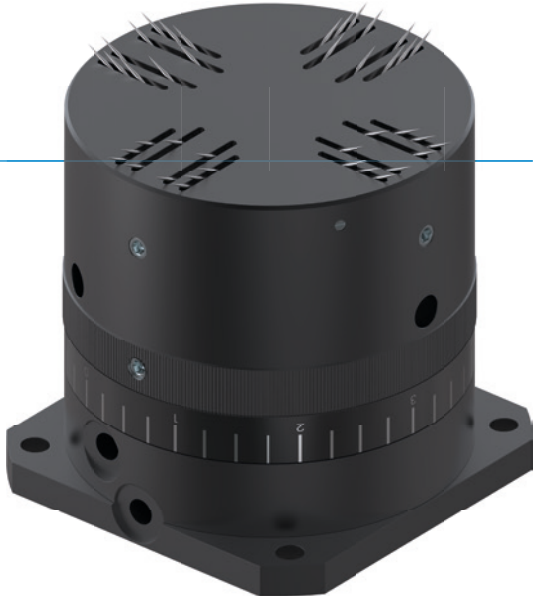


# NEEDLE GRIPPER

## SERIES ST

### ▶ PRODUCT ADVANTAGES



#### ▶ **Smooth stroke configuration**

Customise the stroke for your application with infinitely variable adjustment using an adjusting dial




#### ▶ **Workpiece drain function**

This function guarantees the quick and reliable deposit of the workpiece and prevents disruptions to the process sequence

#### ▶ **Query about magnetic field sensor technology**

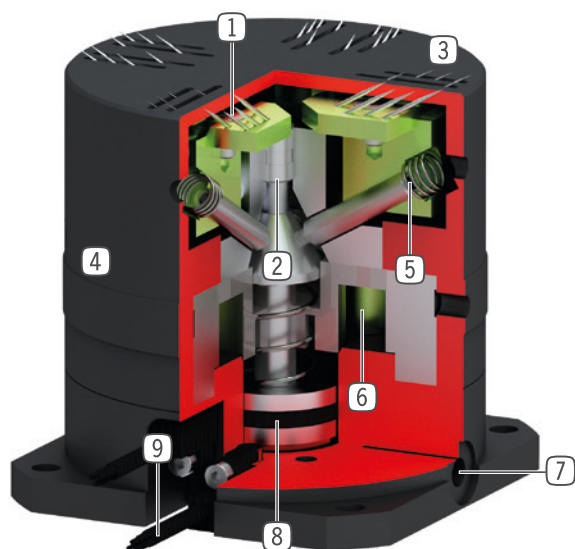
Detecting the end position allows you to have shorter cycle times and an integrated control system

### ▶ SERIES CHARACTERISTICS

Installation size	
STXX	
 <b>5 million maintenance-free cycles (max.)</b>	●
 <b>Magnetic field sensor</b>	●
 <b>IP 30</b>	●



## ► BENEFITS IN DETAIL



- ① **Extending needles**
  - gripping by penetration
- ② **Force transfer**
  - via hardened steel taper pin
- ③ **Needle wiper**
  - helps wiping the workpiece
- ④ **Stroke adjustment**
  - adjustment of the needle stroke
- ⑤ **Integrated spring**
  - for return
- ⑥ **Blow off air connection**
  - to reject the workpiece with air
- ⑦ **Energy supply**
  - possible from several sides (size ST40)
- ⑧ **Drive**
  - single-acting pneumatic cylinder with spring return
- ⑨ **Sensing slot**
  - mounting and positioning of magnetic field sensors

## ► TECHNICAL DATA

Installation size	Needle stroke adjustable [mm]	Needle diameter [mm]	Weight [kg]	IP class
ST36	0 - 1,5	0.7	0.2	IP30
ST40	0 - 2	0.7	0.49	IP30

## ► FURTHER INFORMATION IS AVAILABLE ONLINE



All information just a click away at: [www.zimmer-group.com](http://www.zimmer-group.com). Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.

# NEEDLE GRIPPER

## INSTALLATION SIZE ST40

### ▶ PRODUCT SPECIFICATIONS



### ▶ RECOMMENDED ACCESSORIES



#### ENERGY SUPPLY



**GVM5**  
Straight Fittings - Quick Connect Style



#### CONNECTIONS / OTHER



**S8-G-3**  
Plug-in connector customizable Straight - Connector M8



#### SENSORS



**MFS01-K-KHC-P1-PNP**  
Magnetic field sensor angled, cable 5 m



**MFS01-S-KHC-P1-PNP**  
Magnetic field sensor angled, cable 0.3 m - M8 connector



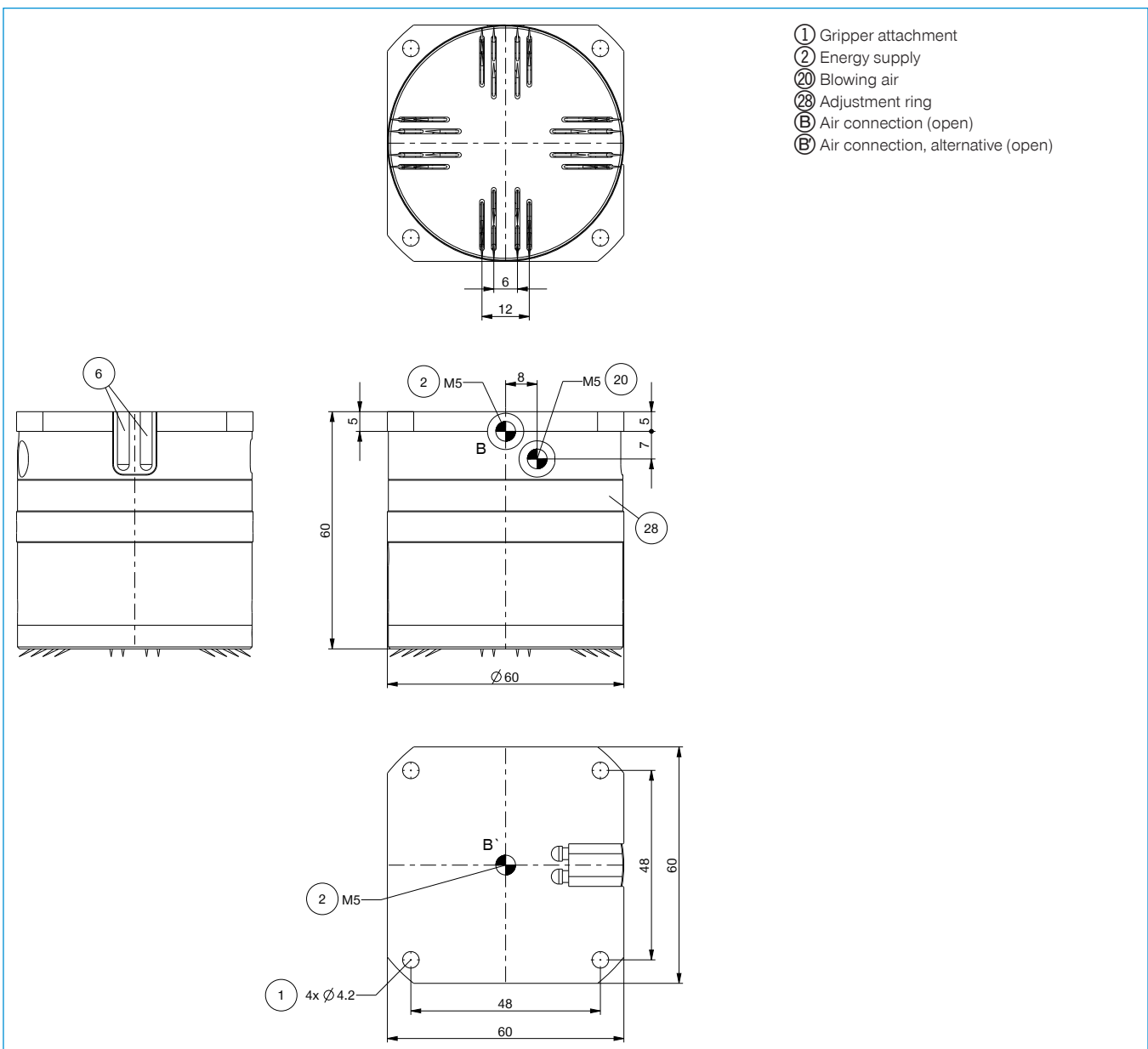
**S12-G-3**  
Plug-in connector customizable Straight - Connector M12



Order no.	ST40-B
Needle stroke adjustable min. [mm]	0
Needle stroke adjustable max. [mm]	2
Number of needles [piece]	40
Needle diameter [mm]	0.7
Retract time / Extend time [s]	0.03
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	4
Operating pressure max. [bar]	8
Nominal operating pressure [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm <sup>3</sup> ]	3
Protection to IEC 60529	IP30
Weight [kg]	0.49

► Technical data

ST40-B

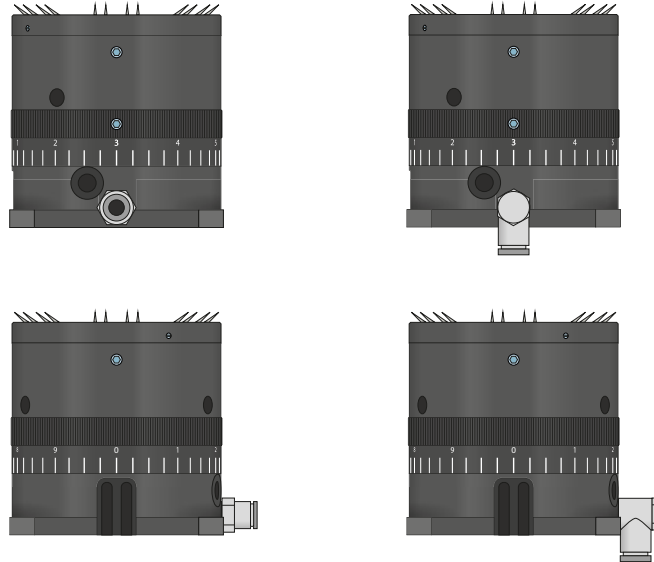


# NEEDLE GRIPPERS

## SERIES ST FUNCTIONAL DESCRIPTION



### ENERGY SUPPLY



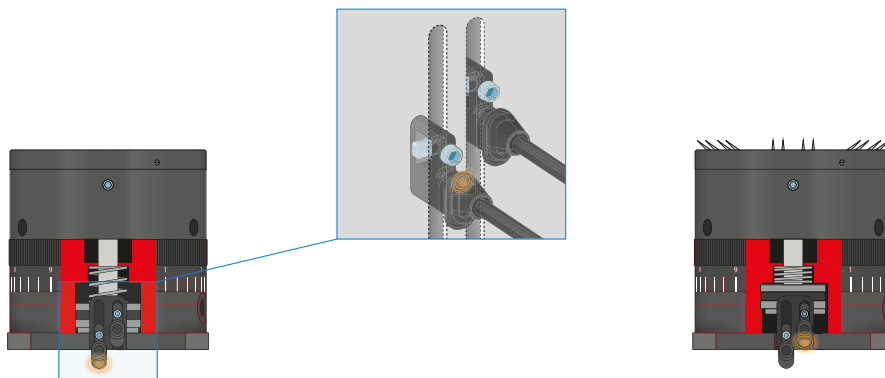
#### Pneumatic threaded connections

Available in straight and angled design. Can be chosen freely depending on the space conditions or installation situation.



### SENSORS

MFS01



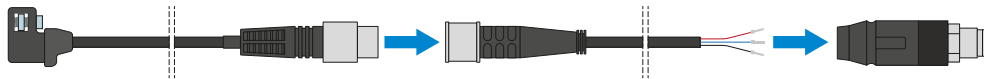
#### 1-point magnetic field sensors – MFS

For non-contact sensing of the piston position

The sensor is clamped in the C-groove of the gripper and detects the magnet attached to the gripper jaws. The MFS01 is available in versions with 5 m cables with exposed leads and 0,3 m cable with connector.



## CONNECTIONS / OTHER



### Plug-in connectors

#### For extending and fabricating the connection lines for the sensors

Cables with a length of 5 m with exposed leads are available. Depending on the specific needs, the cables can be shortened or fabricated with connectors in sizes M8 and M12.