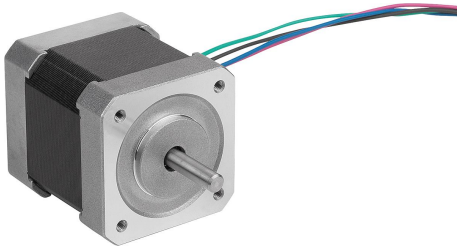


## Item description/product images



## Description

### Version:

2-phase high-torque stepper motor in NEMA 17, NEMA 23 and NEMA 34 sizes with flat-milled shaft (D-shaft). 1.8° increment angle (full increment) with 4-wired connection cable.

### Note:

The stepper motors deliver high torque, high precision and simple control. They function reliably in diverse ambient conditions. The stepper motors can be connected to conventional motor controllers via stranded cables.

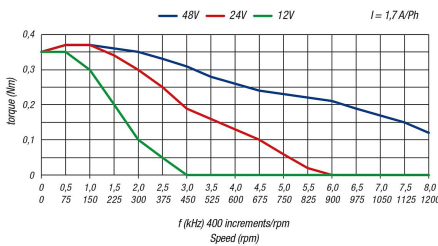
When selecting a suitable motor, using just the retaining torque is not enough, as the motor's torque decreases with the speed. It is therefore essential to select the correct motor according to the torque curve.

### Temperature range:

-10 °C to +50 °C

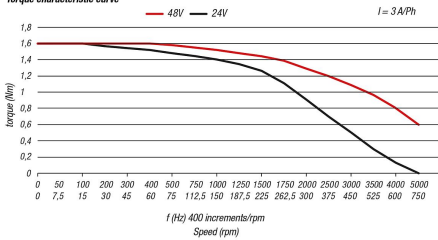
85000-170043

Torque characteristic curve



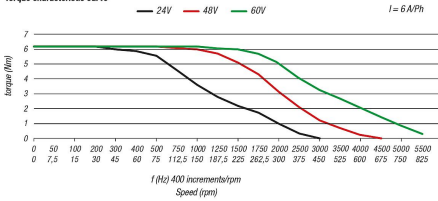
85000-230180

Torque characteristic curve



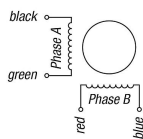
85000-340820

Torque characteristic curve

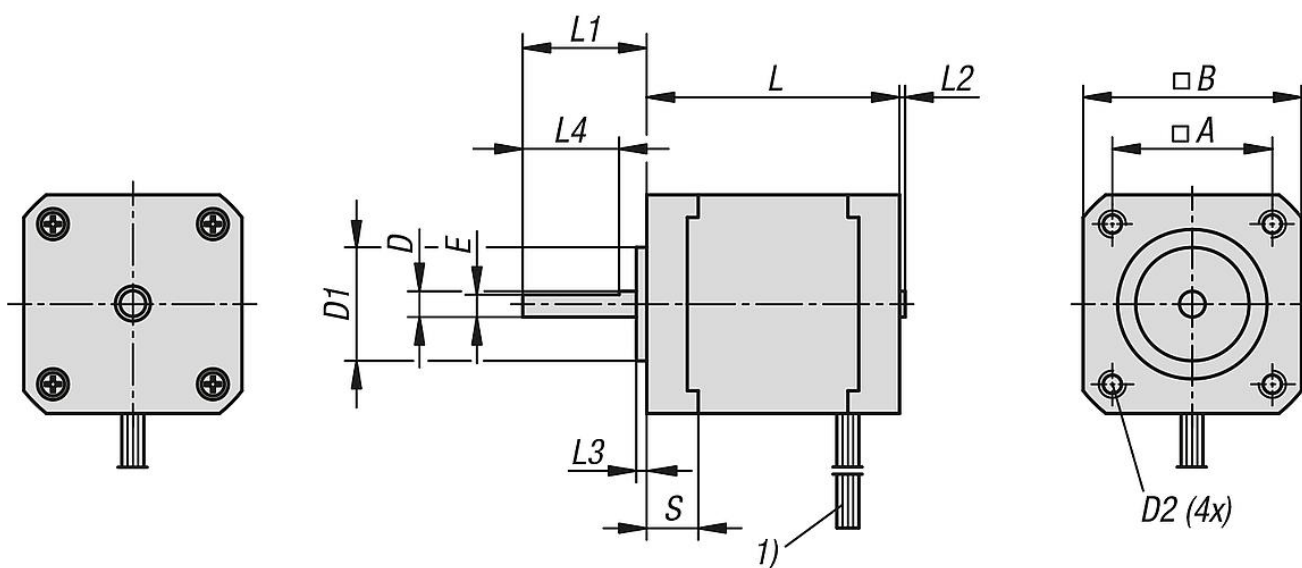


Connection diagram:

Pin	Colour	Phase
1	black	A
2	green	A1
3	red	B
4	blue	B1



Drawings



Overview of items

Order No.	Size	A	B	D	D1	D2	E	L max.	L1	L2	L3	L4	S
85000-170043	NEMA 17	31	42	5	22	M03x4,5	4,5	47	20	0,9	2	15	-
85000-230180	NEMA 23	47,14	57	6,35	38,1	5,1	5,8	80	20,6	-	1,6	15	5
85000-340820	NEMA 34	69,6	86	14	73	6,5	13	120	37	-	1,6	25	9

Order No.	Nom. tension VDC	Retaining torque Nm	Phase current A	Phase resistance Ohm	Inductivity mH	Moment of inertia kgcm <sup>2</sup>	Step angle	No. of braids
85000-170043	5,6	0,43	1,7	1,65	2,8	0,068	1,8	4
85000-230180	6	2	3	1	3,8	0,48	1,8	4
85000-340820	7,2	8,4	6	0,6	5,8	3,2	1,8	4