

## FZA21...

### Remote Setting Units



#### Features

- The FZA21... consist of a potentiometer with connecting terminals, setting knob and changeable scale with transparent cover.
- It is designed exclusively for flush panel mounting. The setting knob can be locked in the set position, or its setting range can be limited.
- The unit can be recalibrated.
- The FZA21... are supplied as follows:
  - FZA21.11 complete with all scales (see *Table 1*).
  - FZA21.21 provided with scale
  - FZA21.31 provided with scale

#### Application

FZA21... remote setting units are used in various control systems for:

- Remote setting of the desired value
- Remote setting of the basic reference value
- Remote control of a regulating unit
- As a detector simulator (temperature or enthalpy) for maximum economy changeover

#### Product Numbers

See *Table 1*.

#### Ordering

When ordering, specify quantity, product number and description.

**Table 1. Product Numbers.**

Product Number	Measured Value	Setting Range	Designation of Scale
FZA21.11	Temperature	-35 – 35°C	-t35
		0 – 50°C	-t50
		0 – 100°C	-t100
		-10 – 90°C	-t90
		30 – 130°C	-t30/130
		0 – 130°C	-t130
		0 – 250°C	-t250
		100 – 200°C	-t100/200
	150 – 450°C	-t450	
	Average of Two Temperatures	0 – 50°C	-t50
	Temperature Differential	2 – 25K	-dt25
		2 – 35K	-dt35
		5 – 65K	-dt65
Humidity	20 – 95% rh	-H95	
	0 – 100% rh	-% <sup>1</sup>	
	0 – 20 g/kg	-x20	
Enthalpy	0 – 100 kJ/kg	-h100	
Pressure	0 – 0.5 bar	-p0.5	
	0 – 2 bar	-p2	
	0 – 10 bar	-p10	
	0 – 20 bar	-p20	
	0 – 40 bar	-p40	
Differential Pressure in Liquid Media	0 – 0.5 bar	-p0.5	
	0 – 2 bar	-p2	
	0 – 10 bar	-p10	
Differential Pressure in Gaseous Media	0 – 20 Pa	-dpa20	
	0 – 100 Pa	-dpa100	
	0 – 500 Pa	-dpa500	
	0 – 3000 Pa	-dpa3000	
Position	0 – 100%	-%	
Current <sup>1</sup>	0 – 20 mA	-% <sup>1</sup>	
	4 – 20 mA	-% <sup>1</sup>	
Voltage <sup>1</sup>	0 – 10 V-	-% <sup>1</sup>	
General <sup>2</sup>	Blank	None <sup>2</sup>	
FZA21.21	Detector Simulators	0 – 50°C	-t50
FZA21.31		0 – 100 kJ/kg	-h1--

1. No scales are available for these measured values and measuring ranges. The 0 – 100% scales or the blank scale plate, which can be marked by hand, can be used.
2. For special applications, the blank scale can be appropriately marked.

<b>Specifications</b>	Potentiometers	0 – 1000 Ω		
	FZA21.11	0 – 1235 Ω (32 – 122°F [0 – 50°C] of a temperature detector QA... with LG-Ni measuring element)		
<b>Material</b>	FZA21.21	0 – 155 Ω		
	FZA21.31	FZA21.11	FZA21.21	FZA21.31
	Resistance of both leads for a permissible error of +1% of the setting range	10 Ω	2.35 Ω	1.55 Ω
	Permissible cable lengths (+1% error)			
	Copper wire 18 AWG	260 feet	65 feet	50 feet
	Copper wire 16 AWG	880 feet	230 feet	165 feet
	Copper wire 14 AWG	1475 feet	330 feet	230 feet
	Copper wire 12 AWG	2300 feet	550 feet	360 feet
	Permissible ambient temperature:			
	Operation	5 – 122°F (–15 – 50°C)		
	Transport and storage	–13 – 149°F (–25 – 65°C)		
	Weight	0.11 lb.		

**Mounting and Installation**

- Mounting location – Panel front
- Prior to mounting, the correct scale must be fitted; it must correspond to the setting range of the unit to be controlled.
- Installation Instructions are included with the unit.

**Commissioning**

When used for remote setting of the desired value: The FZA21.11 is operative only when the setting unit in the controller is set to “ext”.

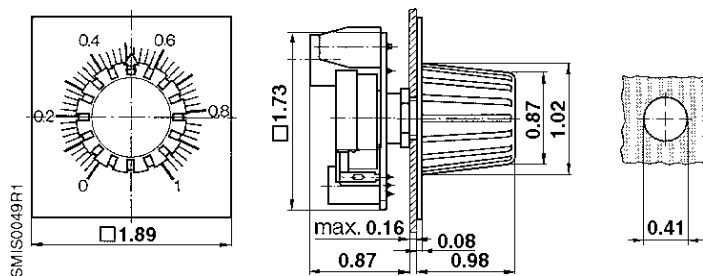
The setting knob can be locked or its setting range limited to prevent access by unauthorized personnel.

**Wiring Diagram**



**Figure 1. Wiring Diagram.**

**Dimensions**



**Figure 2. Dimensions in Inches.**

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