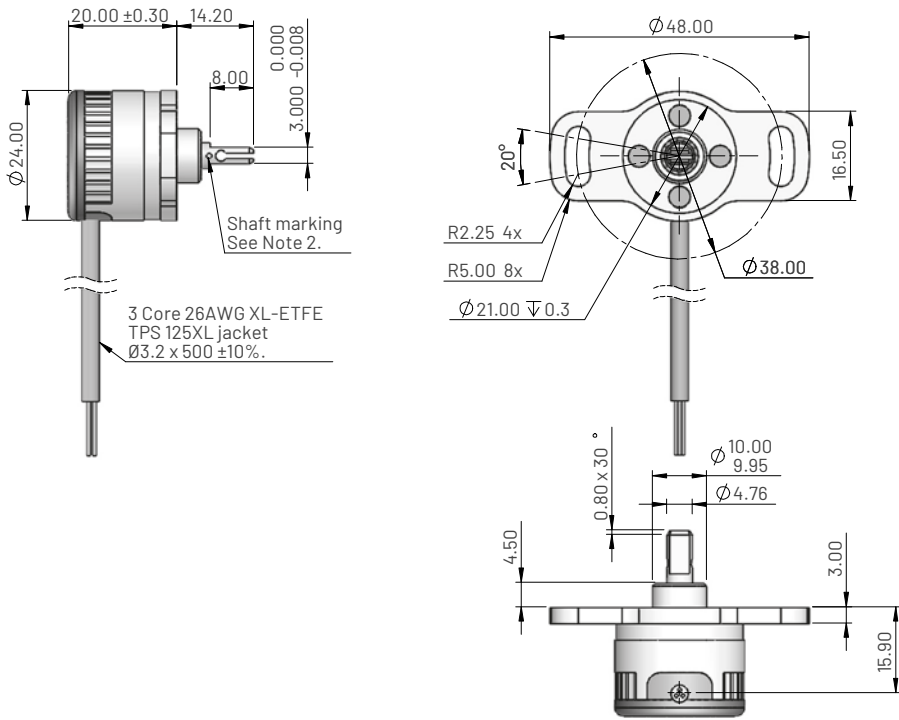
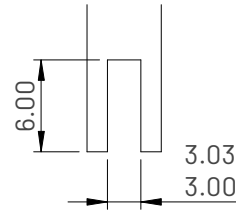


Dimensions for MHR5210 - Flange mounting with a sprung shaft



Driving side detail



Ordering information

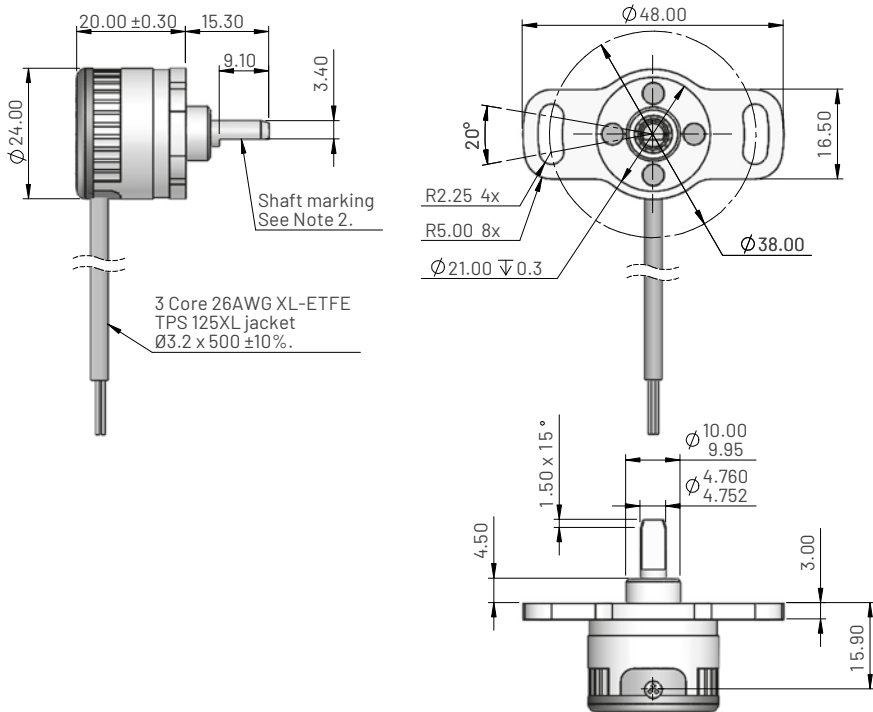
MHR5210 XV-XXX

Output direction (viewed on shaft)

- C = Clockwise
- A = Anticlockwise

Electrical angle in degrees

Dimensions for MHR5220 - Flange mounting with a round shaft



Ordering information

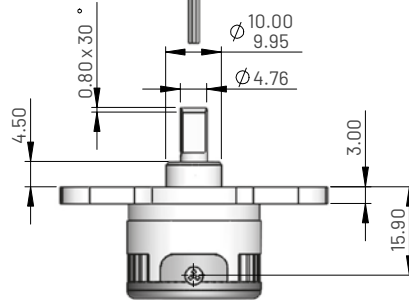
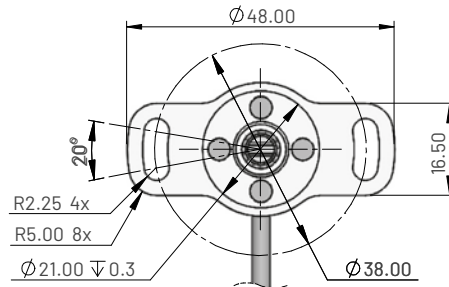
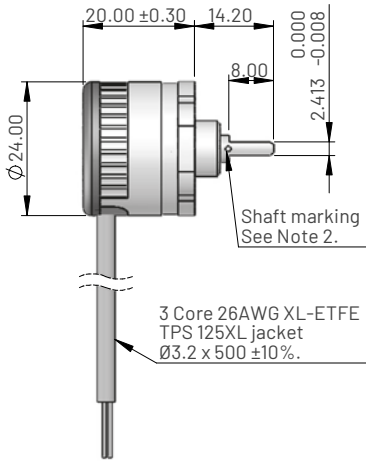
MHR5220 XV-XXX

Output direction (viewed on shaft)

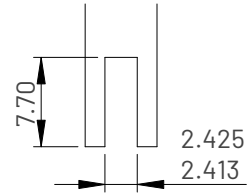
- C = Clockwise
- A = Anticlockwise

Electrical angle in degrees

Dimensions for MHR5230 - Flange mounting with a blade shaft



Driving side detail



Ordering information

MHR5230 XV-XXX

Output direction (viewed on shaft)

C = Clockwise

A = Anticlockwise

Electrical angle in degrees

Electrical and mechanical specification for MHR5200

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 (Vout)	0-Vs (+5)	0 - 5.0	VDC
Monotonic range	Ratiometric with Vs	<0.01% FS	
	Linear Range (see note 5)		
Load resistance	>10K		Ohms
Output noise	<5		mV RMS

Performance specification

Measurement range	20 to 360±2 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	500 Nom		Hz
Max operating speed	600		RPM

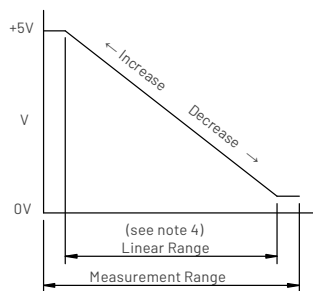
General specification

Weight (approx.)	30		grams
Protection/sealing	Electronic housing IP68 and IP69K		
Life (shaft in bush bearing)	>500 million cycles		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: Glass filled polymer, Top cap: GF polymer, Shaft: Stainless steel 316		

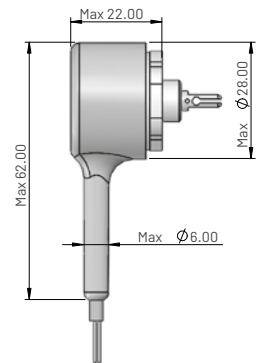
Notes

1. Incorrect wiring may cause internal damage.
2. When shaft marking 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.

Typical output



Accessories



Boot
Part No: JN025-002

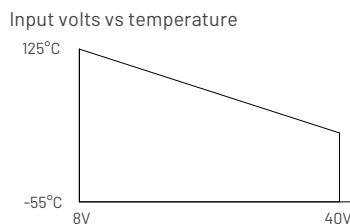
Material
Polyolefin

Boot dimensions when fitted (Boot supplied separately)

Electrical connections (see note 1)

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

Input voltage de-rating graph



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