

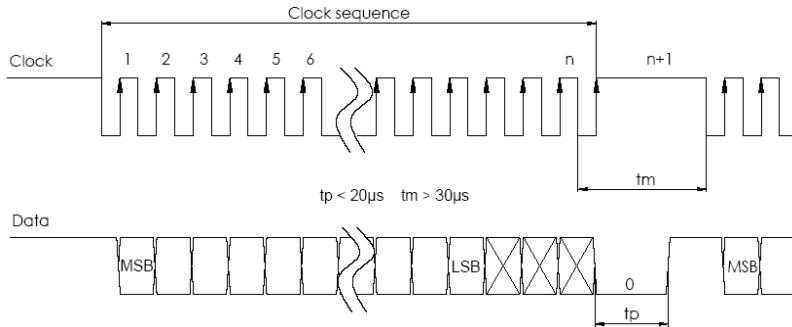


## OPTICAL SSI SINGLE-TURN ENCODERS, CXM5S – STAINLESS STEEL 316 - IP69K

### ELECTRICAL CHARACTERISTIC

Input signal clock CLK	per optocoupler	Clock frequency CLK	• 100kHz to 1MHz for 13 bits encoder
Output signal DATA	line - driver RS422		• 100kHz – $F_{max} = 10^6 / (\text{resolution in bits} - 10)$ for encoder >13bits, ex : $F_{max}=166\text{kHz}$ for 16 bits encoder
Power supply	5 – 30Vdc	Interrogation frame	n=13 bits for 13 bits resolution
Introduction	< 200ms		n=21bits for >13bits resolution
Consumption without load	Max. 100mA		

### SSI TRANSMISSION



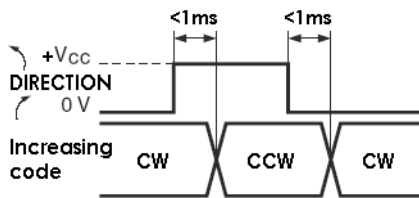
Transmission	Transmission up to 400m at 100kHz in function of the cable characteristics
Câble	High security of transmission by using shielded cable and twisted pairs

\* Consult us for length > 100m

### CONNECTIQUE

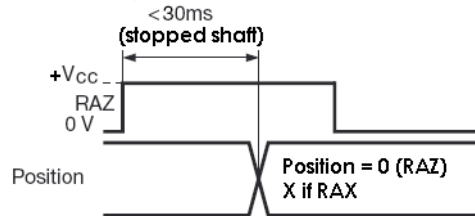
Type	Cable	+ Vcc	0 V	Clk+	Data+	RAZ	Data-	Clk-	DIRECTION
S5	8230/050 PUR 12 wires	BN/GN Brown/Green	WH/GN White/Green	GN Green	GY Grey	BU Blue	PK Pink	BN Brown	WH White

#### DIRECTION input



	min	max	Increasing
Level "0"	0 V	$0,3x(+V_{CC})$	CW
Level "1"	$0,7x(+V_{CC})$	$+V_{CC}$	CCW
I direction	< 5mA		

#### RAZ / RAX input



	min	max
Level "0"	0 V	$0,3x(+V_{CC})$
Level "1"	$0,7x(+V_{CC})$	$+V_{CC}$
I rax/rax	< 5mA	

Nota : Do not connect other pinouts, connect DIRECTION and RAZ to a potential (RAZ at 0V if not used)

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

Range	Shaft Ø	Mechanics	Supply	Output stage	Code	Resolution	Connection	Orientation
<b>CXM5S</b>	<b>10</b>	<b>AA</b>	<b>P</b>	<b>CS</b> : SSI without parity	<b>B</b>	<b>13</b>	<b>S5</b>	Example :
Optical – stainless steel 58mm encoder	10mm	316 stainless steel IP69K Hygienic design	5 to 30Vdc	<b>CP</b> : SSI even parity <b>CI</b> : SSI odd parity	Binary  Gray	13 bits Standard  option: <b>14</b> : 14 bits to <b>16</b> : 16 bits	PUR cable	<b>A020</b>  Axial cable of 2m
Ex:CXM5S	10 /	AA /	P	CS	G //	13 //	S5	A050

#### Monitoring function available as option:

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

Consult us

#### Input / output available as option:

- RAX input (reset to a value X, manufacture setting)
- ERROR output for monitoring functions
- Sine & Cosine outputs without index, 2048ppr (option: 4096 ppr)
- A & B incremental outputs without index, 2048ppr (option: 4096 ppr)

Made in France