

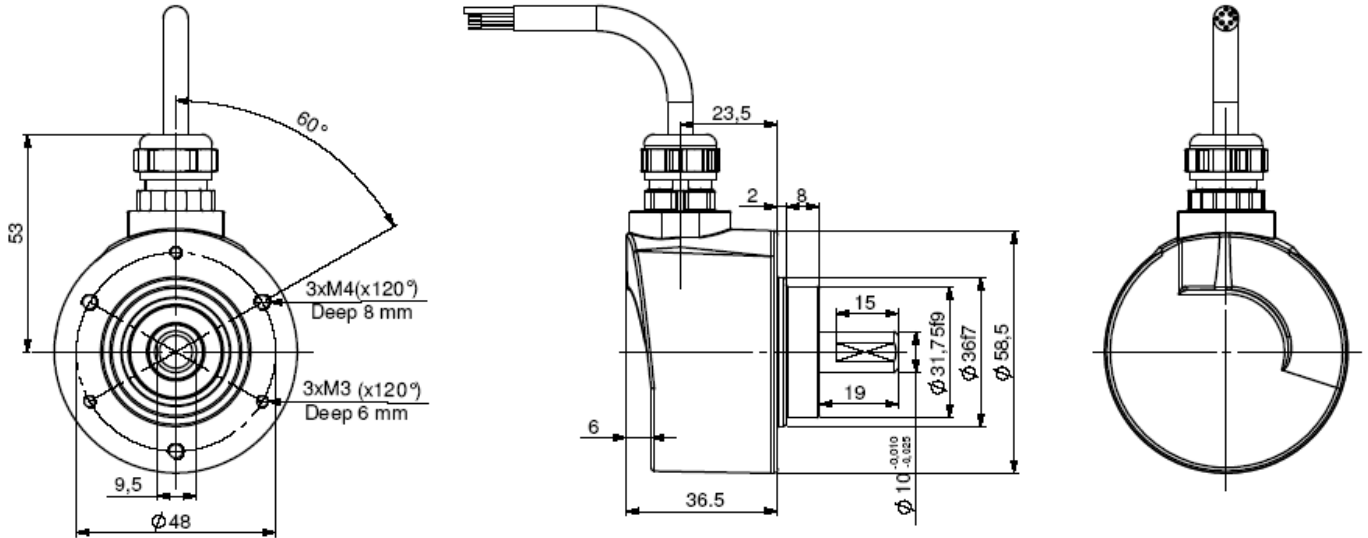
BISS ABSOLUTE SINGLE TURN ENCODERS, CHM5 RANGE

CHM5, the new generation of absolute single turn encoders :

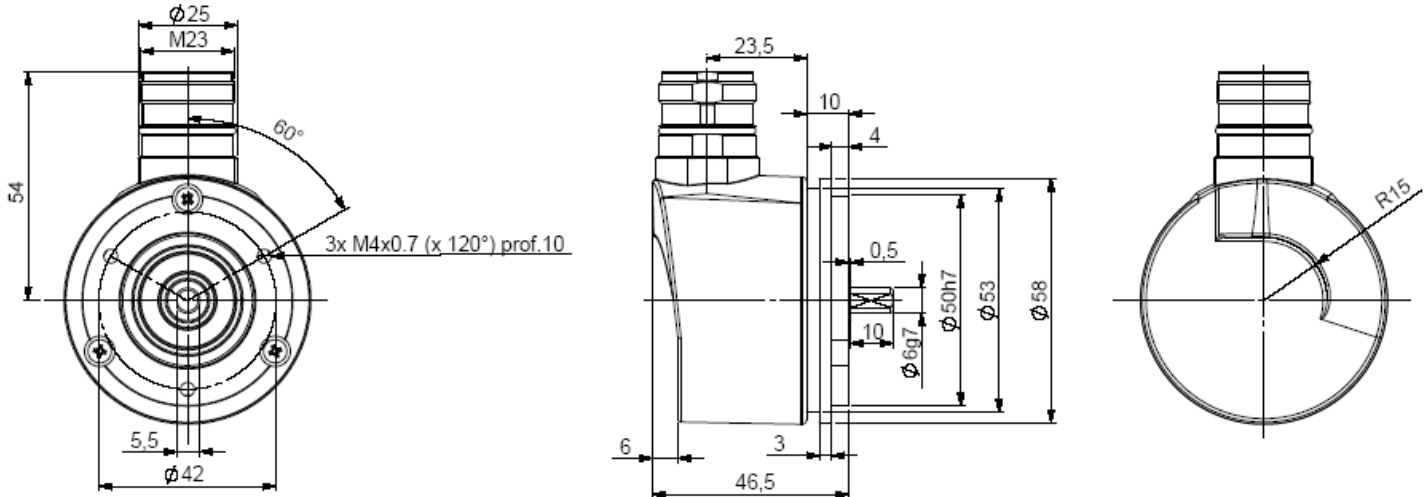
- Robustness and excellent resistance to shocks / vibrations
- High protection level IP65, IP67 feasible with a sealing flange
- High resolutions, up to 16 bits (gray or binary)
- Universal power supply from 5 to 30 Vdc
- High performances in temperature -20°C to 90°C (option -40°C to 100°C)
- Standard DIRECTION entry, RESET option
- Digital or sine incremental outputs option



CHM5_10 connection C5R (radial cable)



CHM5_06 connection C6R (radial M23), flange 9500/003 mounted on the body

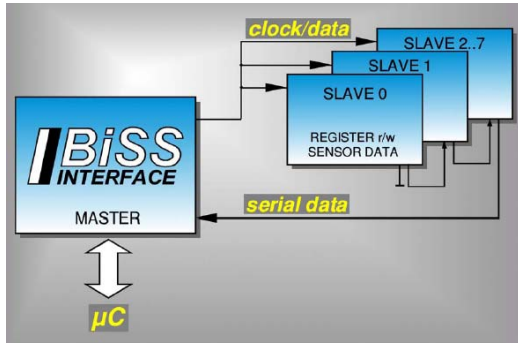


Material	Cover : zinc alloy	Shock (EN60068-2-27)	$\leq 500 \text{ m.s}^{-2}$ (durant 6 ms)
	Body: aluminium	Vibration (EN60068-2-6)	$\leq 100 \text{ m.s}^{-2}$ (10 ... 2 000 Hz)
	Shaft : stainless steel	EMC	EN 61000-6-4, EN 61000-6-2
Bearings	6 000 serie	Isolation	1 000 Veff
Maximal load	Axial : 50 N	Weight (connector)	0,3 kg
	Radial : 100 N	Operating temperature	$-20 \dots 90^{\circ}\text{C}$ (encoder T°)
Shaft inertia	$\leq 1 \cdot 10^{-6} \text{ kg.m}^2$	Storage temperature	$-40 \dots +100^{\circ}\text{C}$
Torque	$\leq 4 \cdot 10^{-3} \text{ N.m}$	Protection(EN 60529)	IP 65 (IP67 with flange option)
Permissible max. speed	$12\,000 \text{ min}^{-1}$	Theoretical mechanical lifetime 10^9 turns (F_{axial} / F_{radial})	
Continuous max. speed	$9\,000 \text{ min}^{-1}$	25 N / 50 N : 99	50 N / 100 N : 12

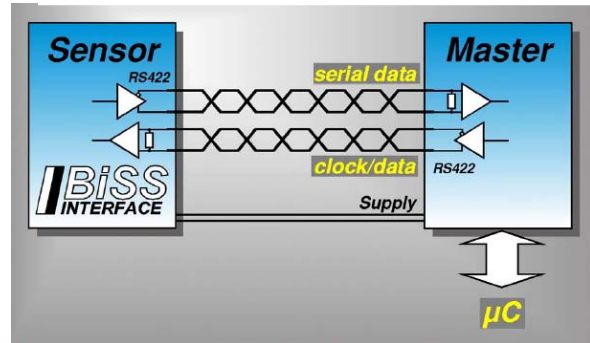
BISS ABSOLUTE SINGLE TURN ENCODERS, CHM5 RANGE



- 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: www.biss-interface.com

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
CHM5	10 : 10mm	P : 5 to 30Vdc	CB : BiSS electronic	B: Binary	13: 13 bits to 16: 16 bits	C6 : M23 12pins CW C8: M23 12pins CCW	R : radial
	06 : 6mm			G : Gray		C5 : cable gland output	Example : R020 : radial cable of 2m
CHM5 _	10 //	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