

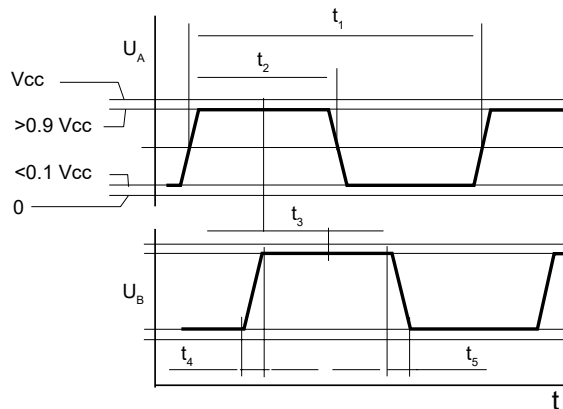
Dimensions in mm.

Encoder Type D Connections	
1	Motor +
2	Vcc
3	Channel A
4	Channel B
5	GND
6	Motor -
7	Strobe
8	NC
9	NC
10	NC

Electrical Data	Characteristics @ 22° C	Unit
1 Number of Lines Available	12	LPR
2 Supply Voltage	5	Volt
3 Supply Current	Typical 4	mA
4 Rise Time	125	ns
5 Fall Time	50	ns
6 Output Signal	Two channels square wave	
7 Electrical Phase Shift	90 ± 40	degree
8 Signal Ratio	50 ± 25	%
9 Maximum Count Frequency	10	kHz
10 Operating Temperature Range:	-20 to +85	°C (°F)
11 Code Wheel Moment of Inertia	0.1	10 <sup>-7</sup> x kgm <sup>2</sup>
12 Weight	Varies by motor size. Contact us.	g (oz)

Available on Motor Types	13N88
Length with motor mm (in)	40.4 (1.59)

Typical Encoder Output Signal



$t_1$	Period
$t_2/t_1$	Signal Ratio
$t_3$	Phase Shift
$t_4$	Rise Time
$t_5$	Fall Time