

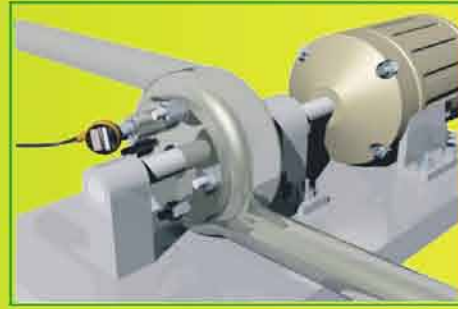
## Applications



- Monitor the oils of cutting machines



- Monitor the cooling water on soldering



- Monitor the lubricant supply on bearings



- Monitor the glue of glue dispensers



- Monitor the cooling water on pumps

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## Products Specification

Order No.	Type	Operating Voltage	Sensible Range Liquid/gas[cm/s]	Housing Material	Sensible Temperature	Operating Temperature	Output	Protection Classification	Programmable
FL0001	Smart Flow Sensors	20~36VDC	3..300/200..3000	Plastics	-25°C..+80°C	-25°C..+80°C	PNP NO/NC	IP67	Yes
FL0002	Smart Flow Sensors	20~36VDC	3..300/200..3000	Plastics	-25°C..+80°C	-25°C..+80°C	NPN NO/NC	IP67	Yes
FL0003	Smart Flow Sensors	85~265VAC	3..300/200..3000	Aluminum Alloy	-25°C..+80°C	-25°C..+80°C	RELAY NO/NC	IP67	Yes
FL0004	Flow + Temperature Sensors	20~36VDC	3..300/200..3000	Aluminum Alloy	-25°C..+80°C	-25°C..+80°C	2 x PNP NO/NC	IP67	Yes
FL0005	Flow + Temperature Sensors	20~36VDC	3..300/200..3000	Aluminum Alloy	-25°C..+80°C	-25°C..+80°C	2 x NPN NO/NC	IP67	Yes
FL0006	Flow + Temperature Sensors	85~265VAC	3..300/200..3000	Aluminum Alloy	-25°C..+80°C	-25°C..+80°C	2 x RELAY NO/NC	IP67	Yes
FL0007	Compact Flow Sensors	20~36VDC	3..60/200..800	Stainless Steel	-25°C..+80°C	-25°C..+80°C	PNP NO/NC	IP67	Yes
FL0008	Compact Flow Sensors	20~36VDC	3..60/200..800	Stainless Steel	-25°C..+80°C	-25°C..+80°C	NPN NO/NC	IP67	Yes



## Flow sensors



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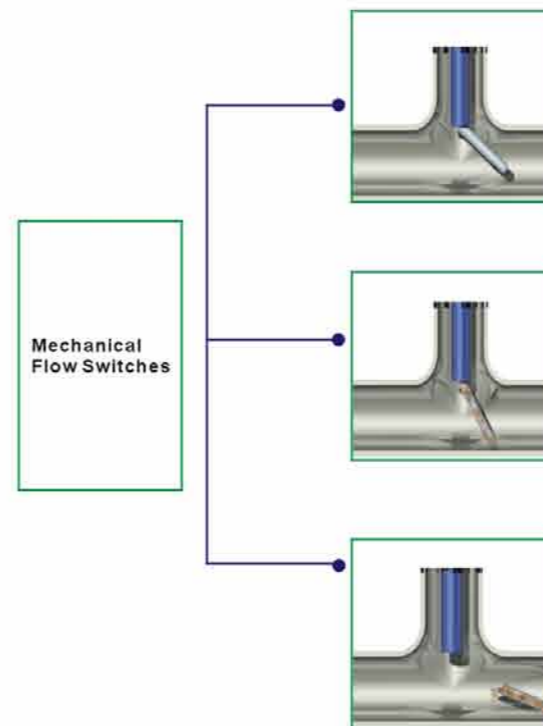




**FL series** is an electronic devices designed for monitoring flow rate. Without mechanical components, this guarantees a reliable monitoring even in case of complex mediums over a long period. The purpose of FL series is to output signal when the flow rate reaches the set-up range. Through control-calculation, FL series can proceed to warn or activate the chain of protection system in order to protect the key equipments and to avoid un-expected damage in production. It can not only successfully reduce the possibility of breakdown and the cost of maintenance, but also keep the countless reliability of operating safety and of economic benefits.

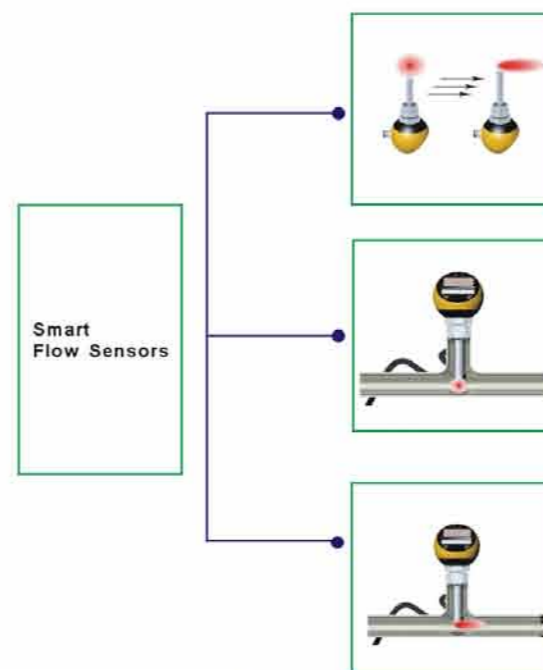
FL series are stable and steadily for applications in hazardous areas by adopting the theory of thermo-diffusion. It can be inserted into the tube or the container and set up the flow rate to an expected value. FL series is a modern-installations electronic flow sensor applied widely in the highly developed countries and surpasses the mechanical flow switches.

**Flow + Temperature Sensor** is the most progressive technique and is created exclusively to satisfy the demands of customers. It perfectly combines temperature sensor and flow sensor in one unit. The LED bar can display indication of the temperature and flow range as well as output warning signals separately. With features as high precision, space saving version, user-friendly handling and impressive design, it could be applied extensively in the industries of electricity, sewage disposal, petroleum, chemical engineering, metallurgy, glass, coolant system, machinery production and more.



- Detect the flow mediums by the swing amplitude of the mechanical paddles or probes.
- No matter of paddles or probes, the detection will be affected by the low sensitivity due to the rusty probes under a long-term working.
- Serious rustiness even causes the break of paddles or probes, and then falling probes may clog up the pipes or damage the machines. It not only makes the mechanical flow switches operate falsely, but also face the derivational problems on the maintenance of pipe system and of machines.

**The performances of Smart Flow Sensors are beyond that of traditional and mechanical flow switches.**



- Equipped with a mini probe, FL series does not affect the flow of mediums while detecting the flow rate.
- For applications where a slow flow rate of mediums, the heat source of the probe fades away slowly, and this slow flow rate can be detected as well. Adversely, when the flow rate of mediums accelerates, the heat source of the probe fades away quickly, and then the quick flow rate can be detected smoothly.
- Adopting stainless steel of the probe can effectively avoid the rustiness.

Accessories

US0001	US0002	US0003	US0007
M18X1.5—M12X1	M18X1.5—G1/4	M18X1.5—G1/2	M18X1.5—∅24mm

Socket

Type	Socket Part No.					
I	C	02	L	5	C	12
L	C: Cable	Length 02: 2M 05: 5M 10: 10M	Connector I: Straight L: Angle	Core 4: 4 5: 5	Material R: PUR C: PVC	Socket size 12: M12