LIST OF CALIBRATION COEFFICIENTS - EXAMPLE

Customer order:		**Revision:**	A	**Print date:**	15.12.2020
Quality supervisor:	tsalat@sylex.sk	**Production supervisor:**	mmucka@sylex.sk		

EQUATIONS

TEMPERATURE EQUATION

$$T = T_{S1}\left(\frac{\lambda_{T,act}-\lambda_{T,ref}}{\lambda_{T,ref}}\right)^3 + T_{S2}\left(\frac{\lambda_{T,act}-\lambda_{T,ref}}{\lambda_{T,ref}}\right)^2 + T_{S3}\left(\frac{\lambda_{T,act}-\lambda_{T,ref}}{\lambda_{T,ref}}\right) + T_{S4}$$

Measurand	Description
T [°C]	Temperature
$\lambda_{T,act}$ [nm] **1	Actual temp. wavelength
$\lambda_{T,ref}$ [nm]	Reference temp. wavelength
T_{S1} [°C]	Temperature sensitivity 1
T_{S2} [°C]	Temperature sensitivity 2
T_{S3} [°C]	Temperature sensitivity 3
T_{S4} [°C]	Temperature sensitivity 4

STRING EXPRESSION

Ts1*((λT,act-λT,ref)/λT,ref)^3+Ts2*((λT,act-λT,ref)/λT,ref)^2+Ts3*((λT,act-λT,ref)/λT,ref)+Ts4

***1 Measured value during monitoring of the sensor*

CALIBRATION COEFFICIENTS

Nr.	Serial number	Customer code	Product	T_{S1} [°C]	T_{S2} [°C]	T_{S3} [°C]	T_{S4} [°C]	$\lambda_{T,ref}$ [nm]
1	197322/0001		STS-04; Range: -50 to +150°C, WL: 1558nm, LCP-01: 0,6mtr SS / 2,5mtr Dyneema, 1x FC/APC	1,05531E+10	-3,32227E+07	1,60646E+05	22,51603856	1558,101696