

IM-15 GEARMOTORS

DC Permanent Magnet Spur Gearmotors

E-2435



torque rating: Standard sintered gear strength to 300 oz. in. Optional cut gears add strength and durability

weight: 15 to 16.5 ounces

gears: Precision high density sintered gear

shaft: Precision-ground; through hardened AISI 1137-1141 steel. Options: length, flats, pinions, gears. Shaft material may change depending upon options selected

bearings: Motor and gearbox bearings are life-lubricated sleeve bearings. Ball bearing option available

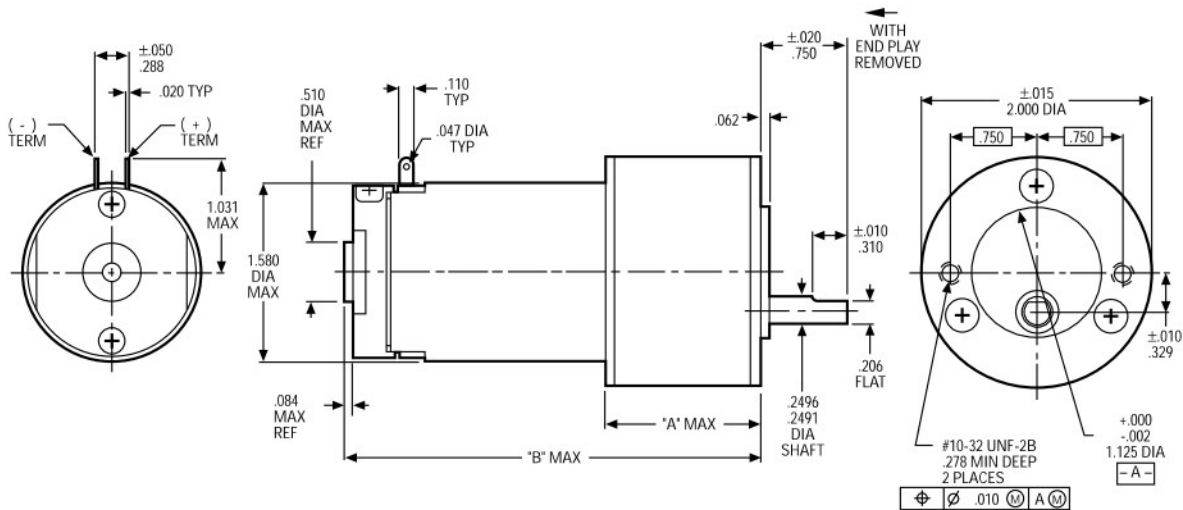
gearbox cover: Steel housing, zinc plate

mounting flange: Die-cast zinc

options available:

- Ball bearings
- Leads
- EMI suppression
- Square mounting flange

Dimensions



E-2435

Standard Part Numbers and Data

STANDARD PART NUMBER PREFIX*	DIMENSION "A" MAX (in.)	DIMENSION "B" MAX (in.)	REDUCTION RATIO	TORQUE MULTIPLIER	CONTINUOUS TORQUE		DIRECTION OF ROTATION
					-2*	-3*	
					(oz. in.)	(oz. in.)	
Short Stack — Motors							
455A100	1.375	3.677	5.90	4.8	19	19	CW
455A101	1.375	3.677	11.50	9.3	37	37	CW
455A102	1.375	3.677	19.66	14.4	57	57	CCW
455A103	1.375	3.677	38.33	28.0	112	112	CCW
455A104	1.375	3.677	65.53	43.2	173	173	CW
455A105	1.375	3.677	127.78	84.3	300	300	CW
455A106	1.375	3.677	218.42	128.9	300	300	CCW
455A107	1.375	3.677	425.93	251.3	300	300	CCW
455A108	1.375	3.677	728.08	385.9	300	300	CW
455A109	1.375	3.677	1,419.75	752.5	300	300	CW
455A110	1.515	3.811	2,426.93	1,164.9	300	300	CCW
455A111	1.515	3.811	4,732.51	2,271.6	300	300	CCW

Long Stack — Motors

455A112	1.375	3.956	5.90	4.8	24	24	CW
455A113	1.375	3.956	11.50	9.3	47	47	CW
455A114	1.375	3.956	19.66	14.4	72	72	CCW
455A115	1.375	3.956	38.33	28.0	140	140	CCW
455A116	1.375	3.956	65.53	43.2	216	216	CW
455A117	1.375	3.956	127.78	84.3	300	300	CW
455A118	1.375	3.956	218.42	128.9	300	300	CCW
455A119	1.375	3.956	425.93	251.3	300	300	CCW
455A120	1.375	3.956	728.08	385.9	300	300	CW
455A121	1.375	3.956	1,419.75	752.5	300	300	CW
455A122	1.515	4.090	2,426.93	1,164.9	300	300	CCW
455A123	1.515	4.090	4,732.51	2,271.6	300	300	CCW

NOTE: 300 oz. in. is the maximum strength of this gearmotor series using standard sintered steel gears. Damage may result if this torque is exceeded

*When You Order

Each of the basic motor armature windings (bottom chart) can be used with any of the gear ratios listed above. To order, state the gear train standard part number prefix, plus a motor armature winding dash number. **EXAMPLE:** 455A100-2 is a 5.9:1 spur gear train with a "-2" short stack motor armature winding, 12 volts, 5,200 rpm no load speed, 3.5 oz. in. rated torque, etc.

Basic Motor Data

ARMATURE WINDING DASH NO.*	VOLTAGE (VDC)	SPEED ±10% NO LOAD (rpm)	CURRENT NO LOAD (max amps)	RATED TORQUE (oz. in.)	CURRENT AT RATED TORQUE (max amps)	TORQUE CONSTANT (oz. in./amps)	RESISTANCE (ohms)
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Short Stack — Motors

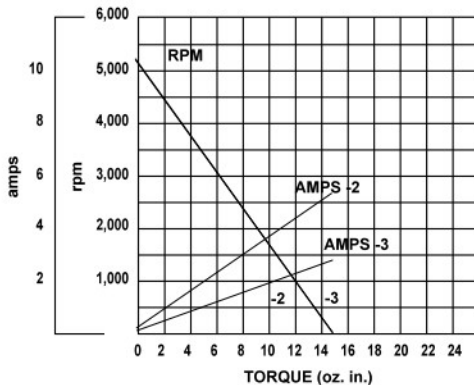
-2	12	5,200	.29	4.0	2.0	2.95	2.25
-3	24	5,200	.14	4.0	1.0	6.00	9.00

Long Stack — Motors

-2	12	5,200	.35	5.0	2.3	3.00	2.00
-3	24	5,200	.17	5.0	1.2	6.10	6.60

Typical Motor Performance

Short Stack Motors
Part Nos.: 455A100 thru 111



Long Stack Motors
Part Nos.: 455A112 thru 123

