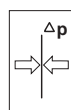
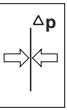




## Pressure - Differential pressure

Overview	205
VEGADIF	206
Isolating diaphragm	208
Accessory	211
Dimensions	214





## Application examples: Differential pressure measurement

### Filter monitoring

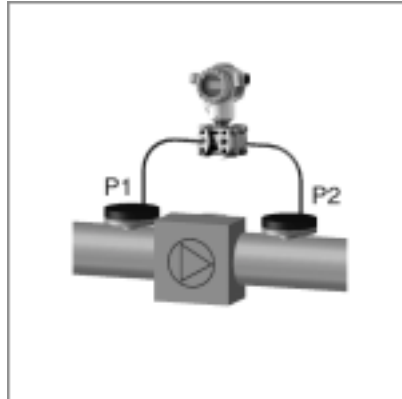


*Filter monitoring with VEGADIF*

A measuring system consists of:

- a VEGADIF differential pressure transmitter

### Pump monitoring

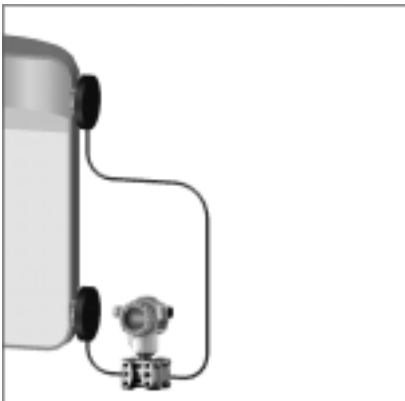


*Pump monitoring with VEGADIF*

A measuring system consists of:

- a VEGADIF differential pressure transmitter

### Level measurement in vessels with superimposed pressure



*Level measurement with VEGADIF*

A measuring system consists of:

- a VEGADIF differential pressure transmitter



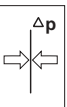
- Further possibilities for differential pressure measurement see chapter "Hydrostatic" and "Process pressure"

## VEGADIF 55

### Differential pressure transmitter with metal diaphragm

Suitable for flow measurement in conjunction with effective pressure transmitters, level measurement on vessels as well as for detection of differential pressures for filter monitoring and pump control.

- metal differential pressure measuring cell
- simple local adjustment
- fault monitoring of measuring cell and electronics
- meets PED (Pressure Equipment Directive) standard
- electronics can be exchanged without recalibration



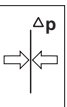


## Isolating diaphragm CSB

### Two isolating diaphragms mounted to VEGADIF 55

Suitable for level and differential pressure measurement of corrosive, high viscosity and/or hot products with static pressure

- various metal separating diaphragms
- gold and PTFE coatings possible
- customer-specific solutions
- optional: adjustment to operating temperature



**Connection high pressure side**

- E Capillaries 1m .....
- F Capillaries special length .....

**Process fitting / Material**

- FC Flange DN50PN40 Form D, DIN2501 / 316L .....
- FD Flange DN50PN40 with extension 50mm/ø48,5 / 316L .....
- FH Flange DN80PN40 Form D, DIN2501 / 316L .....
- FJ Flange DN80PN40 with extension 50mm/ø76 / 316L .....
- F5 Flange 2" 150lb RF, ANSI B16.5 / 316L .....
- F7 Flange 2" 150lb RF, ANSI with extension 2"/ø1,9" / 316L .....
- FS Flange 3" 150lb RF, ANSI B16.5 / 316L .....
- FQ Flange 3" 150lb RF, ANSI with extension 6"/ø2.9" / 316L .....
- AA Cell DN50PN16-400 / 316L .....
- AK Cell DN80PN16-400 / 316L .....
- AR Cell DN100PN16-400 / 316L .....
- CA Cell 2"150-2500 / 316L .....
- CK Cell 3"150-2500 / 316L .....

**Diaphragm material**

- 1 316L .....
- 2 Hastelloy C276 .....
- 3 Tantalum .....

**Isolating liquid / Temperature**

- C Silicone oil KN2.2 / -40...200°C (Pabs <1bar-40...150°C) .....
- G High temp. oil KN3.2 / -10...300°C(Pabs<1bar-10..200°C) .....
- H High temp.oil KN3.2 / -10...400°C(Pabs<1bar-10..200°C) .....
- I Halocarbon oil / -40...150°C (Pabs<1bar -40...+80°C) .....
- R Med.white oil KN62(FDA)/ -15..200°C(Pabs <1bar -15..150°C) .....

**Connection low pressure side**

- E Capillaries 1m .....
- F Capillaries special length .....

**Process fitting / Material**

- FC Flange DN50PN40 Form D, DIN2501 / 316L .....
- FD Flange DN50PN40 with extension 50mm/ø48,5 / 316L .....
- FH Flange DN80PN40 Form D, DIN2501 / 316L .....
- FJ Flange DN80PN40 with extension 50mm/ø76 / 316L .....
- F5 Flange 2" 150lb RF, ANSI B16.5 / 316L .....
- F7 Flange 2" 150lb RF, ANSI with extension 2"/ø1,9" / 316L .....
- FS Flange 3" 150lb RF, ANSI B16.5 / 316L .....
- FQ Flange 3" 150lb RF, ANSI with extension 6"/ø2.9" / 316L .....
- AA Cell DN50PN16-400 / 316L .....
- AK Cell DN80PN16-400 / 316L .....
- AR Cell DN100PN16-400 / 316L .....
- CA Cell 2"150-2500 / 316L .....
- CK Cell 3"150-2500 / 316L .....

**Vacuum service**

- J Yes (recommended with vacuum and gauge pressure appl.) .....
- N No .....

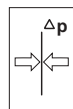
**Material certificate**

- X Without .....
- D Inspection certificate EN10204-3.1B, NACE MR0175 .....

CSB.											
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Capillaries high pressure side in m  
per 100 mm

Capillaries low pressure side in m  
per 100 mm



**Isolating diaphragm CSS**

**One isolating diaphragm mounted to VEGA pressure transmitter**

Suitable for level and pressure measurement of corrosive and/or high temperature products

- various metal separating diaphragms
- gold and PTFE coatings possible
- customer-specific solutions
- optional: adjustment to operating temperature

**Connection high pressure side**

- A** Rigid vertical (100 mm) .....
- B** Rigid horizontal (100 mm) .....
- C** Rigid with cooling distance vertical (150 mm) .....
- D** Rigid with cooling distance horizontal (150 mm) .....
- E** Capillaries 1m .....
- F** Capillaries special length .....

**Process fitting / Material**

- FC** Flange DN50PN40 Form D, DIN2501 / 316L .....
- FD** Flange DN50PN40 with extension 50mm/ø48.5 / 316L .....
- FH** Flange DN80PN40 Form D, DIN2501 / 316L .....
- FJ** Flange DN80PN40 with extension 50mm/ø76 / 316L .....
- F5** Flange 2" 150lb RF, ANSI B16.5 / 316L .....
- F7** Flange 2" 150lb RF, ANSI with extension 2"/ø1.9" / 316L .....
- FS** Flange 3" 150lb RF, ANSI B16.5 / 316L .....
- FQ** Flange 3" 150lb RF, ANSI with extension 6"/ø2.9" / 316L .....

**Diaphragm material**

- 1** 316L .....
- 2** Hastelloy C276 .....
- 3** Tantalum .....

**Isolating liquid / Temperature**

- C** Silicone oil KN2.2 / -40...200°C (Pabs <1bar-40...150°C) .....
- G** High temp. oil KN3.2 / -10...300°C (Pabs <1bar-10...200°C) .....
- H** High temp.oil KN3.2 / -10...400°C (Pabs <1bar-10...200°C) .....
- I** Halocarbon oil / -40...150°C (Pabs <1bar -40...+80°C) .....
- R** Med.white oil+cool.KN62 -15...200°C (Pabs <1bar-15...150°C) .....

**Connection low pressure side**

- 1** 7/16-20 UNF .....

**Material**

- 1** 316L .....

**Seal**

- 1** FPM .....

**Vacuum service**

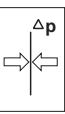
- J** Yes (recommended with vacuum and gauge pressure appl.) .....
- N** no .....

**Material certificate**

- X** Without .....
- D** Inspection certificate EN10204-3.1B, NACE MR0175 .....

CSS.										
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Capillaries high pressure side in m  
per 100 mm



## Oval flange adapter

### Oval flange adapter for VEGADIF

Oval flange adapter 1/2 NPT  
with 2 screws, 2 washers, 1 PTFE seal

**Version / Material**

- 19262 Fastening thread 7/16 UNF / C-steel 1.0460 .....
- 19264 Fastening thread 7/16 UNF / 316L .....
- 19263 Fastening thread M10 / C-steel 1.0460 .....
- 19265 Fastening thread M10 / 316L .....

↓

2.	
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## Ventilation valve

### Ventilation valve for VEGADIF

2 pcs.

**Version / Material**

- 17724 1/4 NPT / 316L .....

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2.	
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## Closing screw

### Closing screw for VEGADIF

2 pcs.

**Version / Material**

- 17725 1/4 NPT / 316L .....

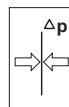
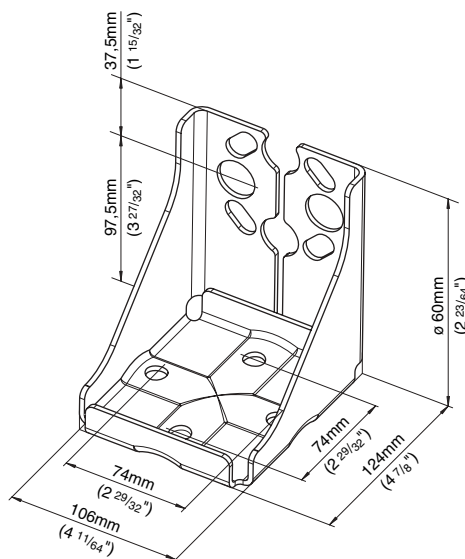
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2.	
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## Mounting angle for VEGADIF

### Mounting angle for VEGADIF

for wall or tube mounting  
with strap for tube mounting  
with fixing screws 7/16 UNF, M10



**Version / Material**

- A Universal angle / 304 .....

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DIFMW.	
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## Screws for valve block

### Screws for valve block

#### Version / Material

<b>19543</b>	7/16 UNF / C-steel	.....
<b>19544</b>	M10 x 55 / C-steel	.....
<b>23330</b>	7/16 UNF / 316 Ti	.....
<b>21736</b>	M10 x 55 / 316Ti	.....

↓  
2.

## Valve block

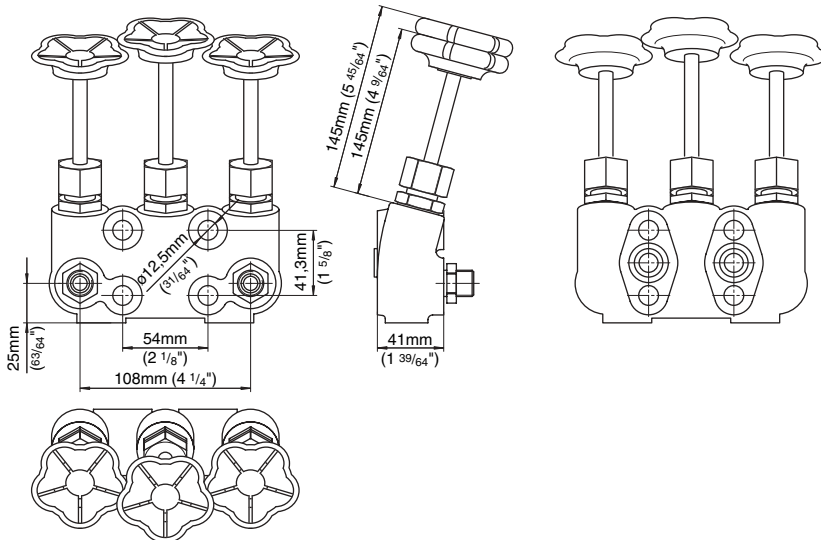
**Valve block according to DIN 19 213**  
for direct flanging to VEGADIF

#### Version / Material

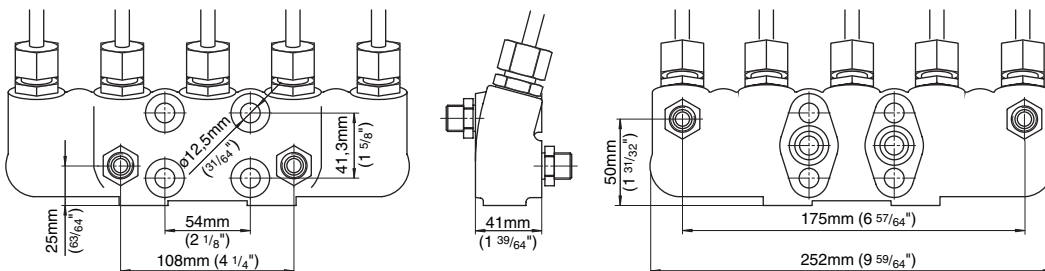
<b>19546</b>	Three-fold PN100 / C22.8 chromized	.....
<b>19547</b>	Three-fold PN100 / 316Ti	.....
<b>19542</b>	Five-fold PN100 / C22.8 chromized	.....
<b>19545</b>	Five-fold PN100 / 316Ti	.....

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2.

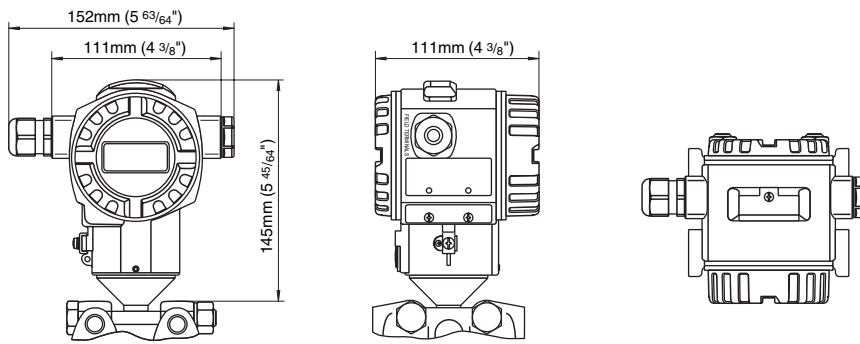
### Three-fold valve block according to DIN 19213



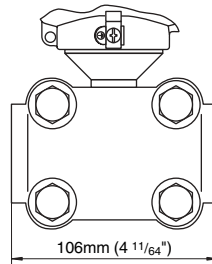
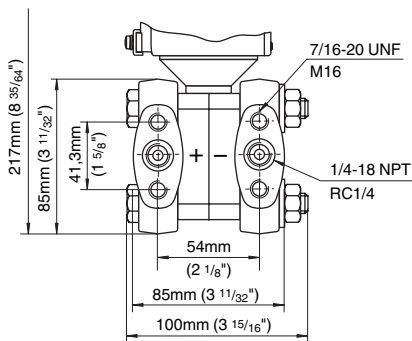
### Five-fold valve block according to DIN 19213



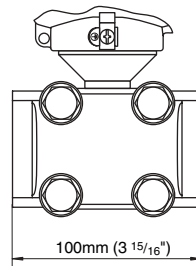
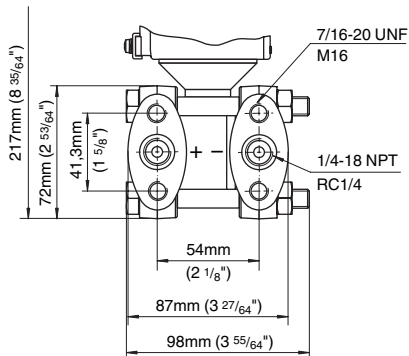
**VEGADIF 55 - Housing**



**VEGADIF 55 - Oval flange, connection 1/4-18 NPT or RC1/4**

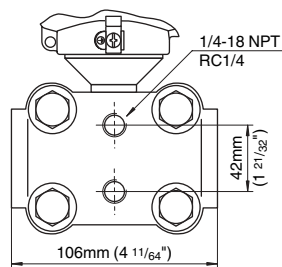
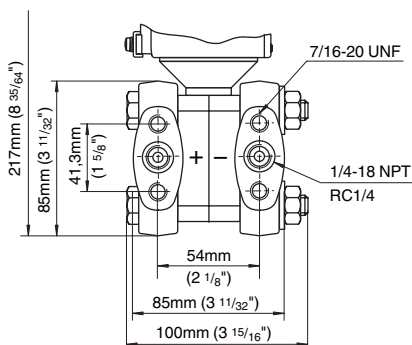


10 mbar and 30 mbar measuring cell



Nominal value > 100 mbar measuring cell

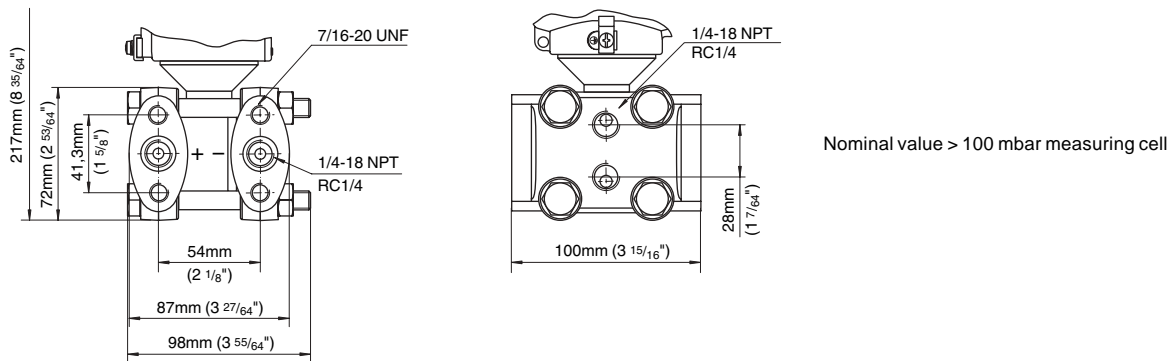
**VEGADIF 55 - Oval flange - connection 1/4-18 NPT or RC1/4, with lateral ventilation**



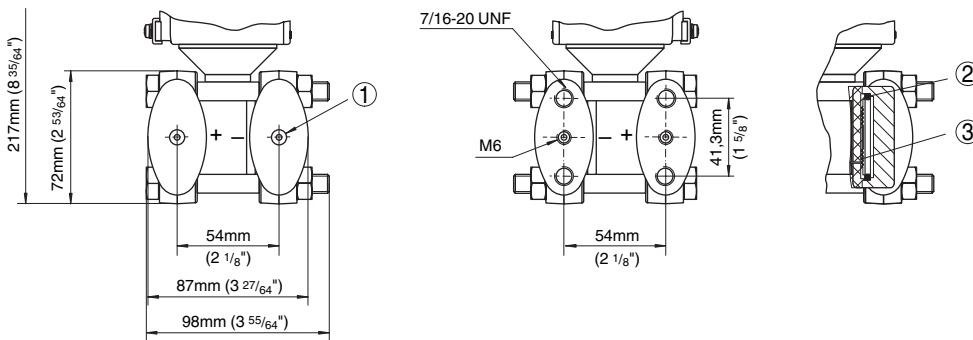
10 mbar and 30 mbar measuring cell



## VEGADIF 55 - Oval flange, connection 1/4-18 NPT or RC1/4, with lateral ventilation

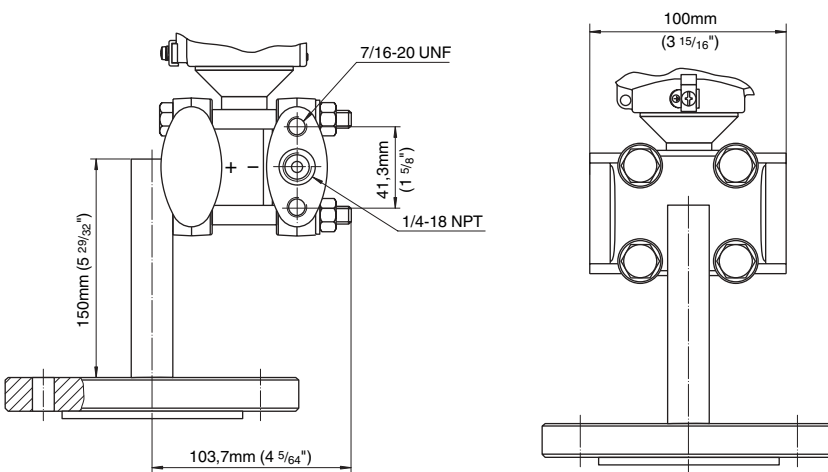


## VEGADIF 55 - Oval flange, prepared for mounting of isolating diaphragms



- 1 Mounting of isolating diaphragms
- 2 Copper ring seal
- 3 Diaphragm

## VEGADIF 55 - Oval flange with one CSS isolating diaphragm



Low pressure side: connection 1/4-18 NPT, fixing 7/16-20 UNF  
 High pressure side: see CSS isolating diaphragm