

Conductivity Level Switch 501

2.72

PRICE COMPETITIVE AND RELIABLE SYSTEM FOR CONTROL OF LEVELS

General

The Conductivity Level Switch 501 is a simple and price competitive system for on/off level measurement. Its typically used in applications like controls pumps and valves or alerts by high or low levels or warn if there is water on the floor etc.

The system includes a signal amplifier (501) that can operate up to three level electrodes. The stainless steel electrodes can be cut to the desired length and connected via the electrode base to the amplifier. The amplifier can be configured to either pump in or out of the tank. The electrode base can be mounted on a standard bracket for mounting directly on the wall or in combination with MJK modular fittings. The 501 transmitter is for DIN-rail mounting.

Operation

The level switch sends an alternating voltage to the electrodes. When the liquid contacts the electrodes, the current running between these is amplified and the output relay is activated.

Two electrodes can be connected to the unit for the detection of one level. Alternatively, three electrodes can be connected for the detection of two levels; one for start and one for stop.

In cases where the liquid is in a conductive tank or where a metal pipe is in constant contact with the liquid, it is only necessary to use one or two electrodes.

Applications

- Waste water pump stations
- Process water
- Drinking water reservoirs
- Level alarm or level indication
- Start/stop of one pump



DATASHEET

US 2.72 Conductivity Level Switch 501 datasheet 2001

mjk
a xylem brand

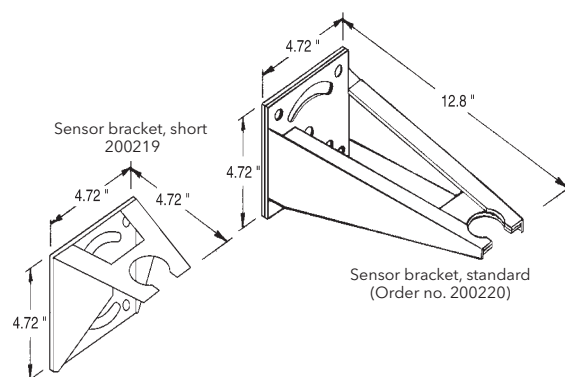
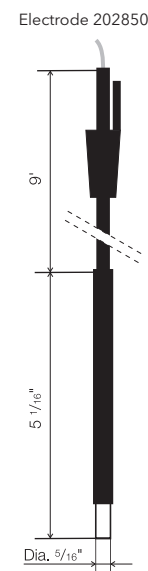
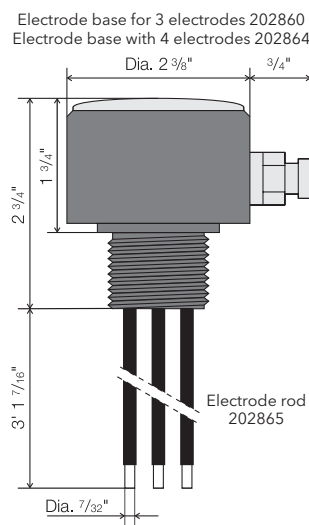
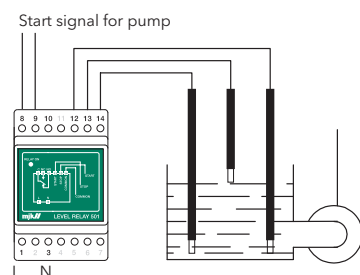
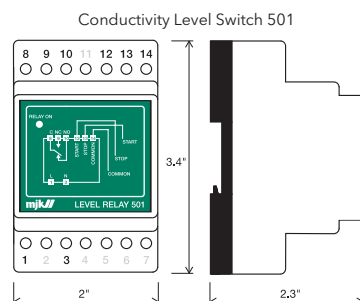
Conductivity Level Switch 501

Specifications

Conductivity Level Switch 501	
Mounting	On DIN rail
Power supply	115 V AC $\pm 10\%$, 12 V DC consumption approx. 4VA
Temp. range	-5 to +150 °F
Materials	Cover: Lexan. Base: Noryl
CE approvals	EN 61000-6-1, EN61000-6-3
Enclosure	NEMA 1
Sensitivity	Min.: 100 mA. Max.: 1mA
Relay output	SPDT switch, max. 115 VAC, 4A resistive/1A inductive load

Conductivity Level Electrodes			
Item no.	202850	202860	202865
Description	Electrode on cable	Electrode base w. 1 electrode	Additional electrode rod
Mounting (thread)	Cable	Thread bracket base 1" NPT	
Length	18/49 ft.	3 ft.	3 ft.
Material	AISI 316/neoprene	POM/AISI 316	AISI 316
Cable	AWG13	None	None

Dimensions and Electrical Connection



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Order Numbers

Conductivity Level Switch 501	
MJK209820	Level relay 501, 115VAC
MJK202830	Level relay 501, 12 VDC
Conductivity Level Electrodes	
MJK202850	Single level/ground electrode with 6m/18ft. cable
MJK202850-15	Single level/ground electrode with 15m/49ft. cable
MJK202860	Electrode base with one electrode rod
MJK202868	Electrode base with 3 electrodes rod (max. 3) with 12m/39ft. cable
MJK202864	Electrode base with 4 electrode rods
MJK202865	Additional electrode rod for base 202860. 1m/3ft.
MJK202865-2	Additional electrode rod for base 202860. 2m/6ft.

Order Numbers Accessories

Conductivity Level Switch 501 Accessories	
MJK200219	Sensor bracket, short
MJK200220	Sensor bracket, standard
MJK560914	Plastic mounting bracket for cable Ø6-10mm