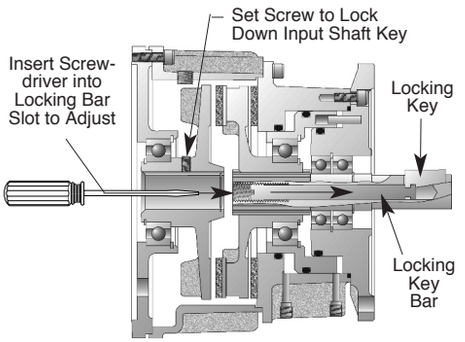
Model Number	Product Number	Foot Mount Set (2 Mounts) Product Number	Shipping Wt. (Lbs)	Input Unit Product Number	Shipping Wt. (Lbs)
Black Coating:					
FMCBE-625	801677	801431	4	929600	7
FMCBE-875	801680	801431	4	928400	7
Nickel Coating:					
FMCBE-625, BISSC*	827272	827251	4	827270	7
FMCBE-875, BISSC*	827282	827261	4	827280	7

*See approximate dimensions, page 233

NEMA Motor/Frame Selection Chart

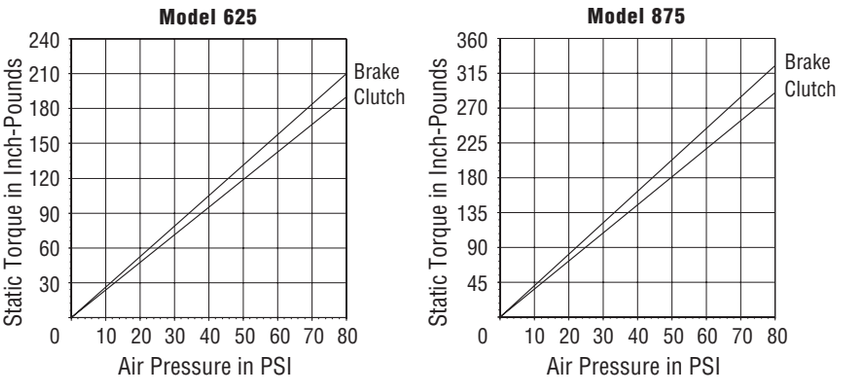
Use this chart as specification and operational criteria for your application.

HP of Motor	RPM	Frame Number	Motor Shaft (IN)	Clutch Brake Model Number
1/4	1800	56C	0.625	FMCBE-625 Black & BISSC
1/4	1200	56C	0.625	FMCBE-625 Black & BISSC
1/3	1800	56C	0.625	FMCBE-625 Black & BISSC
1/3	1200	56C	0.625	FMCBE-625 Black & BISSC
1/2	1800	56C	0.625	FMCBE-625 Black & BISSC
1/2	1200	56C	0.625	FMCBE-625 Black & BISSC
1/2	900	143TC	0.875	FMCBE-875 Black & BISSC
3/4	1800	56C	0.625	FMCBE-625 Black & BISSC
3/4	1200	143TC	0.875	FMCBE-875 Black & BISSC
3/4	900	145TC	0.875	FMCBE-875 Black & BISSC
1	1800	56TC	0.625	FMCBE-625 Black & BISSC
1	1800	143TC	0.875	FMCBE-875 Black & BISSC
1	1200	145TC	0.875	FMCBE-875 Black & BISSC
1-1/2	1800	145TC	0.875	FMCBE-875 Black & BISSC
2	1800	145TC	0.875	FMCBE-875 Black & BISSC



The Locking Key Bar is easily adjusted with a screwdriver. The bar screws into the output shaft, forcing the key tightly and securely into the mating keyway.Tipping of the key is prevented.

Torque Vs. Air Pressure

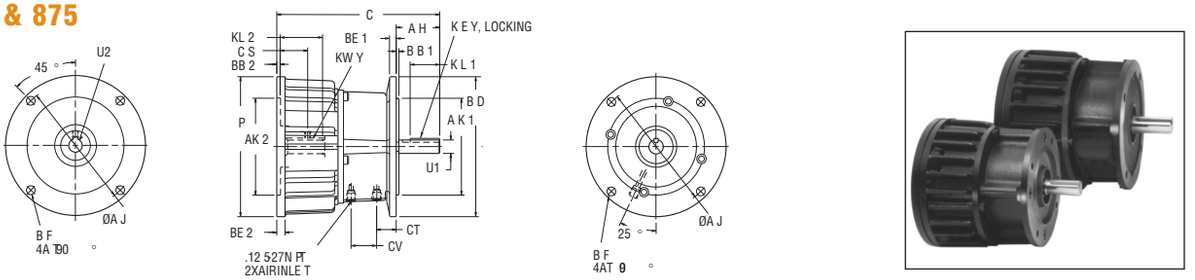


NOTE: Dynamic torque is approximately 85% of static torque.

ARTEN Freios e Embreagens - Fone: 11 5594-8333

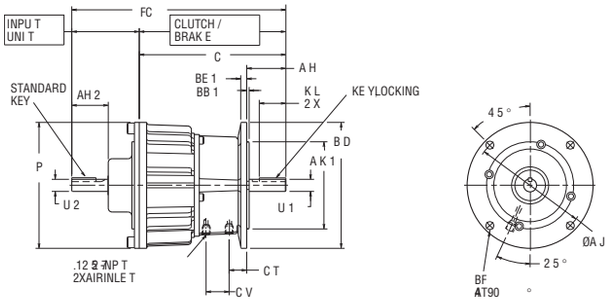
FMCBE MODEL CLUTCH-BRAKES WITH LOCKING KEY- APPROXIMATE DIMENSIONS (INCHES)

Models 625 & 875



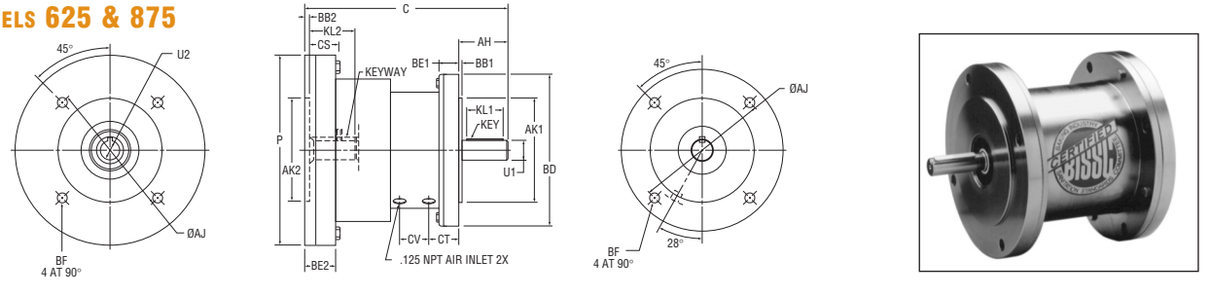
MODEL	PRODUCT NUMBER	AH	AJ	AK1 +.000 -.002	AK2 +.002 -.000	BB1	BB2	BD	BE1	BE2	BF	C	CS	CT	CV	KL1	KL2	P	KEY (SQ)	KWY WD	KWY DP	U1 +.000 -.001	U2 +.001 -.000
625	801677	2.06	5.875	4.499	4.501	0.12	0.16	6.50	0.31	0.38	.406	7.60	1.28	0.91	1.19	1.38	2.05	6.50	0.188	0.188	0.094	.625	.625
875	801680	2.11	5.875	4.499	4.501	0.12	0.19	7.00	0.39	0.56	.406	8.81	1.28	1.10	1.47	1.38	2.04	7.81	0.188	0.188	0.094	.875	.875

Models 625 & 875 with Input



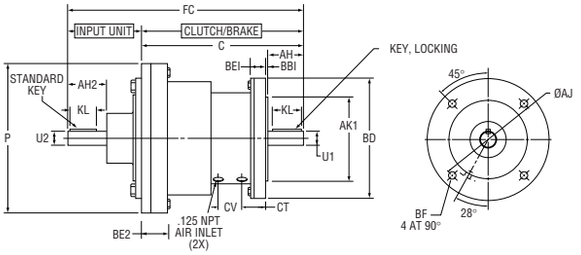
MODEL	PRODUCT NUMBER	AH	AJ	AK1 +.000 -.002	BB1	BE1	C	CT	CV	KL	KEY (SQ)	P	U1 +.000 -.001	INPUT NUMBER	U2 +.000 -.001	AH2	FC
625	801677	2.06	5.875	4.499	0.12	0.31	7.60	0.91	1.19	1.38	0.188	6.50	.625	929600	.875	1.89	11.09
875	801680	2.11	5.875	4.499	0.12	0.39	8.81	1.10	1.47	1.38	0.188	7.81	.875	928400	.875	1.89	12.30

BISSC Models 625 & 875



MODEL	PRODUCT NUMBER	AH	AJ	AK1 +.000 -.002	AK2 +.002 -.000	BB1	BB2	BD	BE1	BE2	BF	C	CS	CT	CV	KL1	KL2	P	KEY (SQ)	KWY WD	KWY DP	U1 +.000 -.001	U2 +.001 -.000
625	827272	2.06	5.875	4.499	4.501	0.12	0.16	6.50	0.83	1.12	.406	7.61	1.28	0.91	1.19	1.50	1.74	6.50	0.19	0.188	.093	.625	.625
875	827282	2.12	5.875	4.499	4.501	0.12	0.19	6.60	0.85	1.34	.406	8.82	1.28	1.10	1.47	1.50	2.02	8.20	0.19	0.188	.093	.875	.875

BISSC Models 625 & 875 with Input



MODEL	PRODUCT NUMBER	AH	AJ	AK1 +.000 -.002	BB1	BD	BE1	BE2	C	CT	CV	FC	KL	KEY (SQ)	P	U1 +.000 -.001	INPUT NUMBER	U2 +.000 -.001	AH2
625	827272	2.06	5.875	4.499	.125	6.50	0.83	1.12	7.61	0.91	1.19	11.62	1.50	0.188	6.50	.625	827270	.625	1.89
875	827282	2.11	5.875	4.499	.125	6.50	0.85	1.34	8.82	1.30	1.27	12.84	1.50	0.188	7.81	.875	827280	.875	1.89

FMCB & FMCBE CLUTCH-BRAKES – MODELS 1125,1375 & 1625

FMCBE Flange Mounted Clutch-Brakes are designed for controlled starts and stops in hostile, dirty environments. Models 1125 and 1375 enclosed design prevents contaminants from interfering with operation of the units while keeping worn friction material from escaping into the environment. Model 1625 has an open housing. Choose from **3 Models**:

- **Bore sizes** of 1.125, 1.375 and 1.625 inches
- Units available in either electroless nickel plating or black oxide coating
- Meets NEMA standard 1.26.5 for waterproof machines
- Static Torque up to 2400 In. Lbs. (brake) and 2000 In. Lbs. (clutch)
- Overhung Load Capacity up to 600 lbs.
- Design Speed up to 1800 rpm. Consult factory for higher speed
- Flange mounts directly to motors and reducers
- Compatible with C-face motors up to 20 HP
- Optional Foot Mount is available for belt drive applications
- Optional Input Unit allows you to incorporate pulleys or couplings into your application
- Single, double acting piston makes overlap impossible
- For additional corrosion protection, contact the factory

FMCB & FMCBE (Totally Enclosed) Flange Mounted Clutch-Brakes

Standard Clutch-Brake is Flange Mounted. Order Foot Mount set separately for belt drive applications. Order Input Unit to incorporate pulleys into your application.

Model Number	Product Number	Bore (In)	HP_T Up To	Overhung Load Capacity (lbs) 1200 RPM	Overhung Load Capacity (lbs) 1800 RPM	Shipping Wt. Wt (Lbs)
Black Coating:						
FMCBE-1125	801600	1.125	0.33	360	240	68
FMCBE-1375	801622	1.375	0.44	525	350	89
FMCB-1625	801731	1.625	1.19	660	600	143
FMCBE-1625	801910	1.625	0.44	660	600	274
Nickel Coating:						
FMCBE-1125	801631	1.125	0.33	360	240	68
FMCBE-1375	801655	1.375	0.44	525	350	89
FMCBE-1625	801917	1.625	0.44	660	600	274

NOTE: Thermal Capacity (HP_T) and Overhung Load data is based upon 50% clutch and 50% brake usage.

Model Number	Product Number	Foot Mount Set (2 Mounts) Product Number	Shipping Wt. (Lbs)	Input Unit Product Number	Shipping Wt. (Lbs)
Black Coating:					
FMCBE-1125	801600	801603	6	935000	12
FMCBE-1375	801622	801603	6	936000	13
FMCB-1625	801731	801734	12	936001	14
Nickel Coating:					
FMCBE-1125	801631	801606	6	935041	12
FMCBE-1375	801655	801606	6	936041	13

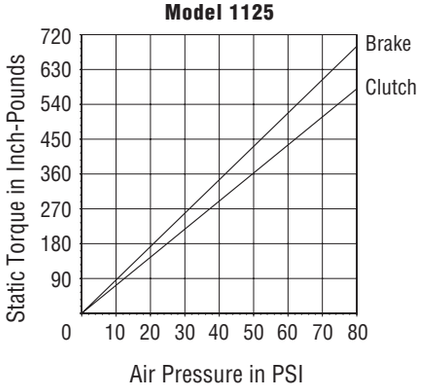
NEMA Motor/Frame Selection Chart

Use this chart as specification and operational criteria for your application.

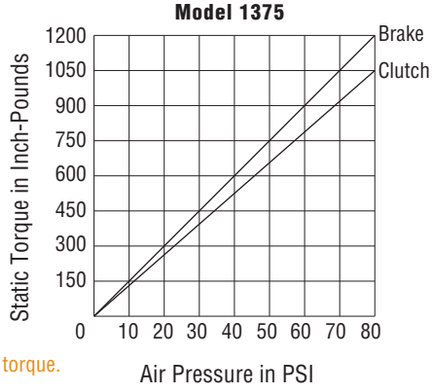
HP of Motor	RPM	Frame Number	Motor Shaft (In)	Clutch Brake Model Number
1	900	182TC	1.125	FMCBE-1125 Black & Nickel
1-1/2	1200	182TC	1.125	FMCBE-1125 Black & Nickel
1-1/2	900	184TC	1.125	FMCBE-1125 Black & Nickel
2	1200	184TC	1.125	FMCBE-1125 Black & Nickel
2	900	213TC	1.375	FMCBE-1375 Black & Nickel
3	1800	182TC	1.125	FMCBE-1125 Black & Nickel
3	1200	213TC	1.375	FMCBE-1375 Black & Nickel
3	900	215TC	1.375	FMCBE-1375 Black & Nickel
5	1800	184TC	1.125	FMCBE-1125 Black & Nickel
5	1200	215TC	1.375	FMCBE-1375 Black & Nickel
7-1/2	1800	213TC	1.375	FMCBE-1375 Black & Nickel
10	1800	215TC	1.375	FMCBE-1375 Black & Nickel
10	1200	2256TC	1.625	FMCB-1625 Black
15	1800	254TC	1.625	FMCB-1625 Black
15	1200	256TC	1.625	FMCB-1625 Black
20	1800	254TC	1.625	FMCB-1625 Black

Torque Vs. Air Pressure

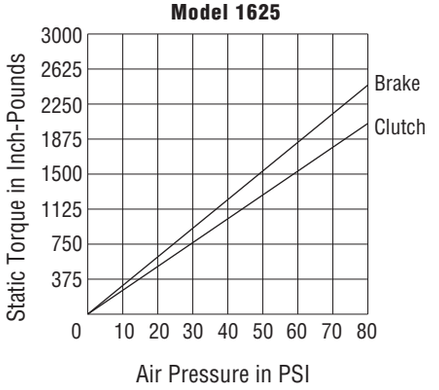
Model 1125



Model 1375



Model 1625



NOTE: Dynamic torque is approximately 85% of static torque.

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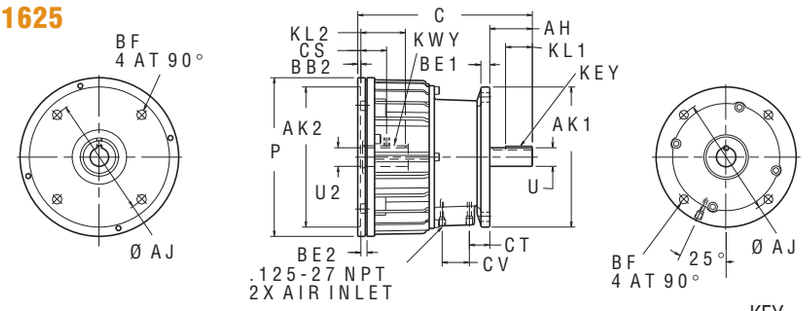
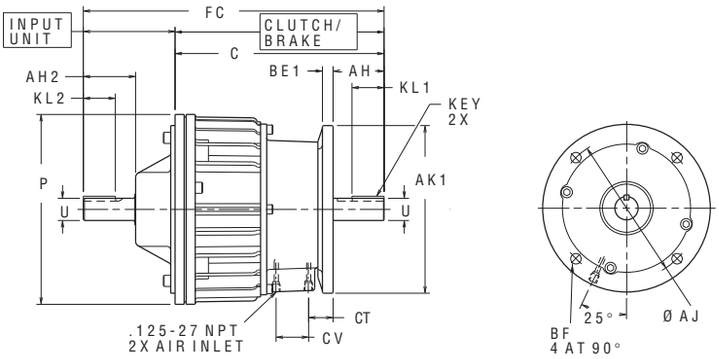
FMCBE & FMCB MODEL CLUTCH-BRAKES - APPROXIMATE DIMENSIONS (INCHES)

Models 1125,1375 & 1625



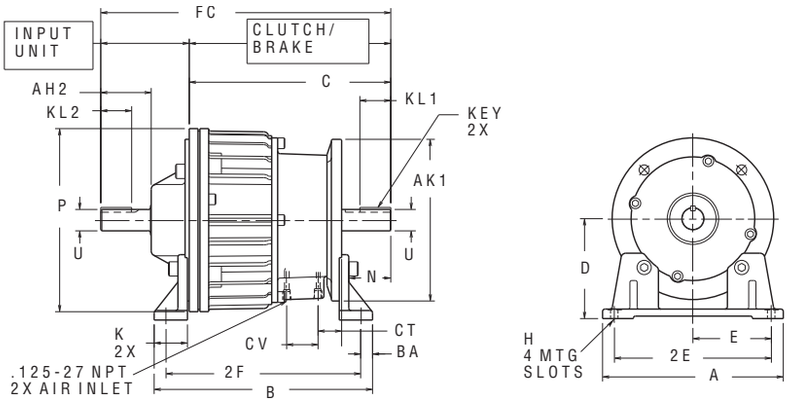
MODEL	PRODUCT NUMBER	AH	AJ	AK1 +.000 -.002	AK2 +.002 -.000	BB2	BE1	BE2	BF	C	CS	CT	CV	KL1	KL2	P	KEY (SQ)	KWY WD	KWY DP	U1 +.000 -.001	U2 +.001 -.000
1125	801600	2.58	7.250	8.499	8.501	0.19	0.54	0.37	.531	10.59	1.56	1.24	1.65	2.00	2.70	9.62	0.250	0.250	0.125	1.125	1.125
1375	801622	3.08	7.250	8.499	8.501	0.19	1.12	0.37	.500-13	12.12	1.77	1.60	1.91	2.56	3.18	10.38	0.312	0.312	0.156	1.375	1.375
1625	801731	3.75	7.250	8.499	8.501	0.30	1.35	0.31	.500-13	13.52	–	1.82	1.91	2.63	4.04	10.00	0.375	0.375	0.157	1.625	1.625
1625	801910	3.75	7.250	8.499	8.501	0.30	1.35	0.31	.500-13	13.52	–	1.82	1.91	2.63	4.04	10.00	0.375	0.375	0.157	1.625	1.625

Models 1125, 1375 & 1625 with Input



MODEL	PRODUCT NUMBER	AH	AJ	AK1 +.000 -.002	BE	C	CT	CV	KL1	KEY (SQ)	P	U1 +.000 -.001	INPUT NUMBER	U2 +.000 -.001	AH2	FC	KL2
1125	801600	2.58	7.250	8.499	0.54	10.59	1.24	1.65	2.00	0.250	9.62	1.125	935000	1.125	2.62	15.22	1.62
1375	801622	3.08	7.250	8.499	1.12	12.12	1.60	1.91	2.56	0.312	10.38	1.375	936000	1.375	3.14	17.26	2.25
1625	801731	3.75	7.250	8.499	1.35	13.52	1.82	1.91	2.63	0.375	10.00	1.625	936001	1.625	3.75	19.76	2.63

Models 1125, 1375 & 1625 with Input & Foot



MODEL	PRODUCT NUMBER	AK +.000 -.002	C	CT	CV	KL1	KEY (SQ)	P	U +.000 -.001	INPUT NUMBER	AH2	FC	KL2
1125	801600	8.499	10.59	1.24	1.65	2.00	0.250	9.62	1.125	935000	2.62	15.22	1.62
1375	801622	8.499	12.12	1.60	1.91	2.56	0.312	10.38	1.375	936000	3.14	17.26	2.25
1625	801910	8.499	13.52	1.82	1.91	2.63	0.375	10.00	1.625	936001	3.75	19.71	2.63

MODEL	FOOT NUMBER	A	B	BA	D	E	2E	2F	H	K	N
1125	801603	9.50	11.48	.63	5.25	4.00	8.00	10.23	.56 x 1.00	1.75	2.21
1375	801603	9.50	12.51	.63	5.25	4.00	8.00	11.26	.56 x 1.00	1.75	2.71
1625	801910	9.50	13.39	.63	5.25	4.00	8.00	12.15	.56 x 1.00	1.75	3.38

FMCBES CLUTCH-BRAKES – MODELS 625 & 875

FMCBES Flange Mounted Clutch-Brakes come with a spring engaged brake and air engaged clutch. For applications where safety is a concern, this unit will engage the brake in the event of air pressure loss. Choose from **2 Models**:

- **Bore sizes** of 0.625 and .875 inches
- All units available in either electroless nickel plating or black oxide coating
- Meets NEMA standard 1.26.5 for waterproof machines
- Static Torque up to 142 In. Lbs. (brake) and 232 In. Lbs. (clutch)
- Overhung Load Capacity up to 292 pounds
- Design Speed up to 1800 rpm. Consult factory for higher speed
- Flange mounts directly to motors and reducers
- Compatible with C-face motors up to 1.5 HP
- Optional Foot Mount is available for belt drive applications
- Optional Input Unit allows you to incorporate pulleys or coupling into your application
- Single, double acting piston makes overlap impossible
- For additional corrosion protection, contact the factory

FMCBES Clutch-Brakes/Spring Engaged Brake

Standard Clutch-Brake is Flange Mounted. Order Foot Mount set separately for belt drive applications. Order Input Unit to incorporate pulleys into your application.

Model Number	Product Number	Bore (In)	HP_T Up To	Overhung Load Capacity (lbs) 1200 RPM	Overhung Load Capacity (lbs) 1800 RPM	Shipping Wt. Wt (Lbs)
Black Coating:						
FMCBES-625	801623	0.625	0.14	138	92	24
FMCBES-875	801624	0.875	0.18	292	195	40
Nickel Coating:						
FMCBES-625	801656	0.625	0.14	138	92	24
FMCBES-875	801657	0.875	0.18	292	195	40

NOTE: Thermal Capacity (HP_T) and Overhung Load data is based upon 50% clutch and 50% brake usage.

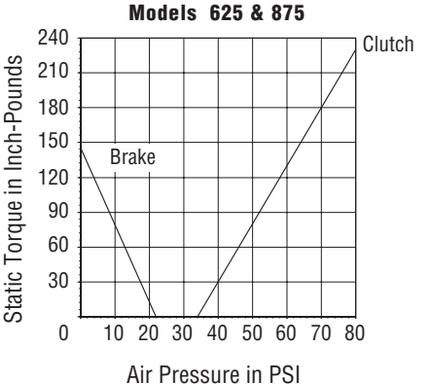
Model Number	Product Number	Foot Mount Set (2 Mounts) Product Number	Shipping Wt. (Lbs)	Input Unit Product Number	Shipping Wt. Wt (Lbs)
Black Coating:					
FMCBES-625	801623	801431	4	929600	7
FMCBES-875	801624	801431	4	928400	7
Nickel Coating:					
FMCBES-625	801656	827251	4	827270	7
FMCBES-875	801657	827261	4	827280	7

NEMA Motor/Frame Selection Chart

Use this chart as specification and operational criteria for your application.

HP of Motor	RPM	Frame Number	Motor Shaft (In)	Clutch-Brake Model Number
1/4	1800	56C	0.625	FMCBES-625
1/4	1200	56C	0.625	FMCBES-625
1/3	1800	56C	0.625	FMCBES-625
1/3	1200	56C	0.625	FMCBES-625
1/2	1800	56C	0.625	FMCBES-625
1/2	1200	56C	0.625	FMCBES-625
1/2	900	143TC	0.875	FMCBES-875
3/4	1800	56C	0.625	FMCBES-625
3/4	1200	143TC	0.875	FMCBES-875
3/4	900	145TC	0.875	FMCBES-875
1	1800	56TC	0.625	FMCBES-625
1	1800	143TC	0.875	FMCBES-875
1	1200	145TC	0.875	FMCBES-875
1-1/2	1800	145TC	0.875	FMCBES-875
2	1800	145TC	0.875	FMCBES-875

Torque Vs. Air Pressure



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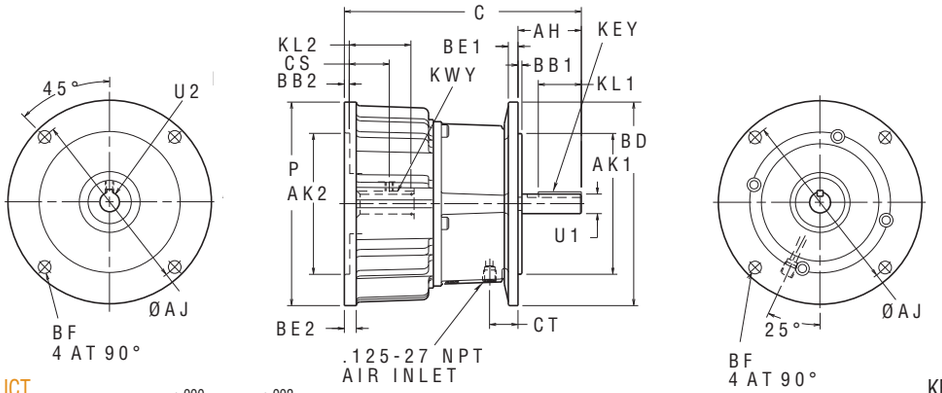
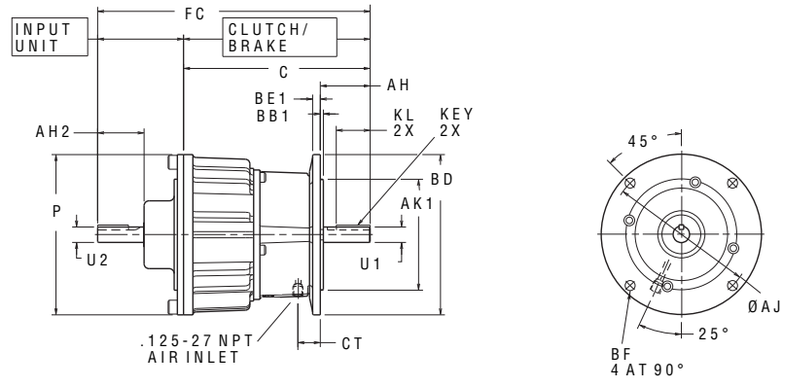
FMCBES MODEL CLUTCH-BRAKES/SPRING ENGAGED BRAKE - APPROXIMATE DIMENSIONS (INCHES)

Models 625 & 875



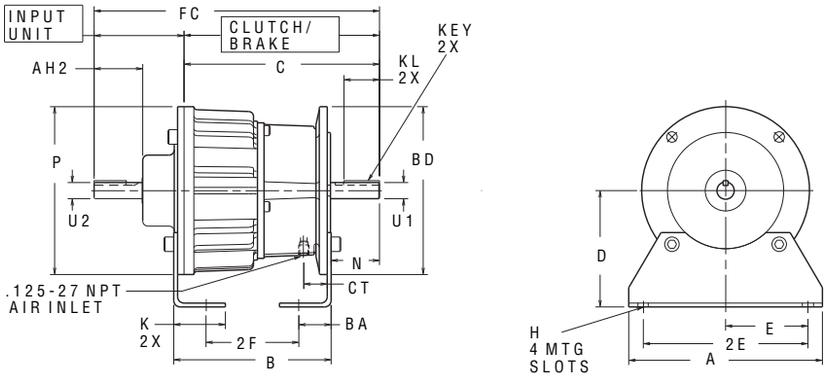
MODEL	PRODUCT NUMBER	AH	AJ	AK1 +.000 -.002	AK2 +.002 -.000	BB1	BB2	BD	BE1	BE2	BF	C	CS	CT	KL1	KL2	P	KEY (SQ)	KWY WD	KWY DP	U1 +.000 -.001	U2 +.001 -.000
625	801623	2.06	5.88	4.499	4.501	0.14	0.19	7.00	0.38	0.56	.406	8.74	1.28	1.08	1.38	2.05	7.81	0.188	0.188	0.094	.625	.625
875	801624	2.12	5.88	4.499	4.501	0.14	0.19	7.00	0.38	0.56	.406	8.81	1.28	1.08	1.38	2.05	7.81	0.188	0.188	0.094	.875	.875

Models 625 & 875 with Input



MODEL	PRODUCT NUMBER	AH	AJ	AK1 +.000 -.002	BB1	BE1	C	CT	KL	KEY (SQ)	P	U1 +.000 -.001	INPUT NUMBER	U2 +.000 -.001	AH2	FC
625	801623	2.06	5.875	4.499	0.14	0.38	8.74	1.08	1.38	0.188	7.81	.625	929600	.875	1.883	12.227
875	801624	2.12	5.875	4.499	0.14	0.38	8.81	1.08	1.38	0.188	7.81	.875	928400	.875	1.893	12.300

Models 625 & 875 with Input & Foot



MODEL	PRODUCT NUMBER	BD	C	CT	KL	KEY (SQ)	P	U1 +.000 -.001	INPUT NUMBER	U2 +.000 -.001	AH2	FC
625	801623	7.00	8.74	1.08	1.38	0.188	7.81	.625	929600	.875	1.88	12.23
875	801524	7.00	8.81	1.08	1.38	0.188	7.81	.875	928400	.875	1.89	12.30

MODEL	FOOT NUMBER	A	B	BA	D	E	2E	2F	H	K	N
625	801431	7.50	7.25	1.25	4.51	3.19	6.38	4.74	.41 x .88	2.00	1.90
875	801431	7.50	7.25	1.25	4.51	3.19	6.38	4.74	.41 x .88	2.00	1.96

FMCBES CLUTCH-BRAKES – MODELS 1125 & 1375

FMCBES Flange Mounted Clutch-Brakes come with a spring engaged brake and air engaged clutch. For applications where safety is a concern, this unit will engage the brake in the event of air pressure loss. Choose from **2 Models**:

- **Bore sizes** of 1.125 and 1.375 inches
- All units available in either electroless nickel plating or black oxide coating
- Meets NEMA standard 1.26.5 for waterproof machines
- Static Torque up to 495 In. Lbs. (brake) and 680 In. Lbs. (clutch)
- Overhung Load Capacity up to 525 pounds
- Design Speed up to 1800 rpm. Consult factory for higher speed
- Flange mounts directly to motors and reducers
- Compatible with C-face motors up to 10 HP
- Optional Foot Mount is available for belt drive applications
- Optional Input Unit allows you to incorporate pulleys or coupling into your application
- Single, double acting piston makes overlap impossible
- For additional corrosion protection, contact the factory

FMCBES Clutch-Brakes/Spring Engaged Brake

Standard Clutch-Brake is Flange Mounted. Order Foot Mount set separately for belt drive applications. Order Input Unit to incorporate pulleys into your application.

Model Number	Product Number	Bore (In)	HP_T Up To	Overhung Load Capacity (lbs) 1200 RPM	Overhung Load Capacity (lbs) 1800 RPM	Shipping Wt. (Lbs)
Black Coating:						
FMCBES-1125	801625	1.125	0.33	360	240	68
FMCBES-1375	801626	1.375	0.44	525	350	89
Nickel Coating:						
FMCBES-1125	801658	1.125	0.33	360	240	68
FMCBES-1375	801659	1.375	0.44	525	350	89

NOTE: Thermal Capacity (HP_T) and Overhung Load data is based upon 50% clutch and 50% brake usage.

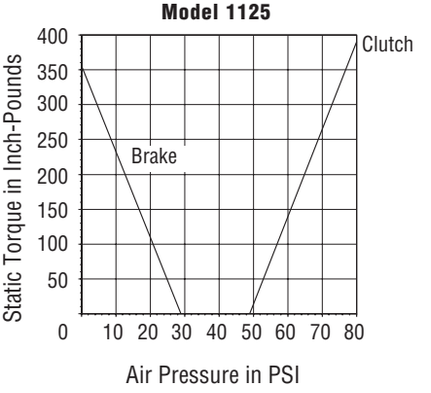
Model Number	Product Number	Foot Mount Set (2 Mounts) Product Number	Shipping Wt. (Lbs)	Input Unit Product Number	Shipping Wt. (Lbs)
Black Coating:					
FMCBES-1125	801625	801603	6	935000	12
FMCBES-1375	801626	801603	6	936000	13
Nickel Coating:					
FMCBES-1125	801658	801606	6	935041	12
FMCBES-1375	801659	801606	6	936041	13

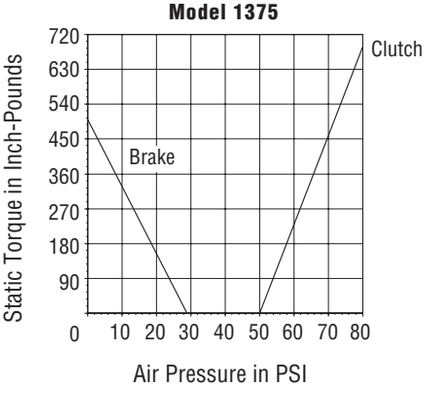
NEMA Motor/Frame Selection Chart

Use this chart as specification and operational criteria for your application.

HP of Motor	RPM	Frame Number	Motor Shaft (IN)	Clutch-Brake Model Number
1	900	182TC	1.125	FMCBES-1125
1-1/2	1200	182TC	1.125	FMCBES-1125
1-1/2	900	184TC	1.125	FMCBES-1125
2	1200	184TC	1.125	FMCBES-1125
2	900	213TC	1.375	FMCBES-1375
3	1800	182TC	1.125	FMCBES-1125
3	1200	213TC	1.375	FMCBES-1375
3	900	215TC	1.375	FMCBES-1375
5	1800	184TC	1.125	FMCBES-1125
5	1200	215TC	1.375	FMCBES-1375
7-1/2	1800	213TC	1.375	FMCBES-1375
10	1800	215TC	1.375	FMCBES-1375

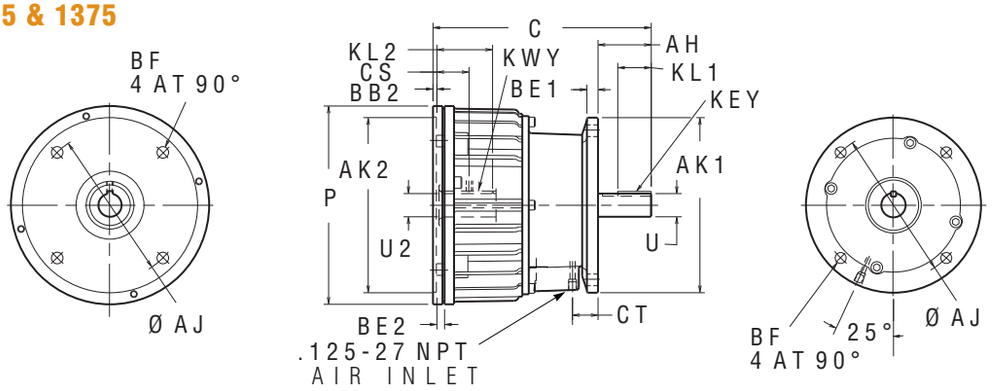
Torque Vs. Air Pressure





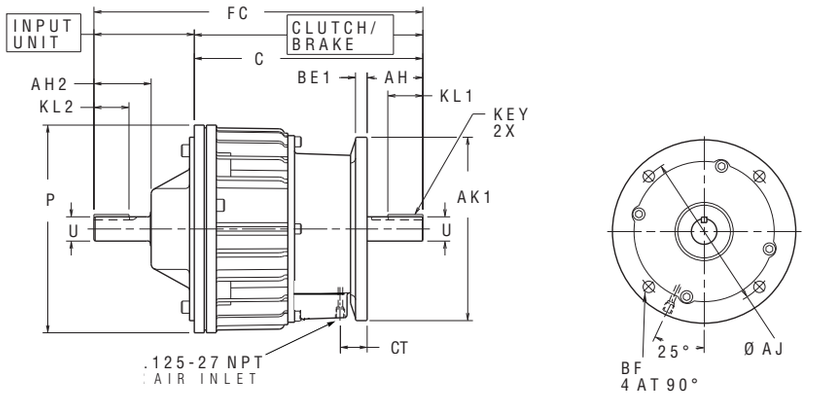
FMCBES MODEL CLUTCH-BRAKES/SPRING ENGAGED BRAKE - APPROXIMATE DIMENSIONS (INCHES)

Models 1125 & 1375



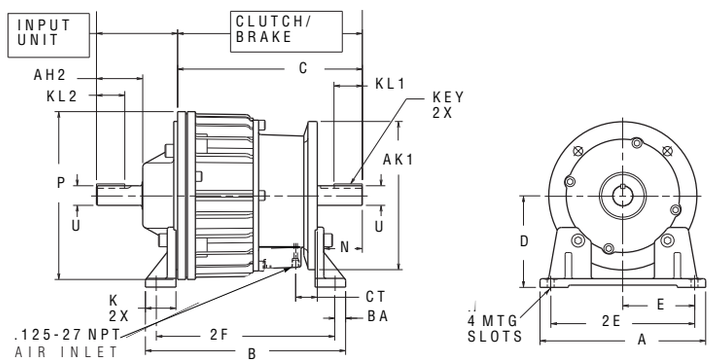
MODEL	PRODUCT NUMBER	AH	AJ	AK1 $^{+.000}_{-.002}$	AK2 $^{+.002}_{-.000}$	BB2	BE1	BE2	BF	C	CS	CT	KL1	KL2	P	KEY (SQ)	KWY WD	KWY DP	U1 $^{+.000}_{-.001}$	U2 $^{+.001}_{-.000}$
1125	801625	2.58	7.250	8.499	8.501	0.19	0.54	0.37	.531	10.59	1.56	1.24	2.00	2.70	9.62	0.250	0.250	0.125	1.125	1.125
1375	801626	3.08	7.250	8.499	8.501	0.19	1.12	0.37	.500-13	12.12	1.77	1.60	2.41	3.18	10.38	0.312	0.312	0.156	1.375	1.375

Models 1125 & 1375 with Input



MODEL	PRODUCT NUMBER	AH	AJ	AK1 $^{+.000}_{-.002}$	BE1	BF	C	CT	KL1	KEY (SQ)	P	U $^{+.000}_{-.001}$	INPUT NUMBER	AH2	FC	KL2
1125	801625	2.58	7.250	8.499	0.54	.531	10.59	1.24	2.00	0.250	9.62	1.125	935000	2.62	15.22	1.62
1375	801626	3.08	7.250	8.499	1.12	.500-13	12.12	1.60	2.56	0.312	10.38	1.375	936000	3.14	17.26	2.25

Models 1125 & 1375 with Input & Foot



MODEL	PRODUCT NUMBER	AK $^{+.000}_{-.002}$	C	CT	KL1	KEY (SQ)	P	U $^{+.000}_{-.001}$	INPUT NUMBER	AH2	FC	KL2
1125	801625	8.499	10.59	1.24	2.00	0.250	9.62	1.125	935000	2.62	15.22	1.62
1375	801626	8.499	12.12	1.60	2.56	0.312	10.38	1.375	936000	3.14	17.26	2.25

MODEL	FOOT NUMBER	A	B	BA	D	E	2E	2F	H	K	N
1125	801603	9.50	11.48	0.62	5.250	4.12	8.06	10.23	.56 x 1.00	1.75	2.21
1375	801603	9.50	12.51	0.62	5.250	4.12	8.06	11.26	.56 x 1.00	1.75	2.71

FMCE CLUTCHES

FMCE Flange Mounted Clutches are excellent in hostile, dirty environments where only a clutch is required. The totally enclosed design functions perfectly in areas where dirt, dust, moisture or other contaminants interfere. Choose from **4 Models**:

- Static Torque up to 1050 In. Lbs.
- Thermal Horsepower rating up to 0.18 @ 1800 rpm
- **Bore sizes** of 0.625 to 1.375 inches
- Available in black oxide coating
- Overhung Load Capacity up to 525 pounds
- Design Speed up to 1800 rpm. Consult factory for higher speed
- Mounts either vertically or horizontally
- Operates on static air pressure, requiring no expensive control system
- Optional Foot Mount is available for offset drive applications
- Optional Input Unit allows you to incorporate pulleys or coupling into your application

FMCE Clutch, Totally Enclosed

Standard Clutch-Brake is Flange Mounted. Order Foot Mount set separately for offest drive applications. Order Input Unit to incorporate pulleys into your application.

Model Number	Product Number	Bore (In)	HP_T Up To	Overhung Load Capacity (lbs) 1200 RPM	Overhung Load Capacity (lbs) 1800 RPM	Shipping Wt. (Lbs)
FMCE-625	801489	0.625	0.14	138	92	24
FMCE-875	801493	0.875	0.18	292	195	40
FMCE-1125	964409	1.125	0.33	360	240	68
FMCE-1375	964410	1.375	0.44	525	350	89

Model Number	Product Number	Foot Mount Set (2 Mounts) Product Number	Shipping Wt. (Lbs)	Input Unit Product Number	Shipping Wt. (Lbs)
FMCE-625,	801489	801431	4	929600	7
FMCE-875	801493	801431	4	928400	7
FMCE-1125	964409	801603	6	935000	12
FMCE-1375	964410	801603	6	936000	13

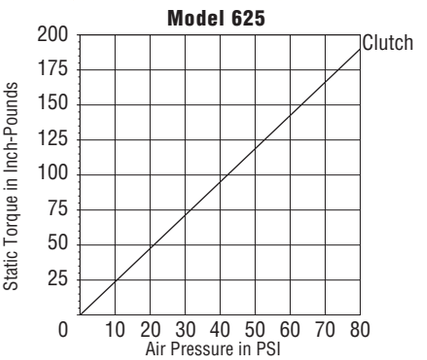
NEMA Motor/Frame Selection Chart

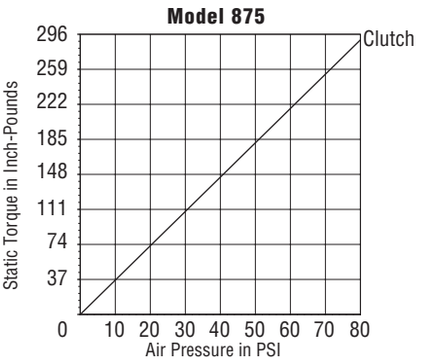
Use this chart as specification and operational criteria for your application.

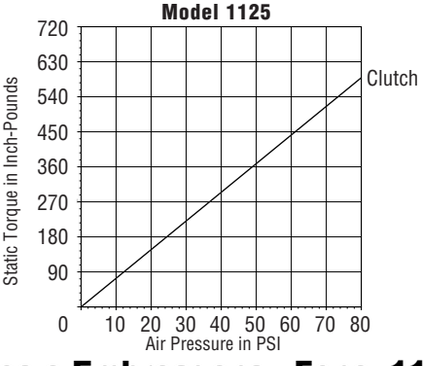
HP of Motor	RPM	Frame Number	Motor Shaft (IN)	Clutch-Brake Model Number
1/4	1800	56C	0.625	FMCE-625
1/4	1200	56C	0.625	FMCE-625
1/3	1800	56C	0.625	FMCE-625
1/3	1200	56C	0.625	FMCE-625
1/2	1800	56C	0.625	FMCE-625
1/2	1200	56C	0.625	FMCE-625
1/2	900	143TC	0.875	FMCE-875
3/4	1800	56C	0.625	FMCE-625
3/4	1200	143TC	0.875	FMCE-875
3/4	900	145TC	0.875	FMCE-875
1	1800	56TC	0.625	FMCE-625
1	1800	143TC	0.875	FMCE-875
1	1200	145TC	0.875	FMCE-875
1	900	182TC	1.125	FMCE-1125

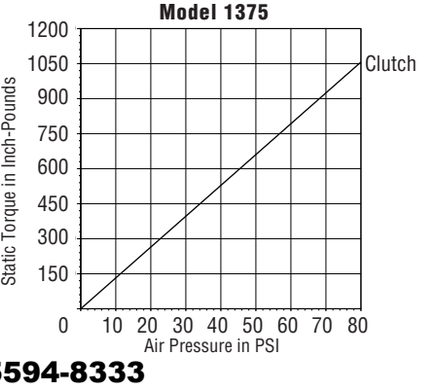
HP of Motor	RPM	Frame Number	Motor Shaft (IN)	Clutch-Brake Model Number
1-1/2	1800	145TC	0.875	FMCE-875
1-1/2	1200	182TC	1.125	FMCE-1125
1-1/2	900	184TC	1.125	FMCE-1125
2	1800	145TC	0.875	FMCE-875
2	1200	184TC	1.125	FMCE-1125
2	900	213TC	1.375	FMCE-1375
3	1800	182TC	1.125	FMCE-1125
3	1200	213TC	1.375	FMCE-1375
3	900	215TC	1.375	FMCE-1375
5	1200	215TC	1.375	FMCE-1375
5	1800	184TC	1.125	FMCE-1125
7-1/2	1800	213TC	1.375	FMCE-1375
10	1800	215TC	1.375	FMCE-1375

Torque Vs. Air Pressure









NOTE: Dynamic torque is approximately 85% of static torque.

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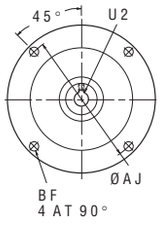
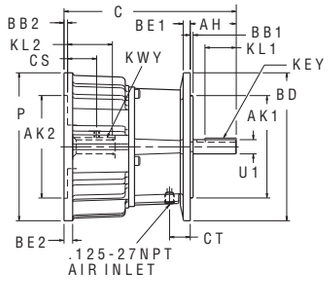
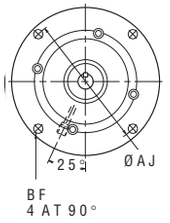
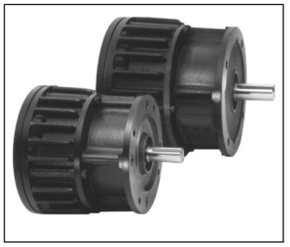
FMCE MODEL CLUTCH - APPROXIMATE DIMENSIONS (INCHES)

Models 625, 875, 1125 & 1375



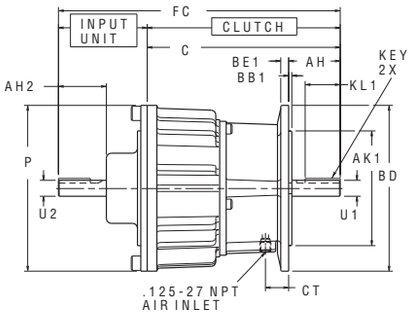


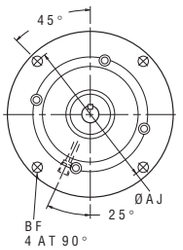




MODEL	PRODUCT NUMBER	AH	AJ	AK1 +.000 -.002	AK2 +.002 -.000	BB1	BB2	BD	BE1	BE2	BF	C	CS	CT	KL1	KL2	P	KEY (SQ)	KWY WD	KWY DP	U1 +.000 -.001	U2 +.001 -.000
625	801489	2.06	5.88	4.499	4.501	0.12	0.16	6.50	0.31	0.56	.406	7.61	1.28	0.91	1.38	1.97	6.50	.188	.188	.094	.625	.625
875	801493	2.11	5.88	4.499	4.501	0.12	0.19	7.00	0.39	0.56	.406	7.97	1.28	1.10	1.38	2.04	7.81	.188	.188	.094	.875	.875
1125	964409	2.58	7.25	8.498	8.501	–	0.19	8.498	0.54	0.37	.562	10.59	1.75	1.30	2.00	2.90	9.63	.250	.250	.125	1.125	1.125
1375	964410	3.08	7.25	8.498	8.501	–	0.19	8.498	1.12	0.37	.531	12.12	1.96	1.60	2.41	3.39	10.38	.312	.312	.156	1.375	1.375

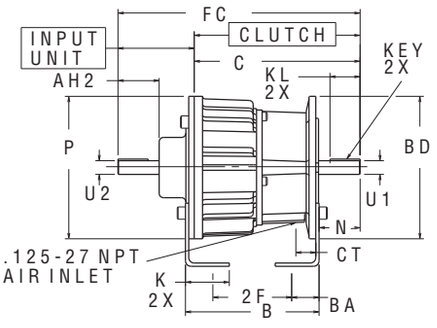
Models 625 & 875 with Input

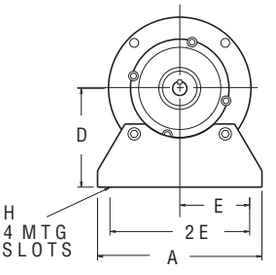




MODEL	PRODUCT NUMBER	AH	AJ	AK1 +.000 -.002	BB1	BD	BE1	C	CT	KL	KEY (SQ)	P	U1 +.000 -.001	INPUT NUMBER	U2 +.000 -.001	AH2	FC
625	801489	2.06	5.88	4.499	0.12	6.50	0.31	7.61	0.91	1.38	0.188	6.50	.625	929600	.875	1.89	11.10
875	801493	2.11	5.88	4.499	0.12	7.00	0.39	7.97	1.10	1.38	0.188	7.81	.875	928400	.875	1.89	11.46

Models 625 & 875 with Input & Foot





MODEL	PRODUCT NUMBER	BD	C	CT	KL	KEY (SQ)	P	U1 +.000 -.001	INPUT NUMBER	U2 +.000 -.001	AH2	FC
625	801489	6.50	7.61	0.91	1.38	0.188	6.50	.625	929600	.875	1.89	11.10
875	801493	7.00	7.97	1.10	1.38	0.188	7.81	.875	928400	.875	1.89	11.46

MODEL	FOOT NUMBER	A	B	BA	D	E	2E	2F	H	K	N
625	801431	7.50	6.10	1.25	4.50	3.19	6.38	3.60	.41 x .88	2.00	1.91
875	801431	7.50	6.41	1.25	4.50	3.19	6.38	3.91	.41 x .88	2.00	1.96

MODULAR CLUTCH-BRAKE SYSTEM

Custom design a power transmission system to fit your specific requirements using the Nexen Modular Clutch-Brake "Building Block" System. Interchangeable modular components provide you with complete flexibility both for today's requirements and for tomorrow's changing needs.

Construct your own Clutch, Brake or Clutch-Brake system to meet your application needs, selecting only those modules required for today's job. Whenever plans change, you can easily add or subtract modules to construct a new application configuration. Customization through the use of standard interchangeable components saves you both time and money.

The Modular Clutch-Brake System allows you almost limitless design control, provides time and cost savings, while providing you with the efficiency of air operation.

Modular Application Configurations

Four Modular Units (Brake, Drive, Input and Output) are the cornerstone of the System. Used either alone or in combination, they allow you to construct a variety of modular application configurations.

- Clutches (Input or Output)
- Brakes (Input or Output)
- Clutch-Brakes (Input or Output)

Once you've determined a configuration, you are provided these additional choices:

- Static Torque capacity up to 1150 In. Lbs. (Clutch) and 1550 In. Lbs. (Brake)
- Design Speed up to 1800 rpm. Consult factory for higher speed
- Thermal Horsepower rating up to 0.77 @ 1800 rpm
- 4 Standard Bore/Shaft sizes ranging from 0.625 to 1.375 inches
- Overhung Load Capacity up to 700 pounds
- Mounting flexibility: Vertically, Horizontally, Gearbox to C-Faced Motor or reducer
- Optional Foot Mount is available in 2 different designs

Advantages of the Modular System

- Compatible with C-face motors up to 10 HP
- Operates on static air pressure for fast, dependable response, soft starts and positive stops, while eliminating the need for expensive control systems
- Less heat build-up. Special fin designed friction discs cool the interior, dissipate heat and decrease torque fade
- Longer Life through forced air cooling
- Self-adjusting clutch and brake modules get the most out of friction material; torque output is constant
- Interchangeability with electric modular units is easy, due to conformity with standard NEMA specifications

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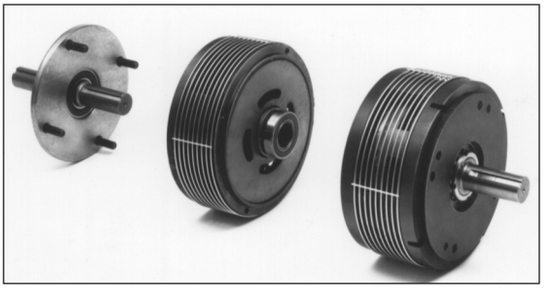
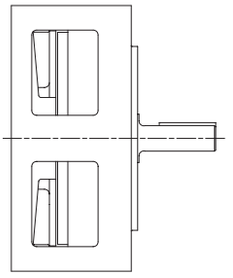
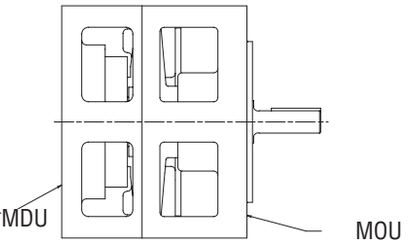
Modular Clutches, Brakes and Clutch-Brakes



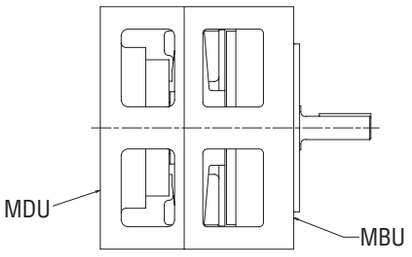
MBU Brake



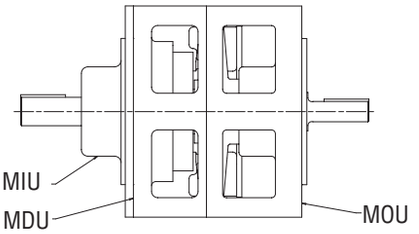
MDO Clutch



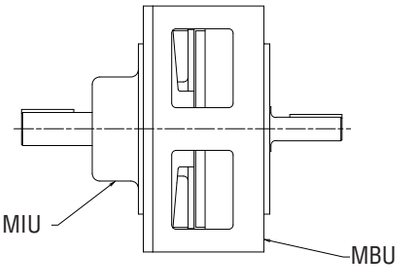
MDB Clutch-Brake



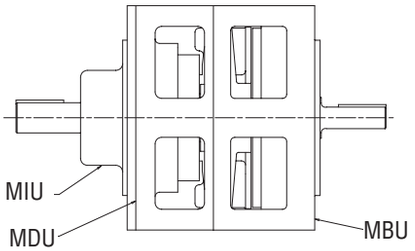
MIDO Input Clutch



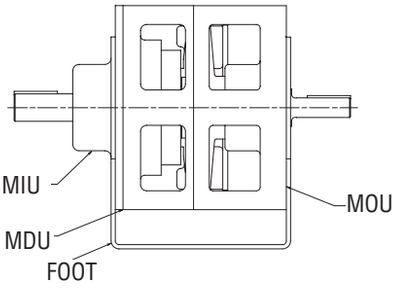
MIB Input Brake



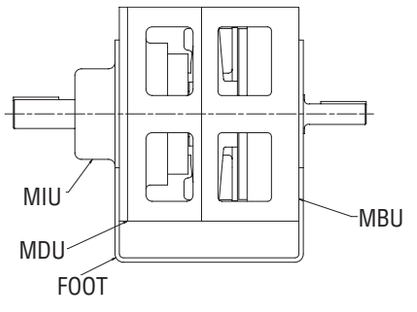
MIDB Input Clutch-Brake



MIDO Foot Mounted Input Clutch



MIDB Foot Mounted Input Clutch-Brake



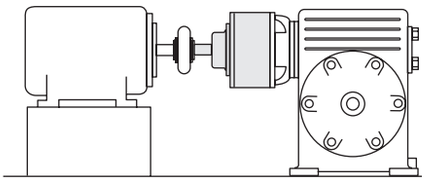
Designing Your Modular System

Designing your system is easily accomplished in 5 steps:

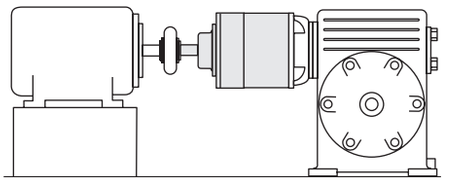
1. Determine the functions your system must perform -
   - Starting (Clutch configuration)
   - Stopping (Brake configuration)
   - Starting & Stopping (Clutch-Brake configuration)
2. Determine your application configuration using the Typical Application drawings on below.
3. A Modular Assembly is designated for each Application (i.e. MIB, MIDO, etc.) Modular Assemblies consist of one or more Module Units. The various Module Assemblies and the Units which comprise them are shown on page 243.

Typical Applications

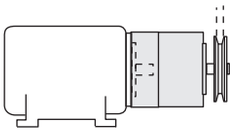
Input Brake mounted to a Reducer and coupled to a Motor (MIB)



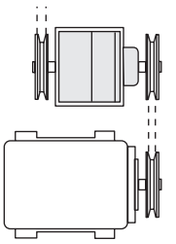
Input Clutch or Input Clutch-Brake mounted to a Reducer and coupled to a Motor (MIDO or MIDB)



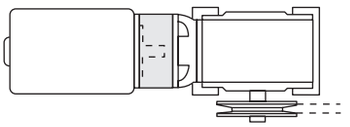
Clutch-Brake on C-Faced Motor (MDB)



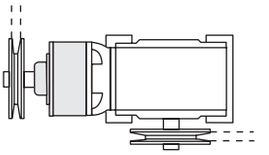
Input Clutch or Input Clutch-Brake With Foot Mount (MIDO or MIDB w/FOOT)



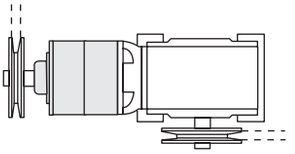
Brake mounted between Motor and Reducer (MBU)



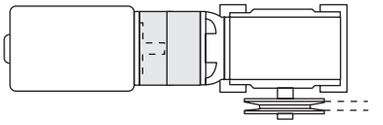
Input Brake Unit mounted directly to a Reducer (MIB)



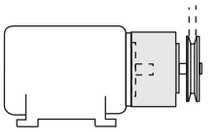
Input Clutch or Input Clutch-Brake mounted directly to a Reducer (MIDO or MIDB)



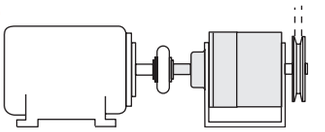
Clutch or Clutch-Brake Unit mounted to a Motor and Reducer (MDO or MDB)



Brake Unit mounted on a C-Face Motor (MBU)



Input Clutch or Input Clutch-Brake with Foot coupled to a Foot Mounted Motor (MIDO or MIDB w/FOOT



NEMA Motor/Frame Selection Chart①

Use this chart as specification and operational criteria for your application.

HP of Motor	RPM	Frame Number	Motor Shaft (IN)	Modular System
1/2	1800	56C	0.625	625
1/2	1200	56C	0.625	625
1/2	900	143TC	0.875	875
3/4	1800	56C	0.625	625
3/4	1200	143TC	0.875	875
3/4	900	145TC	0.875	875
1	1800	56C	0.625	625
1	1800	143TC	0.875	875
1	1200	145TC	0.875	875
1	900	182TC	1.125	1125
1-1/2	1800	145TC	0.875	875
1-1/2	1200	182TC	1.125	1125
1-1/2	900	184TC	1.125	1125
2	1800	145TC	0.875	875
2	1200	184TC	1.125	1125
2	900	213TC	1.375	1375
3	1800	182TC	1.125	1125
3	1200	213TC	1.375	1375
3	900	215TC	1.375	1375
5	1800	184TC	1.125	1125
5	1200	215TC	1.375	1375
7-1/2	1800	213TC	1.375	1375
10	1800	215TC	1.375	1375

① Models FMCBE - 625 & 875, Shown on pages 229 - 237 are recommended for Single Phase Motors.

Overhung Load Data

Values are based upon 10,000 hours of bearing life with the load one inch from pilot face.

Modular System	Module	Lbs. @ 1200 RPM	Lbs. @ 1800 RPM
625	Brake, MBU	321	281
	Output, MOU	321	281
	Input, MIU	279	244
875	Brake, MBU	321	281
	Output, MOU	321	281
	Input, MIU	279	244
1125	Brake, MBU	636	554
	Output, MOU	636	554
	Input, MIU	655	570
1375	Brake, MBU	700	610
	Output, MOU	700	610
	Input, MIU	655	570

Thermal Capacity Data (HP_T)

Standard Modular Systems (Open Design)

Modular Assembly	RPM	625	875	1125	1375
Brake	1800	0.23	0.23	0.33	0.50
MBU	1200	0.20	0.20	0.30	0.46
Clutch	1800	0.44	0.44	0.53	0.77
MDO	1200	0.40	0.40	0.50	0.71
Clutch-Brake	1800	0.40	0.40	0.50	0.75
MDB	1200	0.35	0.35	0.45	0.70
Input Brake	1800	0.23	0.23	0.33	0.50
MIB	1200	0.20	0.20	0.30	0.46
Input Clutch	1800	0.44	0.44	0.53	0.77
MIDO	1200	0.40	0.40	0.50	0.71
Input Clutch-Brake	1800	0.40	0.40	0.50	0.75
MIDB	1200	0.35	0.35	0.45	0.70

Designing Your Modular System, cont.

4. Select the correct Modular Assembly System size.
   - Using the NEMA Motor/Frame Selection Chart, find the frame size, horsepower and output rpm of the motor you will be using. The size of the compatible Modular System is shown in the right hand column. Make a note of this number.
   - If your chosen Modular Assembly calls for a Brake (B), an Output Unit (O), an Input Unit (I) or a combination of these, consult the Overhung Load Data chart to know the limits of the Modular System Size chosen.
   - Review the Thermal Capacity chart to familiarize yourself with the rating of your chosen Modular Assembly by Size.
   - Review the Torque charts to ensure your selected System Size falls within your guidelines.

NOTE: Whenever Modular System Product values are less than your operational values, move up to a System Size to meet your specifications. Moving to a higher System Size may affect motor and frame size requirements.

Designing Your Modular System, cont.

5. Find your chosen System Size on the following pages. Locate your chosen Modular Assembly on the right hand column. The Product Numbers listed in the column are those components required to construct your Modular System. Order each separately.

Dimensional characteristics of each Modular Assembly can be found on the following pages.

625 Modular System Components (0.625 inch bore/shaft):

To achieve the Modular Assemblies shown for the Typical Applications:

1. Find the applicable component Model designation in the table below;
2. Order one of each of the product numbers shown in the column.

Module Component	Model Number	Product Number	Module Shipping Wt. (Lbs)	Model MBU Brake Only	Model MDO Clutch Only	Model MDB Clutch-Brake	Model MIB Input Brake	Model MIDO Input Clutch	Model MIDO-WF Input Clutch w/Foot	Model MIDB Input Clutch-Brake	Model MIDB-WF Input Clutch-Brake w/Foot
Brake Unit	MBU625	928500	18	928500	--	928500	928500	--	--	928500	928500
Drive Unit	MDU625	928600	13	--	928600	928600	--	928600	928600	928600	928600
Input Unit	MIU625	929600	7	--	--	--	929600	929600	929600	929600	929600
Output Unit	MOU625	928800	12	--	928800	--	--	928800	928800	--	--
Foot, U Shape		929300	3	--	--	--	--	--	929300	--	929300

Options for 625 Modular System:

Optional Component	Model Number	Product Number	Shipping Wt. (Lbs)	Comments
Foot, L Shape	MDU-625	931000	3	Use in place of "U" Shaped Foot Mount.
Drip Proof Guard	MDU-625	929501	1	Product Thermal Capacity reduced to .20 HP_t
Drip Proof Guard	MBU-625	929502	1	Product Thermal Capacity reduced to .20 HP_t

875 Modular System Components (0.875 inch bore/shaft):

To achieve the Modular Assemblies shown for the Typical Applications:

1. Find the applicable component Model designation in the table below;
2. Order one of each of the product numbers shown in the column.

Module Component	Model Number	Product Number	Module Shipping Wt. (Lbs)	Model MBU Brake Only	Model MDO Clutch Only	Model MDB Clutch-Brake	Model MIB Input Brake	Model MIDO Input Clutch	Model MIDO-WF Input Clutch w/Foot	Model MIDB Input Clutch-Brake	Model MIDB-WF Input Clutch-Brake w/Foot
Brake Unit	MBU875	928000	18	928000	--	928000	928000	--	--	928000	928000
Drive Unit	MDU875	928100	13	--	928100	928100	--	928100	928100	928100	928100
Input Unit	MIU875	928400	7	--	--	--	928400	928400	928400	928400	928400
Output Unit	MOU875	928700	12	--	928700	--	--	928700	928700	--	--
Foot, U Shape		929300	3	--	--	--	--	--	929300	--	929300

Options for 875 Modular System:

Optional Component	Model Number	Product Number	Shipping Wt. (Lbs)	Comments
Foot, L Shape	MDU-875	931000	3	Use in place of "U" Shaped Foot Mount.
Drip Proof Guard	MDU-875	929501	1	Product Thermal Capacity reduced to .20 HP_t
Drip Proof Guard	MBU-875	929502	1	Product Thermal Capacity reduced to .20 HP_t

1125 Modular System Components (1.125 inch bore/shaft):

To achieve the Modular Assemblies shown for the Typical Applications:
1. Find the applicable component Model designation in the table below;
2. Order one of each of the product numbers shown in the column.

Module Component	Model Number	Product Number	Module Shipping Wt. (Lbs)	Model MBU Brake Only	Model MDO Clutch Only	Model MDB Clutch-Brake	Model MIB Input Brake	Model MIDO Input Clutch	Model MIDO-WF Input Clutch w/Foot	Model MIDB Input Clutch-Brake	Model MIDB-WF Input Clutch-Brake w/Foot
Brake Unit	MBU1125	935200	38	935200	--	935200	935200	--	--	935200	935200
Drive Unit	MDU1125	935100	21	--	935100	935100	--	935100	935100	935100	935100
Input Unit	MIU1125	935000	12	--	--	--	935000	935000	935000	935000	935000
Output Unit	MOU1125	935300	35	--	935300	--	--	935300	935300	--	--
Foot		936900	4	--	--	--	--	--	936900	--	936900
Motor Adapter	MBU1125	937000	1	937000		--	937000	--	--	--	--

Options for 1125 Modular System:

Optional Component	Model Number	Product Number	Shipping Wt. (Lbs)	Comments
Motor Adapter	MBU-1125	937000	1	Use when MBU Model configuration is mounted on a C Face motor alone.
Drip Proof Guard	MDU-1125	935901	1.5	Product Thermal Capacity reduced to .23 HP_t
Drip Proof Guard	MBU-1125	935902	1.5	Product Thermal Capacity reduced to .30 HP_t

1375 Modular System Components (1.375 inch bore/shaft):

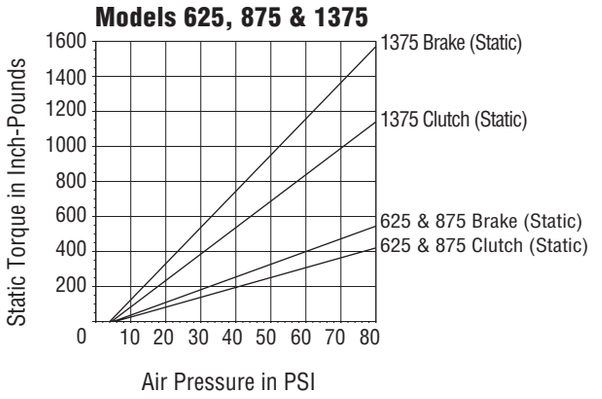
To achieve the Modular Assemblies shown for the Typical Applications:
1. Find the applicable component Model designation in the table below;
2. Order one of each of the product numbers shown in the column.

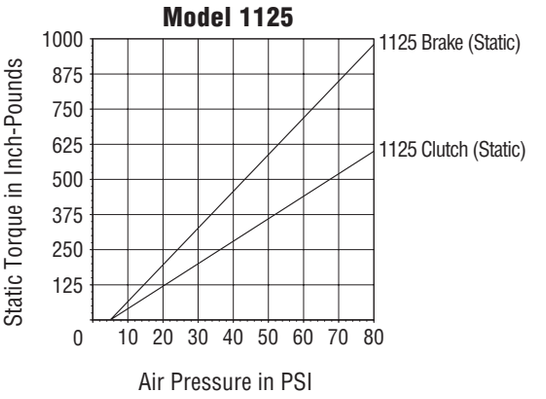
Module Component	Model Number	Product Number	Module Shipping Wt. (Lbs)	Model MBU Brake Only	Model MDO Clutch Only	Model MDB Clutch-Brake	Model MIB Input Brake	Model MIDO Input Clutch	Model MIDO-WF Input Clutch w/Foot	Model MIDB Input Clutch-Brake	Model MIDB-WF Input Clutch-Brake w/Foot
Brake Unit	MBU1375	936200	45	936200	--	936200	936200	--	--	936200	936200
Drive Unit	MDU1375	936100	30	--	936100	936100	--	936100	936100	936100	936100
Input Unit	MIU1375	936000	13	--	--	--	936000	936000	936000	936000	936000
Output Unit	MOU1375	936300	35	--	936300	--	--	936300	936300	--	--
Foot		936900	4	--	--	--	--	--	936900	--	936900
Motor Adapter	MBU1125	937000	1	937000	--	--	937000	--	--	--	--

Options for 1375 Modular System:

Optional Component	Model Number	Product Number	Shipping Wt. (Lbs)	Comments
Motor Adapter	MBU-1375	937000	1	Use when MBU Model configuration is mounted on a C Face motor alone.
Drip Proof Guard	MDU-1375	935901	1.5	Product Thermal Capacity reduced to .23 HP_t
Drip Proof Guard	MBU-1375	935902	1.5	Product Thermal Capacity reduced to .30 HP_t

Torque Vs. Air Pressure

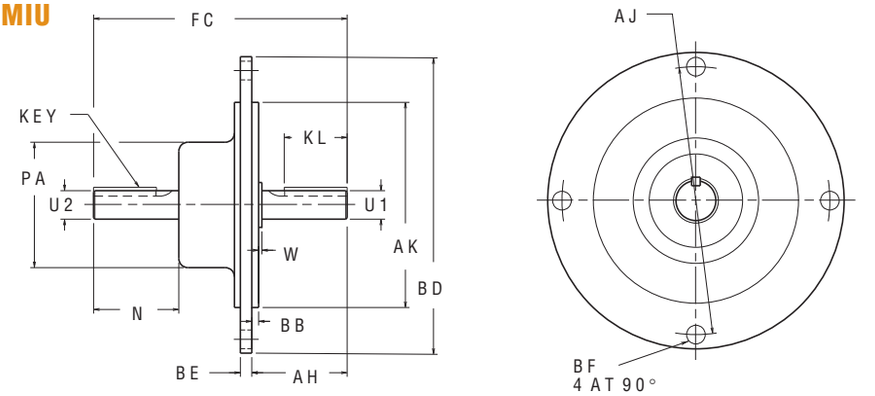




NOTE: Dynamic torque is approximately 85% of static torque.

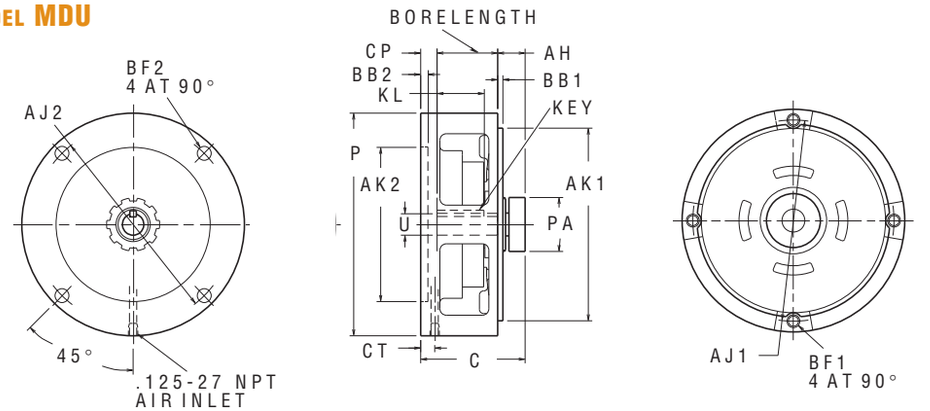
MODULAR CLUTCH-BRAKES - APPROXIMATE DIMENSIONS (INCHES)

Model MIU



MODEL	PRODUCT NUMBER	AH	AJ	AK ±.001	BB	BD	BE	BF	FC	KEY (SQ)	KL	N	PA	U1 +.000 -.001	U2 +.000 -.001	W
625	929600	2.09	5.875	4.499	0.15	6.50	0.25	.410	5.56	0.188	1.38	1.87	2.75	0.625	0.875	0.07
875	928400	2.09	5.875	4.499	0.15	6.50	0.25	.410	5.56	0.188	1.38	1.87	2.75	0.875	0.875	0.06
1125	935000	2.66	7.250	--	--	8.500±.001	0.41	.530	7.50	0.250	1.62	2.62	3.75	1.125	1.125	0.03
1375	936000	3.15	7.250	--	--	8.500±.001	0.41	.530	8.50	0.250	2.25	3.13	3.75	1.375	1.375	0.03

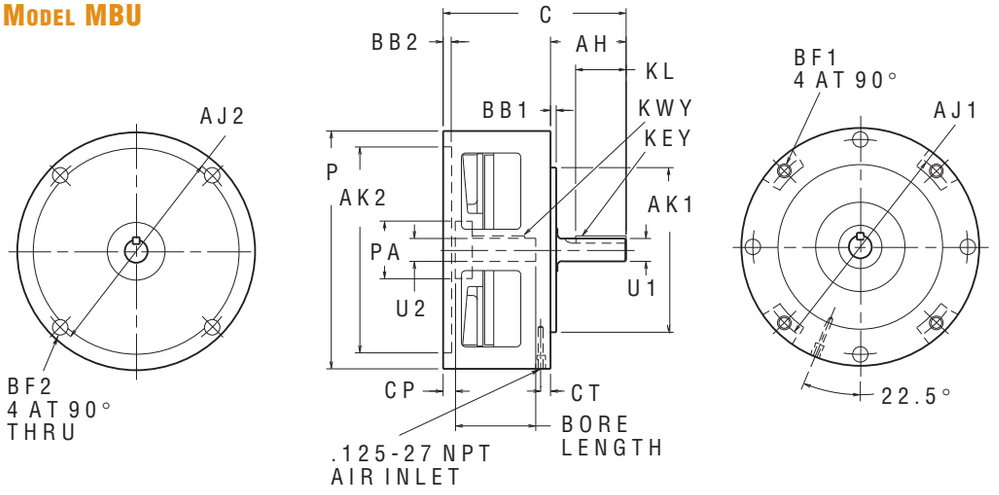
Model MDU



MODEL	PRODUCT NUMBER	AH	AJ1	AJ2	AK ±.001	AK ±.001	BB1	BB2	BF1	BF2	C	CP	CT	KEY (SQ)	KL	P	PA	U1 +.000 -.001	BORE LENGTH
625	928600	0.80	5.875	5.875	5.624	4.502	0.15	0.22	.375-16	0.406	3.05	0.48	0.41	0.188	1.38	6.50	1.58	0.625	1.75
875	928100	0.80	5.875	5.875	5.624	4.502	0.15	0.22	.375-16	0.406	3.05	0.48	0.41	0.188	1.38	6.50	1.58	0.875	1.75
1125	935100	0.82	9.000	7.250	8.499	8.502	0.25	0.21	.375-16	0.530	4.03	0.45	0.53	0.250	1.62	9.56	1.58	1.125	2.74
1375	936100	0.93	9.000	7.250	8.499	8.502	0.25	0.21	.375-16	0.530	4.14	0.39	0.53	0.312	2.25	9.56	2.68	1.375	3.75

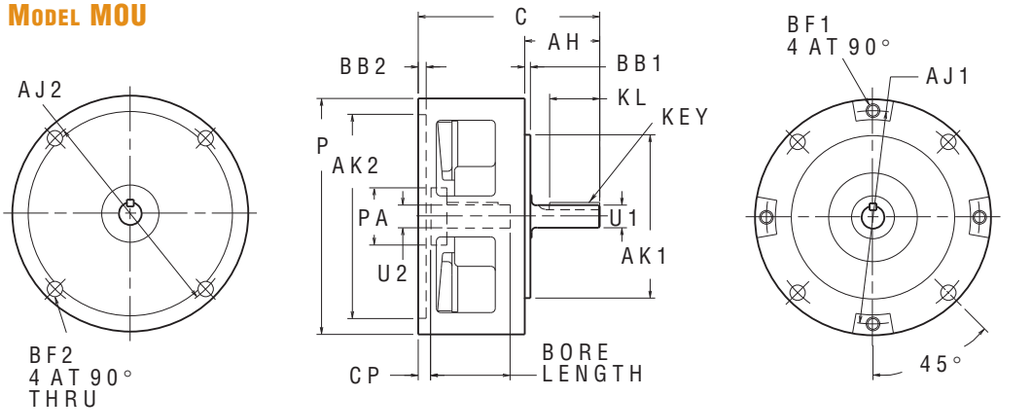
MODULAR CLUTCH-BRAKES - APPROXIMATE DIMENSIONS (INCHES)

Model MBU



MODEL	PRODUCT NUMBER	AH	AJ1	AJ2	AK_1 $^{\pm.001}$	AK_2 $^{\pm.001}$	BB1	BB2	BF1	BF2	C	CP	CT	KEY (SQ)	KL	P	PA	$U1^{+.000}_{-.001}$	$U2^{+.001}_{-.000}$	BORE LENGTH
625	928500	2.06	5.875	5.875	4.499	5.627	0.16	0.22	.375-16	0.422	5.00	0.34	0.25	0.188	1.38	6.50	1.58	0.625	0.625	2.19
875	928000	2.13	5.875	5.875	4.499	5.627	0.16	0.22	.375-16	0.422	5.06	0.34	0.25	0.188	1.38	6.50	1.58	0.875	0.875	2.19
1125	935200	2.90	7.250	9.000	8.499	8.502	0.25	0.31	.500-13	0.422	7.02	0.36	0.62	0.250	1.62	9.56	1.58	1.125	1.125	2.50
1375	936200	3.34	7.250	9.000	8.499	8.502	0.25	0.31	.500-13	0.422	7.46	0.35	0.25	0.312	2.25	9.56	2.68	1.375	1.375	2.75

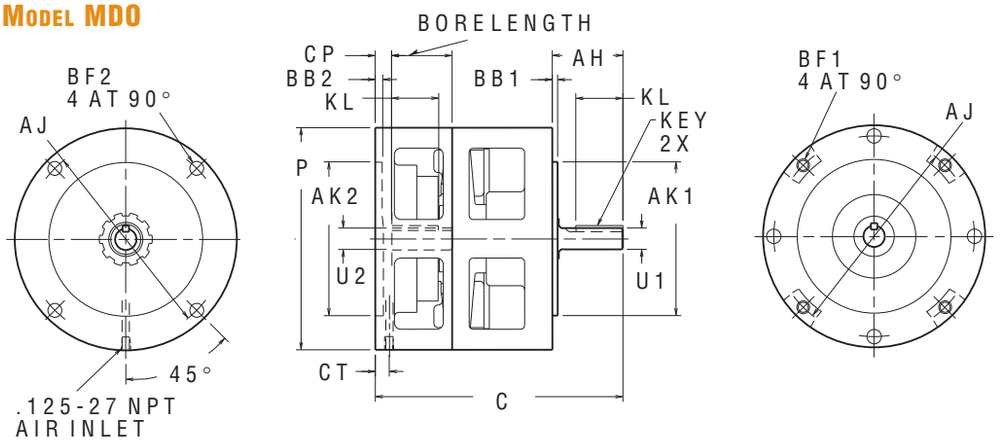
Model MOU



MODEL	PRODUCT NUMBER	AH	AJ1	AJ2	AK_1 $^{\pm.001}$	AK_2 $^{\pm.001}$	BB1	BB2	BF1	BF2	C	CP	KEY (SQ)	KL	P	PA	$U1^{+.000}_{-.001}$	$U2^{+.001}_{-.000}$	BORE LENGTH
625	928800	2.07	5.875	5.875	4.499	5.627	0.16	0.22	.375-16	0.422	5.00	0.34	0.188	1.38	6.50	1.58	0.625	0.625	2.19
875	928700	2.13	5.875	5.875	4.499	5.627	0.16	0.22	.375-16	0.422	5.06	0.34	0.188	1.38	6.50	1.58	0.875	0.875	2.19
1125	935300	2.90	7.250	9.000	8.499	8.502	0.25	0.31	.500-13	0.422	7.02	0.36	0.250	1.62	9.56	1.58	1.125	1.125	2.50
1375	936300	3.34	7.250	9.000	8.499	8.502	0.25	0.31	.500-13	0.422	7.46	0.35	0.312	2.25	9.56	2.68	1.375	1.375	2.75

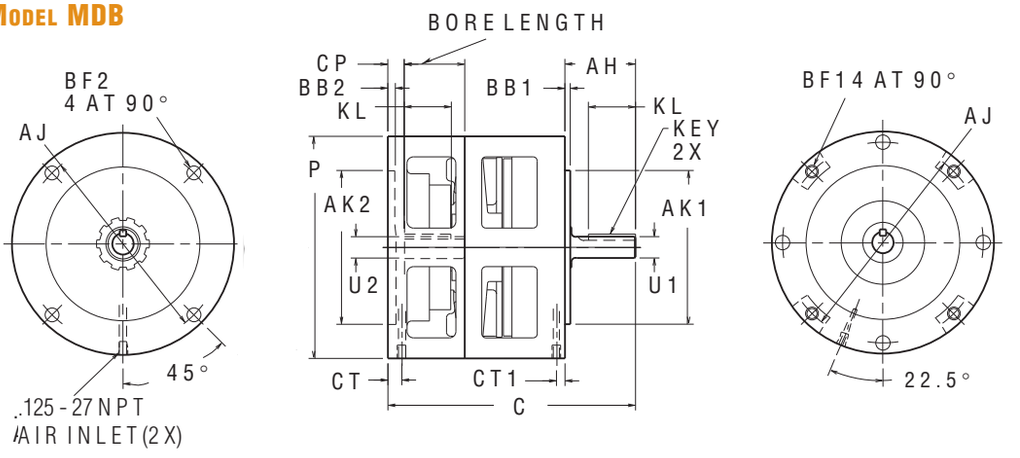
MODULAR CLUTCH-BRAKES - APPROXIMATE DIMENSIONS (INCHES)

Model MDO



MODEL	PRODUCT NUMBER	AH	AJ1	AK1 $^{\pm.001}$	AK2 $^{\pm.001}$	BB1	BB2	BF1	BF2	C	CP	CT	KEY (SQ)	KL	P	U1 $^{+.000}_{-.001}$	U2 $^{+.001}_{-.000}$	BORE LENGTH
625	*see tables*	2.07	5.875	4.499	4.502	0.16	0.22	.375-16	0.406	7.25	0.43	0.41	0.188	1.38	6.50	0.625	0.625	1.75
875	*p. 250*	2.13	5.875	4.499	4.502	0.16	0.22	.375-16	0.406	7.31	0.43	0.41	0.188	1.38	6.50	0.875	0.875	1.75
1125	*and*	2.90	7.250	8.499	8.502	0.25	0.21	.500-13	0.530	10.24	0.45	0.53	0.250	1.62	9.56	1.125	1.125	2.74
1375	*p. 251*	3.34	7.250	8.499	8.502	0.25	0.21	.500-13	0.530	10.68	0.39	0.53	0.312	2.25	9.56	1.375	1.375	3.75

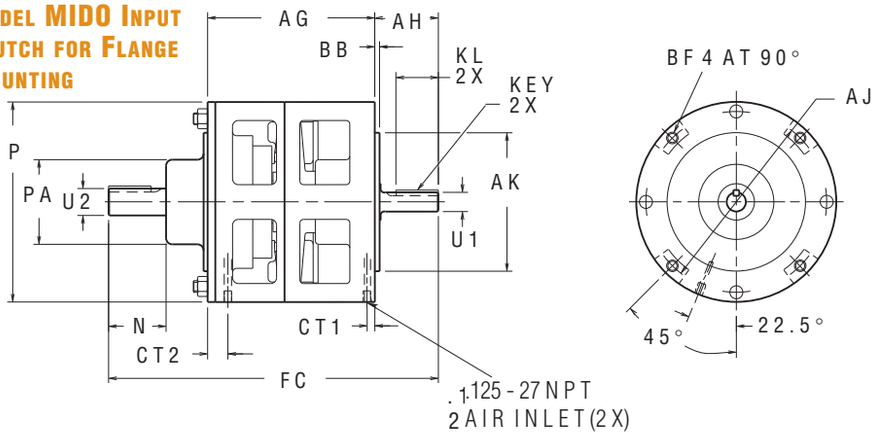
Model MDB



MODEL	PRODUCT NUMBER	AH	AJ1	AK1 $^{\pm.001}$	AK2 $^{\pm.001}$	BB1	BB2	BF1	BF2	C	CP	CT1	CT2	KEY (SQ)	KL	P	U1 $^{+.000}_{-.001}$	U2 $^{+.001}_{-.000}$	BORE LENGTH
625	*see tables*	2.06	5.875	4.499	4.502	0.16	0.22	.375-16	0.406	7.25	0.48	0.25	0.41	0.188	1.38	6.50	0.625	0.625	1.75
875	*p. 250*	2.13	5.875	4.499	4.502	0.16	0.22	.375-16	0.406	7.31	0.48	0.25	0.41	0.188	1.38	6.50	0.875	0.875	1.75
1125	*and*	2.90	7.250	8.499	8.502	0.25	0.21	.500-13	0.530	10.24	0.45	0.62	0.53	0.250	1.62	9.56	1.125	1.125	2.74
1375	*p. 251*	3.34	7.250	8.499	8.502	0.25	0.21	.500-13	0.530	10.68	0.39	0.25	0.53	0.312	2.25	9.56	1.375	1.375	3.75

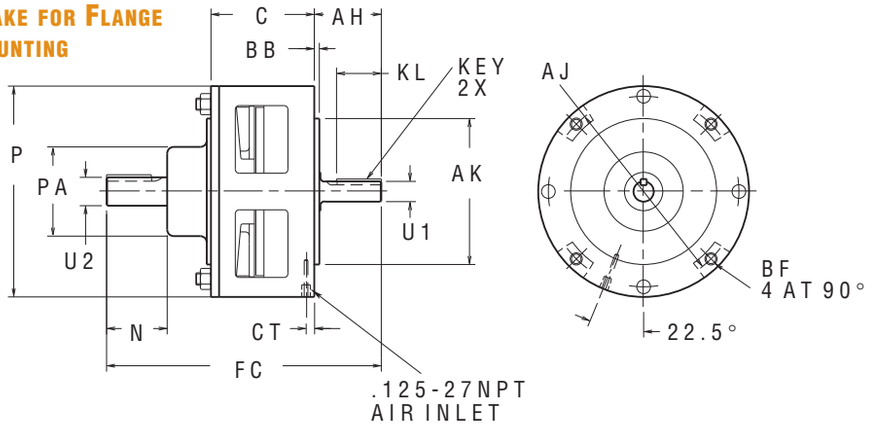
MODULAR CLUTCH-BRAKES - APPROXIMATE DIMENSIONS (INCHES)

Model MIDO Input Clutch for Flange Mounting



MODEL	PRODUCT NUMBER	AG	AH	AJ	AK	BB	BF	CT1	CT2	FC	KEY (SQ)	KL	N	P	PA	U1 $^{+.000}_{-.001}$	U2 $^{+.000}_{-.001}$
625	*see tables*	5.43	2.07	5.875	4.499	0.16	.375-16	0.25	0.66	10.72	0.188	1.38	1.87	6.50	2.75	0.625	0.875
875	*p. 250*	5.43	2.13	5.875	4.499	0.16	.375-16	0.25	0.66	10.78	0.188	1.38	1.87	6.50	2.75	0.875	0.875
1125	*and*	7.54	2.90	7.250	8.499	0.25	.500-13	0.62	0.73	14.87	0.250	1.62	2.62	9.56	3.75	1.125	1.125
1375	*p. 251*	7.54	3.34	7.250	8.499	0.25	.500-13	0.25	0.73	15.82	0.312	2.25	3.13	9.56	3.75	1.375	1.375

Model MIB Input Brake for Flange Mounting

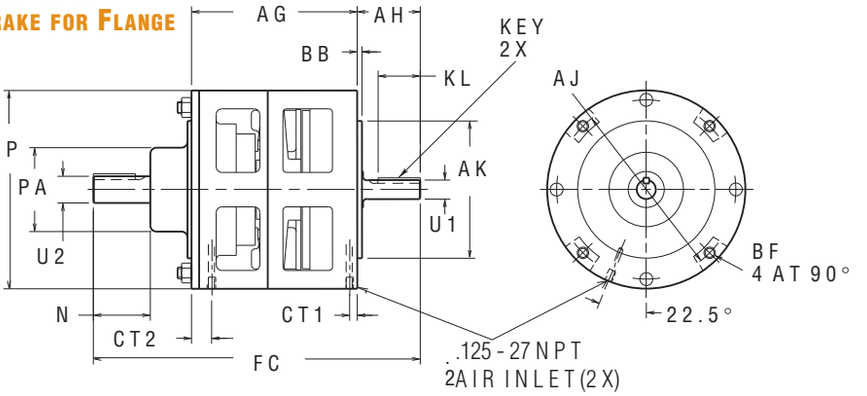


MODEL	PRODUCT NUMBER	AH	AJ	AK	BB	BF	C	CT	FC	KEY (SQ)	KL	N	P	PA	U1 $^{+.000}_{-.001}$	U2 $^{+.000}_{-.001}$
625	*see tables*	2.06	5.875	4.499	0.16	.375-16	3.18	0.25	8.47	0.188	1.38	1.87	6.50	2.75	0.625	0.875
875	*p. 250*	2.13	5.875	4.499	0.16	.375-16	3.18	0.25	8.53	0.188	1.38	1.87	6.50	2.75	0.875	0.875
1125	*and*	2.90	7.250	8.499	0.25	.500-13	4.90	0.62	12.23	0.250	1.62	2.62	9.56	3.75	1.125	1.125
1375	*p. 251*	3.34	7.250	8.499	0.25	.500-13	4.90	0.25	13.18	0.312	2.25	3.13	9.56	3.75	1.375	1.375

NOTE: Models 1125 and 1375 use Motor Adapter, Product Number 937000.

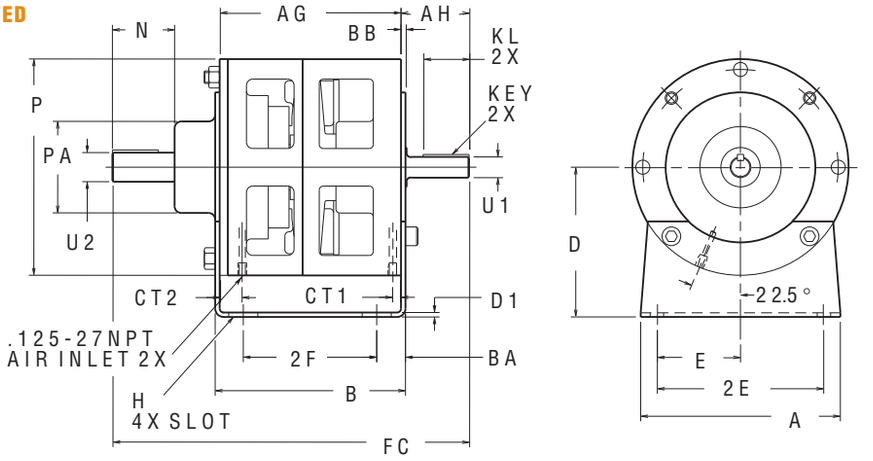
MODULAR CLUTCH-BRAKES - APPROXIMATE DIMENSIONS (INCHES)

Model MIDB Input Clutch-Brake for Flange Mounting



MODEL	PRODUCT NUMBER	AG	AH	AJ	AK ±.001	BB	BF	CT1	CT2	FC	KEY (SQ)	KL	N	P	PA	U1 +.000 -.001	U2 +.000 -.001
625	*see tables*	5.43	2.06	5.875	4.499	0.16	.375-16	0.25	0.66	10.72	0.188	1.38	1.87	6.50	2.75	0.625	0.875
875	*p. 250*	5.43	2.13	5.875	4.499	0.16	.375-16	0.25	0.66	10.78	0.188	1.38	1.87	6.50	2.75	0.875	0.875
1125	*and*	7.54	2.90	7.250	8.499	0.25	.500-13	0.62	0.73	14.87	0.250	1.62	2.62	9.56	3.75	1.125	1.125
1375	*p. 251*	7.54	3.34	7.250	8.499	0.25	.500-13	0.25	0.73	15.82	0.312	2.25	3.13	9.56	3.75	1.375	1.375

MIDO-WF Input Clutch Foot Mounted

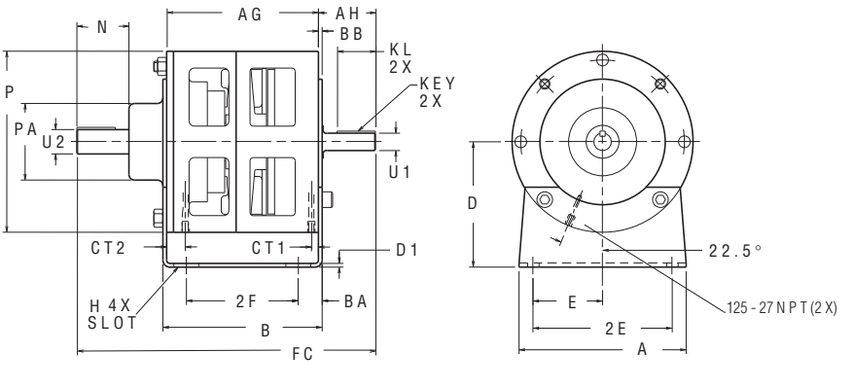


MODEL	PRODUCT NUMBER	A	AG	AH	B	BA	BB	CT1	CT2	D	D1	E	FC	H	KEY (SQ)	KL	N	P	PA	U1 +.000 -.001
625	*see tables*	6.00	5.43	2.07	5.74	0.87	0.16	0.25	0.66	4.50	0.13	2.50	10.72	.88 x.41	0.188	1.38	1.87	6.50	2.75	0.625
875	*p. 250*	6.00	5.43	2.13	5.74	0.87	0.16	0.25	0.66	4.50	0.13	2.50	10.78	.88 x.41	0.188	1.38	1.87	6.50	2.75	0.875
1125	*and*	9.00	7.54	2.90	8.02	1.01	0.25	0.62	0.73	5.25	0.12	3.88	14.87	1.00 x.56	0.250	1.62	2.62	9.56	3.75	1.125
1375	*p. 251*	9.00	7.54	3.34	8.02	1.01	0.25	0.25	0.73	5.25	0.12	3.88	15.82	1.00 x.56	0.312	2.25	3.13	9.56	3.75	1.375

MODEL	PRODUCT NUMBER	U2 +.000 -.001	2E	2F
625	*see tables*	0.875	5.00	4.00
875	*p. 250*	0.875	5.00	4.00
1125	*and*	1.125	7.75	6.00
1375	*p. 251*	1.375	7.75	6.00

MODULAR CLUTCH-BRAKES - APPROXIMATE DIMENSIONS (INCHES)

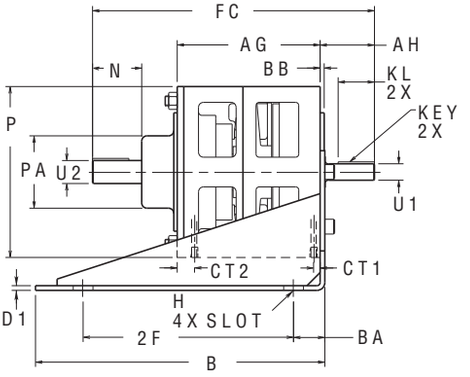
MIDB-WF Input Clutch-Brake Foot Mounted



MODEL	PRODUCT NUMBER	A	AG	AH	B	BA	BB	CT1	CT2	D	D1	E	FC	H	KEY (SQ)	KL	N	P	PA	U1 +.000 -.001
625	*see tables*	6.00	5.43	2.06	5.74	0.87	0.16	0.25	0.66	4.50	0.13	2.50	10.72	.88 x .41	0.188	1.38	1.87	6.50	2.75	0.625
875	*p. 250*	6.00	5.43	2.13	5.74	0.87	0.16	0.25	0.66	4.50	0.13	2.50	10.78	.88 x .41	0.188	1.38	1.87	6.50	2.75	0.875
1125	*and*	9.00	7.54	2.90	8.02	1.01	0.25	0.62	0.73	5.25	0.12	3.88	14.87	1.00 x .56	0.252	1.62	2.62	9.56	3.75	1.125
1375	*p. 251*	9.00	7.54	3.34	8.02	1.01	0.25	0.25	0.73	5.25	0.12	3.88	15.82	1.00 x .56	0.312	2.25	3.13	9.56	3.75	1.375

MODEL	PRODUCT NUMBER	U2 +.000 -.001	2E	2F
625	*see tables*	0.875	5.00	4.00
875	*p. 250*	0.875	5.00	4.00
1125	*and*	1.125	7.75	6.00
1375	*p. 251*	1.375	7.75	6.00

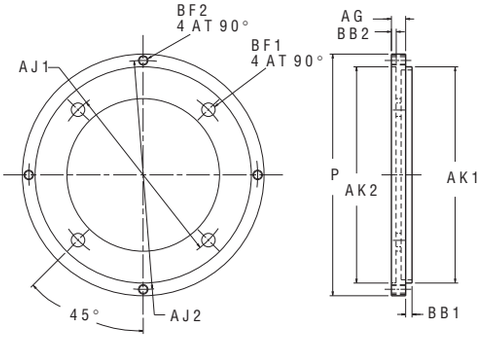
MIDB/MIDO-W/L Foot Mounted



MODEL	PRODUCT NUMBER	A	AG	AH	B	BA	BB	CT1	CT2	D	D1	E	FC	H	KEY (SQ)	KL	N	P	PA	U1 +.000 -.001
625	*See tables*	9.25	5.43	2.07	11.00	1.19	0.16	0.25	0.66	4.50	0.18	4.12	10.72	0.75 x 0.50	0.188	1.38	1.87	6.50	2.75	0.625
875	*p. 250 & 251*	9.25	5.43	2.13	11.00	1.19	0.16	0.25	0.66	4.50	0.18	4.12	10.78	0.75 x 0.50	0.188	1.38	1.87	6.50	2.75	0.875

MODEL	PRODUCT NUMBER	U2 +.000 -.001	2E	2F
625	*See tables*	0.875	8.25	8.00
875	*p. 250 & 251*	0.875	8.25	8.00

Motor Adapter



PRODUCT NUMBER	AG	AJ1	AJ2	AK1 ±.001	AK2 ±.001	BB1	BB2	BF1	BF2	P
937000	0.56	7.25	9.00	8.501	8.502	0.25	0.19	.531	.375-16	9.50

MODEL BCB-275 & FCB-450 CLUTCH-BRAKES

The BCB-275 and FCB-450 are combination clutch-brakes. The BCB-275 and FCB-450 provide:

- Static Torque capacity up to 40 Nm, 350 In. Lbs. @ 5,5 Bar, 80 psi
- Maximum Operating Speed up to 3600 rpm
- Thermal Capacity ratings up to 0,22 kW, 0.30 HP_t for both the clutch and the brake

THESE CLUTCH-BRAKES MUST BE MOUNTED ON THE DRIVEN SHAFT ONLY; Brake stops the hub Choose from **4 Models**:

- **Sheave Mount** unit comes with 1-"3V" Groove sheave
- **2 Pilot Mount** units offer **Standard bore sizes** of 0.500 and 0.625 inches
- For in-line applications, select the optional coupling half
- Better performance at lower cost
- Fewer parts and more torque
- Single piston engagement to eliminate clutch and brake overlap
- Torque capabilities to fit up to 2,2 kW, 3 HP drive motors
- Easy retrofitting of existing Nexen clutch-brakes; pilot dimensions are identical to the original Nexen clutch-brake series

Model BCB-275 Clutch-Brake

Clutch-Brake Style	Product Number	Sheave Diameter mmOD [in]OD	Bore mm [in]	Key Size Sq mm [in]	Clutch Torque Nm [in-lb]	Brake Torque Nm [in-lb]	Thermal Capacity kW [HP_T]	Inertia kg-m^2 [LB IN^2]	Speed max rpm	Shipping Wt. kg [Lbs]
Pilot Mount	826050	--	15,9 [0.625]	4,77 [0.188]	9 [80]	9 [80]	0,10 [0.13]	0,70 [1.7]	3600	3 [5]
Pilot Mount	826051	--	12,7 [0.500]	3 [0.125]	9 [80]	9 [80]	0,10 [0.13]	0,70 [1.7]	3600	3 [5]
Sheave Mt., 1-"3V"	826000	69.8 [2.750]	15,9 [0.625]	4,77 [0.188]	9 [80]	9 [80]	0,10 [0.13]	0,70 [1.7]	3600	3 [5]
Sheave Mt., 1-"A", 3.00 PD	826021	--	15,9 [0.625]	4,77 [0.188]	9 [80]	9 [80]	0,10 [0.13]	0,70 [1.7]	3600	3 [5]

Keys are included.

Coupling Half Options BCB-275

A Coupling Half is used for in-line applications. To achieve a Pilot Mount with Coupling Half mounting configuration:

1. Select a Pilot Mount Clutch from above;
2. Select a Coupling Half from the chart below which fits your shaft requirements;
3. Order Clutch and Coupling Half separately.

Product Number	Bore Size mm [In]	Key Size Sq mm [in]	Shipping Wt. kg [Lbs]
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 pages 34 to 37 for coupling dimensions.

Model FCB-450 Clutch-Brake

Clutch-Brake Style	Product Number	Bore[2] mm [in]	Clutch Torque[3] Nm [in-lb]	Brake Torque[3] Nm [in-lb]	Thermal Capacity kW [HP_T]	Inertia kg-m^2 [in-lb]	Speed max rpm	Shipping Wt. kg [Lbs]
Through-Shaft	827150	22,2 [0.875]	40 [350]	40 [350]	0,22 [0.30]	0,28 [6.6]	3600	7 [15]

[2] Accepts same bore reduction bushings as F450, L-600 and M-800 bushings. [3] Torque measured at 80 psi.

Coupling Half Options FCB-450

A Coupling Half is used for in-line applications. Before spcifying it is important to review the maximum misalignment allowable. For FCB models, choose one of the couplings listed below.

Model	Maximum Misalignment mm [in]			Product Number	Max Bore mm [In]	Shipping Wt. kg [Lbs]	Taper Lock Bushing[1]
	Parallel	Angular	Axial				
FCB-450	0,38 [0.015]	1,02 [0.040]	3,18 [0.125]	802700	25,4 [1.000]	1,4 [3]	#1008

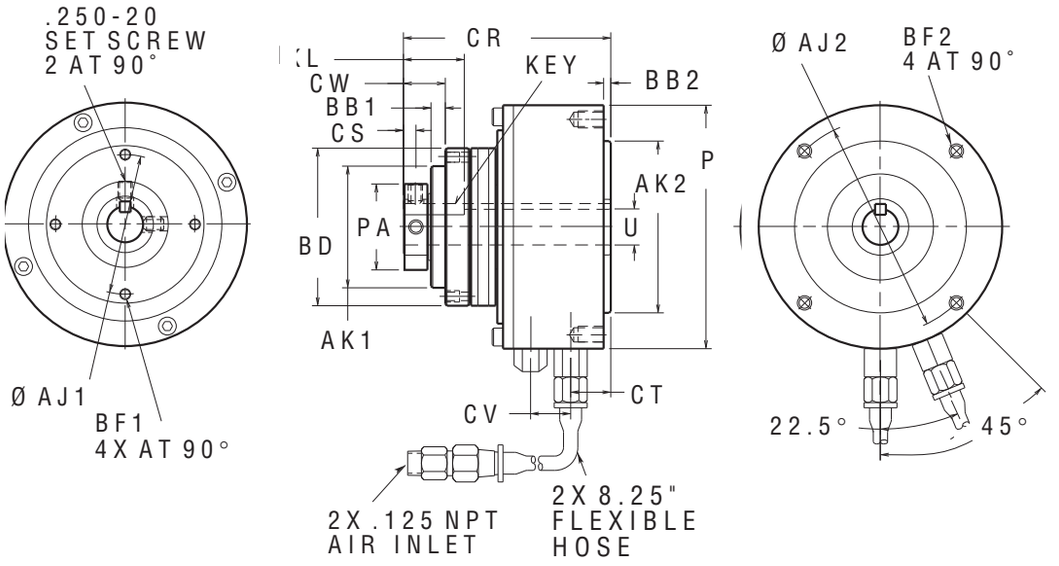
[1] Use Dodge Taper Lock® bushings. NOTE: Refer to pages 34 to 37 for coupling dimensions.

Clutch-brake with coupling option

ARTEN Freios e Embreagens - Fone: 11 5594-8333

BCB-275 MODEL CLUTCH-BRAKES - APPROXIMATE DIMENSIONS (INCHES)

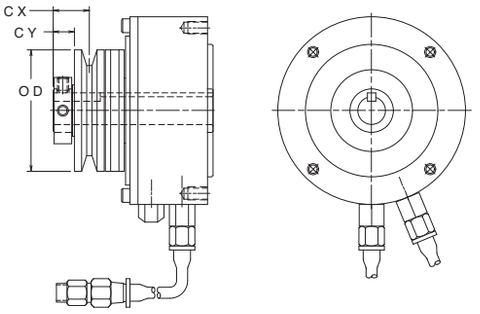
Pilot Mount



PRODUCT NUMBER	AJ1	AJ2	AK1 ±.001	AK2 ±.001	BB1	BB2	BD	BF1	BF2	CR	CS	CT	CV	CW	KL	KEY (SQ)	P	PA	U +.001 -.000
826050	2.437	3.750	2.124	2.999	0.25	0.12	2.75	0.190-32	.250-20	3.62	0.22	0.70	0.70	0.73	1.06	0.188	4.25	1.50	0.625
826051	2.437	3.750	2.124	2.999	0.25	0.12	2.75	0.190-32	.250-20	3.62	0.22	0.70	0.70	0.73	1.38	0.125	4.25	1.50	0.500

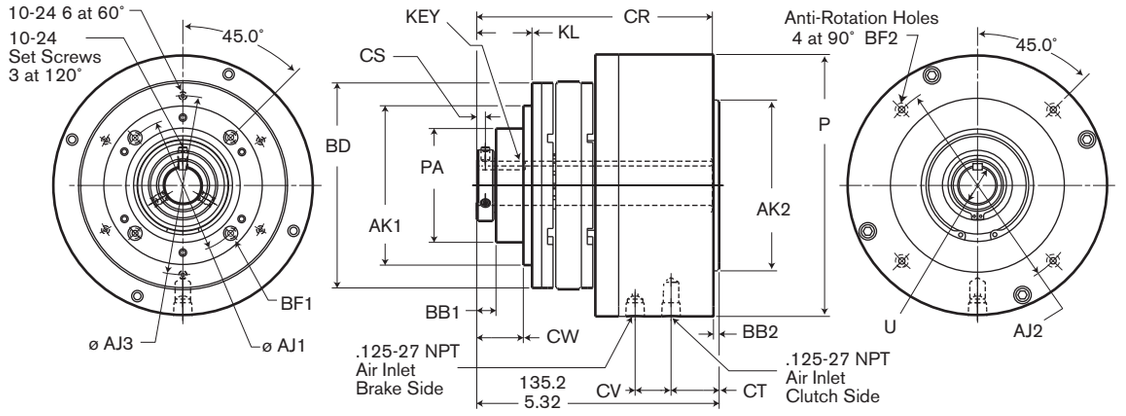
Sheave Mount

PRODUCT NUMBER	SHEAVE BELT	GROOVE	CX	CY	OD
826000	"3V"	1	0.82	0.48	2.75



FCB-450 MODEL CLUTCH-BRAKES - APPROXIMATE DIMENSIONS (INCHES)

Through Shaft



mm
[in]

PRODUCT NUMBER	AJ1	AJ2	AJ3	AK1 ±0.03 [±.001]	AK2 ±0.03 [±.001]	BB1	BB2	BD	BF1	BF2	CR	CS	CT	CV	CW	KL	KEY (SQ)	P	PA ±0.03 [±.001]	U ±0.03 [±.001]
827150	76,20 [3]	120,65 [4.750]	101,60 [4]	88,85 [3.498]	95,25 [3.750]	10,7 [.42]	3,18 [.125]	114,30 [4.500]	.250-20	.312-18	131,4 [5.17]	4,8 [.19]	26,8 [1.06]	20,0 [.79]	26,0 [1.02]	30,8 [1.21]	4,78 [.188] x 26,9 [1.062]	146,0 [5.75]	63,45 [2.498]	22,22 [.875]

LSCB-44HT & 54HT STRAIGHT BORE CONVEYOR BRAKES

Nexen's air-engaged, straight-bore series of conveyor Clutch-Brakes offer high torque in a small package. The LSCB line is ideal for soft starts on accumulating, chain-driven live-roller, or in-line conveyor applications. With a maximum Cluch torque rating of 316 Nm [2800 in-lb] and a bore range from 12 to 38 mm [0.500-1.500 in], these products can outperform the competition at a lower cost. Nexen's conveyor lines comes standard with a pilot designed for easy sprocket mounting or can be configured for a variety of mounting applications (double-single sprocket, timing belt sprocket, v-belt sheave, plate, etc.).

- High torque: 316 Nm [2800 in-lb] at 5.5 bar [80 psi]
- Bore range: 12-38 mm [0.500-1.500 in]
- Through-shaft design with three set screws for easy mounting
- Variable mounting configurations: plate or double-single sprocket, timing belt sprocket, plate, or sheave
- Open design, improved airflow, high thermal horsepower
- Internal spline drive for trouble free disengagement performance
- Shielded ball bearings for low disengagement drag

  -sealed bearings also available
- No rotary air union required
- Compact size
- Spring biased for complete disengagement
- Field repairable o-rings, facings and springs

LSCB- 44HT & 54HT Straight Bore Conveyor Clutch-Brake Specifications

Model	Torque Nm [in-lb] Clutch	Brake	Product Number	Bore mm [in]	Mounting Style	Sprocket Style	Sprocket Pitch	Sprocket Teeth
LSCB-32HT	62 [550]	7 [50]	923520	22,2 [0.875]	Pilot	--	--	--
LSCB-44HT	157 [1388]	9 [81]	923571	28,6 [1.125]	Pilot	--	--	--
			923608	32,0 [1.260]		--	--	--
			923609	30,2 [1.118]		--	--	--
			923579	25,4 [1.000]	Sprocket	Double/Single	60	18
			923584	25,4 [1.000]		Double/Single	80	14
			923589	25,4 [1.000]		Double/Single	60	20
			923597	25,4 [1.000]		Double/Single	50	20
			923623	30,2 [1.188]		Double/Single	60	19
LSCB-54HT	316 [2800]	18 [164]	923591	38,1 [1.500]	Pilot	--	--	--

Single - Type 'A' Sprocket Sizes

Sprocket Mounting Sizes Using Standard Single Strand Roller Chain

Model	Pilot Diameter	Mounting Style	Sprocket Pitch / Minimum Number of Teeth				
			35	40-41	50	60	80
LSCB-44HT	76,2 mm [3.000 in]	Pilot Mount	**	31	25	22	**
		Intregral Sprocket	**	31	17	14	**
LSCB-54HT	101,6 mm [4.000 in]	Pilot Mount	**	**	32	22	21
		Intregral Sprocket	**	**	24	21	23

Units can be configured with plate or double-single sprocket, timing belt sprocket, or v-belt sheave. Nexen can also configure an optional integral brake, Please consult factory for details.
** Consult the Nexen Custom Business Unit at 800-843-7445 before using the starred chain sizes.

Maximum RPM

PSI	Size 32	Size 44	Size 54
80	300 RPM	250 RPM	250 RPM
70	400 RPM	300 RPM	300 RPM
60	550 RPM	350 RPM	350 RPM
50	800 RPM	450 RPM	450 RPM
40	1000 RPM	750 RPM	750 RPM

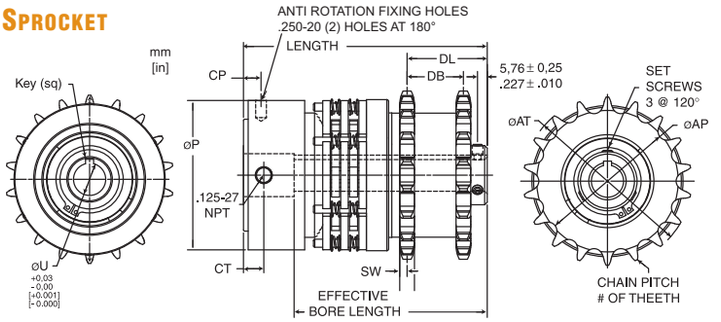
CAUTION

Model LSCB is a driven shaft mounted, clutch-brake with a normally-on (spring engaged), hub stop brake. This unit design is not intended to mount on a motor shaft.

ARTEN Freios e Embreagens - Fone: 11 5594-8333

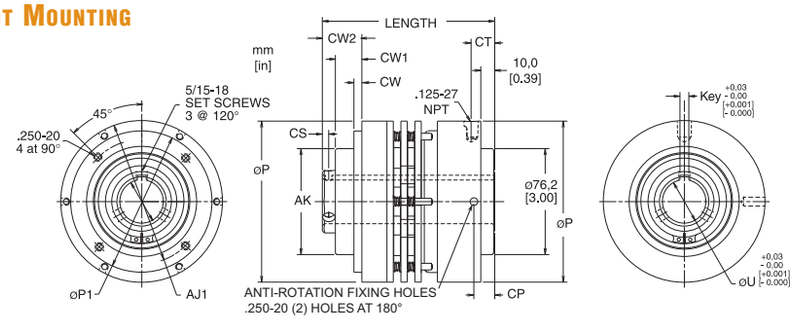
STRAIGHT-BORE CONVEYOR CLUTCH-BRAKE - APPROXIMATE DIMENSIONS METRIC [INCHES]

LSCB-44HT Double Sprocket



MODEL PRODUCT NO.	øAP	øAT	CP	CT	DB	DL	øP	SW	øU	Key	Length	Pitch	Teeth
LSCB-44HT 923579	97.79 [3.85]	119.46 [4.70]	16.2 [0.64]	22.7 [0.89]	37.59 [1.480]	52.0 [2.05]	115.8 [4.56]	5.93 [0.234]	25.40 [1.000]	6.35 [0.250]	179.07 [7.050]	#60	18
LSCB-44HT 923584	98.27 [3.869]	126.52 [4.981]	16.2 [0.64]	22.7 [0.89]	41.28 [1.625]	69.2 [2.72]	116.2 [4.58]	14.54 [0.572]	25.40 [1.000]	6.35 [0.250]	182.88 [7.200]	#80	14
LSCB-44HT 923589	109.86 [4.325]	131.71 [5.186]	16.2 [0.64]	22.7 [0.89]	37.59 [1.480]	52.0 [2.05]	115.8 [4.56]	5.93 [0.234]	25.40 [1.000]	6.35 [0.250]	179.07 [7.050]	#60	20
LSCB-44HT 923597	91.32 [3.595]	109.76 [4.321]	16.2 [0.64]	22.7 [0.89]	33.34 [1.312]	65.4 [2.57]	115.8 [4.56]	8.71 [0.343]	25.40 [1.000]	6.35 [0.250]	179.07 [7.050]	#50	20
LSCB-44HT 923623	103.84 [4.088]	125.60 [4.945]	16.2 [0.64]	22.7 [0.89]	37.69 [1.484]	65.7 [1.58]	115.8 [4.56]	11.66 [0.459]	30.175 [1.188]	6.35 [0.250]	179.07 [7.050]	#60	19

LSCB-HT Pilot Mounting



MODEL PRODUCT NO.	øAJ1	øAK	CP	CS	CT	CW	CW1	CW2	øP	øP1	øU	Key	Length
LSCB-32HT 923520	76.20 [3.000]	63.49 [2.500]	11.2 [0.44]	5.76 [0.230]	23.1 [0.91]	2.5 [0.10]	12.70 [0.500]	24.0 [0.94]	88.4 [3.48]	76.2 [3.00]	22.22 [0.875]	4.78 [0.188]	131.4 [5.180]
LSCB-44HT 923571	88.90 [3.500]	76.20 [3.000]	16.2 [0.64]	4.57 [0.180]	22.7 [0.89]	5.7 [0.22]	19.05 [0.750]	28.4 [1.12]	115.8 [4.56]	101.6 [4.00]	28.58 [1.125]	6.38 [0.251]	141.96 [5.589]
LSCB-44HT 923608	88.90 [3.500]	76.58 [3.015]	16.2 [0.64]	4.57 [.0180]	22.7 [0.89]	5.7 [0.22]	19.05 [0.750]	28.4 [1.12]	116.2 [4.58]	115.8 [4.56]	32.00 [1.260]	6.35 [0.250]	141.96 [5.589]
LSCB-44HT 923509	88.9 [3.500]	76.39 [3.007]	16.2 [0.64]	4.57 [0.180]	22.7 [0.89]	5.7 [0.22]	19.05 [0.750]	50.8 [2.00]	116.2 [4.58]	115.8 [4.56]	30.43 [1.198]	6.35 [0.250]	141.96 [5.589]
LSCB-54HT 923591	120.65 [4.750]	101.60 [4.000]	17.9 [0.71]	6.9 [0.27]	25.56 [0.967]	7.54 [0.30]	26.7 [1.05]	40.1 [1.58]	145.5 [5.73]	139.70 [5.500]	38.10 [1.500]	9.55 [0.376]	160.05 [6.301]

MODEL LCB-600 & MCB-800 CLUTCH-BRAKES

The LCB-600 and MCB-800 are combination clutch-brakes. The LCB-600 and MCB-800 provide:

- Static Torque capacity up to 124 NM, 1100 In. Lbs. @ 5,5 Bar, 80 psi
- Maximum Operating Speed up to 2000 rpm
- Thermal Capacity ratings up to 0,45 kW, 0.60 HP_t for both the clutch and the brake

THESE CLUTCH-BRAKES MUST BE MOUNTED ON THE DRIVEN SHAFT ONLY; Brake stops the hub Choose from **2 Models**:

- For in-line applications, select the optional coupling half
- Better performance at lower cost
- Fewer parts and more torque
- Single piston engagement to eliminate clutch and brake overlap
- Torque capabilities to fit up to 7,5 kW, 10 HP drive motors
- Laboratory proven thermal capacities for fast cycle rates and large load handling capability
- Involute splines for axial motion
- Drive flange accepts components for right angle or in-line drive applications
- Easy retrofitting of existing Nexen clutch-brakes; pilot dimensions are identical to the original Nexen clutch-brake series

Model LCB-600 and MCB-800 Clutch-Brake

Clutch-Brake Style	Product Number	Bore[2] mm [in]	Clutch Torque[3] Nm [in-lb]	Brake Torque[3] Nm [in-lb]	Thermal Capacity kW [HP_T]	Inertia kg-m² [LB IN²]	Speed max rpm	Shipping Wt. kg [Lbs]
LCB-600 Through-Shaft	828950	25,4 [1.000]	51 [450]	51 [450]	0,23 [0.31]	0,68 [16.2]	2000	9 [19]
MCB-800 Through-Shaft	830850	38,1 [1.500]	124 [1100]	124 [1100]	0,45 [0.60]	2,38 [56.4]	1800	17 [30]

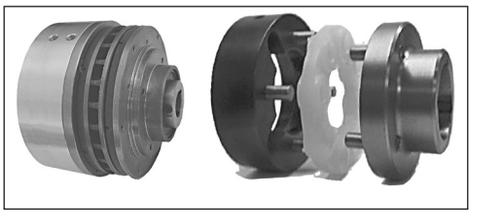
[2] Accepts same bore reduction bushings as F450, L-600 and M-800 bushings. [3] Torque measured at 80 psi.

Coupling Half Options LCB-600 and MCB-800

A Coupling Half is used for in-line applications. Before spcifying it is important to review the maximum misalignment allowable. For FCB models, choose one of the couplings listed below.

Model	Maximum Misalignment mm [in]			Product Number	Max Bore mm [In]	Shipping Wt. kg [Lbs]	Taper Lock Bushing[1]
	Parallel	Angular	Axial				
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

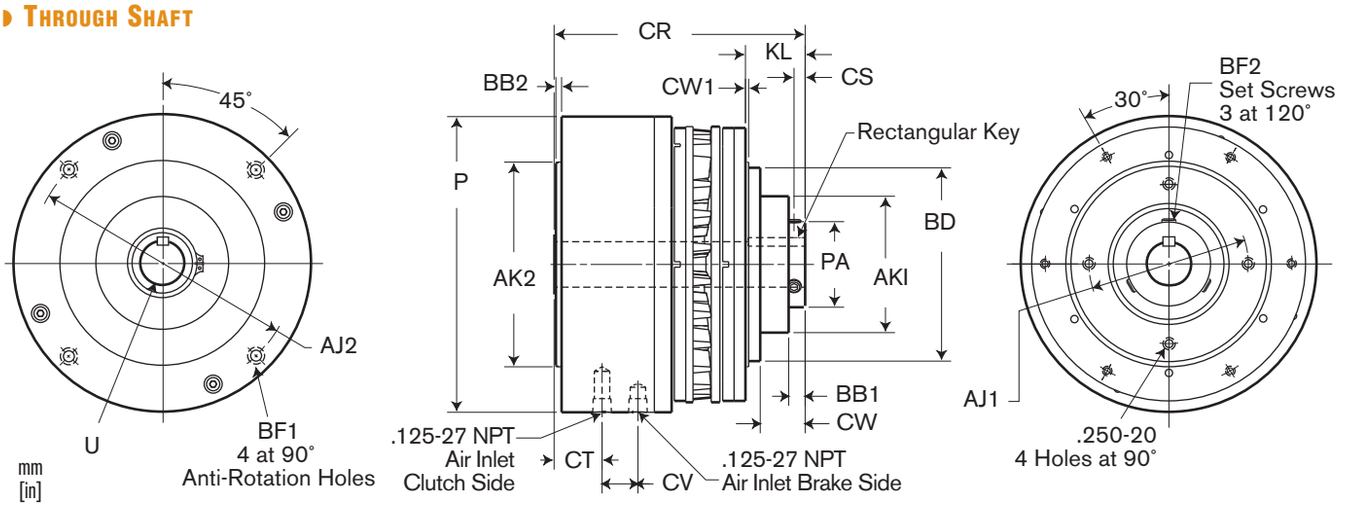
[1] Use Dodge Taper Lock® bushings. NOTE: Refer to pages 34 to 37 for coupling dimensions.



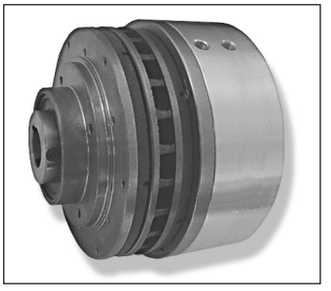
Clutch-brake with coupling option

LCB-600 MODEL CLUTCH-BRAKES - APPROXIMATE DIMENSIONS (INCHES)

THROUGH SHAFT

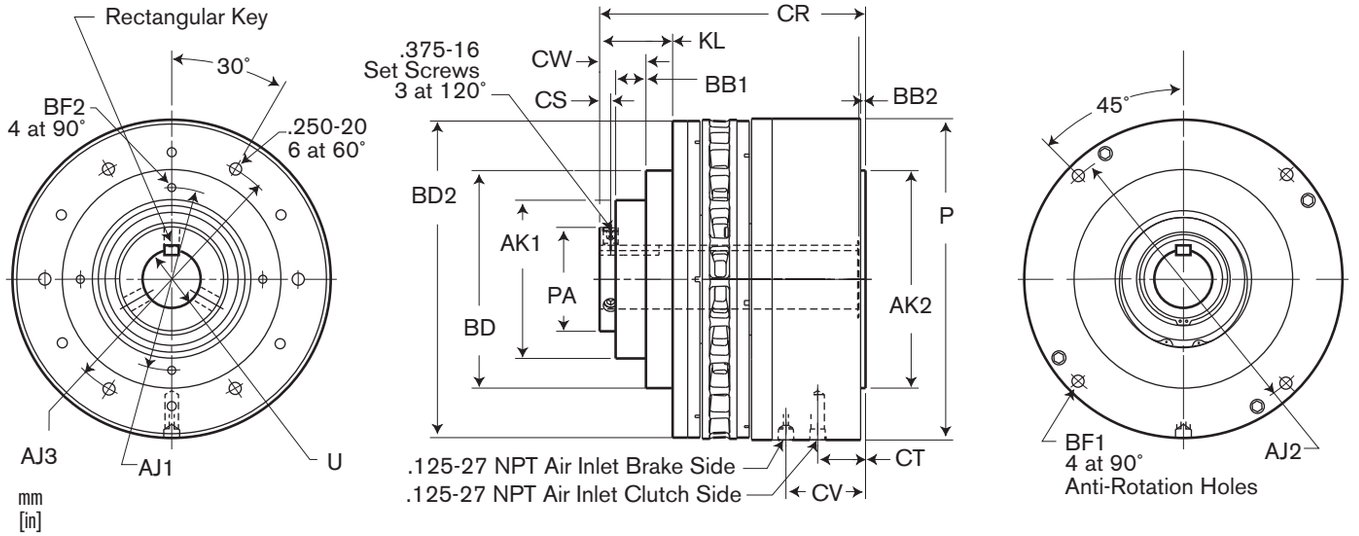


PRODUCT NUMBER	AJ1	AJ2	AK1 [±.001]	AK2 [±.001]	BB1	BB2	BD	BF1	BF2	CR	CS	CT	CV	CW	CW1	KL	KEY (RECTANGULAR)	P	PA [±.001]	U [±.001]
828950	88,89 [3.5]	149,23 [5.875]	76,15 [2.998]	114,30 [4.500]	9,2 [.36]	3,18 [.125]	107,9 [4.25]	.375-16 UNC-28	.312-18	140,2 [5.52]	6,22 [.245]	26,8 [1.05]	20,0 [.79]	25,1 [.99]	1,8 [.07]	33,3 [1.31]	4,78 [.188] x 6,35 [.250] x 31,75 [1.25]	165,1 [6.50]	47,8 [1.88]	25,40 [1.000]



MCB-800 MODEL CLUTCH-BRAKES - APPROXIMATE DIMENSIONS (INCHES)

THROUGH SHAFT



PRODUCT NUMBER	AJ1	AJ2	AJ3	AK1 [±.001]	AK2 [±.001]	BB1	BB2	BD	BD2	BF1	BF2	CR	CS	CT	CV	CW	KEY KL	(RECTANGULAR)	P [±.03]	PA [±.001]	U [±.001]
830850	120,65 [4.750]	190,50 [7.500]	165,10 [6.500]	101,55 [3.998]	139,65 [5.498]	19,46 [.766]	3,17 [.125]	139,65 [5.498]	203 [8.00]	.375-16	.312-18	170,7 [6.72]	7,1 [.28]	30,7 [1.21]	51,1 [2.01]	29,7 [1.17]	46,9 [1.84]	9,52 [.375] x 6,35 [.250] x 38,1 [1.50]	206,2 [8.12]	66,7 [2.62]	38,10 [1.500]

CLUTCH-BRAKE MODELS FWCB & LWCB

The FWCB and LWCB are each an "Air Champ" clutch and an "Air Champ" brake combined into a single unit, forming a combination clutch-brake. They provide:

- Static Torque capacity up to:
  FWCB/400 In. Lbs. @ 80 psi (brake)
  FWCB/100 In. Lbs. @ 80 psi (clutch)
  LWCB/400 In. Lbs. @ 80 psi (brake)
  LWCB/350 In. Lbs. @ 80 psi (clutch)
- Maximum Operating Speed up to 1800 rpm
- Thermal Horsepower ratings of:
  FWCB/0.25 (clutch) @ 1800 rpm
  FWCB/ 0.52 (brake) @ 1800 rpm
  LWCB/0.40 (clutch) @ 1800 rpm
  LWCB/ 0.52 (brake) @ 1800 rpm

THESE CLUTCH-BRAKES MUST BE MOUNTED ON THE DRIVEN SHAFT. Brake housing must not be mounted rigidly.

Choice of Models:
FWCB/5 Models, LWCB/7 Models

- **Sheave Mount** units are available:
  FWCB/1-"3V" or 1-"A" Groove sheave
  LWCB/2-"3V" or 2-"A" Groove sheave
- **Pilot Mount** units offer **Standard bore** sizes of:

  FWCB/0.750 and 0.875 inches
  LWCB/1.000 inches
- For in-line applications, select the optional coupling half

Model FWCB & LWCB Clutch-Brakes

Model	Clutch-Brake Style	Product Number	Sheave Diameter	Bore (In)	Key Size (SQ)	Shipping Wt. (Lbs)
FWCB	Pilot Mount	827100	--	0.875	0.188	14
FWCB	Pilot Mount	827111	--	0.750	0.188	14
FWCB	Sheave Mount 1-"3V"	826700	3.35 OD	0.875	0.188	15
FWCB	Sheave Mount, 1-"3V"	826800	4.50 OD	0.875	0.188	16
FWCB	Sheave Mount, 1-"A"	826900	3.80 PD	0.875	0.188	15
LWCB	Pilot Mount	828900	--	1.000	0.250 x .188	17
LWCB	Sheave Mount, 2-"3V"	828300	4.50 OD	1.000	0.250 x .188	18
LWCB	Sheave Mount, 2-"3V"	828400	5.30 OD	1.000	0.250 x .188	20
LWCB	Sheave Mount, 2-"3V"	828500	6.00 OD	1.000	0.250 x .188	20
LWCB	Sheave Mount, 2-"3V"	828600	8.00 OD	1.000	0.250 x .188	25
LWCB	Sheave Mount, 2-"A"	828700	4.40 PD	1.000	0.250 x .188	21
LWCB	Sheave Mount, 2-"A"	828800	5.40 PD	1.000	0.250 x .188	20

Keys are included.

Bushing Options
(for 0.875 & 1.000 bore clutch-brakes only)

Bushings fit into the clutch-brake, reducing the bore to the size indicated.

Bore Size	Product Number	Reduces Clutch Bore Size to (In)	Number Required	Shipping Wt.(Lbs)
0.875	827200	0.500	2	1
0.875	802500	0.625	2	1
0.875	802600	0.750	2	1
0.875	803100	No Bore/Customer machines	2	1
1.000	829000	0.625	2	2
1.000	829100	0.750	2	2
1.000	829200	0.875	2	2

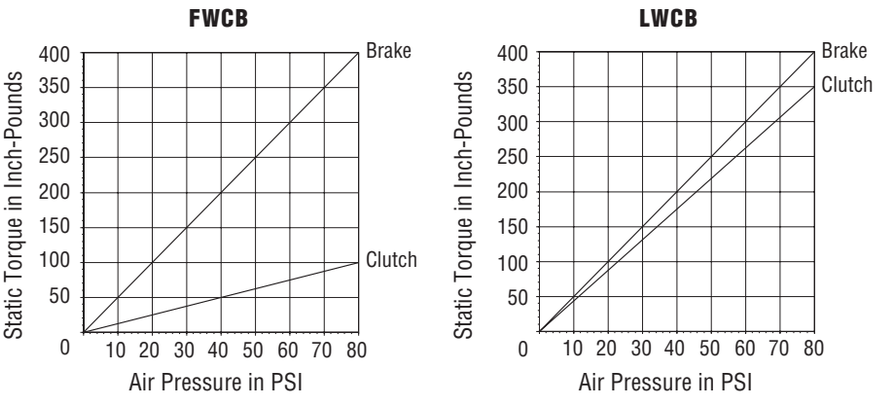
Coupling Half Options,
SEE PAGE 369 FOR COUPLING SPECIFICATIONS

A Coupling Half is used for in-line applications. It is important to review the Maximum Misalignment allowable before specifying. To achieve a Pilot Mount with Coupling Half mounting configuration:

1. Select a Pilot Mount Clutch-Brake;
2. Order Clutch-Brake and Coupling Half separately.
3. Coupling Half is less taper lock bushing. Use Dodge Taper Lock® #1008/FWCB, #1215/LWCB, (0.500 to 1.000/FWCB, 0.500 to 1.125/LWCB, inch bore range). Customer furnished.

Model	Product Number	Maximum Bore Size (In)	Shipping Wt. (Lbs)
FWCB	802700	1.000	3
LWCB	804900	1.125	6

Torque Vs. Air Pressure



NOTE: Dynamic torque is approximately 85% of static torque.

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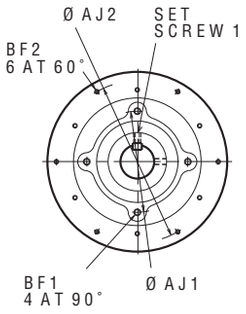
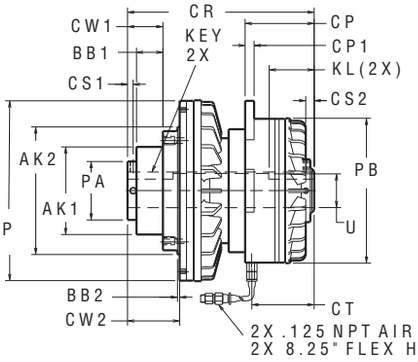
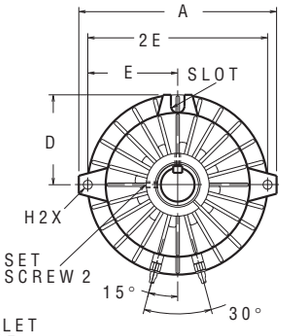
FWCB & LWCB MODEL CLUTCH-BRAKES - APPROXIMATE DIMENSIONS (INCHES)

Pilot Mount



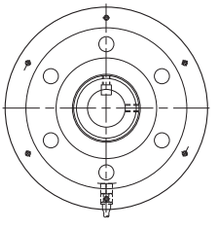


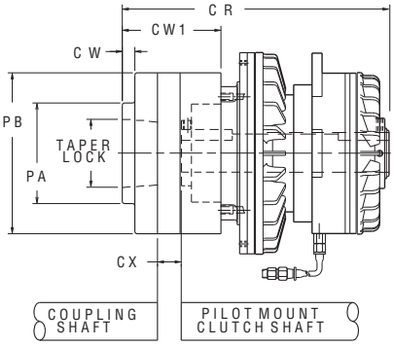


MODEL	PRODUCT NUMBER	A	AJ1	AJ2	AK1±.001	AK2±.001	BB1	BB2	BF1	BF2	CP	CP1	CR	CS1	CS2	CT	CW1	CW2	D	E
FWCB	827100	6.50	3.000	4.000	2.498	3.498	0.60	0.19	.250-20	.190-24	2.39	0.38	6.28	0.19	0.60	2.57	1.02	1.21	3.00	2.88
FWCB	827111	6.50	3.000	4.000	2.498	3.498	0.60	0.19	.250-20	.190-24	2.39	0.38	6.28	0.19	0.60	2.57	1.02	1.21	3.00	2.88
LWCB	828900	6.50	3.500	5.500	2.998	4.498	0.62	0.07	.250-20	.190-24	2.26	0.38	6.19	0.19	0.53	2.33	0.88	1.20	3.00	2.88

MODEL	PRODUCT NUMBER	2E	H	KEY	KL	P	PA	PB	SLOT	SET SCREW 1	SET SCREW 2	U +.001 -.000
FWCB	827100	5.76	.406	0.19 SQ	1.06	4.50	1.56	4.56	0.38 x 0.69	(3).190-24	(3) .164-32	.875
FWCB	827111	5.76	.406	0.19 SQ	1.06	4.50	1.56	4.56	0.38 x 0.69	(3) .190-24	(3) .164-32	.750
LWCB	828900	5.76	.406	0.18 x 0.250	1.25	6.00	1.88	4.56	0.38 X 0.69	(2).250-20	(3) .164-32	1.000

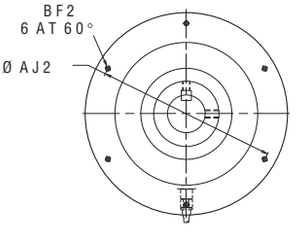
Pilot Mount w/Coupling Half

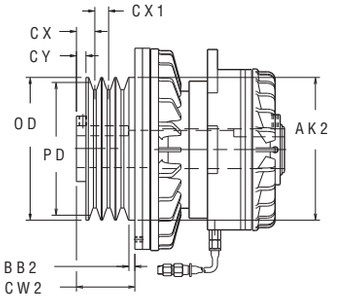




MODEL	PRODUCT NUMBER	CR	CW	CW1	CX	PA	PB	DODGE TAPER LOCK® BUSHING
FWCB	802700	8.01	0.12	2.75	0.70	2.62	3.50	#1008
LWCB	804900	8.68	0.94	3.37	0.64	2.62	4.38	#1215

Sheave Mount





MODEL	PRODUCT NUMBER	SHEAVE BELT	GROOVE	OD	PD	AJ2	AK2±.001	BB2	BF2	CW2	CX	CX1	CY
FWCB	826700	"3V"	1	3.35	--	4.000	3.498	0.06	.190-24	1.20	0.72	--	0.42
FWCB	826800	"3V"	1	4.50	--	--	--	--	--	--	0.85	--	0.41
FWCB	826900	"A"	1	--	3.80	--	--	--	--	--	0.85	--	0.41
LWCB	828300	"3V"	2	4.50	--	5.500	4.498	0.29	.190-24	1.20	0.33	0.41	0.08
LWCB	828400	"3V"	2	5.30	--	--	--	--	--	--	0.51	0.41	0.20
LWCB	828500	"3V"	2	6.00	--	--	--	--	--	--	0.51	0.41	0.20
LWCB	828600	"3V"	2	8.00	--	--	--	--	--	--	0.51	0.41	0.20
LWCB	828700	"A"	2	--	4.40	--	--	--	--	--	0.38	0.62	0.11*
LWCB	828800	"A"	2	--	5.40	--	--	--	--	--	0.38	0.62	0.11*

* Sheave Extends Beyond Hub

CLUTCH-BRAKE MODELS MWCB & HWCB

The MWCB and HWCB are each an "Air Champ" clutch and an "Air Champ" brake combined into a single unit, forming a combination clutch-brake. They provide:

- Static Torque capacity up to:
  MWCB/900 In. Lbs. @ 80 psi (brake)
  MWCB/600 In. Lbs. @ 80 psi (clutch)
  HWCB/2800 In. Lbs. @ 80 psi (brake)
  HWCB/2600 In. Lbs. @ 80 psi (clutch)
- Maximum Operating Speed up to 1800 rpm
- Thermal Horsepower ratings of:
  MWCB/0.75 (clutch) @ 1800 rpm
  MWCB/ 1.30 (brake) @ 1800 rpm
  HWCB/1.25 (clutch) @ 1800 rpm
  HWCB/ 2.23 (brake) @ 1800 rpm

THESE CLUTCH-BRAKES MUST BE MOUNTED ON THE DRIVEN SHAFT. Brake housing must not be mounted rigidly.

Choice of Models:
MWCB/3 Models, HWCB/3 Models

- **Sheave Mount** units are available:
  MWCB/3-"3V" or 2-"B" Groove sheave
  HWCB/3-"5V" or 3-"B" Groove sheave
- **Pilot Mount** units offer **Standard bore** sizes of:

  MWCB/1.437 and 1.500 inches
  HWCB/1.688 and 1.875 inches
- For in-line applications, select the optional coupling half

Model MWCB & HWCB Clutch-Brakes

Model	Clutch-Brake Style	Product Number	Sheave Diameter	Bore (In)	Key Size (SQ)	Shipping Wt. (Lbs)
MWCB	Pilot Mount	830811	--	1.437	0.375	36
MWCB	Pilot Mount	830800	--	1.500	0.375	36
MWCB	Sheave Mount, 3-"3V"	830300	5.30 OD	1.500	0.375	36
MWCB	Sheave Mount, 3-"3V"	830400	6.00 OD	1.500	0.375	38
MWCB	Sheave Mount, 3-"3V"	830500	10.00 OD	1.500	0.375	55
MWCB	Sheave Mount, 2-"B"	830600	5.80 PD	1.500	0.375	38
MWCB	Sheave Mount, 2-"B"	830700	6.80 PD	1.500	0.375	41
HWCB	Pilot Mount	832913	--	1.688	0.375	95
HWCB	Pilot Mount	832900	--	1.875	0.500	95
HWCB	Sheave Mount, 3-"5V"	832400	7.10 OD	1.875	0.500	102
HWCB	Sheave Mount, 3-"5V"	832500	8.00 OD	1.875	0.500	107
HWCB	Sheave Mount, 3-"5V"	832600	16.00 OD	1.875	0.500	142
HWCB	Sheave Mount, 3-"B"	832700	7.40 PD	1.875	0.500	107

Keys are included.

Bushing Options

(for 1.500 & 1.875 bore clutch-brakes only)

Bushings fit into the clutch-brake, reducing the bore to the size indicated.

Bore Size	Product Number	Reduces Clutch Bore Size to (In)	Number Required	Shipping Wt.(Lbs)
1.500	830900	1.125	2	4
1.500	831000	1.188	2	4
1.500	831100	1.250	2	4
1.500	831200	1.375	2	4
1.500	831300	1.438	2	4
1.875	833000	1.375	2	4
1.875	833100	1.438	2	4
1.875	833200	1.500	2	4
1.875	833300	1.625	2	4
1.875	833400	1.750	2	4

Coupling Half Options,

see page 369 for coupling specifications

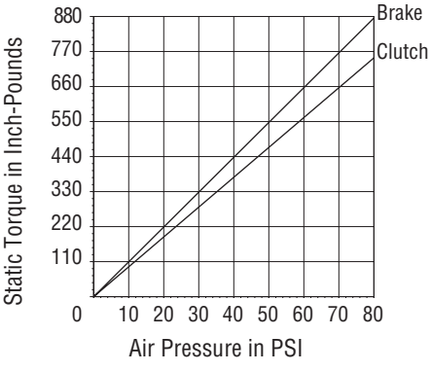
A Coupling Half is used for in-line applications. It is important to review the Maximum Misalignment allowable before specifying. To achieve a Pilot Mount with Coupling Half mounting configuration:

1. Select a Pilot Mount Clutch-Brake;
2. Order Clutch-Brake and Coupling Half separately.
3. Coupling Half is less taper lock bushing. Use Dodge Taper Lock® #2517 for MWCB & HWCB, (1.000 to 2.500 inch bore range). Customer furnished.

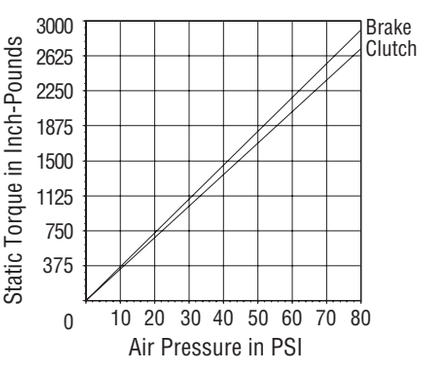
Model	Product Number	Maximum Bore Size (In)	Shipping Wt. (Lbs)
MWCB	807400	2.500	23
HWCB	809700	2.500	33

Torque Vs. Air Pressure

MWCB



HWCB



NOTE: Dynamic torque is approximately 85% of static torque.

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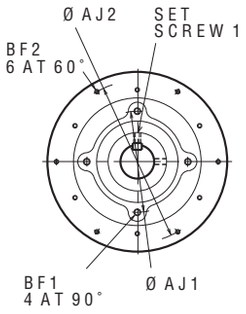
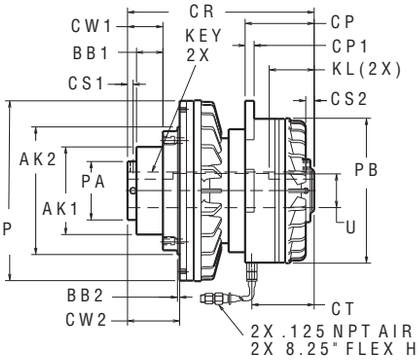
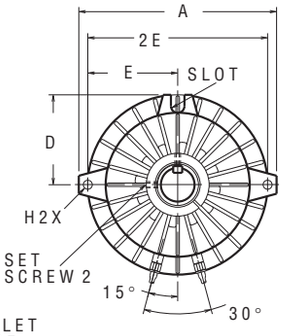
MWCB & HWCB MODEL CLUTCH-BRAKES - APPROXIMATE DIMENSIONS (INCHES)

Pilot Mount



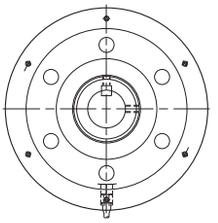


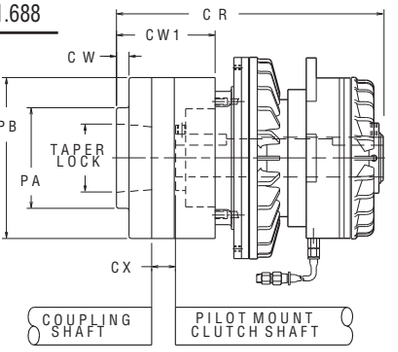


MODEL	PRODUCT NUMBER	A	AJ1	AJ2	AK1±.001	AK2±.001	BB1	BB2	BF1	BF2	CP	CP1	CR	CS1	CS2	CT	CW1	CW2	D	E
MWCB	830800	8.12	4.750	6.500	3.998	5.498	0.77	0.67	.312-18	.250-20	3.07	0.56	7.88	0.22	0.72	2.78	1.14	1.82	4.06	3.68
MWCB	830811	8.12	4.750	6.500	3.998	5.498	0.77	0.67	.312-18	.250-20	3.07	0.56	7.88	0.22	0.72	2.78	1.14	1.82	4.06	3.68
HWCB	832900	11.00	5.625	9.000	4.873	7.098	1.47	0.12	.375-16	.250-20	3.84	0.50	10.38	0.31	0.46	3.46	1.97	2.90	5.00	5.00
HWCB	832913	11.00	5.625	9.000	4.873	7.098	1.47	0.12	.375-16	.250-20	3.84	0.50	10.38	0.31	0.46	3.46	1.97	2.90	5.00	5.00

MODEL	PRODUCT NUMBER	2E	H	KEY	KL	P	PA	PB	SLOT	SET SCREW 1	SET SCREW 2	U +.001 -.000
MWCB	830800	7.36	.406	0.31 x 0.38	1.50	8.00	2.62	6.06	0.63 X 1.00	(2).250-20	(3).250-20	1.500
MWCB	830811	7.36	.406	0.38 x 0.38	1.69	8.00	2.62	6.06	0.63 X 1.00	(2).250-20	(3).250-20	1.438
HWCB	832900	10.00	.500	0.38 x 0.50	2.00	10.00	3.25	8.06	0.75 x 1.00	(2).375-16	(2).312-18	1.875
HWCB	832913	10.00	.500	0.38 x 0.38	2.25	10.00	3.25	8.06	0.75 x 1.00	(2).375-16	(2).312-18	1.688

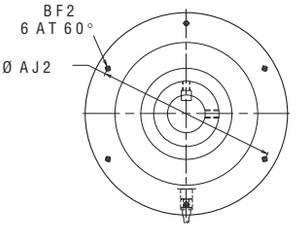
Pilot Mount w/Coupling Half

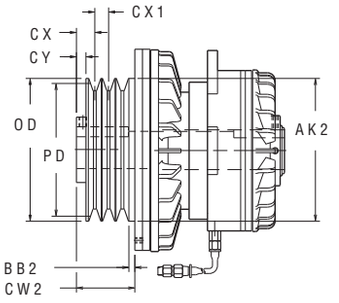




MODEL	PRODUCT NUMBER	CR	CW	CW1	CX	PA	PB	DODGE TAPER LOCK® BUSHING
MWCB	807400	10.99	0.81	4.25	0.87	5.00	7.00	#2517
HWCB	809700	13.32	0.63	4.90	1.18	5.00	8.00	#2517

Sheave Mount





MODEL	PRODUCT NUMBER	SHEAVE BELT	GROOVE	OD	PD	AJ2	AK2±.001	BB2	BF2	CW2	CX	CX1	CY
MWCB	830300	"3V"	3	5.30	--	6.50	5.498	0.06	.250-20	1.80	0.46	.041	0.18
MWCB	830400	"3V"	3	6.00	--	--	--	--	--	--	0.46	0.41	0.18
MWCB	830500	"3V"	3	10.60	--	--	--	--	--	--	0.52	0.41	0.18
MWCB	830600	"B"	2	--	5.80	--	--	--	--	--	0.68	0.75	0.18
MWCB	830700	"B"	2	--	6.80	--	--	--	--	--	0.68	0.75	0.18
HWCB	832400	"5V"	3	7.10	--	9.000	7.098	0.32	.250-20	2.90	0.90	0.69	0.46
HWCB	832500	"5V"	3	8.00	--	--	--	--	--	--	1.03	0.69	0.50
HWCB	832600	"5V"	3	16.00	--	--	--	--	--	--	1.00	0.69	0.50
HWCB	832700	"B"	3	--	7.40	--	--	--	--	--	1.02	0.69	0.50

* Sheave Extends Beyond Hub

MODEL FCDB CLUTCH-DISC CALIPER BRAKES

Easily combine an F-450 "Air Champ" clutch with a DB Model Caliper Disc brake to create a clutch-disc caliper brake. THIS COMBINATION MOUNTS ON THE DRIVING SHAFT.

Clutch features:

- Static Torque capacity up to 140 In. Lbs. @ 80 psi
- Maximum Operating Speed up to 3600 rpm
- Thermal Horsepower rating of 0.30 @ 3600 rpm
- Heat Sink capacity of 30,000 Ft. Lbs.
- Choose from either **Pilot Mount** or **Sheave Mount** styles with **Standard Bore sizes** of 0.750 and 0.875

Caliper Brake features:

- Static Torque capacity up to 600 In. Lbs. @ 80 psi
- Additional Calipers may be added to increase the brake torque
- Arc contoured shoe provides large facing area, for greater facing life and stability
- Mounts easily in any position with T-Bracket
- Available with 10 inch disc
- Disc Speed up to 3600 rpm
- Spring return eliminates disc drag when disengaged

All components must be ordered separately.

Model FCDB Clutch-Disc-Caliper Brakes

1. Determine the Clutch style desired;
2. Order Clutch, Brake, Brake Hose and Disc separately to complete your assembly;
3. Additional Calipers can be added to increase brake torque .

Clutch Style	Product Number	Sheave Diameter	Bore (In)	Key Size (SQ)	Shipping Wt. (Lbs)
Clutch, Pilot Mount	802855	--	0.750	0.188	10
Clutch, Pilot Mount	802850	--	0.875	0.188	12
Clutch, Sheave Mount 1-"3V"	802810	3.35 OD	0.875	0.188	10
Clutch, Pilot w/Coupling Half	*Select a Pilot Mount and a Coupling Half to achieve this style of mount.*				
Caliper Brake w/T Bracket	835000				8
Brake Air Hose Assembly	835400				2
Disc, 10" OD	855900				3

Keys are included.

Bushing Options (for 0.875 bore clutches only)

Bushings fit within the bore of the existing clutch, reducing the bore to the amount indicated.

Product Number	Reduces Clutch Bore Size to (In)	Shipping Wt. (Lbs)
827200	0.500	1
802500	0.625	1
802600	0.750	1
803100	No Bore/Customer machines	1

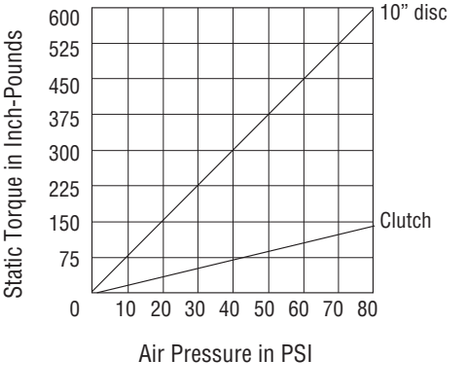
Coupling Half Options, see page 369 for coupling specifications

A Coupling Half is used for in-line applications. It is important to review the Maximum Misalignment allowable before specifying. To achieve a Pilot Mount with Coupling Half mounting configuration:

1. Select a Pilot Mount Clutch-Brake from above;
2. Order Clutch, Brake and Coupling Half separately.
3. Coupling Half is less taper lock bushing. Use Dodge Taper Lock® #1008 (0.500 to 1.000 inch bore range). Customer furnished.

Product Number	Maximum Bore Size (In)	Shipping Wt. (Lbs)
802700	1.000	3

Torque Vs. Air Pressure



NOTE: Dynamic torque is approximately 85% of static torque.

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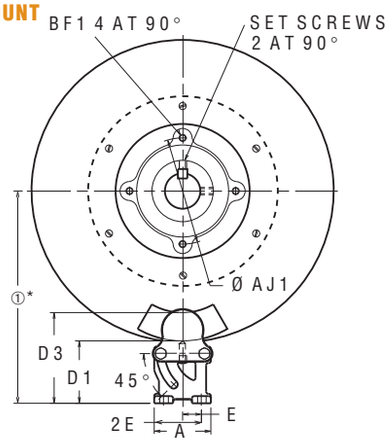
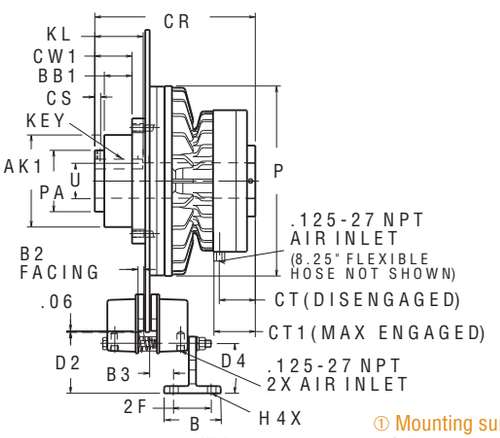
FCDB MODEL CLUTCH-DISC CALIPER BRAKES - APPROXIMATE DIMENSIONS (INCHES)

Pilot Mount



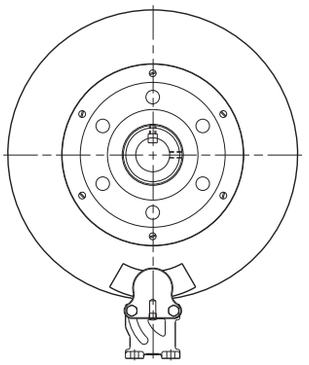


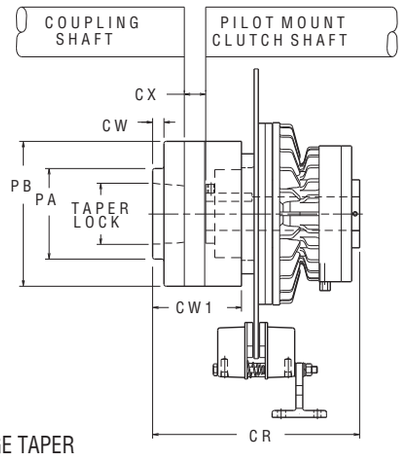
① Mounting surface to disc center = Disc Radius + D2

PRODUCT NUMBER	AJ1	AK1±.001	BB1	BF1	CR	CS	CT	CT1	CW1	KL	KEY (SQ)	P	PA	SET SCREWS	U +.001 -.000
802850	3.000	2.498	0.60	.250-20	4.75	0.25	1.33	1.42	1.04	0.62	0.188	4.56	1.38	.250-20	0.875
802855	3.000	2.498	0.60	.250-20	4.75	0.25	1.33	1.42	1.04	0.62	0.188	4.56	1.38	.250-20	0.750

PRODUCT NUMBER	OD (IN.)	A	B	B3	D1	D2	D3	D4	E	2E	2F
855900	10	3.00	3.00	1.27	3.30	3.24	4.80	2.62	1.00	2.00	2.00
835000	10	3.00	3.00	1.27	3.30	3.24	4.80	2.62	1.00	2.00	2.00

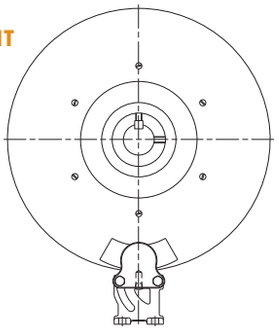
Pilot Mount w/Coupling Half

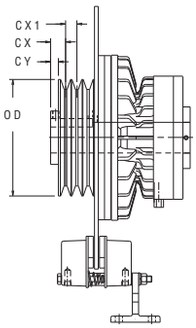




COUPLING PRODUCT NUMBER	CR	CW	CW1	CX	PA	PB	DODGE TAPER LOCK® BUSHING
802700	6.45	0.12	2.75	0.70	2.62	3.50	#1008

Sheave Mount





PRODUCT NUMBER	SHEAVE BELT	SHEAVE GROOVE	OD	CX	CX1	CY
802810	"3V"	1	3.35	0.75	--	0.44

MODEL LCDB CLUTCH-DISC CALIPER BRAKES

Easily combine an L-600 "Air Champ" clutch with a DB Model Caliper Disc brake to create a clutch-disc caliper brake. THIS COMBINATION MOUNTS ON THE DRIVING SHAFT.

Clutch features:

- Static Torque capacity up to 370 In. Lbs. @ 80 psi
- Maximum Operating Speed up to 3600 rpm
- Thermal Horsepower rating of 0.75 @ 3600 rpm
- Heat Sink capacity of 60,000 Ft. Lbs.
- Choose from either **Pilot Mount** or **Sheave Mount** styles with **standard bore** sizes of 1.000 and 1.125 inches

Caliper Brake features:

- Static Torque capacity up to 750 In. Lbs. @ 80 psi
- Additional calipers may be added to increase the brake torque
- Arc contoured shoe provides large facing area, for greater facing life and stability
- Mounts easily in any position with T-Bracket
- Available with 10 or 12 inch disc
- Disc Speed up to 3600 rpm
- Spring return eliminates disc drag when disengaged

All components must be ordered separately.

Model LCDB Clutch-Disc-Caliper Brakes

1. Determine the Clutch style desired;
2. Order Clutch, Brake, Brake Hose and Disc separately to complete your assembly;
3. Additional Calipers can be added to increase brake torque .

Clutch Style	Product Number	Sheave Diameter	Bore (In)	Key Size (SQ)	Shipping Wt. (Lbs)
Clutch, Pilot Mount	805275	--	1.000	0.025	17
Clutch, Pilot Mount	805270	--	1.125	0.025	17
Clutch, Sheave Mount , 2-"3V"	805210	4.50 OD	1.125	0.025	18
Clutch, Pilot w/Coupling Half	*Select a Pilot Mount and a Coupling Half to achieve this style of mount.*				
Caliper Brake w/T Bracket	835000				8
Brake Air Hose Assembly	835400				2
Disc, 10" OD	855500				3
Disc, 12" OD	856000				5

Keys are included.

Bushing Options (for 1.125 bore clutches only)

Bushings fit within the bore of the existing clutch, reducing the bore to the amount indicated.

Product Number	Reduces Clutch Bore Size to (In)	Shipping Wt. (Lbs)
805100	0.625	1
804600	0.750	1
804700	0.875	1
804800	1.000	1
805000	No Bore/Customer machines	1

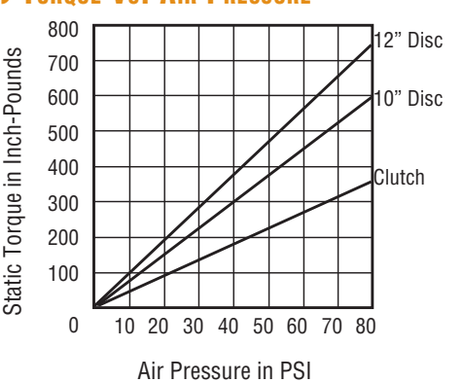
Coupling Half Options, see page 369 for coupling specifications

A Coupling Half is used for in-line applications. It is important to review the Maximum Misalignment allowable before specifying. To achieve a Pilot Mount with Coupling Half mounting configuration:

1. Select a Pilot Mount Clutch-Brake from above;
2. Order Clutch-Brake and Coupling Half separately.
3. Coupling Half is less taper lock bushing. Use Dodge Taper Lock® #1215 (0.500 to 1.125 inch bore range). Customer furnished.

Product Number	Maximum Bore Size (In)	Shipping Wt. (Lbs)
804900	1.125	6

Torque Vs. Air Pressure



NOTE: Dynamic torque is approximately 85% of static torque.

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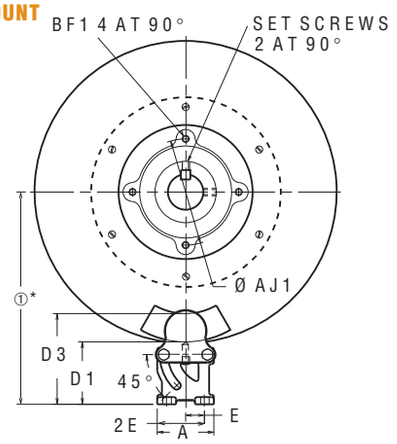
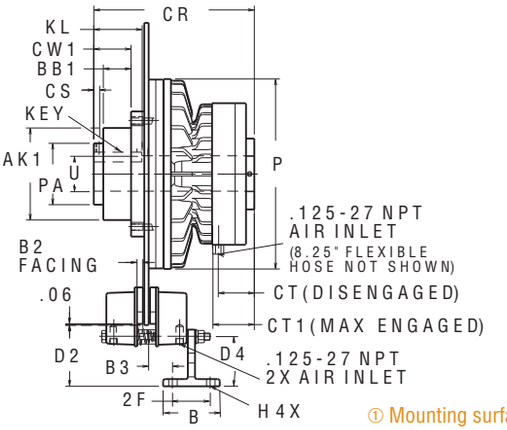
LCDB MODEL CLUTCH-DISC CALIPER BRAKES - APPROXIMATE DIMENSIONS (INCHES)

Pilot Mount





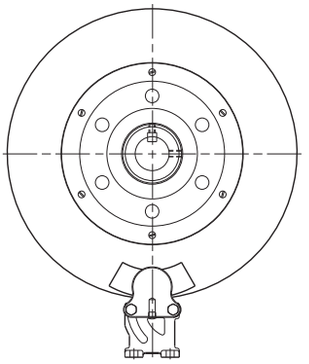
① Mounting surface to disc center = Disc Radius + D2

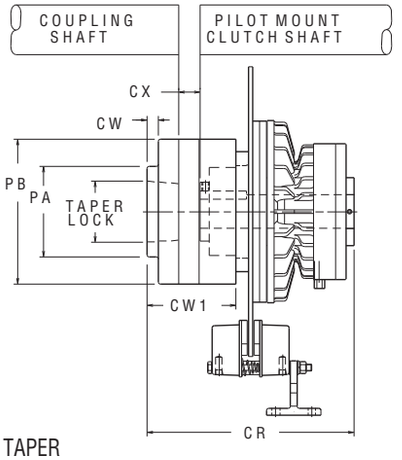
PRODUCT NUMBER	AJ1	AK1±.001	BB1	BF1	CR	CS	CT	CT1	CW1	KL	KEY (SQ)	P	PA	SET SCREWS	U +.001 -.000
805270	3.500	2.998	0.62	.250-20	5.56	0.25	1.79	1.94	1.23	1.37	0.250	6.06	1.84	.312-18	1.125
805275	3.500	2.998	0.62	.250-20	5.56	0.25	1.79	1.94	1.23	1.37	0.250	6.06	1.84	.312-18	1.000

PRODUCT NUMBER	OD (IN.)	A	B	B3	D1	D2	D3	D4	E	2E	2F
855500	10	3.00	3.00	1.27	3.30	3.24	4.80	2.62	1.00	2.00	2.00
835000	10	3.00	3.00	1.27	3.30	3.24	4.80	2.62	1.00	2.00	2.00

PRODUCT NUMBER	OD (IN.)	A	B	B3	D1	D2	D3	D4	E	2E	2F
856000	12	3.00	3.00	1.27	3.30	3.24	4.80	2.62	1.00	2.00	2.00
835000	10	3.00	3.00	1.27	3.30	3.24	4.80	2.62	1.00	2.00	2.00

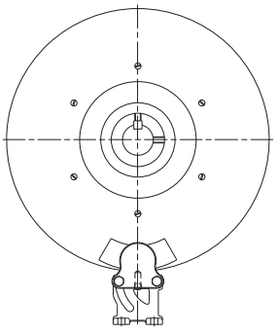
Pilot Mount w/Coupling Half

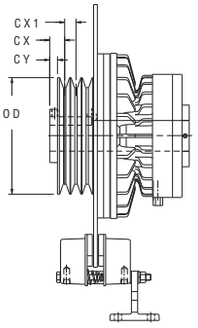




PRODUCT NUMBER	CR	CW	CW1	CX	PA	PB	DODGE TAPER LOCK® BUSHING
804900	7.70	0.94	3.37	0.64	2.62	4.38	#1215

Sheave Mount





PRODUCT NUMBER	SHEAVE BELT	SHEAVE GROOVE	OD	CX	CX1	CY
805210	"3V"	2	4.50	0.68	0.41	0.43

MODEL MCDB CLUTCH-DISC CALIPER BRAKES

Easily combine an M-800 "Air Champ" clutch with a DB Model Caliper Disc brake to create a clutch-disc caliper brake. THIS COMBINATION MOUNTS ON THE DRIVING SHAFT.

Clutch features:

- Static Torque capacity up to 960 In. Lbs. @ 80 psi
- Maximum Operating Speed up to 1800 rpm
- Thermal Horsepower rating of 1.00 @ 1800 rpm
- Heat Sink capacity of 110,000 Ft. Lbs.
- Choose from either **Pilot Mount** or **Sheave Mount** styles with **standard bore** sizes of 1.438 and 1.625 inches

Caliper Brake features:

- Static Torque capacity up to 875 In. Lbs. @ 80 psi
- Additional calipers may be added to increase the brake torque
- Arc contoured shoe provides large facing area, for greater facing life and stability
- Mounts easily in any position with T-Bracket
- Available with 12 or 14 inch disc
- Disc Speed up to 1800 rpm
- Spring return eliminates disc drag when disengaged

All components must be ordered separately.

Model MCDB Clutch-Disc-Caliper Brakes

1. Determine the Clutch style desired;
2. Order Clutch, Brake, Brake Hose and Disc separately to complete your assembly;
3. Additional Calipers can be added to increase brake torque .

Clutch Style	Product Number	Sheave Diameter	Bore (In)	Key Size (SQ)	Shipping Wt. (Lbs)
Clutch, Pilot Mount	807655	--	1.438	0.375	38
Clutch, Pilot Mount	807650	--	1.625	0.375	37
Clutch, Sheave Mount , 3-"3V"	807610	5.30 OD	1.625	0.375	37
Clutch, Pilot w/Coupling Half	*Select a Pilot Mount and a Coupling Half to achieve this style of mount.*				
Caliper Brake w/T Bracket	835000				8
Brake Air Hose Assembly	835400				2
Disc, 12" OD	855600				5
Disc, 14" OD	855700				7

Keys are included.

Bushing Options (for 1.625 bore clutches only)

Bushings fit within the bore of the existing clutch, reducing the bore to the amount indicated.

Product Number	Reduces Clutch Bore Size to (In)	Shipping Wt. (Lbs)
806700	1.000	2
806800	1.125	2
806900	1.188	2
807000	1.250	2
807100	1.375	2
807200	1.438	2
807300	1.500	2
807500	No Bore/Customer machines	2

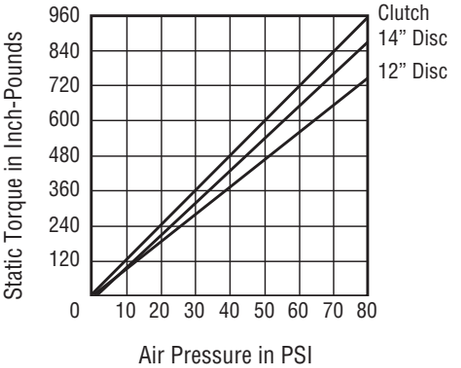
Coupling Half Options, see page 369 for coupling specifications

A Coupling Half is used for in-line applications. It is important to review the Maximum Misalignment allowable before specifying. To achieve a Pilot Mount with Coupling Half mounting configuration:

1. Select a Pilot Mount Clutch-Brake from above;
2. Order Clutch-Brake and Coupling Half separately.
3. Coupling Half is less taper lock bushing. Use Dodge Taper Lock® #2517 (1.000 to 2.500 inch bore range). Customer furnished.

Product Number	Maximum Bore Size (In)	Shipping Wt. (Lbs)
807400	2.500	25

Torque Vs. Air Pressure



NOTE: Dynamic torque is approximately 85% of static torque.

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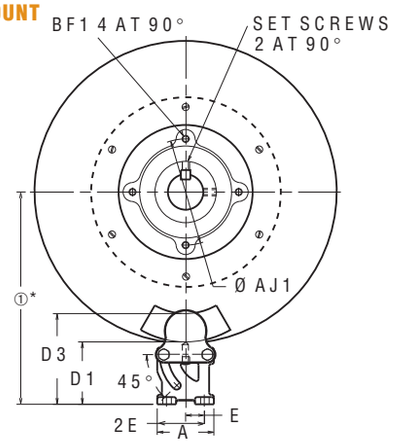
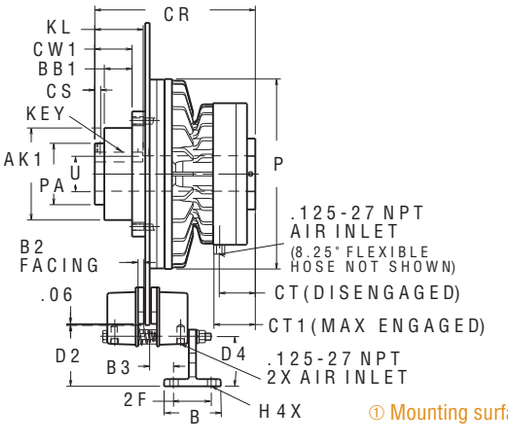
MCDB MODEL CLUTCH-DISC CALIPER BRAKES - APPROXIMATE DIMENSIONS (INCHES)

Pilot Mount





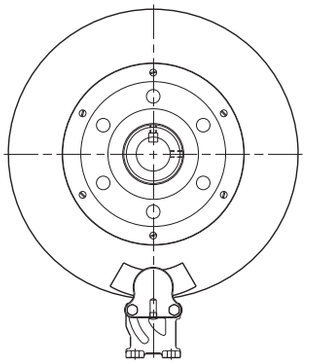
① Mounting surface to disc center = Disc Radius + D2

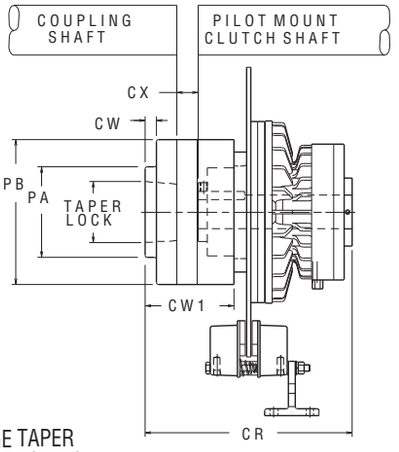
PRODUCT NUMBER	AJ1	AK1±.001	BB1	BF1	CR	CS	CT	CT1	CW1	KL	KEY (SQ)	P	PA	SET SCREWS	U +.001 -.000
807650	4.750	3.998	0.77	.312-18	7.31	0.38	1.62	1.71	1.62	1.69	0.375	8.06	2.63	.375-16	1.625
807655	4.750	3.998	0.77	.312-18	7.31	0.38	1.62	1.71	1.62	1.69	0.375	8.06	2.63	.375-16	1.438

PRODUCT NUMBER	OD (IN.)	A	B	B3	D1	D2	D3	D4	E	2E	2F
855600	12	3.00	3.00	1.27	3.30	3.24	4.80	2.62	1.00	2.00	2.00
835000	10	3.00	3.00	1.27	3.30	3.24	4.80	2.62	1.00	2.00	2.00

PRODUCT NUMBER	OD (IN.)	A	B	B3	D1	D2	D3	D4	E	2E	2F
855700	14	3.00	3.00	1.27	3.30	3.24	4.80	2.62	1.00	2.00	2.00
835000	10	3.00	3.00	1.27	3.30	3.24	4.80	2.62	1.00	2.00	2.00

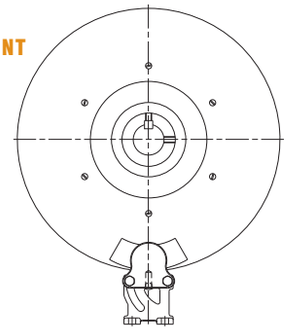
Pilot Mount w/Coupling Half

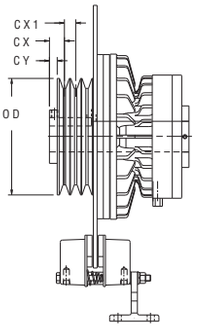




PRODUCT NUMBER	CR	CW	CW1	CX	PA	PB	DODGE TAPER LOCK® BUSHING
807400	9.93	0.81	4.25	0.87	5.00	7.00	#2517

Sheave Mount





PRODUCT NUMBER	SHEAVE BELT	SHEAVE GROOVE	OD	CX	CX1	CY
807610	"3V"	3	5.30	0.96	0.41	0.68

MODEL HCDB CLUTCH-DISC CALIPER BRAKES

Easily combine an H-1000 "Air Champ" clutch with a DB Model Caliper Disc brake to create a clutch-disc caliper brake. THIS COMBINATION MOUNTS ON THE DRIVING SHAFT.

Clutch features:

- Static Torque capacity up to 2800 In. Lbs. @ 80 psi
- Maximum Operating Speed up to 1800 rpm
- Thermal Horsepower rating of 2.25 @ 1800 rpm
- Heat Sink capacity of 230,000 Ft. Lbs.
- Choose from either **Pilot Mount** or **Sheave Mount** styles with **standard bore** sizes of 1.688 and 1.875 inches

Caliper Brake features:

- Static Torque capacity up to 1025 In. Lbs. @ 80 psi
- Additional calipers may be added to increase the brake torque
- Arc contoured shoe provides large facing area, for greater facing life and stability
- Mounts easily in any position with T-Bracket
- Available with 16 inch disc
- Disc Speed up to 1800 rpm
- Spring return eliminates disc drag when disengaged

All components must be ordered separately.

Model HCDB Clutch-Disc-Caliper Brakes

1. Determine the Clutch style desired;
2. Order Clutch, Brake, Brake Hose and Disc separately to complete your assembly;
3. Additional Calipers can be added to increase brake torque .

Clutch Style	Product Number	Sheave Diameter	Bore (In)	Key Size (SQ)	Shipping Wt. (Lbs)
Clutch, Pilot Mount	810055	--	1.688	0.375	63
Clutch, Pilot Mount	810050	--	1.875	0.500	61
Clutch, Sheave Mount , 3-"5V"	810010	7.10 OD	1.875	0.500	69
Clutch, Pilot w/Coupling Half	*Select a Pilot Mount and a Coupling Half to achieve this style of mount.*				
Caliper Brake w/T Bracket	835000				8
Brake Air Hose Assembly	835400				2
Disc, 16" OD	855800				9

Keys are included.

Bushing Options (for 1.875 bore clutches only)

Bushings fit within the bore of the existing clutch, reducing the bore to the amount indicated.

Product Number	Reduces Clutch Bore Size to (In)	Shipping Wt. (Lbs)
805600	1.000	2
809200	1.375	2
809300	1.438	2
809400	1.500	2
809500	1.625	2
809600	1.750	2
809900	No Bore/Customer machines	2

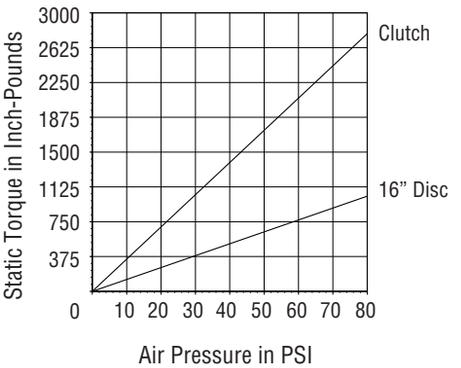
Coupling Half Options, see page 369 for coupling specifications

A Coupling Half is used for in-line applications. It is important to review the Maximum Misalignment allowable before specifying. To achieve a Pilot Mount with Coupling Half mounting configuration:

1. Select a Pilot Mount Clutch-Brake from above;
2. Order Clutch-Brake and Coupling Half separately.
3. Coupling Half is less taper lock bushing. Use Dodge Taper Lock® #2517 (1.000 to 2.500 inch bore range). Customer furnished.

Product Number	Maximum Bore Size (In)	Shipping Wt. (Lbs)
809700	2.500	33

Torque Vs. Air Pressure

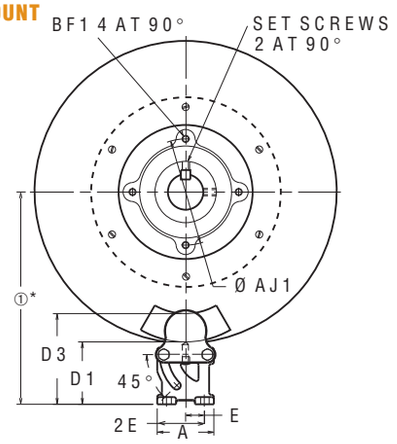


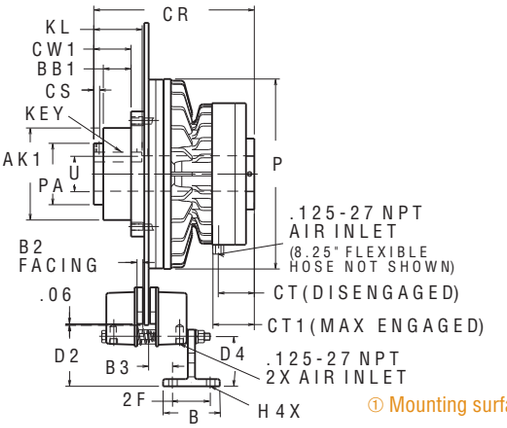
NOTE: Dynamic torque is approximately 85% of static torque.

ARTEN Freios e Embreagens - Fone: 11 5594-8333

HCDB MODEL CLUTCH-DISC CALIPER BRAKES - APPROXIMATE DIMENSIONS (INCHES)

Pilot Mount



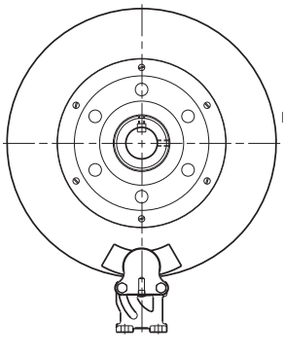


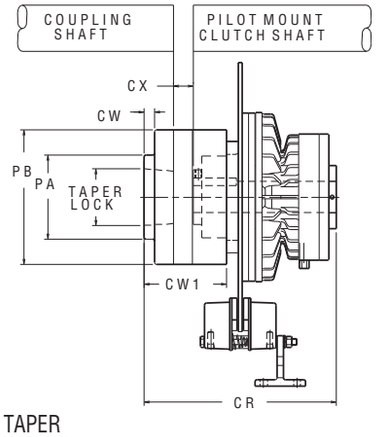
① Mounting surface to disc center = Disc Radius + D2

PRODUCT NUMBER	AJ1	AK1±.001	BB1	BF1	CR	CS	CT	CT1	CW1	KL	KEY (SQ)	P	PA	SET SCREWS	U +.001 -.000
810050	5.625	4.873	1.47	.375-16	8.50	0.31	1.92	2.14	1.97	2.56	0.500	10.06	3.25	.375-16	1.875
810055	5.625	4.873	1.47	.375-16	8.50	0.31	1.92	2.14	1.97	2.56	0.500	10.06	3.25	.375-16	1.688

PRODUCT NUMBER	OD (IN.)	A	B	B3	D1	D2	D3	D4	E	2E	2F
855800	16	3.00	3.00	1.27	3.30	3.24	4.80	2.62	1.00	2.00	2.00
835000	10	3.00	3.00	1.27	3.30	3.24	4.80	2.62	1.00	2.00	2.00

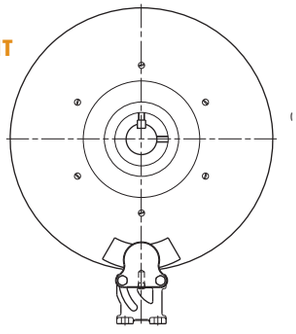
Pilot Mount w/Coupling Half

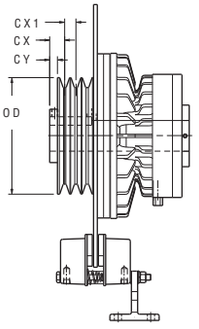




PRODUCT NUMBER	CR	CW	CW1	CX	PA	PB	DODGE TAPER LOCK® BUSHING
809700	11.43	0.63	4.90	1.18	5.00	7.00	#2517

Sheave Mount





PRODUCT NUMBER	SHEAVE BELT	SHEAVE GROOVE	OD	CX	CX1	CY
810010	"5V"	3	7.10	0.91	0.69	0.47