

Stepper Motors

Single phase, 6 steps per revolution
PREClstep® Technology

For combination with:
Drive Electronics: AMAR 138

Series ASP 006-xx-01

	xx =	022	102	380	
Number of steps per revolution ¹⁾		6	6	6	
Step angle		60	60	60	degrees
Nominal voltage ²⁾		1,3	2,7	4,5	V DC
Voltage range		1,0 to 1,6	2,1 to 3,3	3,5 to 5,1	V DC
Pulse width		7,81	7,81	7,81	ms
Coil resistance		22	102	380	Ω
Average current consumption		160	70	30	μA/step/s
Torque at nominal voltage (20°C)		20			μNm
Detent torque		50			μNm
Ambient temperature range		-40 ... +85			°C
Max. load inertia		2			·10 ⁻⁹ kgm ²
Direction of rotation ³⁾		CW			
Axial play		25 to 150			μm
Max. radial play		50			μm
Weight		6,8			g

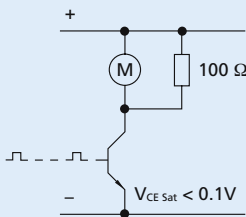
- ¹⁾ Driven by successive pulses of constant polarity
- ²⁾ Positive pole on outside wire
- ³⁾ Viewing the motor from the shaft or pinion end (CW = clockwise)

Jewel bearings are standard

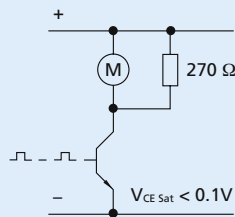
Driver Schematic

The driver can be built using the schemes below depending on the motor supply voltage rating. Pulse length is identical for each motor.

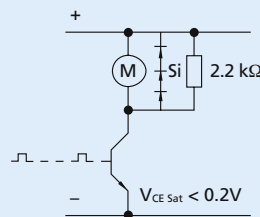
For rapid evaluation, the Drive Electronic AMAR138 is available for each voltage.



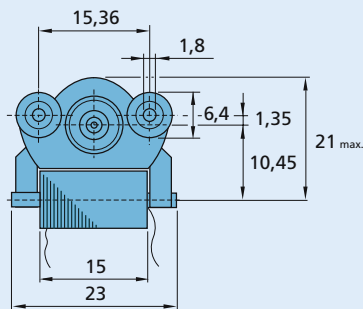
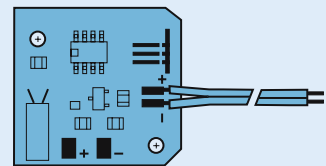
ASP 006-022-01



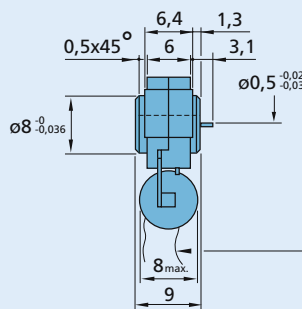
ASP 006-102-01



ASP 006-380-01



ASP 006-xx-01



Loose winding wire, length min. 15 mm, tips are tinned