

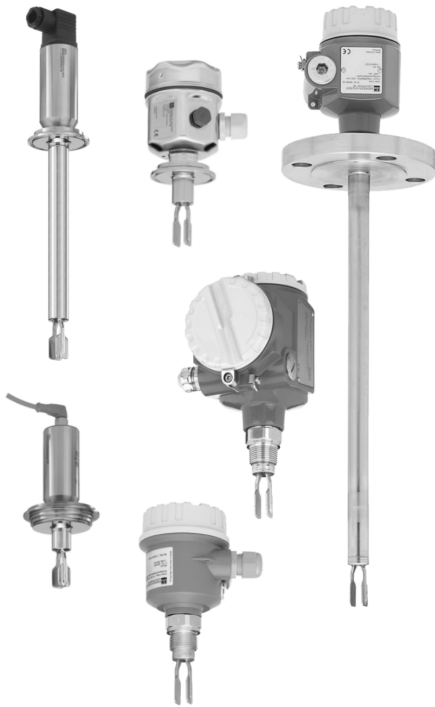
Technical Information

Liquiphant M

FTL50, FTL51, FTL50H, FTL51H

Vibronic

Point level switch for all kinds of liquids



Application

- Process temperatures from $-50\text{ }^{\circ}\text{C}$ to $150\text{ }^{\circ}\text{C}$ (-58 to $302\text{ }^{\circ}\text{F}$)
- Pressures up to 100 bar (1450 psi)
- Viscosities up to $10,000\text{ mm}^2/\text{s}$ (cSt)
- For liquids with densities $\geq 0.5\text{ g/cm}^3$ (SGU)

FTL50: Compact design

FTL51: Extension pipe up to 3 m (9.8 ft) and up to 6 m (20 ft) on request


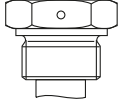
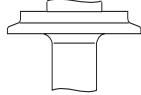
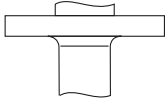
FTL50H, FTL51H: Certified for the food and pharmaceutical industries

Ideal substitute for float switches, as reliable function not affected by flow, turbulence, bubbles, foam, vibration, solids content or buildup.

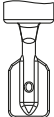


Your benefits

- Recommended for safety systems requiring functional safety to SIL2/SIL3 as per IEC 61508/IEC 61511-1
- Design in accordance with ASME B31.3
- Recommended for use in sterile applications in the life science industry (design in accordance with ASME BPE)
- No adjustment: quick, low-cost startup
- No mechanically moving parts: no maintenance, no wear, long operating life
- Functional safety: Monitoring of tuning fork for damage
- Compact stainless steel housing (optional): the IP69 protection rating guarantees that the unit remains impermeable, even in the event of intensive cleaning or flooding for several hours

Process connections

			
L00-FTL5xxxx-03-05-xx-xx-006	L00-FTL5xxxx-03-05-xx-xx-007	L00-FTL5xxxx-03-05-xx-xx-008	L00-FTL5xxxx-03-05-xx-xx-009
G 3/4, DIN ISO 228/1 R 3/4, EN10226 NPT 3/4, ASME B 1.20.1 (AF 32)	G 1, DIN ISO 228/1 R 1, EN10226 NPT 1, ASME B 1.20.1 (AF 41)	Diverse hygienic and aseptic connections	Flanges as per DIN, ASME, JIS from DN 25 / 1"

Sensors

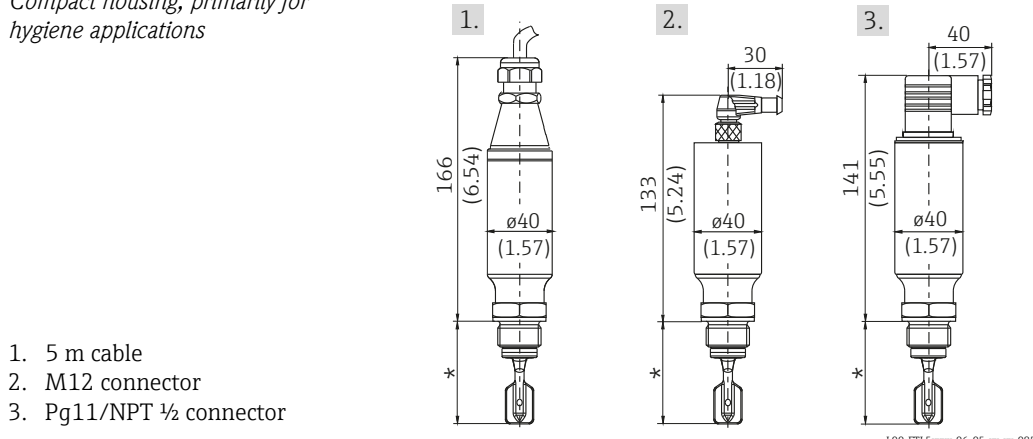
Compact, with extension pipe up to 3 m (up to 6 m on request) or special "length L II" (see → 33ff.)	Compact	Length L	Length L II
			
		L00-FTL5xxxx-03-05-xx-xx-018	
$p_e = \text{bar/psi}$	64/928	64/928 100/1450	64/928 100/1450

Dimensions

Dimensions in mm (in)!

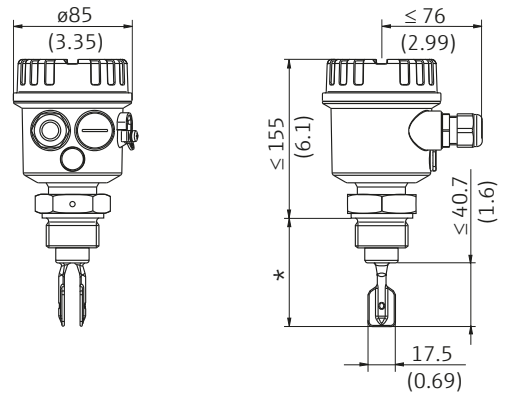
Housing FTL50(H), FTL51(H) with sensor FTL50(H)

Compact housing, primarily for hygiene applications



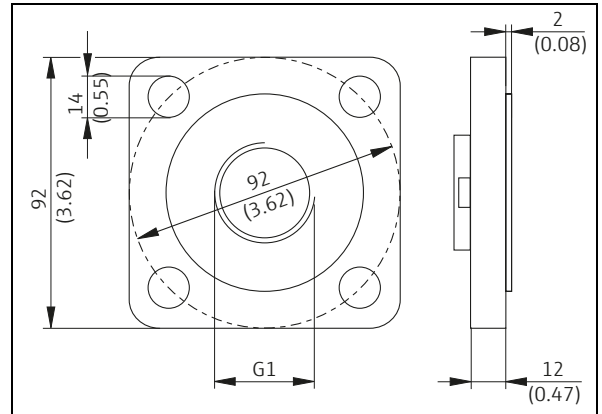
- 1. 5 m cable
- 2. M12 connector
- 3. Pg11/NPT 1/2 connector

Polyester housing F16



Lap joint flange

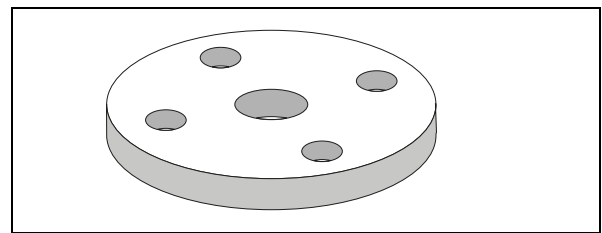
Order number: 918158-0000
 With G 1 thread for mounting
 a Liquiphant FTL50, FTL51
 with process connection GR2
 Pressure up to 40 bar (580 psi)
 Material: corrosion-resistant steel
 1.4301 (AISI 304)
 Weight: 0.54 kg (1.19 lbs)



L00-FTL5xxxx-06-05-xx-xx-108

Lap joint flanges

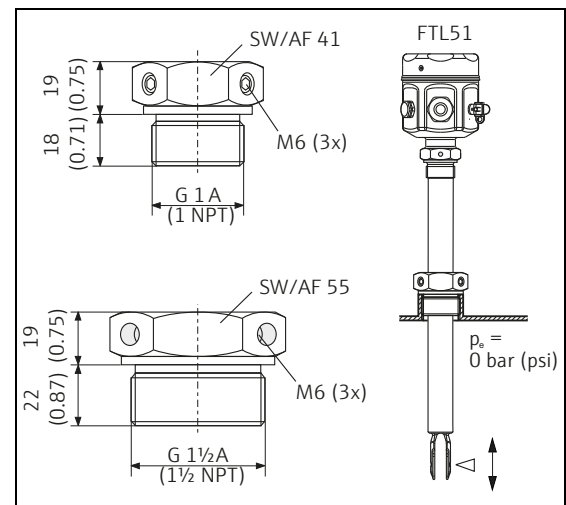
With G 1 thread for mounting
 a Liquiphant FTL50, FTL51
 with process connection GR2
 Material: corrosion-resistant steel
 1.4571 (AISI 316Ti)
 - Order number: 918143-0000
 Flange DN50 PN40, EN 1092-1
 Weight: 3.11 kg (6.86 lbs)
 - Order number: 918144-0000
 Flange ASME 2", 150 psi, RF
 Weight: 2.38 kg (5.25 lbs)



L00-FTL5xxxx-03-05-xx-xx-015

Sliding sleeves for unpressurized operation

Switch point infinitely variable for
 Liquiphant MFTL51
 Material: corrosion-resistant steel
 1.4435 (AISI 316 L)
 Weight for G 1, NPT 1: 0.21 kg (0.46 lbs)
 Weight for G 1½, NPT 1½: 0.54 kg (1.19 lbs)



L00-FTL5xxxx-06-05-xx-xx-109

Thread	Standard	Material	Order number	Approval
G 1	DIN ISO 228/I	1.4435 (AISI 316 L)	52003978	
G 1	DIN ISO 228/I	1.4435 (AISI 316 L)	52011888	With inspection certificate EN 10204 - 3.1 material
NPT1	ASME B 1.20.1	1.4435 (AISI 316 L)	52003979	
NPT1	ASME B 1.20.1	1.4435 (AISI 316 L)	52011889	With inspection certificate EN 10204 - 3.1 material
G 1½	DIN ISO 228/I	1.4435 (AISI 316 L)	52003980	
G 1½	DIN ISO 228/I	1.4435 (AISI 316 L)	52011890	With inspection certificate EN 10204 - 3.1 material