

LEVEL AND TEMPERATURE INDICATOR KIT

ASSEMBLY INSTRUCTIONS

AIR LIQUIDE – DMC

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ARPEGE 40-70-110-140-170 RANGE

1 – <u>LEVEL INDICATOR ASSEMBLY</u>

The gauge must imperatively be assembled in an empty and equipment-free vessel.

1.1 – <u>CAPACITIVE GAUGE (figure 1 page 5)</u>

- Put the pre-assembled gauge in place (1) without distorting it, by inserting the lower cylindrical part of the gauge into the slot of the fixing lug (2) at the bottom of the vessel.

- Ensure that the epoxy tubes lean well against the neck of the vessel.

- Place the flange (3) without damaging the cables.
- Tighten the screws (4) to fasten.

1.2 – <u>LEVEL INDICATOR CASE (figure 2 page 6)</u>

- Unscrew the knurled stop ring (7) from the pumping valve.
- Position the support plate (6) on the vessel.
- Manually tighten the knurled stop ring (7).
- Assemble the indicator case (5) onto the support plate (6).
- Connect the gauge cable (8) to the case (5) using the coaxial connector.
- Connect the electric plug (9) to the power supply case (10) to be attached to the wall.
- Cover with the protective cap (11) without blocking the various cables
- Fasten the cap with the screws.
- Turn on the system.
- Calibrate the gauge (see NH78363).

NB: The indicators are supplied pre-calibrated with the gauge. If the gauge is changed without changing the indicators, the indicators need to be recalibrated.

NH78314-EN



2 – <u>LEVEL INDICATOR AND TEMPERATURE INDICATOR ASSEMBLY</u>

2.1 – <u>CAPACITIVE GAUGE AND TEMPERATURE PROBE (figure1 page 5)</u>

- Insert the temperature probe into the epoxy tube, until it slightly protrudes at the tip of the tube (approximately 1 cm).

- Put the pre-assembled gauge in place (1) without distorting it, by inserting the lower cylindrical part of the gauge into the slot of the fixing lug (2) at the bottom of the vessel.

- Ensure that the epoxy tubes lean well against the neck of the vessel.

- Place the flange (3) without damaging the cables.

- Tighten the screws (4) to fasten.

- Tighten the Rilsan collar (16) onto the probe cable (13) in order to prevent it from falling into the vessel (figure 3 page 8)

<u>NOTE</u>: The position of the probe influences the temperature measured inside the vessel.

2.2 – <u>LEVEL INDICATOR CASE AND TEMPERATURE INDICATOR</u> (Figure 2 page 6)

- Unscrew the black knurled stop ring (7) from the pumping valve.
- Place the system onto the vessel.
- Manually tighten the knurled stop ring (7).
- Assemble the 2 cases onto the support plate (6).
- Connect the gauge cable to the level indicator case using the coaxial connector.
- Connect the temperature probe to the temperature case on the DIN 5-pin connector.
- Connect the 2 indicators to the power supply case (10) to be attached to the wall.
- Cover with the protective cap (11) without blocking the various cables
- Fasten the cap with the screws.
- Turn on the system.
- Calibrate the gauge (see NH78363).

NB: The indicators are supplied pre-calibrated with the gauge. If the gauge is changed without changing the indicators, the indicators need to be recalibrated

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LEVEL INDICATOR KIT 40-70-110-140-170



Figure 1

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Figure 2

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3 – <u>LEVEL CONTROL ASSEMBLY</u>

The gauge must imperatively be assembled in an empty and equipment-free vessel.

3.1 – <u>CAPACITIVE GAUGE</u>

See procedure (figure 1 page 5) § 1.1

3.2 – <u>LEVEL CONTROL (figure 3 page 8)</u>

- Place the liquid supply tube (2) with the support plate (6).
- Unscrew the black knurled stop ring (3).
- Position the support plate (6) on the vessel
- Manually tighten the knurled stop ring (3).
- Assemble the indicator case (6) onto the plate equipped with the electrovalve (4).
- Power-supply the electrovalve with the plug (7).
- Connect the gauge wire (10) to the case (6) using the coaxial connector.
- Connect the supply plug (8) to the power supply case (9) to be attached to the wall.
- Cover with the protective cap (11) without blocking the various cables
- Fasten the cap with the screws.
- Turn on the system.
- Connect the nitrogen transfer hose onto the joining piece (12).
- Calibrate the gauge (NH78363).

NB: The indicators are supplied pre-calibrated with the gauge. If the gauge is changed without changing the indicators, the indicators need to be recalibrated.



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Figure 3

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4 – <u>LEVEL CONTROL AND TEMPERATURE INDICATOR ASSEMBLY</u>

4.1 – <u>CAPACITIVE GAUGE</u>

See procedure (figure 1 page5) § 2.1.

4.2 – <u>LEVEL CONTROL AND TEMPERATURE PROBE (figure 3 page 8)</u>

- Place the liquid supply tube (2) with the support plate (6).
- Unscrew the black knurled stop ring (3).
- Position the support plate (6) on the vessel.
- Manually tighten the knurled stop ring (3).
- Assemble the 2 indicators (6) onto the plate equipped with the electrovalve (4).
- Power-supply the electrovalve with the plug (7).
- Connect the gauge wire (10) to the case (6) using the coaxial connector.
- Connect the probe (13) to the temperature indicator (12) using the DIN 5-pin connector
- Connect the 2 indicators to the power supply case (10) to be attached to the wall.
- Cover with the protective cap (11) without blocking the various cables.
- Fasten the cap with the screws.
- Turn on the system.
- Connect the nitrogen transfer hose onto the joining piece (12).
- Calibrate the gauge (NH78363).



5 – <u>TEMPERATURE INDICATOR ASSEMBLY</u>

5.1 – <u>VESSEL EQUIPPED WITH A CAPACITIVE GAUGE (figure 3 page 8)</u>

- Pull off the protective cap (11).
- Unscrew the flange (15).

- Insert the temperature probe into the epoxy tube, until it slightly protrudes at the tip of the tube (approximately 1 cm).

- Put the flange back in place (15) without damaging the cables.

- Tighten the Rilsan collar (16) onto the probe cable (13) in order to prevent it from falling into the vessel

NOTE: The position of the probe influences the temperature measured inside the vessel.

- Assemble the temperature indicator (14) onto the plate.
- Connect the probe cable (13) onto the case (14) using the DIN 5-pin connector.
- Connect the power supply plug (8) to the power supply case (9).
- Cover with the protective cap (11) without blocking the various cables
- Fasten the cap with the screws.
- Turn on the system.
- Adjust the alarm threshold of the thermometer case (NH78363).

5.2 – <u>VESSEL WITHOUT CAPACITIVE GAUGE (figure 3 page 8)</u>

- Insert the probe into the tube, until it slightly protrudes at the tip of the tube.
- Screw the flange (15) without damaging the cable.

- Tighten the Rilsan collar (16) onto the probe cable in order to prevent it from falling into the vessel

NOTE: The position of the probe influences the temperature measured inside the vessel.

- Unscrew the black knurled stop ring (3).
- Position the support plate (6) on the vessel.
- Manually tighten the knurled stop ring (3).
- Assemble the temperature indicator (14) onto the plate.
- Connect the gauge cable (13) to the case (14) using the DIN 5-pin connector.
- Connect the power supply plug (8) to the power supply case (9).
- Cover with the protective cap (11) without blocking the various cables
- Fasten the cap with the screws.
- Turn on the system.
- Adjust the alarm threshold of the thermometer case (NH78363).