



### GENERAL FEATURES

- Piezoresistive measurement principle
- Ceramic membrane
- Long-term stable operation
- EMC and Reverse Polarity protection
- 4-20 mA or 0-10 V analog output
- Different level measuring between 4 meters and 100 meters
- IP68 protection class
- High quality
- Reasonable price, economical solution

PTL 120 level pressure sensors with piezoresistive working principle; are used for level measurement in applications like streams, reservoirs, water tanks, saltwaters, wastewaters etc. With its ceramic membrane structure, it has high corrosion resistance and is highly resistant to salt water.

With its stainless steel housing with IP68 protection class, it can work in harsh environments.

Thanks to the surge voltage and reverse polarity protection, the PTL 120 series are unaffected by electrical fluctuations and reverse connections.

Optionally configurable pressure ranges, analog output and mechanical connection options offer solutions suitable for various applications.

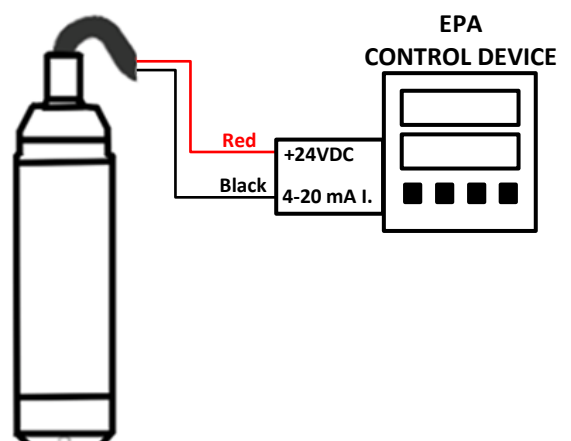
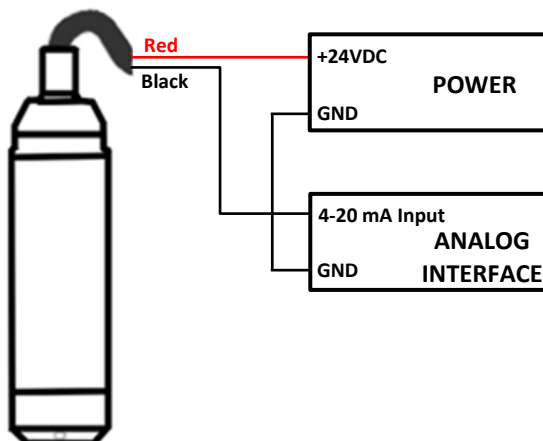
### TECHNICAL SPECIFICATIONS

<b>Supply Voltage</b>	12 ... 30 VDC	<b>Output Signal</b>	4...20 mA (2 wire) 0...10 VDC (3 wire)
<b>Measuring Principle</b>	Piezoresistive	<b>Operating Temperature</b>	-20°C ... +70°C
<b>Membrane</b>	Ceramic	<b>Storage Temperature</b>	-20°C ... +70°C
<b>O-Ring</b>	NBR	<b>Protection Class</b>	IP68
<b>Measuring Range</b>	Different models between 400 mbar and 25 bar can be selected	<b>Body Material</b>	1.4462 (duplex) 1.4404 (AISI 316L) Titanium
<b>Maximum Pressure</b>	%200 FS	<b>Cable Material</b>	PE (polythene)
<b>Precision</b>	%0,3	<b>Weight</b>	~350 gr
<b>Electrical Connection</b>	3 x 0,22 mm <sup>2</sup> shielded cable Cable outer diameter: 7,5 ±0,2 mm Drain pipe diameter: 2 mm (Cable length according to level value)	<b>EMC Protection</b>	Emission: EN/IEC 61000-6-3 Immunity: EN/IEC 61000-6-2

### ELECTRICAL CONNECTION

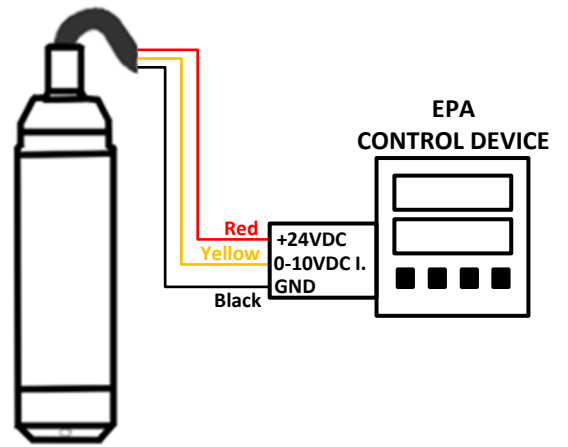
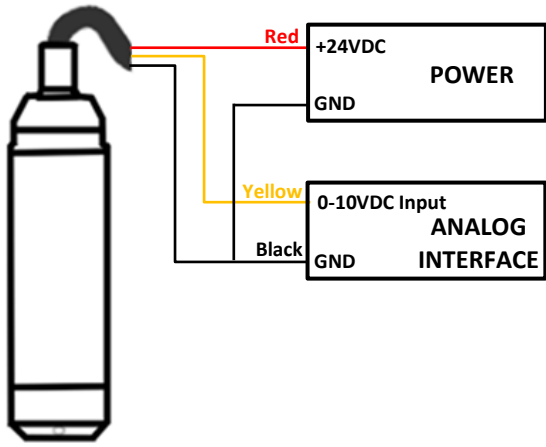
#### 4-20 mA Connection

Signal	Cable
+12...30 VDC ( + supply)	Red
4-20 mA	Black



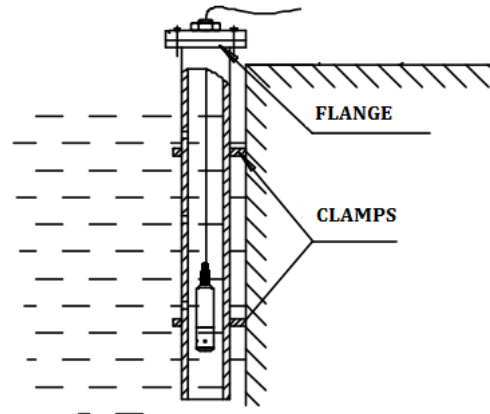
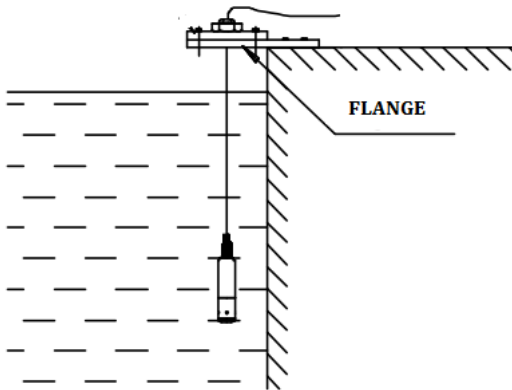
### 0-10 VDC Connection

Signal	Cable
+12...30 VDC ( + supply)	Red
GND	Black
0-10 VDC	Yellow



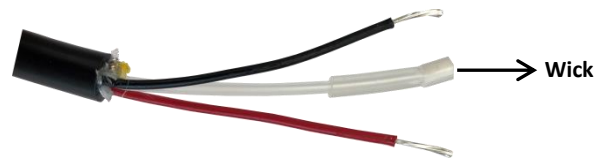
### SAMPLE APPLICATION

During the application, the product free submerge. Dams, rivers and streams of the product against a surge in applications should be suspended through the pipes.

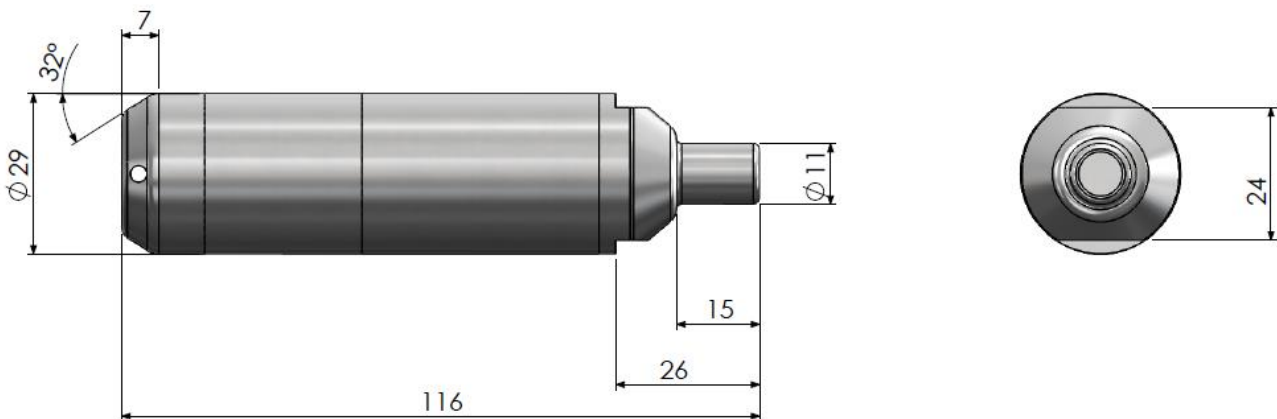


#### WARNING!!!

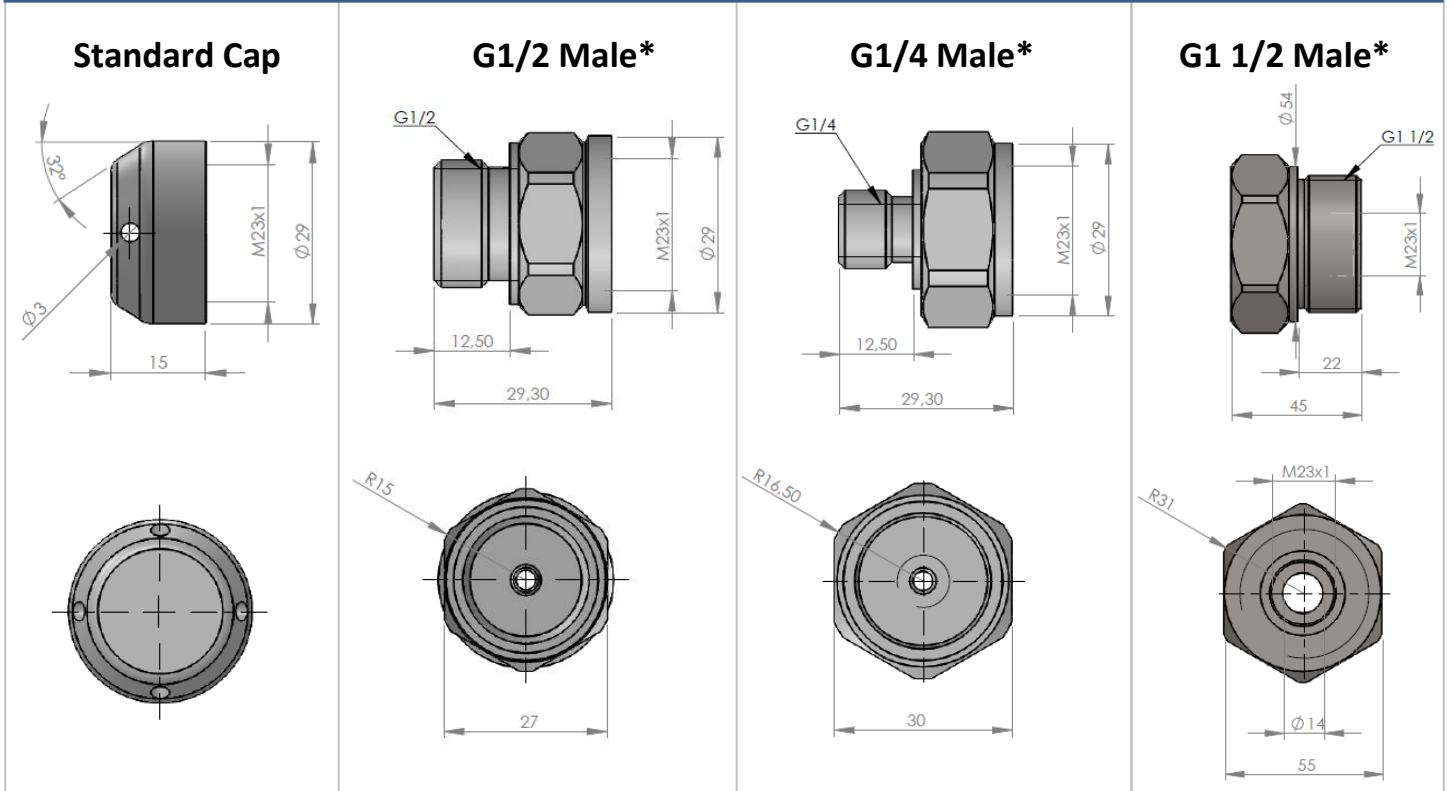
If the wick in the drain pipe is removed, the product will be out of warranty.



### MECHANICAL DIMENSIONS (with standard cap) (in mm)



## MECHANICAL CONNECTION OPTIONS



Fittings marked with (\*) are optional.

## SAMPLE APPLICATION FIELDS

- Process technology
- Seawater, saline water applications
- Water treatment (wastewater, grey-water, drinking water)
- Marine applications
- Level of river and lake



## ORDER CODE

<p><b>Model</b></p> <p style="text-align: center;">PTL 120 - XX - X - XX - XX - XX</p>	<p><b>Output Signal</b></p> <p>V : 0-10 VDC A : 4-20 mA</p>	<p><b>Cable Length</b></p> <p>5M : 5 meters 8M : 8 meters 10M: 10 meters * Must be selected 1 meter above the value to be measured in liquid level measurement</p>	<p><b>Pressure</b></p> <p>Different models between 400 mbar and 25 bar can be selected</p> <p>*(For water, 1 meter level = 100 milibar)</p>	<p><b>Mechanical Connection</b></p> <p>No Code : Standard Cap G1/4 : G1/4 Connection G1/2 : G1/2 Connection G1.1/2 : G1 1/2 Connection</p>	<p><b>Body Material</b></p> <p>E300: 1.4462 (duplex) E316: 1.4404 (AISI 316L) E100: Titanium</p>
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Product	Housing	Cable Material	O-Ring	Applications
PTL 110	1.4404 (AISI 316L)	PE (polythene)	NBR	Wells, water tanks, lake level, river level, reservoirs
PTL 120	1.4462 (duplex)	PE (polythene)	NBR	Sea water, saline water, waste water gray water
	1.4404 (AISI 316L)			
	Titanium			
PTL 130	1.4404 (AISI 316L)	PTFE (polytetrafluorethylene)	Viton (FKM)	Oils and fuels

Atek Sensor Technologies



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