

# Magnetic float level controller

## MNR 7 Ex



- Construction: stainless steel 1.4571
- Up to 4 bi-stable change over contacts
- ATEX II 1/2 G - EEx ib IIC T4

### APPLICATIONS

Automation ON/OFF of pumps and solenoid valves, low and high alarm indication, automatic tank filling up or draining, etc.

MNR7 level controllers are suitable to non viscous, non sticky liquids without magnetic and solids particles. The liquids may not crystallize or polymerized.

### PRINCIPLE

Switches are mounted in the guide tube; they are actuated by the magnet built in the float, to allow 1 to 4 level detections within the application.

### DESCRIPTION

The housing is IP65 and the cable pass through a cable gland PG11, acc. to Ex specifications. Internal wiring is done on a screw terminal.

On the lower end of guide tube, a blocking ring allows to take off the float before to fit the guide tube through a small diameter hole.

### ORDERING

Please, verify the material compatibility with your chemical fluid and the limits of pressure and temperature with your process maxima, as well the correspondence of ATEX certificate with your requirements.

- Our technicians may help you in MNR7 definition. Always mention the fluid in contact, concentration, process temperature and pressure.

- Note the exact distance of contact(s) measured as of the sealing surface. Consider the minimum distance between two contacts (100 mm) and dead zone we indicate on the drawings.

- The power supply of each contact of the MNR 7 Ex should be from a Zener barrier or certified Intrinsically Safe relay. Our RDN 11 relay is convenient to that purpose, see documentation 251.

### TECHNICAL FEATURES

Wetted parts material:	Stainless steel DIN 1.4571 (AISI 316 L) - PTFE
Housing:	Aluminum, IP 65 acc. EN 60 529
Process connection:	BSP 1" as a standard Flange DN100 PN10 stainless steel 1.4571
Length:	200...3000 mm
Minimum specific weight:	750 g / L
Fluid temperature:	-20...+100°C
Room temperature:	-20...+60°C
Contact:	1 to 4
Minimum distance between 2 contacts:	50 mm
Contact type:	bi-stable change over contacts, 60 VA

The use of a magnetic float level controller MNR 7 Ex is only for connection to intrinsically safe control circuits in conformity with EEx ia II C or EEx ib II C specification in zone 0 category 1.

CE Mark: in accordance with low-voltage directive (73/23/ECC), EMC directive (89/336/ECC); EN 50 082-2:1995 and EN 55 011 (class A):1991.

**BAMO MESURES**

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Magnetic float level controller  
**MNR 7 Ex**

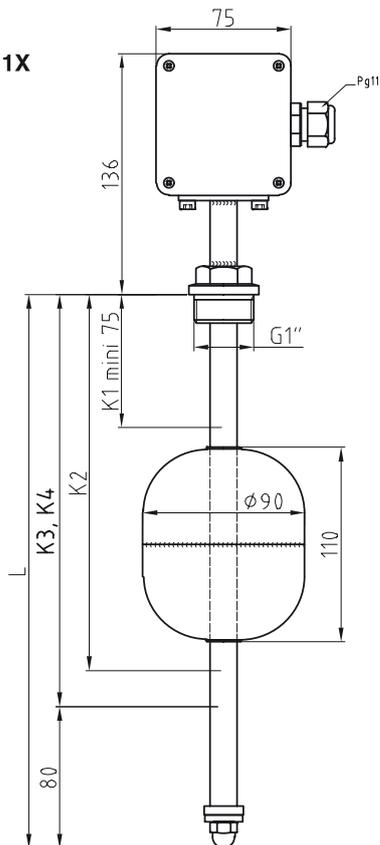
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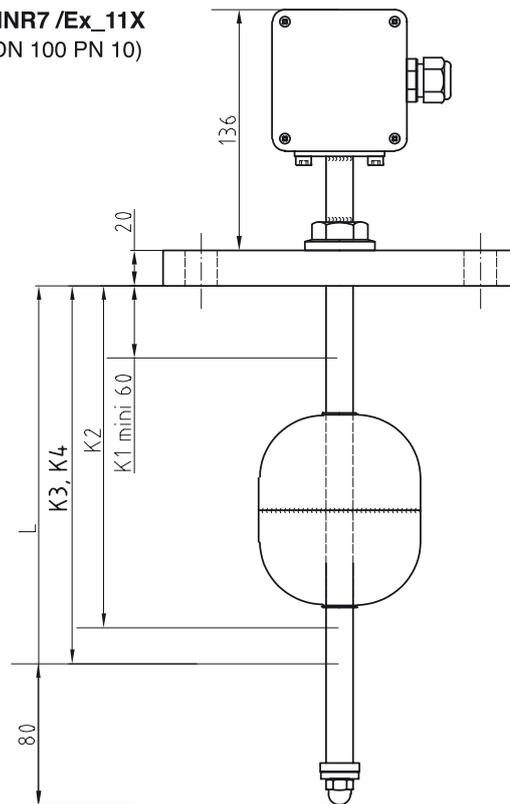
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**550-03/1**

MNR7 /Ex\_11X  
(1" G)



MNR7 /Ex\_11X  
(DN 100 PN 10)



**CODE NUMBERS AND REFERENCES**

Code	Reference	Designation
550 501	MNR7 /Ex 1-1	Level controller Ex / 1 contact / 1" G
550 502	MNR7 /Ex 2-1	Level controller Ex / 2 contacts / 1" G
550 503	MNR7 /Ex 3-1	Level controller Ex / 3 contacts / 1" G
550 504	MNR7 /Ex 4-1	Level controller Ex / 4 contacts / 1" G
550 511	MNR7 /Ex 1-2	Level controller Ex / 1 contact / flange DN 100 PN 10
550 512	MNR7 /Ex 2-2	Level controller Ex / 2 contacts / flange DN 100 PN 10
550 513	MNR7 /Ex 3-2	Level controller Ex / 3 contacts / flange DN 100 PN 10
550 514	MNR7 /Ex 4-2	Level controller Ex / 4 contacts / flange DN 100 PN 10
550 010	+value	Extra-cost for each 100 mm over the standard length of 500 mm

**NOTES**

The maximum room temperature is 60°C.

For use as a category 1 device, only if room temperature is between -20 and +60°C and the room pressure is between 0.8 and 1.1 bar.

When the zone is not under category 1 requirements, the maximum fluid temperature acceptable for the level controller MNR7 Ex is 100°C