

## 7.5° 7.5 Watts 4 phases Part number made to order



- 48 steps/revolution (7.5°)
- Absorbed power : 7.5 W
- 2 or 4 phase versions available

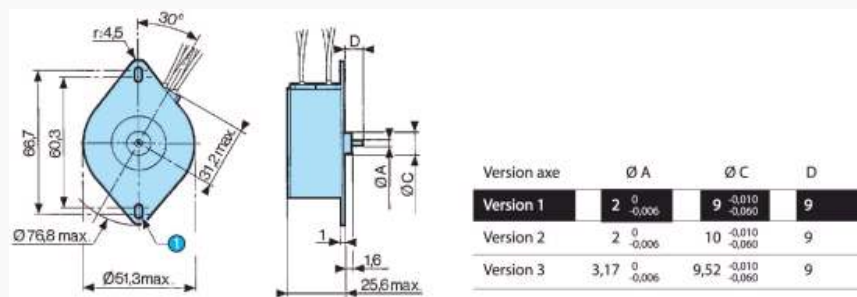
### Part numbers

	Type	Type	Number of phases	Electronic controller used	Resistance per phase (ö)	Inductance per phase (mH)	Current per phase (A)	Voltage at motor terminals (V)
<b>82 920 012</b>	4 phases	82 920 0 4		Unipolar	46	48	0,28	12,9

### Specifications

Absorbed power (W)	7,5
Holding torque (mNm)	57
Step angle (°)	7,5
Positioning accuracy (%)	5
Rotor inertia (gcm <sup>2</sup> )	18,8
Max. detent torque (mNm)	6
Max. coil temperature (°C)	120
Storage temperature (°C)	-40 →+80
Thermal resistance of coil - ambient air (°C/W)	9,3
Insulation resistance (at 500 Vcc) (MΩ) following NFC 51200 standard	> 10 <sup>3</sup>
Insulation voltage (50 Hz, 1 minute) (V) following NFC 51200 standard	> 600
Wires length (mm)	250
Weight (g)	210
Protection rating	IP 40

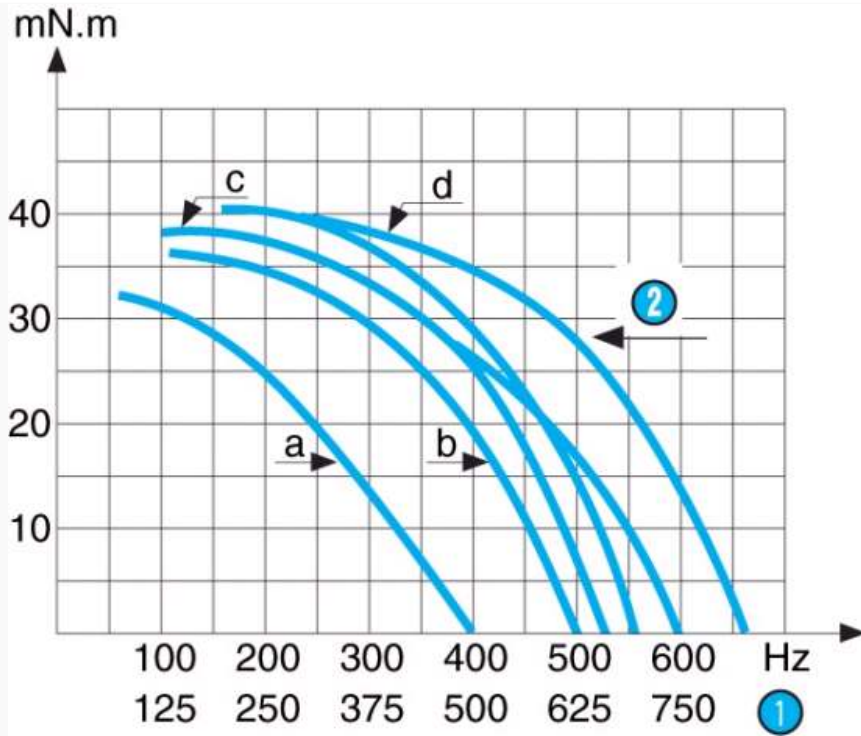
### Dimensions (mm)



N°	Legend
①	2 oblong fixing holes : wide 3.5

### Curves

#### 4 phases

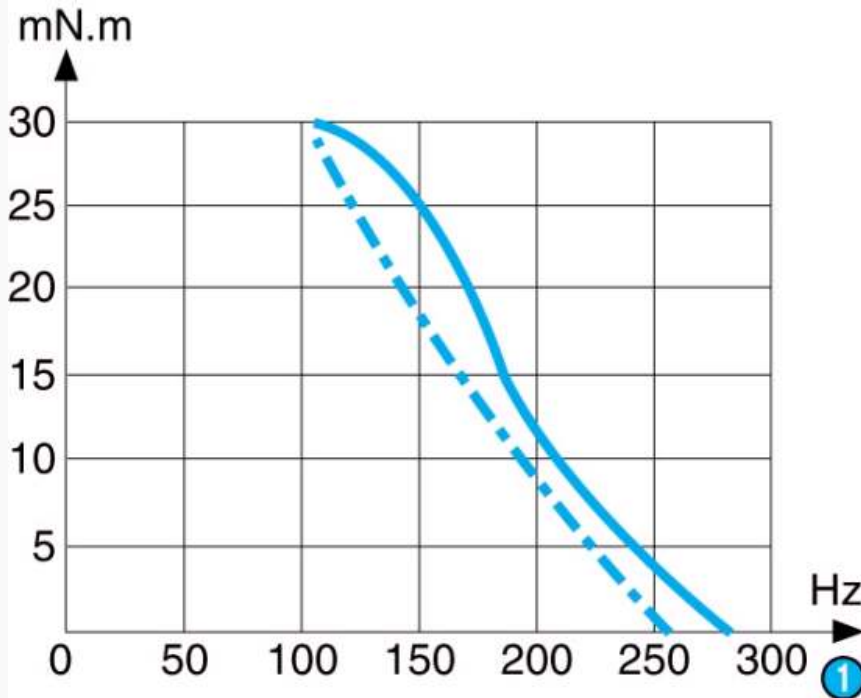


Inertia of measuring chain : 2,2 g.cm<sup>2</sup> a = constant voltage controller with R<sub>s</sub> (resistance in series) = 0 b = constant voltage controller with R<sub>s</sub> (resistance in series) = R motor c = constant voltage controller with R<sub>s</sub> (resistance in series) = 2R motor d = constant voltage controller with R<sub>s</sub> (resistance in series) = 3R motor The measurements are made with full stepping, 2-phases energised.

N°	Legend
①	RPM
②	Max. operating curves

**Curves**

4 phase - 46 Ω - Constant voltage - Curve produced with card 84 854 405

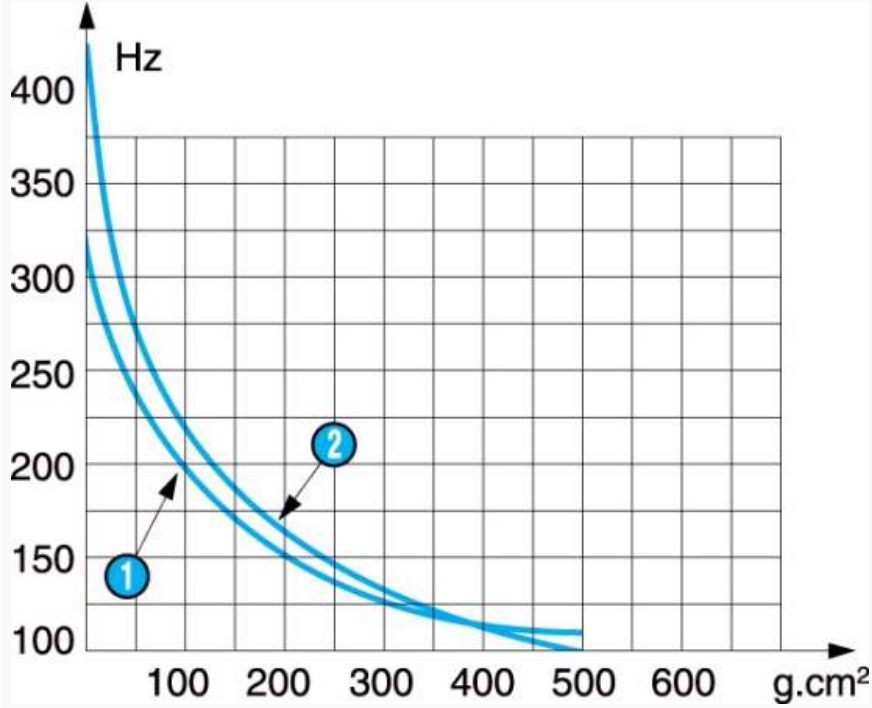


Max. stopping-starting and operating curves at I constant (PBL 3717) for 2 (motor) phases 10.7 ohms. Holding torque 70 mN.m Current per phase 0.59 A

N°	Legend
①	RPM

**Curves**

Max. stopping-starting frequency curves as a function of the external inertia load at zero antagonistic torque. Tests at constant U.



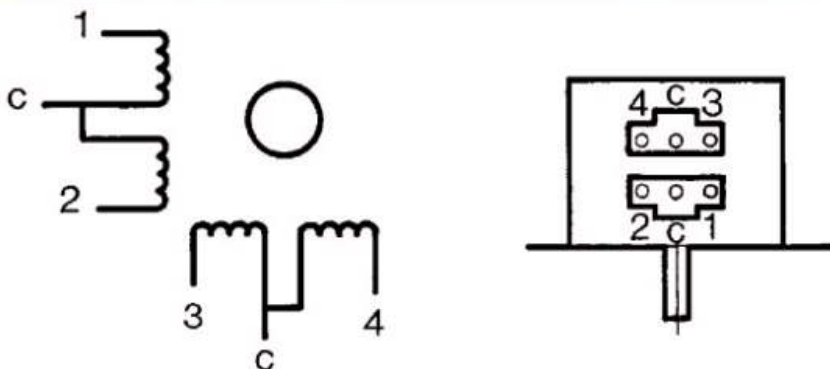
N.B. Measurement conditions : Tam = 25 °C, motor cold

N°	Legend
1	2 phases
2	4 phases

**Connections**

4 phases

	1	2	3	4
1	-		-	
2	-			-
3		-		-
4		-	-	
5	-		-	



Energisation sequence for clockwise rotation : 2 phases energised (viewed shaft end, front forward) Commons connected to positive.

N°	Legend
1	Step

**Product adaptations**

- Special output shafts
- Special supply voltages
- Special cable lengths
- Special connectors