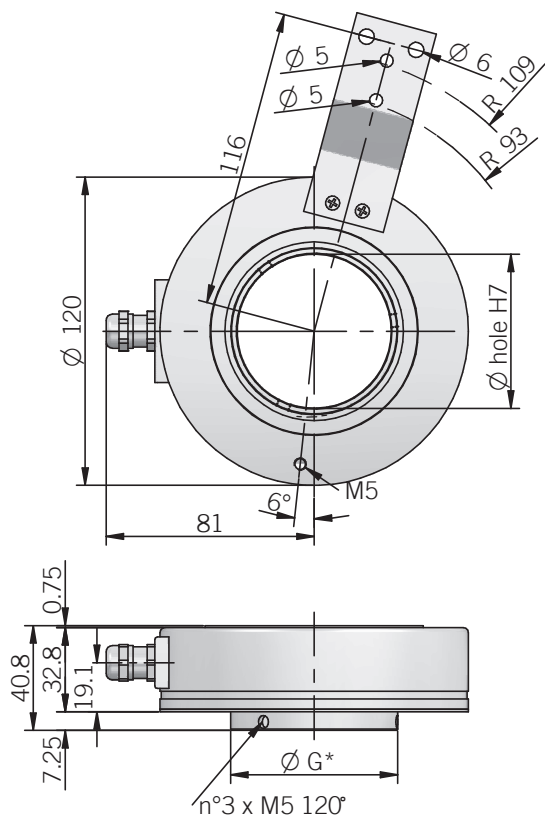




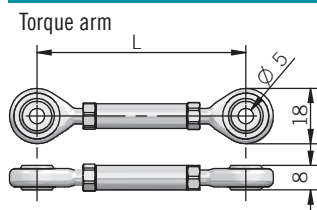
## EL 120 P



SHAFT DIAMETER	*G
∅ 40	∅ 65
∅ 50	∅ 65
∅ 60	∅ 75

dimensions in mm

### ACCESSORIES



Lenght	Ordering code
L = 80 ± 10mm	SN5A30 (P/N 94010061)
L = 110 ± 10mm	SN5A60 (P/N 94010070)
L = 140 ± 10mm	SN5A90 (P/N 94010071)

With torque arm n° 2 M5 x 12 UNI ISO 7380 are included

### ELECTRICAL SPECIFICATIONS

<b>Resolution</b>	from 400 to 2048 ppr
<b>Power supply</b>	5 = 4,5 ... 5,5 V DC 5/28 = 4,75 ... 29,4 V DC 8/24 = 7,6 ... 25,2 V DC (reverse polarity protection)
<b>Current consumption without load</b>	100 mA max
<b>Max load current</b>	N / C / P / PC = 50 mA / channel L = 20 mA / channel
<b>Output type*</b>	NPN / NPN open collector / push-pull / line driver
<b>Max output frequency</b>	105 kHz
<b>Counting direction</b>	A leads B clockwise (shaft view)
<b>Electromagnetic compatibility</b>	IEC 61000-6-2 IEC 61000-6-4

\*output levels according to power supply, for further details please see under Technical basics section

### MECHANICAL SPECIFICATIONS

<b>Bore diameter</b>	∅ 40 / 50 / 60 mm
<b>Enclosure rating</b>	IP 54 (IEC 60529)
<b>Max rotation speed</b>	3000 rpm
<b>Shock</b>	50 G, 11 ms (IEC 60068-2-27)
<b>Vibration</b>	10 G, 10 ... 2000 Hz (IEC 60068-2-6)
<b>Moment of inertia</b>	approx 215 x 10 <sup>-6</sup> kgm <sup>2</sup>
<b>Starting torque (at +20°C / +68°F)</b>	< 0,05 Nm
<b>Body material</b>	EN-AW 2011 aluminum
<b>Shaft material</b>	EN-AW 2011 aluminum
<b>Housing material</b>	EN-AW 2011 aluminum
<b>Bearings</b>	2 ball bearings
<b>Bearings life</b>	10 <sup>9</sup> revolutions
<b>Operating temperature</b>	0° ... +60 °C (+32° ... +140°F)
<b>Storage temperature</b>	-25° ... +70 °C (-13° ... +158°F)
<b>Fixing torque for grub screws</b>	max 0,75 Nm
<b>Weight</b>	750 g (26,46 oz)

### CONNECTIONS

Function	Cable output N / C / P / PC	Cable output Line driver
+V DC	red	red
0 V	black	black
Ch. A	green	green
Ch. A-	/	brown
Ch. B	yellow	yellow
Ch. B-	/	orange
Ch. Z	blue	blue
Ch. Z-	/	white
⊥	shield	shield

### RESOLUTIONS

**400 - 800 - 1000 - 1024 - 1440 - 1600 - 2000 - 2048**

please directly contact our offices for other pulses, preferred resolutions in bold