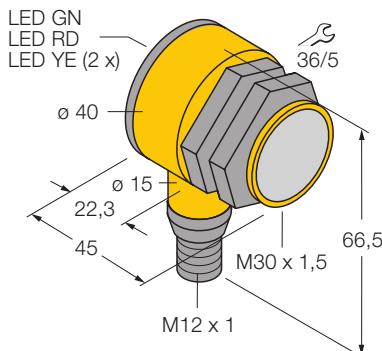


# ultrasonic sensor

## diffuse mode sensor

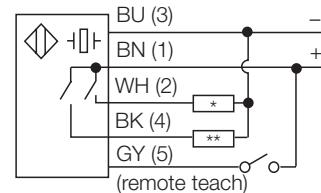
### T30UDPAQ



<b>Type</b>	T30UDPAQ
Ident-No.	3055545
<b>Range</b>	15... 100 cm
Ultrasound frequency	230 kHz
Temperature drift	0.17 % / K
Repeatability	$\geq \pm 0.375$ mm
Ambient temperature	-20...+ 70 °C
<b>Operating voltage</b>	12... 24VDC
DC rated operational current	150 mA
No-load current $I_0$	50 mA
Output function	2x normally open, pnp
Short-circuit protection	yes / cyclic
Reverse polarity protection	complete
Switching frequency	20 Hz
Voltage drop at $I_e$	1.5V
Wire breakage protection	yes
<b>Housing</b>	cylindrical/threaded, T30
Dimensions	45 mm
Housing diameter	40 mm
Housing material	plastic, Polyester
Connection	connectors, M12 x 1
Degree of protection	IP67
<b>Display switch state</b>	LED yellow

- compact housing style
- connection via M12 x 1 connector
- Operating voltage 12...24 VDC
- two pnp transistor outputs
- two independent switching ranges adjustable via button or control line

#### Wiring diagram



\* output 1

\*\* output 2: 100 mA maximum

#### 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.