

PE250 integrated positioner

The Integrated Positioner PE250 is a vectorial brushless motor drive integrated inside the motor body, driven by means of CANopen/DS401/DS402 standard; the main feature is the high integration and simplification of the wiring. The assembly is composed of the motor block, control electronics (DSP) and the power section with 48V power supply. For operation it suffices to connect the DB9 connector of the CAN line and the power cable. Three optoisolated inputs are available with a limit switch and zero micro function.

Two LEDs are positioned at the base of the motor, which signal the drive and the CAN line status.

In an adjacent position are the configuration dip switches for the address, speed and CAN line terminal.

The positioner is supplied with a standard attachment flange.



Cod. H4PE250XXXX

CHARACTERISTICS	DESCRIPTION	NOTES
	GENERALS	
Dimensions [mm]	220 x 90 x 60	
Weight [Kg]	2,5	
Operating environment	Industrial	
Protection class	IP54	
Operating temperature [°C]	0 to 50	
Humidity (without condensate)	≤ 75%	
Max operating altitude [m]	2000	

CHARACTERISTICS	DESCRIPTION	GENERAL
MECHANICAL		
Rotation speed [RPM]	3000	
Torque with rotor locked [Nm]	0,7	
Breakaway torque peak [Nm]	2,7	
Discontinuous torque class S3-10 50% [Nm]	0,9	
Encoder resolution [ppr]	1000, 500 in optical technology 256 in magnetic technology	- With multiplication by 4
Output shaft diameter [mm]	9	
Mounting flange [mm]	60	
Moment of inertia [Kg·cm ²]	0.23	
ELECTRICAL		
Logic power supply [V] Absorption [mA]	24±10% 150	
Logic power supply [V] Absorption [mA]	48 DC±10% Depending on the operating conditions.	
Logic power supply [V] Maximum deliverable [mA]	24V ±10% 200	
CPU		
Microprocessor	DSP Texas 16-bit fixed point at 40 MHz	
Internal memory	Internal Flash EPROM 32 Kword Internal SRAM 1 Kword	
Parameter memory	Flash	
INTERFACING		
Field bus	1 CAN line CANopen (DS301/401/402) protocol	- 1 Mbit/s, 800 Kbit/s, 500 Kbit/s, 250 Kbit/s - CAN addresses configurable from 1 to 16
Serial	1 RS232 line	- For SW configuration and update
Digital inputs	1 zero micro 2 limit switches	- 24V optoisolated
SOFTWARE		
Vectorial control algorithm	Current control (PID) Speed control (PID) Position control (PID) Overvoltage/Undervoltage on DC-Link I ² T	- Current measurement in power branches - Speed feedback from encoder - Position feedback from encoder
Signaling	Drive activated DC-Link undervoltage Position reached Acceleration/Deceleration Zero reached	
Allarms	Overcurrent DC-Link undervoltage/overvoltage Thermal runaway I ² T limit reached Position tolerance exceeded CAN error Limit switch	
Configuration software (PC)	PID parameters, I ² T parameters, positioning tolerances, position tables.	- Serial RS232 communication (9600 b/s)
Real-time display	DC-Link, temperature, currents, speed, position.	
EXPANSIONS		
Parking brake		
Integrated planetary gears		