

# HR series

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



## 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  $\pm$  0.50 VDC
- Resolution: 128 pulses 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  $\pm$ 3,4mA
- LED supply: 6 VDC 10 mA



## GENERAL SPECIFICATIONS

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

The company reserves the right to change specifications without notice.



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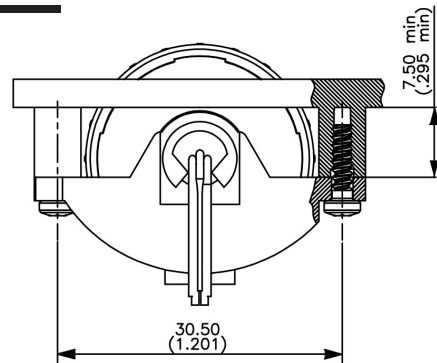


## MATERIALS

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



## MOUNTING



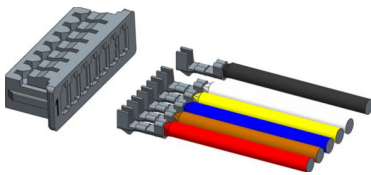
## CONNECTIONS

### 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

### WITH 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	LED-	Green
7	Ground 0V	Black

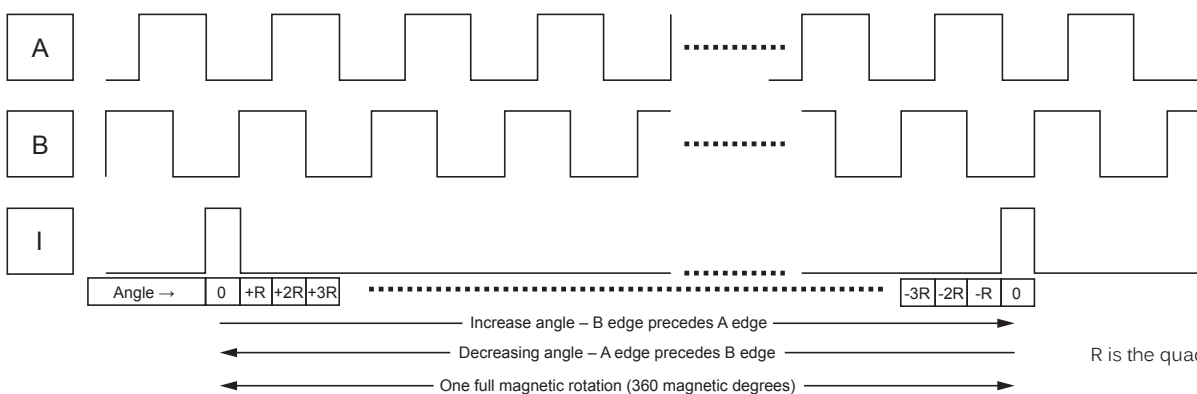


Wiring harness with multiwire leads  
AWG28 - Length 140mm (5.51in)



## OUTPUT

### ONE FULL MAGNETIC REVOLUTION

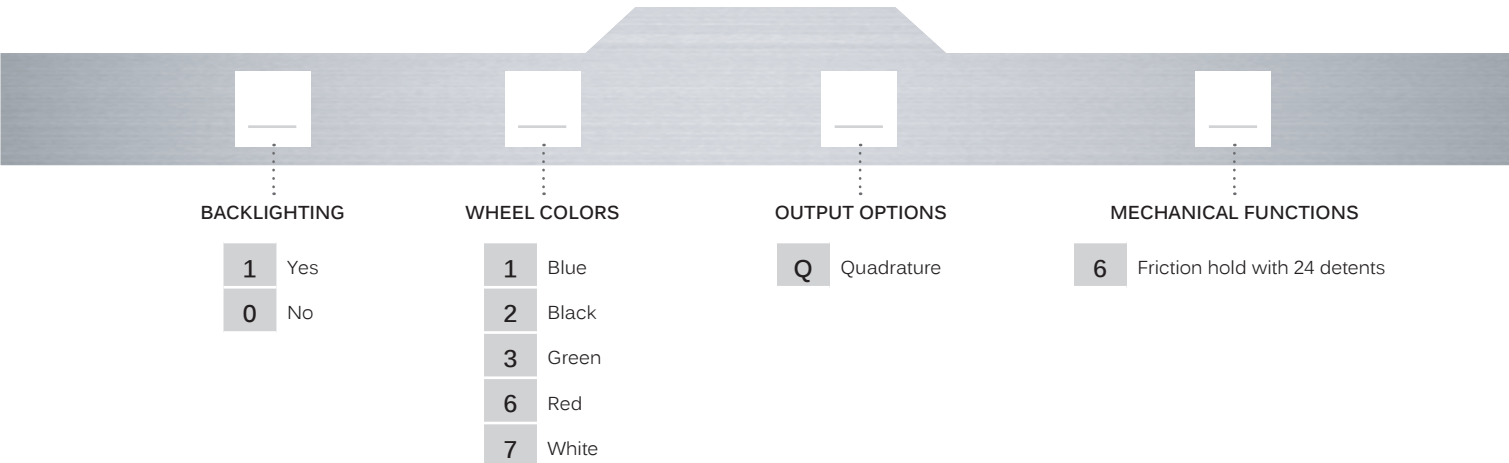
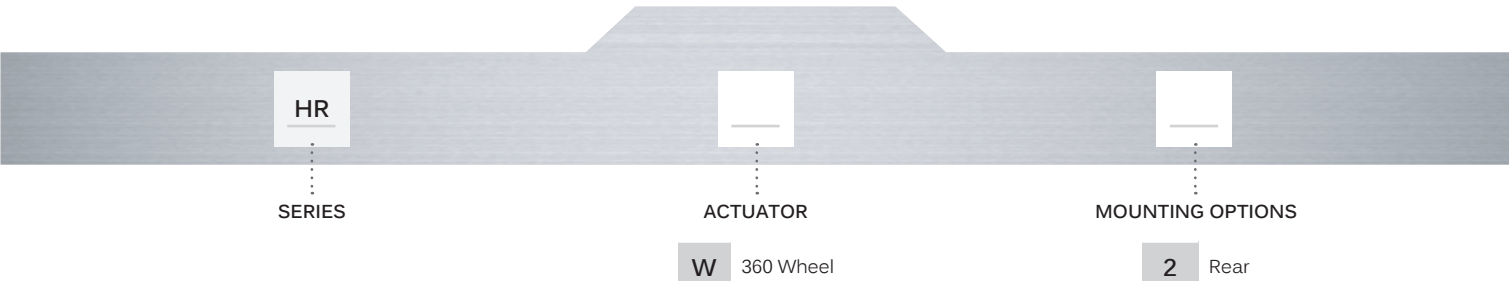


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## BUILD YOUR PART NUMBER



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## INFINITE WHEEL

