



extract from our online catalogue:

wms-301/RT/HV/M30

current to: 2026-09-03



wms

wms sensors are ideal for customer-driven signal evaluation.

Highlights

Basics

- > **Trigger input** > for control of the ultrasonic transmitter
- > **Echo output** > for customer-provided evaluation in the controller
- > **1 echo output** > with a load up to 10 mA
- > **5 detection ranges** with a measurement range of 30 mm to 8 m
- > **0.36 mm resolution**
- > **10–30 V operating voltage**

The wms sensors

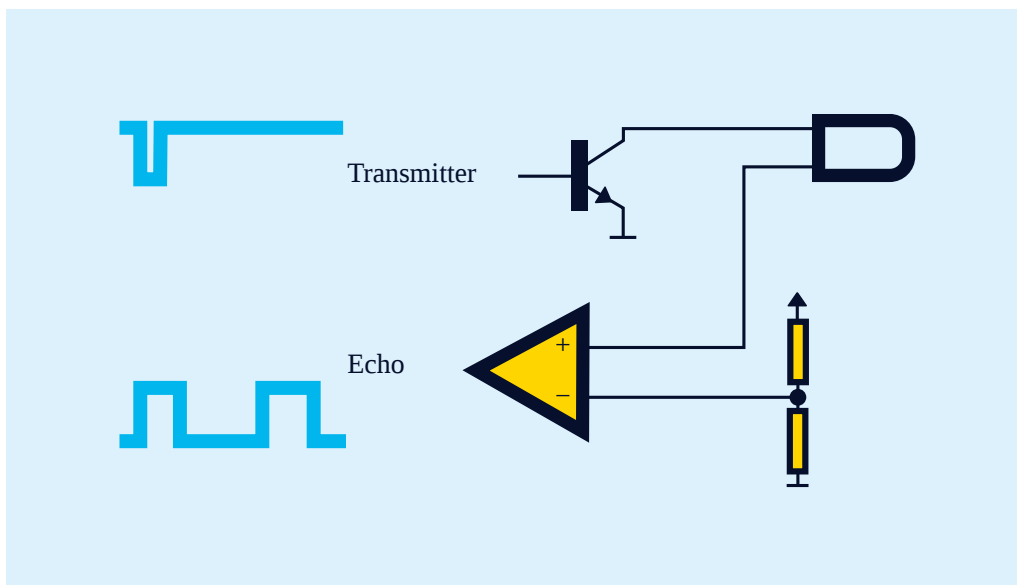
require connection to the customer's own control and signal evaluation equipment.

wms - the inexpensive alternative

to a self-contained sensor when the sensor must be controlled by the customer's system. A microprocessor control is normally required for this.

The »transmitter« signal input

briefly has to be set to $-U_B$ by the control unit via an open-collector circuit. As a result, an the wms sensor emits a sound pulse for the time of this signal.



Triggering a wms sensor from the customer's control system

The »echo« signal output

subsequently transmits all echo signals received depending on their duration as 1 bit values (echo yes/no). This takes between 8 and 65 ms depending on the type of sensor. The positive-switched (pnp) output can be loaded with 10 mA. The computation of the distance and subsequent processing is carried out in the customer's control system.

Our project engineers

will be happy to assist you in integrating a wms sensor into your control system.

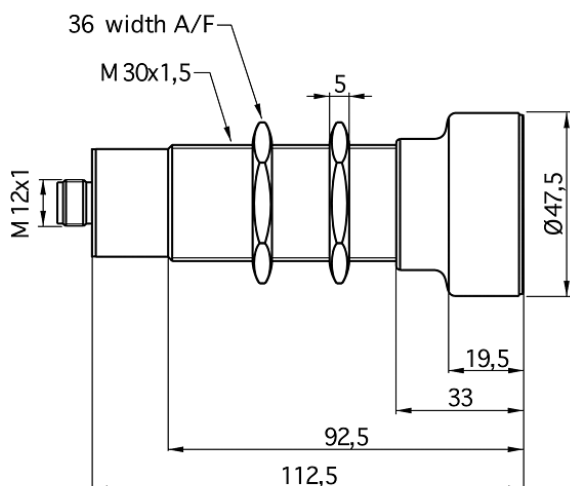
You have special requirements?

Nothing as simple as that.

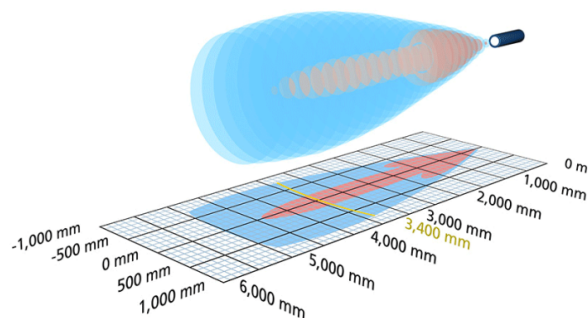
With us, you can easily find an individual solution. Let us talk about your application: +49 231 97 51 51-82.

wms-301/RT/HV/M30

scale drawing



detection zone



Successor model available

wms-340/RT



echo output

5,000 mm

design

cylindrical M30

operating mode

sensor for evaluators

particularities

archive sensor

Ultrasonic-Specific

means of measurement

echo propagation time measurement

transducer frequency

120 kHz

blind zone

350 mm

operating range

3.400 mm

max. range

5,000 mm

reproducibility

± 0.15 %

accuracy

temperature drift 0.17 %/K

Electrical Data

operating voltage U_B

10 - 30 V d.c., reverse polarity protection

voltage ripple

± 10 %

no-load current consumption

≤ 30 mA

type of connection

4-pin M12 initiator plug

outputs

output 1

signal output echo
pnp: $I_{max} = 10$ mA (signal output echo)

Inputs

input 1

signal input - transmitter

housing

material	brass sleeve, nickel-plated, plastic parts, PBT
ultrasonic transducer	polyurethane foam, epoxy resin with glass contents
class of protection to EN 60529	IP 65
operating temperature	-20°C to +70°C
storage temperature	-40°C to +85°C
weight	280 g
further versions	wms-301/RT/HV/ M30E wms-301/RT/HV/M30/ K2
further versions	stainless steel cable connection (on request)

Technical Features/Characteristics

temperature compensation	no
controls	no
scope for settings	no
synchronization	yes
multiplex	yes
indicators	no

Accessories

deployable accessory	KST4A-2/M12 KST4A-5/M12 KST4G-2/M12 KST4G-5/M12
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pin assignment

