

DOBERMANN 3

Technical *specifications*



TECHNICAL SPECIFICATIONS

			14	15	17	19
Cells	Number		64	64	64	64
Aspect ratio	Flat		5,75	5,75	5,75	5,75
	Projected		4,47	4,47	4,47	4,47
Area	Flat	m2	14	15	17	19
	Projected	m2	12,11	12,97	14,7	16,4
Span	Flat	m	9	9,3	9,9	10,46
Chord	Max	m	1,92	1,99	2,12	2,24
Lines	Total	m	190	198	211	224
	Main		2+1/4/2+1	2+1/4/2+1	2+1/4/2+1	2+1/4/2+1
Risers	Number	3+2	A+A´/B/C+C´	A+A´/B/C+C´	A+A´/B/C+C´	A+A´/B/C+C´
	Speed-bar	mm	140	140	140	140
	Trimmers	mm	70	70	70	70
Speed range	Closed trim	km/h	42 (*7kg/m2)	42 (*7kg/m2)	42 (*7kg/m2)	42 (*7kg/m2)
	Open trim	km/h	54 (*7kg/m2)	54 (*7kg/m2)	54 (*7kg/m2)	54 (*7kg/m2)
	Top speed	km/h	80-85 (*7-8kg/m2)	80-85 (*7-8kg/m2)	80-85 (*7-8kg/m2)	80-85 (*7-8kg/m2)
Glider weight		kg	3,85	4	4,3	4,6
Total weight in flight	Min-Max	kg	55-120	60-130	65-150	70-170
Certification			230kg DGAC	230kg DGAC	230kg DGAC	230kg DGAC

The total weight of the wing may differ ±2% due to variations in the weight of the fabric supplied by the manufacturers.

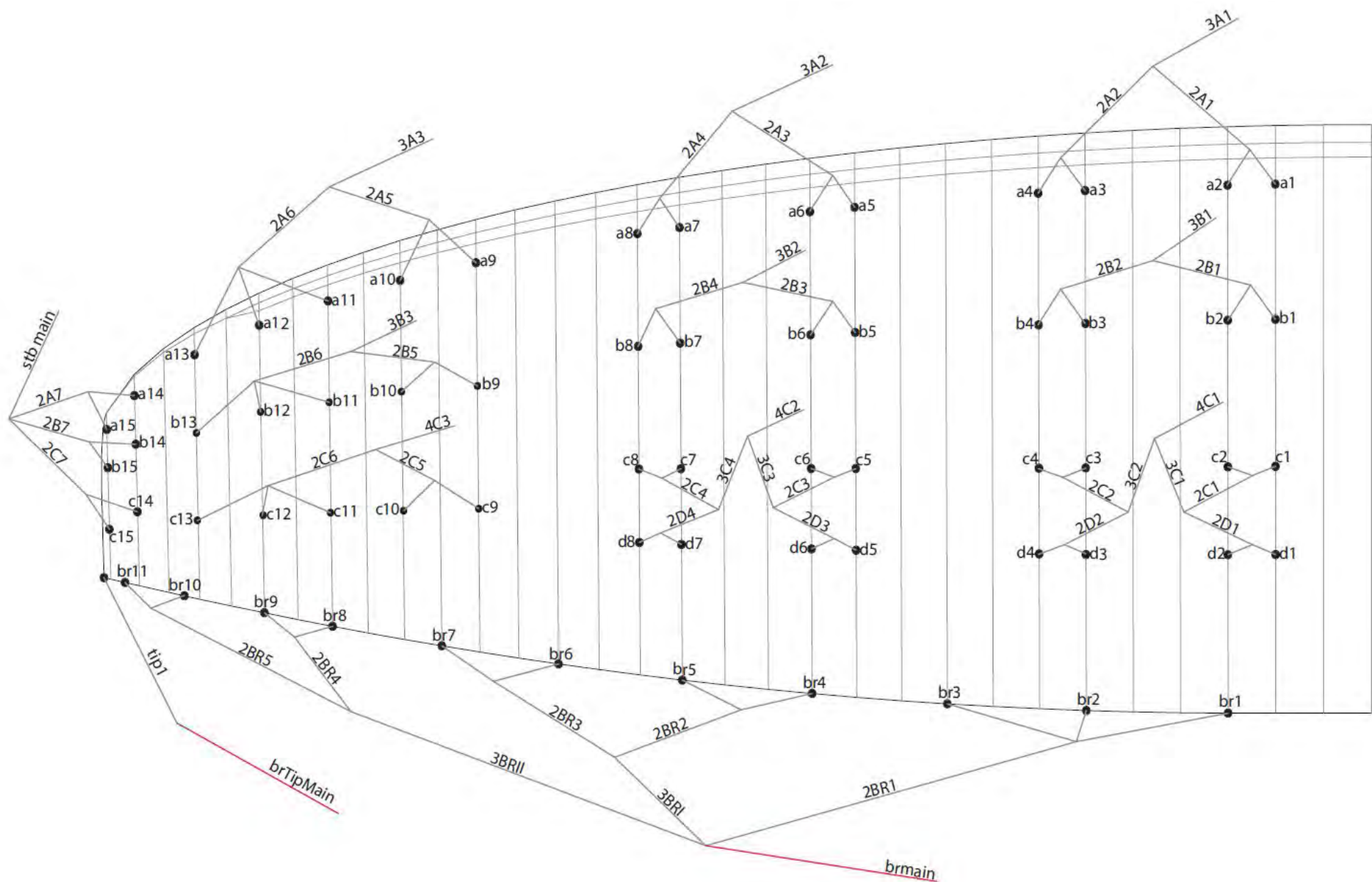
MATERIALS

CANOPY	FABRIC CODE	SUPPLIER
UPPER SURFACE	N30 DMF	DOMINICO TEX CO (KOREA)
BOTTOM SURFACE	N30 DMF	DOMINICO TEX CO (KOREA)
PROFILES	30DFM	DOMINICO TEX CO (KOREA)
DIAGONALS	30DFM	DOMINICO TEX CO (KOREA)
LOOPS	LKI - 10	KOLON IND. (KOREA)
REINFORCEMENT LOOPS	W-420	D-P (GERMANY)
TRAILING EDGE REINFORCEMENT	MYLAR	D-P (GERMANY)
RIBS REIFORCEMNET	LTN-0.8 STICK	SPORTWARE CO.CHINA
THREAD	SERAFIL 60	AMAN (GERMANY)

SUSPENSION LINES	FABRIC CODE	SUPPLIER
UPPER CASCADES	A-8001/U 50	EDELRID (GERMANY)
UPPER CASCADES	A-8001/U 70	EDELRID (GERMANY)
UPPER CASCADES	A-8001/U 90	EDELRID (GERMANY)
UPPER CASCADES	A-8001/U 130	EDELRID (GERMANY)
MIDDLE CASCADES	A-8001/U 50	EDELRID (GERMANY)
MIDDLE CASCADES	A-8001/U 70	EDELRID (GERMANY)
MIDDLE CASCADES	A-8001/U 90	EDELRID (GERMANY)
MIDDLE CASCADES	A-8001/U 130	EDELRID (GERMANY)
MIDDLE CASCADES	A-8001/U 190	EDELRID (GERMANY)
MAIN	A-8001/U 90	EDELRID (GERMANY)
MAIN	A-8001/U 130	EDELRID (GERMANY)
MAIN	A-8001/U 190	EDELRID (GERMANY)
MAIN	A-8001/U 230	EDELRID (GERMANY)
MAIN	A-8001/U 340	EDELRID (GERMANY)
MAIN BREAK	TARAX - 240	EDELRID (GERMANY)
MAIN TIP	PPSL - 120	LIROS GMHB (GERMANY)
THREAD	SERAFIL 60	AMAN (GERMANY)

RISERS	FABRIC CODE	SUPPLIER
MATERIAL	G-R 19	TECNI SANGLES (FRANCE)
COLOR INDICATOR	210D	TECNI SANGLES (FRANCE)
THREAD	V138	COATS (ENGLAND)
MAILLONS	MRI4	ANSUNG PRECISION (KOREA)
PULLEYS	RF25109	RONSTAN (AUSTRALIA)

SUSPENSION PLAN



RISERS PLAN

A	A'	B	C'	C
3A1	3A3	3B1	4C3	4C1
3A2		3B2		4C2
		3B3		
		stbmain		



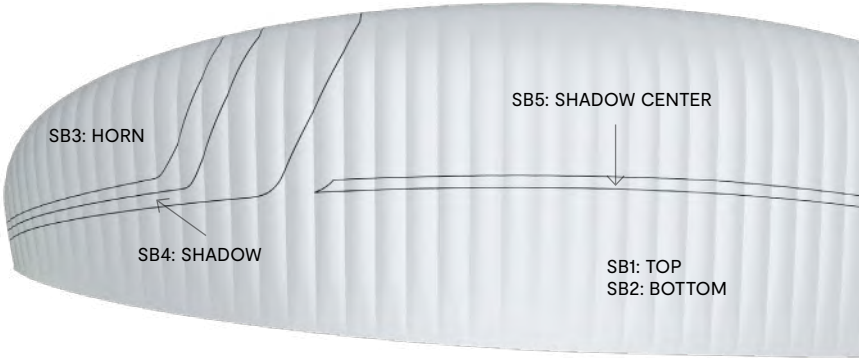
COLORS



BOREAL	SB1	ROYAL BLUE	TOP	REF: 317
	SB2	WHITE	BOTTOM	REF: 001
	SB3	LIMA	HORN	REF: 500
	SB4	WHITE	SHADOW	REF: 001
	SB5	LIMA	SHADOW CENTER	REF: 500



EARTH	SB1	GOLD	TOP	REF: 939
	SB2	WHITE	BOTTOM	REF: 001
	SB3	SPECTRA GREEN	HORN	REF: 17-5335
	SB4	WHITE	SHADOW	REF: 001
	SB5	SPECTRA GREEN	SHADOW CENTER	REF: 17-5335



WING LOAD

DOBERMANN 3

14			15			17			19		
P.T.V.		KG/M2	P.T.V.		KG/M2	P.T.V.		KG/M2	P.T.V.		KG/M2
55	=	3,67	60	=	4,00	65	=	3,82	70	=	3,68
60	=	4,00	65	=	4,33	70	=	4,12	75	=	3,95
65	=	4,33	70	=	4,67	75	=	4,41	80	=	4,21
70	=	4,67	75	=	5,00	80	=	4,71	85	=	4,47
75	=	5,00	80	=	5,33	85	=	5,00	90	=	4,74
80	=	5,33	85	=	5,67	90	=	5,29	95	=	5,00
85	=	5,67	90	=	6,00	95	=	5,59	100	=	5,26
90	=	6,00	95	=	6,33	100	=	5,88	105	=	5,53
95	=	6,33	100	=	6,67	105	=	6,18	110	=	5,79
100	=	6,67	105	=	7,00	110	=	6,47	115	=	6,05
105	=	7,00	110	=	7,33	115	=	6,76	120	=	6,32
			115	=	7,67	120	=	7,06	125	=	6,58
						125	=	7,35	130	=	6,84
						130	=	7,65	135	=	7,11
									140	=	7,37
									145	=	7,63
									150	=	7,89

LINES

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REF.	MAT.	kg	COLOR	mm	REF.	MAT.	kg	COLOR	mm	REF.	MAT.	kg	COLOR	mm	REF.	MAT.	kg	COLOR	mm
A					B					C					D				
a1	8001/U	130	ORANGE	229	b1	8001/U	130	BLUE	226	c1	8001/U	70	BLUE	228	d1	8001/U	50	BLUE	227
a2	8001/U	90	ORANGE	197	b2	8001/U	90	BLUE	195	c2	8001/U	70	BLUE	190	d2	8001/U	50	BLUE	196
a3	8001/U	90	ORANGE	206	b3	8001/U	90	BLUE	203	c3	8001/U	70	BLUE	198	d3	8001/U	50	BLUE	202
a4	8001/U	130	ORANGE	217	b4	8001/U	130	BLUE	214	c4	8001/U	70	BLUE	218	d4	8001/U	50	BLUE	217
a5	8001/U	130	ORANGE	213	b5	8001/U	130	BLUE	209	c5	8001/U	70	BLUE	211	d5	8001/U	50	BLUE	211
a6	8001/U	90	ORANGE	186	b6	8001/U	90	BLUE	185	c6	8001/U	70	BLUE	180	d6	8001/U	50	BLUE	183
a7	8001/U	90	ORANGE	250	b7	8001/U	90	BLUE	182	c7	8001/U	70	BLUE	177	d7	8001/U	50	BLUE	182
a8	8001/U	130	ORANGE	260	b8	8001/U	130	BLUE	193	c8	8001/U	70	BLUE	195	d8	8001/U	50	BLUE	194
a9	8001/U	90	ORANGE	814	b9	8001/U	50	BLUE	754	c9	8001/U	50	BLUE	586	BRAKE				
a10	8001/U	90	ORANGE	757	b10	8001/U	50	BLUE	702	c10	8001/U	50	BLUE	524	br1	8001/U	50	BLUE	1313
a11	8001/U	90	ORANGE	773	b11	8001/U	50	BLUE	716	c11	8001/U	50	BLUE	537	br2	8001/U	50	BLUE	1028
a12	8001/U	90	ORANGE	740	b12	8001/U	50	BLUE	691	c12	8001/U	50	BLUE	523	br3	8001/U	50	BLUE	902
a13	8001/U	90	ORANGE	764	b13	8001/U	50	BLUE	721	c13	8001/U	50	BLUE	580	br4	8001/U	50	BLUE	853
a14	8001/U	90	ORANGE	254	b14	8001/U	50	BLUE	210	c14	8001/U	50	BLUE	186	br5	8001/U	50	BLUE	732
a15	8001/U	90	ORANGE	228	b15	8001/U	50	BLUE	201	c15	8001/U	50	BLUE	190	br6	8001/U	50	BLUE	728
2A1	8001/U	190	ORANGE	1213	2B1	8001/U	190	BLUE	1199	2C1	8001/U	90	BLUE	355	2D1	8001/U	70	Blue	448
2A2	8001/U	190	ORANGE	1165	2B2	8001/U	190	BLUE	1156	2C2	8001/U	90	BLUE	358	2D2	8001/U	70	Blue	448
2A3	8001/U	190	ORANGE	1109	2B3	8001/U	190	BLUE	1087	2C3	8001/U	90	BLUE	342	2D3	8001/U	70	Blue	423
2A4	8001/U	190	ORANGE	1005	2B4	8001/U	190	BLUE	1.061	2C4	8001/U	90	BLUE	290	2D4	8001/U	70	Blue	365
2A5	8001/U	90	ORANGE	783	2B5	8001/U	70	BLUE	725	2C5	8001/U	70	BLUE	550					
2A6	8001/U	90	ORANGE	733	2B6	8001/U	70	BLUE	684	2C6	8001/U	70	BLUE	513	2BR1	8001/U	70	BLUE	1.897
2A7	8001/U	90	ORANGE	589	2B7	8001/U	70	BLUE	610	2C7	8001/U	70	BLUE	676	2BR2	8001/U	50	BLUE	827
										3C1	8001/U	130	BLUE	626	2BR3	8001/U	50	BLUE	770
										3C2	8001/U	130	BLUE	584	2BR4	8001/U	50	BLUE	447
										3C3	8001/U	90	BLUE	546	2BR5	8001/U	50	BLUE	579
										3C4	8001/U	90	BLUE	574	3BRI	8001/U	70	BLUE	1016
															3BRII	8001/U	70	BLUE	1589
3A1	8001/U	340	ORANGE	3381	3B1	8001/U	230	BLUE	3326	4C1	8001/U	190	BLUE	3578	brmain	TARAX	240	RED	2649
3A2	8001/U	340	ORANGE	3378	3B2	8001/U	230	BLUE	3344	4C2	8001/U	130	BLUE	3583	BRAKE KNOT POINT:				2449
3A3	8001/U	130	ORANGE	2955	3B3	8001/U	130	BLUE	3039	4C3	8001/U	90	BLUE	3425	brTipmain	PPSL	120		1200
					stb main	8001/U	90	BLUE	3452						TIP KNOT POINT:				1000

LINES

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REF.	MAT.	kg	COLOR	mm	REF.	MAT.	kg	COLOR	mm	REF.	MAT.	kg	COLOR	mm	REF.	MAT.	kg	COLOR	mm					
A					B					C					D					BRAKE				
a1	8001/U	130	ORANGE	236	b1	8001/U	130	BLUE	234	c1	8001/U	70	BLUE	236	d1	8001/U	50	BLUE	235	br1	8001/U	50	BLUE	1359
a2	8001/U	90	ORANGE	204	b2	8001/U	90	BLUE	202	c2	8001/U	70	BLUE	197	d2	8001/U	50	BLUE	203	br2	8001/U	50	BLUE	1065
a3	8001/U	90	ORANGE	213	b3	8001/U	90	BLUE	210	c3	8001/U	70	BLUE	205	d3	8001/U	50	BLUE	209	br3	8001/U	50	BLUE	936
a4	8001/U	130	ORANGE	224	b4	8001/U	130	BLUE	222	c4	8001/U	70	BLUE	225	d4	8001/U	50	BLUE	225	br4	8001/U	50	BLUE	883
a5	8001/U	130	ORANGE	220	b5	8001/U	130	BLUE	216	c5	8001/U	70	BLUE	218	d5	8001/U	50	BLUE	218	br5	8001/U	50	BLUE	758
a6	8001/U	90	ORANGE	193	b6	8001/U	90	BLUE	191	c6	8001/U	70	BLUE	186	d6	8001/U	50	BLUE	189	br6	8001/U	50	BLUE	753
a7	8001/U	90	ORANGE	258	b7	8001/U	90	BLUE	188	c7	8001/U	70	BLUE	183	d7	8001/U	50	BLUE	188	br7	8001/U	50	BLUE	779
a8	8001/U	130	ORANGE	270	b8	8001/U	130	BLUE	200	c8	8001/U	70	BLUE	202	d8	8001/U	50	BLUE	200	br8	8001/U	50	BLUE	439
a9	8001/U	90	ORANGE	842	b9	8001/U	50	BLUE	780	c9	8001/U	50	BLUE	606						br9	8001/U	50	BLUE	408
a10	8001/U	90	ORANGE	783	b10	8001/U	50	BLUE	727	c10	8001/U	50	BLUE	542						br10	8001/U	50	BLUE	277
a11	8001/U	90	ORANGE	800	b11	8001/U	50	BLUE	741	c11	8001/U	50	BLUE	556						br11	8001/U	50	BLUE	350
a12	8001/U	90	ORANGE	766	b12	8001/U	50	BLUE	715	c12	8001/U	50	BLUE	541						tip 1	8001/U	50	BLUE	3381
a13	8001/U	90	ORANGE	791	b13	8001/U	50	BLUE	746	c13	8001/U	50	BLUE	600										
a14	8001/U	90	ORANGE	263	b14	8001/U	50	BLUE	218	c14	8001/U	50	BLUE	193										
a15	8001/U	90	ORANGE	236	b15	8001/U	50	BLUE	208	c15	8001/U	50	BLUE	197										
2A1	8001/U	190	ORANGE	1254	2B1	8001/U	190	BLUE	1240	2C1	8001/U	90	BLUE	367	2D1	8001/U	70	Blue	464	2BR1	8001/U	70	BLUE	1968
2A2	8001/U	190	ORANGE	1208	2B2	8001/U	190	BLUE	1198	2C2	8001/U	90	BLUE	371	2D2	8001/U	70	Blue	464	2BR2	8001/U	50	BLUE	855
2A3	8001/U	190	ORANGE	1147	2B3	8001/U	190	BLUE	1125	2C3	8001/U	90	BLUE	354	2D3	8001/U	70	Blue	438	2BR3	8001/U	50	BLUE	799
2A4	8001/U	190	ORANGE	1041	2B4	8001/U	190	BLUE	1099	2C4	8001/U	90	BLUE	300	2D4	8001/U	70	Blue	378	2BR4	8001/U	50	BLUE	463
2A5	8001/U	90	ORANGE	811	2B5	8001/U	70	BLUE	750	2C5	8001/U	70	BLUE	569						2BR5	8001/U	50	BLUE	599
2A6	8001/U	90	ORANGE	759	2B6	8001/U	70	BLUE	708	2C6	8001/U	70	BLUE	531						3BR1	8001/U	70	BLUE	1061
2A7	8001/U	90	ORANGE	610	2B7	8001/U	70	BLUE	631	2C7	8001/U	70	BLUE	699						3BR11	8001/U	70	BLUE	1655

LINES

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REF.	MAT.	kg	COLOR	mm	REF.	MAT.	kg	COLOR	mm	REF.	MAT.	kg	COLOR	mm	REF.	MAT.	kg	COLOR	mm					
A					B					C					D					BRAKE				
a1	8001/U	130	ORANGE	251	b1	8001/U	130	BLUE	249	c1	8001/U	70	BLUE	251	d1	8001/U	50	BLUE	250	br1	8001/U	50	BLUE	1446
a2	8001/U	90	ORANGE	218	b2	8001/U	90	BLUE	216	c2	8001/U	70	BLUE	211	d2	8001/U	50	BLUE	217	br2	8001/U	50	BLUE	1135
a3	8001/U	90	ORANGE	226	b3	8001/U	90	BLUE	223	c3	8001/U	70	BLUE	218	d3	8001/U	50	BLUE	222	br3	8001/U	50	BLUE	1001
a4	8001/U	130	ORANGE	239	b4	8001/U	130	BLUE	237	c4	8001/U	70	BLUE	240	d4	8001/U	50	BLUE	239	br4	8001/U	50	BLUE	940
a5	8001/U	130	ORANGE	234	b5	8001/U	130	BLUE	230	c5	8001/U	70	BLUE	232	d5	8001/U	50	BLUE	232	br5	8001/U	50	BLUE	808
a6	8001/U	90	ORANGE	206	b6	8001/U	90	BLUE	204	c6	8001/U	70	BLUE	199	d6	8001/U	50	BLUE	202	br6	8001/U	50	BLUE	801
a7	8001/U	90	ORANGE	275	b7	8001/U	90	BLUE	200	c7	8001/U	70	BLUE	195	d7	8001/U	50	BLUE	200	br7	8001/U	50	BLUE	829
a8	8001/U	130	ORANGE	287	b8	8001/U	130	BLUE	213	c8	8001/U	70	BLUE	215	d8	8001/U	50	BLUE	214	br8	8001/U	50	BLUE	467
a9	8001/U	90	ORANGE	897	b9	8001/U	50	BLUE	831	c9	8001/U	50	BLUE	645						br9	8001/U	50	BLUE	434
a10	8001/U	90	ORANGE	834	b10	8001/U	50	BLUE	774	c10	8001/U	50	BLUE	577						br10	8001/U	50	BLUE	295
a11	8001/U	90	ORANGE	852	b11	8001/U	50	BLUE	789	c11	8001/U	50	BLUE	592						br11	8001/U	50	BLUE	373
a12	8001/U	90	ORANGE	816	b12	8001/U	50	BLUE	762	c12	8001/U	50	BLUE	576						tip 1	8001/U	50	BLUE	3697
a13	8001/U	90	ORANGE	842	b13	8001/U	50	BLUE	795	c13	8001/U	50	BLUE	640										
a14	8001/U	90	ORANGE	280	b14	8001/U	50	BLUE	232	c14	8001/U	50	BLUE	205										
a15	8001/U	90	ORANGE	251	b15	8001/U	50	BLUE	221	c15	8001/U	50	BLUE	209										
2A1	8001/U	190	ORANGE	1334	2B1	8001/U	190	BLUE	1318	2C1	8001/U	90	BLUE	390	2D1	8001/U	70	Blue	493	2BR1	8001/U	70	BLUE	2104
2A2	8001/U	190	ORANGE	1288	2B2	8001/U	190	BLUE	1278	2C2	8001/U	90	BLUE	396	2D2	8001/U	70	Blue	495	2BR2	8001/U	50	BLUE	908
2A3	8001/U	190	ORANGE	1220	2B3	8001/U	190	BLUE	1197	2C3	8001/U	90	BLUE	376	2D3	8001/U	70	Blue	466	2BR3	8001/U	50	BLUE	852
2A4	8001/U	190	ORANGE	1110	2B4	8001/U	190	BLUE	1171	2C4	8001/U	90	BLUE	321	2D4	8001/U	70	Blue	403	2BR4	8001/U	50	BLUE	493
2A5	8001/U	90	ORANGE	863	2B5	8001/U	70	BLUE	799	2C5	8001/U	70	BLUE	606						2BR5	8001/U	50	BLUE	638
2A6	8001/U	90	ORANGE	809	2B6	8001/U	70	BLUE	754	2C6	8001/U	70	BLUE	565						3BR1	8001/U	70	BLUE	1147
2A7	8001/U	90	ORANGE	650	2B7	8001/U	70	BLUE	672	2C7	8001/U	70	BLUE	744						3BR1I	8001/U	70	BLUE	1781
																				</				

LINES

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REF.	MAT.	kg	COLOR	mm	REF.	MAT.	kg	COLOR	mm	REF.	MAT.	kg	COLOR	mm	REF.	MAT.	kg	COLOR	mm
A					B					C					D				
a1	8001/U	130	ORANGE	266	b1	8001/U	130	BLUE	263	c1	8001/U	70	BLUE	265	d1	8001/U	50	BLUE	264
a2	8001/U	90	ORANGE	231	b2	8001/U	90	BLUE	229	c2	8001/U	70	BLUE	223	d2	8001/U	50	BLUE	230
a3	8001/U	90	ORANGE	239	b3	8001/U	90	BLUE	235	c3	8001/U	70	BLUE	230	d3	8001/U	50	BLUE	234
a4	8001/U	130	ORANGE	253	b4	8001/U	130	BLUE	251	c4	8001/U	70	BLUE	254	d4	8001/U	50	BLUE	253
a5	8001/U	130	ORANGE	247	b5	8001/U	130	BLUE	243	c5	8001/U	70	BLUE	245	d5	8001/U	50	BLUE	246
a6	8001/U	90	ORANGE	218	b6	8001/U	90	BLUE	216	c6	8001/U	70	BLUE	210	d6	8001/U	50	BLUE	214
a7	8001/U	90	ORANGE	290	b7	8001/U	90	BLUE	211	c7	8001/U	70	BLUE	206	d7	8001/U	50	BLUE	211
a8	8001/U	130	ORANGE	304	b8	8001/U	130	BLUE	225	c8	8001/U	70	BLUE	228	d8	8001/U	50	BLUE	226
a9	8001/U	90	ORANGE	948	b9	8001/U	50	BLUE	878	c9	8001/U	50	BLUE	682					
a10	8001/U	90	ORANGE	882	b10	8001/U	50	BLUE	818	c10	8001/U	50	BLUE	611					
a11	8001/U	90	ORANGE	900	b11	8001/U	50	BLUE	834	c11	8001/U	50	BLUE	626					
a12	8001/U	90	ORANGE	863	b12	8001/U	50	BLUE	806	c12	8001/U	50	BLUE	610					
a13	8001/U	90	ORANGE	891	b13	8001/U	50	BLUE	841	c13	8001/U	50	BLUE	676					
a14	8001/U	90	ORANGE	297	b14	8001/U	50	BLUE	245	c14	8001/U	50	BLUE	217					
a15	8001/U	90	ORANGE	265	b15	8001/U	50	BLUE	234	c15	8001/U	50	BLUE	221					
2A1	8001/U	190	ORANGE	1409	2B1	8001/U	190	BLUE	1392	2C1	8001/U	90	BLUE	411	2D1	8001/U	70	Blue	520
2A2	8001/U	190	ORANGE	1364	2B2	8001/U	190	BLUE	1353	2C2	8001/U	90	BLUE	420	2D2	8001/U	70	Blue	524
2A3	8001/U	190	ORANGE	1290	2B3	8001/U	190	BLUE	1264	2C3	8001/U	90	BLUE	397	2D3	8001/U	70	Blue	491
2A4	8001/U	190	ORANGE	1174	2B4	8001/U	190	BLUE	1240	2C4	8001/U	90	BLUE	340	2D4	8001/U	70	Blue	427
2A5	8001/U	90	ORANGE	912	2B5	8001/U	70	BLUE	844	2C5	8001/U	70	BLUE	641					
2A6	8001/U	90	ORANGE	855	2B6	8001/U	70	BLUE	797	2C6	8001/U	70	BLUE	598					
2A7	8001/U	90	ORANGE	687	2B7	8001/U	70	BLUE	711	2C7	8001/U	70	BLUE	786					
										3C1	8001/U	130	BLUE	727					
										3C2	8001/U	130	BLUE	683					
										3C3	8001/U	90	BLUE	635					
										3C4	8001/U	90	BLUE	670					
3A1	8001/U	340	ORANGE	4022	3B1	8001/U	230	BLUE	3958	4C1	8001/U	190	BLUE	4252	brmain	TARAX	240	RED	3151
3A2	8001/U	340	ORANGE	4038	3B2	8001/U	230	BLUE	3997	4C2	8001/U	130	BLUE	4274	BRAKE KNOT POINT:			2951	
3A3	8001/U	130	ORANGE	3553	3B3	8001/U	130	BLUE	3650	4C3	8001/U	90	BLUE	4099	brTipmain	PPSL	120		1200
					stb main	8001/U	90	BLUE	4133						TIP KNOT POINT:			1000	



LINE MEASUREMENTS

DOBERMANN 3 - 14

LINES HEIGHT MM					
	A	B	C	D	br
1	4808	4736	4772	4864	5649
2	4776	4705	4734	4833	5364
3	4737	4670	4703	4797	5238
4	4748	4681	4723	4812	5135
5	4685	4625	4667	4748	5014
6	4658	4601	4636	4720	4953
7	4618	4572	4609	4689	4977
8	4628	4583	4627	4701	4899
9	4537	4503	4549		4869
10	4480	4451	4487		4875
11	4446	4424	4463		4945
12	4413	4399	4449		4204
13	4437	4429	4506		
14	4280	4262	4304		
15	4254	4253	4308		
RISERS LENGHT MM					
	A	B	C		
	500	500	500	STANDARD	
	500	535	570	TRIM OPENED	
	360	465	570	ACCELERATED	

DOBERMANN 3 - 15

LINES HEIGHT MM					
	A	B	C	D	br
1	4993	4919	4957	5053	5965
2	4961	4887	4918	5021	5671
3	4924	4853	4887	4984	5542
4	4935	4865	4907	5000	5437
5	4870	4809	4852	4936	5312
6	4843	4784	4820	4907	5251
7	4802	4755	4793	4876	5277
8	4814	4767	4812	4888	5195
9	4721	4684	4731		5164
10	4662	4631	4667		5169
11	4627	4603	4643		5242
12	4593	4577	4628		4376
13	4618	4608	4687		
14	4455	4436	4479		
15	4428	4426	4483		
RISERS LENGHT MM					
	A	B	C		
	500	500	500	STANDARD	
	500	535	570	TRIM OPENED	
	360	465	570	ACCELERATED	

DOBERMANN 3 - 17

LINES HEIGHT MM					
	A	B	C	D	br
1	5347	5268	5310	5412	6270
2	5314	5235	5270	5379	5959
3	5276	5202	5239	5342	5825
4	5289	5216	5261	5359	5715
5	5224	5160	5204	5294	5583
6	5196	5134	5171	5264	5520
7	5155	5104	5145	5232	5548
8	5167	5117	5165	5246	5461
9	5070	5031	5080		5428
10	5007	4974	5012		5434
11	4971	4944	4986		5512
12	4935	4917	4970		4692
13	4961	4950	5034		
14	4788	4767	4812		
15	4759	4756	4816		
RISERS LENGHT MM					
	A	B	C		
	500	500	500	STANDARD	
	500	535	570	TRIM OPENED	
	360	465	570	ACCELERATED	

LINE MEASUREMENTS

DOBERMANN 3 - 19

LINES HEIGHT MM					
	A	B	C	D	br
1	5682	5598	5640	5748	6701
2	5647	5564	5598	5714	6374
3	5610	5531	5570	5678	6234
4	5624	5547	5594	5697	6121
5	5560	5489	5536	5631	5984
6	5531	5462	5501	5599	5919
7	5487	5433	5475	5567	5951
8	5501	5447	5497	5582	5858
9	5398	5357	5410		5823
10	5332	5297	5339		5829
11	5293	5266	5311		5911
12	5256	5238	5295		4983
13	5284	5273	5361		
14	5102	5079	5126		
15	5070	5068	5130		

RISERS LENGHT MM			
A	B	C	
500	500	500	STANDARD
500	535	570	TRIM OPENED
360	465	570	ACCELERATED

SUSPENSION

MATERIAL CODE		A-8001/U	A-8001/U	A-8001/U	A-8001/U	A-8001/U	A-8001/U	A-8001/U	PPSL	TARAX
STRENGTH CODE		050	070	90	130	190	230	340	120	240
DIAMETER m/m	ø	0,5	0,7	0,8	0,9	1,1	1,1 x 1,4	1,4 X 1,9	1,15	1,9
CORE MATERIAL		ARAMID	ARAMID	ARAMID	ARAMID	ARAMID	ARAMID	ARAMID	DYNEEMA	DYNEEMA
SLEEVE MATERIAL		NO	NO	NO	NO	NO	NO	NO	POLYESTER	POLYESTER
WEIGHT G/M	TOTAL	0,3	0,4	0,5	0,8	1,1	1,4	2,1	1	2,3
BREAKING STRENGTH daN	MINIMUM	50	70	90	130	190	230	340	120	240
	MAXIMUM	59	78	110	144	211	255	380	159	
STRENGTH AFTER 5.000 BENDING CYCLES	TEST EN	26	39	49	88	52	69	196,6	135	
ELONGATION AT	5 daN en %	0,4	0,5	0,4	0,4	0,4	0,3	0,2		0,1-0,3
	10 daN en %	0,7	0,7	0,6	0,6	0,6	0,5	0,3	0,2	0,2-0,4
	15 daN en %	1,1	1	0,8	0,8	0,7	0,6	0,4		0,2-0,6
	20 daN en %	1,5	1,3	1	0,9	0,9	0,7	0,5		0,3-0,7
	25 daN en %	1,9	1,5	1,3	1	1	0,8	0,6		0,4-0,8
	30 daN en %	3,3	2,8	2,3	1,8	1,6	1,3		0,6	
	75 daN en %		3,7	3,2	3,1	2,7	2,3	1,5		0,9-1,2
	100 daN en %					2,6	3,6	1,9		1,1-1,5
	125 daN en %					3,5	3,3			
	150 daN en %					4,3	3,6	2,6		1,5-2,1
	175 daN en %									
	200 daN en %							3,1		2-2,8
ELONGATION MAX. BREAKING STRENGTH %		3,8	3,9	4,3	4	4,4	4,4		2	

MAILLON & PULLEY

DESCRIPTION		
	MAILLON	DELTA
	CODE	MRI4
	MATERIAL	STAINLESS STEEL
	SIZE	4,3 m/m
	WEIGHT	12 G/PIECE
	QUANTITY	8 PIECES
	INSERTS	4 GREEN / 4 BLACK
TECHNICAL SPECIFICATIONS		
	DIMENSIONS	m/m
	L.T.	28
	L.I.	20
	H.T.	38
	H.I.	30
	O	4
	E	11
	T	4
	LOAD	KG
	WORKING LIMIT	150
	BREAKING	750
MATERIAL		
AISI 304 STAINLESS STEEL		STANDARD
CLOSING APPLIED BY MANUAL & ENTIRE SCREWING OF THE NUT		
TO GUARANTEE THE HIGHEST SAFETY (NO THREAD SHOULD BE OBVIOUS)		
SYSTEMATIC CONTROL OF MAILLON QUICK-LINKS BEFORE EVERY FLIGHT		

DESCRIPTION		
	PULLEY	20 m/m
	CODE	ID018041
	MATERIALS	STAINLESS STEEL
		NYLON
		CARBON ACETAL
	BEARING	DELRIN®
	WEIGHT	14 G/PIECE
TECHNICAL SPECIFICATIONS		
	DIMENSIONS	m/m
	L.T.	20
	H.T.	33
	Ø	5 MAX
	LOAD	KG
	WORKING LIMIT	200
	BREAKING	400

THREAD

WING MAKING	
NAME	SERAFIL
N° OF REFERENCE	60
MATERIAL	POLYESTER
TYPE OF FINISH	SILK
LINEAR DENSITY	NM 61 / 3 (DTEX 163 * 3)
BREAKING STRENGTH	3,000 CN
ELONGATION	17,00%

PROPIETIES SERAFIL	
SOLIDITY ARTIFICIAL LIGTH	ISO 105 B02 > 5 - 6
SOLIDITY SWEAT	ISO 105 E04 > 4
SOLIDITY WASHING	ISO 105 C04 > 3
SOLIDITY GRAZE IN DRY	ISO 105 X12 > 4
SOLIDITY WASHING IN DRY	ISO 105 D01 > 3 - 4
TREATMENT WATER REPELLENT	WR

RISERS MAKING	
NAME	COATS BONDED C.F.P.
N° OF REFERENCE	V138
MATERIAL	POLYESTER
TYPE OF FINISH	SILK
BREAKING STRENGTH	9,5 KG
ELONGATION	19%

RISERS

RISERS	
N° OF REFERENCE	G-R 19
MATERIAL	POLYESTER
WIDTH	19 M/M
THICKNESS	1,6 M/M
BREAKING STRENGTH	850 KG
ELONGATION	MAX. 12%
WEIGHT	23 G/M
COLOR	BLACK

COLOR INDICATOR	
N° OF REFERENCE	IC-G 1-2
MATERIAL	POLYESTER
WIDTH	70 M/M
THICKNESS	0,80 M/M
BREAKING STRENGTH	130 DN
ELONGATION	35 %
WEIGHT	32 G * L.M.
COLOR	GREEN

LOOPS	
N° OF REFERENCE	LK1 - 10
MATERIAL	NYLON
WIDTH	10 M/M
BREAKING STRENGTH	84 KG
ELONGATION	30 %
WEIGHT	5,5 G/M
COLOR	WHITE



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