

## 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. EA 120 P is available with SSI and ICO output.

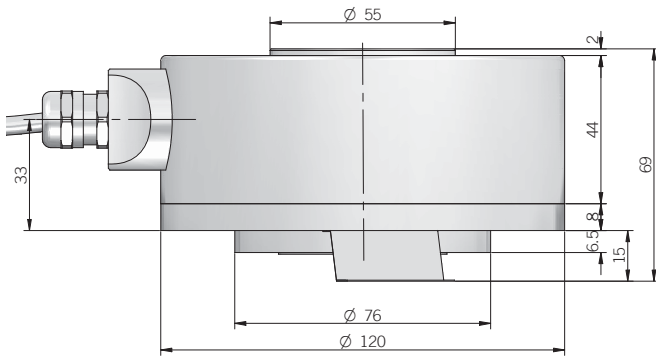
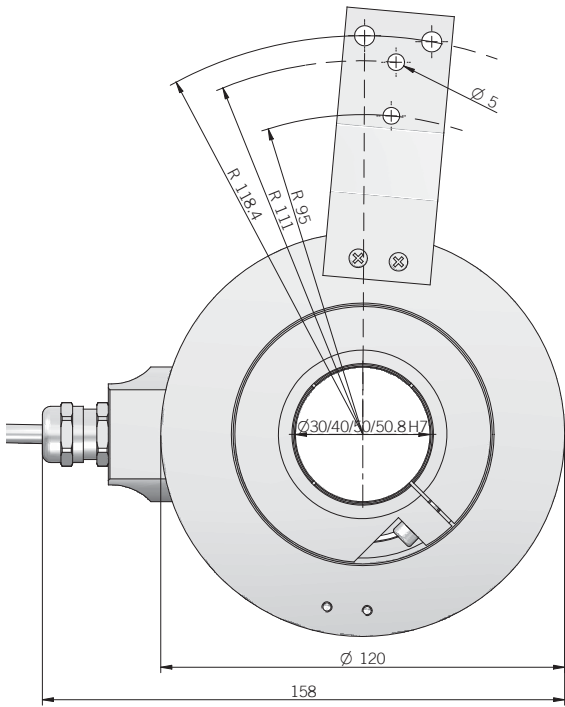
- Up to 13 bit
- Through hollow shaft from 30 to 50.8 mm



## ORDERING CODE

EA	120	P	2048	B	5	S	X	X	50	X	3	PCR	.	XXX
<b>SERIES</b> singleturn absolute encoder	<b>SIZE</b> mm	<b>TYPE</b>	<b>RESOLUTION</b> (SSI) (powers of 2) ppr from 2 to 8192 (SSI) (multiples and submultiples of 360) ppr from 90 to 3600 (SSI) (multiples and submultiples of 1000) ppr from 250 to 4000 (ICO) ppr 720 / 1000 / 1024 <i>please directly contact our offices for pulses availability</i>	<b>CODE</b> (SSI) binary (SSI) Gray (ICO) incremental code output	<b>POWER SUPPLY</b> 5 V DC 8 ... 28 V DC	<b>OUTPUT TYPE</b> SSI (ICO) line driver (ICO) push-pull	<b>OPTION</b> X unused option (SSI) ZE programmable zero pulse (SSI) A 10 kHz (standard ICO start-up sequence frequency) B 1 kHz (optional ICO start-up sequence frequency)	<b>LOGIC</b> X unused option	<b>VARIANT</b> XXX custom version	<b>OUTPUT TYPE</b> PCR radial cable output with SKINTOP® (standard length 0.5 m) (12-core) HAR radial H connector output (12-pin) MCR radial M connector output (7-pin) (SSI) MAR radial M connector output (19-pin) (ICO) M12R radial M12 connector output (8-pin)	<b>MAX ROTATION SPEED</b> 3 3000 rpm	<b>ENCLOSURE RATING</b> X IP 54	<b>SHAFT DIAMETER</b> 30 mm 40 mm 50 mm 50.8 mm	

# EA 120 P



## Electrical specifications

<b>Resolution</b>	up to 8192 ppr (SSI) up to 1024 ppr (IC0)
<b>Power supply</b>	5 V DC 8 ... 28 V DC
<b>Current consumption without load</b>	200 mA max
<b>Max load current</b>	20 mA for channel (SSI) 30 mA for channel (IC0)
<b>Electronic interface</b>	SSI IC0 push-pull IC0 line driver
<b>Max output frequency</b>	1 MHz (SSI) 40 kHz (IC0)
<b>Monostable time (SSI)</b>	10 ... 25 µs
<b>Electromagnetic compatibility</b>	IEC 61000-6-2 IEC 61000-6-3

## Mechanical specifications

<b>Shaft diameter</b>	30 / 40 / 50 / 50.8 mm
<b>Enclosure rating</b>	IP 54
<b>Max rotation speed</b>	3000 rpm
<b>Shock</b>	50 G, 11 ms (IEC 60068-2-27)
<b>Vibrations</b>	10 G, 10÷2000 Hz (IEC 60068-2-6)
<b>Bearings</b>	n° 2 ball bearings
<b>Bearings life</b>	10 <sup>9</sup> revolutions
<b>Body material</b>	aluminium UNI 9002/5
<b>Shaft material</b>	stainless steel UNI X10CrNiS1809
<b>Housing material</b>	aluminium UNI 9002/5
<b>Operating temperature</b>	0° ... +60 °C
<b>Storage temperature</b>	-15° ... +70 °C
<b>Weight</b>	1000 g

### Output connections for SSI encoder

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

### Output connections for IC0 encoder

Function	12 wire cable colours	Pin "M19MP"
+ Vdc	red	V
0 Volt	black	T
U / D	red-blue	U
Ready	gray	G
Restart	violet	H
A	green	A
A-	brown	D
B	yellow	B
B-	pink	E
Z	blue	C
Z-	white	F