

optical Encoder, digital outputs,
2 channels, 120 lines per revolution

For combination with Stepper Motors

Series PE22-120

		PE22-120	
Lines per revolution	N	120	
Frequency range, up to ¹⁾	f	30	kHz
Signal output, square wave		2	Channels
Supply voltage	U_{DD}	4,5 ... 5,5	V
Current consumption, typical ²⁾	I_{DD}	20	mA
Pulse width	P	180 ± 45	°e
Phase shift, channel A to B	Φ	90 ± 45	°e
Logic state width	S	90 ± 45	°e
Cycle	C	360 ± 30	°e
Signal rise/fall time, max. ($C_{LOAD} = \text{pF}$)	tr/tf	0,5 / 0,1	µs
Inertia of code disc	J	0,24	gcm ²
Operating temperature range		-20 ... +85	°C

2) $U_{DD} = 5\text{ V}$: with unloaded outputs

For combination with Motor

[illegible]

Characteristics

These incremental shaft encoders in combination with two phases stepper motors are designed for indication and control of both, shaft velocity and direction of rotation as well as for position verification.

The encoder is placed at the rear output shaft of the stepper motor and extends its overall length by 11 mm.

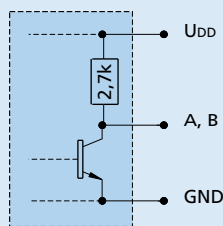
The supply voltage for the encoder and the stepper motors as well as the two channel output signals are interfaced through a ribbon cable with connector.

Details for the stepper motors and suitable reduction gearheads are on the corresponding data sheets.

To view our large range of accessory parts, please refer to the "Accessories" chapter.

Circuit diagram / Output signals

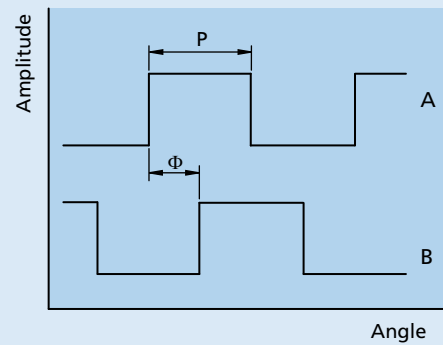
Output circuit



Recommendation:
Please use a latch to capture the outputs.

Output signals

with clockwise rotation as seen from the shaft end

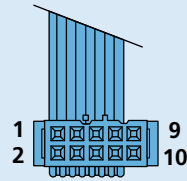


Connector information / Variants

No. Function

1	Motor Phase A +
2	Motor Phase A -
3	Motor Phase B +
4	Motor Phase B -
5	UDD ENC
6	GND
7	Channel A
8	Channel B
9	N.C.
10	N.C.

Connection Encoder and Motor



Connector

Series 71600-010LF
PVC-ribbon cable

Full product description

■ Example:
AM2224SB025016 PE22-120
AM2224R3012586 PE22-120

Dimensional drawing A

