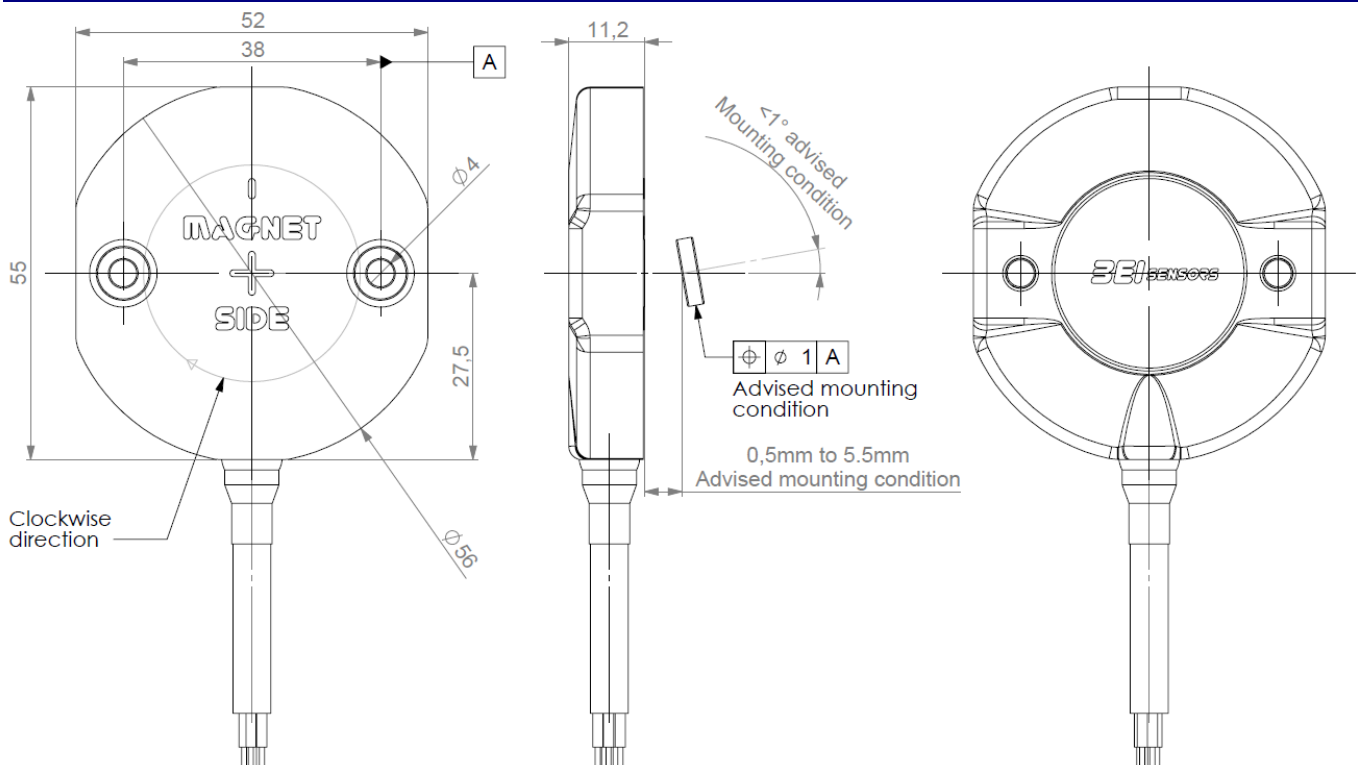


PRELIMINARY - MAGNETIC SSI ABSOLUTE SINGLE TURN MODULAR SENSORS, ACW4 RANGE

- With its two-part design, the ACW4 SSI absolute single-turn 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: -20°C to 85°C (-20...+125°C option).
- Magnetic technology.
- Universal supply 5 to 30Vdc – SSI interface.
- Available resolution up to 12 bits per revolution.
- Turn counting up to 4 096 (12 bits).
- Also available : analog, PWM and CANopen outputs.
- Standard PUR cable output.



STANDARD ACW4 DIMENSION



Shaft system with magnet to be ordered separately (cf specific data-sheet).

MECHANICAL DATA

Material	Macromelt OM638	Protection	IP 67
Encoder weight (approx.)	0,100 kg	Shocks (EN60068-2-27)	$\leq 2000\text{m.s}^{-2}$ (during 6 ms)
Operating temperature	- 20... + 85 °C (encoder T°)	Vibrations (EN60068-2-6)	$\leq 200\text{m.s}^{-2}$ (55 ... 2 000 Hz)
Storage temperature	- 20... + 85 °C		

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.

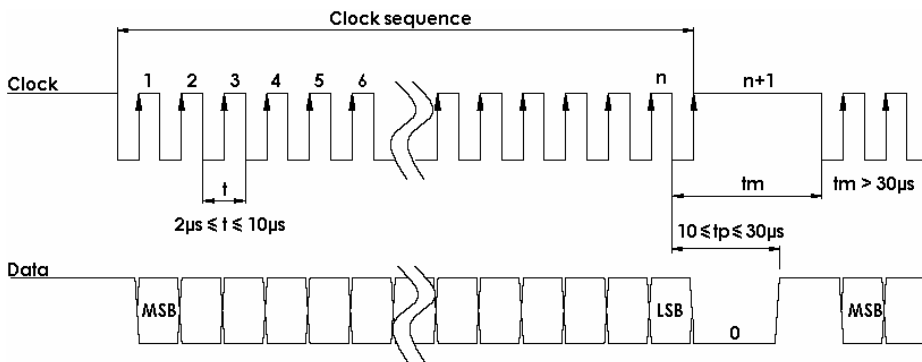
Connection / Cable assemblies: On the whole range of our sensors a wide selection of electrical connections are possible.

PRELIMINARY - MAGNETIC SSI ABSOLUTE SINGLE TURN MODULAR SENSORS, ACW4 RANGE

ELECTRICAL DATA

Power supply	5 – 30Vdc	Isolation	500 Veff
Consumption without load	<40mA (at 24Vdc)	Introduction	<1s
Resolution	12 bits	Refresh rate	< 400µs
Accuracy	± 0,3%	Input signal clock CLK	Per optocoupler
Repeatability	± 0,1%	Output signal DATA	line - driver RS422

SSI TRANSMISSION



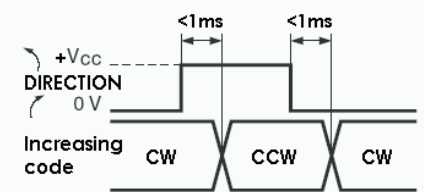
Transmission	Transmission up to 400m at 100kHz in function of the cable characteristics.
Cable	High security of transmission by using shielded cable and twisted pairs.

* Consult us for length > 100m.

STANDARD SSI CONNECTION

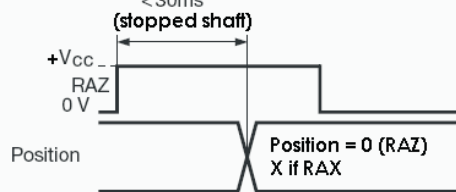
Ref.	Type	+ Vcc	0 V	Clk+	Data+	RAZ	Data-	Clk-	Direction	Ground
S5	SSI cable PUR 8230/050	BN/GN Brown/Green	WH/GN White/Green	GN Green	GY Gray	BU Blue	PK Pink	BN Brown	WH White	General shielding

DIRECTION input



Level "0"	min 0V	max $0,3x(+V_{CC})$	Increasing CW
Level "1"	$0,7x(+V_{CC})$	$+V_{CC}$	CCW
I direction	< 5mA		

RAZ / RAX input



Level "0"	min 0V	max $0,3x(+V_{CC})$	Position = 0 (RAZ) X if RAX
Level "1"	$0,7x(+V_{CC})$	$+V_{CC}$	
I raz/rax	< 5mA		

Nota : Do not connect other pinouts, connect DIRECTION and RAZ to a potential (RAZ at 0V if not used)

ACW4 ORDERING REFERENCE (Contact the factory for special versions , ex : dimensions, connections...)

	Shaft Ø	Supply	Output stage	Code	Resolution	Connection	Orientation
ACW4 : Absolute multi-turn encoder	00 : modular	P : 5 to 30Vdc	CS : SSI without parity	B : Binary G : Gray	12 : 12 bits	S5 : SSI PUR cable	R005 : 50cm radial cable
Ex: ACW4_	00 //	P	CS	G //	12 //	S5	R005

Made in France