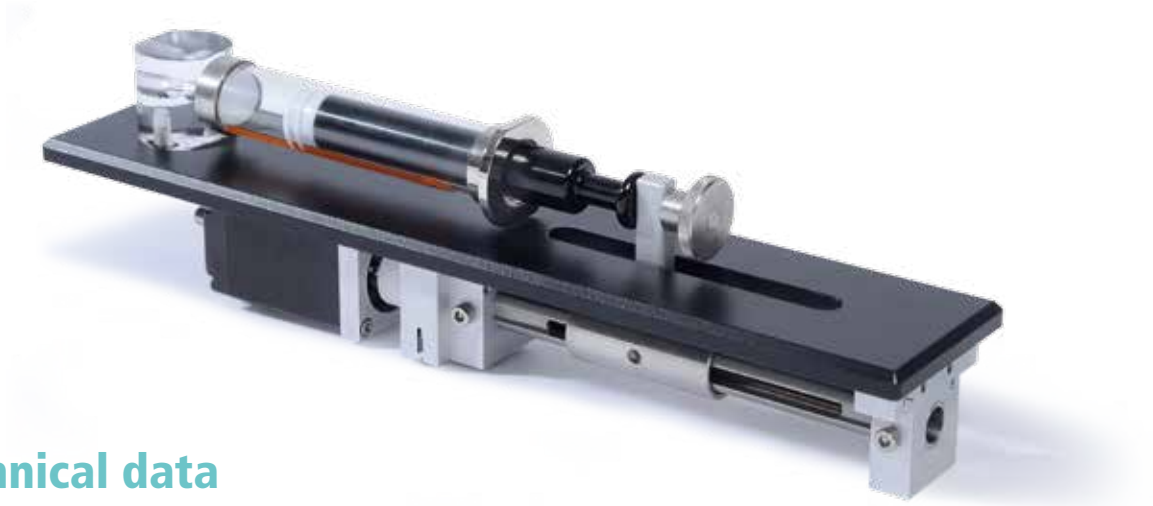
Precision SY

The Precision-SY built-in syringe pump is a typical OEM product. The pump was specially developed for use in equipment where high precision in the microliter and nanoliter range is required when introducing samples or reagents. It is specially matched to the requirements of the analysis equipment, i.e. the shape and color of the mounting plate are tailored to customer requirements. This means that there is no single model in the traditional sense. Instead, you, the customer, can define a tailored product that is perfectly matched to your equipment.

The core elements of the pumps are a stepper motor, a spindle, a linear guideway, a syringe holder and replaceable syringes. Thanks to the high stepper motor resolution of 25,600 steps per revolution, individual steps during the movement sequence are barely perceptible. A connecting element that forms a rigid connection between the spindle and the syringe plunger transmits the drive force from the stepper motor, thus delivering the feed motion for filling or emptying the syringe. Metering syringes with volumes between 0.05 ml and 10 ml are used.

The Precision-SY OEM syringe pump is optionally available with our SMC01 controller.
If you want any more information, please request our data sheet for SMC01.



Technical data

Mechanical data	
Dimensions LxWxH (without syringe holder)	230 x 50 x 35 mm
Approx. weight	600 g
Maximum stroke	63.5 mm
Minimum feed rate	0.273 nm/s
Maximum feed rate	1.367 mm/s
Smallest step resolution	0,0273 µm per step
Accuracy	±0.5%
Reproducibility	±0.5%
Transverse force	100 N
Materials used on surface	Powder-coated aluminum, PCTFE
Syringe holder	1/4 – 28 UNF thread
Plunger button	6 – 32 UNC thread

Electrical data for motor	
Stepper motor	1.8°
Current/phase	0.67 A
Operating temperature	-10 to 50 °C
Increase in temperature during operation	Max. 80 °C (standstill, 2 phases)

Data sensors	
End position / reference position	Hall effect sensor
Incremental encoder	Optionally

Operating conditions	
Temperature range	+10 to +40 °C
Relative humidity	20 % to 80 %, non-condensing
Suitable media	aqueous, acidic, alkaline and organic media

Data communication	
Data protocol	RS485 / USB
LabView support	Yes

SPETEC® GmbH · Berghamer Str. 2 · 85435 Erding · Germany
Phone: +49 8122/9953-3 · Fax: +49 8122/9953-55
Email: spetec@spetec.de · www.spetec.de