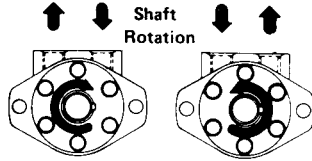


# ADM/ABM SERIES GEROTOR MOTOR – LOW SPEED – HIGH TORQUE



The Prince ADM Series of high-torque, low speed motors incorporates the orbiting gerotor principle for dependable operation over a wide range of applications. Although dimensionally small, this motor is capable of providing considerable power over a wide speed range and is instantly reversible by simply reversing the direction of the hydraulic fluid flow. The needs of many applications requiring high starting, stall and running torque combined with slow speed are met by this motor.

### Features

- Fully reversible simply by reversing the direction of hydraulic fluid flow.
- Alternative port positioning for versatility of installation. (see next page)
- Optional shaft configurations. (see next page)
- Modular construction for economical servicing and repair; also permits special adaptations.

### Filtration

10 micron or finer.  
(per ISO cleanliness code level 17/14)

### Ordering Code

MOTOR TYPE:

ADM or ABM

MOTOR SIZE:

50

75

100

150

200

250

300

400

MOUNTING:

2 Hole Flange—2

4 Hole Flange—4

SHAFT TYPE:

Standard 1" Key R

1" Splined S

1" Tapered T

1" w/Cross-hole U

### PORTS:

P — 1/2 NPTF  
(Standard)

O — 7/8 x 14 SAE  
O-Ring Port

T — Manifold Port Face  
(See Next Page)

END PLATE:  
(Blank for Standard)

X — Drain Port  
(if required)

ADM MOTORS ONLY

### APPLICATIONS

Use the ADM Series for light to medium duty applications such as grain augers and elevators, salt and sand spreaders, carwash and sweeper brushes, conveyors, winches, scissor lifts, and many others. Use the ABM in application requiring the higher side load capabilities of the roller bearing on the output shaft. In production quantities other features such as special shafts, ports, mounting, or end plate porting can be manufactured, consult your sales representative. To assure optimum motor life, run motor for approximately one hour at 30% of rated pressure before application of full load.

### CROSS REFERENCE

CHARLYN "H" Series

DANFOSS "DH" Series

It is not recommended to operate at a condition requiring both maximum torque and speed. Splined shafts are recommended in application operating at above 2500 in-lbs continuous torque or under conditions of frequent reversal.

ADM ABM	DISPLACEMENT		MAXIMUM PRESSURE				MAXIMUM SPEED		WT.*
	CC/REV	CU.IN/REV	PSI		Kgf/CM <sup>2</sup>		CONT	INT°	
50	49.1	3.0	1400	2200	98	153	800	1000	12.8
75	76.6	4.7	1400	2100	98	146	750	950	13.1
100	99.6	6.1	1300	2000	91	139	600	750	13.4
150	153.2	9.3	1200	1900	84	132	400	500	14.0
200	199.2	12.2	1200	1800	84	125	300	400	14.5
250	252.8	15.3	1100	1700	77	118	250	325	15.0
300	293.2	17.9	1000	1600	70	111	200	250	15.5
400	398.4	24.4	900	1300	63	90	125	160	16.7

\* Weights shown are for ADM. For ABM add 1.3 lbs.

Maximum Axial Thrust Load on Shaft 1000 lbs.

° Intermittent operation = 10% Operation of every minute

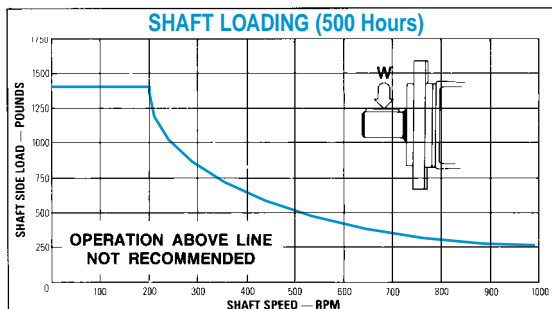
TEMP: NORMAL OPERATING 80° F TO 140° F, MAX 185° F

Maximum inlet pressure 2,500 psi for motors in series

Maximum back pressure 1,000 psi

OIL: Mineral based hydraulic fluid 100-200 SUS @ operating temperature

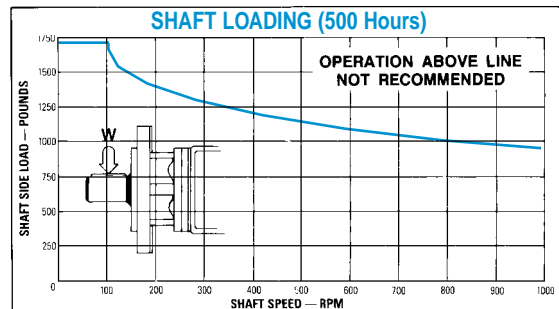
## ADM SERIES



Standard Seal Kit: OHCK-ADM

## ABM SERIES

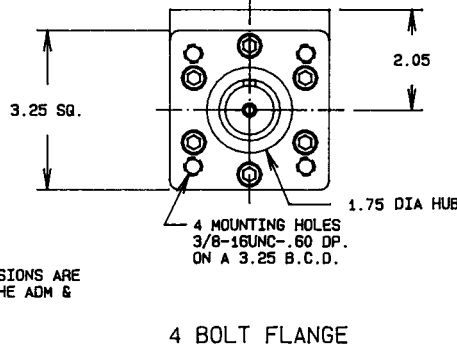
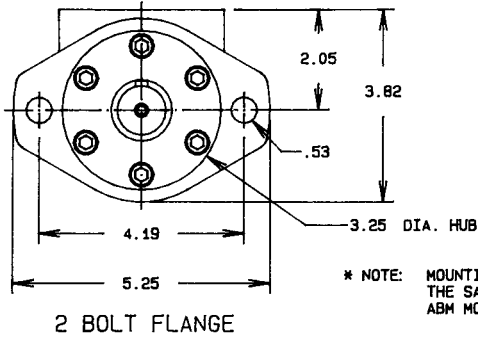
Features Prince's gerotor design with the added advantage of front radial bearings for applications requiring high side load. Can often be used in installations normally requiring complex and costly bearing, pillow blocks, and couplings, and allows the use of smaller gears, pulleys and sprockets.



Standard Seal Kit: OHCK-ABM

# MOUNTING DIMENSIONS ADM/ABM

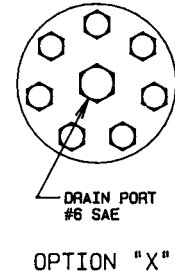
## MOUNTING



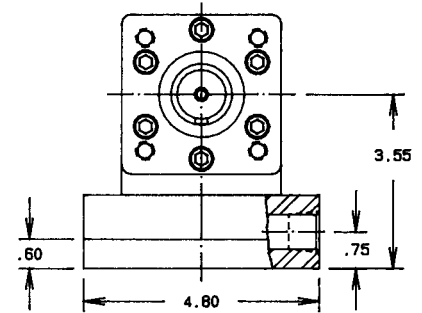
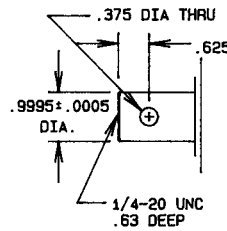
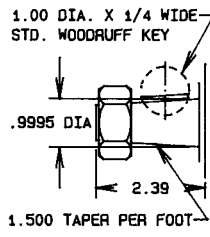
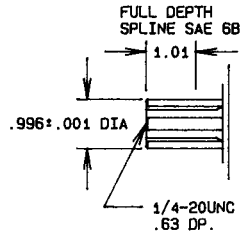
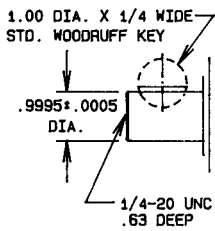
\* NOTE: MOUNTING DIMENSIONS ARE THE SAME FOR THE ADM & ABM MOTORS.

## DRAIN PORT

(IF REQUIRED)



## SHAFT TYPE



R-STANDARD 1" KEYED SHAFT

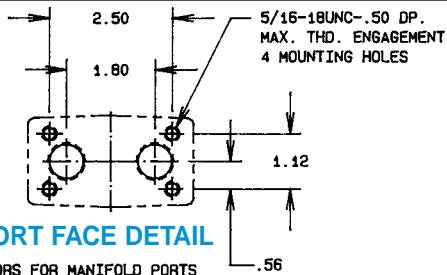
S-1" 6B SPLINED SHAFT

T-1" TAPERED SHAFT

U-1" SHAFT WITH 3/8 CROSS HOLE  
ADM MOTORS ONLY

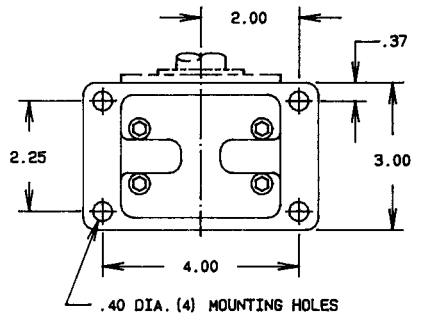
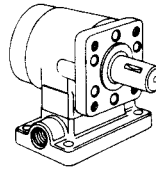
## PORT FACE DETAIL

MOTORS FOR MANIFOLD PORTS OR BASE BLOCK MOUNTING OR CROSS PORT RELIEF VALVE. (REQUIRES -113 O-RING)  
OPTION "T"



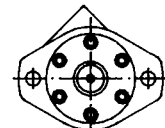
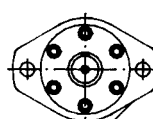
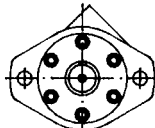
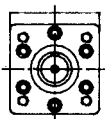
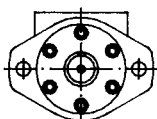
## BASE BLOCK MANIFOLD MOUNTING KIT

KIT NO.: 786030001 1/2 NPT PORTS  
786030002 #10 SAE PORTS  
KIT INCLUDES BASE BLOCK, O-RINGS, AND MOUNTING BOLTS.

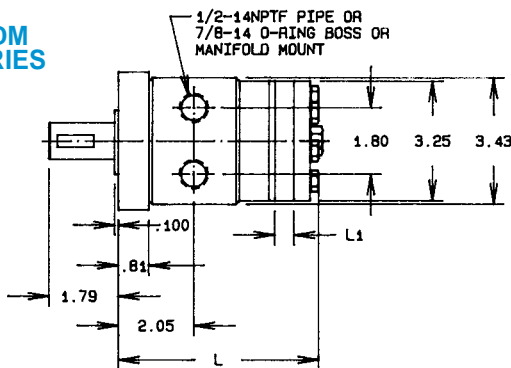


\* NOTE: CAN ONLY BE USED ON MOTORS WITH OPTION "T".

## FOR OPTIONAL PORT POSITIONS ROTATE MOUNTING FLANGE

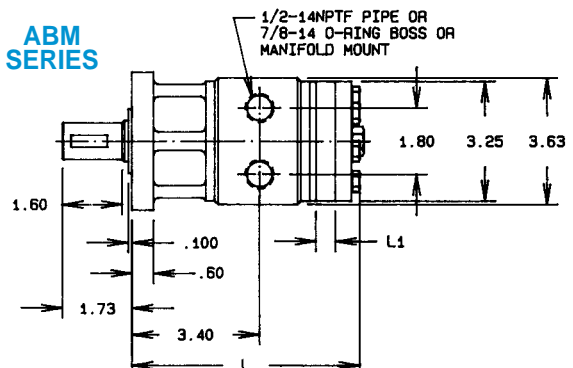


## ADM SERIES



	ADM 50	75	100	150	200	250	300	400
L	5.14	5.26	5.40	5.75	5.89	6.14	6.39	6.89
L1	.250	.375	.520	.863	1.00	1.25	1.50	2.00

## ABM SERIES



	ABM 50	75	100	150	200	250	300	400
L	5.91	6.03	6.18	6.52	6.66	6.91	7.16	7.66
L1	.250	.375	.520	.863	1.00	1.25	1.50	2.00

PUMPS AND MOTORS