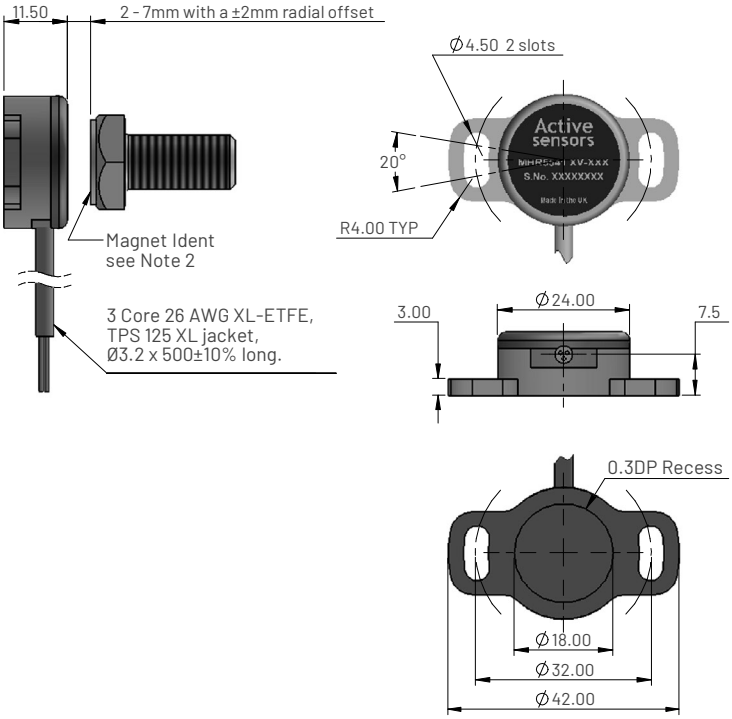
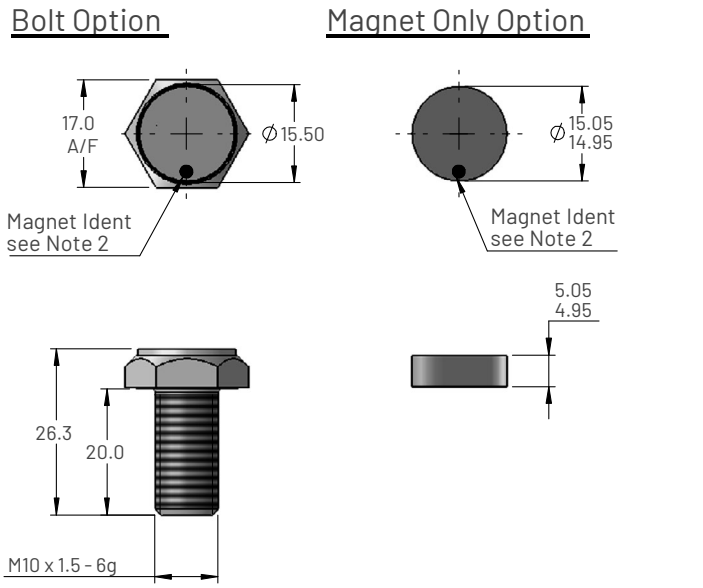
Dimensions for MHR5540 - Flange mounting with magnet options



Dimensions for MHR554X XV-XXX Magnet holder options



Ordering code

MHR554X XV-XXX

Magnet holder option
- 1 = Bolt option
- 2 = Magnet only option

Output direction (viewed on shaft)
- C = Clockwise
- A = Anticlockwise

Electrical angle in degrees

Electrical and mechanical specification for MHR5500 Series

Input specification			
Supply voltage (Vs)	5.0±10% regulated	8 to 30 unregulated	VDC
Over voltage protection	Up to 50		VDC
Supply current	<15		mA
Reverse polarity protection	Up to -10		VDC
Power on settlement time	<100		ms
Input voltage rise time	0.25 minimum		V/ms
Output specification			
Output type	Analogue voltage		
Output direction	Clockwise or anticlockwise (specified at time of order)		
Voltage output (Iout)	0-Vs (+5)	0 - 5.0	mA
Line regulation	Ratiometric with Vs	<0.01	%FS
Monotonic range	Linear Range (see note 5)		
Load resistance (max)	>10K		Ohms
Output noise	<5		mV RMS
Performance specification			
Measurement range	20 to 360 in 1° increments		°
Resolution	0.025		% of measurement range
Non-linearity (Note 4)	<±0.25		%FS
Temperature coefficient (Vout)	<±0.003	<±0.011	%FS/°C
Update rate (nominal)	500		Hz
Max operating speed	600		RPM
General specification			
Weight (approx.)	17		grams
Protection/sealing	Electronic housing IP68 and IP69K		
Life	Virtually infinite		dependant on environment
Dither life	Contactless - no degradation due to shaft dither		
Operational temperature	-40 to +150	See de-rating graph	°C
Storage temperature	-55 to +150		°C
Materials	Case: Aluminium 6082, Top cap: GF polymer, Shaft: Stainless steel 316		

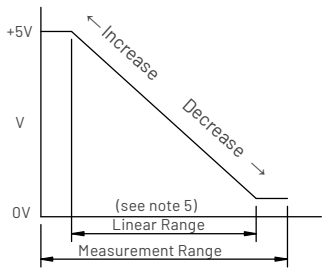
Notes

1. Incorrect wiring may cause internal damage.
2. When magnet ident is facing cable exit, instrument is mid-travel (2.5V output).
3. Do not operate between 5.5V and 8V.
4. Non-linearity is calculated from least squares best fit method over the Linear Range.
5. Linear Range = Measurement range x 0.995 Nom.
6. Due to hall effect technology used in this device, ferrous materials and magnetic fields close to the sensor may influence output.
7. General dimension tolerance is ±0.25.

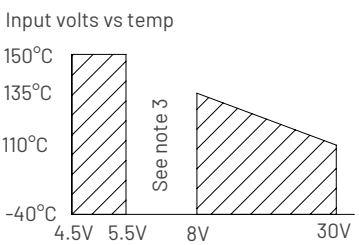
Electrical connections (see note 1)

Wire Colour	Function
Red	Supply Voltage (Vs)
White	Output Voltage (Vout)
Black	Ground

Typical output



Input voltage de-rating graph



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