



**STANDARD FEATURES:**

- Ball bearings
- High starting torque
- Precision die cast end bells
- Class B rated
- Reversible
- Stainless steel output shafts

**OPTIONAL FEATURES:**

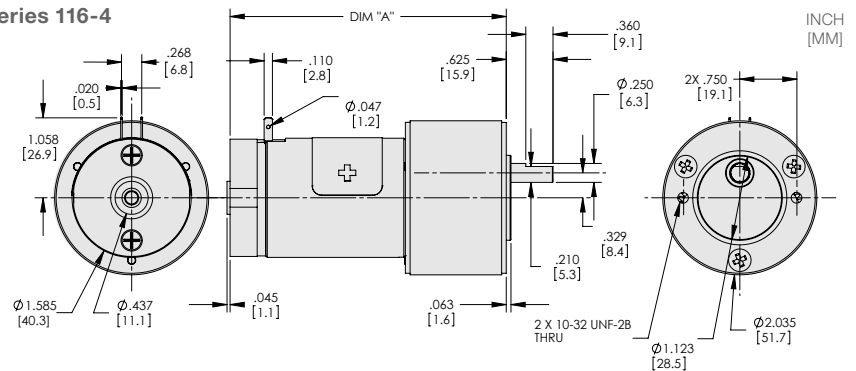
- Encoders up to 2048 CPR
- Voltage ranges to 48VDC
- EMI noise suppression
- Customized shafts
- Customized lead harnesses
- Custom mounting
- Rear shaft extensions
- Integral lead wires
- Gearboxes
  - Planetary  
Ratios up to 2653:1  
(See Series 116-8 & 116-9)
  - Spur  
12:1; 48:1; 192:1; 768:1

**TYPICAL APPLICATIONS:**

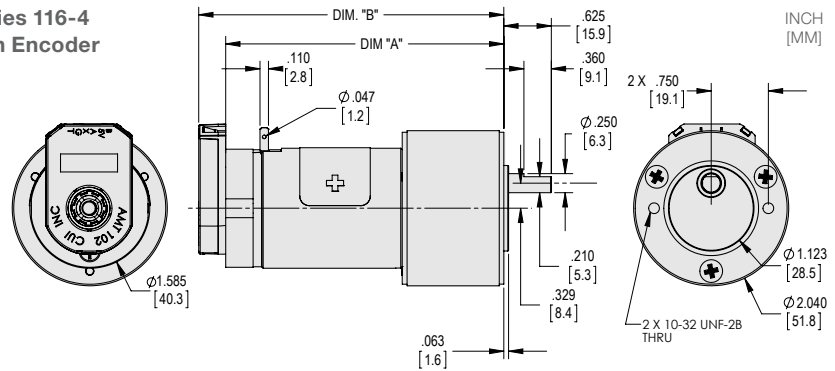
- Printers
- Plotters
- Pumps
- Fans
- Cutting Tools
- Medical Devices
- Robotics
- Beverage Dispensing
- Gaming/Recreational Machines



**Series 116-4**



**Series 116-4 with Encoder**



**Series 116 Part Numbering Example**

116-**□□□□□**\*

**ENCODER OPTION C, D, OR M**

Counts Per Revolution (CPR) (C =100, D = 500 or M = 1000)  
(Others Are Available - See Factory) \*\*\*Otherwise Leave Blank\*\*\*

**Gear Ratio**

Motor Type 4 & 5 (12, 48, 192, or 768)  
Motor Type 6 & 8 (5, 27, 130, or 642)  
Motor Type 7 & 9 (5, 27, 130)

**Motor Speed**

(16, 32, or 48) (e.g. 32 = 3200 RPM)

**Rated Voltage**

(12 or 24)

**Motor Type:**

- 4 = Motor, Terminals, 2" Spur Gearbox, Encoder Optional
- 5 = Motor, Integral Leads, 2" Spur Gearbox, Encoder Optional
- 6 = Motor, Integral Leads, Metal Planetary Gearbox, Encoder Optional
- 7 = Motor, Integral Leads, Plastic Planetary Gearbox, Encoder Optional
- 8 = Motor, Terminals, Metal Planetary Gearbox, Encoder Optional
- 9 = Motor, Terminals, Plastic Planetary Gearbox, Encoder Optional

# Series 116-4

## 1.6" DC Spur Gear Motor



### PERFORMANCE

PART NUMBER	RATIO	VOLTS NOM	NO LOAD SPEED	NO LOAD CURRENT	LOAD SPEED	LOAD TORQUE	LOAD CURRENT	MAX. THEORETICAL TORQUE (* INDICATES GEARBOX LIMIT)			DIM "A" MAX INCH [mm]	DIM "B" MAX INCH [mm]		
			WNL	INL	W	TL	IL	IN-OZ	RPM	AMPS				
			R.P.M.	AMPS	R.P.M.	IN-OZ	AMPS	IN-OZ	REF.	REF.				
			NOM.	MAX.	NOM.	NOM.	MAX.	REF.	REF.	REF.				
116-41216-12	12:1	12	240	0.2	130	78	1.6	190	STALL	4.0	3.75 [96]	4.10 [104]		
116-41232-12			350	0.3	270	68	2.0	316	STALL	9.0				
116-41248-12			500	0.4	410	58	2.6	335	STALL	13.0				
116-41216-48	48:1		60	0.2	33	280	1.6	672	STALL	4.0				
116-41232-48			90	0.3	67	245	2.0	850*	22	7.0				
116-41248-48			125	0.4	100	209	2.6	850*	36	10.0				
116-41216-192	192:1		15	0.2	11	500	0.9	850*	9	1.3				
116-41232-192			22	0.3	19	500	1.3	850*	17	2.0				
116-41248-192			32	0.4	27	500	2.0	850*	25	3.0				
116-41216-768	768:1		4	0.2	3.3	500	0.4	850*	3	0.5			4.00 [102]	4.35 [111]
116-41232-768			6	0.3	5.2	500	0.5	850*	5	0.7				
116-41248-768			8	0.4	7.4	500	0.8	850*	7	1.1				
116-42416-12	12:1	24	240	0.1	150	78	0.8	225	STALL	2.2	3.75 [96]	4.10 [104]		
116-42432-12			350	0.2	276	68	1.1	317	STALL	4.2				
116-42448-12			470	0.2	400	58	1.3	340*	90	6.0				
116-42416-48	48:1		60	0.1	38	280	0.8	810	STALL	2.2				
116-42432-48			85	0.2	70	245	1.0	850*	26	3.2				
116-42448-48			120	0.2	100	209	1.3	850*	47	4.1				
116-42416-192	192:1		15	0.1	12	500	0.4	850*	10	0.7				
116-42432-192			22	0.2	20	500	0.8	850*	18	1.3				
116-42448-192			30	0.2	28	500	1.0	850*	26	1.4				
116-42416-768	768:1		4	0.1	3.4	500	0.2	850*	3	0.3			4.00 [102]	4.35 [111]
116-42432-768			6	0.2	5.2	500	0.3	850*	5	0.4				
116-42448-768			8	0.2	7.4	500	0.4	850*	7	0.5				

For Integral Leads, Replace 116-4 with 116-5.

For Encoder, Add C, D, or M to end of part number. (C=100 CPR, D=500 & M=1000)