

CANOPEN ABSOLUTE MULTITURN ENCODERS, SHU9 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

Adaptation with reduction hubs in aluminium or in PEEK composite

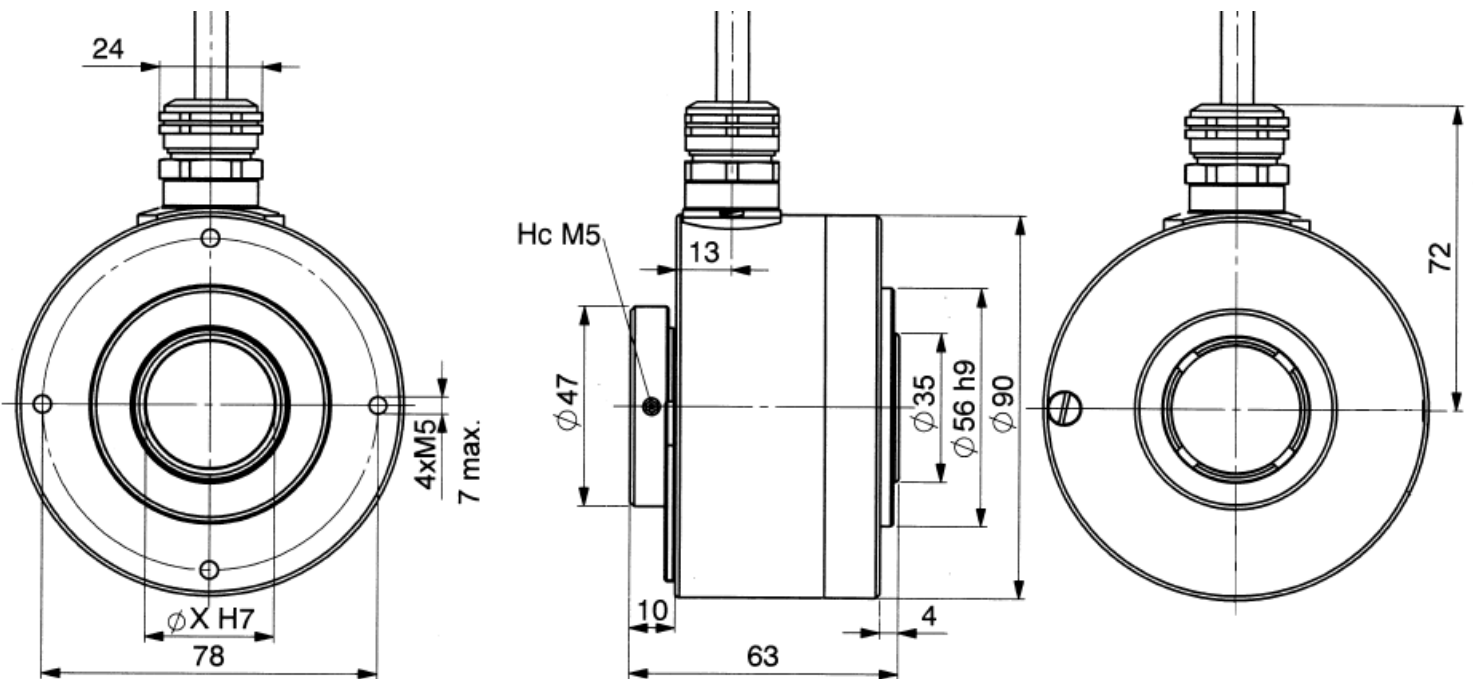
Possibility of double or triple mounting in associating incremental, absolute and tachymetric functions

CANopen

Also available in parallel, SSI and fieldbus interfaces : DeviceNet and Profibus



SHU9_30 connection BBR (radial cable)



Material	Cover : zinc alloy	Vibration (EN60068-2-6)	≤ 100 m.s ⁻² (10 ... 500 Hz)
(Stainless steel option)	Body: aluminium	EMC	EN 50081-1, EN 61000-6-2
Shaft	Stainless steel	Isolation	1 000 V eff
Bearings	6807 serie	Encoder weight (approx.)	0,900kg zinc alloy cover, alu body
Maximal loads	Axial : 50 N		1,100kg zinc alloy cover, stainless steel body
	Radial : 80 N		1,200kg stainless steel body & cover
Shaft inertia	≤ 56.10 ⁻⁶ kg.m ²	Operating temperature	- 10... + 70 °C (encoder T°)
Torque	≤ 25.10 ⁻³ N.m	Storage temperature	- 10... + 70 °C
Permissible max. speed	6 000 min ⁻¹	Protection(EN 60529)	IP 65
Continuous max speed	3 600 min ⁻¹	Torque (ring screw)	nominal: N.m, break: N.m
Shaft seal	P.T.F.E	Theoretical mechanical lifetime 10 ⁹ turns (F _{axial} / F _{radial})	
Shocks (EN60068-2-27)	≤ 300 m.s ⁻² (during 6 ms)	25 N / 40 N : 140	50 N / 80 N : 17

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Programmable parameters

Resolution: defines the resolution per revolution (0 to 8 192)

Global resolution (MAX RANGE) : total amount of codes for the encoder (2 to 536 870 911)

Transmission speed : programmable from 10kbaud (1000m) to 1 Mbaud (40 m) ; value per default: 20 Kbaud

Address: define the software address of the encoder on the bus (1 to 127, value by default: id = 1)

Direction : define the direction of count of the encoder

2 programmable markers a high marker and a low marker

RAX : defines the value of its preset position (non turning shaft)

Communication modes

3 modes are available to interrogate the encoder :

POLLING mode: the encoder transmits the position on the demand of the master. This mode permits the programming and the interrogation of the parameters of the encoder as well as its position

CYCLIC mode: the encoder transmits its position in an asynchronous manner. The frequency of the transmission is defined by the programmable cyclical timer register from 0 to 65 535 ms

SYNCHRO mode: the encoder transmits its position on a synchronous demand by the master

CANOPEN CONNECTION

1	2	3	4	5	6	7	8	9
DEFAULT	CAN LOW	CAN GND	N.C.	N.C.	0V	CAN HIGH	N.C.	11/30Vdc

DEFAULT : an impulsereset the encoder at the speed : 20kbaud, adress=1, Clock-wise, Multiturn - 13bits resolution

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
SHU9 : Zinc cover Alu body	30:30mm							
SBU9 : Zinc cover Stainless steel body	Shaft reduction hubs available from 10 to 28mm	5 : 11 to 30Vdc	BB : CANopen	B: Binary	13 : 8192 points per turn (2 ¹³)	B16 : 65 536 turns (2 ¹⁶)	BB: PUR CanOpen cable output + DB9	R010 : radial cable de 1m
SXU9 : Stainless steel cover & body								
SHU9 _	30 //	5	BB	B //	13	B16 //	BB	R010

Made in FRANCE