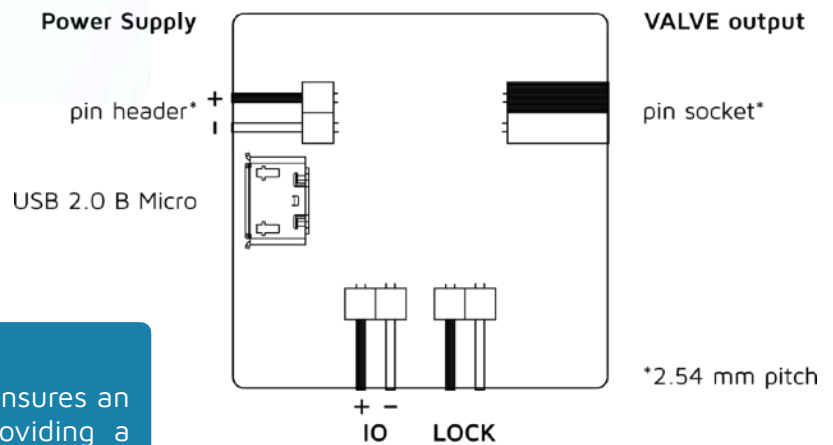
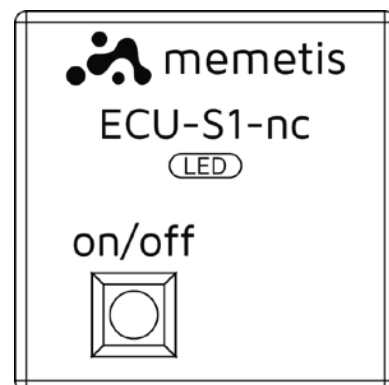


# Electronic Control Unit *Small*



The small electronic control unit (ECU-S1) ensures an easy start with memetis products by providing a constant output current specifically tailored to the respective memetis product.

The ECU-S1-nc is specifically developed for the control of one memetis normally-closed Microvalve. It can be powered from USB B Micro or an external power supply, and has a wide input voltage range of 4.5 - 24 V.



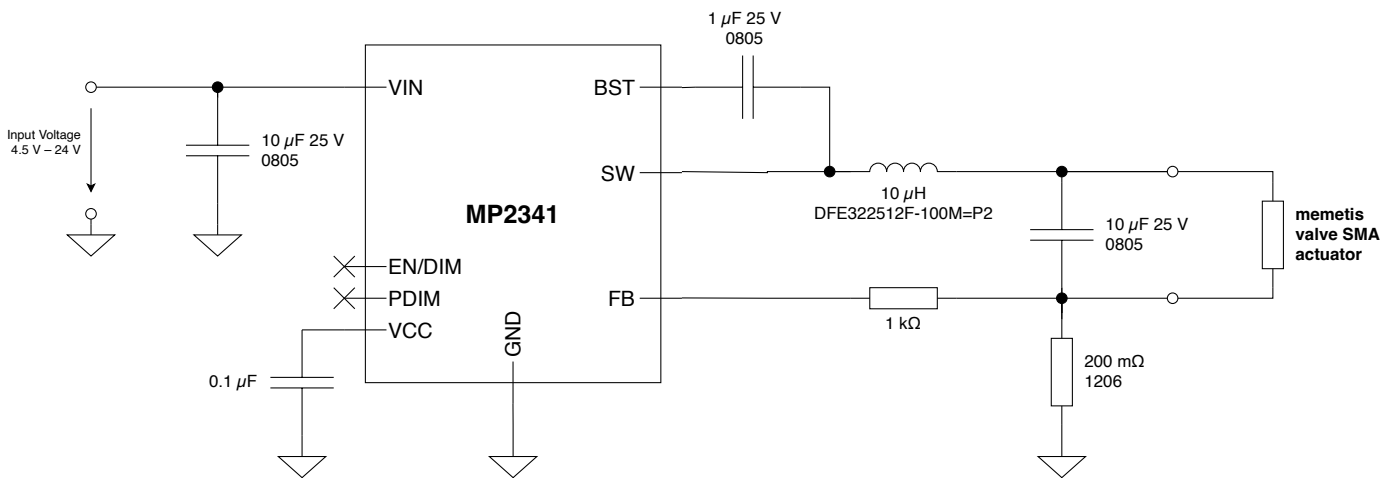
## Contact Information

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 Email: [support@memetis.com](mailto:support@memetis.com)

**Specifications**

Model ID	ECU-S1-nc
Power supply	<ul style="list-style-type: none"> <li>• 4.5 - 24 V DC, USB 2.0 Micro B Socket <b>OR</b></li> <li>• 2.54 mm pin header, direct internal connection</li> </ul> <b>Attention: do not use both at the same time.</b>
Max. power supply current (standby)	< 1.0 mA @ 4.5 - 24 V
Max. power supply current (output active)	Connected to memetis normally-closed Microvalve, 86 mA @ 5V, 43 mA @ 12 V, 27 mA @ 24 V, hardware rev. 1.5
VALVE output	500 mA continuous constant current source, 2.54 mm pin socket
IO input	0 - 20 V non-isolated digital input, 10 kΩ pull-down, HIGH enables VALVE output, LOW disables it, 2.54 mm pin header
IO input threshold	LOW < 1 V, HIGH > 2.5 V
LOCK input	Short with jumper to place device in LOCK mode before connecting power, when locked VALVE output will always be active, all user input is ignored, 2.54 mm pin header
ON/OFF push button	Pressing once enables VALVE output, pressing again disables output
LED	Off when VALVE output is disabled, permanently on when VALVE output is active and output current in regulation, flashing when output current error detected
Temperature range	-20 °C - 60 °C
Dimensions	32 x 32 x 9.5 mm <sup>3</sup>

Electrical circuit schematic for the constant current source used:



### Customized Electronic Solutions

Couldn't find what you were looking for? Or would you like a customised solution? memetis also develops customised electronic solutions, including the control of other components such as pumps and sensors to control complete modules. Just get in touch with us - we will be happy to support you!



### Further Information about Electronics

Would you like to develop your own electronics? On this page you will find all electronics-related information on the operation of our valves - from initial product testing through to the sophisticated electronic integration of complex fluidic logics:

[Electronic support website](#)

### More memetis Products

Normally closed Microvalves	Ultra-compact, low-power consuming and silent microvalves
Chip Actuators	Strong, linear actuators designed for mechanical cartridge actuation
Fluidic Valve Adapters	Direct tube connectors or threaded adapters with third-party fittings
ECU-P2	Programmable two channel electronic control unit



Figure 3: All products are available from the memetis online shop at [shop.memetis.com](http://shop.memetis.com)

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