

**Leporello** (- 2 -) (- 3 -)

SITRANS P\_DS III series  
Operating instructions  
in brief A5E00047093-03

Please refer to the Instruction Manual prior to installation and startup!

- A5E00047090 (D)
- A5E00047092 (GB)
- A5E00053218 (F)
- A5E00053219 (I)
- A5E00053220 (E)

- 1 -

**Connection box**

- 2 -

**Keyboard (setting without display)**

5 s Keyboard disable Read-only OFF

SPAN

ZERO

Symbols

- 3 -

**Digital display**

15 8 9 11 10

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**Legend 1-15**

- 1 Screen connection
- 2 (+) power supply
- 3 (-) power supply
- 4 Test plug for external DC ammeter
- 5 Mode key
- 6 Increment key
- 7 Decrement key
- 8 Measured value
- 9 Dimension/bar graph
- 10 Flow measurement
- 11 Mode
- 12 Lower current limit
- 13 Sign for measured value
- 14 Upper current limit
- 15 Communication display

C	Constant current mode
L	Read-only
LA	Keyboard disabled
LI	Only MA can be set
LS	Only ME can be set
LT	Keyboard disabled (available only via HART)

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**Operation**

**MA = start-of-scale ME = full-scale**

Display mode in mA % pressure	
M2 Set and adjust MA <sup>1) 2) 4)</sup>	
M3 Set and adjust ME <sup>1) 2) 4)</sup>	
M4 Adjust damping <sup>1) 2)</sup>	
M5 Adjust MA without pressure <sup>1) 2)</sup>	
M6 Adjust ME without pressure <sup>1) 2)</sup>	
M7 Zero adjustment <sup>2) 4)</sup>	

M = Mode

1) [M] Save value  
4) [↑] and [↓] Set value

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**Operation**

M8	Current transm. ↑ and ↓ for 2 s <sup>2) 3)</sup>
M9	Fault current upper/lower <sup>1) 2)</sup>
M10	Keyboard disabling, read-only <sup>1) 2)</sup>
M11	Square root <sup>1) 2)</sup>
M12	Start of square-rooting <sup>1) 2)</sup>
M13	mA % measuring mode <sup>1) 2)</sup>
M14	mA % dimension <sup>1) 2)</sup>

2) [↑] or [↓] change value  
3) [M], exit without saving

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**Setting start of scale and full scale**

A Initial situation

B Setting start of scale (p. e. 2 bar)

C Setting full scale (p. e. 14 bar)

D Calculating output current:  $\frac{11 \text{ bar} - 2 \text{ bar}}{14 \text{ bar} - 2 \text{ bar}} \cdot 16 \text{ mA} + 4 \text{ mA} = 16 \text{ mA}$  (p. e. 11 bar)

Prerequisite: see Instruction Manual, Section 3

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**Setting start of scale: Select mode 02**

Apply pressure corresponding to MA to the transmitter

[↑] and [↓] Keep pressed for 2 s to set MA to 4 mA

**Setting full scale: Select mode 03**

Apply pressure corresponding to ME to the transmitter

[↑] and [↓] Keep pressed for 2 s to set ME to 20 mA

Note: the keys may be disabled! Remove keyboard disabling See page 3

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**Adjusting start of scale: Select mode 02**

Apply reference pressure

Connect DC ammeter (recommended)

Adjust MA using [↑] or [↓] (variable speed) and save MA using [M]

**Adjusting full scale: Select mode 03**

Apply reference pressure

Connect DC ammeter (recommended)

Adjust ME using [↑] or [↓] (variable speed) and save ME using [M]

Adjust current according to calculation formula, see Instruction Manual, Section 3

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**Setting start of scale without application of pressure: Select mode 05**

Set start-of-scale value to the lower sensor limit using [↑] and [↓] (2 s)

Press [M], save value

**Setting full scale without application of pressure: Select mode 06**

Set full-scale value to the upper sensor limit using [↑] and [↓] (2 s)

Press [M], save value

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**Adjusting start of scale without application of pressure: Select mode 05**

Adjust pressure which is to correspond to MA using [↑] or [↓] (variable speed)

Press [M], save value

**Adjusting full scale without application of pressure: Select mode 06**

Adjust pressure which is to correspond to ME using [↑] or [↓] (variable speed)

Press [M], save value

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**Zero adjustment: Select mode 07**

Vent transmitter or adjust known reference pressure (absolute pressure < 0.1 % of span)

Set Zero using [↑] and [↓]

Adjust Zero using [↑] and [↓]

Press [M], save value

**Ex Data**

See Instruction Manual and conformity certificates! (see page - 1 -)

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**Application point of the square rooting characteristic**

Flow [%] 20

Pressure [%] 4

Parameter range for application point

- 1) Linear up to application point
- 2) Square rooting for 3) fixed application point
- 3) Slowly increasing linear up to application point

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**FW/HW releases**

can be read from the approval label:

FW: aa . bb . cc

- aa - FW release
- bb - Document revision
- cc - Device type

HW: xx . yy . zz

- xx - Compatibility identifier
- yy - Connecting board version
- zz - Serial number

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