

STEPPING MOTOR FAMILY

Series 59mm (PAS, PBS) Geared Stepping Motor



Step Angle:	7.5° & 15°
Torque Range:	Up to 200 oz-in [1412 mN-m]
Position Accuracy:	+/- 5% max.
Number of Phases:	4 phase bifilar
Insulation Class:	Class A (105°C)
Lead Wire:	6 leads 24AWG (approx. 8.5 inches [215.9 mm])
Operation Ambient Temp:	-10°C to +40°C (approx.)
Shaft Bearing:	Sleeve Bearing (Ball Bearing Available upon request)
Gear Unit:	Zinc Die cast - AGMA 7 Standards with hardened steel gears
Note: Typical data subject to change without notification	

PAS and PBS Geared Motors are available with standard or high-torque rotors. The wide range of gear reductions allows the user to get a motor that exactly fits each application. Voltages other than those shown as well as 2-phase bipolar windings may be specified.

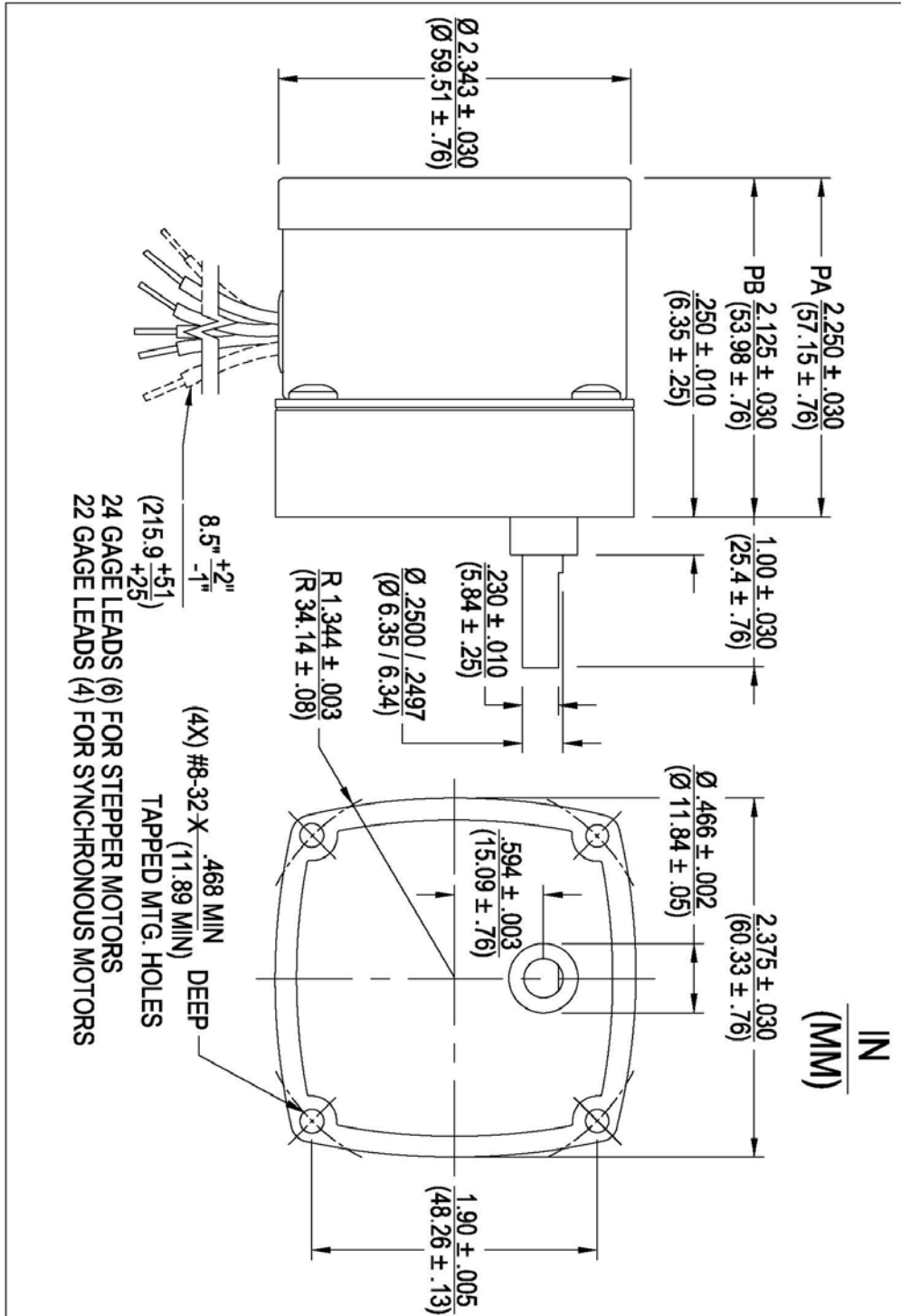
All gears are hobbled to AGMA 7 standards. Pinions are extruded from a special steel with a modified long addendum tooth form to provide higher strength. Both pinion and gear teeth are case hardened for wear resistance and rotate upon hardened and ground steel studs. Synthetic lubrication is used throughout.

Notes:

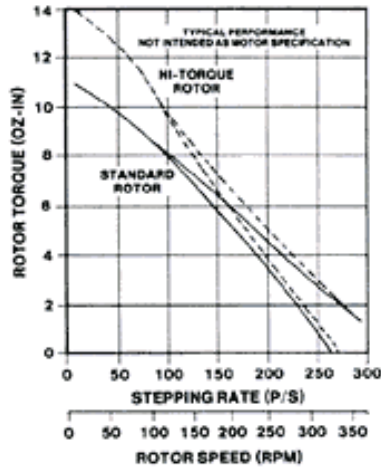
- Maximum recommended gear train loading is 200 oz-in [1412 mN-m].

Model	Part Number	Reduction	Step Angle (deg)	Steps per Revolution	Rated Torque @ 200 p/s (oz-in)	Rated Torque @ 200 p/s (mN-m)	Output Speed (RPM)	Input Power (watts)	Nominal Voltage (Vdc)	Winding Resistance (ohms)	Weight (oz)	Weight (g)
PAS	3206-001	300	0.025	14400	200	1412.3	0.83	8	12	35	18	510.3
PAS	3206-024	300	0.025	14400	200	1412.3	0.83	8	6	8	18	510.3
PAS	3206-034	300	0.025	14400	200	1412.3	0.83	8	24	135	18	510.3
PAS	3206-002	150	0.05	7200	200	1412.3	1.67	8	12	35	18	510.3
PAS	3206-042	125	0.06	6000	200	1412.3	2	8	6	8	18	510.3
PAS	3206-003	75	0.1	3600	200	1412.3	3.33	8	12	35	18	510.3
PAS	3206-004	50	0.15	2400	168	1186.3	5	8	12	35	18	510.3
PAS	3206-031	50	0.15	2400	168	1186.3	5	8	24	135	18	510.3
PAS	3206-011	30	0.25	1440	101	713.2	8.33	8	12	35	18	510.3
PAS	3206-020	30	0.25	1440	101	713.2	8.33	8	6	8	18	510.3
PAS	3206-030	30	0.25	1440	101	713.2	8.33	8	24	135	18	510.3
PAS	3206-013	25	0.3	1200	84	593.2	10	8	24	135	18	510.3

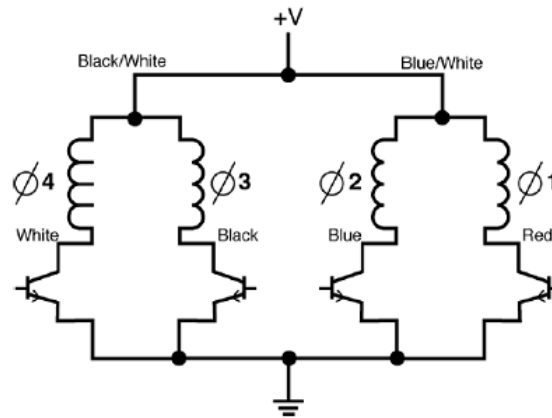
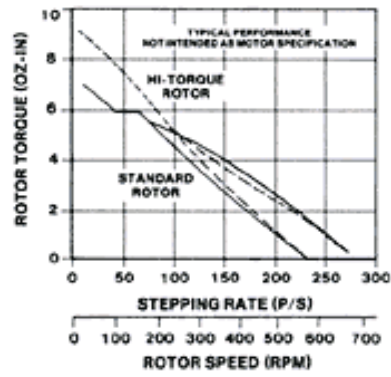
Model	Part Number	Reduction	Step Angle (deg)	Steps per Revolution	Rated Torque @ 200 p/s (oz-in)	Rated Torque @ 200 p/s (mN-m)	Output Speed (RPM)	Input Power (watts)	Nominal Voltage (Vdc)	Winding Resistance (ohms)	Weight (oz)	Weight (g)
PAS	3206-012	20	0.375	960	67.2	960	12.5	8	12	35	18	510.3
PAS	3206-008	10	0.75	480	36	480	25	8	12	35	18	510.3
PAS	3206-043	8.33	0.9	400	30	400	30	8	12	35	18	510.3
PAS	3206-009	5	1.5	240	18	240	50	8	12	35	18	510.3
PAS	3206-041	4.17	1.8	200	15	200	60	8	12	35	18	510.3
PAS	3206-044	3	2.5	144	10.8	144	83.33	8	5	6	18	510.3
PAS	3206-010	2	3.75	96	7.2	96	125	8	12	35	18	510.3
PBS	3208-001	300	0.05	7200	200	7200	1.67	8.5	12	32	18	510.3
PBS	3208-002	150	0.1	3600	200	3600	3.33	8.5	12	32	18	510.3
PBS	3208-028	150	0.1	3600	200	3600	3.33	8.5	24	130	18	510.3
PBS	3208-003	75	0.2	1800	155.4	1800	6.67	8.5	12	32	18	510.3
PBS	3208-005	50	0.3	1200	112	1200	10	8.5	12	32	18	510.3
PBS	3235-004	50	0.3	1200	112	1200	10	8.5	12	32	18	510.3
PBS	3208-036	40	0.5	720	89	720	12.5	8.5	12	32	18	510.3
PBS	3208-004	30	0.5	720	66.9	720	16.67	8.5	12	32	18	510.3
PBS	3235-005	30	0.5	720	66.9	720	16.67	8.5	12	32	18	510.3
PBS	3208-009	20	0.75	480	44.6	480	25	8.5	12	32	18	510.3
PBS	3208-016	20	0.75	480	44.6	480	25	6	6	7	18	510.3
PBS	3208-024	20	0.75	480	44.6	480	25	8.5	24	130	18	510.3



MODELS PAS 3205-001 AND PAS 3229-002
UNIPOLAR L/R DRIVE



MODELS PBS 3207-001 AND PBS 3231-002
UNIPOLAR L/R DRIVE



Ø4	Ø3	Ø2	Ø1
White	Black	Blue	Red

CCW ROTATION ↑	1	0	1	0	CW ROTATION ↓
	1	0	0	1	
	0	1	0	1	
	0	1	1	0	

1 = ON, 0 = OFF

SWITCHING SEQUENCE