




FTR - Flight Test Report

Dieser Prüfbericht darf ohne schriftliche Zustimmung der EAPR nicht, auch nicht auszugsweise, veröffentlicht werden.

| | | | |
|--------------|--|------------------|-----------------------|
| Manufacturer |  SOL SPORTS Rua Walter Marquardt, 1180 Jaraguá do Sul/SC - Brasil | Type testing No. | EAPR-GS-0553/16 |
| | | serial number | 18637 |
| Model | Atmus2 XL | Location | Montafon |
| Comment | | | Werfenweng, Bischling |



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| | | | | | |
|-------------------------|------------|-------------------------|---|-------------------------|---|
| Date of testing | 07.10.2016 | Minimum take off weight | 105 kg | Maximum take off weight | 125 kg |
| Testpilot | | |  | Anselm Rauh |  |
| Harness | | EAPR Testequipment | | EAPR | |
| Pilot's take off weight | | 105 kg | | 123 kg | |

| | |
|----------------|----------|
| Classification | B |
|----------------|----------|



| Test-criteria | Minimum take off weight | Evaluation | Maximum take off weight | Evaluation |
|--|--|------------|--|------------|
| 1. Inflation / take-off - 4.4.1 | | | | |
| Rising behavior | Smooth, easy and constant rising, no pilot correction required | A | Smooth, easy and constant rising, no pilot correction required | A |
| Special take off technique required | No | A | No | A |
| 2. Landing - 4.4.2 | | | | |
| Special landing technique required | No | A | No | A |
| 3. Speeds in straight flight - 4.4.3 | | | | |
| Trim speed more than 30km/h | Yes | A | Yes | A |
| Speed range using the controls larger than 10km/h | Yes | A | Yes | A |
| Minimum speed | Less than 25 km/h | A | Less than 25 km/h | A |
| 4. Control movement - 4.4.4 | | | | |
| Max. weight in flight up to 80kg | | - | | - |
| Max. weight in flight 80 to 100kg | | - | | - |
| Max. weight in flight greater than 100kg | Increasing >65 cm | A | Increasing >65 cm | A |
| 5. Pitch stability exiting accelerated flight - 4.4.5 | | | | |
| Dive forward angle on exit | Dive forward less than 30° | A | Dive forward less than 30° | A |
| Collapse occurs | No | A | No | A |
| 6. Pitch stability operating controls during accelerated flight - 4.4.6 | | | | |
| Collapse occurs | No | A | No | A |
| 7. Roll stability and damping - 4.4.7 | | | | |
| Oscillations | Reducing | A | Reducing | A |
| 8. Stability in gentle spirals - 4.4.8 | | | | |
| Tendency to return to straight flight | Spontaneous exit | A | Spontaneous exit | A |
| 9. Behaviour exiting a fully developed spiral dive - 4.4.9 | | | | |
| Initial response of glider (first 180°) | Immediate reduction of rate in turn | A | Immediate reduction of rate in turn | A |
| Tendency to return to straight flight | Spontaneous exit | A | Spontaneous exit | A |
| Turn angle to recover normal flight | Less than 720°, spontaneous recovery | A | Less than 720°, spontaneous recovery | A |
| 10. Symmetric front collapse - 4.4.10 | | | | |
| Folding lines used | No | | No | |
| Entry | Rocking back less than 45° | A | Rocking back less than 45° | A |
| Recovery | Spontaneous in less than 3 sec | A | Spontaneous in less than 3 sec | A |
| Dive forward angle on exit | 0° - 30° Keeping course | A | 0° - 30° Keeping course | A |
| Cascade occurs | No | A | No | A |
| Entry | Rocking back less than 45° | A | Rocking back less than 45° | A |
| Recovery | Spontaneous in less than 3 sec | A | Spontaneous in less than 3 sec | A |
| Dive forward angle on exit | 0° - 30° Keeping course | A | 0° - 30° Keeping course | A |
| Cascade occurs | No | A | No | A |
| Entry | Rocking back less than 45° | A | Rocking back less than 45° | A |
| Recovery | Spontaneous in less than 3 sec | A | Spontaneous in less than 3 sec | A |
| Dive forward angle on exit | 0° - 30° Entering a turn of less than 90° | A | 0° - 30° Keeping course | A |
| Cascade occurs | No | A | No | A |
| 11. Exiting deep stall (parachutal stall) - 4.4.11 | | | | |
| Deep stall achieved | Yes | | Yes | |
| Recovery | Spontaneous in less than 3 sec | A | Spontaneous in less than 3 sec | A |
| Dive forward angle on exit | 0° - 30° | A | 0° - 30° | A |
| Change of course | Changing course less than 45° | A | Changing course less than 45° | A |
| Cascade occurs | No | A | No | A |

| 12. High angle of attack recovery - 4.4.12 | | | | | | | | | |
|---|---|--------------------------|--------------------|-----------|--|--------------------------|--------------------|-----------|---|
| Recovery | Spontaneous in less than 3 sec | | | A | Spontaneous in less than 3 sec | | | A | |
| Cascade occurs | No | | | A | No | | | A | |
| 13. Recovery from a developed full stall - 4.4.13 | | | | | | | | | |
| Dive forward angle on exit | 0° - 30° | | | A | 30° - 60° | | | B | |
| Collapse | No collapse | | | A | No collapse | | | A | |
| Cascade occurs (other than collapse) | No | | | A | No | | | A | |
| Rocking backward | Less than 45° | | | A | Less than 45° | | | A | |
| Line tension | Most lines tight | | | A | Most lines tight | | | A | |
| 14. Asymmetric collapse (trim speed) - 4.4.14 | | | | | | | | | |
| Folding lines used | No | | | | No | | | | |
| Change of course until re-inflation | trim speed, max 50% collapse | < 90° | Dive or roll angle | 0° - 15° | A | < 90° | Dive or roll angle | 0° - 15° | A |
| | | Spontaneous re-inflation | | | A | Spontaneous re-inflation | | | A |
| Re-inflation behavior | trim speed, max 50% collapse | Less than 360° | | | A | Less than 360° | | | A |
| Total change of course | | No | | | A | No | | | A |
| Collapse on the opposite side occurs | trim speed, max 75% collapse | No | | | A | No | | | A |
| Twist occurs | | No | | | A | No | | | A |
| Cascade occurs | trim speed, max 75% collapse | No | | | A | No | | | A |
| Change of course until re-inflation | | 90° - 180° | Dive or roll angle | 15° - 45° | B | 90° - 180° | Dive or roll angle | 15° - 45° | B |
| Re-inflation behavior | trim speed, max 75% collapse | Spontaneous re-inflation | | | A | Spontaneous re-inflation | | | A |
| Total change of course | | Less than 360° | | | A | Less than 360° | | | A |
| Collapse on the opposite side occurs | accelerated, max 50% collapse | No | | | A | No | | | A |
| Twist occurs | | No | | | A | No | | | A |
| Cascade occurs | accelerated, max 50% collapse | No | | | A | No | | | A |
| Change of course until re-inflation | | < 90° | Dive or roll angle | 15° - 45° | A | < 90° | Dive or roll angle | 15° - 45° | A |
| Re-inflation behavior | accelerated, max 75% collapse | Spontaneous re-inflation | | | A | Spontaneous re-inflation | | | A |
| Total change of course | | Less than 360° | | | A | Less than 360° | | | A |
| Collapse on the opposite side occurs | accelerated, max 75% collapse | No | | | A | No | | | A |
| Twist occurs | | No | | | A | No | | | A |
| Cascade occurs | accelerated, max 75% collapse | No | | | A | No | | | A |
| Change of course until re-inflation | | 90° - 180° | Dive or roll angle | 15° - 45° | B | 90° - 180° | Dive or roll angle | 15° - 45° | B |
| Re-inflation behavior | accelerated, max 75% collapse | Spontaneous re-inflation | | | A | Spontaneous re-inflation | | | A |
| Total change of course | | Less than 360° | | | A | Less than 360° | | | A |
| Collapse on the opposite side occurs | | No | | | A | No | | | A |
| Twist occurs | | No | | | A | No | | | A |
| Cascade occurs | | No | | | A | No | | | A |
| Change of course until re-inflation | | Yes | | | A | Yes | | | A |
| 180° turn away from the collapsed side possible in 10 sec | Yes | | | A | Yes | | | A | |
| Amount of control range between turn and stall or spin | More than 50% of the symmetric control travel | | | A | More than 50% of the symmetric control travel | | | A | |
| 16. Trim speed spin tendency - 4.4.16 | | | | | | | | | |
| Spin occurs | No | | | A | No | | | A | |
| 17. Low speed spin tendency - 4.4.17 | | | | | | | | | |
| Spin occurs | No | | | A | No | | | A | |
| 18. Recovery from a developed spin - 4.4.18 | | | | | | | | | |
| Spin rotation angle after release | Stops spinning in less than 90° | | | A | Stops spinning in less than 90° | | | A | |
| Cascade occurs | No | | | A | No | | | A | |
| 19. B-line-stall - 4.4.19 | | | | | | | | | |
| Change of course before release | Changing course less than 45° | | | A | Changing course less than 45° | | | A | |
| Behaviour before release | Remains stable with straight span | | | A | Remains stable with straight span | | | A | |
| Recovery | Spontaneous in less than 3 sec | | | A | Spontaneous in less than 3 sec | | | A | |
| Dive forward angle on exit | 0° - 30° | | | A | 0° - 30° | | | A | |
| Cascade occurs | No | | | A | No | | | A | |
| 20. Big ears - 4.4.20 | | | | | | | | | |
| Entry procedure | Standard technique | | | A | Special device required | | | A | |
| Behaviour during big ears | Stable flight | | | A | Stable flight | | | A | |
| Recovery | Spontaneous in less than 3 sec | | | A | Spontaneous in less than 3 sec | | | A | |
| Dive forward angle on exit | 0° - 30° | | | A | 0° bis 30° | | | A | |
| 21. Big Ears in accelerated flight - 4.4.21 | | | | | | | | | |
| Entry procedure | Standard technique | | | A | Special device required | | | A | |
| Behaviour during big ears | Stable flight | | | A | Stable flight | | | A | |
| Recovery | Spontaneous in less than 3 sec | | | A | Spontaneous in less than 3 sec | | | A | |
| Dive forward angle on exit | 0° - 30° | | | A | 0° bis 30° | | | A | |
| Behaviour immediately after releasing the accelerator while maintaining big ears | Stable flight | | | A | Stable flight | | | A | |
| 23. Alternative means of directional control - 4.4.22 | | | | | | | | | |
| 180° turn achievable in 20 sec | Yes | | | A | Yes | | | A | |
| Stall or spin occurs | No | | | A | No | | | A | |
| 23. Any other flight procedure and/or configuration described in the user's manual - 4.4.23 | | | | | | | | | |
| Procedure works as described | | | | NA | | | | NA | |
| Procedure suitable for novice pilots | | | | NA | | | | NA | |
| Cascade occurs | | | | NA | | | | NA | |
| 24. Remarks of testpilot: | | | | | | | | | |
| | | | | | B-Stall darf nur langsam und mit wenig Weg gezogen werden. | | | | |