

# Product data sheet

## Characteristics

### ILP2R421MC1A

integrated drive ILP with 2-phase stepper motor  
- 24..48 V DC - RS485 - 0.19 N.m



#### Main

Range of product	Lexion integrated drive
Product or component type	Motion integrated drive
Device short name	ILP
Motor type	2-phase stepper motor
Network type	DC
Electrical connection	Industrial connector
[Us] rated supply voltage	24...48 V
Length	77.72 mm
Winding type	Medium speed of rotation and medium torque
Gear box type	Without
Nominal speed	800 rpm at 24 V 1500 rpm at 48 V
Holding torque	0.19 N.m

#### Complementary

Communication interface	RS485
Transmission rate	4.8, 9.6, 19.2, 38.4, 115 kbauds
Mounting support	Flange
Motor flange size	42 mm
Feedback type	Index pulse
Holding brake	Without
Supply voltage limits	12...48 V
Current consumption	1.3 A (maximum continuous)
Input/Output type	11 signals (each be used as input or output)
Voltage state 0 guaranteed	<= 0.8 V
Voltage state 1 guaranteed	>= 2.2 V
Discrete input current	1.75 mA at 24 V for 24 V signal interface
Maximum switching current	600 mA single channel 275 mA four channels
Protection type	Overload of output voltage Short circuit of the output voltage
Peak stall torque	0.19 N.m
Continuous stall torque	0.19 N.m
Speed feedback resolution	800 steps 6400 steps 51200 steps 50000 steps 5000 steps 40000 steps 400 steps 3200 steps 25600 steps 25000 steps 20000 steps 2000 steps 200 steps 1600 steps 12800 steps 10000 steps 1000 steps
Accuracy error	+/- 0.3 arc/min
Rotor inertia	0.038 kg.cm <sup>2</sup>

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Service life in hours	20000 H
Marking	CE

## Environment

Standards	EMC immunity IEC 61000-4-2 EN 55011:2007, A2:2007 for Group 1, Class A EN 61000-3-2 : 2006 EN 61000-3-3:1995, A1:2001, A2:2005 IEC 61000-4-11 IEC 61000-4-3 IEC 61000-4-4 IEC 61000-4-5 IEC 61000-4-6
Ambient air temperature for operation	0...50 °C without derating > 50...65 °C with power derating of 2 % per °C
Permissible ambient air temperature around the device	100 °C
Ambient air temperature for storage	-25...70 °C
Operating altitude	<= 1000 m without derating
Relative humidity	15...85 % without condensation
IP degree of protection	IP54 total except shaft bushing conforming to EN/IEC 60034-5 IP41 shaft bushing conforming to EN/IEC 60034-5

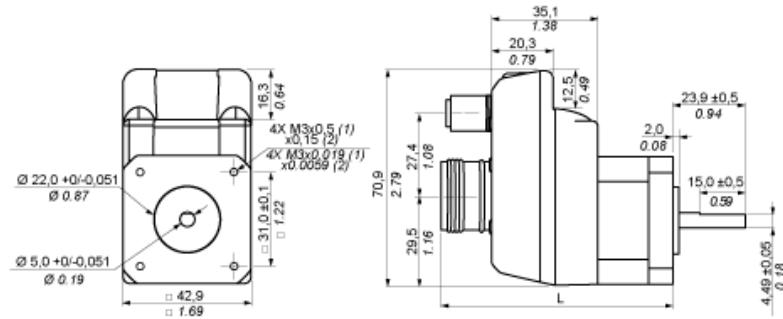
## Offer Sustainability

Sustainable offer status	Not Green Premium product
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Integrated Drive with Industrial Connectors

Dimensions

mm  
in.



(1) Thread

(2) Depth

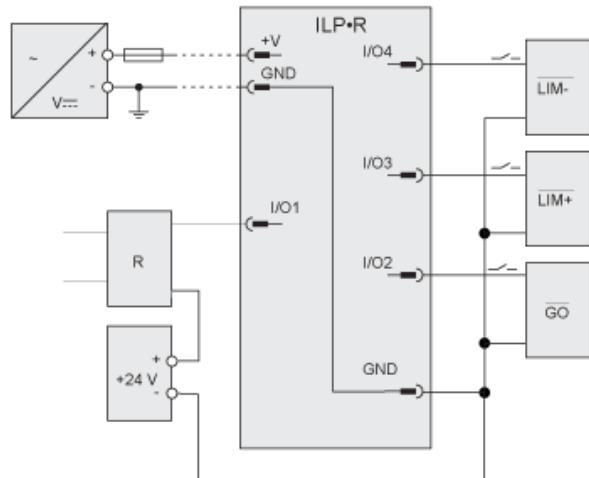
L  $77,72 \text{ mm}/3.06 \text{ in.}$

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### Connection Example with 4 I/O Signals

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Three sinking inputs (I/O4 - I/O2) and a sourcing output (I/O1).

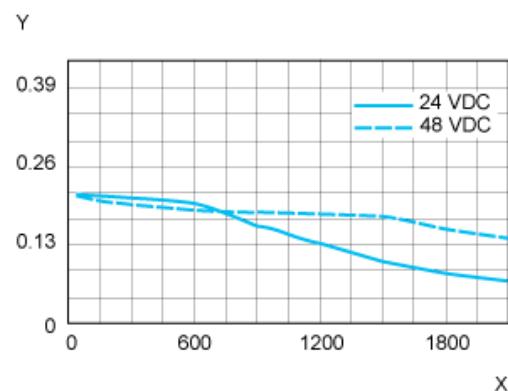


R      Relay

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### Torque Characteristics

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X Speed of rotation in rpm  
Y Torque in Nm