

CALIBRATION REPORT

CALIBRATION PROPERTIES

Calibrated by: Anders Thorstad Bø

Type/Producer: HKM375-17barA

SN: 8344-11-618

Range: 0-10 bar A

Unit: bar

test

Druck PTX 1830

2867610

0-10 bar a

kPa

CALIBRATION SOURCE PROPERTIES

Type/Producer: DPI 601

SN: 14206/96-1

Uncertainty [%]: 0,01

POLY FIT EQUATION:

$Y = -1.12500852E+0X^0 + 1.71667697E+3X^1$

CALIBRATION SUMMARY:

Max Uncertainty : 0.047552 [%]

Max Uncertainty : 0.000493 [bar]

RSQ : 1.000000

Calibration points : 23

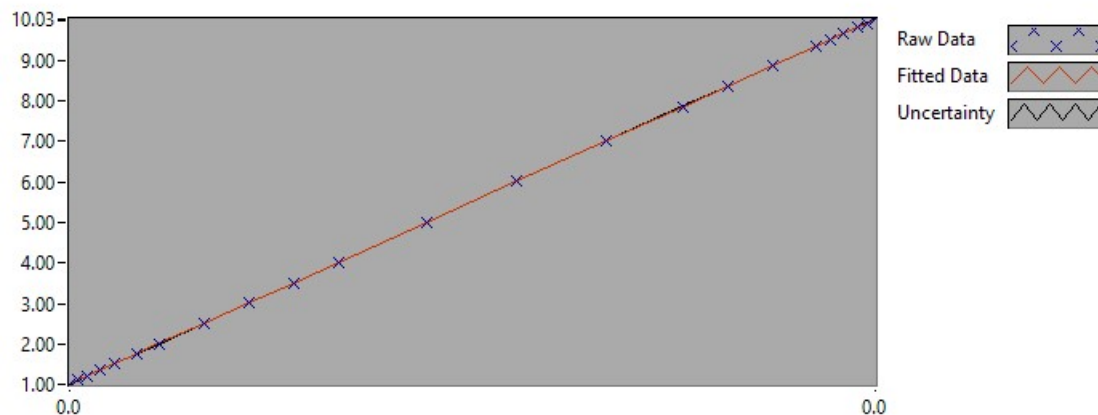


Figure 1 : Calibration chart (The uncertainty band is multiplied by 10)

Anders Thorstad Bø

CALIBRATION VALUES

| Value [bar] | Voltage [V] | Best Poly Fit [bar] | Deviation [bar] | Uncertainty [%] | Uncertainty [bar] |
|-------------|-------------|---------------------|-----------------|-----------------|-------------------|
| 1.007520 | 0.001242 | 1.007829 | -0.000309 | 0.047552 | 0.000479 |
| 1.105668 | 0.001299 | 1.105787 | -0.000119 | 0.042737 | 0.000473 |
| 1.210826 | 0.001361 | 1.211243 | -0.000417 | 0.038440 | 0.000465 |
| 1.355044 | 0.001445 | 1.355288 | -0.000244 | 0.033654 | 0.000456 |
| 1.504269 | 0.001532 | 1.504230 | 0.000039 | 0.029669 | 0.000446 |
| 1.755648 | 0.001678 | 1.756098 | -0.000450 | 0.024520 | 0.000430 |
| 2.012035 | 0.001828 | 2.012575 | -0.000540 | 0.020612 | 0.000415 |
| 2.513792 | 0.002119 | 2.512731 | 0.001061 | 0.015353 | 0.000386 |
| 3.012544 | 0.002410 | 3.011796 | 0.000748 | 0.011945 | 0.000360 |
| 3.512298 | 0.002701 | 3.512115 | 0.000184 | 0.009608 | 0.000337 |
| 4.023069 | 0.002999 | 4.022763 | 0.000306 | 0.007917 | 0.000319 |
| 5.012561 | 0.003575 | 5.012502 | 0.000059 | 0.005936 | 0.000298 |
| 6.014072 | 0.004159 | 6.014100 | -0.000028 | 0.004989 | 0.000300 |
| 7.018587 | 0.004743 | 7.017831 | 0.000756 | 0.004644 | 0.000326 |
| 7.867868 | 0.005239 | 7.867919 | -0.000051 | 0.004613 | 0.000363 |
| 8.367622 | 0.005530 | 8.367839 | -0.000217 | 0.004652 | 0.000389 |
| 8.866374 | 0.005821 | 8.866946 | -0.000572 | 0.004717 | 0.000418 |
| 9.365127 | 0.006111 | 9.365100 | 0.000027 | 0.004800 | 0.000450 |
| 9.521362 | 0.006202 | 9.522055 | -0.000692 | 0.004827 | 0.000460 |
| 9.664578 | 0.006285 | 9.664554 | 0.000025 | 0.004853 | 0.000469 |
| 9.818811 | 0.006375 | 9.818271 | 0.000540 | 0.004882 | 0.000479 |
| 9.925973 | 0.006437 | 9.925946 | 0.000027 | 0.004902 | 0.000487 |
| 10.021116 | 0.006493 | 10.021246 | -0.000130 | 0.004922 | 0.000493 |

COMMENTS:

Test with AI-configuration AI-Bridge
Vex=2.5V (Module can't handle 10V)
Temp = 20.5
Vert H-diff = 0

The uncertainty is calculated with 95% confidence. The uncertainty includes the randomness in the calibrated instrument during the calibration, systematic uncertainty in the instrument or property which the instrument under calibration is compared with (dead weight manometer, calibrated weights etc.), and due to regression analysis to fit the calibration points to a linear calibration equation. The calculated uncertainty can be used as the total systematic uncertainty of the calibrated instrument with the given calibration equation.