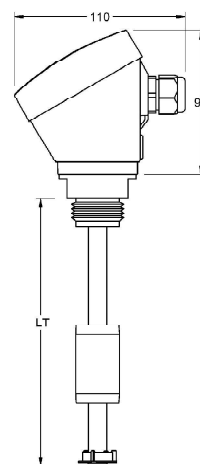
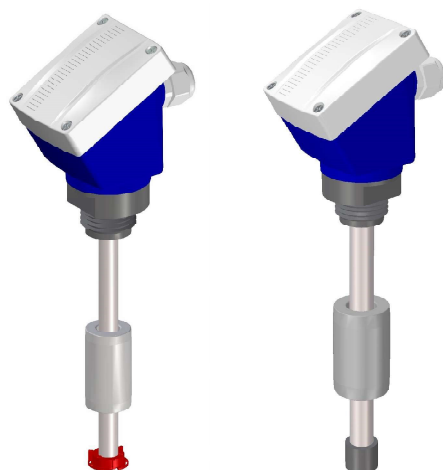

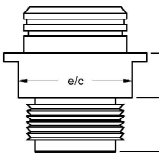
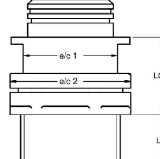
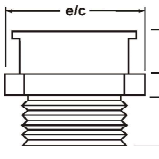
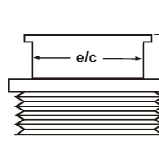





IMN TB PP

MAGNETIC LEVEL SWITCH



General	Operating principle	The IMN level magnetic switches are based on the action of a reed switch located inside the tube, which is activated by a magnet housed inside the float, moved due to the thrust of the liquid.			
	Application	· For the detection of one or more points in liquid level. · Used in maneuvers for filling, emptying, overflow alarm, etc.			
	Manufacturing	AThey are customized to suit the installation conditions.			
Housing	Electrical connection	Connection housing. PBT. 64x95x110 mm			
	Protection	IP67			
	Temperature (T _a)	-20..+80 °C			
	Cable gland	M20 x 1,5 mm. PA. IP68			
	Ø Cable hose (mm)	6..12 mm			
Body	Guide tube	100..1000 mm: Ø12 mm, PP. Float FCPP04M14 1000..3500 mm: Ø16 mm, PP. Float FCPP05M18			
	Stoppers	PP			
	Temperature	-10..+60 °C			
	Mounting position	Vertical, ±15°			
Process connection	Thread	1" G	1"1/4 G	1"1/2 G	2" G
	Material	PP			
	 e/c (mm)	36	40 (1) / 51 (2)	55	64
	LR (mm)	19	22	21	26
	LCP (mm)	15	33	17	
		It is advisable that the float is narrower than the thread width			
Floats	Model	FCPP04M14		FCPP05M18	
	Material	PP		PP	
	Dimension (mm)	Ø 29x50		Ø 38x60	
	Pressure (kg/cm²)	3		3	
	Density (g/cm³)	e > 0,6		e > 0,5	
	FS / FH (mm)	20 / 30		30 / 30	
					
Contacts	Nr. of contacts	1..3 (tube Ø12 mm) 1..5 (tube Ø16 mm)			
	Class	NO: 120 WVA / 250 VAC-3A NC-NO/NC: 60 WVA / 230 VAC-1A			
	Distance between them	> 40 mm			
Protection	Standard	Normal execution without inner filling. Applicable to most applications.			
	Protected	Anti-condensation effect. In installations where there are large temperature differentials.			
	Insulated	Filled with epoxy resin. Establishing a higher degree of tightness.			

How to define the sensor settings

Determine the total length according to the characteristics of the tank and the level of the liquid to be controlled.

According to the maneuver you wish to perform, determine the amount, location and type of contacts.
Use the table below to define these characteristics.

Contacts: To set the type of contact (NO, NC, NONC) should be without the presence of the float. For example, if you want the lower end of the sensor contact opens when the tank runs out of fluid, set an NC contact for the lower position.

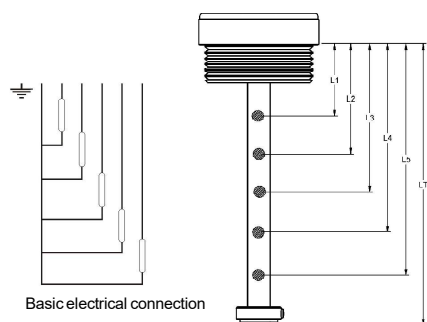
Direction of action (↑ ↓): Setting the direction of action of the float (the filling or emptying) allows more precise adjustment of the trigger point of each one of the contacts.

Electrical connection: If not otherwise specified, it is provided a common connection for all the contacts and an active connection for each one of them, according to the diagram below.

Additional floats: The sensor comes equipped by default with one single float, the lower stopper and, if required, the upper stopper. It can be requested as many additional floats as many contacts are necessary.

Operation conditions: Check that the conditions of pressure, temperature and density of your system match those offered by the model chosen. If you have questions regarding the behavior of materials in contact with the liquid you want to control, see the chemical resistance chart on our website.

Apart from the possibilities listed here, there are others such as other types of float, various electrical connections, etc. For any of these combinations refer to our document, "Connections and schema IMN" section in our website.



	mm	NO	NC	NONC	↑	↓	Stop
L1							
L2							
L3							
L4							
L5							
LT							

Use this document to define the data of sensor and attach it at the time of ordering. Specify in mm. total length of the sensor.

Specify in mm. the position of each one of the contacts used in your application. Mark an "X" to set the type and direction of action of each contact.

In the case of using additional floats, mark an "X" between the contacts that an additional stopper must be placed.

In the table below, check the boxes next to the selected features.

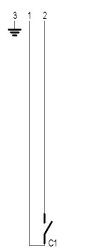
REFERENCE	VERSION		PROCESS		FLOAT		TOTAL LENGTH		Nr. CONTACTS		Nr. FLOATS	
IMN TB PP	<input type="checkbox"/> V1	Standard	<input type="checkbox"/> P06	1"G	<input type="checkbox"/> F51	FCPP04M14	L (mm)		<input type="checkbox"/> C1	1 contact	<input type="checkbox"/> N1	1 float
	<input type="checkbox"/> V2	Protected	<input type="checkbox"/> P07	1" 1/4 G	<input type="checkbox"/> F52	FCPP05M18			<input type="checkbox"/> C2	2 contacts	<input type="checkbox"/> N2	2 floats
	<input type="checkbox"/> V3	Insulated	<input type="checkbox"/> P08	1" 1/2 G					<input type="checkbox"/> C3	3 contacts	<input type="checkbox"/> N3	3 floats
			<input type="checkbox"/> P10	2" G					<input type="checkbox"/> C4	4 contacts	<input type="checkbox"/> N4	4 floats
									<input type="checkbox"/> C5	5 contacts	<input type="checkbox"/> N5	5 floats

To compose a reference, select an option from each of the columns. Example: IMN TB PP V1 P06 F51 L500 C1 N1

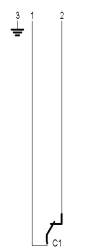
Installations advise		Installation in areas with turbulence			
If the tank walls are metal made, the switch must be far from them at least 100 mm.	The maximum slope should be $\pm 15^\circ$	Place the sensor as far as possible from areas with turbulences.	Dissuasive pipe. It protects the race of the float from turbulences.	Separating wall to prevent from turbulences.	PSIA, DSIA relay: Differential control of max. and min. by timing.

ELECTRICAL CONNECTION EXAMPLES

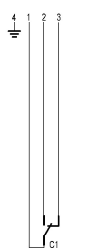
1 CONTACT



CNX43

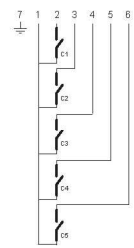


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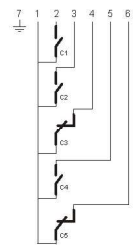


CNX45

5 CONTACTS

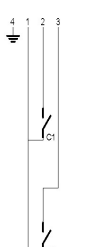


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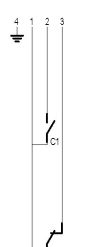


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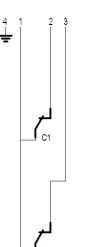
2 CONTACTS



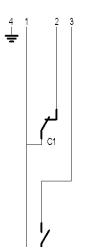
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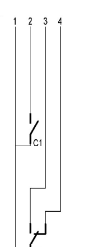
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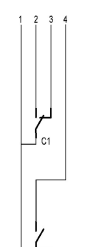
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CNX49

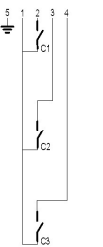


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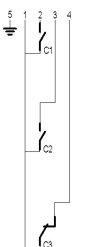


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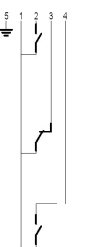
3 CONTACTS



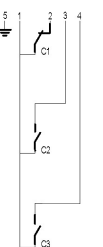
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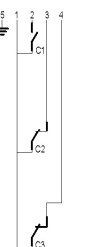
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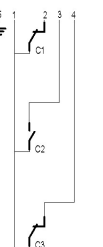
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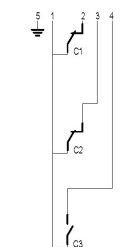
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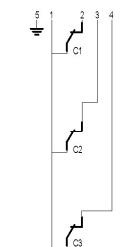
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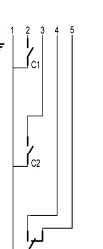
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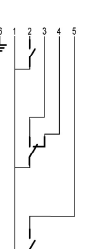
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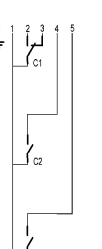
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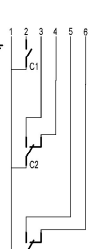
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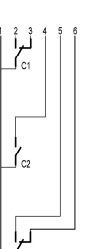
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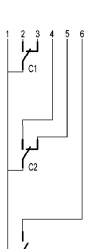
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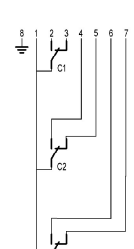
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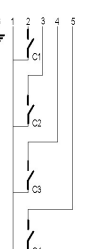


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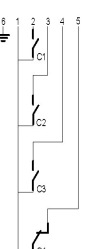


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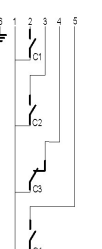
4 CONTACTS



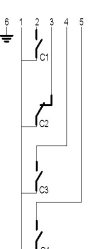
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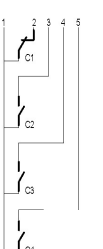
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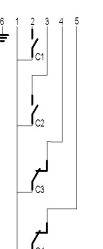
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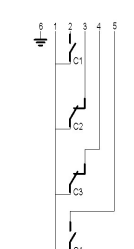
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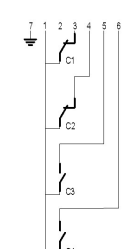
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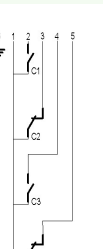
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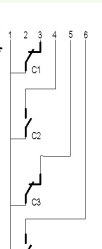
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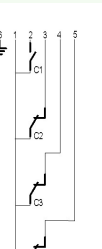
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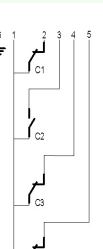
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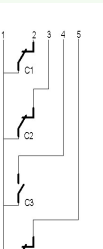
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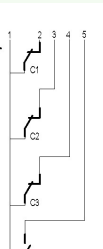
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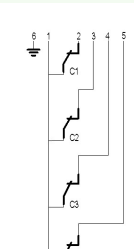
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CNX80



CNX81



CNX82