

# SANMOTION F2

2-PHASE STEPPING SYSTEMS

## Stepping Motor with Lead Screw

42mm sq.

1.8° /step

### Application

Medical instrumentation, syringe pumps, 3D printing machine



### Features

**Recommended max. Load** 80N  
**Max. Speed** 200mm/s

**Standard Stroke** 94mm  
**Max. Stroke** 250mm

### Downsizing and simplification of design and assembly

This product incorporates a leadscrew inside the stepping motor to make it compact. This allows equipment size to be reduced.

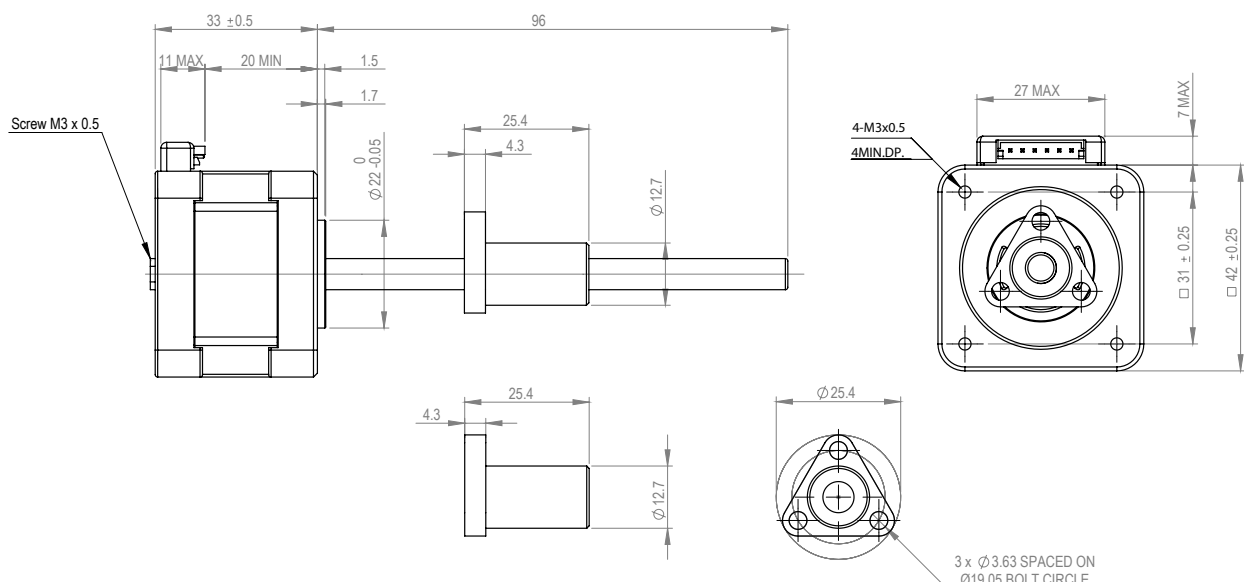
### Easy Linear Motion Control

The stepping motor technology allows an easy and accurate control of the position, according to the number of pulses received by the driver.

### High Construction Flexibility

Thanks to several choices of motors, screws and nuts this solution suits the best for your requirements. Customized products are available on request.

### Dimensions [Units: mm]



## Specifications

### 1.8° /Step Bipolar winding

Standard Models (others on request)	Max. Force [N]	Recommended load limit [N]	Max. Speed - half step [mm/s]	Resolution [μm/ full step]	Stroke [mm]	Rated current [A/phase]	Winding resistance [Ω/phase]	Winding inductance [mH/phase]	Optional motor cable [500 mm]
2S4233B100-0094-N000	600	80	75	7.95	94	1	3.4	6.5	4835728-1
2S4233B100-0094-X000	225	80	300	31.75					

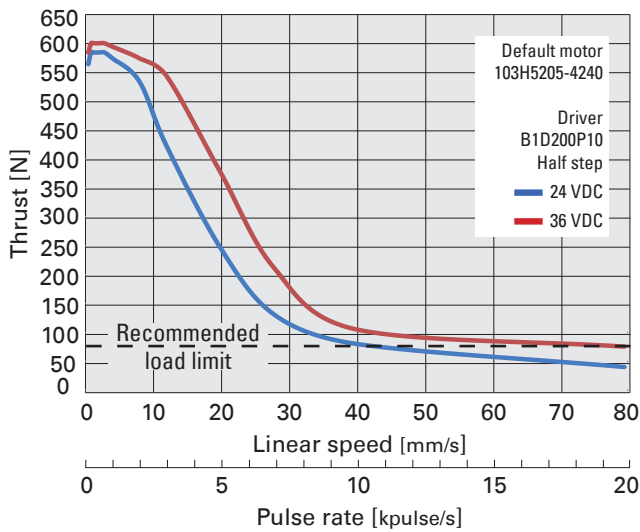
	Material	Coating	Accuracy [mm/mm]
Leadscrew	Stainless Steel 303	TFE	better than 0,0006

	Material
Nut	Polyacetal with lubrication

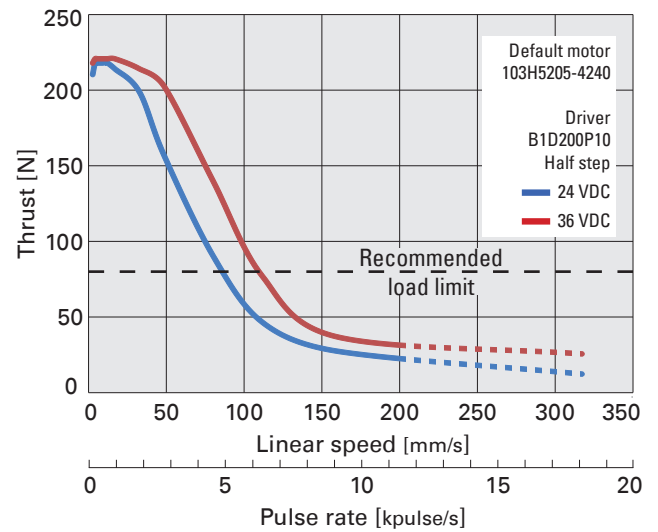
Please consult us for customized models.

## Thrust [N] - Speed [mm/s] curves, 100% duty cycle

Model No : 2S4233B100-0094-N000



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Caution: The data are only for reference and may vary depending on the application and nut. Please consult our technical center for more details.

## Part Numbers

### 2S 4233 B100-0094-N000

<b>Serie 2S</b> 2-phase stepper with integrated lead screw	
<b>Motor Dimensions</b> Flange x Length 4233: 42 x 33mm	
<b>Current/Phase</b> B: Bipolar 100: 1A U: Unipolar xxx: other	
<b>Screw Length</b> 0094: 94mm (max. 250mm)	
<b>Actuator Resolution</b> N: 0.00795 mm/step X: 0.03175 mm/step x: other	
<b>Options</b> 000: standard xxx: other	

## Customization

We offer fully customizable products to meet your exact needs. In order to define the proper solution, please fill in our dedicated application sheet «[MC\\_160222](#)».

Among requested information, here is a list of basic requirements:

What is the required FORCE ?		N
What is the LINEAR SPEED ?		mm/s
What is the STEP INCREMENT ?		mm/step
What is the length of STROKE ? (max. 250mm)		mm
Winding and current per phase ?	<input type="checkbox"/> Bipolar <input type="checkbox"/> Unipolar	A/phase
Requested LIFE TIME ?		cycles

## CUSTOMIZED SOLUTIONS

2-Phase Stepping Motor with Lead Screw

42<sub>mm sq.</sub>

1.8° /step

### Application Data Sheet

#### Information

<b>Name</b>		<b>Title/Dept.</b>	
<b>Company Name</b>			
<b>Address</b>			
<b>Phone</b>		<b>Fax</b>	
<b>Email</b>			

#### Application Requirements

##### 1. Mechanical Data

What is the required FORCE ?		N
What is the LINEAR SPEED ?		mm/s
What is the STEP INCREMENT ?		mm/step
What is the DUTY CYCLE ?		
What is the MOTION ?	<input type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	
What is the MOUNTING DIRECTION ?		
What is the length of STROKE ? (max. 250mm)		
END MACHINING requirement ?	<input type="checkbox"/> Cut to Length Only <input type="checkbox"/> Other (please specify)	
Lead screw ACCURACY ?		mm/mm
Lead Screw COATING ?	<input type="checkbox"/> No <input type="checkbox"/> TFE	

NUT requirements ?	<input type="checkbox"/> No nut	
	<input type="checkbox"/> Standard nut - without «anti-backlash» function, POM	
	<input type="checkbox"/> Other (please specify below) <input type="checkbox"/> with «anti-backlash» function <input type="checkbox"/> without «anti-backlash» function	
	Material	
	Dimensions	Please provide drawing of the nut
Requested LIFE TIME ?		cycles

##### 2. Electrical Data

Current per phase		A/phase	Driver Voltage		VDC
Motor coils ?	<input type="checkbox"/> Bipolar <input type="checkbox"/> Unipolar				

##### 3. Environmental Data

OPERATING TEMPERATURE ?		°C
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##### 4. Sales Data

Quantity Required		per lot
Target Price		€
Samples Required		units
Mass Production Schedule		dd/mm/yy

##### 6. Submit your request

Please send back this form to your sales representative or contact us at:	
Company:	EAO Ltd
Phone:	01444 236000
E-mail:	sales.euk@eao.com