

**SERIES 12 SUB-FHP**

**Electrical Specifications:**

Both SCR (90 volt) and Low Voltage (12 volt) right angle gearmotors. the 90 volt motors are performance matched for continuous service over a 60:1 speed range. All have constant torque throughout the speed range when powered by a full-wave, unfiltered SCR-type 115 volt input adjustable speed control having a typical form factor of 1.3 to 1.4. The low voltage motors are also performance matched for continuous duty. Motors are designed for battery power or can be used with a low voltage controller with form factor up to 1.05.



**Mechanical Specifications:**

This worm-type right-angle gearing features hardened, steel worm with bronze worm wheel for long life and quiet operation. Single-piece die cast aluminum alloy housing is vacuum impregnated with Resinol RT for protection and sealing. This gearbox combines light weight with high tensile strength along with being precision machined for alignment of bearings and gearing. For optimum seal life, we use high-temperature Nitrile seals. Gearbox provided with solid output shaft, but can be converted to a hollow output shaft mounting by using snap-ring pliers and remove the snap ring and solid output shaft. Also the T-base feet are bolted to the gearbox, but can easily be removed and converted to face mounting.



Conduit box not supplied with motor. See page 107.

**RIGHT-ANGLE DC • SCR 90 VOLT RATED  
TEFC • 1.0 SERVICE FACTOR**

Input HP	F.L. Torque (In.-Lbs.)	Output RPM	Catalog Number	List Price▲	Enclosure	Gearmotor Type & Frame	Ratio to 1	Full Arm Volts DC	Load Amps. DC
1/8*	125	28	M1135292	\$533	TENV	12B60-34D	61	90	1.6
1/8*	87	45	M1135291	533	TENV	12B39-34D	39	90	1.6
1/4	158	58	M1135290	563	TEFC	12B30-34G	30	90	2.8
1/4	100	90	M1135289	563	TEFC	12B19-34G	19	90	2.6
1/4	85	115	M1135288	563	TEFC	12B15-34G	15	90	2.6
1/4	61	167	M1135287	563	TEFC	12B11-34G	10.6	90	2.6
1/4	46	250	M1135286	563	TEFC	12B7-34G	7	90	2.6

\* Supplied with TENV motor enclosure  
▲ Use "S" discount symbol.

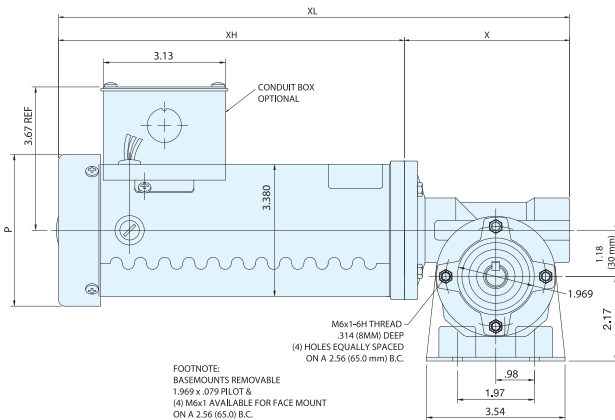
**RIGHT-ANGLE DC • LOW VOLTAGE (12V)  
TENV • 1.0 SERVICE FACTOR**

Input HP	F.L. Torque (In.-Lbs.)	Output RPM	Catalog Number	List Price▲	Enclosure	Gearmotor Type & Frame	Ratio to 1	Arm Volts DC	Full Load Amps. DC
1/8	134	27	M1135285	\$555	TENV	12B60-34C	61	12	14
1/8	94	45	M1135284	555	TENV	12B39-34C	39	12	15
1/4	158	58	M1135297	580	TENV	12B30-34F	30	12	24
1/4	100	90	M1135296	580	TENV	12B19-34F	19	12	24
1/4	85	115	M1135295	580	TENV	12B15-34F	15	12	23
1/4	61	167	M1135294	580	TENV	12B11-34F	10.6	12	21
1/4	46	250	M1135293	580	TENV	12B7-34F	7	12	23

▲ Use "S" discount symbol.

**NOTES:**

1. Conduit box not supplied with the gearmotor. Mounting provisions are provided and can use conduit box kit catalog number M1760007 found on page 107.
2. For solid double output shaft, consult factory.



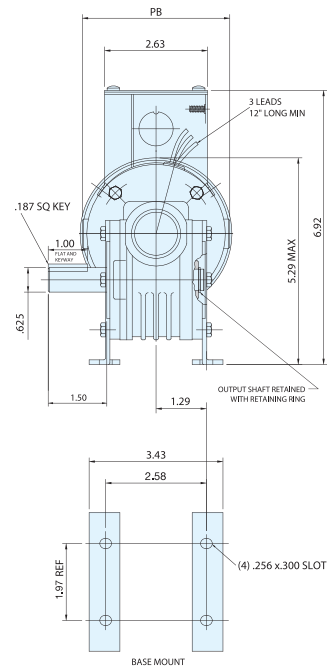
FOOTNOTE:  
BASEMOUNTS REMOVABLE  
1.969 x .079 FILOET &  
(4) M6x1 AVAILABLE FOR FACE MOUNT  
ON A 2.56 (65.0) B.C.

**SCR 90 VOLT RATED  
DIMENSIONS (INCHES)**

P	X	XL	XH	PB
3.38	4.32	11.07	6.75	4.00
3.38	4.32	11.07	6.75	4.00
3.88	4.32	13.16	8.84	3.76
3.88	4.32	13.16	8.84	3.76
3.88	4.32	13.16	8.84	3.76
3.88	4.32	13.16	8.84	3.76
3.88	4.32	13.16	8.84	3.76
3.88	4.32	13.16	8.84	3.76

**LOW VOLTAGE (12V)  
DIMENSIONS (INCHES)**

P	X	XL	XH	PB
3.38	4.32	10.57	6.25	4.21
3.38	4.32	10.57	6.25	4.21
3.38	4.32	11.82	7.5	4.21
3.38	4.32	11.82	7.5	4.21
3.38	4.32	11.82	7.5	4.21
3.38	4.32	11.82	7.5	4.21
3.38	4.32	11.82	7.5	4.21
3.38	4.32	11.82	7.5	4.21



# IP55 WASHGUARD GEARMOTORS

## PARALLEL SHAFT



Gearmotors

### General Specifications:

DC permanent magnet gearmotors rated for continuous duty. Designed for use with fullwave non-filtered SCR controls or battery supplied low voltage for adjustable speed applications requiring constant torque throughout the speed range.



### Mechanical Specifications:

Gearbox output shafts are coated with Mirolon 3300 fortified Teflon for superior corrosion resistance.

Frame, endshields, armature and interior components protected by enamel and polyester compounds for resistance to moisture, acids, alkalis and oil.

Cast conduit box with threaded conduit holes and Nitrile gaskets keep water out. The conduit box cover is made from 304 stainless steel.

For any condensation that may accumulate inside the motor, a one-way stainless steel vapor vent is provided. All hardware is stainless steel. Motor painted with white epoxy for superior corrosion resistance and protection. Machined fits between the endbells and motor frame are sealed with gaskets. Thru-bolt heads and nuts sealed with fiber washers. O-rings under each threaded brush cover.

Precision machined in-line steel gears, with a first stage steel helical gear followed by spur-type gears. Lubrication is permanent semi-fluid grease, reducing possibility of leakage. Output shafts have needle bearings for high load capacities.

### Application Notes:

LEESON WASHGUARD motors are designed for extended life in applications requiring regular washdown or otherwise wet environments. Washguard motors retard the entrance of water. Extra protection for the motor's interior prevents rust and corrosion build-up and releases trapped moisture to insure a longer life than possible with a standard motor.

These gearmotors are designed for mounting at any angle, but shaft up with motor below should be avoided to prevent leakage of lubricant into the motor should the shaft seal fail.

Overhung load capacities shown are at center of the output shaft.

The motor's stall torque exceeds recommended full load torques for the gearboxes. A current limiting device should be used to prevent damage to the gear sets.

## P300 SERIES • SCR RATED • 90V PARALLEL SHAFT • TENV • 1.0 SERVICE FACTOR

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	List Price▲	Gearmotor Type & Frame	Ratio to 1	Arm. Volts DC	Full Load Amps DC	Over-hung Load (Lbs.)	DIMENSIONS				
										P	PB	X Inches	XL	XH
5	353	1/20	<b>M1125261</b>	\$672	P303-31	336	90	.81	565	3.13	3.80	3.54	10.44	8.94
31	220	1/8	<b>M1125262</b>	690	P303-31	58	90	1.6	327	3.13	3.80	3.54	11.94	10.44
51	130	1/8	<b>M1125263</b>	638	P302-31	35	90	1.6	277	3.13	3.80	3.54	11.94	10.44
94	77	1/8	<b>M1125264</b>	638	P302-31	19	90	1.6	236	3.13	3.80	3.54	11.94	10.44
167	43	1/8	<b>M1125265</b>	638	P302-31	11	90	1.6	197	3.13	3.80	3.54	11.94	10.44

▲ Use "S" discount symbol.

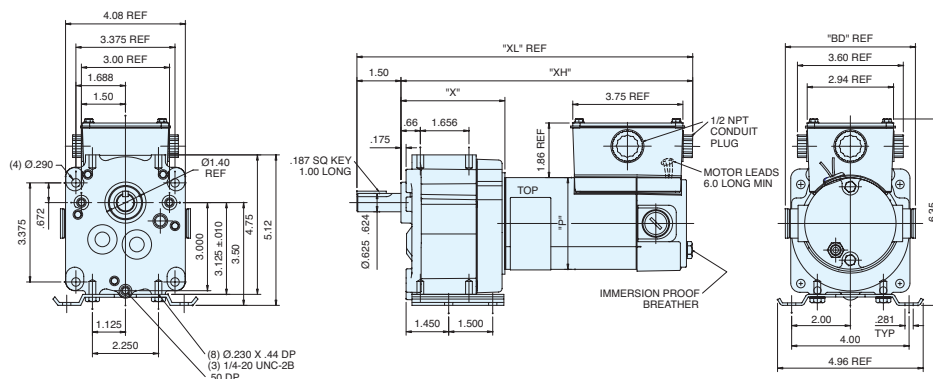
## P300 SERIES • LOW VOLTAGE (12V) PARALLEL SHAFT • TENV • 1.0 SERVICE FACTOR

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	List Price▲	Gearmotor Type & Frame	Ratio to 1	Arm. Volts DC	Full Load Amps DC	Over-hung Load (Lbs.)	DIMENSIONS				
										P	PB	X Inches	XL	XH
5	353	1/20	<b>M1125266</b>	\$690	P303-31	336	12	6.4	565	3.13	3.80	3.54	10.44	8.94
31	220	1/8	<b>M1125267</b>	707	P303-31	58	12	11.0	327	3.13	4.43	3.54	11.44	9.94

▲ Use "S" discount symbol.



**White Duck**





# IP55 WASHGUARD GEARMOTORS

## PARALLEL SHAFT

### General Specifications:

DC permanent magnet gearmotors rated for continuous duty. Designed for use with fullwave non-filtered SCR controls or battery supplied low voltage for adjustable speed applications requiring constant torque throughout the speed range.



### Mechanical Specifications:

Gearbox output shafts are coated with Miroton 3300 fortified Teflon for superior corrosion resistance.

Frame, endshields, armature and interior components protected by enamel and polyester compounds for resistance to moisture, acids, alkalis and oil.

Cast conduit box with threaded conduit holes and Nitrile gaskets keep water out. The conduit box cover is made from 304 stainless steel.

For any condensation that may accumulate inside the motor, a one-way stainless steel vapor vent is provided. All hardware is stainless steel. Motor painted with white epoxy for superior corrosion resistance and protection. Machined fits between the endbells and motor frame are sealed with gaskets. Thru-bolt heads and nuts sealed with fiber washers. O-rings under each threaded brush cover.

Precision machined in-line steel gears, with a first stage steel helical gear followed by spur-type gears. Lubrication is permanent semi-fluid grease, reducing possibility of leakage. Output shafts have needle bearings for high load capacities.

### Application Notes:

LEESON WASHGUARD motors are designed for extended life in applications requiring regular washdown or otherwise wet environments. WASHGUARD motors retard the entrance of water.

Extra protection for the motor's interior prevents rust and corrosion build-up and releases trapped moisture to insure a longer life than possible with a standard motor.

These gearmotors are designed for mounting at any angle, but shaft up with motor below should be avoided to prevent leakage of lubricant into the motor should the shaft seal fail.

Overhung load capacities shown are at center of the output shaft.

The motor's stall torque exceeds recommended full load torques for the gearboxes. A current limiting device should be used to prevent damage to the gear sets.

### PE350 SERIES PARALLEL SHAFT

#### TENV • 1.0 SERVICE FACTOR • SCR RATED 90V

Output RPM	F.L. Torque (Lb.in.)	Input HP	Catalog Number	List Price▲	Gearmotor Type & Frame	Ratio to 1	Arm Volts DC	Full Load Amps DC	Overhung Load (Lbs.)	DIMENSIONS				
										P	PB	X Inches	XL	XH
14	341	1/8	M1125268	\$695	P353-31	180	90	1.5	465	3.13	3.80	3.45	11.84	9.84
42	280	1/4	M1125269	719	P353-32	58	90	2.6	327	3.25	3.80	3.45	13.84	11.84
83	155	1/4	M1125270	701	P353-32	29	90	2.6	267	3.25	3.80	3.45	13.84	11.84
250	45	1/4	M1125271	701	P352-32	10	90	2.6	201	3.25	3.80	3.45	13.84	11.84
500	25	1/4	M1125272	701	P352-32	5	90	2.6	194	3.25	3.80	3.45	13.84	11.84

▲ Use "S" discount symbol.

### PE350 SERIES PARALLEL SHAFT

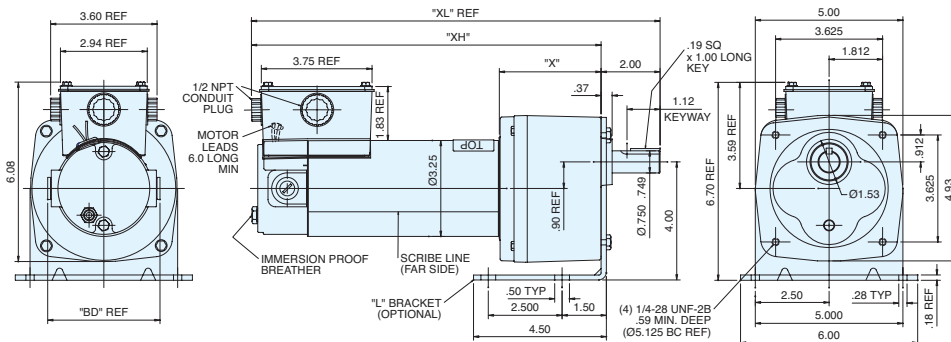
#### TENV • 1.0 SERVICE FACTOR • LOW VOLTAGE 12V

Output RPM	F.L. Torque (Lb.in.)	Input HP	Catalog Number	List Price▲	Gearmotor Type & Frame	Ratio to 1	Arm Volts DC	Full Load Amps DC	Overhung Load (Lbs.)	DIMENSIONS				
										P	PB	X Inches	XL	XH
14	341	1/8	M1125273	\$713	P353-31	180	12	12	465	3.13	4.43	3.45	11.58	9.58
42	325	1/4	M1125274	753	P353-32	58	12	20	327	3.25	4.43	3.45	13.84	11.84

▲ Use "S" discount symbol.



White Duck







# SUB-FHP AC GEARMOTORS

## PARALLEL SHAFT GEARMOTORS

### 12-100 In-Lbs Output Torque

#### Design Specifications:

Single phase gearmotors, totally enclosed for continuous duty, general purpose applications.

Permanent split capacitor designs are rated for 115 VAC 60 hertz input, and have starting torques equal to the running torques. The inline gearing is of precision machined steel, with first stage steel helical gear followed by spur type gears. Lubrication is by semi-fluid grease, reducing possibility of leakage and providing permanent lubrication. Output shafts have needle bearings for high load capacities. Shafts are hardened steel.

#### Application Notes:

These gearmotors are designed for mounting at any angle, but shaft up with motor below should be avoided to prevent leakage of lubricant into the motor should the motor's shaft seal fail. If these gearmotors are stalled, gearhead damage may result, especially in the ratios of 60:1 and higher. Provisions to limit the torque are recommended. The torque values listed are the recommended full load torque values for reasonable gear life.

Overhung load capacities shown are at center of output shaft. All PZ Series gearmotors are supplied with continuous duty "run" capacitor. **Conduit box not supplied with motor.** See page 107 for optional conduit box.

Model PZ gearmotors have the same mounting dimensions as Bodine model D and Z gearmotors, Bison 100 gearmotors, and Baldor/Boehm PSS, plus many of the Dayton gearmotors.

For additional information, see Bulletin 1830.



### PZ SERIES AC GEARMOTORS

#### PARALLEL SHAFT • TEFC • 115V • SINGLE PHASE

#### 40°C AMBIENT • 1.0 SERVICE FACTOR

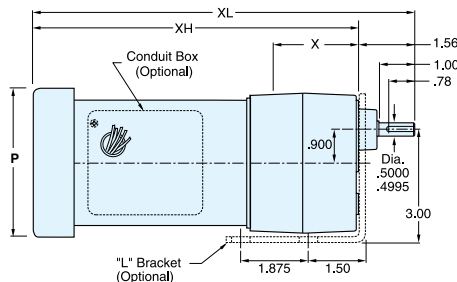
Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	List Price▲	Gearmotor Type & Frame	Ratio to 1	F.L. Amps 115 VAC	Over-hung Load (Lb.)	DIMENSIONS				Capacitor Mfd. 240 VAC
									P	X	XL	XH	
2	100	1/150	M1125050#	\$421	PZ5-31	900	0.4	155	3.07	3.23	8.71	7.15	3.0
9	100	1/15	M1125127	421	PZ4-31	180	0.9	155	3.88	3.23	10.42	8.86	10.0
19	100	1/15	M1125128	421	PZ4-31	90	0.9	155	3.88	3.23	10.42	8.86	10.0
28	100	1/15	M1125129	421	PZ3-31	60	0.9	155	3.88	2.43	9.62	8.06	10.0
57	56	1/15	M1125130	405	PZ3-31	30	0.9	171	3.88	2.43	9.62	8.06	10.0
94	36	1/15	M1125131	405	PZ3-31	18	0.9	171	3.88	2.43	9.62	8.06	10.0
142	24	1/15	M1125132	392	PZ2-31	12	0.9	180	3.88	2.13	9.32	7.76	10.0
283	12	1/15	M1125133	392	PZ2-31	6	0.9	180	3.88	2.13	9.32	7.76	10.0

# TENV enclosure  
▲ Use "S" discount symbol.

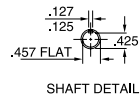
## BODINE/BISON/DAYTON

### DIRECT INTERCHANGE

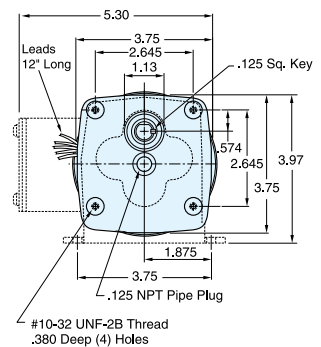
### PZ SERIES - AC



ALL DIMENSIONS IN INCHES



SHAFT DETAIL



#### QUICK REFERENCE

GEARMOTOR CROSS REFERENCE	Page 163
"L" BRACKET AND CONDUIT BOX	107



### 43-391 In-Lbs Output Torque



#### Design Specifications:

Single phase gearmotors, totally enclosed for continuous duty, general purpose applications. Permanent split capacitor designs are rated for 115/230VAC, 60/50 Hertz input, and have starting torques equal to the running torques. The in-line gearing is of precision machined steel, with first stage steel helical gear followed by spur type gears. Lubrication is by semi-fluid grease, reducing possibility of leakage and providing permanent lubrication. Output shafts have needle bearings for high load capacities. Shafts are hardened steel.

#### Application Notes:

These gearmotors are designed for mounting at any angle, but shaft up with motor below should be avoided to prevent leakage of lubricant into the motor should the motor's shaft seal fail. If these gearmotors are stalled, gearhead damage may result, especially in the ratios of 60:1 and higher. Provisions to limit the torque are recommended. The torque values listed are the recommended full load torque values for reasonable gear life. Overhung load capacities shown are at center of output shaft. All P240 gearmotors are supplied with continuous duty "run" capacitor. **Conduit box not supplied with motor.** See page 107 for optional conduit box.

Model P240 gearmotors have the same mounting dimensions as Bison's 224 and 242 gearmotors and many Dayton gearmotors.

For additional information, see Bulletin 1830.

Please contact LEESON for output speeds not listed.

### P240 SERIES AC GEARMOTORS

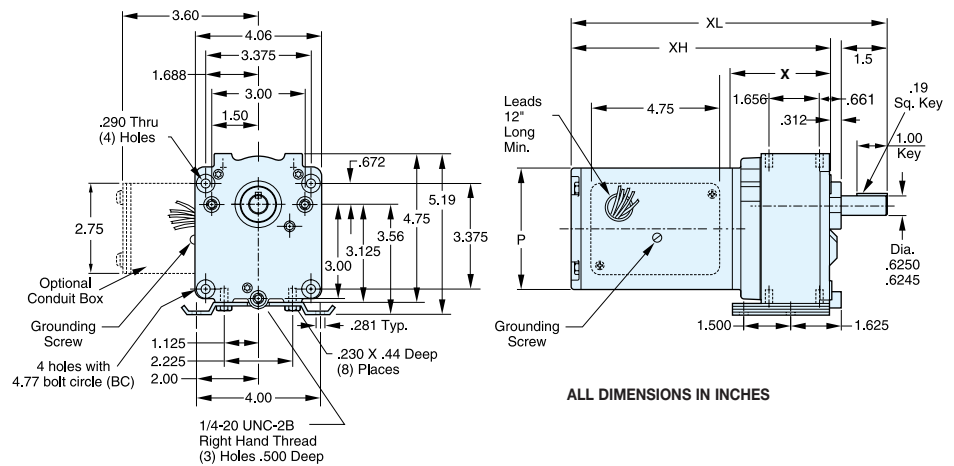
#### PARALLEL SHAFT • TOTALLY ENCLOSED • 115/230V SINGLE PHASE • 40°C AMBIENT • 1.0 SERVICE FACTOR

60 Hz Output RPM	F.L. Torque (Lb.in.)	Input HP	Catalog Number	List Price▲	Gearmotor Type & Frame	Ratio to 1	F.L. Amps 115V AC	Overhung Load (Lb.)	DIMENSIONS				Capacitor Mfd. 240 VAC
									P	X	XL	XH	
8	345	1/15	M1145029	\$629	P243-38D	216	1.0	491	3.85	3.50	10.46	8.96	7.5
15	250	1/15	M1145023	629	P243-38D	114	1.0	407	3.85	3.50	10.46	8.96	7.5
16	391	1/6	M1145030**	683	P243-38F	103	2.1	399	4.43	3.50	12.13	10.63	15.0
30	135	1/15	M1145024	572	P242-38D	52	1.0	330	3.85	3.50	10.46	8.96	7.5
30	295	1/6	M1145031**	683	P243-38F	58	2.1	330	4.43	3.50	12.13	10.63	15.0
40	219	1/6	M1145032**	683	P243-38F	43	2.1	303	4.43	3.50	12.13	10.63	15.0
45	92	1/15	M1145025	572	P242-38D	35	1.0	292	3.85	3.50	10.46	8.96	7.5
60	157	1/6	M1145033**	626	P242-38D	29	2.1	268	4.43	3.50	12.13	10.63	15.0
70	61	1/15	M1145026	572	P242-38D	23	1.0	256	3.85	3.50	10.46	8.96	7.5
90	103	1/6	M1145034**	626	P242-38D	19	2.1	237	4.43	3.50	12.13	10.63	15.0
97	43	1/15	M1145027	572	P242-38D	16.5	1.0	232	3.85	3.50	10.46	8.96	7.5
139	30	1/15	M1145028	572	P242-38D	11.5	1.0	208	3.85	3.50	10.46	8.96	7.5
156	60	1/6	M1145035**	626	P242-38D	10.6	2.1	201	4.43	3.50	12.13	10.63	15.0

▲ Use "S" discount symbol.  
\*\* TEFC enclosure.

## BISON/DAYTON DIRECT INTERCHANGE

### P240 SERIES



ALL DIMENSIONS IN INCHES

### 25-341 In-Lbs Output Torque

#### Design Specifications:

Sub-FHP AC gearmotors. Totally enclosed for continuous duty, general purpose applications. All rated for 60/50 Hz operation except hi-torque single-phase which are 60 Hz only.



Gearbox has rugged aluminum die cast housing, for maximum gear and bearing support. Precision machined gearing, hardened for maximum load capability. All gearing designed and rated to AGMA Class 9 standards and to withstand momentary shock overload of 200%. Oversized output bearings for greater overhung load capacity and longer life. High-carbon alloy output shaft provides maximum strength and rigidity. All needle bearing journals are precision-ground after heat treating, to provide maximum finish and fit. Single lip, spring loaded, heavy-duty industrial oil seals help keep lubricant in and dirt out. Gears and bearings are splash lubricated with permanent, heavy-duty gear oil.

#### Application Notes:

These gearmotors are designed for mounting at any angle, but shaft-up with motor below gearhead is not recommended.

Run capacitor supplied with gearmotor at no additional cost. **Three phase and hi-torque single-phase models include conduit box, other single-phase models do not.** See page 107 for optional conduit box.

Overhung load capacities shown are at center of output shaft.

Model PE350 gearmotors have the same mounting dimensions as Bodine's "E" box and many Baldor/Boehm gearmotors.

**BODINE  
DIRECT  
INTERCHANGE**

### PE350 SERIES AC GEARMOTORS

#### SINGLE PHASE • PARALLEL SHAFT • TEFC • 115/230V

60 Hz Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	List Price▲	Type & Frame	Ratio to 1	F.L. Amps 115V AC	Overhung Load Lbs.	DIMENSIONS XL Inches	XH Inches	Capacitor Mfd. 240VAC
5	310	1/12	096000#	\$599	PE353-42	336	1.3	565	11.36	9.36	10.0
9	341	1/12	096001#	599	PE353-42	180	1.3	491	11.36	9.36	10.0
14	330	1/12	096002#	599	PE353-42	124	1.3	459	11.36	9.36	10.0
19	250	1/12	096003#	599	PE353-42	91	1.3	374	11.36	9.36	10.0
29	270	1/6	096004	629	PE353-42	58	3.2	327	13.32	11.32	15.0
34	250	1/6	096005	629	PE353-42	50	3.2	330	13.32	11.32	15.0
40	180	1/6	096006	629	PE353-42	43	3.2	303	13.32	11.32	15.0
59	135	1/6	096007	594	PE352-42	29	3.2	267	13.32	11.32	15.0
75	90	1/6	096008	594	PE352-42	23	3.2	256	13.32	11.32	15.0
113	68	1/6	096009	594	PE352-42	15	3.2	222	13.32	11.32	15.0
160	45	1/6	096010	594	PE352-42	10	3.2	196	13.32	11.32	15.0
340	25	1/6	096011	594	PE352-42	5	3.2	190	13.32	11.32	15.0

#### Hi-Torque Single Phase PE350 Gearmotors With Capacitor Start Motors

58	320	1/3	096049	696	PE353-42	30	7.2	300	14.56	12.56	...
85	218	1/3	096050	654	PE353-42	20	7.2	300	14.56	12.56	...
173	109	1/3	096051	654	PE353-42	10	7.2	300	14.56	12.56	...
345	55	1/3	096052	654	PE353-42	5	7.2	300	14.56	12.56	...

# TENV enclosure

▲ Use "S" discount symbol.

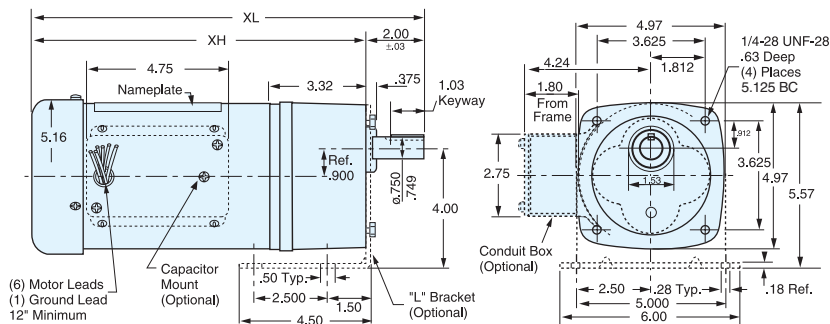
### PE350 SERIES AC GEARMOTORS

#### THREE PHASE • PARALLEL SHAFT • TEFC • 230/460V

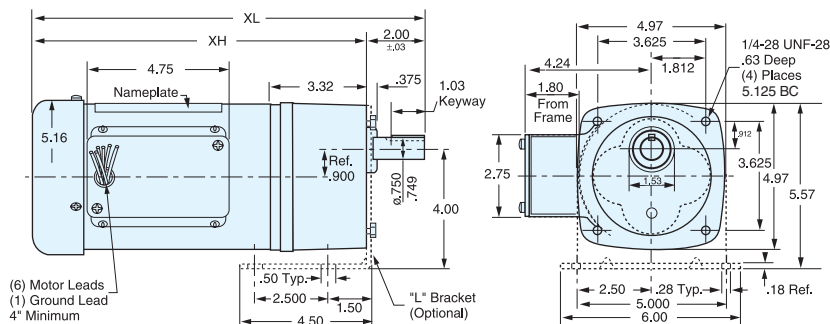
Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	List Price▲	Type & Frame	Ratio to 1	F.L. Amps 230V AC	Overhung Load Lbs.	DIMENSIONS XL Inches	XH Inches
58	320	1/3	096013	\$691	PE353-42	30	1.6	300	13.81	11.81
85	218	1/3	096014	649	PE352-42	20	1.6	300	13.81	11.81
173	109	1/3	096015	649	PE352-42	10	1.6	300	13.81	11.81
345	55	1/3	096016	649	PE352-42	5	1.6	300	13.81	11.81

▲ Use "S" discount symbol.

#### PE350 SINGLE PHASE



#### PE350 THREE PHASE



ALL DIMENSIONS IN INCHES

**70-1105 In-Lbs  
Output Torque**

**Design Specifications:**

Fractional horsepower AC gearmotors. Totally enclosed for continuous duty, general purpose applications. Rated for 60 Hz input.



Gearbox has rugged aluminum die cast housing, for maximum gear and bearing support. Precision machined gearing, hardened for maximum load capability. All gearing designed and rated to AGMA Class 9 standards and to withstand momentary shock overload of 200%. Oversized output bearings for greater overhung load capacity and longer life. High-carbon alloy output shaft provides maximum strength and rigidity. All needle bearing journals are precision-ground after heat treating, to provide maximum finish and fit. Heavy-duty industrial oil seals help keep lubricant in and dirt out. Gears and bearings are splash lubricated with permanent, heavy-duty gear oil.

**Application Notes:**

These gearmotors are designed for mounting at any angle, but shaft-up with motor below gearhead is not recommended. P1100 AC gearmotors have the same mounting dimensions as Bison 482 gearmotors and many Dayton gearmotors. Three phase units suitable for inverter duty.

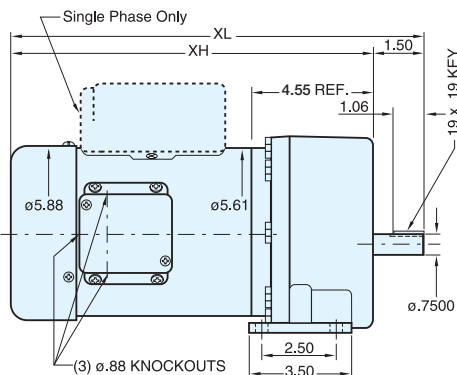
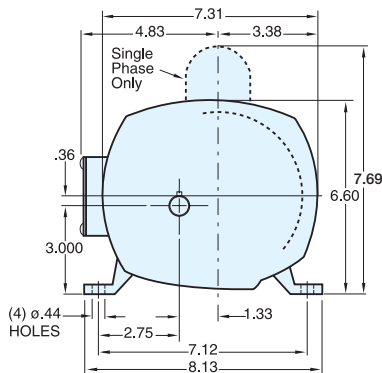
**Both single and three phase models include conduit box.** For additional information, see Bulletin 1830.

**P1100 SERIES AC GEARMOTORS**  
SINGLE PHASE • FRACTIONAL HP • TEFC • 115/230V

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	List Price▲	Type & Frame	Ratio to 1	F.L. Amps 115V AC	Overhung Load Lbs.	DIMENSIONS XL XH Inches	
8	975	1/4	107000	\$844	P1103-48	212	5.4	700	13.42	11.92
12	1030	1/4	107004	844	P1103-48	143	5.4	700	13.42	11.92
18	800	1/4	107003	844	P1103-48	95	5.4	700	13.42	11.92
26	569	1/4	107002	844	P1103-48	66	5.4	650	13.42	11.92
59	248	1/4	107005	826	P1102-48	29	5.4	625	13.42	11.92
133	114	1/4	107001	826	P1102-48	13	5.4	525	13.42	11.92
18	1089	1/3	107006	854	P1103-48	95	6.2	700	13.67	13.17
26	752	1/3	107012	854	P1103-48	66	6.2	650	13.67	13.17
41	461	1/3	107011	836	P1102-48	42	6.2	650	13.67	13.17
59	330	1/3	107010	836	P1102-48	29	6.2	625	13.67	13.17
91	224	1/3	107009	836	P1102-48	19	6.2	575	13.67	13.17
157	125	1/3	107008	836	P1102-48	11	6.2	500	13.67	13.17
288	70	1/3	107007	836	P1102-48	6	6.2	400	13.67	13.17
22	1105	1/2	107013	930	P1103-48	79	8.8	700	14.17	12.67
41	700	1/2	107017	912	P1102-48	42	8.8	650	14.17	12.67
59	496	1/2	107016	912	P1102-48	29	8.8	625	14.17	12.67
91	336	1/2	107015	912	P1102-48	19	8.8	575	14.17	12.67
133	229	1/2	107014	912	P1102-48	13	8.8	525	14.17	12.67

Gearmotors

**BISON/DAYTON  
DIRECT INTERCHANGE**



ALL DIMENSIONS IN INCHES

**P1100 SERIES AC GEARMOTORS**  
THREE PHASE • FRACTIONAL HP • TEFC • 230/460V

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	List Price▲	Type & Frame	Ratio to 1	F.L. Amps 230V AC	Overhung Load Lbs.	DIMENSIONS XL XH Inches	
18	1089	1/3	107025	\$909	P1103-48	95	1.6	700	12.92	11.42
26	752	1/3	107026	909	P1103-48	66	1.6	650	12.92	11.42
41	461	1/3	107027	889	P1102-48	42	1.6	650	12.92	11.42
59	330	1/3	107028	889	P1102-48	29	1.6	625	12.92	11.42
91	224	1/3	107029	889	P1102-48	19	1.6	575	12.92	11.42
157	125	1/3	107030	889	P1102-48	11	1.6	500	12.92	11.42
288	70	1/3	107031	889	P1102-48	6	1.6	400	12.92	11.42
22	1105	1/2	107032	958	P1103-48	79	2.0	700	13.42	11.92
41	700	1/2	107033	944	P1102-48	42	2.0	650	13.42	11.92
59	496	1/2	107034	944	P1102-48	29	2.0	625	13.42	11.92
91	336	1/2	107035	944	P1102-48	19	2.0	575	13.42	11.92
133	229	1/2	107036	944	P1102-48	13	2.0	500	13.42	11.92
288	100	1/2	107037	944	P1102-48	6	2.0	400	13.42	11.92

▲ Use "S" discount symbol.

**QUICK REFERENCE**

**GEARMOTOR CROSS REFERENCE** ..... Page 163  
**"L" BRACKET AND CONDUIT BOX** ..... 107



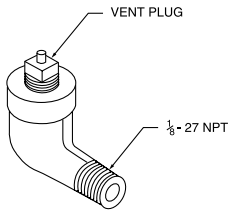
### 14-113 In-Lbs Output Torque

#### Design Specifications:

Single phase gearmotors, totally enclosed for continuous duty, general purpose applications. Permanent split capacitor motors rated 115/230 VAC 60/50 hertz input, and have starting torque equal to the running torque. This worm-type right-angle gearing features hardened, steel worm with bronze worm wheel for long life and quiet operation. Precision machined aluminum housings are used. Gearbox has all ball bearings. The housing is sealed and lubrication is permanent with an oil bath. The output shaft is field interchangeable from left hand style to right hand style.

#### Application Notes:

For optimum seal life, these right angle gearmotors have a lubrication breather positioned for horizontal mounting. For other mountings, the breather-plug must be reoriented by using a 90° NPT taper pipe elbow (see drawing). However, the motor portion of the gearmotor should never be mounted below the gearhead. Overhung load capacities shown are at center of output shaft. These motors are supplied with continuous duty "run" capacity. **Conduit box not supplied with motor.** See page 107 for optional conduit box and base kit.



Please contact LEESON for output speeds not listed. For additional information, see Bulletin 1830.

**BODINE/DAYTON**  
DIRECT INTERCHANGE

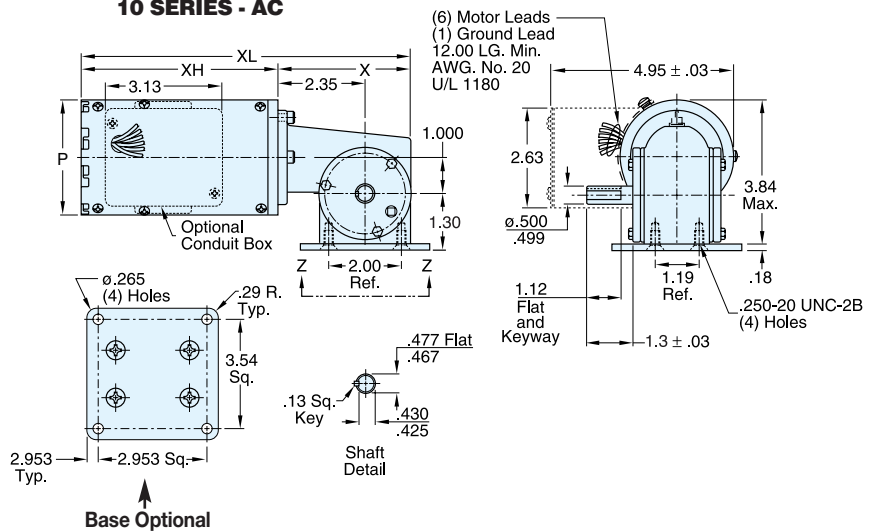
### RIGHT-ANGLE AC GEARMOTORS

#### TOTALLY ENCLOSED • 115/230 V • SINGLE PHASE

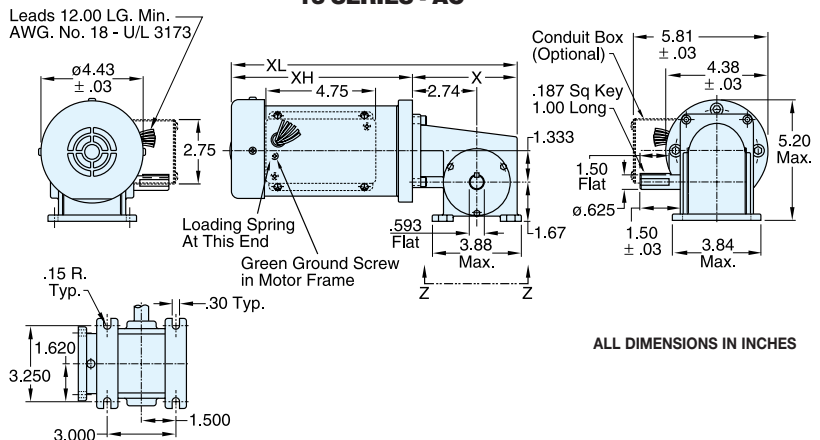
60 Hz Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	List Price▲	Gearmotor Type & Frame	Ratio to 1	F.L. Amps 115V AC	Overhung Load (Lb.)	DIMENSIONS				Capacitor Mfd.
									P Dia.	X Inches	XL Inches	XH	
28	37	1/15	M1125080	\$518	10F60-31C	60	0.9	185	3.07	3.63	8.94	5.31	10.0+
43	34	1/15	M1125081	518	10F40-31C	40	0.9	185	3.07	3.63	8.94	5.31	10.0+
58	40	1/15	M1125082	518	10F30-31C	30	0.9	185	3.07	3.63	8.94	5.31	10.0+
85	24	1/15	M1125083	518	10F20-31C	20	0.9	185	3.07	3.63	8.94	5.31	10.0+
173	14	1/15	M1125084	518	10F10-31C	10	0.9	185	3.07	3.63	8.94	5.31	10.0+
29	110	1/6	M1145037**	703	13F60-38F	60	2.0	235	3.85	4.50	12.31	7.81	15.0*
43	113	1/6	M1145038**	703	13F40-38F	40	2.0	235	3.85	4.50	12.31	7.81	15.0*
57	95	1/6	M1145082**	703	13F30-38F	30	2.0	235	3.85	4.50	12.31	7.81	15.0*
83	75	1/6	M1145039**	703	13F20-38F	20	2.0	235	3.85	4.50	12.31	7.81	15.0*
170	43	1/6	M1145040**	703	13F10-38F	10	2.0	235	3.85	4.50	12.31	7.81	15.0*
340	23	1/6	M1145041**	703	13F05-38F	5	2.0	235	3.85	4.50	12.31	7.81	15.0*

▲ Use "S" discount symbol.  
\*\* TEFC enclosure.  
+ 250 VAC  
\* 300 VAC

#### 10 SERIES - AC



#### 13 SERIES - AC



ALL DIMENSIONS IN INCHES