

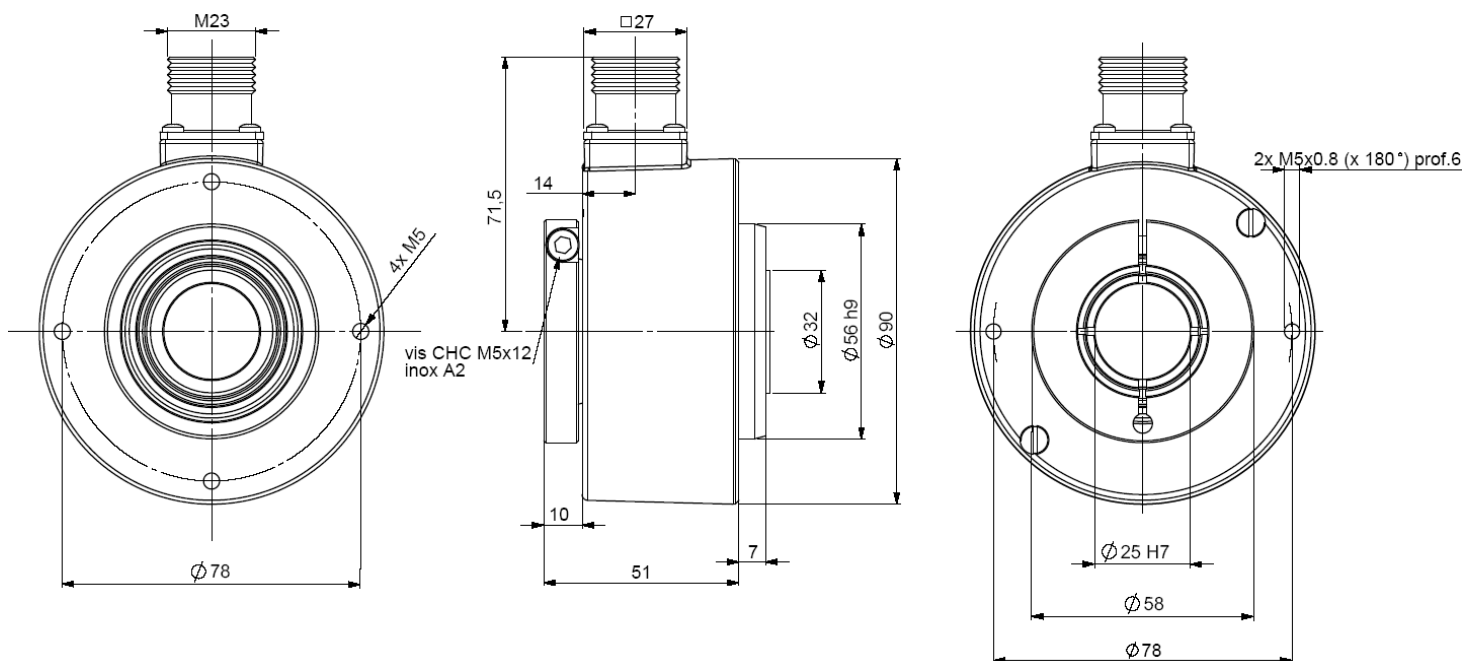
## PARALLEL ABSOLUTE SINGLE TURN ENCODERS, CHU9 RANGE

CHU9, 90mm parallel absolute single turn encoders :

- Especially designed for heavy-duty (steel, paper, wood – mills, cranes ...) Compact and robust conception. Excellent resistance to shocks/vibrations and to high axial/radial loads.
- Through hollow shaft 30mm, reduction hubs available from 10 to 28mm.
- High protection level IP65.
- High performances in temperature  $-20^{\circ}\text{C}$  to  $90^{\circ}\text{C}$ .
- Universal power supply from 5 to 30 Vdc – parallel output.
- High resolutions possibility, up to 14 bits (Gray or binary).
- Standard DIRECTION input.
- Double/triple mounting in combinations of incremental, absolute, analogue signals.



### CHU9\_25 connection CPR (radial M23), with reduction hub 9418/125 (25mm) mounted on the shaft



## MECHANICAL CHARACTERISTICS

Material	Cover : zinc alloy	Vibrations (EN60068.2.6)	$\leq 200\text{m.s}^{-2}$ (10 ... 1 000Hz)
Stainless steel option	Body : aluminium	EMC	EN 61000-6-4, EN 61000-6-2
Shaft	Stainless steel	Isolation	1000 Veff
Bearings	6807 serie	Encoder weight (approx.)	0,700kg zinc alloy cover, alu body
Maximum loads	Axial : 50 N		1,000kg zinc alloy cover, stainless steel body
	Radial : 80 N		1,200kg stainless steel cover and body
Shaft inertia	$\leq 55.10^{-6}$ kg.m <sup>2</sup>	Operating temperature	- 20 ... + 90 °C (encoder T°)
Torque	$\leq 25.10^{-3}$ N.m	Storage temperature	- 40 ... + 100 °C
Permissible max. speed	6 000 min <sup>-1</sup>	Protection(EN 60529)	IP 65
Continuous max. speed	3 600 min <sup>-1</sup>	Torque (ring screw)	nominal: 3N.m, break: 4N.m
Shaft seal	Viton	Theoretical mechanical lifetime 10 <sup>9</sup> turns (F <sub>axial</sub> / F <sub>radial</sub> )	
Shocks (EN60068.2.27)	$\leq 500$ m.s <sup>-2</sup> (during 6 ms)	25 N / 40 N : 140	50 N / 80 N : 17

## PARALLEL ABSOLUTE SINGLE TURN ENCODERS, CHU9 RANGE

### CONNECTION

	color	13 bits + DIRECTION CP or C3	14 bits + DIRECTION C1
1	white WH	0V	0V
2	brown BN	+Vcc	+Vcc
3	green GN	D0	D0
4	yellow YE	D1	D1
5	grey GY	D2	D2
6	pink PK	D3	D3
7	blue BU	D4	D4
8	red RD	D5	D5
9	black BK	D6	D6
10	violet VT	D7	D7
11	white/brown WH/BN	D8	D8
12	white/green WH/GN	D9	D9
13	white/yellow WH/YE	D10	D10
14	white/grey WH/GY	D11	D11
15	white/pink WH/PK	D12	D12
16	white/blue WH/BU	DIRECTION	D13
17	White/red WH/RD	/	DIRECTION

Example, 10 bits encoder : only MSB will be supplied (D3 to D12)

### ORDERING REFERENCE (Contact the factory for special versions, ex: special flanges, connections, electronics...)

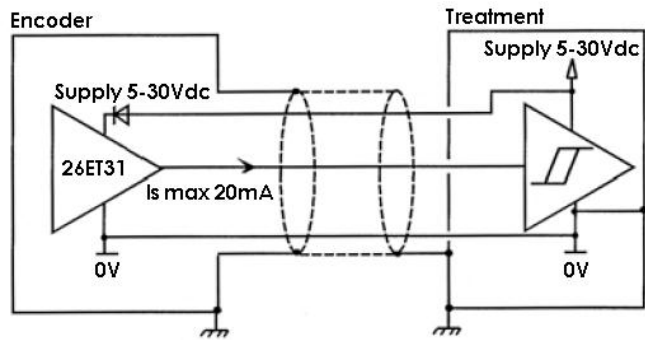
	Shaft Ø	Supply	Output stage	Code	Resolution	Connection	Orientation
<b>CHU9</b> Cover : zinc Body : alu	30: 30mm  Reduction hubs available 10 to 28mm	P : 5 to 30Vdc	C5 : push pull 5 to 30Vdc	B : Binary  G : Gray	Power of 2:  1: 1 bit to 14: 14 bits	CP : M23 16 pins 13 bits + direction	R : radial
C1 : M23 17 pins 14 bits + direction							
<b>CXU9</b> Stainless steel cover & body						C3 : cable gland + 16 wires cable	Example : <b>R020</b> : radial cable 2m
<b>CHU9</b>	30	P	C5	G	13	C3	R020

#### Monitoring function available as option :

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

Consult us.

### ELECTRONIC



Power supply : 5 to 30Vdc  
Consumption without load : 100mA max  
Current output per channel : Is=20mA max  
Level '0' (Is=20mA) max : V<sub>ol</sub> = 0,5Vdc  
Level '1' (Is=20mA) min : V<sub>oh</sub> = Vcc-2,5Vdc

Protection against short circuits and inversion of polarity

#### DIRECTION

CW increasing code: DIRECTION pin to +Vcc  
CCW increasing code : DIRECTION pin to 0V

#### LATCH (option)

Active data on the outputs : LATCH pin to 0V  
Frozen data on the outputs: LATCH pin to +Vcc

Consult us for the connection of an encoder with this option.