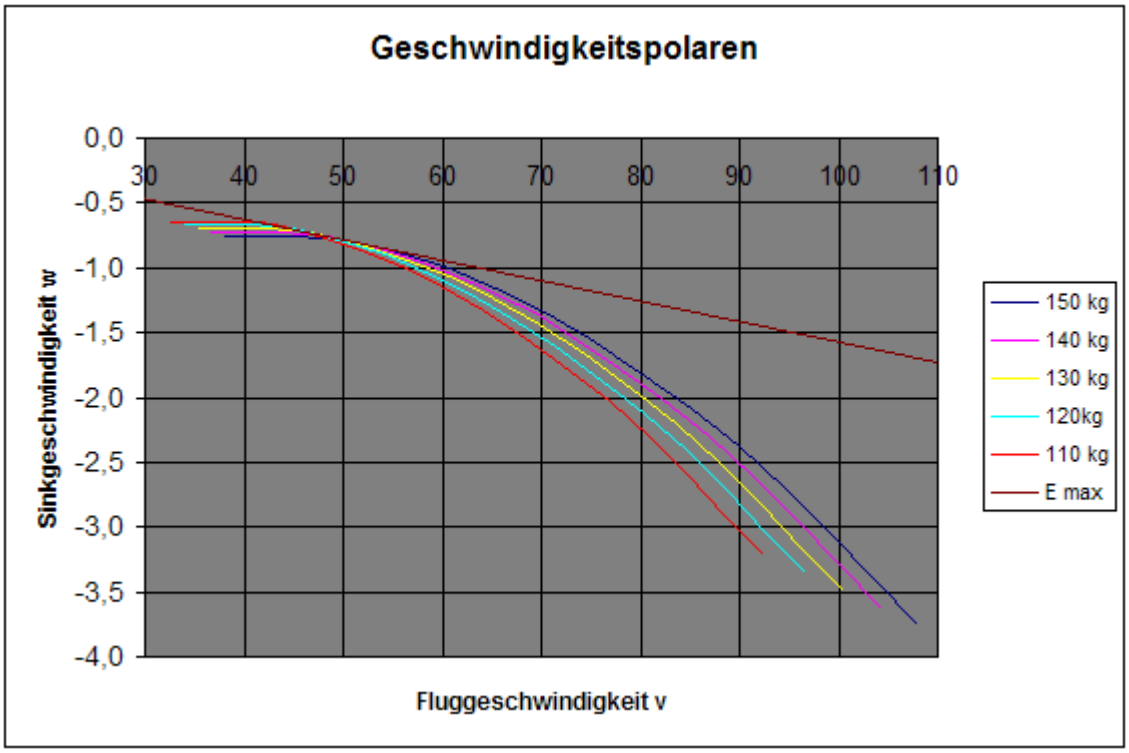
Instantaneous velocity data for different flying weights

Abbreviations: v: Airspeed
w: Rate of descent
E: Lift/drag ratio, the speed of best L/D is marked in yellow

Mass (kg)	v (km/h)	v (m/s)	w (m/s)	E (-)
150	38.00	10,56	-0,75	14,1
	52,00	14,44	-0,82	17,6
	70,00	19,44	-1,33	14,6
	90,00	25,00	-2,38	10,5
	108,00	30,00	-3,75	8,0
140	36,71	10,20	-0,72	14,1
	50,24	13,95	-0,79	17,6
	67,63	18,79	-1,28	14,6
	86,95	24,15	-2,30	10,5
	104,34	28,98	-3,62	8,0
130	35,38	9,83	-0,70	14,1
	48,41	13,45	-0,76	17,6
	65,17	18,10	-1,24	14,6
	83,79	23,27	-2,22	10,5
	100,54	27,93	-3,49	8,0
120	33,99	9,44	-0,67	14,1
	46,51	12,92	-0,73	17,6
	62,61	17,39	-1,19	14,6
	80,50	22,36	-2,13	10,5
	96,60	26,83	-3,35	8,0
110	32,54	9,04	-0,64	14,1
	44,53	12,37	-0,70	17,6
	59,94	16,65	-1,14	14,6
	77,07	21,41	-2,04	10,5
	92,49	25,69	-3,21	8,0



These polar lines were created from a combination of flight tests and competitive flying. They have worked well when used for input in flight computers. From wind tunnel measurements at the Institute for Aerodynamics and Gas Dynamics of the University of Stuttgart, the lift/drag ratio is reduced by up to 3 points when the harness is misaligned to the airstream by only 15°. The theoretically possible best lift/drag ratio of the Atos VR is attained only with optimal conditions and a very careful pilot. For regular use in en-route flight computers, a polar with a lift/drag ratio of 17.6 – 18 is best.

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