

# SANMOTION F2

2-PHASE STEPPING SYSTEMS

## Stepping Motor with Encoder

- 35 mm sq.
- 42 mm sq.
- 56 mm sq.
- 60 mm sq.
- 86 mm sq.

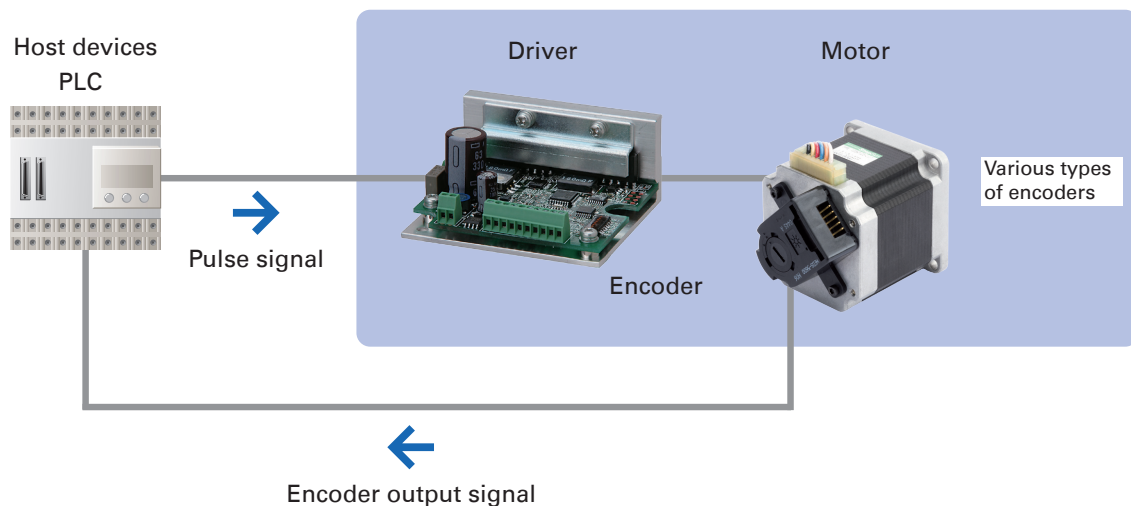
**Applications**

Medical instrumentation, 3D printing, industrial machines.



### When open-loop control is not enough

Stepping systems provide precise positioning with easy control. By adding an encoder to a stepping motor, the controller can monitor the actual position directly, closing the feedback loop and improving the safety and reliability.



### Stepping Motor with Encoder: Features

**Safety: Position verification**

Adding an encoder is an ideal and easy solution for safety-sensitive applications, requiring position verification and position maintenance, such as medical instrumentation.

**Close-loop control with stepper benefit**

High-end close loop control can be achieved while keeping the advantages of stepping motors: stable stop without hunting, higher torque than DC servo motor at low speed over the same size, eliminating the need of gearboxes.

**Reliability: Stall Detection**

Device reliability is improved with possible detection and reporting of stalls.

**Accurate Homing**







Encoder with index pulse option can be used to achieve precise homing.







Quick customization service is available to meet your particular need.

# Product Lineup

## Stepping Motors

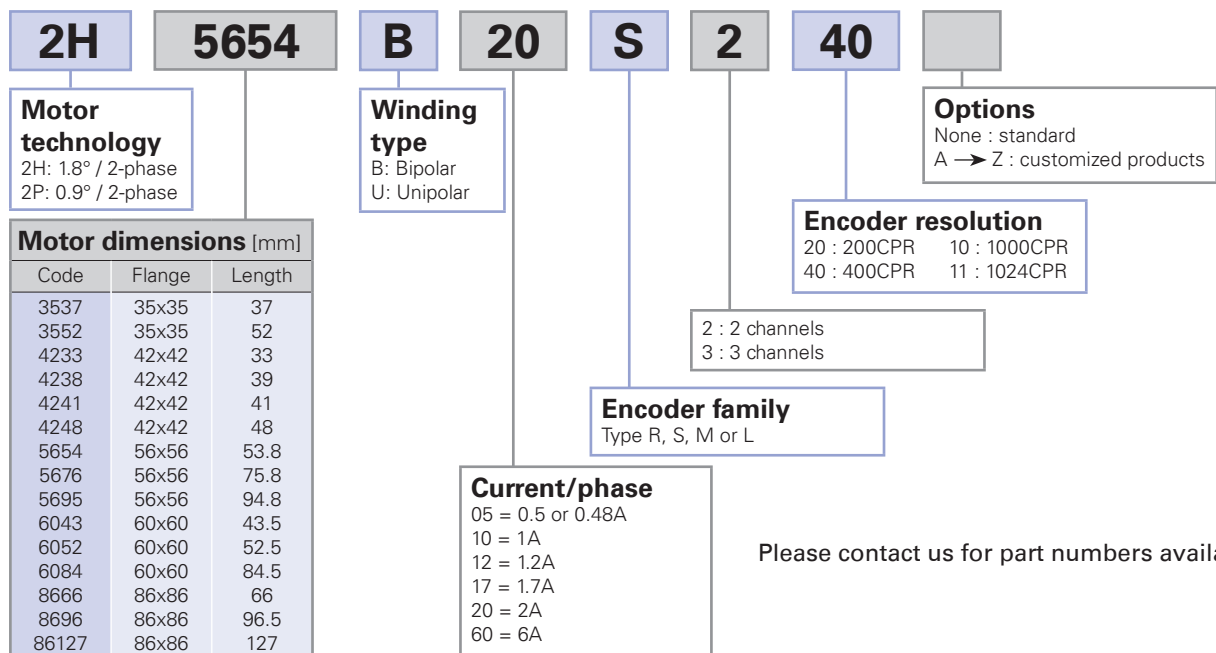
Basic step angle	Motor size	Holding torque [Nm min.] Model number
1.8°	35 mm sq. 	0.195 to 0.23 2H35□
0.9°	42 mm sq. 	0.23 2P42□
1.8°	42 mm sq. 	0.26 to 0.42 2H42□
1.8°	56 mm sq. 	0.83 to 2 2H56□
1.8°	60 mm sq. 	0.88 to 2.7 2H60□
1.8°	86 mm sq. 	3.3 to 9 2H86□

## Incremental Optical Encoders

Encoder type	CPR	Index option	Output type	Features
<b>R</b> type 	200		single ended	Compact size Simple interface Cost effective
<b>S</b> type 	400	■	single ended	Medium resolution Pulse index option Simple interface
<b>M</b> type 	1000 1024	■	single ended	High resolution Pulse index option Simple interface
<b>L</b> type 	400		line driver	Noise immunity Transmitting encoder signal over a long distance

Other types of motors and encoders on demand.

## How to read part numbers



Please contact us for part numbers available.

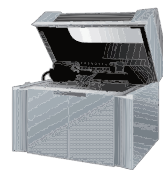
## Application Examples



Blood Analyser



Mammograph



3D Printing



Industrial machine

For more information on «Stepping motor with Encoder», please contact us at **+33 1 48 63 26 61** or email us at **info@sanyodenki.eu**.

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