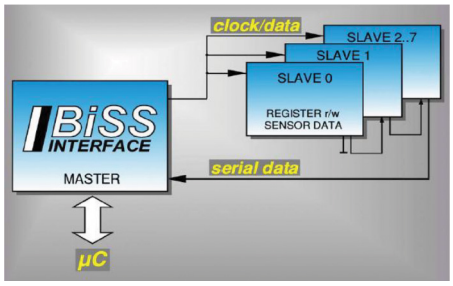
CHO5

BISS ABSOLUTE SINGLE TURN ENCODERS

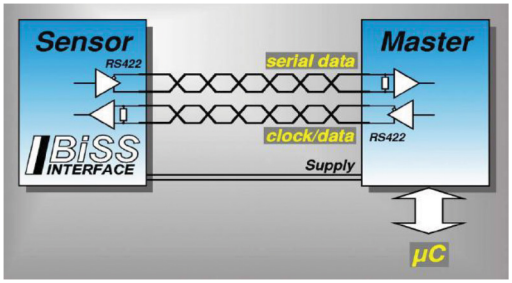
Features

- 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	≤ $2{,}2.10^{-6}$ kg.m^2
Torque	≤ 6.10^{-3} N.m
Permissable Max. Speed	9,000 min^{-1}
Continuous Max. Speed	6,000 min^{-1}
Shaft Seal	Viton
Shocks (EN60068-2-27)	≤ 500 m.s^{-2} (during 6 ms)
Vibrations (EN60068-2-6)	≤ 100 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 10^9 turns (F_{axial} / F_{radial})	
10 N / 25 N	230
25 N / 50 N	29

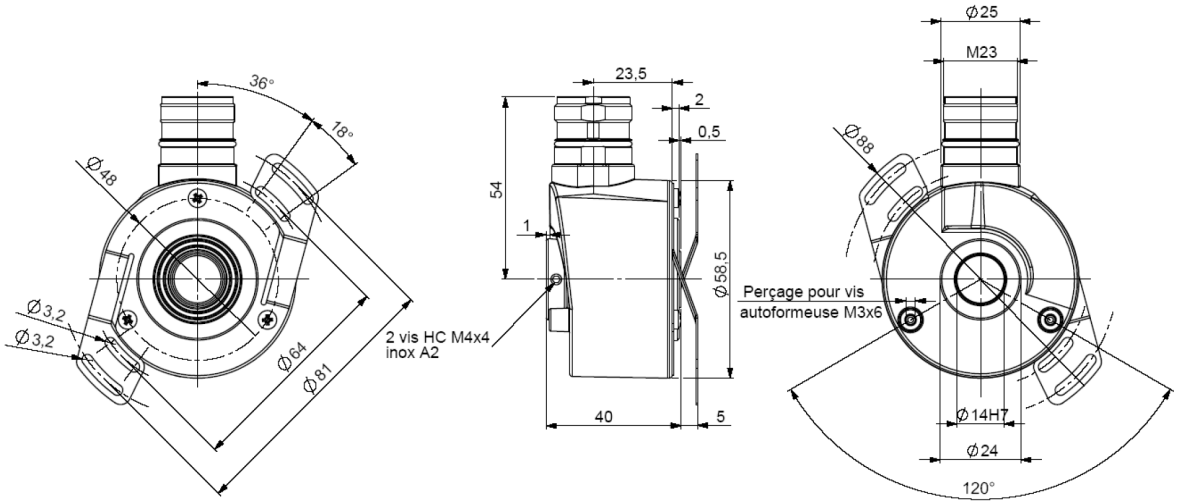
Electrical Data

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

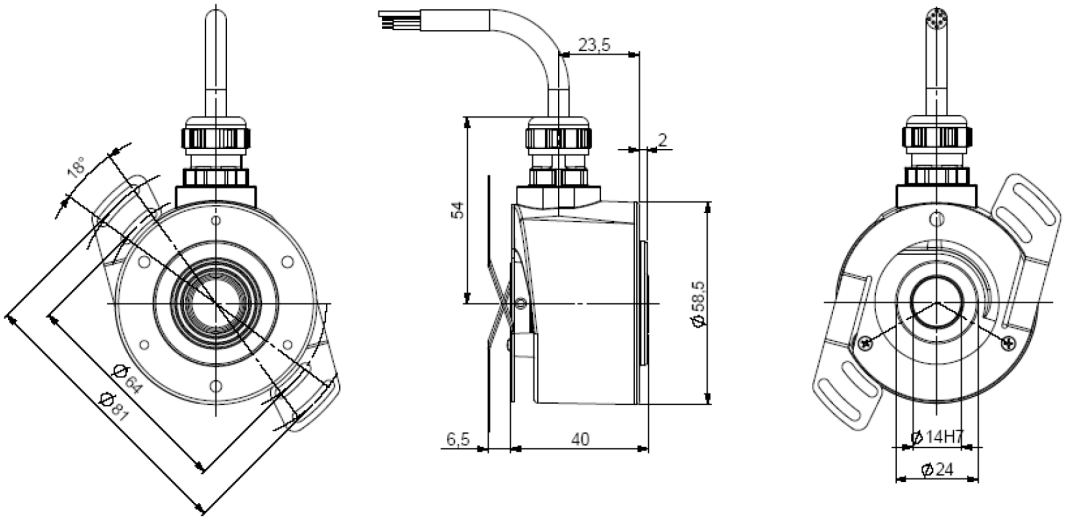
DIMENSIONS

Dimensions in mm

CHO5_14 connection C6R (radial M23), with DAC 9445/015 mounted on the body



CHO5_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

ORDERING OPTIONS

Example : CHO5_14//PCBG//13//C5R050

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

CH05 _ 14 // P CB G // 13 // C5 R050

Family

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
C8: 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 avalable 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)

AGENCY APPROVALS & CERTIFICATIONS

CE

Made in France

CONTACT US

Americas
+1 (800) 350 2727 – Option 1
sales.beisensors@sensata.com
Europe, Middle East & Africa
+33 (3) 88 20 8080
position-info.eu@sensata.com
Asia Pacific
sales.isasia@list.sensata.com
China +86 (21) 2306 1500
Japan +81 (45) 277 7117
Korea +82 (31) 601 2004
India +91 (80) 67920890
Rest of Asia +886 (2) 27602006 ext 2808

Rev:05/15/18