SF-500S Ultrasonic Level Meter

Product Description

SF-500S is an ultrasonic non-contacting flow meter for open channels. The measured level value is converted into the rate of flow in specific weirs or flumes where the accurate level value is very important. LXD-04 is an exclusive sensor for open channel flow providing accurate level reading. SF-500S provides a variety of weir and flumes formulations enabling it to be used in different applications. The measured flow information is saved in the memory of SF-500S and it can be downloaded by USB or transmitted via digital communication such as RS232, RS485 or Modbus.

SF-500S Ultrasonic Level Meter

Features

- Exclusive Sensor for open channels
- User Friendly Menu
- Error Instruction Guide by QR code
- RS232, RS485, Modbus
- USB Data Download
- USB Firmware Upgrade
- Data logging for long term period
- Various Flumes and Weirs Formulations

1. Parshall Flumes
2. Supressed Rectangular Weirs
3. Contracted Rectangular Weirs
4. V-Notch (triangular) Weirs
5. Cipolletti Weirs
6. Leopold Lagco Flumes
7. Palmer Bowlus Flumes
8. H Flumes
9. Trapezoidal Flumes

Specification

Controller – SF-500S

Measurement	Ultrasonic non-contacting
Measurement Range	$0.00m^3/h \sim 200,000.00m^3/h$
Accuracy	0.2% of F.S
Resolution	1mm
Damping Rate	0.1m/min ~ 100m/min adjustable
Data Logging Period	Maximum 672 days (1hr interval)
Output	• Two 4~20mA analog outputs into max 750Ω • 3 Relays • RS232, RS485, Modbus
Display	Illuminated Graphic LCD
IP Rating	IP65
Temperature	-20°C - 60°C (-4°F - 140°F)
Material	Polycarbonate
Dimension	166(W)×250(H)x95(D) mm

![Deeter Electronics logo]

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| Weight	ca. 2kg
Power Supply	• 100~230V AC±15%, 50/60Hz, 29VA(12W) Fuse 250V T1.0A • DC 9~30V, Max 8W

Sensor – LXD-04

Range	0.3~4m (0.98~13ft)
Bean Angle	8˚ at -3dB
Process Connection	1" PF
Weight	ca. 1.0kg
Material	PVDF
Temperature	-30°C - 70°C (-22°F - 158°F)
Temperature Compensation	Built-in temperature sensor
IP Rating	IP68
Cable	2 Core Shield (AWG18)

Certificate – CE, UL, FCC
Warranty – 3 Years
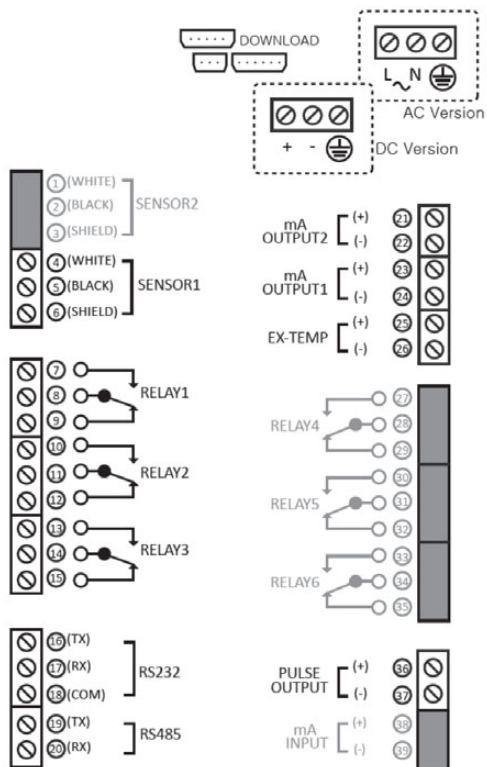* The specification is subject to change without notice.

SF-500S Dimensions
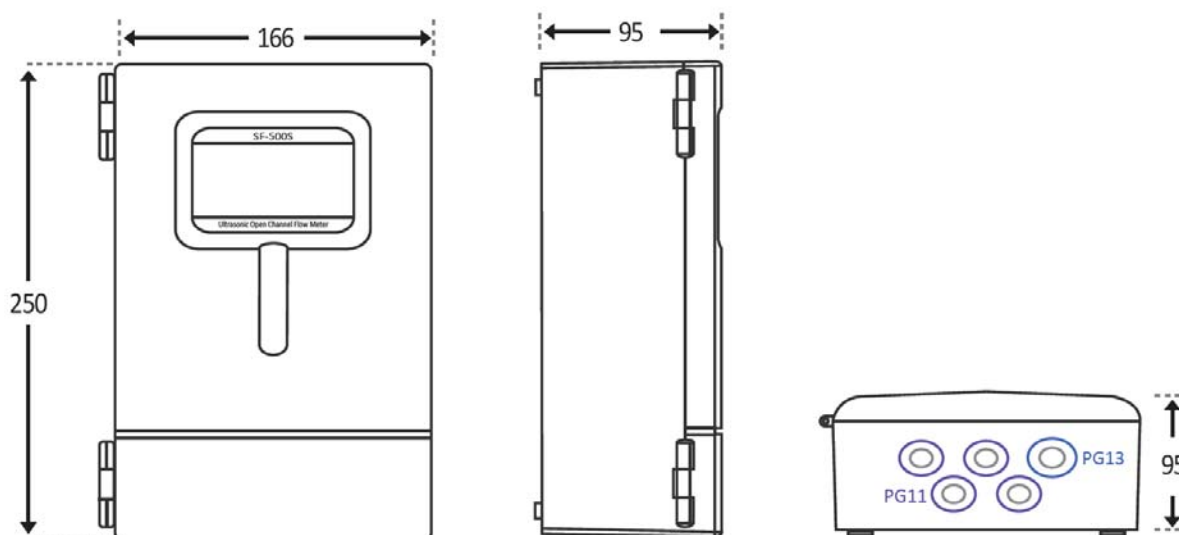
Dimensions shown in mm

SF-500S Ultrasonic Level Meter

SF-500S Wiring

* Unused terminal blocks are colored in gray.

SF-500S Ordering Code

Sensor Selection		
1	LXD−04,1xSENSOR	

Power Supply		
A	AC 100 to 230V (Standard)	
B	DC 9 to 30V	

Communication		
N	none	
A	RS232 (Standard)	
B	RS485	
C	RS232 on Modbus	
D	RS485 on Modbus	

Relay		
3	3x Relay	

SF500S-

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SF-500S Ordering Code

LXD-04 External Temperature Sensor

LXD-04S

1 " PF

106.5

67

[unit: mm]

TERMINAL ③ ⑤ TUBE

TUBE ④

LEAD WIRE ②

3.000

PT 1/8"

16

SENSOR BODY ①

30

0,9⌀
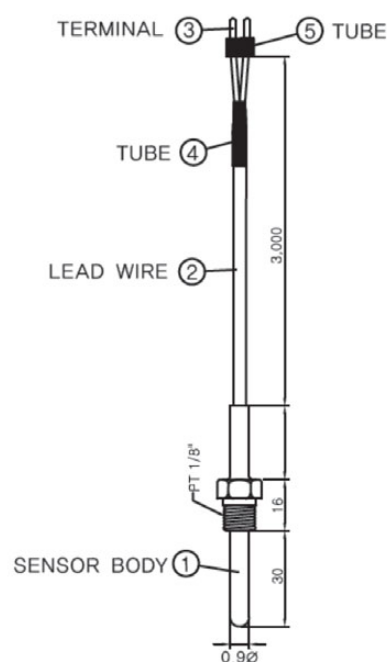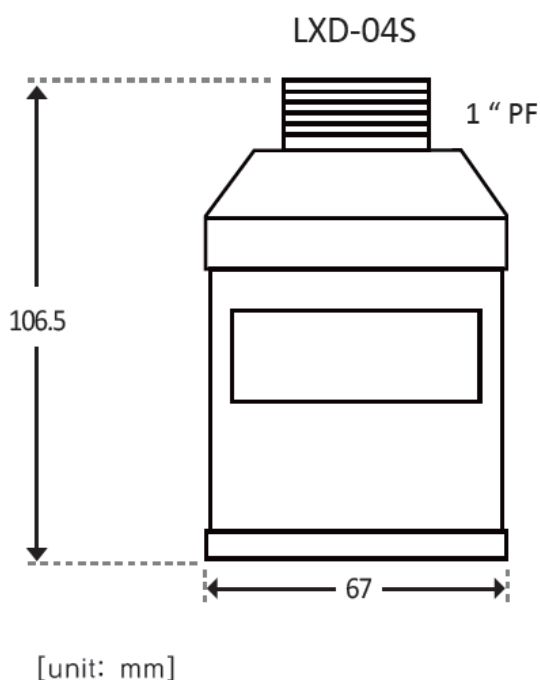
[unit: mm]

LXD-04 Sensor Cable

Black | White
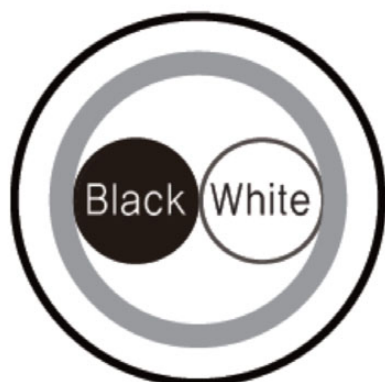
18AWG x 2Core with Shield

ISO 9001

SOCOTEC

UKAS
MANAGEMENT
SYSTEMS
0063

SF-500S Ultrasonic Level Meter

LXD-04 Ordering Code

LXD-04 Sensor Ordering Code							
Measurement Range							
04	4m						
	Sensor Material						
	P	PVDF					
		Sensor Cable Length					
		1	1m				
		5	5m				
		10	10m				
		20	20m				
		30	30m				
		T*	Tailor–made				
			External Temperature Sensor				
			A	Thermometer			
				Accessary–Flange			
				N	none		
				1	80A		
				2	100A		
				3	150A		
				4	200A		
				T*	Tailor–made		
					Accessary–Flange Standard		
					D	DIN	
					A	ANSI	
					J	JIS	
						Accessary–Extension Pipe	
						N	none
						T*	Tailor–made
LXD		-					

T* Specify the exact size.

All electrical equipment should be installed by a qualified/certified electrician.
Deeter Electronics Ltd follows a policy of continual development of its products and reserves the right to change specifications and/or features without notice

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