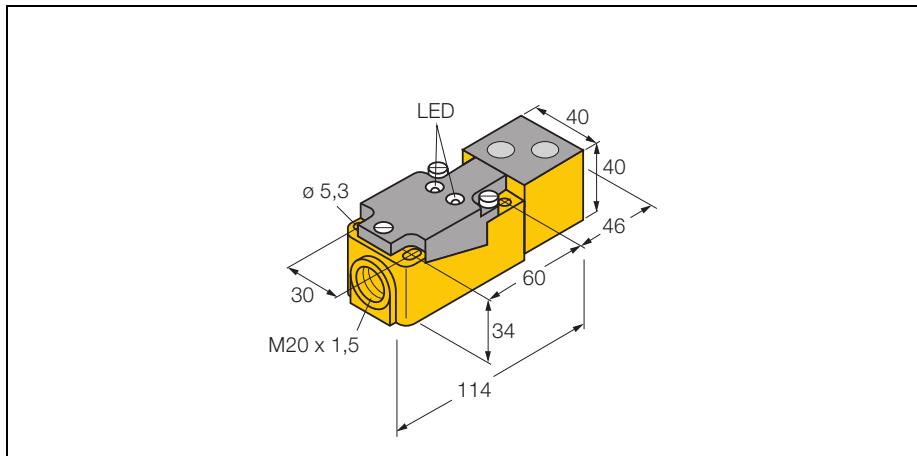


ultrasonic sensor

diffuse mode sensor

RU100-CP40-AP6X2



Type	RU100-CP40-AP6X2
Ident-No.	16100

Range	5... 180 cm
Ultrasound frequency	40 kHz
Temperature drift	0.4 % / K
Repeatability	≥ ± 5 mm
Edge lengths of the nominal actuator	200 mm
Pass speed	2 m/s
Approach speed	1 m/s
Ambient temperature	0...+ 70 °C

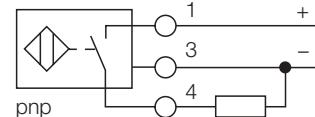
Operating voltage	10... 30VDC
DC rated operational current	200 mA
No-load current I_0	20 mA
Output function	normally open, pnp
Short-circuit protection	yes / cyclic
Reverse polarity protection	complete
Switching frequency	3 Hz
Voltage drop at I_e	2.5V
Wire breakage protection	yes

Housing	rectangular
Dimensions	160 x 40 x 40 mm
Housing material	plastic, PBT-GF30-V0
Connection	Terminal chamber
Degree of protection	IP40

Display switch state	LED yellow
Display 'Object detected'	LED green

- ultrasonic sensor
- DC transistor output
- rectangular
- pnp transistor output, normally open
- plastic
- Terminal chamber
- an initial range value between 5...100 cm and the axial width between 10...100 cm are adjustable within the measuring range

Wiring diagram



Functional principle

Ultrasonic sensors use ultrasonic waves for non-contact and wear-free detection of a large variety of objects. It does not matter whether the object is transparent or opaque, metallic or non-metallic, or of liquid, solid or powdery consistence. Environmental conditions such as spray, dust or rain hardly affect their function.