

OLT Series

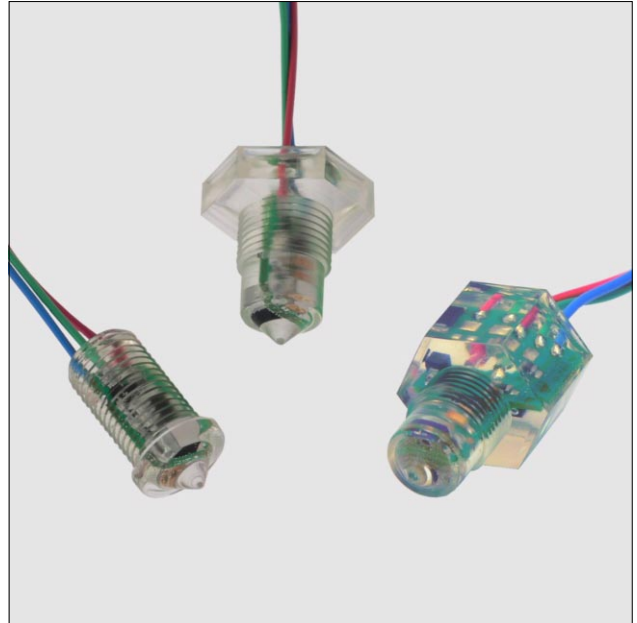
Trogamid optical liquid level switches

FEATURES

- Solid state technology, no moving parts
- Miniature size, easy to install
- TTL compatible or transistor output versions
- 100 mA or 1 A output current
- Trogamid housings
- High media compatibility
- Fast response, electrically robust

WETTED MATERIALS

Tip and housing: Trogamid

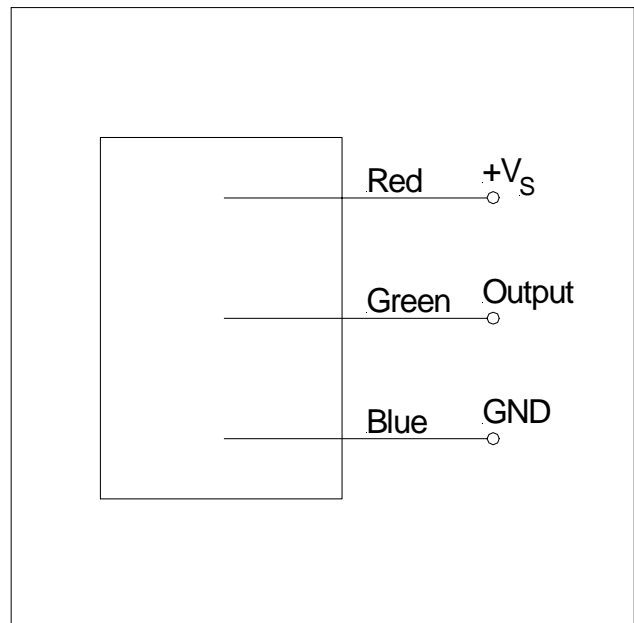


SPECIFICATIONS

Maximum ratings

Supply voltage	
OLT01..., OLT25X...	4.5...15.4 V
OLT25U...	8...30 V
Supply current	
OLT01..., OLT25X...	2.5 mA
OLT25U...	7.5 mA
Output current	
OLT01...	100 mA
OLT25...	1 A
Operating temperature range	
OLT01...	-25...80°C
OLT25...	-40...125°C
Pressure range	
OLT...F	20 bar
all others	7 bar
Dielectric strength	4 kV
Protection class	IP 67

ELECTRICAL CONNECTION



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OUTPUT VOLTAGE

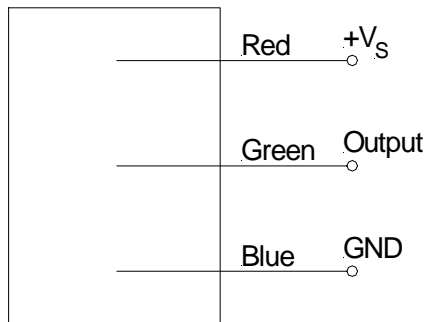
Part no.	Condition	Output voltage (V_{out})	
		High	Low
OLT01...	$V_s = 4.5...15.4 \text{ V}$, $I_{out} = 100 \text{ mA}$	$V_{out} = V_s - 1.0 \text{ V max}$	$V_{out} = 0 \text{ V} + 0.5 \text{ V max}$
OLT25X...	$V_s = 4.5...15.4 \text{ V}$, $I_{out} = 1 \text{ A}$	$V_{out} = V_s - 1.5 \text{ V max}$	$V_{out} = 0 \text{ V} + 0.5 \text{ V max}$
OLT25U...	$V_s = 8...30 \text{ V}$, $I_{out} = 1 \text{ A}$	$V_{out} = V_s - 1.8 \text{ V max}$	$V_{out} = 0 \text{ V} + 0.7 \text{ V max}$

PERFORMANCE CHARACTERISTICS

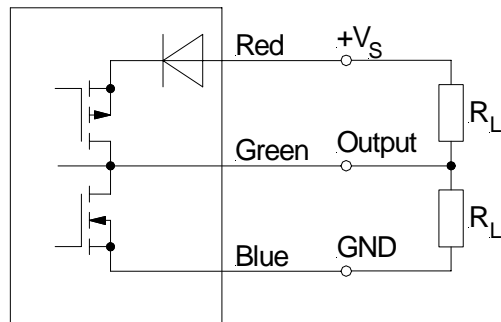
Characteristics	Min.	Typ.	Max.	Unit
Repeatability			± 1	mm
Hysteresis (depending on liquid)			1	
Response time rising liquid			50	μs
Response time falling liquid (ethanol)			1	s

ELECTRICAL CONNECTION (cont.)

TTL compatible



Push-Pull (current sinking and sourcing)



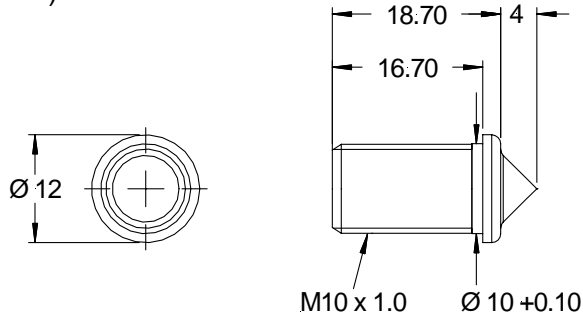
Note: All OLT... devices are supplied with lead wires. The wire lengths are 200 mm -0, +30 mm measured from the back of the housing. Wire diameters are 0.511 mm (AWG 24) for all OLT01... devices and 0.812 mm (AWG 20) for all OLT25... devices.

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OUTLINE DRAWING

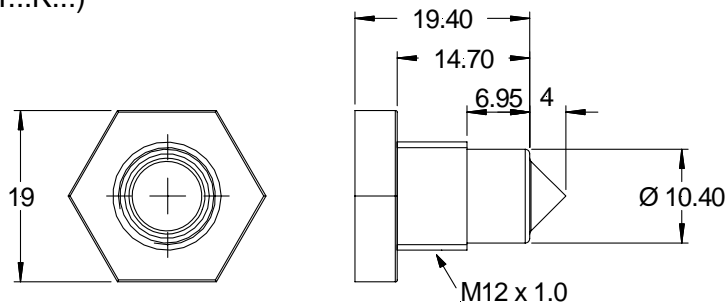
M10 thread
(Housing type OLT...F...)



mass: 5 g

dimensions in mm

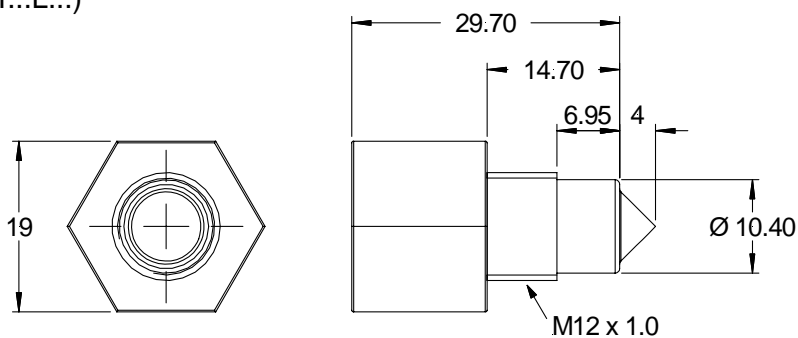
M12 thread short
(Housing type OLT...K...)



mass: 6 g

dimensions in mm

M12 thread long
(Housing type OLT...L...)



mass: 10 g

dimensions in mm

Note: Do not mount the sensor with prism pointing downwards.
The prism should be at least 10 mm away from any infrared-reflecting surface.

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ORDERING INFORMATION

TTL compatible output devices

Options	Series		Output			Housing type	Termination			
			Current	Type	Function					
	OLT	01T	100 mA	TTL compatible	0	Low in air	F	M10 thread	3	3 wire
					1	High in air	K	M12 thread short		
Example: OLT 01T 0 F 3										

Transistor output devices

Options	Series		Output			Housing type	Termination			
			Current	Type	Function					
	OLT	25X	1 A	Push-Pull (V _s = 4.5...15.4 V)	0	Low in air	L	M12 thread long	3	3 wire
		25U	1 A	Push-Pull (V _s = 8...30 V)	1	High in air				
Example: OLT 25U 0 L 3										

Accessories (please order separately using the following order numbers)

Order No.	Description	Use with
F I X I N G N U T S		
ZA000910	M12 x 1, nickel plated brass	OLT...K..., OLT...L...
ZA000911	M12 x 1, stainless steel (303, clear passivated)	
ZA000912	M10 x 1, plastic	OLT...F...
W A S H E R S		
ZA000913	M12 x 1, VAMAC	OLT25...L... (high temperature devices)
ZA000914	M12 x 1, nitrile	OLT01...K... (standard temperature devices)
ZA000915	9.5 x 1, silicone O-ring, shore ~60	OLT01...F...

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