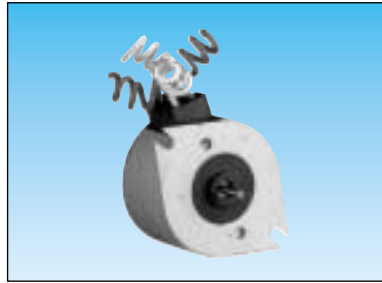


Permanent magnet stepper motors 24 steps/revolution (15°) - Ø 35 mm



Part numbers

82 910 501 82 910 502 RS 199-863

Characteristics

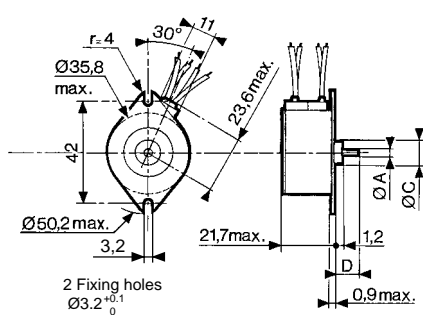
		82 910 501	82 910 502	RS 199-863
Number of phases		2	4	4
Absorbed power	W	5	5	5
Electronic controller used	Bipolar Unipolar	• —	— •	• —
Resistance per phase		12.9	115	115
Inductance per phase	mH	17.3	62	62
Current per phase	A	0.44	0.14	0.14
Holding torque	mN.m	20	15	15
Voltage at motor terminals	V	5.6	17	17
Step angle	°	15	15	15
Positioning accuracy	%	5	5	5
Inertia of rotor	gcm ²	4.9	4.9	4.9
Max. detent torque	mN.m	3	3	3
Max. coil temperature	°C	120	120	120
Storage temperature	°C	- 40 + 80	- 40 + 80	- 40 + 80
Thermal resistance of coil - ambient air	°C/W	14	14	14
Insulation resistance (at 500V DC) (1)	MΩ	> 10 ³	> 10 ³	> 10 ³
Insulation voltage (50 Hz, 1 minute) (1)	V	> 600	> 600	> 600
Standard length of leads	mm	250	250	250
Weight	g	90	90	90
Protection		IP 40	IP 40	IP 40

(1) Following NFC 51200 standard

Motor shaft

See Dimensions (for other versions, please enquire)

Dimensions



Shaft type	Ø shaft A	Ø centre C	Length shaft- D
	2 -0.002 -0.006	9 0 -0.018	10

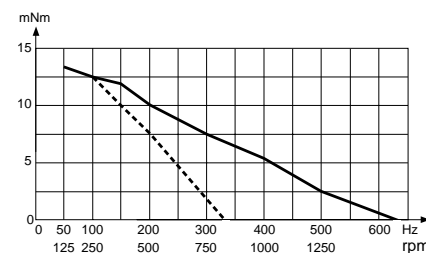
Curves

Nominal value dynamic curves

Stopping-starting

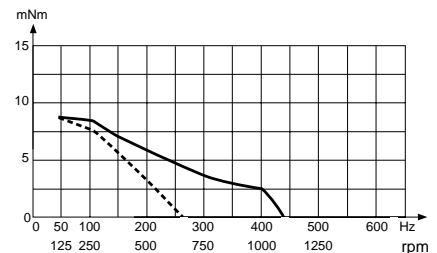
Max. operating curves

2 phases - 12.9 Ω



Measurement conditions :
L 297 298 SGS constant voltage supply board,
5.6 V at motor terminals,
2 phases energised, full steps,
inertia of measuring system 4.53 g.cm²

4 phases - 115 Ω



Measurement conditions :
89 990 101 constant voltage supply board,
17 V at motor terminals,
2 phases energised, full steps,
inertia of measuring system 4.53 g.cm²

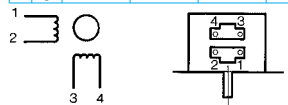
1

Connections

2 phases

Energisation sequence for clockwise rotation: (viewed from shaft end)

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

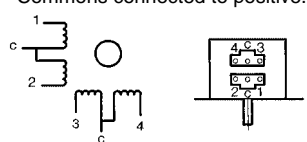


4 phases

Energisation sequence for clockwise rotation: 2 phases energised (viewed from shaft end, front forward)

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

Commons connected to positive.



Other information

For basic principles, see page 3/5
Other versions are possible to special order in reasonable quantities :
- special coil
- special shaft possible with rear output
- special lead length
82 910 5 Motor with sintered bronze bearings
82 910 8 Motor with plastic bearings

To order, specify :

Standard products,
non stocked

1 Part number

Example : Permanent magnet stepper motor
82 950 001