Stepper Motors

Single phase, 24 steps per revolution
PRECIstep® Technology

For combination with:
Drive Electronics: AMAR 138

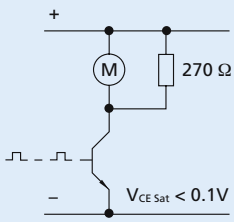
Series ASP 124-xx-06

xx =	022	102	380	
Number of steps per revolution [1]	24	24	24	
Step angle	15	15	15	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)	75			µNm
Detent torque	200			µNm
Ambient temperature range	–40 ... +85			°C
Max. load inertia	30			$\cdot 10^{-9}$ kgm²
Direction of rotation [3]	CW			
Axial play	200			µm
Max. radial play	22			µm
Weight	13			g

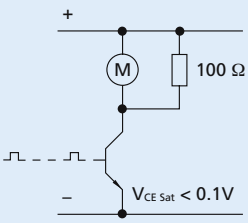
[1] Driven by successive pulses of constant polarity
[2] Positive pole on red wire
[3] Viewing the motor from the shaft or pinion end. Motors are delivered, on request, either CW (clockwise) or CCW (counter clockwise).

Jewel bearings are standard

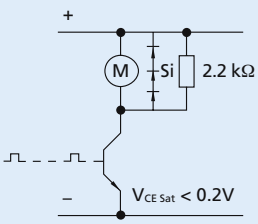
Driver Schematic
The driver can be built using the schemes below depending on the motor supply voltage rating.
Pulse length is identical for each motor.



ASP 124-022-06

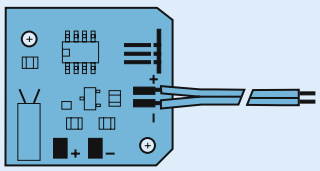


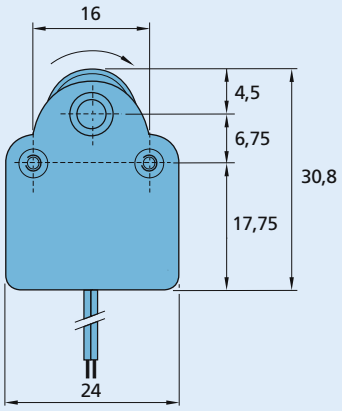
ASP 124-102-06



ASP 124-380-06

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





ASP 124-xx-06