



## 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>48 V                                             |
| Network type              | DC                                                       |
| Communication interface   | Ethernet/IP, Integrated                                  |
| Length                    | 9.7 in (247.3 mm)                                        |
| Winding type              | Medium speed of rotation and medium torque               |
| Electrical Connection     | Printed circuit board connector                          |
| Holding brake             | With                                                     |
| Gear box type             | Without                                                  |
| Nominal speed             | 100 rpm 24 V<br>200 rpm 48 V                             |
| Nominal torque            | 53.1 lbf.in (6 N.m)                                      |
| Holding torque            | 53.1 Lbf.In (6 N.m) holding brake<br>53.1 lbf.in (6 N.m) |

## Complementary

|                                       |                                                                  |
|---------------------------------------|------------------------------------------------------------------|
| Transmission Rate                     | 125, 250, 500 kbauds                                             |
| Mounting Support                      | Flange                                                           |
| Motor flange size                     | 3.3 in (85 mm)                                                   |
| Number of motor stacks                | 3                                                                |
| Centring collar diameter              | 2.4 in (60 mm)                                                   |
| Centring collar depth                 | 0.08 in (2 mm)                                                   |
| Number of mounting holes              | 4                                                                |
| Mounting holes diameter               | 0.3 in (6.5 mm)                                                  |
| Circle diameter of the mounting holes | 3.9 in (99 mm)                                                   |
| Feedback type                         | Index pulse                                                      |
| Shaft end                             | Untapped                                                         |
| Second shaft                          | Without second shaft end                                         |
| Shaft diameter                        | 0.6 in (14 mm)                                                   |
| Shaft length                          | 1.2 in (30 mm)                                                   |
| Supply voltage limits                 | 18...55 V                                                        |
| Current consumption                   | 5000 mA maximum continuous                                       |
| Associated fuse rating                | 16 A                                                             |
| Commissioning interface               | RS485 Modbus TCP 9.6, 19.2 and 38.4 kbauds)                      |
| Input/output type                     | 4 signals (each be used as input or output)                      |
| Voltage state 0 guaranteed            | -3...4.5 V                                                       |
| Voltage state 1 guaranteed            | 15...30 V                                                        |
| Discrete input current                | 10 MA at 24 V safety input<br>2 mA at 24 V 24 V signal interface |

|                           |                                                                                      |
|---------------------------|--------------------------------------------------------------------------------------|
| Discrete output voltage   | 23...25 V                                                                            |
| Maximum switching current | 100 mA per output<br>200 mA total                                                    |
| Protection Type           | Safe torque off<br>Short circuit of the output voltage<br>Overload of output voltage |
| Peak stall torque         | 53.1 lbf.in (6 N.m)                                                                  |
| Continuous stall torque   | 53.1 lbf.in (6 N.m)                                                                  |
| Speed feedback resolution | 20000 points/turn                                                                    |
| Accuracy error            | +/- 6 arc min                                                                        |
| Rotor inertia             | 3.5 kg.cm <sup>2</sup>                                                               |
| Maximum mechanical speed  | 2000 rpm                                                                             |
| Maximum radial force Fr   | 110 N                                                                                |
| Maximum axial force Fa    | 170 N tensile force)<br>30 N force pressure)                                         |
| Service life in hours     | 20000 h bearing                                                                      |
| Brake pull-in power       | 22 W                                                                                 |
| Brake release time        | 40 ms                                                                                |
| Brake application time    | 20 ms                                                                                |
| Marking                   | CE                                                                                   |
| Type of cooling           | Natural convection                                                                   |
| Net Weight                | 14.3 lb(US) (6.5 kg)                                                                 |

## Environment

|                                                       |                                                                                                                                          |
|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Standards                                             | IEC 61800-3<br>IEC 61800-3, Ed 2<br>IEC 60072-1<br>EN 61800-3:2001, second environment<br>IEC 50178<br>EN 61800-3 : 2001-02<br>IEC 50347 |
| Product Certifications                                | TÜV[RETURN]cUL[RETURN]UL                                                                                                                 |
| Ambient air temperature for operation                 | 104...131 °F (40...55 °C) with power derating of 2 % per °C)<br>32...104 °F (0...40 °C) without derating)                                |
| Permissible ambient air temperature around the device | 221 °F (105 °C) power amplifier<br>230 °F (110 °C) motor                                                                                 |
| Ambient Air Temperature for Storage                   | -13...158 °F (-25...70 °C)                                                                                                               |
| Operating altitude                                    | <= 3280.84 ft (1000 m) without derating                                                                                                  |
| Relative humidity                                     | 15...85 % without condensation                                                                                                           |
| Vibration resistance                                  | 20 m/s <sup>2</sup> 10...500 Hz) 10 cycles IEC 60068-2-6                                                                                 |
| Shock resistance                                      | 150 m/s <sup>2</sup> 1000 shocks IEC 60068-2-29                                                                                          |
| IP degree of protection                               | IP41 shaft bushing: conforming to IEC 60034-5<br>IP54 total except shaft bushing: conforming to IEC 60034-5                              |

## Ordering and shipping details

|                   |               |
|-------------------|---------------|
| Category          | US1PC5618288  |
| Discount Schedule | PC56          |
| GTIN              | 3606485205021 |
| Returnability     | No            |
| Country of origin | DE            |

## Packing Units

|                              |                      |
|------------------------------|----------------------|
| Unit Type of Package 1       | PCE                  |
| Number of Units in Package 1 | 1                    |
| Package 1 Height             | 4.09 in (10.4 cm)    |
| Package 1 Width              | 7.09 in (18.0 cm)    |
| Package 1 Length             | 14.4 in (36.5 cm)    |
| Package 1 Weight             | 13.2 lb(US) (6.0 kg) |

## Offer Sustainability

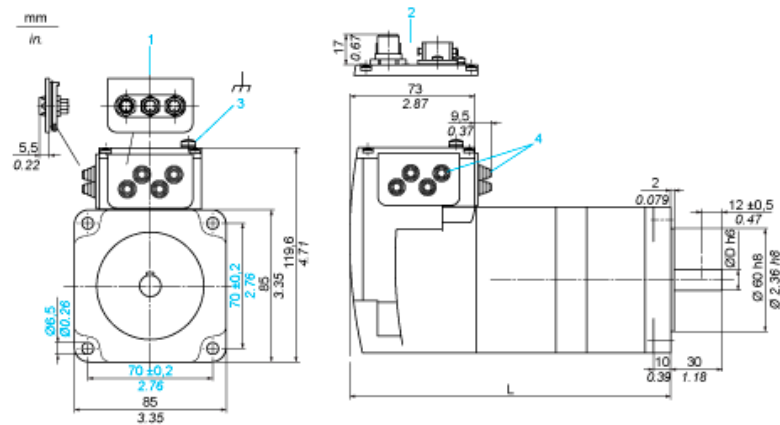
|                            |                                                                                                                                                                                                                                                                                             |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                                                                                                                                       |
| California proposition 65  | 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> |
| REACH Regulation           | <a href="#">REACH Declaration</a>                                                                                                                                                                                                                                                           |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)                                                                                                                                                                                                                                  |
| Mercury free               | Yes                                                                                                                                                                                                                                                                                         |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>                                                                                                                                                                                                                                                      |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                                                                                                                                                                                         |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                                                                                                                                                                                                               |
| Circularity Profile        | <a href="#">End Of Life Information</a>                                                                                                                                                                                                                                                     |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.                                                                                                                                                                |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

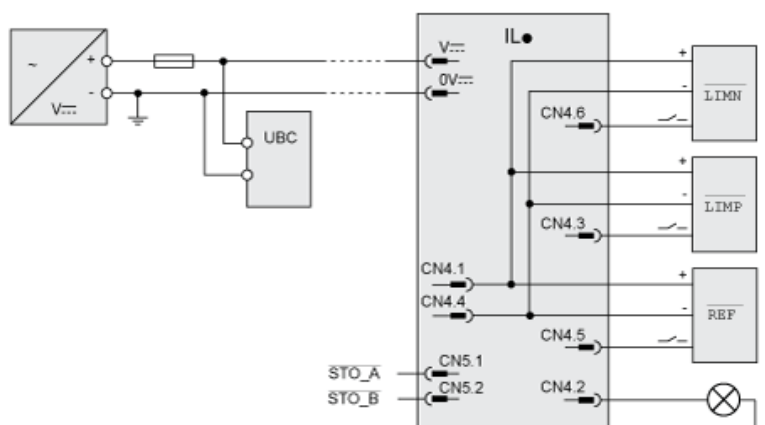
Integrated Drive with Holding Brake

Dimensions



- 1 Accessories: I/O signal insert with industrial connectors
- 2 Option: industrial connectors
- 3 Earth (ground) terminal
- 4 Accessories: cable entries  $\varnothing = 3 \dots 9 \text{ mm}/0.12 \dots 0.35 \text{ in.}$
- L 247.3 mm/9.74 in.
- D 14 mm/0.55 in.

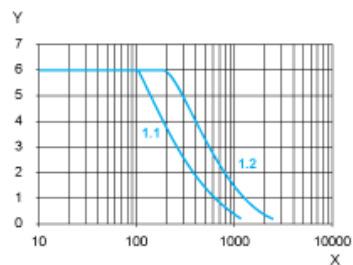
Connection Example with 4 I/O Signals



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## Torque Characteristics

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X Speed of rotation in rpm

Y Torque in Nm

1.1 Max. torque at 24 V

1.2 Max. torque at 48 V