

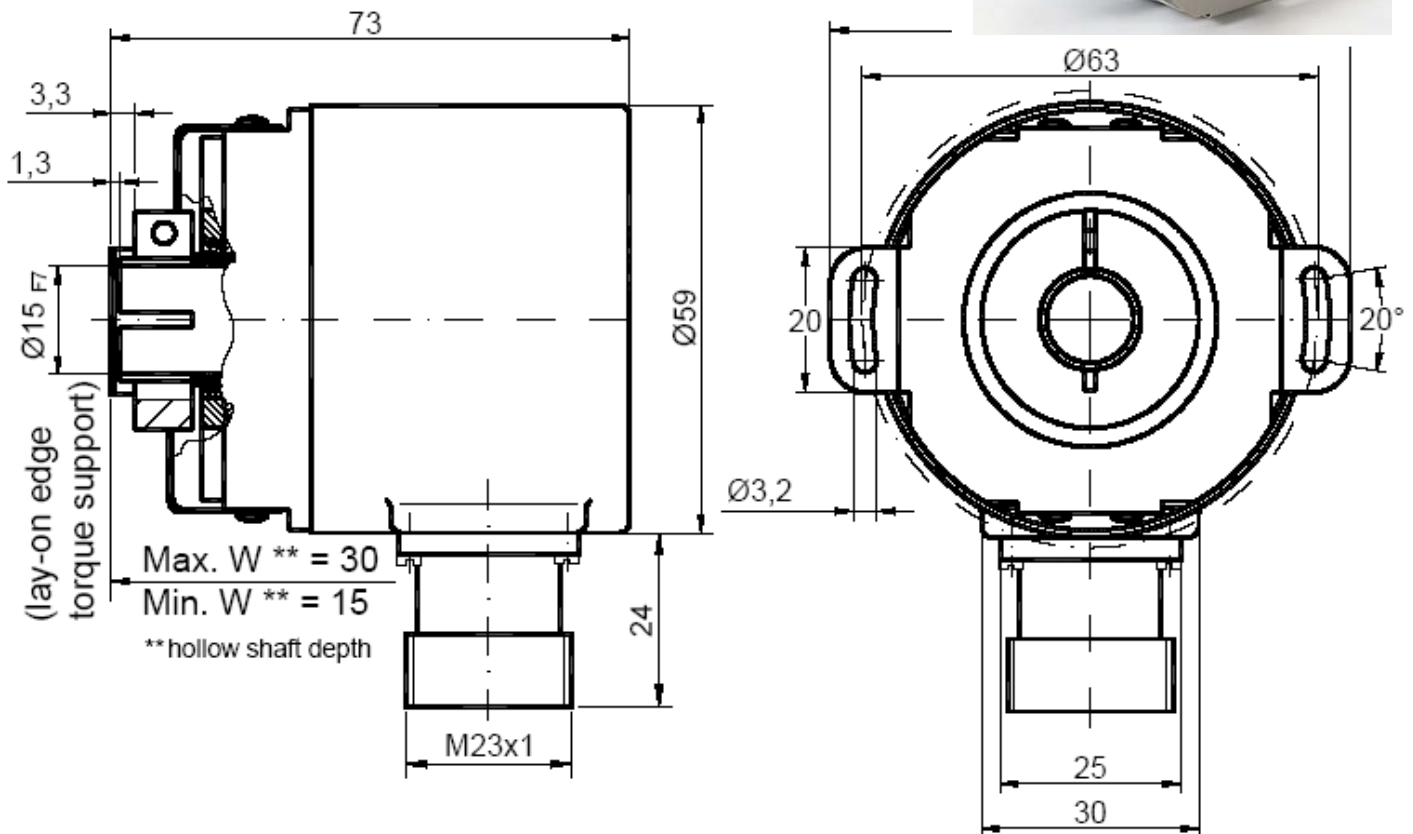
## ABSOLUTE ENCODERS SINGLE TURN SSI, SERIE FHK515-SSIR

FHK515-SSIR, Ø58mm standard encoder with transmission series :

- compact and robust conception
- hollow shaft version Ø 15 mm, reduction hub available
- precision bearing with sealing flange
- high performances between -40°C and 85°C
- Coded disc in non-distortable and unbreakable material
- Mechanical memory of turns number with a pignony system
- GRAY Code
- Resolution : 13 bits = 8192 points / turn (max 16 bits)
- Protection against polarity inversions and tensions
- High integration CMS Technology



FHK515-SSIR (M23 12 radial pins)



Acceptable beat	axial	radial
static	± 0.3 mm	± 0.5 mm
dynamic	± 0.1 mm	± 0.2 mm

Possibility of reduction of the hollow shaft diameter to 12mm, 10mm or 8mm using hubs (putting them inside the shaft)

### MECHANICAL CHARACTERISTICS

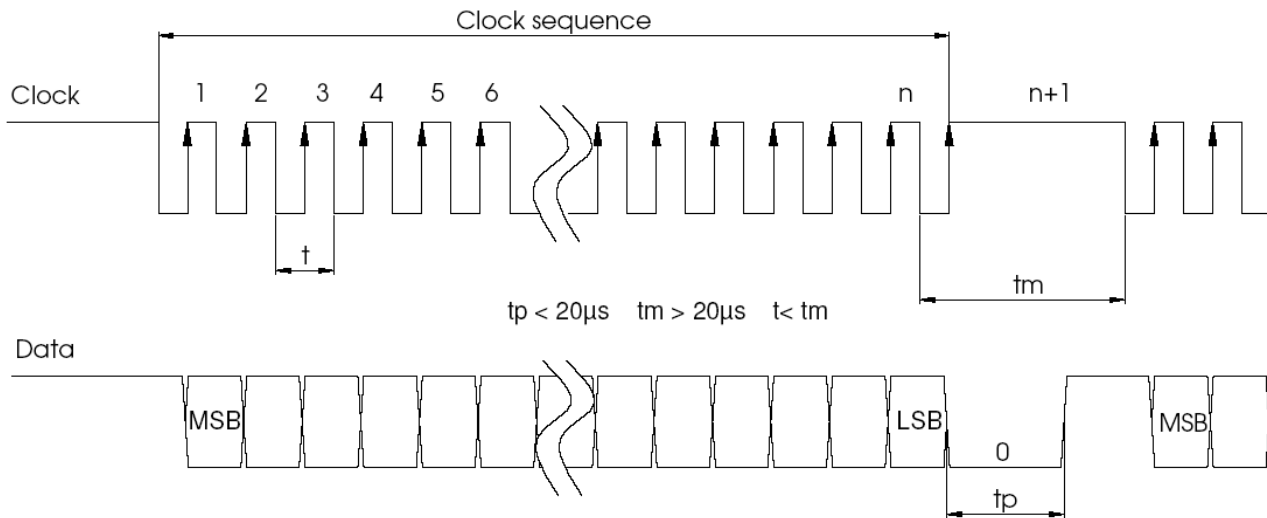
Material (Stainless steel in option)	Cover : aluminium	shocks (EN 60068-2-27)	≤ 100 g (half sinus, 6 ms)
	Body : aluminium	shocks (EN 60028-2-29)	≤ 10 g (half-sinus, 16ms)
	shaft: Stainless steel	Vibrations (EN 60068-2-6)	≤ 10 g (10Hz... 1 000Hz)
Maximal load	Axial : 40 N	weight (version aluminium)	200 g
	Radial : 110 N	Operating temperature	- 40 ... + 85°C
Shaft inertia	≤ 30 g.cm <sup>2</sup>	Storing temperature	- 40 ... + 85°C
torque	≤ 3 N.cm	Humidity	98 % without condensation
Max speed (continuous)	6 000 tr/min	Protection degree	cover: IP65, body: IP64

## CODEURS ABSOLUS MONOTOURS SSI, SERIE FHK515-SSIR

### ELECTRICAL CHARACTERISTICS

Input signal clock CLK	per opto-coupleur	Cycle time (Reset)	< 150 $\mu$ s
Output signal clock DATA	line - driver RS422	introduction	< 1 s
Clock frequency CLK	100kH - 2MHz	Consumption	max 1W
Precision	+ 1/2 LSB	Electrical lifetime	> 10 <sup>5</sup> h
supply	10 - 30Vdc	CEM	EN 61000-6-4 EN 61000-6-2

### SSI TRANSMISSION

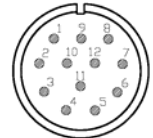


Driver	Data referring to standard RS422 ; transmission up to 10 Mbits/s
Transmission	Transmission up to 1 200m
Security	Transmission of signals
Cable	High security of transmission by using shielded cable and twisted pairs

### SSI CONNECTION ON M23 CONNECTOR 12 PINS

Type	CLK -	CLK +	DATA +	DATA -	Sense	Reset	+ Ub = 10-30Vdc	GND
S1	1	2	3	4	8	9	11	12

Embase codeur:



### INPUTS

Counting when shaft in CW (body side)		Value back to zero	
0 (input = NC ou GND)	Increasing counting	0 (entrée = NC ou GND)	Position
1 (input = +Ub ou $\geq$ 4,5V)	Decreasing counting	1 (entrée = +Ub ou $\geq$ 4,5V)	Reset on decreasing front (100ms)

### REFERENCES

FHK5	S1	00	G	00	13	B	15	0	PRL
Absolute mono turn encoder	Reset Fonction	Version	Gray Code	Mono turn encoder	Resolution in the tour : 2 <sup>13</sup> (8 192)	Hollow shaft	Shaft diameter 15mm, reduction hubs available	without mechanical option	radial connector output

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