

Series 420

Pneumatic Control Unit Type 3417



Application

Panel-mounted instruments (front frame 72 x 144 mm) for plant and process engineering for displaying, remote transmission and changeover of pneumatic signals in the range of 0.2 to 1.0 bar (3 to 15 psi)

The units with various displays are used for remote transmission and changeover of reference variables and control signals.

Special features

- Compact design with a mounted depth of 180 or 320 mm, resulting in an installation depth of 260 or 400 mm
- Measured values and reference variables are easy to read off the 100 mm-long flat scale, display of control signals on a 36-mm long scale

Versions

| Type | 3417- | | |
|------------------------------------------|-------|------|------|
| Mounted depth | | | |
| 180 mm | | 1 | |
| 320 mm | | 2 | |
| Single control signal transmitter | | | |
| For manipulated variable | | | 0 |
| For reference variable | | | 2 |
| With feedback | | | 4 |
| Dual control signal transmitter | | | |
| For manipulated variable | | | 1 |
| For reference variable | | | 3 |
| With feedback | | | 5 |
| Signal changeover | | | |
| Without | | | 6 |
| With | | | 7 |
| With | | | 8 |

Other versions also with LEDs available on request

Design and principle of operation

The instruments are assigned to the Series 420 Pneumatic System and contain components which are also used in Type 3421 Compact Controllers (Data Sheet T 7506 EN) and Type 3427 Manual Control Unit (Data Sheet T 7511 EN). The illustrations on page 2 show the front view, the functional diagram, and the pneumatic connections at the back of the instruments.

The control units are equipped with either one or two metal bellows measuring units (vertical 100-mm long scale), one or two pneumatic adjusters or a selector switch depending on the control task. The measuring units convert the supplied signal pressure into a deflection which is transmitted to the pointer.

Ordering text

Type 3417-... Pneumatic Control Unit, input 0.2 to 1 bar/ 3 to 15 psi, optional special version, accessories.

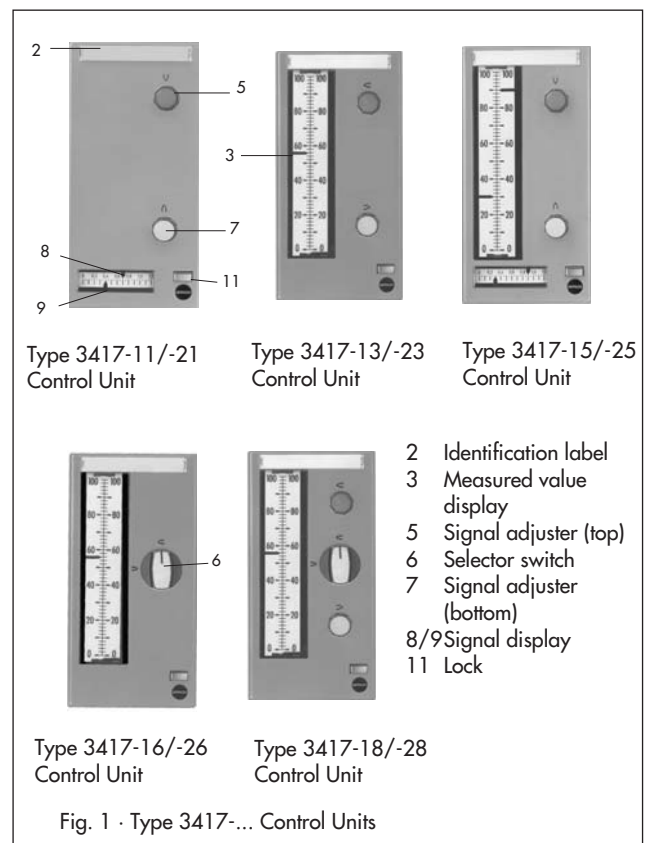


Fig. 1 · Type 3417-... Control Units

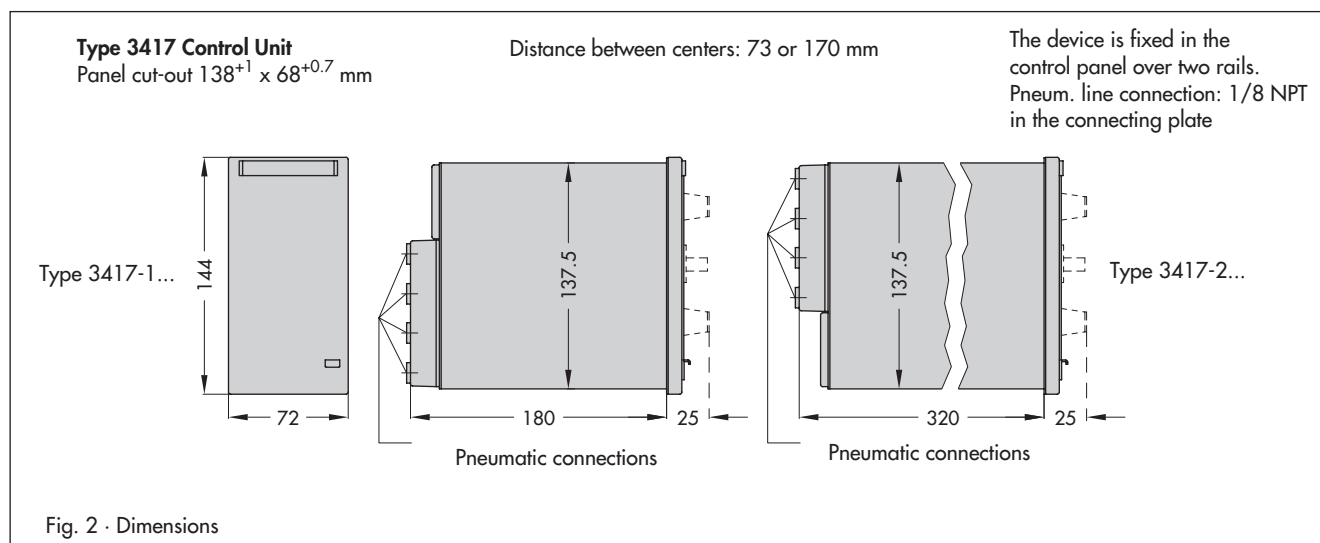
Table 1 · Technical data

| | | |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| Reference variable display | Measuring range 0.2 to 1.0 bar (3 to 15 psi) Overloadable up to 1.4 bar (20 psi) · Display tolerance class 1 · Scale: 0 to 100 % linear, square root (rear), scale length 100 mm | |
| Control signal display | Measuring range 0 to 1.2 bar (0 to 18 psi) Overloadable up to 1.4 bar (20 psi) · Display tolerance class 2.5 · Scale: 0 to 1.2 bar (0 to 18 psi), scale length 36 mm | |
| Signal adjuster | Adjustment range: 0.02 to 1.5 bar (0.3 to 19 psi) · Supply air: 1.4 bar (20 psi) Air consumption per adjuster: 0.06 m ³ /h Air supply: > 1.5 m ³ /h | |
| Perm. amb. temp. | -20 to +60 °C | |
| Type | 3417-10/-18 | 3417-20/-28 |
| Weight, approx. | 1.75 kg | 2.25 kg |

Instrument versions

| Type | Front view | Functional diagram | Pneumatic connection | Type | Front view | Functional diagram | Pneumatic connection |
|--------------------|------------|--------------------|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------|-----------------------------------------------------|
| 3417-10 3417-20 | | | Connection with Type 3417-1... mounted depth 180 mm | 3417-11 3417-21 | | | Connection with Type 3417-1... mounted depth 180 mm |
| 3417-12 3417-22 | | | | 3417-13 3417-23 | | | |
| 3417-14 3417-24 | | | | 3417-15 3417-25 | | | |
| 3417-16 3417-26 | | | | 3417-17 3417-27 | | | |
| 3417-18 3417-28 | | | | Circuit symbols <ul style="list-style-type: none"> Pneumatic adjuster Supply air Selector switch | | | |

Dimensions in mm



Specifications subject to change without notice.



SAMSON AG · MESS- UND REGELTECHNIK
Weismüllerstraße 3 · 60314 Frankfurt am Main · Germany
Phone: +49 69 4009-0 · Fax: +49 69 4009-1507
Internet: <http://www.samson.de>

T 7527 EN