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October 04, 2018

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

Service Request Type.: BPV-National BC  
Service Request No.: 2389702  
Your Reference No.: EH-CRN-19  
Registered to.: ENDRESS + HAUSER CONDUCTA INC

Dear SCOTT ISLIP,

Please find enclosed the original response from BC, registered under the CRN No.: 0F20561.51.

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

**Date:** September 13, 2018  
**Account #:** 35231  
**Journal #:** 71641

**Attn:** TANYA FRANCIS

**Re:** Application for Design Registration

The design, as detailed in your, TSSA SR# 2389702, for a Fitting is accepted for registration as follows:

**Registered To:** ENDRESS + HAUSER CONDUCTA CRN: 0F20561.51  
INC

**MDMT:** 32 deg F

**MAWT:** 266 deg F

**MAWP:** 150 psig

**Drawing #:** Report: EH-CRN-19

**Drawing Revision:** 0

**Conditions Of Registration:**

Registration of OUSAF11 Optical Sensor as per attached scope of registration sheets (2 pgs).

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 July 25, 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

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**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.



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**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 304L S.Steel ASTM A182-304L, ASTM A479-304L UNS S30403,  
 Type 316 S.Steel ASTM A182-316, ASTM A479-316 UNS S31600, Alloy 20 ASTM B462, ASTM B366 UNS N08020,  
 Hastelloy C-276 ASTM B564, ASTM B574 UNS N10276, Hastelloy C22 ASTM B366, ASTM B564 UNS N06022,  
 Hastelloy B3 ASTM B462, ASTM B564, ASTM B335 UNS N10675, Monel 400 ASTM B564, ASTM B164 UNS N04400 (Note: Monel 400 limited to 100F max.),  
 Inconel 600 ASTM B166, ASTM B564 UNS N06600, Inconel 625 ASTM B564, ASTM B446 UNS N06625,  
 Inconel 825 ASTM B425, ASTM B564 UNS N08825, Duplex ASTM A479, ASTM A182 UNS S31803,  
 Super Duplex ASTM A479, ASTM A182-F53 UNS S32750, Super Duplex ASTM A479, ASTM A182-F55 UNS S32760,  
 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.)

**THIS IS PART OF**  
**CRN** 0F20561.5  
 Technical Standards & Safety Authority  
 Boilers & Pressure Vessels  
 Safety Program

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

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**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,  
Monel 400 ASTM B564, ASTM B164 UNS N04400,  
Inconel 825 ASTM B564 UNS N08825,  
Hastelloy C22 ASTM B564 UNS N06022

Hastelloy B3 ASTM B462, ASTM B564, ASTM B335 UNS N10675,  
Inconel 600 ASTM B166, ASTM B564 UNS N06600,  
Super Duplex ASTM A479, ASTM A182-F55 UNS S32760,

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



**TECHNICAL  
SAFETY BC**

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