



TSP10

Compact stepper motor drive

TSP10-PB

- Compact size
- Supply voltage 24-74V_{DC} , max. motor current 7 A_{rms}
- 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, programmable with Profibus
- Bus interface galvanic isolated
- Set-up the Profibus address on the top of the device with two rotary switches
- Please request a sample project for the commissioning of S7 (info@ahs-antriebstechnik.de)

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TSP10-PB Compact stepper motor drive

The TSP10-PB 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 a 9-pin Sub-D socket for the RS232-connections and as a 9-pin Sub-D socket for the Profibus DP are located at the front of the drive. The Set-Up for the Profibus address is made by two rotary switches at the top side of the drive.

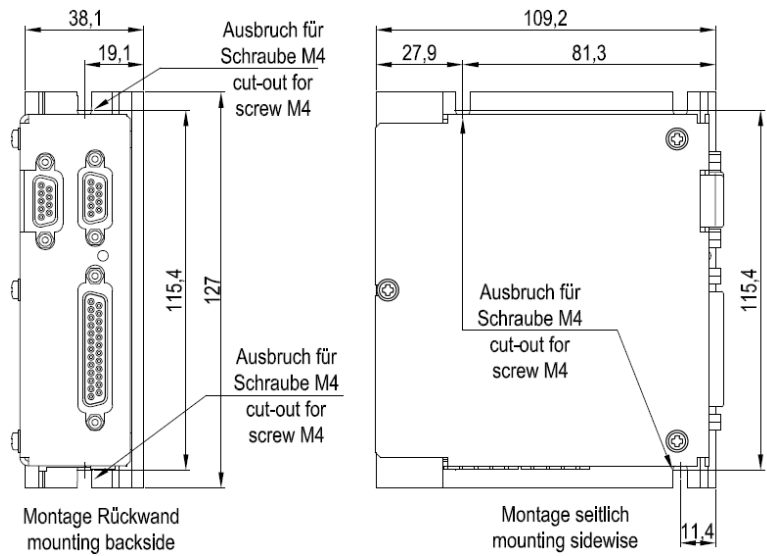
A two colour LED indicates the status of the drive by colors and flashing signals. All digital inputs and outputs are opto-isolated. In addition the basic drive has Indexer functionality. Because only a few basic settings are required, the stepper with little effort can be integrated into any control 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 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
Heat sink temperature	<50°C with heat sink (optional) max 7A @ 25°C/ 3.5A @45° C
Humidity	max. 60°C, forced cooling may be necessary
Fault protection	10-90%, non-condensing
Idle current reduction	Line-to-Line and line-to-neutral shorts and over temperature
Inputs	free adjustable
Input interface	10 inputs, free configurable
Outputs	RS232, Profibus DP
	4 outputs, SPS compatible free configurable Status LED : green = ready for use; red = failure; yellow = motor movement
Baud rate	Up to 12 MBaud

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
Profibus socket according to standard	9-pole Sub-D-socket



all dimensions in mm

Ordering code

TSP10-PB0-00-AA = Standard version

TSP10 Type code

T	S	P	1	0	-	B	A	0	-	0	0	-	A	A
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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								
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	
Follow up identifier DSM9														09

Note: Not all combinations of the type code are possible.