# Product data sheet

Specification





integrated drive ILS with stepper motor - 24..36 V - Profibus DP - 3.5 A

ILS1B571PB1A0

! Discontinued on: Sep 15, 2023

① To be end-of-service on: Dec 31, 2024

① Discontinued

Product availability: Non-Stock - Not normally stocked in distribution facility

#### Main

| Range Of Product          | Lexium integrated drive                    |
|---------------------------|--|
| Product Or Component Type | Motion integrated drive                    |
| Device Short Name         | ILS  |
| Motor Type                | 3-phase stepper motor                      |
| Number Of Motor Poles     | 6  |
| Phase                     | Single phase                               |
| [Us] Rated Supply Voltage | 24 V<br>36 V                               |
| Network Type              | DC   |
| Communication Interface   | Profibus DP, Integrated                    |
| Length                    | 4.01 in (101.9 mm)                         |
| Winding Type              | Medium speed of rotation and medium torque |
| Electrical Connection     | Printed circuit board connector            |
| Holding Brake             | Without                                    |
| Gear Box Type             | Without                                    |
| Nominal Speed             | 1000 rpm 36 V<br>500 rpm 24 V              |
| Nominal Torque            | 3.98 lbf.in (0.45 N.m)                     |
| Holding Torque            | 4.51 lbf.in (0.51 N.m)                     |

## Complementary

| Transmission Rate        | 9.6, 19.2, 45.45, 93.75, 187.5, 500, 1500, 3000, 6000 and 12000 kbauds |
|--------------------------|--|
| Mounting Support         | Flange   |
| Motor Flange Size        | 2.24 in (57 mm)  |
| Number Of Motor Stacks   | 1  |
| Centring Collar Diameter | 1.50 in (38.1 mm)  |
| Centring Collar Depth    | 0.06 in (1.6 mm)   |
| Number Of Mounting Holes | 4  |
| Mounting Holes Diameter  | 0.20 in (5.2 mm)   |

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

| Circle Diameter Of The Mounting Holes | 2.62 in (66.6 mm)   |
|---------------------------------------|---|
| Feedback Type                         | Index pulse   |
| Shaft End                             | Untapped  |
| Second Shaft                          | Without second shaft end  |
| Shaft Diameter                        | 0.25 in (6.35 mm)   |
| Shaft Length                          | 0.83 in (21 mm)   |
| Supply Voltage Limits                 | 1840 V  |
| Current Consumption                   | 3500 mA maximum   |
| Associated Fuse Rating                | 10 A  |
| Input/Output Type                     | 4 signals (each be used as input or output)   |
| Voltage State 0 Guaranteed            | -34.5 V   |
| Voltage State 1 Guaranteed            | 1530 V  |
| Discrete Input Current                | 10 mA at 24 V on/STO_A safety input<br>3 mA at 24 V on/STO_B safety input<br>2 mA at 24 V 24 V signal interface |
| Discrete Output Voltage               | 2325 V  |
| Maximum Switching Current             | 100 mA per output<br>200 mA total   |
| Protection Type                       | Short circuit of the output voltage Overload of output voltage Safe torque off                                  |
| Peak Stall Torque                     | 3.98 lbf.in (0.45 N.m)  |
| Continuous Stall Torque               | 3.98 lbf.in (0.45 N.m)  |
| Speed Feedback Resolution             | 20000 points/turn   |
| Accuracy Error                        | +/- 6 arc min   |
| Rotor Inertia                         | 0.1 kg.cm²  |
| Maximum Mechanical Speed              | 3000 rpm  |
| Maximum Radial Force Fr               | 24 N  |
| Maximum Axial Force Fa                | 100 N tensile force)<br>8.4 N force pressure)   |
| Service Life In Hours                 | 20000 h bearing   |
| Marking                               | CE  |
| Type Of Cooling                       | Natural convection  |
| Net Weight                            | 2.87 lb(US) (1.3 kg)  |

## **Environment**

| Standards                                | EN/IEC 61800-3   |
|--|--|
|  | IEC 60072-1  |
|  | EN 61800-3:2001, second environment  |
|  | IEC 61800-3, Ed 2  |
|  | EN 50347   |
|  | EN/IEC 50178   |
|  | EN 61800-3 : 2001-02   |
| Product Certifications                   | TÜV  |
|  | cUL  |
|  | UL   |
| Ambient Air Temperature For<br>Operation | 122149 °F (5065 °C) with power derating of 2 % per °C) 32122 °F (050 °C) without derating) |

| Permissible Ambient Air<br>Temperature Around The Device | 221 °F (105 °C) power amplifier<br>230 °F (110 °C) motor   |  |
|--|--|--|
| Ambient Air Temperature For Storage                      | -13158 °F (-2570 °C)   |  |
| Operating Altitude                                       | <= 3280.84 ft (1000 m) without derating  |  |
| Relative Humidity  | 1585 % without condensation  |  |
| Vibration Resistance                                     | 20 m/s² 10500 Hz) 10 cycles EN/IEC 60068-2-6   |  |
| Shock Resistance   | 150 m/s² 1000 shocks EN/IEC 60068-2-29   |  |
| Ip Degree Of Protection                                  | IP41 shaft bushing: conforming to EN/IEC 60034-5 IP54 total except shaft bushing: conforming to EN/IEC 60034-5 |  |

# Ordering and shipping details

| Category          | US1PC5618288  |
|-------------------|---------------|
| Discount Schedule | PC56          |
| Gtin              | 3389119226820 |
| Returnability     | No            |
| Country Of Origin | DE            |

# **Packing Units**

| Unit Type Of Package 1       | PCE                      |
|------------------------------|--------------------------|
| Number Of Units In Package 1 | 1                        |
| Package 1 Height             | 4.13 in (10.5 cm)        |
| Package 1 Width              | 6.69 in (17 cm)          |
| Package 1 Length             | 9.45 in (24 cm)          |
| Package 1 Weight             | 3.29 lb(US) (1.494 kg)   |
| Unit Type Of Package 2       | S04                      |
| Number Of Units In Package 2 | 8                        |
| Package 2 Height             | 11.81 in (30 cm)         |
| Package 2 Width              | 15.75 in (40 cm)         |
| Package 2 Length             | 23.62 in (60 cm)         |
| Package 2 Weight             | 29.11 lb(US) (13.204 kg) |
| Package 3 Height             | 11.81 in (30.0 cm)       |

## **Contractual warranty**

Warranty 18 months

## Sustainability Screen Premium

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >





Transparency RoHS/REACh

### Well-being performance

| <b>Ø</b> | Mercury Free               |     |
|----------|----------------------------|-----|
| <b>②</b> | Rohs Exemption Information | Yes |
|          | Pvc Free                   |     |

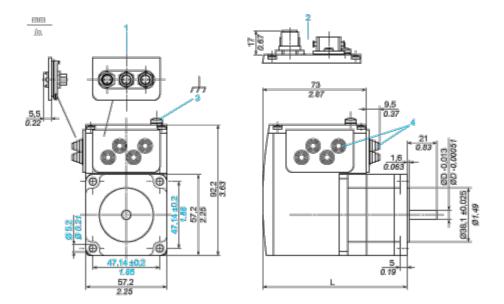
#### **Certifications & Standards**

| Reach Regulation         | REACh Declaration  |
|--------------------------|--|
| Eu Rohs Directive        | Pro-active compliance (Product out of EU RoHS legal scope)   |
| China Rohs Regulation    | China RoHS declaration   |
| Environmental Disclosure | Product Environmental Profile  |
| Weee                     | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins. |
| Circularity Profile      | End of Life Information  |
|                          |  |

#### **Dimensions Drawings**

#### **Integrated Drive**

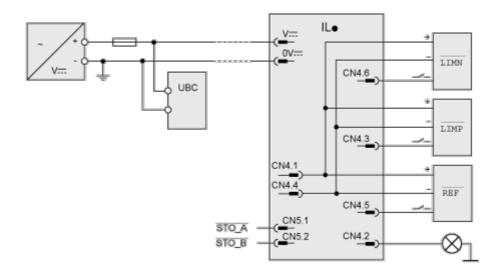
#### **Dimensions**



- 1 Accessories: I/O signal insert with industrial connectors
- 2 Option: industrial connectors
- 3 Earth (ground) terminal
- 4 Accessories: cable entries  $\emptyset = 3 \dots 9 \text{ mm}/0.12 \dots 0.35 \text{ in.}$
- L 101.9 mm/4.01 in.
- D 6.35 mm/0.25 in.

Connections and Schema

### Connection Example with 4 I/O Signals

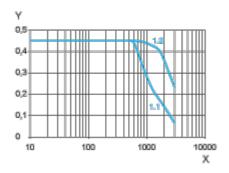


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#### Performance Curves

### **Torque Characteristics**



- X Speed of rotation in rpm
- Y Torque in Nm
- 1.1 Max. torque at 24 V
- 1.2 Max. torque at 36 V