

Description

The PS3 sampling system which has been especially designed for the installation on milk collection trucks works according to the principle of a hose pump and makes it possible to take the samples directly from the pipeline. The PS3 must be always operated with the GEA Diessel **ZEVODAT-M** system.

The configurations:

PS3E1: Basic device with pump unit and integrated control electronics

PS3: Pump unit in housing (to be used as extension component only)

PS3E2: Sampling system consisting of a PS3E1 including PS3 pump unit

Special features:

- Quasi-continuous operation by using a step motor
- Improved lifetime of the hose due to a redesigned pump head and speed limitation
- Good representativity due to a very low sampling volume of the individual sample and frequent individual sampling
- Low carry-over because of small moistening areas in the system. Suitable for bacteriological sampling.
- Easy installation
- Good cleaning capability
- Few maintenance required
- Bottle holders for different sizes; can be optionally fitted with a bottle sensor

It is no problem to retrofit the device into an existing pipeline. At an adequate point the pipeline has to be provided with a borehole (D = 14.5 mm) to weld-in a socket. Then the **PS3 sampler** is placed upon and fastened with pipe clips.

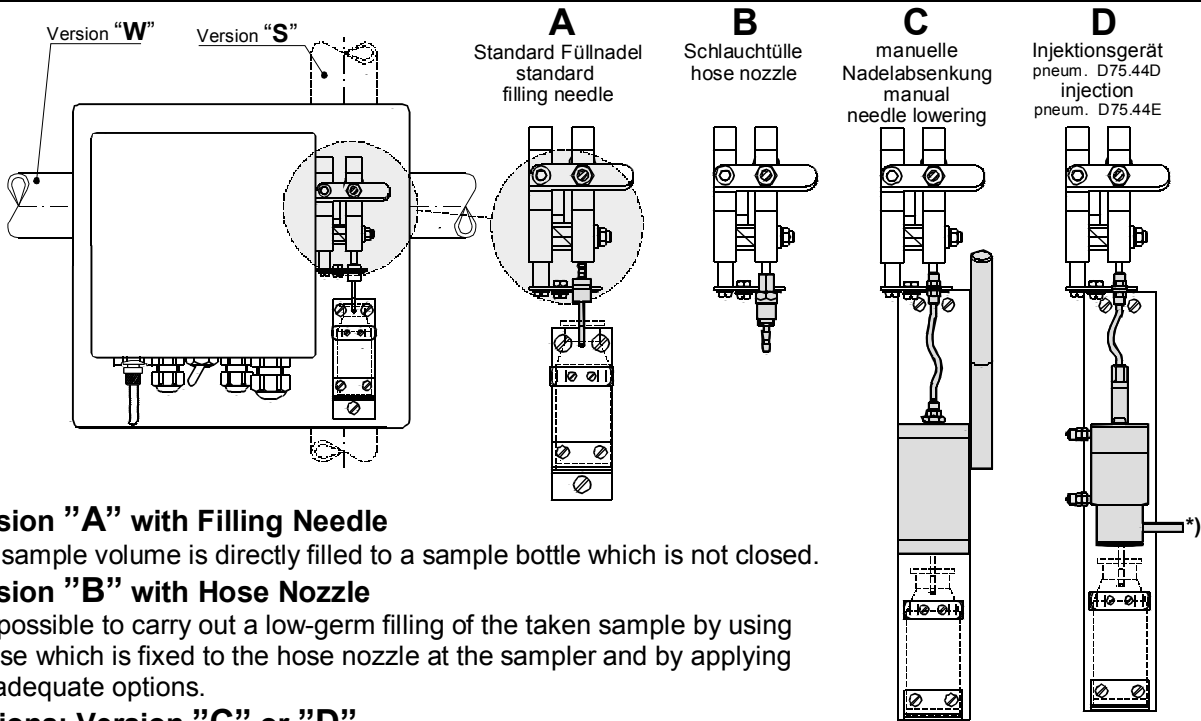
GEA Diessel GmbH
Steven 1
31135 Hildesheim
Germany
☎ +49 (0)5121-742-0

Peristaltic Sampler
PS-3 E1/E2
with integrated electronics
for external control by Zevodat

D 75.22 E

Issued: 01.2005

Page -1- of -2- pages



Version "A" with Filling Needle

The sample volume is directly filled to a sample bottle which is not closed.

Version "B" with Hose Nozzle

It is possible to carry out a low-germ filling of the taken sample by using a hose which is fixed to the hose nozzle at the sampler and by applying the adequate options.

Options: Version "C" or "D"

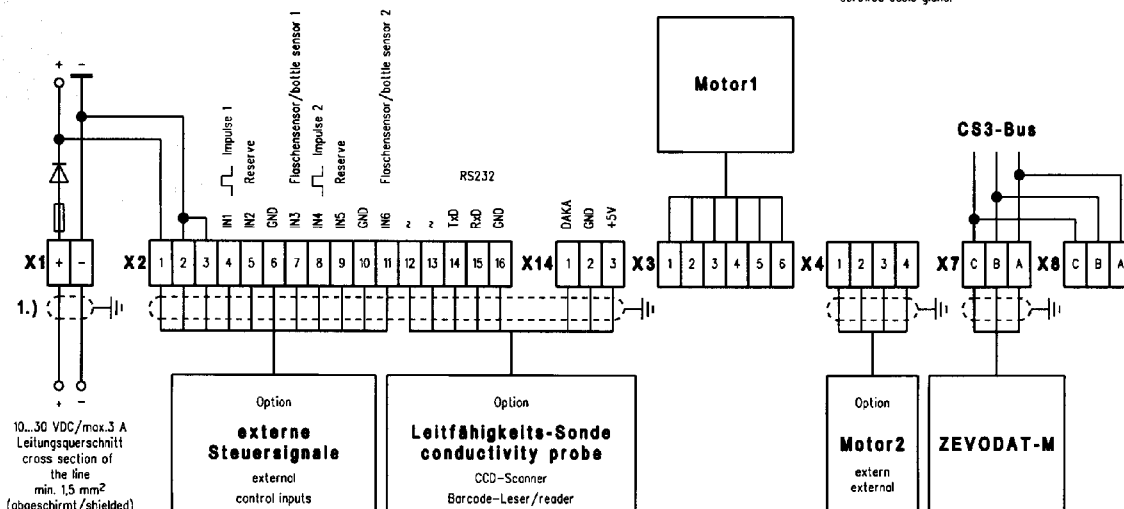
- Injection needle for a low-germ sampling process
- Sample bottle with slotted stopper made of caoutchouc.
- Magazine for several sample bottles for a fully automatic sampling process.

*) mit Spülanschluß
with connection for rinsing

Technical Data

| | | | | |
|--|--|----------------|----------------|----------------|
| Hose pipe connection | Connection to different nominal widths possible. (Borehole \varnothing 14.5 mm for nozzle) | | | |
| Sampling volume | 140 ml/min max. Attention: In case of small reception quantities it is indispensable to check the operating conditions in order to determine the attainable sampling volume. Standard value: 30 ml at an operating period of 20 seconds min. | | | |
| Pressure in the product line (pressure: bar absolute) | 1 - 2.5 bar: Special design to be used at pressures below the atmospheric pressure (0.5 - 1 bar absolute) (Special adapter!) | | | |
| Materials | Stainless steel no. 1.4301 (AISI 304) / housing : Al lacquered Silicone tube | | | |
| Operating voltage | 10 ... 30 V DC | | | |
| Current consumption (max.) when using one motor | | 12 V DC | 24 V DC | 30 V DC |
| | Quiescent current | 0.3 A | 0.15 A | 0.12 A |
| Operating current | | 2.7 A | 1.3 A | 1.0 A |
| Fuse protection of the device | 7.5 A (brown) | | | |

Connection scheme PS3E1/E2



1.) Die Abschirmungen werden in der Kabelverschraubung aufgelegt.
The shields are put on the screwed cable gland.

10...30 VDC/max.3 A
Leitungsquerschnitt
cross section of
the line
min. 1.5 mm²
(abgeschirmt/shielded)

Option
**externe
Steuersignale**
external
control inputs

Option
Leitfähigkeits-Sonde
conductivity probe
CCD-Scanner
Barcode-Leser/reader

Option
Motor2
extern
external

ZEVO DAT-M