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|--|---|--|
| Device test card for spreader | | |
| for test equipment with electronic measuring transducer 176717000 | | |
| Device type: | Model: | LUKAS |
| Serial no.: | | |
| Device holder: | | |
| Regulations: | - operating instructions (device) - GUV-G 9102 - operating instructions (test equipment) | Test interval - according to GUV-G 9102 - after repair work |

Basic safety instructions:

 **WARNING / CAUTION / PLEASE NOTE!**
Personal protective equipment must ALWAYS be worn when testing devices!

 In addition, adequate screening*) must ALWAYS be worn when carrying out the tests!
LUKAS rescue equipment may only be tested with LUKAS test equipment!

*) Appropriate screening may be obtained from your authorized LUKAS dealer or directly from LUKAS!

 **NOTE:**
Before using this test card, ensure that the card is up to date and only use the latest version.
The latest device test cards may be obtained from the LUKAS website or directly from LUKAS.


Test devices required for combination devices:

- Hydraulic aggregate (**note operating pressure**)
- Test manometer
- Spreader and combination test device
- Positioning bolts and spacer disks
- Measuring transducer
- Crack test set
- Stop watch
- Appropriate protective screening

Evaluation:

| | | | | | |
|--|--|--|--|--|--|
| Results: | | | | | |
| Repaired on: | | | | | |
| Released for use on: | | | | | |
| Blocked / no longer approved for use on: | | | | | |
| Signature of test person: | | | | | |

Visual Inspection:

| Tests | Target value | Results | Results | Results | Results |
|--|---|---------|---------|---------|---------|
| Opening width of measuring arms at the tips | 1) | | | | |
| General sealing (leaks) | | | | | |
| Operability of the star grip | | | | | |
| Existence and stability of handle | | | | | |
| Spreader tips and arms without cracks and notches | | | | | |
| Pins and retaining rings on the spreader arms are present and in a proper condition, | | | | | |
| Tips in place and locked and/or dowel pin correctly fitted |  | | | | |
| Tip locks easily (if a lock has been provided) | | | | | |
| Corrugation of the tips clean and well-edged, no tears | | | | | |
| Labels complete and legible | | | | | |
| Covers in perfect condition | | | | | |
| Couplings easy to operate | | | | | |
| Dust caps in place | | | | | |
| All hoses undamaged | | | | | |
| Anti-kink protection in place and undamaged | | | | | |
| Hoses are not yet 10 years old (see imprint date) | | | | | |

1) The target values are to be taken out of the target value table for LUKAS rescue equipment and entered in the test table.

Remarks about visual inspection:

Functional test:

| Tests | Target value | Results | Results | Results | Results |
|--|-------------------|---------|---------|---------|---------|
| Environmental temperature during functional test °C / °F | 15...35 / 59...95 | | | | |
| Pressure when pump is in operation (p_1 in bar) | | | | | |
| Pressure when closing the spreader (p_2 in bar) | | | | | |
| Differential pressure p_{DIFF} ($p_{DIFF} = p_2 - p_1$) | 2) | | | | |
| Arm play in direction of force [a1] | 2) | | | | |
| Arm play perpendicular to the direction of force; offset [v2] | 2) | | | | |
| Tip play in direction of force [a2] | 2) | | | | |
| Tip play perpendicular to the direction of force; offset [v6] | 2) | | | | |
| Opening time, unloaded (in seconds) | 3) | | | | |
| Closing time, unloaded (in seconds) | 3) | | | | |
| Spreading force test | 2) | | | | |
| Pressure or spreader force maintenance test Loss of pressure or spreader force after 1 minute | max. 10% | | | | |
| Closing force test | 2) | | | | |
| Pressure or closing force maintenance test Loss of pressure or force after 1 minute | max. 10% | | | | |
| No further movement when releasing the star grip while opening or closing | 4) | | | | |

2) The target values are to be taken out of the target value table for LUKAS rescue equipment and entered in the test table.

3) Depending on the volume transported by the tested hydraulic aggregate, the relevant target values are to be taken from the diagrams (see target value table) and entered under "target value" in the test table. The transport volume is indicated in the technical data for the hydraulic aggregate (or on the type label of the hydraulic aggregate). [Time deviations of $\pm 15\%$ are acceptable]

4) The star grip must automatically return to the neutral position and the spreader arms may not automatically change position once they have returned to the neutral position (no run-on). If the conditions above are not met, a

Remarks about functional test: