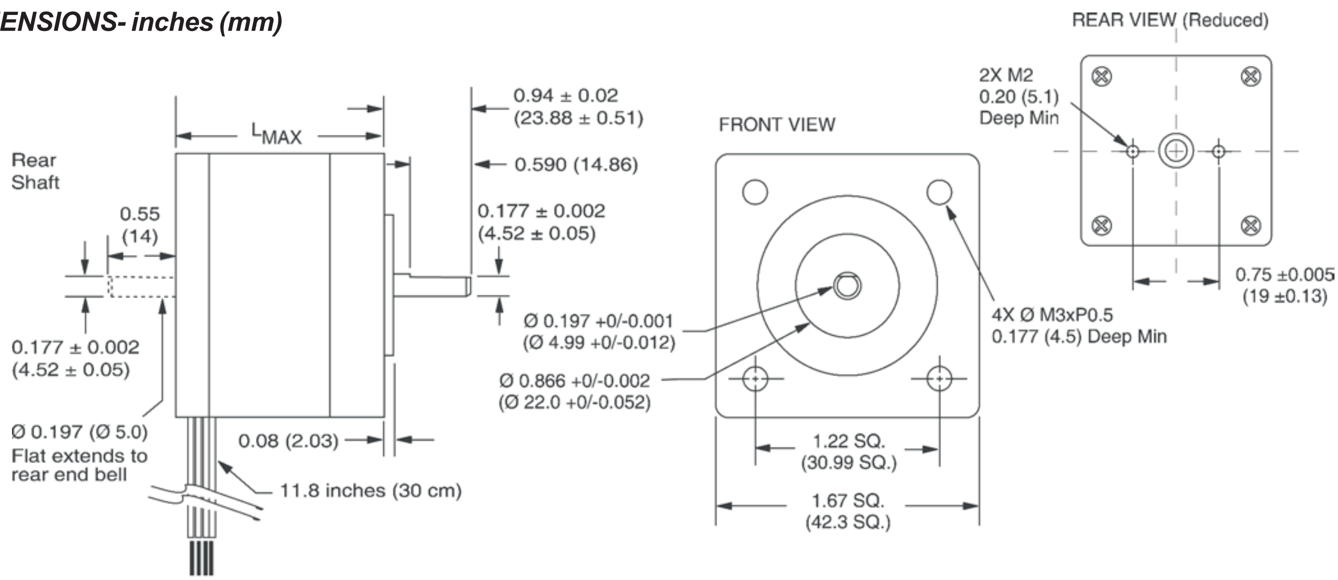
SIZE 17 1.8° HYBRID STEPPING MOTORS

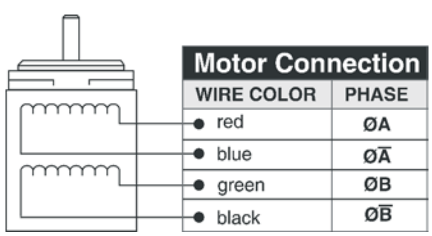
SPECIFICATIONS

Model Number	Holding Torque oz-in (N-cm)	Phase Current Amps	Number of Leads	Phase Resistence Ohms	Phase Inductance mH	Detent Torque oz-in-sec²	Rotor Inertia oz-in-sec²	L_{MAX} Length inches (cm)	Weight oz (gm)
AM17-32-1	32 (23)	1.5	4	1.3	2.1	1.7 (1.2)	0.000538 (0.038)	1.34 (3.4)	7.4 (210)
AM17-60-2	60 (42)	1.5	4	2.1	5.0	2.1 (1.5)	0.0008037 (0.057)	1.57 (4.0)	8.1 (230)
AM17-75-3	75 (53)	1.5	4	2.0	3.85	3.5 (2.5)	0.0011562 (0.082)	1.89 (4.8)	12.7 (360)

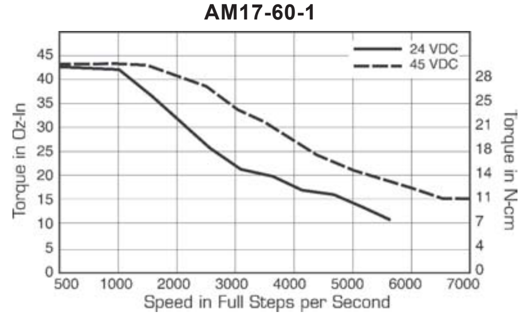
DIMENSIONS- inches (mm)



CONNECTION

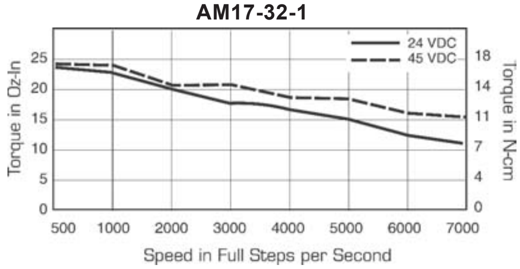


AM17-60-1

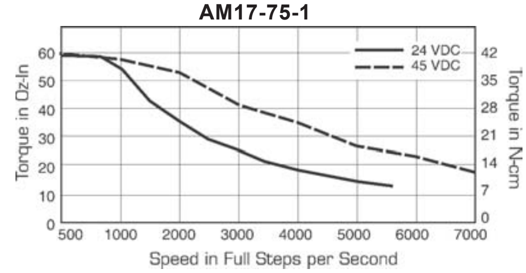


TORQUE SPEED CURVES- 1.5 Amps RMS

AM17-32-1



AM17-75-1

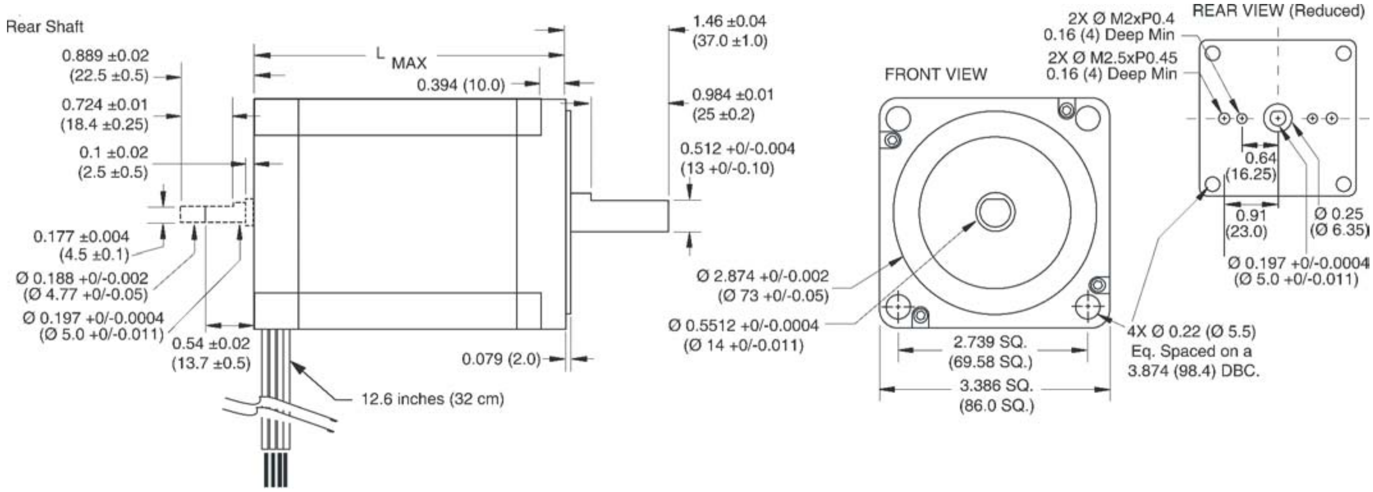


SIZE 34 1.8° HYBRID STEPPING MOTORS

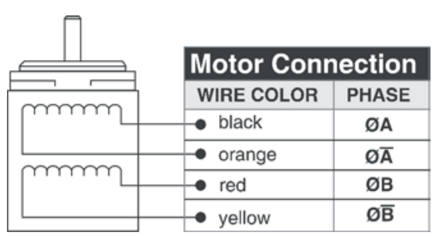
SPECIFICATIONS

Model Number	Holding Torque oz-in (N-cm)	Phase Current Amps	Number of Leads	Phase Resistence Ohms	Phase Inductance mH	Detent Torque oz-in-sec²	Rotor Inertia oz-in-sec²	L_{MAX} Length inches (cm)	Weight oz (gm)
AM34-419-1	419 (296)	6.3	4	0.25	1.6	10.9 (7.7)	0.01416 (1.0)	2.36 (6.0)	60.0 (1700)
AM34-637-2	637 (450)	6.3	4	0.35	3.3	14.2 (10.0)	0.02266 (1.6)	3.15 (8.0)	84.7 (2400)
AM34-1303-3	1303 (920)	6.3	4	0.50	6.6	19.8 (6.9)	0.04815 (3.4)	4.72 (12.2)	141.1 (4000)

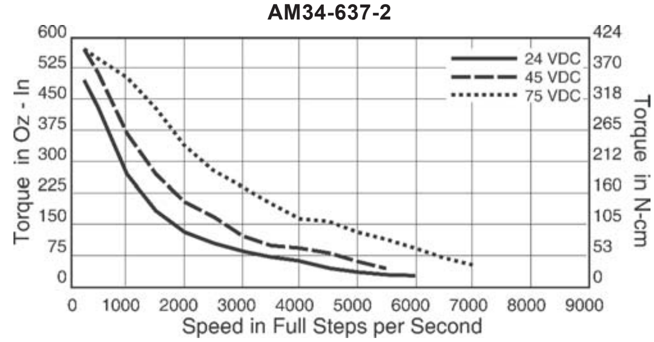
DIMENSIONS- inches (mm)



CONNECTION

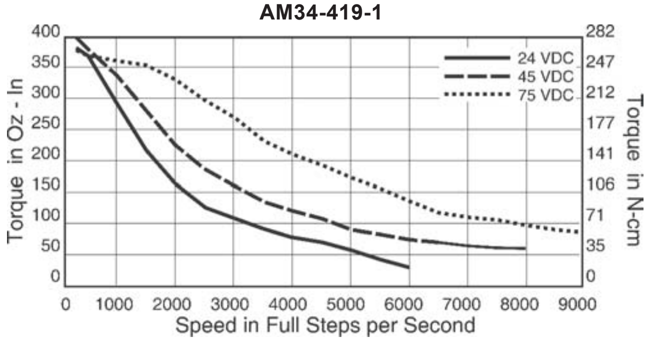


AM34-637-2

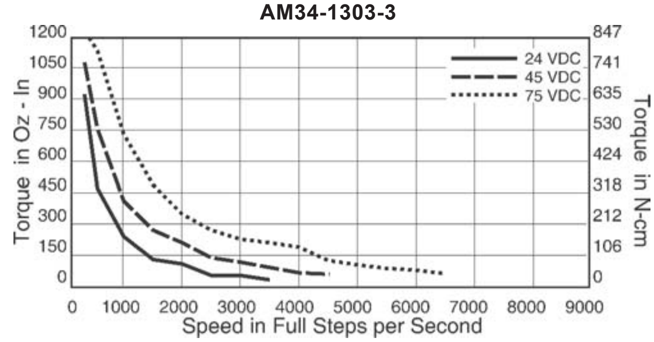


TORQUE SPEED CURVES- 6.3 Amps RMS

AM34-419-1



AM34-1303-3

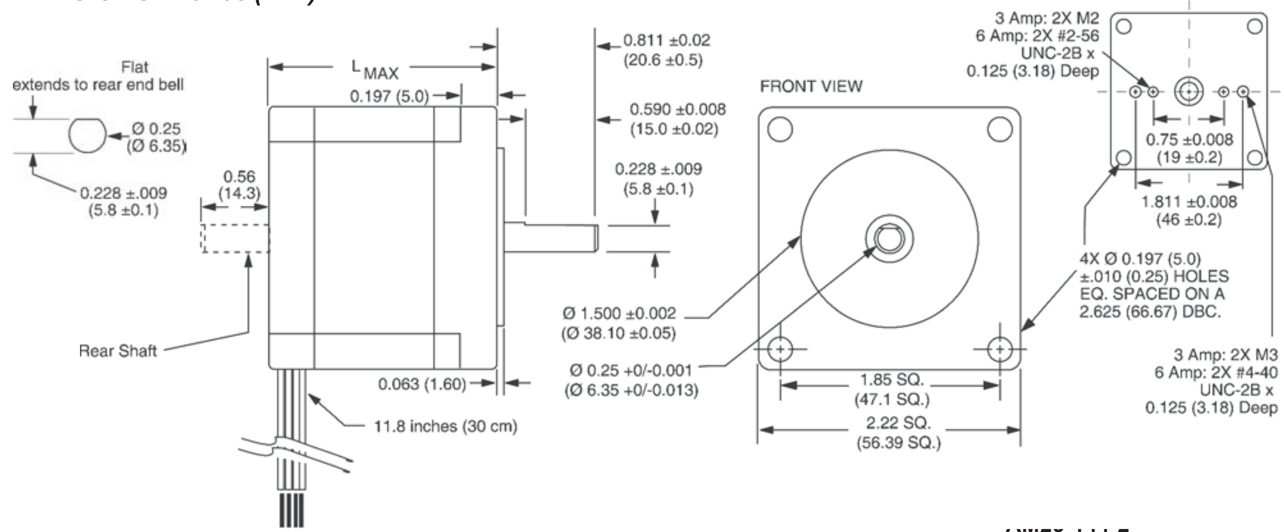


SIZE 23 1.8° HYBRID STEPPING MOTORS

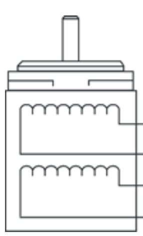
SPECIFICATIONS

Model Number	Holding Torque oz-in (N-cm)	Phase Current Amps	Number of Leads	Phase Resistence Ohms	Phase Inductance mH	Detent Torque oz-in-sec^2	Rotor Inertia oz-in-sec^2	L_{MAX} Length inches (cm)	Weight oz (gm)
AM23-90-1	90 (64)	3.0	4	0.65	1.5	3.9 (2.7)	0.00255 (0.18)	1.77 (4.5)	16.9 (480)
AM23-144-2	144 (102)	3.0	4	0.85	2.6	5.6 (3.9)	0.00368 (0.26)	2.13 (5.4)	21.2 (600)
AM23-239-3	239 (169)	3.0	4	0.95	3.36	9.7 (6.9)	0.0065 (0.46)	2.99 (7.6)	35.3 (1000)

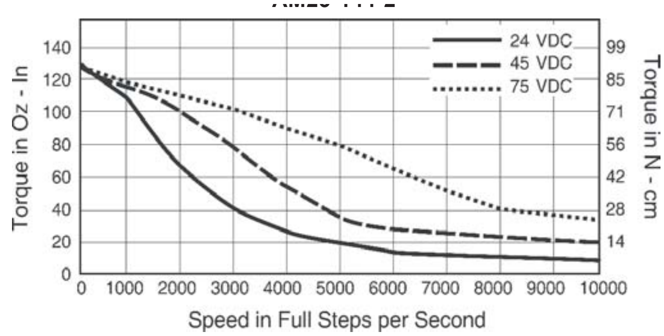
DIMENSIONS- inches (mm)



CONNECTION

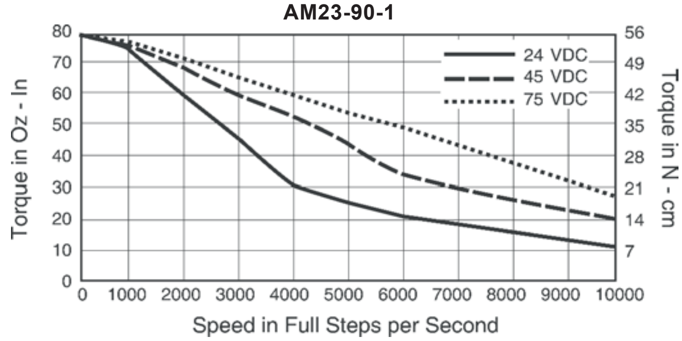


Motor Connection	
WIRE COLOR	**PHASE**
red	ØA
red/white	$\overline{ØA}$
green	ØB
green/white	$\overline{ØB}$

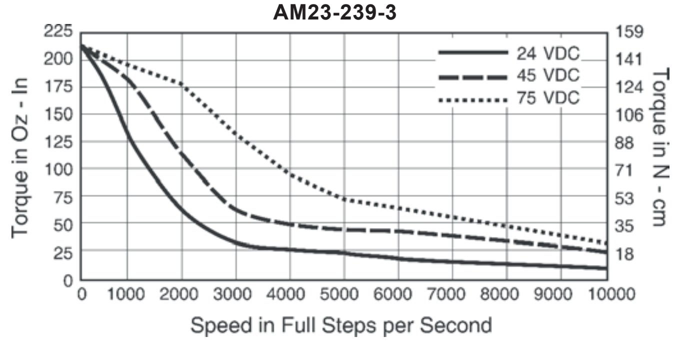


TORQUE SPEED CURVES- 3.0 Amps RMS

AM23-90-1

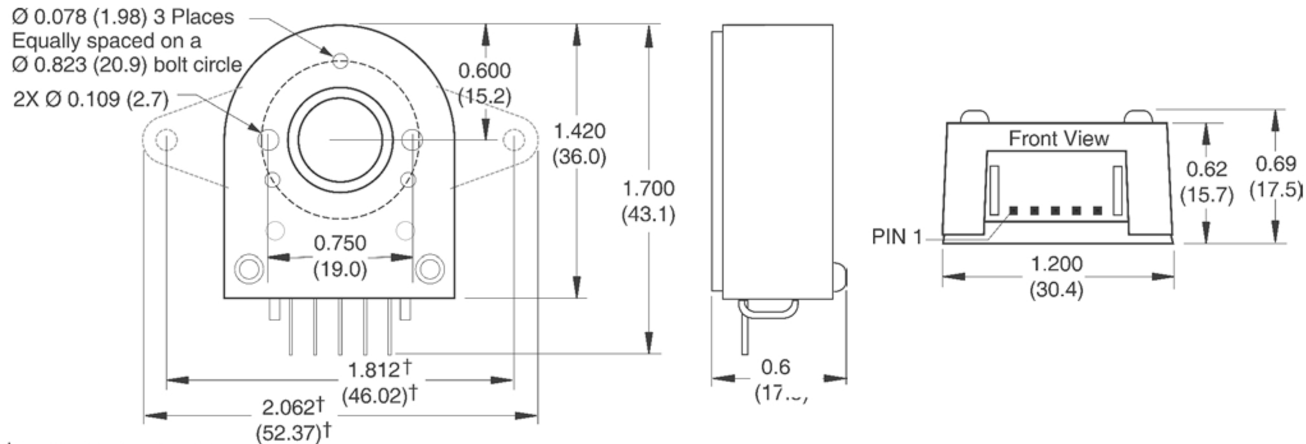


AM23-239-3



500 LINE ENCODER OPTION

DIMENSIONS- inches (mm)

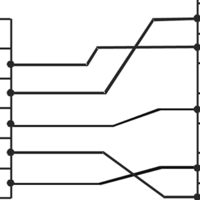


†Applicable for size 34 stepping motors

ENCODER PIN ASSIGNMENTS

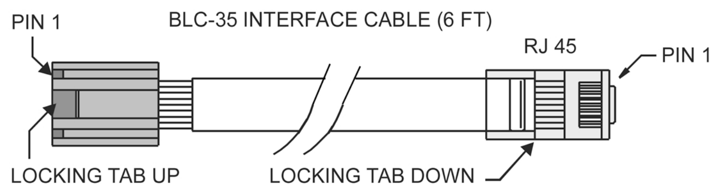
5 PIN PLUG

DESC.	PIN
GND	1
INDEX	2
CH A	3
+5V	4
CH B	5



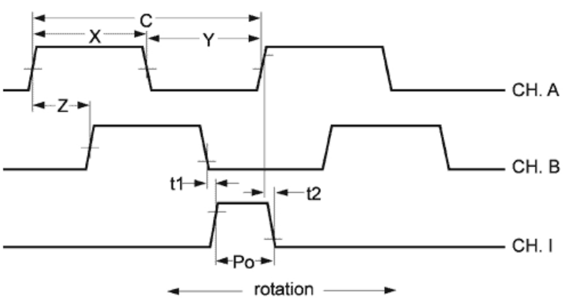
RJ 45

PIN	DESC.
1	Z+
2	GND
3	NC
4	A+
5	NC
6	B+
7	VCC
8	NC



All AM Series motors ordered with encoder option can utilize the optional BLC-35 cable

ENCODER TIMING DIAGRAM



Rotation:
CW - B Leads A
CCW - A Leads B

Characteristics

Parameter	Symbol	Min	Typ	Max	Units
Cycle Error			3	5.5	°e
Symmetry		130	180	230	°e
Quadrature		40	90	140	°e
Index Pulse Width	Po	60	90	120	°e
Index Rise After CH B or CH A fall	t1	-300	100	250	ns
Index Fall After CH A or CH B risel	t2	70	150	1000	ns