

# Управляемый уровневый радар LTC51

## Технические характеристики

По вопросам продаж и поддержки обращайтесь:

Алматы (727)345-47-04  
Ангарск (3955)60-70-56  
Архангельск (8182)63-90-72  
Астрахань (8512)99-46-04  
Барнаул (3852)73-04-60  
Белгород (4722)40-23-64  
Благовещенск (4162)22-76-07  
Брянск (4832)59-03-52  
Владивосток (423)249-28-31  
Владикавказ (8672)28-90-48  
Владимир (4922)49-43-18  
Волгоград (844)278-03-48  
Вологда (8172)26-41-59  
Воронеж (473)204-51-73  
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06  
Ижевск (3412)26-03-58  
Иркутск (395)279-98-46  
Казань (843)206-01-48  
Калининград (4012)72-03-81  
Калуга (4842)92-23-67  
Кемерово (3842)65-04-62  
Киров (8332)68-02-04  
Коломна (4966)23-41-49  
Кострома (4942)77-07-48  
Краснодар (861)203-40-90  
Красноярск (391)204-63-61  
Курск (4712)77-13-04  
Курган (3522)50-90-47  
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13  
Москва (495)268-04-70  
Мурманск (8152)59-64-93  
Набережные Челны (8552)20-53-41  
Нижний Новгород (831)429-08-12  
Новокузнецк (3843)20-46-81  
Ноябрьск (3496)41-32-12  
Новосибирск (383)227-86-73  
Омск (3812)21-46-40  
Орел (4862)44-53-42  
Оренбург (3532)37-68-04  
Пенза (8412)22-31-16  
Петрозаводск (8142)55-98-37  
Псков (8112)59-10-37  
Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15  
Рязань (4912)46-61-64  
Самара (846)206-03-16  
Санкт-Петербург (812)309-46-40  
Саратов (845)249-38-78  
Севастополь (8692)22-31-93  
Саранск (8342)22-96-24  
Симферополь (3652)67-13-56  
Смоленск (4812)29-41-54  
Сочи (862)225-72-31  
Ставрополь (8652)20-65-13  
Сургут (3462)77-98-35  
Сыктывкар (8212)25-95-17  
Тамбов (4752)50-40-97  
Тверь (4822)63-31-35

Тольятти (8482)63-91-07  
Томск (3822)98-41-53  
Тула (4872)33-79-87  
Тюмень (3452)66-21-18  
Ульяновск (8422)24-23-59  
Улан-Удэ (3012)59-97-51  
Уфа (347)229-48-12  
Хабаровск (4212)92-98-04  
Чебоксары (8352)28-53-07  
Челябинск (351)202-03-61  
Череповец (8202)49-02-64  
Чита (3022)38-34-83  
Якутск (4112)23-90-97  
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(727) 345-47-04

Беларусь +(375) 257-127-884

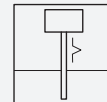
Узбекистан +998(71)205-18-59

Киргизия +996(312)96-26-47

эл.почта: [phb@nt-rt.ru](mailto:phb@nt-rt.ru) || сайт: <https://pepperl-fuchs.nt-rt.ru/>



# Guided Level Radar LTC51



- Premium device for level measurement in liquids
- Measuring range up to 45 m (148 foot)
- Process connection from 3/4 inch thread or flange
- Temperature range up to 200 °C (392 °F)
- Pressure range up to 40 bar (600 psi)
- Up to SIL 3 acc. to IEC/EN 61508

CE  **SIL 3** Ü

## Function

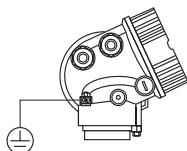
The device offers the following benefits:

- Reliable measurement even for changing product and process conditions
- HistoROM data management for easy commissioning, maintenance and diagnostics
- Highest reliability due to Multi-Echo tracking
- Seamless integration into control or asset management systems
- Intuitive user interface in national languages
- Approvals: ATEX, IECEx

The following interfaces are available for system integration:

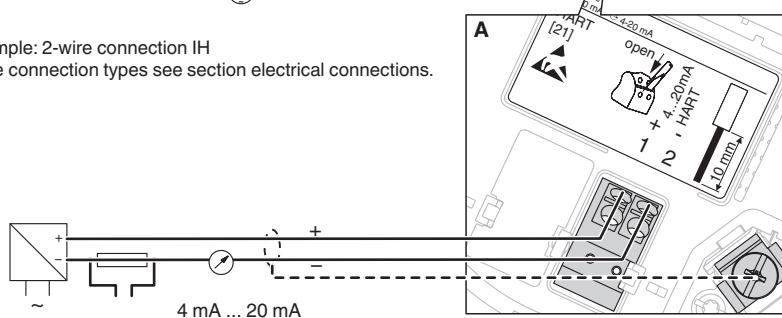
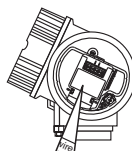
- HART with 4 mA ... 20 mA analog (standard)
- PROFIBUS PA (option)

## Connection



Example: 2-wire connection IH

More connection types see section electrical connections.



## Technical Data

### General specifications

Measuring method

The device is a measuring system that functions according to the time-of-flight method. The distance from the reference point (process connection of the measuring device) to the product surface is measured.

Construction type

device with rod probe  
device with coax probe  
device with rope probe

Series

LTC51

### Functional safety related parameters

## Technical Data

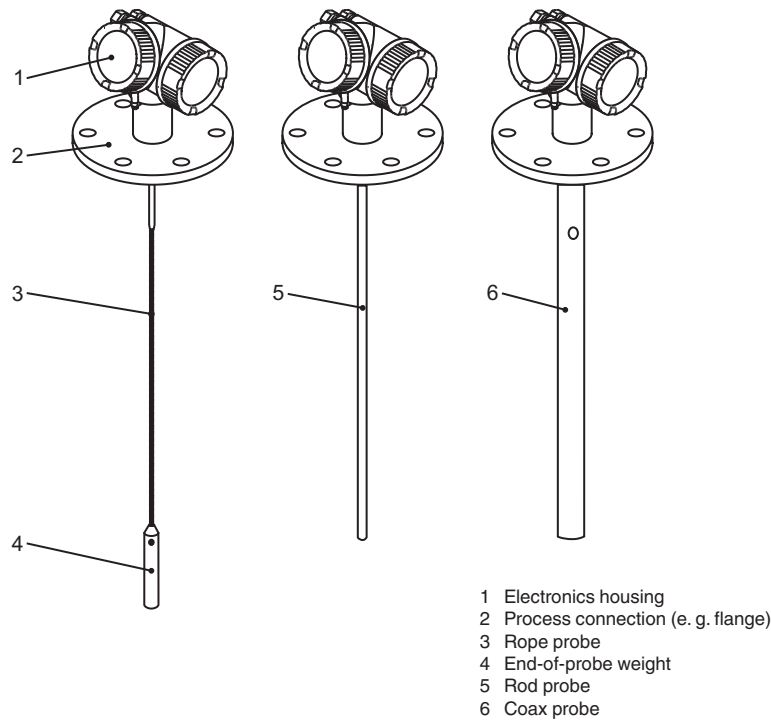
|                                                                |                |                                                                                                                                                                                                                                                    |
|----------------------------------------------------------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety Integrity Level (SIL)                                   |                | SIL 3                                                                                                                                                                                                                                              |
| <b>Supply</b>                                                  |                |                                                                                                                                                                                                                                                    |
| Rated voltage                                                  | U <sub>r</sub> | 11.5 ... 35 V DC, 2-wire<br>10.4 ... 48 V DC, 4-wire<br>90 ... 253 V AC, 50/60 Hz                                                                                                                                                                  |
| <b>Input</b>                                                   |                |                                                                                                                                                                                                                                                    |
| Measured variable                                              |                | distance between reference point and product surface                                                                                                                                                                                               |
| Measurement range                                              |                | rod probe: 4 m/10 m (13 ft/33 ft) (for divisible/indivisible rod probes)<br>coax probe: 6 m (20 ft)<br>rope probe: 45 m (148 ft)                                                                                                                   |
| <b>Output</b>                                                  |                |                                                                                                                                                                                                                                                    |
| Output signal                                                  |                | 4 ... 20 mA<br>2 x 4 ... 20 mA                                                                                                                                                                                                                     |
| Communication                                                  |                | 4 ... 20 mA HART (standard)<br>PROFIBUS PA (option)                                                                                                                                                                                                |
| <b>Directive conformity</b>                                    |                |                                                                                                                                                                                                                                                    |
| Electromagnetic compatibility                                  |                |                                                                                                                                                                                                                                                    |
| Directive 2014/30/EU                                           |                | EN 61326-1:2006 , EN 61326-2-3:2006                                                                                                                                                                                                                |
| Low voltage                                                    |                |                                                                                                                                                                                                                                                    |
| Directive 2014/35/EU                                           |                | EN 61010-1:2010                                                                                                                                                                                                                                    |
| <b>Conformity</b>                                              |                |                                                                                                                                                                                                                                                    |
| Degree of protection                                           |                | IEC 60529:2001                                                                                                                                                                                                                                     |
| <b>Measurement accuracy</b>                                    |                |                                                                                                                                                                                                                                                    |
| Accuracy                                                       |                | digital:<br>- measuring range up to 15 m (49 feet): ±2 mm (0.08 inch)<br>- measuring range > 15 m (49 feet): ±10 mm (0.39 inch)<br>analog: 0.02 %<br>sum of non-linearity, non-repeatability and hysteresis included in the maximum measured error |
| <b>Operating conditions</b>                                    |                |                                                                                                                                                                                                                                                    |
| Process conditions                                             |                |                                                                                                                                                                                                                                                    |
| Process temperature                                            |                | -40 ... 200 °C (-40 ... 392 °F)                                                                                                                                                                                                                    |
| Process pressure (static pressure)                             |                | -1 ... 40 bar (-14.5 ... 580.2 psi)                                                                                                                                                                                                                |
| Dielectric constant                                            |                | rod probe: DC ≥ 1.6<br>coax probe: DC ≥ 1.4<br>rope probe: DC ≥ 1.6                                                                                                                                                                                |
| <b>Ambient conditions</b>                                      |                |                                                                                                                                                                                                                                                    |
| Ambient temperature                                            |                | -40 ... 80 °C (-40 ... 176 °F)                                                                                                                                                                                                                     |
| <b>Mechanical specifications</b>                               |                |                                                                                                                                                                                                                                                    |
| Degree of protection                                           |                | IP68, NEMA 6P (24 hours in water 1.83 m (6 ft) deep)<br>IP66, NEMA 4X                                                                                                                                                                              |
| Connection                                                     |                | gland M20<br>thread M20, G1/2, NPT1/2<br>device plug M12, 7/8 in                                                                                                                                                                                   |
| Material                                                       |                | materials in contact with process :<br>rod probe, coax probe: 1.4404/316L<br>rope probe: 1.4401/316<br>process connections: 1.4404/316L, 2.4602/Alloy C22<br>process membran, seal: Viton, EPDM, Kalrez, gas-tight feed through as option          |
| Process connection                                             |                | threads: from 3/4 in<br>flanges: DIN EN from DN40, ANSI from 1-1/2 in, JIS from DN40                                                                                                                                                               |
| <b>Data for application in connection with hazardous areas</b> |                |                                                                                                                                                                                                                                                    |
| EU-type examination certificate                                |                | see instruction manuals (SI)                                                                                                                                                                                                                       |
| Directive conformity                                           |                |                                                                                                                                                                                                                                                    |
| Directive 2014/34/EU                                           |                | EN 60079-0:2012+A11:2013 , EN 60079-1:2007 , EN 60079-11:2012 , EN 60079-15:2010 , EN 60079-26:2007 , EN 60079-31:2009                                                                                                                             |
| <b>International approvals</b>                                 |                |                                                                                                                                                                                                                                                    |
| IECEx approval                                                 |                | see instruction manuals (SI)                                                                                                                                                                                                                       |
| <b>Certificates and approvals</b>                              |                |                                                                                                                                                                                                                                                    |
| Overspill protection                                           |                | see approval (ZE)                                                                                                                                                                                                                                  |
| Telecommunications                                             |                | radio license FCC                                                                                                                                                                                                                                  |

# Technical Data

|                             |                                                                                                                 |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------|
| <b>General information</b>  |                                                                                                                 |
| Supplementary documentation | technical information (TI)<br>manuals, brief instructions (BA, KA)<br>instruction manuals (SI)<br>approval (ZE) |

|                    |                                |
|--------------------|--------------------------------|
| <b>Accessories</b> |                                |
| Designation        | see technical information (TI) |

# Assembly



# Type Code

This overview does not mark options which are mutually exclusive.  
Option with \* = on request/in preparation  
Option with \*\* = multiple options can be selected

| L     | T                                                                           | C | 5 | 1 | - | (1) | - | (2) | (3) | (4) | - | (5) | (6) | (7) | - | (8) | (9) | . | L |
|-------|-----------------------------------------------------------------------------|---|---|---|---|-----|---|-----|-----|-----|---|-----|-----|-----|---|-----|-----|---|---|
| LTC51 | Device                                                                      |   |   |   |   |     |   |     |     |     |   |     |     |     |   |     |     |   |   |
| LTC51 | Guided level radar                                                          |   |   |   |   |     |   |     |     |     |   |     |     |     |   |     |     |   |   |
| (1)   | Type of probe                                                               |   |   |   |   |     |   |     |     |     |   |     |     |     |   |     |     |   |   |
| 1     | in mm, rod Ø8 mm, 1.4404/316L                                               |   |   |   |   |     |   |     |     |     |   |     |     |     |   |     |     |   |   |
| 2     | in mm, rope Ø4 mm, 1.4401/316, max. 150 mm nozzle height, center rod        |   |   |   |   |     |   |     |     |     |   |     |     |     |   |     |     |   |   |
| 3     | in inch, rope Ø1/6 inch, 1.4401/316, max. 6 in nozzle height, center rod    |   |   |   |   |     |   |     |     |     |   |     |     |     |   |     |     |   |   |
| 4     | in mm, coax, 1.4404/316L                                                    |   |   |   |   |     |   |     |     |     |   |     |     |     |   |     |     |   |   |
| 5     | in inch, rod Ø1/3 inch, 1.4404/316L                                         |   |   |   |   |     |   |     |     |     |   |     |     |     |   |     |     |   |   |
| 6     | in mm, rod Ø12 mm, Alloy C                                                  |   |   |   |   |     |   |     |     |     |   |     |     |     |   |     |     |   |   |
| 7     | in inch, rod Ø1/2 inch, Alloy C                                             |   |   |   |   |     |   |     |     |     |   |     |     |     |   |     |     |   |   |
| 8     | in mm, rod Ø12 mm, 1.4404/316L                                              |   |   |   |   |     |   |     |     |     |   |     |     |     |   |     |     |   |   |
| 9     | in inch, rod Ø1/2 inch, 1.4404/316L                                         |   |   |   |   |     |   |     |     |     |   |     |     |     |   |     |     |   |   |
| A     | in mm, rod Ø16 mm, 1.4404/316L, 500 mm divisible                            |   |   |   |   |     |   |     |     |     |   |     |     |     |   |     |     |   |   |
| B     | in inch, rod Ø0,63 inch, 1.4404/316L, 20 inch divisible                     |   |   |   |   |     |   |     |     |     |   |     |     |     |   |     |     |   |   |
| C     | in mm, rod Ø16 mm, 1.4404/316L, 1000 mm divisible                           |   |   |   |   |     |   |     |     |     |   |     |     |     |   |     |     |   |   |
| D     | in inch, rod Ø0,63 inch, 1.4404/316L, 40 inch divisible                     |   |   |   |   |     |   |     |     |     |   |     |     |     |   |     |     |   |   |
| E     | in mm, rope Ø4 mm, 1.4401/316, max. 300 mm nozzle height, center rod        |   |   |   |   |     |   |     |     |     |   |     |     |     |   |     |     |   |   |
| F     | in inch, rope Ø1/6 inch, 1.4401/316, max. 12 inch nozzle height, center rod |   |   |   |   |     |   |     |     |     |   |     |     |     |   |     |     |   |   |

## Type Code

| (1) | Type of probe              |
|-----|----------------------------|
| G   | in inch, coax, 1.4404/316L |
| H   | in mm, coax, Alloy C       |
| K   | in inch, coax, Alloy C     |
| X   | Special version            |

| (2)     | Process connection                                                     |
|---------|------------------------------------------------------------------------|
| Flanges |                                                                        |
| A51     | 1-1/2 inch 150 lbs RF, 1.4401/316/1.4404/316L, ANSI B16.5 (CRN)        |
| A52     | 1-1/2 inch 300 lbs RF, 1.4401/316/1.4404/316L, ANSI B16.5 (CRN)        |
| A61     | 2 inch 150 lbs RF, 1.4401/316/1.4404/316L, ANSI B16.5 (CRN)            |
| A62     | 2 inch 300 lbs RF, 1.4401/316/1.4404/316L, ANSI B16.5 (CRN)            |
| A81     | 3 inch 150 lbs RF, 1.4401/316/1.4404/316L, ANSI B16.5 (CRN)            |
| A82     | 3 inch 300 lbs RF, 1.4401/316/1.4404/316L, ANSI B16.5 (CRN)            |
| A91     | 4 inch 150 lbs RF, 1.4401/316/1.4404/316L, ANSI B16.5 (CRN)            |
| A92     | 4 inch 300 lbs RF, 1.4401/316/1.4404/316L, ANSI B16.5 (CRN)            |
| AA1     | 6 inch 150 lbs RF, 1.4401/316/1.4404/316L, ANSI B16.5 (CRN)            |
| AB1     | 8 inch 150 lbs RF, 1.4401/316/1.4404/316L, ANSI B16.5 (CRN)            |
| C51     | 1-1/2 inch 150 lbs, Alloy C > 1.4401/316/1.4404/316L, ANSI B16.5 (CRN) |
| C52     | 1-1/2 inch 300 lbs, Alloy C > 1.4401/316/1.4404/316L, ANSI B16.5 (CRN) |
| C61     | 2 inch 150 lbs, Alloy C > 1.4401/316/1.4404/316L, ANSI B16.5 (CRN)     |
| C62     | 2 inch 300 lbs, Alloy C > 1.4401/316/1.4404/316L, ANSI B16.5 (CRN)     |
| C65     | DN40 PN10-40, Alloy C > 1.4404/316L, EN 1092-1                         |
| C73     | DN50 PN10/16, Alloy C > 1.4404/316L, EN 1092-1                         |
| C75     | DN50 PN25/40, Alloy C > 1.4404/316L, EN 1092-1                         |
| C81     | 3 inch 150 lbs, Alloy C > 1.4401/316/1.4404/316L, ANSI B16.5 (CRN)     |
| C82     | 3 inch 300 lbs, Alloy C > 1.4401/316/1.4404/316L, ANSI B16.5 (CRN)     |
| C93     | DN80 PN10/16, Alloy C > 1.4404/316L, EN 1092-1                         |
| C95     | DN100 PN10/16, Alloy C > 1.4404/316L, EN 1092-1                        |
| CA3     | DN80 PN25/40, Alloy C > 1.4404/316L, EN 1092-1                         |
| CA5     | DN100 PN25/40, Alloy C > 1.4404/316L, EN 1092-1                        |
| D65     | DN40 PN10/40 B1, 1.4404/316L, EN 1092-1                                |
| D73     | DN50 PN10/16 B1, 1.4404/316L, EN 1092-1                                |
| D75     | DN50 PN25/40 B1, 1.4404/316L, EN 1092-1                                |
| D93     | DN80 PN10/16 B1, 1.4404/316L, EN 1092-1                                |
| DA3     | DN80 PN25/40 B1, 1.4404/316L, EN 1092-1                                |
| DA5     | DN100 PN25/40 B1, 1.4404/316L, EN 1092-1                               |
| DC3     | DN150 PN10/16 B1, 1.4404/316L, EN 1092-1                               |
| DE3     | DN200 PN16 B1, 1.4404/316L, Flansch EN 1092-1                          |
| J16     | 10K 50A RF, 1.4404/316L, JIS B2220                                     |
| J17     | 10K 80A RF, 1.4404/316L, JIS B2220                                     |
| J18     | 10K 40A RF, 1.4404/316L, JIS B2220                                     |
| J19     | 10K 100A RF, 1.4404/316L, JIS B2220                                    |
| Threads |                                                                        |
| G21     | G3/4, ISO 228, 1.4404/316L                                             |
| G51     | G1-1/2, ISO 228, 1.4404/316L (CRN)                                     |
| N21     | MNPT3/4, ANSI, 1.4404/316L                                             |
| N51     | MNPT1-1/2, ANSI, 1.4404/316L (CRN)                                     |
| XXX     | Special version                                                        |

| (3) | Electrical connection                   |
|-----|-----------------------------------------|
| A   | Gland M20, IP66/68, NEMA 4X/6P          |
| B   | Thread M20, IP66/68, NEMA 4X/6P         |
| C   | Thread G1/2, IP66/68, NEMA 4X/6P        |
| D   | Thread NPT1/2, IP66/68, NEMA 4X/6P      |
| I   | Connector M12, IP66/68, NEMA 4X/6P      |
| M   | Connector 7/8 inch, IP66/68, NEMA 4X/6P |
| X   | Special version                         |

| (4) | Seal                                               |
|-----|----------------------------------------------------|
| 3   | EPDM, -40 to 120 °C                                |
| 4   | Kalrez, -20 to 200 °C, saturated steam max. 150 °C |
| 5   | Viton, -30 to 150 °C                               |
| X   | Special version                                    |

| (5) | Housing                             |
|-----|-------------------------------------|
| A1  | GT19 dual compartment, plastics PBT |

## Type Code

| (5) | Housing                            |
|-----|------------------------------------|
| A2  | GT20 dual compartment, alu coated  |
| A3  | GT18 dual compartment, 1.4404/316L |
| XX  | Special version                    |

| (6) | Electrical output                          |
|-----|--------------------------------------------|
| AH  | 4-wire, 90 to 253 V AC, 4 to 20 mA, HART   |
| DH  | 4-wire, 10.4 to 48 V DC, 4 to 20 mA, HART  |
| ID  | 2-wire, 4 to 20 mA, HART, switching output |
| IE  | 2-wire, 4 to 20 mA, HART, 4 to 20 mA       |
| IH  | 2-wire, 4 to 20 mA, HART                   |
| PA  | 2-wire, PROFIBUS PA, switching output      |
| XX  | Special version                            |

| (7) | Display, operation                                                 |
|-----|--------------------------------------------------------------------|
| B   | Without display, via communicator                                  |
| D   | SD02 4-line, push-buttons and data backup function                 |
| E   | * SD03 4-line, illuminated, touch control and data backup function |

| (8) | Approval                                                                   |
|-----|----------------------------------------------------------------------------|
| C1  | * CSA C/US IS Cl.I,II,III Div.1 Gr.A-G, NI Cl.1 Div.2, Ex ia               |
| C2  | * CSA C/US XP Cl.I,II,III Div.1 Gr.A-G, NI Cl.1 Div.2, Ex d                |
| CG  | CSA C/US General Purpose                                                   |
| E1  | ATEX II 1G Ex ia IIC T6...T1 Ga                                            |
| E2  | ATEX II 1/3G Ex ic [ia] IIC T6...T1 Ga/Gc                                  |
| E3  | ATEX II 3G Ex nA IIC T6...T1 Gc                                            |
| E4  | ATEX II 3G Ex ic IIC T6...T1 Gc                                            |
| ED  | ATEX II 1/2G Ex d [ia] IIC T6...T1 Ga/Gc                                   |
| EG  | * ATEX II 1/2G Ex d [ia] IIC T6...T1 Ga/Gb or 1/2 D Ex ta IIIC Txx°C Da/Db |
| EW  | ATEX II 1/2G Ex ia IIC T6...T1 Ga/Gb or 1/2 G Ex d [ia] IIC T6...T1 Ga/Gb  |
| EX  | ATEX II 1/2G Ex ia IIC T6...T1 Ga/Gb                                       |
| FI  | * FM IS Cl.I,II,III Div.1 Gr.A-G, AEx ia, NI Cl.1 Div.2                    |
| FN  | * FM XP Cl.I,II,III Div.1 Gr.A-G, AEx d, NI Cl.1 Div.2                     |
| IA  | IECEEx Ex ia T6...T1 Ga                                                    |
| IB  | IECEEx Ex ia IIC T6...T1 Ga/Gb                                             |
| IC  | IECEEx Ex d [ia] IIC T6...T1 Ga/Gb                                         |
| ID  | IECEEx Ex ic [ia] IIC T6...T1 Ga/Gc                                        |
| IG  | IECEEx Ex nA IIC T6...T1 Gc                                                |
| IH  | IECEEx Ex ic IIC T6...T1 Gc                                                |
| NA  | Version for non-explosion-hazardous area                                   |
| SX  | * ATEX II 1/2G Ex ia IIC T6...T1 Ga/Gb or 1/2 D Ex ia IIIC Txx°C Da/D      |

### Additional Options

| (9) | Additional operation language |
|-----|-------------------------------|
| C   | French                        |
| D   | Spanish                       |
| E   | Italian                       |
| F   | Dutch                         |
| G   | Portuguese                    |
| H   | Polish                        |
| I   | Russian                       |
| J   | Turkish                       |
| K   | Chinese abbreviations         |
| L   | Japanese                      |
| M   | Korean                        |
| O   | Bahasa                        |
| Q   | Vietnamese                    |
| R   | Czech                         |

| (9) | Calibration                |
|-----|----------------------------|
| 4   | 5-point linearity protocol |

| (9) | Service **                      |
|-----|---------------------------------|
| T   | Customized parametrization HART |
| U   | Customized parametrization PA   |

## Type Code

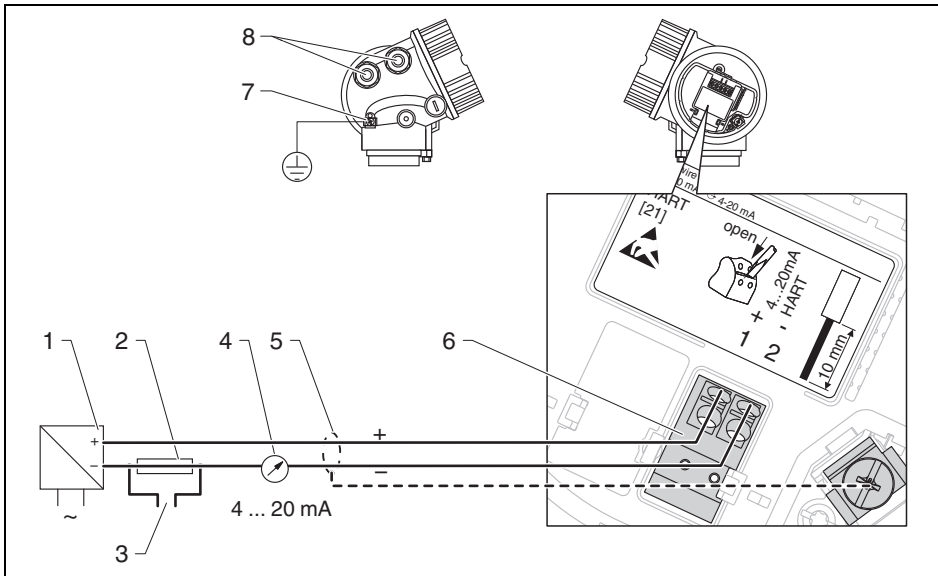
|                                   |                                                                                                                                                                                          |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>(9) Test, certificate **</b>   |                                                                                                                                                                                          |
| A                                 | Material certificate, wetted metallic parts, EN 10204-3.1 inspection certificate                                                                                                         |
| <b>(9) Additional approval **</b> |                                                                                                                                                                                          |
| S                                 | SIL Functional Safety                                                                                                                                                                    |
| W                                 | WHG overfill protection                                                                                                                                                                  |
| <b>(9) Probe design **</b>        |                                                                                                                                                                                          |
| B                                 | Sensor remote, 3 m cable, detachable, with mounting bracket                                                                                                                              |
| C                                 | Sensor remote, 6 m cable, detachable, with mounting bracket                                                                                                                              |
| D                                 | Sensor remote, 9 m cable, detachable, with mounting bracket                                                                                                                              |
| <b>(9) Firmware version</b>       |                                                                                                                                                                                          |
| 5                                 | 01.00.zz, HART, DevRev01                                                                                                                                                                 |
| 7                                 | 01.00.zz, PROFIBUS PA, DevRev01                                                                                                                                                          |
| <b>(9) Marking</b>                |                                                                                                                                                                                          |
| 1                                 | Tagging (TAG), see additional specification                                                                                                                                              |
| 2                                 | Bus address, see additional specifications                                                                                                                                               |
| <b>L Probe length</b>             |                                                                                                                                                                                          |
| Length                            | Length depends on chosen type of probe:<br>- Rod probe: length in mm, 16 mm to 10000 mm<br>- Rope probe: length in mm, 16 mm to 45000 mm<br>- Coax probe: length in mm, 16 mm to 6000 mm |

## Accessories

|                                                                                     |                          |                |
|-------------------------------------------------------------------------------------|--------------------------|----------------|
|   | <b>PACTware 5.0</b>      | FDT Framework  |
|  | <b>DTM Level Control</b> | DTM collection |

## Connection

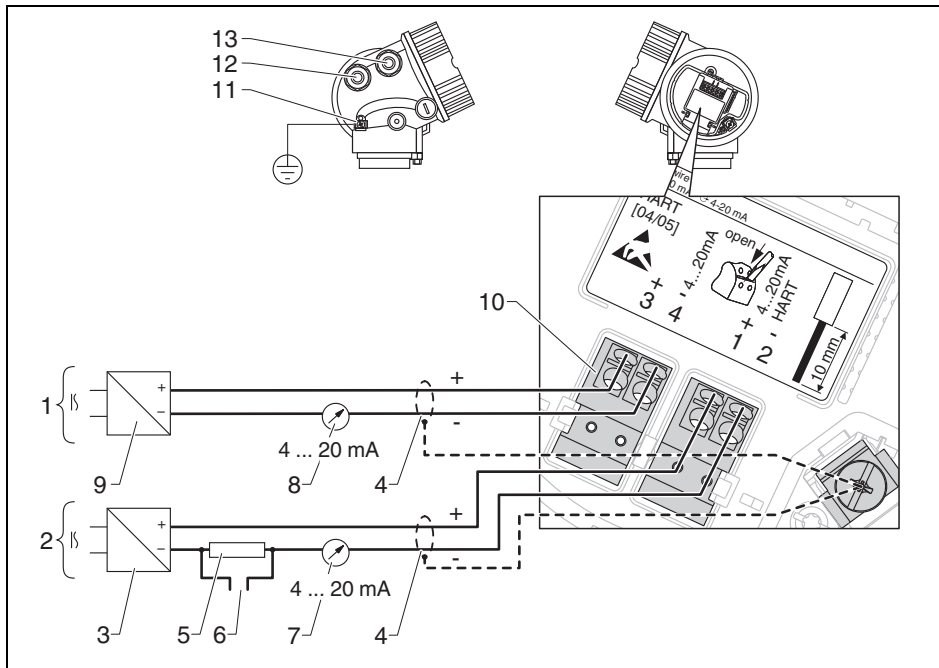
### 2-wire, 4 mA ... 20 mA HART (version IH)



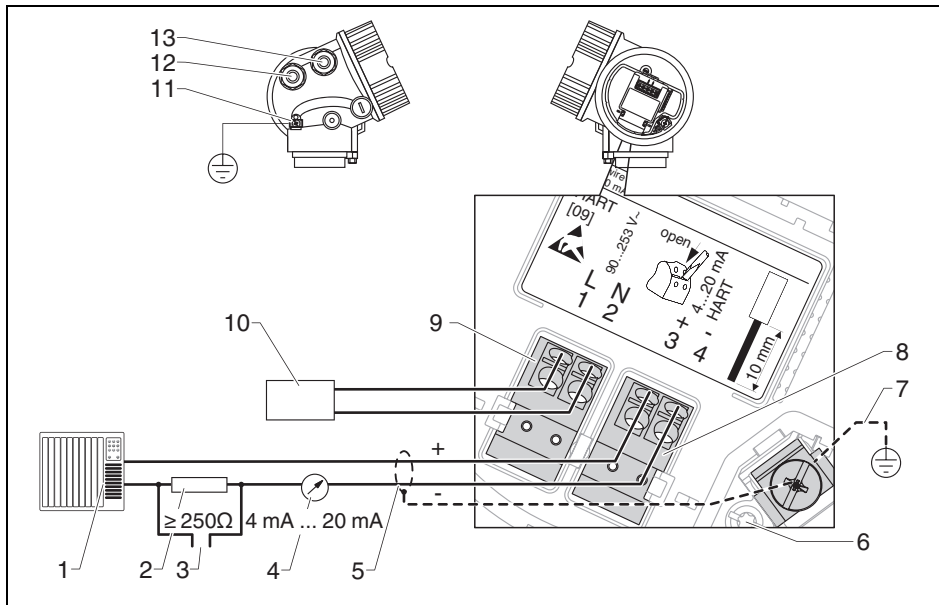
- 1 Active barrier with power supply (e. g. KCD2-STC-Ex1): observe terminal voltage
- 2 HART communication resistor ( $\geq 250 \Omega$ ): observe maximum load
- 3 Connection for optional field communicator
- 4 Analog display device: observe maximum load
- 5 Cable screen; observe cable specification
- 6 4 mA ... 20 mA HART (passive): terminals 1 and 2
- 7 Terminal for potential equalization line
- 8 Cable entry



## 2-wire, 4 mA ... 20 mA HART, 4 mA ... 20 mA (version IE)



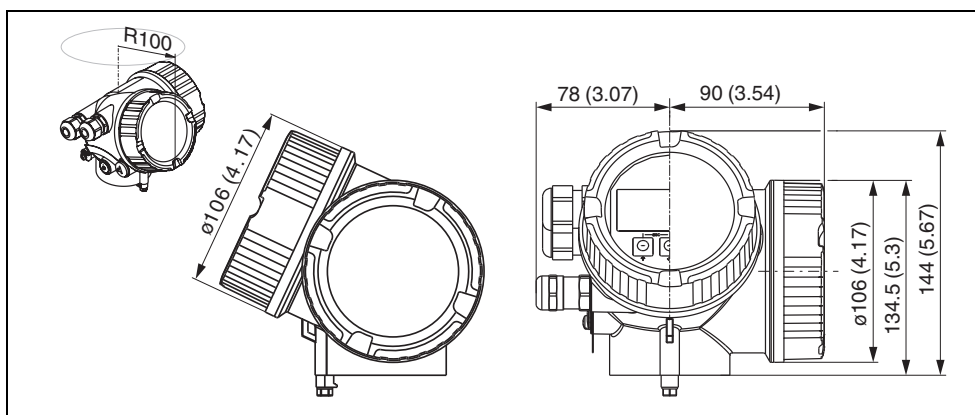
- 1 Connection current output 2
- 2 Connection current output 1
- 3 Supply voltage for current output 1 (e. g. KCD2-STC-Ex1); observe terminal voltage
- 4 Cable screen; observe cable specification
- 5 HART communication resistor ( $\geq 250 \Omega$ ); observe maximum load
- 6 Connection for optional field communicator
- 7 Analog display device; observe maximum load
- 8 Analog display device; observe maximum load
- 9 Supply voltage for current output 2 (e. g. KCD2-STC-Ex1); observe terminal voltage
- 10 Current output 2: terminals 3 and 4
- 11 Terminal for the potential equalization line
- 12 Cable entry for current output 1
- 13 Cable entry for current output 2

**4-wire: 4 ... 20 mA HART (90 ... 253 V AC) (version AH)**

- 1 Evaluation unit, e. g. PLC
- 2 HART communication resistor ( $\geq 250 \Omega$ ): observe maximum load
- 3 Connection for optional filed communicator
- 4 Analog display device: observe maximum load
- 5 Signal cable including screening (if required), observe cable specification
- 6 Protective connection; do not disconnect!
- 7 Protective earth, observe cable specification
- 8 4 mA ... 20 mA HART (active): terminals 3 and 4
- 9 Supply voltage: terminals 1 and 2
- 10 Supply voltage: observe terminal voltage, observe cable specification
- 11 Terminal for potential equalization
- 12 Cable entry for signal line
- 13 Cable entry for power supply

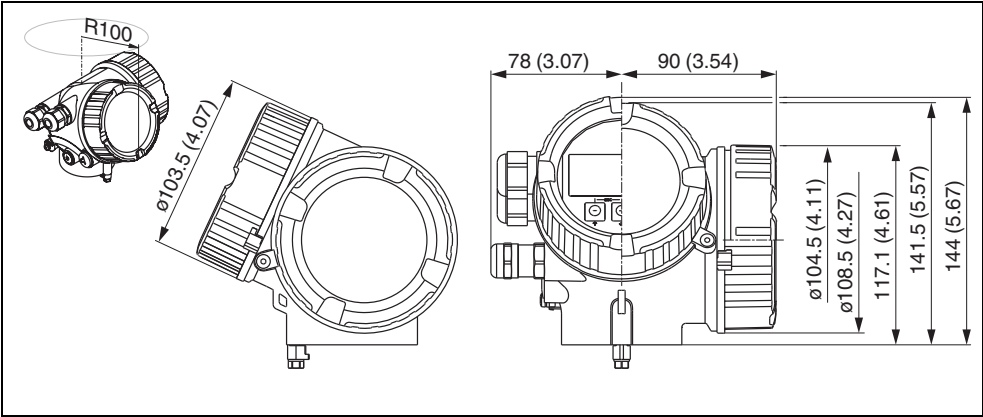
**Dimensions****Housing GT19, plastics PBT (version A1)**

Dimensions in mm (in)



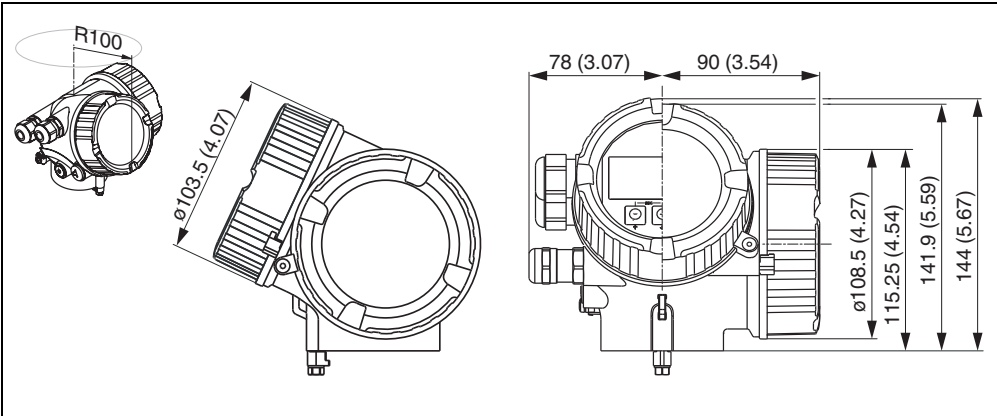
Housing GT20, alu coated (version A2)

Dimensions in mm (in)



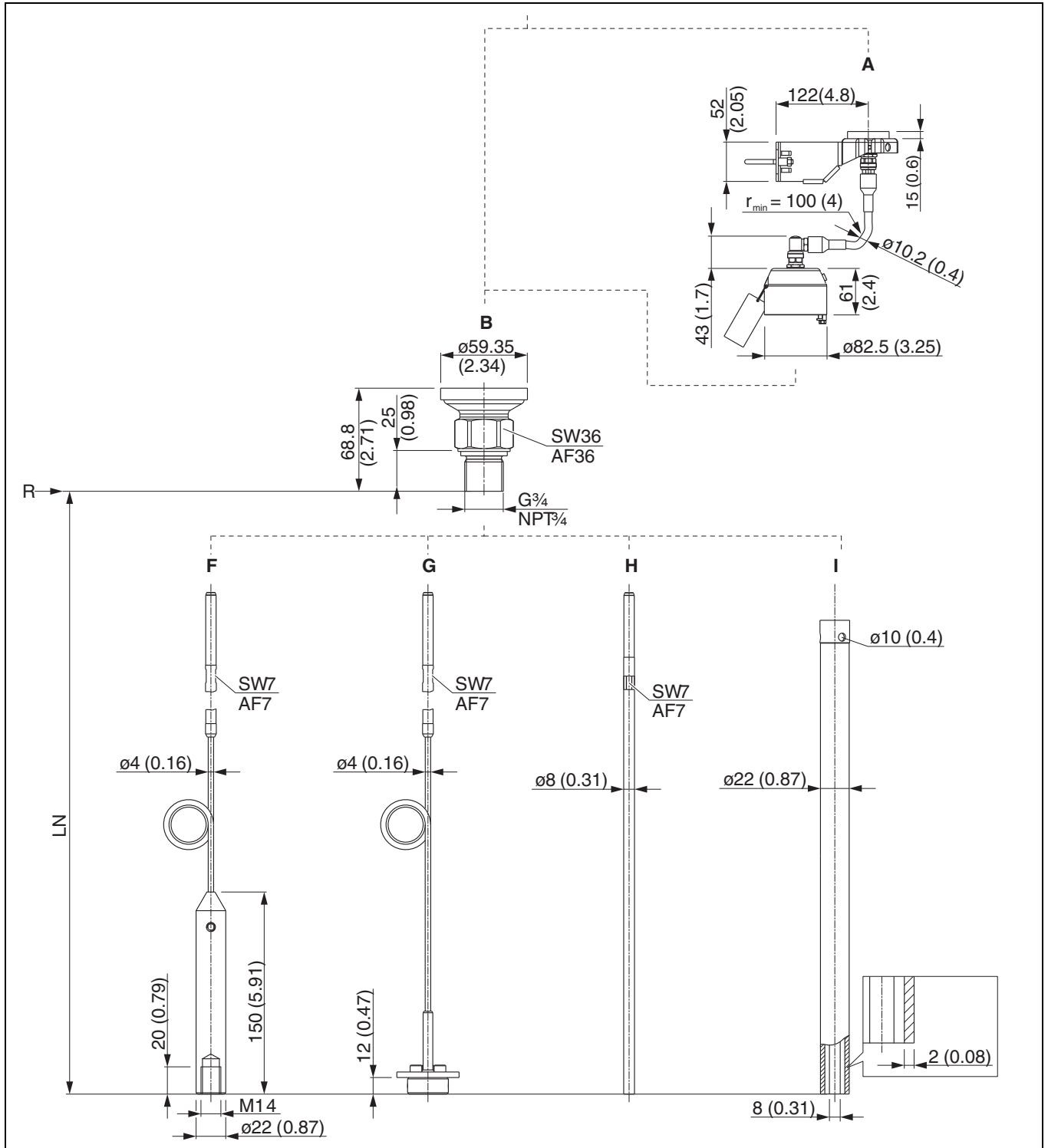
Housing GT18, stainless steel (version A3)

Dimensions in mm (in)



Process connections (G3/4, NPT3/4) and probes

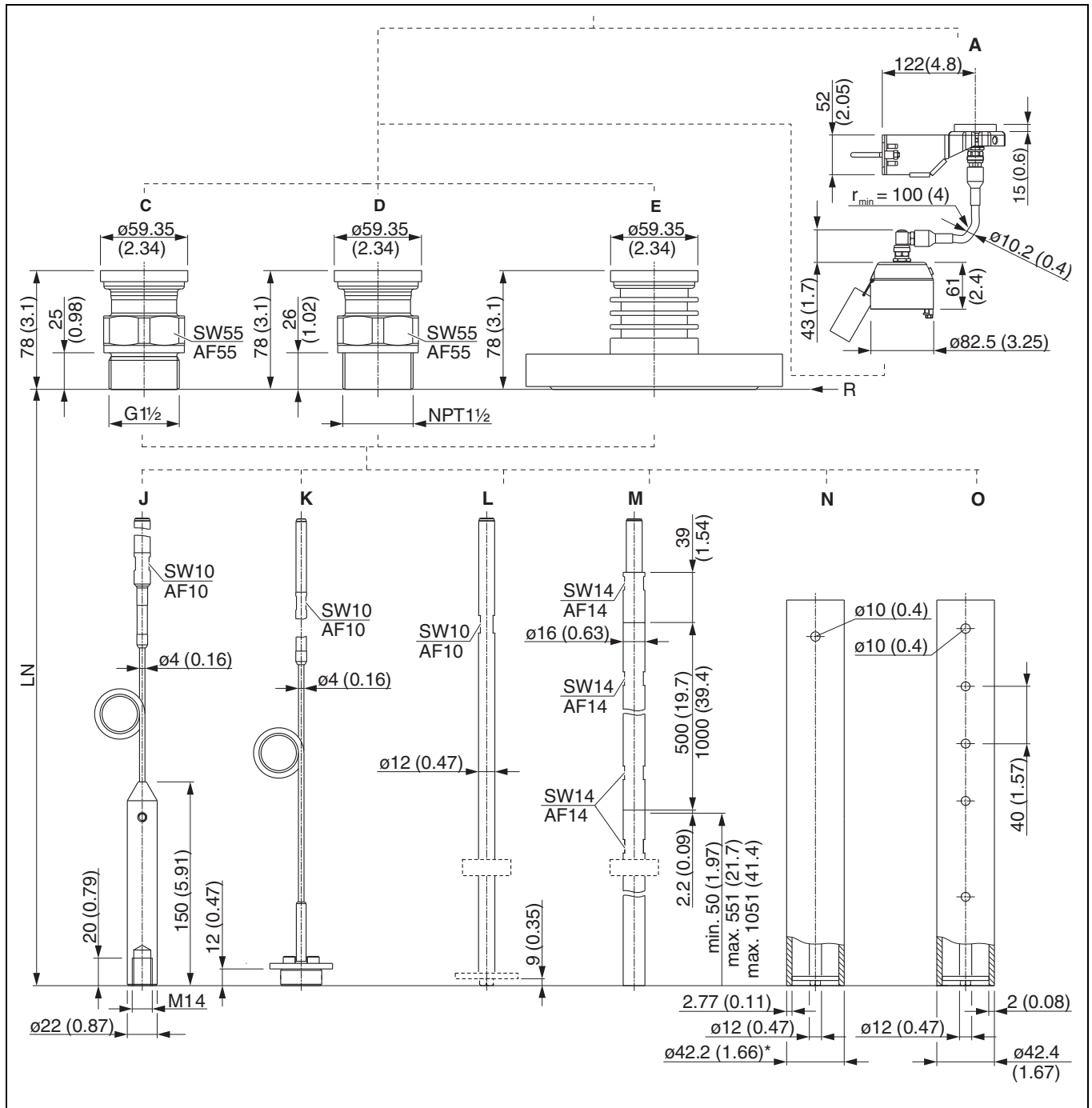
Dimensions in mm (in)



- A** Mounting bracket for probe design "Sensor remote" (feature "Probe design")
- B** Thread ISO228 G3/4 or ANSI MNPT3/4 (feature "Process connection")
- F** Rope probe 4 mm or 1/6 in (feature "Probe")
- G** Rope probe 4 mm or 1/6 in; centering disk on request (feature "Probe")
- H** Rod probe 8 mm or 1/3 in (feature "Probe")
- I** Coax probe (feature "Probe")
- LN** Length of probe
- R** Reference point of the measurement

## Process connections (G1-1/2, NPT1-1/2, flange) and probes

Dimensions in mm (in)



- A** Mounting bracket for probe design "Sensor remote" (feature "Probe design")  
**C** Thread ISO228 G1-1/2 (feature "Process connection")  
**D** Thread ANSI MNPT1-1/2 (feature "Process connection")  
**E** Flange ANSI B16.5, EN1092-1, JIS B2220 (feature "Process connection")  
**J** Rope probe 4 mm or 1/6 in (feature "Probe")  
**K** Rope probe 4 mm or 1/6 in; centering disk on request (feature "Probe")  
**L** Rod probe 12 mm or 1/2 in; centering disk on request (feature "Probe")  
**M** Rod probe 16 mm or 0.63 in, 20 in or 40 in divisible; centering disk on request (feature "Probe")  
**N** Coax probe; Alloy C (feature "Probe")  
**O** Coax probe; 316L (feature "Probe")  
**LN** Length of probe  
**R** Reference point of the measurement

## По вопросам продаж и поддержки обращайтесь:

Алматы (727)345-47-04  
Ангарск (3955)60-70-56  
Архангельск (8182)63-90-72  
Астрахань (8512)99-46-04  
Барнаул (3852)73-04-60  
Белгород (4722)40-23-64  
Благовещенск (4162)22-76-07  
Брянск (4832)59-03-52  
Владивосток (423)249-28-31  
Владикавказ (8672)28-90-48  
Владимир (4922)49-43-18  
Волгоград (844)278-03-48  
Вологда (8172)26-41-59  
Воронеж (473)204-51-73  
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06  
Ижевск (3412)26-03-58  
Иркутск (395)279-98-46  
Казань (843)206-01-48  
Калининград (4012)72-03-81  
Калуга (4842)92-23-67  
Кемерово (3842)65-04-62  
Киров (8332)68-02-04  
Коломна (4966)23-41-49  
Кострома (4942)77-07-48  
Краснодар (861)203-40-90  
Красноярск (391)204-63-61  
Курск (4712)77-13-04  
Курган (3522)50-90-47  
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13  
Москва (495)268-04-70  
Мурманск (8152)59-64-93  
Набережные Челны (8552)20-53-41  
Нижегород (831)429-08-12  
Новокузнецк (3843)20-46-81  
Ноябрьск (3496)41-32-12  
Новосибирск (383)227-86-73  
Омск (3812)21-46-40  
Орел (4862)44-53-42  
Оренбург (3532)37-68-04  
Пенза (8412)22-31-16  
Петрозаводск (8142)55-98-37  
Псков (8112)59-10-37  
Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15  
Рязань (4912)46-61-64  
Самара (846)206-03-16  
Санкт-Петербург (812)309-46-40  
Саратов (845)249-38-78  
Севастополь (8692)22-31-93  
Саранск (8342)22-96-24  
Симферополь (3652)67-13-56  
Смоленск (4812)29-41-54  
Сочи (862)225-72-31  
Ставрополь (8652)20-65-13  
Сургут (3462)77-98-35  
Сыктывкар (8212)25-95-17  
Тамбов (4752)50-40-97  
Тверь (4822)63-31-35

Тольятти (8482)63-91-07  
Томск (3822)98-41-53  
Тула (4872)33-79-87  
Тюмень (3452)66-21-18  
Ульяновск (8422)24-23-59  
Улан-Удэ (3012)59-97-51  
Уфа (347)229-48-12  
Хабаровск (4212)92-98-04  
Чебоксары (8352)28-53-07  
Челябинск (351)202-03-61  
Череповец (8202)49-02-64  
Чита (3022)38-34-83  
Якутск (4112)23-90-97  
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(727) 345-47-04

Беларусь +(375) 257-127-884

Узбекистан +998(71)205-18-59

Киргизия +996(312)96-26-47

эл.почта: [phb@nt-rt.ru](mailto:phb@nt-rt.ru) || сайт: <https://pepperl-fuchs.nt-rt.ru/>