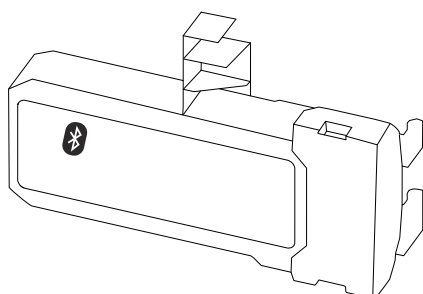


Special Documentation

Bluetooth module

BT10

Accessories



Application

- Remote operation of HART devices via Bluetooth® wireless technology
- Suitable for Levelflex and Micropilot
(For details, see the "Designated use" section)

Your benefits

- Quick and easy setup with the SmartBlue app
- No additional tools or adapters needed
- Signal curve via SmartBlue (app)
- Encrypted single point-to-point data transmission (tested by Fraunhofer Institute) and password-protected communication via Bluetooth® wireless technology
- Range under reference conditions: >10 m (33 ft)

Intended use

Suitable for the following device versions:

Levelflex FMP50, FMP51, FMP52, FMP53, FMP54, FMP55, FMP56, FMP57

- Communication: HART
- Firmware version: 01.03.zz or higher
- Device version: 4
- When the Bluetooth module is used, the minimum supply voltage of the device increases by up to 2 V

Micropilot FMR50, FMR51, FMR52, FMR53, FMR54, FMR56, FMR57

- Communication: HART
- Firmware version: 01.02.zz or higher
- Device version: 3
- When the Bluetooth module is used, the minimum supply voltage of the device increases by up to 3 V

Micropilot FMR60, FMR62, FMR67

- Communication: HART
- Firmware version: 01.00.zz or higher
- Device version: 1
- When the Bluetooth module is used, the minimum supply voltage of the device increases by up to 2 V

Retrofitting with the Bluetooth module

The following devices can be retrofitted with the Bluetooth module:

Levelflex FMP50, FMP51, FMP52, FMP53, FMP54, FMP55, FMP56, FMP57

- Approval: IECEx
 - Approval number: IECExKEM10.0043X
 - Safety instructions for using the Bluetooth module: XA01798F
- Approval: ATEX
 - Approval number: KEMA10ATEX0093X, EG10009X, EG10010X
 - Safety instructions for using the Bluetooth module: XA01798F

Micropilot FMR50, FMR51, FMR52, FMR53, FMR54, FMR56, FMR57

- Approval: IECEx
 - Approval number: IECExPTB12.0044X
 - Safety instructions for using the Bluetooth module: XA01798F
- Approval: ATEX
 - Approval number: PTB12ATEX2018X, EG12022X, EG12023X
 - Safety instructions for using the Bluetooth module: XA01798F

Micropilot FMR60, FMR62, FMR67

- Approval: IECEx
 - Approval number: IECExIBE16.0035X
 - Safety instructions for using the Bluetooth module: XA01798F
- Approval: ATEX
 - Approval number: IBExU16ATEX1194X, EC00478X, EC00479X
 - Safety instructions for using the Bluetooth module: XA01798F



Devices with WHG or marine approval: retrofit is not possible

Declaration of conformity



Restrictions in case of retrofitting

The use of the Bluetooth module may be restricted depending on the transmitter approval. A device may only be retrofitted with the Bluetooth module if the option *NF* (Bluetooth) is listed under *Optional specifications* in the Safety Instructions (XA) associated with the device.



EU Declaration of Conformity

(de)	EU-Konformitätserklärung	(lv)	ES atbilstības deklarācija
(fr)	Déclaration de conformité UE	(hu)	EU-megfelelőségi nyilatkozat
(bg)	ЕС Декларация за съвместимост	(nl)	EG-conformiteitsverklaring
(es)	Declaración CE de conformidad	(pl)	Deklaracja zgodności UE
(cs)	EU prohlášení o shodě	(pt)	Declaração de conformidade da CE
(da)	EF-overensstemmelseserklæring	(ro)	Declarație de conformitate UE
(et)	ELi vastavusdeklaratsioon	(sk)	Vyhlasenie o zhode EÚ
(el)	Δήλωση συμμόρφωσης ΕΕ	(sl)	EU izjava o skladnosti
(hr)	EU Izjava o sukladnosti	(fi)	EU-vaatimustenmukaisuusvakuutus
(it)	Dichiarazione di Conformità UE	(sv)	EU-försäkran om överensstämmelse
(lt)	ES atitikties deklaracija		

Endress+Hauser SE+Co. KG, Hauptstraße 1, 79689 Maulburg

declares as manufacturer under sole responsibility, that the product

(de)	erklärt als Hersteller in alleiniger Verantwortung, dass das Produkt
(fr)	déclare en tant que fabricant, sous sa seule responsabilité, que le produit
(bg)	декларира като производител с изключителна отговорност, че продуктът
(es)	declara, en calidad de fabricante y asumiendo en exclusiva la responsabilidad, que el producto
(cs)	jakožto výrobce, prohlašuje na svou vlastní zodpovědnost, že výrobek
(da)	erklærer som producent under eneansvar, at produktet
(et)	kinnitab tootjana oma ainuvastutusel, et toode
(el)	δηλώνει ως κατασκευαστής με αποκλειστική της ευθύνη, ότι το προϊόν
(hr)	izjavljuje kao proizvođač s isključivom odgovornošću da je proizvod
(it)	dichiara, sotto la propria esclusiva responsabilità in quanto fabbricante, che il prodotto
(lt)	kaip gamintojas prisiimdamas atsakomybę patvirtina, kad gaminys
(lv)	kā ražotājs un uzņemoties visu atbildību paziņo, ka izstrādājums
(hu)	mint gyártó kizárólagos felelőssége mellett kijelenti, hogy a termék
(nl)	verklaart als fabrikant onder volledige verantwoordelijkheid, dat het product
(pl)	jako producent oświadcza, na swoją wyłączną odpowiedzialność, że wyrób
(pt)	declara como fabricante sob responsabilidade exclusiva, que o produto
(ro)	în calitate de producător, declară pe proprie răspundere că produsul
(sk)	vyhlasuje ako výrobca na vlastnú zodpovednosť, že výrobok
(sl)	kot proizvajalec z izključno odgovornostjo izjavlja, da je izdelek
(fi)	ilmoittaa valmistajana yksinomaaisella vastuullaan, että tuote
(sv)	förkunnar som tillverkare med ensamansvar, att produkten

Bluetooth adapter

BT10

Endress+Hauser 

People for Process Automation



conforms to following European Directives:

- (de) den folgenden Europäischen Richtlinien entspricht:
- (fr) est conforme aux directives européennes suivantes :
- (bg) отговаря на следните европейски директиви:
- (es) se ajusta a las siguientes directivas europeas:
- (cs) vyhovuje následujícím evropským směrnicím:
- (da) er i overensstemmelse med følgende direktiver:
- (et) vastab järgmistele Euroopa direktiividele:
- (el) συμμορφώνεται με τις ακόλουθες Ευρωπαϊκές Οδηγίες:
- (hr) u skladu sa sljedećim europskim direktivama:
- (it) è conforme alle seguenti direttive europee:
- (lt) atitinka toliau nurodytas Europos Sąjungos direktyvas:
- (lv) atbilst tālāk norādīto Eiropas direktīvu prasībām:
- (hu) megfelel az alábbi európai irányelveknek:
- (nl) voldoet aan de volgende Europese richtlijnen:
- (pl) jest zgodny z następującymi dyrektywami europejskimi:
- (pt) está em conformidade com as seguintes diretrizes europeias:
- (ro) este în conformitate cu următoarele directive europene:
- (sk) je v súlade s týmito európskymi smernicami:
- (sl) skladen z naslednjimi evropskimi direktivami:
- (fi) täyttää seuraavat eurooppalaiset direktiivit:
- (sv) överensstämmer med följande europeiska direktiv:

RED 2014/53/EU (L153/62)

RoHS 2011/65/EU (L174/88)



Applied harmonized standards or normative documents:

- (de) Angewandte harmonisierte Normen oder normative Dokumente:
- (fr) Normes harmonisées ou documents normatifs appliqués :
- (bg) Приложени хармонизирани стандарти или нормативни документи:
- (es) Normas armonizadas o documentos normativos aplicados:
- (cs) Aplikované harmonizované normy nebo normativní dokumenty:
- (da) Anvendte harmoniserede standarder eller normative dokumenter:
- (et) Kohaldatud harmoneeritud standardid või normdokumendid:
- (el) Εφαρμοσμένα εναρμονισμένα πρότυπα ή κανονιστικά έγγραφα:
- (hr) Primijenjeni usklađeni standardi ili normativni dokumenti:
- (it) Norme armonizzate o documenti normativi applicati:
- (lt) Taikytini suderintieji standartai ar norminiai dokumentai:
- (lv) Piemērotie saskaņotie standarti vai normatīvie dokumenti:
- (hu) Alkalmazott harmonizált szabványok vagy normatív dokumentumok:
- (nl) Toegepaste geharmoniseerde normen of normatieve documenten:
- (pl) Zastosowane normy zharmonizowane lub dokumenty normatywne:
- (pt) Normas harmonizadas aplicadas ou documentos normativos:
- (ro) Standarde armonizate sau documente normative în vigoare:
- (sk) Použité harmonizované normy alebo normatívne dokumenty:
- (sl) Uporabljeni harmonizirani standardi ali normativni dokumenti:
- (fi) Sovelletut yhdenmukaistetut standardit tai ohjeelliset asiakirjat:
- (sv) Tillämpade harmoniserade standarder eller normativa dokument:

EN 300328-V2.2.2	(2019)
EN 301489-1 V2.2.3	(2019)
EN 301489-17 V3.3.4	(2020)
EN 61010-1	(2010)
EN 61326-1	(2013)
EN 61326-2-3	(2013)
EN 61326-2-5	(2013)
EN IEC 62311	(2020)
EN IEC 63000	(2018)



i.V. Dr. Arno Götz
Department Manager Product Safety

Maulburg, 21.01.2022
Endress+Hauser SE+Co. KG

EC_00706_03.22

A0047849

Registered trademarks

Bluetooth®

The Bluetooth® wordmark and logos are registered trademarks of Bluetooth SIG, Inc. and any use of these trademarks by Endress+Hauser is licensed. Other trademarks and trade names are those of their respective owners.

Apple®

Apple, the Apple logo, iPhone, and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple Inc.



Android®

Android, Google Play and the Google Play logo are trademarks of Google Inc.

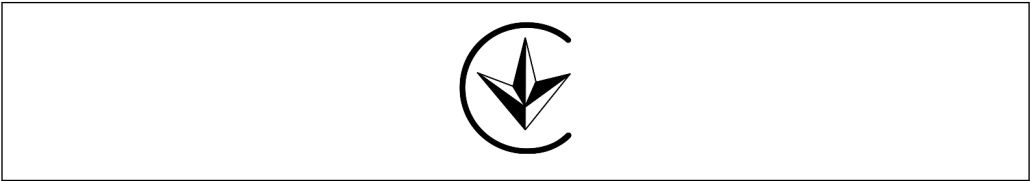
Radio approvals

Europe	This device meets the requirements of the Radio Equipment Directive RED 2014/53/EU. The standards applied are listed in the Declaration of Conformity.
--------	---

Qatar	ictQATAR Type Approval reg. No.: CRA/SM/2019/R-7593 Importer No: FT-2887
-------	---

United Arab Emirates	<div><div>TRA - United Arab Emirates Dealer ID: DA37063/14 TA RTTE: ER73409/19 Model: BT10 Type: Bluetooth</div></div>
----------------------	---

Ukraine	UA.TR.052 DoC: Download
---------	--



A0040061

Canada and USA

English

This device complies with Part 15 of the FCC Rules and with Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following two conditions:

- this device may not cause harmful interference, and
- this device must accept any interference received, including interference that may cause undesired operation



Changes or modifications made to this equipment not expressly approved by Endress+Hauser SE+Co. KG may void the FCC authorization to operate this equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- reorient or relocate the receiving antenna
- increase the separation between the equipment and receiver
- connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- consult the dealer or an experienced radio/TV technician for help

Radiofrequency radiation exposure information

This equipment complies with FCC and IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm (7.87 in) between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Français

Le présent appareil est conforme aux CNR d'industrie Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes:

- L'appareil ne doit pas produire de brouillage, et
- L'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement



Les changements ou modifications apportées à cet appareil non expressément approuvée par Endress+Hauser SE+Co. KG peut annuler l'autorisation FCC d'utiliser cet appareil.

Déclaration d'exposition aux radiations

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm (7.87 in) de distance entre la source de rayonnement et votre corps.

Ce transmetteur ne doit pas être placé au même endroit ou utilisé simultanément avec un autre transmetteur ou antenne.

Brazil

01226-19-07318

Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário.



A0039064

Mexico

El funcionamiento de este equipo está sujeto a las dos condiciones siguientes:

- (1) Este equipo o aparato no puede causar interferencias perjudiciales.
- (2) Este equipo o aparato debe aceptar todas las interferencias, incluyendo las que puedan causar un funcionamiento indeseado del equipo o aparato.

Este producto contiene un módulo inalámbrico

Marca: Endress+Hauser

Modelo: BT10

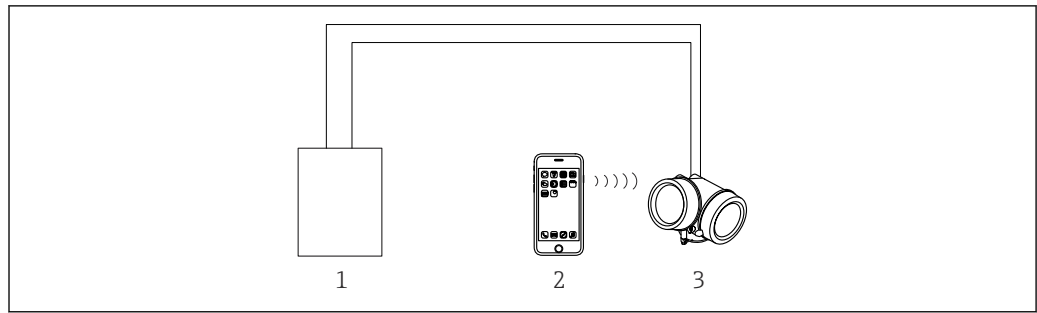
IFT No.: RCPENBT18-2146



A0034100

Japan	<p>Japanese Radio Law and Japanese Telecommunications Business Law Compliance.</p> <p>This device is granted pursuant to the Japanese Radio Law (電波法) and the Japanese Telecommunications Business Law (電気通信事業法).</p> <p>This device should not be modified (otherwise the granted designation number will become invalid).</p>
Malaysia	 <p>A0040072</p>
Singapore	<p>Complies with IMDA Standards</p> <p>DA108204</p>
Taiwan	<p>根據 NCC 低功率電波輻射性電機管理辦法規定：</p> <p>第十二條 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。</p> <p>第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。</p> <p>產品名稱 Endress+Hauser</p> <p>產品型號 BT10</p> <p>產地 德國</p> <p>製造商 Endress+Hauser SE+Co.KG</p>
Thailand	<p>เครื่องวิทยุคมนาคมนี้ ได้รับยกเว้น ไม่ต้องได้รับ ใบอนุญาตให้มี ใช้ซึ่งเครื่องวิทยุคมนาคม หรือตั้งสถานีวิทยุคมนาคมตามประกาศ กสทช. เรื่อง เครื่องวิทยุคมนาคม และสถานีวิทยุคมนาคมที่ได้รับยกเว้นไม่ต้องได้รับใบอนุญาต วิทยุคมนาคม ตามพระราชบัญญัติวิทยุคมนาคม พ.ศ. 2498</p> <div>    </div>
Indonesia	<p>81507/SDPPI/2022</p> <p>4962</p> 
Other countries	<p>Other national approvals are available on request.</p>

Operation via Bluetooth® wireless technology

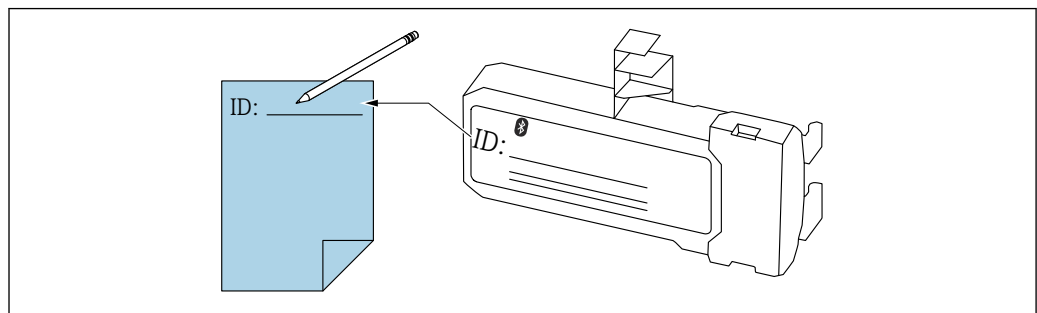


A0034939

1 Possibilities for remote operation via Bluetooth® wireless technology

- 1 Transmitter power supply unit
- 2 Smartphone or tablet with SmartBlue (app)
- 3 Transmitter with Bluetooth® wireless technology

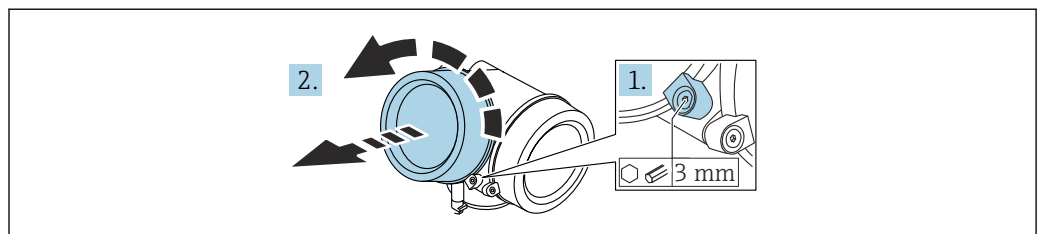
Preparing to install the Bluetooth module



A0036446

Make a note of the ID of the Bluetooth module. The ID is used as the initial password of the device in SmartBlue.

Opening the electronics compartment

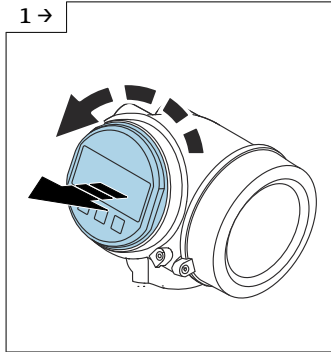


A0021430

- 1. Release the screw of the securing clamp for the cover using an Allen key (3 mm). Swivel the securing clamp counterclockwise by 90°.
- 2. Unscrew the cover and inspect the cover seal. Replace the defective seal.

Mounting the Bluetooth module

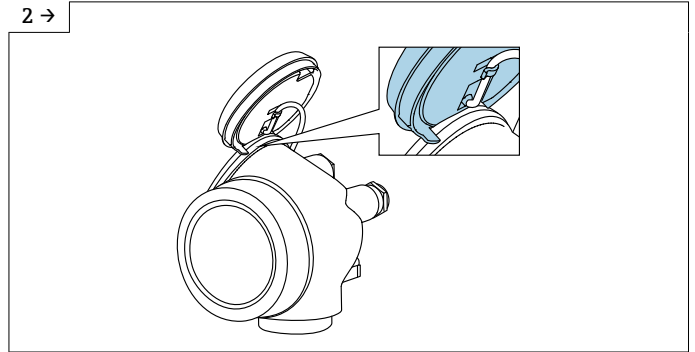
1 →



A0021431

- Release the display by rotating the housing.

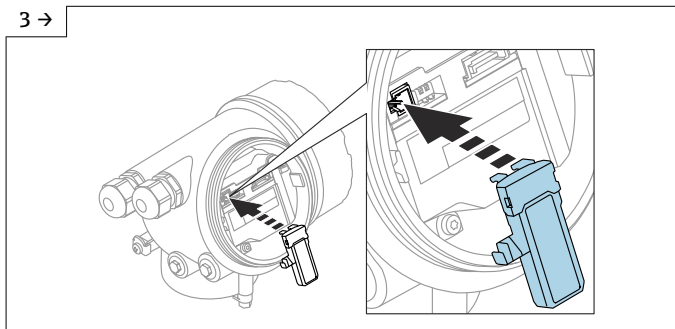
2 →



A0036086

- Attach the display to the edge of the housing.

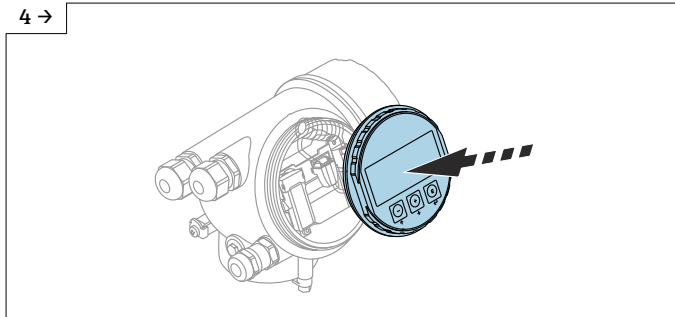
3 →



A0036452

- Attach the new Bluetooth module.

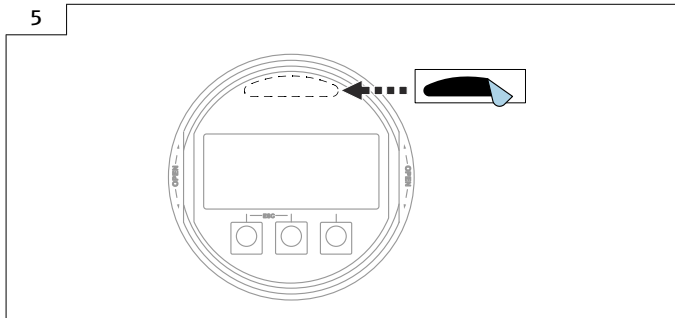
4 →



A0036453

- Feed the display cable into the gap between the housing and main electronics module. Plug the display into the electronics compartment until it engages.

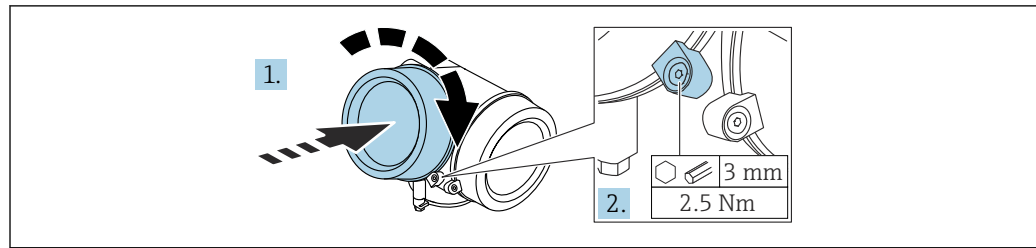
5



A0036672

- FCC, IC or MIC: Apply the FCC, IC or MIC stick-on label to the display if not already present.

Closing the electronics compartment



A0021451

1. Screw down the cover of the electronics compartment.
2. Swivel the securing clamp clockwise by 90°. Tighten the screw of the securing clamp for the cover using an Allen key (3 mm) and a torque of 2.5 Nm.

Commissioning via SmartBlue (App)

Requirements

Device requirements

Commissioning via SmartBlue is only possible if the device has a Bluetooth module.

SmartBlue system requirements

SmartBlue is available as a download from the Google Play Store for Android devices and from the iTunes Store for iOS devices.

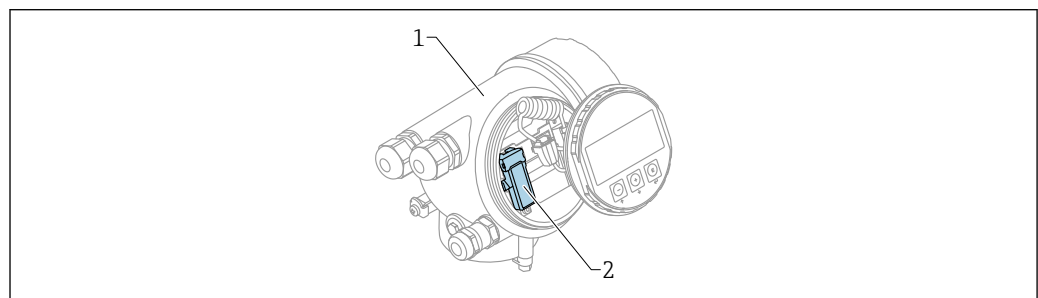
- Devices with iOS:
iPhone 4S or higher from iOS9.0; iPad2 or higher from iOS9.0; iPod Touch 5th generation or higher from iOS9.0
- Devices with Android:
From Android 4.4 KitKat and *Bluetooth*® 4.0

Initial password

The ID of the Bluetooth module is used as the initial password when establishing the connection for the first time.

The ID can be found:

- On the information sheet enclosed with the device
This information sheet, which is specific to the serial number, can also be found in the Device Viewer (www.endress.com/deviceviewer).
- On the nameplate of the Bluetooth module



A0036790

2 Device with Bluetooth module

1 Electronics housing of device

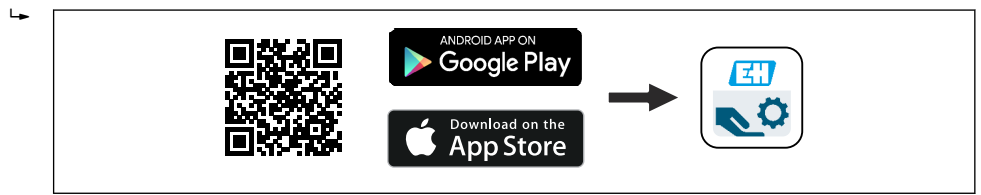
2 Nameplate of Bluetooth module; the ID specified on the nameplate is used as the initial password.

i All the login data (including the password changed by the user) are saved in the Bluetooth module, and not in the device itself. This is important to remember if the module is removed from one device and installed in another device.

Commissioning

SmartBlue App

1. Scan the QR code or enter "SmartBlue" in the search field of the App Store.



A0039186

 3 Download link

2. Start SmartBlue.
3. Select device from livelist displayed.
4. Enter the login data:
 - ↳ User name: admin
 - Password: serial number of the device
5. Tap the icons for more information.



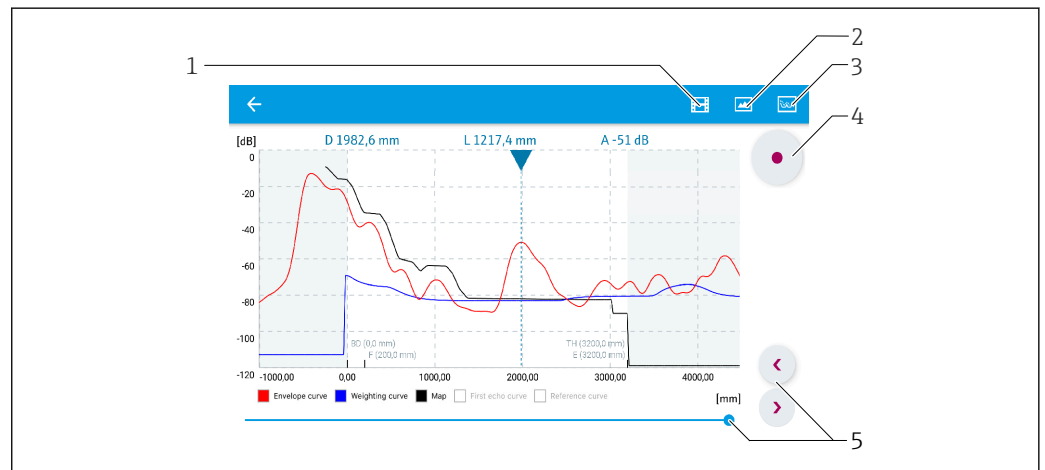
After logging in for the first time, change the password!

Envelope curve display in SmartBlue


Envelope curves can be displayed and recorded in SmartBlue.

In addition to the envelope curve, the following values are displayed:

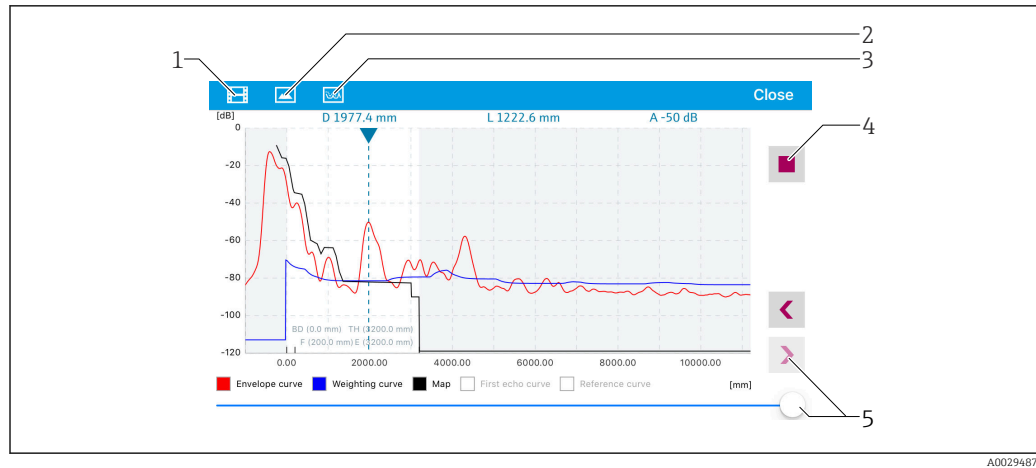
- D = Distance
- L = Level
- A = Absolute amplitude
- With screenshots, the displayed section (zoom function) is saved
- With video sequences, the whole area without zoom function is saved all the time



A0029486

 4 Envelope curve display (sample) in SmartBlue for Android

- 1 Record video
- 2 Create screenshot
- 3 Display mapping menu
- 4 Start/stop video recording
- 5 Move time on time axis



5 Envelope curve display (sample) in SmartBlue for iOS

- 1 Record video
- 2 Create screenshot
- 3 Display mapping menu
- 4 Start/stop video recording
- 5 Move time on time axis



www.addresses.endress.com
