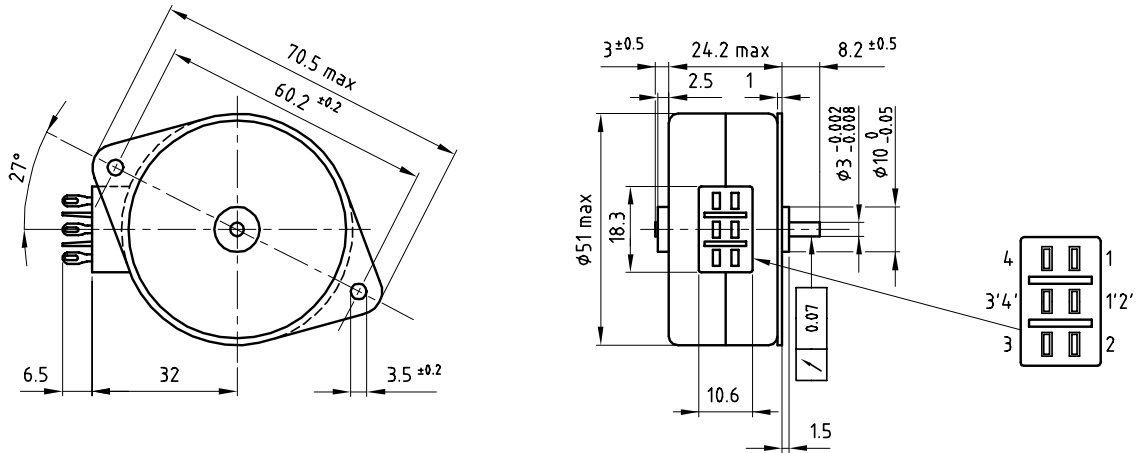


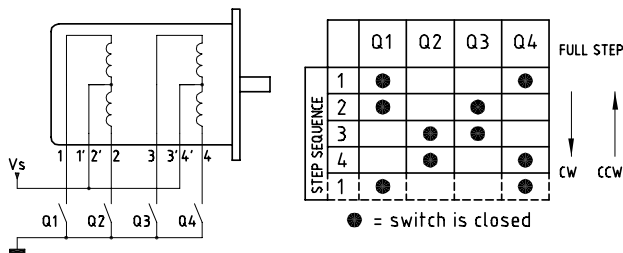
Dimensional drawing



Motor data

Motor order number	9904 112 +	31104	31004	31106	31006
Number of phases		4	4	4	4
Drive Electronics		Unipolar	Unipolar	Unipolar	Unipolar
Nominal Voltage	[V]	5	12	5	12
Number of steps per revolution		48	48	48	48
Step angle	[°]	7.5	7.5	7.5	7.5
Step angle tolerance	[°]	± 0.4	± 0.4	± 0.4	± 0.4
Max. working Torque	[mNm]	24	20	33	30
Holding Torque	[mNm]	32	28	46	42
Absorbed power	[W]	3.5	3.8	3.5	3.8
Resistance per phase	[Ohm]	11	65	11	65
Inductance per phase	[mH]	16	100	16	100
Current per phase	[mA]	400	175	400	175
Thermal resistance winding-ambient	[K/W]	13	13	13	13
Rotor Moment of Inertia	[kgm ²]	1.1x10 ⁻⁶	1.1x10 ⁻⁶	1.1x10 ⁻⁶	1.1x10 ⁻⁶

Electrical Connection



General data

x	Type of bearings	sleeve	
x	Maximum radial load	5	N
x	Maximum axial load	1.5	N
x	Ambient temp. range operating	-20/+70	°C
x	Ambient temp. range storage	-40/+100	°C
x	Mass of motor	170	g

Product combinations

- x Gearbox S52A
- x Gearbox S70A
- x Gearbox S70B