

# ACI Central Inc.

20 McAulay Court  
Charlottetown, PE C1A 9M7  
Canada

## Detail Information - Revision - Pressure Fitting Design

**CRN:** 0F2097.7980YTN REV2  
**Manufacturer:** Endress & Hauser Conducta Inc.  
**FID/PV:** FID-14878  
**Trademark:** "Endress+Hauser", "EH" stylized in a rectangular shape.  
**Description:** Revision is CRN renewal. Indumax CLS54, CLS54D, Smartec CLD134. Plant locations in Gerlingen, Waldheim, Groß-Umstadt Germany; Suzhou, China & Anaheim, CA.  
**Design code:** ASME B31.1 & B31.3  
**Registration date:** 01/22/2018  
**Expiry date:** 01/12/2028

<b>Pressure Rating</b>	<b>Type</b>	<b>Size</b>	<b>Material</b>
87.2psia(72.5psi)@14F to 302F	Indumax CLS54 & CLD134	2" ASME BPE, ISO2852,  DIN 3276 Ferrule, DN40-125  Varivent, DN50 Dairy fitting  DIN11851	PEEK (non metallic) sensor hd;  1.4435/A479316L/UNS S31603  (Process housing)  Housing can have add. superior  or equiv. properties incl.  SS, Alloy 20, Hastelloy,  Monel, Inconel, Duplex SS,  Super Duplex & Titanium  Monel limited to 100F &  Titan.247F(B31.3);173F(B31.1)

Note: Clamps are not part of registration



345 Carlingview Drive  
Toronto, Ontario M9W 6N9  
Tel: 416 734 3300  
Fax: 416 231 1626  
Toll Free: 1.877.682.8772

[www.tssa.org](http://www.tssa.org)

June 05, 2018

SCOTT ISLIP  
ROUND ENGINEERING INC  
10 SEGWUN RD  
WATERDOWN ON L8B 0K6  
CA

**Service Request Type:** BPV-Fitting Registration  
**Service Request No.:** 2315106  
**Your Reference No.:** R-0761  
**Registered to:** ENDRESS + HAUSER CONDUCTA INC

Dear SCOTT ISLIP,

Technical Standards and Safety Authority (TSSA) is pleased to inform you that your submission has been reviewed and registered as follows:

**CRN No.:** 0F2097.75R2  
**Main Design No.:** Indumax CLS54, CLS54D & Smartec CLD134 (see the attachment to the Statutory Declaration Form for the scope of registration)  
**Expiry Date:** 12-Jan-2028

Please be advised that a valid quality control system must be maintained for the fitting registration to remain valid until the expiry date.

The stamped copy of the approved registration and the invoice are mailed separately. Should you have any questions or require further assistance, please contact a Customer Service Advisor at 1.877.682.TSSA (8772) or e-mail [customerservices@tssa.org](mailto:customerservices@tssa.org). We will be happy to assist you. When contacting TSSA regarding this file, please refer to the Service Request number provided above.

Yours truly,

Mark Valcic P. Eng.  
Engineer Specialist BPV  
Tel.: 416-734-3494  
Fax: 416-231-1626  
Email: [mvalcic@tssa.org](mailto:mvalcic@tssa.org)



**TECHNICAL STANDARDS & SAFETY AUTHORITY**  
 14th Floor, Centre Tower  
 3300 Bloor Street West  
 Toronto, Ontario  
 Canada M8X 2X4

Show facsimile of manufacturer's logo or trademark, as it will appear on the fitting, in the space below

**Endress+Hauser**  
 People for Process Automation



**STATUTORY DECLARATION**  
**Registration of Fittings**

I, MIKE YOUROSKI, QUALITY MANAGER  
(Name and Position, e.g. President, Plant Manager, Chief Engineer)

of ENDRESS+HAUSER CONDUCTA INC.  
(Name of Manufacturer)

Located at 4123 LA PALMA AVE., ANAHEIM, CA, USA, 92807 1-714-577-5600  
(Plant Address) (Telephone No.) (Fax No.)

do solemnly declare that the fittings listed hereunder, which are subject to the **Technical Standards and Safety Act**, Boilers and Pressure Vessels Regulation, comply with all of the requirements of ASME B31.3, ASME B31.1

(Title of recognized North American Standard)

which specifies the dimensions, materials of construction, pressure/temperature ratings, identification marking the fittings and service;

or are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with \_\_\_\_\_ as supported by the attached data which identifies the dimensions, material of construction, pressure/temperature ratings and the basis for such ratings, the marking of the fitting for identification and service.

I further declare that the manufacture of these fittings is controlled by a quality system meeting the requirements of ISO:9001:2008 which has been verified by the following authority, SQS

The items covered by this declaration, for which I seek registration, are category F type fittings. In support of this application, the following information and/or test data are attached as follows:  
DRAWINGS, CALCULATIONS, REPORTS, SCOPE OF CRN

(drawings, calculations, test reports, etc.)

Declared before me at \_\_\_\_\_ in the \_\_\_\_\_ of \_\_\_\_\_

the \_\_\_\_\_ day of \_\_\_\_\_ AD 20\_\_\_\_. See attached acknowledgment

Commissioner for Oaths:

\_\_\_\_\_  
(Printed name)

\_\_\_\_\_  
(Signature)

Michael Youroski

(Signature of Declarer)

**FOR OFFICE USE ONLY**

To the best of my knowledge and belief, the application meets the requirements of the **Technical Standards and Safety Act**, Boilers and Pressure Vessels Regulation, and CSA Standard B51 and is accepted for registration in Category F1

CRN: OF2097.75R2

Registered by: MARK VALCIC, P.ENG.

Dated: JUNE 5, 2018

NOTE: This registration expires on JANUARY 12, 2018

Technical Standards and Safety Authority

Boilers and Pressure Vessels Safety Program

**REGISTERED**

C.R.N. OF2097.75R2

Signed: [Signature]

Date: JUNE 5, 2018

NOTE: SEE THE ATTACHMENT FOR THE SCOPE OF REGISTRATION - Mike June 5/18

# CALIFORNIA ALL- PURPOSE CERTIFICATE OF ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California }

County of Orange }

On September 8, 2017 before me, Laurel Boles  
(Here insert name and title of the officer)

personally appeared Michael Youroski,  
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) ~~(s)~~ (is) are subscribed to the within instrument and acknowledged to me that ~~he~~ she/they executed the same in ~~his~~ her/their authorized capacity(ies), and that by ~~his~~ her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

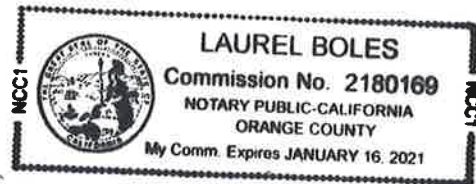
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Notary Public Signature

(Notary Public Seal)



## ADDITIONAL OPTIONAL INFORMATION

### DESCRIPTION OF THE ATTACHED DOCUMENT

TSSA Statutory Declaration

(Title or description of attached document)

Registration of Fittings

(Title or description of attached document continued)

Number of Pages 1 Document Date 09/08/2017

### CAPACITY CLAIMED BY THE SIGNER

- Individual (s)  
 Corporate Officer

(Title)

- Partner(s)  
 Attorney-in-Fact  
 Trustee(s)  
 Other \_\_\_\_\_

## INSTRUCTIONS FOR COMPLETING THIS FORM

*This form complies with current California statutes regarding notary wording and, if needed, should be completed and attached to the document. Acknowledgments from other states may be completed for documents being sent to that state so long as the wording does not require the California notary to violate California notary law.*

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- Date of notarization must be the date that the signer(s) personally appeared which must also be the same date the acknowledgment is completed.
- The notary public must print his or her name as it appears within his or her commission followed by a comma and then your title (notary public).
- Print the name(s) of document signer(s) who personally appear at the time of notarization.
- Indicate the correct singular or plural forms by crossing off incorrect forms (i.e. ~~he/she/they~~, is /are ) or circling the correct forms. Failure to correctly indicate this information may lead to rejection of document recording.
- The notary seal impression must be clear and photographically reproducible. Impression must not cover text or lines. If seal impression smudges, re-seal if a sufficient area permits, otherwise complete a different acknowledgment form.
- Signature of the notary public must match the signature on file with the office of the county clerk.
  - ❖ Additional information is not required but could help to ensure this acknowledgment is not misused or attached to a different document.
  - ❖ Indicate title or type of attached document, number of pages and date.
  - ❖ Indicate the capacity claimed by the signer. If the claimed capacity is a corporate officer, indicate the title (i.e. CEO, CFO, Secretary).
- Securely attach this document to the signed document with a staple.

**ENDRESS+HAUSER CONDUCTA INC.**

4123 LA PALMA AVE.  
ANAHEIM, CA  
92807, USA

08-Dec-17

**SCOPE OF CRN REGISTRATION**

**PRODUCT DESCRIPTION**

Description	Design Standard (Note 3)	End Connections (Note 1)	EH Documents
Indumax CLS54, CLS54D, Smartec CLD134	ASME B31.3, ASME B31.1, ASME BPE, ASME VIII-1 UG-101	2" ASME BPE, ISO2852, DIN 3276 Ferrule, DN40-125 Varivent N, DN50 Dairy Fitting DIN 11851	T100400C/07/EN/13.16, BA00508C/07/EN/03.17, T100401C/07/EN/13.15.

**PRESSURE - TEMPERATURE RATINGS**

MDMT	MAWP AT 302F	Notes
14F	87.2 psia (72.5 psig)	None

**MATERIALS OF CONSTRUCTION**

Process Housing Material (Note 2)	Sensor Head Material	Notes
Stainless Steel 1.4435 TYPE 316L UNS S31603	PEEK (Polyetheretherketone)	Optional process housing materials may be used. See <b>Note 2</b> .

**MANUFACTURING LOCATIONS**

Endress+Hauser Conducta 70839 Gerlingen incl. manufacturing sites 04736 Waldheim and 64823 Gross-Umstadt, Germany	Endress+Hauser Conducta 215021 Suzhou, Endress+Hauser Analytical Instruments Suzhou Co. Ltd. P.R. China
Endress+Hauser Conducta 4123 LA Palma Ave., Anaheim, CA 92807, USA	

**Note 1)** The ASME BPE Ferrule and Varivent connection shall be used with a clamp, however the assembly clamp is not part of this CRN. Pressure-Temperature ratings may be limited by the clamp type used in the joint assembly. The clamp used to complete the joint shall have its own CRN and shall have pressure-temperature ratings the same or higher than the product ratings.

**Note 2)** The following additional alloys of superior or equivalent properties to those listed above are also included in the scope of registration: Type 304 S.Steel UNS S30400, Type 304L S.Steel UNS S30403, Type 316 S.Steel UNS S31600, Type 316L S.Steel UNS S31603, Alloy 20 UNS N08020, Hastelloy C-276 UNS N10276, Hastelloy C22 UNS N06022, Hastelloy B3 UNS N10676, Monel 400 UNS N04400 (Note Monel 400 limited to 100F max.), Inconel 600 UNS N06600, Inconel 625 UNS N06625, Duplex S.Steel UNS S31803, Super Duplex UNS S32750, Super Duplex UNS S32760, Titanium Grade 3 UNS R50550 (Note Titanium limited to 247F max. for ASME B31.1 service and 173F max. for ASME B31.1 Service.)

**Note 3)** In accordance with ASME B31.1 para. 123.1.2(D) when this product is manufactured from a ASME B31.1 unlisted material and used under the ASME B31.1 code the facility owner must accept the use of the unlisted material.





To:	TSSA	From:	Janet Townsend
Company:	Endress+Hauser Conducta Inc.	Phone:	416-747-4291
Pages:	9	Location:	Toronto
Our File:	ANR-5041	Date:	July 23, 2018

Your File: 2336950

**Subject: Request for Design Registration**

Dear Ms. Francis,

CSA has reviewed the documentation submitted by TSSA on behalf of Endress+Hauser Conducta Inc.

These fittings have been registered by CSA for the Province of Québec. In accordance with an agreement between CSA, the Provinces of Québec and Saskatchewan; this registration is recognized by Quebec and Saskatchewan. These fittings are acceptable for use in these Provinces.

The letters CSA will be applied as a prefix to the CRN indicate which fittings have been registered in this manner. A copy of the stamped Statutory Declaration is attached.

The CRN is CSA-0F2097.76R2.

A copy of the Statutory Declaration with an original stamp affixed will be forwarded to you along with our invoice by regular mail.


Yours truly

A handwritten signature in blue ink that reads 'Janet Townsend'.

**Janet Townsend**  
Program Manager  
CSA Group

178 Rexdale Blvd.  
Toronto, ON, M9W 1R3  
Canada  
[www.csagroup.org](http://www.csagroup.org)

# Statutory Declaration Registration of Fittings

REGISTERED 

CRN: CSA-OF2097.76 R2

Registration Process administered by  
CSA Group per CSA B51

### (a) Design Qualification

I, MIKE YOUROSKI

(Name of applicant)

QUALITY MANAGER

(Position eg, president, plant manager, chief eng.)

of ENDRESS+HAUSER CONDUCTA INC.

(name of company)

Located at 4123 LA PALMA AVE., ANAHEIM, CA, USA, 92807

(plant address)

do solemnly declare that the fittings listed hereunder, which are subject to the Boilers & Pressure Vessels Act:

comply with all the requirements of the ANSI/ASME codes as to their dimensions, material, identification & service for which are required:

Or

are not covered by the provisions of the ANSI/ASME codes, and are therefore constructed to comply with \_\_\_\_\_ code and standard, and are designed to the best current engineering practice, as shown by the supporting test data.

### (b) Quality control of Manufacture

I further declare the manufacture of these fittings is controlled by a quality control program which complies with the requirements of ISO 9001: 2008, and has been verified by the following authority or authorized agency SQS

The fittings<sup>2</sup> covered by this declaration, for which I seek registration, are CATEGORY F

In support of the application, the following information, calculations and/or test data are attached:

DRAWINGS, CALCULATIONS, REPORTS, SCOPE OF CRN

Declared before me at \_\_\_\_\_

In the of \_\_\_\_\_ of \_\_\_\_\_

The \_\_\_\_\_ day of \_\_\_\_\_ AD 2 0 0

A (commissioner for oaths)

*See attached acknowledgment*

*Michael Youroski*  
(Signature of Declarer)

### For Official Use Only

The application is accepted for registration in Category \_\_\_\_\_ in accordance with the Boilers and Pressure Vessels Act and CSA Standard B51.

This registration must be revalidated after ten (10) years from the date of acceptance. Jan. 12. 2028

Registered Number CRN CSA-OF2097.76 R2

For the Chief Inspector  
Date



A. BANWATT  
July .12. 2018

<sup>1</sup> Three completed copies of Statutory Declaration form together with three copies of Catalogs, drawings of Bulletins illustrating above fittings shall be submitted.

<sup>2</sup> All fittings are required to be registered in the name of the Manufacturer.

<sup>3</sup> This form shall be completed and signed by the president of highest official in the manufacturing plan where the fitting is produced.

1. See attachment as the scope of registration.
2. Renewal registration without construction material, design specification or pressure rating change.
3. Technical review performed in the previous registration.



# CALIFORNIA ALL- PURPOSE CERTIFICATE OF ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California }

County of Orange }

On September 8, 2017 before me, Laurel Boles,  
(Here insert name and title of the officer)

personally appeared Michael Youroski,  
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) ~~(is)~~ are subscribed to the within instrument and acknowledged to me that ~~he~~ she/they executed the same in ~~(his)~~ her/their authorized capacity(ies), and that by ~~(his)~~ her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

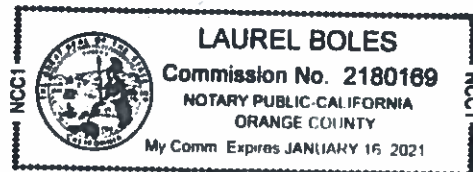
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

*Laurel Boles*

Notary Public Signature

(Notary Public Seal)



## ADDITIONAL OPTIONAL INFORMATION

### DESCRIPTION OF THE ATTACHED DOCUMENT

Quebec Statutory Declaration

(Title or description of attached document)

Registration of Fittings

(Title or description of attached document continued)

Number of Pages 1 Document Date 09/08/2017

### CAPACITY CLAIMED BY THE SIGNER

- Individual (s)  
 Corporate Officer

\_\_\_\_\_  
(Title)

- Partner(s)  
 Attorney-in-Fact  
 Trustee(s)  
 Other \_\_\_\_\_

## INSTRUCTIONS FOR COMPLETING THIS FORM

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- The notary public must print his or her name as it appears within his or her commission followed by a comma and then your title (notary public).
- Print the name(s) of document signer(s) who personally appear at the time of notarization.
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  - ❖ Indicate title or type of attached document, number of pages and date.
  - ❖ Indicate the capacity claimed by the signer. If the claimed capacity is a corporate officer, indicate the title (i.e. CEO, CFO, Secretary).
- Securely attach this document to the signed document with a staple.





# Technical Safety Authority of Saskatchewan

REGISTERED



CRN: CSA-0F2097.76R2

Registration Process administered by CSA Group per CSA B51

2202 2nd Ave.  
Regina, SK S4R 1K3  
PH: (306)798-7112 Toll Free: (866)530-8599  
FAX: (306)787-9273 Toll Free: (866)760-9255  
Email: [boilerpermits@tsask.ca](mailto:boilerpermits@tsask.ca)  
Website: [www.tsask.ca](http://www.tsask.ca)

## Statutory Declaration (Registration of Fittings)

TSK-1008

### I. Declaration Information

I, MIKE YOUROSKI

QUALITY MANAGER

(company title, e.g. vice president, plant manager, chief engineer)  
(must be in a position of authority in the manufacturing plant where the fitting is produced)

of: ENDRESS+HAUSER CONDUCTA INC.  
(name of manufacturer)

In this space, show facsimile of manufacturer's logo or trademark as it will appear on the fitting.



located at: 4123 LA PALMA AVE. ANAHEIM, CA 92807, USA  
(Plant Address - Apt/Street) (City, Prov) (Postal Code)

do solemnly declare that the fittings listed hereinunder, which are subject to the **Saskatchewan Boiler and Pressure Vessel Safety Act** (check one)

- Comply with the requirements of ASME B31.1, B31.3 which specifies the dimensions, (title of recognized North American Standard) Materials of construction, pressure / temperature ratings and identification marking of the fittings, or
- Are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with \_\_\_\_\_ as supported by the attached data which identifies the dimensions, materials of construction, pressure / temperature ratings and the basis for such ratings, and the marking of the fittings for identification.

I further declare that the manufacturer of these fittings is controlled by a quality control program which has been verified by the following authority, ISO 9001:2008 SQS as being suitable for the manufacturer of these fittings to the stated standard. The fittings covered by this declaration, for which I seek registration, are CATEGORY F

In support of this application, the following information, calculations and / or test data are attached:

DRAWINGS, CALCULATIONS, REPORTS, SCOPE OF CRN

date

### II. Declaration

DECLARED before me at \_\_\_\_\_ In the \_\_\_\_\_ of \_\_\_\_\_  
this \_\_\_\_\_ day of \_\_\_\_\_

Michael Youroski  
(print name)

Michael Youroski  
(Signature)

See attached acknowledgment  
(Signature of Commissioner of Oaths)

### III. Office Use Only

To the best of my knowledge and belief, the application meets the requirements of the **Boiler and Pressure Vessel Safety Act** and CSA B51, Clause 4.2, and is accepted for registration in Category \_\_\_\_\_

CSA-0F2097.76R2  
(Registration Number)

July .12.2018  
(Date Registered - MM DD YYYY)  
(For the Administrator / CSA Inspector)

Jan .12.2020  
(Expiry Date - MM DD YYYY)  
A. BANWATT

\*Note:

1. See attachment as the scope of registration.
2. Renewal registration without construction material, design specification or pressure rating change.
3. Technical review performed in the previous registration.



TSK-1008  
Rev. 10/2012  
Page 1 of 1

# CALIFORNIA ALL- PURPOSE CERTIFICATE OF ACKNOWLEDGMENT

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State of California }

County of Orange }

On September 8, 2017 before me, Laurel Boles,  
(Here insert name and title of the officer)

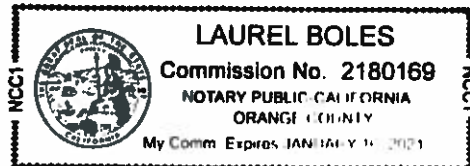
personally appeared Michael Youroski,  
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) ~~(is)~~ are subscribed to the within instrument and acknowledged to me that ~~he~~ she/they executed the same in ~~his~~ her/their authorized capacity(ies), and that by ~~his~~ her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Laurel Boles  
Notary Public Signature

(Notary Public Seal)



## ADDITIONAL OPTIONAL INFORMATION

**DESCRIPTION OF THE ATTACHED DOCUMENT**

Saskatchewan Statutory Declaration  
(Title or description of attached document)

Registration of Fittings  
(Title or description of attached document continued)

Number of Pages 1 Document Date 09/08/2017

**CAPACITY CLAIMED BY THE SIGNER**

Individual (s)  
 Corporate Officer

\_\_\_\_\_ (Title)

Partner(s)  
 Attorney-in-Fact  
 Trustee(s)  
 Other \_\_\_\_\_


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- Securely attach this document to the signed document with a staple.

**ENDRESS+HAUSER CONDUCTA INC.**  
 4123 LA PALMA AVE.  
 ANAHEIM, CA  
 92807, USA

08-Dec-17



1 of 1

ATTACHMENT TO

C.R.N. CSA-0F2097.76R2

Signed: [Signature]

128 Bowdoin Boulevard, Toronto, ON, Canada M5W 1B3

SCOPE OF CRN REGISTRATION

PRODUCT DESCRIPTION	Design Standard (Note 3)	End Connections (Note 1)	EH Documents
Indumax CLS54, CLS54D, Smartec CLD134	ASME B31.3, ASME B31.1, ASME BPE, ASME VIII-1 UG-101	2" ASME BPE, ISO2852, DIN 3276 Ferrule, DN40-125 Varivent N, DN50 Dairy Fitting DIN 11851	T100400C/07/EN/13.16, BA00508C/07/EN/03.17, T100401C/07/EN/13.15.

**PRESSURE - TEMPERATURE RATINGS**

MDMT	MAWP AT 302F	Notes
14F	87.2 psia (72.5 psig)	None

**MATERIALS OF CONSTRUCTION**

Process Housing Material (Note 2)	Sensor Head Material	Notes
Stainless Steel 1.4435 TYPE 316L UNS S31603	PEEK (Polyetheretherketone)	Optional process housing materials may be used. See Note 2.

**MANUFACTURING LOCATIONS**

Endress+Hauser Conducta 70839 Gerlingen incl. manufacturing sites 04736 Waldheim and 64823 Gross-Umstadt, Germany	Endress+Hauser Conducta 215021 Suzhou, Endress+Hauser Analytical Instruments Suzhou Co. Ltd. P.R. China
Endress+Hauser Conducta 4123 LA Palma Ave., Anaheim, CA 92807, USA	

**Note 1)** The ASME BPE Ferrule and Varivent connection shall be used with a clamp, however the assembly clamp is not part of this CRN. Pressure-Temperature ratings may be limited by the clamp type used in the joint assembly. The clamp used to complete the joint shall have its own CRN and shall have pressure-temperature ratings the same or higher than the product ratings.

**Note 2)** The following additional alloys of superior or equivalent properties to those listed above are also included in the scope of registration: Type 304 S.Steel UNS S30400, Type 304L S.Steel UNS S30403, Type 316 S.Steel UNS S31600, Type 316L S.Steel UNS S31603, Alloy 20 UNS N08020, Hastelloy C-276 UNS N10276, Hastelloy C22 UNS N06022, Hastelloy B3 UNS N10676, Monel 400 UNS N04400 (Note Monel 400 limited to 100F max.), Inconel 600 UNS N06600, Inconel 625 UNS N06625, Inconel 825 UNS N08825, Duplex S.Steel UNS S32750, Super Duplex UNS S32750, Super Duplex UNS S32760, Titanium Grade 3 UNS R50550 (Note Titanium limited to 247F max. for ASME B31.1 Service.)

**Note 3)** In accordance with ASME B31.1 para. 123.1.2(D) when this product is manufactured from a ASME B31.1 unlisted material and used under the ASME B31.1 code the facility owner must accept the use of the unlisted material.

CRN 0109775R2

PART OF  
 ASME B31.1  
 CRN 0109775R2  
 Safety Authority  
 Technical Standards & Safety Vessels  
 Boilers & Pressure Program  
 Safety Program

[Signature]  
 5/10



# Certificate

SQS herewith certifies that the company named below has a management system which meets the requirements of the standards specified below.



**Endress+Hauser Conducta GmbH & Co. KG**

Dieselstrasse 24  
70839 Gerlingen  
Germany

Scope of certification

According to appendix

Field of activity

Research and development, manufacturing and sales of measurement technology for liquid analysis

Normative basis

ISO 9001:2015	Quality Management System
ISO 14001:2015	Environmental Management System
OHSAS 18001:2007	Occupational Health and Safety Management System

Scope(s) 18, 19

Validity 01.04.2017 – 31.03.2020  
Issue 01.04.2017

Reg. no. 10705

  
X. Edelmann, President SQS

  
R. Glauser, CEO SQS



Swiss Association for Quality and Management Systems SQS  
Bernstrasse 103, 3052 Zollikofen, Switzerland





## Endress+Hauser Conducta GmbH & Co. KG

Dieselstrasse 24  
70839 Gerlingen  
Germany

Central Function	Field of activity	Scope(s)	Norm / Revision	Reg. no.	Validity
Endress+Hauser Conducta GmbH & Co. KG Dieselstrasse 24 / Postfach 100 154 70839 Gerlingen Germany	Research and development, manufacturing and sales of measurement technology for liquid analysis	18, 19	ISO 9001:2015 ISO 14001:2015 OHSAS 18001:2007	10705	01.04.2017 31.03.2020

Locations	Field of activity	Scope(s)	Norm / Revision	Reg. no.	Validity
Endress+Hauser Conducta GmbH & Co. KG Siemensstraße 2 64823 Groß-Umstadt Germany	Research and development, manufacturing and sales of measurement technology for liquid analysis	18, 19	ISO 9001:2015 ISO 14001:2015 OHSAS 18001:2007	10705	01.04.2017 31.03.2020
Endress+Hauser Conducta Waldheim Gewerbegebiet Richzenhain Landberger Straße 28 04736 Waldheim Germany	Research and development, manufacturing and sales of measurement technology for liquid analysis	18, 19	ISO 9001:2015 ISO 14001:2015 OHSAS 18001:2007	10705	01.04.2017 31.03.2020
Endress+Hauser Conducta, Inc. 4123 East La Palma Ave, Suite 200 Anaheim, CA 92807 United States of America	Research and development, manufacturing and sales of measurement technology for liquid analysis	18, 19	ISO 9001:2015 ISO 14001:2015 OHSAS 18001:2007	10705	01.04.2017 31.03.2020
Endress+Hauser Analytical Instruments (Suzhou) Co., Ltd. 491 Su-Hong-Zhong-Lu China-Singapore Industrial Park Suzhou, Jiangsu Province China	Research and development, manufacturing and sales of measurement technology for liquid analysis	18, 19	ISO 9001:2015 ISO 14001:2015 OHSAS 18001:2007	10705	01.04.2017 31.03.2020

X. Edelmann, President SQS

R. Glauser, CEO SQS



Swiss Association for Quality and Management Systems SQS  
Bernstrasse 103, 3052 Zollikofen, Swiss



178 Rexdale Blvd.  
Toronto, Ontario  
Canada M9W 1R3  
Tel: (416) 747-4000  
[www.csagroup.org](http://www.csagroup.org)



March 2017

## **CRN – Canadian Registration Numbers - Saskatchewan**

The Province of Saskatchewan participates with Quebec and the Canadian Standards Association (CSA Group) for the registrations of “Fittings”.

Per an agreement with CSA Group in April 1998, Saskatchewan recognizes registrations done by CSA Group and accepts such fittings for use in Saskatchewan.

The letters “CSA” are applied as a prefix to the CRN to indicate which “Fittings” have been registered in this manner. You should inform your clients of this additional marking requirement and that “Fittings” registered by CSA Group are accepted for use in Saskatchewan Canada.



345 Carlingview Drive  
Toronto, Ontario  
CANADA M9W 6N9  
Tel.: 416.734.3300  
Fax.: 416.231.1626  
Toll Free: 1.877.682.8772  
[www.tssa.org](http://www.tssa.org)

August 02, 2018

SCOTT ISLIP  
ROUND ENGINEERING INC  
10 SEGWUN RD  
WATERDOWN ON L8B 0K6  
CA

Service Request Type.: BPV-National BC  
Service Request No.: 2336946  
Your Reference No.: R-0761  
Registered to.: ENDRESS + HAUSER CONDUCTA INC

Dear SCOTT ISLIP,

Please find enclosed the original response from BC, registered under the CRN No.: 0F2097.751.

As all jurisdictional fees are handled by the Technical Standards and Safety Authority (TSSA), you do not pay any jurisdictions directly.

Should you have any questions or require further assistance, I will be happy to assist you.  
For general enquiries, please contact a Customer Service Advisor at 1.877.682.TSSA (8772) or e-mail [customerservices@tssa.org](mailto:customerservices@tssa.org). When contacting TSSA regarding this file, please refer to the Service Request number provided above.

Yours truly,

Tanya Francis  
Administrative Assistant\_ BPV Engineering  
Tel.: 416-734-3423  
Fax: 416-231-6183  
Email :[tfrancis@tssa.org](mailto:tfrancis@tssa.org)

---

TECHNICAL STANDARDS & SAFETY AUTHORITY  
345 CARLINGVIEW DRIVE  
TORONTO ON M9W 6N9

**Date:** July 13, 2018  
**Account #:** 35231  
**Journal #:** 71021

**Attn:** TANYA FRANCIS

**Re:** Application for Design Registration

The design, as detailed in your, TSSA SR# 2336946, for a Fitting is accepted for registration as follows:

**Registered To:** ENDRESS + HAUSER CONDUCTA CRN: 0F2097.751  
INC

**MDMT:** 14 deg F

**MAWT:** 302 deg F

**MAWP:** 72.5 psig

**Drawing #:** Report EH-CRN-26

**Conditions Of Registration:**

Registration of Indumax CLS54, CLS54D, Smartec CLD134 sensors as per att'd scope of registration sheet.

This design was registered based on a technical review performed by the province of initial registration in accordance with the Association of Chief Inspectors policy on reciprocal recognition of design review.

**Reviewer's Notes:**

As required by CSA B51 4.2.1, this registration expires on January 12, 2028. This CRN is valid until the expiry date as long as the Manufacturer maintains a valid quality control program verified by an acceptable third-party agency until that date. Should the certification of the quality control program lapse before the expiry date, this registration shall become void.

Contact me if you have any questions. The invoice for registration will be forwarded under separate cover.

SHARON PETERS

boiler.designregistration@technicalsaftybc.ca  
Design Administration

**cc:**



**ENDRESS+HAUSER CONDUCTA INC.**  
 4123 LA PALMA AVE.  
 ANAHEIM, CA  
 92807, USA

08-Dec-17

**SCOPE OF CRN REGISTRATION**

**PRODUCT DESCRIPTION**

Description	Design Standard (Note 3)	End Connections (Note 1)	EH Documents
Indumax CLS54, CLS54D, Smartec CLD134	ASME B31.3, ASME B31.1, ASME BPE, ASME VIII-1 UG-101	2" ASME BPE, ISO2852, DIN 3276 Ferrule, DN40-125 Varivent N, DN50 Dairy Fitting DIN 11851	TI00400C/07/EN/13.16, BA00508C/07/EN/03.17, TI00401C/07/EN/13.15.

**PRESSURE - TEMPERATURE RATINGS**

MDMT	MAWP AT 302F	Notes
14F	87.2 psia (72.5 psig)	None

**MATERIALS OF CONSTRUCTION**

Process Housing Material (Note 2)	Sensor Head Material	Notes
Stainless Steel 1.4435 TYPE 316L UNS S31603	PEEK (Polyetheretherketone)	Optional process housing materials may be used. See Note 2.

**MANUFACTURING LOCATIONS**

Endress+Hauser Conducta 70839 Gerlingen incl. manufacturing sites 04736 Waldheim and 64823 Gross-Umstadt, Germany	Endress+Hauser Conducta 215021 Suzhou, Endress+Hauser Analytical Instruments Suzhou Co. Ltd. P.R. China
Endress+Hauser Conducta 4123 LA Palma Ave., Anaheim, CA 92807, USA	



CRN #: 0F2097.751  
 Date: JULY 3, 2018  
 BC J#: 71021

**Note 1)** The ASME BPE Ferrule and Varivent connection shall be used with a clamp, however the assembly clamp is not part of this CRN. Pressure-Temperature ratings may be limited by the clamp type used in the joint assembly. The clamp used to complete the joint shall have its own CRN and shall have pressure-temperature ratings the same or higher than the product ratings.

**Note 2)** The following additional alloys of superior or equivalent properties to those listed above are also included in the scope of registration: Type 304 S.Steel UNS S30400, Type 304L S.Steel UNS S30403, Type 316 S.Steel UNS S31600, Type 316L S.Steel UNS S31603, Alloy 20 UNS N08020, Hastelloy C-276 UNS N10276, Hastelloy C22 UNS N06022, Hastelloy B3 UNS N10676, Monel 400 UNS N04400 (Note Monel 400 limited to 100F max.), Inconel 600 UNS N06600, Inconel 625 UNS N06625, Inconel 825 UNS N08825, Duplex S.Steel UNS S32750, Super Duplex UNS S32750, Super Duplex UNS S32760, Titanium Grade 3 UNS R50550 (Note Titanium limited to 247F max. for ASME B31.1 service and 173F max. for ASME B31.1 Service.)

**Note 3)** In accordance with ASME B31.1 para. 123.1.2(D) when this product is manufactured from a ASME B31.1 unlisted material used under the ASME B31.1 code the facility owner must accept the use of the unlisted material.

**THIS IS PART OF**  
**CRN 0F2097.751**  
 and  
 Technical Standards & Safety Authority  
 Boilers & Pressure Vessels  
 Safety Program  
*John June 5/18*



345 Carlingview Drive  
Toronto, Ontario  
CANADA M9W 6N9  
Tel.: 416.734.3300  
Fax.: 416.231.1626  
Toll Free: 1.877.682.8772  
[www.tssa.org](http://www.tssa.org)

August 16, 2018

SCOTT ISLIP  
ROUND ENGINEERING INC  
10 SEGWUN RD  
WATERDOWN ON L8B 0K6  
CA

Service Request Type.: BPV-National AB  
Service Request No.: 2336942  
Your Reference No.: R-0761  
Registered to.: ENDRESS + HAUSER CONDUCTA INC

Dear SCOTT ISLIP,

Please find enclosed the original response from AB, registered under the CRN No.: 0F02097.72.

As all jurisdictional fees are handled by the Technical Standards and Safety Authority (TSSA), you do not pay any jurisdictions directly.

Should you have any questions or require further assistance, I will be happy to assist you. For general enquiries, please contact a Customer Service Advisor at 1.877.682.TSSA (8772) or e-mail [customerservices@tssa.org](mailto:customerservices@tssa.org). When contacting TSSA regarding this file, please refer to the Service Request number provided above.

Yours truly,

Tanya Francis  
Administrative Assistant\_ BPV Engineering  
Tel. : 416-734-3423  
Fax : 416-231-6183  
Email : [tfrancis@tssa.org](mailto:tfrancis@tssa.org)



the pressure equipment safety authority

9410 - 20 Ave N.W.  
Edmonton, Alberta, Canada T6N 0A4  
Tel: (780) 437-9100 / Fax: (780) 437-7787

August 07, 2018

**Attention:** Tanya Francis  
TECHNICAL STANDARDS & SAFETY AUTHORITY  
345 CARLINGVIEW DRIVE  
TORONTO, ON M9W 6N9

**Email:** tfrancis@tssa.org

The design submission, tracking number 2018-04258, originally received on June 29, 2018 was surveyed and accepted for registration as follows:

**CRN :** 0F02097.72

**Accepted on:** August 07, 2018

**Reg Type:** ADDITION TO ACC. FITTING

**Expiry Date:** January 12, 2028

**Drawing No. :** SEE SCOPE, CRN RENEWAL As Noted

**Fitting type:** SENSORS

Design registered in the name of : ENDRESS + HAUSER CONDUCTA INC

**The registration is conditional on your compliance with the following notes:**

*As indicated on AB-41 Statutory Declaration form and submitted documentation, the code of construction are ASME B31.3 and ASME B31.1.*

- *This registration is valid only for fittings fabricated at the location(s) covered by the QC certificate attached to the accepted AB-41 Statutory Declaration form.*
- *This registration is valid only until the indicated expiry date and only if the Manufacturer maintains a valid quality management system approved by an acceptable third-party agency until that date.*
- *Should the approval of the quality management system lapse before the expiry date indicated above, this registration shall become void.*

*From the range of alternative materials under Note (2) in the scope CRN covers only materials that comply with code mandatory requirement UG-101 (d)(1)(-b)(-2)(+a)(+b)(+c).*

An invoice covering survey and registration fees will be forwarded from our Revenue Accounts.

Enclosed are stamped prints for your reference.

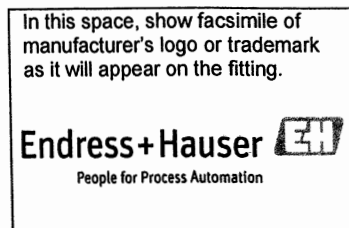
If you have any question don't hesitate to contact me by phone at (780) 433-0281 ext 3330 or fax (780) 437-7787 or e-mail grynchuk@absa.ca.

Sincerely,

GRYNCHUK, MILLA, P. Eng.  
DOP Cert. No. D00005217

STATUTORY DECLARATION Registration of Fittings

I, MIKE YOUROSKI, QUALITY MANAGER (name of applicant) (position title) of ENDRESS+HAUSER (name of manufacturer) located at SEE ATTACHED WORLDWIDE LOCATIONS APPENDIX (plant address)



do solemnly declare that the fittings listed hereunder, which are subject to the Safety Codes Act (check one)

[X] comply with the requirements of ASME B31.3, ASME B31.1 which specifies the dimensions, (title of recognized North American Standard)

materials of construction, pressure/temperature ratings and identification marking of the fittings, or [ ] are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with as supported by the attached (title of code of construction or other applicable document) data which identifies the dimensions, materials of construction, pressure/temperature ratings and the basis for such ratings, and the marking of the fittings for identification.

I further declare that the manufacture of these fittings is controlled by a quality control program which has been verified by the following authority, SQS (ISO 9001) as being suitable for the manufacture of these fittings to the stated standard. The fittings covered by this declaration, for which I seek registration, are

CATEGORY F (brief description of fittings)

In support of this application, the following information, calculations and/or test data are attached:

DRAWINGS, CALCULATIONS, REPORTS, SCOPE OF CRN

DECLARED before me at in the of this day of (city) (Month) (Year) (province or state)

(print) (a Commissioner of Oaths or Notary Public)

(sign) See attached acknowledgment (a Commissioner of Oaths or Notary Public)

Michael Youroski (signature of applicant)

For ABSA Office Use Only:

NOTES:

To the best of my knowledge and belief, the application meets the requirements of the Safety Codes Act and CSA Standard B51, Clause 4.2, and is accepted for registration in Category F

Registration Number: OF02097.72 (Signature of the Administrator/SCO)

Date Registered: AUG 07 2018 Expiry Date: 2018 Jan. 12

**WORLDWIDE LOCATIONS APPENDIX**

**ENDRESS+HAUSER CONDUCTA MANUFACTURING LOCATIONS  
& CERTIFYING AUTHORITIES**

---

(rev. October 10, 2017)

**Endress+Hauser Conducta**

70839 Gerlingen incl. manufacturing sites  
04736 Waldheim and 64823 Gross-Umstadt, Germany  
**ISO 9001 Certified by SQS**

**Endress+Hauser Conducta**

4123 LA Palma Ave.,  
Anaheim, CA  
92807, USA  
**ISO 9001 Certified by SQS**

**Endress+Hauser Analytical Instruments (Suzhou) Co., Ltd.**

491 Su-Hong-Zhong-Lu  
China-Singapore Industrial Park  
Suzhou, Jiangsu Province, China  
**ISO 9001 Certified by SQS**

0102097.72

# CALIFORNIA ALL- PURPOSE CERTIFICATE OF ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California }

County of Orange }

On October 31, 2017 before me, Laurel Boles,  
(Here insert name and title of the officer)

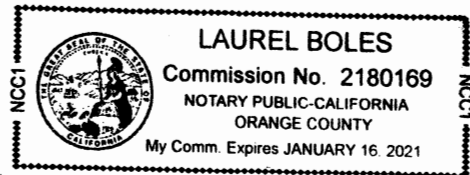
personally appeared Michael Youroski,  
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) (s) are subscribed to the within instrument and acknowledged to me that he she/they executed the same in (his) her/their authorized capacity(ies), and that by (his) her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Laurel Boles  
Notary Public Signature

(Notary Public Seal)



0902097-72

### ADDITIONAL OPTIONAL INFORMATION

**DESCRIPTION OF THE ATTACHED DOCUMENT**

Alberta Statutory Declaration CAT F  
(Title or description of attached document)

Registration of Fittings  
(Title or description of attached document continued)

Number of Pages 2 Document Date 10/31/2017

**CAPACITY CLAIMED BY THE SIGNER**

Individual (s)  
 Corporate Officer

\_\_\_\_\_ (Title)

Partner(s)  
 Attorney-in-Fact  
 Trustee(s)  
 Other \_\_\_\_\_

### INSTRUCTIONS FOR COMPLETING THIS FORM

*This form complies with current California statutes regarding notary wording and, if needed, should be completed and attached to the document. Acknowledgments from other states may be completed for documents being sent to that state so long as the wording does not require the California notary to violate California notary law.*

- State and County information must be the State and County where the document signer(s) personally appeared before the notary public for acknowledgment.
- Date of notarization must be the date that the signer(s) personally appeared which must also be the same date the acknowledgment is completed.
- The notary public must print his or her name as it appears within his or her commission followed by a comma and then your title (notary public).
- Print the name(s) of document signer(s) who personally appear at the time of notarization.
- Indicate the correct singular or plural forms by crossing off incorrect forms (i.e. he/she/they-, is /are ) or circling the correct forms. Failure to correctly indicate this information may lead to rejection of document recording.
- The notary seal impression must be clear and photographically reproducible. Impression must not cover text or lines. If seal impression smudges, re-seal if a sufficient area permits, otherwise complete a different acknowledgment form.
- Signature of the notary public must match the signature on file with the office of the county clerk.
  - ❖ Additional information is not required but could help to ensure this acknowledgment is not misused or attached to a different document.
  - ❖ Indicate title or type of attached document, number of pages and date.
  - ❖ Indicate the capacity claimed by the signer. If the claimed capacity is a corporate officer, indicate the title (i.e. CEO, CFO, Secretary).
- Securely attach this document to the signed document with a staple.

**ENDRESS+HAUSER CONDUCTA INC.**

4123 LA PALMA AVE.  
ANAHEIM, CA  
92807, USA

08-Dec-17

**SCOPE OF CRN REGISTRATION**

**PRODUCT DESCRIPTION**

Description	Design Standard (Note 3)	End Connections (Note 1)	EH Documents
Indumax CLS54, CLS54D, Smartec CLD134	ASME B31.3, ASME B31.1, ASME BPE, ASME VIII-1 UG-101	2" ASME BPE ISO2852, DIN 2276 Ferrule, DN40-125 Varivent N, DN50 Da... DIN 11851	TI00400C07/EN/13.16, BA00508C/07/EN/03.17, TI00401C/07/EN/13.15.

**PRESSURE - TEMPERATURE RATINGS**

MDMT	MAWP AT 302F	REGISTRATION NO.	Notes
14F	87.2 psia (72.5 psig)	None	

**MATERIALS OF CONSTRUCTION**

Process Housing Material (Note 2)	TYPE OF FITTINGS	Notes
Stainless Steel 1.4435 TYPE 316L UNS S31603	None	Optional process housing materials may be used. See Note 2.

**MANUFACTURING LOCATIONS**

Endress+Hauser Conducta 70839 Gerlingen incl. manufacturing sites 04736 Waldheim and 64823 Gross-Umstadt, Germany	Endress+Hauser Conducta 215021 Suzhou, Endress+Hauser Analytical Instruments Suzhou Co. Ltd. P.R. China
Endress+Hauser Conducta 4123 LA Palma Ave., Anaheim, CA 92807, USA	* See acceptance letter for conditions

**Note 1)** The ASME BPE Ferrule and Varivent connection shall be used with a clamp, however the assembly clamp is not part of this CRN. Pressure-Temperature ratings may be limited by the clamp type used in the joint assembly. The clamp used to complete the joint shall have its own CRN and shall have pressure-temperature ratings the same or higher than the product ratings.

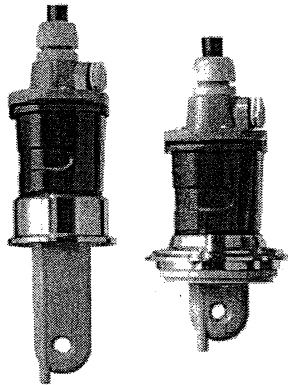
\* **Note 2)** The following additional alloys of superior or equivalent properties to those listed above are also included in the scope of registration: Type 304 S.Steel UNS S30400, Type 304L S.Steel UNS S30403, Type 316 S.Steel UNS S31600, Type 316L S.Steel UNS S31603, Alloy 20 UNS N08020, Hastelloy C-276 UNS N10276, Hastelloy C22 UNS N06022, Hastelloy B3 UNS N10676, Monel 400 UNS N04400 (Note Monel 400 limited to 100F max.), Inconel 600 UNS N06600, Inconel 625 UNS N06625, Inconel 825 UNS N08825, Duplex S.Steel UNS S31803, Super Duplex UNS S32750, Super Duplex UNS S32760, Titanium Grade 3 UNS R50550 (Note Titanium limited to 247F max. for ASME B31.3 service and 173F max. for ASME B31.1 Service.)

**Note 3)** In accordance with ASME B31.1 para. 123.1.2(D) when this product is manufactured from a ASME B31.1 unlisted material and used under the ASME B31.1 code the facility owner must accept the use of the unlisted material.

**ASQA**  
SAFETY CODES ACT - PROVINCE OF ALBERTA  
REGISTRATION OF FITTINGS  
**0F02097.72**  
REGISTRATION NO. *Indumax CLS54; Smartec CLD134*  
DWG. NO. or CAT. NO.  
TYPE OF FITTINGS *Sensors*  
**AUG 07 2018** Date  
INITIALS *[Signature]*  
MILLA GRYNCHUK, P.Eng.  
DESIGN SURVEY ENGINEER

## Technical Information Indumax CLS54

Hygienic inductive conductivity sensor for applications in the food, beverage, pharmaceutical and biotech industries



### Application

The CLS54 conductivity sensor is specifically designed for use in hygienic applications in the food, beverage and pharmaceutical industries and in biotechnology. Thanks to its hygiene certificates and its food-safe, virgin PEEK design without any joints or crevices, it meets the strict demands of these industries. The CLS54 is ideal for:

- Phase separation of product/water and product/product mixtures in pipe systems
- Control of cleaning in place (CIP) processes in the return line
- Concentration control in the remaking of CIP cleaning agents
- Product monitoring in pipes, bottling plants and quality assurance
- Leakage monitoring

in the following industries:

- Dairies
- Breweries
- Beverages (water, juices, soft drinks)
- Pharmaceuticals and biotechnology

Use with the Liquiline CM42 and Liquisys CLM223/253 transmitters; integral part of the Smartec CLD134 measuring system.

### Your benefits

- Unique hygienic design, therefore no risk of recontamination
- Has all the hygiene certificates required in the hygiene sector
- Has all the process connections commonly used in the hygiene sector
- Durable thanks to fully encapsulated, sealless design
- Fast measurement with temperature response time  $t_{90}$  under 26 s, ensuring safe and efficient phase separation
- Insensitive to electrode contamination and polarization thanks to inductive measuring principle
- Explosion protection

Endress+Hauser 

People for Process Automation