



Parto Sahand Ara

# LIT-F

## LEVEL INDICATOR TRANSMITTER FLOAT





## LEVEL INDICATOR MODEL: LIT-F

### Applications

- level detection for almost all liquid media
- Process water and drinking water treatment, food and beverage industry, pharmaceutical industry



### Description

The model LIT-F level transmitters with reed measuring chain are used for level measurement in liquid media. They work on the float principle with magnetic transmission.

The float's magnetic system in the guide tube actuates a resistance measuring chain that corresponds to a 3-wire potentiometer circuit. The measurement voltage generated by this is proportional to the fill level.

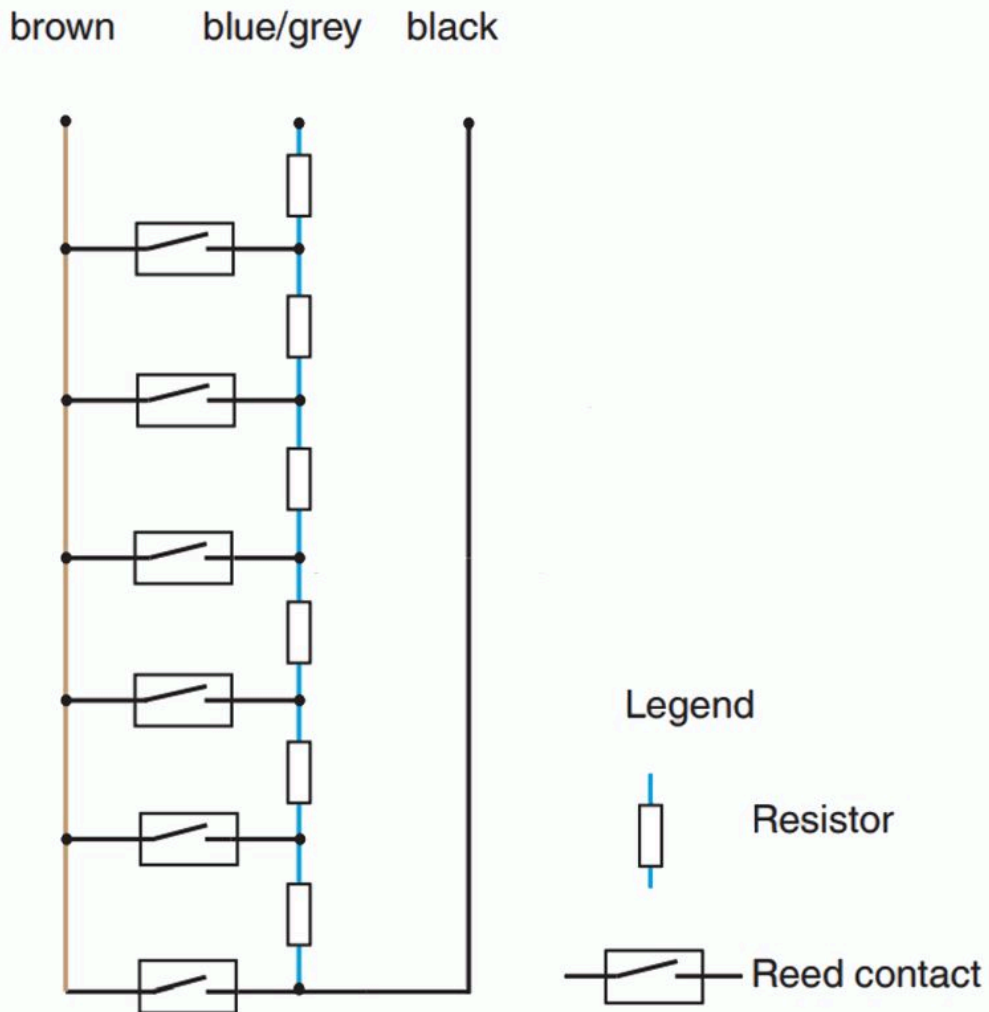
The measurement voltage is very finely stepped due to the contact separation of the measuring chain and is thus virtually continuous. Depending on the requirements several different contact separations are available

- Process- and procedure-specific solutions possible
- Operating temperature:  $T = -80 \dots +200 \text{ }^\circ\text{C}$  [ $-112 \dots +392 \text{ }^\circ\text{F}$ ]
- Operating pressure:  $P = \text{Vacuum to } 25 \text{ bar}$  [ $362,6 \text{ psi}$ ]
- Limit density:  $\rho \geq 400 \text{ kg/m}^3$  [ $25,0 \text{ lbs/ft}^3$ ]
- Wide variety of different electrical connections, process connections and materials
- Explosion-protected versions (option)



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## Internal circuit diagram of the reed level transmitters



### Model overview

Level transmitter	Description
LIT-FA	Version without head-mounted transmitter
LIT-FB	Version with head-mounted transmitter



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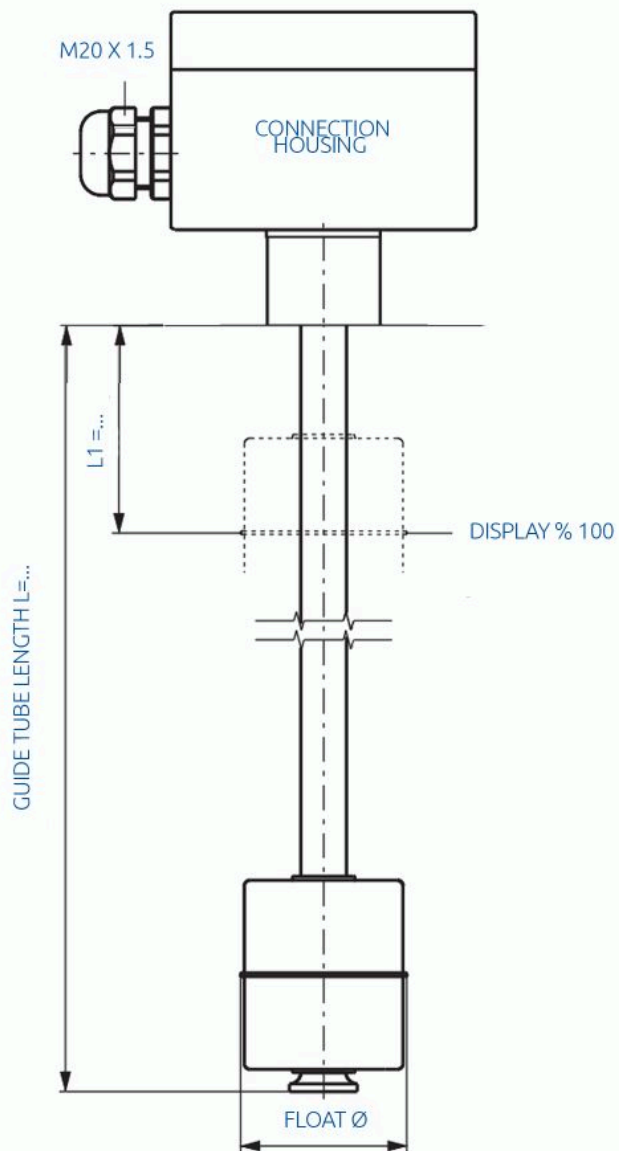
## Internal circuit diagram of the reed level transmitters

	Model LIT-FA	Model LIT-FB
<b>Material (process connection, guide tube, float)</b>	Stainless steel 1.4435 (316L) Stainless steel 1.4404 (316L) Electropolished surface	
<b>Process connection</b>	Threaded pipe connection DIN 11851, downwards, DN 50 ... DN 150 Clamp pipe connection DIN 32676, DN 25 ... DN 100 or 1" ... 4" Clamp pipe connection ISO 2852, DN 25 ... DN 150 Others on request	
<b>Guide tube diameter</b>	12 mm [0.5 in] 14 mm [0.6 in] 18 mm [0.7 in]	
<b>Max. guide tube length L</b>	1,500 mm (guide tube diameter 12 mm [0.5 in]) 3,500 mm (guide tube diameter 14 mm [0.6 in]) 6,000 mm (guide tube diameter 18 mm [0.7 in])	
<b>Float diameter</b>	44 ... 120 mm [1.7 ... 4.7 in]	
<b>Float selection</b>	Depending on guide tube diameter and process conditions	
<b>Max. operating pressure</b>	See page 5	
<b>Temperature range</b>	-20 ... +120 °C [-4 ... +248 °F] Option: High-temperature version: 120 ... 200 °C [248 ... 392 °F] Low-temperature version: -80 ... -20 °C [-112 ... -4 °F]	
<b>Contact separation</b>	5 mm [0.2 in] 10 mm [0.4 in] 15 mm [0.6 in] 18 mm [0.7 in]	
<b>Resolution</b>	2.7 mm [0.1 in] 5.5 mm [0.2 in] 7.5 mm [0.3 in] 9 mm [0.4 in] (depending on contact separation)	
<b>Overall resistance of the measuring chain</b>	Depending on length and separation	
<b>Head-mounted transmitter</b>	External transmitter	Head-mounted transmitter
<b>Tube end</b>	Float limitation welded to guide tube Float limitation removable (with FDA conform sealing per CFR21 Food and Drugs for guide tube diameters 12 mm [0.5 in] and 14 mm [0.6 in])	
<b>Output</b>	3-wire potentiometer	4 ... 20 mA
<b>Connection cable to transmitter/control room</b>	Cable length max. 2,000 m, 3-wire, shielded	2-wire, shielded
<b>Permissible supply voltage</b>	< AC 50 V < DC 75 V	See the data sheet of the head-mounted transmitter used
<b>Mounting position</b>	Vertical $\pm 30^\circ$	
<b>Ingress protection</b>	Up to IP66 or IP68 per IEC/EN 60529 (depending on version)	



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### Dimensions in mm





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## Connection Heads



**B EX-PROOF**



**Box Aluminium**



## LEVEL SWITCH BYPASS MODEL: LIT-F

## Order Code

LIT-F Configuration	
1	<b>Process connection</b>
	F Flange
	T Tread
	C Clamp
*	Other - please specify
2	<b>Size Process connection</b>
	F1 1" 150 Flange
	T1 1/2" Tread
	C1 1 1/2" Clamp
*	Other - please specify
3	<b>Material</b>
	1 316SS
*	Other - please specify
4	<b>Float Type</b>
	1 Cylindrical
2	Spherical
5	<b>Length (L)</b>
	1 500 mm
	2 1000 mm
***	***?
6	<b>Connection head</b>
	BA Box Aluminium
	Ex B EX-PROOF
C	Cable

Additional order details \_\_\_\_\_

LIT-F - 

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1            2            3            4            5            6



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