

# Sterile Connection, Diaphragm Seals For Sterile Process Technology NEUMO BioControl®, Model 990.60

WIKA Data Sheet DS 99.55



## Applications

- Biochemical and pharmaceutical industry
- Sterile process technology
- Food industry

## Special Features

- No dead space
- Hygienic design
- Materials and surface finish quality according to the guidelines and standards of the pharmaceutical industry
- 3-A certified and FDA approved

## Description

### Process connection

NEUMO BioControl® connection for installation in BioControl® system model 910.60, see data sheet AC 09.14

- Size 25 (installation diameter 30.5 mm)
- Size 50 (installation diameter 50.0 mm)
- Size 65 (installation diameter 68.0 mm)
- Size 80 (installation diameter 87.5 mm)

### Pressure rating

PN 16 for size 50 ... 80, PN 25 for size 25

### Pressure ranges

0 ... 0,25 bar to 0 ... 16 bar or to 0 ... 25 bar with size 25

### Material of wetted parts

Stainless steel 1.4435 (AISI 316L)

### Measuring instrument connection

Pressure gauge or transmitter directly welded, process pressure transmitter with threaded adapter

### System fill fluid

KN 7 Glycerine, food compatible, FDA approved, per standard US Pharmacopoeia XXIV and European Pharmacopoeia (1998)



Diaphragm Seal, NEUMO BioControl® Model 990.60 with Pressure Transmitter, Stainless Steel Fieldcase Model F-20



Diaphragm Seal, NEUMO BioControl® Model 990.60 with Pressure Gauge, Stainless Steel Series Model 232.50.100

## Options

### Process connection

- Material: stainless steel 1.4435, electropolished

### Diaphragm seal for connection to Zone 0

- Body with flame arrester

### Pressure measuring instrument assembly

- Assembly via cooling tower
- Assembly via capillary, when ordering please specify length of capillary

### System fill fluid

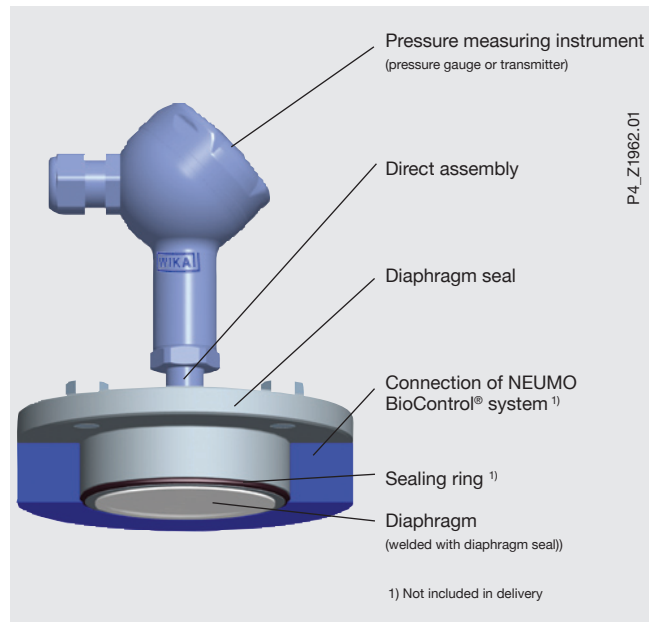
- KN 12: Glycerine/water, FDA approved
- KN 59: Neobee® M-20, FDA approved
- KN 92: Medicinal white mineral oil, FDA and USP approved

### Documentation

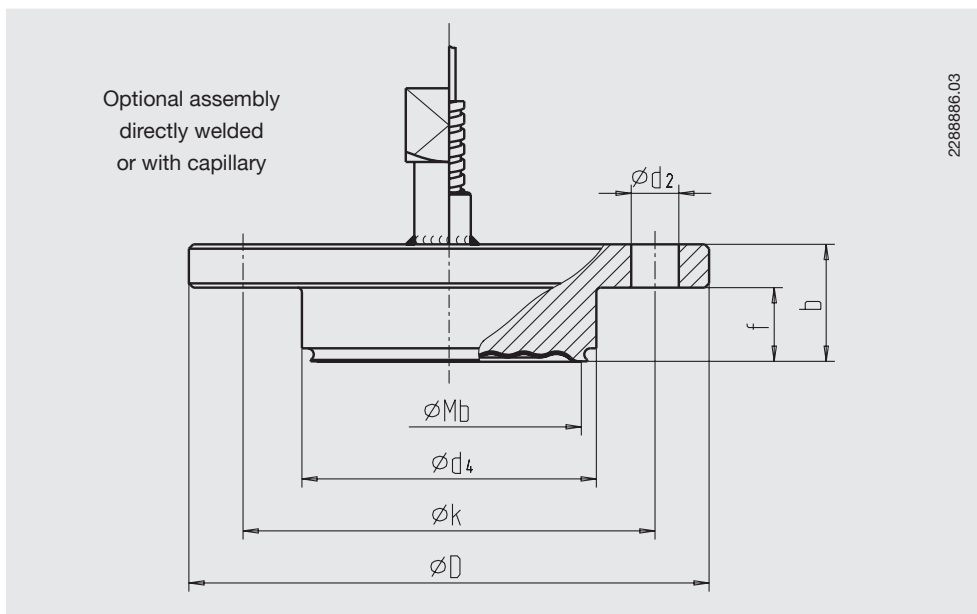
- 2.2 or 3.1 Material Certificate, DIN 10 204
  - Test and calibration certificates
  - Pressure and stability tests
  - Confirmation of FDA approval
  - 3-A symbol approval certificate
- Further certificates and documents on request

## Example for installation

### Diaphragm seal for sterile process technology model 990.60



## Dimensions in mm



| BioControl®<br>connection | Dimensions in mm |                |                |     |    |    |     | Weight<br>in kg |
|---------------------------|------------------|----------------|----------------|-----|----|----|-----|-----------------|
|                           | Mb               | d <sub>2</sub> | d <sub>4</sub> | D   | f  | b  | k   |                 |
| Size 25                   | 22               | 4 x Ø 7        | 30.5           | 64  | 11 | 20 | 50  | 0.27            |
| Size 50                   | 40               | 4 x Ø 9        | 50             | 90  | 17 | 27 | 70  | 0.65            |
| Size 65                   | 59               | 4 x Ø 11       | 68             | 120 | 17 | 27 | 95  | 1.30            |
| Size 80                   | 72               | 4 x Ø 11       | 87.5           | 140 | 25 | 37 | 115 | 2.65            |

Mb = effective diameter of diaphragm

## Assembly on bourdon tube pressure gauges

- Stainless steel version model 232.50/233.50, without/with liquid filling (see data sheet PM 02.02)



- Stainless steel, safety pattern version model 232.30/233.30, without/with liquid filling (see data sheet PM 02.04)



Following application conditions apply:

- Pressure gauge directly assembled on diaphragm seal  
Temperature range  
process: +10 ... +150 °C  
ambient: +10 ... +40 °C

|  |       | NEUMO BioControl® connection with DN |                              |                              |                                  |
|--|-------|--------------------------------------|------------------------------|------------------------------|----------------------------------|
|  |       | 25                                   | 50                           | 65                           | 80                               |
| Pressure gauge   | Model | 23x.50.63                            | 23x.50.63<br>23x.50.100      | 23x.50.63<br>23x.50.100      | 23x.50.100<br>23x.30.100         |
| Minimum measuring range  |       | 0 ... 4 bar<br>-1 ... +3 bar         | 0 ... 1 bar<br>-1 ... +3 bar | 0 ... 1 bar<br>-1 ... +3 bar | 0 ... 0.6 bar<br>-1 ... +1.5 bar |
| Overpressure safety (optional)   |       | -                                    | 2 x full scale value         | 2 x full scale value         | 2 x full scale value             |
| Inductive alarm contact (optional), suitable for Zone 1 and Zone 2 (model 831) |       | -                                    | possible                     | possible                     | possible                         |

## Assembly on transmitters

- Pressure transmitter model S-10 or model F-20, (see data sheet PE 81.01 or PE 81.19)



- Process pressure transmitter UniTrans, model UT-10 / IUT-10, (see data sheet PE 86.01 / PE 86.02)



- or with process pressure transmitter, model IPT-10, (see data sheet PE 86.11)



The above mentioned application conditions apply.

|                         |  | NEUMO BioControl® connection with DN |               |                |                |
|-------------------------|--|--------------------------------------|---------------|----------------|----------------|
|                         |  | 25                                   | 50            | 65             | 80             |
| Minimum measuring range |  | 0 ... 4 bar                          | 0 ... 600 bar | 0 ... 600 mbar | 0 ... 250 mbar |

Further instrument versions and measuring ranges can be supplied subject to technical verification and clarification by WIKA.

## Ordering information

Model / Size of NEUMO BioControl® connection / Material of wetted parts / Type of assembly, if necessary length of capillary / System fill fluid / Assembly on pressure measuring instrument model... / Process conditions as per questionnaire / Options or special versions

Modifications may take place and materials specified may be replaced by others without prior notice.  
Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing.

