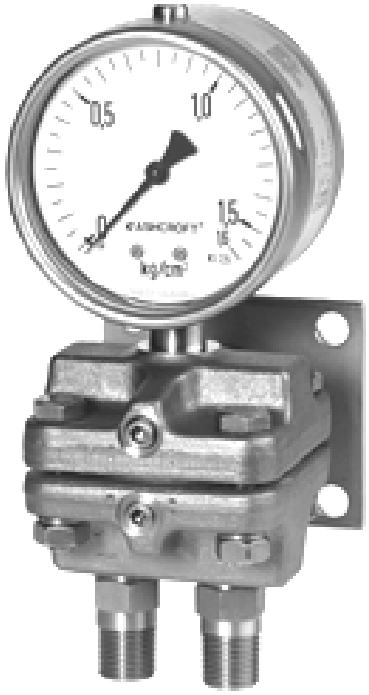
ASHCROFT®

# Stainless steel differential pressure gauge
# Model F5509 and F6509

## Max. static pressure 25 bar

Nominal size 100 mm or 160 mm
Accuracy: Class 2,5 (DIN), optional 1,6%



### Features

- Stainless steel case and wetted parts
- Static pressure 10 bar or 25 bar one side load permitted
- Protection IP54 or IP65
- Chamber purge and bleed connection available
- High corrosive resistance
- Dry or liquid filled
- Optional solid front

### Ranges

0 ... 25 mbar up to 0 ... 250 mbar (max. static pressure 10 bar)
0 ... 400 mbar up to 0 ... 25 bar (max. static pressure 25 bar)

### Applications

Chemical and petrochemical industry
Machine and apparatus construction
Food and beverage industry
Pulp and paper industry

| **Technical specification** | **F5509** | | **F6509** | |
|---|---|---|---|---|
| Dial size [mm] | 100 | 160 | 100 | 160 |
| Construction | Open front cylindrical case with blow out disc at the back | | Solid front safety pattern cylindrical case with blow out at the back | |
| Zero adjustment | Externally, at the top of the case | | | |
| Measuring principle | Diaphragm (see back side) | | | |
| Range [mbar] | 25 40 60 100 160 250 400 | | | |
| [bar] | 0,6 1 1,6 2,5 4 6 10 16 25 | | | |
| max. static pressure | Range < 400 mbar static pressure = 10 bar (10 times F.S. load at one side) | | | |
| | Range ≥ 400 mbar static pressure = 25 bar (10 times F.S. load at one side) | | | |
| Pressure type | Differential | | | |
| Process connection | G ¼ B male, G ¼ female, G ½ B male, G ½ female | | | |
| | ¼" NPT male, ¼" NPT female, ½" NPT male, ½" NPT female, others on request | | | |
| Connection location | Lower | | | |
| Material | | | | |
| Pressure connection | Stainless steel AISI 316Ti (1.4571) | | | |
| Pressure chamber | Stainless steel AISI 316Ti (1.4571), Viton O-ring, Teflon on request | | | |
| Measuring diaphragm | > 1 bar stainless steel AISI 316Ti (1.4571) | | | |
| | ≤ 1 bar Duratherm (NiCrCo alloy) | | | |
| Bellows | Stainless steel AISI 316Ti (1.4571) | | | |
| Case/bayonet ring | Stainless steel AISI 304 (1.4301) | | | |
| Window | Laminated safety glass | | | |
| Dial | Aluminum, black markings on white background | | | |
| Pointer | Aluminum, black, optional red set hand or maximum pointer | | | |
| Movement | Stainless steel AISI 304/AISI 303 (1.4301/1.4305) | | | |
| Accuracy | Class 2,5 (2,5% F.S.), optional class 1,6 (1,6% F.S.) | | | |
| Permissible | | | | |
| Ambient temperature | -25 ... 85°C | | | |
| Medium temperature | max. 100°C | | | |
| Storage temperature | -40 ... 60°C | | | |
| Effect | max. 0,3% / 10 K | | | |
| Protection according EN 60 529/IEC 529 | IP54 (dry), IP65 (liquid filled), optional IP65 for dry gauges | | | |
| Filling liquids | Glycerin, silicone, others on request | | | |
| Mounting | Direct, optional wall or 2" pipe mounting, others on request | | | |
| Weight dry/filled [kg] range | ≤ 400 mbar 9/9,5 | ≤ 400 mbar 9,4/10 | ≤ 400 mbar 9/9,5 | ≤ 400 mbar 9,4/10 |
| | ≥ 600 mbar 4/4,5 | ≥ 600 mbar 4,4/5 | ≥ 600 mbar 4/4,5 | ≥ 600 mbar 4,4/5 |
| Accessories, options | 3 or 5 way manifolds, valves, gauges with contacts (see data sheet G1.K55/D) | | | |





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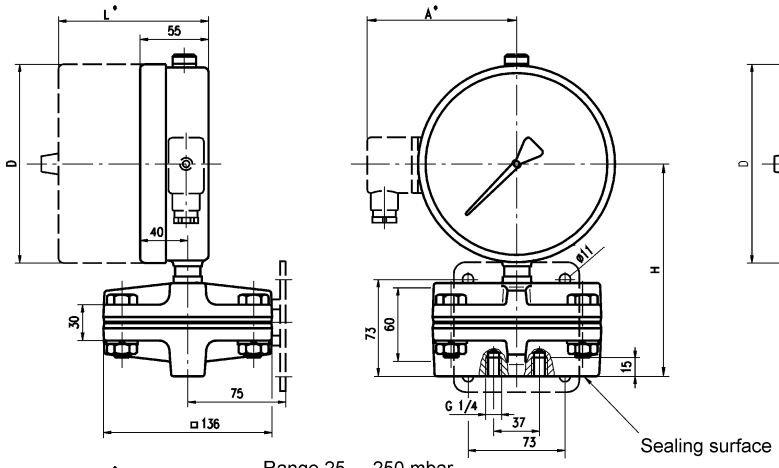
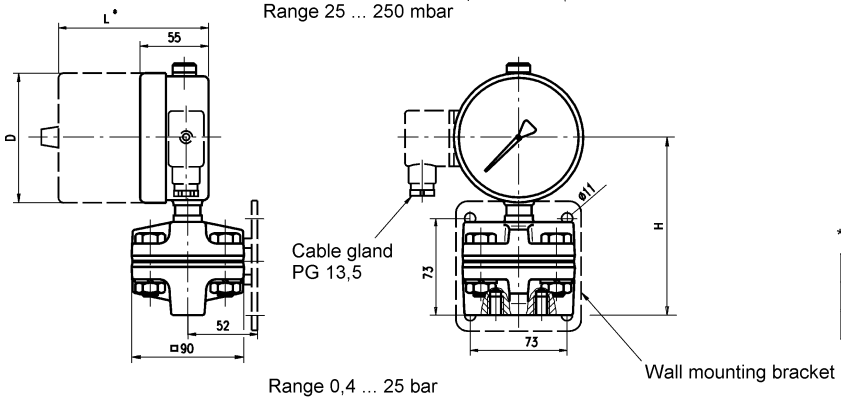
## General dimensions [mm]

**F5509**

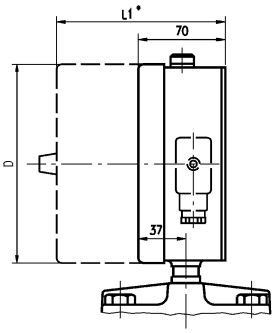


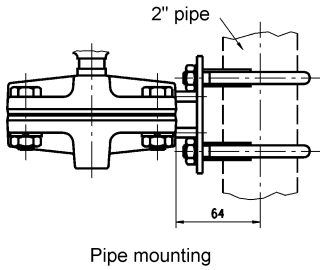

Range 25 ... 250 mbar




Range 0,4 ... 25 bar

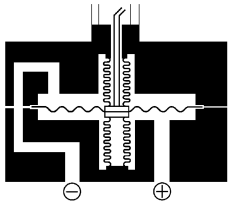
**F6509**




Pipe mounting

Measuring principle




* with integrated contacts

| Dial Size | D | H | A | L | L1 |
|---|---|---|---|---|---|
| 100 | Ø 101 | 140 | 86 | 100 | 116 |
| 160 | Ø 161 | 170 | 120 | 102 | 118 |

Rev.B

## Order information

| Size | Type | System material | Execution | Process connection | Connection orientation | Range | Engineer-in units | Filling/contacts | Options |
|---|---|---|---|---|---|---|---|---|---|
| **(100)** 100 mm<br>**(160)** 160 mm | **F5509**<br>**F6509** | **(S) Pressure compartment** AISI 316Ti (1.4571)<br>**Diaphragm** > 1 bar AISI 316Ti (1.4571), ≤ 1 bar Duratherm<br>**Bellows** AISI 316Ti (1.4571) | **(=)** IP54 standard case<br>**(L)** Liquid filled IP65 | **(27)** G ¼ female<br>**(02)** ¼" NPT male<br>**(04)** ½ " NPT male<br>**(13)** G ¼ B male<br>**(15)** G ½ B male<br>**(25)** ¼" NPT female<br>**(50)** ½ " NPT female<br>**(51)** G ½ female | **(L)** Lower | **0/ 25**<br>**0/ 40**<br>**0/ 60**<br>**0/ 100**<br>**0/ 160**<br>**0/ 250**<br>**0/ 400**<br>**0/ 0,6**<br>**0/ 1**<br>**0 1,6**<br>**0/ 2,5**<br>**0/ 4**<br>**0/ 6**<br>**0/ 10**<br>**0/ 16**<br>**0/ 25**<br>max. static pressure for < 400 mbar 10 bar for ≥ 400 mbar 25 bar | **(MBAR)**<br>**(BAR)**<br>psi and others on request<br>compound ranges on request | **(=)** Standard no filling<br>**(GV)** Silicone<br>**(GR)** Glycerin<br>**( )** Contact type and function (see data sheet G1.K55/E) | **(NH)** Tagging wired<br>**(DA)** Dial marking<br>**(FW)** Wall mounted bracket<br>**(TB)** Purge and vent connection G 1/8<br>**(EP)** Maximum pointer adjustable<br>**(TM)** 2" pipe mounting bracket<br>**(LJ)** Field fillable IP65 (only for execution =) |

## How to order

| Size | Type | System material | Execution | Process connection | Connection orientation | Range | Engineering unit | Filling/contacts | Option |
|---|---|---|---|---|---|---|---|---|---|
| 100 | F5509 | S | S | 27 | L | 0/16 | BAR | = | TM |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