



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 15, 2016

SCOTT ISLIP  
ROUND ENGINEERING INC  
10 SEGWUN RD  
WATERDOWN ON L0R 2H8  
CA

Service Request Type.: BPV-National AB  
Service Request No.: 1873790  
Your Reference No.: EH-CRN-12  
Registered to.: ENDRESS + HAUSER CONDUCTA INC

Dear SCOTT ISLIP,

Please find enclosed the original response from AB, registered under the CRN No.: 0F18315.52.

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](mailto:customerservices@tssa.org). When contacting TSSA regarding this file, please refer to the Service Request number provided above.

Yours truly,

Joanna Karpinski

Tel. : 416-734-3377  
Fax : 416-231-6183  
Email : [jkarpinski@tssa.org](mailto:jkarpinski@tssa.org)

July 12, 2016

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

The design submission, tracking number 2016-03090, originally received on May 30, 2016 was surveyed and accepted for registration as follows:

**CRN :** 0F18315.52

**Accepted on:** July 12, 2016

**Reg Type:** New Design

**Expiry Date:** March 10, 2026

**Drawing No. :** SEE SCOPE OF REGISTRATION Rev NONE

**Fitting type:** SMARTEC CLD18

Design registered in the name of : ENDRESS + HAUSER GMBH & CO KG

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

*It is the manufacturer's responsibility to advise the end user that the fittings with the Tri-Clamps and Varivent connection can be used only with clamps that have Alberta CRN.*

*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.*

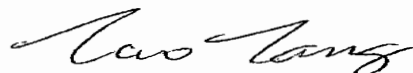
*This registration is valid only until the indicated expiry date and only if the Manufacturer maintains a valid quality management system approved by an acceptable third-party agency until that date.*

*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.

Sincerely,

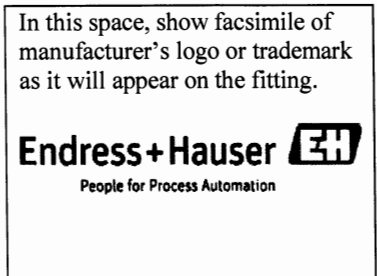


TANG, TAO, P. Eng.



the pressure equipment safety authority

STATUTORY DECLARATION  
Registration of Fittings



I, MIKE YUROSKI,

QUALITY MANAGER

(company title, e.g. vice president, plant manager, chief engineer) (must be in a position of authority)

of ENDRESS+HAUSER CONDUCTA INC.

(name of manufacturer)

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 Safety Codes Act (check one)

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

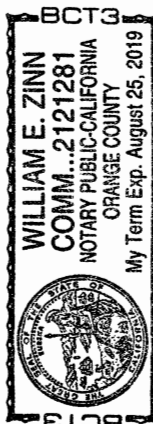
materials of construction, pressure/temperature ratings and identification marking of the fittings, or

are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with \_\_\_\_\_ as supported by the attached 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 9001:2008) 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 SMARTEC CLD18 - CAT. F

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 Anaheim in the County of Orange

this 17 day of Feb., 2016

(print) William E. Zinn

(sign) \_\_\_\_\_  
(A Commissioner for Oaths)

Mike Youroski  
(Signature of Applicant)

For Office Use Only See Scope of Registration.

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 18315.52

Leo Tany  
(For the Administrator/Chief Inspector of Alberta)

Date Registered: JUL 12 2016

Expiry Date: March 10, 2026

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

19-Jan-16

**SCOPE OF CRN REGISTRATION**

**PRODUCT DESCRIPTION**

Description	Design Standard	End Connections	Drawings	EH TI Document
Smartec CLD18	ASME B31.3, ASME VIII-1 UG-101(m)	G 1-1/2, 2" ASME BPE, ISO2852, DIN 32676 Clamp Ferrule (Note 1), DN40-125 Varivent (Note 1)	R-0446, 401609, 401610, 401602	TI01080C/07/EN/02.14

**PRESSURE - TEMPERATURE RATINGS**

MDMT	MAWP AT 122 F	MAWP AT 230 F	MAWP AT 266 F
14F	174 psig	98 psig at 230 F	72.5 psig at 266 F

**MATERIALS OF CONSTRUCTION**

PROCESS ADAPTER MATERIAL (NOTE 2)	SENSOR SHELL MATERIAL	Optional process adapter materials may be used.
ASTM A479-316L, STAINLESS STEEL 1.4435 TYPE 316L, UNS S31603	PEEK (POLYETHERETHERKETONE)	

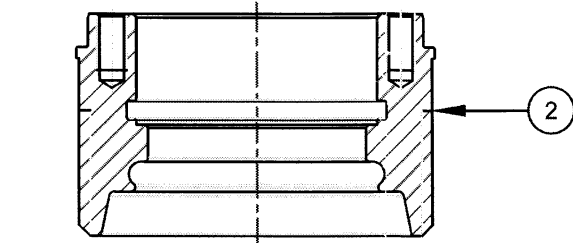
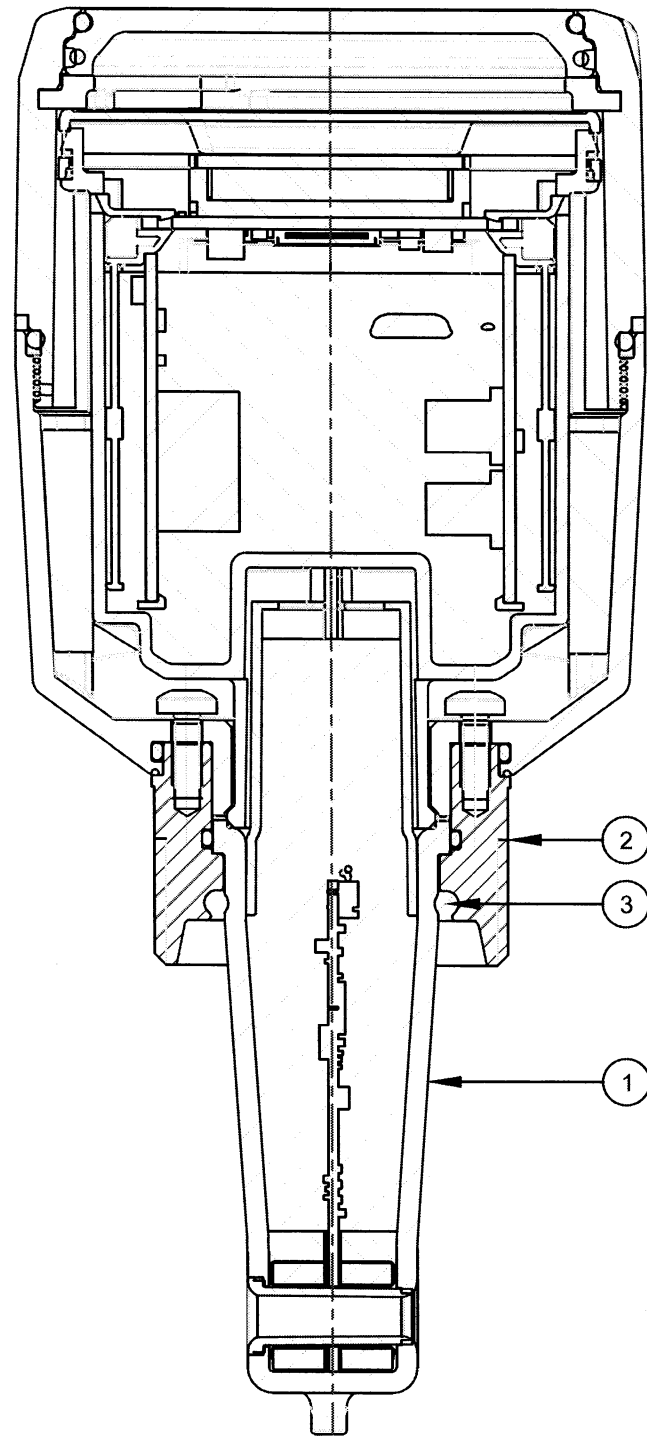
<b>ABSA</b>	
SAFETY ACT - PROVINCE OF ALBERTA	
REGISTRATION OF FITTINGS	
None	
REGISTRATION NO.	OF 18315-52
DWG. NO. / DATE NO.	Scope of Registration
TYPE OF FITTINGS	Smartec CLD18
See Note 2.	INITIALS: Tao Tang
Date	JUL 12 2016
	TAO TANG, P.Eng. DESIGN SURVEY ENGINEER

**MANUFACTURING LOCATIONS**

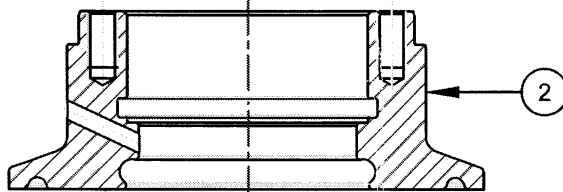
Endress+Hauser Conducta 70839 Gerlingen incl. manufacturing sites 04736 Waldheim and 64823 GroB-Umstadt, Germany	Endress+Hauser Conducta 215021 Suzhou, Endress+Hauser Analytical Instruments Suzhou Co. Ltd. P.R. China
Endress+Hauser Conducta 4123 LA Palma Ave., Anaheim, CA 92807, USA	

**Note 1)** The assembly clamp is not part of the CRN and is not manufactured by ENDRESS+HAUSER. Pressure-Temperature ratings may be limited by the clamp type used in the joint assembly. Consult clamp Manufacturer for clamp Pressure-Temperature ratings.

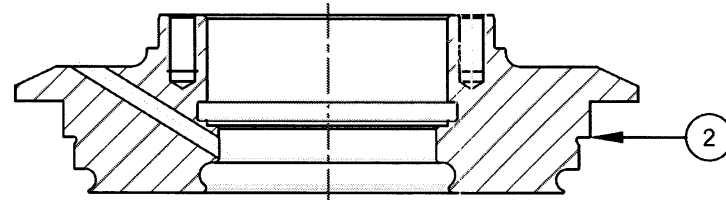
**Note 2)** The following additional alloys of superior or equivalent properties to those listed above are also included in the scope of registration as follows:  
 N06022, B574/B564, (C-22, 2.4602); N10276, B574/B564, (C-276, 2.4819); S31803, A479/A182, F51, (318LN, 1.4462); S32750, A240/A182, F53, (2507, 1.4410); S32760, A479/A182, F55, (Zeron 100, 1.4501); N06600, B166/B564, (Inconel 600, 2.4816); N06625, B446/B564, (Inconel 625, 2.4856); N08825, B425/B564, (Inconel 825, 2.4858); S30400/S30403, A479/A182, (304/304L, 1.4301/1.4306/1.4307);



G 1-1/2 PROCESS CONNECTION



ISO2852 CLAMP 2"



GEA TUCHENHAGEN VARIVENT  
DN40-125

Bill of Materials

Item	Description	Material	Qty
1	PLASTIC SHELL	PEEK (POLYETHERETHERKETONE)	1
2	PROCESS ADAPTOR	STAINLESS STEEL 1.4435 TYPE 316L STAINLESS STEEL UNS S31603	1
3	PLASTIC SHELL SEAL	ELASTOMER	1

Notes:

- All dimensions are in inches. SI units if provided are in brackets.
- Reference ENDRESS+HAUSER Technical Information Bulletin TI01080C/07/EN/02.14 and drawings 401609, 401610, 401602.
- Design conditions:
  - 174 psig at 122F
  - 98 psig at 230F
  - 72.5 psig at 266F (max. 60 minutes)

OF 18315.52

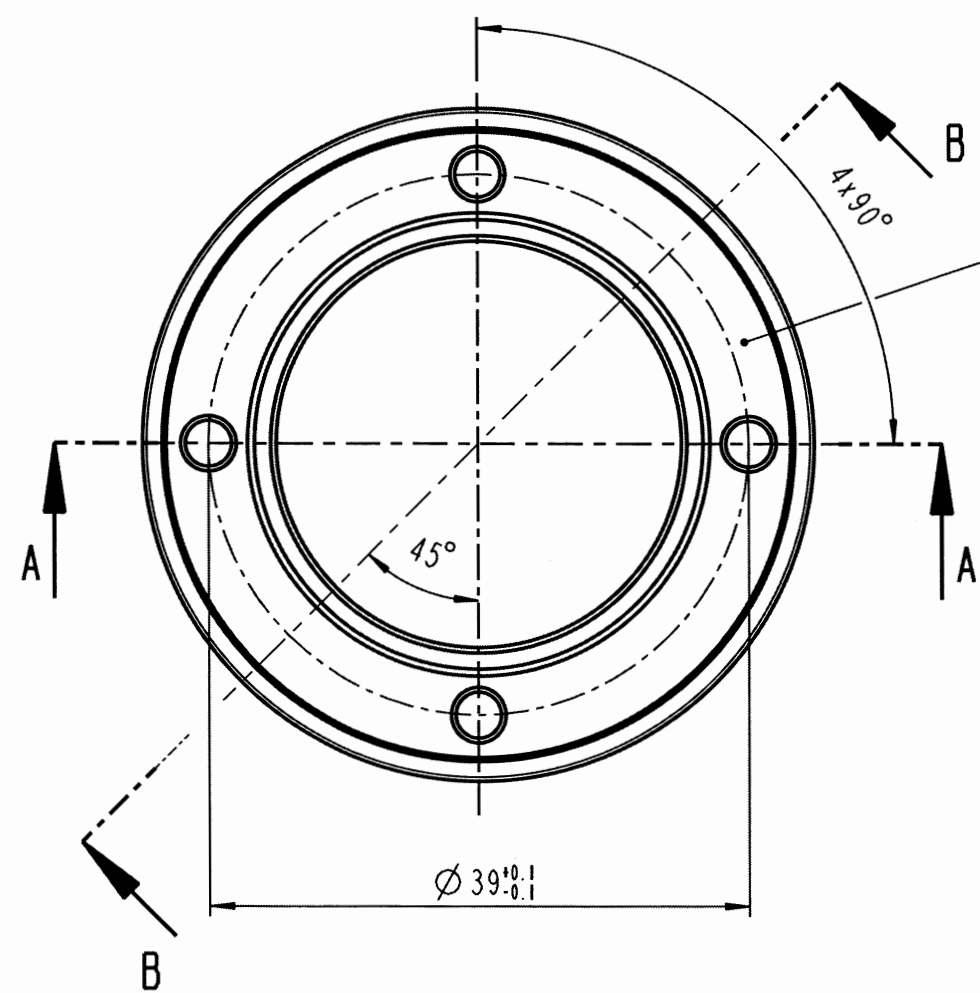
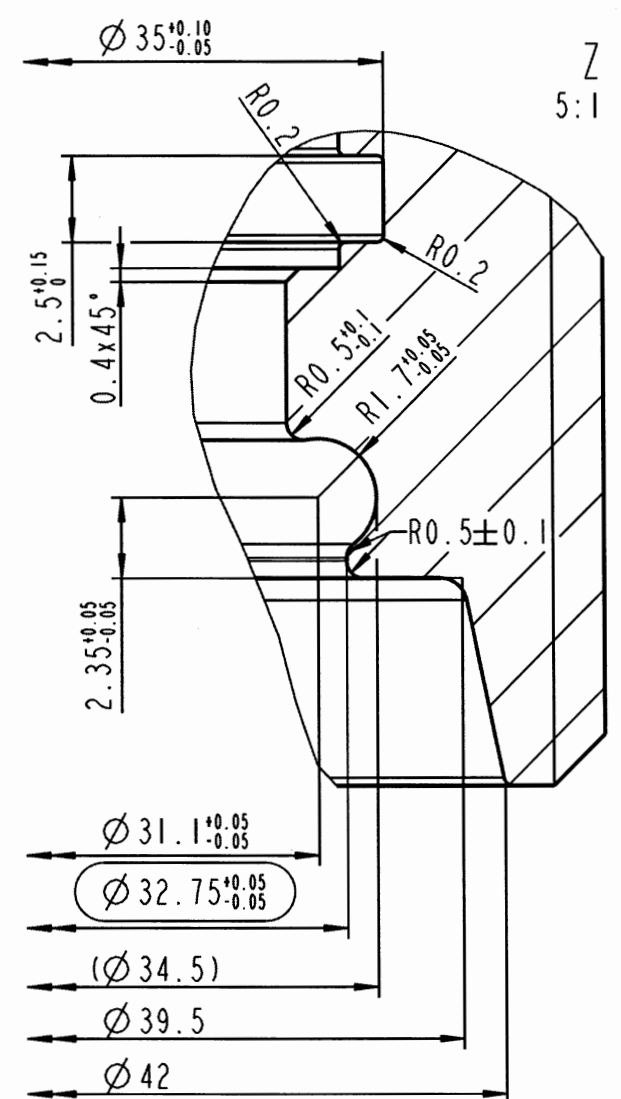
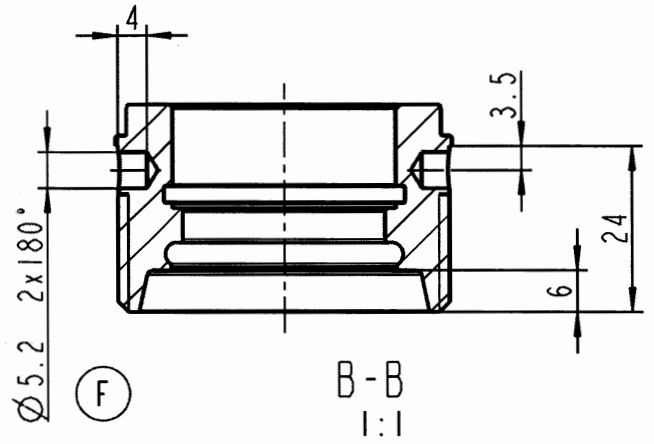
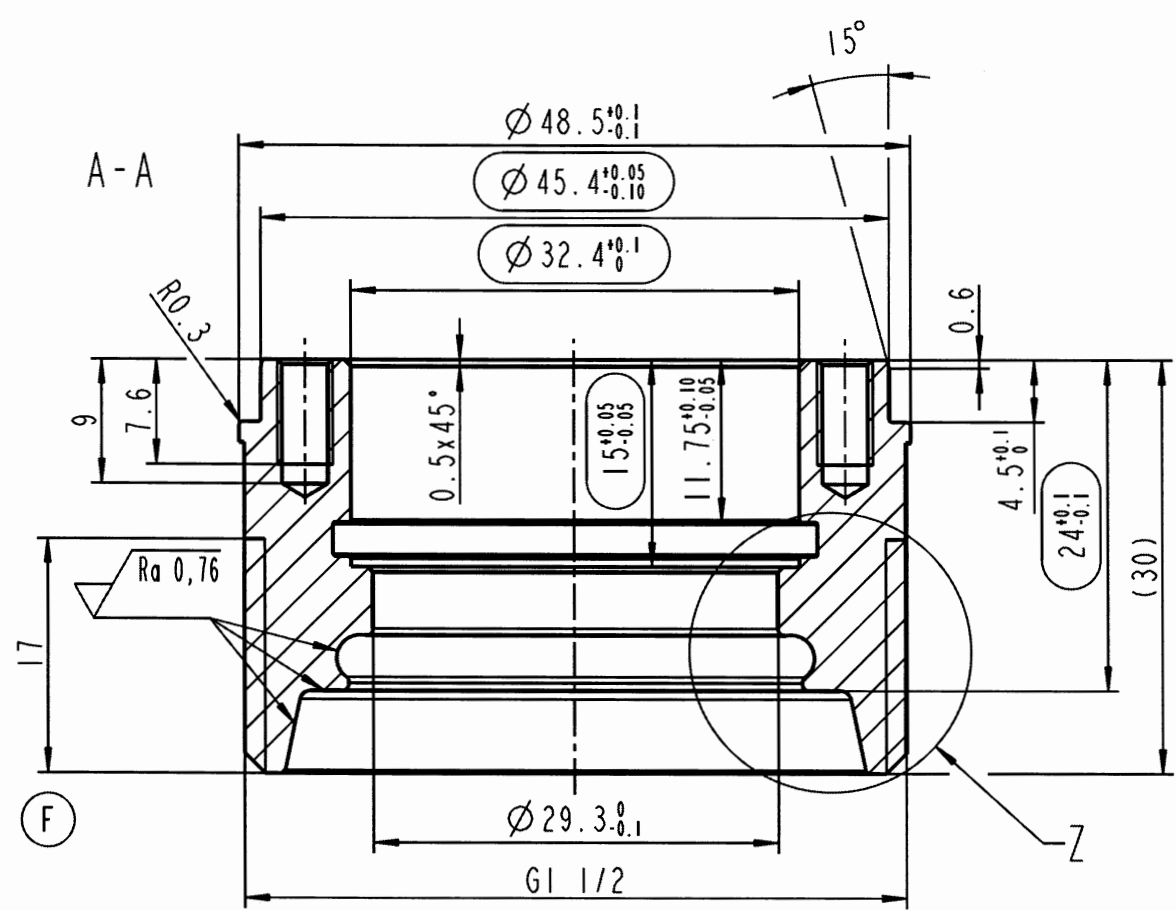
REV.	DESCRIPTION	DATE	INITIALS

**Endress+Hauser**   
People for Process Automation

TITLE  
SMARTEC CRN GENERAL ARRANGEMENT DRAWING

UNLESS OTHERWISE NOTED 1. DIMENSIONS ARE IN INCHES. IF USED SI UNITS ARE IN ( ) BRACKETS. 2. TOLERANCES FRACTIONAL: +/- 1/8" DECIMALS: .XX +/- .02 .XXX +/- .005		THE INFORMATION CONTAINED IN THE DRAWING IS THE SOLE PROPERTY OF ENDRESS+HAUSER. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF ENDRESS+HAUSER IS PROHIBITED.		MODEL CLD18	WORK ORDER N/A
DRAWN BY SI	CHECKED BY RI	DRAWING SIZE B	SCALE NONE	DATE 18/01/2016	DRAWING NO. R-0446
		REV. 0	SHEET 1 of 1		

GEOMETRICAL TOLERANCING: DIN ISO 1101  
 SURFACE TEXTURE: DIN ISO 1302  
 EDGES OF WORKING PARTS: DIN 6784



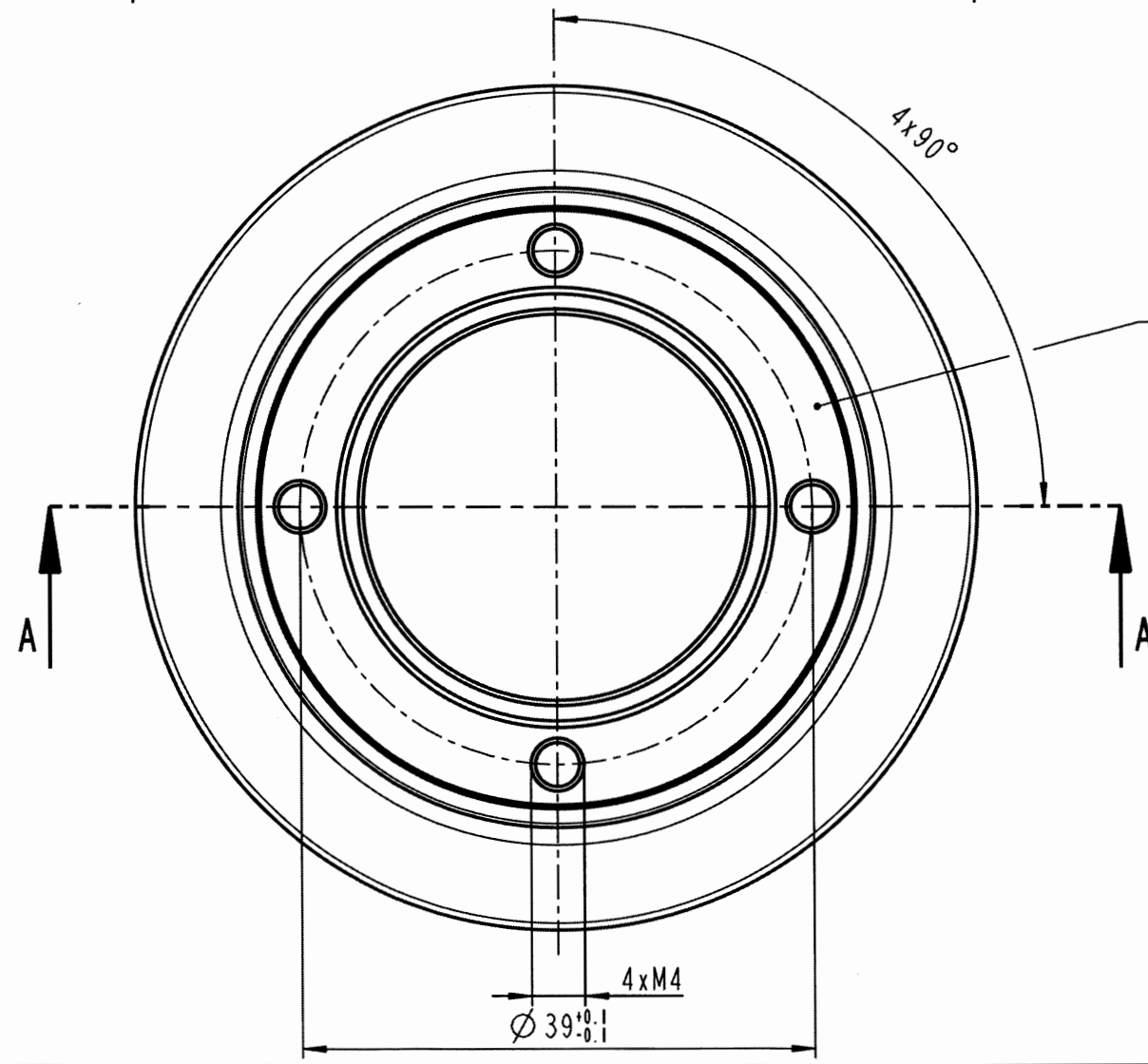
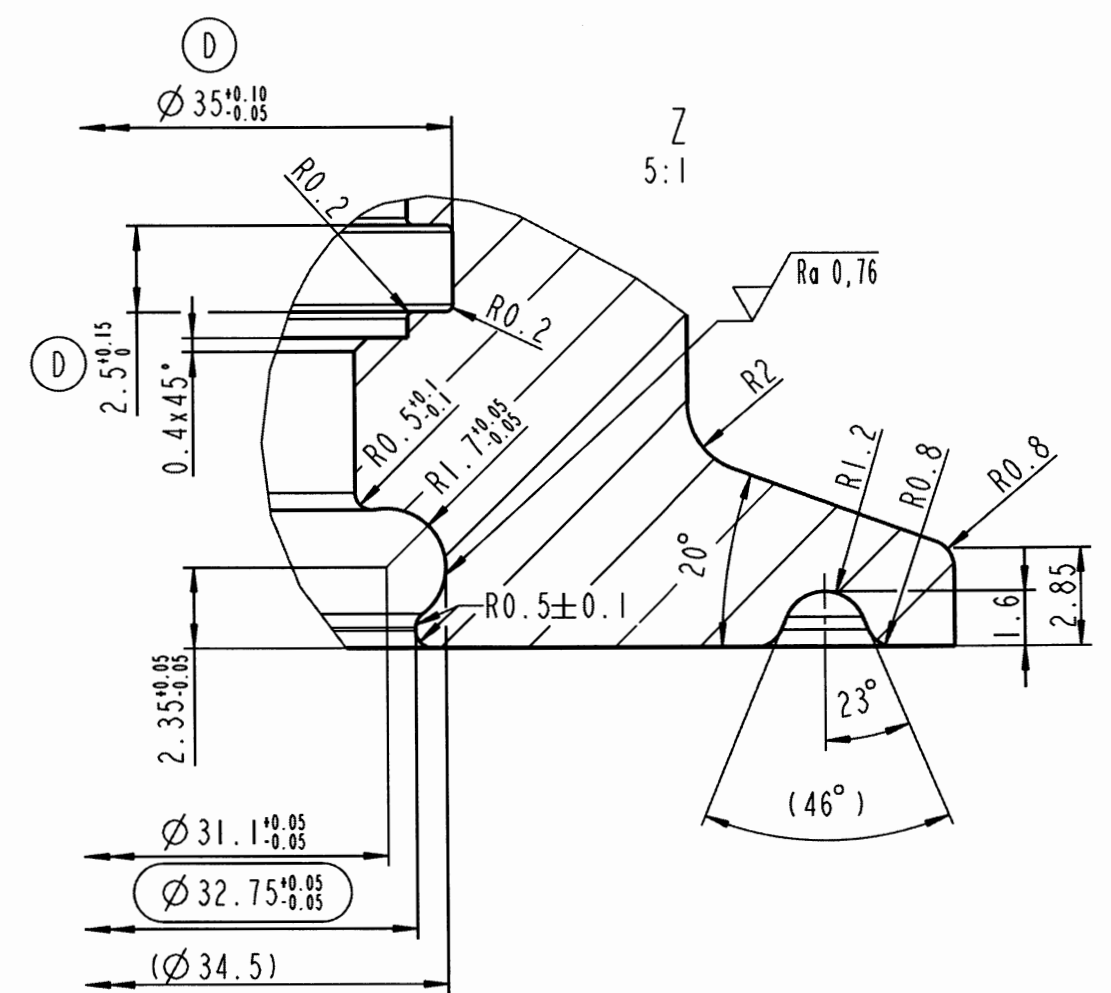
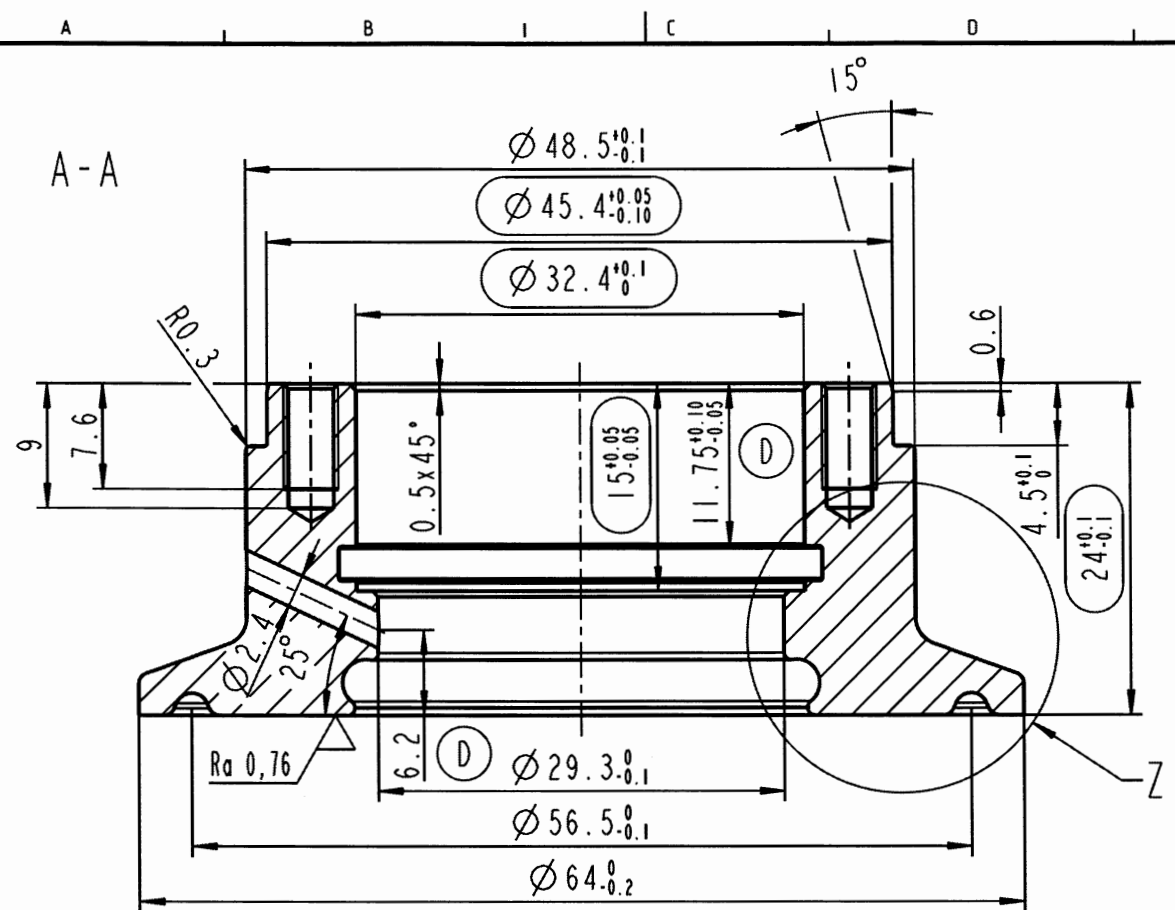
Beschriftungsfläche für  
 3.1 Chargenkennzeichnung nach EN10204  
 labelling area for  
 3.1 charge identification acc. to EN10204

Oberfläche frei von Kratzern  
 und sonstigen Beschädigungen!  
 surface free of scratches  
 and other damages!

Maßstab/scale: 2:1  
 Zeichnungsnummer / drawing-no.: 401609  
 INDEX: F  
 Oberflächenrauheit: Ra 1,6 (Ra 0,76)  
 elektropliert / electropolished

OF 18315-52

Schutzvermerk nach ISO 16016 beachten. Refer to protection notice ISO 16016.		PLM 401609/000/F	DIS	Endress+Hauser Conducta GmbH & Co. KG Gerlingen, Germany	
Status	In_Serie	 Toleranz/tolerance ISO 2768-mH-E		Werkstoff/material: 1.4435 3.1 Zeugnis	
entworfen designed	Datum/date Name/name			Maßstab/scale: 2:1	Zeichnungsnummer / drawing-no.: 401609
Änderung revised	104308	creator-system: Pro/E		Benennung / title: Prozessadapter G1 1/2" CLD18	
geprüft approved	15.04.14 serflinga	Format: DIN A3	process adapter G1 1/2" CLD18		
Gerät/used for: CLD18		Blatt/page: 1/1		Production free <input type="checkbox"/> GER <input type="checkbox"/>	



(D) Beschriftungsfläche für  
3.1 Chargenkennzeichnung nach EN10204  
labelling area for  
3.1 charge identification acc. to EN10204

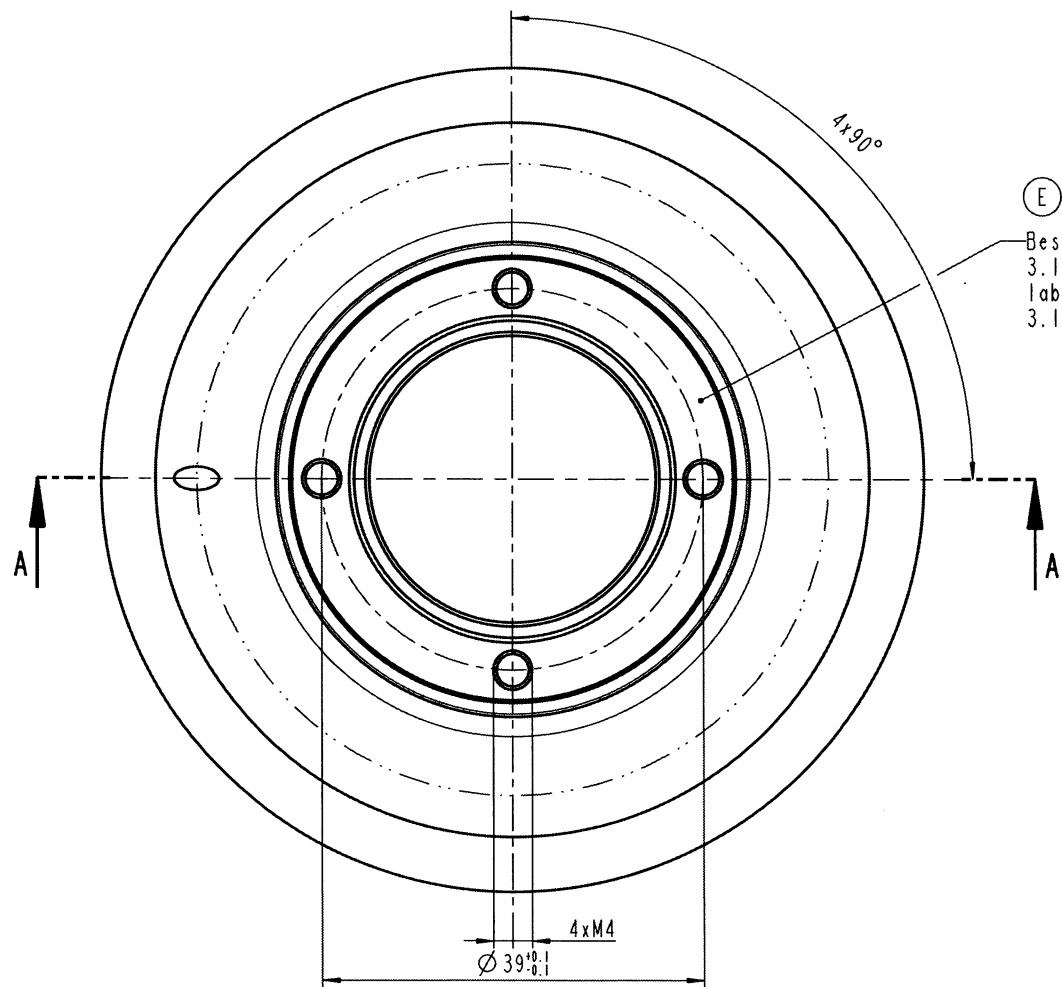
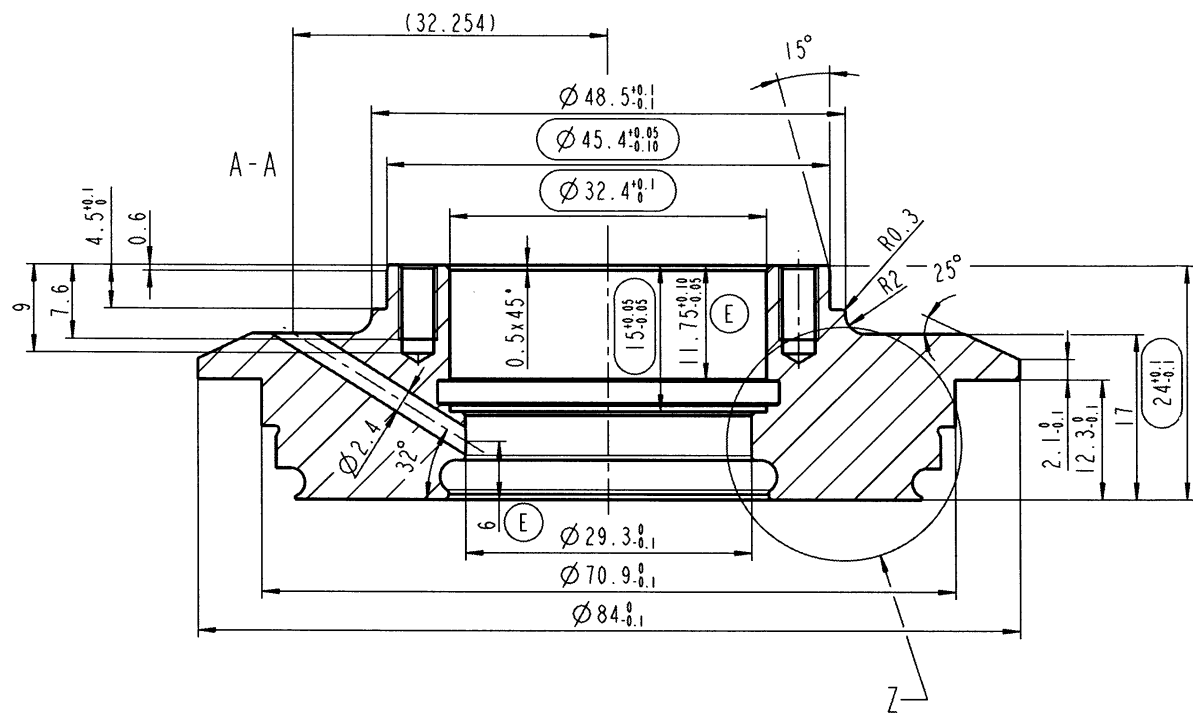
0F18315-52

Oberfläche frei von Kratzern  
und sonstigen Beschädigungen! /  
surface free of scratches  
and other damages!

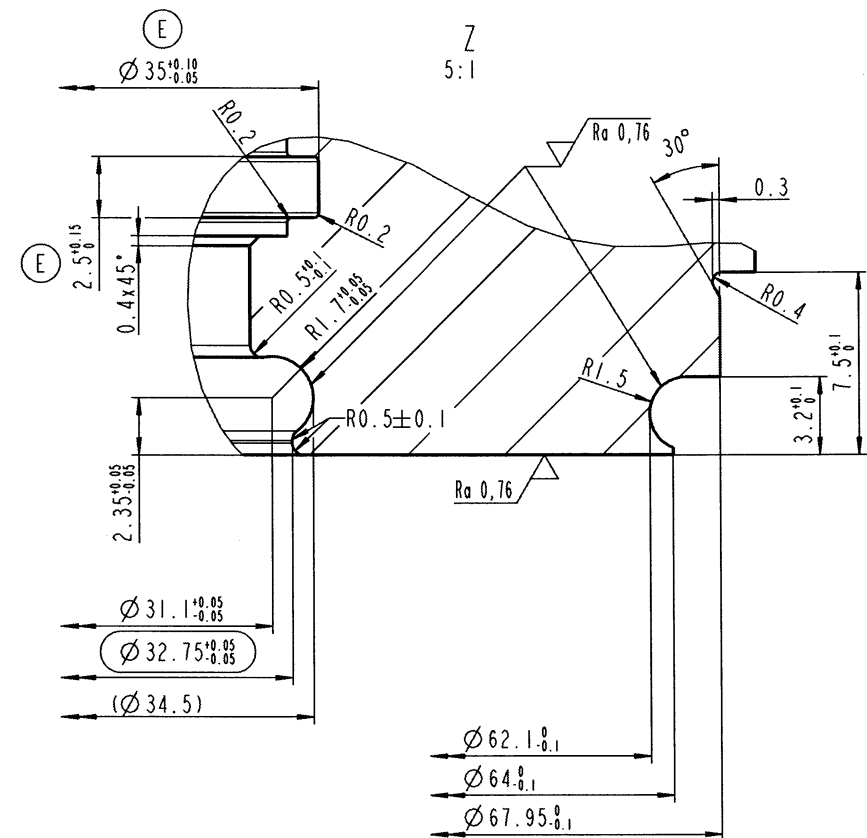
elektropoliert / electropolished  
 Ra 1,6 (Ra 0,76)

GEOMETRICAL TOLERANCING, DIN ISO 1101  
SURFACE TEXTURE, ISO 1302  
EDGES OF WORKING PARTS, DIN 6784

Schutzvermerk nach ISO 16016 beachten.		PLM	DIS	Endress+Hauser Conducta GmbH & Co. KG Gerlingen, Germany	
Refer to protection notice ISO 16016.		401610/000/0		<b>Endress+Hauser</b>	
Status	In_Serie			Werkstoff/material: 1.4435 3.1 Zeugnis	
entworfen designed	Datum/date Name/name			Maßstab/scale: 2:1	Zeichnungsnummer / drawing-no. 401610
Anderung revision	Nullserie.	Toleranz/tolerance ISO 2768-mH-E		Benennung / title: Prozessadapter ISO2852 Clamp 2" CLD18 process adapter ISO2852 Clamp 2" CLD18	
geändert revised	20.06.13 Pfa	creator-system	Pro/E		
geprüft approved	03.07.13 fanselow	Format	DIN A3		
Gerät/used for: CLD18		Blatt/page 1/1		Production free	



(E) Beschriftungsfläche für  
 3.1 Chargenkennzeichnung nach EN10204  
 labelling area for  
 3.1 charge identification acc. to EN10204



018315-52

Oberfläche frei von Kratzern  
 und sonstigen Beschädigungen! /  
 surface free of scratches  
 and other damages!

-0,3    0,3    Ra 1,6    (Ra 0,76)    elektropoliert / electropolished

Schutzvermerk nach ISO 16016 beachten, PLM DIS		Endress+Hauser Conducta GmbH & Co. KG Gerlingen, Germany		<b>Endress+Hauser</b>	
Refer to protection notice ISO 16016.		401602/0001		Werkstoff/material: 1.4435 3.1 Zeugnis	
Status	In_Serie			Maßstab/scale:	Zeichnungsnummer / drawing-no.
entworfen designed	08.07.11 Pfa			2:1	401602
Änderung revision	Nullserie.	Toleranz/tolerance ISO 2768-mH-E		Benennung / title:	
geändert revised	20.06.13 Pfa	creator- System	Pro/Æ	Prozessadapter Varivent DN40-125 CLD18	
geprüft approved	03.07.13 fanselow	Format	DIN A2	process adapter Varivent DN40-125 CLD18	
Gerät / used for:	CLD18	Blatt / page	1 / 1	Production free	