# Cleco

**MOUNTABLE POWER MOTORS** 



# **MOUNTABLE POWER MOTORS**

Choose the right Air Motor to fit your application.

Apex Tool Group's air motors are engineered for flexibility and reliability. Cleco air motors cover a wide range of uses where compressed air is advantageous: powering air driven machinery, raising foundry copes and drags, rotating a turntable, mixing paint, powering cranes, valve actuation, or power source for mechanical hands or universal joints.



# 22 Series - Air Motor - Rotary Vane -Reversible/Non Reversible

### Maximum Power 0.7 hp | 0.52 kw

- Maximum Power 0.7 hp | 0.52 kw
- Torque Range 0.6 28.4 ft. lbs. | 0.81 38.48 Nm

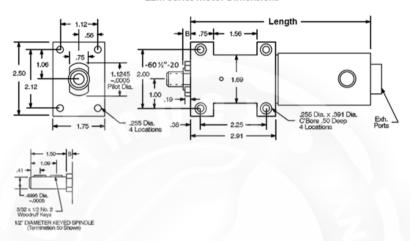


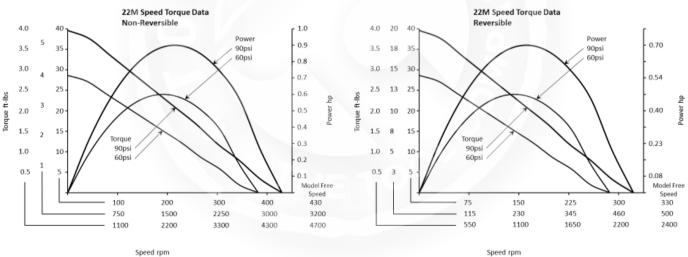
Model	Mount	Spindle	RPM at Max HP	Free Speed	Torque Stall	Wei	ght	Gear Ratio	Length	Horsepo- wer	Air Consump- tion	Control
		Туре	r/min	r/min	Ft Lb I Nm	Lb	kg	natio	in I mm	Hp I kW	Scfm	
22M5070-50	Flange and Base Mounting	1/2 in Keyed Spindle	165	330	28.4   38.48	3.06	1.39	50.4-1	7.88   200	0.7	29	Reversible
22M5070-60	Flange and Base Mounting	1/2-20 Threa- ded Spindle	165	330	28.4   38.48	3.06	1.39	50.4-1	7.88   200	0.7	29	Reversible
22V5040-50	Flange and Base Mounting	1/2" in Keyed Spindle	215	430	5.8   7.86	4.0	1.81	38.7-1	7.88   200	0.9	29	LH Rotation
22M5071-50	Flange and Base Mounting	1/2" in Keyed Spindle	250	500	19.6   26.56	3.06	1.39	34.8-1	7.88   200	0.7	29	Reversible
22M5270-50	Flange and Base Mounting	1/2" in Keyed Spindle	1200	2400	4.0   5.42	2.38	1.08	7.1-1	6.16   156	0.7	29	Reversible
22M5340-50	Flange and Base Mounting	1/2" in Keyed Spindle	1600	3200	5.8   7.86	4.0	1.81	7.1-1	6.19   157	0.9	29	Non-Rever- sible
22M5440-50	Flange and Base Mounting	1/2" in Keyed Spindle	2350	4700	4.0   5.42	4.0	1.81	4.9-1	6.19   157	0.9	29	Non-Rever- sible

Air Inlet: 1/4" NPT-Side and rear Air consumption: 29 cfm(.82 m3/min) All tools performance rated @ 90psi(620 kPa) air pressure Standard Equipment:
Hex socket screw provided for closure of unused inlet

Flush fitting for lubrication of gears

### 22M Series Motor Dimensions





# A2 Series - Air Motor - Axial Piston

## Maximum Power 0.6 hp | 0.45 kw

- Maximum Power 0.6 hp | 0.45 kw
- Torque Range 2 107 ft. lbs. | 2.7 145 Nm
- Reversible
- Rear Exhaust
- Keyed Spindle



Model	Mount	Spindle	RPM at Max HP	Free Speed	Torque Stall	W	eight	Gear - Ratio	Length	Horsepo- wer	Air Consumption	Control
		Туре	r/min	r/min	Ft Lb I Nm	Lb	kg	hallo	in I mm	Hp I kW	Scfm	
A2R306M	Face Mounting	7/8 in Keyed Spindle	44	90	107   145	22	10	53.6-1	14.28   363	0.6	21.2	Reversible
A2R305M	Face Mounting	7/8 in Keyed Spindle	75	150	63.0   85	22	10	31.4-1	14.28   363	0.6	21.2	Reversible
A2R304M	Face Mounting	7/8 in Keyed Spindle	99	200	48.0   65	22	10	23.8-1	14.28   363	0.6	21.2	Reversible
A2R303M	Face Mounting	7/8 in Keyed Spindle	169	345	28.0   38	22	10	13.9-1	14.28   363	0.6	21.2	Reversible
A2R302M	Face Mounting	7/8 in Keyed Spindle	255	520	19.0   26	14	6.35	9.25-1	12.12   308	0.6	21.2	Reversible
A2R301M	Face Mounting	7/8 in Keyed Spindle	575	1170	8.0   11	14	6.35	4.1-1	12.12   308	0.6	21.2	Reversible

All models assume overhung load located at 1.75" (44.45mm) from face of motor.

These motors must be operated with sufficient load to prevent speed from exceeding maximum allowable speed, 75% of free speed as shown on performance curve.

General: Air Inlet: 3/8" NPTF

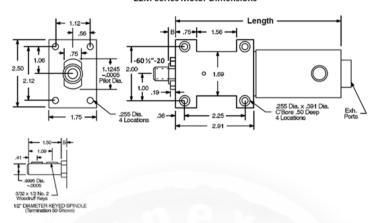
All tools performance rated @ 90psi (620 kPa) air pressure.

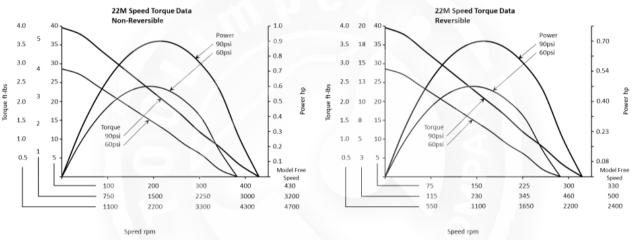
Optional Equipment:

Lubricating Oil - Part 533485 (1 gallon) Airlube 10W/NR

Gear Grease - Part A123771 (16oz) Shell Gadus S2 V220 00

### 22M Series Motor Dimensions





# **B4 Series - Air Motor - Axial Piston**

### Maximum Power 0.9 hp | 0.67 kw

- Maximum Power 0.9 hp | 0.67 kw
- Torque Range 4 232 ft. lbs. | 6.8 315 Nm
- Reversible
- Rear Exhaust
- Keyed Spindle

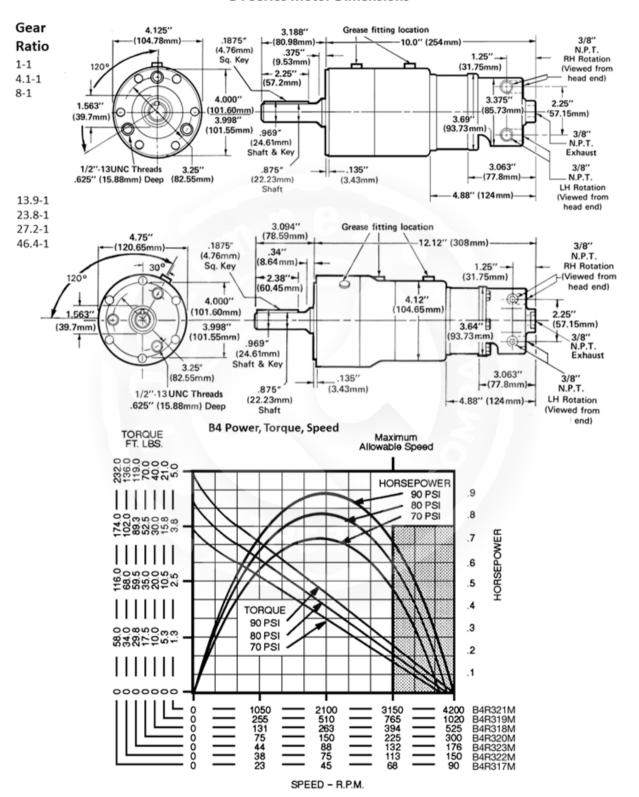


Model Mount		Spindle Type	Spindle HP		Free Torque Speed Stall		ight	Gear Ratio	Length	Horsepo- wer	Air Consump- tion	Control
		Турс	r/min	r/min	Ft Lb I Nm	Lb	kg	natio	in I mm	Hp I kW	Scfm	
B4R317M	Face Mounting	7/8 in Keyed Spindle	46	90	232.0   315	22.5	10.2	46.4-1	15.21   386	0.9	39.9	Reversible
B4R322M	Face Mounting	7/8 in Keyed Spindle	79	150	136.0   184	22.5	10.2	27.2-1	15.21   386	0.9	39.9	Reversible
B4R323M	Face Mounting	Disconti- nued	90	175	119.0   161	22.5	10.2	23.8-1	15.21   386	0.9	39.9	Reversible
B4R320M	Face Mounting	7/8 in Keyed Spindle	154	300	70.0   95	22.5	10.2	13.9-1	15.21   386	0.9	39.9	Reversible
B4R318M	Face Mounting	7/8 in Keyed Spindle	270	525	40.0   54	14.5	6.6	8-1	13.19   335	0.9	39.9	Reversible
B4R319M	Face Mounting	7/8 in Keyed Spindle	525	1020	21.0   28	14.5	6.6	4.1-1	13.19   335	0.9	39.9	Reversible
B4R321M	Face Mounting	Disconti- nued	2150	4200	5.0   6.8	14.5	6.6	1-1	13.19   335	0.9	39.9	Reversible

All models assume overhung load located at 1.75" (44.45mm) from face of motor.

These motors must be operated with sufficient load to prevent speed from exceeding maximum allowable speed, 75% of free speed as shown on performance curve. These motors must be operated with summer load to proceed General:
Air Inlet: 3/8" NPTF
All tools performance rated @ 90psi (620 kPa) air pressure.
Optional Equipment:
Exhaust Muffler – Part 813485
Lubricating Oil – Part 533485 (1 gallon) Airlube 10W/NR
Gear Grease - Part A123771 (16oz) Shell Gadus S2 V220 00

### **B4 Series Motor Dimensions**



# A6 Series - Air Motor - Axial Piston

### Maximum Power 1.9 hp | 1.42 kw

- Maximum Power 1.9 hp | 1.42 kw
- Torque Range 11 370 ft. lbs. | 15 502 Nm
- Reversible
- Rear Exhaust
- Keyed Spindle



Model	Mount	Spindle Type	RPM at Max HP	Free Speed	Torque Stall	W	eight	Gear Ratio	Length	Horsepo- wer	Air Consump- tion	Control
		4	r/min	r/min	Ft Lb I Nm	Lb	kg	natio	in I mm	Hp I kW	Scfm	
A6R331M	Face Mounting	1 1/8 in Keyed Spindle	54	100	370.0   502	43	19.5	33.6-1	19.06   484	1.9	62	Reversible
A6R333M	Face Mounting	1 1/8 in Keyed Spindle	89	170	223.0   302	43	19.5	20.3-1	19.06   484	1.9	62	Reversible
A6R332M	Face Mounting	1 1/8 in Keyed Spindle	152	290	130.0   176	43	19.5	11.9-1	19.06   484	1.9	62	Reversible
A6R307M	Face Mounting	1 1/8 in Keyed Spindle	315	605	64.0   87	27	12.2	5.8-1	15.88   403	1.9	62	Reversible
A6R335M	Face Mounting	1 1/8 in Keyed Spindle	535	1030	37.0   50	27	12.2	3.4-1	15.88   403	1.9	62	Reversible
A6R308M	Face Mounting	Discontinued	1820	3500	1.0   15	27	12.2	1-1	15.88   403	1.9	62	Reversible

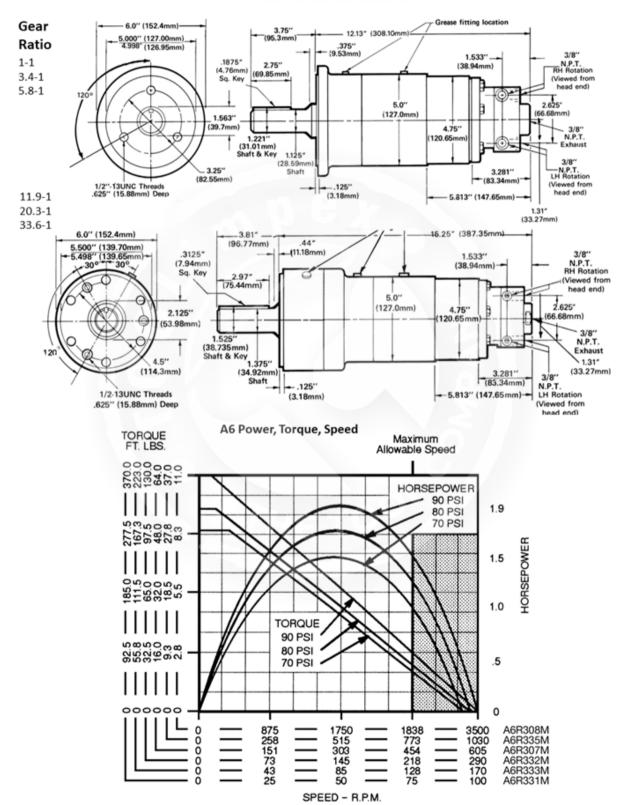
All models assume overhung load located at 2.25" (57.15mm) from face of motor.

These motors must be operated with sufficient load to prevent speed from exceeding maximum allowable speed, 75% of free speed as shown on performance curve.

General:
Air Inlet: 3/8" NPTF
All tools performance rated @ 90psi (620 kPa) air pressure.

Optional Equipment:
Exhaust Muffler – Part 81348Lubricating Oil – Part 533485 (1 gallon) Airlube 10W/NR
Gear Grease - Part A123771 (16oz) Shell Gadus S2 V220 0

### **A6 Series Motor Dimensions**



# A8 Series - Air Motor - Axial Piston

### Maximum Power 2.7 hp | 2.01 kw

- Maximum Power 2.7 hp | 2.01 kw
- Torque Range 19 638 ft. lbs. | 26 865 Nm
- Reversible
- Rear Exhaust
- **Keyed Spindle**



Model	Mount	Spindle Type	RPM at Max HP	Free Speed	Torque Stall	W	eight	Gear Ratio	Length	Horsepo- wer	Air Consump- tion	Control
			r/min	r/min	Ft Lb I Nm	Lb	kg	natio	in I mm	Hp I kW	Scfm	
A8R336M	Face Mounting	1 3/8 in Keyed Spindle	38	75	638.0   865	51	23.1	33.6-1	20.63   524	2.7	112	Reversible
A8R338M	Face Mounting	1 3/8 in Keyed Spindle	65	125	385.0   522	51	23.1	20.3-1	20.63   524	2.7	112	Reversible
A8R337M	Face Mounting	1 3/8 in Keyed Spindle	109	215	226.0   306	51	23.1	11.9-1	20.63   524	2.7	112	Reversible
A8R311M	Face Mounting	1 1/8 in Keyed Spindle	225	450	110.0   149	38	17.2	5.8-1	17.5   445	2.7	112	Reversible
A8R310M	Face Mounting	1 1/8 in Keyed Spindle	375	765	64.0   87	38	17.2	3.4-1	17.5   445	2.7	112	Reversible
A8R309M	Face Mounting	1 1/8 in Keyed Spindle	1300	2600	19.0   26	38	17.2	1-1	17.5   445	2.7	112	Reversible

All models assume overhung load located at 2.25" (57.15mm) from face of motor.

These motors must be operated with sufficient load to prevent speed from exceeding maximum allowable speed, 75% of free speed as shown on performance curve.

General:

Air Inlet: 1/2" NPTF

All tools performance rated @ 90psi (620 kPa) air pressure.

Optional Equipment

Lubricating Oil – Part 533485 (1 gallon) Airlube 10W/NR

Gear Grease - Part A123771 (16oz) Shell Gadus S2 V220 00

(Viewed from head end)

> 1.75" - (44.45mm)

N.P.T. Exhaust

1/2" N.P.T.

LH Rotation

(Viewed from head end)

(88.9mm)

### **A8 Series Motor Dimensions** Gear 6.0" (152.4mm) -\_\_\_3.75"\_\_\_ (95.25mm) 13.75" (349.25mm) Ratio Grease fitting location 1.66" 5.000" (127.00mm) .38"-42.16mm) 1-1 4.998" (126,95mm) .1875\* (9.65mm) 1/2" 3.4-1 (4.76mm) N.P.T. RH Rotation Sq. Key 2.75" 5.8-1 (69.85mm) (Viewed from head end) 6.0" Dia. (152.4mm) 3.5" 1.56" (39.62mm) (88.9mm) 6.19" Dia. (157.23 mm) (44.45mm) 1.221" (31.013mm) 1/2" N.P.T. Exhaust Shaft & Key 1.125" (28.59mm) - 1/2" N.P.T. ─.125" (3.18mm) 1/2-13UNC Threads (82.55mm) Shaft 3.97"\_\_\_ (100.84mm) LH Rotation 11.9-1 .625" (15.88mm) Deep (Viewed from head end) 20.3-1 33.6-1 6.0" (152.4mm) -3.82" (97.03mm) 16.81" (426.97mm) 5.500" (139.70mm) 5.498" (139.65mm) .44" (11,18mm) Grease fitting location 3135" (42.16mm) 120° (7.96mm) 30° Sq. Key 2.97" - 1/2" N.P.T. **RH Rotation**

6.0"

(152.4mm)

6.19"

(157.23mm)

(75.44mm)

1.3755"

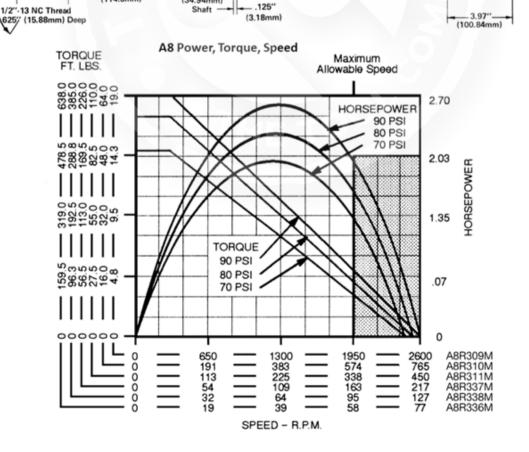
(34.94mm)

(38.71mm) Shaft & Key

2.12" Dia. (53.85 mm)

4.5"

(114.3mm)



# MA2 Series - Air Motor - Radial Piston

Maximum Power 1.5 hp | 1.12 kw

- Maximum Power 1.5 hp | 1.12 kw
- Torque Range 8.6 262 ft. lbs. | 12 355 Nm
- Threaded Spindle



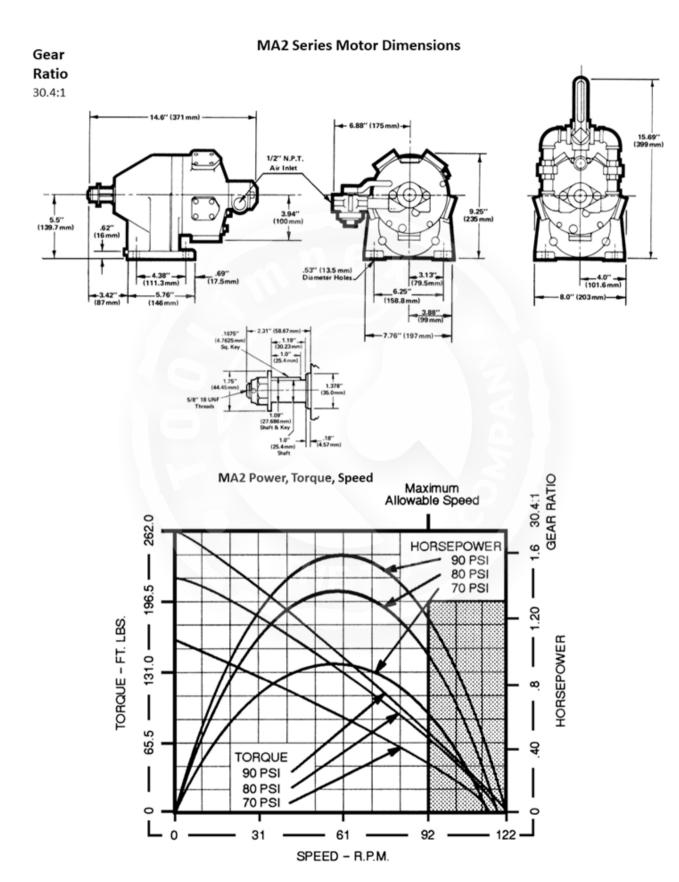
Model	Mount	Spindle Type	RPM at Max HP	Free Speed	Torque Stall	<b>B</b> we	eight	Gear Ratio	Length	Horsepo- wer	Air Consump- tion	Control
			r/min	r/min	Ft Lb I Nm	Lb	kg	natio	in I mm	Hp I kW	Scfm	
MA2W403M	Foot Mounting	5/8 in Threaded Spindle	60	120	262.0   355	43	19.5	30.4-1	14.6   371	1.5	58	No Valving

All models assume overhung load located at 0.625" (15.88mm) from face of motor.

These motors must be operated with sufficient load to prevent speed from exceeding maximum allowable speed shown on performance curve. General:

Air Inlet: 1/2" NPTF All tools performance rated @ 90psi (620 kPa) air pressure. Note::

Fill the motor to the proper level before operating. Use engine oil API Service Classified "SC" in the following weights: Above 32° F: SAE 30W
Below 32° F: SAE 10W



# MA3 Series -Air Motor - Radial Piston

Maximum Power 3.0 hp | 2.24 kw

- Maximum Power 3.0 hp | 2.24 kw
- Torque Range 24 588 ft. lbs. | 33 797 Nm
- Threaded Spindle



Model	Mount	Spindle Type	RPM at Max HP r/min	Free Speed r/min	Torque Stall Ft Lb I Nm	Weight  Lb kg		Gear Ratio	Length	Horsepo- wer Hp l kW	Air Consump- tion Scfm	Control
MA3W407M	Foot Mounting	5/8 in Threaded Spindle	48	100	588.0   797	67	30.1	24.6-1	16.56   421	3.0	95	No Valving
MA3W406M	Foot Mounting	5/8 in Threaded Spindle	1190	2600	24.0   33	51	23.1	1-1	13.76   350	3.0	80	No Valving

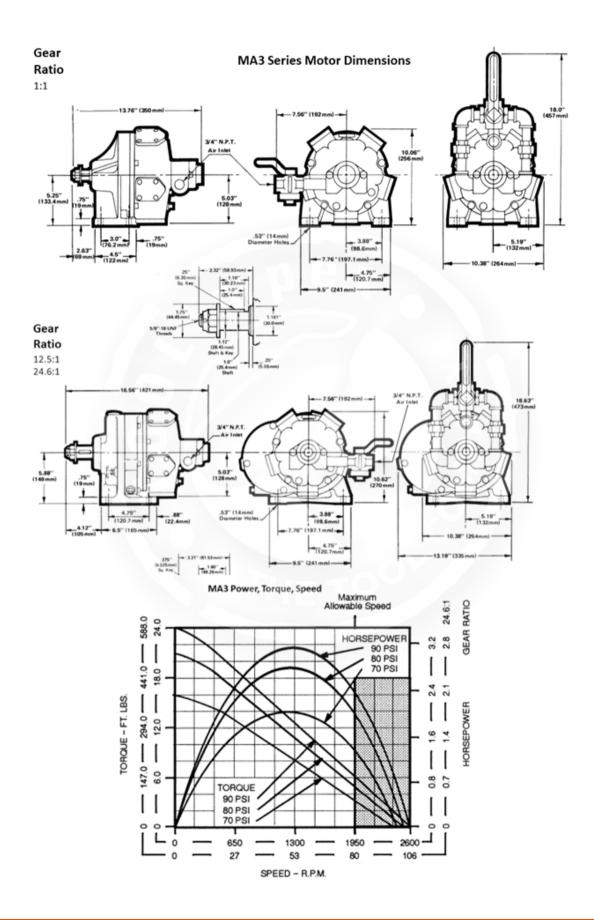
Non-geared models assume overhung load located at 0.625" (15.88mm) from face of motor.

Geared models assume overhung load located at 1" (25.40mm) from face of motor.

These motors must be operated with sufficient load to prevent speed from exceeding maximum allowable speed, 65% of free speed as shown on performance curve.

General: Air Inlet: 3/4" NPTF All tools performance rated @ 90psi (620 kPa) air pressure.

Notet:
Fill the motor to the proper level before operating. Use engine oil API Service Classified "SC" in the following weights:
Above 32° F: SAE 30W
PBelow 32° F: SAE 10W



# MB Series - Air Motor - Radial Piston

Maximum Power 5.5 hp | 4.10 kw

- Maximum Power 5.5 hp | 4.10 kw
- Torque Range 34 700 ft. lbs. | 46 949 Nm
- Threaded Spindle



Model	Mount	Spindle Type	RPM at Max HP	Free Speed	Torque Stall	Wei	ght	Gear Ratio	Length	Horsepo- wer	Air Consump- tion	Control
		4	r/min	r/min	Ft Lb I Nm	Lb	kg	nauo	in I mm	Hp I kW	Scfm	
MBR377M	Foot Mounting	1 1/2in keyed	74	150	700.0   949	148	67.1	20.4-1	18.12   460	5.5	154	Reversible Valving
MBW411M	Foot Mounting	1 1/2in keyed	74	150	700.0   949	148	67.1	20.4-1	18.12   460	5.5	154	No Valving
MBW412M	Foot Mounting	1 1/2in keyed	133	270	388.0   526	148	67.1	11.3-1	18.12   460	5.5	148	No Valving
MBW413M	Foot Mounting	1 1/2in keyed	268	540	192.0   260	148	67.1	5.6-1	18.12   460	5.5	140	No Valving
MBS380M	Foot Mounting	1 1/2in keyed	270	540	192.0   260	145	65.8	5.6-1	18.12   460	5.5	144	Single Direction Valving

All models assume overhung load located at 1" (25.40mm) from face of motor.

These motors must be operated with sufficient load to prevent speed from exceeding maximum allowable speed, 65% of free speed as shown on performance curve. Inese motors must be operated with sufficient load to prevent speed from exceeding maximum allowable speed, 65% of the General:

Air Inlet: 1" NPTF

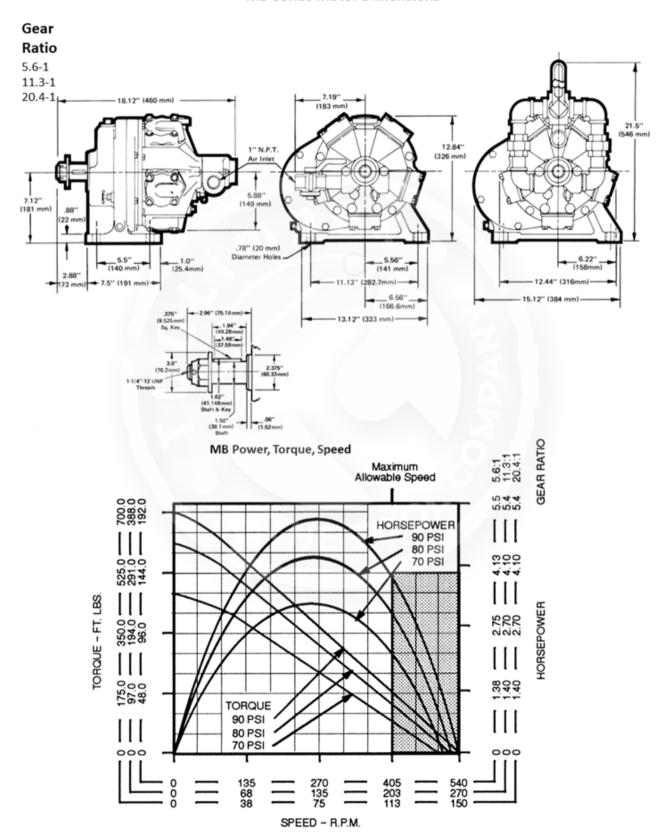
All tools performance rated @ 90psi (620 kPa) air pressure.

Note:Fill the motor to the proper level before operating. Use engine oil API Service Classified "SC" in the following weights:

Above 32° F: SAE 30W

Below 32° F: SAE 10W

### **MB Series Motor Dimensions**



# MK Series - Air Motor - Radial Piston

### Maximum Power 11 hp | 8.20 kw

- Maximum Power 11 hp | 8.20 kw
- Torque Range 117 1654 ft. lbs. | 159 2243 Nm
- Threaded Spindle



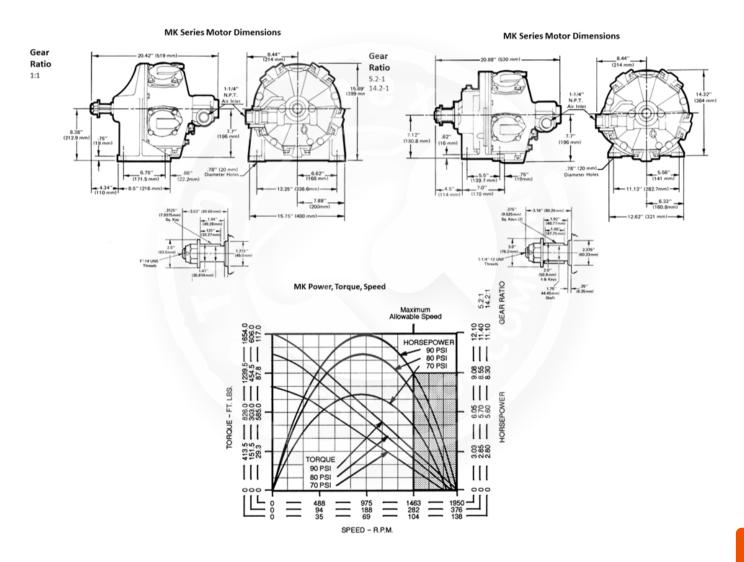
Model	Mount	Spindle Type	RPM at Max HP	Free Speed	Torque Stall	We	eight	Gear Ratio	Length	Horsepo- wer	Air Consump- tion	Control
			r/min	r/min	Ft Lb I Nm	Lb	kg	natio	in I mm	Hp I kW	Scfm	
MKW419M	Foot Mounting	1 1/4 in Threaded Spindle	67	135	1654.0   2243	230	104.3	14.2-1	20.88   530	11	288	No Valving
MKS392M	Foot Mounting	Disconti- nued	69	135	1654.0   2243	225	102.1	14.2-1	20.88   530	11	293	Single Direction Valving
MKR395M	Foot Mounting	1 1/4 in Threaded Spindle	183	375	606.0   822	230	104.3	5.2-1	20.88   530	11	299	Reversible Valving
MKW420M	Foot Mounting	1 1/4 in Threaded Spindle	183	375	606.0   822	230	104.3	5.2-1	20.88   530	11	299	No Valving
MKW418M	Foot Mounting	1 in Threa- ded Spindle	975	1900	117.0   159	104	91.6	1-1	20.42   519	11	311	No Valving

Note:
Note:
Fill the motor to the proper level before operating. Use engine oil API Service Classified "SC" in the following weights:
Above 32° F: SAE 30W
Below 32° F: SAE 10W

All models assume overhung load located at 1" (25.40mm) from face of motor.

These motors must be operated with sufficient load to prevent speed from exceeding maximum allowable speed, 65% of free speed as shown on performance curve.

General:
Air Inlet: 1-1/4" NPTF
All tools performance rated @ 90psi (620 kPa) air pressure.



# MM Series - Air Motor - Radial Piston

Maximum Power 15 hp | 11.19 kw

- Maximum Power 15 hp | 11.19 kw
- Torque Range 138 1952 ft. lbs. | 187 2647 Nm
- Threaded Spindle



Model	Mount	Spindle	RPM at Max HP	Free Speed	Torque Stall	W	eight	Gear Ratio	Length	Horsepo- wer	Air Consump- tion	Control
		Туре	r/min	r/min	Ft Lb I Nm	Lb	kg	nauo	in I mm	Hp I kW	Scfm	
MMW422M	Foot Mounting	1 1/4 in Threaded Spindle	71	150	1952.0   2647	231	104.8	14.2-1	20.88   530	15	345	No Valving
MMW423M	Foot Mounting	1 1/4 in Threaded Spindle	194	400	715.0   970	231	104.8	5.2-1	20.88   530	15	332	No Valving
MMS400M	Foot Mounting	1 1/4 in Threaded Spindle	206	400	715.0   970	226	102.5	5.2-1	20.88   530	15	336	Single Direction Valving
MMW421M	Foot Mounting	1 1/4 in Threaded Spindle	1010	2100	138.0   187	214	97.1	1-1	20.42   519	15	352	No Valving
MMS396M	Foot Mounting	1 1/4 in Threaded Spindle	1070	2100	138.0   187	210	95.3	1-1	20.42   519	15	348	Single Direction Valving

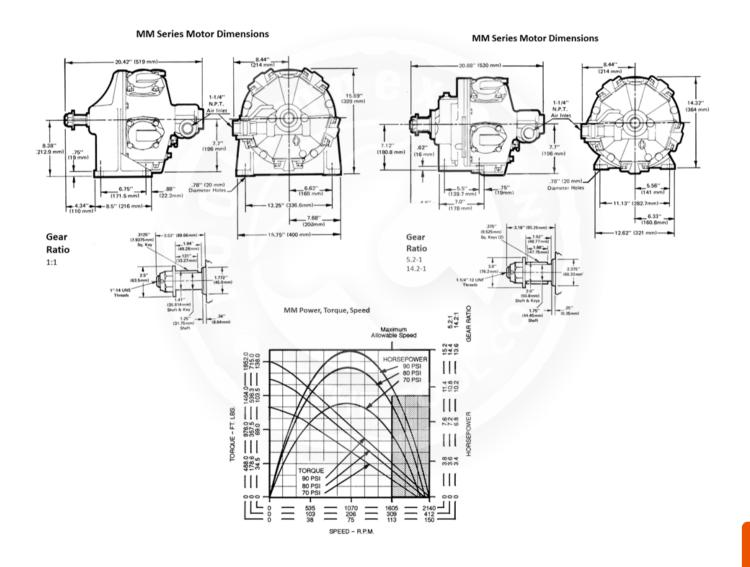
All models assume overhung load located at 1" (25.40mm) from face of motor.

These motors must be operated with sufficient load to prevent speed from exceeding maximum allowable speed, 65% of free speed as shown on performance curve.

General: Air Inlet: 1-1/4" NPTF All tools performance rated @ 90psi (620 kPa) air pressure.

Note:
Fill the motor to the proper level before operating. Use engine oil API Service Classified "SC" in the following weights:

Above 32° F: SAE 30W Below 32° F: SAE 10W





Mobil: +420 731 018 782 Mobil: +420 603 530 174