



## FDUD291, FDUD292, FDUL221, FDUM291, FDUM292

Sinteso™



### Detector exchanger, Detector exchanger and tester, Line tester, Telescope rods

- The detector exchanger FDUD291 serves for the rational inserting and removal of Sinteso™ point detectors.
- The detector exchanger and tester FDUD292 is a universal tool serving for the rational inserting and removal of Sinteso™ point detectors, as well as for the commissioning, maintenance and troubleshooting with point detectors, manual call points, alarm sounders, in-/output modules and linear smoke detectors.
- The line tester FDUL221 serves for system configuration and diagnosis. The device can be operated as stand-alone device, or can be connected to a PC for more sophisticated applications.
- The telescope rod FDUM291 with continuous length adjustment up to approx. 5.5m room height and the telescope rod FDUM292 with continuous length adjustment up to approx. 8m room height serve as extension of the exchanger, tester and other tools.

### Characteristics

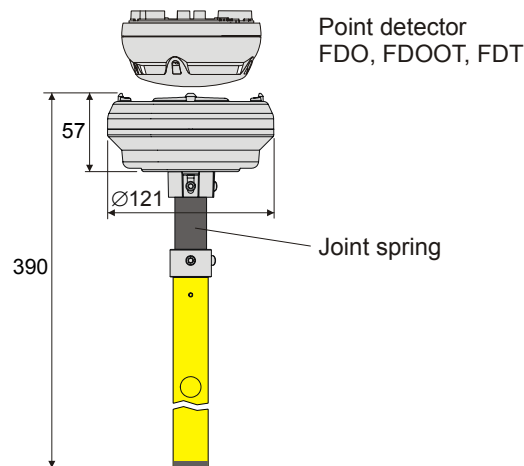
- ecologically processing
- recyclable materials
- detector exchange possible without ladder or scaffold up to 8m room height
- Joint springs facilitate all-side inclination for beveled insertion or removal of point detectors.
- The point detector can be gripped in four turning positions for increased work efficiency.
- Specially developed springs retain the point detector in the detector extractor.
- compatible with the telescope rays FDUM291/292 and the conventional extension rods VR10/11/12/13 and the MP/MT grab rods and extension rods

### Function

- rational insertion and removal of point detectors FDO, FDOOT, FDT

### Application

- for all point detectors FDO, FDOOT, FDT



## Detector exchanger and tester FDUD292

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The detector exchanger and tester FDUD292 is a universal tool for the insertion and removal of point detectors and for the commissioning and maintenance of all FDnet-devices, with the exception of the flame detector FDF and the line separator FDCL.

### Characteristics

- ecologically processing
- recyclable materials
- electronic und synthetic material simple separable
- efficient and ecological detector testing without gas
- detector exchange possible without ladder or scaffold up to 8m room height
- elastic springs facilitate all-side inclination for beveled insertion or removal of point detectors
- The point detector can be gripped in four turning positions for increased work efficiency.
- Specially developed springs retain the point detector in the detector extractor.
- Efficient operation due to alphanumeric display including lighting and keypad.
- LED display for test OK, exchange recommended, exchange necessary
- 9V battery

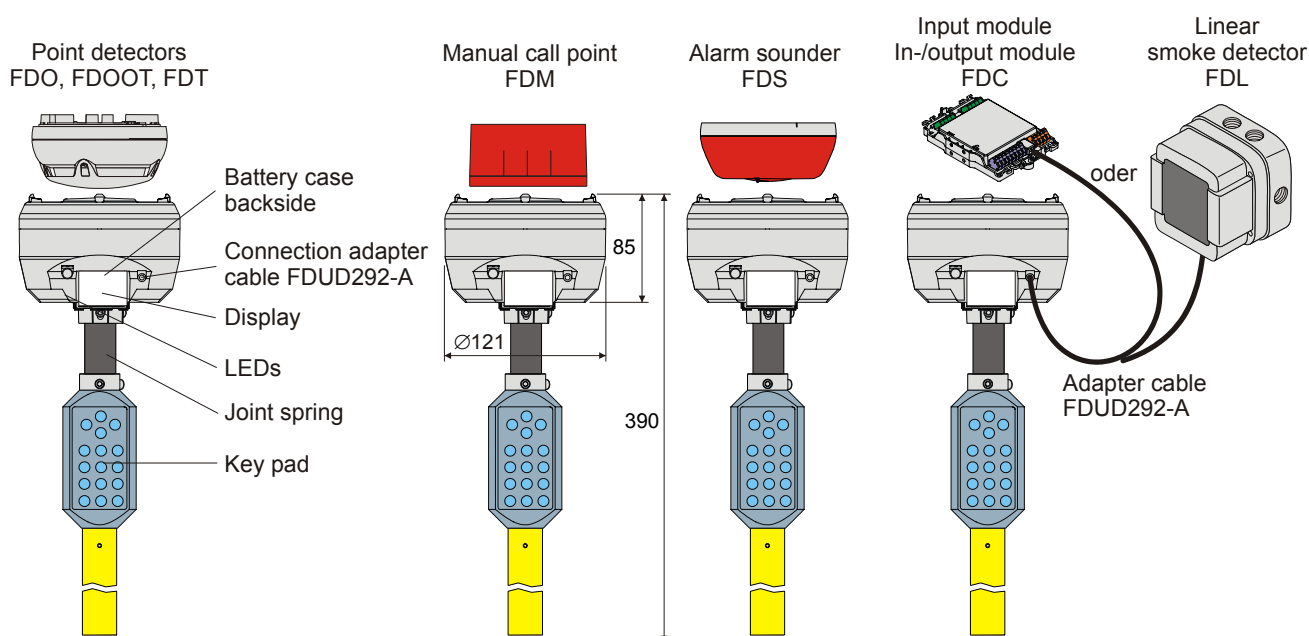
- compatible with the telescope rays FDUM291/292 and the conventional extension rods VR10/11/12/13 and the MP/MT grab rods and extension rods

### Function

- rational insertion and removal of point detectors FDO, FDOOT, FDT
- Commissioning, maintenance, status check and testing of detectors with extend diagnosis information on site.
- polling parameters such as bus address and changes to detector settings
- efficient troubleshooting with detectors, installation and control unit
- access levels for corresponding access authorization with password

### Application

- for all point detectors FDO, FDOOT, FDT, manual call points FDM, alarm sounders FDS (wireless MC link)
- input module FDCI, in-/output module FDCIO, linear smoke detector FDL via adapter cable FDUD292-A



### Telescope bars FDUM291 and FDUM292

#### Characteristics

- yellow plastic tubes in light and robust execution (non-conductive material)
- plastic sockets and slide bearings provide for easy sliding of the tubes
- quick spring-type locking mechanisms and continuous length adjustment
- The tubes can be extended to their maximum length and are protected against further extension by a stop bolt.
- Further extension of the telescope rods is not possible.
- The use with previous test devices is possible.

#### FDUM291

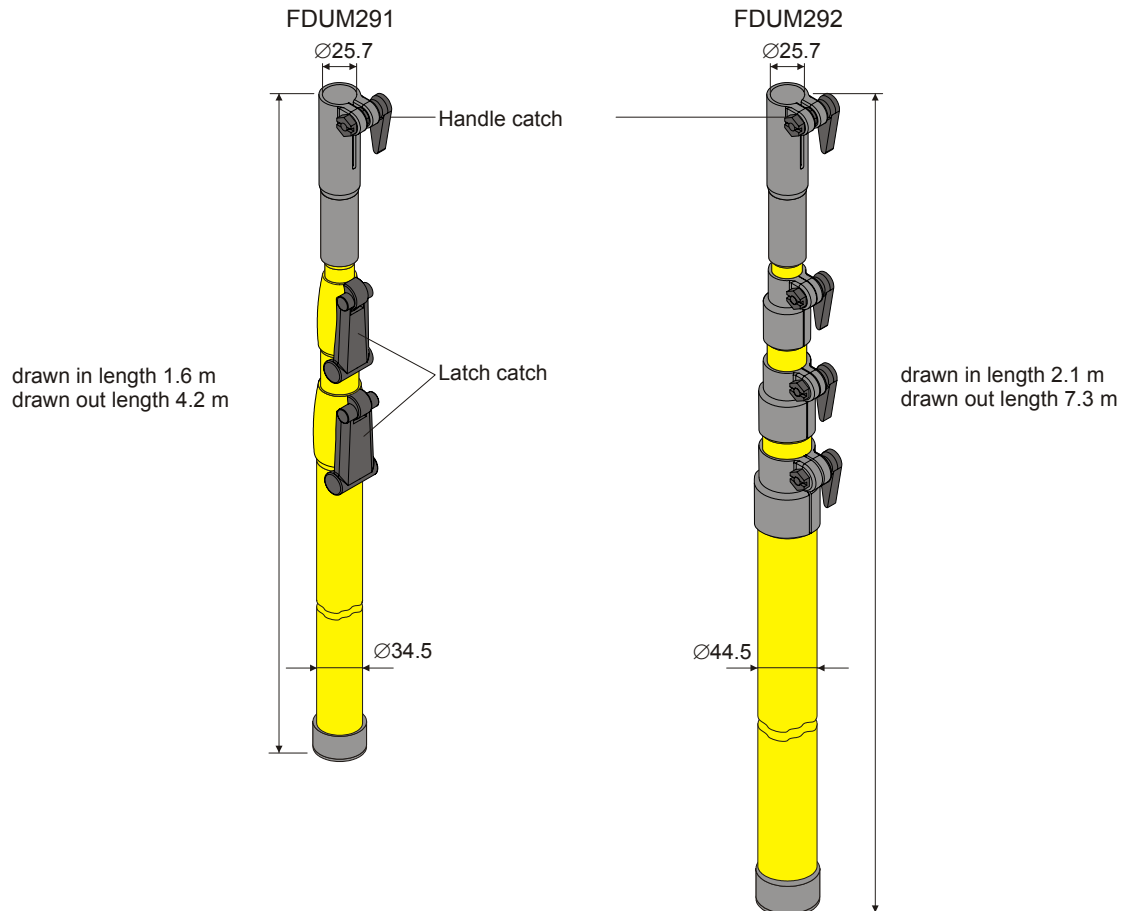
- light telescope rod for all applications, for room heights up to 5.5m
- latch catch for continuous length adjustment
- three-part telescope with tri-oval tubes as practical grip
- distortion of the tubes is not possible
- weight 1.2kg without attached tool

### FDUM292

- long, robust telescope rod for room heights up to 8m
- handle catch for continuous length adjustment
- stable, four-part telescope with round tubes
- weight 3.2kg without attached tool

### Application

- The telescope rods FDUM291/292 serve as extensions for the detector exchanger FDUD291, detector exchanger and tester FDUD292 and other applications.



### Line tester FDUL221

#### Characteristics

- ecologically processing
- recyclable materials
- 4-line display with 20 characters per line
- easy, menu-guided operation
- power supply via battery or mains adapter

#### Function

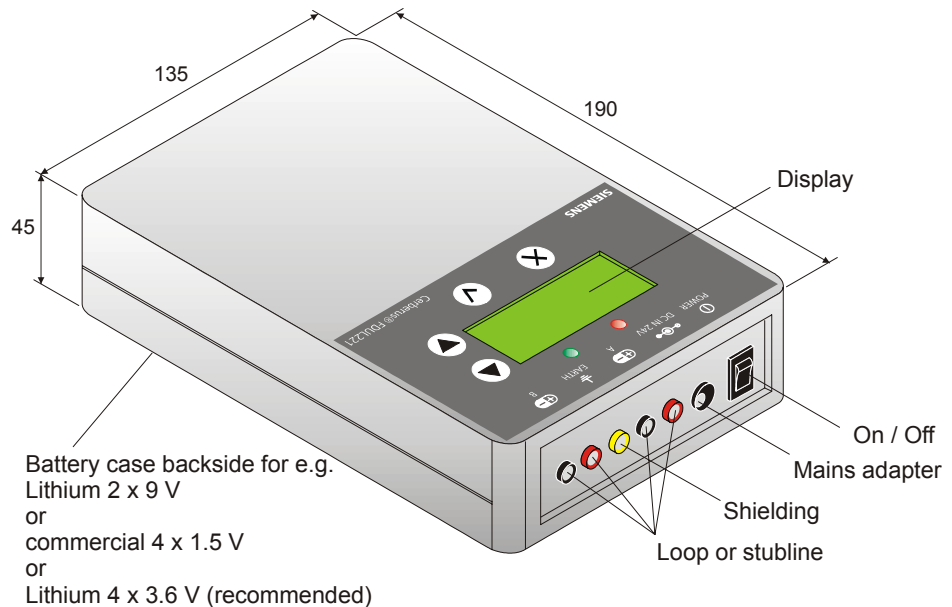
Different functions can be polled, e.g.:

- number of devices found at the A and B connection
- number and place of line errors found
- short circuit, open line, ground fault with conductor(s)
- total resistance too high and/or charging voltage at the end of line too low
- data transmission fault due to too high line capacity
- unauthorized line configuration

- scrolling from detector to detector, with indication of type and serial number
- indication of branches and selection of the branch for scrolling
- activation of the internal response indicator of the selected detector and recognition of the connected alarm sounder

### Application

- The line tester FDUL221 is a universal device for the final testing of completely installed FDnet fire detection lines, when no control unit has been connected yet. For troubleshooting for electricians, installers or service technicians.



### Technical data

|                                   |  |                                     |
|-----------------------------------|--|-------------------------------------|
| Detector exchanger and tester     | Operating voltage                            | 9 VDC                               |
|                                   | – Alkali battery                             | Type IEC 6 LF 22 / capacity 500 mAh |
|                                   | for temperatures under $-10^{\circ}\text{C}$ |                                     |
|                                   | – Lithium brownstone battery                 | ULTRALIFE U9VL or U9VL-J            |
|                                   |  | Capacity 950 – 1200 mAh             |
|                                   | Operating current                            |                                     |
| – Stand by (light off / on)       | 2 mA / 42 mA                                 |                                     |
| – Communication (3 LEDs + Summer) | 95 mA  |                                     |
| Operating temperature             | $-25... +40^{\circ}\text{C}$                 |                                     |
| – temporary                       | $-30... +50^{\circ}\text{C}$                 |                                     |
| Storage temperature               | $-30... +75^{\circ}\text{C}$                 |                                     |
| – with battery                    | $-25... +60^{\circ}\text{C}$                 |                                     |
| Humidity                          | $\leq 95\%$ rel. (no condensation)           |                                     |
| Line tester                       | Operating voltage                            | min. 6 VDC                          |
|                                   | – Battery or via                             | 4 x 1.5 V or 2 x 9 V or 4 x 3.6 V   |
|                                   | – Mains adapter                              | 240 VAC/24 VDC, 625 mA              |
|                                   | Quiescent current                            | .....                               |
|                                   | Current consumption during measuring         | depending on number of devices      |
|                                   | Detection line voltage                       | 32 VDC                              |
|                                   | Detection line current                       | 300 mA at 18 V operating voltage    |
|                                   | Operating temperature                        | $-25... +40^{\circ}\text{C}$        |
|                                   | Storage temperature                          | $-30... +75^{\circ}\text{C}$        |
|                                   | – with battery                               | $-25... +60^{\circ}\text{C}$        |
| Humidity                          | $\leq 95\%$ rel. (no condensation)           |                                     |

## Details for ordering

|             | Type      | Part no     | Designation   | Weight   |
|-------------|-----------|-------------|---|----------|
|             | FDUD291   | A5Q00003585 | Detector exchanger  | 0.480 kg |
|             | FDUD292   | A5Q00003357 | Detector exchanger and tester incl. adapter cable FDUD292-A   | 0.900 kg |
| Spare part  | FDUD292-A | A5Q00004990 | Adapter cable<br>Audio stereo cable with 3.5 mm stereo jack   | 0.040 kg |
| Accessories | –         | 2766690001  | Alkali battery Type<br>IEC 6 LF 22.9 V / 0.5 Ah   | 0.046 kg |
|             | –         | 4704940001  | Lithium brownstone battery 9 V / 1.2 Ah   | 0.038 kg |
|             | FDUM291   | A5Q00004996 | Telescope rod three-part telescope with tri-oval tubes (1.6 m / 4.2 m)  | 1.200 kg |
| Spare parts | –         | A5Q00009787 | Lever with screw and nut (Handle catch)   | 0,020 kg |
|             | –         | A5Q00009786 | Adapter with lever, screw and nut incl. attachment and bushing screw  | 0,080 kg |
|             | –         | A5Q00009788 | Small flap with screw and nut (Latch catch)   | 0,014kg  |
|             | –         | A5Q00009789 | Large flap with screw and nut (Latch catch)   | 0,014kg  |
|             | FDUM292   | A5Q00004997 | Telescope rod four-part telescope with round tubes (2.1 m / 7.3 m)  | 3.200 kg |
| Spare parts | –         | A5Q00009787 | Lever with screw and nut (Handle catch)   | 0,020 kg |
|             | –         | A5Q00009786 | Adapter with lever, screw and nut incl. attachment and bushing screw  | 0,080 kg |
|             | FDUL221   | A5Q00004397 | Line tester incl. line connection set<br>FDUL221-A, power supply set FDUL221-B and PC cable (RS232) FDUL221-C | 0.900 kg |
| Spare parts | FDUL221-A | A5Q00008436 | Line connection set   | 0.100 kg |
|             | FDUL221-B | A5Q00008437 | Power supply set  | 0.250 kg |
|             | FDUL221-C | A5Q00008438 | PC cable (RS232)  | 0.030 kg |
| Accessories | –         | 2766690001  | Alkali battery<br>Type IEC 6 LF 22, 9 V / 0.5 Ah  | 0.046 kg |
|             | –         | 4704940001  | Lithium brownstone battery 9 V / 1.2 Ah   | 0.038 kg |
|             | –         | 5205350001  | Lithium battery 3.6 V / 1.9 Ah  | 0.017 kg |