

## Specifications

### POWER SUPPLY

separated for power and for logic (optional and not isolated):

Model	Power Supply	Current for each motor
SW4D2070	12 ÷ 48 Vdc	0.0 ÷ 7.0 ARMS (10 APEAK)

### COMMUNICATION INTERFACE

Profinet

### ENCODER INTERFACE

incremental encoder for each motor not isolated input 5V Differential (RS422) or 5V Single-Ended (TTL/CMOS)

### USB INTERFACE

service USB interface for programming and real time debug

### OPTOISOLATED INPUTS

8 digital inputs

### OPTOISOLATED OUTPUTS

4 digital outputs

### EMULATED STEP RESOLUTION

Stepless Control Technology (65536 positions per turn)

### SAFETY PROTECTIONS

Over/UnderVoltage, OverCurrent, OverTemperature, Phase/Phase and Phase/Ground Short

### TEMPERATURE

operating from 5°C to 40°C, storage -25°C to 55°C

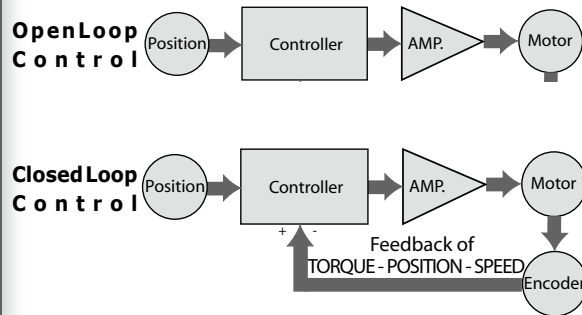
### HUMIDITY

5% ÷ 85%

### PROTECTION CLASS

IP20

## Open-loop / Closed-Loop



Better control compared to both an open loop stepper solution and a servo-controlled brushless solution

## Profinet Fieldbus vectorial drivers for 2 stepper motors

**TITANIO**  
VECTOR - STEPPER - DRIVES



2  
axes

**PROFI**<sup>®</sup>  
**NET**

WARRANTY  
3  
YEARS

# SW4 Titanio drivers

- Profinet
- Outputs to drive two independent motors
- USB serial for real time programming and debugging
- Compliance with the most common PLC Masters on the market
- Integrated oscilloscope
- Vectorial control, for smooth and silent movements
- Closed loop of speed, torque and position
- Easily programmable with e3PLC Programming Environment

**ever**  
e-MOTION SOLUTIONS

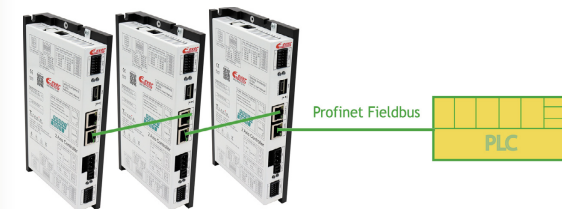
EVER Motion Solutions srl  
Via del Commercio, 2/4 -9/11  
Loc. S. Grato - Z.I.  
26900 - LODI (LO) - Italy  
Tel. 0039 0371 412318 - Fax 0039 0371 412367  
email infoever@everelettronica.it  
www.everelettronica.it

## Profinet

Configuration programmable - c0990

Profinet DP is used for data exchange between controllers or PLC and IO devices or drives. Main Profinet DP characteristics implemented in our drives are:

- develop with the Enhanced Real-Time Ethernet Controller 200P (siemens V4.6 PN Stack inside)
- GSDML V2.35 file
- it features an IRT switch (Dual Ethernet)
- it can be controlled over Profinet as an IO device
- supports RT (Real Time) protocol for Profinet IO, for applications with up to 10 ms cycle time: module 64 bytes I, 64 Bytes O
- supports IRT (Isochronous Real Time) protocol for Profinet IO, for applications with less than 1 ms cycle time: module 64 bytes I IRT, 64 Bytes O IRT
- it uses 64bytes (Input) and 64bytes (Output) to transfer IO data between the IO-Controller (PLC) and the IO-Device (SW5A Profinet)
- 16 bytes (I/O) are fixed mapped
- 40 bytes (I/O) may be variably mapped to desired drives functions using e3PLC.
- 8 bytes (I/O) are used to R/W Drive objects according to CANOpen SDO service
- additionally, digital I/O (24Vdc) and analog Inputs are available as distributed I/O points over Profinet

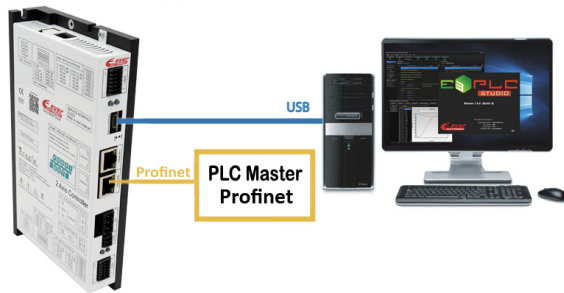


Drive control through commands by Master Controller

Suitable for multi axes systems, built in powerfull Motion Module functionality assures perfect synchronization among axes and reduces Master Controller workload

## Configuration software

IDE e3PLC configuration (programmable) - c0990



Ever co. proprietary PC Software Tools for easy and quick configuration or programming, real time debug and supervision of each system

Autonomous management of the firmware for the execution of the **homing**, of the target movement with relative or absolute quota and for the generation of the ramp profiles

**Torque mode** for operation with torque limitation

Speed control thanks to digital inputs, analogue inputs or fieldbus

**Electronic CAM** with advanced programming of internal profiles inside the drive

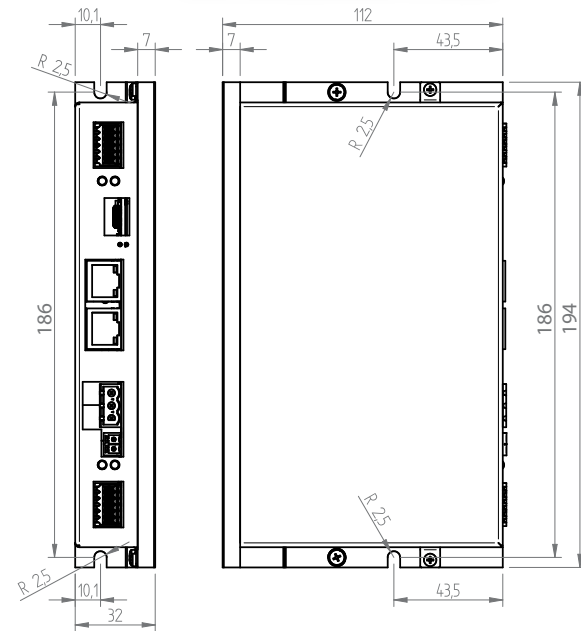
**Electric shaft** with encoder or analogue input with variable tracking ratio (Electric Gear)

Fast inputs and outputs for motor' start & stop and event synchronization for high speed response applications such as labeling, nick finder, flying saw etc.

Possibility to synchronize the movements in multi-axis systems, even without fieldbus

Enabling and on-the-fly changing of the motion control modes

## Mechanical Data



Models	Dimensions (mm)			Weight (g.)
	H	L	W	
SW4D2070T4S2-00	194.0	112.0	32.0	490

Available Models

Mechanical Specifications

## Ordering information for SW4 Profinet drives

Ordering code		Power			System resources					Control mode
Versions	Config.	Power supply	Logic Power Supply	Current	Digital inputs	Digital outputs	Interface	Encoder	Service interface	Modes
<b>SW4 EtherCAT drives Models</b>										
SW4A2070T4S2-00	c0990	12 ÷ 48 Vdc	12 ÷ 48 Vdc	0 ÷ 7.1 Arms (0÷10.0 Apeak) for each motor	8	4	Profinet	Incremental for each motor	USB service for configuration, programming and debug in real time	Profinet mode

### Configuration and Programming Kits

Kit code	Description
USBC_SERV0EE-1M	USB service eePLC programming with cable and CD-Rom.