

## PRELIMINARY - BISS ABSOLUTE SINGLE TURN ENCODERS, CHO5 RANGE, POSI+™

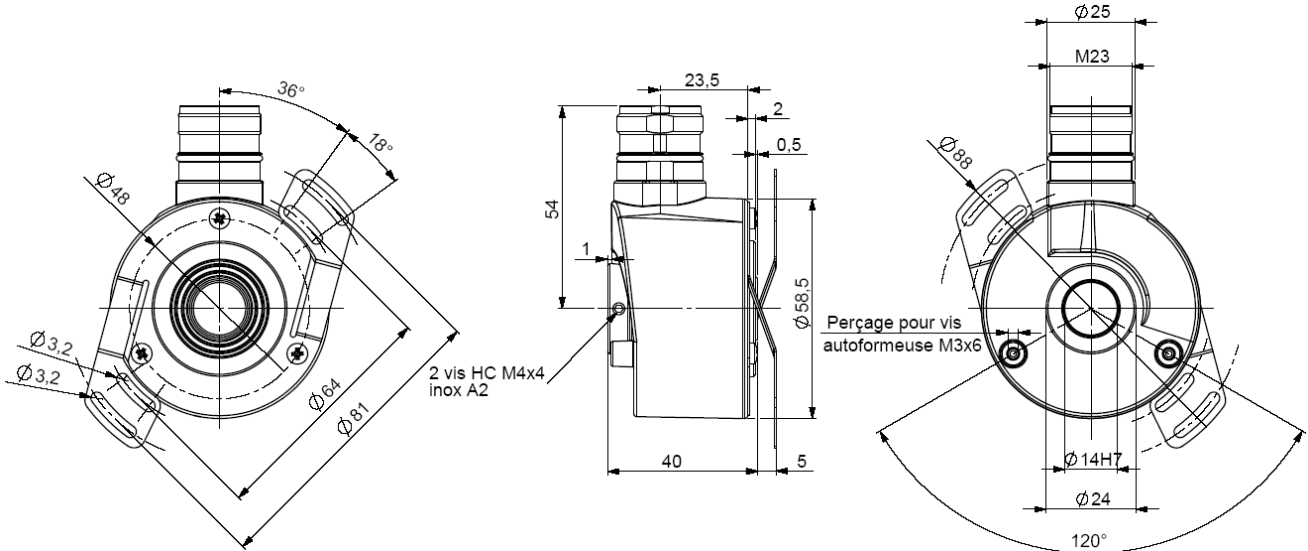
**POSI+™**, the new generation of absolute single turn encoders :

- Robustness and excellent resistance to shocks / vibrations
- High protection level IP65
- High resolutions, up to 20 bits (Gray or binary)
- Universal power supply from 5 to 30 Vdc
- High performances in temperature -20°C to 90°C (option -40°C to 100°C)
- Standard DIRECTION entry, RESET option
- Digital or sine incremental outputs option

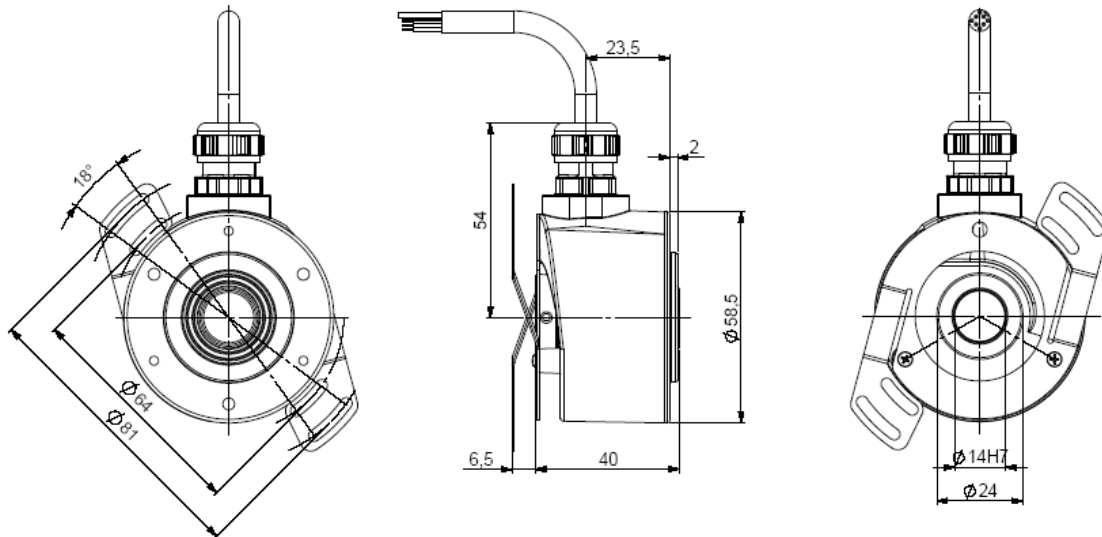
**BISS**  
INTERFACE



**CHO5\_14 connection C5R (radial M23), with DAC 9445/015 mounted on the body**



**CHO5\_14 connection C6R (radial cable), with DAC 9445/015 mounted on the cover**

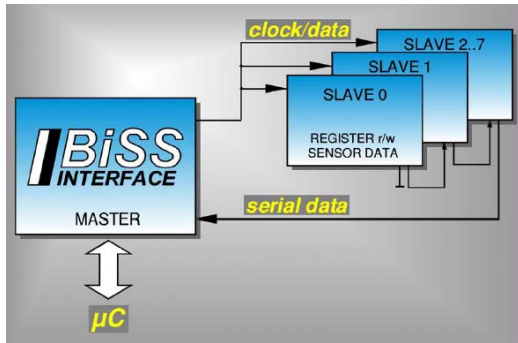


Material	Cover : zinc alloy	Shock (EN60068-2-27)	≤ 500 m.s <sup>-2</sup> (durant 6 ms)
	Body: aluminium	Vibration (EN60068-2-6)	≤ 100 m.s <sup>-2</sup> (10 ... 2 000 Hz)
	Shaft : stainless steel	EMC	EN 61000-6-4, EN 61000-6-2
Bearings	6 803 serie	Isolation	1 000 Veff
Maximal load	Axial : 20 N	Weight (connector)	0,270 kg
	Radial : 50 N	Operating temperature	- 20 ... 90°C (encoder T°)
Shaft inertia moment	≤ 2,2.10 <sup>-6</sup> kg.m <sup>2</sup>	Storage temperature	- 40... + 100°C
Torque	≤ 6.10 <sup>-3</sup> N.m	Protection (EN 60529)	IP 65
Permissible max. speed	9 000 min <sup>-1</sup>	Torque (ring pressure screw)	nominal: 1.5N.m, break: 2.0N.m
Continuous max. speed	6 000 min <sup>-1</sup>	Theoretical mechanical lifetime 10 <sup>9</sup> turns (F <sub>axial</sub> / F <sub>radial</sub> )	
Shaft seal	Viton	10 N / 25 N : 230	25 N / 50 N : 29

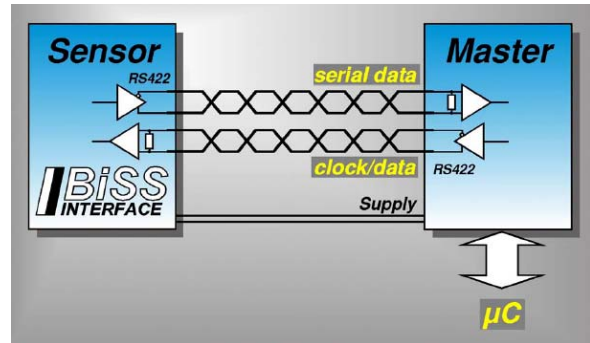
## PRELIMINARY - BISS ABSOLUTE SINGLE TURN ENCODERS, CHO5 RANGE, POSI+™ CE



- Bi-directional
- Synchronous-serial communication
- Short cycle times
- Up to 8 slaves with one master
- Multicycle data transmission



The BiSS Interface master-slave concept supports up to 8 data sources in one or more devices



BiSS Interface wiring with unidirectional lines (one sensor with several slave levels, for example)

Power supply Vcc	5 to 30Vdc (polarity protected)	
Consumption without load	Max 100mA	
Introduction	<1s	
Inputs	DIRECTION and RESET option	
Outputs	Level high $\geq 2,5V$ (for I=20mA) Load high $\leq -20mA$ BiSS: RS-422	Level low $\leq 0,5Vdc$ (for I=20mA) Load low $\leq 20mA$
For more information: <a href="http://www.biss-interface.com">www.biss-interface.com</a>		

### BISS STANDARD CONNECTION

Type	Vcc	0V	Clk+	Data+	Data-	Clk-	DIRECTION
C6	1	2	3	4	6	7	9
C5	BN - Brown	WH - White	GN - Green	GY - Grey	PK - Pink	YE - Yellow	RD - Red
C8	8	1	3	2	10	11	5

Direction :

- CW increasing code: DIRECTION to 0V
- CCW increasing code : DIRECTION to +Vcc

**ORDERING REFERENCE** (Contact the factory for special versions, ex: special flanges, connections, electronics...)

	Shaft Ø	Supply	Output stage	Code	Resolution	Connection	Orientation
CHO5	14 : 14mm  Reduction hubs available	P : 5 to 30Vdc	CB : BiSS electronic	B: Binary	Max: 20 bits, power of 2  13 : 13 bits to 19 : 19 bits	C6 : M23 12pins CW for SSI transmission  C8 : M23 12pins CW for SSI transmission	R : radial
				G: Gray	20 bits: consult us	C5 : SSI cable, cable gland output	Example : R020 : radial cable of 2m
CHO5 _	14 //	P	CB	G //	13 //	B7	R050

#### Monitoring function available in option :

- of the code coherence
- of the LED internal regulated current loop
- of temperature range with 2 limits

#### Input / output available in option:

- RESET input
- ERROR output for monitoring functions
- Sine & Cosine outputs without index, 2048ppr (option : 4096 ppr)
- A & B incremental outputs without index, 2048ppr (option : 4096 ppr)

Consult us