

ACW4 ANALOG

ANALOG ABSOLUTE SINGLE TURN MODULAR SENSOR

Sensata-BEI Sensors' ACW4 sensors provide absolute single turn measurement with an analog output in an over-molded, modular design that offers flexibility and protection from the environment.



Features

- With its two-part design, the ACW4 absolute single-turn offers maximum flexibility for installation
- Rugged and excellent resistance to shock and vibration
- Robust, proven magnetic technology
- Environmentally resistant, IP 67 standard (IP69K option)
- Extended operating range from -40° C to 85° C
- Uses universal supply 5 to 30 VDC – Analog output
- Available Resolution up to 12 bits per revolution
- Variety of magnet holders available

Applications

- Factory Automation
- Process Automation



SPECIFICATIONS

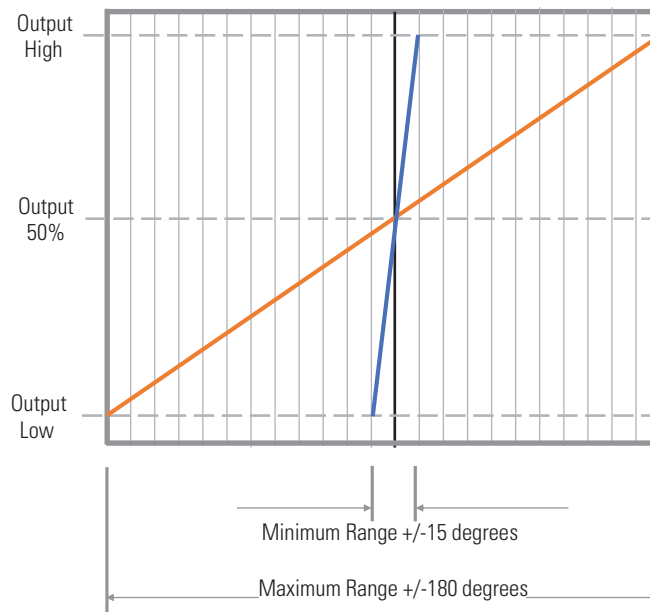
Mechanical

Terminations	PVC cable
Housing	Macromelt PA638
Weight	0,150 kg

Electrical

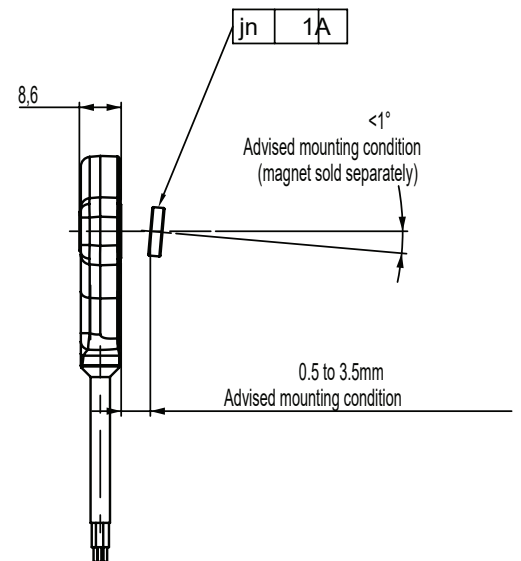
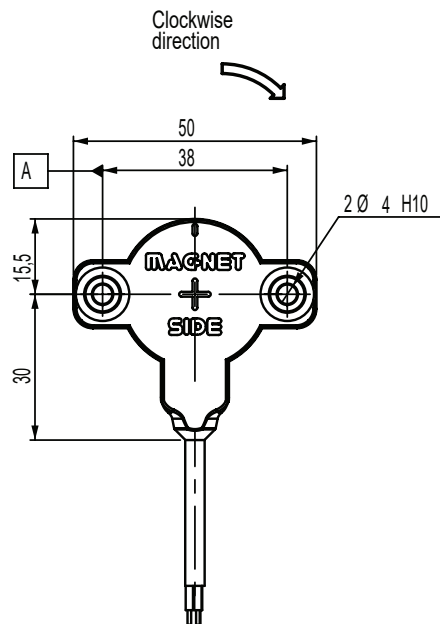
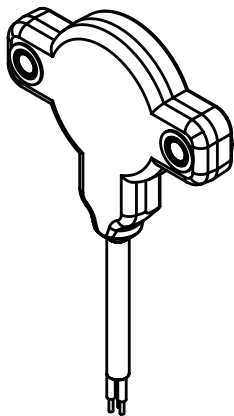
Electrical Angle	360°
Output Function	0– 10 Vdc, 0.5 to 4.5 Vdc, or 4 – 20 mA
Minimal Cycle Time	1ms
Resolution	Single –turn, 12 bits
Accuracy	+/-0.3% on 360°
Repeatability	+/-0.1% on 360°
Supply Voltage	5Vdc, 11 to 30 Vdc, or 15 to 30 Vdc
Start-up	< 1s
Response time	< 10 ms (5L2 and 3L1 electronics), <1ms (All other electronics)
Recommended Load	> 10 kOhms (voltage out), 500 Ohms (current out)
Current Requirements	< 40mA
Protection	Overvoltage Protection: Yes Reverse Polarity Protection: Yes Short Circuit Protection: Yes
EMC	IEC 61000-4-2 Electrostatic discharge (ESD) 4 kV, 8 kV IEC 61000-4-3 Electromagnetic fields 10 V/m (80MHz - 1GHz), 3V/m (1.4GHz - 2GHz), 1V/m (2GHz - 2.7GHz) IEC 61000-4-4 Electrical fast transients (burst) 1 kV IEC 61000-4-6 Conducted disturbances, induced by RF-fields 10 Veff.

Analog Output



DIMENSIONS

All Dimensions are in millimeters.
 Shaft system with magnet to be ordered separately (see Accessories).





CONNECTIONS

Function	Vcc	0V	Analog Out	Ground
Color	Brown BN	White WH	Green GN	Shield



NOTES

Stray magnetic fields can interfere with accuracy and repeatability of the signal.



ORDERING OPTIONS

Example : ACW4_00//3L1//00360//L3R020

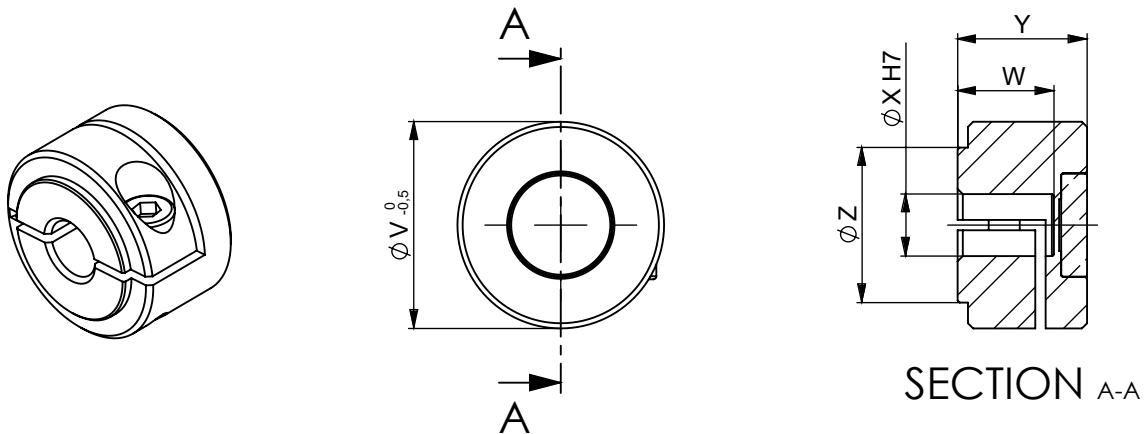
(Contact the factory for special versions, ex : dimensions, connections...)

	ACW4	00	//	3L1	1	//	00360	//	L3	R020
Family										
ACW4: Absolute Single-Turn Sensor										
Shaft Ø										
00: Modular										
Supply										
3L1: 15 to 30 Vdc, 0-10V Output										
5L2: 11 to 30 Vdc, 0.5 - 4.5 V Output										
3L3: 15 to 30 Vdc, 4 – 20 mA Output										
2LR: 5Vdc +/- 5%, Ratiometric 10 – 90% of Vcc										
Direction										
1: CW, Clockwise positive										
2: CCW, Counterclockwise positive										
Range										
00360: 360° range										
Connection										
L3: 3 conductor PVC cable										
Connection Orientation										
R020: Radial cable 2m long										

Female magnet support + Magnet 8810/013

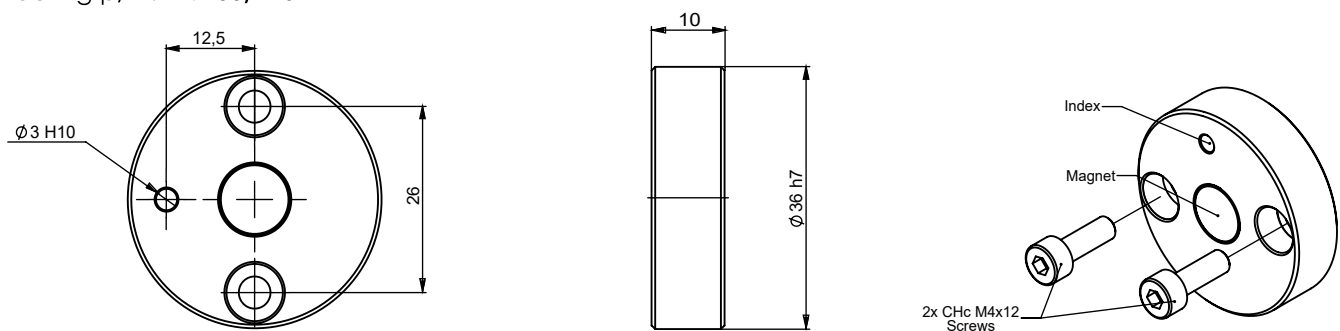
 Ordering p/n : **M9105/Kxx**

KXX: Where XX is the shaft mounting diameter in mm. Standards are 06, 08, 10, 11, and 14 mm. i.e M9105/K10 mounts to a 10 mm shaft.

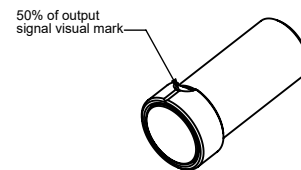
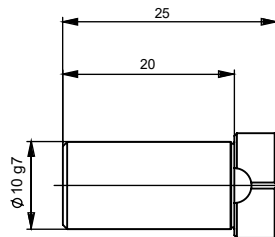
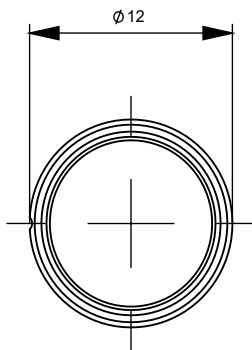


	M9105/K06	M9105/K08	M9105/K10	M9105/K11	M9105/K14
X	06 H7	08 H7	10 H7	11 H7	14 H7
V	20	20	26	26	29
W	9,3	9,3	10	10	10
Y	12,5	12,5	14	14	14
Z	15	15	15	15	18

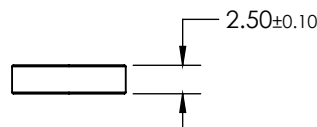
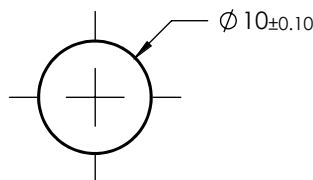
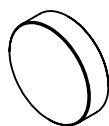
Frontal magnet support + Magnet 8810/013

 Ordering p/n : **M9105/F26**


Male magnet support + Magnet 8810/013
Ordering p/n : **M9105/M10-01**



Magnet
Ordering p/n : **8810/013**



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