

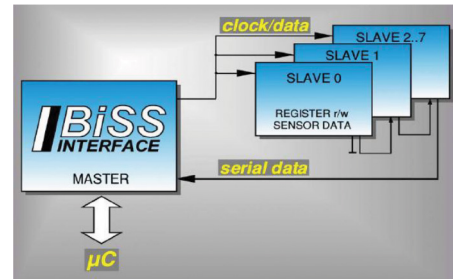
CHO5

BISS ABSOLUTE SINGLE TURN ENCODERS

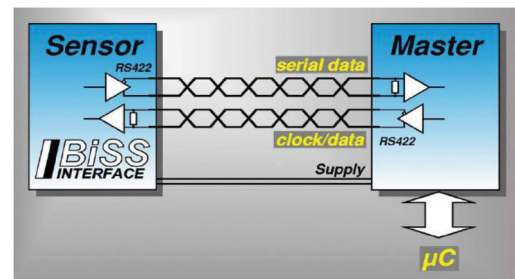


Features

- Robustness and excellent resistance to shocks / vibrations
 - High protection level IP65
 - High resolutions, 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 entry, RESET option
 - Digital or sine incremental outputs option
-
- 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).



SPECIFICATIONS

Material	Cover: Zinc Alloy Body: Aluminum Shaft: Stainless Steel
Bearings	6803 series
Maximal Loads	Axial: 20 N Radial: 50 N
Shaft Inertia	$\leq 2,2 \cdot 10^{-6} \text{ kg.m}^2$
Torque	$\leq 6 \cdot 10^{-3} \text{ N.m}$
Permissible Max. Speed	9,000 min ⁻¹
Continuous Max. Speed	6,000 min ⁻¹
Shaft Seal	Viton
Shocks (EN60068-2-27)	$\leq 500 \text{ m.s}^{-2}$ (during 6 ms)
Vibrations (EN60068-2-6)	$\leq 100 \text{ m.s}^{-2}$ (10 ... 2,000 Hz)
EMC	EN 61000-6-4, EN 61000-6-2
Isolation	1,000 Veff
Weight (Connector)	0,270 kg
Operating Temperature	- 20 ... 90°C (encoder T°)
Storage Temperature	- 40 ... + 100°C
Protection (EN 60529)	IP 65
Torque (Ring Pressure Screw)	0,7 ... 0,9 N.m
Theoretical mechanical lifetime 10⁹ turns (F_{axial} / F_{radial})	
10 N / 25 N	230
25 N / 50 N	29

Electrical Data

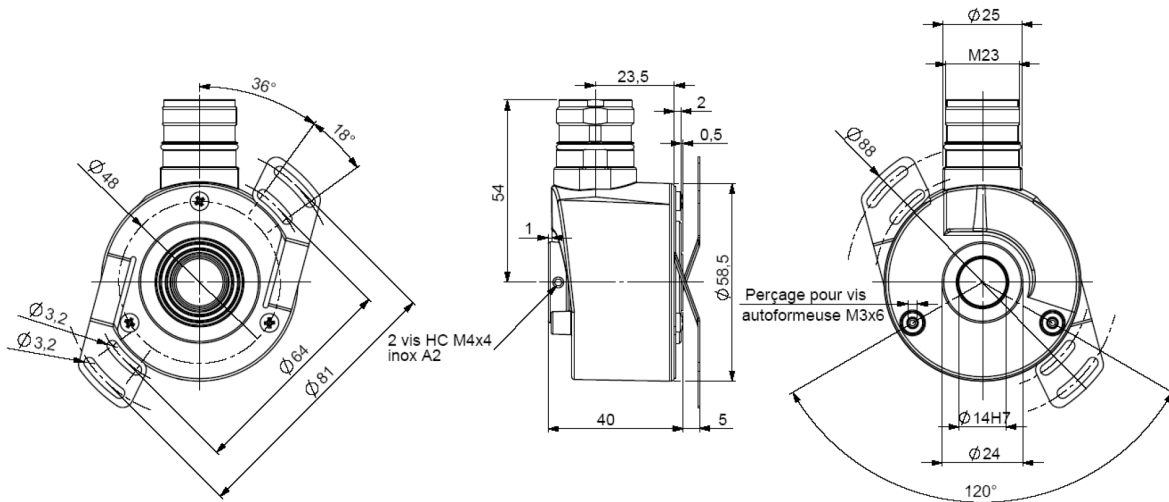
Power Supply Vcc	5 to 30Vdc (polarity protected)
Consumption Without Load	Max 100mA
Introduction	< 1 s
Inputs	DIRECTION and RESET option
Outputs	Level high $\geq 2,5\text{V}$ (for I=20mA) Load high $\leq -20\text{mA}$ BiSS: RS-422 Level low $\leq 0,5\text{Vdc}$ (for I=20mA) Load low $\leq 20\text{mA}$



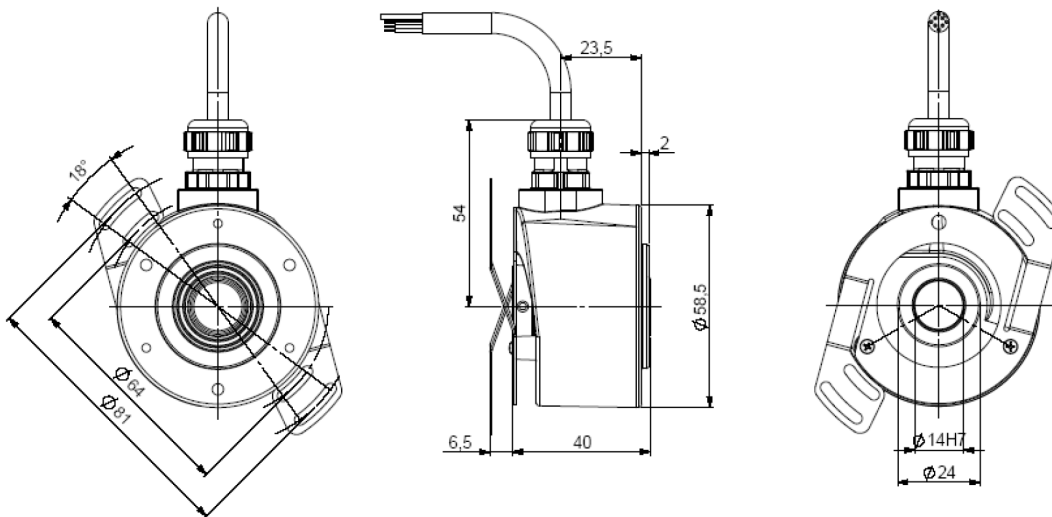
DIMENSIONS

Dimensions in mm

CH05_14 connection C6R (radial M23), with DAC 9445/015 mounted on the body



CH05_14 connection C5R (radial cable), with DAC 9445/015 mounted on the cover



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

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



Contact the factory for special versions, ex: special flanges, electronics, connections...

Family	CH05	-	14	//	P	CB	G	//	13	//	C5	R050
CH05												
Shaft Ø												
14: 14mm Reduction hubs available												
Supply												
P: 5 to 30Vdc												
Output Stage												
CB: BiSS Electronic												
Code												
B: Binary G: Gray												
Resolution												
Power of 2 13: 13 bits to 16: 16 bits												
Connection												
C6: M23 12 pins CW for SSI transmission CB: M23 12 pins CW for SSI transmission C5: SSI cable, cable gland output												
Orientation												
R: Radial Example: R020: radial cable of 2m												

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)



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