LIGHT DUTY **SERIES EC23**

Miniature Encoder

Key Features

- High 5000 PPR Capability
- Optional Screw Terminal Connections
- Standard Size 23 (2.3" diameter)







tion) including output loa Accuracy: (Worst case any edge to any other edge) ±10.8°/PPR Outputs: 7272 Push-Pull: 40 Format: Two channel quadrature (AB) with op- tional Index (Z) and complementary outputs 7272 Differential Lin source Phase Sense: A leads B for CW or CCW shaft rotation as viewed from the shaft end of the encoder; see Ordering Information 7273 Open Collector Noise Immunity: Terestor	Shaft Runout: 0.001" max. TIR OmA, sink or source Shaft Speed: 10,000 RPM max. mechanic Line Driver: 40 mA, sink or Shaft Tolerance: Nominal -0.0004"/-0.000 Starting Torque: Shielded bearings: 0.1 oz-in max.; tor: 40mA, sink max Sealed bearings: 0.2 oz -in max.
edge) ±10.8°/PPR 7272 Push-Pull: 40 Format: Two channel quadrature (AB) with op- tional Index (Z) and complementary outputs 7272 Differential Lines Phase Sense: A leads B for CW or CCW shaft 7273 Open Collecto rotation as viewed from the shaft end of the encoder; see Ordering Information Frequency Response Quadrature Phasing: 90° ± 25° electrical Electrical Immunity	Line Driver: 40 mA, sink or tor: 40mA, sink max Shielded bearings: 0.1 oz-in max.; Sealed bearings: 0.2 oz -in max
ional Index (Z) and complementary outputs source Phase Sense: A leads B for CW or CCW shaft 7273 Open Collecto rotation as viewed from the shaft end of the Frequency Response encoder; see Ordering Information Noise Immunity: Te Quadrature Phasing: 90° ± 25° electrical Electrical Immunity	tor: 40mA, sink max Shielded bearings: 0.1 oz-in max.; Sealed bearings: 0.2 oz -in max
Phase Sense: A leads B for CW or CCW shaft 7273 Open Collecto rotation as viewed from the shaft end of the Frequency Response encoder; see Ordering Information Noise Immunity: Te Quadrature Phasing: 90° ± 25° electrical Electrical Immunity	Sealed bearings: 0.2 oz -in max
encoder; see Ordering Information Noise Immunity: Te Quadrature Phasing: 90° ± 25° electrical Electrical Immunity	Sealed Dealings. 0.2 02III IIIax.
Quadrature Phasing: 90° ± 25° electrical Electrical Immunity	Tested to EN61326-1
Symmetry: 180° + 25° electrical short circuit protect	ity: Reverse polarity and Housing and Cover: Aluminum
	cted Shaft Material: Stainless Steel
ndex: 90° ± 25° electrical, gated with B Termination: Cable	le, Screw Terminals Disc Material: Glass
Vaveforms: Squarewave with rise and fall times ess than 1 microsecond into a load capacitance foil shield; 3 twisted	i, 105 °C rated, overall Weight: 13 oz. max. ed pairs 26 AWG (output inted pairs 24 AWC (input
of 1000 pf signals), plus 2 twis power)	visted pairs 24 AWG (input ENVIRONMENTAL Operating Temperature: Standard: 0 to +70 °C

	ELECTRICAL CONNECTIONS				Differen		
		/ire color codes are r models that are sp			Term.	Function (If Used)	
		ed cable.			Α	Signal A	
	pre-wired cable.				В	Signal B	
		Single Ende			С	Signal Z	
	Term.	Function (If Used)	Wire Color Code		D	Power Source	
		· · ·			E	No Connection	
	A	Signal A	BRN		F	Common	
	В	Signal B	ORN		G	Case	
	С	Signal Z	YEL		H	Signal Ā	
	D Power Source		RED		1	Signal B	
E No Connection F Common		BLK		J	Signal Z		
				J	Signal Z		
	G	Case	GRN	1			

5 min. to	26 \	/DC m	nax a	t 80 m	nA ma	x not	
including						,	
Outputs:							
	ь в.						
7272 Pus	n-Pl	JII: 40	ma, s	SINK OF	sour	се	
7272 Diffe	eren	tial Li	ne Dr	iver: 4	0 mA	, sink	or
source							
	n ()	llooto	r. 10	m /	nk m		
7273 Ope	11 60	JIIecic	1.40	na, si	IIK IIId	1X	
Frequenc	y Re	espon	se: 28	50 kHz	z min.		
Noise Imi	mun	itv: T	ested	to EN6	51326·	-1	
Electrical							
			-	10130	μυιατι	.y anu	
short circ							
Terminati	ion:	Cable	e, Scre	ew Ter	rminal	S	
Cable: PV	/C ja	icket,	105 °	C rate	d, ove	erall	
foil shield	: 3 t	wiste	d pair	s 26 A	ŴG (outou	t l
signals), p							
	Jus	2 1001		/un 5 2	- 7.00	a (inp	uı
power)							
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ORN

YEL RED

BLK GRN BRN/WH ORN/WH YEL/WH

MECHANICAL
Shaft Size: 1/4"
Shaft Loading: 5 lbs. max radial and axial
Shaft Runout: 0.001" max. TIR
Shaft Speed: 10,000 RPM max. mechanical
Shaft Tolerance: Nominal -0.0004"/-0.0007"
Starting Torque:
Shielded bearings: 0.1 oz-in max.;
Sealed bearings: 0.2 ozin max.
Moment of Inertia: 2.83 x 10 ⁻⁴ oz-in-sec ²
Housing and Cover: Aluminum
Shaft Material: Stainless Steel
Disc Material: Glass
Weight: 13 oz. max.
ENVIBONMENTAL
ENVIRONMENTAL
Operating Temperature:
Standard: 0 to +70 °C
Storage Temperature: -40 to +90 °C
Shock: 50 G's for 11 milliseconds duration
Vibration: 5 to 2000 Hz at 20 G's
Humidity: Up to 98% (non-condensing)

Enclosure Rating: NEMA12/IP54 (dirt tight,

splashproof)

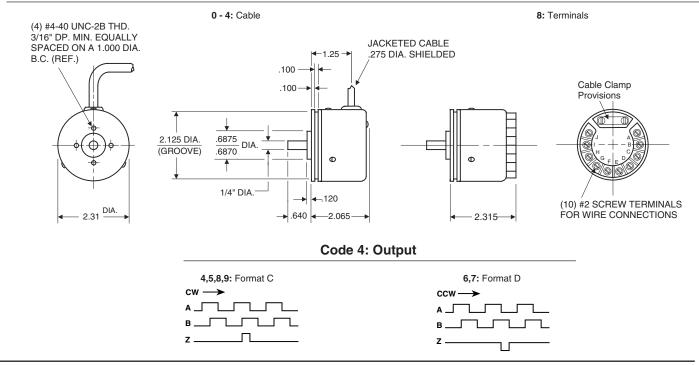


SERIES EC23

	To order, comp		J Information er with code numbers from t	the table below:	
Code 1: Model	Code 2: Pulses/Rev	Code 3: Mechanical	Code 4: Output	Code 5: Electrical	Code 6: Termination
EC23 Size 23 Enclosed	3000 3600 4096 5000	Ordering 1/4" Shaft, Shielded Bearings, 2.31" Dia. Servo Mount w/ 4-Hole Face Mount 1 1/4" Shaft, Sealed Bear- ings, 2.31" Dia. Servo Mount w/ 4-Hole Face Mount	 g Information 4 Single Ended, with Index, Format C 5 Differential, with Index, Format C 6 Single Ended, with Index, Format D 7 Differential, with Index, Format D 8 Single Ended, No Index, Format C 9 Differential, No Index, Format C 	 5-26V in, 5-26V Open Collector w/2.2kΩ Pullups out 5-26V in, 5-26V Open Collector out 5-26V in; 5V out, Push- Pull out 5-26V in; 5V Line Driver out 5-26V in, 5-26V Line Driver out 	 0 18" Cable, Side Exit 1 3' Cable, Side Exit 2 6' Cable, Side Exit 3 10' Cable, Side Exit 4 15' Cable, Side Exit 8 Screw Terminals

Dimensions (inches/mm)

Code 6: Termination



Worldwide Brands: NorthStar™ • Dynapar™ • Hengstler™ • Harowe™



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