# DMS5xx2

The integrated motor **DMS5xx2** series allows an accurate and complete motor control through the industrial **Modbus RTU** protocol.

Modbus RTU is an open and easy to implement communication protocol, based on the client/server architecture. Many **PLC** and **HMI** of the latest generation natively support the Modus RTU protocol, moreover **PC** based systems can easy implement it thanks to free libraries.

The physical layer **RS485** is isolated from the auxiliary and power supply, the communication speed reaches **921.600bit/s**. Among the implemented functions is the **23 0x17 Read/Write Multiple registers** which allows in a single transaction to read and write multiple registers at the same time and can be used, for example, to update the position set point and read the encoder quota in a single operation.

The models with integrated **Encoder** allow the **closed-loop** control which eliminates stall problems, allows torque control, reduces noises and improves the overall performance of the application. Activating the dynamic current control, the motor heating and the energy consumption are reduced.

The integrated motor is made in full digital technology and drives the motor in vector control technique to minimize motor vibrations and noise.

The power and logic supply are separated and the device is protected against over-voltage, under-voltage, over-temperature, etc.

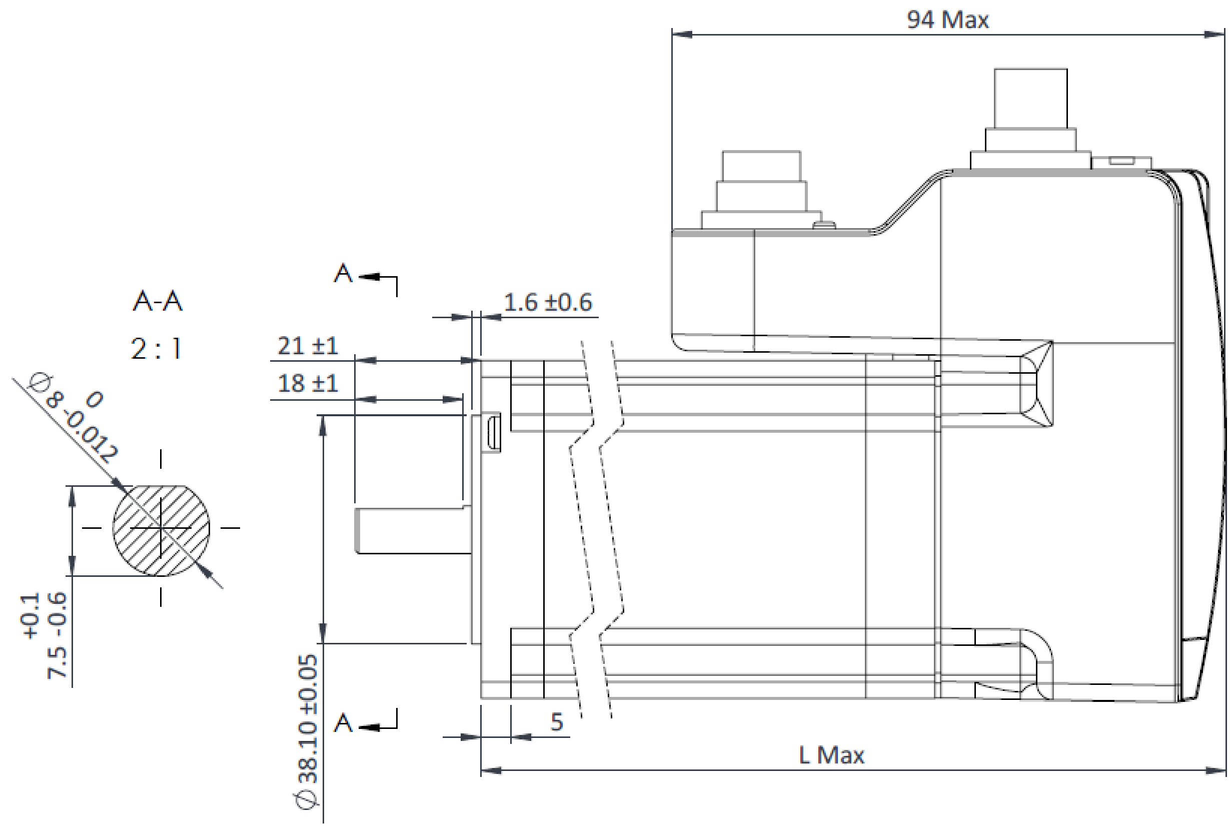
The compact size and complete I/O resources simplify installation and reduce wiring costs.

Family development

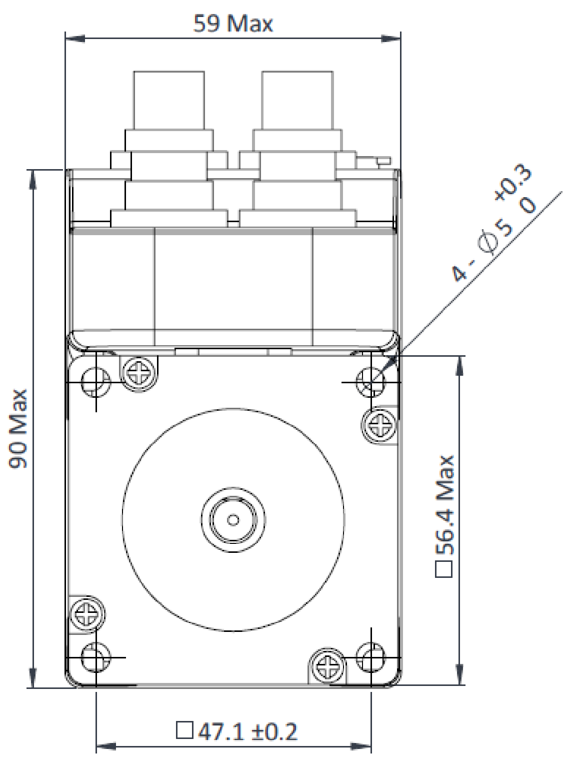
| Power Supply<br>/ Motor Current<br><br>24Vdc Auxiliary Power Supply | 3 Digital Inputs<br>3 Digital Inputs/Outputs<br>2 Analog Inputs | 3 Digital Inputs<br>3 Digital Inputs/Outputs<br>2 Analog Inputs<br>**Closed loop incremental Encoder** |
|---|---|---|
| 20..50Vdc / 1.1Nm | **DMS504241** | **DMS524241** |
| 20..50Vdc / 1.8Nm | **DMS504264** | **DMS524264** |
| 20..50Vdc / 3.0Nm | **DMS504271** | **DMS524271** |
| 24..90Vdc / 1.1Nm | **DMS507241** | **DMS527241** |
| 24..90Vdc / 1.8Nm | **DMS507264** | **DMS527264** |
| 24..90Vdc / 3.0Nm | **DMS507271** | **DMS527271** |

The drive setting and diagnostics are possible with the use of the free **Omni Automation IDE** software.

# DMS5xx2




| Model | L Max (mm) |
|---|---|
| DMS5xx241 | 106 |
| DMS5xx264 | 126 |
| DMS5xx271 | 150 |



# DMS5xx3

The integrated motor **DMS5xx3** series allows an accurate and complete motor control through the industrial **Modbus RTU** protocol.

Modbus RTU is an open and easy to implement communication protocol, based on the client/server architecture. Many **PLC** and **HMI** of the latest generation natively support the Modus RTU protocol, moreover **PC** based systems can easy implement it thanks to free libraries.

The physical layer **RS485** is isolated from the auxiliary and power supply, the communication speed reaches **921.600bit/s**. Among the implemented functions is the **23 0x17 Read/Write Multiple registers** which allows in a single transaction to read and write multiple registers at the same time and can be used, for example, to update the position set point and read the encoder quota in a single operation.

The models with integrated **Encoder** allow the **closed-loop** control which eliminates stall problems, allows torque control, reduces noises and improves the overall performance of the application.

The integrated motor is made in full digital technology and drives the motor in vector control technique to minimize motor vibrations and noise. The power supply can be provided in both DC and **AC**. The compact size and complete I/O resources simplify installation and reduce wiring costs.

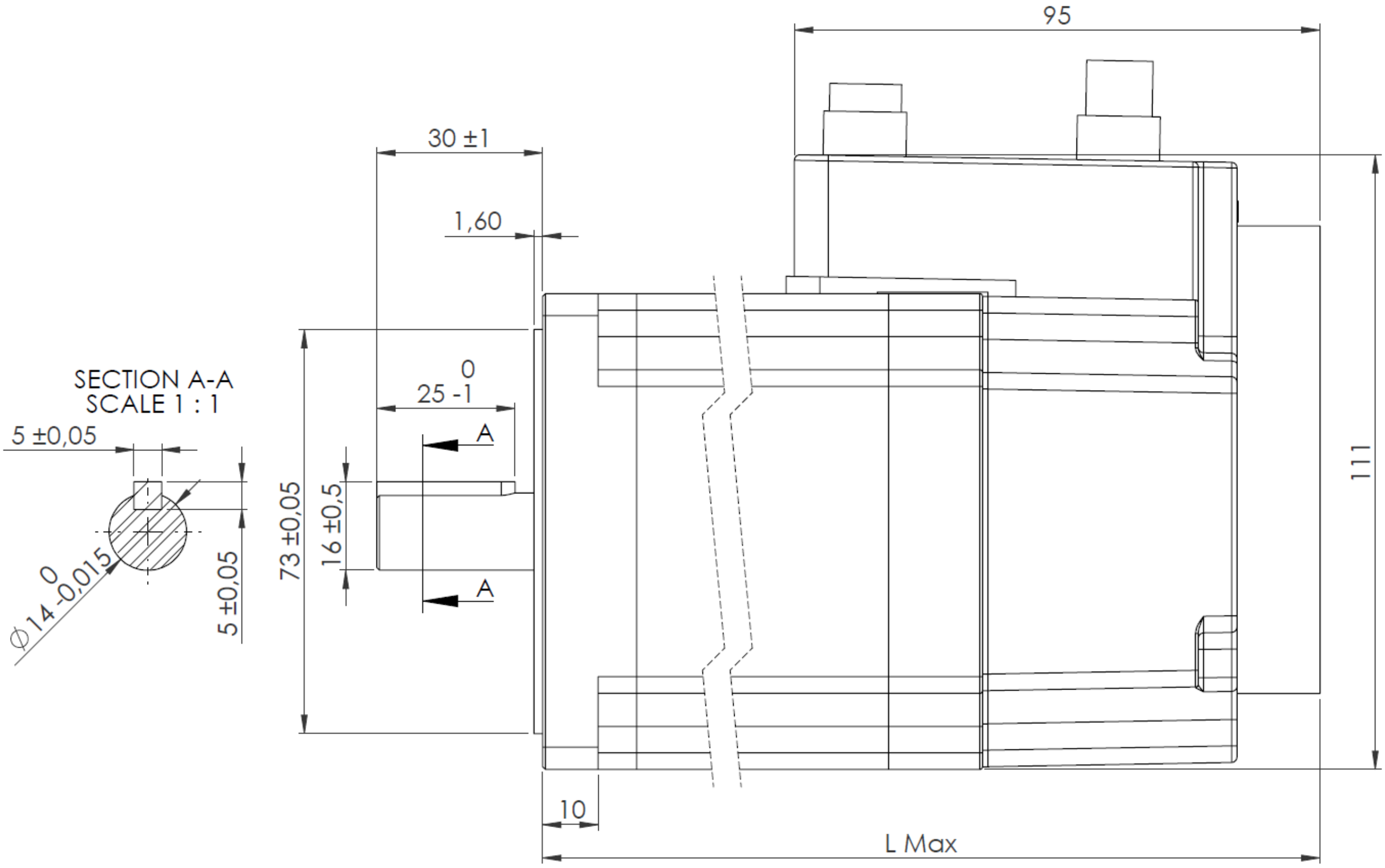
Family development

| Power Supply<br>/ Motor Current<br><br>24Vdc Auxiliary Power Supply | 3 Digital Inputs<br>3 Digital Inputs/Outputs<br>2 Analog Inputs | 3 Digital Inputs<br>3 Digital Inputs/Outputs<br>2 Analog Inputs<br>**Closed loop incremental Encoder** |
|---|---|---|
| 20..50Vdc (16..36Vac) / 4.4Nm | **DMS504321(A)** | **DMS524321(A)** |
| 20..50Vdc (16..36Vac) / 6.8Nm | **DMS504331(A)** | **DMS524331(A)** |
| 20..50Vdc (16..36Vac) / 9.2Nm | **DMS504350(A)** | **DMS524350(A)** |
| 20..50Vdc (16..36Vac) / 12.1Nm | **DMS504360(A)** | **DMS524360(A)** |
| 24..90Vdc (20..65Vac) / 4.4Nm | **DMS507321(A)** | **DMS527321(A)** |
| 24..90Vdc (20..65Vac) / 6.8Nm | **DMS507331(A)** | **DMS527331(A)** |
| 24..90Vdc (20..65Vac) / 9.2Nm | **DMS507350(A)** | **DMS527350(A)** |
| 24..90Vdc (20..65Vac) / 12.1Nm | **DMS507360(A)** | **DMS527360(A)** |

*The suffix **A** (for ex. DMS524331**A**) identifies the AC versions*

La configurazione e la diagnostica avvengono mediante il software gratuito **Omni Automation IDE**.

# DMS5xx3




| Model | L Max (mm) |
|---|---|
| DMS5xx321x | 141 |
| DMS5xx331x | 161 |
| DMS5xx350x | 189 |
| DMS5xx360x | 213 |