Technical specification

LSU 100, Level sensor

894334

Flygt

ITT Industries

TECHNICAL DATA

The ITT Flygt level sensor LSU 100 is used to measure a liquid level and to give a signal to a control system. The LSU 100 ultrasonic level transmitter is designed to be mounted above a liquid and will measure the distance to the liquid surface.

The sensor is specially developed to withstand a harsh environment and for media typical for Flygt pumps: sewage, slurry and viscous liquids (not foamy surface).

LSU 100 is a two wire 24V dc loop powered transmitter and may be connected to any suitable dc power source using the factory fitted cable, ingress protection IP 68.

The output is a standard 4 - 20 mA direct current, proportional to the measured level.

The LSU 100 transmitter may be mounted in a hazardous area provided that it is supplied from a protected power supply. It is the responsibility of the user to ensure suitable Intrinsically Safe Barriers are installed. Full details are given in the installation and maintenance instructions.

The sensor is well adapted to the prevalent control systems on the market and fits of course also the ITT Flygt controllers of type FGC and FMC200 - 600.

Standard measuring ranges

Range in m (air)	Cable length (m)	Part no.
0 – 5,0	20	83 94 22
0 – 10,0	20	83 94 24

Electrical data

Power supply: 12 - 40 V DC, two-wire system
Power supply Ex: 12 - 30 V DC, in hazardous area zone 0, two-wire system
Output signal: 4 - 20 mA
Communications: HART digital communication (rev 5)
Earthing: Not required
Cable size: ∅ 4mm, 2x0,22 mm²
Cable length: 20 m
Media temperature: -40°C - 60°C
Temperature drift: ±0,015% of total range per °C

TECHNICAL DATA

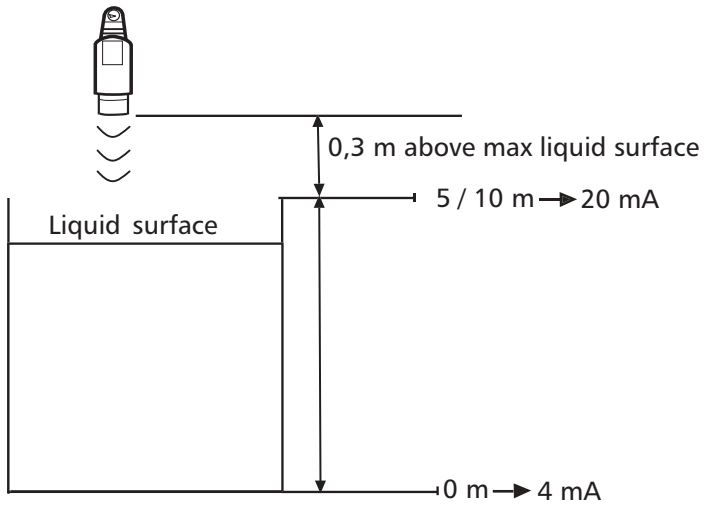
Material and Operating

Body Material:	PVC (stabilized)
Cable sealant:	Epoxy adhesive
Locknut:	Nylon
Cable:	PVC cable, shielded, two core
Bracket:	Stainless steel
Length of sensor:	228 mm (incl. bracket 288 mm)
Diameter of sensor:	62 mm (largest measure)
Ingress protection:	IP68 (5 m H_2O)
Mounting:	Stainless steel mounting bracket
Position dependent:	As vertical as possible, to ensure a good echo (beam angle 12°)
Intrinsic safety approval:	CENELEC EEx ia IIC T4, T6
Safety parameters:	U_i=30V, I_i=120mA, P_i=0,82W, L_i=27µH, C_i=5nF
Ex-barrier, part number:	84 30 55 (option)

Approvals

Electromagnetic compatibility, EMC:	ref.no. 89/336/EEC, 92/31/EEC
Standard:	EN 61326 + A1
Machinery Directive:	ref.no. 98/37/EC
ATEX Directive:	ref.no. 94/09/EC
Standard:	EN 50014+A1+A2, EN 50020, EN 50284
Certificate number:	BAS01ATX1061X
CSA Ex standard:	CAN/CSA E60079

Installation



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