



EPP7041-1002 | Stepper motor module 50 V DC, 1.5 A, with incremental encoder

The EPP7041-1002 EtherCAT P Box is intended for the direct connection of different Stepper Motors. The PWM output stages for two motor coils with compact design are located in the module together with two inputs for limit switches and cover a wide voltage and current range. The EPP7041-1002 can be adjusted to the motor and the application by changing just a few parameters. 64-fold micro-stepping ensures particularly quiet and precise motor operation. Connection of an incremental encoder enables a simple servo axis to be realised. Two digital inputs and a digital 0.5 A output enable connection of end switches and a motor brake.

Technical data	EPP7041-1002
Number of outputs	1 stepper motor, 1 digital 24 V DC output
Number of inputs	2 digital inputs, encoder system (24 V DC encoder)
Connection method	M12, screw type
Load type	2-phase stepper motor (uni-/bipolar)
Nominal voltage	8...50 V DC
Distributed clocks	yes
Protocol	EtherCAT
Bus interface	2 x M8 socket, shielded, screw type, EtherCAT-P-coded
Output current	2 x 1 A, 2 x 1.5 A peak current (overload- and short-circuit proof)
Step frequency	configurable up to 8000 full steps/s
Step pattern	64-fold micro stepping
Current controller frequency	approx. 30 kHz
Diagnostics LED	error phase A and B, loss of step/stagnation, power, enable
Resolution	approx. 5000 positions (per revolution)
Power supply connection	not necessary
Bit width in the process image	input/output: 2 x 16 bit data + 1 x 16 bit control/status
Current consumption from Us	typ. 100 mA
Special features	travel distance control, encoder input
Weight	approx. 165 g
Operating/storage temperature	-25...+60 °C/-40...+85 °C
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Protect. class/installation pos.	IP 65/66/67 (conforms to EN 60529)/variable
Approvals	CE, UL in preparation

Accessories	
ZK700x-010x-0xxx	Cables for EtherCAT P: Ultra-fast Communication and Power in One Cable
ZK2020-3xxx-xxxx	Cables for M8 power supply
AS2021-0Dy0	stepper motor, 50 V DC, 0.8 Nm standstill torque, 2.0 A standstill current
Cables, gears and couplings	accessories for AS2000 stepper motors