Sanyo Denki StepSyn 103H7123-5840

2-Phase Hybrid Stepping Motor | NEMA 23 / 56 mm sq. | 1.8°/step

The Sanyo Denki StepSyn 103H7123-5840 is a 2-phase hybrid stepping motor designed for precise, repeatable open-loop positioning in industrial automation. It divides each full rotation into 200 discrete 1.8° steps, allowing accurate speed and position control without feedback sensors. Housed in a compact 56 mm square (NEMA 23) frame with a single D-cut shaft and bipolar 3 A/phase winding, it delivers 1 N·m of holding torque for demanding motion-control tasks.

General / Identification

Manufacturer	Sanyo Denki
Series	StepSyn (SANMOTION F2, 2-phase)
Model / Type	103H7123-5840
Motor type	2-phase hybrid stepping motor

Performance / Functional

Basic step angle	1.8° per step
Steps per revolution	200 (full step)
Holding torque	1 N·m
Rotor inertia	0.21×10^{-4} kg·m^2

Electrical

Number of phases	2
Rated current	3 A / phase
Winding / drive	Bipolar

Mechanical & Environmental

Frame / flange size	56 mm square (NEMA 23)
Motor length	53.8 mm
Output shaft	Single shaft, D-shaped
Net weight	0.65 kg
Operating temperature	-10 °C to +50 °C
Operating humidity	20 to 90% RH (non-condensing)

Connections

Connection type	Lead-wire type

Typical applications: CNC machinery, robotics, semiconductor and electronics manufacturing equipment, packaging and labelling machines, and general factory automation requiring precise open-loop positioning.
