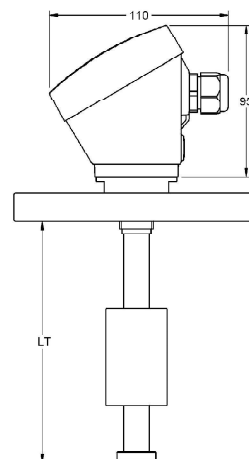
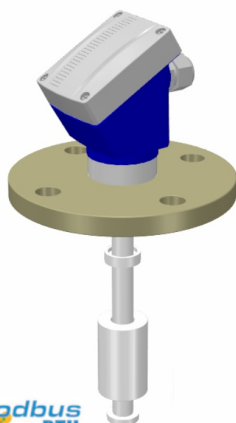
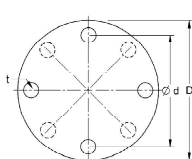




IMN DB PVDF

MAGNETIC LEVEL SWITCH



General	Operating principle	The IMN level magnetic sensors are based on the action of a reed switch located inside the tube, which is activated by a magnet housed inside the float and moves due to the thrust of the liquid.				
	Application	<ul style="list-style-type: none"> For the detection of one or more points in liquid level. Used in maneuvers for filling, emptying, overflow alarm, etc. 				
	Manufacturing	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 and stops	100..3500 mm. Ø16 mm (PVDF)				
	Temperature	-10..+60 °C				
	Mounting position	Vertical, ±15°				
Process connection	Flange	DN25	DN32	DN40	DN50	DN100
	Material	PP (Polypropylene)				
	n x t (mm)	4x14		4x18		8x18
	Ø d (mm)	85	100	110	125	180
	D (mm)	115	140	150	165	220
	Thickness (LCP) (mm)		8			10
						
Floats	Model	FCPF09M18				
	Material	PVDF				
	Dimension (mm)	Ø 38x60				
	Pressure (kg/cm ²)	2				
	Density (g/cm ³)	e > 0,71				
	FS / FH (mm)	17,4 / 9,9				
						
Contacts	Nr. of contacts	1..5				
	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 determine the sensor settings

Determine the total length according to the characteristics of the shell and the liquid level 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, seek an NC contact for the position.

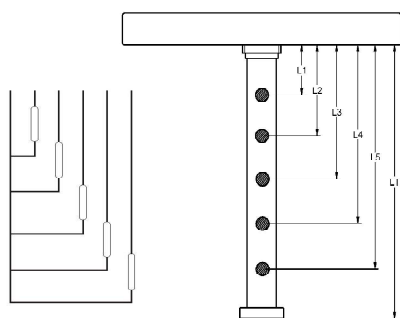
Direction of action (↑ ↓): Set the direction of action of the float (the filling or emptying) allows more precise adjustment of the position of the contacts to the point of desired performance.

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

Additional floats: The sensor comes equipped by default with a single float, the lower stop and if required, the upper stop. Can request as many additional floats as many contacts as necessary.

Conditions of work: 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 chemical resistance chart on our website.

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



Basic electrical connection

	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 of the contacts used in your application.
Place an "X" the type and direction of action of each contact.




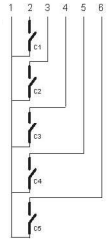
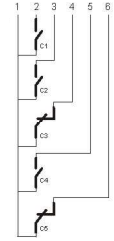

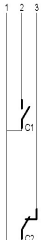
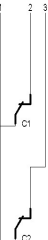
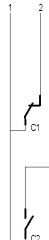
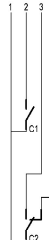
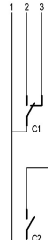
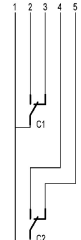
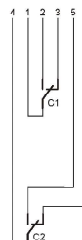



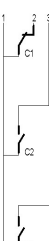

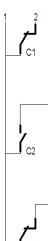
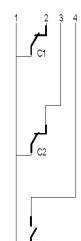
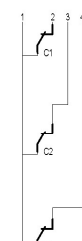






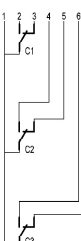
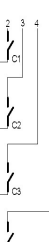
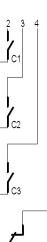
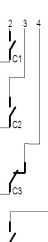
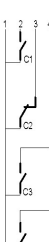
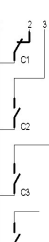
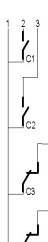
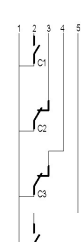
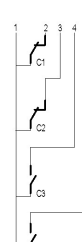
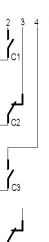
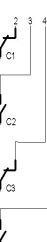
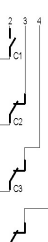
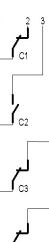
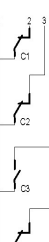
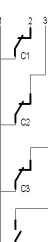
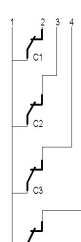
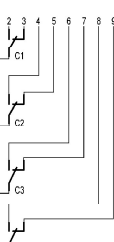
In the case of using additional floats, mark an "X" between what contacts should be placed caps separators.
In the composition table references check boxes next to the selected features.

REFERENCE	VERSION	PROCESS	FLOAT	TOTAL LENGTH	Nr. CONTACTS	Nr. FLOATS
IMN DB PVDF	<input type="checkbox"/> V1 Standard	<input type="checkbox"/> P34 DN25	<input type="checkbox"/> F60 FCPF09M18	L 100..3500 mm	<input type="checkbox"/> C1 1 contact	<input type="checkbox"/> N1 1 float
	<input type="checkbox"/> V2 Protected	<input type="checkbox"/> P35 DN32			<input type="checkbox"/> C2 2 contacts	<input type="checkbox"/> N2 2 floats
	<input type="checkbox"/> V3 Insulated	<input type="checkbox"/> P36 DN40			<input type="checkbox"/> C3 3 contacts	<input type="checkbox"/> N3 3 floats
		<input type="checkbox"/> P37 DN50			<input type="checkbox"/> C4 4 contacts	
		<input type="checkbox"/> P39 DN100			<input type="checkbox"/> C5 5 contacts	

To compose a reference, select an option from each of the columns. Example: IMN DB PVDF V1 P36 F60 L500 C1 N1

Installations advise	Installation in areas with turbulence
<p>If the tank is metal walls, the probe will separate from them at least 100 mm.</p> <p>The maximum slope should be ±15°</p>	<p>Place the sensor as far as possible from areas of turbulence.</p> <p>Still pipe. Protects the race of the float of the turbulence.</p> <p>Separating wall or discouragement.</p> <p>PSIA, DSIA relay: Differential control of max. and min. by timing.</p>

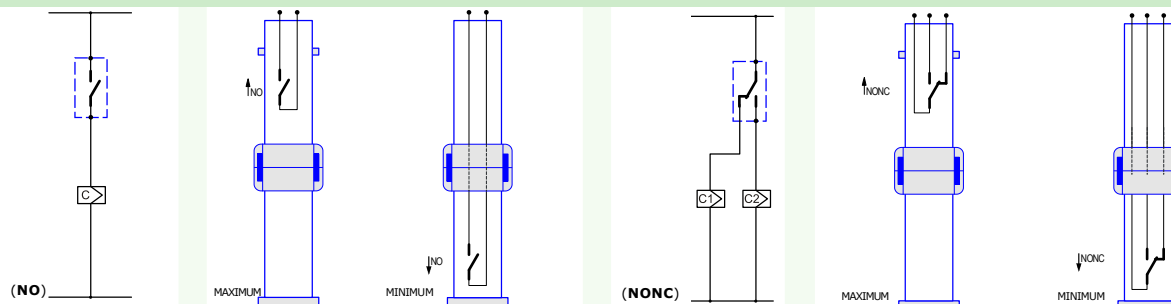
ELECTRICAL CONNECTION EXAMPLES

1 CONTACT	 CNX1	 CNX2	 CNX3				5 CONTACTS	 CNX86	 CNX87	
	 CNX4	 CNX5	 CNX6	 CNX7	 CNX8	 CNX9		 CNX10	 CNX11	
	 CNX12	 CNX13	 CNX14	 CNX15	 CNX16	 CNX17		 CNX18	 CNX19	
3 CONTACTS	 CNX20	 CNX21	 CNX22	 CNX23	 CNX24	 CNX25	 CNX26			
	 CNX27	 CNX28	 CNX29	 CNX30	 CNX31	 CNX32	 CNX33	 CNX34		
4 CONTACTS	 CNX35	 CNX36	 CNX37	 CNX38	 CNX39	 CNX40	 CNX41	 CNX42		

More information regarding, in "Utilities / Tables" on our website (www.disibeint.com)

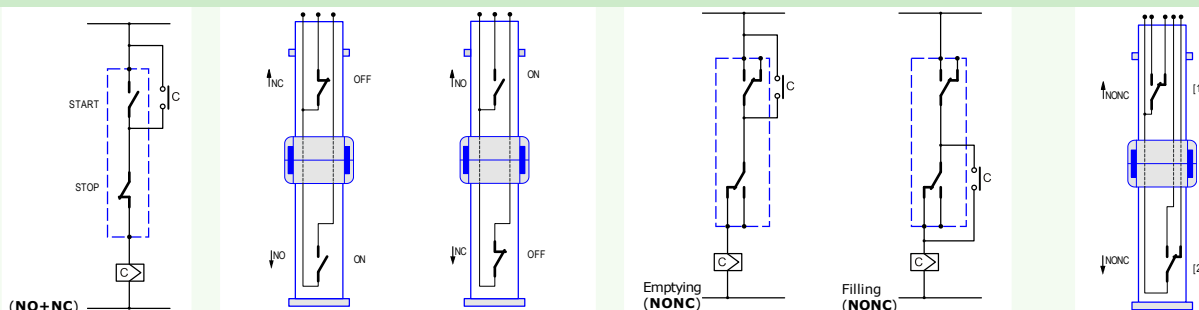
1 CONTACT

CONTROL TO ONE MAXIMUM OR MINIMUM LEVEL



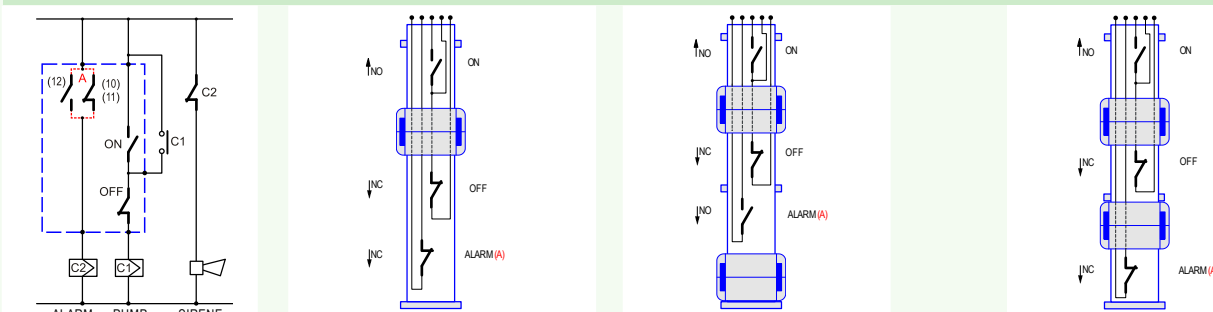
2 CONTACTS

START-STOP WITH INTERLOCK



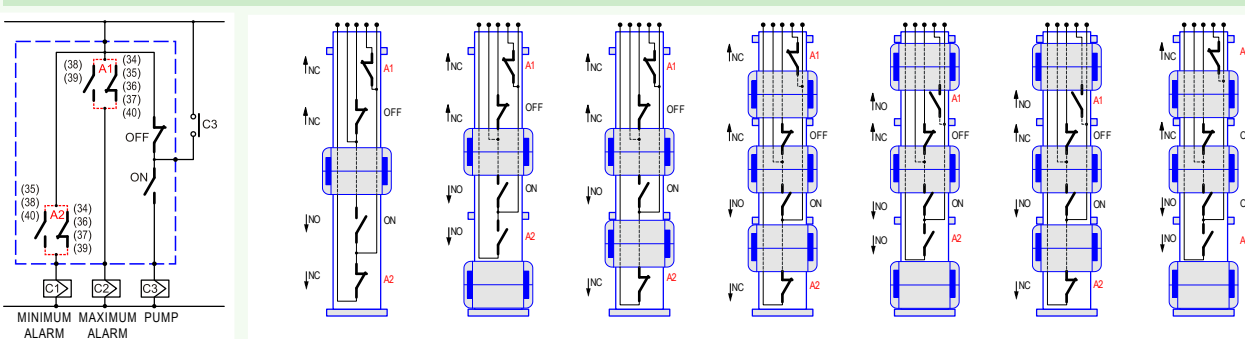
3 CONTACTS

START-STOP EMPTYING + LEVEL MINIMUM ALARM



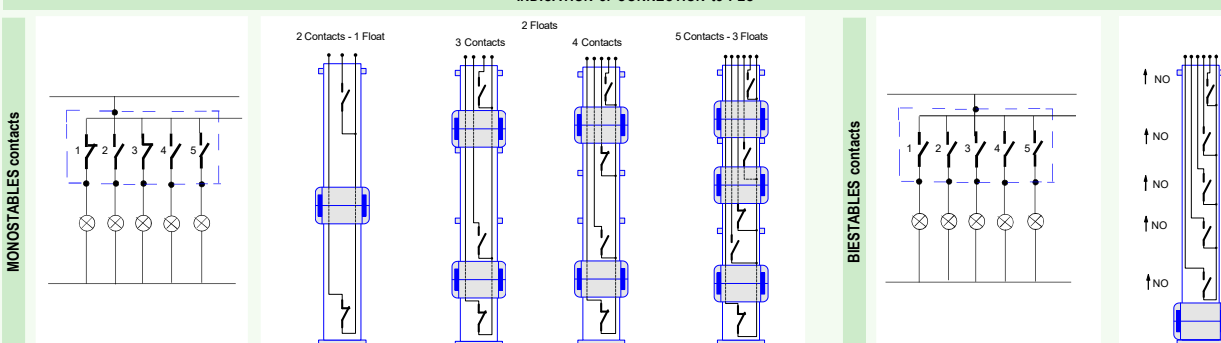
4 CONTACTS

START-STOP FILLING + OVERFLOW ALARM



5 CONTACTS

INDICATION or CONNECTION to PLC



More related information in "Utilities / Tables" on our website (www.disibeint.com)