HR series

Infinite wheel Encoder • non contacting Hall effect technology • 24 positions



351-HR360m2206

DISTINCTIVE FEATURES

Infinite wheel Encoder Above 1 Million cycles Backlighting option Electronics sealed to IP68 360° roller



ENVIRONMENTAL SPECIFICATIONS

- Operating Temperature: -30 °C to +70 °C (-22 °F to +158 °F)
- Storage Temperature: -40 °C to +85 °C (-40 °F to +185 °F°)
- Electronics sealed to IP68 according IEC 60529
- Shock resistance: 50 g during 11 ms
- Salt spray: IEC 60068-2-11 test Ka



ELECTRICAL SPECIFICATIONS

- Supply Voltage Range: 5 VDC ± 0.50 VDC
- Resolution: 128pulses per revolution could be modified with programming Manchester code on Man_Out Wire
- Reverse Polarity Max: -40 VDC max
- Overvoltage Max: 40 V
- Consumption: 17mA ±3,4mA
- LED supply: 6 VDC 10 mA



- APEM SAS patented design
- Operating Force between position: $2.5 \text{ N} \pm 0.5 \text{N}$ (with 24 positions)
- Expected Life: 1 000 000 lifecycles
- Mass/Weight: 11 g ±2 g (0.4 oz ± 0.07 oz)





JOYSTICKS



1

HR series

Infinite wheel Encoder • non contacting Hall effect technology • 24 positions

D MATERIALS

- Body: Polyamide
- Wheel: Polyamide
- Electronics sealing: epoxy
- Connector: polyester (Molex 510210700)
- Multiwire lead AWG28, length 140 mm



WITHOUT BACKLIGHTING

| PIN | FUNCTION | COLOR |
|-----|------------------------|--------|
| 1 | Power supply: +VDC 5 V | Red |
| 2 | Man-Out | Brown |
| 3 | Out_B | Blue |
| 4 | Out_A | Yellow |
| 5 | Out_Z | White |
| 6 | | |
| 7 | Ground 0V | Black |

| PIN | FUNCTION | COLOR |
|-----|------------------------|--------|
| 1 | Power supply: +VDC 5 V | Red |
| 2 | Man_Out | Brown |
| 3 | Out_B | Blue |
| 4 | Out_A | Yellow |
| 5 | Out_Z | White |
| 6 | LED- | Green |
| 7 | Ground 0V | Black |



Wiring harness with multiwire leads AWG28 - Length 140mm (5.51in)

WITH BACKLIGHTING

ONE FULL MANGETIC REVOLUTION



JOYSTICKS

HR series

Infinite wheel Encoder • non contacting Hall effect technology • 24 positions



APEM

HR series

Infinite wheel Encoder • non contacting Hall effect technology • 24 positions

INFINITE WHEEL





