

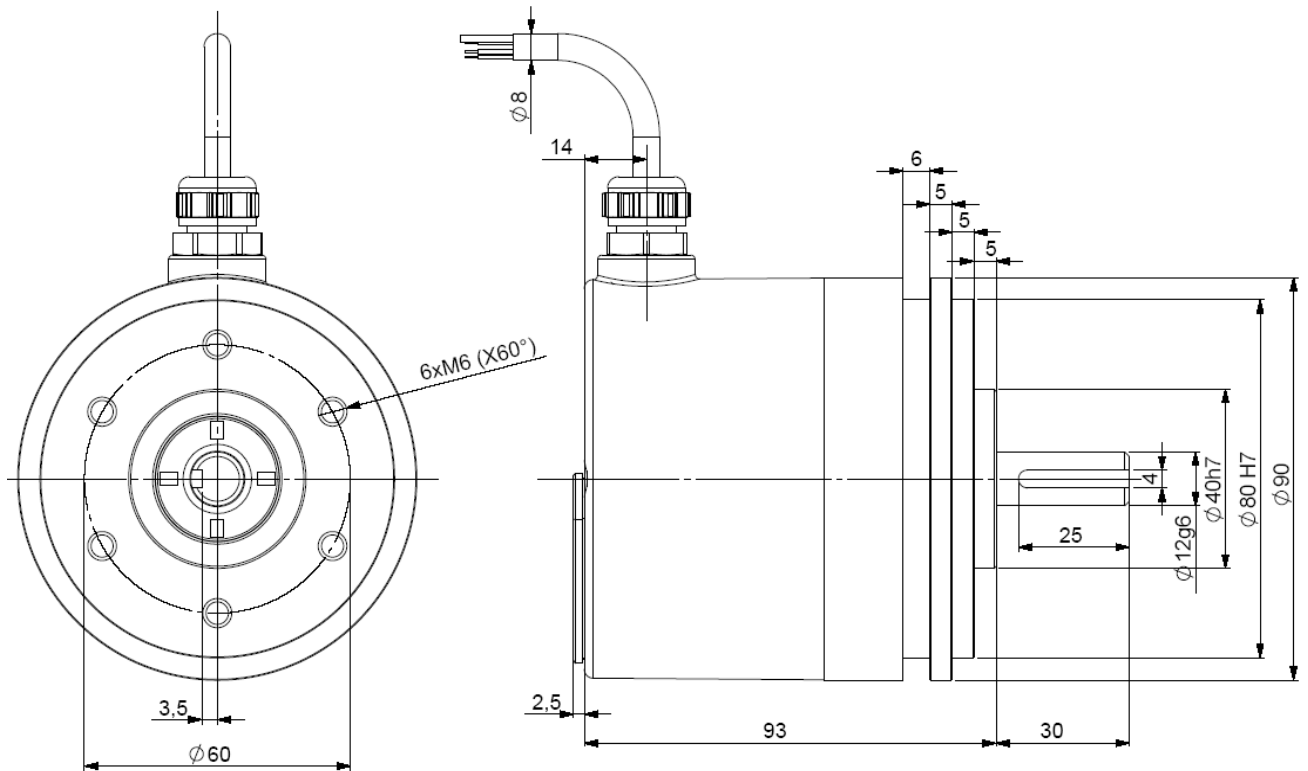
PROFIBUS ABSOLUTE MULTITURN ENCODERS, SHM9 RANGE

Especially designed for Heavy Duty Industry (steel, paper, wood – mills, cranes...). Compact and robust conception. Excellent resistance to shocks/vibrations and to extreme axial/radial loads

Solid shaft output, IP67



Also available in SSI and fieldbus interfaces : CanOpen and DeviceNet



Material	Cover : zinc alloy
Stainless steel option	Body: aluminium
Shaft	Stainless steel
Bearings	6001 serie
Maximal loads	Axial : 100 N
	Radial : 200 N
Shaft inertia	$\leq 15 \cdot 10^{-6}$ kg.m ²
Torque	$\leq 10 \cdot 10^{-3}$ N.m
Permissible max. speed	6 000 min ⁻¹
Continuous max speed	6 000 min ⁻¹
Shaft seal	Viton
Shocks (EN60068-2-27)	≤ 300 m.s ⁻² (during 6 ms)

Vibration (EN60068-2-6)	≤ 100 m.s ⁻² (10 ... 500 Hz)		
EMC	EN 50081-1, EN 61000-6-2		
Isolation	1 000 V eff		
Encoder weight (approx.)	1,100kg zinc cover, alu body		
	2,400kg zinc cover, stainless steel body		
	2,600kg stainless steel cover and body		
Operating temperature	- 10... + 70 °C (encoder T°)		
Storage temperature	- 10... + 70 °C		
Protection(EN 60529)	IP 67 (cable)		
Theoretical electrical lifetime 10 ⁹ turns (F _{axial} / F _{radial})			
	20 N / 30 N	50 N / 100 N	100 N / 200 N
	360	18	2,2

PROFIBUS ABSOLUS MULTITOURS PROFIBUS, SHM9 RANGE



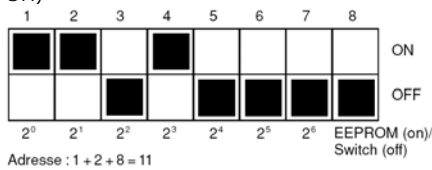
General

Transmission frequency: from 9.6Kbaud to 12Mbaud

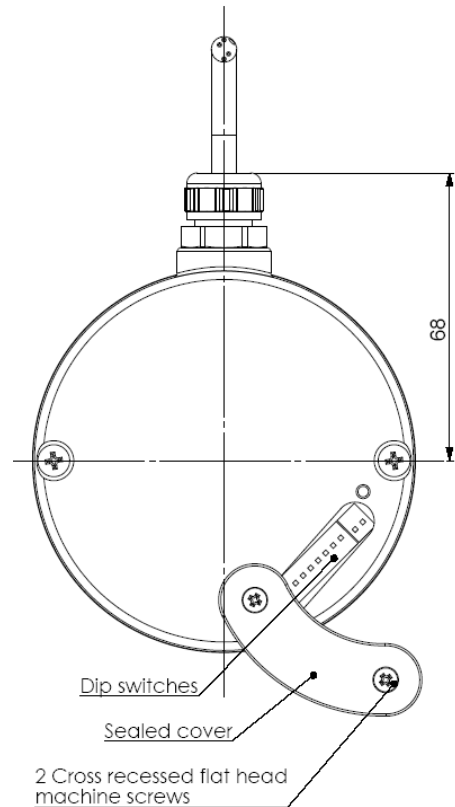
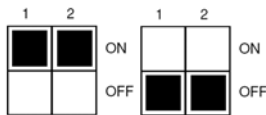
Electronic interface: RS 485 opto-isolated

Address : permits the addressing of each encoder in an installation (32 master stations or slaves stations per segment without repetitor, 127 maximum with repetitor)

The 8 switch permits to chose the addressing per deep switch (8=off) or per programm(8=on)



Impedancy adaptation : is activated per the deep switch dip switch (1 and 2 = on) in the terminal box or on the encoder



Programmable parameters

Direction : Permits the definition of the counting direction of the encoder (CW or CCW) following its mechanical position

Resolution : the number of points per turn can be between 0 and 8192

Global resolution (MAX RANGE) : Total number of codes of the encoder (2 to 536 870 912)

Rax : defines the value of its actual position

PROFIBUS CONNECTION

B3 : cable + connector M23 12 pins				
A	B	Vcc	GNd	Reserved
2	4	7	8	1, 3, 5, 6, 9, 10, 11, 12

B4 : cable			
A	B	Vcc	Gnd
GN / green	YE / yellow	BR / brown	WH / white

Reserved: do not connect

Nota : Refer to the bus standards for the maximal derivation length

ORDERING CODE (Special versions upon request, for ex. special flanges/electronics/connections...)

	Shaft Ø	Supply	Output stage	Code	Resolution	Number of turns	Connection	Connection orientation	
SHM9 Zinc cover Alu body	11:11mms 12:12mms	5 : 11 to 30Vdc	BG : Profibus	B: Binary	13 : 8192 points per turn (2 ¹³)	B16 : 65 536 turns (2 ¹⁶)	B3 : Cable gland + cable + M23 12 pins B4 : Cable gland + 4 wires cable	Example : R010 : radial cable 1m	
SBM9 Zinc cover Stainless steel body									
SXM9 Stainless steel cover & body									
SHM9	-	12 //	5	BG	B //	13	B16 //	B4	R010

Made in FRANCE