

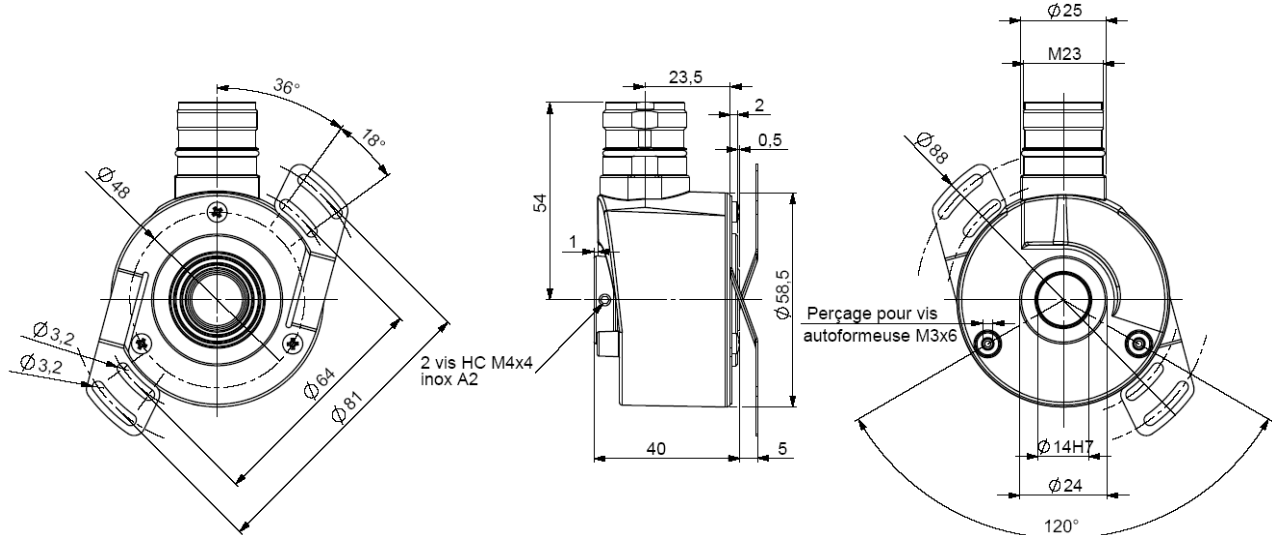
SSI ABSOLUTE SINGLE TURN ENCODERS, CHO5 RANGE

CHO5, the new generation of SSI absolute single turn encoders :

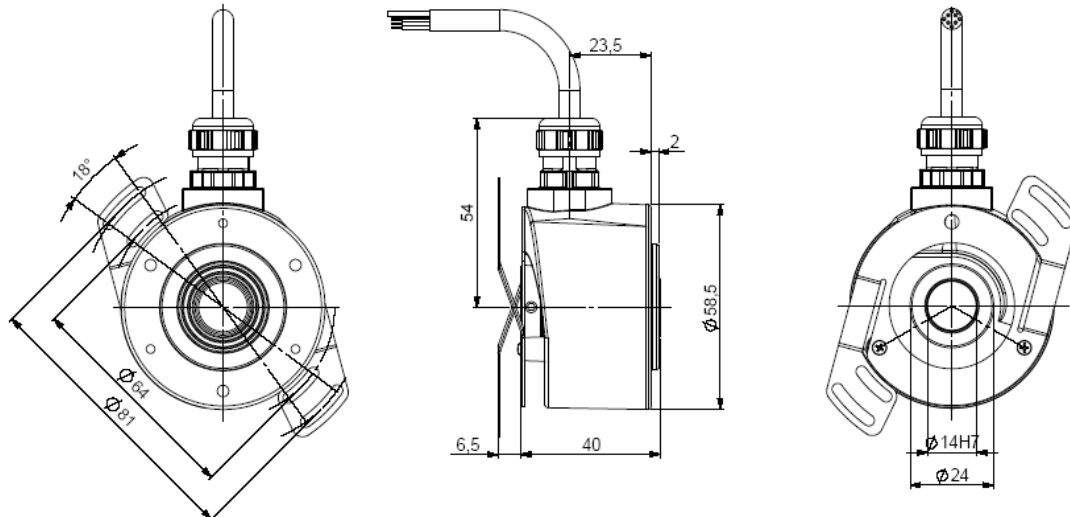
- Through hollow shaft version Ø14mm, with reduction hubs in aluminium of 6, 8, 10 and 12 mm
- Robustness and excellent resistance to shocks / vibrations
- High protection level IP65
- High resolutions possibility, up to 16 bits (Gray or binary)
- Universal power supply from 5 to 30 Vdc
- High performances in temperature -20°C to 90°C (option -40°C to 100°C)
- Standard DIRECTION and RESET input
- Numeric or sine incremental outputs option



CHO5_14 connection S6R (radial M23), DAC 9445/015* mounted on body



CHO5_14 connection S5R (radial cable), DAC 9445/015* mounted on the cover



* Accessory to be ordered separately

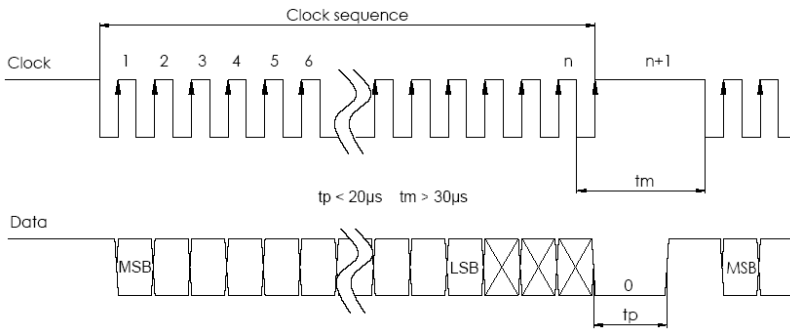
Material	Cover : zinc alloy	Shocks (EN60068-2-27)	≤ 500 m.s ⁻² (during 6 ms)
	Body: aluminium	Vibrations (EN60068-2-6)	≤ 100 m.s ⁻² (10 ... 2 000 Hz)
	Shaft : stainless steel	EMC	EN 61000-6-4, EN 61000-6-2
Bearings	6 803 serie	Isolation	1 000 V eff
Maximum loads	Axial : 20 N	Encoder weight (approx.)	0,270 kg
	Radial : 50 N	Operating temperature	- 20 ... + 90°C (Encoder T°)
Shaft inertia	≤ 2,2.10 ⁻⁶ kg.m ²	Storage temperature	- 40... + 100°C
Torque	≤ 6.10 ⁻³ N.m	Protection(EN 60529)	IP 65
Permissible max. speed	9 000 min ⁻¹	Torque (ring pressure screw)	nominal: 1.5 N.m, break: 2.0 N.m
Continuous max. speed	6 000 min ⁻¹	Theoretical mechanical lifetime 10 ⁹ turns (F _{axial} / F _{radial})	
Shaft seal	Viton	10N / 25N : 230	20N / 50N : 29

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ELECTRICAL CHARACTERISTIC

Input signal clock CLK	per optocoupler	Clock frequency CLK	<ul style="list-style-type: none"> 100kHz to 1MHz for 13 bits encoder 100kHz - $F_{max} = 10^6 / (\text{resolution in bits} - 10)$ for encoder > 13bits, ex : $F_{max} = 166\text{kHz}$ for 16 bits encoder
Output signal DATA	line - driver RS422		
Power supply	5 - 30Vdc	Interrogation frame	n=13 bits for 13 bits resolution n=21 bits for >13bits resolution
Introduction	< 200ms		
Consumption without load	Max. 100mA		

SSI TRANSMISSION



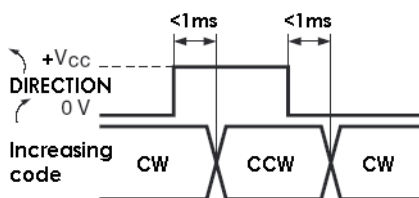
Transmission	Transmission up to 400m at 100kHz in function of the cable characteristics
Cable	High security of transmission by using shielded cable and twisted pairs

* Consult us for length > 100m

CONNECTIQUE STANDARD SSI

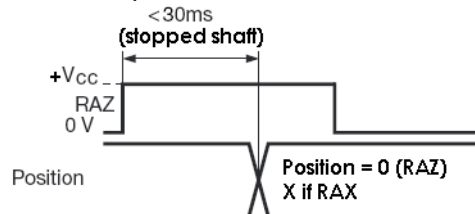
Type	+ Vcc	0 V	Clk+	Data+	RAZ	Data-	Clk-	DIRECTION
S6	1	2	3	4	5	6	7	9
S5	BN/GN Brown/Green	WH/GN White/Green	GN Green	GY Grey	BU Blue	PK Pink	BN Brown	WH White
S8	8	1	3	2	6	10	11	5

DIRECTION input



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

RAZ / RAX input



	min	max
Level "0"	0 V	$0,3x(+V_{CC})$
Level "1"	$0,7x(+V_{CC})$	+Vcc
I raz/rax	< 5mA	

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

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 Shaft reduction hubs available up to 6mm	P : 5 to 30Vdc	CS : SSI without parity CP : SSI even parity CI : SSI odd parity	B : Binary G : Gray	Power of 2 13: 13 bits standard option: 14: 14 bits to 16: 16 bits	S6 : M23 12pins CW for SSI transmission S8: M23 12pins CCW for SSI transmission S5 : SSI cable, cable gland output	R : radial Example : R020 : radial cable of 2m
CHO5	_ 10 //	P	CS	G //	13 //	S6	R

Monitoring function available as option :

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

Consult us

Entry / output available as option:

- RAX input (reset to a value X, manufacture setting)
- ERROR output for monitoring functions
- Sine & Cosine outputs without index, 2048ppr (option: 4096 ppr)
- A & B incremental outputs without index, 2048ppr (option: 4096 ppr)

Made in FRANCE