

DRSO

Radar Level Measurement Sensors



OVERVIEW

Operation

The Radar Level Meters of DESTA 120 GHz series are excellent devices for no contact level measurement. It is suitable for heavy dust, steam and other extreme conditions, as well as special process storage tanks with stirring and heating rod.

Application

- High accuracy level metering, perspective measurement
- Level measurement for huge tank
- In the situation of heavy dust, vapour or with mixing, stirring, heater etc.

Features

- Compact design
- Protection type IP67
- No need air purge
- Its's quite cost effective
- High accuracy
- High sensitivity
- Wide measurement range



OPERATING DATA

Temperature Limit

-60...-200°C
-60...1000°C (with cooling tube or quartz isolation flange)

Weight

3.51/4.00 kg (N.W/G.W)

Accuracy

±0.7mm

Beam Angle

0.7° (with antenna radome)

Humidity

≤95%RH

Antenna

Lens, PTFE/PEEK/PE, can be equipped with antenna radome/anticorrosion antenna/cooling tube/quartz isolation flange

Process Pressure

-1...5MPa, -1...32MPa (with QIA)

Resolution

±0.008 mm

Frequency

120GHz-130GHz frequency sweep 10 GHz

Dielectric Constant

1.0-100, viscosity<1000cp

MEASURING RANGES

Range

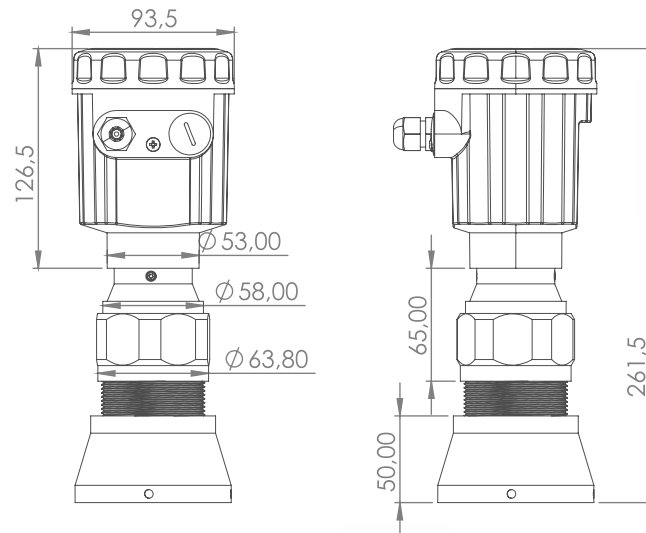
0,1...50/100/150 m

MATERIALS

Casing Material

Aluminium

TECHNICAL DRAWINGS AND DIMENSIONS



CONNECTION

Standart

M56x2

Electrical Connection

M20x1,5

ELECTRICAL DATA

Signal Output

2-wire 4-20 mA
2-wire 4-20 mA+HART
2 wire 4-20 mA+MODBUS

Control Output

4-20 mA or MODBUS RS485
1 route 250VAC/24VDC, 5A relay output,
configurable alarm range on request

Error Output

4 mA, 22 mA and 20.5 mA as optional

Power Supply

4-wire 9-42 VDC (<5W)/100-250 VAC,
50HZ/60HZ (<6W)

Adjustment

PC software or Wi-fi/BT+APP or Tank side meter
320x240 dot 65K 2,6xTFT colored LCD which
can be operated under the sun/ 4 keys

Cable Entrance

M20x1,5

Recommended Cable

AWG18 or 0.75mm²

Protection Degree

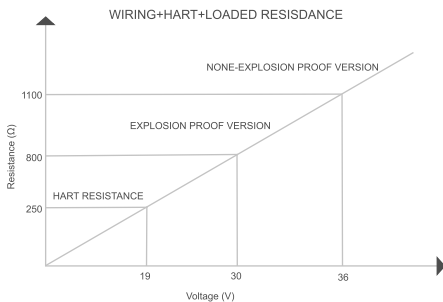
IP67

COMMUNICATION

On Request

HART
MODBUS

LOAD RESISTANCE CHART



ORDERING

Model	
DRSO	Radar Level Measurement Sensors

Antenna	
LE	Lens
PT	PTFE
PK	PEEK
PE	PE
AC	Anti corrosion

Temperature	
LT	Standard (-60°C...+200°C)
HT	With cooling tube (-60°C...+1000°C, Max. pres. 50 Bar)
HP	With quartz isolation flange (-60°C...+200°C, Max. pres. 320 Bar)

Range	
050	50 m
100	100 m
150	150 m

Output	
N	2 wire, 4-20 mA
H	2 wire, 4-20 mA + HART
M	2 wire, 4-20 mA + Modbus RS-485

Power Supply	
DC	9-42 VDC
AC	100-250 VAC

Hazardous Area	
N	None
Xi	II 1/2G Ex ia IIC T4 Gb(Ga)

