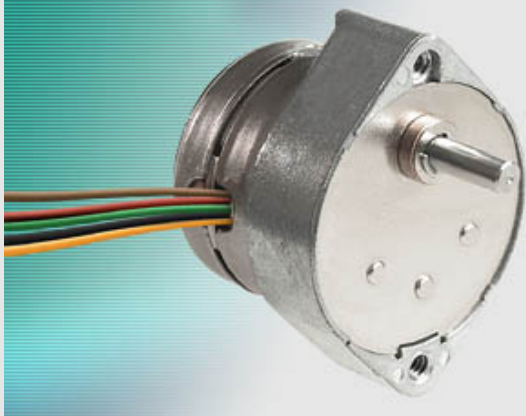


GEAR MOTORS

## 26M TYPE 'V' SERIES

WIDEST RANGE  
OF GEAR RATIOS AVAILABLE



### GENERAL SPECIFICATIONS

DC Operating Voltage	5 / 12
Gear Train Rating:	
Static Running*	141.2 mN•m / 20 oz-in 70.6 mN•m / 10 oz-in
Max. Operating Temperature	100°C
Insulation Resistance at 500Vdc	100MΩ

\* Measured with 2 phases energized

 [CLICK HERE TO PRINT THIS SERIES](#)  
OPENS PDF IN NEW WINDOW

The specifications in this publication are believed to be accurate and reliable. However, it is the responsibility of the product user to determine the suitability of Portescap products for a specific application. While defective products will be replaced without charge if promptly returned, no liability is assumed beyond such replacement.

Portescap Danaher Motion motors will not be CE marked where the Low Voltage Directive, the Electro-Magnetic Compatibility or other appropriate EU directives are not applicable - this is an EU legal requirement.

## TECHNICAL SPECIFICATIONS

	UNIPOLAR		BIPOLAR	
Part Number	26M048B1U	26M048B2U	26M048B1B	26M048B2B
DC Operating Voltage	5	12	5	12
Resistance per Winding (ohms)	19.6	110	19.8	108
Inductance per Winding (mH)	5.3	36.5	13.0	60.7
Holding Torque* (mN•m/oz-in) (motor only)	9.2 / 1.3	9.2 / 1.3	10.6 / 1.5	10.6 / 1.5
Rotor Moment of Inertia (g.m <sup>2</sup> )	1.1 x 10 <sup>-4</sup>	1.1 x 10 <sup>-4</sup>	1.1 x 10 <sup>-4</sup>	1.1 x 10 <sup>-4</sup>
Step Angle* (motor only)	7.5°	7.5°	7.5°	7.5°
Steps per Revolution* (motor only)	48	48	48	48
Gear Train Rating (mN•m / oz-in)				
Static	141.2 / 20	141.2 / 20	141.2 / 20	141.2 / 20
Running*	70.6 / 10	70.6 / 10	70.6 / 10	70.6 / 10
Max. Operating Temperature	100°C	100°C	100°C	100°C
Ambient Temperature Range				
Operating	-20°C to 70°C	-20°C to 70°C	-20°C to 70°C	-20°C to 70°C
Storage	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C
Bearing Type	Bronze sleeve	Bronze sleeve	Bronze sleeve	Bronze sleeve
Insulation Resistance at 500Vdc	100 megohms	100 megohms	100 megohms	100 megohms
Dielectric Withstanding Voltage	650±50 VRMS 60 Hz, 2 sec	650±50 VRMS 60 Hz, 2 sec	650±50 VRMS 60 Hz, 2 sec	650±50 VRMS 60 Hz, 2 sec
Weight (g/oz)	57.2 / 2	57.2 / 2	57.2 / 2	57.2 / 2
Leadwires	28 AWG	28 AWG	28 AWG	28 AWG

\* Measured with 2 phases energized

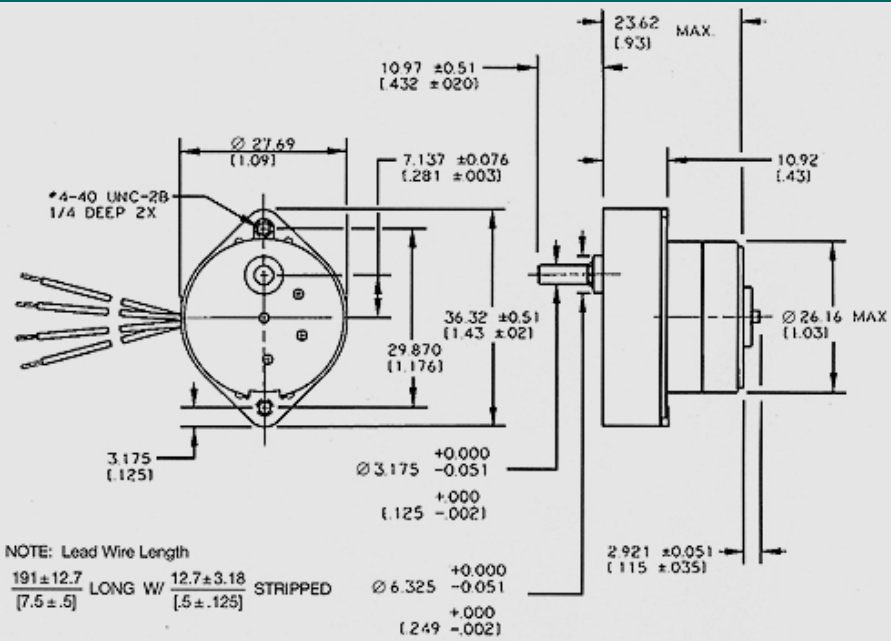
## GEAR RATIO

Part Suffix	Gear Ratio	Output Step Angle*	Output Speed RPM @100 PPS*	Running Torque @ 100 PPS* mN•m/oz-in
-V11	2:1	3.75°	62.50	8.9 / 1.16
-V16	5:1	1.5°	25.00	17.01 / 2.41
-V19	7.5:1	1.00°	16.66	21.08 / 3.00
-V21	10:1	.75°	12.50	28.24 / 4.00
-V24	15:1	.50°	8.33	35.30 / 5.00
-V27	20:1	.375°	6.25	46.88 / 6.64
-V31	30:1	.25°	4.17	70.6 / 10.00
-V37	60:1	.125°	2.09	112.96 / 16.00

\* Measured with 2 phases energized

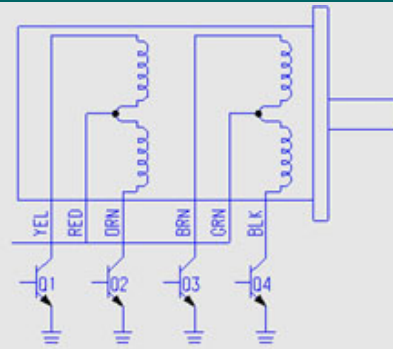
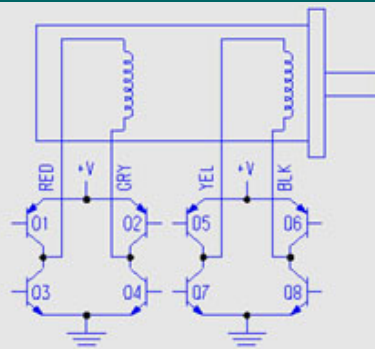
MECHANICAL DIMENSIONS

UNITS = MM / INCHES



WIRING DIAGRAM

( FOR MOTOR ONLY )



BIPOLAR

STEP	01-04	02-03	05-08	06-07
1	ON	OFF	ON	OFF
2	ON	OFF	OFF	ON
3	OFF	ON	OFF	ON
4	OFF	ON	ON	OFF
1	ON	OFF	ON	OFF

CCW ROTATION (left side) and CW ROTATION (right side) are indicated by arrows.

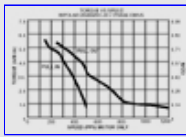
UNIPOLAR

STEP	01	02	03	04
1	ON	OFF	ON	OFF
2	ON	OFF	OFF	ON
3	OFF	ON	OFF	ON
4	OFF	ON	ON	OFF
1	ON	OFF	ON	OFF

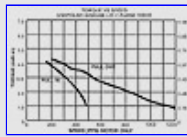
CCW ROTATION (left side) and CW ROTATION (right side) are indicated by arrows.

## MOTOR DYNAMICS

CLICK ON A THUMBNAIL TO MAGNIFY



26M048B Type 'V', Bipolar



26M048B Type 'V', Unipolar

