

HEXIS SMARTAC KG800 Series

FOR THE ATTENTION OF USERS

In the tables below, the colors of the HEXIS SMARTAC KG800 range are given in different color spaces.

Definitions

CIE L*a*b* Space

The CIE L*a*b* space is a colorimetric system based on the visual perception of colors, optimized to measure color shift.

L*a*b* values are useful to create a spot colors library in RIP software when you wish to reproduce them. This method should be preferred in order to make the most of your printer's range printable colors.

The Coated FOGRA39 standard

CMYK values correspond to the quantities of primary inks needed to obtain, according to the Coated FOGRA39 standard, the closest color on an offset press. Since this colorimetric space has a limited range of colors, many SMARTAC KG800 references cannot be reproduced within this system.

Colorimetric spaces sRGB and ADOBE RGB (1998)

RGB values are the amount of red, green and blue light required to reproduce the colors on a calibrated screen and normalized to the sRGB or ADOBE RGB (1998) standard. The sRGB data is dedicated to the display on the internet..

ADOBE RGB (1998) comes from the world of professional photography and the need for a dedicated RGB space to the printing business..

The values in this document are indicative and not contractual

Reproducing a color on a printing system requires that it be calibrated and accurately characterized through an ICC profile suitable for that system.

Hexis offers, a custom profile creation service or free, ICC profiles download that match your machine-media-RIP configuration, and thus ensures a quality colorimetric rendering. Each configuration requires a different ICC profile. These tools are available on the Hexis website at : <http://www.hexis-graphics.com/en/iccs/index>.

It is the user's responsibility to visually compare the printed color with the reference of the color chart in order to assess the differences in color and their acceptability. Not all colors of the HEXIS SMARTAC KG800 color chart can be printed on a large-format printer. Only those that belong to the printer gamut can be printed.

Hexis takes no responsibility for the direct or indirect consequences of using these tables.

Color Characterization Table for SMARTAC KG800

SMARTAC	Color Space												
	Lab D50 2°			CoatedFOGRA39				sRGB			Adobe RGB (1998)		
Reference	L	a	b	C	M	Y	K	R	G	B	R	G	B
KG8002M	95,66	-0,7	2,05	0	0	5	0	255	240	205	252	240	207
KG8890M	12,49	0,11	-0,07	79	70	62	89	37	34	28	39	37	32
KG8108B	90,8	-6,64	87,92	2	0	91	0	253	228	0	247	228	22
KG8109B	85,57	6,68	99,83	0	14	100	0	255	206	0	247	205	0
KG8115B	83,93	11,72	88,48	0	20	97	0	255	198	0	246	197	0
KG8123B	81,28	16,53	106,9	0	26	100	0	255	187	0	244	186	0
KG8136B	78,55	20,5	98,46	0	31	100	0	255	177	0	239	175	0
KG8137B	72,81	30,87	84,3	0	44	100	0	254	152	0	231	152	0
KG8138B	76,72	30,87	89,17	0	40	100	0	255	163	0	244	162	0
KG8164B	61,84	57,01	79,38	0	70	100	0	254	96	0	222	95	0
KG8165B	59,13	53,72	76,45	0	71	100	0	240	93	0	211	93	0
KG8166B	54,95	57,66	68,21	0	79	100	0	231	75	0	202	76	0
KG8795B	48,17	68,95	64,05	0	97	100	0	222	24	0	191	29	0
KG8485B	45,38	65,36	55,48	5	99	100	1	209	24	2	179	29	8
KG8187B	43,5	70,54	52,03	5	100	100	1	209	0	12	178	0	17
KG8186B	40,18	64,6	45,13	13	100	100	6	191	0	16	163	0	24
KG8503B	26,08	49,48	26,75	25	100	96	40	129	0	20	110	0	26
KG8505B	23,81	41,83	14,19	31	100	71	49	114	6	30	97	14	35
KG8220B	45,2	65,8	11,3	9	100	38	2	205	24	79	175	29	79
KG8VMOB	25,89	30,15	-37,51	86	100	12	2	90	40	104	80	44	103
KG8PKIB	25,24	37,06	-19,11	65	100	27	24	105	29	78	92	34	78
KG8297B	62,47	-19,08	-34,92	70	13	3	0	92	161	186	116	160	184
KG8299B	52,29	-23,21	-46,4	91	22	0	0	0	137	179	72	136	177

Color Characterization Table for SMARTAC KG800

SMARTAC	Color Space												
	Lab D50 2°			CoatedFOGRA39				sRGB			Adobe RGB (1998)		
Reference	L	a	b	C	M	Y	K	R	G	B	R	G	B
KG8293B	32,9	-6,03	-55,26	100	62	8	1	0	83	146	36	83	144
KG8300B	27,13	-0,43	-53,12	100	72	19	6	0	66	130	33	68	127
KG8RFXB	24,88	11,76	-52,26	100	82	21	4	40	55	123	49	58	120
KG8280B	19,77	11,32	-46,74	100	86	32	18	33	44	103	41	47	102
KG8281B	14,32	13,37	-40,32	100	90	35	38	31	31	82	36	36	82
KG8532B	9,71	-0,75	-17,2	100	82	49	81	18	27	43	28	33	46
KG8VJPB	79,21	-22,44	76,43	33	0	99	0	189	206	0	193	204	26
KG8VPRB	72,11	-41,73	70,77	56	0	100	0	127	194	0	150	193	19
KG8375B	73,72	-47,36	59,16	58	0	95	0	116	202	29	146	201	56
KG8369B	59,23	-58,43	51,79	80	0	100	0	0	165	0	93	164	38
KG8370B	54,59	-31,3	49,93	68	18	100	4	96	143	0	112	142	34
KG8348B	39,64	-61,06	13,33	100	20	92	12	0	114	56	21	114	62
KG8336B	24,62	-43,55	5,09	100	35	91	51	0	72	40	9	74	46
KG8302B	17,52	-18,09	2,5	100	51	82	73	14	50	32	34	53	38
KG8VMDB	20,06	-4,53	14,73	72	58	85	72	50	50	20	53	53	28
KG8476B	18,84	10,56	14,34	51	73	82	76	66	39	19	62	44	28
KG8899B	90,11	-0,42	4,69	7	5	14	0	240	223	186	236	223	188
KG8002B	96,35	-0,18	-0,64	0	0	2	0	255	243	213	255	243	214
KG8428B	79,55	-0,56	-0,87	22	15	18	1	208	196	172	203	195	172
KG8430B	53,82	-3,02	-2,65	51	35	37	16	130	129	114	130	129	115
KG8445B	40,16	-2,74	-1,39	61	45	47	35	96	95	83	96	96	85
KG8G02B	22,54	-2,07	2,77	69	56	66	69	56	54	41	58	57	46
KG8889B	3,47	0,17	-0,18	91	79	62	98	17	14	12	24	23	21

Color Characterization Table for SMARTAC KG800

SMARTAC	Color Space												
	Lab D50 2°			CoatedFOGRA39				sRGB			Adobe RGB (1998)		
Reference	L	a	b	C	M	Y	K	R	G	B	R	G	B
KG8890B	3,04	0,2	-0,1	91	79	62	98	15	13	11	21	20	17
KG8963B	36,19	-4,92	-22,65	85	58	30	15	68	87	106	77	89	105
KG8964B	19,59	0,04	-33,85	100	83	38	31	22	48	86	39	53	85
KG8961B	17,98	1,92	-24,08	100	87	42	41	35	43	69	43	48	70
KG8965B	14,04	-2,06	-17,84	100	84	47	63	25	37	52	35	42	55
KG8990B	60,94	-0,79	-1,25	41	31	32	10	153	145	128	151	145	129
KG8GFUB	60,68	-0,88	-1,5	42	31	32	10	155	147	130	151	146	130
KG8879B	49,8	-1,04	0,2	51	39	41	22	123	117	100	121	117	102
KG8948B	45,05	0,32	5,37	50	42	51	31	116	105	83	114	106	86
KG8875B	36,56	0,3	3,83	56	48	54	44	95	86	69	93	87	72
KG8878B	35,6	-1,6	-0,15	61	48	50	42	89	86	74	87	85	75
KG8870B	52,18	7,04	21,57	32	42	63	24	152	120	74	142	118	77
KG8871B	51,1	2,58	27,42	37	39	74	25	143	119	61	133	116	65
KG8877B	62,52	-0,85	-1,45	40	30	31	9	159	151	133	156	150	134

Exchange Table between SMARTAC KG800 and PANTONE/RAL color charts

The following colorimetric correlation, between the references SMARTAC KG800 and PANTONE/RAL, as well as the color shift expressed in ΔE 2000, are given only as an informative guide to facilitate the search and have no contractual value (colors may be altered by the reproduction quality of documents or screens).

It's the user's responsibility to visually compare the physical color charts in order to assess the differences in color and their acceptability.

Hexis takes no responsibility for the direct or indirect consequences when using these tables.

Delta E is measured on a scale from 0 to 100, where 0 is less color difference, and 100 indicates complete distortion.

How to interpret the data of a DeltaE2000 ?

(Interpretation remains individual)

0 to 1	A normally invisible difference
Above 1 up to 2	Very small difference, only evident for a trained eye
Above 2 up to 3.5	Average difference, also evident for all
Above 3.5 up to 6	An obvious difference
Greater than 6	A very obvious difference

SMARTAC	PANTONE	ΔE 2000	RAL K7	ΔE 2000
KG8002M	Pantone Cool Gray 1 C	5,8	Ral 9003	1,4
KG8890M	Pantone Neutral Black C	0,6	Ral 9005	0,8
KG8108B	Pantone 604 C	3,1	Ral 1028	2,7
KG8109B	Pantone 109 C	0,6	Ral 1021	4,2
KG8115B	Pantone 7548 C	2,7	Ral 1028	2,4
KG8123B	Pantone 7408 C	4,3	Ral 1021	3,3
KG8136B	Pantone 7549 C	1,1	Ral 1003	2,0
KG8137B	Pantone 137 C	2,8	Ral 1037	1,5
KG8138B	Pantone 2013 C	3,2	Ral 1032	0,8
KG8164B	Pantone Bright Orange	2,0	Ral 2008	2,8
KG8165B	Pantone 158 C	5,0	Ral 2004	3,6
KG8166B	Pantone 166 C	1,3	Ral 2009	2,2
KG8795B	Pantone 173 C	4,4	Ral 2002	6,0
KG8485B	Pantone 7599 C	4,7	Ral 2002	1,8
KG8187B	Pantone 2035 C	3,4	Ral 3020	1,7

Exchange Table between SMARTAC KG8000 and PANTONE/RAL color charts

SMARTAC	PANTONE	ΔE 2000	RAL K7	ΔE 2000
KG8186B	Pantone 7620 C	4,0	Ral 3000	2,0
KG8503B	Pantone 7622 C	7,0	Ral 3032	1,8
KG8505B	Pantone 188 C	4,0	Ral 3005	1,8
KG8220B	Pantone 7635 C	2,8	Ral 4010	3,4
KG8VMOB	Pantone 7680 C	1,7	Ral 4005	17,9
KG8PKIB	Pantone 7657 C	3,5	Ral 4006	6,6
KG8297B	Pantone 2190 C	5,8	Ral 5007	5,8
KG8299B	Pantone 2192 C	2,2	Ral 5012	2,4
KG8293B	Pantone 300 C	3,9	Ral 5005	4,0
KG8300B	Pantone 2945 C	3,6	Ral 5002	3,1
KG8RFXB	Pantone 2146 C	1,7	Ral 5002	3,8
KG8280B	Pantone 288 C	2,2	Ral 5022	3,1
KG8281B	Pantone 2758 C	1,6	Ral 5013	2,7
KG8532B	Pantone 289 C	3,0	Ral 5026	0,5
KG8VJPB	Pantone 382 C	3,0	Ral 1016	8,6
KG8VPRB	Pantone 2286 C	2,1	Ral 6018	15,2
KG8375B	Pantone 7488 C	3,0	Ral 6017	2,3
KG8369B	Pantone 2272 C	4,4	Ral 6018	6,1
KG8370B	Pantone 370 C	2,3	Ral 6017	7,6
KG8348B	Pantone 3415 C	3,1	Ral 6024	2,6
KG8336B	Pantone 3298 C	10,1	Ral 6020	2,3
KG8302B	Pantone 567 C	4,2	Ral 6007	1,1
KG8VMDB	Pantone 5747 C	7,1	Ral 6014	3,7
KG8476B	Pantone 476 C	4,9	Ral 8017	3,5
KG8899B	Pantone Cool Gray 1 C	5,1	Ral 9003	3,4
KG8002B	Pantone 649 C	6,6	Ral 9016	4,9
KG8428B	Pantone 428 C	1,9	Ral 7047	3,6
KG8430B	Pantone 423 C	5,2	Ral 7046	1,5
KG8445B	Pantone 445 C	3,6	Ral 7012	1,2
KG8G02B	Pantone 447 C	1,8	Ral 9004	1,0
KG8889B	Pantone Neutral Black C	6,0	Ral 9017	1,8
KG8890B	Pantone Neutral Black C	6,3	Ral 9004	1,9

Exchange Table between SMARTAC KG8000 and PANTONE/RAL color charts

SMARTAC	PANTONE	ΔE 2000	RAL K7	ΔE 2000
KG8963B	Pantone 2160 C	5,9	Ral 5023	3,2
KG8964B	Pantone 648 C	18,2	Ral 5013	2,5
KG8961B	Pantone 2767 C	1,4	Ral 5003	2,2
KG8965B	Pantone 289 C	2,1	Ral 5011	2,1
KG8990B	Pantone 877 C	2,3	Ral 7045	1,2
KG8GFUB	Pantone 877 C	2,1	Ral 7042	2,0
KG8879B	Pantone 424 C	2,0	Ral 7037	2,1
KG8948B	Pantone 2333 C	3,8	Ral 7039	0,6
KG8875B	Pantone 2336 C	4,4	Ral 9011	3,4
KG8878B	Pantone 445 C	4,1	Ral 7043	1,7
KG8870B	Pantone 874 C	3,1	Ral 8007	2,2
KG8871B	Pantone 871 C	2,2	Ral 8000	2,2
KG8877B	Pantone 877 C	3,6	Ral 7004	1,7