



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

October 04, 2018

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

Service Request Type.: BPV-National AB
Service Request No.: 2389640
Your Reference No.: EH-CRN-19
Registered to.: ENDRESS + HAUSER CONDUCTA INC

Dear SCOTT ISLIP,

Please find enclosed the original response from AB, registered under the CRN No.: 0F20561.52.

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

September 15, 2018

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

Email: tfrancis@tssa.org

The design submission, tracking number 2018-06026, originally received on September 10, 2018 was surveyed and accepted for registration as follows:

CRN : 0F20561.52 **Accepted on:** September 15, 2018
Reg Type: NEW DESIGN **Expiry Date:** July 25, 2028
Drawing No. : OUSAF11 OPTICAL As Noted
Fitting type: OPTICAL SENSORS
Design registered in the name of : ENDRESS + HAUSER CONDUCTA INC

Description	MAWP	Design Temperature
rating per scope		

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

Only hot rolled and forged bar may be used for hubs and clamps connections construction.

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

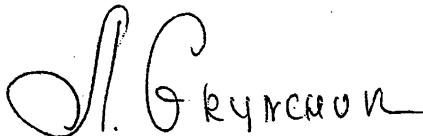
- This registration is valid only for fittings fabricated at the location(s) covered by the QC certificate attached to the accepted AB-41 Statutory Declaration form.*
- This registration is valid only until the indicated expiry date and only if the Manufacturer maintains a valid quality management system 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.*

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.

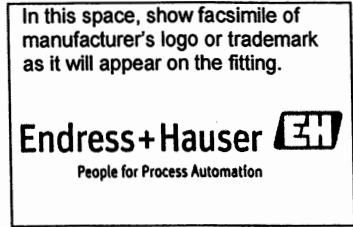
Sincerely,



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)

- comply with the requirements of ASME B31.3, ASME B31.1 which specifies the dimensions, 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 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 (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: OF 20561.52 SEP 15 2018 (Signature of the Administrator/SCO)

Date Registered: SEP 15 2018 Expiry Date: 2028 July 25

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

0F20561.52

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.

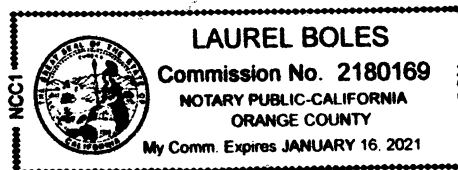
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

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

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.

0920501.1050270

ENDRESS+HAUSER CONDUCTA INC.

4123 LA PALMA AVE.
ANAHEIM, CA
92807, USA

23-May-18

Page 1 of 2

SCOPE OF CRN REGISTRATION**PRODUCT DESCRIPTION**

Description	Design Standard (Note 3)	End Connections (Note 1)	Drawings	EH TI Document
OUSAF11 Optical Sensor	ASME B31.3, ASME B31.1, ASME BPE, ASME VIII-1 UG-101	1" NPT, G1 Thread, 2", 2-1/2" and 3" ASME BPE Ferrule, DN40-125 Varivent	401573, 401574, 401785, 401786, 401788, 401892, 401993, 401994, 401988	TI00474C/07/EN/15.16

PRESSURE - TEMPERATURE RATINGS

MDMT	MAWP AT 194F (Continuous)	MAWP AT 266 F (Intermittent)	Notes
32F	150 psia	150 psia	The sensor may be continuously subjected to a temperature of 266F for a length of time equal to 2 hours maximum.

MATERIALS OF CONSTRUCTION

Process Housing Material (Note 2)	Sensor Head Material	Notes
Stainless Steel ASTM A479-316L 1.4435 TYPE 316L UNS S31603	FEP (Fluorinated ethylene propylene)	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 ASTM A182-304, ASTM A479-304 UNS S30400,
Type 316 S.Steel ASTM A182-316, ASTM A479-316 UNS S31600,
Hastelloy C-276 ASTM B564, ASTM B574 UNS N10276,
Hastelloy B3 ASTM B462, ASTM B564, ASTM B335 UNS N10675,
Inconel 600 ASTM B166, ASTM B564 UNS N06600,
Inconel 825 ASTM B425, ASTM B564 UNS N08825,
Super Duplex ASTM A479, ASTM A182-F53 UNS S32750,
Titanium ASTM B381-F3 UNS R50550 (Note Titanium limited to 247F max for ASME B31.3 service and 173F max. for ASME B31.1 Service)

Type 304L S.Steel ASTM A182-304L, ASTM A479-304L UNS S30403,
Alloy 20 ASTM B462, ASTM B366 UNS N08020,
Hastelloy C22 ASTM B366, ASTM B564 UNS N06022,
Monel 400 ASTM B564, ASTM B164 UNS N04400 (Note: Monel 400 limited to 100F max.)
Inconel 625 ASTM B564, ASTM B446 UNS N06625,
Duplex ASTM A479, ASTM A182 UNS S31803,
Super Duplex ASTM A479, ASTM A182-F55 UNS S32760,

DF 20561.52

ENDRESS+HAUSER CONDUCTA INC.

4123 LA PALMA AVE.

ANAHEIM, CA

92807, USA

23-May-18

Page 2 of 2

SCOPE OF CRN REGISTRATION CONTINUED

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 following non listed materials.

Hastelloy C-276 ASTM B564 UNS N10276,

Hastelloy B3 ASTM B462, ASTM B564, ASTM B335 UNS N10675,

Monel 400 ASTM B564, ASTM B164 UNS N04400,

Inconel 600 ASTM B166, ASTM B564 UNS N06600,

Inconel 825 ASTM B564 UNS N08825,

Super Duplex ASTM A479, ASTM A182-F55 UNS S32760,

Hastelloy C22 ASTM B564 UNS N06022

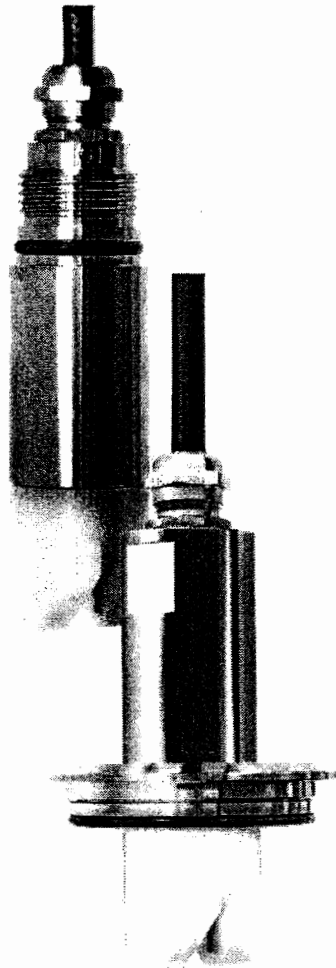
In all cases the above unlisted materials shall only be used for nonboiler external piping.

CSA	
SAFETY CODES ACT - PROVINCE OF ALBERTA	
REGISTRATION OF FITTINGS	
REGISTRATION NO.	0F20561.52
REG. NO. or CAT. NO.	<i>0USAF 11</i>
TYPE OF FITTINGS	<i>optical sensors</i>
SEP 15 2018	<i>[Signature]</i>
INITIALS	MILLA GRYNORUK, P.Eng.
	DESIGN SURVEY ENGINEER

Technical Information

OUSAF11

Optical sensor for the measurement of VIS/NIR absorption



Application

The OUSAF11 sensor measures the VIS/NIR absorption of liquids.

- Interphase detection
 - Milk detection in CIP solutions
 - Phase separation, e.g. milk/water
 - Product loss detection in outlet
- Measurement of solids in:
 - Primary industry
 - Mining

Your benefits

- Cost savings and less product loss thanks to fast interphase detection:
 - Measuring range 0 to 3 AU (absorbance units)
 - Two path lengths available: 5 and 10 mm
 - Low-voltage incandescent lamp
- High degree of product safety owing to non-glass, robust and hygienic design:
 - Stainless steel housing and sensor head made from dirt-repellent FEP
 - FDA-compliant materials and 3-A certification
 - CIP/SIP-resistant
- Easy maintenance saves time and costs
- Flexible
 - Submersible sensor for applications in open tanks and basins
 - Insertion sensor with Triclamp or Varivent connection for hygienic applications in pipes and vessels
 - Color-independent measurement with optional NIR detector
 - Operating temperature range 0 to 90 °C (32 to 190 °F)

0F20561.52