



TSP10

Stepper motor drive with Analog and encoder interface

TSP10-ANE

- Compact size
- Supply voltage 24-74V_{DC}, max. motor current 7 A_{rms}
- Analog inputs (2) and Outputs (2) (0-10V, ±10V)
- Supply voltage 10V for the connection of a potentiometer
- Analog setpoint for position or velocity
- Idle current reduction
- Noiseless at standstill, smooth operation
- Low heat losses
- Opto-isolated inputs (10) and outputs (4)
- Separated supply voltage for electronic and motor
- Programmable motion tasks with adjustable ramps

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TSP10-ANE - Compact stepper motor drive

The TSP10 drive is a compact microstep power module for 2-phase stepper motors with various configurations for the best possible customization to the individual application.

The units are designed for panel mounting and equipped with the mating plugs; the compact size allows installation, where only restricted mounting space is available. The heat dissipation is laterally possible over an optional heat-sink or over the bearing surface at the back.

The supply voltage plug and the motor plug are placed at the bottom side of the drive. The 25-pin Sub-D socket for the digital I/Os as well as three 9-pin Sub-D socket for the RS232-connection, for the analog and encoder are located at the front of the drive. A fast parameterization can be done via the two rotary switches at the top side of the case.

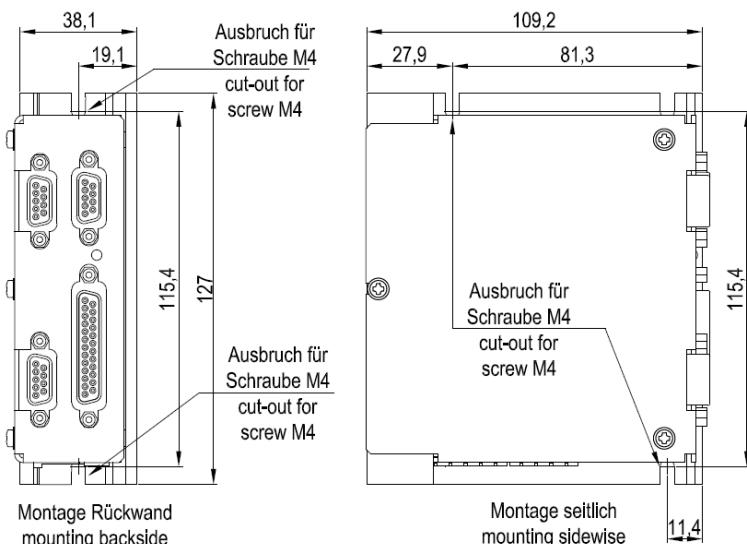
A two colour LED indicates the status of the drive by colors and flashing signals. All digital inputs and outputs are opto-isolated. Because only a few basic settings are required, the stepper with little effort can be integrated into any control system.

Technical data

Supply voltage	power supply voltage 24 - 74V _{DC}
Motor current	max. 10 A _{peak} ; 0,2 bis 7 A _{rms} adjustable in mA (fast parameterization: 16 steps) for 2-phase stepper motors with 4,6 or 8 leads
Power supply	for the motor power supply only an unregulated DC voltage is required.
Ambient temperature	<50°C without heat sink max 3.2A @ 25°C / 1.6A @ 45°C <50°C with heat sink (optional) max 7A @ 25°C/ 3.5A @45°C
Heat sink temperature	max. 60°C, forced cooling may be necessary
Humidity	10-90%, non-condensing
Fault protection	Line-to-Line and line-to-neutral shorts and over temperature
Idle current reduction	free adjustable
Inputs	10 digital inputs, free configurable 2 analog inputs, AE1: ±10V, AE2: 0..10V
Input interface	RS232
Outputs	4 digital outputs, SPS compatible free configurable 2 analog outputs, 0..10V or ±10V 1 power supply 10V, 100mA Status LED : green = ready for use; red = failure; yellow = motor movement

Connection/ Dimensions

Connectors	
Supply voltage	4-pole plug-in terminal strip
Motor	5-pole plug-in terminal strip
Serial interface	9-pin Sub-D-socket
I/Os	25-pin Sub-D-socket
Analog-Interface	9-pole Sub-D-socket
Encoder	9-pole Sub-D-socket



all dimensions in mm

Ordering code

TSP10-ANE-00-AA = Standard version

TSP10 Type code

T	S	P	1	0	-	B	A	0	-	0	0	-	A	A
Drive Series														
Max. Output Power = 10 A _{peak}														
Basic Device (Step & Direction, RS232)						BA								
Profibus						PB								
Profinet (in preparation)						PN								
ModBus						MB								
CAN-Bus						CB								
Analog (+/- 10 Volt)						AN								
Standard (no feedback)						0								
Encoder RS422/TTL						E								
Encoder HTL						H								
Encoder Biss-C						C								
Digital Inputs = 24V; Step & Direction = 5V.....							00							
Digital Inputs = 5V; Step & Direction = 5V.....							05							
Digital Inputs = 24V; Step & Direction = 24V....							24*							
Standard								AA						
Customization								XX						

*only available for the TSP10-BA
www.ahs-antriebstechnik.de

Technische Änderungen vorbehalten / Specifications are subject to change without notice