

# Flush Diaphragm Sanitary Pressure Gauges Sealgauge® Stainless Steel Case, Stainless Steel Wetted Parts Type 432.55 - Dry Case

WIKA Datasheet 432.55



## Applications

- Suitable for food, biological, pharmaceutical and other industries requiring sanitary process connections
- Quick release connection allows for direct, fast installation and removal in sanitary piping systems.
- Suitable for applications that prohibit the use of transmission liquids

## Product Features

- Dry measuring cell, no transmission fluid
- Stainless steel wetted parts and case
- Built to withstand corrosive, highly viscous and crystallizing medium
- No pressure transmitting fluid
- Flush, welded diaphragm

## Specifications

### Design

Per EN 837-3

### Sizes (all sizes not stocked)

4" and 6" (100 and 160 mm)

### Accuracy class

± 1.6% of span

### Ranges

0 ... 10 psi (0.6 bar) to 0 ... 150 psi (10 bar)  
or all other equivalent vacuum or compound ranges

### Pressure limitations

Steady: full-scale value  
Fluctuating: 0.9 x full-scale value  
Short time: 1.5 x full-scale value

### Operating temperature

Ambient: -4°F to +140°F (-40°C to +60°C)  
Media: max. 302°F (+150°C)



Flush diaphragm Sealgauge model 432.55

### Temperature error

Additional error when temperature changes from reference temperature of 68°F (20°C) ±0.4% of span for every 18°F (10°K) rising or falling.

### Ingress protection

NEMA 3 (IP 54 per EN 60529 / IEC 529)

### Process connection

316L SS, lower mount (LM)  
Clamp connections<sup>1)</sup>: Clamp connections per DIN 32676  
Clamp connections per ISO 2852

### Diaphragm element

Material: 316L SS  
Surface roughness ≤ 0.4 μm

### Movement

Stainless steel

### Dial

White aluminum with black lettering

### Pointer

Black aluminum

<sup>1)</sup> For design details and dimensions, see tables on pages 2 and 3.

## Case / Ring

304 SS case and bayonet ring  
Lower mount (LM)  
Weather protection NEMA 3X (IP54)

## Window

Laminated safety glass

## Order Options

- Higher overpressure protection
- Polycarbonate window
- Other process connection, e.g.:
  - Threaded connections per DIN 11851 with grooved union nut or threaded coupling
  - VARIVENT®
  - Aseptic flange connection per DIN 11864-2 form A with flange with groove or flange with tongue
  - Aseptic flange connection per DIN 11864-3 form A with flange with groove or flange with tongue
  - Others on request
- Connector location at 3, 9, or 12 o'clock
- Custom dial layouts
- Additional pressure units available
- Alarm contact (Datasheet AC 08.01)
- Wetted parts and external metallic components electropolished

## Dimensions in mm

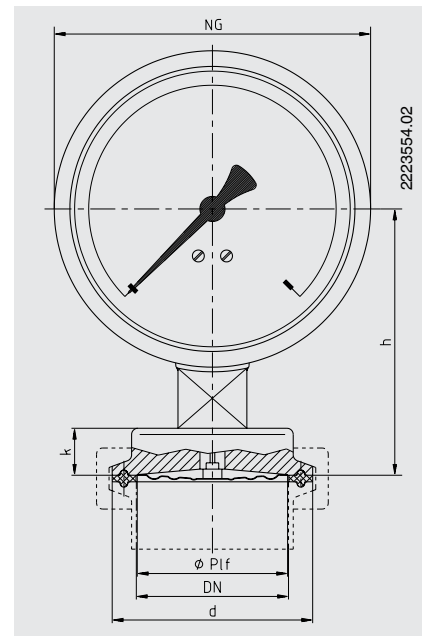
### Standard version

Type of process connection: Clamp connection per DIN 32676  
Pipe standard: Pipes per DIN 11866 row B or ISO 1127 row 1

DN	For pipe Outer Ø x wall thickness	PN 1)	Dimensions in mm				
			NS	h	Ø Plf	d	k
60.3 (or DN 50)	60.3 x 2	40	100	85	48	77.5	15
			160	115			
76.1 (or DN 65) (option)	76.1 x 2	25	100	85		91	
			160	115			

Type of process connection: Clamp connection per DIN 32676  
Pipe standard: Pipes per DIN 11866 row C or ASME BPE

DN	For pipe Outer Ø x wall thickness	PN 1)	Dimensions in mm				
			NS	h	Ø Plf	d	k
2"	50.8 x 1.65	40	100	85	48	64	15
			160	115			
2 ½" (option)	63.5 x 1.65	25	100	85		77.5	
			160	115			
3" (option)	76.2 x 1.65		100	85		91	
			160	115			



Type of process connection: Clamp connection

Pipe standard: Pipes per BS4825 part 3 and O.D.-tube

DN	For pipe Outer Ø x wall thickness	PN 1)	Dimensions in mm				
			NS	h	Ø Plf	d	k
2"	50.8 x 1.6	40	100	85	48	64	15
			160	115			
2 ½" (option)	63.5 x 1.6	25	100	85		77.5	
			160	115			
3" (option)	76.2 x 1.6		100	85		91	
			160	115			

Type of process connection: Clamp connection per DIN 32676

Pipe standard: Pipes per DIN 11866 row A or DIN 11850 row 2

DN	For pipe Outer Ø x wall thickness	PN 1)	Dimensions in mm				
			NS	h	Ø Plf	d	k
50	53 x 1.5	40	100	85	48	64	15
			160	115			
65 (option)	70 x 2	25	100	85		91	
			160	115			

Type of process connection: Clamp connection per ISO 2852

Pipe standard: Pipes per ISO 2037 and BS 4825 part 1

DN	For pipe Outer Ø x wall thickness	PN 1)	Dimensions in mm				
			NS	h	Ø Plf	d	k
51	51 x 1.2	25	100	85	48	64	15
			160	115			
63.5 (option)	63.5 x 1.6		100	85		77.5	
			160	115			
70 (option)	70 x 1.6		100	85		91	
			160	115			
76.1 (option)	76.1 x 1.6		100	85		91	
			160	115			

EHEDG conformity only in combination with a Kalrez® stainless steel gasket from Dupont de Nemours or with a T-ring seal from Combifit International B.V.

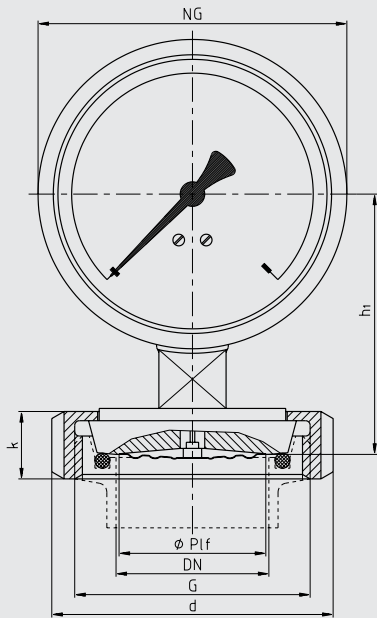
1) For maximum pressure range consider pressure rating of clamp.

## Option

Type of process connection: Threaded connection per DIN 11851

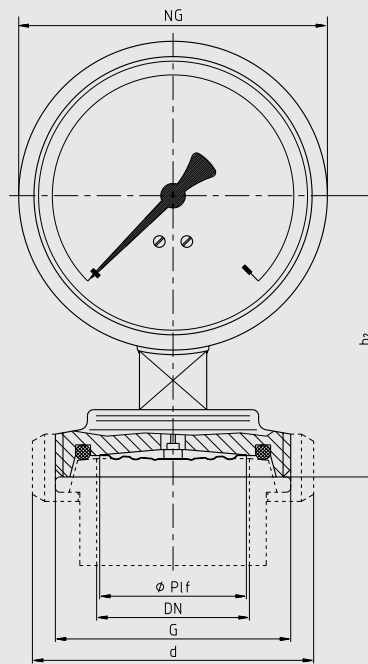
Pipe standard: Pipes per DIN 11850 row 2

### with grooved union nut



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### with threaded coupling



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DN	For pipe Outer Ø x wall thickness	Dimensions in mm				Ø P1f	G	d	k
		D	h <sub>1</sub>	h <sub>2</sub>					
50	53 x 1.5	100	85	92	48	Rd 78 x 1/6	92	22	
		160	115	122					
80	85 x 2	100	92	98	48	Rd 110 x 1/4	127	29	
		160	122	128					

EHEDG conformity only in combination with ASEPTO-STAR k-flex upgrade, sealing from Kieselmann GmbH.

3-A conformity only in combination with profile sealing from SKS Komponenten BV or Kieselmann GmbH.

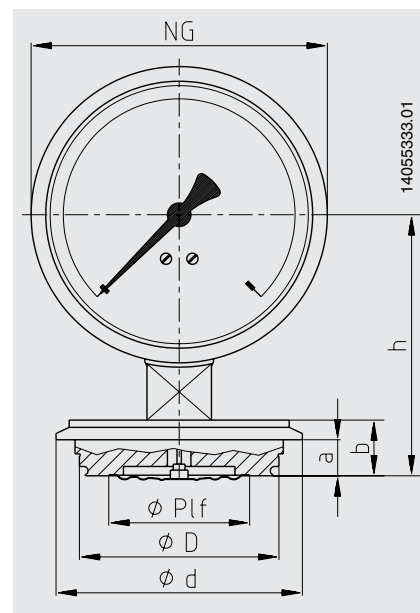
## Option

Type of process connection: VARIVENT®

Access unit connection	DN	Dimensions in mm					
		NS	h	Ø P1f	d	a	b
Form N	40/50	100	89	48	84	12.3	19
		160	119				

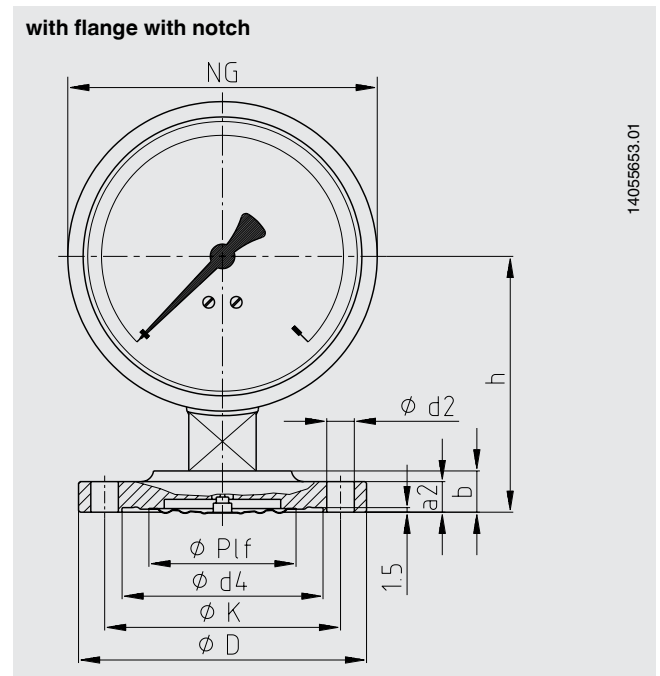
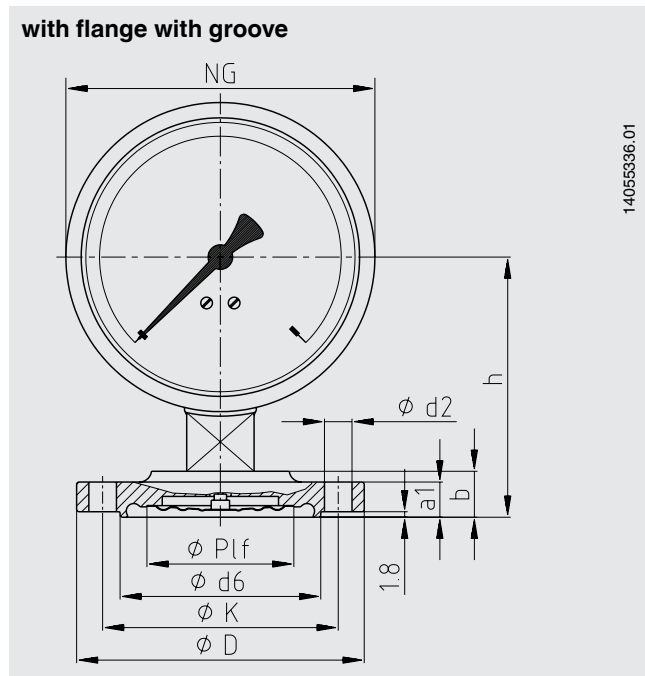
Suitable for installation into the VARINLINE® access unit from GEA Tuchenhagen  
EHEDG conformity only in combination with EPDM O-ring from GEA Tuchenhagen GmbH.

VARIVENT® and VARINLINE® are registered trademarks of the company GEA Tuchenhagen GmbH.



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**Option: Aseptic flange connection DIN 11864-2 form A**



Type of process connection: Aseptic flange connection per DIN 11864-2 form A

Pipe standard: Pipes per DIN 11866 row A or DIN 11850 row 2

DN	For pipe Outer Ø x wall thickness	PN 1) NS	Dimensions in mm											Aseptic O-ring
			h	Ø P1f	d6	d4	K	D	a1	a2	b	d2		
50	53 x 1.5	16	100	85	48	65.6	65.7	77	94	11.5	10	15	4 x Ø 9	52 x 5
			160	115										
65	70 x 2.0	16	100	85	48	81.6	81.7	95	113	11.5	10	15	8 x Ø 9	68 x 5
			160	115										
80	85 x 2.0	16	100	85	48	97.6	97.7	112	133	13.5	12	15	8 x Ø 11	83 x 5
			160	115										

Type of process connection: Aseptic flange connection per DIN 11864-2 form A

Pipe standard: Pipes per DIN 11866 row B or DIN ISO 1127 row 1

DN	For pipe Outer Ø x wall thickness	PN 1) NS	Dimensions in mm											Aseptic O-ring
			h	Ø P1f	d6	d4	K	D	a1	a2	b	d2		
60.3	60.3 x 2.0	16	100	85	48	71.9	72	85	103	11.5	10	15	4 x Ø 9	58 x 5
			160	115										
76.1	76.1 x 2.0	16	100	85	48	88	88.1	104	125	13.5	12	15	8 x Ø 11	73.5 x 5
			160	115										

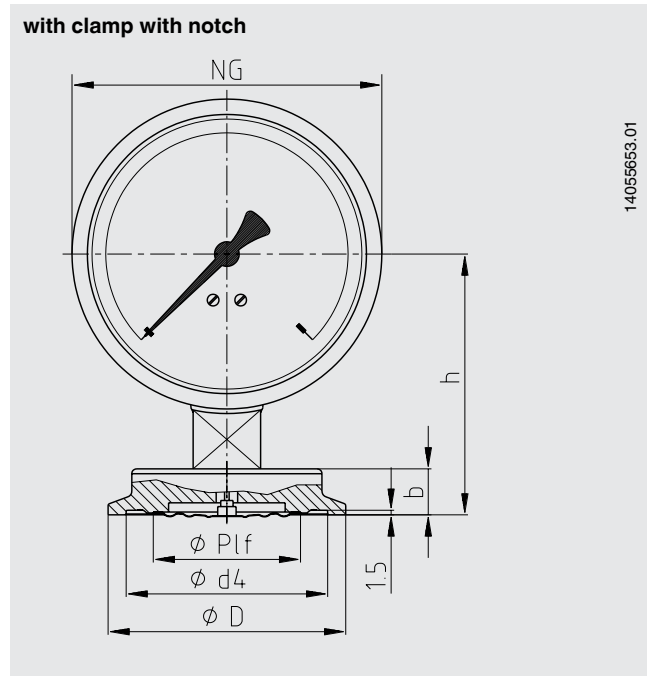
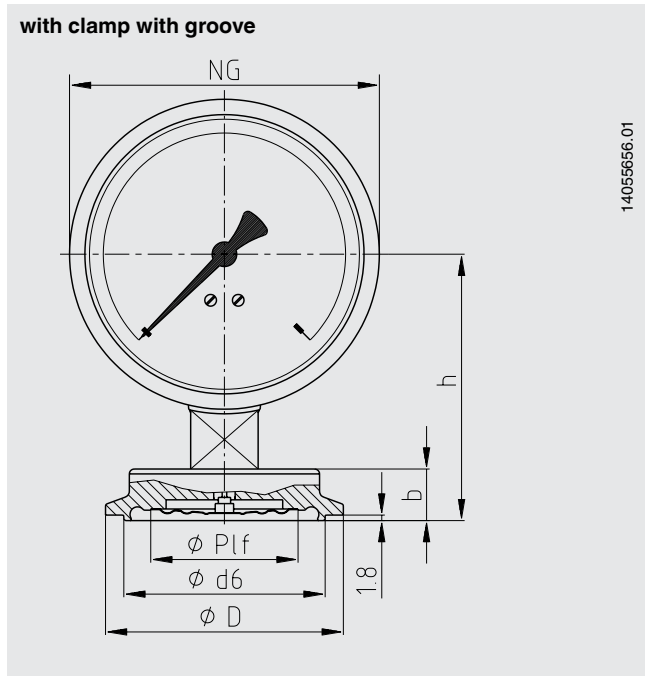
Type of process connection: Aseptic flange connection per DIN 11864-2 form A

Pipe standard: Pipes per DIN 11866 row C or ASME BPE 1997

DN	For pipe Outer Ø x wall thickness	PN 1) NS	Dimensions in mm											Aseptic O-ring
			h	Ø P1f	d6	d4	K	D	a1	a2	b	d2		
2"	50.8 x 1.65	16	100	85	48	63.4	63.5	75	92	11.5	10	15	4 x Ø 9	50 x 5
			160	115										
2 ½"	63.5 x 1.65	16	100	85	48	75.8	75.9	89	107	11.5	10	15	4 x Ø 9	62 x 5
			160	115										
3"	76.2 x 1.65	16	100	85	48	89.5	89.6	104	125	13.5	12	15	8 x Ø 11	75 x 5
			160	115										

1) Permissible pressure in bar; these pressures may only be applied when using suitable sealing materials up to a temperature from -10 to +140 °C.

**Option: Aseptic clamp connection DIN 11864-3 form A**



Type of process connection: Aseptic clamp connection per DIN 11864-3 form A

Pipe standard: Pipes per DIN 11866 row A or DIN 11850 row 2

DN	For pipe Outer $\phi$ x wall thickness	PN 1)	Dimensions in mm							
			NS	h	$\phi P1f$	d6	d4	D	b	Aseptic O- ring
50	53 x 1.5	25	100	85	48	65.6	65.7	77.5	15	52 x 5
			160	115						
65	70 x 2.0	25	100	85	48	81.6	81.7	91	15	68 x 5
			160	115						
80	85 x 2.0	16	100	85	48	97.6	97.7	106	15	83 x 5
			160	115						

Type of process connection: Aseptic clamp connection per DIN 11864-3 form A

Pipe standard: Pipes per DIN 11866 row B or DIN ISO 1127 row 1

DN	For pipe Outer $\phi$ x wall thickness	PN 1)	Dimensions in mm							
			NS	h	$\phi P1f$	d6	d4	D	b	Aseptic O- ring
60.3	60.3 x 2.0	25	100	85	48	71.9	72	91	15	58 x 5
			160	115						
76.1	76.1 x 2.0	16	100	85	48	88	88.1	106	15	73.5 x 5
			160	115						

Type of process connection: Aseptic clamp connection per DIN 11864-3 form A

Pipe standard: Pipes per DIN 11866 row C or ASME BPE 1997

DN	For pipe Outer $\phi$ x wall thickness	PN 1)	Dimensions in mm							
			NS	h	$\phi P1f$	d6	d4	D	b	Aseptic O- ring
2"	50.8 x 1.65	25	100	85	48	63.4	63.5	77.5	15	50 x 5
			160	115						
2 1/2"	63.5 x 1.65	25	100	85	48	75.8	75.9	91	15	62 x 5
			160	115						
3"	76.2 x 1.65	16	100	85	48	89.5	89.6	106	15	75 x 5
			160	115						

1) Permissible pressure in bar; these pressures may only be applied when using suitable sealing materials up to a temperature from -10 to +140 °C.

## Approvals

- **GOST-R**, import certificate, Russia
- **GOST**, metrology, measurement technology, Russia
- **EHEDG**, food, European Community
- **3-A**, food, USA
- **CRN**, safety (e.g. electr. safety, overpressure, ...), Canada
- **KOSHA**, ignition protection type "i" - intrinsic safety, South Korea

## Certificates <sup>1)</sup>

- 2.2 test report per EN 10204 (e.g. state-of-the-art manufacturing, material proof, indication accuracy)
- 3.1 inspection certificate per EN 10204 (e.g. material proof for wetted metallic parts, indication accuracy)

1) Option

Approvals and certificates, see website

## Ordering information

Model / Nominal size / Scale range / Process connection (standard, size) / Options

