

7.5° 5 Watts 2 phases Part number 82910001



- 48 steps/revolution (7.5°)
- Absorbed power : 5 W
- 2 or 4 phase versions available

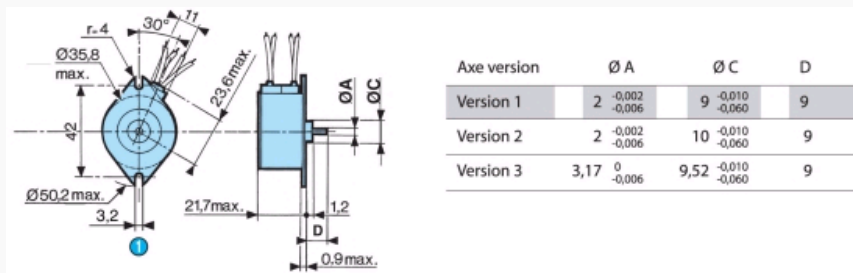
Part numbers

	Type	Type	Electronic controller used	Bearings
82910001	2 phases	82 910 0	Bipolar	Sintered bronze

Specifications

Resistance per phase (Ω)	9
Inductance per phase (mH)	12
Current per phase (A)	0,52
Holding torque (mNm)	25
Voltage at motor terminals (V)	4,7
Absorbed power (W)	5
Step angle ($^{\circ}$)	7,5
Positioning accuracy (%)	5
Rotor inertia (gcm^2)	4,9
Max. detent torque (mNm)	3
Max. coil temperature ($^{\circ}\text{C}$)	120
Storage temperature ($^{\circ}\text{C}$)	-40 \rightarrow +80
Thermal resistance of coil - ambient air ($^{\circ}\text{C/W}$)	14
Insulation resistance (at 500 Vcc) (MQ) following NFC 51200 standard	$> 10^3$
Insulation voltage (50 Hz, 1 minute) (V) following NFC 51200 standard	> 600
Wires length (mm)	250
Weight (g)	90
Protection rating	IP 40

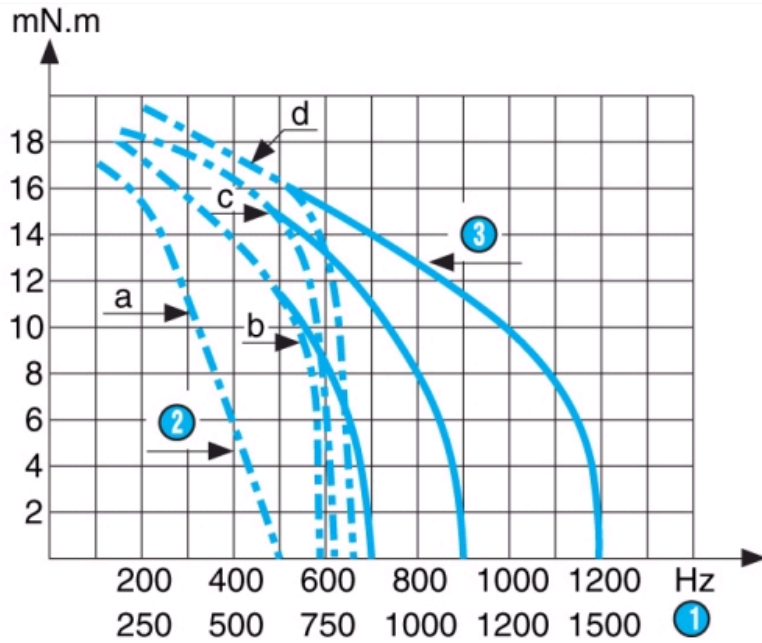
Dimensions (mm)



N°	Legend
1	2 fixing holes $\phi 3.2$

Curves

2 phases

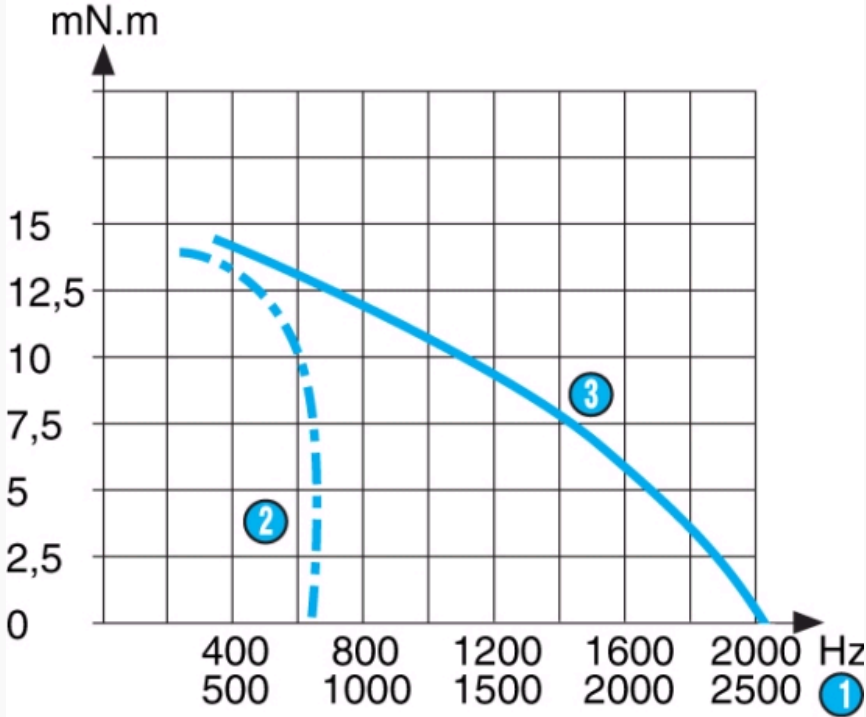


Inertia of measuring chain : 1,5 g.cm² a = constant voltage controller with R_s (resistance in series) = 0 b = constant voltage controller with R_s (resistance in series) = R motor c = constant voltage controller with R_s (resistance in series) = 2R motor d = constant voltage controller with R_s (resistance in series) = 3R motor The measurements are made with full stepping, 2-phases energised.

N°	Legend
①	RPM
②	Max. stopping-starting curves
③	Max. operating curves

Curves

Max. stopping-starting and operating curves at I constant (PBL 3717) for 2 (motor) phases 12.9 Ω



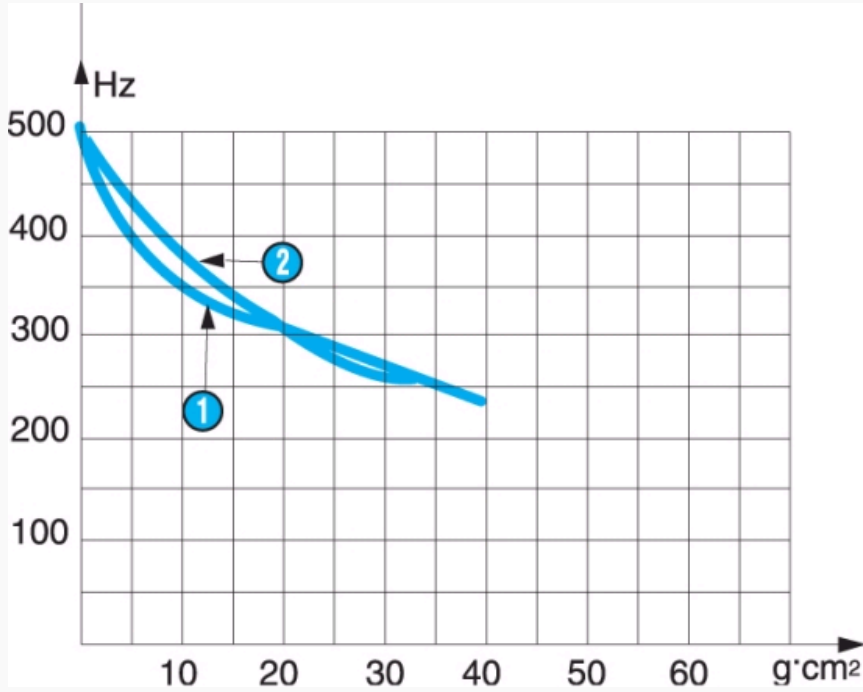
Inertia of measuring chain : 1,5 g.cm² a = constant voltage controller with R_s (resistance in series) = 0 b = constant voltage controller with R_s (resistance in series) = R motor c = constant voltage controller with R_s (resistance in series) = 2R motor d = constant voltage controller with R_s (resistance in series) = 3R motor The measurements are made with full stepping, 2-phases energised.

N°	Legend
①	RPM

②	Max. stopping-starting curves
④	Max. operating curves

Curves

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



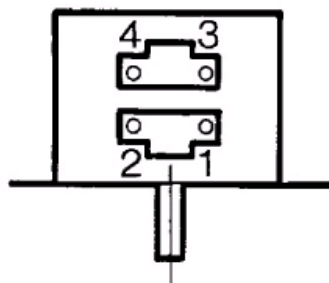
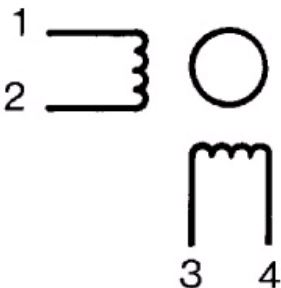
N.B. Measurement conditions : Tam = 25 °C, motor cold

N°	Legend
①	2 phases
②	4 phases

Connections

2 phases

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



Energisation sequence for clockwise rotation (viewed shaft end)

N°	Legend
①	Step

Product adaptations

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