



## Posidyne Specifications (Model 02—11)

Size	Logic	Max Clutch Torque (Lb. In.)			Max. Brake Torque (Lb. In.)					Max. RPM		Max. KE per Engmt. (Ft. Lbs.)	Average Thermal HP			Air Vol. per Engmt. (in3)	Oil Cap (Qts)	Inertia of Cyclic Parts (Lb.Ft.2)
					Springs Only		With Max. Air Assist						Basic & Fan Cooled	Water Cooled	Basic			
		Static	Dyn.	Max. Air Press (psi)	Static	Dyn.	Static	Dyn.	Max. Air Press (psi)									
02	S	518	439	60 psi	48	41	553	468	60 psi	1800	3600	11,230	Horizontal			1	Horiz 2	0.04
	SA	542	458	80 psi	164	139	501	424	40 psi				0.8	2	4			
	A	503	426	80 psi	126	107	----	----	----				Vertical					
	B	336	284	80 psi	252	214	----	----	----				0.35	1	2			
	C	335	284	60 psi	----	----	----	----	----									
	P	590	499	60 psi	----	----	505	428	60 psi									
2.5	S	1331	1126	60 psi	113	96	1396	1181	60 psi	1800	3600	15,865	Horizontal			5	Horiz 2.5	0.20
	SA	1482	1227	80 psi	512	433	1663	1399	40 psi				0.70	2.00	4.00			
	A	1451	1254	80 psi	476	403	----	----	----				Vertical					
	B	968	819	80 psi	952	806	----	----	----				0.35	1.00	2.00			
	C	1270	1074	60 psi	----	----	----	----	----									
	SCP	1234	1061	60 psi	----	----	1051	904	60 psi									
03	S	2574	2178	60 psi	144	122	2049	1734	60 psi	1800	3600	21,494	Horizontal			8	Horiz 3.5	0.20
	SA	2790	2361	80 psi	651	551	2238	1894	40 psi				0.75	2.80	8.00			
	A	2852	2413	80 psi	602	509	----	----	----				Vertical					
	B	1895	1603	80 psi	1203	1018	----	----	----				0.38	1.40	4.00			
	C	2474	2093	60 psi	----	----	----	----	----									
	SCP	2668	2258	60 psi	----	----	1833	1551	60 psi									
05	S	4325	3659	60 psi	212	179	4021	3402	60 psi	1800	3600	42,988	Horizontal			8	Horiz 8	0.30
	SA	4889	4137	80 psi	789	668	3645	3085	40 psi				1.00	4.50	12.00			
	A	4487	3797	80 psi	1136	962	----	----	----				Vertical					
	B	2626	2222	80 psi	2273	1923	----	----	----				0.50	2.25	6.00			
	C	4017	3399	60 psi	----	----	----	----	----									
	SCP	4362	3691	60 psi	----	----	3518	2977	60 psi									
10	S	9832	8320	60 psi	691	585	10489	8875	60 psi	1800	3600	68,035	Horizontal			12	Horiz 10	0.69
	SA	9471	8014	80 psi	2766	2340	9297	7867	40 psi				1.00	6.00	15.00			
	A	10013	8472	80 psi	2797	2366	----	----	----				Vertical					
	B	5097	4313	80 psi	5593	4733	----	----	----				0.50	3.00	7.50			
	C	9228	7808	60 psi	----	----	----	----	----									
	SCP	9936	8407	60 psi	----	----	8612	7287	60 psi									
11	S	18045	15269	80 psi	888	751	14962	12630	60 psi	** 1200	N/A	108,105	Horizontal			15	Horiz 10	1.60
	SA	13358	11303	80 psi	2961	2505	9980	8445	40 psi				4.00					
	A	14036	11877	80 psi	2661	2252	----	----	----				Vertical					
	B	8019	6785	80 psi	5322	4504	----	----	----				2.00					
	C	18045	15269	80 psi	----	----	----	----	----									
	SCP	17833	15090	80 psi	----	----	17833	15090	60 psi									
P	20054	16969	80 psi	----	----	14038	11878	60 psi										



## Posidyne Specifications (Model 14—20)

Size	Logic	Max Clutch Torque (Lb. In.)			Max. Brake Torque (Lb. In.)					Max. RPM		Max. KE per Engmt. (Ft. Lbs.)	Average Thermal HP			Air Vol. per Engmt. (in3)	Oil Cap (Qts)	Inertia of Cyclic Parts (Lb.Ft.2)
					Springs Only		With Max. Air Assist						Basic & Fan Cooled	Water Cooled	Basic			
		Static	Dyn.	Max. Air Press (psi)	Static	Dyn.	Static	Dyn.	Max. Air Press (psi)									
14	S	22989	19453	80 psi	1681	1410	23737	20085	60 psi	** 1200	N/A	170,532	Horizontal			15	Horiz 10	1.75
	SA	16484	13948	80 psi	5237	4431	16264	13762	40 psi				4.00					
	A	17576	14782	80 psi	4660	3962	----	----	----				Vertical					
	B	10783	9124	80 psi	8352	7067	----	----	----				2.00					
	C	23453	19844	80 psi	----	----	----	----	----									
	SCP	23183	19617	80 psi	----	----	20793	17594	60 psi									
	P	26066	22056	80 psi	----	----	22056	18662	60 psi									
20	S	31082	26300	80 psi	2018	1707	32274	27308	60 psi	600 (Basic) 1800 (Fan)	1800	137,221	Horizontal			23	Horiz 25	4.37
	SA	25837	21862	80 psi	5045	4269	20173	17069	40 psi				1.50 8.00 25.00					
	A	26332	22281	80 psi	4759	4027	----	----	----				Vertical					
	B	18087	15304	80 psi	9518	8054	----	----	----				0.75 4.00 12.50					
	C	30455	25770	80 psi	----	----	----	----	----									
	SCP	32737	27700	80 psi	----	----	28115	23789	60 psi									
	P	34578	29258	80 psi	----	----	30256	25601	60 psi									
30	S	78857	67028	50 psi	8010	6808	72185	61357	60 psi	1200	1200	322,062	CF			97	CF	61.00
	SA	75478	64156	60 psi	20026	17200	68157	57933	40 psi									
	A	75478	64156	60 psi	20026	17200	----	----	----									
	C	78857	67028	50 psi	----	----	----	----	----									
	SCP	76600	65110	45 psi	----	----	65657	55808	60 psi									
	P	74871	63640	45 psi	----	----	64175	54548	60 psi									

**NOTES:**  
 Thermal HP ratings based on 1800 RPM and 70° ambient temperature. Higher thermal ratings available with forced lubrication. Consult factory with application details  
 For Water cooled Units Cooling water flow requirements in GPM equals .10 x thermal horsepower  
 Oil Capacity is only approximate. Always fill unit to center of sight gauge.  
 Air pressures are at maximum torque. Operating pressures are generally much lower. Refer to "Pressure vs. Static Torque" charts for proper pressure settings.  
 Size 11 and 14 Posidyne rated @ 1200 RPM. Fan cooled only. These sizes can run up to 1800 RPM with the External Cooling System shown below. CF- Consult Factory

## Basic Posidyne Overhung Load Capacity

Size	Input Shaft			Output Shaft					
	900 RPM	1200 RPM	1800 RPM	900 RPM		1200 RPM		1800 RPM	
				Without Encoder	With Encoder	Without Encoder	With Encoder	Without Encoder	With Encoder
02	700	600	500	765	550	680	490	595	430
2.5	900	800	700	1020	805	935	740	850	670
03	1400	1350	1150	1785	1410	1700	1340	1490	1180
05	1400	1350	1150	1785	1410	1700	1340	1490	1180
10	1800	1700	1500	2550	2140	2380	2000	1960	1650
11	2200	2000	---	3910	3280	3570	3000	---	---
14	2200	2000	---	3910	3280	3570	3000	---	---
20	4100	3000	1800	4500	3780	4080	3430	3530	2970
30	9400	8500	---	11900	---	10900	---	---	---



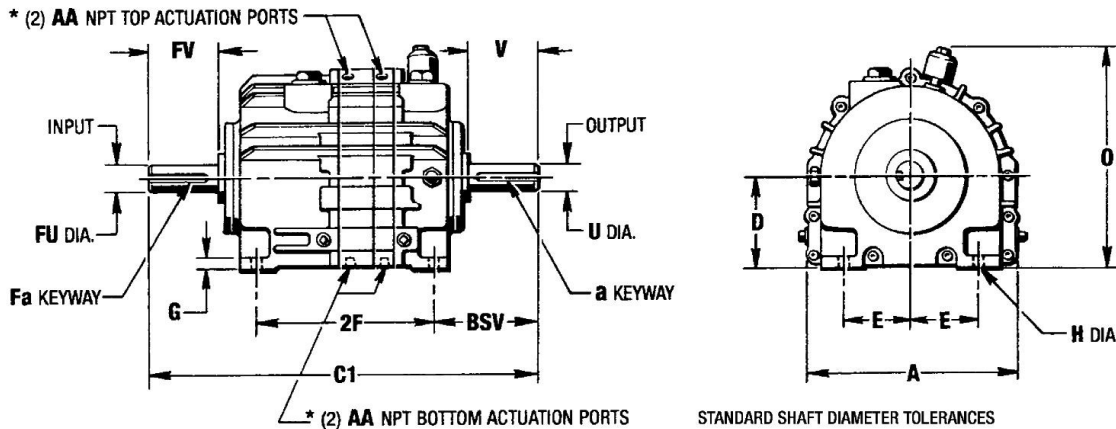
## Basic Posidyne Overhung Load Capacity

Size	Input Shaft			Output Shaft					
	900 RPM	1200 RPM	1800 RPM	900 RPM		1200 RPM		1800 RPM	
				Without Encoder	With Encoder	Without Encoder	With Encoder	Without Encoder	With Encoder
02	700	600	500	765	550	680	490	595	430
2.5	900	800	700	1020	805	935	740	850	670
03	1400	1350	1150	1785	1410	1700	1340	1490	1180
05	1400	1350	1150	1785	1410	1700	1340	1490	1180
10	1800	1700	1500	2550	2140	2380	2000	1960	1650
11	2200	2000	---	3910	3280	3570	3000	---	---
14	2200	2000	---	3910	3280	3570	3000	---	---
20	4100	3000	1800	4500	3780	4080	3430	3530	2970
30	9400	8500	---	11900	---	10900	---	---	---

Overhung Loads are based on Bearing life L10 25,000 hrs. @ 20% duty at midpoint of shaft extension based on standard male shaft diameters. (Not applicable to C-Face.)

CAUTION - Excessive overhung load will shorten bearing life and may exceed the capacity of the shaft to the point of failure

## Basic Posidyne Dimensions



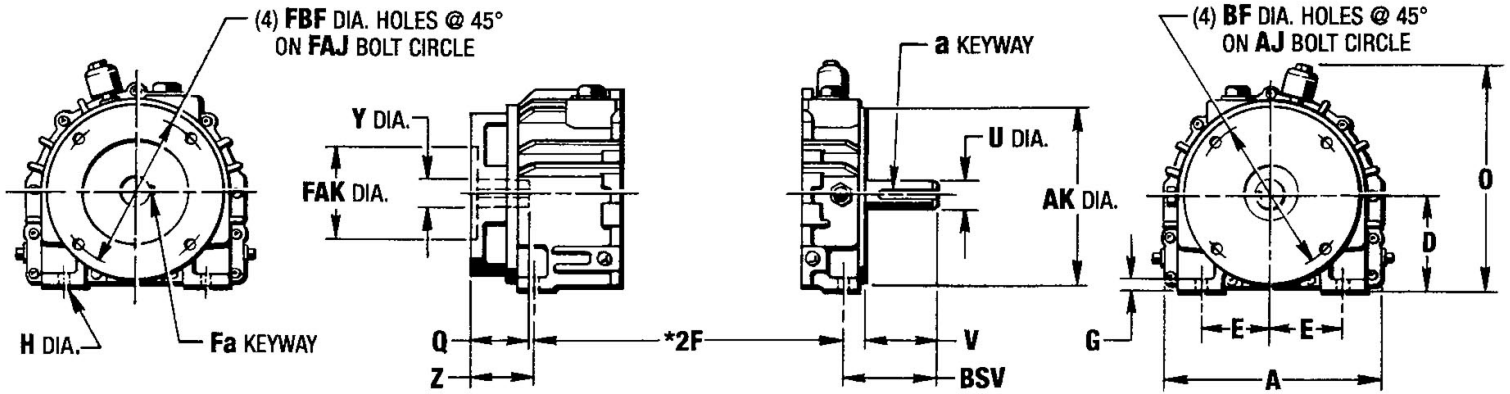
STANDARD SHAFT DIAMETER TOLERANCES  
 UP TO & INCLUDING 1.500" DIA. .... +.0000" -.0005"  
 OVER 1.500" DIA. .... +.000" -.001"

Size	Drive Dimensions (Inches)									Shaft Dimension (Inches)						Porting-AA	
	A	D	E	2F	G	H	O	BSV	C1	a Keyway	Fa Keyway	U	FU	V	FV	(Bot.)	(Top)
02	9.00	4.00	3.50	7.00	0.59	0.44	9.25	3.50	14.62	1/4 x 1/8	1/4 x 1/8	1.125	1.125	2.000	2.000	1/8-28	1/8-28
2.5	9.50	4.37	3.31	8.75	0.50	0.44	10.00	4.62	18.25	5/16 x 5/32	5/16 x 5/32	1.375	1.375	3.000	3.000	1/4-18	1/4-18
03	10.25	4.50	3.31	8.77	0.50	0.44	10.69	5.16	19.25	5/16 x 5/32	5/16 x 5/32	1.375	1.375	3.500	3.500	1/4-18	1/4-18
05	10.25	6.50	3.50	10.25	0.75	0.56	12.69	5.75	22.75	3/8 x 3/16	3/8 x 3/16	1.625	1.625	4.000	4.000	1/4-18	1/4-18
10	12.50	6.50	3.50	15.38	1.00	0.75	14.00	5.61	27.50	3/8 x 3/16	3/8 x 3/16	1.750	1.750	3.750	3.750	1/4-18	1/4-18
11	12.63	6.50	4.75	15.38	1.00	0.75	14.56	6.75	31.56	5/8 x 5/16	5/8 x 5/16	2.375	2.375	5.000	5.000	1/4-18	1/4-18
14	12.63	6.50	4.75	15.38	1.13	0.75	15.21	6.75	32.04	5/8 x 5/16	5/8 x 5/16	2.375	2.375	4.430	4.430	1/4-18	1/4-18
20	17.50	9.00	5.75	19.63	1.25	0.88	19.00	7.38	35.50	5/8 x 5/16	5/8 x 5/16	2.750	2.750	4.750	4.750	3/8-18	3/8-18
30	22.50	13.00	8.00	29.25	1.50	1.06	24.37	9.88	49.00	1 x 1/2	1 x 1/2	4.000	4.000	6.580	6.580	1/2-14	1/2-14

Top porting and bottom porting are both supplied. The use of bottom porting is recommended to purge contaminants out of the piston area when exhausted. The use of top porting does not purge the piston and can become clogged due to the buildup of moisture and lubricating oil.



## Posidyne C-Face Mounting Option Dimensions

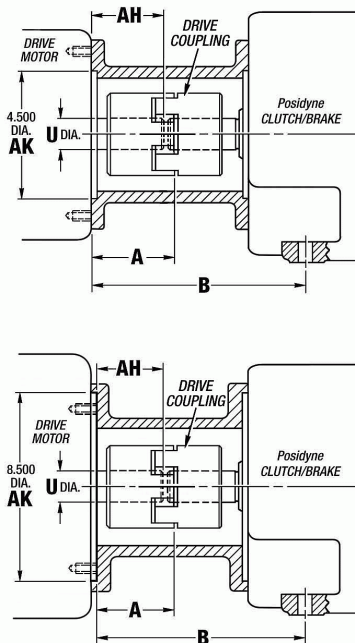


Size	Input Module	Input Dimensions (Inches)							Output Module	Output Dimensions (Inches)						Foot Mounting Dimensions (Inches)						
		FAJ	FAK	Fa	FBF	Q	Y	Z		AJ	AK	a	BF	BSV	U	V	A	D	E	G	H	O
02	3	5.88	4.5	3/16 x 3/32	0.41	2.62	7/8	3.44	3**	5.88	4.5	3/16 x 3/32	3/8-16 x .75	2.94	7/8	2.06	9.00	4.00	3.50	0.59	0.44	9.25
	4	7.25	8.5	1/4 x 1/8	0.53	2.75	1 1/8	3.25	4	7.25	8.5	1/4 x 1/8	1/2-13 x 1	4.56	1 1/8	2.69						
2.5	3	5.88	4.5	3/16 x 3/32	0.41	3.50	7/8	2.56	3	5.88	4.5	3/16 x 3/32	3/8-16 x .75	4.62	7/8	2.12	9.50	4.37	3.31	0.50	0.44	10.00
	4	7.25	8.5	1/4 x 1/8	0.53	3.50	1 1/8	2.81	4	7.25	8.5	1/4 x 1/8	1/2-13 x 1	4.13	1 1/8	2.62						
	5	7.25	8.5	5/16 x 5/32	0.53	3.50	1 3/8	2.81	5	7.25	8.5	5/16 x 5/32	1/2-13 x 1	4.62	1 3/8	3.00						
03	4	7.25	8.5	1/4 x 1/8	0.53	3.50	1 1/8	2.81	4	7.25	8.5	1/4 x 1/8	1/2-13 x 1	4.22	1 1/8	2.62	10.25	4.50	3.31	0.50	0.44	10.50
	5	7.25	8.5	5/16 x 5/32	0.53	3.50	1 3/8	2.81	5	7.25	8.5	5/16 x 5/32	1/2-13 x 1	5.16	1 3/8	3.50						

\* See Basic Posidyne Dimensions.

\*\* Spacer may be required to keep Output Housing from interfering with mating C-Face

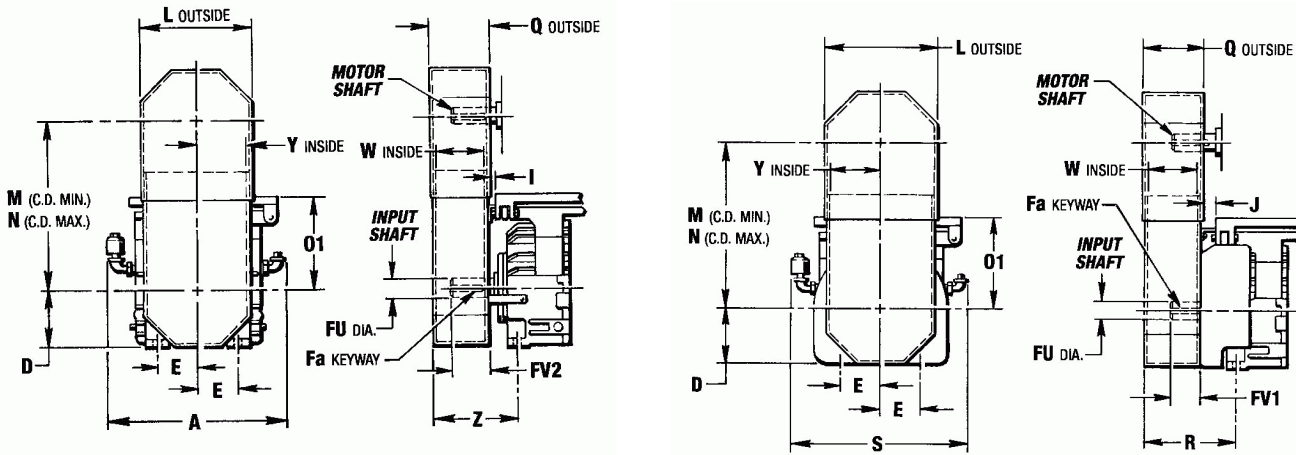
## Posidyne Long Coupled C-Face Input Option Dimensions



Posidyne Size	Motor Frame	Dimensions (Inches)				
		AH	AK Dia	U Dia	A	B
02	143T, 145t	2.290	4.500	0.875	2.630	6.620
	182, 184	2.290			3.170	
	182T, 184T	2.630	8.500	1.125	3.230	7.370
	213, 215	2.750				
2.5	182T, 184T	2.630	8.500	1.125	3.460	8.690
	213, 215	2.750			3.520	
	213T, 215T	3.130		1.375	3.710	
	254, 256	3.500			3.890	
	254T, 256T	3.750			4.600	
03	182T, 184T	2.630	8.500	1.125	3.500	8.780
	213, 215	2.750			3.510	
	213T, 215T	3.130		1.375	3.760	9.470
	254, 256	3.500			4.220	
	254T, 256T	3.750			4.520	



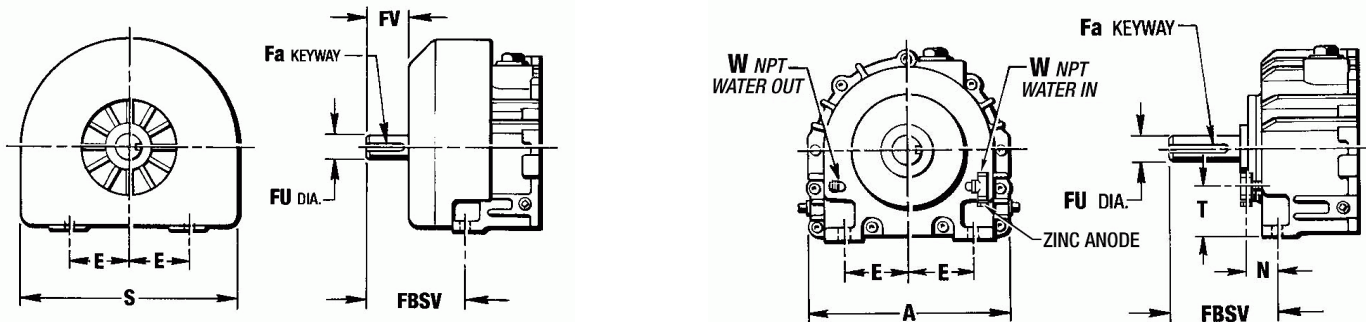
## Posidyne Piggyback Options Dimensions



Size	Drive Dimensions								Piggyback Dimensions											Max. Pulley	
	A	D	E	Fa	FU	FV1	FV2	S	I	J	L	M	N	1	Q	R	W	Y	Z	Dia.	Width
02	---	4.00	3.50	1/4 x 1/8	1 1/8	1.00	1.00	---	---	---	7.31	12.31	13.31	7.12	3.16	5.38	2.50	3.12	5.38	6.00	2.00
2.5	---	4.37	3.31	5/16 x 5/32	1 3/8	2.13	2.13	---	1.25	1.25	7.62	11.50	15.19	8.44	4.31	4.75	4.19	3.69	4.75	5.39	3.00
03	11.50	4.50	3.31	5/16 x 5/32	1 3/8	2.38	3.50	11.50	0.38	1.50	9.12	12.50	16.50	7.94*	4.68	6.62	4.38	4.44	5.50	6.84	3.25
05	11.50	6.50	3.50	3/8 - 3/16	1 5/8	2.94	4.00	11.50	1.50	2.56	9.12	12.50	16.50	7.94*	4.68	8.38	4.38	4.44	7.31	6.84	3.25
10	---	6.50	3.50	3/8 - 3/16	1.75	2.63	3.75	---	1.56	2.94	12.12	16.12	19.12	9.62	5.18	8.88	4.88	5.94	7.50	9.00	3.75

\*This dimension changes to 8.44 with 254 thru 286 Frame Motors.  
 Manifold Mounted Valve not available with Piggyback Mounting.

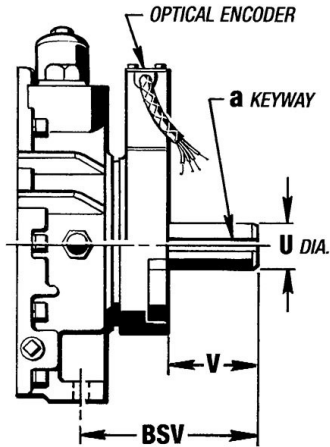
## Posidyne Cooling Options Dimensions



Size	Dimensions (Inches)									
	A	E	Fa	FBSV	FU	FV	N	S	T	W
02	9.00	3.50	1/4 x 1/8	4.12	1.13	1.38	---	9.0	---	---
2.5	9.50	3.31	5/16 x 5/32	4.88	1.38	2.25	2.0	10.5	2.50	0.38
03	10.25	3.31	5/16 x 5/32	5.31	1.38	2.31	2.0	11.5	2.50	0.38
05	10.25	3.50	3/8 x 3/16	6.75	1.63	2.72	1.5	11.5	4.75	0.38
10	12.50	3.50	3/8 x 3/16	6.62	1.75	2.88	2.0	14.0	4.00	0.38
11	12.63	4.75	5/8 x 5/16	9.43	2.38	5.50	---	14.0	---	---
14	12.63	4.75	5/8 x 5/16	9.43	2.38	5.50	---	14.0	---	---
20	17.50	5.75	5/8 x 5/16	8.50	2.75	3.75	4.0	19.0	7.25	0.50



## Posidyne Encoder Options Dimensions



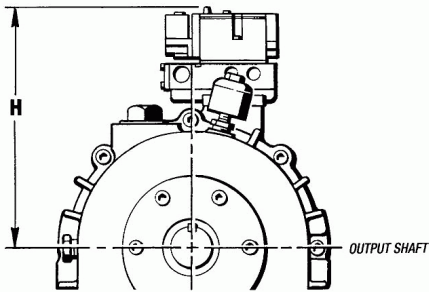
Size	Output Module	U	V	BSV	a
02	C	1.125	2.17	4.57	3/16 x 3/32
2.5	C	1.375	1.79	4.62	5/16 x 5/32
03	C		2.50	5.16	
05	C	1.625	3.00	5.75	3/8 x 3/32
10	C	1.750	2.71	5.50	
11	C	2.375	3.91	6.75	5/8 x 5/32
14	C	2.375	3.34	6.75	
20	C	2.750	4.37	8.19	
30	---	---	---	---	---

## Posidyne Manifold Mounted Valve Dimensions

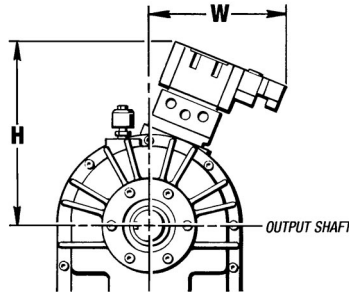
Without Regulators and Gauges

Without Regulators and Gauges

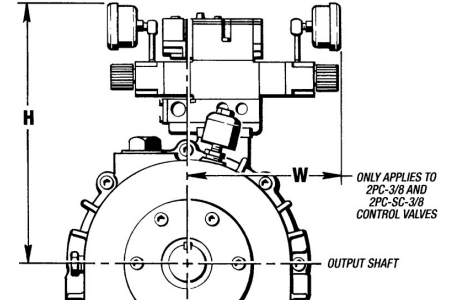
With Regulators and Gauges)



02, 2.5, 03, 05 and 10 Posidyne Clutch/Brakes (2 Pr. Inlet-3/8 Manifold Mounted Control Valve)



11 and 14 Posidyne Clutch/Brake (2PI-5/8 Manifold Mntd. Control Valve) 20 and 30 Posidyne Clutch/Brake (2PI-3/4 Manifold Mntd. Control Valve)



02, 2.5, 03, 05 and 10 Posidyne Clutch/Brakes (1PC-3/8, PC-3/8 and 2PC-SC-3/8 Manifold Mntd. Control Valves)

Size	Without Regulators		With Regulators	
	H	W	H	W
02	8.16	---	10.00	6.13
2.5	8.82	---	47.00	6.70
03	9.44	---	10.92	6.70
05	9.32	---	11.75	6.70
10	10.57	---	11.63	6.70
11	12.77	9.63	12.89	---
14	12.77	9.63	---	---
20	14.05	11.75	---	---
30	18.05	11.75	---	---



## Posidyne Available Options

### (3) Input Module

	02	2.5	03	05	10	11	14	20	30
1	x	x	x	x	x	x	x	x	x
3	x	x	x	x	---	---	---	---	---
4	x	x	x	x	---	---	---	---	---
5	---	x	x	x	---	---	---	---	---
7	x	x	x	x	x	---	---	---	---
9	x	x	x	---	---	---	---	---	---
A	x	x	x	---	---	---	---	---	---
B	---	x	x	---	---	---	---	---	---

### (4) Control Logic

	02	2.5	03	05	10	11	14	20	30
S	X	X	X	X	X	X	X	X	X
A	X	X	X	X	X	X	X	X	X
B	X	X	X	X	X	X	X	X	---
C	X	X	X	X	X	X	X	X	X
D	X	X	X	X	X	X	X	X	X
E	---	X	X	X	X	X	X	X	X
F	---	X	X	X	---	---	---	---	---
G	---	X	X	X	---	---	---	---	---
P	X	X	X	X	X	X	X	X	X
J	---	X	X	X	---	---	---	---	---

### (5) Output Module

	02	2.5	03	05	10	11	14	20	30
1	X	X	X	X	X	X	X	X	X
3	X	X	---	---	---	---	---	---	---
4	X	X	X	---	---	---	---	---	---
5	---	X	X	---	---	---	---	---	---
7	X	X	X	X	X	---	---	---	---
C	X	X	X	X	X	X	X	X	X
E	X	---	---	---	---	---	---	---	---

### (7) Cooling

	02	2.5	03	05	10	11	14	20	30
1	X	X	X	X	X	---	---	X	X
2	---	X	X	X	X	---	---	X	---
5	---	X	X	X	X	X	X	X	X
7	X	X	X	X	X	X	X	X	X

\*Fan cooling not available with C-Face input.

### Posidyne Piggyback Motor Option Available

Motor Frame	02	2.5	03	05	10
143T	X				
145T	X				
182T	X	X	X		
184T	X	X	X		
213T		X	X	X	
215T		X	X	X	
254T			X	X	
256T			X	X	
284T				X	X
324T				X	X
326T					X
364T					X
365T					X

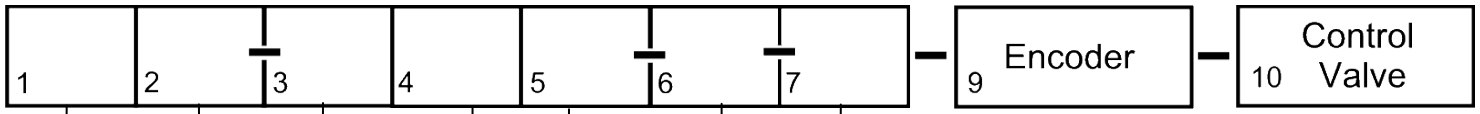
To limit the torque delivered to a drive and the physical size of the motor mounted on our piggyback drives, please use the above chart.

### (6) Mounting Positions

All options available in all sizes.



# Posidyne How To Order



**(1, 2) Size**

0	2	=02
2	5	=25
0	3	=03
0	5	=05
1	0	=10
1	1	=11
1	4	=14
2	0	=20
3	0	=30

N=No Encoder.  
 See How to Order  
 Encoder for Ordering  
 Number.

N=No Valve  
 See How to Order  
 Valve for Ordering  
 Number

**(7) Cooling**

1	= Basic (Radiant)
2	= Water Cooled
5	= Fan Cooled***
7	= Fan Cooled, Split Shroud***
8	= Force Lube

**(3) Input Module**

1	= Basic		
3	= 4 1/2 FAK, 7/8 FU	143TC 145TC	C-Face Quill
4	= 8 1/2 FAK, 1 1/8 FU	182TC 184TC	
5	= 8 1/2 FAK, 1 3/8 FU	213TC 215TC	
7	=Piggyback & Ceiling		
9	= 4 1/2 FAK, 7/8 FU	143TC 145TC	C-Face Coupled
A	= 8 1/2 FAK, 1 1/8 FU	182TC 184TC	
B	= 8 1/2 FAK, 1 3/8 FU	213TC 215TC	

**(5) Output Module**

1	= Basic	T Frame	
3	= 4 1/2 FAK, 7/8 FU	143TC 145TC	C-Face Quill
4	= 8 1/2 FAK, 1 1/8 FU	182TC 184TC	
5	= 8 1/2 FAK, 1 3/8 FU	213TC 215TC	
7	=Piggyback & Ceiling Mount*		
C	= Optical Encoder (02-20) Sizes** Not available on C Face Output		
D	=Optical Encoder 4 1/2" AK, 5/8" U ** (02 only)**		
E	= Optical Encoder 4 1/2" AK, 7/8" U ** (02 only)**		

**(6) Mounting Position**

H	= Horizontal
D	= Vertical, Input Down
U	= Vertical, Input Up
L	= Wall on Left (Viewing Input)
R	= Wall on Right (Viewing Input)
Z	= Horizontal, Marine Duty
W	= Vertical, Input Down, Marine Duty
P	= Vertical, Input Up, Marine Duty

**(4) Control Logic**

S	=S - Air set clutch / light spring set
A	=A - Air set clutch / medium spring set brake
B	=B - Air set clutch / heavy spring set brake
C	=C - Air set clutch / no brake
D	=SA - Air set clutch / medium spring set brake with Air assist
E	=SCP - Self centered piston / Air set clutch / Air set brake
F	=SA/ACP - Air centered piston/Air set clutch / medium spring set brake with
G	=B/ACP - Air centered piston / Air set clutch / heavy spring set brake
P	=P - Air set clutch / Air set brake (without springs)
J	=A/ACP - Air centered piston / Air set clutch / medium spring set brake

**Example**

To order a size 2.5 Posidyne, C Face input for 184TC frame motor, with "S" Control Logic, output housing to accept encoder, horizontal mounting, basic cooling, with manifold mounted control valve.

Ordering Number 25-4SC-H-1/ \_\_\_ / \_\_\_

**NOTES**

\* When Piggyback Mounting is required both input and output modules must be specified Piggyback. The motor frames size must also be specified to predrill and tap the motor mounting base.

\*\* The Output Housing is machined to accept an encoder.

\*\*\* Not available on C Face input.