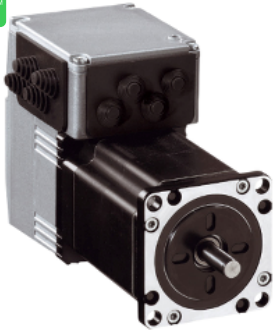


# Product data sheet

Specifications



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

ILS1B573PC1A0

! Discontinued on: 01 February 2023

! To be end-of-service on: 31 December 2026

! Discontinued - Service only

### 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
Network number of phases	Single phase
[Us] rated supply voltage	24 V 36 V
Network type	DC
Communication interface	Profibus DP, integrated
Length	138.9 mm
Winding type	Medium speed of rotation and medium torque
Electrical connection	Industrial connector
Holding brake	Without
Gear box type	Without
Nominal speed	200 rpm at 24 V 500 rpm at 36 V
Nominal torque	1.5 N.m
Holding torque	1.7 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	57 mm
Number of motor stacks	3
Centring collar diameter	38.1 mm
Centring collar depth	1.6 mm
Number of mounting holes	4
Mounting holes diameter	5.2 mm

<b>Circle diameter of the mounting holes</b>	66.6 mm
<b>Feedback type</b>	Index pulse
<b>Shaft end</b>	Untapped
<b>Second shaft</b>	Without second shaft end
<b>Shaft diameter</b>	8 mm
<b>Shaft length</b>	21 mm
<b>Supply voltage limits</b>	18...40 V
<b>Current consumption</b>	3500 mA maximum
<b>Associated fuse rating</b>	10 A
<b>Input/Output type</b>	4 signals (each be used as input or output)
<b>Voltage state 0 guaranteed</b>	-3...4.5 V
<b>Voltage state 1 guaranteed</b>	15...30 V
<b>Discrete input current</b>	10 mA at 24 V on/STO_A for safety input 3 mA at 24 V on/STO_B for safety input 2 mA at 24 V for 24 V signal interface
<b>Discrete output voltage</b>	23...25 V
<b>Maximum switching current</b>	100 mA per output 200 mA total
<b>Protection type</b>	Overload of output voltage Short circuit of the output voltage Safe torque off
<b>Peak stall torque</b>	1.5 N.m
<b>Continuous stall torque</b>	1.5 N.m
<b>Speed feedback resolution</b>	20000 points/turn
<b>Accuracy error</b>	+/- 6 arc min
<b>Rotor inertia</b>	0.38 kg.cm <sup>2</sup>
<b>Maximum mechanical speed</b>	3000 rpm
<b>Maximum radial force Fr</b>	50 N
<b>Maximum axial force Fa</b>	100 N (tensile force) 8.4 N (force pressure)
<b>Service life in hours</b>	20000 h bearing
<b>Marking</b>	CE
<b>Type of cooling</b>	Natural convection
<b>Net weight</b>	2 kg

## Environment

<b>Standards</b>	EN 50347 EN 61800-3 : 2001-02 EN 61800-3:2001, second environment IEC 60072-1 EN/IEC 50178 IEC 61800-3, Ed 2 EN/IEC 61800-3
<b>Product certifications</b>	TÜV cUL UL
<b>Ambient air temperature for operation</b>	50...65 °C (with power derating of 2 % per °C) 0...50 °C (without derating)
<b>Permissible ambient air temperature around the device</b>	105 °C power amplifier 110 °C motor
<b>Ambient air temperature for storage</b>	-25...70 °C

<b>Operating altitude</b>	<= 1000 m without derating
<b>Relative humidity</b>	15...85 % without condensation
<b>Vibration resistance</b>	20 m/s <sup>2</sup> (f= 10...500 Hz) 10 cycles conforming to EN/IEC 60068-2-6
<b>Shock resistance</b>	150 m/s <sup>2</sup> 1000 shocks conforming to EN/IEC 60068-2-29
<b>IP degree of protection</b>	IP41 shaft bushing: conforming to EN/IEC 60034-5 IP54 total except shaft bushing: conforming to EN/IEC 60034-5

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	10.5 cm
<b>Package 1 Width</b>	19.0 cm
<b>Package 1 Length</b>	39.0 cm
<b>Package 1 Weight</b>	2.8 kg

## Offer Sustainability

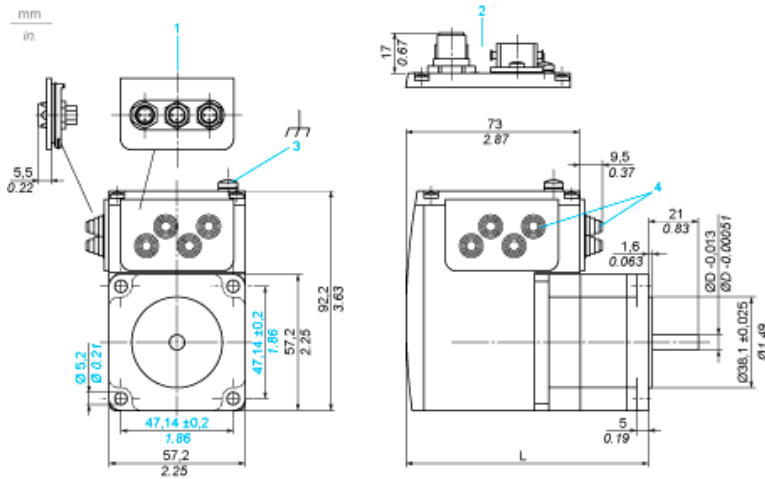
<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
<b>Mercury free</b>	Yes
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>
<b>RoHS exemption information</b>	Yes
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>
<b>WEEE</b>	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
<b>PVC free</b>	Yes
<b>California proposition 65</b>	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

## Contractual warranty

<b>Warranty</b>	18 months
-----------------	-----------

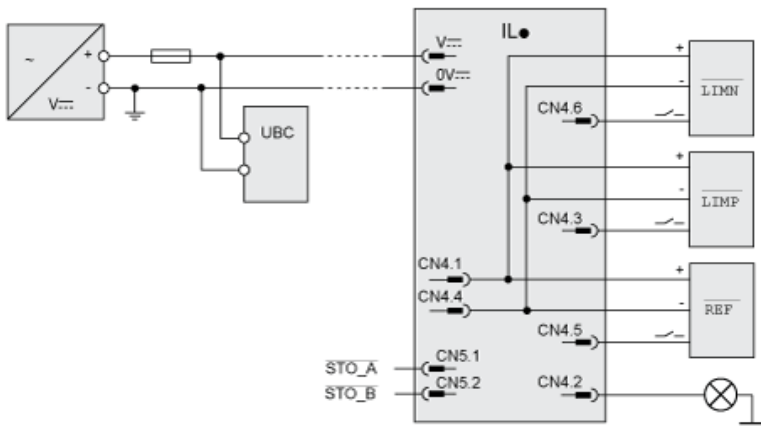
Integrated Drive

Dimensions



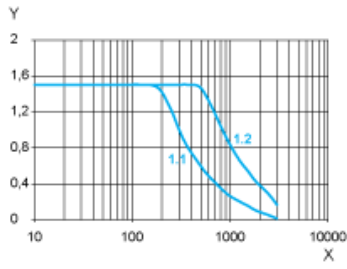
- 1 Accessories: I/O signal insert with industrial connectors
- 2 Option: industrial connectors
- 3 Earth (ground) terminal
- 4 Accessories: cable entries  $\text{Ø} = 3 \dots 9 \text{ mm} / 0.12 \dots 0.35 \text{ in.}$
- L 138.9 mm/5.47 in.
- D 8.00 mm/0.31 in.

## Connection Example with 4 I/O Signals



**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

**Recommended replacement(s)**

ILS1B573PC1A0 is replaced by the following product range:



**Lexium ILA, ILE, ILS**  
Integrated drives for motion control  
Products: 466