Orientalmotor

For sales and support, email info@msitec.com or call 866-397-7388.

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Item # AZD-KPN, AZ Series PROFINET Compatible Driver (24/48 VDC)

αSTEP

AZ Series AC input drivers now comes with PROFINET communications for a battery-free, absolute mechanical sensor motor and driver solution. For use with all Oriental Motor AZ Series motors and linear & rotary actuators equipped with the AZ Series.

- Built-in Protective Functions
- Monitoring Functions
- Support Software for Paramater Setting (free download)
- For use with DC Input AZ Series Motors

The GSD file used varies depending on the manufacturing date of the driver. Please check the name **+ more**

Specifications | **Communications** | **Dimensions** | **System** | **Product Number**
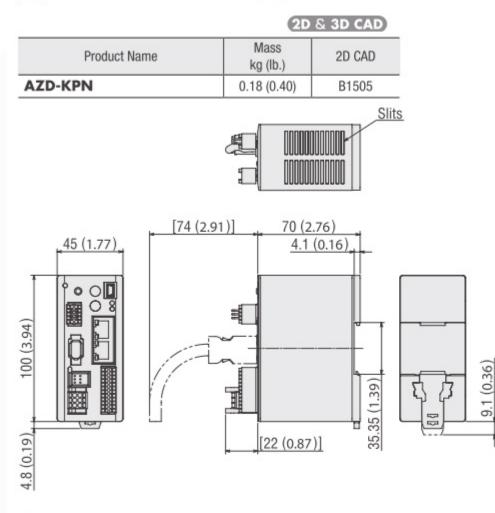
Specifications	−

Lead Time[1]	Contact your local sales office for product lead-times, available to ship dates and shipping methods.
Driver Type	PROFINET Compatible
Power Supply	24/48 VDC
Control Power Supply	24 VDC ±5%, 0.25 A (0.5 A for Electromagnetic Brake)
Interface - Pulse Input	2 Inputs, Photocoupler Max Input Frequency Line Driver: 1 MHz (Duty Cycle 50%) Open Collector: 250kHz (Duty Cycle 50%)
Interface - Control Input	6 inputs, Photocoupler
Interface - Pulse Output	2 outputs, Line Driver
Interface - Control Output	6 outputs, Photocoupler/Open collector

Interface - Power Shut Down Signal Input	2 inputs, Photocoupler
Interface - Power Shut Down Monitor Output	1 output, Photocoupler/Open collector
Interface - Field Network	PROFINET
Degree of Protection	IP10
Insulation Resistance (Driver)	When a 500 VDC megger is applied to the following locations, resistance is 100MΩ or higher. Between the PE terminal and main power supply terminal.
Ambient Temperature Range	0ºC ~ +50ºC (+32ºF ~ +122ºF) (nonfreezing)
Ambient Humidity	85% max. (noncondensing)
Operating Atmosphere	No corrosive gases or dust. Cannot be used in radioactive area, magnetic field, vacuum or other special environment.

Communications −

Communication Protocol	PROFINET IO Ver.2.4
Vendor ID	0x33E: ORIENTAL MOTOR
Transmission Rate	100 Mbps (Autonegotiation)
Communication Method	Full Duplex (Autonegotiation)
Cable Specifications	Shielded Twisted Pair (STP) Cable Straight-through/Crossover Cable, Category 5e or higher
Communication Connector	RJ45 X 2 (Shielded)
Conformance Class	B
RT/IRT	RT
NetLoad Class	I
Protocol to be Supported	DCP, LLDP, SNMP, MRP* *varies depending on the driver used. Please refer to "Communications specifications" in the PROFINET Compatible Driver User Manual
Number of Occupied Bytes - Output (Host Controller > Driver)	40 bytes
Number of Occupied Bytes -Input (Driver > Host Controller)	56 bytes
Network Topologies	Star, Tree, Line, Ring* *varies depending on the driver used. Please refer to "Communications specifications" in the PROFINET Compatible Driver User Manual

■Dimensions Unit: mm (in.)

2D & 3D CAD

Product Name	Mass kg (lb.)	2D CAD
AZD-KPN	0.18 (0.40)	B1505

Slits

[74 (2.91)]   70 (2.76)

45 (1.77)   4.1 (0.16)

100 (3.94)

35.35 (1.39)

9.1 (0.36)

4.8 (0.19)

[22 (0.87)]

● Included

Control Power Supply Connector (CN1)
Connector: DDFMC0,5/5-ST-2,54 (PHOENIX CONTACT GmbH & Co. KG)

Main Power Supply Connector (CN4)
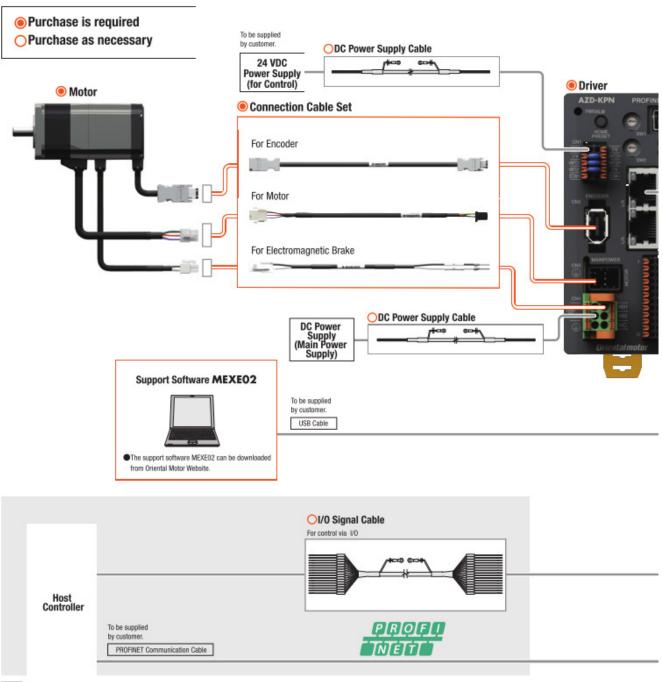Connector: DFMC1,5/3-ST-3,5-LR (PHOENIX CONTACT GmbH & Co. KG)

I/O Signal Connector (CN7)
Connector: DDFMC0,5/12-ST-2,54 (PHOENIX CONTACT GmbH & Co. KG)

■System Configuration

●When combining with DC input PROFINET compatible driver

This is an example of a system configuration when the PROFINET compatible driver is used with I/O control or via PROFINET communication.
A motor, a driver, and a connection cable set/flexible connection cable set are required to purchase separately.

◉ Purchase is required
○ Purchase as necessary

To be supplied by customer.

24 VDC Power Supply (for Control)

○ DC Power Supply Cable

◉ **Motor**

◉ **Connection Cable Set**

For Encoder

For Motor

For Electromagnetic Brake

◉ **Driver**

AZD-KPN   PROFIN

DC Power Supply (Main Power Supply)

○ DC Power Supply Cable

Support Software MEXE02

To be supplied by customer.

USB Cable

● The support software MEXE02 can be downloaded from Oriental Motor Website.

○ **I/O Signal Cable**

For control via I/O

Host Controller

To be supplied by customer.

PROFINET Communication Cable

PROFI NET

Note
● The motor cable and electromagnetic brake cable from the motor cannot be connected directly to the driver. Use connection cables to connect to the driver.

Product Number

Product Name

AZD - K PN
①   ② ③

①	Driver Type	**AZD**: **AZ** Series Driver
②	Power Supply Input	**K**: 24/48 VDC
③	Network Type	**PN**: PROFINET