

MAIN FEATURES

The EA 120 is an absolute encoder with through hollow shaft suitable for textile machine, elevator motors and generally all the applications where big diameter shaft is required.

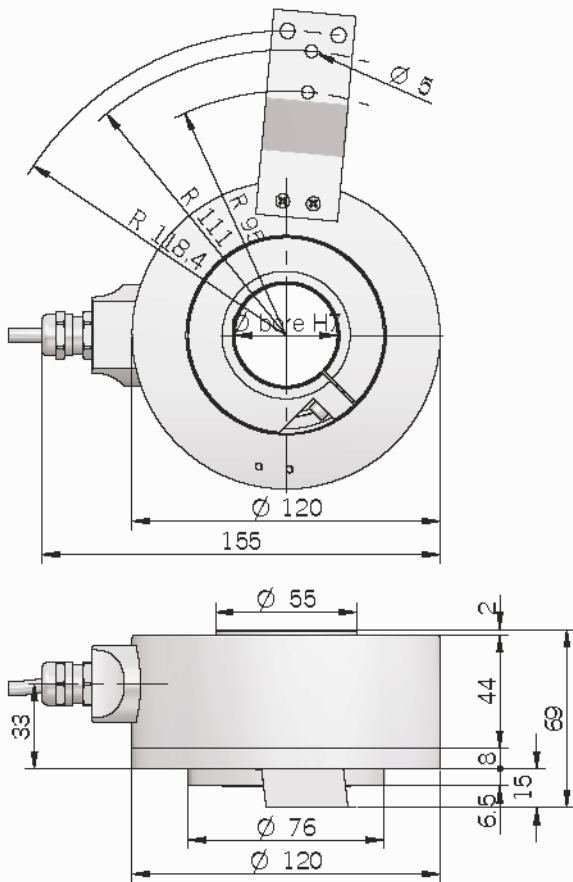
- Up to 13 bit
- Through hollow shaft from 30 to 50.8 mm (2")



ORDERING CODE

EA	120	P	2048	B	5	S	X	X	50	X	3	PCR	.	XXX
SERIES												VARIANT		
singleturn absolute encoder EA												XXX custom version		
SIZE												OUTPUT TYPE		
mm 120												PCR radial cable output with cable gland (standard length 0.5 m) (12-core)		
TYPE												HAR radial H connector output (12-pin)		
through hollow shaft with spring and front fixing P												MCR radial M connector output (7-pin)		
RESOLUTION												M12R radial M12 connector output (8-pin)		
(powers of 2) ppr from 2 to 8192 (multiples and submultiples of 360)												MAX ROTATION SPEED		
ppr from 90 to 3600 (multiples and submultiples of 1000)												3 3000 rpm		
ppr from 250 to 4000												ENCLOSURE RATING		
<i>N.B.: please directly contact our offices for pulses availability</i>												X IP 54		
CODE												SHAFT DIAMETER		
Binary B												30 mm		
Gray G												40 mm		
POWER SUPPLY												50 mm		
5 V DC 5												50.8 mm (2")		
8 ... 28 V DC 8/28												OPTION		
OUTPUT TYPE												X unused option		
SSI S												ZE code reset		
LOGIC												X unused option		

EA 120 P



Electrical specifications

Resolution	up to 8192 ppr
Power supply	5 V DC \pm 10% 8 ... 28 V DC \pm 5%
Current consumption without load	200 mA max
Max load current	20 mA for channel
Electronic interface	RS422 SSI
Auxiliary inputs (U/D - Reset)	active high (+Vdc) connect to 0V if not used / Reset t_{min} 150 ms
Max output frequency	1 MHz SSI
Monostable time (SSI)	16 μ s
Accuracy	\pm 1/2 LSB
Counting direction	decreasing clockwise (shaft view)
Start-up time	150 ms
Electromagnetic compatibility	IEC 61000-6-2 IEC 61000-6-4

Mechanical specifications

Shaft diameter	30 / 40 / 50 / 50.8 (2") mm
Enclosure rating	IP 54
Max rotation speed	3000 rpm
Shock	50 G, 11 ms (IEC 60068-2-27)
Vibrations	10 G, 10-2000 Hz (IEC 60068-2-6)
Bearings	n° 2 ball bearings
Bearings life	10 ⁹ revolutions
Body material	EN-AW 2011 aluminum
Shaft material	1.4305 / AISI 303 stainless steel
Housing material	EN-AW 2011 aluminum
Operating temperature	0° ... +60 °C
Storage temperature	-15° ... +70 °C
Weight	1000 g

Output connections for SSI encoder

Funzione	12 wire cable colours	Pin "M07MP"	Pin "M12MP"	Pin "H12"
+ Vdc	red	G	8	8
0 Volt	black	F	5	1
U / D	red-blue	E	7	5
data +	green	C	3	2
data -	brown	D	2	10
clock +	yellow	A	4	3
clock -	orange	B	6	11
RESET	white	/	1	4