

Product Information EK

PHARMA

Pressure Gauge EK

Application

- Hygienic pressure measurement

Application examples

- Local display without power supply

Hygienic design/Process connection

- Direct connection for 3/4" und 1" Tri-Clamp and Anderson-Negele CPM
- CIP-/SIP-cleaning up to 149 °C (300 °F) / maximum 60 minutes
- Gauges completely made of stainless steel
- Sensor materials and actuating fill are FDA conform
- IP 66, housing for optimized cleanability
- Conforming to 3-A Sanitary Standard 74-06
- Autoclaveable version with Anderson-Negele CPM fitting

Features

- Complete device is certified by 3-A-SSI
- 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 M20

Authorizations



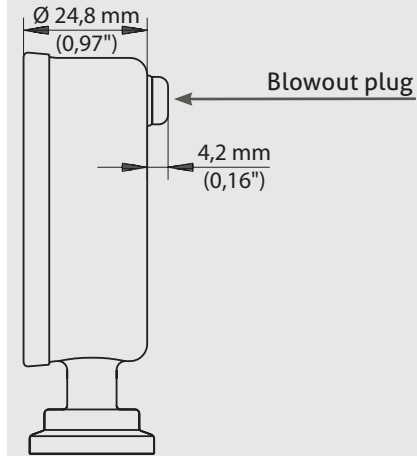
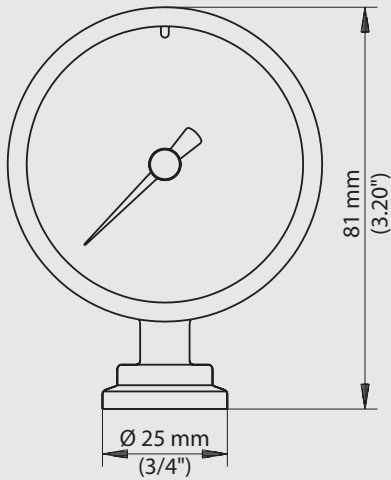
EK for 3/4" Tri-Clamp



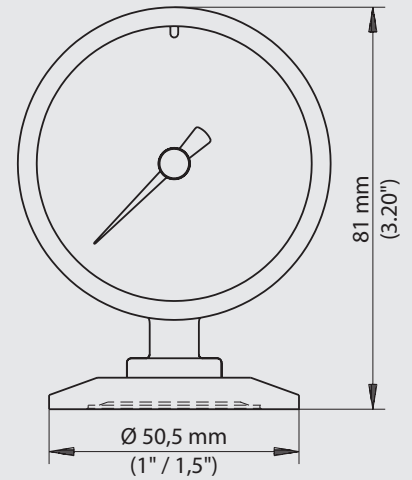
Specification		
Material	diaphragm	1.4404 (316L) $R_a \leq 0.2 \mu\text{m}$ (0.2 microns, 8 micro-inches)
	fitting	1.4404 (316L)
	bourdon tube	1.4301 (304)
	movement	1.4301 (304)
	case	1.4301 (304)
	lens	polycarbonat / Lexan (standard gauge) polysulfone (autoclaveable version)
	case fill	glycerine (option)
Actuating fill	FDA approval number	medical white oil 21 CFR 172.878 and 21 CFR 178.3620(a)
	option	Neobee M20 Glycerin (100 % USP grade)
Protection class		IP 66 / NEMA 4X
Over-range capability		minimum 25 % of full range
Accuracy	measurement	± 1.5 % of full scale *
	repeatability	± 0.5 % of full scale
	linearity	± 0.5 % of full scale
	hysteresis	± 0.5 % of full scale
Temperature	process	-3 °C...140 °C (25 °F...284 °F) autoclaveable at 149 °C (300 °F) for 60 minutes with process connection CPM and unfilled case
	CIP/SIP ambient	149 °C (300 °F) / maximum 60 minutes 4 °C...49 °C (40 °F...120 °F) slower reaction at deep temperatures
Temperature effect		less then 0,035 BAR (0.5 PSI) per 5.5 °C (10 °F) change in 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 prac- tices inaccordance with Article 3.3 of the PED 98/23/EC CSA B51-03 CRN# CSA0F9754.5C

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

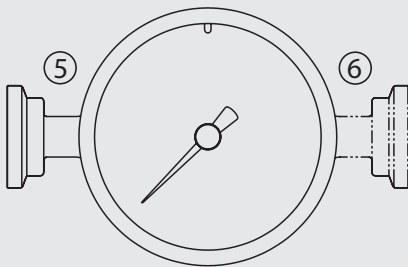
EK for 3/4" Tri-Clamp



EK for 1" resp. 1½" Tri-Clamp



Option connection left (5) / right (6)



Conditions for a measuring point according to 3-A Sanitary Standard 74-06



- The pressure gauges EK conforming to the 3-A Sanitary Standard.
- The sensors are designed for CIP-/ SIP-cleaning. Maximum 149 °C / 60 minutes.
- Only with 3-A conforming process connection.
- Mounting position, self draining and the position of the leakage hole must be in accordance to current 3-A Sanitary Standard.

Order code

EK (mini sanitary pressure gauge, diameter housing 63 mm, incl. material certificate)

Measuring range PSI

029 (30 "Hg/0...30)
031 (30 "Hg/0...60)
066 (0...30)
069 (0...60)
071 (0...100)
074 (0...160)

Measuring range BAR

055 (-1.0...2.0)
056 (-1.0...4.0)
475 (-1.0...6.0)
057 (0...2.0)
192 (0...4.0)
309 (0...7.0)
337 (0...11.0)
063 (0...15.0)

01 Fixed character

Mount / connection

1 (down)
5 (left)
6 (right)

Process connection

002 (Tri-Clamp 3/4")
003 (Tri-Clamp 1")
123 (CPM - autocleaveable)
161 (Mini CPM)

Filling (system)

1 (medical white oil)
5 (Neobee M23)

Damping / case fill

1 (without, unfilled case)
2 (glycerine filling,
 not available for connection "5" and "6")
3 (vented crystal/unfilled case,
 standard with CPM fitting "123")

EK 055 01 1 002 1 1