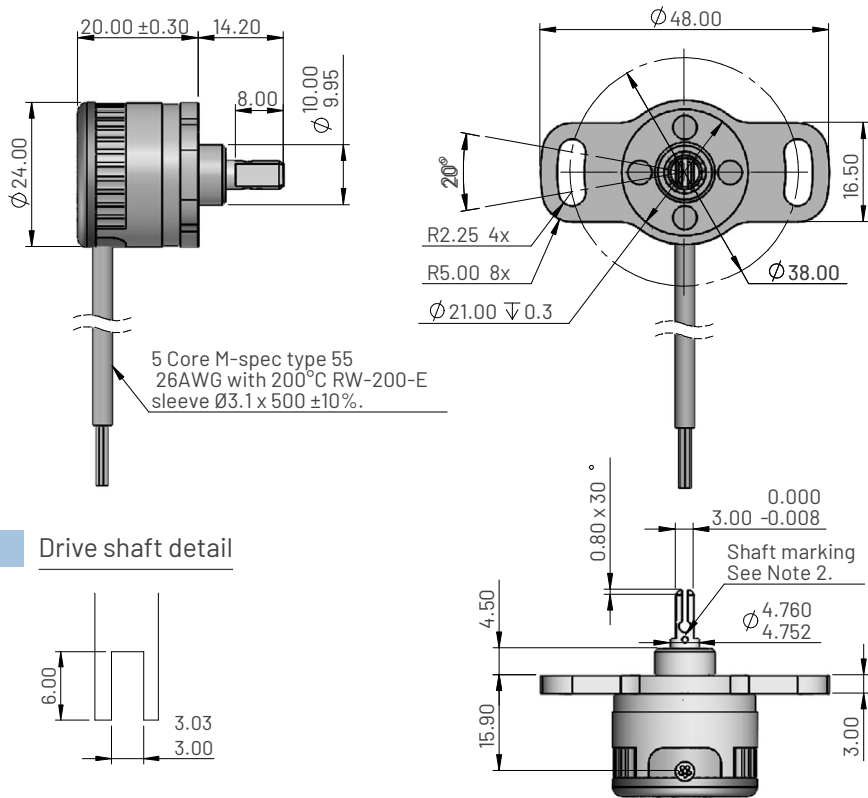


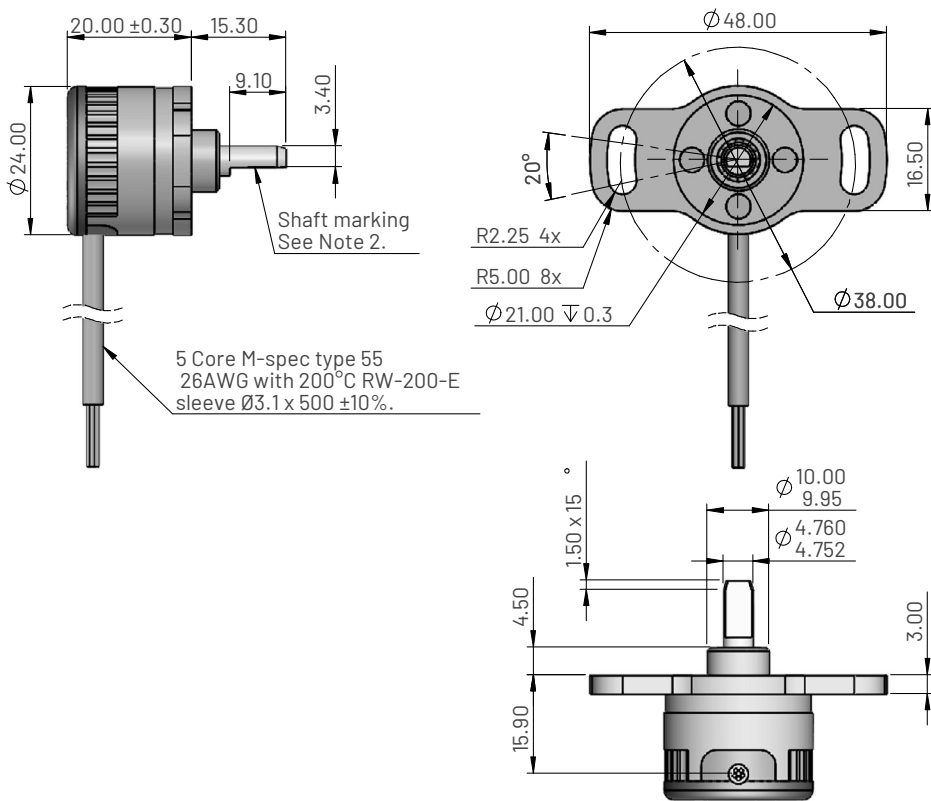
MHR5200 CB Series - Magnetic-Hall rotary position sensor

High performance series, Encoder output

Dimensions for MHR521X CB - Flange mounting, sprung shaft



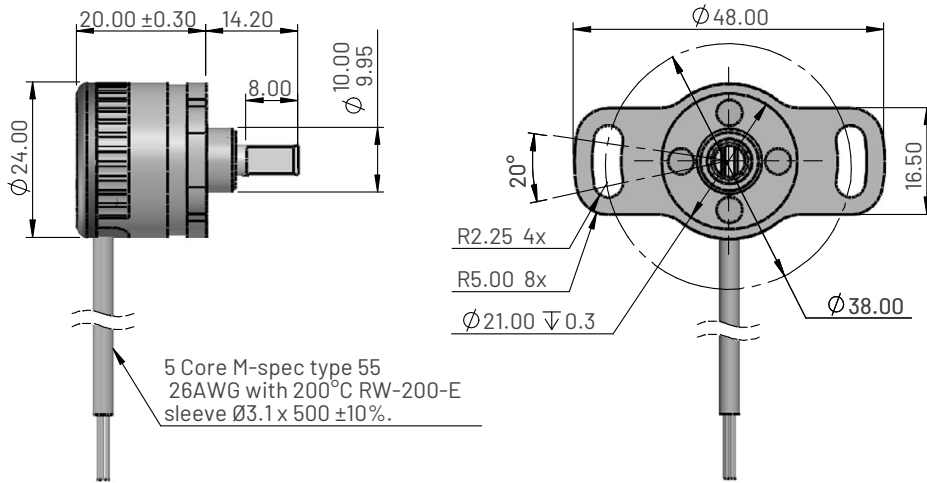
Dimensions for MHR522X CB - Flange mounting, sprung shaft



MHR5200 CB Series - Magnetic-Hall rotary position sensor

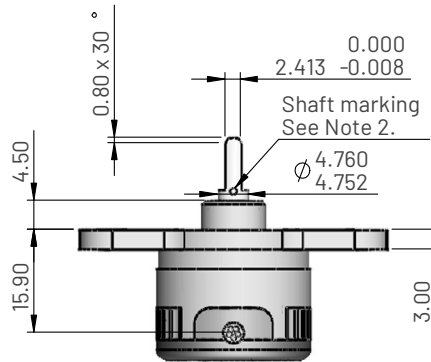
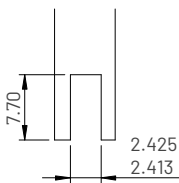
High performance series, Encoder output

Dimensions for MHR523X CB - Flange mounting, blade shaft



5 Core M-spec type 55
26AWG with 200°C RW-200-E
sleeve Ø3.1 x 500 ± 10%.

Drive shaft detail



Ordering information

MHR523X CB-X

Heatshrink boot _____
 0 = Unbooted
 1 = Heatshrink boot
 Output direction (viewed on shaft) _____
 C = Clockwise
 Pole pairs 1 to 7 _____

Electrical and mechanical specification for MHR5100 CE

Parameters	Values	Units
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	Digital	
Voltage output (Vout)	0-Vs(+5v) 0 - 5.0	VDC
Low level output	<0.4	VDC
High level output	>4.25	VDC
Load resistance	>10K	Ohms
Output noise	<5	mV RMS
Performance specification		
Pole pairs	1 to 7	
Dynamic angle error	Typical = 0.02, Max = 0.18	°
Max operating speed	14,500	RPM
General specification		
Weight (approx.)	29.0	grams
Protection/sealing	Electronic housing IP68 and IP69K	
Life (shaft in bush bearing)	>500 million cycles	dependent on environment
Dither life	Contactless - no degradation due to shaft dither	
Operational temperature	-40 to +125 See de-rating graph	°C
Storage temperature	-55 to +150	°C
Materials	Sensor	Case: Glass filled polymer, Shaft: Stainless steel 316
	Top cap	GF polymer

MHR5200 CB Series - Magnetic-Hall rotary position sensor

High performance series, Encoder output

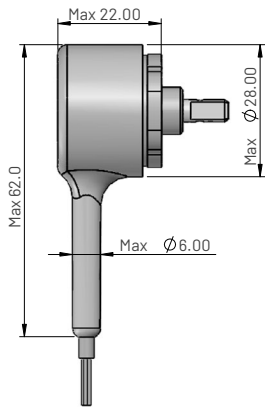
Notes

1. Incorrect wiring may cause internal damage.
2. Zero position is aligned when shaft marking is facing cable exit.
3. Due to Hall effect technology used in this device, close proximity of ferrous materials and magnetic fields may influence output.
4. Do not operate between 5.5V and 8V.

Electrical connections (see note 1)

Wire Colour	Function
Red	Supply Voltage (Vs)
Green	Channel A
Blue	Channel B
Yellow	Index
Black	Ground

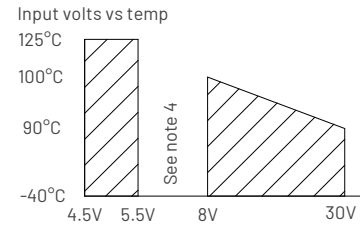
Accessories



Boot
Part No: JN025-002

Material
Polyolefin

Input voltage de-rating graph



Typical output

