

Hill House Products has been providing NEMA 56C Permanent Magnet DC brushed motors and DC controls for over 40 years. Over that time period we have worked very closely with many large manufacturers of these PMDC brushed motors. Today we offer a large range of these motors in different voltages, speed, horsepower and duty cycles.

It is very important when selecting a PMDC motor to consider all the application requirements, the better suited a motor is, the better the longevity. If sized appropriately, most of these PMDC brushed motors will provide years of service.

The NEMA 56C is used extensively throughout the OEM and industrial market because it offers “off the shelf” availability and a standard global mechanical design. This allows for any correct pulley, sprocket or NEMA 56C gearbox to be used. These motors can also be custom made to fit almost any OEM application. Provided below are the basic parameters;

MECHANICAL FEATURES

- Mechanical dimensions meet NEMA 56C configuration, front flange mount and will work with 56C gear boxes reducers.
- Motor has a rolled steel shell housing and cast aluminum end bells.
- ABEC 1 Ball bearings front and rear for long life.
- Motor base (foot) can be removed if needed.
- Motor base is “slotted” for easy motor positioning to set belt or chain tension.
- Motors have a “conduit box” to keep wire connections secure.
- Motors are available in a TEFC (totally enclosed fan cooled) or TENV (total enclosed non-ventilated)

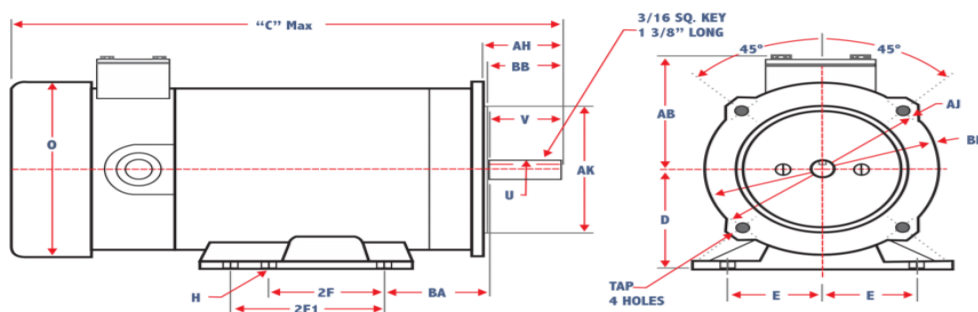
ELECTRICAL FEATURES

- Designed to be used on DC power, or rectified AC with an SCR or PWM controller
- Simple two wire connection Red (+) and Black (-)
- Easily reverse rotation direction (reverse lead wires).
- High energy ceramic magnets.
- Class “F” insulation system on magnet wire.
- Replaceable carbon brushes, convenient access from outside motor using simple flat tip screw driver.

PERFORMANCE ATTRIBUTES

- Linear torque/speed curve.
- Adjustable speed range of 50:1 with use of SCR or PWM control.
- 300% starting torque (intermittent duty) to move high load applications.
- Available is speeds from 1400 RPM~2500 RPM (custom windings)
- Available in 12, 24, 36, 90, and 180 VDC.
- Motors can be “dynamically braked” or used with a regenerative drive for faster stopping.
- Motors are UL approved.
- Standard 12-month warranty from date code on label.

HP	RPM	ARM. DC VOLTS	FRAME	ENCL.	F.L. AMPS	TORQUE (IN-LBS)	WGT. LBS
1/4	1750	90	56C	TEFC	2.9	9	21
	1750	90	56C	TENV	2.9	9	21
	1750	180	56C	TEFC	1.45	9	21
	1750	180	56C	TENV	1.45	9	21
1/3	1750	90	56C	TEFC	3.6	13.5	23
	1750	90	56C	TENV	3.6	13.5	23
	1750	180	56C	TEFC	1.8	13.5	23
	1750	180	56C	TENV	1.8	13.5	23
1/2	1750	90	56C	TEFC	5.2	18	25
	1750	90	56C	TENV	5.2	18	25
	1750	180	56C	TEFC	2.6	18	25
	1750	180	56C	TENV	2.6	18	25
3/4	1750	90	56C	TEFC	7.8	27	30
	1750	180	56C	TEFC	3.9	27	30
1	1750	90	56C	TEFC	10.4	36	33
	1750	180	56C	TEFC	5.2	36	33



HP	HHP56-025-90-18(FC)	HHP56-033-90-18(FC)**	HHP56-033-90-18(NV)**	HHP56-05-90-18(FC)**	HHP56-05-180-18(FC)**	HHP56-75-90-18(FC)**	HHP56-1-90-18(FC)**	HHP56-1-180-18(FC)
D	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
E	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44
2F	3	3	3	3	3	3	4	4
2F1	0.00	0.00	0.00	0.00	0.00	0.00	5	5
H	11/32	11/32	11/32	11/32	0	11/32	11/32	11/32
O	5.625	5.625	0.000	5.625	0.00	5.625	5.625	5.625
U	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625
V	1.875	1.875	1.875	1.875	1.875	1.875	1.875	1.875
AB	4	4	4	4	4	4	4	4
AH	2.063	2.063	2.063	2.063	2.063	2.063	2.063	2.063
AJ	5.875	5.875	5.875	5.875	5.875	5.875	5.875	5.875
AK	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
BA	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75
BB	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
BD	6.14	6.14	6.14	6.14	6.14	6.14	6.14	6.14
TA								
P	375-16	375-16	375-16	375-16	375-16	375-16	375-16	375-16
C	11.625	11.625	11.181	12.438	12.010	13.938	14.750	14.750

*DIMENSIONS LISTED ABOVE ARE FOR REFERENCE ONLY

**ITEMS SHOWN ARE CURRENTLY IN STOCK