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

Pressure Rating	Туре	Size	Material
87.2psia(72.5psi)@14F to 302F	Indumax CLS54 & CLD134	2" ASME BPE, ISO2852,	PEEK (non metallic) sensor hd;
		DIN 3276 Ferrule, DN40-125	1.4435/A479316L/UNS S31603
		Varivent, DN50 Dairy fitting	(Process housing)
		DIN11851	Housing can have add. superior
			or equiv. properties incl.
Note: Clamps are not part	of registration		SS, Alloy 20, Hastelloy,
			Monel, Inconel, Duplex SS,
			Super Duplex & Titanium
			Monel limited to 100F &
			Titan.247F(B31.3);173F(B31. 1)



345 Carlingview Drive Toronto, Ontario M9W 6N9 Tel: 416.734.3300 Fax: 416 231 1626 Toll Free: 1 877 682 8772

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. We will be happy to assist you. When contacting TSSA regarding this file, please refer to the Service Request number provided above.

Mark Valcic P. Eng. **Engineer Specialist BPV**

Tel.: 416-734-3494 Fax: 416-231-1626

Email: 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 DECLA Registration of Fitti		
, MIKE YOUROSKI, QUALITY MANAGER		*
(Name and Position, e.g. President, Plant Manager, C	hief Engineer)	
of ENDRESS+HAUSER CONDUCTA INC.		
(Name of Manufacturer)		
Located at	1-714-577-5600	
(Plent Address)	(Telephone No.)	(Fax No.)
do solemnly declare that the fittings listed hereunder, which are subject to the and Pressure Vessels Regulation, comply with all of the requirements of ASME B31.3, ASME B31.1	he Technical Standards	and Safety Act, Boilers
(Title of recognized North American Standard Which specifies the dimensions, materials of construction, pressure/temperature ra) tingo identification modine:	the Citizen and any facility
or are not covered by the provisions of a recognized North American standa as supported by the attached data which pressure/temperature ratings and the basis for such ratings, the marking of the	ch identifies the dimensions e fitting for identification ar	, material of construction, nd service.
I further declare that the manufacture of these fittings is controlled by a quality system which has been verified by the following authority, SQS	m meeting the requirement	ts of 150:9001:2008
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	
commissioner for Oaths:	adhed acknow	dedgmont
	1. In set class	1006
(Signature)	whal you	larar)
	(Signature of Boo	idioi/
FOR OFFICE USE ONLY to the best of my knowledge and belief, the application meets the requirements of the sechnical Standards and Safety Act, Boilers and Pressure Vessels Regulation, and SA Standard B51 and is a septed for registration in Category	Technical Standards and Safety Authority	Boilers and Pressure Vessels Safety Program
RN: 0+1097.75/2	REGIST	TERED
egistered by: MARK VALCIC, P.ENG.	C.R.N.	1+10K2
ote: This registration expires on JANUARY 12, 228	Signed: Ju	VE 5, 2018
The second secon		70 o 57 o 1 (1)
"HOME: SEE THE ATTACHMENT FOR THE SEO	THE REPUECION	145 104 - MG
		Three
		0

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.

County of Orange	}
On September 8, 2017 before me.	Laurel Boles
. 103	(Here insert name and title of the officer)
personally appeared Michael Youroski	,
G 50 CE260	actory evidence to be the person(s) whose
Daniel State Committee Com	instrument and acknowledged to me that
D4D-04-04-04-04-04-04-04-04-04-04-04-04-04-	er/their authorized capacity(ies), and that by
	ent the person(s) , or the entity upon behalf of
which the person(s) acted, executed the	e instrument.
I certify under PENALTY OF PERJURY	under the laws of the State of California that
the foregoing paragraph is true and cor	rect.
	LAUREL BOLES
WITNESS my hand and official seal.	Commission No. 2180169
10 10	NOTARY PUBLIC-CALIFORNIA ORANGE COUNTY
Source Book	My Comm. Expires JANUARY 16: 2021
Notary Public Signature (No	otary Public Seal)
•	,
ADDITIONAL OPTIONAL INFORMATI	INSTRUCTIONS FOR COMPLETING THIS FORM
DESCRIPTION OF THE ATTACHED DOCUMENT	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
TSSA Statutory Declaration	as the wording does not require the California notary to violate California notary law.
(Title or description of attached document)	 State and County information must be the State and County where the document signer(s) personally appeared before the notary public for acknowledgment.
Registration of Fittings (Title or description of attached document continued)	 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
Number of Pages 1 Document Date 09/08/2017	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.
CAPACITY CLAIMED BY THE SIGNER	 Indicate the correct singular or plural forms by crossing off incorrect forms (i.e.
☑ Individual (s)	he/she/they, is /are) or circling the correct forms. Failure to correctly indicate this information may lead to rejection of document recording.
☐ Corporate Officer	 The notary seal impression must be clear and photographically reproducible.
(Title)	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

Indicate the capacity claimed by the signer. If the claimed capacity is a

acknowledgment is not misused or attached to a different document. Indicate title or type of attached document, number of pages and date.

corporate officer, indicate the title (i.e. CEO, CFO, Secretary).

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

www.NotaryClasses.com 800-873-9865

Trustee(s)

Attorney-in-Fact

☐ Partner(s)

Other

State of California

ENDRESS+HAUSER CONDUCTA INC.

4123 LA PALMA AVE. ANAHEIM, CA 92807, USA

SCOPE OF CRN REGISTRATION

PRODUCT DESCRIPTION

End Con End Con End Con End Con DN40-125 Variv	Design Standard (Note 3) ASME B31.3, ASME B31.1, ASME BPE, ASME VIII-1 UG-101		End Connections (Note 1)	ASME B31.3, ASME BPE, ISO2852, DIN 3276 Ferrule, B31.1, ASME BPE, DN40-125 Varivent N, DN50 Dairy Fitting ASME VIII-1 UG-101 DN40-125 Varivent N, DN50 Dairy Fitting DN40-125 Varivent N, DN50 Dairy Fitting
------------------------------------------------------------	-------------------------------------------------------------------------------	--	--------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

PRESSURE - TEMPERATURE RATINGS

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

MATERIALS OF CONSTRUCTION

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

MANUFACTURING LOCATIONS

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

Pressure-Temperature ratings may be limited by the clamp type used in the joint assembly. The clamp used to complete the joint shall have 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 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 S31600, Type 316D S.Steel UNS S31600, Type 304L S.Steel UNS S31603, Type 304L S.Steel UNS S31604, Type 304L Super Duplex UNS S32750, Super Duplex UNS S32760, Titanium Grade 3 UNS R50550 (Note Titanium limited to 247F max. for ASMESS 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.Steal UNS 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 standard used under the ASME B31.1 code the facility owner must accept the use of the unlisted material.

ASTERIATE STRABET OF ASTERIAL MUTHORING AND STRANGE STREET OF THE STRANGE STREET OF THE STRANGE STREET OF THE STRE



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

Janet TownsendProgram Manager
CSA Group

178 Rexdale Blvd. Toronto, ON, M9W 1R3 Canada

www.csagroup.org

REGISTERED



CRN: CSA-OF2097.76 R2

Statutory Declaration Registration of Fittings

(a)	Design Qualification			
l ¹	MIKE YOUROSKI			
•	(Name of applicant)			
	QUALITY MANAGER			
	(Position eg, president, plant manager, chief eng.)			
of	ENDRESS+HAUSER CONDUCTA INC.			
	(name of company)			
Loc	ated at 4123 LA PALMA AVE., ANAHEIM, CA, USA, 92807			
	(plant address)			
do s	colemnly declare that the fittings listed hereunder, which are subject to the Boilers & Pressure Vessels Act:			
Or	comply with all the requirements of the ANSI/ASME codes as to their dimensions, material, identification & service for which are required:			
	are not covered by the provisions of the ANSI/ASME codes, and are therefore constructed to comply with			
(b)	Quality control of Manufacture			
l furi ISO	ther declare the manufacture of these fittings is controlled by a quality control program which complies with the requirements of 9001: 2008 , and has been verified by the following authority or authorized agency <u>SQS</u>			
The	fittings ² covered by this declaration, for which I seek registration, are CATEGORY F			
In su	apport of the application, the following information, calculations and/or test data are attached: WINGS. CALCULATIONS. REPORTS. SCOPE OF CRN			
	ared before me at See attached acknowledgment			
In the	e of of			
The	day of AD 2 0 0			
_	Granute of Doubles			
	For Official Use Only			
The	e application is accepted for registration in Category in accordance with the Boilers and Pressure Vessels Act d CSA Standard B51.			
Thi	s registration must be revalidated after ten (10) years from the date of acceptance. Jun - 12 · 2028			
Re	gistered Number CRN CSA-0F2097.76R2 For the Chief Process A. BANWATT Date CSD Group July .12 · 2018			
_				

Three completed copied of Statutory Declaration form together with three copies of Catalogs, drawings of Bulletins illustrating above fittings shall be submitted.

All fittings are required to be registered in the name of the Manufacturer.

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

Renewal registration without construction material, design special 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	,
	actory evidence to be the person(s) whose
name(s)(s)are subscribed to the within	instrument and acknowledged to me that
	er/their authorized capacity(ies), and that by
	ent the person(s), or the entity upon behalf of
which the person(s) acted, executed the	
Legify under PENALTY OF PER IURY	under the laws of the State of California that
the foregoing paragraph is true and cor	
the foregoing paragraph is true and cor	LAUREL BOLES
	Commission No. 0400400
WITNESS my hand and official seal.	S NOTARY PUBLIC-CALIFORNIA
(1 N N	ORANGE COUNTY My Comm Expires JANUARY 16, 2021
Jamel Dolas	***************************************
Notary Public Signature (No.	otary Public Seal)
•	•
ADDITIONAL OPTIONAL INFORMAT	INSTRUCTIONS FOR COMPLETING THIS FORM
DESCRIPTION OF THE ATTACHED DOCUMENT	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
Quebec Statutory Declaration	law.
(Title or description of attached document)	 State and County information must be the State and County where the document signer(s) personally appeared before the notary public for acknowledgment.
Registration of Fittings (Title or description of attached document continued)	 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
Number of Pages 1 Document Date 09/08/2017	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.
CAPACITY CLAIMED BY THE SIGNER	 Indicate the correct singular or plural forms by crossing off incorrect forms (i.e.
☑ Individual (s)	he/she/they, is /are) or circling the correct forms. Failure to correctly indicate this information may lead to rejection of document recording.
☐ Corporate Officer	 The notary seal impression must be clear and photographically reproducible.
(Title)	Impression must not cover text or lines. If seal impression smudges, re-seal if a sufficient area permits, otherwise complete a different acknowledgment form.
□ Partner(s)	 Signature of the notary public must match the signature on file with the office of
☐ Attorney-in-Fact	the county clerk. Additional information is not required but could help to ensure this
☐ Trustee(s)	acknowledgment is not misused or attached to a different document.
Other	 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).
www.NotaryClasses.com 800-873-9865	 Securely attach this document to the signed document with a staple.

REGISTERED



Technical CRN: CSA-OF2097.76 R2
Safety Authority
of Saskatchest and Process administered by

rocess administered by

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

Website: www.tsask.ca

Statutory Declaration (Registration of Fittings)

			TSK-1008	
1.	Declaration Information			
7	MIKE YOUROSKI		In this space, show facsimile of	
"	QUALITY MANAGER		manufacturer's logo or trademark as it will appear on the fitting.	
	(company title, e.g. vice president, plant manag (must be in a position of authority in the manufacturing plan	ger, chief engineer)	Endress+Hauser 3	
of:	ENDRESS+HAUSER CONDUCTA INC.	, , , , , , , , , , , , , , , , , , ,	People for Process Automation	
	(name of manufacture	r)		
loca	ated at: 4123 LA PALMA AVE.	ANAHEIM, CA	92807, USA	
do s Ves	(Plant Address – Apt/Street) solemnly declare that the fittings listed hereinung sel Safety Act (check one)	(City,Prov) der, which are subject to the Sas	(Postal Code) skatchewan Boiler and Pressure	
6		.1, B31.3 w	hich specifies the dimensions,	
	(title of recog Materials of construction, pressure / tempera	inized North American Standard)		
C	Are not covered by the provisions of a recogn	nized North American standard a	and are therefore manufactured	
1:1	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 th	tese fittings to the stated standard. The fittings of EGORY F			
In s	upport of this application, the following information	on, calculations and / or test data	a are attached:	
	AWINGS, CALCULATIONS, REPORTS			
		, coor E or oran		
11	date.			
	Declaration			
	CLARED before me at	In the	of	
this	day of	·	20.00	
	Michael Yourosk.	(Signature)	Yourash.	
See attached acknowledgment (Signature)				
(S	gnature of Commissioner of Oaths)	caument		
III.	Office Use Only			
To th	e best of my knowledge and belief, the application mo B51, Clause 4.2, and is accepted for registration in C	eets the requirements of the <i>Boiler</i> ategory	and Pressure Vessel Safety Act and	
	SA-OF2097.76 R2	July . 12 · 2018	Jan. 12.2028	
	egistration Number)	(Date Registered - MM DD YYYY)	(Expiry Date - MM DD YYYY)	
		(For the Admic Brand /CSAf In pector	A.BANWATT	
		Group		

*Note:

1. See attachment as the scope of registration.

2. Renewal registration without construction material, design spec 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.

County of Orange	. }
On September 8, 2017 before me,	Laurel Boles,
personally appeared Michael Youroski	(Here insert name and title of the officer)
name(s)(s)are subscribed to the within he she/they executed the same in his/h	factory evidence to be the person(s) whose instrument and acknowledged to me that ser/their authorized capacity(ies), and that by sent the person(s), or the entity upon behalf of e instrument.
I certify under PENALTY OF PERJURY the foregoing paragraph is true and con	\$*************************************
WITNESS my hand and official seal.	LAUREL BOLES Commission No. 2180169 NOTARY PUBLIC CALIFORNIA ORANGE COUNTY My Comm Express JANEAGEY 16 (2012)
Wotary Public Signature (N	otary Public Seal)
•	INSTRUCTIONS FOR COMPLETING THIS FORM
ADDITIONAL OPTIONAL INFORMAT	This form complies with current California statutes regarding notary wording and,
DESCRIPTION OF THE ATTACHED DOCUMENT	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
Saskatchewan Statutory Declaration	as the wording does not require the California notary to violate California notary law.
(Title or description of attached document)	State and County information must be the State and County where the document
Registration of Fittings	signer(s) personally appeared before the notary public for acknowledgment. Date of notarization must be the date that the signer(s) personally appeared which
(Title or description of attached document continued)	must also be the same date the acknowledgment is completed.
Number of Pages 1 Document Date 09/08/2017	 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
CAPACITY CLAIMED BY THE SIGNER	notarization. Indicate the correct singular or plural forms by crossing off incorrect forms (i.e.
	he/shc/they, is /are) or circling the correct forms. Failure to correctly indicate this
☐ Corporate Officer	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
(Title)	 sufficient area permits, otherwise complete a different acknowledgment form. Signature of the notary public must match the signature on file with the office of
☐ Attorney-in-Fact	the county clerk.
☐ Trustee(s) ☐ Other	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
MANAN Notany Classes com 800.873.0865	corporate officer, indicate the title (i.e. CEO, CFO, Secretary). • Securely attach this document to the signed document with a staple

State of California



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

SCOPE OF CRN REGISTRATION

CRNCSA-0 ATTACHMENT TO

PRODUCT DESCRIPTION

92807, USA

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

PRESSURE - TEMPERATURE RATINGS

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

MATERIALS OF CONSTRUCTION

Notes	Ontional proposed and another	2000	be used. See Note 2.	
Sensor Head Material		PEEK (Polyetheretherketone)		
Process Housing Material (Note 2)	Stainless Steel 1.4435 TYPE 316L UNS	624602	COOLCO	

MANUFACTURING LOCATIONS

Endress+Hauser Conducta 70839 Gerlingen incl. manufacturing sites 04736 Waldheim and 64823 Gross-Umstadt, Germany Endress+Hauser Conducta 4123 LA Palma Ave., Anaheim, CA 92807, USA

Pressure-Temperature ratings may be limited by the clamp type used in the joint assembly. The clamp used to complete the joint shall have 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. 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 NO8020, 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.Steal-browner Super Duplex UNS S32750, Super Duplex UNS S32760, Titanium Grade 3 UNS R50550 (Note Titanium limited to 247F max. for ASMEB3) 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 material and used under the ASME B31.1 code the facility owner must accept the use of the unlisted material. CRNO used under the ASME B31.1 code the facility owner must accept the use of the unlisted material.

| Boilers & pressure Vessels | Safety Program

Safety Ruthority



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 SOS





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







Appendix

Page 2 of 2 Reg.-no. 10705 Issue 01.04.2017



People for Process Automation

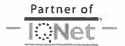
Endress+Hauser Conducta GmbH & Co. KG

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)	Nonn/Revision	Reg. no.	Validity	
Endress+Hauser Conducta GmhH & 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 Landsberger 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 Last La Palma Ave, Suite 200 Analieim, 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









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



March 2017

<u>CRN – Canadian Registration Numbers - Saskatchewan</u>

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

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.

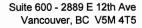
As all jurisdictional fees are handled by the Technical Standards and Safety Authority (TSSA), you do not pay any jurisdictions directly.

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. 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





Toll Free: 1-866-566-7233 www.technicalsafetybc.ca

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@technicalsafetybc.ca Design Administration

cc:

(PROD) 30400-20 GST #: 87391 2802 RT0001

ENDRESS+HAUSER CONDUCTA INC.

4123 LA PALMA AVE. ANAHEIM, CA 92807, USA

SCOPE OF CRN REGISTRATION

PRODUCT DESCRIPTION

Description	Design Standard (Note 3)	End Connections (Note 1)	EH Documents
Indumax CLS54,	ASME B31.3, ASME	2" ASME BPE, ISO2852, DIN 3276 Ferrule,	TI00400C/07/EN/42 16 BA00E09C/07/EN/02 17
CLS54D, Smartec	B31.1, ASME BPE,	DN40-125 Varivent N, DN50 Dairy Fitting	TI00400C/07/EN/13.16, BA00508C/07/EN/03.17,
CLD134	ASME VIII-1 UG-101	DIN 11851	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	DEEK (Dalwath another deatons)	Optional process housing materials may
S31603	PEEK (Polyetheretherketone)	be used. See Note 2.

MANUFACTURING LOCATIONS

service and 173F max. for ASME B31.1 Service.)

Endress+Hauser Conducta	Endress+Hauser Conducta
70839 Gerlingen incl. manufacturing sites	215021 Suzhou, Endress+Hauser Analytical Instruments Suzhou Co. Ltd.
04736 Waldheim and 64823 Gross-Umstadt, Germany	P.R. China
Endress+Hauser Conducta	{ Q(
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 had: its own CRN and shall have pressure-temperature ratings the same or higher than the product ratings. BC J#: 7102

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 Super Duplex UNS S32750, Super Duplex UNS S32760, Titanium Grade 3 UNS R50550 (Note Titanium limited to 247F max. for

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.

Boilers & Pressure Vesse Safety Program

JULY 3



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

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. 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

9410 - 20 Ave N.W.

Edmonton, Alberta, Canada T6N 0A4

Tel: (780) 437-9100 / Fax: (780) 437-7787

August 07, 2018

Attention: Tanya Francis

Email:tfrancis@tssa.org

TECHNICAL STANDARDS & SAFETY AUTHORITY

345 CARLINGVIEW DRIVE TORONTO, ON M9W 6N9

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

			In this space, show facsimile of manufacturer's logo or trademark
I, MIKE YOUROSKI	, QUALITY MANAGE		as it will appear on the fitting.
(name of applicant) of ENDRESS+HAUSER	(position title) (must be i	n a position of authority)	Endress+Hauser
	name of manufacturer)		People for Process Automation
located at SEE ATTACHED WORLD	OWIDE LOCATIONS APPR	ENDIX	
	(plant address)		
do solemnly declare that the fittings li (check one)	isted hereunder, which are	subject to the Safety C	odes Act
comply with the requirements	of ASME B31.3, ASME B		pecifies the dimensions,
materials of construction, pre	ssure/temperature ratings	and identification mark	ing of the fittings, or
are not covered by the provisi	ions of a recognized North	American standard and	d are therefore manufactured
to comply with			supported by the attached
·	de of construction or other applic	•	
data which identifies the dime	ensions, materials of consti	ruction, pressure/tempe	erature ratings and the basis
for such ratings, and the mark	king of the fittings for identi	fication.	
I further declare that the manufacture	e of these fittings is control	led by a quality control	program which has been
verified by the following authority, SC	QS (ISO 9001)	as being suitabl	e for the manufacture of these
fittings to the stated standard. The f	ittings covered by this decl	aration, for which I see	k registration, are
CATEGORY F			
	(brief description of fittings)		
In support of this application, the foll	owing information, calculate	tions and/or test data a	re attached:
DRAWINGS, CALCULATIONS, RE	PORTS, SCOPE OF CRI	1	
DECLARED before me at	/ in the	/ of	
(cit			(province or state)
this day of	(Month) (Ye	ar)	
(print)			
(a Commissioner of Oaths or No	otary Public)		
(sign) See attached ackr	nowledgment	Muchael Grignature	of applicant)
For ABSA Office Use Only:			
NOTES:			
To the best of my knowledge and be Standard B51, Clause 4.2, and is ac			e Safety Codes Act and CSA
Registration Number: 0 F0	2097.72	Liza	the Administrator/SCO)
Date Registered: AUG 0 7	2018	Expiry Date: 204	R Lan. 12

The information you provide is necessary only for the administration of the programs as required by the Alberta Safety Codes Act and Regulations in the Pressure Equipment Discipline.



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



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 hefore me I aurel Boles

On October 01, 2011 Delote me,	(Here insert name and title of the officer)
personally appeared Michael Youroski	•
who proved to me on the basis of satisfa	actory evidence to be the person(s) whose
	nstrument and acknowledged to me that
	er/their authorized capacity(ies), and that by
	ent the person(s), or the entity upon behalf of
which the person(s) acted, executed the	•
Willow the person (e) detect, excedited the	
	\$
I certify under PENALTY OF PERJURY	under the laws of the State of California that
the foregoing paragraph is true and corr	rect.
	LAUREL BOLES Commission No. 2180169 NOTARY PUBLIC-CALIFORNIA ORANGE COUNTY My Comm. Expires JANUARY 16, 2021
WITNESS my hand and official seal.	Commission No. 2180169
with Loo my hand and official seal.	NOTARY PUBLIC-CALIFORNIA
(k, n, n, n)	ORANGE COUNTY My Comm. Expires JANUARY 16, 2021
House Roles	STATE OF THE PROPERTY OF THE P
Notary Public Signature (No	otary Public Seal)
ADDITIONAL OPTIONAL INFORMATI	INSTRUCTIONS FOR COMPLETING THIS FORM
DESCRIPTION OF THE ATTACHED DOCUMENT	This form complies with current California statutes regarding notary wording and, if needed, should be completed and attached to the document. Acknowledgments
DESCRIPTION OF THE ATTACHED DOCUMENT	from other states may be completed for documents being sent to that state so long
Alberta Statutory Declaration CAT F	as the wording does not require the California notary to violate California notary law.
(Title or description of attached document)	 State and County information must be the State and County where the document
Registration of Fittings	signer(s) personally appeared before the notary public for acknowledgment. • Date of notarization must be the date that the signer(s) personally appeared which
(Title or description of attached document continued)	must also be the same date the acknowledgment is completed.
Number of Pages 2 Document Date 10/31/2017	• The notary public must print his or her name as it appears within his or her
Number of Pages Document Date	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 o
	notarization.
CAPACITY CLAIMED BY THE SIGNER	• Indicate the correct singular or plural forms by crossing off incorrect forms (i.e.
☑ Individual (s)	he/she/they, is /are) or circling the correct forms. Failure to correctly indicate thi information may lead to rejection of document recording.
☐ Corporate Officer	The notary seal impression must be clear and photographically reproducible.
	Impression must not cover text or lines. If seal impression smudges, re-seal if sufficient area permits, otherwise complete a different acknowledgment form.
(Title)	Signature of the notary public must match the signature on file with the office of the notary public must match the signature on the with the office of the notary public must match the signature on the with the office of the notary public must match the signature on the with the office of the notary public must match the signature on the with the office of the notary public must match the signature on the with the office of the notary public must match the signature on the with the office of the notary public must match the signature on the with the office of the notary public must match the signature on the with the office of the notary public must match the signature on the with the office of the notary public must match the signature on the with the office of the notary public must match the signature on the with the office of the notary public must match the signature of the notary public must match th
☐ Partner(s)	the county clerk.
☐ Attorney-in-Fact	 Additional information is not required but could help to ensure this acknowledgment is not misused or attached to a different document.
☐ Trustee(s)	Indicate title or type of attached document, number of pages and date.
Other	Indicate the capacity claimed by the signer. If the claimed capacity is
N. A. Charles Con 622 202	 corporate officer, indicate the title (i.e. CEO, CFO, Secretary). Securely attach this document to the signed document with a staple.
www.NotaryClasses.com/800/873-9865	- becausely attach this document to the signed document with a staple.

ENDRESS+HAUSER CONDUCTA INC.

4123 LA PALMA AVE. ANAHEIM, CA 92807, USA

SCOPE OF CRN REGISTRATION

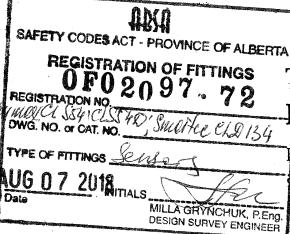
PRODUCT DESCRIPTION

THE POST OF THE PO	11011						
Description	Design Standard (Note 3)			nections (Note 1)		EH Documents	
Indumax CLS54,	ASME B31.3, ASME	2" ASME BI	PE ISO2852 F	NN 3276 Female:	TI00 4000	107/ENUAD 40 BAGGEOGO/07/E	N/00 47
CLS54D, Smartec	B31.1, ASME BPE,	DN40-125	Varivent N. DN	150 Dan King	11004000	707/EN/13.16, BA00508C/07/E	:N/03.17,
CLD134	ASME VIII-1 UG-101		DIN 1185	Wen	CE OF ALBERTA	TI00401C/07/EN/13.15.	
PRESSURE - TEMPE	RATURE RATINGS		SAFETY COD		WE OF ALL PROPERTY OF THE PROP		
MDMT	MAWP AT 302F		REGIS	0F02	0 9 Vales 7	2	
14F	87.2 psia (72.5 psig)		REGISTRATION	A001	None		
MATERIALS OF CON	MATERIALS OF CONSTRUCTION		DWG. NO. OF CA	WG. NO. OF CAT. NO.			
Process Housing	Material (Note 2)	1	TYPE OF ISTERNOS Head-Material		Notes		
Stainless Steel 1.44	35 TYPE 316L UNS	7	IIG A-7/2	012theretherketo		Optional process housing	g materials may
S31	603	-		MILLA	GRYNOHUK. P.Eng.	be used. See N	lote 2.
MANUFACTURING L	OCATIONS		Date	DESIG	N SURVEY ENGINEER		
Endress+Hauser Cond	lucta		Endr	ess+Hauser Cond	ducta		
70839 Gerlingen incl. manufacturing sites			215021 Suzhou, Endress+Hauser Analytical Instruments Suzhou Co. Ltd.				
04736 Waldheim and 64823 Gross-Umstadt, Germany			P.R. China				
Endress+Hauser Cond	Endress+Hauser Conducta			ranste	neo lox	Hos Jac	
4123 LA Palma Ave., A	4123 LA Palma Ave., Anaheim, CA			City of	race out	The second second	
92807, USA				DUNI 1	4045	\mathcal{C}	

Note 1) The ASME BPE Ferrule and Varivent connection shall be used with a clamp, however the assembly slamp 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.

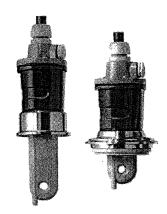
Note 2) The following additional alloys of superior or equivalent properties to those listed above are also included in the scope of registration: Type 304 S.Steel UNS S30400, Type 304L S.Steel UNS S30403, Type 316 S.Steel UNS S31600, Type 316L S.Steel UNS S31603, Alloy 20 UNS N08020, Hastelloy C-276 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.



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
- ullet 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