

# HCW4

## Magnetic incremental modular sensor



Blind shaft 50mm non-contacting position sensor with incremental output.

- With its two-part design, the HCW4 incremental sensor offers maximum flexibility when installing it.
- Application fields : agriculture, construction, forestry vehicles, medical, solar panels...
- Robustness and excellent resistance to shocks / vibrations.
- Standard IP 67 protection (IP69K option).
- Operating temperature range: -40°C to 85°C (-40...+125°C option).
- Magnetic technology.
- Universal supply 5 to 30Vdc – incremental output.
- Available resolution up to 1024 points per revolution.
- Standard PVC or PUR cable output

ELECTRICAL SPECIFICATIONS		MECHANICAL SPECIFICATIONS	
<b>Range of motion</b>	0° to 360° continuous rotation	<b>Material</b>	Macromelt OM638
<b>Power supply</b>	5 VDC or 5-30 VDC, depending on the output	<b>Encoder weight (approx.)</b>	100 g
<b>Resolution</b>	1024 pulses/rev.	<b>Operating temperature</b>	-40...+85°C
		<b>Storage temperature</b>	-40...+85°C
		<b>Protection</b>	IP 67
		<b>Shocks (EN 60068-2-27)</b>	≤ 2000m/s <sup>2</sup> (during 6 ms)
		<b>Vibration (EN 60068-2-6)</b>	≤ 200m/s <sup>2</sup> (55...2000 Hz)
<b>Contact Regal Components for special versions</b>			

ORDER INFORMATION						
	Mechanics	Supply Output stage	Signals	Resolution	Connection	Connection orientation
<b>HCW4</b> Incremental encoder	<b>00:</b> Modular	<b>2G2:</b> 5VDC TTL / RS422 output  <b>PG5:</b> 5 to 30 VDC Push-pull output (TTL / RS422 available if encoder supply is 5 VDC)	<b>9:</b> A, A/ B, B/ 0, 0/	<b>1024</b> max	<b>G3:</b> PVC cable 8 wires  <b>GP:</b> PUR cable 12 wires	<b>R020:</b> Radial cable 2 m
<b>Ex: HCW4</b>	<b>00</b>	<b>PG5</b>	<b>9</b>	<b>00256</b>	<b>G3</b>	<b>R005</b>
<b>Available resolutions: 32, 64, 128, 256, 1024</b>						

### ADAPTATION POSSIBILITY

BEI Sensors distinguishes itself by its flexible approach and ability to react to customers needs, with us no limit exists; we shall always try to supply you the product offering the best solution to your specifications.

**Modified mechanics:** Precision prototypes units, small and medium size. Units that will match themselves exactly to your mechanical configuration or to your dimensional constraints.

**Specific shaft system:** for example with integrated coupling.

**Send us your subset:** we can integrate our encoder into your subset and return you the complete assembly with the guarantee of an optimal mounting.

**Connection / Cable assemblies:** On the whole range of our sensors a wide selection of electrical connections are possible

2015-03-18, specifications subject to change without notice

ISO 9001  
BUREAU VERITAS  
Certification



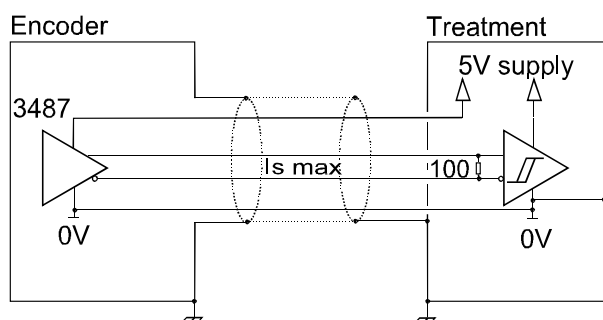
REGAL COMPONENTS AB • LEFFLERSGATAN 1 • SE-754 50 UPPSALA • SWEDEN  
+46 (0)18-65 70 00 • WWW.REGAL.SE • INFO@REGAL.SE

*Regal*

# HCW4

## Magnetic incremental modular sensor

### Output electronic type 2G2



#### 2G2 electronic (100kHz)

Supply : 5Vdc  $\pm 10\%$

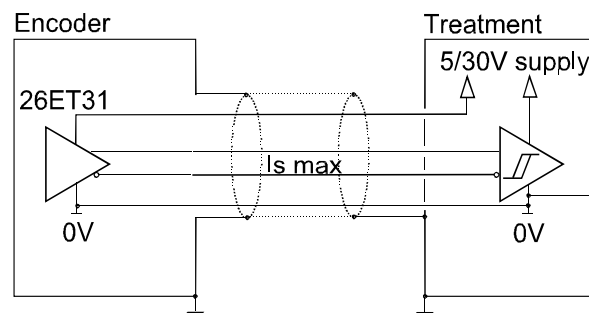
Cons. without load : 40mA max

Current per channel : 40mA max

0 max ( $I_s=20\text{mA}$ ) :  $V_{ol} = 0,5\text{Vdc}$

1 min ( $I_s=20\text{mA}$ ) :  $V_{oh} = 2,5\text{Vdc}$

### Output electronic type PG5



#### PG5 electronic(100kHz)

Supply : 5 to 30Vdc

Cons. without load : 40mA max

Current per channel : 40mA max

0 max ( $I_s=20\text{mA}$ ) :  $V_{ol} = 0,5\text{Vdc}$

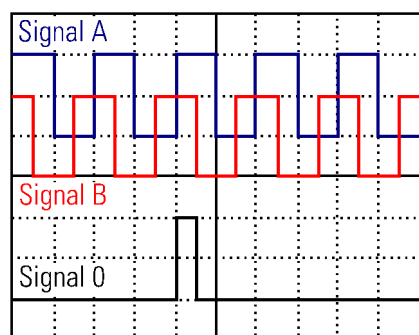
1 min ( $I_s=20\text{mA}$ ) :  $V_{oh} = V_{cc}-3\text{Vdc}$

Protection against short circuits and in-  
version of polarity.

### STANDARD CONNECTION

		-	+	A	B	0	A/	B/	0/	Ground
<b>G3</b>	PVC cable, 8 wires 8230/020	WH white	BN brown	GN green	YE yellow	GY grey	PK pink	BU blue	RD red	Main shield
<b>GP</b>	PUR cable 12 wires 8230/050	WH white + WH/GN white/green	BU blue + BN/GN brown/green	GY grey	BN brown	RD red	PK pink	GN green	BK black	General shielding

### Incremental output



2015-03-18, specifications subject to change without notice

ISO 9001  
BUREAU VERITAS  
Certification



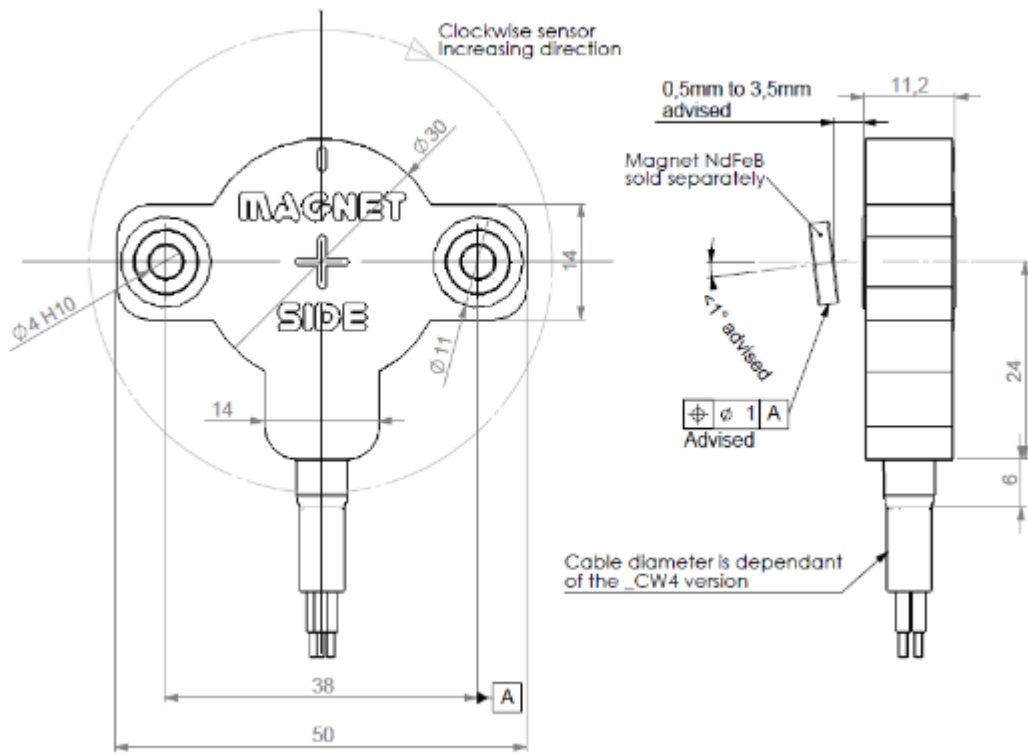
REGAL COMPONENTS AB • LEFFLERSGATAN 1 • SE-754 50 UPPSALA • SWEDEN  
+46 (0)18-65 70 00 • WWW.REGAL.SE • INFO@REGAL.SE

Regal

# HCW4

## Magnetic incremental modular sensor

### Standard HCW4 dimension



(mm)

2015-03-18, specifications subject to change without notice

ISO 9001  
BUREAU VERITAS  
Certification



REGAL COMPONENTS AB • LEFFLERSGATAN 1 • SE-754 50 UPPSALA • SWEDEN  
+46 (0)18-65 70 00 • WWW.REGAL.SE • INFO@REGAL.SE

*Regal*