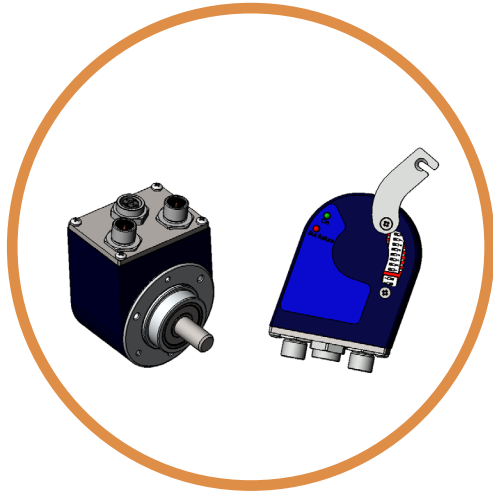




| PHM5

ABSOLUTE MULTI-TURN ENCODER, PROFIBUS INTERFACE



- Solid shaft Ø 6 and Ø 10 mm
- Extra-flat encoder – 58mm housing
- Robustness and excellent resistance to shocks / vibrations
- High protection level IP65
- High performances in temperature –20°C to +85°C
- 5 to 30 Vdc power supply
- Standard resolution : 8192 points per revolution (13 bits resolution)
- High resolution available in option: 65 536 points par revolution (16 bits resolution)
- Turns numerisation up to 65 536 (16 bits)
- Connection via M12 connectors
- DPV0, Class 2, encoder profile 3.062
- PHM5 also available with SSI, programmable SSI, CANopen and RS232 interface



SPECIFICATIONS

Mechanical

Material	Cover : treated steel
	Body : aluminum
	Shaft : stainless steel
Bearings	6 000 serie
Maximum load	Axial : 50 N
	Radial : 100 N
Shaft inertia	$\leq 1.10^{-6}$ kg.m ²
Torque	$\leq 4.10^{-3}$ N.m
Permissible max. speed	6 000 min ⁻¹
Continuous max. speed	6 000 min ⁻¹
Shock (EN60068-2-27)	≤ 500 m.s ⁻² (during 6 ms)
Vibration (EN60068-2-6)	≤ 100 m.s ⁻² (10 ... 2 000 Hz)
EMC	EN 61000-6-4, EN 61000-6-2
Isolation	500V (1 min.)
Weight (approx.)	0,600 kg
Operating temperature	- 20 ... + 85 °C (encoder T°)
Storage temperature	- 20 ... + 85 °C
Protection(EN 60529)	IP 65
Theoretical mechanical lifetime 10⁹ turns (Faxial / Fradial)	25 N / 50 N : 99
	50 N / 100 N : 12

GENERALITY

Transmission frequency: from 9.6Kbaud to 12Mbaud.

Electronic interface: opto-isolated RS 485.

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



End line resistance termination: 1, 2 "ON"
(Beginning or end line)

Switch - on "ON"	1	2	3	4	5	6	7
=	1	2	4	8	16	32	64

Switch 8 on "OFF".

Example: Address 5: Switch 1 & 3 on "ON", others on "OFF".

PARAMETERS PROGRAMMABLES

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, option: 0 to 65536.

Global resolution (MAX RANGE) : Total number of codes of the encoder (2 to 536 870 912, option 2 to 2 147 483 648).

Reset : defines the value of its actual position.

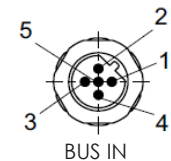
Time base : defines the base time for the speed calculation (10 ms , 100 ms, 1 s, speed in rpm).

CONNECTION

BUS IN (M12 - 5 male pinout B code)

Signal	NC	BUS A	NC	BUS B	NC
Pinout	1	2	3	4	5

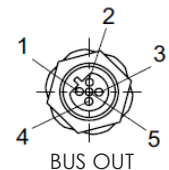
NC : do not connect.



BUS OUT (M12 - 5 female pinouts B code)

Signal	P5V	BUS A	BUS GND	BUS B	NC
Pinout	1	2	3	4	5

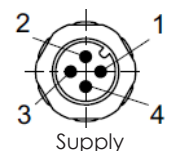
P5V & BUS GND for the connection of the end-line termination resistance.



POWER SUPPLY (M12 - 4 male pinouts A code)

Signal	+Vcc	NC	0Vdc	NC
Pinout	1	2	3	4

Power supply : 5-30V, consumption <200 mA (160mA typ)

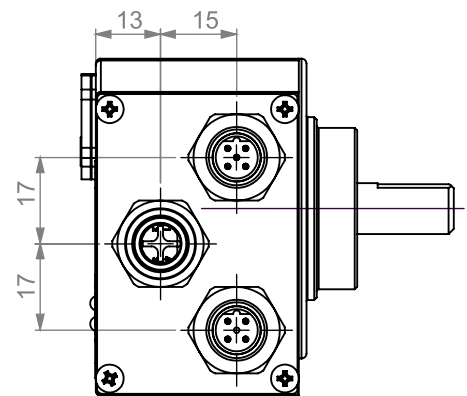
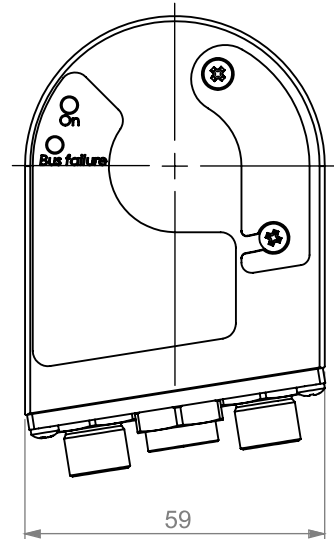
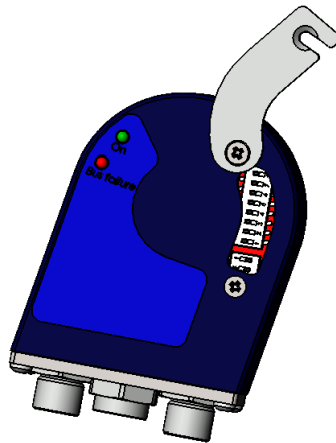
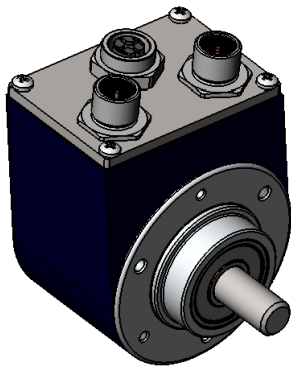
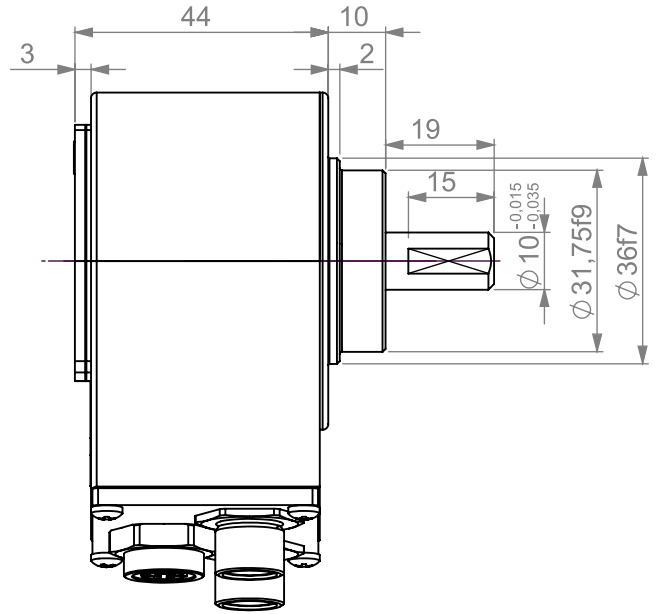
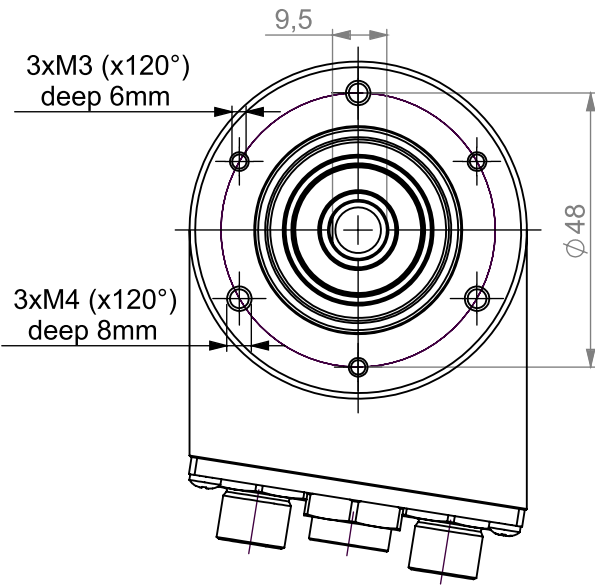




DIMENSIONS

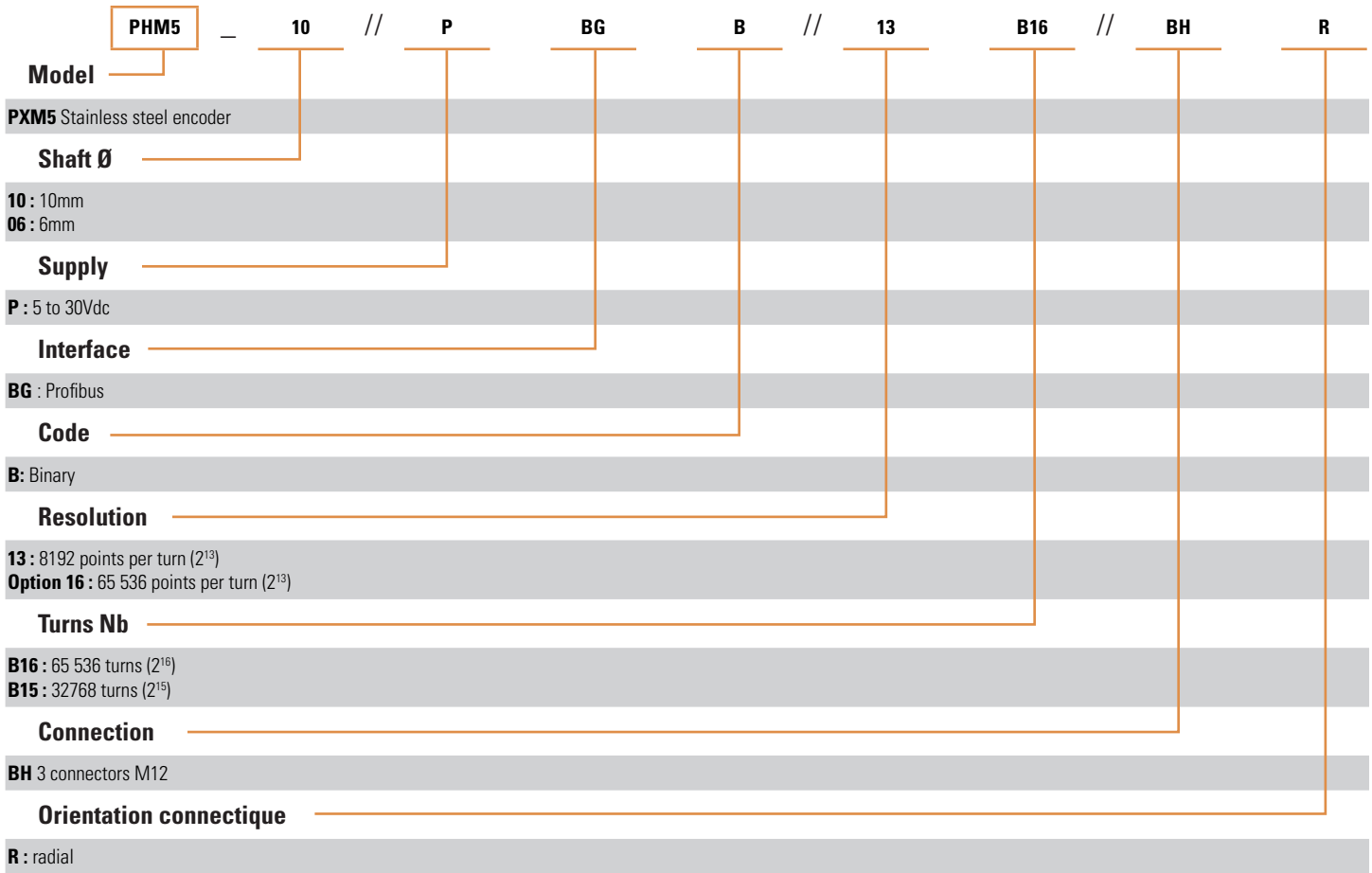
All dimensions are in: mm

PHM5 Profibus - connection 3xM12





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



AGENCY APPROVALS & CERTIFICATIONS



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