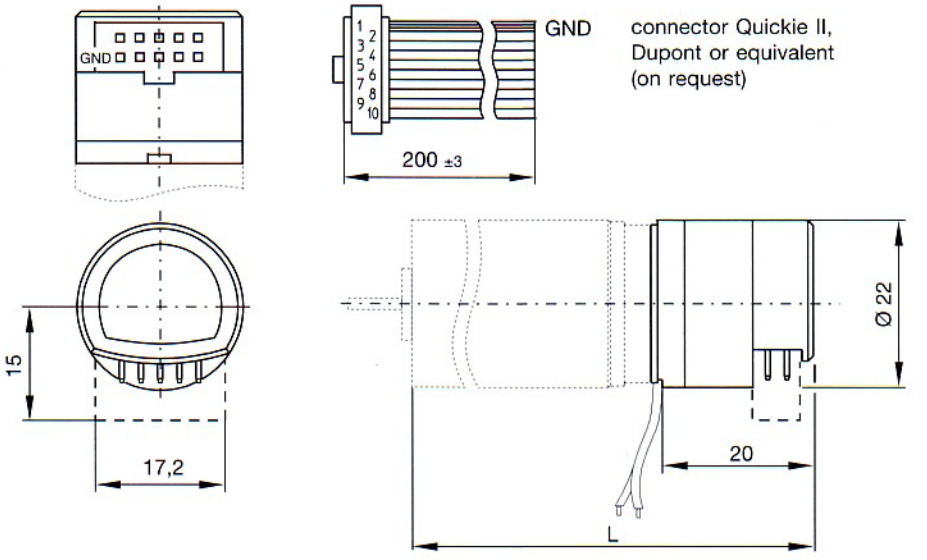
E9

Encoder

3 channel optical encoder



connector Quickie II, Dupont or equivalent (on request)

scale 1:1
dimensions in mm
mass: 6.2 g

Characteristics at 22 °C

1	Number of lines available			100, 144, 200, 256, 360, 500[1]
2	Supply current	typical	mA	10
		max.	mA	20
		stand-by	µA	50
3	Output signal		CMOS	compatible
4	Electrical phase shift between A and B		degree	90 ± 20
5	Duty cycle		%	50 ± 10
6	Max. count frequency		kHz	200
7	Operating temperature range	at 90% humidity	°C	-40 to +100
8	Code wheel moment of inertia		10^{-7} x kgm^2	0.12
9	Supply voltage	Vcc	V	5 ±10%

Pin out	1	2	3	4	5	6	7	8	9	10
10 Version 1	GND	Vcc	dir.	$\overline{\text{stand-by}}$	$\overline{A}$	A	$\overline{B}$	B	$\overline{Z}$	Z

Available on motor types	22N48	22V48	23LT12	23DT12	23V48	26N48	28DT12	35NT82
11 L = length (mm)	53.9	56.2	57.6	71	67.6	62.1	85.1	84
12 see page	16	18	19	19	20	21	23	24

[1] ask for a 2R motor type for use with the E9 in 500 lines version

Typical encoder output signal

Version 1

PIN Output
1 GND
2 Vcc
4 $\overline{\text{Standby}}$[1]
6 CH A
5 $\overline{\text{CH A}}$
8 CH B
7 $\overline{\text{CH B}}$
3 DIR
10 CH Z
9 $\overline{\text{CH Z}}$

Features

- 2 channel quadrature output and index pulse
- small size
- integrated direction of rotation detection
- stand-by function with latched state of channels (to desactivate the stand-by mode, connect the pin 4 to the +5V)
- complementary outputs
- up/down pulse signals (on request)
- CMOS compatible.
  [1] The input $\overline{\text{Standby}}$ has to be connected to 0 V_{DC} or +5 V_{DC}
- single 5V_{DC} supply