

Encoders

Optical Encoders PRECiStep® Technology

For combination with:
Stepper Motor: AM2224, AM2224-R3

Series PE 22–120

		PE 22–120	
Lines per revolution	N	120	
Signal output, square wave		2	channels
Supply voltage	V _{CC}	4,5 ... 5,5	V DC
Current consumption, typical (V _{CC} = 5 V DC)	I _{CC}	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, typical	tr / tf	0,5 / 0,1	µs
Frequency range ¹⁾	f	up to 30	kHz
Inertia of code disc	J	24	·10 ⁻⁹ kgm ²
Operating temperature range		-20 ... +85	°C

¹⁾ Velocity (rpm) = f (Hz) x 60/N

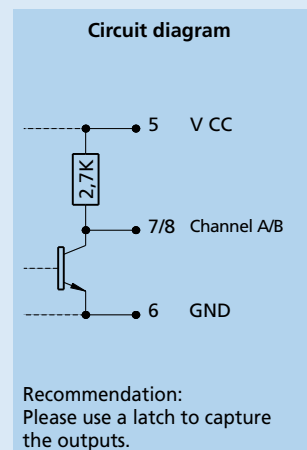
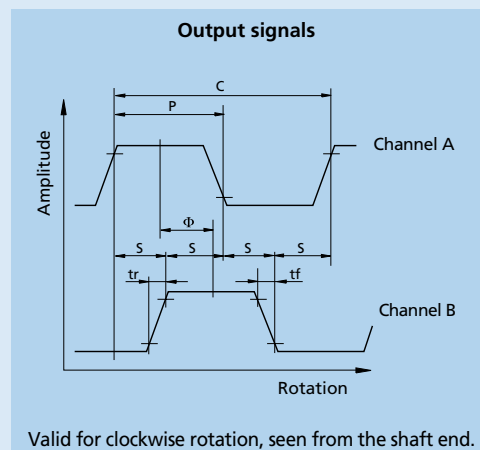
Features / Output signals / Circuit diagram

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 integrated in the Stepper Motors and extends the overall length by only 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.

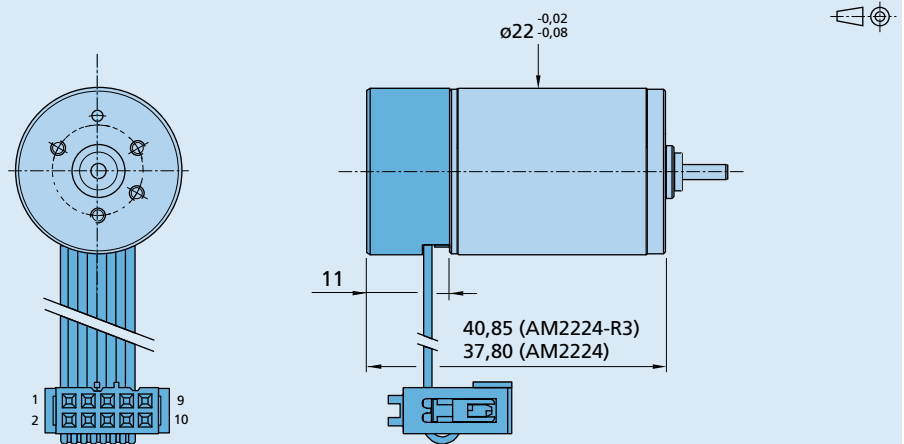
Details for the stepper motors and suitable reduction gearheads are on the corresponding data sheets.



Cable connection

Pin	Function
1	Motor Phase A +
2	Motor Phase A -
3	Motor Phase B +
4	Motor Phase B -
5	V _{CC}
6	GND
7	Channel A
8	Channel B
9	N.C.
10	N.C.

Connector type FCI serie 71600-010LF
Ribbon cable, 180 mm - PVC



PE 22–120