aerobask

Diamond DA62

for X-PLANE

PERFORMANCE TABLES

ONLY FOR SIMULATION
DO NOT USE FOR REAL FLIGHT

TAKE-OFF DISTANCE

Conditions:

- Power lever . . . . . both MAX
- Flaps . . . . . T/O
- Runway . . . . . dry, paved, level
- Nose wheel lift-off . . . . . @ v R
- Airspeed for initial climb . . . . . @ v 50ft

Take-Off Distance - Normal Procedure - 1999 kg / 4407 lb

Weight:	**1999 kg / 4407 lb**	**Flaps:**	**T/O**
v_R:	**76 KIAS**	**Power:**	**MAX**
v_{50ft}:	**83 KIAS**	**Runway:**	**dry, paved, level**

Distances are given in meter [m]

Press. Alt. [ft] / [m]		Outside Air Temperature - [°C] / [°F]						
		0 / 32	**10** / 50	**20** / 68	**30** / 86	**40** / 104	**50** / 122	**ISA**
SL	**Ground Roll**	360	380	400	430	490	550	385
	15 m / 50 ft	590	630	660	710	800	910	638
1000 305	**Ground Roll**	380	400	430	460	520	600	405
	15 m / 50 ft	630	660	700	750	850	980	664
2000 610	**Ground Roll**	400	430	450	490	560	640	425
	15 m / 50 ft	660	700	740	800	910	1040	694
3000 914	**Ground Roll**	430	450	480	530	600	680	444
	15 m / 50 ft	690	730	780	850	970	1110	727
4000 1219	**Ground Roll**	450	480	510	570	650	740	468
	15 m / 50 ft	730	770	820	920	1050	1200	759
5000 1524	**Ground Roll**	480	510	540	610	700		493
	15 m / 50 ft	780	820	880	990	1130		797
6000 1829	**Ground Roll**	520	550	590	670	760		525
	15 m / 50 ft	840	880	940	1080	1230		848
7000 2134	**Ground Roll**	560	600	650	740	840		563
	15 m / 50 ft	900	950	1030	1180	1350		903
8000 2438	**Ground Roll**	610	650	710	810	930		601
	15 m / 50 ft	970	1030	1140	1300	1480		962
9000 2743	**Ground Roll**	660	710	790	900	1030		642
	15 m / 50 ft	1050	1130	1260	1440	1660		1025
10000 3048	**Ground Roll**	720	770	870	1000			691
	15 m / 50 ft	1150	1230	1390	1600			1100

CLIMB PERFORMANCE - TAKE-OFF CLIMB

Conditions:

- Power lever . . . . . both 95%
- Flaps . . . . . UP
- Landing gear . . . . . retracted
- Airspeed . . . . . v Y

Take-Off Climb - Flaps UP

Flaps: UP **Power: 95%**

v_Y: 87 KIAS **Gear: retracted**

Weight [kg] / [lb]	Press. Alt. [ft]	Press. Alt. [m]	Rate of Climb - [ft/min]								
			Outside Air Temperature - [°C] / [°F]								
			-20	-10	0	10	20	30	40	50	ISA
			-4	14	32	50	68	86	104	122	
1999 / 4407	SL		1270	1270	1260	1260	1250	1240	1190	1070	1254
	2000	610	1250	1250	1240	1230	1230	1220	1130	1020	1233
	4000	1219	1230	1220	1220	1210	1200	1170	1080	960	1210
	6000	1829	1210	1200	1190	1180	1170	1110	1010		1188
	8000	2438	1180	1170	1160	1150	1130	1040	920		1164
	10000	3048	1150	1140	1130	1110	1050	930			1133
	12000	3658	1120	1100	1080	1050	940	810			1101
	14000	4267	1040	1020	980	910	770	630			1022
	16000	4877	930	910	860	750	620				924
	18000	5486	810	780	740	620	490				809
	20000	6096	700	680	610	470					709
1900 / 4189	SL		1360	1350	1350	1340	1340	1330	1270	1150	1340
	2000	610	1340	1330	1330	1320	1310	1310	1220	1090	1320
	4000	1219	1320	1310	1300	1290	1290	1260	1150	1030	1297
	6000	1829	1290	1280	1280	1270	1260	1190	1080		1274
	8000	2438	1270	1260	1250	1240	1220	1120	990		1250
	10000	3048	1240	1220	1210	1200	1130	1010			1218
	12000	3658	1200	1190	1170	1130	1010	880			1185
	14000	4267	1120	1100	1060	980	830	690			1103
	16000	4877	1010	980	940	820	680				1001
	18000	5486	880	850	810	680	550				881
	20000	6096	770	750	670	530					778

CLIMB PERFORMANCE - CRUISE CLIMB

Conditions:

- Power lever . . . . . both 95%
- Flaps . . . . . UP
- Landing gear . . . . . retracted
- Airspeed . . . . according table

Cruise Climb

Flaps: UP **Power: 95%**

v_{CLIMB}: 93 KIAS **Gear: retracted**

Weight [kg] / [lb]	Press. Alt. [ft]	Press. Alt. [m]	Rate of Climb - [ft/min]								
			Outside Air Temperature - [°C] / [°F]								
			-20 -4	-10 14	0 32	10 50	20 68	30 86	40 104	50 122	ISA
1999 / 4407	SL		1280	1270	1270	1260	1260	1250	1200	1080	1261
	2000	610	1260	1250	1250	1240	1240	1230	1140	1020	1242
	4000	1219	1240	1230	1230	1220	1210	1180	1080	960	1220
	6000	1829	1220	1210	1200	1190	1180	1110	1010		1194
	8000	2438	1190	1180	1170	1160	1140	1040	930		1167
	10000	3048	1160	1140	1130	1120	1060	940			1138
	12000	3658	1120	1110	1090	1050	940	800			1110
	14000	4267	1040	1020	980	900	760	620			1024
	16000	4877	930	900	850	740	610				917
	18000	5486	800	770	730	600	470				799
	20000	6096	680	660	590	450					695
1900 / 4189	SL		1360	1360	1350	1350	1340	1340	1280	1150	1346
	2000	610	1340	1340	1330	1330	1320	1310	1220	1090	1327
	4000	1219	1320	1320	1310	1300	1290	1260	1150	1030	1305
	6000	1829	1300	1290	1280	1270	1260	1200	1090		1279
	8000	2438	1270	1260	1250	1240	1220	1120	1000		1250
	10000	3048	1240	1230	1220	1210	1140	1010			1221
	12000	3658	1200	1190	1170	1130	1010	870			1192
	14000	4267	1120	1100	1060	970	820	680			1103
	16000	4877	1000	970	930	810	670				991
	18000	5486	870	840	790	660	530				868
	20000	6096	750	730	650	500					761

ONE ENGINE INOPERATIVE CLIMB PERFORMANCE

Conditions:

- Remaining engine . . . . . 95% load
- Dead engine . . . . . feathered and secured
- Flaps . . . . . UP
- Landing gear . . . . . retracted
- Airspeed . . . . . v YSE
- Sideslip . . . . . one ball out, max. 5° bank

NOTE : With respect to handling and performance, the left-hand engine (pilots view) is considered the "critical" engine.

One Engine Inoperative Climb

Flaps: UP **Power: 95%**

v_{YSE}: 87 KIAS **Gear: retracted**

Weight [kg] / [lb]	Press. Alt. [ft]	Press. Alt. [m]	Rate of Climb - [ft/min]								
			Outside Air Temperature - [°C] / [°F]								ISA
			-20 -4	-10 14	0 32	10 50	20 68	30 86	40 104	50 122	
1999 / 4407	SL		325	320	310	300	290	280	255	210	294
	2000	610	310	300	290	280	270	260	225	185	277
	4000	1219	290	280	265	255	245	230	195	150	259
	6000	1829	265	255	245	235	225	200	160		241
	8000	2438	245	235	220	210	195	160	115		222
	10000	3048	220	205	190	180	150	105			199
	12000	3658	190	175	160	135	90	40			175
	14000	4267	140	120	95	55	0	-55			127
	16000	4877	75	55	25	-25	-75				69
	18000	5486	0	-20	-50	-100	-145				2
	20000	6096	-65	-85	-120	-175					-58
1900 / 4189	SL		375	365	355	345	335	330	300	255	342
	2000	610	360	345	335	325	315	305	275	225	326
	4000	1219	335	325	315	305	295	280	240	190	308
	6000	1829	315	305	295	285	270	245	205		290
	8000	2438	295	280	270	255	240	205	155		271
	10000	3048	270	255	240	225	195	150			248
	12000	3658	240	225	210	185	135	80			224
	14000	4267	190	170	145	100	40	-15			175
	16000	4877	120	100	70	15	-40				115
	18000	5486	45	25	-5	-60	-110				46
	20000	6096	-25	-45	-80	-140					-15

TIME, FUEL & DISTANCE TO CLIMB

Conditions:

- Power lever . . . . . both 95%
- Flaps . . . . . UP
- Landing gear . . . . . retracted
- Airspeed . . . . . v climb

Time, Fuel and Distance to Climb

Flaps: UP — **Power: 95%**

v_{climb}: 93 KIAS — **Gear: retracted**

Weight [kg] / [lb]	Press. Alt. [ft]	Press. Alt. [m]	OAT [°C]	OAT [°F]	TAS [kt]	RoC [ft/min]	RoC [m/s]	Time [min]	Fuel [US gal]	Dist-ance [NM]
1999 / 4407	**SL**		15	59	92	1260	6.4	0	0.0	0
	2000	600	11	52	93	1250	6.3	2	0.6	2
	4000	1219	7	45	94	1240	6.3	4	1.1	5
	6000	1829	3	38	96	1230	6.2	5	1.6	7
	8000	2438	-1	30	97	1215	6.1	7	2.2	10
	10000	3048	-5	23	99	1200	6.1	9	2.7	13
	12000	3658	-9	16	100	1190	6.0	11	3.3	16
	14000	4267	-13	9	102	1170	5.9	12	3.9	20
	16000	4877	-17	2	104	1145	5.8	14	4.5	24
	18000	5486	-21	-5	105	1115	5.6	17	5.1	28
	20000	6096	-25	-12	107	1075	5.4	19	5.8	33
1900 / 4189	**SL**		15	59	92	1345	6.8	0	0.0	0
	2000	600	11	52	93	1335	6.7	2	0.5	2
	4000	1219	7	45	94	1325	6.7	4	1.0	4
	6000	1829	3	38	96	1315	6.6	5	1.5	7
	8000	2438	-1	30	97	1300	6.6	7	2.0	9
	10000	3048	-5	23	99	1285	6.5	8	2.6	12
	12000	3658	-9	16	100	1275	6.4	10	3.1	15
	14000	4267	-13	9	102	1255	6.3	12	3.6	18
	16000	4877	-17	2	104	1230	6.2	14	4.2	22
	18000	5486	-21	-5	105	1195	6.0	16	4.8	26
	20000	6096	-25	-12	107	1155	5.8	18	5.4	30

CRUISE PERFORMANCE

Conditions:

- Flaps . . . . . UP
- Landing gear . . . . . retracted
- Weight . . . . . up to1999 kg / above 1999 kg

Cruise Performance up to 1999 kg (4407 lb)

Press. Alt. [ft] / [m]	Outside Air Temperature - [°C]														
	ISA-10			ISA			ISA+10			ISA+20			ISA+30		
	Pwr [%]	FF [US gal/h]	TAS [kt]	Pwr [%]	FF [US gal/h]	TAS [kt]	Pwr [%]	FF [US gal/h]	TAS [kt]	Pwr [%]	FF [US gal/h]	TAS [kt]	Pwr [%]	FF [US gal/h]	TAS [kt]
2000 610	95	19.3	172	95	19.3	174	95	19.3	176	95	19.3	177	95	19.2	179
	75	14.8	156	75	14.8	158	75	14.8	160	75	14.8	162	75	14.8	163
	60	11.8	143	60	11.8	145	60	11.8	146	60	11.8	148	60	11.8	149
	45	9.0	126	45	9.0	127	45	9.0	128	45	9.0	130	45	9.0	131
4000 1219	95	19.3	175	95	19.3	177	95	19.3	179	95	19.3	181	95	19.2	182
	75	14.8	159	75	14.8	161	75	14.8	163	75	14.8	165	75	14.8	166
	60	11.8	146	60	11.8	147	60	11.8	149	60	11.8	150	60	11.8	152
	45	9.0	128	45	9.0	129	45	9.0	131	45	9.0	132	45	9.0	133
6000 1829	95	19.3	178	95	19.3	180	95	19.3	182	95	19.3	184	95	19.3	186
	75	14.8	162	75	14.8	164	75	14.8	166	75	14.8	168	75	14.8	170
	60	11.8	148	60	11.8	150	60	11.8	152	60	11.8	153	60	11.8	155
	45	9.0	130	45	9.0	132	45	9.0	133	45	9.0	134	50	9.8	143
8000 2438	95	19.3	182	95	19.3	184	95	19.3	186	95	19.3	188	95	19.2	190
	75	14.8	166	75	14.8	168	75	14.8	169	75	14.8	171	75	14.8	173
	60	11.8	151	60	11.8	153	60	11.8	155	60	11.8	156	60	11.8	158
	45	9.0	133	45	9.0	134	50	9.8	142	50	9.8	144	50	9.8	145
10000 3048	95	19.3	185	95	19.3	188	95	19.3	190	95	19.3	191	95	18.8	192
	75	14.8	169	75	14.8	171	75	14.8	173	75	14.8	175	75	14.8	176
	60	11.8	154	60	11.8	156	60	11.8	157	60	11.8	159	60	11.8	161
	45	8.9	135	50	9.8	144	50	9.8	145	50	9.8	146	50	9.8	148
12000 3658	95	19.3	189	95	19.3	191	95	19.2	193	95	18.8	194	95	18.1	194
	75	14.8	172	75	14.8	174	75	14.8	176	75	14.8	178	75	14.8	180
	60	11.8	157	60	11.8	159	60	11.8	160	60	11.8	162	60	11.8	164
	50	9.7	145	50	9.7	146	50	9.7	148	50	9.7	149	50	9.7	150
14000 4267	95	18.7	190	95	18.5	192	95	18.1	193	85	16.7	191	80	15.6	188
	75	14.8	175	75	14.8	177	75	14.8	179	75	14.8	181	75	14.8	183
	60	11.8	160	60	11.8	162	60	11.8	163	60	11.8	165	60	11.8	167
	50	9.7	147	50	9.7	149	50	9.7	150	50	9.7	152	55	10.7	160
16000 4877	95	17.3	190	87	17.1	192	85	16.7	192	80	15.7	190	-	-	-
	75	14.8	179	75	14.8	181	75	14.8	183	75	14.8	185	75	14.8	187
	60	11.8	163	60	11.8	165	60	11.8	166	60	11.8	168	60	11.8	170
	50	9.7	150	50	9.7	151	55	10.7	160	55	10.7	162	55	10.7	163
18000 5486	80	15.7	187	80	15.7	189	80	15.7	191	-	-	-	-	-	-
	75	14.8	182	75	14.8	184	75	14.8	186	75	14.8	188	75	14.8	190
	60	11.8	166	60	11.8	168	60	11.8	170	60	11.8	171	60	11.8	173
	55	10.7	159	55	10.7	161	55	10.7	163	55	10.7	164	55	10.7	166
20000 6096	75	14.8	186	75	14.8	188	70	13.9	185	70	13.9	187	70	13.9	189
	60	11.8	169	60	11.8	171	60	11.8	173	60	11.8	174	60	11.8	176

LANDING DISTANCES

Conditions:

- Power lever . . . . . both IDLE
- Flaps . . . . . LDG
- Runway . . . . . dry, paved, level
- Approach speed . . . . . v REF

Landing Distance - Flaps LDG - 1999 kg / 4407 lb								
Weight: 1999 kg / 4407 lb					Flaps: LDG			
v_{REF}: 84 KIAS					Power: IDLE			
					Runway: dry, paved, level			
Distances are given in meter [m]								
Press. Alt. [ft] / [m]		Outside Air Temperature - [°C] / [°F]						
		0 / 32	10 / 50	20 / 68	30 / 86	40 / 104	50 / 122	ISA
SL	Ground Roll	370	390	390	410	440	490	383
	15 m / 50 ft	680	700	720	740	800	870	706
1000 305	Ground Roll	390	390	410	420	460	510	394
	15 m / 50 ft	700	720	740	760	830	910	722
2000 610	Ground Roll	400	410	420	440	490	540	408
	15 m / 50 ft	720	740	760	790	870	950	740
3000 914	Ground Roll	450	460	480	500	560	610	456
	15 m / 50 ft	780	800	820	860	950	1040	793
4000 1219	Ground Roll	490	510	530	560	620	680	500
	15 m / 50 ft	830	850	880	940	1030	1120	842
5000 1524	Ground Roll	530	550	570	620	680		537
	15 m / 50 ft	880	900	930	1000	1100		885
6000 1829	Ground Roll	570	590	610	670	740		570
	15 m / 50 ft	920	950	970	1070	1170		923
7000 2134	Ground Roll	620	650	670	750	820		622
	15 m / 50 ft	980	1010	1050	1160	1270		981
8000 2438	Ground Roll	710	740	790	870	960		709
	15 m / 50 ft	1080	1110	1170	1290	1410		1073
9000 2743	Ground Roll	850	880	940	1030	1130		834
	15 m / 50 ft	1220	1260	1340	1470	1610		1204
10000 3048	Ground Roll	1010	1030	1120	1230			988
	15 m / 50 ft	1390	1420	1540	1690			1364

GO-AROUND CLIMB PERFORMANCE

Conditions:

- Power lever . . . . . both MAX
- Flaps . . . . . LDG
- Landing gear . . . . . extended
- Airspeed: . . . . . v REF

Go-Around Climb Performance

Flaps: LDG **Power: MAX**

v_{REF}: 84 KIAS **Gear: extended**

Weight [kg] / [lb]	Press. Alt. [ft]	Press. Alt. [m]	Rate of Climb - [ft/min]								
			Outside Air Temperature - [°C] / [°F]								
			-20 -4	-10 14	0 32	10 50	20 68	30 86	40 104	50 122	ISA
1999 / 4407	SL		675	660	650	640	615	575	525	440	633
	2000	610	650	640	625	615	590	550	480	395	612
	4000	1219	625	615	600	585	555	500	425	335	589
	6000	1829	600	585	565	545	510	445	370		559
	8000	2438	565	545	525	500	450	375	295		528
	10000	3048	525	505	465	425	370	280			489
1900 / 4189	SL		735	720	710	695	670	630	575	485	691
	2000	610	710	695	685	670	650	605	530	445	670
	4000	1219	685	670	660	640	610	555	475	380	646
	6000	1829	660	640	620	605	570	495	415		616
	8000	2438	620	600	585	555	505	425	340		584
	10000	3048	580	560	520	480	420	320			545
1800 / 3968	SL		795	785	770	760	735	695	635	535	754
	2000	610	775	760	745	735	710	665	585	490	733
	4000	1219	750	735	720	705	670	610	525	425	709
	6000	1829	720	705	685	665	630	550	465		678
	8000	2438	685	665	645	615	560	475	385		645
	10000	3048	645	620	580	535	475	370			604

For the rate of climb in [m/s] divide by 196.8 or multiply by 0.00508.

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