

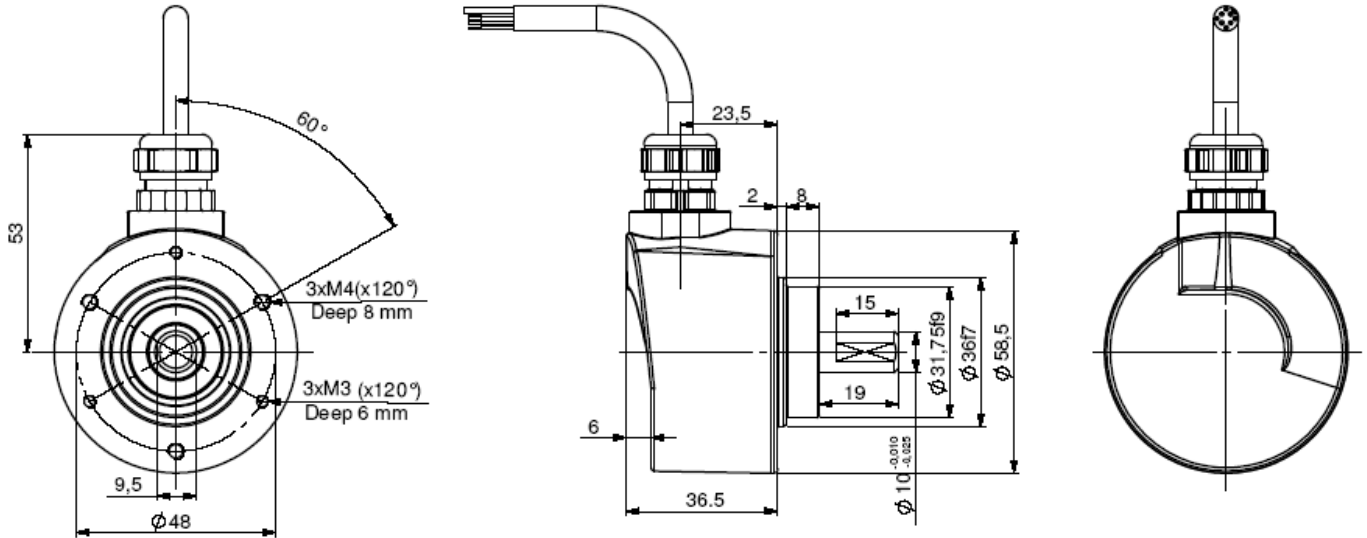
## PRELIMINARY - SSI ABSOLUTE SINGLE TURN ENCODERS, CHM5 RANGE, POSI+™

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

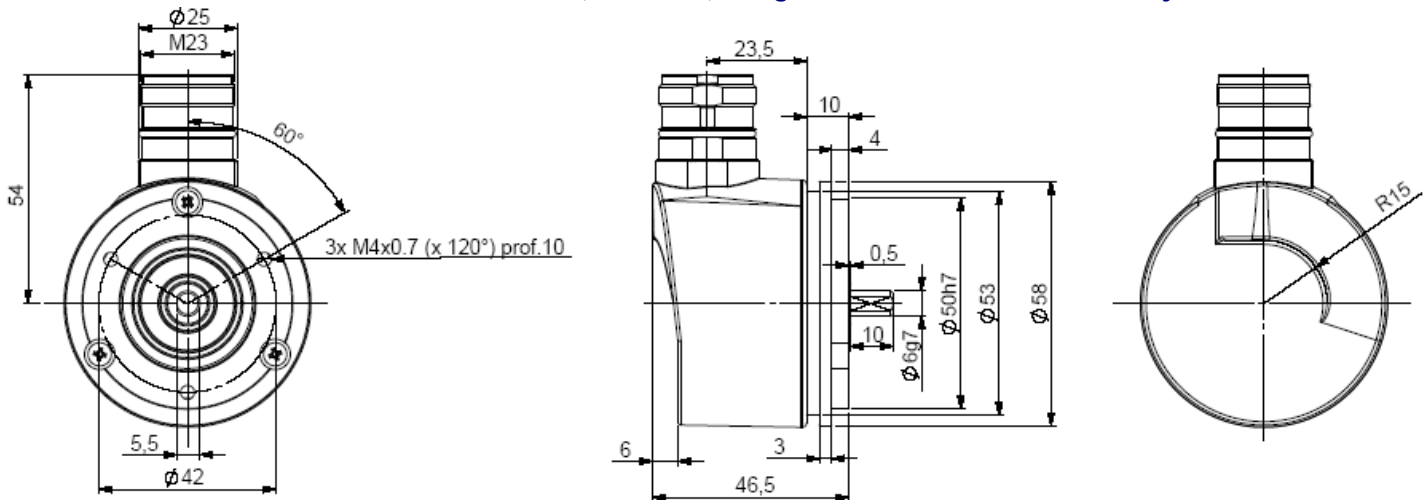
- Robustness and excellent resistance to shocks / vibrations
- High protection level IP65, IP67 feasible with a sealing flange
- High resolutions, up to 20 bits (gray or binary)
- Universal power supply from 5 to 30 Vdc
- High performances in temperature -20°C to 90°C (option -40°C to 100°C)
- Standard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



**CHM5\_10 connection C7R (radial cable)**



**CHM5\_06 connection C6R (radial M23), flange 9500/003 mounted on the body**



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	6 000 serie	Isolation	1 000 Veff
Maximal load	Axial : 50 N	Weight (connector)	0,3 kg
	Radial : 100 N	Operating temperature	- 20 ... 90°C (encoder T°)
Shaft inertia moment	≤ 1.10 <sup>-6</sup> kg.m <sup>2</sup>	Storage temperature	- 40... + 100°C
Torque	≤ 4.10 <sup>-3</sup> N.m	Protection(EN 60529)	IP 65 (IP67 with flange option)
Permissible max. speed	12 000 min <sup>-1</sup>	Theoretical mechanical lifetime 10 <sup>9</sup> turns (F <sub>axial</sub> / F <sub>radial</sub> )	
Continuous max. speed	9 000 min <sup>-1</sup>	25 N / 50 N : 99	50 N / 100 N : 12

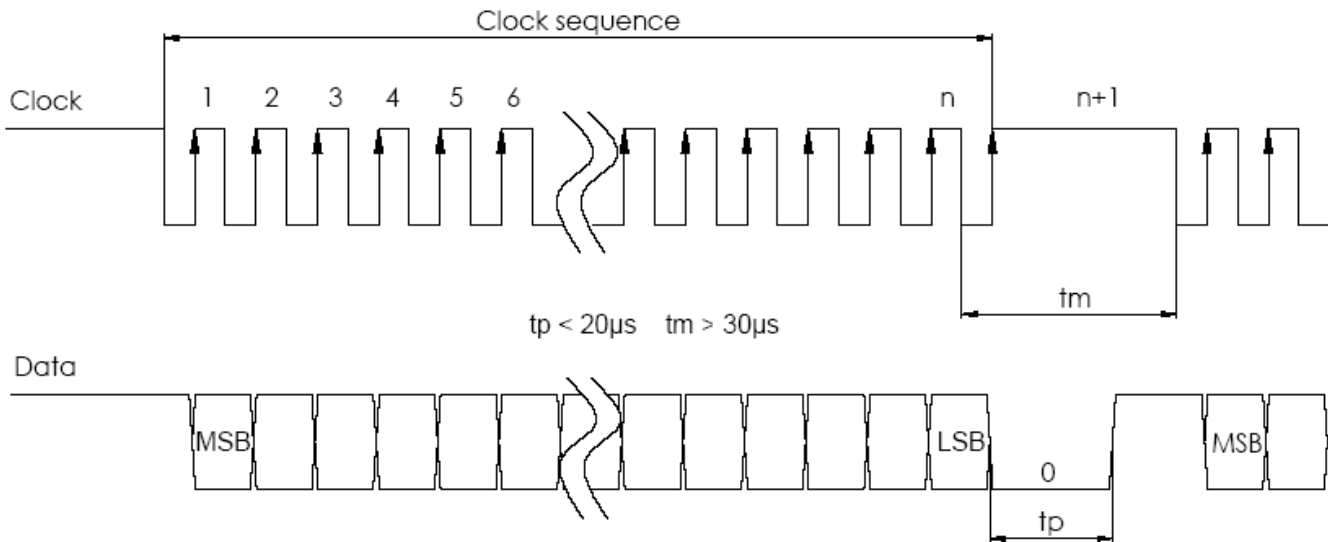
## PRELIMINARY - SSI ABSOLUTE SINGLE TURN ENCODERS, CHM5 RANGE, POSI+™

### ELECTRICAL CHARACTERISTIC

Input signal clock CLK	per opto-coupleur	Power supply	5 – 30Vdc
Output signal DATA	line - driver RS422	Introduction	< 1 s
Clock frequency CLK	100kHz – 1MHz (13 bits encoder*)	Consumption without load	100mA max

\*Consult us for other resolution

### SSI TRANSMISSION ( n = 13 without parity )



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

### SSI STANDARD CONNECTION

Type	Vcc	0V	Clk+	Data+	Data-	Clk-	DIRECTION
C6	1	2	3	4	6	7	9
C7	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	CS : SSI without parity	B : Binary	Max: 20 bits, power of 2  13: 13 bits to 13: 13 bits	C6 : M23 12pins CW for SSI transmission	R : radial
	06 : 6mm		CP : SSI even parity  CI : SSI odd parity			G : Gray	
CHM5	10 //	P	CS	G //	13 //	C7	Example : R020 : radial cable of 2m
							R050

### Monitoring function available in option :

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

Consult us

### Entry / output available in option:

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