OLM Series

High performance optical liquid level switches

FEATURES

- **Solid state technology, no moving parts**
- **TTL compatible or transistor output**
- **10 mA or 800 mA output current**
- **Stainless steel housing**
- **High media compatibility**
- **Fast response, electrically robust**

WETTED MATERIALS

Tip:	Polysulphone
Housing:	Stainless steel 304

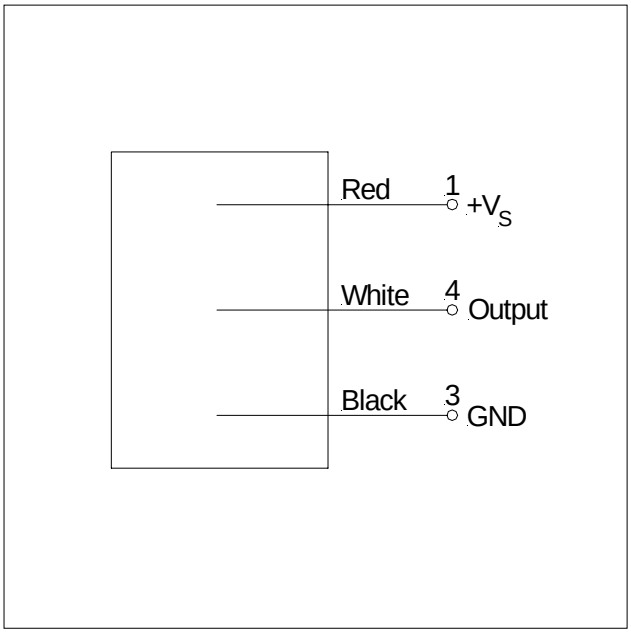
SPECIFICATIONS

Maximum ratings

Supply voltage	
OLM01T...	5...12 V
OLM80U...	10...45 V
Supply current	
OLM01T...	15 mA
OLM80U...	25 mA
Output current	
OLM01T...*	10 mA
OLM80U...	800 mA
Operating temperature range	
OLM...2...	-25 to 80°C
OLM...4...	-40 to 125°C
Pressure range	25 bar
Protection class	up to IP 68

* 10 mA sink current, source current depends on V_S and R_L

ELECTRICAL CONNECTION



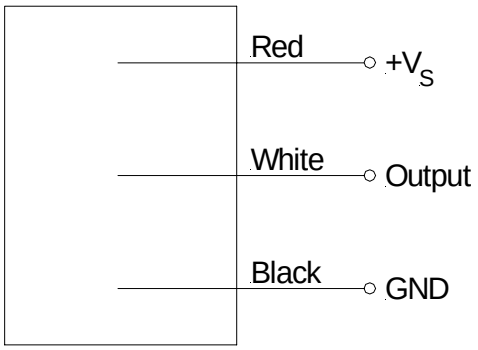
PERFORMANCE CHARACTERISTICS

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

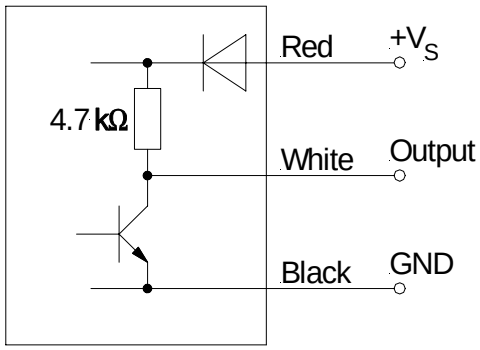
ELECTRICAL CONNECTION (cont.)

Assigment	Electrical Termination	
	M12 x 1 (pin)	Cable, 3 m (lead colour)
$+V_S$	1	Red
N/C	2	-
GND	3	Black
Output	4	White

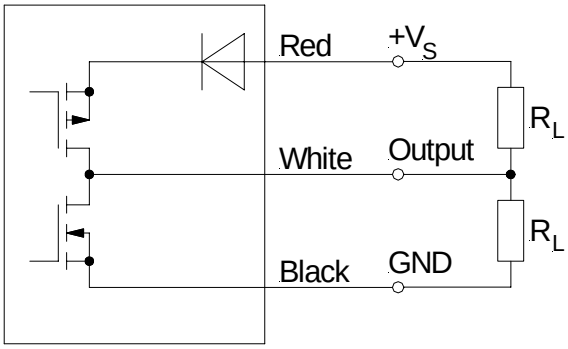
TTL compatible (high in air)



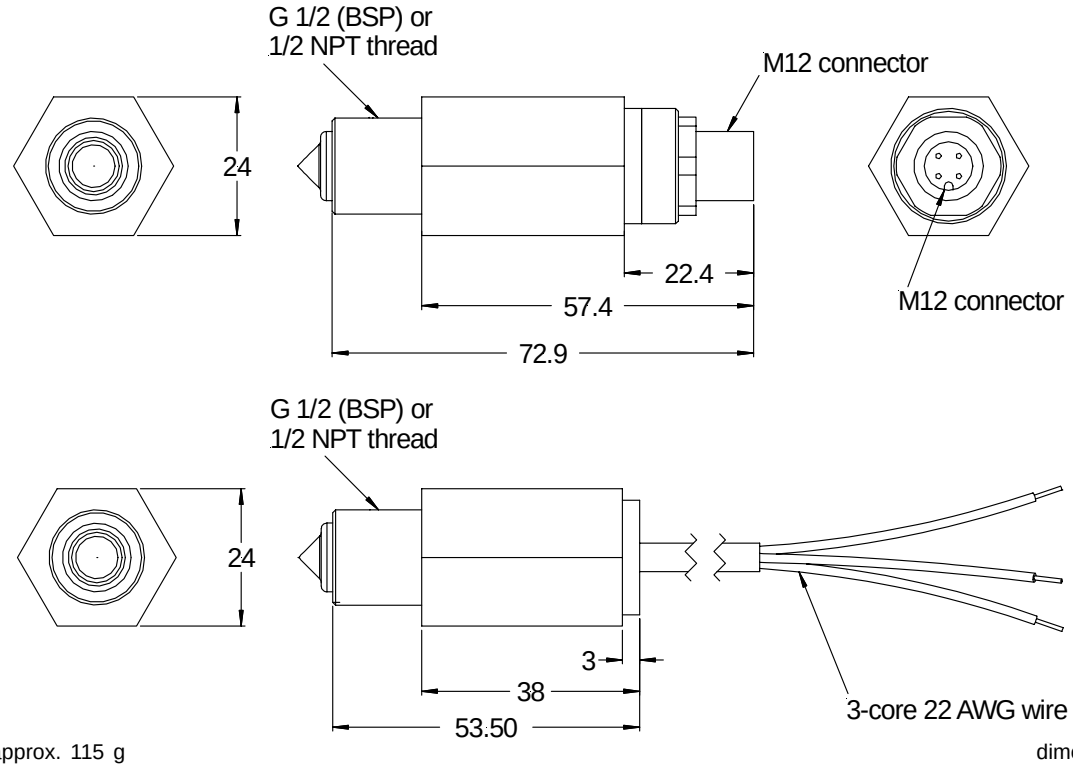
TTL compatible (low in air)



Push-Pull (current sinking and sourcing)



OUTLINE DRAWING



mass: approx. 115 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.

ORDERING INFORMATION

	Series	Output					Tip material		Housing type		Temperature		Termination	
			Current	Type	Function									
Options	OLM	01T	10 mA	TTL compatible	0	Low in air	P	Polysul-phone	S	G 1/2 (BSP)	2	-25...80 °C	D	M12 x 1 (IP67)
		80U	800 mA	Push-Pull	1	High in air			T	1/2 NPT	4*	-40...125 °C	M	Cable, 3m (IP67)
											* not available for ...01T0... versions			
Example:	OLM	80U			0		P		S		2		D	