Powerlink fieldbus vectorial drivers for 2 independent stepper motors

TITANIO
VECTOR - STEPPER - DRIVES

MULTIPROTOCOL

WARRANTY 3 YEARS

2 Dual Axis

SN4D
Titanio drivers

- Outputs to drive two independent motors
- Industrial Ethernet Interface Multiprotocol
- Service serial for real time programming and debugging
- Compliance with the most common PLC Masters on the market
- IP65 protection
- Closed loop of speed, torque and position

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

Features

Specifications

POWER SUPPLY

Model	Power Supply	Max. Out Current
SN4D2030	12 ÷ 48 Vdc	0.0 ÷ 3.0 Arms (4.20 Apeak)

COMMUNICATION INTERFACE
Industrial Ethernet Interface Multiprotocol

ENCODER INTERFACE
1 incremental encoder not isolated input for each motor
5V Single-Ended (TTL/CMOS) or 24V Sink

SCI INTERFACE
service SCI interface for programming and real time debug

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
IP65

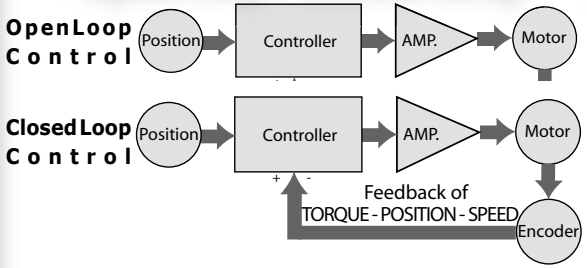
MULTIPROTOCOL

The drive can be configured to communicate with a wide range of major fieldbuses on the market without any hardware alteration but with a simple software setup.
Fieldbuses already available for interfacing on a Multiprotocol device include:

PROFINET® EtherCAT® ETHERNET POWERLINK

Downloading the ad hoc firmware, it's possible to change the communication protocol according to the need of your application. Multiprotocol drives ensure fast and flexible operation and user-friendly configuration provided on the software, without the need for additional servers or special hardware.

Open loop / Closed Loop



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

Powerlink

Fieldbus configuration (slave) - c0A80

Powerlink with integrated DS402 functionalities.

- Supported Modes:
  Profile Torque Mode
  Profile Position Mode, Velocity Mode
  Profile Velocity Mode, Homing Mode
  Interpolated Position Mode
  Cyclic Synchronous Position Mode
  Cyclic Synchronous Velocity Mode
  Cyclic Synchronous Velocity Mode

- Multiple Supported Homing Modes:
  1, 2, 17, 18, 19, 20, 21, 22, 35, 37

- Touch Probe functionalities

- Factor Group

- Dynamic PDO Mapping

- Minimum cycle time:
  1 ms

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

Control Modes

Configuration software

Fieldbus configuration (slave)

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

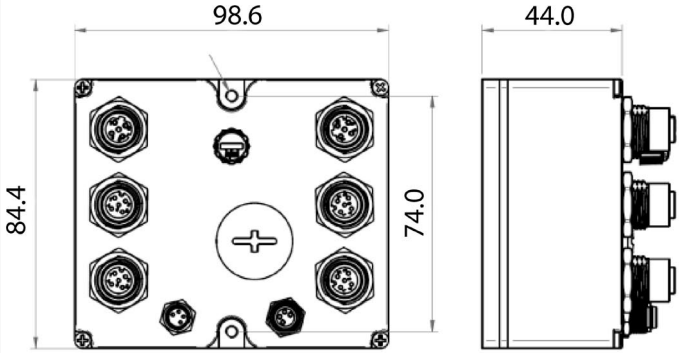
Speed control thanks fieldbus

Electronic CAM with advanced programming of internal profiles inside the drive

Electric shaft with encoder with variable tracking ratio (Electric Gear)

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

Mechanical Data



Models	Dimensions (mm) H	L	W	Weight (g.)
SN4D2030x202-0x	84.4	98.6	44.0	400 about

Ordering information for SN4D Powerlink

Ordering code		Power		System resources			Control mode
Versions	Config.	Power supply	Current	Encoder input	Interface	SCI interface	Modes
SN4D drives model							
SN4D2030R202-00	c0A80	24 ÷48 Vdc	0 ÷ 3.0 Arms for each motor (0÷4.20 Apeak for each motor)	Incremental 24 Vdc Sink	Powerlink	Service serial for configuration, programming and debug in real time	Fieldbus Powerlink
SN4D2030R202-00				Incremental 5 Vdc Single-Ended (TTL/CMOS)			
SN4D2030H202-00	c0690			Incremental 24 Vdc Sink	EtherCAT		Fieldbus EtherCAT
SN4D2030H202-01				Incremental 5 Vdc Single-Ended (TTL/CMOS)			
SN4D2030E202-00	c0890			Incremental 24 Vdc Sink	Modbus TCP/IP		Programmable 'Stand Alone' on Modbus TCI/IP fieldbus
SN4D2030E202-01				Incremental 5 Vdc Single-Ended (TTL/CMOS)			
SN4D2030T202-00	c0990			Incremental 24 Vdc Sink	Profinet		Programmable 'Stand Alone' on Profinet fieldbus
SN4D2030T202-01				Incremental 5 Vdc Single-Ended (TTL/CMOS)			

Configuration and Programming Kits	
Kit code	**Description**
SN4D_SERV00-SL	SCI configuration communication kit with cables, service serial to RS485 and RS485 to USB converters.

Available Models

Mechanical Specifications