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Size 23 stepper motor with optional encoder.

Applied Motion offers stepper motors with encoders mounted on them. This document details the specifications of the standard encoder options and gives dimensions of these encoders.

Encoders offered are Differential Encoders with Line Drivers. these provide two channels of signals with complementary signals. Versions with Index also offer Z channel and its complementary signal.

Pulse Counts

Encoders without Index Pulse

100x
200x
500x
1000x

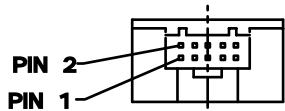
Encoders with Index Pulse

100i
200i
500i

Ordering

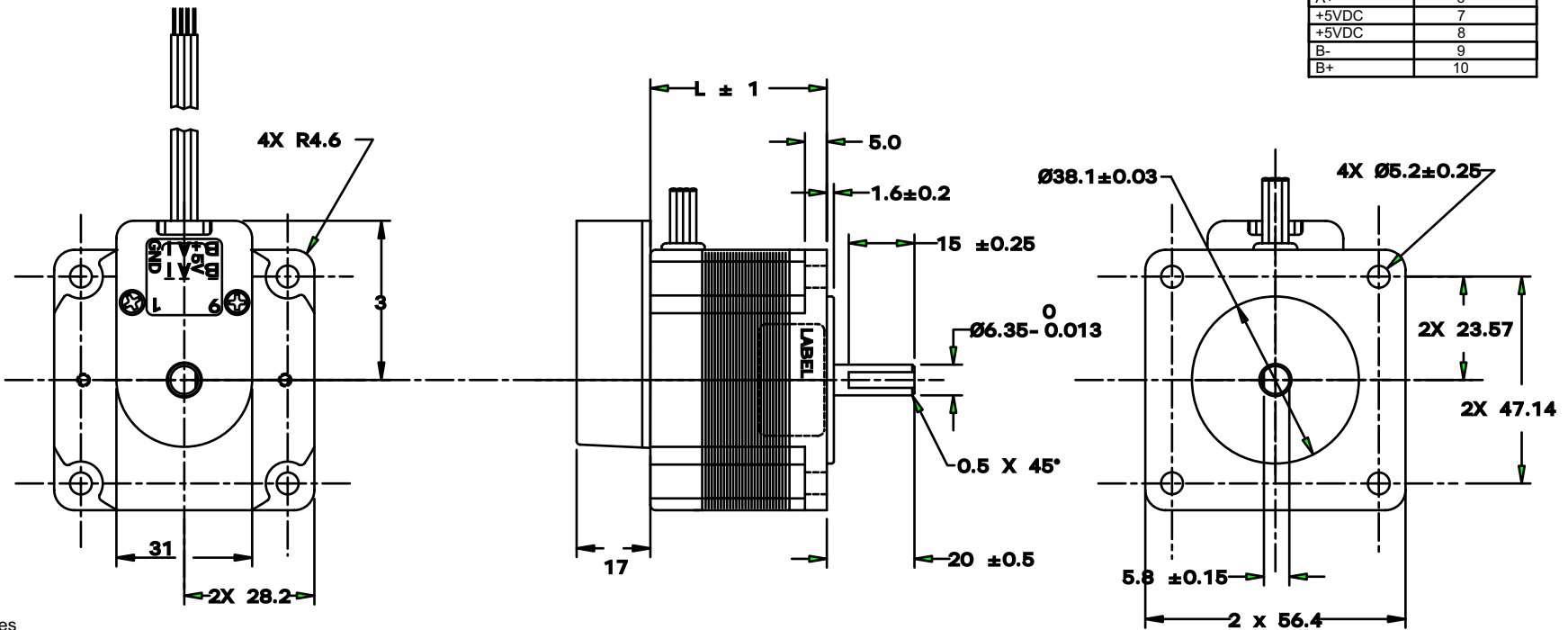
Add the Pulse Count type to the end of the motor part number. Remember that a double shaft motor is required.

example HT23-400D-500i



Encoder Signals

Signal	Pin No
GND	1
GND	2
Z-	3
Z+	4
A-	5
A+	6
+5VDC	7
+5VDC	8
B-	9
B+	10



Notes

1. Double shaft version required for encoder mounting.
2. Encoder - is differential with line driver.

Versions available -

- Without index - 100x
- 200x
- 500x
- 1000x
- With Index - 100i
- 200i
- 500i

3. Part Number example- HT17-075D-500i
4. Encoder not supplied with cable or connector.

TOLERANCES		THIRD ANGLE PROJECTION		APPLIED MOTION PRODUCTS, INC.	
DECIMALS: MM (INCH) X.XXX = ±0.01 (.005) X.XX = ±0.10 (.010) X.X = ±0.20 (.020)				STEP MOTOR OUTLINE	
ANGLES: MACH. = ±.5° CHAM. = ±5°					
COMPUTER DATA		APPROVALS	DATE	B	DWG NO. HT23 with Encoder
BASE DRAWING		DRAWN			
		CHECKED		REV	
		APPROVED		SCALE: FULL	SHEET 1 OF 1

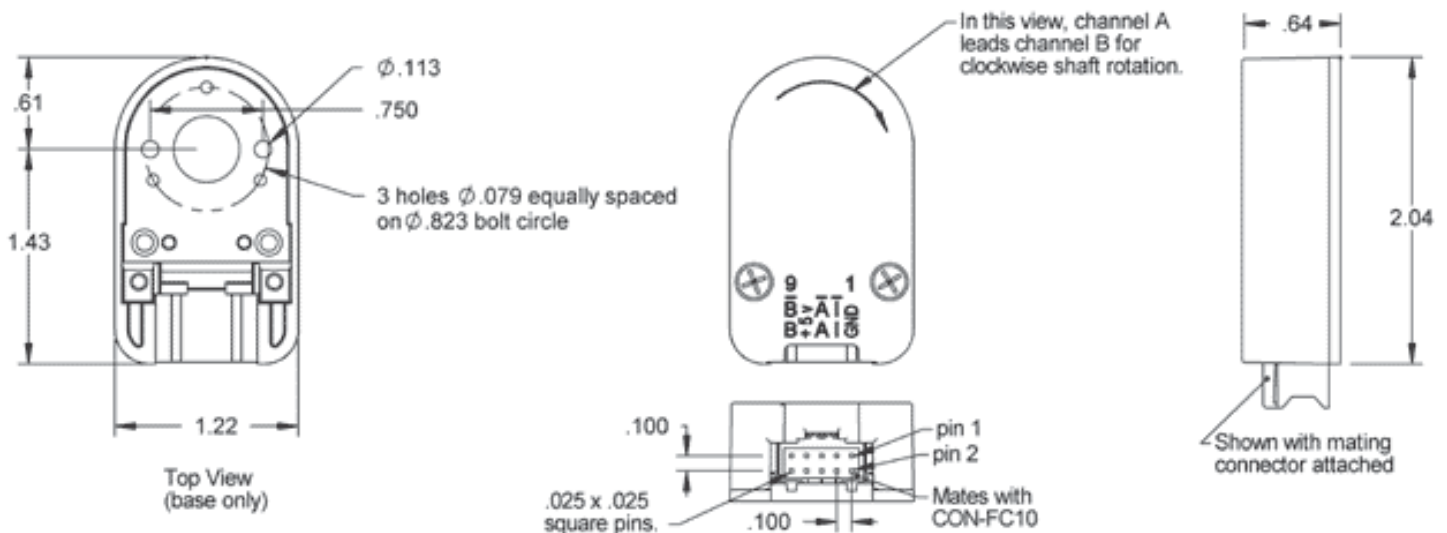


Electrical Specifications:

Specification	Min.	Typ.	Max.	Units	Notes
Supply	4.5	5.0	5.5	Volts	
Current Consumption Index	-	65	95	mA	No load
Current Consumption <1000 CPR	-	25	50	mA	No load
Current Consumption	-	65	95	mA	No load
Output Voltage Sourcing to +5	2.4	3.4	-	Volts	@ -20mA
Output Voltage Sinking to Ground	-	0.4	0.8	Volts	@ 20mA

Pin-outs:

Pin	Standard
1	Ground
2	Ground
3	Index-
4	Index+
5	A- channel
6	A+ channel
7	+5VDC power
8	+5VDC power
9	B- channel
10	B+ channel



Cables and Connectors

Basic Connector with pins

Description: One connector shell (Molex# 15-04-5104) and two IDC 5-pin inserts (Molex# 14-60-0058) for 22-26 AWG wires.



Standard Cable

Description: 10-pin finger-latching connector on one end with 6ft , 8-conductor shielded round twisted pair 24 AWG cable.

