HM 110.01
Set of measuring objects, brass

Learning objectives/experiments

- determination of the opening characteristic of different valves and fittings
- determination the pressure loss at various valves

Specification

[1] commercial brass valves and fittings
[2] valves and fittings fitted with screw fittings are inserted in the measuring section without any tools
[3] precise differential pressure measurement via annular chambers

Technical data

- non-return valve, straight
- angle seat valve
- shut-off valve, straight
- gate valve
- strainer

L: max. 330mm per measuring object (with screw)
Weight: approx. 1,5kg

Scope of delivery

1 set of measuring objects

Description

- **commercial valves and fittings from industry**
- **precise pressure measurement via annular chambers**

Shut-off valves and fittings are used in practice to control material flow in pipes. Depending on the opening state of the respective shut-off valve, there is a pressure loss in the fluid due to the deflection of the flow. This pressure loss depends on the geometry and operating principle of the respective valve and determines their field of application. Some valves and fittings are suitable for setting different flow rates because of their uniform pressure loss at different opening states. Other valves and fittings produce high resistances and are suitable only to completely shut or open pipes.

HM 110.01 includes commercial valves and fittings from industry for use in the HM 112 trainer. The set includes a non-return valve, a gate valve, an angle seat valve, a shut-off valve and a strainer.

Pressure measuring points are located immediately upstream and downstream of the pipe elements. These are designed as annular chambers, ensuring a precise pressure measurement. The individual valves and fittings can be inserted into the measuring section of the trainer HM 112 without the use of tools.

HM 110.01
Set of measuring objects, brass

Required accessories

070.11200	HM 112	Fluid mechanics trainer