



LIST OF CALIBRATION COEFFICIENTS

Customer order:

Revision: A

Print date: 03.05.202

Quality supervisor: tsalat@sylex.sk

Production supervisor: mmucka@sylex.sk

EQUATIONS

PRESSURE EQUATION

$$P = \alpha \cdot \left(\frac{\lambda_{pressure,2} - \lambda_{pressure,ref\ 2}}{\lambda_{pressure,ref\ 2}} - \frac{\lambda_{pressure,1} - \lambda_{pressure,ref\ 1}}{\lambda_{pressure,ref\ 1}} \right)^2 + \beta \cdot \left(\frac{\lambda_{pressure,2} - \lambda_{pressure,ref\ 2}}{\lambda_{pressure,ref\ 2}} - \frac{\lambda_{pressure,1} - \lambda_{pressure,ref\ 1}}{\lambda_{pressure,ref\ 1}} \right) + \gamma$$

STRING EXPRESSION

P[bar]=a*(((lpressure,2-lpressure,ref 2)/lprssure, ref 2)- ((lpressure,1-lpressure,ref 1)/lprssure, ref 1))^2+b*(((lpressure,2-lpressure,ref 2)/lprssure, ref 2)- ((lpressure,1-lpressure,ref 1)/lprssure, ref 1))+g

Measurand	Description
P [bar]	Pressure
$\lambda_{pressure,1}$ [nm] **1	Actual wavelength peak 1
$\lambda_{pressure,2}$ [nm] **1	Actual wavelength peak 2
$\lambda_{pressure,1\ ref}$ [nm]	Reference peak 1 wavelength
$\lambda_{pressure,2\ ref}$ [nm]	Reference peak 2 wavelength
α [bar]	Pressure sensitivity coefficient
β [bar]	Pressure sensitivity coefficient
γ [bar]	Pressure sensitivity coefficient
<i>**1 Measured value during monitoring of the sensor</i>	

CALIBRATION COEFFICIENTS

Nr.	Serial number	Customer code	Product	PRESSURE COEFFICIENTS				
				$\lambda_{pressure,1\ ref}$ [nm]	$\lambda_{pressure,2\ ref}$ [nm]	α [bar]	β [bar]	γ [bar]
1	203645/0001		LLS-01; 1bar; WL: 1542/1544,5nm, LCP-03: 2x 15m, 2x FC/APC, 2x WCP-01	1541,11424	1543,57669	-4272,03803	207,07618	-0,02117