

Gearmotors

Quick Reference – Stock Sub-FHP Gearmotors

AC Single & Three Phase

Single Phase 115V
12-100 In-Lbs
Output Torque
Page 340

DC SCR & Low Voltage

DC SCR 90 & 180V
10-100 In-Lbs
Output Torque
Low Voltage (12V)
36-100 In-Lbs torque
Page 320



Parallel Shaft
PZ Series
Gearmotors

BODINE/BISON/DAYTON
DIRECT INTERCHANGE

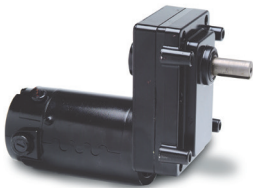


P240 & P300 Series
Gearmotors

Single Phase 115/230V
43-391 In-Lbs
Output Torque
Page 342

DC SCR 90 & 180V
27-353 In-Lbs
Output Torque
Low Voltage (12V)
113-353 In-Lbs torque
Page 322

BISON/DAYTON
DIRECT INTERCHANGE



OS300 Series
Gearmotors

DC SCR 90V
and
Low Voltage (12V)
Output Torque
130-268 In-Lbs
Page 324



PE350 Series
Gearmotors

Single Phase 115/230V
25-341 In-Lbs
Output Torque
Three Phase 230/460V
55-320 In-Lbs
Output Torque
Page 344

DC SCR 90 & 180V
25-371 In-Lbs
Output Torque
Low Voltage (12V)
155-341 In-Lbs torque
Page 326

BODINE
DIRECT
INTERCHANGE



P1100 Series
Gearmotors

Single Phase 115/230V
70-1105 In-Lbs
Output Torque
Three Phase 230/460V
70-1105 In-Lbs
Output Torque
Page 346

DC SCR 90V
105-1112 In-Lbs
Output Torque
Low Voltage (12V)
320-1087 In-Lbs torque
Page 328

BISON/DAYTON
DIRECT INTERCHANGE



Right-Angle
Worm Type
10 & 13 Series
Gearmotors

Single Phase 115/230V
14-113 In-Lbs
Output Torque
Page 348

DC SCR 90 & 180V
5-135 In-Lbs
Output Torque
Low Voltage (12V)
25-135 In-Lbs torque
Page 330

BODINE/DAYTON
DIRECT INTERCHANGE



Bravo Right Angle
Worm Type
12 Series
Gearmotors

DC SCR 90V
and
Low Voltage (12V)
Output Torque
46-134 In-Lbs
Page 332



Quick Reference – Stock Sub-FHP Washguard® Gearmotors



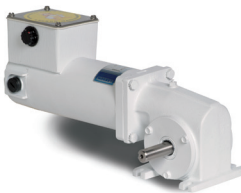
P300 Series
Gearmotors

DC SCR 90V
and
Low Voltage (12V)
Output Torque
44-353 In-Lbs
Page 335



PE350 Series
Gearmotors

DC SCR 90V
and
Low Voltage (12V)
Output Torque
25-341 In-Lbs
Page 337



Right-Angle
13 Series
Gearmotors

DC SCR 90V
and
Low Voltage (12V)
Output Torque
50-135 In-Lbs
Page 339



P240 Series
Gearmotors

AC – Single Phase &
Three Phase
Washdown Duty
60-391 In-Lbs
Output Torque
Page 343

BISON/DAYTON
DIRECT INTERCHANGE



Right-Angle
Worm Type
10 & 13 Series
Gearmotors

AC – Single Phase &
Three Phase
Washdown Duty
23-220 In-Lbs
Output Torque
Page 349

BODINE/DAYTON
DIRECT INTERCHANGE

Stock Sub-FHP Three Phase Inverter Rated Gearmotors



Includes gearmotor
series PZ, P240,
PE350 and 13 series
right-angle

Three Phase 230V
12-391 In-Lbs
Output Torque
Page 352



Gearmotors

Parallel Shaft - PZ Series - DC

SCR Rated - 10-100 In-Lbs Torque

Low Voltage - 36-100 In-Lbs Torque



General Specifications - SCR Rated Gearmotors:

- Performance matched for continuous duty service over 60:1 speed range
- Constant torque throughout the range when powered by a full-wave unfiltered SCR-type adjustable speed control having a typical form factor of 1.3 to 1.4

General Specifications - Low Voltage Gearmotors:

- Performance matched for continuous duty service
- Designed for battery power or can be used with a low voltage controller with form factor up to 1.05

Features:

- Precision machined in-line steel gears
- 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
- Shafts are hardened steel
- Optional conduit box and PZ gearmotor mounting bracket available, see page 342

Application Notes:

- These gearmotors are designed for mounting at any angle, but motor below the reducer should be avoided to prevent leakage of lubricant into the motor should the motor shaft seal fail
- Motor's stall torque could exceed recommended full load torques. A current limiting device such as an SCR control should be used to prevent damage. This issue is even more critical for low voltage motors, typically no controller is used since motor is connected directly to a battery, so some type of current limit or fusing should be considered
- Overhung load capacities shown are at center of output shaft
- Model PZ gearmotors have the same mounting dimensions as Bodine model D and Z, Baldor/Boehm, Bison 100 gearmotors, and a number of Dayton gearmotors
- For additional information, see Bulletin 1830
- **Bodine/Baldor/Boehm/Bison/Dayton direct interchange**



SCR Rated - 10-100 In-Lbs Torque
Low Voltage - 36-100 In-Lbs Torque

90 & 180 Volts - TENV - PZ Series

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Stock	List Price	Model Number	Gearmotor Type & Frame	Ratio to 1	Arm. Volts DC	F.L. Amps DC	Overhung Load (lb.)	Dimensions (inches)				♥Notes
												P	X	XL	XH	
4	40	1/40	M1115002.00	✓	527	985.620	PZ5-30A	450	90	0.5	155	3.00	3.25	9.28	7.72	S, US
40	40	1/40	M1125046.00	✓	527	985.623	PZ5-30A	450	180	0.2	155	3.00	3.25	9.30	7.74	S, US
10	100	1/20	M1115001.00	✓	527	985.621	PZ4-30E	180	90	0.5	155	3.00	3.25	9.28	7.72	S, US
100	100	1/20	M1125047.00	C/A	527	985.624	PZ4-30A	180	180	0.3	155	3.00	3.25	9.30	7.74	S, US
20	100	1/20	M1115000.00	✓	527	985.622	PZ4-30E	90	90	0.5	155	3.00	3.25	9.28	7.72	S, US
100	100	1/20	M1125048.00	C/A	527	985.625	PZ4-30A	90	180	0.3	155	3.00	3.25	9.30	7.74	S, US
30	100	1/17	M1125002.00	✓	573	985.627	PZ3-30B	60	90	0.8	155	3.00	2.68	8.74	7.18	S, US
100	100	1/17	M1125037.00	✓	573	985.635	PZ3-30B	60	180	0.4	155	3.00	2.68	8.74	7.18	S, US
60	56	1/17	M1125003.00	✓	573	985.628	PZ3-30B	30	90	0.8	171	3.00	2.68	8.74	7.18	S, US
56	56	1/17	M1125036.00	✓	573	985.634	PZ3-30B	30	180	0.4	171	3.00	2.68	8.74	7.18	S, US
100	36	1/17	M1125004.00	✓	573	985.626	PZ3-30B	18	90	0.8	171	3.00	2.68	8.74	7.18	S, US
36	36	1/17	M1125035.00	✓	573	985.631	PZ3-30B	18	180	0.4	171	3.00	2.68	8.74	7.18	S, US
150	24	1/17	M1125005.00	✓	544	985.629	PZ2-30B	12	90	0.8	180	3.00	2.40	8.46	6.90	S, US
24	24	1/17	M1125034.00	✓	544	985.633	PZ2-30B	12	180	0.4	180	3.00	2.40	8.46	6.90	S, US
300	10	1/17	M1125006.00	✓	544	985.630	PZ2-30B	6	90	0.8	180	3.00	2.40	8.46	6.90	S, US
10	10	1/17	M1125033.00	✓	544	985.632	PZ2-30B	6	180	0.4	180	3.00	2.40	8.46	6.90	S, US

C/A - Check Availability

Specifications are subject to change without notice

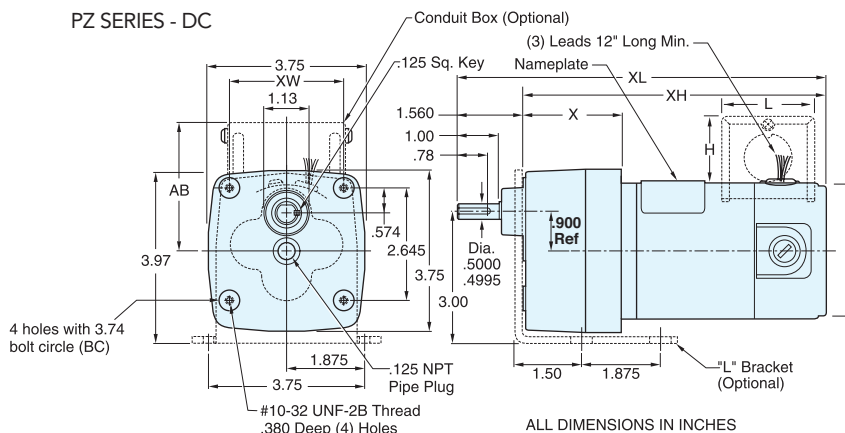
♥ Note listing on inside back flap

12 Volts - TENV - PZ Series

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Stock	List Price	Model Number	Gearmotor Type & Frame	Ratio to 1	Arm. Volts DC	F.L. Amps DC	Overhung Load (lb.)	Dimensions (inches)				♥Notes
												P	X	XL	XH	
10	100	1/20	M1125213.00	✓	583	985.653	PZ4-30	180	12	2.7	155	3.00	3.25	9.28	7.72	S, US
30	100	1/17	M1125214.00	✓	619	985.654	PZ3-30	60	12	5.2	155	3.00	2.68	8.74	7.18	S, US
55	56	1/17	M1125215.00	✓	619	985.655	PZ3-30	30	12	5.6	171	3.00	2.68	8.74	7.18	S, US

Specifications are subject to change without notice

♥ Note listing on inside back flap



Conduit Box Dimensions (IN)

Frame	XW	AB	H	L
30/31	2.63	3.47	1.90	3.13

View On-line Technical Information



Gearmotors

Parallel Shaft - P300 Series - DC

SCR Rated - 27-353 In-Lbs. Torque

Low Voltage - 113-353 In-Lbs Torque



General Specifications - SCR Rated Gearmotors:

- Performance matched for continuous duty service over 60:1 speed range
- Constant torque throughout the range when powered by a full-wave unfiltered SCR-type adjustable speed control having a typical form factor of 1.3 to 1.4

General Specifications - Low Voltage Gearmotors:

- Performance matched for continuous duty service
- Designed for battery power or can be used with a low voltage controller with form factor up to 1.05

Features:

- Precision machined in-line steel gears
- 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
- Shafts are hardened steel
- Optional conduit box available, see page 350

Application Notes:

- These gearmotors are designed for mounting at any angle, but motor below the reducer should be avoided to prevent leakage of lubricant into the motor should the motor shaft seal fail
- Motor's stall torque could exceed recommended full load torques. A current limiting device such as an SCR control should be used to prevent damage. This issue is even more critical for low voltage motors, typically no controller is used since motor is connected directly to a battery, so some type of current limit or fusing should be considered
- Overhung load capacities shown are at center of output shaft
- For additional information, see Bulletin 1830
- **Bison/Dayton direct interchange**

SCR Rated - 27-353 In-Lbs. Torque
Low Voltage - 113-353 In-Lbs Torque

90 & 180 Volts - TENV - P300 Series

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Stock	List Price	Model Number	Gearmotor Type & Frame	Ratio to 1	Arm. Volts DC	F.L. Amps DC	Over- hanging Load (lb.)	Dimensions (inches)				♥ Notes
												P	X	XL	XH	
5	353	1/20	M1115024.00	✓	755	985.602	P303-30E	336	90	0.5	565	3.00	3.54	10.07	8.57	S, US
9	268	1/20	M1115025.00	✓	755	985.603	P303-30E	216	90	0.5	474	3.00	3.54	10.07	8.57	S, US
18	150	1/20	M1115026.00	✓	755	985.604	P303-30E	103	90	0.5	385	3.00	3.54	10.07	8.57	S, US
20	140	1/20	M1125092.00	✓	774	985.607	P303-31E	90	180	0.3	370	3.11	3.54	10.07	8.57	S, US
24	280	1/8	M1125069.00	✓	774	985.611	P303-30E	76	90	1.3	353	3.00	3.54	11.54	10.04	S, US
31	220	1/8	M1125070.00	✓	774	985.612	P303-30E	58	90	1.3	327	3.00	3.54	11.54	10.04	S, US
31	220	1/8	M1125038.00	✓	774	985.617	P303-30E	58	180	0.7	327	3.00	3.54	11.54	10.04	S, US
34	82	1/20	M1115027.00	✓	755	985.605	P303-30E	52	90	0.5	318	3.00	3.54	10.07	8.57	S, US
51	130	1/8	M1125071.00	✓	712	985.615	P302-30E	35	90	1.3	277	3.00	3.54	11.54	10.04	S, US
51	130	1/8	M1125039.00	✓	712	985.614	P302-30E	35	180	0.7	277	3.00	3.54	11.54	10.04	S, US
51	55	1/20	M1115028.00	✓	695	985.606	P302-30E	35	90	0.5	281	3.00	3.54	10.07	8.57	S, US
61	113	1/8	M1125072.00	✓	712	985.610	P302-30E	29	90	1.3	267	3.00	3.54	11.54	10.04	S, US
60	45	1/20	M1125093.00	✓	712	985.609	P302-31E	29	180	0.3	267	3.11	3.54	10.07	8.57	S, US
94	77	1/8	M1125073.00	✓	712	985.613	P302-30E	19	90	1.3	236	3.00	3.54	11.54	10.04	S, US
94	77	1/8	M1125040.00	✓	712	985.618	P302-30E	19	180	0.7	236	3.00	3.54	11.54	10.04	S, US
109	27	1/20	M1115029.00	✓	695	985.601	P302-30E	16	90	0.5	224	3.00	3.54	10.07	8.57	S, US
106	26	1/20	M1125094.00	C/A	695	985.608	P302-31E	16	180	0.3	222	3.11	3.54	10.07	8.57	S, US
167	43	1/8	M1125074.00	✓	712	985.616	P302-30E	11	90	1.3	197	3.00	3.54	11.54	10.04	S, US
170	43	1/8	M1125041.00	✓	712	985.619	P302-30E	11	180	0.7	196	3.00	3.54	11.54	10.04	S, US

C/A - Check Availability

♥ Note listing on inside back flap

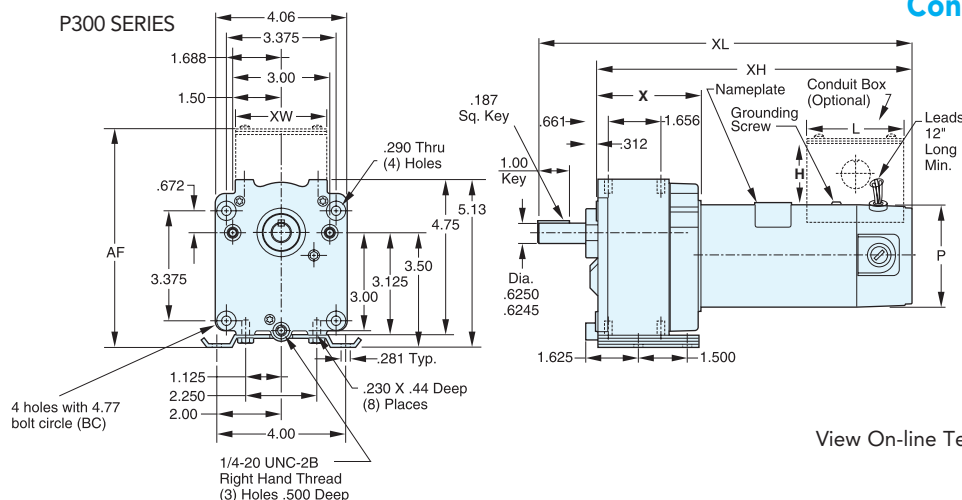
Specifications are subject to change without notice

12 Volt - TENV - P300 Series

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Stock	List Price	Model Number	Gearmotor Type & Frame	Ratio to 1	Arm. Volts DC	F.L. Amps DC	Over- hung Load (lb.)	Dimensions (inches)				♥ Notes
												P	X	XL	XH	
5	353	1/20	M1125217.00	✓	774	985.657	P303-30	336	12	5.6	565	3.00	3.85	10.07	8.57	S, US
31	220	1/8	M1125218.00	✓	793	985.658	P303-30	58	12	10.6	327	3.00	3.54	11.54	10.04	S, US
51	130	1/8	M1125219.00	✓	729	985.659	P302-30	35	12	10.3	277	3.00	3.23	11.54	10.04	S, US
61	113	1/8	M1125220.00	✓	729	985.660	P302-30	29	12	10.4	267	3.00	3.23	11.54	10.04	S, US

Specifications are subject to change without notice

♥ Note listing on inside back flap



Conduit Box Dimensions (IN.)

Frame	AF	XW	H	L
30/31	6.26	2.63	1.90	3.13

View On-line Technical Information

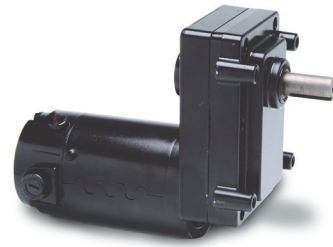


Gearmotors

Off-Set Shaft Gearmotors - OS300 Series - DC

SCR Rated - 130-268 In-Lbs. Torque

Low Voltage - 130-268 In-Lbs. Torque



General Specifications - SCR Rated Gearmotors:

- Performance matched for continuous duty service over 60:1 speed range
- Constant torque throughout the range when powered by a full-wave unfiltered SCR-type adjustable speed control having a typical form factor of 1.3 to 1.4

General Specifications - Low Voltage Gearmotors:

- Performance matched for continuous duty service
- Designed for battery power or can be used with a low voltage controller with form factor up to 1.05

Features:

- Precision machined in-line steel gears
- 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
- Shafts are hardened steel
- Optional conduit box available, see page 350

Application Notes:

- These gearmotors are designed for mounting at any angle, but motor below the reducer should be avoided to prevent leakage of lubricant into the motor should the motor shaft seal fail
- Motor's stall torque could exceed recommended full load torques. A current limiting device such as an SCR control should be used to prevent damage. This issue is even more critical for low voltage motors, typically no controller is used since motor is connected directly to a battery, so some type of current limit or fusing should be considered
- Overhung load capacities shown are at center of output shaft



**SCR Rated - 130-268 In-Lbs. Torque
Low Voltage - 130-268 In-Lbs. Torque**

90 Volts - TENV - OS300 Series

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Stock	List Price	Model Number	Gearmotor Type & Frame	Ratio to 1	Arm. Volts DC	F.L. Amps DC	Overhung Load (lb.)	Dimensions (inches)				♥ Notes
												P	X	XL	XH	
9	268	1/20	M1125251.00	C/A	637	985.692	OS303-30	210	90	0.5	474	3.00	2.81	4.5	8.52	S, US
19	150	1/20	M1125250.00	✓	637	985.691	OS303-30	103	90	0.6	385	3.00	2.81	4.5	8.52	S, US
24	280	1/8	M1125249.00	✓	653	985.690	OS303-30	76	90	1.3	353	3.00	2.81	6.42	10.45	S, US
31	220	1/8	M1125248.00	✓	653	985.689	OS303-30	58	90	1.4	327	3.00	2.81	6.42	10.45	S, US
51	130	1/8	M1125247.00	✓	653	985.688	OS303-30	35	90	1.4	277	3.00	2.81	6.42	10.45	S, US

C/A - Check Availability

Specifications are subject to change without notice

♥ Note listing on inside back flap

12 Volts - TENV - OS300 Series

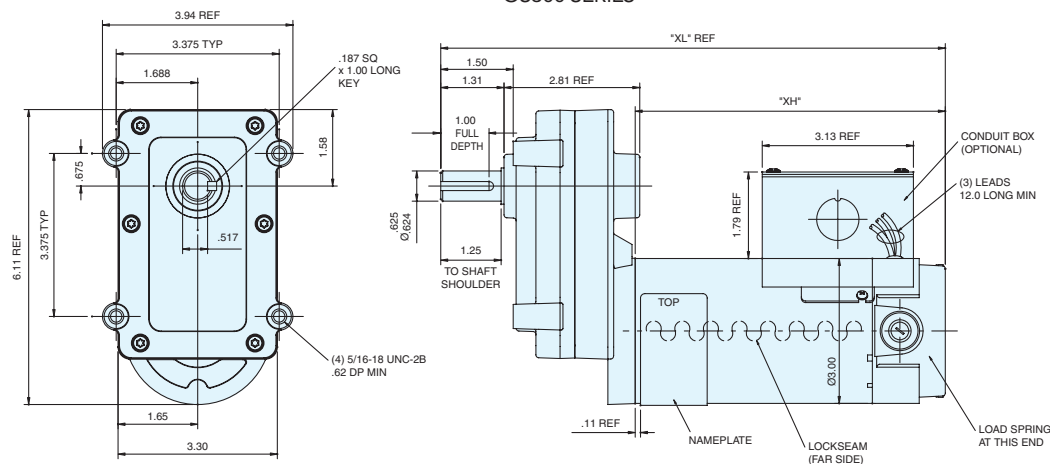
Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Stock	List Price	Model Number	Gearmotor Type & Frame	Ratio to 1	Arm. Volts DC	F.L. Amps DC	Overhung Load (lb.)	Dimensions (inches)				♥ Notes
												P	X	XL	XH	
9	268	1/20	M1125256.00	C/A	653	985.697	OS303-30	210	12	4.5	474	3.00	2.81	4.5	8.52	S, US
18	150	1/20	M1125255.00	C/A	653	985.696	OS303-30	103	12	5.0	385	3.00	2.08	4.5	8.52	S, US
24	280	1/8	M1125254.00	✓	669	985.695	OS303-30	76	12	10.6	353	3.00	2.81	6.42	10.45	S, US
31	220	1/8	M1125253.00	✓	669	985.694	OS303-30	58	12	10.6	327	3.00	2.81	6.42	10.45	S, US
51	130	1/8	M1125252.00	✓	669	985.693	OS303-30	35	12	10.3	277	3.00	2.81	6.42	10.45	S, US

C/A - Check Availability

Specifications are subject to change without notice

♥ Note listing on inside back flap

OS300 SERIES



ALL DIMENSIONS IN INCHES

View On-line Technical Information



Gearmotors

PE350 Series - Parallel Shaft - DC

SCR Rated - 25-371 In-Lbs. Torque

Low Voltage - 155-341 In-Lbs Torque



General Specifications - SCR Rated Gearmotors:

- Performance matched for continuous duty service over 60:1 speed range
- Constant torque throughout the range when powered by a full-wave unfiltered SCR-type adjustable speed control having a typical form factor of 1.3 to 1.4

General Specifications - Low Voltage Gearmotors:

- Performance matched for continuous duty service
- Designed for battery power or can be used with a low voltage controller with form factor up to 1.05

Features:

- Rugged die cast aluminum gear 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 long life
- High carbon alloy output shaft provides maximum strength and rigidity
- All needle bearing journals are precision ground after heat treating to provide maximum fit and finish
- Heavy duty industrial oil seals keep lubricant in and dirt out
- Gears and bearings are splash lubricated with permanent, heavy duty gear oil
- Optional conduit box available, see page 350

Application Notes:

- These gearmotors are designed for mounting at any angle, but motor below the reducer should be avoided to prevent leakage of lubricant into the motor should the motor shaft seal fail
- Motor's stall torque could exceed recommended full load torques. A current limiting device such as an SCR control should be used to prevent damage. This issue is even more critical for low voltage motors, typically no controller is used since motor is connected directly to a battery, so some type of current limit or fusing should be considered
- Overhung load capacities shown are at center of output shaft
- **Bodine/Baldor direct interchange**



SCR Rated - 25-371 In-Lbs. Torque
Low Voltage - 155-341 In-Lbs Torque

90 & 180 Volts - TENV - PE350 Series

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Stock	List Price	Model Number	Gearmotor Type & Frame	Ratio to 1	Arm. Volts DC	F.L. Amps DC	Overhung Load (lb.)	Dimensions (inches)		♥Notes
												XL	XH	
7	330	1/8	M1135106.00	✓	763	M34D25NZ62	P353-34	336	90	0.7	565	11.31	9.31	S, US
	330	1/8	M1135139.00	✓	763	M34D25NZ71	P353-34	336	180	0.4	565	11.31	9.31	S, US
14	341	1/8	M1135107.00	✓	763	M34D25NZ61	P353-34	180	90	1.0	465	11.31	9.31	S, US
	341	1/8	M1135140.00	✓	763	M34D25NZ72	P353-34	180	180	0.5	465	11.31	9.31	S, US
21	371	1/4	M1135117.00	✓	799	M34D25NZ52	P353-34	124	90	1.1	413	13.31	11.31	S, US
	371	1/4	M1135141.00	✓	799	M34D25NZ73	P353-34	124	180	0.6	413	13.31	11.31	S, US
27	305	1/4	M1135115.00	✓	799	M34D25NZ51	P353-34	91	90	1.5	374	13.31	11.31	S, US
	305	1/4	M1135142.00	✓	799	M34D25NZ74	P353-34	91	180	0.8	374	13.31	11.31	S, US
42	280	1/4	M1135108.00	✓	799	M34D25NZ53	P353-34	58	90	2.3	327	13.31	11.31	S, US
	280	1/4	M1135143.00	✓	799	M34D25NZ75	P353-34	58	180	1.2	327	13.31	11.31	S, US
50	250	1/4	M1135109.00	✓	799	M34D25NZ54	P353-34	50	90	2.3	315	13.31	11.31	S, US
	250	1/4	M1135144.00	✓	799	M34D25NZ76	P353-34	50	180	1.2	315	13.31	11.31	S, US
62	220	1/4	M1135110.00	✓	799	M34D25NZ55	P353-34	43	90	2.3	303	13.31	11.31	S, US
	220	1/4	M1135145.00	✓	799	M34D25NZ77	P353-34	43	180	1.2	303	13.31	11.31	S, US
83	155	1/4	M1135114.00	✓	755	M34D25NZ57	P352-34	29	90	2.3	267	13.31	11.31	S, US
	155	1/4	M1135146.00	✓	755	M34D25NZ78	P352-34	29	180	1.2	267	13.31	11.31	S, US
125	100	1/4	M1135111.00	✓	755	M34D25NZ56	P352-34	23	90	2.0	256	13.31	11.31	S, US
	100	1/4	M1135147.00	✓	755	M34D25NZ79	P352-34	23	180	1.0	256	13.31	11.31	S, US
165	70	1/4	M1135112.00	✓	755	M34D25NZ58	P352-34	15	90	2.0	232	13.31	11.31	S, US
	70	1/4	M1135148.00	✓	755	M34D25NZ80	P352-34	15	180	1.0	232	13.31	11.31	S, US
250	45	1/4	M1135116.00	✓	755	M34D25NZ60	P352-34	10	90	2.0	201	13.31	11.31	S, US
	45	1/4	M1135149.00	✓	755	M34D25NZ81	P352-34	10	180	1.0	201	13.31	11.31	S, US
500	25	1/4	M1135113.00	✓	755	M34D25NZ59	P352-34	5	90	2.0	194	13.31	11.31	S, US
	25	1/4	M1135150.00	✓	755	M34D25NZ82	P352-34	5	180	1.0	194	13.31	11.31	S, US

Specifications are subject to change without notice

♥ Note listing on inside back flap

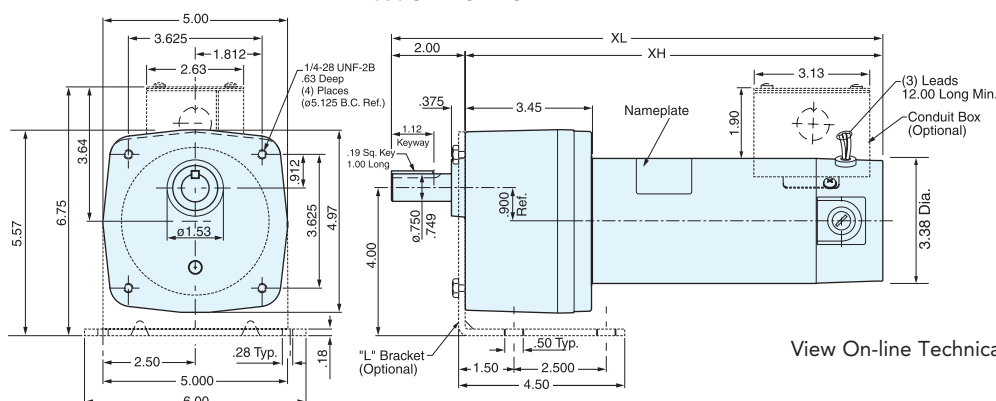
12 Volts - TENV - PE350 Series

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Stock	List Price	Model Number	Gearmotor Type & Frame	Ratio to 1	Arm. Volts DC	F.L. Amps DC	Overhung Load (lb.)	Dimensions (inches)		♥Notes
												XL	XH	
14	341	1/8	M1135243.00	✓	778	M34D25NZ154	P353-34	180	12	8.7	465	11.05	9.05	S, US
42	325	1/4	M1135244.00	✓	816	M34D25NZ155	P353-34	58	12	21.0	327	13.31	11.31	S, US
62	220	1/4	M1135245.00	✓	816	M34D25NZ156	P353-34	43	12	21.0	303	13.31	11.31	S, US
83	155	1/4	M1135246.00	✓	774	M34D25NZ157	P352-34	29	12	21.0	267	13.31	11.31	S, US

Specifications are subject to change without notice

♥ Note listing on inside back flap

PE350 SERIES - DC



ALL DIMENSIONS IN INCHES

View On-line Technical Information



Gearmotors

Parallel Shaft - P1100 Series - DC

SCR Rated - 105-1112 In-Lbs. Torque

Low Voltage - 320-1087 In-Lbs. Torque



General Specifications - SCR Rated Gearmotors:

- Performance matched for continuous duty service over 60:1 speed range
- Constant torque throughout the range when powered by a full-wave unfiltered SCR-type adjustable speed control having a typical form factor of 1.3 to 1.4

General Specifications - Low Voltage Gearmotors:

- Performance matched for continuous duty service
- Designed for battery power or can be used with a low voltage controller with form factor up to 1.05

Features:

- Rugged die cast aluminum gear 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 long life
- High carbon alloy output shaft provides maximum strength and rigidity
- All needle bearing journals are precision ground after heat treating to provide maximum fit and finish
- Heavy duty industrial oil seals keep lubricant in and dirt out
- Gears and bearings are splash lubricated with permanent, heavy duty gear oil
- Conduit box included as standard

Application Notes:

- These gearmotors are designed for mounting at any angle, but motor below the reducer should be avoided to prevent leakage of lubricant into the motor should the motor shaft seal fail
- Motor's stall torque could exceed recommended full load torques. A current limiting device such as an SCR control should be used to prevent damage. This issue is even more critical for low voltage motors, typically no controller is used since motor is connected directly to a battery, so some type of current limit or fusing should be considered
- Overhung load capacities shown are at center of output shaft
- For additional information, see Bulletin 1830
- **Bison/Dayton direct interchange**



SCR Rated - 105-1112 In-Lbs. Torque
Low Voltage - 320-1087 In-Lbs. Torque

90 Volts - Totally Enclosed - Rigid Base - P1100 Series

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Stock	List Price	Model Number	Gearmotor Type & Frame	Ratio to 1	Arm. Volts DC	F.L. Amps DC	Over-hung Load (lb.)	Dimensions (inches)		♥Notes
												XL	XH	
8	1087	1/4	108700.00	✓	1,300	4D17NZ17	P1103-48	212	90	2.7	700	14.24	12.74	S, US, 12
12	1030	1/4	108701.00	✓	1,300	4D17NZ18	P1103-48	143	90	2.7	700	14.24	12.74	S, US, 12
18	750	1/4	108702.00	✓	1,300	4D17NZ19	P1103-48	95	90	2.7	700	14.24	12.74	S, US, 12
42	353	1/4	108703.00	✓	1,268	4D17NZ20	P1102-48	42	90	2.7	650	14.24	12.74	S, US, 12
60	238	1/4	108704.00	✓	1,268	4D17NZ21	P1102-48	29	90	2.7	625	14.24	12.74	S, US, 12
92	160	1/4	108705.00	✓	1,268	4D17NZ22	P1102-48	19	90	2.7	575	14.24	12.74	S, US, 12
135	105	1/4	108706.00	✓	1,268	4D17NZ23	P1102-48	13	90	2.7	525	14.24	12.74	S, US, 12
18	1112	1/2	108707.00	✓	1,405	4D17FZ23	P1103-48	95	90	5.0	700	16.49	14.99	S, US
33	822	1/2	108708.00	✓	1,405	4D17FZ24	P1103-48	53	90	5.0	650	16.49	14.99	S, US
42	705	1/2	108709.00	✓	1,379	4D17FZ25	P1102-48	42	90	5.0	650	16.49	14.99	S, US
60	476	1/2	108710.00	✓	1,379	4D17FZ26	P1102-48	29	90	5.0	625	16.49	14.99	S, US
92	320	1/2	108711.00	✓	1,379	4D17FZ27	P1102-48	19	90	5.0	575	16.49	14.99	S, US
135	210	1/2	108712.00	✓	1,379	4D17FZ28	P1102-48	13	90	5.0	525	16.49	14.99	S, US

Note 12 - TENV

♥ Note listing on inside back flap

Specifications are subject to change without notice

12 Volts - Totally Enclosed - Rigid Base - P1100 Series

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Stock	List Price	Model Number	Gearmotor Type & Frame	Ratio to 1	Arm. Volts DC	F.L. Amps DC	Over-hung Load (lb.)	Dimensions (inches)		♥Notes
												XL	XH	
8	1087	1/4	108729.00	✓	1,328	4D17NZ43	P1103-48	212	12	21.0	700	13.74	12.24	S, US, 12
60	238	1/4	108730.00	✓	1,299	4D17NZ44	P1102-48	29	12	21.0	625	13.74	12.24	S, US, 12
42	705	1/2	108731.00	✓	1,405	4D17FZ52	P1102-48	42	12	40.0	650	15.99	14.49	S, US
92	320	1/2	108732.00	C/A	1,405	4D17FZ53	P1102-48	19	12	40.0	575	15.99	14.49	S, US

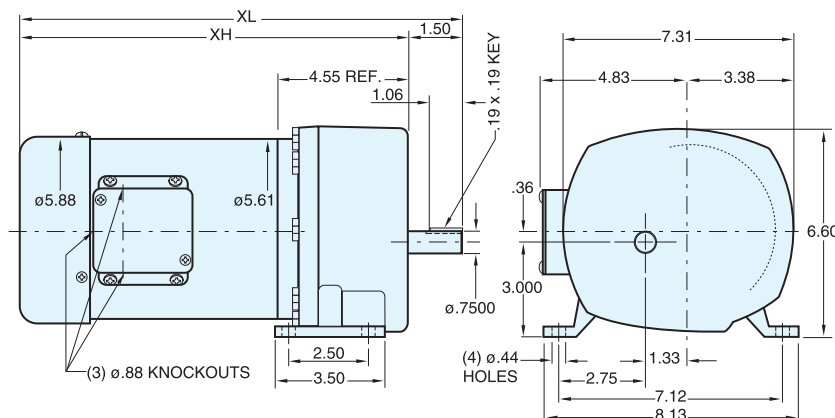
C/A - Check Availability

♥ Note listing on inside back flap

Note 12 - TENV

Specifications are subject to change without notice

P1100 SERIES - DC



ALL DIMENSIONS IN INCHES

View On-line Technical Information



Gearmotors

Right-Angle DC Gearmotors

SCR Rated - 5-135 In-Lbs. Torque

Low Voltage - 25-135 In-Lbs. Torque



General Specifications - SCR Rated Gearmotors:

- Performance matched for continuous duty service over 60:1 speed range
- Constant torque throughout the range when powered by a full-wave unfiltered SCR-type adjustable speed control having a typical form factor of 1.3 to 1.4

General Specifications - Low Voltage Gearmotors:

- Performance matched for continuous duty service
- Designed for battery power or can be used with a low voltage controller with form factor up to 1.05

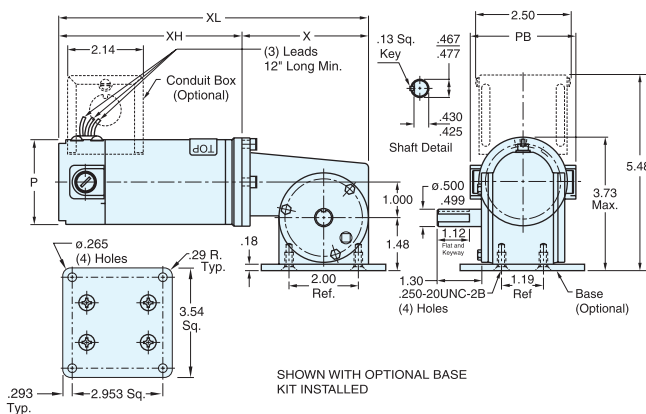
Features:

- Worm-type right-angle gearing features hardened, steel worm with bronze worm wheel for long life and quiet operation
- Precision machined aluminum gear housing
- Lubrication is permanent with an oil bath
- Gearbox has all ball bearings
- Output shaft is field interchangeable from left hand to right hand style by reassembly
- Double output shaft available as a factory option
- Optional conduit box available, see page 350
- Optional gearbox base available (10 Series only), see page 350

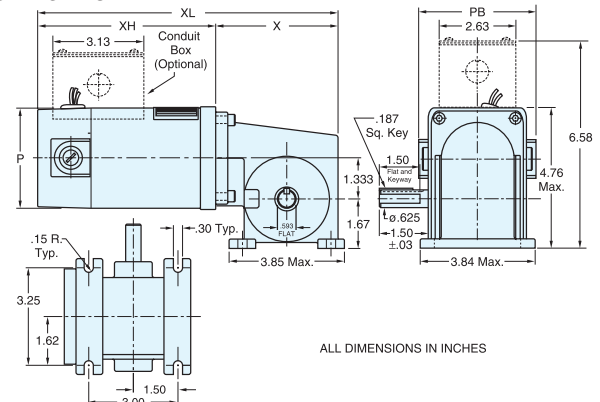
Application Notes:

- 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 deg 1/8" NPT taper pipe elbow (See drawing). Elbow not available from LEESON
- These gearmotors are designed for mounting at any angle, but motor below the reducer should be avoided to prevent leakage of lubricant into the motor should the motor shaft seal fail
- Overhung load capacities shown are at center of output shaft
- For additional information, see Bulletin 1830

10 SERIES - DC



13 SERIES - DC



Right-Angle DC Gearmotors

SCR Rated - 5-135 In-Lbs. Torque & Low Voltage - 25-135 In-Lbs. Torque

90 & 180 Volts - TENV - Right-Angle

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Stock	List Price	Model Number	Gearmotor Type & Frame	Ratio to 1	Arm. Volts DC	F.L. Amps DC	Over-hung Load (lb.)	Dimensions (inches)					♥ Notes
												P	PB	X	XL	XH	
42	22	1/17	M1115018.00	✓	591	985.504	10F60-25D	60	90	0.9	185	2.50	3	3.6	8.79	5.19	S, US
62	19	1/17	M1115019.00	✓	591	985.505	10F40-25D	40	90	0.9	185	2.50	3	3.6	8.79	5.19	S, US
125	16	1/17	M1115020.00	✓	591	985.506	10F20-25D	20	90	0.9	185	2.50	3	3.6	8.79	5.19	S, US
250	10	1/17	M1115021.00	✓	591	985.509	10F10-25D	10	90	1.0	185	2.50	3	3.6	8.79	5.19	S, US
500	5	1/17	M1115022.00	✓	591	985.507	10F05-25D	5	90	1.0	185	2.50	3	3.6	8.79	5.19	S, US
42	30	1/12	M1135053.00	✓	591	M34D25NZ30	13F60-34A	60	180	0.5	235	3.38	4	4.5	9.64	5.14	S, US
62	35	1/12	M1135054.00	C/A	591	M34D25NZ31	13F40-34A	40	180	0.5	235	3.38	4	4.5	9.64	5.14	S, US
125	18	1/12	M1135055.00	✓	591	CM34D25NZ32	13F20-34A	20	180	0.5	235	3.38	4	4.5	9.64	5.14	S, US
250	10	1/12	M1135056.00	C/A	591	M34D25NZ47	13F10-34A	10	180	0.5	235	3.38	4	4.5	9.64	5.14	S, US
500	5	1/12	M1135057.00	C/A	591	M34D25NZ48	13F05-34A	5	180	0.5	235	3.38	4	4.5	9.64	5.14	S, US
42	80	1/8	M1135069.00	✓	681	M34D25NZ18	13F60-34C	60	90	1.4	235	3.38	4	4.5	10.64	6.14	S, US
62	70	1/8	M1135038.00	✓	681	M34D25NZ6	13F40-34C	40	90	1.4	235	3.38	4	4.5	10.64	6.14	S, US
62	70	1/8	M1135058.00	✓	681	M34D25NZ26	13F40-34C	40	180	0.7	235	3.38	4	4.5	10.64	6.14	S, US
125	45	1/8	M1135039.00	✓	681	M34D25NZ7	13F20-34C	20	90	1.4	235	3.38	4	4.5	10.64	6.14	S, US
125	45	1/8	M1135059.00	✓	681	M34D25NZ27	13F20-34C	20	180	0.7	235	3.38	4	4.5	10.64	6.14	S, US
250	25	1/8	M1135040.00	✓	681	M34D25NZ8	13F10-34C	10	90	1.4	235	3.38	4	4.5	10.64	6.14	S, US
250	25	1/8	M1135060.00	✓	681	M34D25NZ28	13F10-34C	10	180	0.7	235	3.38	4	4.5	10.64	6.14	S, US
500	13	1/8	M1135041.00	✓	681	M34D25NZ9	13F05-34C	5	90	1.4	235	3.38	4	4.5	10.64	6.14	S, US
500	13	1/8	M1135061.00	C/A	681	M34D25NZ29	13F05-34C	5	180	0.7	235	3.38	4	4.5	10.64	6.14	S, US
62	135	1/4	M1135042.00	✓	734	M34D25NZ10	13F40-34G	40	90	2.3	235	3.38	4	4.5	12.64	8.14	S, US
62	135	1/4	M1135062.00	✓	734	M34D25NZ33	13F40-34G	40	180	1.3	235	3.38	4	4.5	12.64	8.14	S, US
83	125	1/4	M1135043.00	✓	734	M34D25NZ11	13F30-34G	30	90	2.3	235	3.38	4	4.5	12.64	8.14	S, US
83	125	1/4	M1135063.00	✓	734	M34D25NZ34	13F30-34G	30	180	1.3	235	3.38	4	4.5	12.64	8.14	S, US
125	90	1/4	M1135044.00	✓	734	M34D25NZ12	13F20-34G	20	90	2.3	235	3.38	4	4.5	12.64	8.14	S, US
125	90	1/4	M1135064.00	✓	734	M34D25NZ35	13F20-34G	20	180	1.3	235	3.38	4	4.5	12.64	8.14	S, US
250	50	1/4	M1135045.00	✓	734	M34D25NZ13	13F10-34G	10	90	2.3	235	3.38	4	4.5	12.64	8.14	S, US
250	50	1/4	M1135065.00	✓	734	M34D25NZ36	13F10-34G	10	180	1.3	235	3.38	4	4.5	12.64	8.14	S, US
500	30	1/4	M1135046.00	✓	734	M34D25NZ14	13F05-34G	5	90	2.3	235	3.38	4	4.5	12.64	8.14	S, US
500	30	1/4	M1135066.00	✓	734	M34D25NZ37	13F05-34G	5	180	1.3	235	3.38	4	4.5	12.64	8.14	S, US

C/A - Check Availability

♥ Note listing on inside back flap

Specifications are subject to change without notice

12 Volts - TENV - Right-Angle Series

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Stock	List Price	Model Number	Gearmotor Type & Frame	Ratio to 1	Arm. Volts DC	F.L. Amps DC	Over-hung Load (lb.)	Dimensions (inches)					♥ Notes
												P	PB	X	XL	XH	
42	80	1/8	M1135249.00	C/A	695	M34D25NZ158	13F60-34	60	12	11.0	235	3.38	4.21	4.5	10.39	5.89	S, US
250	25	1/8	M1135250.00	✓	695	M34D25NZ159	13F10-34	10	12	11.0	235	3.38	4.21	4.5	10.39	5.89	S, US
62	135	1/4	M1135251.00	✓	744	M34D25NZ160	13F40-34	40	12	21.0	235	3.38	4.21	4.5	12.64	8.14	S, US
125	90	1/4	M1135252.00	✓	744	M34D25NZ161	13F20-34	20	12	21.0	235	3.38	4.21	4.5	12.64	8.14	S, US

C/A - Check Availability

♥ Note listing on inside back flap

Specifications are subject to change without notice

View On-line Technical Information



Gearmotors

Bravo™ Series 12 SUB-FHP - DC Right-Angle Gearmotors



General Specifications - SCR Rated Gearmotors:

- Performance matched for continuous duty service over 60:1 speed range
- Constant torque throughout the range when powered by a full-wave unfiltered SCR-type adjustable speed control having a typical form factor of 1.3 to 1.4

General Specifications - Low Voltage Gearmotors:

- Performance matched for continuous duty service
- Designed for battery power or can be used with a low voltage controller with form factor up to 1.05

Features:

- 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
- Light weight gearbox combines high tensile strength along with being precision machined for alignment of bearings and gearing
- High temperature Nitrile seals for optimum seal life
- Gearbox provided with solid output shaft, but can be converted to a hollow output shaft. Simply remove the solid shaft by removing the Snap rings
- T-base feet provided are removable to convert to face mounting
- Optional conduit box available, see page 350



Bravo™ Series 12 SUB-FHP - DC Right-Angle Gearmotors

90 Volts - Totally Enclosed - Right-Angle

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Stock	List Price	Model Number	Enclosure	Gearmotor Type & Frame	Ratio to 1	Arm. Volts DC	F.L. Amps. DC	♥Notes
28	125	1/8	M1135292.00	✓	696	M34D17NZ31	TENV	12B60-34D	61.0	90	1.6	S, US, 12
45	87	1/8	M1135291.00	C/A	696	M34D17NZ30	TENV	12B39-34D	39.0	90	1.6	S, US, 12
58	158	1/4	M1135290.00	✓	735	M34D17FZ7	TEFC	12B30-34G	30.0	90	2.8	S, US
90	100	1/4	M1135289.00	✓	735	M34D17FZ6	TEFC	12B19-34G	19.0	90	2.6	S, US
115	85	1/4	M1135288.00	C/A	735	M34D17FZ5	TEFC	12B15-34G	15.0	90	2.6	S, US
167	61	1/4	M1135287.00	✓	735	M34D17FZ4	TEFC	12B11-34G	10.6	90	2.6	S, US
250	46	1/4	M1135286.00	✓	735	M34D17FZ3	TEFC	12B7-34G	7.0	90	2.6	S, US

C/A - Check Availability

♥ Note listing on inside back flap

Note 12 - TENV

Specifications are subject to change without notice

12 Volt - TENV - Right-Angle

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Stock	List Price	Model Number	Enclosure	Gearmotor Type & Frame	Ratio to 1	Arm. Volts DC	F.L. Amps. DC	♥Notes
27	134	1/8	M1135285.00	C/A	724	M34D17NZ29	TENV	12B60-34C	61.0	12	14.0	S, US
45	94	1/8	M1135284.00	✓	724	M34D17NZ28	TENV	12B39-34C	39.0	12	15.0	S, US
58	158	1/4	M1135297.00	✓	758	M34D17NZ36	TENV	12B30-34F	30.0	12	24.0	S, US
90	100	1/4	M1135296.00	C/A	758	M34D17NZ35	TENV	12B19-34F	19.0	12	24.0	S, US
115	85	1/4	M1135295.00	C/A	758	M34D17NZ34	TENV	12B15-34F	15.0	12	23.0	S, US
167	61	1/4	M1135294.00	C/A	758	M34D17NZ33	TENV	12B11-34F	10.6	12	21.0	S, US
250	46	1/4	M1135293.00	✓	758	M34D17NZ32	TENV	12B7-34F	7.0	12	23.0	S, US

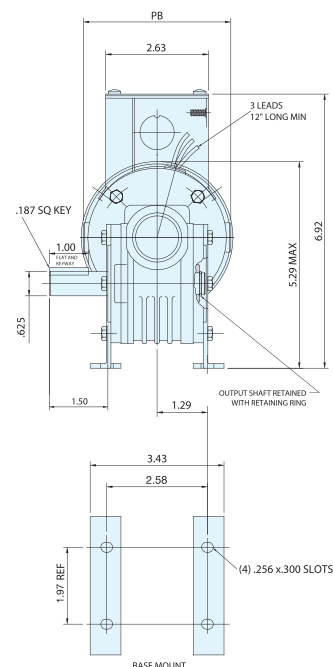
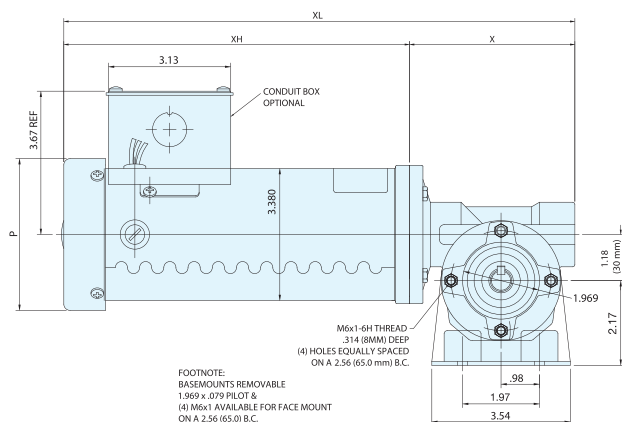
C/A - Check Availability

♥ Note listing on inside back flap

Specifications are subject to change without notice

Notes:

- 1 Conduit box not supplied with the gearmotor. Mounting provisions are provided and can use conduit box kit catalog number M1760007.00 found on page 342.
- 2 For solid double output shaft, consult factory.



SCR 90 Volt Rated (IN)

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 (IN)

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	7.50	4.21
3.38	4.32	11.82	7.50	4.21
3.38	4.32	11.82	7.50	4.21
3.38	4.32	11.82	7.50	4.21
3.38	4.32	11.82	7.50	4.21
3.38	4.32	11.82	7.50	4.21

View On-line Technical Information



Gearmotors

IP55 Washguard® Gearmotors - P300 Series - DC



General Specifications - SCR Rated Gearmotors:

- Performance matched for continuous duty service over 60:1 speed range
- Constant torque throughout the range when powered by a full-wave unfiltered SCR-type adjustable speed control having a typical form factor of 1.3 to 1.4

General Specifications - Low Voltage Gearmotors:

- Performance matched for continuous duty service
- Designed for battery power or can be used with a low voltage controller with form factor up to 1.05

Features:

- 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, alkalies and oil
- Precision machined in-line steel gears
- 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
- Gearbox Shafts are hardened steel
- Cast conduit box with threaded conduit holes and Nitrile gaskets keep water out
- 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
- 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

Application Notes:

- Extended life in wet, high humidity applications
- Design repels water from entering motor
- Internal components protected against rust and corrosion
- These gearmotors are designed for mounting at any angle, but motor below the reducer should be avoided to prevent leakage of lubricant into the motor should the motor shaft seal fail
- Overhung load capacities shown are at center of output shaft
- Motor's stall torque could exceed recommended full load torques. A current limiting device such as an SCR control should be used to prevent damage. This issue is even more critical for low voltage motors, typically no controller is used since motor is connected directly to a battery, so some type of current limit or fusing should be considered
- USDA Approved white epoxy finish
- **Bison/Dayton direct interchange**





Gearmotors

IP55 Washguard® Gearmotors - PE350 - DC



General Specifications - SCR Rated Gearmotors:

- Performance matched for continuous duty service over 60:1 speed range
- Constant torque throughout the range when powered by a full-wave unfiltered SCR-type adjustable speed control having a typical form factor of 1.3 to 1.4

General Specifications - Low Voltage Gearmotors:

- Performance matched for continuous duty service
- Designed for battery power or can be used with a low voltage controller with form factor up to 1.05

Features:

- 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, alkalies and oil
- Precision machined in-line steel gears
- 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
- Gearbox Shafts are hardened steel
- Cast conduit box with threaded conduit holes and Nitrile gaskets keep water out
- 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
- 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

Application Notes:

- Extended life in wet, high humidity applications
- Design repels water from entering motor
- Internal components protected against rust and corrosion
- These gearmotors are designed for mounting at any angle, but motor below the reducer should be avoided to prevent leakage of lubricant into the motor should the motor shaft seal fail
- Overhung load capacities shown are at center of output shaft
- Motor's stall torque could exceed recommended full load torques. A current limiting device such as an SCR control should be used to prevent damage. This issue is even more critical for low voltage motors, typically no controller is used since motor is connected directly to a battery, so some type of current limit or fusing should be considered
- USDA Approved white epoxy finish
- **Bodine/Baldor direct interchange**





90 Volts - TENV - PE350 Series - Parallel Shaft

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Stock	List Price	Model Number	Gearmotor Type & Frame	Ratio to 1	Arm. Volts DC	F.L. Amps DC	Overhung Load (lb.)	Dimensions (inches)					♥Notes
												P	PB	X	XL	XH	
14	341	1/8	M1125268.00	✓	908	M31D25VZ1	P353-31	180	90	1.5	465	3.13	3.8	3.45	11.84	9.84	S, US
42	280	1/4	M1125269.00	✓	940	M32D25VZ1	P353-32	58	90	2.6	327	3.25	3.8	3.45	13.84	11.84	S, US
83	155	1/4	M1125270.00	✓	915	M32D25VZ2	P353-32	29	90	2.6	267	3.25	3.8	3.45	13.84	11.84	S, US
250	45	1/4	M1125271.00	✓	915	M32D25VZ3	P352-32	10	90	2.6	201	3.25	3.8	3.45	13.84	11.84	S, US
500	25	1/4	M1125272.00	✓	915	M32D25VZ4	P352-32	5	90	2.6	194	3.25	3.8	3.45	13.84	11.84	S, US

Specifications are subject to change without notice

♥ Note listing on inside back flap

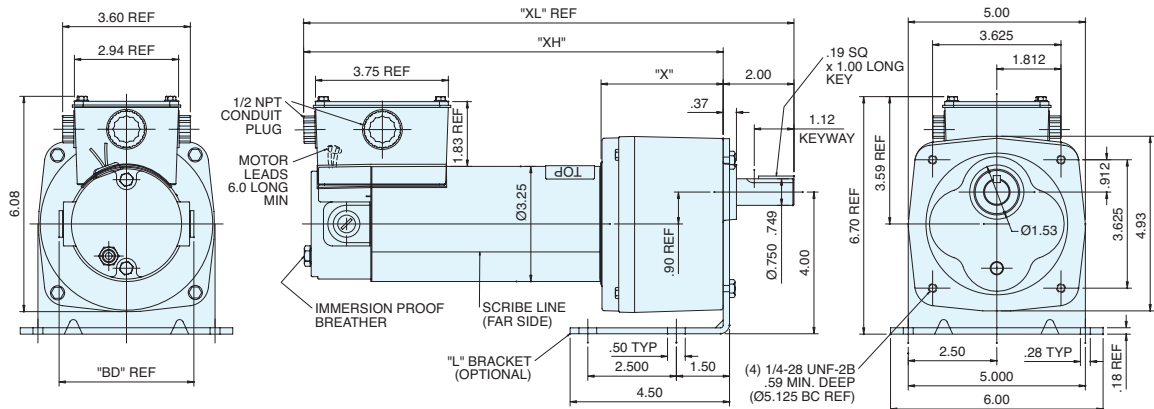
12 Volts - TENV - PE350 Series - Parallel Shaft

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Stock	List Price	Model Number	Gearmotor Type & Frame	Ratio to 1	Arm. Volts DC	F.L. Amps DC	Overhung Load (lb.)	Dimensions (inches)					♥Notes
												P	PB	X	XL	XH	
14	341	1/8	M1125273.00	C/A	930	M31D25VZ2	P353-31	180	12	12.0	465	3.13	4.43	3.45	11.58	9.58	S, US
42	325	1/4	M1125274.00	C/A	983	M32D25VZ5	P353-32	58	12	20.0	327	3.25	4.43	3.45	13.84	11.84	S, US

C/A - Check Availability

Specifications are subject to change without notice

♥ Note listing on inside back flap



View On-line Technical Information





General Specifications - SCR Rated Gearmotors:

- Performance matched for continuous duty service over 60:1 speed range
- Constant torque throughout the range when powered by a full-wave unfiltered SCR-type adjustable speed control having a typical form factor of 1.3 to 1.4

General Specifications - Low Voltage Gearmotors:

- Performance matched for continuous duty service
- Designed for battery power or can be used with a low voltage controller with form factor up to 1.05

Features:

- 303 Stainless Steel gearbox output shaft
- Frame, endshields, armature and interior components protected by enamel and polyester compounds for resistance to moisture, acids, alkalies and oil
- Cast conduit box with threaded conduit holes and Nitrile gaskets keep water out
- 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
- 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
- Worm-type right-angle gearing features hardened, steel worm with bronze worm wheel for long life and quiet operation
- Precision machined aluminum gear housing
- Lubrication is permanent with an oil bath
- Gearbox has all ball bearings
- Output shaft is field interchangeable from left hand to right hand style by reassembly
- Double output shaft available as a factory option

Application Notes:

- 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 deg 1/8" NPT taper pipe elbow (See drawing). Elbow not available from LEESON
- These gearmotors are designed for mounting at any angle, but motor below the reducer should be avoided to prevent leakage of lubricant into the motor should the motor shaft seal fail
- Overhung load capacities shown are at center of output shaft
- For additional information, see Bulletin 1830



Gearmotors

Parallel Shaft - SUB-FHP - AC Gearmotors

12-100 In-Lbs. Output Torque



Features:

- Permanent split capacitor design rated for 115VAC 60 HZ input
- Precision machined in-line steel gears
- 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
- Shafts are hardened steel
- Optional conduit box and PZ gearmotor mounting bracket available

Application Notes:

- These gearmotors are designed for mounting at any angle, but motor below the reducer should be avoided to prevent leakage of lubricant into the motor should the motor shaft seal fail
- The motor's stall torque could exceed recommended full load torques causing gearhead damage, especially in ratios of 60:1 and higher. Provisions to limit the torque are recommended
- The torque values listed are the recommended full load torque values
- Overhung load capacities shown are at center of output shaft
- For additional information, see Bulletin 1830
- All PZ Series gearmotors are supplied with continuous duty "run" capacitor
- Optional conduit box available, see page 350
- For additional information, see Bulletin 1830
- **Bodine/Bison/Dayton direct interchange**



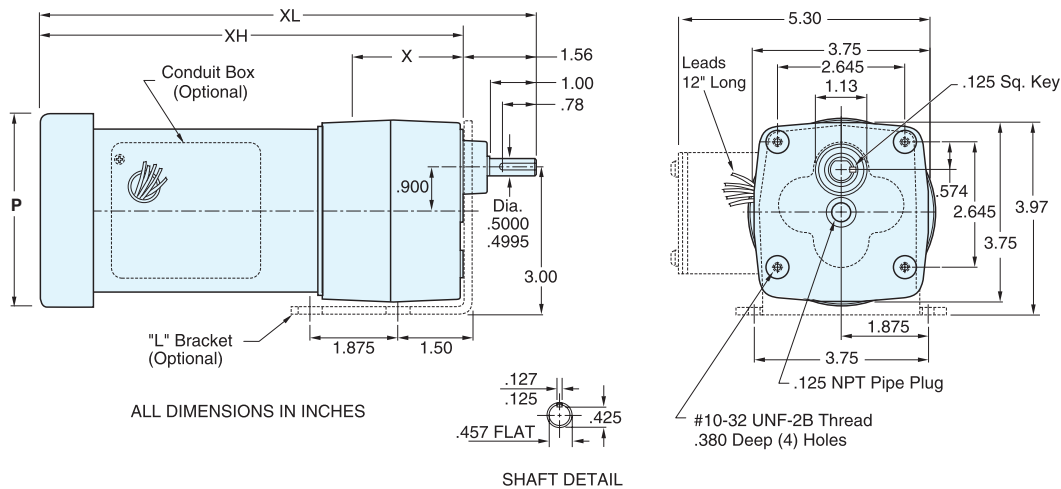
115 Volts - TEFC - Single Phase

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Stock	List Price	Model Number	Gearmotor Type & Frame	Ratio to 1	F.L. Amps 115	Overhung Load (lb.)	Dimensions (inches)				Capacitor Mfd. 240 VAC	♥Notes
											P	X	XL	XH		
2	100	1/150	M1125050.00	✓	549	M31P17NZ1	PZ5-31	900	0.4	155	3.07	3.23	8.71	7.15	3	S, US, 12
9	100	1/15	M1125127.00	✓	549	M31P17FZ1	PZ4-31	180	0.9	155	3.88	3.23	10.42	8.86	10	S, US, 13
19	100	1/15	M1125128.00	✓	549	M31P17FZ2	PZ4-31	90	0.9	155	3.88	3.23	10.42	8.86	10	S, US, 13
28	100	1/15	M1125129.00	✓	549	M31P17FZ3	PZ3-31	60	0.9	155	3.88	2.43	9.62	8.06	10	S, US, 13
57	56	1/15	M1125130.00	✓	528	M31P17FZ4	PZ3-31	30	0.9	171	3.88	2.43	9.62	8.06	10	S, US, 13
94	36	1/15	M1125131.00	✓	528	M31P17FZ5	PZ3-31	18	0.9	171	3.88	2.43	9.62	8.06	10	S, US, 13
142	24	1/15	M1125132.00	✓	511	M31P17FZ6	PZ2-31	12	0.9	180	3.88	2.13	9.32	7.76	10	S, US, 13
283	12	1/15	M1125133.00	✓	511	M31P17FZ7	PZ2-31	6	0.9	180	3.88	2.13	9.32	7.76	10	S, US, 13

Note 12 - TENV
Specifications are subject to change without notice

♥ Note listing on inside back flap

PZ SERIES - AC



View On-line Technical Information



Gearmotors

P240 Series - SUB-FHP - AC Gearmotors

Output Torque - 43-391 In-Lbs.



Features:

- Permanent split capacitor design rated for 115/230VAC 60/50 HZ input
- Precision machined in-line steel gears
- 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
- Shafts are hardened steel
- Optional conduit box available

Application Notes:

- These gearmotors are designed for mounting at any angle, but motor below the reducer should be avoided to prevent leakage of lubricant into the motor should the motor shaft seal fail
- The motor's stall torque could exceed recommended full load torques causing gearhead damage, especially in ratios of 60:1 and higher. Provisions to limit the torque are recommended
- Overhung load capacities shown are at center of output shaft
- All P240 Series gearmotors are supplied with continuous duty "run" capacitor
- For additional information, see Bulletin 1830
- **Bison/Dayton direct interchange**



P240 Series - SUB-FHP - AC Gearmotors
Output Torque - 43-391 In-Lbs.

Single Phase - 115/230 Volts - TEFC - P240 Series

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Stock	List Price	Model Number	Gearmotor Type & Frame	Ratio to 1	F.L. Amps 115	Over-hung Load (lb.)	Dimensions (inches)				Capacitor Mfd. 240 VAC	♥ Notes
											P	X	XL	XH		
8	345	1/15	M1145029.00	✓	821	M38P17NZ26	P243-38D	216	1.0	491	3.85	3.50	10.46	8.96	7.5	S, US, 12
15	250	1/15	M1145023.00	✓	821	M38P17NZ20	P243-38D	114	1.0	407	3.85	3.50	10.46	8.96	7.5	S, US, 12
16	391	1/6	M1145030.00	✓	891	M38P17FZ9	P243-38F	103	2.1	399	4.43	3.50	12.13	10.63	15	S, US, 13
30	135	1/15	M1145024.00	✓	746	M38P17NZ21	P242-38D	52	1.0	330	3.85	3.50	10.46	8.96	7.5	S, US, 12
30	295	1/6	M1145031.00	✓	891	M38P17FZ10	P243-38F	58	2.1	330	4.43	3.50	12.13	10.63	15	S, US, 13
40	219	1/6	M1145032.00	✓	891	M38P17FZ11	P243-38F	43	2.1	303	4.43	3.50	12.13	10.63	15	S, US, 13
45	92	1/15	M1145025.00	C/A	746	M38P17NZ22	P242-38D	35	1.0	292	3.85	3.50	10.46	8.96	7.5	S, US, 12
60	157	1/6	M1145033.00	✓	817	M38P17FZ12	P242-38D	29	2.1	268	4.43	3.50	12.13	10.63	15	S, US, 13
70	61	1/15	M1145026.00	✓	746	M38P17NZ23	P242-38D	23	1.0	256	3.85	3.50	10.46	8.96	7.5	S, US, 12
90	103	1/6	M1145034.00	✓	817	M38P17FZ13	P242-38D	19	2.1	237	4.43	3.50	12.13	10.63	15	S, US, 13
97	43	1/15	M1145027.00	✓	746	M38P17NZ24	P242-38D	16.5	1.0	232	3.85	3.50	10.46	8.96	7.5	S, US, 12
139	30	1/15	M1145028.00	✓	746	M38P17NZ25	P242-38D	11.5	1.0	208	3.85	3.50	10.46	8.96	7.5	S, US, 12
156	60	1/6	M1145035.00	✓	817	M38P17FZ14	P242-38D	10.6	2.1	201	4.43	3.50	12.13	10.63	15	S, US, 13

C/A - Check Availability

Note 12 - TENV

Specifications are subject to change without notice

♥ Note listing on inside back flap

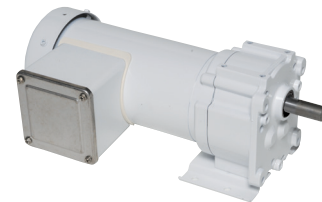
Gearmotors

P240 Series - SUB-FHP - AC Gearmotors

IP55 AC Washguard® Gearmotors

General Specifications - SCR Rated Gearmotors:

Single and Three-phase washdown duty gearmotors rated for continuous duty applications. Permanent split designed single-phase motors include capacitor in conduit box. Motors are designed for extended life in applications requiring regular washdown or otherwise wet environments. Avoid shaft up applications, with motor below, should shaft seal fail.



Features:

- Shaft material coated with Teflon/Ceramic plating
- White epoxy painted motors
- O-rings and gaskets used for sealing
- Hardened Worm-type gearing used
- Interior components protected against corrosion
- Ball bearings used in gear housing
- Sealed output shafts
- Output shafts have needle bearings for high load capacities
- UL listed and CSA certified

115/230 Volts - 1 & 3-Phase - TEFC - P240 Series

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Stock	List Price	Model Number	Gearmotor Type & Frame	Ratio to 1	Voltage	F.L. Amps 230 V	Phase	Over-hung Load (Lbs.)
16	391	1/6	M1145138.00	✓	935	M38P17FZ39	P240	103	115/230	1.05	1	399
40	219	1/6	M1145139.00	✓	935	M38P17FZ40	P240	43	115/230	1.00	1	303
156	60	1/6	M1145140.00	✓	858	M38P17FZ41	P240	10.6	115/230	1.00	1	201
16	391	1/6	M1145144.00	✓	935	M38T17FZ20	P240	103	230	0.72	3	237
30	295	1/6	M1145145.00	✓	935	M38T17FZ21	P240	58	230	0.72	3	237

Specifications are subject to change without notice

♥ Note listing on inside back flap

View On-line Technical Information



Single Phase - 115/230 Volts - TEFC - PE350 Series - Parallel Shaft

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Stock	List Price	Model Number	Gearmotor Type & Frame	Ratio to 1	F.L. Amps @ 115V	Over-hung Load (lb.)	Dimensions (inches)		Capacitor Mfd. 240 VAC	♥Notes
											XL	XH		
5	310	1/12	096000.00	✓	781	42P17NZ1	PE353-42	336	1.3	565	11.36	9.36	10	S, US, 12
9	341	1/12	096001.00	✓	781	42P17NZ2	PE353-42	180	1.3	491	11.36	9.36	10	S, US, 12
14	330	1/12	096002.00	✓	781	42P17NZ3	PE353-42	124	1.3	459	11.36	9.36	10	S, US, 12
19	250	1/12	096003.00	✓	781	42P17NZ4	PE353-42	91	1.3	374	11.36	9.36	10	S, US, 12
29	270	1/6	096004.00	✓	821	42P17FZ1	PE353-42	58	3.2	327	13.32	11.32	15	S, US, 13
34	250	1/6	096005.00	✓	821	42P17FZ2	PE353-42	50	3.2	330	13.32	11.32	15	S, US, 13
40	180	1/6	096006.00	C/A	821	42P17FZ3	PE353-42	43	3.2	303	13.32	11.32	15	S, US, 13
59	135	1/6	096007.00	✓	775	42P17FZ4	PE352-42	29	3.2	267	13.32	11.32	15	S, US, 13
75	90	1/6	096008.00	✓	775	42P17FZ5	PE352-42	23	3.2	256	13.32	11.32	15	S, US, 13
113	68	1/6	096009.00	✓	775	42P17FZ6	PE352-42	15	3.2	222	13.32	11.32	15	S, US, 13
160	45	1/6	096010.00	C/A	775	42P17FZ7	PE352-42	10	3.2	196	13.32	11.32	15	S, US, 13
340	25	1/6	096011.00	✓	775	42P17FZ8	PE352-42	5	3.2	190	13.32	11.32	15	S, US, 13
Hi-Torque Single Phase PE350 Gearmotors With Capacitor Start Motors														
58	320	1/3	096049.00	✓	909	42C17FZ4	PE353-42	30	7.2	300	14.56	12.56	...	S, US, 13
85	218	1/3	096050.00	✓	853	42C17FZ5	PE353-42	20	7.2	300	14.56	12.56	...	S, US, 13
173	109	1/3	096051.00	✓	853	42C17FZ6	PE353-42	10	7.2	300	14.56	12.56	...	S, US, 13
345	55	1/3	096052.00	✓	853	42C17FZ7	PE353-42	5	7.2	300	14.56	12.56	...	S, US, 13

C/A - Check Availability

Note 12 - TENV

Specifications are subject to change without notice

♥ Note listing on inside back flap

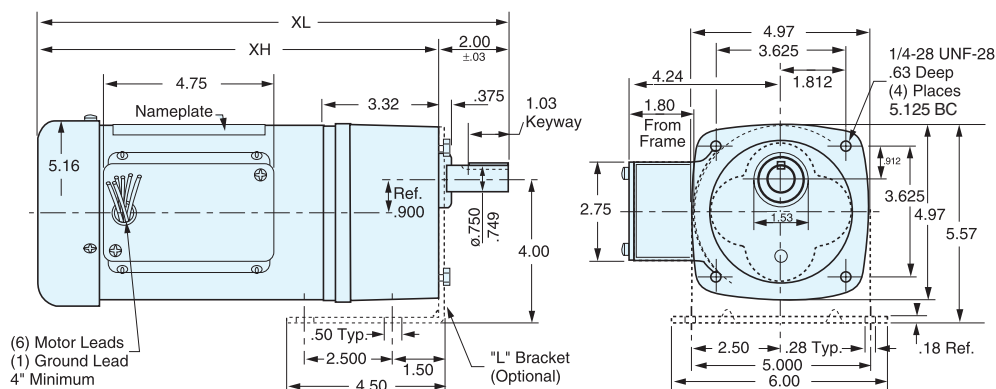
Three Phase - 230/460 Volt - PE350 Series - Parallel Shaft - TEFC

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Stock	List Price	Model Number	Gearmotor Type & Frame	Ratio to 1	F.L. Amps @ 230V	Over-hung Load (lb.)	Dimensions (inches)		♥Notes
											XL	XH	
58	320	1/3	096013.00	✓	902	42T17FZ14	PE353-42	30	1.6	300	13.81	11.81	S, US, 13
85	218	1/3	096014.00	✓	847	42T17FZ15	PE352-42	20	1.6	300	13.81	11.81	S, US, 13
173	109	1/3	096015.00	✓	847	42T17FZ16	PE352-42	10	1.6	300	13.81	11.81	S, US, 13
345	55	1/3	096016.00	✓	847	42T17FZ17	PE352-42	5	1.6	300	13.81	11.81	S, US, 13

Specifications are subject to change without notice

♥ Note listing on inside back flap

PE350 THREE PHASE



View On-line Technical Information



Gearmotors

P1100 Series - AC Gearmotors - Parallel Shaft

Output Torque - 70-1105 In-Lbs

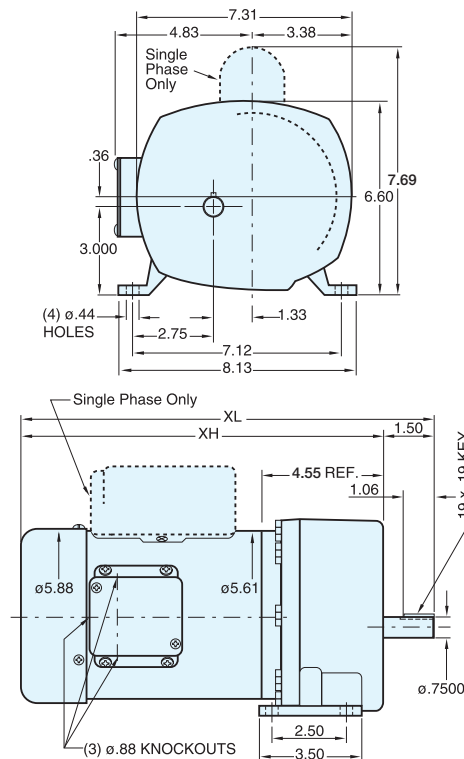


Features:

- Capacitor start designs rated for 115/230VAC 60 HZ input
- Rugged die cast aluminum gear 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 long life
- High carbon alloy output shaft provides maximum strength and rigidity
- All needle bearing journals are precision ground after heat treating to provide maximum fit and finish
- Heavy duty industrial oil seals keep lubricant in and dirt out
- Gears and bearings are splash lubricated with permanent, heavy duty gear oil
- Conduit box included as standard

Application Notes:

- These gearmotors are designed for mounting at any angle, but motor below the reducer should be avoided to prevent leakage of lubricant into the motor should the motor shaft seal fail
- Overhung load capacities shown are at center of output shaft
- For additional information, see Bulletin 1830
- **Bison/Dayton direct interchange**



Single Phase - 115/230 Volt - TEFC - P1100 Series

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Stock	List Price	Model Number	Gearmotor Type & Frame	Ratio to 1	F.L. Amps @ 115V	Over-hung Load (lb.)	Dimensions (inches)		♥ Notes
											XL	XH	
8	975	1/4	107000.00	✓	1,102	4C17FZ24	P1103-48	212	5.4	700	13.42	11.92	S, US
12	1030	1/4	107004.00	✓	1,102	4C17FZ28	P1103-48	143	5.4	700	13.42	11.92	S, US
18	800	1/4	107003.00	✓	1,102	4C17FZ27	P1103-48	95	5.4	700	13.42	11.92	S, US
26	569	1/4	107002.00	✓	1,102	4C17FZ26	P1103-48	66	5.4	650	13.42	11.92	S, US
59	248	1/4	107005.00	✓	1,077	4C17FZ29	P1102-48	29	5.4	625	13.42	11.92	S, US
133	114	1/4	107001.00	✓	1,077	4C17FZ25	P1102-48	13	5.4	525	13.42	11.92	S, US
18	1089	1/3	107006.00	✓	1,114	4C17FZ30	P1103-48	95	6.2	700	13.67	13.17	S, US
26	752	1/3	107012.00	✓	1,114	4C17FZ36	P1103-48	66	6.2	650	13.67	13.17	S, US
41	461	1/3	107011.00	✓	1,091	4C17FZ35	P1102-48	42	6.2	650	13.67	13.17	S, US
59	330	1/3	107010.00	✓	1,091	4C17FZ34	P1102-48	29	6.2	625	13.67	13.17	S, US
91	224	1/3	107009.00	✓	1,091	4C17FZ33	P1102-48	19	6.2	575	13.67	13.17	S, US
157	125	1/3	107008.00	✓	1,091	4C17FZ32	P1102-48	11	6.2	500	13.67	13.17	S, US
288	70	1/3	107007.00	✓	1,091	4C17FZ31	P1102-48	6	6.2	400	13.67	13.17	S, US
22	1105	1/2	107013.00	✓	1,214	4C17FZ37	P1103-48	79	8.8	700	14.17	12.67	S, US
41	700	1/2	107017.00	✓	1,190	4T17FZ41	P1102-48	42	8.8	650	14.17	12.67	S, US
59	496	1/2	107016.00	✓	1,190	4C17FZ40	P1102-48	29	8.8	625	14.17	12.67	S, US
91	336	1/2	107015.00	✓	1,190	4C17FZ39	P1102-48	19	8.8	575	14.17	12.67	S, US
133	229	1/2	107014.00	✓	1,190	4C17FZ38	P1102-48	13	8.8	525	14.17	12.67	S, US

Specifications are subject to change without notice

♥ Note listing on inside back flap

Three Phase - 230/460 Volt - TEFC - P1100 Series

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Stock	List Price	Model Number	Gearmotor Type & Frame	Ratio to 1	F.L. Amps @ 115V	Over-hung Load (lb.)	Dimensions (inches)		♥ Notes
											XL	XH	
18	1089	1/3	107025.00	✓	1,186	4T17FZ47	P1103-48	95	1.6	700	12.92	11.42	S, US
26	752	1/3	107026.00	✓	1,186	4T17FZ53	P1103-48	66	1.6	650	12.92	11.42	S, US
41	461	1/3	107027.00	✓	1,159	4T17FZ54	P1102-48	42	1.6	650	12.92	11.42	S, US
59	330	1/3	107028.00	✓	1,159	4T17FZ55	P1102-48	29	1.6	625	12.92	11.42	S, US
91	224	1/3	107029.00	✓	1,159	4T17FZ56	P1102-48	19	1.6	575	12.92	11.42	S, US
157	125	1/3	107030.00	✓	1,159	4T17FZ57	P1102-48	11	1.6	500	12.92	11.42	S, US
288	70	1/3	107031.00	✓	1,159	4T17FZ58	P1102-48	6	1.6	400	12.92	11.42	S, US
22	1105	1/2	107032.00	✓	1,251	4T17FZ48	P1103-48	79	2.0	700	13.42	11.92	S, US
41	700	1/2	107033.00	✓	1,232	4T17FZ49	P1102-48	42	2.0	650	13.42	11.92	S, US
59	496	1/2	107034.00	✓	1,232	4T17FZ50	P1102-48	29	2.0	625	13.42	11.92	S, US
91	336	1/2	107035.00	✓	1,232	4T17FZ51	P1102-48	19	2.0	575	13.42	11.92	S, US
133	229	1/2	107036.00	✓	1,232	4T17FZ52	P1102-48	13	2.0	500	13.42	11.92	S, US
288	100	1/2	107037.00	✓	1,232	4T17FZ46	P1102-48	6	2.0	400	13.42	11.92	S, US

Specifications are subject to change without notice

♥ Note listing on inside back flap

View On-line Technical Information



Gearmotors

Right-Angle - AC Gearmotors

Output Torque - 14-113 In-Lbs



Features:

- Permanent split capacitor design rated for 115/230VAC 60/50 HZ input
- Worm-type right-angle gearing features hardened, steel worm with bronze worm wheel for long life and quiet operation
- Precision machined aluminum gear housing
- Lubrication is permanent with an oil bath
- Gearbox has all ball bearings
- Output shaft is field interchangeable from left hand to right hand style by reassembly
- Double output shaft available as a factory option
- Optional conduit box available, see page 342
- Optional gearbox base available (10 Series only), see page 342

Application Notes:

- 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 deg 1/8" NPT taper pipe elbow (See drawing). Elbow not available from LEESON
- These gearmotors are designed for mounting at any angle, but motor below the reducer should be avoided to prevent leakage of lubricant into the motor should the motor shaft seal fail
- Overhung load capacities shown are at center of output shaft
- Continuous duty run capacitor supplied as standard
- For additional information, see Bulletin 1830
- **Bodine/Dayton direct interchange**

Single Phase - 115/230 Volt - TEFC - Right-Angle

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Stock	List Price	Model Number	Gearmotor Type & Frame	Ratio to 1	F.L. Amps @115V	Over-hung Load (lb.)	Dimensions (inches)				Capacitor Mfd. 240 VAC	♥Notes
											P	X	XL	XH		
28	37	1/15	M1125080.00	✓	677	M31P17NZ19	10F60-31C	60	0.9	185	3.07	3.63	8.94	5.31	10.0 ^a	S, US, 12
43	34	1/15	M1125081.00	✓	677	M31P17NZ18	10F40-31C	40	0.9	185	3.07	3.63	8.94	5.31	10.0 ^a	S, US, 12
58	40	1/15	M1125082.00	✓	677	M31P17NZ17	10F30-31C	30	0.9	185	3.07	3.63	8.94	5.31	10.0 ^a	S, US, 12
85	24	1/15	M1125083.00	✓	677	M31P17NZ16	10F20-31C	20	0.9	185	3.07	3.63	8.94	5.31	10.0 ^a	S, US, 12
173	14	1/15	M1125084.00	✓	677	M31P17NZ15	10F10-31C	10	0.9	185	3.07	3.63	8.94	5.31	10.0 ^a	S, US, 12
29	110	1/6	M1145037.00	✓	918	M38P17FZ16	13F60-38F	60	2.0	235	3.85	4.50	12.31	7.81	15.0 ^c	S, US, 13
43	113	1/6	M1145038.00	✓	918	M38P17FZ17	13F40-38F	40	2.0	235	3.85	4.50	12.31	7.81	15.0 ^c	S, US, 13
57	95	1/6	M1145082.00	✓	918	M38P17FZ23	13F30-38F	30	2.0	235	3.85	4.50	12.31	7.81	15.0 ^c	S, US, 13
83	75	1/6	M1145039.00	✓	918	M38P17FZ18	13F20-38F	20	2.0	235	3.85	4.50	12.31	7.81	15.0 ^c	S, US, 13
170	43	1/6	M1145040.00	✓	918	M38P17FZ19	13F10-38F	10	2.0	235	3.85	4.50	12.31	7.81	15.0 ^c	S, US, 13
340	23	1/6	M1145041.00	✓	918	M38P17FZ20	13F05-38F	5	2.0	235	3.85	4.50	12.31	7.81	15.0 ^c	S, US, 13

^a 250 VAC

^c 300 VAC

Note 12 - TENV

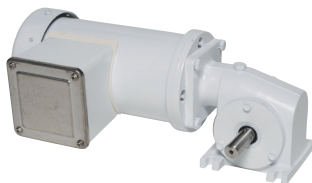
Specifications are subject to change without notice

♥ Note listing on inside back flap



View On-line Technical Information





Gearmotors

IP55 AC Washguard® Gearmotors Right-Angle - Single & Three Phase

General Specifications:

Single and Three-phase washdown duty gearmotors rated for continuous duty applications. Permanent split designed single-phase motors include capacitor in conduit box. Motors are designed for extended life in applications requiring regular washdown or otherwise wet environments. Avoid shaft up applications, with motor below, should shaft seal fail.

Features:

- Shaft material is coated with Teflon/Ceramic plating
- White epoxy painted motors
- O-rings and gaskets used for sealing
- Hardened Worm-type gearing used
- Interior components protected against corrosion
- Ball bearings used in gear housing
- Sealed output shafts
- Output shafts have needle bearings for high load capacities
- UL listed and CSA certified

Single & Three Phase - TEFC - Right-Angle

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Stock	List Price	Model Number	Gearmotor Type & Frame	Ratio to 1	Voltage	F.L. Amps @ 230V	Phase	Over-hung Load (Lbs)
43	113	1/6	M1145141.00	✓	785	M38P17FZ42	Right-Angle	40	115/230	1.00	1	235
83	75	1/6	M1145142.00	✓	963	M38P17FZ43	Right-Angle	20	115/230	1.00	1	235
340	23	1/6	M1145143.00	✓	963	M38P17FZ44	Right-Angle	5	115/230	1.00	1	235
29	220	3/8	M1145146.00	✓	963	M38T17FZ22	Right-Angle	60	230.0	1.30	3	235
172	105	3/8	M1145147.00	✓	963	M38T17FZ23	Right-Angle	10	230.0	1.30	3	235

Specifications are subject to change without notice

♥ Note listing on inside back flap

View On-line Technical Information



Gearmotors

SUB-FHP Accessories

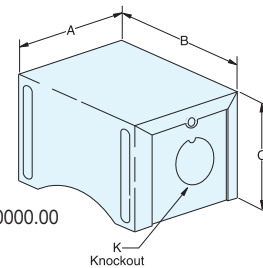
SUB-FHP Gearmotor Conduit Boxes

Optional steel conduit or junction boxes are available. The boxes are painted and mount in holes using screws provided with all stock gearmotors.

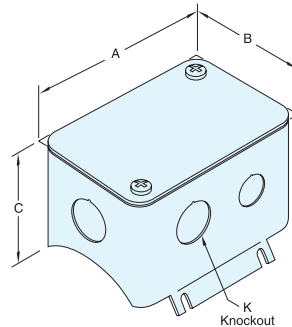
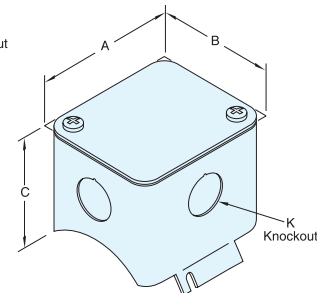
Catalog Number	Frame	List Price	Dimensions (inches)			
			A	B	C	K
M1760000.00*	25	43	2.09	2.45	2.23	0.875
M1760021.00*	30/31	43	3.13	2.63	2.28	0.875
M1760007.00	34	43	3.13	2.63	2.28	0.875
M1760012.00	38	45	4.75	2.75	2.00	1.125
175893.00	42	45	4.75	2.75	2.00	1.125

Note: * For any gearmotor catalog number beginning with M1115XXX, must clarify from gearmotor type and frame columns as listed on catalog pages 321, 323 and 331. For example, if gearmotor type and frame lists P303-30E, then use 30 frame conduit box kit M1760021. If gearmotor type and frame lists 10F60-25, then use conduit box kit M1760000.

Specifications are subject to change without notice

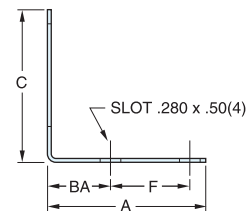
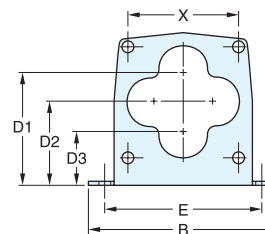


M1760000.00

M1760012.00
&
175893.00M1760007.00
&
M1760021.00

SUB-FHP Gearmotor "L" Mounting Bracket

Optional "L" brackets can be used to mount parallel shaft type PZ or PE350 gearmotors. Of steel construction, they are painted and include screws for mounting to the motor, but not the application.



Catalog Number	Frame	List Price	Dimensions (inches)									
			A	B	C	1D1	1D2	1D3	X	BA	F	E
M1760003.00	PZ Gearmotors	54	3.75	4.5	3.94	3	2.3	1.5	2.6	1.5	1.88	3.75
M1760011.00**	PE350 Gearmotors	66	4.50	6	5.52	4	3.1	2.2	3.6	1.5	2.50	5.00
M1760029.00Δ	PE350 Gearmotors	69	4.50	6	5.52	4	3.1	2.2	3.6	1.5	2.50	5.00

* Maximum radial load no greater than 50 lbs. This bracket can also be used on DC motors in the 34 frame having the style C mounting.

**Maximum radial load no greater than 200 lbs.

Δ Washguard PE350 L-Bracket

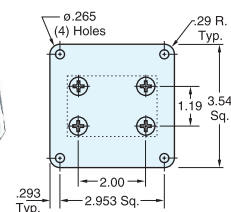
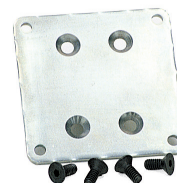
Specifications are subject to change without notice

SUB-FHP Gearmotor Right-Angle Base Kit

This Optional Base Kit can be used with the 10 Series right-angle gearmotors. (Includes screws for mounting to gearbox, but not the application.)

Catalog Number	List Price
M1760006.00	59

Specifications are subject to change without notice



For SUB-FHP Right-Angle AC Gearmotors

MFD Rating	Voltage Rating	Catalog Number	List Price	Dimensions (inches)			
				W	H	T	D
10	250	003043.05	50	1.89	1.14	0.75	1.14
15	300	003042.05	55	2.28	1.61	1.14	2.48

For SUB-FHP P240 & PE350 AC Gearmotors

Gearmotor Type	MFD Rating	Voltage Rating	Catalog Number	List Price	Dimensions (inches)			
					W	H	T	D
P240	7.5	250	003042.02	55	1.89	1.14	0.75	2.01
PE350	10	250	003042.06	50	1.89	1.24	0.89	2.11
P240	15	300	003042.05	55	2.28	1.61	1.14	2.48
PE350	15	250	003042.04	65	2.28	1.46	0.93	2.33

For SUB-FHP AC PZ Series gearmotors

MFD Rating	Voltage Rating	Catalog Number	List Price	Dimensions (inches)			
				W	H	T	D
3	250	003043.01	55	1.22	0.93	0.57	0.97
10	250	003043.05	50	1.89	1.14	0.75	1.14

