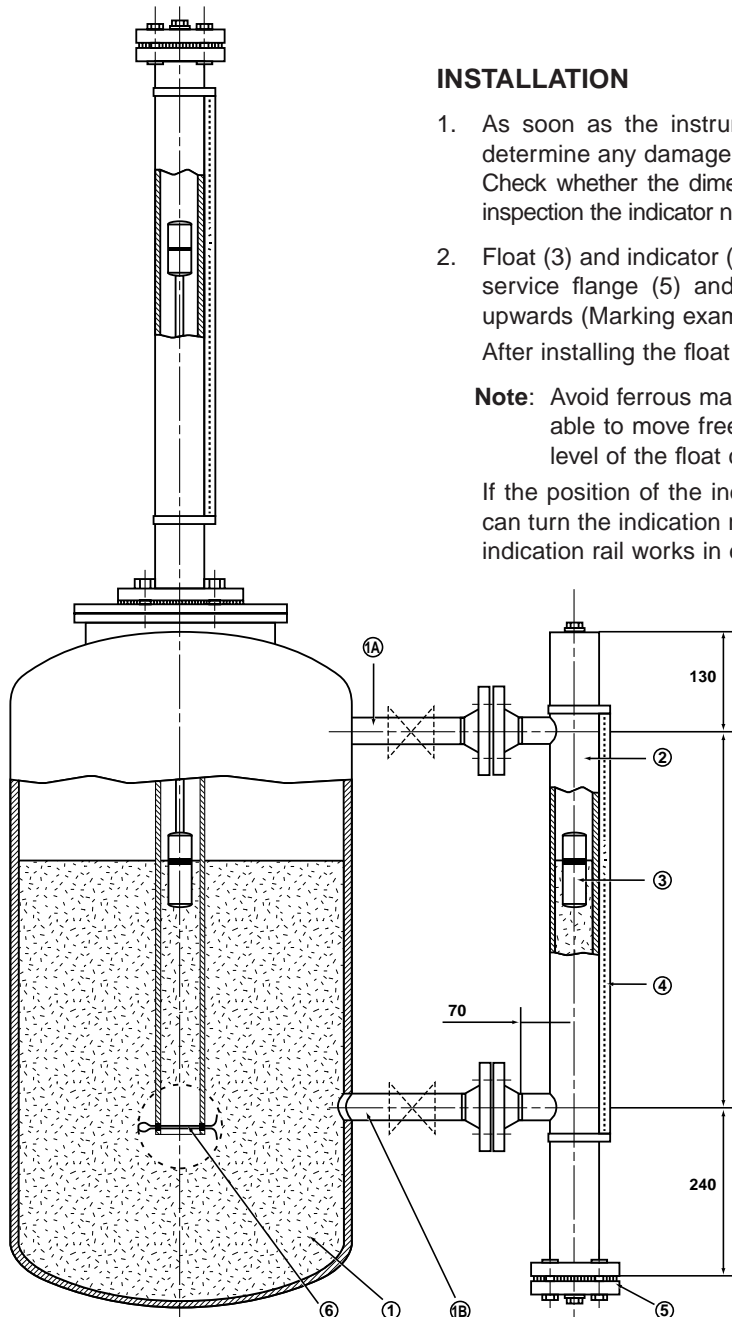


INSTALLATION AND OPERATION MANUAL



INSTALLATION

1. As soon as the instrument is received, it should be carefully inspected to determine any damage incurred by shipment. Check whether the dimensions of the indicator correspond with your order. After inspection the indicator needs to be installed as per following instructions:
2. Float (3) and indicator (2) are packed separately in the same box. Remove the service flange (5) and put the float into the indicator (2) engraving 'TOP' upwards (Marking example see page 2). After installing the float (3) tighten service flange (5).

Note: Avoid ferrous material to come in contact with the float, since it must be able to move free. The magnetic system is exactly installed at immerse level of the float corresponding to liquid density.

If the position of the indication rail (4) does not meet with your approval, you can turn the indication rail around the pipe. Due to a ring-magnetic-system the indication rail works in each position of the pipe.

3. Adjust magnetic flappers (4) with a magnet in the way that only the white side is visible. If liquid raises, the float turns flappers from white to red.
4. Levelgauge type MAG-5 has no side connections this type must be mounted to the vessel with top and bottom connections.

SPECIAL INSTRUCTIONS FOR TYPE MAG-4

1. Release split-pin (6) at lower end of guide pipe. Insert float construction with taller part of the float to lower end of guide pipe (shorter cylinder includes magnetic system).
2. Lock guide pipe with split-spin (6). Now the gauge can be mounted to vessel.

SPECIAL INSTRUCTIONS FOR TYPE MAG-34

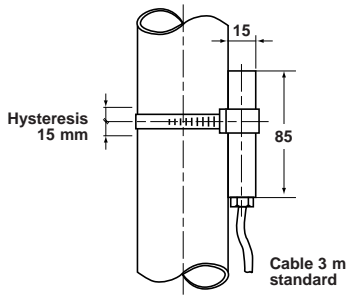
At float chamber and side studs are small holes (\varnothing 3 mm) for venting. This has no influence on the stress of the level gauge.

IMPORTANT: The float is only resistant to max. working pressure. Be sure not to increase working pressure when float is inside the gauge pipe!

Remove float during pressure test of the Vessel!

ELECTRIC ALARM CONTACTS

Electric alarm contacts can be mounted in each position and directions. There is a range of alarm contacts selected by temperature and electrical load.



START UP

1. Close drain valve and service flange.
2. Open valve 1A very slowly.
3. Open valve 1B very slowly.

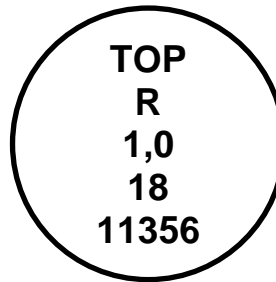
Note: The liquid inside the float chamber now moves up to the same level as in the tank. When the float passes the wafers they rotate 180°, showing the observer the opposite face. The wafers turn white to red. If they move in reverse direction, turn the complete indicator 180°.

MAINTENANCE

Usually the gauge is maintenance free. If there is dirty liquid, put the gauge out of operation by closing the valves 1B and 1A. Then remove service flanges and clean float and gauge pipe.

ATTENTION

Be sure that vent and drain plugs are tight and sealed! The float can only withstand maximum working pressure. Be sure not to increase working pressure when float is inside the gauge pipe! Remove float during pressure test of the vessel!



Example for marking of the float:
 TOP = top side
 R = type of magnetic system
 1,0 = specific gravity
 16 = working pressure
 11356 = serial number

IMPORTANT

SERVICE POLICY

Owners of Magnetrol products may request the return of a control; or, any part of a control for complete rebuilding or replacement. They will be rebuilt or replaced promptly. Magnetrol International will repair or replace the control, at no cost to the purchaser, (or owner) **other than transportation cost** if:

- a. Returned within the warranty period; and,
- b. The factory inspection finds the cause of the malfunction to be defective material or workmanship.

If the trouble is the result of conditions beyond our control; or, is **NOT** covered by the warranty, there will be charges for labour and the parts required to rebuild or replace the equipment.

In some cases, it may be expedient to ship replacement parts; or, in extreme cases a complete new control, to replace the original equipment before it is returned. If this is desired, notify the factory of both the model and serial numbers of the control to be replaced. In such cases, credit for the materials returned, will be determined on the basis of the applicability of our warranty. No claims for misapplication, labour, direct or consequential damage will be allowed.

RETURNED MATERIAL PROCEDURE

So that we may efficiently process any materials that are returned, it is essential that a "Return Material Authorisation" (RMA) form will be obtained from the factory. It is mandatory that this form will be attached to each material returned. This form is available through Magnetrol's local representative or by contacting the factory. Please supply the following information:

- | | |
|----------------------------|----------------------|
| 1. Purchaser Name | 4. Desired Action |
| 2. Description of Material | 5. Reason for Return |
| 3. Serial Number | 6. Process details |

All shipments returned to the factory must be by prepaid transportation. Magnetrol **will not accept** collect shipments. All replacements will be shipped FOB factory.

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UNDER RESERVE OF MODIFICATIONS



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