



Supplementary operating instructions for ProMinent® gamma/ L and ProMinent® Sigma with power output

Depending on the “Relay” identcode characteristic the pump can be fitted with the “4-20 mA power output with relay” assembly (not available for pump with relay or PROFIBUS®):

- „C“ = 4-20 mA output with 1 fault indicating relay N/C
- „D“ = 4-20 mA output with 3 fault-indicating relays N/O
- „E“ = 4-20 mA outputs with pacing relay N/O

To retrofit the “Power output” assembly, mount in the same position as the relay module on the side of the pump pedestal (see “Installation instructions for relay retrofit kit”). The equipment now complies with identcode characteristic “Relay” = C.

Technical data

Power output: load max.:	300 Ohm	Relays: voltage max.:	24 V
contact:	zero volts		

Signal I of the power output signals the current, valid mathematical pump metering volume in accordance with following formula:

$$I(4...20) = 16 \times F/F_{max} \times L/100 + 4$$

- I = Output current in mA
- f = Stroke rate in strokes/min
- L = Stroke length in %
- fmax = max. frequency strokes/min

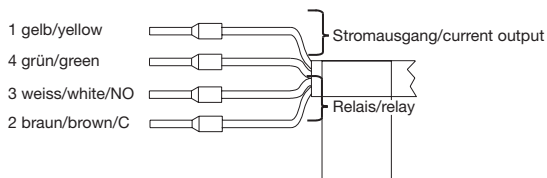
In the “Contact” and “Batch” operating modes f is the stroke rate set in the “Stroke rate” permanent display.

Identcode characteristic “control variant” = 2 or 3 (analogue input) only: The power output range corresponds to that of the analogue input: set the analogue input to the range 0 ... 20 mA (SET - ANALG) the power output range is also 0 ... 20 mA.

gamma/ L only: The analogue input processing type “Curve” is not possible.

In the “Stop” (due to fault or operation) or “Pause” modes the power output emits a current of 4 mA (0 mA).

Belegung Kabel und Buchse: / Cable and socket configuration:



- 1: Strom + Current +
- 4: Strom - Current -
- 2: Relais C Relay C
- 3: Relais NO Relay NO

