Encoder E9
3 Channel Optical Encoder

GND

Connector Quikie II, Dupont or equivalent (on request)

GND

200 ±3

Ø 22

15

17,2

20

L

dimensions in mm
mass: 6.2g

E9
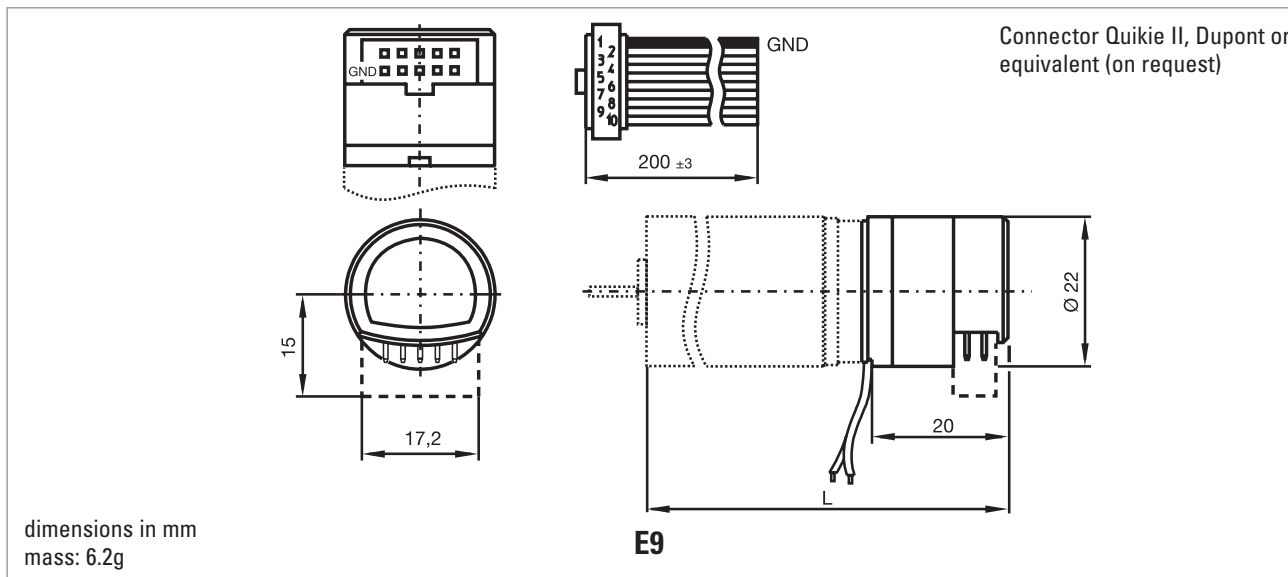
Characteristics at 22ºC

Number of lines available						100, 144, 200, 500[1]			
Supply current	typical		mA			10			
	max		mA			20			
	stand-by		µA			50			
Output signal			CMOS			compatible			
Electrical phase shift between A and B			degree			90 ± 20			
Duty cycle			%			50 ± 10			
Max. count frequency			kHz			200			
Operating temperature range	at 90% humidity		ºC			-40 to + 85			
Code wheel moment of inertia			10^{-7} x kgm^2			0.12			
Supply voltage	Vcc		V			5 ± 10%			
Pin Out	1	2	3	4	5	6	7	8	9	10
Version 1	GND	Vcc	dir.	stand-by	A	A	B	B	Z	Z
Version 2	GND	Vcc	dir.	stand-by	up	A	down	B	pulse	Z

	13 BC	16 BS	16BL	22BS	22BM	22BL.					
Available on Motor Types	22N48	22V48	23GST82	23V48	25GST/GT	26N48	28L18	28LT12	28DT12	30GT	35NT32
L = length (mm)	53.9	56.2	58.5	67.6	84.10/72.50		62.1	61.5	61.2	85.1	89.6	84
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[1] ask for a 2R motor type for use with the E9 in 500 lines; other number of lines on request ; other number of lines on request

[2] E9 Encoder is available for P530, P532, P850 and P852 models. Visit www.portescap.com for product details.

[3] Dimensions with brushless motors not given. Visit www.portescap.com for product details.

Typical Encoder Output Signal

PIN Output
1 GND
2 Vcc
4 Standby[1]
6 CH A
5 CH A
8 CH B
7 CH B
3 DIR
10 CH Z
9 CH Z

PIN Output
1 GND
2 Vcc
4 Standby[1]
6 CH A
8 CH B
3 DIR
10 CH Z
9 Pulse
5 Up
7 Down
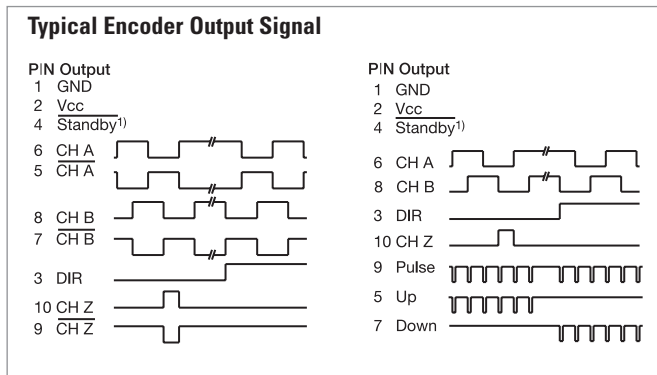
Features
- 2 channel quadrature output and index pulse
- Small size
- Integrated direction of rotation detection
- Stand-by function with latched state of channels (to de-activate the stand-by mode, connect the pin 4 to the ±5V)
- Complimentary outputs
- Up/down pulse signals (on request)
- CMOS compatible.
  to 0 V $_{DC}$ or +5V $_{DC}$
- Single 5V $_{DC}$ supply
- [1] The input stand-by has to be connected

Encoder