

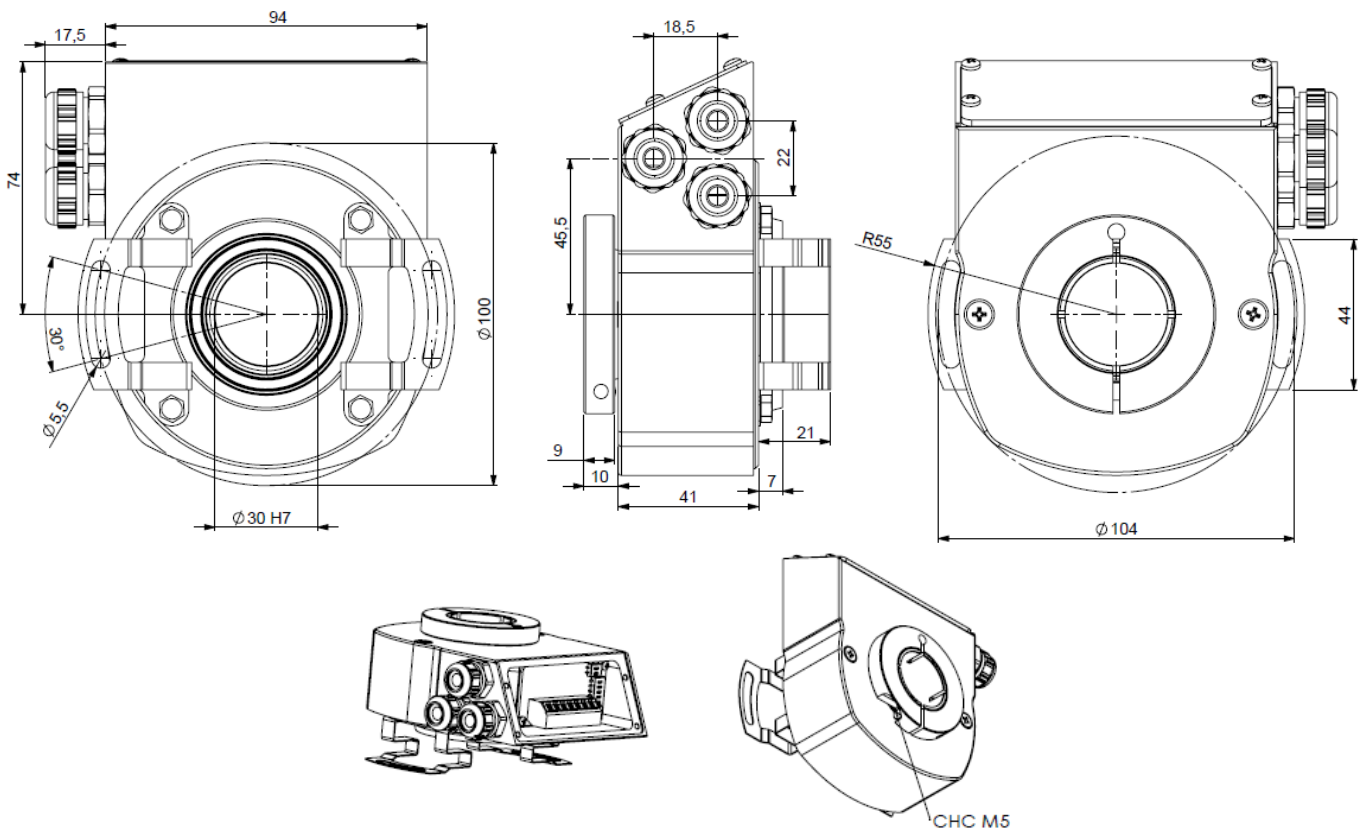
## ABSOLUTE MULTI-TURN ENCODER, PROFIBUS INTERFACE, PHU9S SERIE



- Profibus encoder - Ø30mm through shaft version
- PEEK or aluminium reduction hubs available : 10 to 28mm,
- Robustness and excellent resistance to shocks / vibrations,
- Double or triple mounting possibility (incremental – tachometer or absolute interfaces),
- High protection level IP65,
- High performances in temperature -20°C to +80°C
- 5 to 30 Vdc power supply,
- High resolution available: 8 192 points par revolution (13 bits resolution),
- Turns numerisation up to 65 536 (16 bits),
- DPV0, Class 2, encoder profile 3.062.
- Certification ATEX : II 3 G  
Ex nA II T4



### DIMENSION : PHU9S Profibus connection BTR (Terminal box) - with DACs 9445/009\* mounted on bearings housing



\* : accessory to be ordered separately.

### MECHANICAL CHARACTERISTICS

Material	Cover : steel	Shock (EN60068-2-27)	≤ 500 m.s <sup>-2</sup> (during 6 ms)
	Body : aluminium	Vibration (EN60068-2-6)	≤ 100 m.s <sup>-2</sup> (10 ... 2 000 Hz)
	Shaft : stainless steel	EMC	EN 61000-6-4, EN 61000-6-2
Bearings	6 807 serie	Isolation	500V (1 min)
Maximal load	Axial : 50 N	Weight (approx.)	1,200 kg
	Radial : 80 N	Operating temperature	- 20... + 80 °C (Encoder T°)
Shaft inertia	≤ 55.10 <sup>-6</sup> kg.m <sup>2</sup>	Storage temperature	- 20... + 80 °C
Torque	≤ 25.10 <sup>-3</sup> N.m	Protection(EN 60529)	IP 65
Permissible max. speed	6 000 min <sup>-1</sup>	Torque (ring pressure screw)	nominal: 3N.m, break: 4N.m
Continuous max. speed	3 600 min <sup>-1</sup>	Theoretical mechanical lifetime 10 <sup>9</sup> turns (F <sub>axial</sub> / F <sub>radial</sub> )	
Shaft seal	Viton	25 N / 40 N : 140	50 N / 80 N : 17

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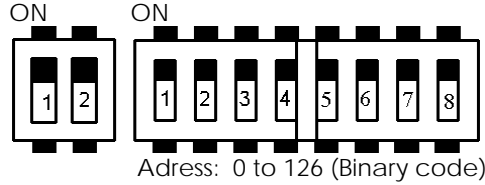
### GENERALITY

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

**Transmission frequency**: from 9.6Kbaud to 12Mbaud.

**Electronic interface**: opto-isolated RS 485.

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



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: Adress 5: Switch 1 & 3 on "ON", other on "OFF".

### PARAMETRES 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.

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

**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

Integrated terminal bos on encoder – "push-in" connection – max 1,5mm<sup>2</sup>.

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

	Shaft Ø	ATEX	Supply	Interface	Code	Resolution	Tunrs Nb	Connection	Connection orientation
PHU9S	30:	EX:	P :	BG :	B:	13 :	B16 :	BT :	R :
PXU9S Stainless steel encoder	30mm 10 to 28mm reduction hub available	Ex II 3 G Ex nA II T4	5 to 30Vdc	Profibus	Binary	8192 points per turn (2 <sup>13</sup> )	65 536 turns (2 <sup>16</sup> )	Terminal box	Radial
Ex: PHU9S	30 /	EX /	P	BG	B //	13	B16 //	BT	R

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