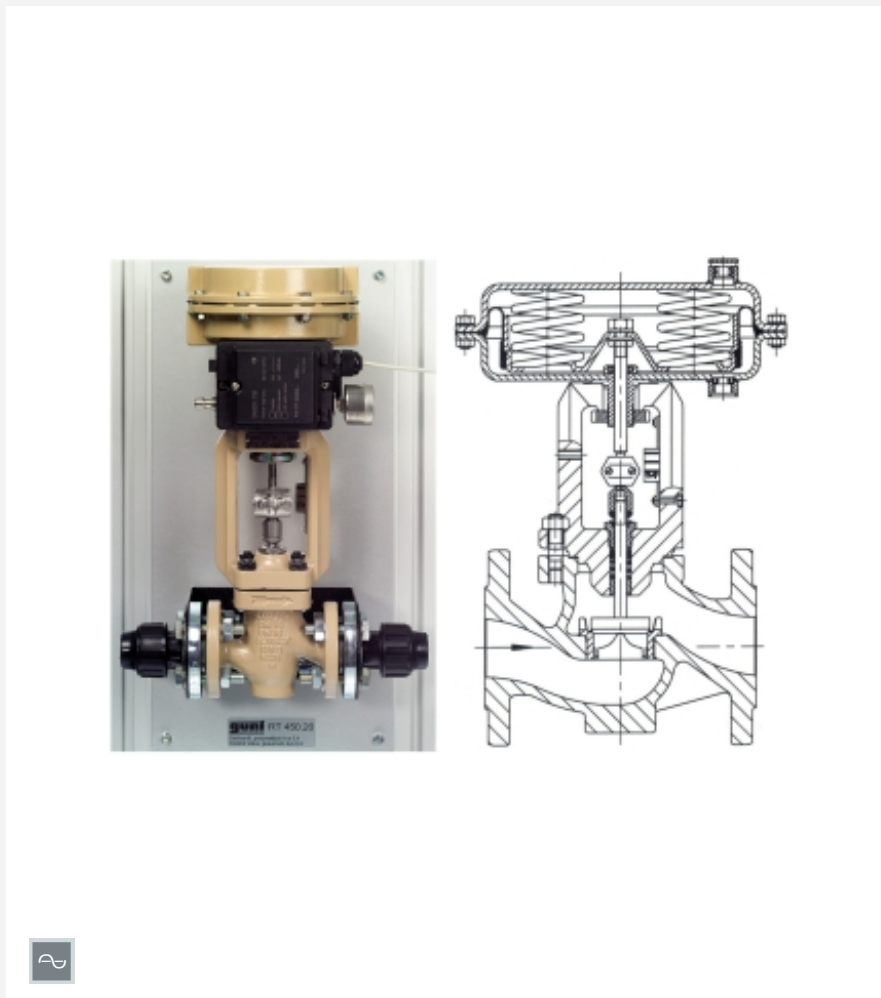


RT 450.20

Control valve, pneumatically driven, Kvs 0,4



Description

- industrial control valve with electro-pneumatic positioner
- used in the construction of level and flow rate control systems

The electro-pneumatic control valve is used primarily as the actuator in a level or flow rate control loop.

The control valve is installed on a panel which can be quickly and easily attached to the frame of the RT 450 base module. An electrical signal input (identical to the controller output) is pre-configured and routed to the base module terminal array which is specific to the particular application.

The control valve is fitted with an electro-pneumatic positioner which requires a supply of compressed air. The valve rod is driven by a pneumatically operated membrane. The electro-pneumatic control valve is set to the safe "closed" position when no auxiliary power is applied.

Learning objectives/experiments

- functional range of an electro-pneumatically operated control valve
- recording of the flow rate characteristic during the experiment (flow rate dependent on degree of opening)
- standard current signals and correct electrical wiring and interconnection

Specification

- [1] control valve as actuator in control loop
- [2] electro-pneumatic positioner to actuate the pneumatic control valve drive by an electrical signal
- [3] operating direction: rising
- [4] safety position: closed
- [5] adapter with quick-coupling for experiments with air

Technical data

Control valve

- DN 15
- PN 16
- K_{vs} value: 0,4
- characteristic: linear

Actuator drive

- diaphragm area: 120cm²
- stroke: max. 15mm
- nominal signal range: 0,2...1bar
- electro-pneumatic positioner
 - ▶ input signal: 4...20mA

Hydraulic connection, control valve

- clamp connector type PA: D=25mm
- adapter with quick-coupling: 6mm

LxWxH: 426x168x326mm

Weight: approx. 6kg

Required for operation

Compressed air supply via RT 450

Scope of delivery

- 1 control valve with electro-pneumatic positioner