## Washguard<sup>®</sup> Motors **DC Washdown Duty Motors** White Epoxy Painted





### DC - SCR Rated 90 & 180 Volts - TENV - C Face with Removable Base

HP	Full Load RPM	NEMA Frame	Catalog Number	Stock
1/4	1750	S56C	108423.00	$\checkmark$
	1750	SS56C	098375.00	C/A
1/3	1750	S56C	108424.00	
	1750	SS56C	098376.00	C/A
1/2	1750	S56C	108226.00	
	1750	S56C	108227.00	√
3/4	1750	S56C	108228.00	$\checkmark$
	1750	S56C	108229.00	√
1	1750	S56C	108230.00	
	1750	S56C	108231.00	$\checkmark$
1 1/2	1750	S56C	108232.00	

Model Number	App. Wgt. (lbs)	Arm. Volts DC	Control Volts AC Input	F. L. Amps DC	"C" Dim. (Inches)	♥Notes
C4D17VK9C	23	90	115.0	2.7	10.69	S, US, 12
C42D17VK1	21	180	230.0	1.4	10.22	S, US, 12
C4D17VK10	26	90	115.0	3.5	11.69	S, US, 12
C42D17VK2	22	180	230.0	1.7	10.22	S, US, 12
C4D17VK1	38	90	115.0	4.9	13.69	S, US, 12
C4D17VK2	43	180	230.0	2.4	13.69	S, US, 12
C4D17VK3	53	90	115.0	7.0	15.69	S, US, 12
C4D17VK4	50	180	230.0	3.5	15.69	S, US, 12
C4D17WK1	45	90	115.0	10.0	15.81	S, US, 13
C4D17WK2	42	180	230.0	5.0	14.81	S, US, 13
C4D17WK3	50	180	230.0	7.6	15.81	S, US, 13

Note listing on inside back flap

## Washguard<sup>®</sup> - DC - IEC Frame

#### 180 Volts - TENV IP55 - B5 Flange With Removable B3 Base

HP/ kW	Full Load RPM	NEMA Frame	Catalog Number	Stock
1/237	1750	71	098040.00	C/A
3/455	1750	80	108407.00	C/A

Model Number	App. Wgt. (lbs)	Arm. Volts DC	Control Volts AC Input	F. L. Amps DC	"C" Dim. (Inches)	♥Notes
42D17VD1	22	180	230.0	2.5	10.69	S, US
4D17VD1	52	180	230.0	3.5	16.02	S, US

Note listing on inside back flap

If base is removed, do not reinstall bolts without using washers to compensate for the thickness of base. These WASHGUARD® motors are modular design but stocked with B5 flange and B3 foot. The foot is removable. The B5 flange can be replaced with a B14 face or other diameter B5 flanges noted on page 175.

All Washdown Duty Motors Have Class F Insulation.

Automotive Duty Motors

Definite

# Washguard<sup>®</sup> Motors SUB-FHP IP55 Washguard<sup>®</sup> Motors

# White Epoxy Painted

Automotive Duty Motors

Pump Motors

#### **General Specifications:**

Precision subfractional horsepower DC permanent magnet motors. Designed for use with fullwave nonfiltered SCR controls or battery supplied low voltage for adjustable speed applications requiring constant torque throughout the speed range.

#### Features:

- 303 Stainless steel shaft resists corrosion
- Lubricated spring loaded contact seals prevent moisture from entering the motor
- Double sealed, Oversize bearings with high temp lubricant
- Exterior and interior components protected against moisture, acids, alkalies and oil
- Cast conduit box for superior sealing includes:
  - Threaded conduit entrance
    - Drain holes
    - Nitrile gaskets
    - 304 stainless steel conduit box cover
    - Stainless steel hardware
- USDA Approved white epoxy finish
- Nylon seals at bolt heads for superior sealing
- O ring sealed brush covers



#### 90 Volts DC - TENV - Square Flange Less Feet

HP	Full Load RPM	NEMA Frame	▼ Catalog Number	Stock
1/8	1750	31S	M1120181.00	$\checkmark$
1/6	1750	31S	M1120183.00	$\checkmark$
1/4	2500	32F42CZ	M1120185.00	√

Model Number	App. Wgt. (lbs)	Arm. Volts DC	Control Volts AC Input	F. L. Amps DC	"C" Dim. (Inches)	♥Notes
M31D17VZ1	11	90	115.0	1.5	8.57	S, US
M31D17VZ3	11	90	115.0	1.9	10.07	S, US
M32D25VC1	13	90	115.0	1.9	10.00	S, US

• Note listing on inside back flap

## Low Voltage - 12 Volt - TENV - Square Flange or C Face

HP	Full Load RPM	NEMA Frame	▼ Catalog Number	Stock
1/8	1750	31S	M1120182.00	$\checkmark$
1/6	1750	31S	M1120184.00	$\checkmark$
1/4	2500	32F42CZ	M1120186.00	√

Model Number	App. Wgt. (lbs)	Arm. Volts DC	F. L. Amps DC	"C" Dim. (Inches)	♥Notes
M31D17VZ2	7	12	10.5	8.1	S, US
M31D17VZ4	11	12	14.5	9.6	S, US
M32D25VC2	13	12	20.0	9.5	S, US

Note listing on inside back flap

Agricultura Motors

HVAC / Far Motors





IP55 Washguard<sup>®</sup> Gearmotors - Parallel Shaft White Epoxy Painted



#### 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



Special Voltage

Motors

Purpose Motors

Definite



## IP55 Washguard<sup>®</sup> Gearmotors - Parallel Shaft White Epoxy Painted

Automotive Duty Motors

Pump Motors

Agricultural Motors

HVAC / Fan Motors

Special Voltage Motors

## P300 Series - SCR RATED - 90V - Parallel Shaft - TENV - 1.0 Service Factor

Output RPM	F.L Torque (Lb.In.)	Input HP	Catalog Number	Stock
5	353	1/20	M1125261.00	$\checkmark$
31	220	1⁄8	M1125262.00	$\checkmark$
51	130	1⁄8	M1125263.00	√
94	77	1⁄8	M1125264.00	$\checkmark$
167	43	1⁄8	M1125265.00	√

Model Number	Gearmotor Type & Frame	Ratio to 1	DC Arm. Volts	Full Load Amps DC	Over-hung Load (Lbs.)
CM31D17VZ5	P303-31	336	90	0.8	565
CM31D17VZ6	P303-31	58	90	1.6	327
CM31D17VZ7	P302-31	35	90	1.6	277
CM31D17VZ8	P302-31	19	90	1.6	236
CM31D17VZ9	P302-31	11	90	1.6	197

Р	PB	X Inches	XL	хн
3.13	3.8	3.54	10.44	8.94
3.13	3.8	3.54	11.94	10.44
3.13	3.8	3.54	11.94	10.44
3.13	3.8	3.54	11.94	10.44
3.13	3.8	3.54	11.94	10.44

Specifications are subject to change without notice

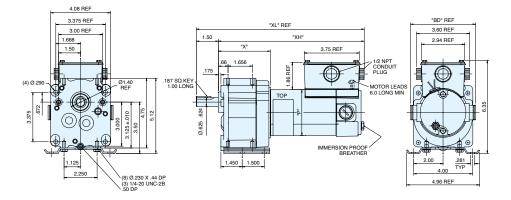
## P300 Series - Low Voltage (12V) - Parallel Shaft - TENV - 1.0 Service Factor

Output RPM	F.L Torque (Lb.In.)	Input HP	Catalog Number	Stock
5	353	1/20	M1125266.00	$\checkmark$
31	220	1⁄8	M1125267.00	√

Model Number	Gearmotor Type & Frame	Ratio to 1	DC Arm. Volts	Full Load Amps DC	Over-hung Load (Lbs.)
CM31D17VZ10	P303-31	336	12	6.4	565
CM31D17VZ11	P303-31	58	12	11.0	327

Р	PB	X Inches	XL	ХН
3.13	3.8	3.54	10.44	8.94
3.13	4.43	3.54	11.94	9.94

Specifications are subject to change without notice







IP55 Washguard<sup>®</sup> Gearmotors - Parallel Shaft White Epoxy Painted



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



Pump Motors





#### **TENV - 1.0 Service Factor - SCR Rated 90V**

Output RPM	F.L Torque (Lb.In.)	Input HP	Catalog Number	Stock
14	341	1⁄8	M1125268.00	$\checkmark$
42	280	1/4	M1125269.00	√
83	155	1/4	M1125270.00	√
250	45	1/4	M1125271.00	$\checkmark$
500	25	1/4	M1125272.00	√

Model Number	Gearmotor Type & Frame	Ratio to 1	DC Arm. Volts	Full Load Amps DC	Over-hung Load (Lbs.)
M31D25VZ1	P353-31	180	90	1.5	465
M32D25VZ1	P353-32	58	90	2.6	327
M32D25VZ2	P353-32	29	90	2.6	267
M32D25VZ3	P352-32	10	90	2.6	201
M32D25VZ4	P352-32	5	90	2.6	194

Р	PB	X Inches	XL	хн
3.13	3.8	3.45	11.84	9.84
3.25	3.8	3.45	13.84	11.84
3.25	3.8	3.45	13.84	11.84
3.25	3.8	3.45	13.84	11.84
3.25	3.8	3.45	13.84	11.84

Specifications are subject to change without notice

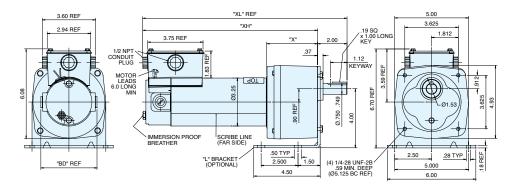
#### PE350 Series Parallel Shaft - TENV - 1.0 Service Factor - Low Voltage 12V

Output RPM	F.L Torque (Lb.In.)	Input HP	Catalog Number	Stock
14	341	1⁄8	M1125273.00	$\checkmark$
42	325	1/4	M1125274.00	V

Model Number	Gearmotor Type & Frame	Ratio to 1	DC Arm. Volts	Full Load Amps DC	Over-hung Load (Lbs.)
M31D25VZ2	P353-31	180	12	12.0	465
M32D25VZ5	P353-32	58	12	20.0	327

Р	PB	X Inches	XL	ХН
3.13	4.43	3.45	11.58	9.58
3.25	4.43	3.45	13.84	11.84

Specifications are subject to change without notice





Motors