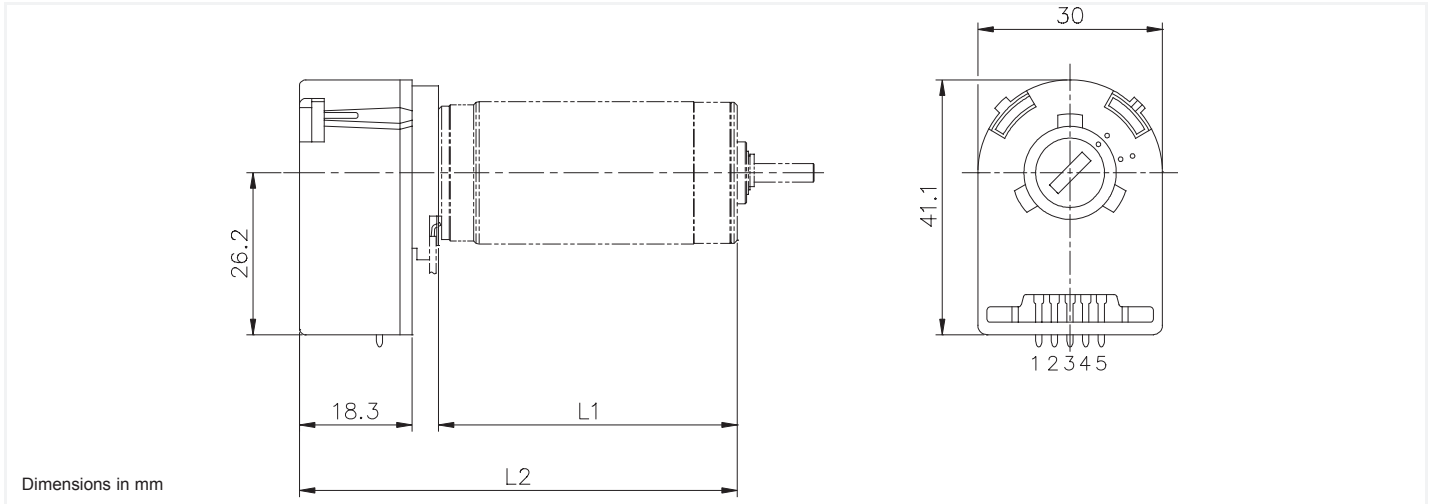


HEDS 5500/5540

Optical Encoder



Characteristics @ 22°C

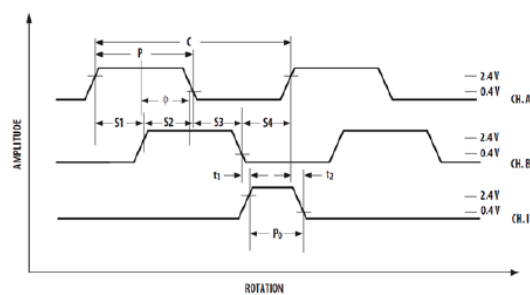
| | | | |
|---|------------------------------|---|-------------------------------------|
| 1 | Number of Lines Available | 96 to 1024 | LPR |
| 2 | Supply Voltage | 5 ± 10% | Volt |
| 3 | Supply Current | Typical 17 - 57 | mA |
| 4 | Output Signal | 2 channels, square wave in quadrature 3 Channels (with index) | CMOS |
| 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 ⁻⁷ | 10 ⁻⁷ x kgm ² |
| 9 | Weight | 17 | g (oz) |

| Available on motor types | 22N48 | 22N98 | 22V48 | 23GST | 26N48 | 28LT12 | 28D11 | 28DT12 |
|-----------------------------|-------------|-------------|-------------|-------------|-----------|-------------|-------------|-------------|
| Length with motor - mm (in) | 54.9 (2.16) | 54.9 (2.16) | 57.2 (2.25) | 58.6 (2.31) | 63 (2.48) | 63.8 (2.51) | 82.1 (3.23) | 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 (PO): 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 electrical degrees (°e), 1 bar and window pair
Channel I rising time (t1): The value is nominally 100 ns
Channel I falling time (t2): The value is nominally 150 ns