

**Product Information EK****PHARMA**

# Pressure Gauge EK

**Application**

- Hygienic pressure measurement

**Application examples**

- Local display without power supply

**Hygienic design/Process connection**

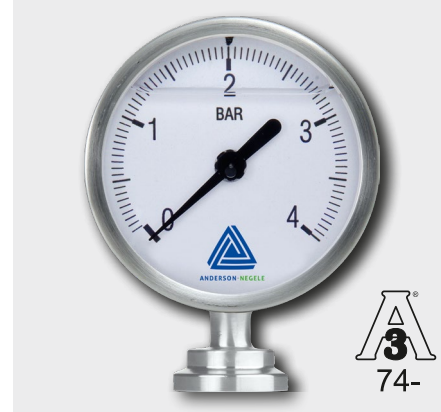
- Versions available to conform to 3-A Standard 74-
- Sensor materials and actuating fill are FDA conform
- Gauges completely made of stainless steel
- Direct connection for 3/4" und 1" Tri-Clamp and Anderson-Negele CPM
- Autoclaveable version with Anderson-Negele CPM fitting
- IP 66, housing for optimized cleanability

**Features**

- CIP-/SIP-cleaning up to 149 °C (300 °F) / maximum 60 minutes
- Zero adjustable
- Surface  $R_a \leq 0.2 \mu\text{m}$  (0.2 microns, 8 micro-inches) is standard

**Options**

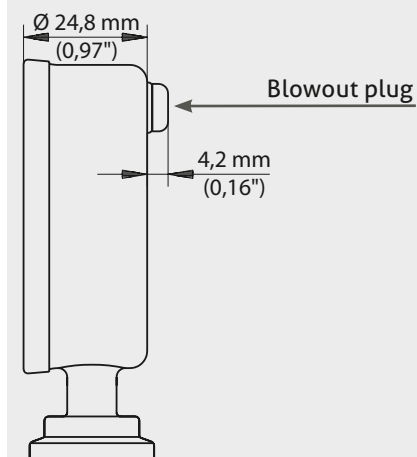
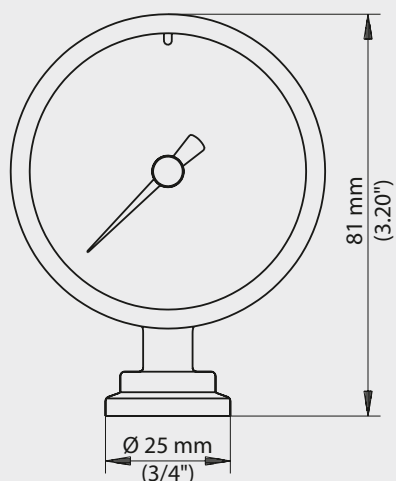
- Case filling with glycerine for damping
- Actuating fill with Neobee® M-20

**EK for 3/4" Tri-Clamp**

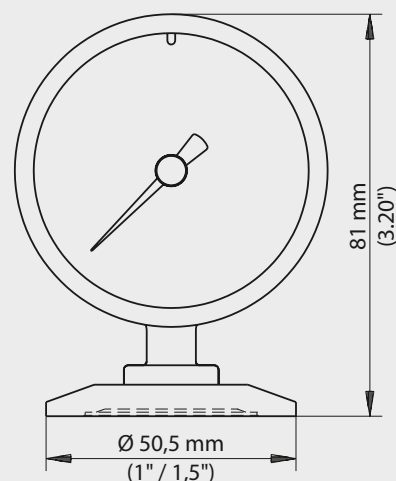
| Specification         |                         |                                                                                                                                                   |
|-----------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Material              | diaphragm               | 1.4404 / AISI 316L<br>$R_a \leq 0.2 \mu\text{m}$ (0.2 microns, 8 micro-inches)                                                                    |
|                       | fitting                 | 1.4404 / AISI 316L                                                                                                                                |
|                       | bourdon tube            | 1.4301 / AISI 304                                                                                                                                 |
|                       | movement                | 1.4301 / AISI 304                                                                                                                                 |
|                       | case                    | 1.4301 / AISI 304                                                                                                                                 |
|                       | lens                    | polycarbonat / Lexan (standard gauge)<br>polysulfone (autoclaveable version)                                                                      |
|                       | case fill               | glycerine (option)                                                                                                                                |
| Actuating fill        | FDA approval number     | medical white oil<br>21 CFR 172.878 and 21 CFR 178.3620(a)                                                                                        |
|                       | option                  | Neobee® M-20<br>Glycerin (100 % USP grade)                                                                                                        |
| Protection class      |                         | IP 66 / NEMA 4X                                                                                                                                   |
| Over-range capability |                         | minimum 25 % of full range                                                                                                                        |
| Accuracy              | measurement             | $\pm 1.5$ % of full scale *                                                                                                                       |
|                       | repeatability           | $\pm 0.5$ % of full scale                                                                                                                         |
|                       | linearity               | $\pm 0.5$ % of full scale                                                                                                                         |
|                       | hysteresis              | $\pm 0.5$ % of full scale                                                                                                                         |
| Temperature           | process                 | -3 °C...140 °C / 25 °F...284 °F<br>autoclaveable at 149 °C / 300 °F for 60 minutes with<br>process connection CPM and unfilled case               |
|                       | CIP/SIP<br>ambient      | 149 °C / 300 °F for maximum 60 minutes<br>4 °C...49 °C / 40 °F...120 °F<br>slower reaction at deep temperatures                                   |
| Temperature effect    |                         | less then 0,035 bar / 0.5 psi per 5.5 °C / 10 °F change in<br>process or ambient temperature                                                      |
| Stability             | from 10...90 % of range | $< \pm 0.01$ %/K of full scale in process or ambient temperature                                                                                  |
| Weight                |                         | 140...390 g (depending on process connection and filling)                                                                                         |
| Standards             |                         | Designed and manufactured to sound engineering practices<br>in accordance with Article 3.3 of the PED 98/23/EC<br>CSA B51-03<br>CRN# CSA0F9754.5C |

\*) from 10...90 % of pressure range

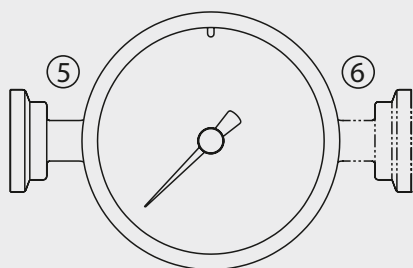
EK for 3/4" Tri-Clamp



EK for 1" resp. 1½" Tri-Clamp



Option connection left (5) / right (6)

**Note on 3-A Sanitary Standard 74-**

Information on installation according to 3-A standard is available on our website:  
[www.anderson-negele.com/3A74.pdf](http://www.anderson-negele.com/3A74.pdf)

Click on the PDF icon to download the document.

## Order code

**EK** mini sanitary pressure gauge, diameter housing 63 mm / 2.48", incl. material certificate

**Measuring range PSI**

|            |               |
|------------|---------------|
| <b>029</b> | 30 "Hg/0...30 |
| <b>031</b> | 30 "Hg/0...60 |
| <b>066</b> | 0...30        |
| <b>069</b> | 0...60        |
| <b>071</b> | 0...100       |
| <b>074</b> | 0...160       |

**Measuring range BAR**

|            |            |
|------------|------------|
| <b>055</b> | -1.0...2.0 |
| <b>056</b> | -1.0...4.0 |
| <b>475</b> | -1.0...6.0 |
| <b>057</b> | 0...2.0    |
| <b>192</b> | 0...4.0    |
| <b>309</b> | 0...7.0    |
| <b>337</b> | 0...11.0   |
| <b>063</b> | 0...15.0   |

**01** Fixed character

**Mount / connection**

|          |       |
|----------|-------|
| <b>1</b> | down  |
| <b>5</b> | left  |
| <b>6</b> | right |

**Process connection (A: 3-A approval)**

|            |                        |
|------------|------------------------|
| <b>002</b> | Tri-Clamp 3/4" A       |
| <b>003</b> | Tri-Clamp 1" A         |
| <b>123</b> | CPM A – autocleaveable |
| <b>161</b> | Mini CPM A             |

**Filling system**

|          |                                                 |
|----------|-------------------------------------------------|
| <b>1</b> | medical white oil                               |
| <b>5</b> | Neobee® M-20 (not available for Tri-Clamp 3/4") |

**Damping / case fill**

|          |                                                                  |
|----------|------------------------------------------------------------------|
| <b>1</b> | without, unfilled case                                           |
| <b>2</b> | glycerine filling,<br>not available for connection "5" and "6"   |
| <b>3</b> | vented crystal/unfilled case,<br>standard with CPM fitting "123" |

**EK 055 01 1 002 1 1**