

## 80 W Motomate Right angle gearbox Part number 80081002



- Movement control for simple mechanisms
- All-in-one solution for quick integration
- Compact with high performance
- Intuitive programming with graphical function blocks
- Adapted for severe environments
- 12 pulses per revolution of the motor
- Independant torque control
- Uses the functionalities of TNI20

### Part numbers

Type	Ratio	Max. speed (rpm)	Available torque (Nm)
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### Specifications

#### General characteristics

Supply voltage (V)	24 (20 →37)
Max. current (A)	6
Immunity from micro power cuts (ms)	1
Operating temperature (°C)	-20 →+40
Protection index	IP 54

#### Programming

Inputs / outputs	4I/4O
Programming method	Function blocks / SFC
Program size	128
Program memory	Flash EEPROM
Program cycle time (ms)	10
Real-time clock	No

#### Logic inputs

Max. number	4 (I1 →I4)
Input impedance (kΩ)	> 10
Logic 1 voltage threshold (V)	> 15
Logic 0 voltage threshold (V)	< 5
Response time (ms)	10

#### High speed inputs

Max. number	2 (I1 →I2)
Max. frequency (k Hz)	4

#### Analogue input

Max. number	2 (I3 →I4)
Measurement range	0-10 VDC
Resolution	8 bits
Accuracy	± 5 %

#### Logic outputs / PWM

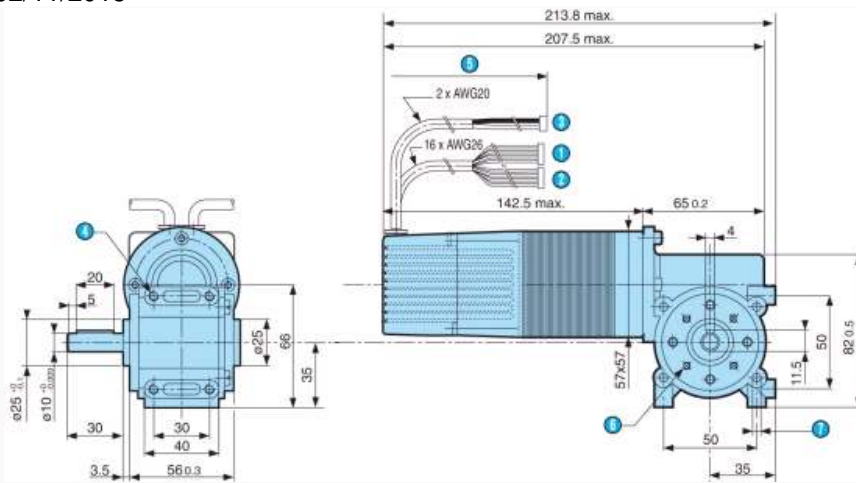
Max. number	4 (O1 →O4)
Type of output	PNP
Insulation	No
Max. current (mA)	250
Leakage current (mA)	< 0,1
Response time (ms)	10
PWM frequency (k Hz)	0.11 →1.8
PWM accuracy at 120 Hz	5 %

### Accessories

Description	Code
Programming kit PC/Motomate - serial port	79 294 791
Programming kit PC/Motomate - USB	79 294 790
Programming software on CD ROM	79 294 792

### Dimensions (mm)

#### Right angle gearbox



Radial load max. = 150 N Axial load max. = 100 N

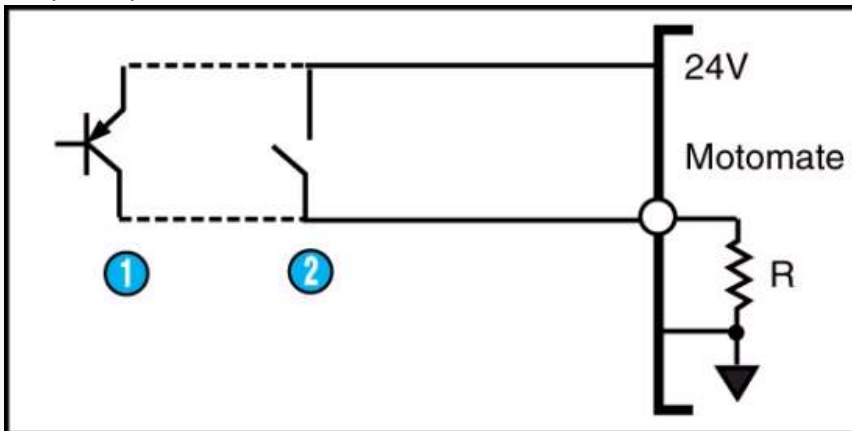
N°	Legend
①	Connector 6 way : programming motomate
②	Connector 10 way : inputs/outputs motomate
③	Connector 2 way : power supply
④	4 x M5 depth 8 mm
⑤	Cable length 500 ± 5 mm
⑥	4 x M4 on Ø 36 depth 8 mm
⑦	4 x M5 depth 8 mm

### User precautions

- \*a) Never reverse the polarity of the supply
- \*b) Do not short-circuit the outputs O1 to O4 to ground
- Do not use the motor as a generator
- For more details on the geared motors, consult the brushless catalogue

### Applications

#### Examples of input connections



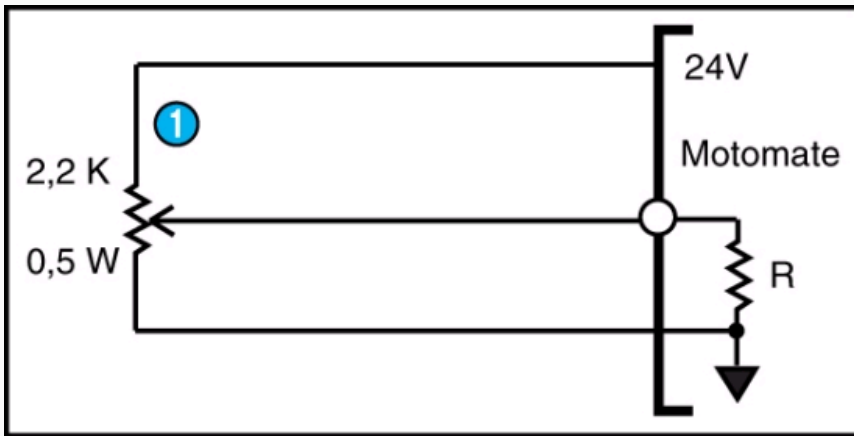
N°	Legend
①	Sensor output PNP
	or
②	Contact

### Applications



N°	Legend
1	Sensor output NPN

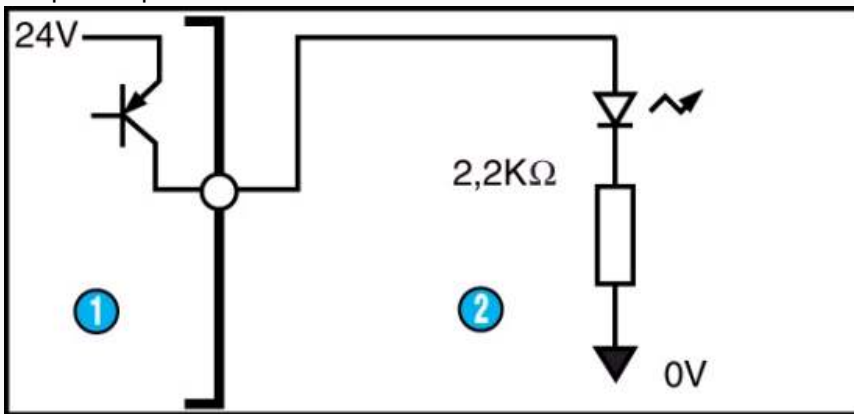
Applications



N°	Legend
1	Potentiometer

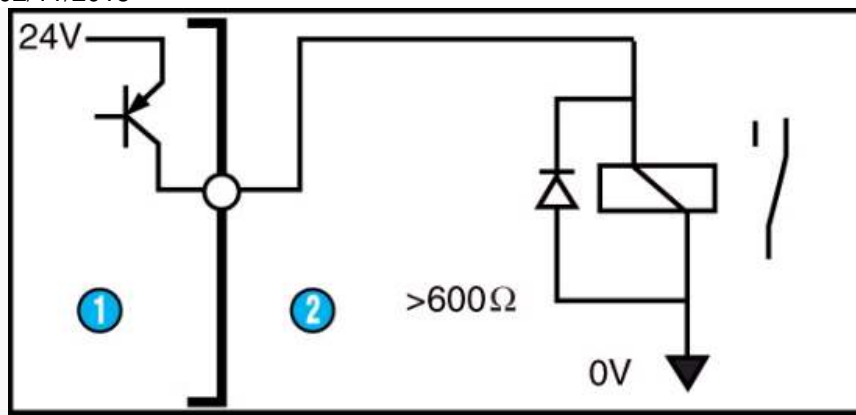
Applications

Examples of output connections



N°	Legend
1	Motor
2	Load LED

Applications



N°	Legend
1	Motor
2	Load relay

#### Product adaptations



- Special output shaft
- Special supply voltage
- Special cable length
- Customised electronics
- Special connectors
- Special gear ratios
- Special material for the gear wheels.
- Special mounting plate
- Customer programs installed at the factory