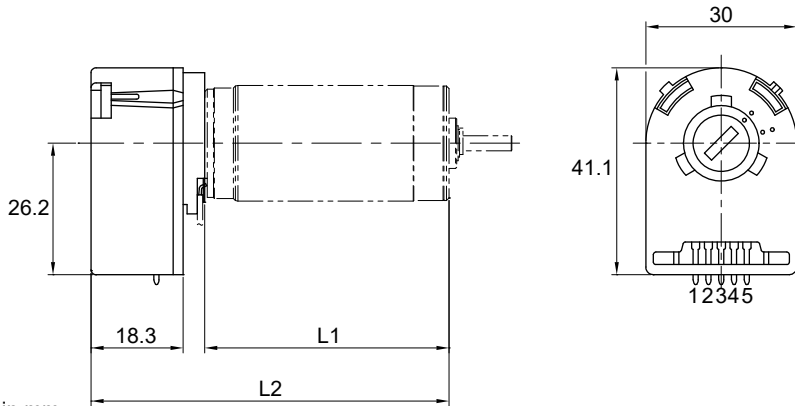


HEDS 5500/5540

3 Channel Optical Encoder



Encoder Connections	
1	Mass
2	NC
3	Channel A
4	Vcc
5	Channel B

Dimensions in mm.

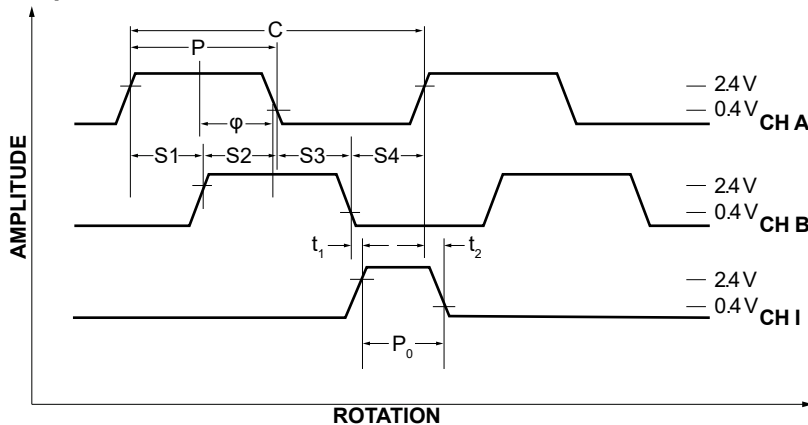
Electrical Data	Characteristics @ 22° C	Unit
1 Number of Lines Available	96 to 1024	LPR
2 Supply Voltage	5 ± 10%	Volt
3 Supply Current	Typical/Maximum 17 - 57	mA
4 Output Signal	2 channels, square wave in quadrature 3 Channels (with index)	
5 Electrical Phase Shift	90 ± 10	degree
6 Maximum Count Frequency	100	kHz
7 Operating Temperature Range:	-40 to +100	°C (°F)
8 Code Wheel Moment of Inertia	0.6 X 10 <sup>-7</sup>	10 <sup>-7</sup> x kgm <sup>2</sup>
9 Weight	17	g (oz)

Available on Motor Types*	22N98	23GST	26N48	28LT12	28DT12
Length with motor mm (in)	54.9 (2.16)	58.6 (2.31)	63 (2.48)	63.8 (2.51)	85.2 (3.35)

Available on Motor Types*	35NT
Length with motor mm (in)	83.45 (3.29)

\*On request, encoder available on other motors. Encoder also available with line-driver.

Output Waveforms



**Phase (φ):** This value is nominally 90°e for quadrature output.

**Index Pulse Width (P<sub>0</sub>):** This value is nominally 90°e or 1/4 cycle.

**State Width (S):** Each state is nominally 90°e.

**Pulse Width (P):** This value is nominally 180°e or 1/2 cycle.

**One Cycle (C):** 360°e, 1 bar and window pair.

**Channel I rising time (t<sub>1</sub>):** The value is nominally 100 ns.

**Channel I falling time (t<sub>2</sub>):** The value is nominally 150 ns.