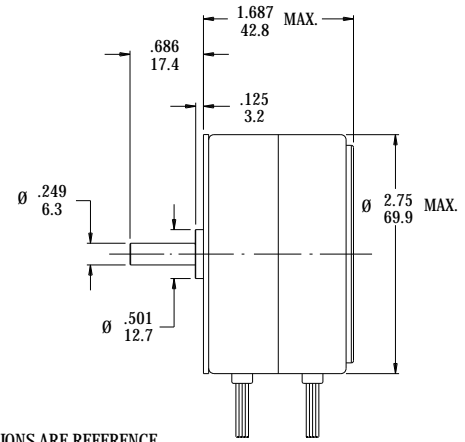
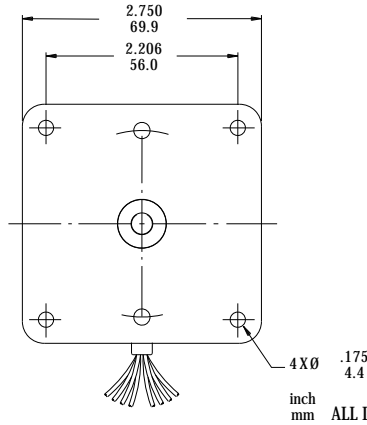


# ➤ SIZE 28 15° Step Motor



## STANDARD FEATURES

- Rigid Construction
- Sleeve Bearing
- Lead Positioning
- 105° C Insulation
- Step Angle Accuracy ±1.0°



inch mm ALL DIMENSIONS ARE REFERENCE

## STANDARD MOTOR SPECIFICATIONS

	Part Number	Voltage	Holding Torque oz-in	Torque to Inertia Ratio <sup>1</sup> Rad/sec <sup>2</sup>	Resistance per Phase <sup>2</sup> Ohms	Inductance per Phase <sup>3</sup> mH	Ke <sup>4</sup> V/K RPM	Step Time <sup>5</sup> mS	Rotor Inertia <sup>6</sup> Moiss	Detent Torque <sup>7</sup> oz-in
Unipolar	S-110	5	54.8	26095	3.6	10.4	23.3	9.0	2.10	3.25
	S-405	12	54.8	26095	21.4	61.7	56.8	11.6	2.10	3.25
	S-406	24	54.8	26095	85.4	246.4	113.5	18.0	2.10	3.25
Bipolar	S-385	5	58.0	27619	1.8	10.5	23.2	9.5	2.10	3.25
	S-409	12	58.0	27619	10.7	70.0	59.7	12.4	2.10	3.25
	S-408	24	58.0	27619	42.8	253.6	113.6	16.0	2.10	3.25

1. Computed from holding torque and rotor inertia.
2. Adjusted to 25°C.
3. Measured at 400 Hz; small ac signal and 1/3 rated dc current applied.
4. Peak to peak voltage.
5. Time for rotor to reach its initial crossover point (minimum reluctance) of its final step position.
6. Moiss (oz-in-sec<sup>2</sup> x 10<sup>3</sup>).
7. Peak value of a sleeve bearing motor.

### NOTES:

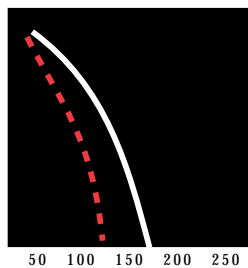
- Insulation Resistance exceeds 100 MEGOHMS.
- Mounting plate thickness .060 inches.
- Unit Weight approximately 21.4 ounces.
- Contact Hansen for further information.

## UNIPOLAR

DYNAMIC TORQUE S-405

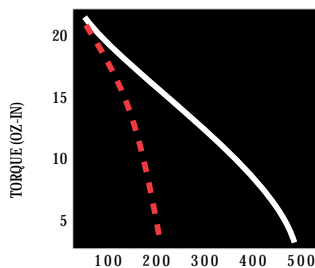
PULL-OUT  
PULL-IN

L/R



SPEED (PPS)

L/4R



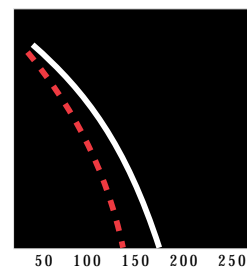
SPEED (PPS)

## BIPOLAR

DYNAMIC TORQUE S-409

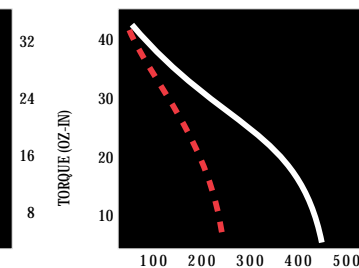
PULL-OUT  
PULL-IN

L/R



SPEED (PPS)

L/4R



SPEED (PPS)

## OPTIONAL FEATURES

- Voltages
- Ball Bearings
- Higher Insulation Class
- Custom Leads and Terminations
- Custom Shafting
- Custom Mounting
- Rear Shaft Extensions