







## **EMOTION 3**

### Safety in a new generation

The EMOTION 3 is setting new standards in the field of safety and performance. There was never made such a huge effort before, to reach a new developing level. The test and construction workings on the new high-end A-wing lasted for more than a year. Many studies and prototypes were created and discarded and optimized through countless test flights.

The demands to the newest generation of the established EMOTION series were very high, nevertheless all expectations were exceeded with the new concept of the wing. U-Turn is relying on class-suitable gliders, and so during the development of the new A-class-wing everything was put under the motto of uncompromising passive safety.

The EMOTION 3 is combining sportive features with very high tolerance. Especially in turbulent air it is not easy to ruffle the wing – is a pressure compensation

The EMOTION 3 is the perfect wing for beginners the reactions turn out very that promises the secure fun-factor even long after school. The wing is aimed at all pilots, who are looking a high-end A-class wing in the newest generation.

necessary anyway, moderate and damped. The high stability is supporting the outraging glide features and the rise performance of the EMOTION 3. Even in weak

thermal the wing is rising very efficiently and is dynamically turned into curves, this is especially positively notable when centering in the thermal. With the EMOTION 3 particular focus was put on reliable starting behavior. The wing is rising evenly and without tendency of the canopy diving forward. It is filling itself fast even at little wind and with small effort.

The EMOTION 3 is based on a new ground plan and a modified wing profile, which combines the glide performance with a very high tolerance spectrum. Chief designer Ernst Strobl equipped the EMOTION 3 with 36 cells and a flat AR of 5, also the wing is equipped with the newest technical features. Besides the PPN, the 3D shaping is providing optimized inflow and form stability of the cell opening area. Elaborate calculations of the ballooning in combination with the optimized pre-tensioning of the wing are providing a balanced pressure distribution and circulation of the profile. Mini-ribs at the rear end of the wing are giving the profile more form fidelity and are optimizing the aerodynamics additionally, especially when braking. The High Pressure Crossport Design (HPCD) provides an ideal aeration of the crossports, which helps to balance the pressure differences on the inside of the wing, and therefore enhances the safety.

But also at the material mix, only durable components were used, such as the top-materials Dokdo 30 and Dokdo 20. These are providing small weight and high abrasion resistance at the same time. An easily understandable line concept with few main lines are providing easy handling and a good overview at groundhandling. The riser are equipped with the Pilot Assistant (PAS) – at which, besides color codings, icons are providing a better orientation on the line levels. Additionally the main suspensions are furnished with the new standard color codings, that is providing better orientation when hooking in the harness. (With the new RX3 Allround-harness the color coding on the main suspension loops are perfectly complementing each other. With that U-Turn is offering a consistent overall concept as first manufacturer.)

The EMOTION 3 is the perfect wing for beginners that promises the secure fun-factor even long after school. The wing is aimed at all pilots, who are looking a high-end A-class wing in the newest generation. Maximum passive safety equipped with much performance and direct handling are guaranteeing fast learning success.

The canopy is available in 3 appealing color combinations and six certified sizes from XS (50-80 kg) up to XL (120-155 kg).

The EMOTION 3 is offering safety in the newest gereration. Arrange a test flight and convince yourself!

For further information visit www.u-turn.de

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#### LTF/EN-A SCHOOL/STARTER XS 23/S 25,5/M 28,5/L 31,5/XL 35

	XS	S	M	L	XL
Start weight Startgewicht	50-80 kg	60-95 kg	80-110 kg	100-130 kg	120-155 kg
Flat area Fläche ausgelegt	23 m²	25,5 m²	28,5 m²	31,5 m²	35 m²
Projected area Fläche projiziert	19,119 m²	21,197 m²	23,691 m²	26,184 m²	29,51 m²
Flat wingspan Spannweite ausgelegt	10,724 m	11,292 m	11,937 m	12,55 m	13,323 m
Projected wingspan Spannweite projiziert	8,273 m	8,711 m	9,209 m	9,682 m	10,278 m
Flat AR Streckung ausgelegt	5	5	5	5	5
Projected AR Streckung projiziert	3,58	3,58	3,58	3,58	3,58
Chord: center / wingtip Flügeltiefe: Mitte / Stabilo	2,550 m / 0,721 m	2,722 m / 0,769 m	2,849 m / 0,805 m	3,008 m / 0,850 m	3,186 m / 0,901 m
V-trim V-Trimm	~ 37-39 km/h	~ 37-39 km/h	~ 37-39 km/h	~ 37-39 km/h	~ 37-39 km/h
V-max V-Max.	52 + km/h	52 + km/h	52 + km/h	52 + km/h	52 + km/h
Bridle height Abstand Tragegurt-Kappe	6,649 m	7,001 m	7,401 m	7,781 m	8,26 m
Nr. of cells Zellenanzahl	36	36	36	36	36
Glider weight Gewicht	4,7 kg	5,2 kg	5,8 kg	6,1 kg	6,8 kg
Bridle length Gesamt Leinenlänge	243 m	 256m	272 m	286 m	304 m
Line diameter Leinenduchmesser	0,95 / 1,2 / 1,65 1,8 / 2,0 mm	0,95 / 1,2 / 1,65 1,8 / 2,0 mm	0,95 / 1,2 / 1,65 1,8 / 2,0 mm	0,95 / 1,2 / 1,65 1,8 / 2,0 mm	0,95 / 1,2 / 1,65 1,8 / 2,0 mm
Speed system / trimmer Fuß Beschleuniger / Trimmer	Yes / No Ja / Nein	Yes / No Ja / Nein			
Certification Zulassung	EN-A/LTF-A	EN-A/LTF-A	EN-A/LTF-A	EN-A/LTF-A	EN-A/LTF-A
Certified standards and procedures Angewandte Testverfahren	LTF 91/09 & EN 926- 1:2006, 926-2:2006	LTF 91/09 & EN 926- 1:2006, 926-2:2007	LTF 91/09 & EN 926- 1:2006, 926-2:2008	LTF 91/09 & EN 926- 1:2006, 926-2:2009	LTF 91/09 & EN 926 1:2006, 926-2:2010
Folding lines used for certification Faltleinen für Testflüge benutzt	No Nein	No Nein	No Nein	No Nein	No Nein
Certification No. Zulassungsnummer	EAPR-GS-0355/15	EAPR-GS-0353/15	EAPR-GS-0352/15	EAPR-GS-0351/15	EAPR-GS-0354/15







