MÖLLER

Alarm Guide LiquoGuard® 7
Most Common Causes

Amazing what's possible.

High Pressure Alarm

Measured CSF Pressure (ICP) is greater than the High Alarm setting

- Patient's ICP is high
- Pump is in Pause mode
- Flow Rate value (Vset) is too low
- High Alarm setting is too low
- Hemmorhage; Excessive accumulation of fluid; Brain swelling
- Incorrect pressure sensor placement

Low Pressure Alarm

Measured CSF Pressure (ICP) is less than the Low Alarm setting

- Catheter is fully occluded
- LG7 tube set is fully occluded/kinked proximal to the transducers (occlusion/clot may be in the three-way stopcock)
- Stopcock to catheter is closed
- Catheter is not positioned correctly in the patient
- Patient's ICP is low (Note: negative ICP values are physiologically possible)
- Low Alarm setting is too high
- Catheter is disconnected from LG7 tube set
- Vset is too high
- Ventricles are collapsed – Slit ventricles
- Leakage

Loss of Pulsation

Pulsation frequency is too low or Amplitude change is too small

- Weak / dampened waveform is due to the patient's physiological condition
- Catheter is fully occluded
- LG7 tube set is fully occluded/kinked proximal to the transducers (occlusion/clot may be in the three-way stopcock)
- Catheter is disconnected from LG7 tube set
- Catheter is not positioned correctly in the patient
- Ventricles are collapsed – Slit ventricles
- Catheter is partially occluded
- Craniotomy

Pressure Too Constant

Measured pressure is not plausible – no pressure fluctuations detected

- Catheter is fully occluded
- LG7 tube set is fully occluded/kinked proximal to the transducers (occlusion/clot may be in the three-way stopcock)
- Catheter is disconnected from LG7 tube set
- Catheter is not positioned correctly in the patient
- Ventricles are collapsed – Slit ventricles

High Pressure Alarm

Measured CSF Pressure is greater than the High Alarm setting

- Pump is in Pause mode
- High Alarm setting is too low
- LG7 transducer is not positioned correctly on the patient
- Flow Rate value (Vset) is too low
- Hemorrhage

Low Pressure Alarm

Measured CSF Pressure is less than the Low Alarm setting

- Catheter is fully occluded/kinked
- LG7 tube set is fully occluded/kinked proximal to the transducers (occlusion/clot may be in the three-way stopcock)
- Catheter is not positioned correctly in the patient
- Patient's CSF pressure is low (Note: negative CSF pressure values are physiologically possible)
- Low Alarm setting is too high
- Vset too high
- Leakage

Loss of Pulsation

Pulsation frequency is too low or Amplitude change is too small

- Weak/dampened waveform is due to the patient's physiological condition
- Catheter is fully occluded/kinked
- LG7 tube set is fully occluded/kinked proximal to the transducers (occlusion/clot may be in the three-way stopcock)
- Catheter is disconnected from LG7 tube set
- Catheter is not positioned correctly in the patient
- Catheter is partially occluded
- Non-communicating CSF compartment

Pressure Too Constant

Measured pressure is not plausible – no pressure fluctuations detected

- Catheter is fully occluded/kinked
- Catheter is disconnected from LG7 tube set
- Catheter is not positioned correctly in the patient
- LG7 tube set is fully occluded/kinked proximal to the transducers (occlusion/clot may be in the three-way stopcock)

Low Flow

Average flow rate is less than the low flow alarm setting

- Flow rate (Vset) is too low
- Catheter is partially occluded
- Catheter is fully occluded

High Flow

Average flow rate is greater than the high flow alarm setting

- Emergency drainage was activated
- Flow rate (Vset) is too high

Battery Low

Main battery charge is less than 20%

- Unit operating on low battery power

Pump Cover Open

Pump must be in Pause mode before opening the cover flap to load/unload the tube set; or to manually expedite drainage of CSF (TURN ROTOR)

Tube Set Disconnected

Sensor cable no longer detected – sensor cable has been disconnected from the LG7 monitor

Tube Set Usage Limit Expired

Tube set has reached its expiration and must be replaced

Tube Set Sensor Difference

Difference in the pressure measured by the two (2) transducers exceeds the variance limit

Tube Set Malfunction

Tube set is no longer functioning properly and must be replaced

CAUTION: Federal (USA) law restricts this device to sale by or on the order of a physician. Rx only. Operating LiquoGuard® 7 requires proper training, education, and experience. Refer to product IFU for instructions, warnings, precautions, and contraindications.

It is recommended to always pay attention to the alarm windows as displayed on the LiquoGuard® 7 screen and follow given instruction.

Adjusting the monitor's settings may prevent the notification of an alarm condition. The LiquoGuard® 7 alarm concept requires the audio/visual alarms are always noted by the caregiver. Refer to the LiquoGuard® 7 IFU for additional information regarding the setting of parameters and interpreting alarms.
Listed causes are most common but not all-inclusive. Other physiological and/or mechanical conditions may trigger an alarm.

For additional information, please call Moeller Medical Devices, USA at 844-526-1885 and/or consult MÖLLERS´s website at www.moeller-medical.com

MÖLLER Medical GmbH
Wasserkuppenstrasse 29-31
36043 Fulda, Germany
info@moeller-medical.com

Moeller Medical Devices USA Inc.
428 Hudson River Road
Waterford, NY 12188
info@us.moeller-medical.com