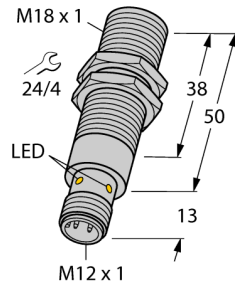


**ultrasonic sensor**  
**diffuse mode sensor**  
**RU20-M18K-LFX-H1141**

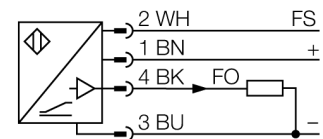
**TURCK**

Industrial  
Automation



- Compact design
- Male connector M12 x 1
- 4-hole LED, visible from all sides
- Frequency range selectable via control line FS
- Opening angle of sonic cone 6°

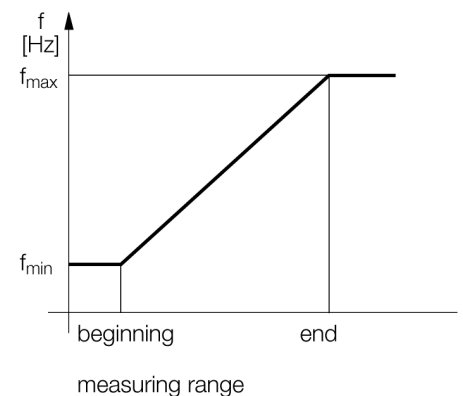
**Wiring diagram**



**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.

**Characteristic**



|                                      |                            |
|--------------------------------------|----------------------------|
| <b>Type code</b>                     | RU20-M18K-LFX-H1141        |
| Ident no.                            | 1830030                    |
| <b>Design</b>                        | cylindrical/threaded, M18  |
| Dimensions                           | Ø18x 63 mm                 |
| Housing material                     | Metal, CuZn, nickel-plated |
| Connection                           | male, M12 x 1              |
| Protection class                     | IP67                       |
| Ambient temperature                  | -25...+70 °C               |
| <b>Switching state</b>               | •                          |
| <b>Operating voltage</b>             | 20...30VDC                 |
| DC rated operational current         | ≤ 150 mA                   |
| No-load current $I_0$                | ≤ 20 mA                    |
| Voltage drop at $I_0$                | ≤ 2 V                      |
| Short-circuit protection             | yes/ cyclic                |
| Reverse polarity protection          | complete                   |
| Wire breakage protection             | yes                        |
| <b>Range</b>                         | 3...20 cm                  |
| Ultrasound frequency                 | 400 kHz                    |
| Repeatability                        | ≥ ± 1 mm                   |
| Edge lengths of the nominal actuator | 20 mm                      |

ultrasonic sensor  
diffuse mode sensor  
RU20-M18K-LFX-H1141



Wiring accessories

| Type code     | Ident no. | Description                                                                                                                                                                                                      | Dimension drawing |
|---------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| RKC4.4T-2/TEL | 6625013   | Connection cable, female M12, straight, 4-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> |                   |
| WKC4.4T-2/TEL | 6625025   | Connection cable, female M12, angled, 4-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>   |                   |