



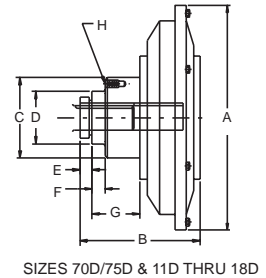
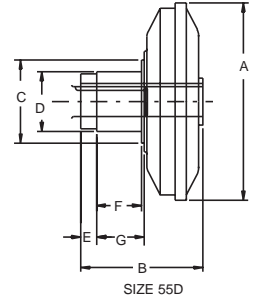
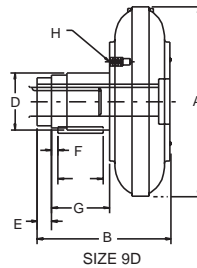
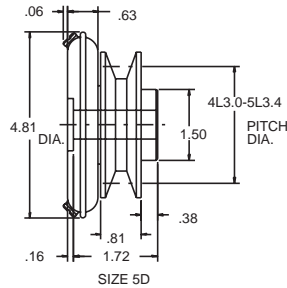
SELECTION/DIMENSIONS



FLEXIDYNE Drives



Each FLEXIDYNE, including a container of flow charge, is individually packaged. A speed drop cutout is included with 15D and 18D sizes. Cutout features and a cross section drawing are shown in the Modifications/Accessories section.



NOTE: Drawings are for dimensional purposes and do not necessarily represent construction

5D FLEXIDYNE DRIVE

Nom. Stock Bores ▲	w/Integral Sheave	Part Number	Wt. Lbs.	Keyseat	Key Req'd.
	P.D.				
5/8	4L2.2-5L2.6	305106	3.4	3/16 X 3/32 X 111/16	3/16 X 3/16 X 13/8
	4L3.0-5L3.4	305101	2.4		
	4L3.6-5L4.0	305102	3.6		
3/4 (Max.)	4L3.0-5L3.4	305103	2.7	3/16 X 3/32 X 111/16	3/16 X 3/16 X 17/8

▲ +.0005" +.0025" over nominal. Bores not listed will be quoted on application.



FLEXIDYNE 55D THRU 18D FLEXIDYNE DRIVE

DRIVE SIZE	MAX. RPM	NOM STOCK BORES *	Part Number	Wt Lbs	Keyseat ♥	Key Req'd
55D	3600	5/8	305015	3.0	3/16 x 3/32 x 31/16	3/16 x 3/16 x 13/8
		7/8 (Max)	305016	2.8		
70D	3300	7/8	305021	9.5	3/16 x 3/32 x 35/16	3/16 x 3/16 x 13/8
		11/8 (Max.)	305022	9.7	1/4 x 1/8 x 35/16	1/4 x 1/4 x 13/4
75D	3300	1	305085	10.0	1/4 x 1/8 x 4	1/4 x 1/4 x 13/4
		11/8	305056	10.2	1/4 x 1/8 x 4	1/4 x 1/4 x 13/4
		13/8 (Max.)	305057		5/16 x 3/32 x 4	5/16 x 1/4 x 23/8 ♦
9D	2300	11/8	309070	23.0	1/4 x 1/8 x 6	1/4 x 1/4 x 2
		11/4	309071	24.0	1/4 x 1/8 x 6	1/4 x 1/4 x 23/4
		13/8	309072	23.5	5/16 x 5/32 x 6	5/16 x 5/16 x 23/4
		15/8 (Max.)	309073	23.0	3/8 x 1/8 x 6	3/8 x 5/16 x 33/4 r
11D	2400	13/8	311070	45.0	5/16 x 5/32 x 75/16	5/16 x 5/16 x 23/4
		15/8	311071	46.0	3/8 x 3/16 x 75/16	3/8 x 3/8 x 33/4
		17/8 (Max.)	311072	45.0	1/2 x 1/8 x 75/16	1/2 x 3/8 x 51/2 ♦
11DL		21/8 (Max.)	311073	44.0	1/2 x 1/8 x 75/16	1/2 x 3/8 x 51/2 ♦
15D	1800	17/8	315070	100.0	1/2 x 1/4 x 103/16	1/2 x 1/2 x 5
		21/8	315071	92.0	1/2 x 1/4 x 103/16	1/2 x 1/2 x 5
		23/8 (Max.)	315072	96.0	5/8 x 1/8 x 103/16	5/8 x 7/16 x 51/2 ♦
18D	1500	27/8	318060	154.0	3/4 x 3/8 x 103/16	3/4 x 3/4 x 93/4
		33/8 (Max.)	318065	154.0	7/8 x 1/4 x 103/16	7/8 x 11/16 x 93/4 ♦

Size	A	B	C -.000 +.002	D	E	F	G **	H	
								No. of Holes	Thd's
55D	5.38	3.07	2.752	1.69	0.47	1.38	1.41	...	...
70D	8.13	3.56	3.755/3.753	2.81	0.63	0.63	1.03	4	††
75D	8.13	4.25	3.755/3.753	2.81	0.63	0.63	1.72	4	††
9D	9.50	6.75	...	3.00{	0.69	0.56	3.38	4	♣
11D	11.25	8.28	5.082/5.080	3.610/3.605	0.75	2.50	4.38	4	§
11DL									
15D	14.50	11.19	6.625/6.623	4.63	1.00	3.25	6.31	6	▲
18D	18.00	14.75	9.189/9.187	6.00	1.13	1.50	9.25	6	♣

Note: To facilitate order processing specify part numbers

Setscrews: One furnished over keyway, one @ 120°

* All sizes: +.0005" +.0025" over nominal. Bores not listed will be quoted on application

† Key provided

** Provide 3/32 min. clearance between sheave and FLEXIDYNE drive

♦ Key is furnished for these sizes only

♥ Keyseat begins at left end of FLEXIDYNE drive as viewed in drawings on page PT3-8

♣ 1/4-20x1/2" deep on 3-1/2" Dia. B.C. (1/4x2-1/2" Soc. Hd. Cap Screws w/1-3/8" thd., not furnished).

§ 3/8-16x1-1/8" deep on 4-3/8" Dia. B.C. (3/8x1-3/4" Soc. Hd. Cap Screws w/1-1/4" thd., furnished).

▲ 1/2-13x1-1/4" deep on 5-3/4" Dia. B.C. (1/2x2" Soc. Hd. Cap Screws w/1-1/2" thd., furnished).

♣ 1/2-13x1-5/16" deep on 8-3/16 Dia. B.C. (1/2x2-1/4" Soc. Hd. Cap Screws w/1-1/2" thd., furnished)."

†† 1/4-20x5/8" deep on 3-1/4" Dia. B.C. (1/4x1-1/4" for 70 & 1/4x1-1/4" for 75 furnished).

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SELECTION/DIMENSIONS



FLEXIDYNE

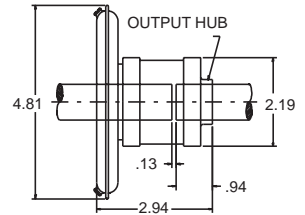
5C FLEXIDYNE COUPLING

The 5C FLEXIDYNE Coupling uses a formed steel housing and tubular flexible element. See ordering instructions in table below.

5C FLEXIDYNE Couplings

Available Bores	Keyway	Part Numbers	
		MECHANISM for Motor Shaft (Avg. Wt. 2.2 Lbs.)	OUTPUT HUB for Driven Shaft (Avg. Wt. .55 Lbs.)
1/2"	1/8 x 1/16	.....	305120
5/8"	3/16 x 3/32	305115	305121
3/4"	3/16 x 3/32	305118	305122
7/8"	3/16 x 3/32		305123

Note: Total coupling consists of (1) output hub and (1) mechanism. Order by description x bore. To facilitate order processing, order these items by part number. Max bore of mechanism = 3/4"; output hub = 1".

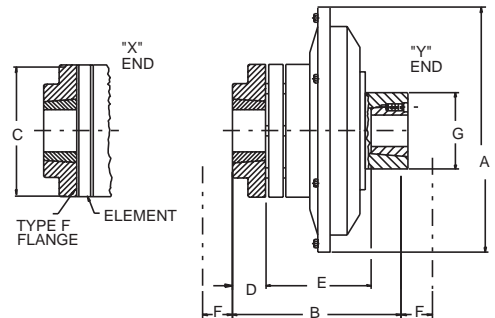


55C thru 11C FLEXIDYNE Couplings

The 55C thru 11C size FLEXIDYNE Coupling uses the same flexible disc used in DODGE POLY-DISC Couplings. The molded polyurethane disc offers longer life and smoother, quieter operation. Disc has excellent physical properties yet remains pliable to cushion shock loads and accommodate misalignment.

H and F Flanges, carried in stock, can be arranged in the position which best suits the application. **In H type the bushing installs from the Hub side of the flange; in F type from the Face side.**

Sufficient flow charge is furnished with each unit.





FLEXIDYNE

55C THRU 11C FLEXIDYNE COUPLINGS

Cplg. Size	Bore Range of Bushing		Max. RPM	Cplg. Less Bushings	Items required for Complete Coupling†									
	Min.	Max.			Mechanism (Includes disc)			Poly-Disc Flange w/o Bush.				Bushings		
					Wt. Lbs.	Part No.	Wt. Lbs.	Size	TYPE H Part No.	TYPE F Part No.	Wt. Lbs.	Motor End		Driven End
		Bush No.	Avg. Wt. Lbs.	Bush No.	Avg. Wt. Lbs.									
55C	1/2	1	1800	5.0	305019	4.0	2-5/8	008057	008058	1.0	1008	.2	1008	.2
70C	*	*	1800	15.6	305025	13.6	4	008041	008040	2.0	1215	.7	1610	.7
75C	1/2	1-11/16	1800	18.6	305058	14.1	5-1/4	008043	008042	4.5	1615	1.0	1610	.7
9C	1/2	2-11/16	1800	40.6	309074	30.6	7	008045	008044	10.0	2517	2.8	2517	2.8
11C	1/2	2-11/16	1800	57.2	311074	44.2	8	008047	008046	13.0	2517	2.8	2517	2.8

Cplg Size	Replacement Poly-disc			A	B	C	D	E ◆	F ▲	G	X End	Y End
	No	Part	Wt.									
		Number	Lbs.									
55C	2-5/8	008030	1	5.38	3.5	2.63	0.88	1.41	0.75	2.25	Driven	Motor
70C	4	008032	0.2	8.13	6.06	4	★	3.56	1.06	3.63	Motor	Driven
75C	5-1/4	008033	0.5	8.13	6.38	5.25	★	3.88	1.06	3.63		
9C	7	008034	0.9	9.5	8.63	7	1.75	5.13	1.63	4.13		
11C	8	008035	1.5	11.25	9.63	8	1.75	6.13	1.63	4.88		

Complete coupling consists of (1) Mechanism, including flexible disc, (1) POLY-DISC Flange, and two Bushings. TAPER-LOCK bushings sold separately.

- † To facilitate order processing specify part numbers. Determine whether H or F Flange is required and order accordingly.
- * Motor End: 1/2" - 1-1/4" (Min./Max.); Driven End: 1/2" - 1-5/8"
- ◆ Normal dimension. Shaft end float which increases or decreases "E" by slight amounts is permissible.
- ★ 1" on driven end, 1-1/2" on motor end.
- ▲ Space required to loosen bushing with shortened hex key using screws as jack screws-no puller required.

Keyways-See tables below for Standard Keyways and Shallow Keyways

Standard Keyways

Bore Range	Keyway
1/2 - 9/16 Incl.	1/8 x 1/16
over 9/16 - 7/8 Incl.	3/16 x 3/32
over 7/8 - 1-1/4 Incl.	1/4 x 1/8
over 1-1/4 - 1-3/8 Incl.	5/16 x 5/32
over 1-3/8 - 1-3/4 Incl.	3/8 x 3/16
over 1-3/4 - 2-1/4 Incl.	1/2 x 1/4
over 2-1/4 - 2-3/4 Incl.	5/8 x 5/16
over 2-3/4 - 3-1/4 Incl.	3/4 x 3/8
over 3-1/4 - 3-3/4 Incl.	7/8 x 7/16
over 3-3/4 - 4-1/2 Incl.	1 x 1/2
over 4-1/2 - 5-1/2 Incl.	1-1/4 x 5/8
over 5-1/2 - 6-1/2 Incl.	1-1/2 x 3/4

Shallow Keyways

Bush No.	Bore Range	
1008	15/16 - 1	Note: Key furnished for these exceptions only.
1610	1-9/16 - 11-1/16	
1615		
2517	2-5/16 - 2-11/16	Note: Key furnished for these exceptions only.



SELECTION/DIMENSIONS



FLEXIDYNE

TYPE PH FLEXIDYNE COUPLINGS

This unique combination of PARA-FLEX coupling and FLEXIDYNE mechanism offers maximum protection for motors and driven machines. The FLEXIDYNE unit allows the motor to accelerate quickly and start the load smoothly while the Para-Flex coupling permits up to 1° angular misalignment, up to 1/16" parallel misalignment and 3/32" end float. Consequently, starting torque can be tailored to the driven load requirements while torsional and lateral vibration and shock loads are being absorbed or cushioned.

The driven end of the couplings uses TAPER-LOCK bushings only. However, the motor end is available bushed or bored-to-size. Bored-to-size flanges accommodate larger shafts than possible with bushed flanges. Smaller size flanges are reversible offering the H and F position from the same flange. A choice of H or

F flanges is offered for size PX140. A speed drop cutout is furnished with 15116 and larger sizes.

TYPE PH FLEXIDYNE COUPLINGS W/ TAPER-LOCK FLANGES

Cplg. Size	Cplg. Less Bushings ♦	Items Req'd. for Complete Coupling ▲													
		MECHANISM				TAPER-LOCK FLG. ASSY					ELEMENT				
		Driven End Bore Range		Part No.	Wt. Lbs.	Motor End Bore Range		Size	Part Nos. for Respective Types			Wt. Lbs.	Size	Part No.	Wt. lbs.
		Min.	Max.			Min.	Max.		St'd. (Reversible)	Type H	Type F				
987	46.7	1/2	2-11/16	309077†	40	1/2	1-11/16	PX70	010603	.....	.....	5.1	PH87	011227	1.6
1196	65.5	1/2	2-11/16	311077	56	1/2	2-1/8	PX80	010604	.....	.....	7.4	PH96	011228	2.1
15116	137.5	1-5/16	3-1/4	315073	120	1/2	2-11/16	PX100	010606	.....	.....	15.0	PH116	011230	2.5
D15116	184.5	1-5/16	3-1/4	315074	167	1/2	2-11/16	PX100	010606	.....	.....	15.0	PH116	011230	2.5
D15131	175.7	1-5/16	3-1/4	315075	150	1/2	2-11/16	PX110	010607	.....	.....	21.6	PH131	011231	4.1
18172	314.2	1-3/16	3-15/16	318110	242	1-3/16	3-15/16	PX140	.....	011134	011154	64.0	PH172	011234	8.2
D18172	320.2	1-3/16	3-15/16	318400	248	1-3/16	3-15/16	PX140	.....	011134	011154	64.0	PH172	011234	8.2

♦ When ordering bushings, specify bore and part number.

▲ To facilitate order processing specify part numbers. In sizes 18172 and D18172, determine whether H or F Flange is required and order accordingly. Complete Coupling consists of (1) Mechanism, (1) Taper-Lock Flange Assembly, (1) Element and (2) Bushings.

† Assembled-to-order. Consult DODGE for delivery.

TYPE PH FLEXIDYNE COUPLINGS W/ BORED-TO-SIZE FLANGES

Cplg. Size	Coupling Less Bushings ♦		BS FLANGE ASSEMBLY							
	Rgh. Bored	Fin. Bored	Size	Rgh. Bored			Fin. Bored w/ St'd. K. W.			
				Bore ★	Part Number	Wt. Lbs.	Motor End Bore Range	Wt. Lbs. ♦	Set Screw	
	Wt. Lbs.	Wt. Lbs.								
987	49.5	47.3	PX70BS	None	10301	7.9	1/2 - 2-1/8	5.7		
1196	69.1	66.3	PX80BS		10302	11	1/2 - 2-9/16	8.2		
15116	147.5	139.5	PX100BS		10304	25	1/2 - 3-1/4	17	⊕	
D15116	194.5	186.5	PX100BS		10304	25	1/2 - 3-1/4	17		
D15131	189.1	176.1	PX110BS		10305	35	1/2 - 3-15/16	22		
18172	336.2	311.2	PX140BS	2/1/2004	10530	86	2-3/4 - 4-1/2	61	⊕	
D18172	342.2	317.2	PX140BS	2/1/2004	10530	86	2-3/4 - 4-1/2	61		

Note: Complete Coupling consists of (1) Mechanism, (1) BS Flange Assembly, (1) Element and (1) Bushing.

♥ Bored per order-Sizes PX70 thru PX110 are furnished with a clearance fit from nominal bores (up to 2" +.000-.000, over 2" +.0015-.0000). In PX140 size, tolerance will be applied to custom bores (up to 3" +.000-.001, over 3" thru 6" +.0000-.0015; over 6" +.000-.002). Largest Bore listed should be considered as maximum.

⊕ One furnished over keyway.

⊕ Not furnished unless specified on order.

* Standard keyway is the same as shown on page. For shallow keyway exceptions, see table at right:

NOTE: Taper-Lock bushings sold separately

♦ Approximate weight with maximum bore

★ -.010 to -.015" no keyway

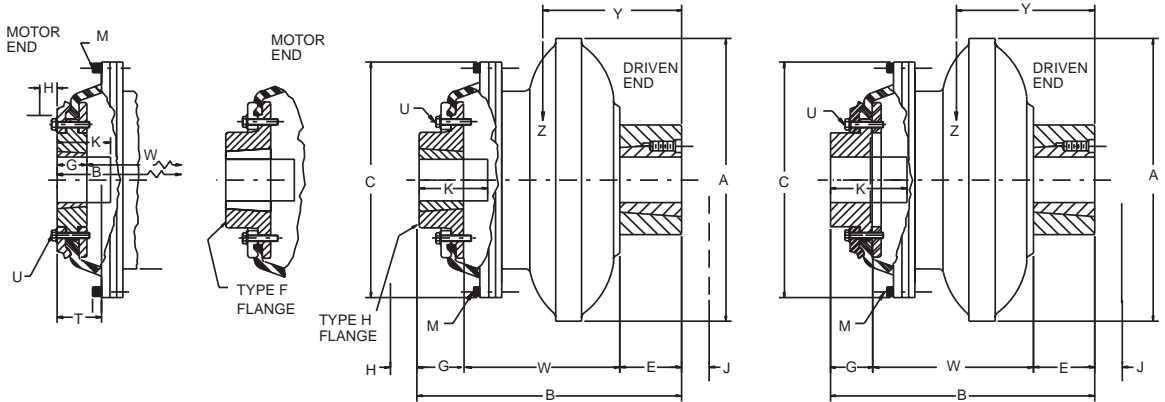
BS Fig. size	Bore Range	Keyway	NOTE-Key furnished for these exceptions only.
PX70	2 - 2-1/8	1/2 x 1/8	
PX80	2-3/8 - 2-9/16	5/8 x 3/16	
PX100	3-1/16 - 3-1/4	3/4 x 3/16	
PX110	3-11/16 - 3-3/4	7/8 x 1/4	
	3-13/16 - 3-15/16	1 x 1/4	

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FLEXIDYNE

TYPE PH FLEXIDYNE COUPLINGS (cont.)



Coupling Size	Max. RPM	A	B		C	E ♣	G		H †	J †	K ▲		M ◆ (No.) & Size of Screws
			TAPER-LOCK Flange	Bored-to-Size Flange			TAPER-LOCK Flange	Bored-to-Size Flange			TAPER-LOCK Flange	Bored-to-Size Flange	
987	1800	9.5	8.75	9.75	9.44	1.75	1	1.75	1.06	1.63	3.19	4.19	(8) 5/16-18 x 1-1/4
1196	1800	11.25	10.06	11.19	10.31	1.75	1.25	2	1.38	1.38	4.38	5.5	(6) 3/8-16 x 1-1/2
15116	1800	14.5	12.31	13.81	12.31	3	1.75	2.63	1.63	2.06	4.44	5.94	(8) 3/8-16 x 1-1/2
D15116	1800	14.5	13.88	15.31	12.31	3	1.75	2.63	1.63	2.06	4.44	5.94	(8) 3/8-16 x 1-1/2
D15131	1800	14.5	14.63	16.38	13.81	3	1.75	3	1.63	2.06	5.19	6.94	(8) 3/8-16 x 2
18172	1500	18	16.31	17.44	18.31	3.5	3.5	3.88	2.63	2.63	7.5	8.5	(8) 1/2-13 x 2
D18172	1500	18	17.81	18.94	18.31	3.5	3.5	3.88	2.63	2.63	7.31	8.5	(8) 1/2-13 x 2

Coupling Size	T		U**		W ■		X	Y ♥	Z ♣ (Lbs.)
	TAPER-LOCK Flange	Bored-to-Size Flange	No. and Size of Screws		TAPER-LOCK Flange	Bored-to-Size Flange			
			TAPER-LOCK Flange	Bored-to-Size Flange					
987	1.59	1.59	(5) 5/16-18 x 1-1/2	(5) 5/16-18 x 1-1/2	5.94	6.25	..	3.88	43
1196	1.91	1.91	(6) 5/16-18 x 1-1/2	(6) 5/16-18 x 1-1/2	7.06	7.44	..	4.13	66
15116	2.09	2.09	(6) 3/8-16 x 1-3/4	(6) 3/8-16 x 1-3/4	7.56	8.19	..	5.5	107
D15116	2.09	2.09	(6) 3/8-16 x 1-3/4	(6) 3/8-16 x 1-3/4	9.13	9.69	..	6.5	153
D15131	2.56	2.56	(6) 3/8-16 x 2	(6) 3/8-16 x 2	9.88	10.38	..	6.5	153
18172	3.63	3	(8) 1/2-13 x 2-1/2	(8) 1/2-13 x 2-1/4	9.31	10.06	0.19	6.75	209
D18172	3.63	3	(8) 1/2-13 x 2-1/2	(8) 1/2-13 x 2-1/4	10.81	11.56	0.19	6.69	284

♣ Driven shaft should not extend into coupling beyond dimension E.

† Space required to loosen bushing with shortened hex key using screws as jackscrew no puller required.

▲ Motor shaft may extend into coupling beyond dimension G but not beyond dimension K.

* Reversible flanges permit Type H or F from the same flange.

■ Normal distance between shafts. End float which increases or decreases W by slight amounts is permissible.

♥ Distance from driven end to center of gravity of driven section of coupling.

♣ Weight of driven section with maximum bore and flow charge.

◆ Socket head cap screw.

** Hex head cap screw, SAE Grade 8; Optional: Nickel plated Grade 8 screws"

Keyways-Standard Keyways are shown on page PT3-11. For Shallow keyway exceptions see table below.

Bush No	Bore Range	NOTE - Key furnished for these exceptions only. See TAPER-LOCK section for Keyway information
1610	1-9/16 - 1-5/8	
2012	1-15/16 - 2-1/8	
2517	2-5/16 - 2-11/16	
3030	2-13/16 - 3-1/4	
3535	3-5/16 - 3-15/16	



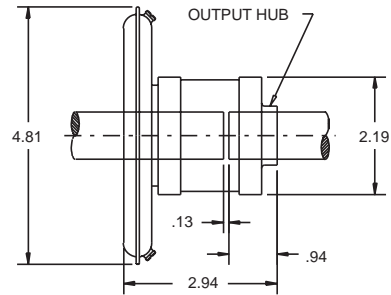
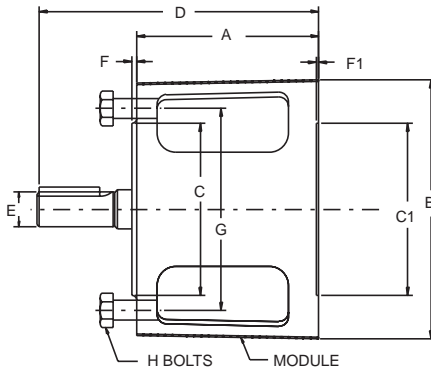
SELECTION/DIMENSIONS



FLEXIDYNE C-FLEX MODULE

C-Flex is a system for easily adapting stock FLEXIDYNE couplings to conventional AC motor/C-Face reducer drive combinations. The advantages of this low cost arrangement include soft start and intermittent overload protection utilizing popular NEMA-B motors and across-the-line switching. Costly reduced voltage starters or specially wound motors are not required. FLEXIDYNE

unit operates bi-directionally (reversing) and allows starting of heavy inertial loads without oversized motors. C-Flex fits all standard NEMA C-Face mountings of 56C, 140TC, 180TC and 210TC frame utilized on 1/2 thru 10 HP, 1750 ROM AC motors. The C-Flex output bearing provides support for single-bearing reducer types, but is equally suitable for reducers having two input shaft bearings.



C-FLEX MODULES

HP Rating @ 1750 RPM	For NEMA C-Face Frame	C-Flex Unit ▲			FLEXIDYNE Mechanism			A	B	C Dia.	C1 Dia.	D	Nom. E. Dia.	F	F1	G Dia. B.C.	H Bolts	
		Model No.	Part No.	Wt. (Lbs.)	Size	Part No.	Wt. (Lbs.)										No.	Size
1/2 3/4 1	56C	150	305026	14.5	5CF x 5/8 ■	305117	2.2	4.75	6.63	4.500	4.501	6.69	5/8	.100	0.19	5.88	4	★
										4.497	4.503			.160				
1 1-1/2 2	140TC	200	305027	14.5	5CF x 7/8 ■	305037	2	4.75	6.63	4.500	4.501	6.81	7/8	.100	0.19	5.88	4	★
										4.497	4.503			.160				
3 5	180TC	500	305028	54.5	70C	305025	13.6	12.5	10	8.499	8.500	15.31	1-1/8	.200	0.22	7.25	4	.
										8.497	8.502			.250				
7-1/2 10	210TC	1000	305029	58.2	75C	305058	14.1	12.5	10	8.499	8.500	15.84	1-3/8	.200	0.22	7.25	4	.
										8.497	8.502			.250				

SELECTION DATA-For 1/2 thru 2 HP rating, see table below.

For 3 thru 10 HP rating, see tables on page PT3-6 and PT3-7

■ For 5C FLEXIDYNES see page PT3-10.

▲ Includes all necessary parts except mechanism.

★ 3/8 -16 x 1-1/4 Hex Hd. Cap Screw.

* 1/2 -13 x 1-1/2 Soc. Hd. Cap Screw.

SELECTION OF 5CF FLEXIDYNE MECHANISM USED IN C-FLEX MODULE

Rated Motor HP	100% @ 1760 RPM			125% @ 1750 RPM			150% @ 1740 RPM			175% @ 1700 RPM			200% @ 1650 RPM		
	Start- ing HP	Flow Charge		Start- ing HP	Flow Charge		Start- ing HP	Flow Charge		Start- ing HP	Flow Charge		Start- ing HP	Flow Charge	
		Lbs.	Oz.		Lbs.	Oz.		Lbs.	Oz.		Lbs.	Oz.		Lbs.	Oz.
1/2	.50	0	4	.62	0	5	.75	0	5	.85	0	6	.94	0	7
3/4	.75	0	5	1.00	0	6	1.10	0	6	1.30	0	7	1.40	0	8
1	1.00	0	6	1.20	0	7	1.50	0	7	1.70	0	8	1.90	0	9
1-1/2	1.50	0	7	1.90	0	8	2.20	0	8	2.50	0	9	2.80	0	10
2	2.00	0	8	2.50	0	9	3.00	0	9	3.40	0	10	3.60	0	11