



## ▶ Smart stepper motor

### 6477 product range

- Nominal Torque .... 1.2 Nm
- Speed ..... 2.25 rpm
- Weight ..... < 64 gr
- Communication ... LIN1.3 / LIN 2.0 / LIN2.1  
PWM / ON-OFF

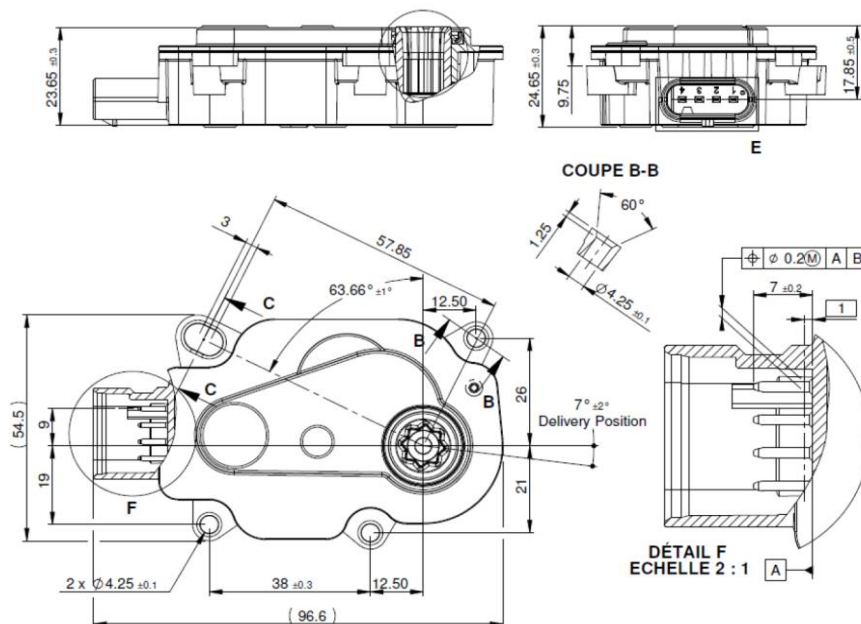
Smart stepper Actuator with regulated speed, torque and stall detection.  
Custom communication and strategy.

#### ▶ Technical data

Mass	< 64 gr	Dimensions	96 x 54 x 24 mm
Nominal torque	1.2 Nm at 2.25 rpm	Operating voltage range	9 - 16 V
Minimum torque in Boost Mode	2.0 Nm at 2.25 rpm	Nominal current	<220 mA (driving) <90 mA (holding)
Holding torque	1.5 Nm	Nominal speed	2.25rpm

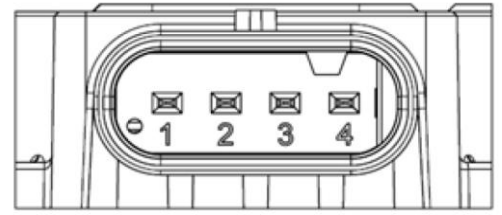
#### ▶ Dimensions

Drawing not to scale. All dimensions in mm.



## ▶ Electrical Interface

<b>Connector</b>	MLK 4 Pin Connector Code A Hirschmann Drawing Nr. 872-975-KB Custom connector on demand
<b>Pinout</b>	LIN: 1=GND, 2=LIN, 3=Vbat, 4=N/A(Vbat) PWM: 1=CMD, 2=GND, 3=Vbat, 4=N/A(GND) Custom pinout on demand
<b>Polarity reversal protection</b>	Integrated diode
<b>Overload protection</b>	Recommended fuse 1A slow blow



## ▶ Operating conditions

<b>Temperature</b>	-40°C to +105°C	<b>Life time</b>	Up to 250'000 cycles
<b>Protection Class</b>	IP6k9k+7	<b>ROHS (Lead free)</b>	Compliant
<b>Applicable standard</b>	Environmental : ISO 16750 EMC : according to OEM specification (integrated EMC filtering and protection)	<b>IMDS</b>	Compliant

## ▶ Command and strategy

The actuator doesn't have internal end-stop. Unlimited angular revolution is possible.  
Actuator is backdrivable for failsafe .

The available communication are:

- LIN1.3, LIN2.0, LIN2.1
- PWM (unidirectional, bidirectional, custom protocol on demand)
- ON-OFF (0-12V, custom protocol on demand)

Strategy feature are:

- CW / CCW revolution
- Stall detection
- Travel learning or calibration (actuator checks if the available angle of the application is in the tolerance)
- Intermediate position
- Diagnostic (under-voltage, over-voltage, over-temperature, mechanical block, mechanical break ...)
- Custom strategy on demand

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