



OVERVIEW

Operation

The Radar Level Meters of DESTA 80 GHz series are excellent devices for no contact level measurement. The microwave impulses, emitted by the radar's antenna, travel at speed of light and a part of the energy, reflected by the surface of the medium to be measured, is received by the same antenna. The flying time between the emission and the arrival of the impulses, is proportional to the existing distance.

Features

- Compact design
- Air purge system option
- Cost effective
- More applicaiton in remote target detection
- Frequency modulation (FCMW radar)
- Higher resolution
- Long distance imaging and multi-spectral imaging.

Application

- Sediment, cement etc.
- Level measurement for evaporating liquids
- Dust adhesion
- Industrial processes
- Extreme conditions
- Strong smoke and dust environmental



OPERATING DATA

Frequency

-40...85°C (ABS)
-40...150°C (Al)
-40...250°C (SS)

Installation

Thread or $\geq$ DN50 Flange

Accuracy

± 3 mm (70m measuring range)
 ± 5 mm (150m measuring range)

Beam Angle

8°

Humidity

$\leq 95\%$ RH

Antenna Type

Encapsulated horn antenna(8mm)
Lens antenna on request

Process Pressure

-1...10MPa

Display Language

English, Turkish

MATERIALS

Housing

Aluminum
Plastic, stainless steel on request

Flange

AISI304
PA, AISI 316/L, PTFE on request

Antenna

PTFE
PEEK, Polyamide on request

MEASURING RANGES

Range

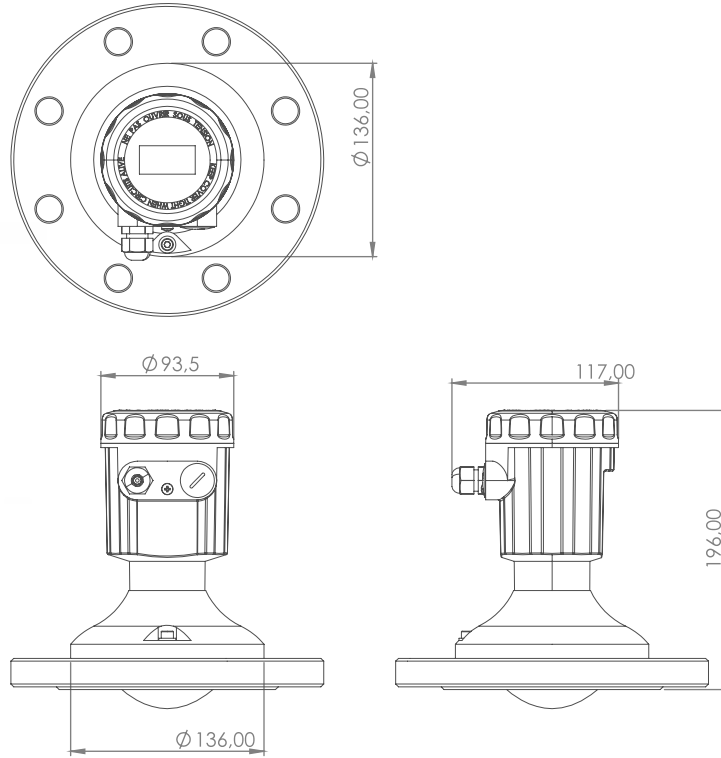
0...150 m

DK Range

2.0...100, Adapt to medium viscosity <3000cp



TECHNICAL DRAWINGS AND DIMENSIONS



ELECTRICAL DATA

Signal Output

2-wire 4-20 mA
2-wire 4-20 mA+ HART, The device agrees with SIL2 requirements for safety-related systems (as per IEC 61508).
2-wire 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 on request

Power Supply

2-w re 16-36 VDC (Max <45 VDC)
4-w re 9-36 VDC/100-250 VAC, 50HZ/60HZ (AC)

Display

128x64dotsLCD/ 4 key

Cable Entrance

M20x1.5 (ø5.9mm) axial cable outlet

Recommended Cable

AWG18 or 0.75mm²

Protection Degree

IP67 or IP68



COMMUNICATION

On Request

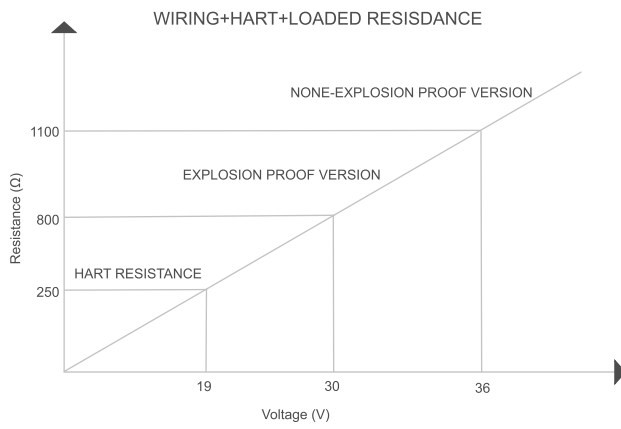
HART®

HART® 7

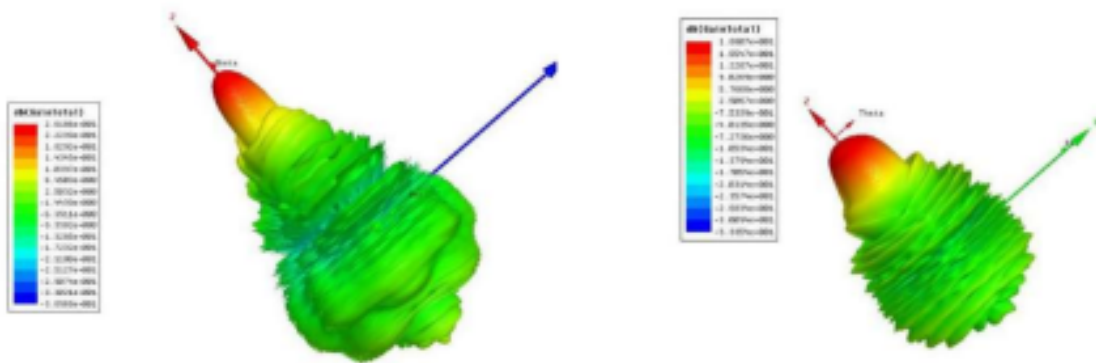
MODBUS

WIFI Connection (Bluetooth, LoRa, IoT)

LOAD RESISTANCE CHART



ANALYSIS



ORDERING

Model	
DYOT	Radar Level Meter

Output	
S	4-20 mA
H	4-20 mA + HART®
H7	4-20 mA + HART® 7
P	Profibus
R	RS485-MODBUS

Power Supply	
AC	110-250 VAC
DC	2-wire 24 VDC (no wi-fi)
D1	4-wire 24 VDC

Range	
03	0-30 m
07	0-70 m
10	0-100 m
15	0-150 m

Wifi Connection	
N	None
B	Bluetooth
L	LoRa
I	IoT

Process Connection	
T	Thread
F	Flange (specify in order)

Flange Material	
P1	PA
P2	PTFE
S1	AISI304
S2	AISI316
S3	AISI316L

Housing	
AB	ABS (-40...85°C)
AL	2Aluminum (-40...150°C)
SS	Stainless steel (-40...250°C)

Enclosure	
67	IP67
68	IP68

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

