

One System – Multiple Options: KSR Bypass Level Measurement

*Visual Level Indicator,
Guided Microwave KSR-GT,
Resistance Level Transmitter,
Magnetostrictive Transmitter*



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MEASURING PRINCIPLE

High frequency microwave radar pulses are coupled on a cable or rod and guided along the probe (TDR). The pulses are reflected by the product surface and received by the processing electronics as level echoes. A microprocessor analyses these measured echoes and converts them into level information using the ECHOFOX software. With this measuring principle, complex adjustment of the probe to the medium is no longer necessary. The instruments are preset to the probe length ordered.

FEATURES

Guided radar microwaves are virtually unaffected by all process conditions. Even process conditions such as high dust or very steamy atmospheres do not influence the accuracy of the measurement.

The rod versions can be shortened and thus be adapted on-site to individual conditions. Product or density fluctuations, or changes in the dielectric constant do not influence the accuracy.

Build-up on the KSR GT (Guided wave radar Transmitter) is no problem at all! Strong build-up on the probe or the vessel wall does not influence the measurement result.

All these characteristics result in high accuracy, excellent repeatability and easy commissioning without the need to fill the vessel. Electronics are available in 2- or 4-wire design with replaceable and adjustable probes.

KSR GT can be used in all types of industries: chemical and petrochemical, shipbuilding, On/Offshore, food and pharmaceutical.

KSR-KUEBLER GT:
exchangeable display
and configuration
module, PLICSCOM



Redundant Level Measurement

Up to three independent measurement principles in each system facilitate redundant measurement values.

- **Visual indication**
- **Guided microwave KSR GT**
- **Resistance transmitter**
- **Magnetostrictive transmitter**

The Options

Single Bypass System
with KSR GT 655 / 666 Coax Version

Double Bypass System
with KSR GT 611 / 666 Rod Version

Single Chamber System
with KSR GT 611 / 666 Rod Version

Glass gauge with KSR FX 611

These options cover a wide range of applications to suit individual specifications.

General Data

Signal processing ECHOFOX® for echo analysis with Fuzzy-Logic

Display and adjustment: Module PLICSCOM / PC with PACTware or HART terminal

Measurement accuracy: Rod version +/- 5mm
Coax version +/- 5mm

Dielectric constant: Rod version 1,7
Coax version 1,4

Measuring range: up to 6 m

Process conditions: Temperature -100 ... 400°C
Pressure -1 ... 160 bar

Material wetted parts: 316L (1.4435),
Hastelloy C22 (2.4602)

Approvals: ATEX II 1G, 1/2G, 2G EEx ia IC T6
ATEX II 1/2G, 2G EEx d ia IIC T6
ATEX II 1/2D IP6X T
WHG
Shipbuilding

Technical Data

KSR GT 611
with rod elektrode



Application: Liquids

Measuring range: 0,15 ... 4 m (0.5 ... 13 ft)

Process fitting: Thread, flange

Material: 1.4435 (316L) und PCTFE,
Hastelloy C22 (2.4602)

Process temperature: -40 ... +150°C (-40 ... 302°F)

Process pressure: -1 ... 40 bar
(-100 ... 4000 kPa/
-14.5 ... 580 psi)

Signaloutput: 4 ... 20 mA/HART in Two-
and Four-Wire technology,
Profibus PA, Foundation
Fieldbus

KSR GT 655
with coax elektrode



Application: Liquids

Measuring range: 0,05 ... 6 m (0.16 ... 20 ft)

Process fitting: Thread, flange

Material: 1.4435 (316L) and PTFE
(TFM 4105), Hastelloy C22
(2.4602) and PTFE (TFM
4105)

Process temperature: -40 ... +150°C (-40 ... 302°F)

Process pressure: -1 ... 40 bar
(-100 ... 4000 kPa/
-14.5 ... 580 psi)

Signaloutput: 4 ... 20 mA/HART in Two-
and Four-Wire technology,
Profibus PA, Foundation
Fieldbus

KSR GT 666
with rod elektrode



Application: Liquids

Measuring range: 0,15 ... 4 m (0.5 ... 13 ft)

Process fitting: Thread, flange

Material: 1.4435 (316L) and PEEK,
Hastelloy C22 (2.4602)

Process temperature: -100 ... +400°C (-148 ... 752°F)

Process pressure: -1 ... 160 bar
(-100 ... 16000 kPa)

Signaloutput: 4 ... 20 mA/HART in Two-
and Four-Wire technology,
Profibus PA, Foundation
Fieldbus

KSR GT 666
with coax elektrode



Application: Liquids

Measuring range: 0,05 ... 6 m (0.16 ... 20 ft)

Process fitting: Thread, flange

Material: 1.4435 (316L) and PEEK,
Hastelloy C22 (2.4602) and
PTFE (TFM 4105)

Process temperature: -100 ... +400°C (-148 ... 752°F)

Process pressure: -1 ... 160 bar
(-100 ... 16000 kPa)

Signaloutput: 4 ... 20 mA/HART in Two-
and Four-Wire technology,
Profibus PA, Foundation
Fieldbus

KSR KUEBLER

