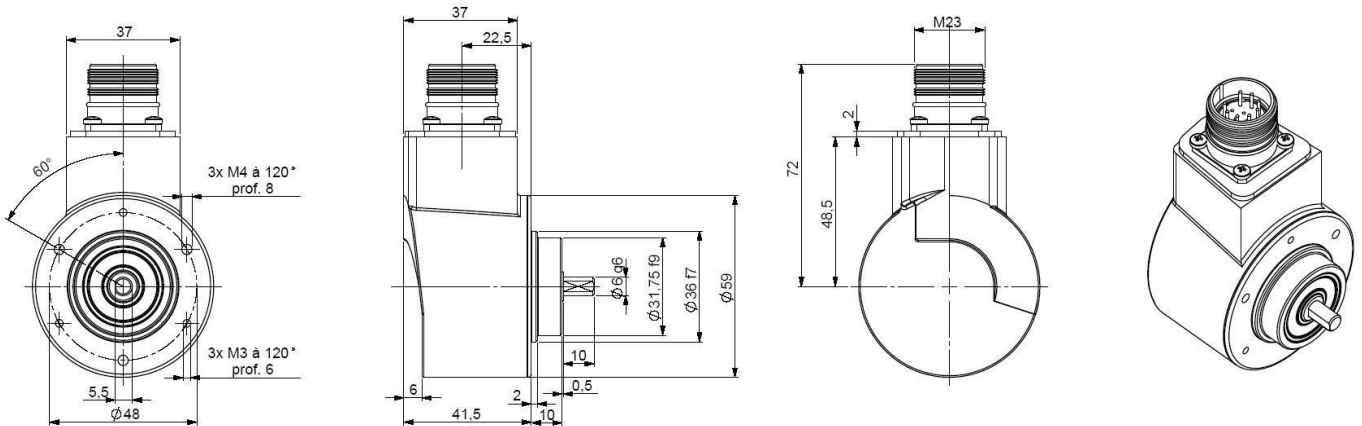


ABSOLUTE MULTITURN ENCODER, PHM5 SERIE, POSI+™

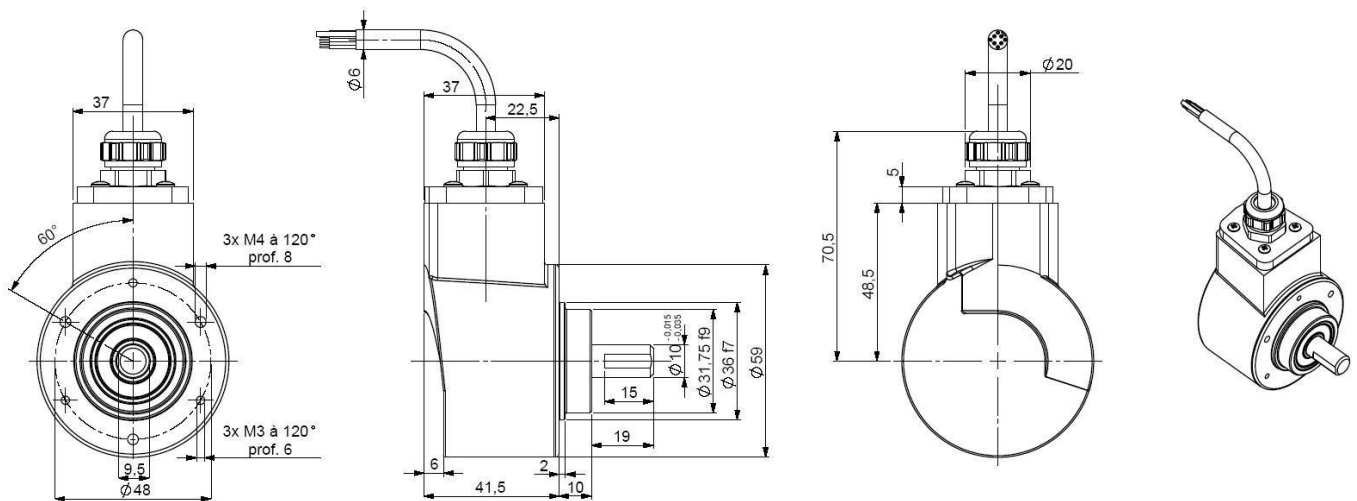
- Solid shaft $\varnothing 6$ and $\varnothing 10$ mm ,
- Robustness and excellent resistance to shocks / vibrations
- High protection level IP65, IP67 feasible with a sealing flange
- High performances in temperature -20°C to 85°C
- Isolated SSL interface, clock from 100 to 500 kHz
- Universal electronic circuits from 5 to 30Vdc, protection against short-circuits and inversion of polarity
- High resolutions available: 8192 (13 bits) per turn, and turn counting up to 65 536 (16 bits)
- 2 inputs : Direction and Reset
- available with incremental channels
- push-button on the cover option for a encoder reset to a value X



PHM5_06 connection S6/M8R (radial 12 pinouts M23)



PHM5_10 connection S7R (radial cable)

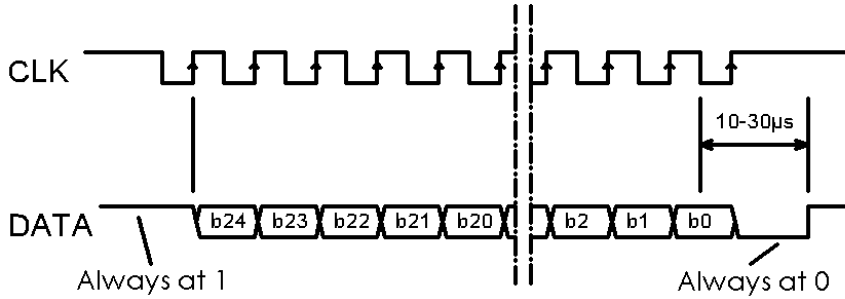


Material	Cover : treated steel	Shocks (EN60028-2-29)	≤ 10 g (during 6 ms)	
	Body: aluminium	Vibrations (EN60068-2-6)	≤ 10 g (10 Hz...500 Hz)	
	Shaft : stainless steel	EMC	EN 61000-6-4, EN 61000-6-2	
Bearings	6 000 ZZ1	Isolation voltage	50 V eff	
Maximal loads	Axial : 50 N	Electrical life time	$> 10^5$ h	
	Radial : 100 N	Weight	650 g	
Shaft inertia	≤ 10 g.cm ²	Operating temperature	$-20... + 85^{\circ}\text{C}$	
Torque	≤ 0.4 N.cm	Storage temperature	$- 30... + 85^{\circ}\text{C}$	
Maximum speed	12 000 rpm	Humidity	98 % (without condensation)	
Speed (continuous)	9 000 rpm	Protection(EN 60529)	IP 65 (IP67 with flange option)	
Maximal acceleration	1.10^5 rad.s ⁻²	Theoretical mechanical lifetime 10^9 tours (F_{axial} / F_{radial})		
Shaft seal	Viton	10 N / 25 N	25 N / 50 N	50 N / 100 N
Shocks (EN60068-2-27)	≤ 30 g (during 11 ms)	1 200	99	12

ABSOLUTE MULTITURN ENCODER, PHM5 SERIE, POSI+™

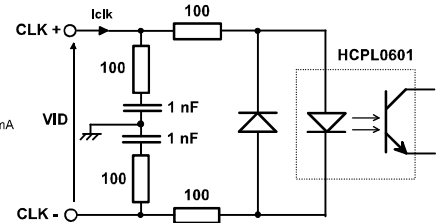
SSI TRANSMISSION

WITHOUT PARITY (25 BITS)



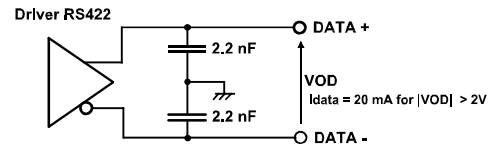
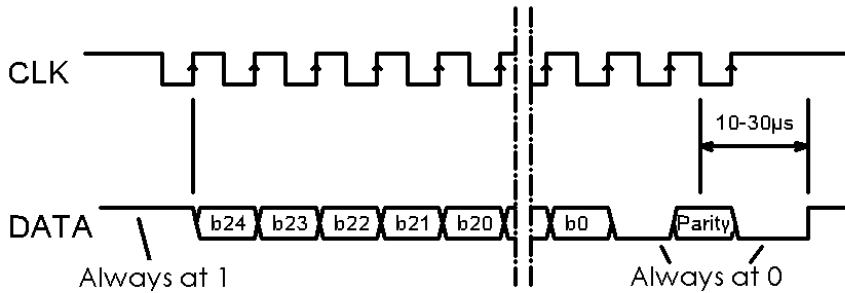
Power supply : 5 to 30 V DC
Ondulation max : 500 mV
Protection against inversion of polarity
Consumption without load : 100 mA (60mA typical at 24V)

|VID| max = 5V
|Iclk| max = 15 mA
|VID| > 2V



ISOLATED CLOCK ENTRY

WITH PARITY (25 BITS)



RS422 DATA OUTPUTS

SSI CONNECTION

Type	Vcc	Gnd	Clk+	Data+	Rax	Data-	Clk-	Direction	OUT1	OUT2
S6	1	2	3	4	5	6	7	9	10	11
S7	BN Brown	WH White	GN Green	GY Grey	BU Blue	PK Pink	YE Yellow	RD Red	BK Black	RD/BU Red/ Blue
M8	8	1	3	2	6	10	11	5	4	9

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

	∅ shaft	Power supply	Outputs	Code	Resolution			Connection	Connection orientation
PHM5	10 : 10mm 06 : 6mm	P : 5 to 30Vdc	SS : SSI without parity	G : Gray	13 B12 D5			S6 : M23 12 pins clockwise M8 : M23 12 pins counter clockwise	R : radial
					Resolution	Nb of turns	Nb data		
					13: 13 bits	B12: 12 bits	D5: 25 bits	S7 : cable	Example : R020 : radial cable of 2m
PHM5	10 //	P	SS	G //	13	B12	D5 //	S7	R050