

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



5 million maintenance-free cycles (max.)



Magnetic field sensor

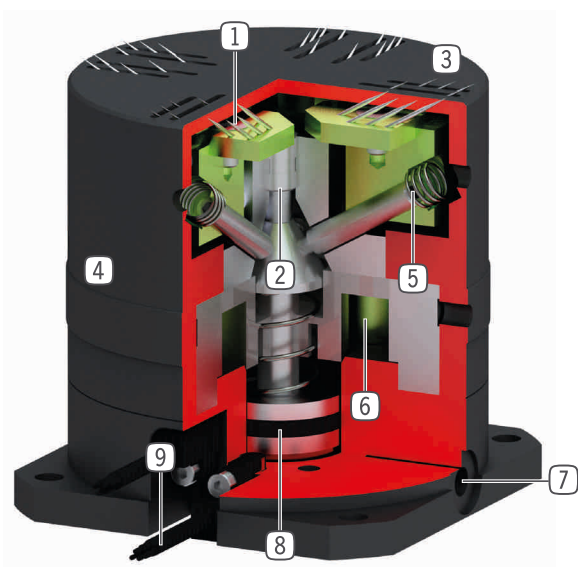


IP30





► 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	0.21	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. 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



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



CONNECTIONS / OTHER



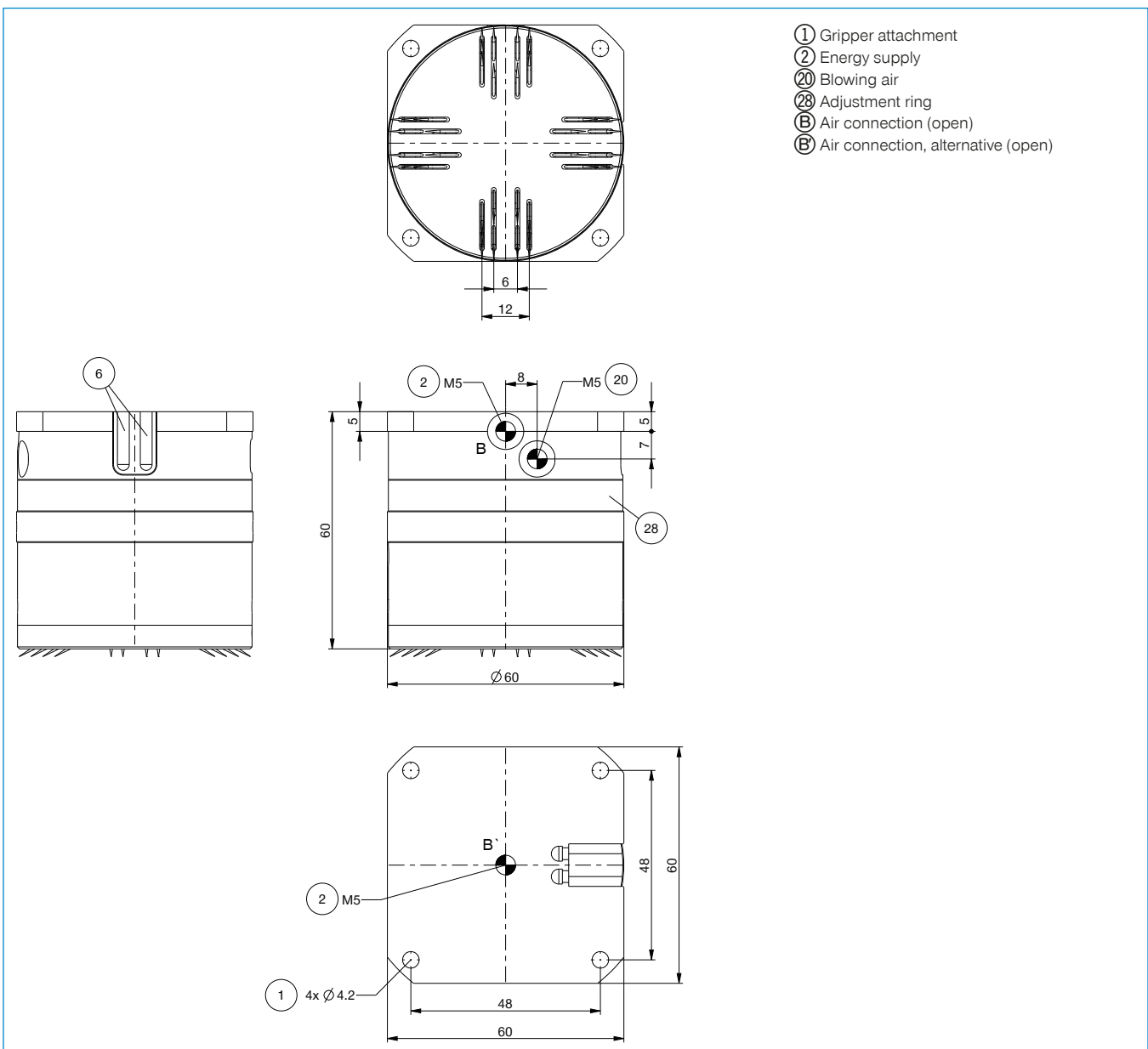
S8-G-3
Plug-in connector customizable Straight - Connector M8



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



► Technical data	
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 ³]	3
Weight [kg]	0.49



- ① Gripper attachment
- ② Energy supply
- ⑳ Blowing air
- ㉘ Adjustment ring
- Ⓑ Air connection (open)
- Ⓑ' Air connection, alternative (open)

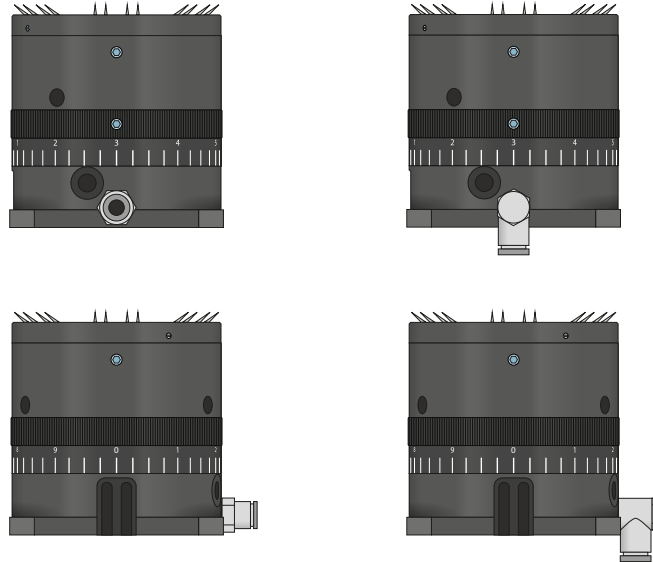


NEEDLE GRIPPERS

SERIES ST FUNCTIONAL DESCRIPTION



ENERGY SUPPLY



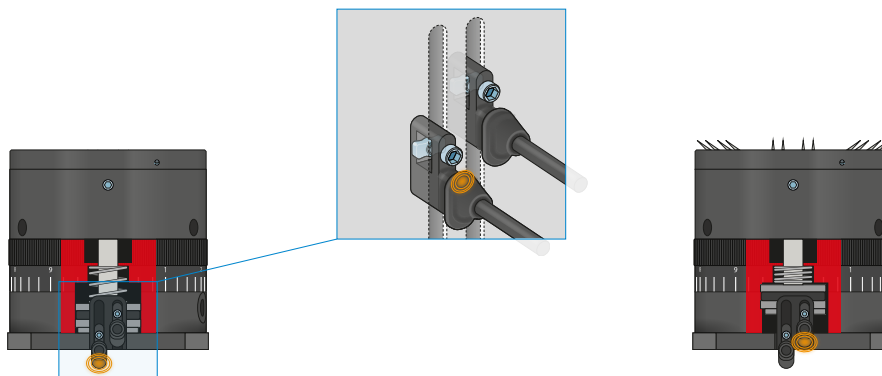
Pneumatic threaded connections

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



SENSORS

MFS01



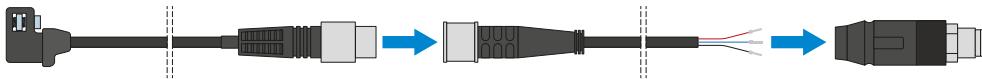
1-point magnetic field sensors – MFS

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.