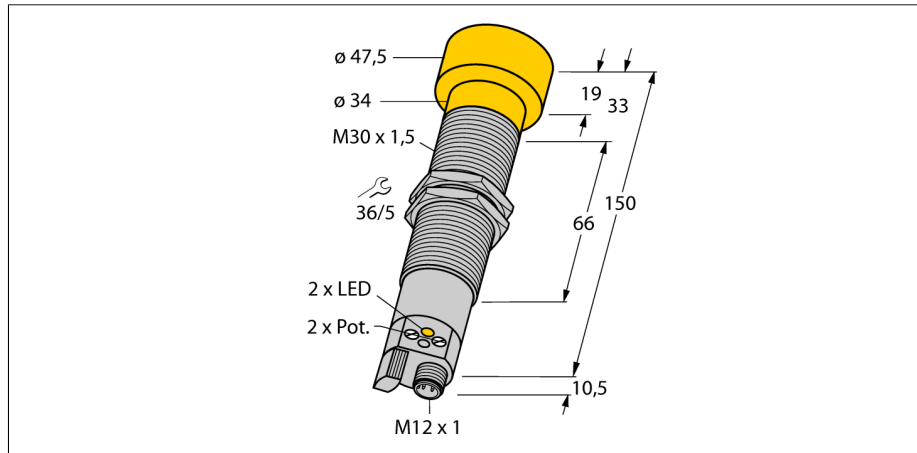


**Ultrasonic sensor**  
**diffuse mode sensor**  
**RUC300-M3047-2AP8X-H1151**

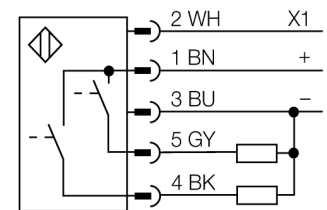
**TURCK**

Industrial  
Automation



- Upper value of first and second switching range adjustable via potentiometer
- Further parameters adjustable via programming device RU-PDI (accessories)
- 2 PNP transistor outputs (NO contact)
- synchronizable
- opening angle of sonic cone 6°

**Wiring diagram**



**Functional principle**

Ultrasonic sensors use ultrasonic waves for non-contact and wear-free detection of many objects. Regardless of whether the object is transparent or opaque, metallic or non-metallic, or of liquid, solid or powdery consistency. Even environmental conditions such as spray, dust or rain hardly affect their function.

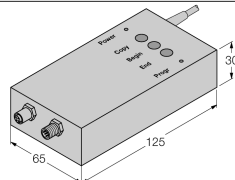
|                                      |                            |
|--------------------------------------|----------------------------|
| <b>Type code</b>                     | RUC300-M3047-2AP8X-H1151   |
| Ident no.                            | 1840420                    |
| <b>Design</b>                        | cylindrical/threaded, M30  |
| Dimensions                           | Ø30x 160.5 mm              |
| Housing material                     | Metal, CuZn, nickel-plated |
| Connection                           | male, M12 x 1              |
| Protection class                     | IP65                       |
| Ambient temperature                  | -25...+70 °C               |
| <b>Switching state</b>               | • yellow                   |
| <b>Operating voltage</b>             | 20...30VDC                 |
| DC rated operational current         | ≤ 300 mA                   |
| No-load current I <sub>0</sub>       | ≤ 50 mA                    |
| Output function                      | 2x NO, PNP                 |
| Switching frequency                  | 2 Hz                       |
| Hysteresis                           | ≤ 20 mm                    |
| Voltage drop at I <sub>0</sub>       | ≤ 3 V                      |
| Short-circuit protection             | yes/ cyclic                |
| Reverse polarity protection          | complete                   |
| Wire breakage protection             | yes                        |
| <b>Range</b>                         | 40...300 cm                |
| Ultrasound frequency                 | 120 kHz                    |
| Repeatability                        | ≥ ± 5 mm                   |
| Temperature drift                    | 1.5% of full scale         |
| Edge lengths of the nominal actuator | 50 mm                      |
| Approach speed                       | ≤ 16 m/s                   |
| Pass speed                           | ≤ 5 m/s                    |

**Ultrasonic sensor  
diffuse mode sensor  
RUC300-M3047-2AP8X-H1151**

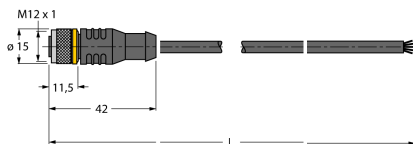
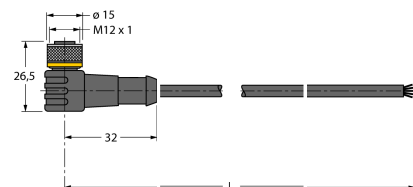
**TURCK**

Industrial  
Automation

**Accessories**

| Type code | Ident no. | Description                                                                              | Dimension drawing                                                                   |
|-----------|-----------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| RU-PDI    | 1890000   | programming device for configuration of ultrasonic sensor types RU...-M18 and RUC...-M30 |  |

**Wiring accessories**

| Type code     | Ident no. | Description                                                                                                                                                                                                      | Dimension drawing                                                                     |
|---------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| RKC4.5T-2/TEL | 6625016   | Connection cable, female M12, straight, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a> |   |
| WKC4.5T-2/TEL | 6625028   | Connection cable, female M12, angled, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>   |  |