

# MT 140.10

## Cutaway model: piston compressor



### Learning objectives/experiments

- principle of operation and design of a piston compressor

### Specification

- [1] hand-operated cutaway model for demonstrating the function of a piston compressor
- [2] industrial original component, fully functional cutaway model
- [3] solid metal base plate, handles

### Technical data

Air-cooled single-cylinder piston compressor

- cylinder bore: 50mm
- stroke: 32mm
- displacement volume: 63cm<sup>3</sup>
- speed: 1850min<sup>-1</sup>
- max. pressure: 10bar
- intake capacity: 115L/min
- drive power output: 700W

LxWxH: 300x200x350mm

Weight: approx. 8kg

### Scope of delivery

- 1 cutaway model
- 1 description
- 1 sectional view

### Description

#### ■ demonstration of a piston compressor and demonstration of its principle of operation

By using cutaway models it is possible to clearly demonstrate the operational principles of driven positive displacement machines.

The cutaway model MT 140.10 shows a piston compressor. It is a useful addition to the assembly exercise for piston compressor MT 141.

In order to be able to use the cutaway models in engineering teaching, each model comes with a standards-compliant and practical drawing and a technical description.

Problems of engineering drawing, fasteners and machine parts or production and testing technology can be studied in a clear and practical manner using the cutaway models.

The cutaway models represent original components in which the active parts are clearly visible to the user while fully maintaining their mechanical functionality. Each of the cutaway models is securely mounted on a base plate, which also has handles to allow them to be carried. They are powered by hand.