

Sonnenschein A400.

■ Sonnenschein dryfit

■ Sonnenschein 400

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■ 5,5 180  
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 ■ 20"

( 80%).

■ Sonnenschein 400

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■ DIN43539 5.

Sonnenschein 400





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		5	10	15	20	30	45	1	2	3	4	5	8	10	
A406/165	NGA4060165HS0CA	196,0	163,0	143,0	131,0	115,0	98,0	82,0	53,0	41,0	32,4	27,0	18,1	15,9	
A412/5,5	NGA41205D5HS0RA	9,9	8,3	7,0	6,0	4,9	3,8	3,0	2,0	1,4	1,1	1,0	0,6	0,5	
A412/8,5	NGA41208D5HS0RA	15,0	12,0	10,0	8,0	6,9	5,3	4,3	2,8	2,1	1,7	1,4	1,0	0,8	
A412/12	NGA4120012HS0RA	18,0	15,0	12,0	11,0	9,0	7,0	5,5	3,3	2,5	2,0	1,7	1,2	1,1	
A412/20	NGA4120020HS0BA	33,0	25,0	22,0	20,0	17,0	14,0	11,0	6,0	4,7	3,8	3,2	2,1	1,9	
A412/32	NGA4120032HS0BA	53,0	43,0	36,0	32,0	28,0	21,0	17,0	11,0	8,1	6,5	5,4	3,7	3,0	
A412/50	NGA4120050HS0CA	81,0	68,0	57,0	51,0	42,0	34,0	28,0	18,0	12,8	10,2	8,5	5,7	4,8	
A412/65	NGA4120065HS0FA	102,0	77,0	63,0	56,0	48,0	42,0	36,0	22,0	15,9	12,9	10,9	7,3	6,2	
A412/85	NGA4120085HS0FB	121,0	103,0	89,0	80,0	71,0	55,0	45,0	29,0	21,3	16,9	14,1	9,6	8,2	
A412/90	NGA4120090HS0CA	136,0	117,0	100,0	89,0	71,0	55,0	46,0	30,0	22,8	17,6	14,8	10,4	8,9	
A412/100	NGA4120100HS0CA	144,0	124,0	105,0	93,0	72,0	56,0	46,0	31,0	23,5	17,9	15,2	10,8	9,6	
A412/120	NGA4120120HS0CA	175,0	138,0	120,0	108,0	95,0	78,0	61,0	37,0	27,5	22,3	18,9	13,0	11,3	
A412/180	NGA4120180HS0CA	240,0	193,0	170,0	156,0	130,0	103,0	84,0	59,0	42,6	34,1	28,6	19,2	16,5	

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		5	10	15	20	30	45	1	2	3	4	5	8	10	
A406/165	NGA4060165HS0CA	243,0	211,0	180,0	158,0	132,0	109,0	88,0	56,0	43,1	33,9	28,2	18,8	16,5	
A412/5,5	NGA41205D5HS0RA	11,3	9,3	7,8	6,5	5,1	4,0	3,2	2,1	1,5	1,2	1,0	0,7	0,5	
A412/8,5	NGA41208D5HS0RA	17,0	14,0	11,0	9,0	7,4	5,7	4,5	2,9	2,1	1,7	1,4	1,0	0,8	
A412/12	NGA4120012HS0RA	21,0	18,0	14,0	12,0	10,0	8,0	6,2	3,7	2,8	2,2	1,9	1,3	1,2	
A412/20	NGA4120020HS0BA	36,0	27,0	23,0	21,0	18,0	15,0	12,0	7,0	4,9	3,9	3,3	2,2	2,0	
A412/32	NGA4120032HS0BA	63,0	51,0	42,0	36,0	30,0	23,0	19,0	12,0	8,6	6,8	5,7	3,9	3,2	
A412/50	NGA4120050HS0CA	98,0	81,0	66,0	57,0	46,0	37,0	29,0	19,0	13,3	10,5	8,8	5,9	5,0	
A412/65	NGA4120065HS0FA	120,0	95,0	76,0	64,0	52,0	45,0	39,0	23,0	16,7	13,4	11,3	7,6	6,5	
A412/85	NGA4120085HS0FB	147,0	125,0	105,0	91,0	75,0	60,0	49,0	31,0	22,3	17,6	14,7	10,0	8,5	
A412/90	NGA4120090HS0CA	166,0	142,0	118,0	100,0	79,0	61,0	50,0	32,0	23,5	18,3	15,5	10,8	9,0	
A412/100	NGA4120100HS0CA	176,0	150,0	125,0	104,0	81,0	62,0	50,0	32,0	24,1	18,7	15,9	11,3	10,0	
A412/120	NGA4120120HS0CA	202,0	155,0	133,0	119,0	102,0	85,0	67,0	39,0	28,7	23,0	19,4	13,2	12,0	
A412/180	NGA4120180HS0CA	291,0	235,0	195,0	171,0	144,0	112,0	90,0	62,0	44,7	35,5	29,7	19,9	18,0	

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		5	10	15	20	30	45	1	2	3	4	5	8	10	
A406/165	NGA4060165HS0CA	290,0	246,0	210,0	180,0	143,0	115,0	92,0	58,0	43,7	34,4	28,6	19,1	16,6	
A412/5,5	NGA41205D5HS0RA	13,0	9,8	8,2	6,9	5,3	4,2	3,3	2,2	1,5	1,2	1,0	0,7	0,5	
A412/8,5	NGA41208D5HS0RA	19,0	15,0	12,0	10,0	7,5	5,8	4,6	3,0	2,2	1,7	1,5	1,0	0,8	
A412/12	NGA4120012HS0RA	24,0	20,0	16,0	13,0	10,0	8,0	6,6	3,9	2,9	2,3	1,9	1,4	1,2	
A412/20	NGA4120020HS0BA	45,0	34,0	27,0	23,0	18,0	15,0	12,0	7,0	5,0	3,9	3,3	2,2	2,0	
A412/32	NGA4120032HS0BA	73,0	57,0	46,0	39,0	31,0	24,0	19,0	12,0	8,8	6,9	5,8	3,9	3,2	
A412/50	NGA4120050HS0CA	109,0	90,0	73,0	61,0	48,0	38,0	30,0	19,0	13,5	10,7	8,9	6,0	5,0	
A412/65	NGA4120065HS0FA	134,0	107,0	84,0	70,0	56,0	48,0	41,0	24,0	17,1	13,6	11,4	7,7	6,5	
A412/85	NGA4120085HS0FB	170,0	140,0	118,0	100,0	79,0	63,0	51,0	32,0	22,7	17,9	14,9	10,0	8,5	
A412/90	NGA4120090HS0CA	186,0	154,0	128,0	108,0	84,0	64,0	52,0	33,0	24,1	18,8	15,8	11,0	9,0	
A412/100	NGA4120100HS0CA	194,0	160,0	134,0	112,0	86,0	65,0	52,0	33,0	24,8	19,2	16,3	11,4	10,0	
A412/120	NGA4120120HS0CA	233,0	174,0	145,0	127,0	106,0	88,0	69,0	40,0	29,1	23,3	19,5	13,2	12,0	
A412/180	NGA4120180HS0CA	329,0	266,0	216,0	185,0	152,0	117,0	94,0	63,0	45,6	36,1	30,2	20,2	18,0	

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		5	10	15	20	30	45	1	2	3	4	5
A406/165	NGA4060165HSOCA	332,0	273,0	233,0	198,0	152,0	119,0	94,0	58,0	44,0	34,6	28,7
A412/5,5	NGA41205D5HSORA	14,3	10,3	8,6	7,2	5,5	4,3	3,4	2,2	1,6	1,2	1,0
A412/8,5	NGA41208D5HSORA	21,0	15,0	12,0	10,0	7,6	5,9	4,7	3,0	2,2	1,7	1,5
A412/12	NGA4120012HSORA	28,0	21,0	16,0	13,0	10,0	8,0	6,8	4,0	2,9	2,3	2,0
A412/20	NGA4120020HSOBA	51,0	38,0	29,0	24,0	19,0	15,0	12,0	7,0	5,0	4,0	3,3
A412/32	NGA4120032HSOBA	84,0	61,0	50,0	42,0	32,0	25,0	20,0	12,0	8,9	7,0	5,8
A412/50	NGA4120050HSOCA	122,0	94,0	77,0	64,0	49,0	39,0	31,0	19,0	13,6	10,7	8,9
A412/65	NGA4120065HSOFA	148,0	111,0	89,0	73,0	57,0	49,0	41,0	24,0	17,3	13,7	11,5
A412/85	NGA4120085HSOFB	192,0	151,0	127,0	106,0	82,0	64,0	52,0	32,0	22,8	17,9	14,9
A412/90	NGA4120090HSOCA	206,0	164,0	137,0	113,0	87,0	66,0	53,0	33,0	24,3	18,9	16,3
A412/100	NGA4120100HSOCA	213,0	171,0	141,0	117,0	89,0	67,0	53,0	34,0	25,1	19,4	17,0
A412/120	NGA4120120HSOCA	280,0	200,0	160,0	136,0	109,0	90,0	70,0	40,0	29,3	23,4	19,6
A412/180	NGA4120180HSOCA	366,0	287,0	234,0	199,0	156,0	120,0	95,0	64,0	46,0	36,4	30,4

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		5	10	15	20	30	45	1	2	3	4	
A406/165	NGA4060165HSOCA	389,0	301,0	248,0	210,0	157,0	121,0	95,0	59,0	43,9	34,5	
A412/5,5	NGA41205D5HSORA	15,5	10,7	8,7	7,3	5,6	4,3	3,4	2,2	1,6	1,2	
A412/8,5	NGA41208D5HSORA	23,0	16,0	12,0	10,0	7,7	6,0	4,7	3,0	2,2	1,7	
A412/12	NGA4120012HSORA	30,0	22,0	17,0	14,0	11,0	9,0	6,8	4,0	2,9	2,3	
A412/20	NGA4120020HSOBA	56,0	40,0	31,0	25,0	19,0	15,0	12,0	7,0	5,0	4,0	
A412/32	NGA4120032HSOBA	94,0	65,0	52,0	43,0	33,0	25,0	20,0	12,0	8,9	7,0	
A412/50	NGA4120050HSOCA	133,0	98,0	79,0	66,0	50,0	39,0	31,0	19,0	13,6	10,7	
A412/65	NGA4120065HSOFA	161,0	114,0	91,0	75,0	57,0	49,0	42,0	24,0	17,3	13,7	
A412/85	NGA4120085HSOFB	210,0	159,0	134,0	110,0	84,0	65,0	52,0	32,0	22,8	17,9	
A412/90	NGA4120090HSOCA	225,0	172,0	142,0	116,0	88,0	67,0	53,0	33,0	24,5	19,0	
A412/100	NGA4120100HSOCA	232,0	178,0	146,0	120,0	90,0	68,0	54,0	34,0	25,3	19,5	
A412/120	NGA4120120HSOCA	311,0	217,0	169,0	142,0	111,0	91,0	71,0	41,0	29,4	23,4	
A412/180	NGA4120180HSOCA	399,0	305,0	250,0	212,0	159,0	122,0	96,0	64,0	46,0	36,4	

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		5	10	15	20	30	45	1	2	3	4	
A406/165	NGA4060165HSOCA	422,0	318,0	256,0	215,0	160,0	122,0	96,0	59,0	44,0	34,6	
A412/5,5	NGA41205D5HSORA	16,1	11,0	8,9	7,5	5,6	4,4	3,4	2,2	1,6	1,2	
A412/8,5	NGA41208D5HSORA	24,0	16,0	13,0	10,0	7,8	6,0	4,8	3,0	2,2	1,7	
A412/12	NGA4120012HSORA	33,0	23,0	17,0	14,0	11,0	9,0	6,8	4,0	2,9	2,3	
A412/20	NGA4120020HSOBA	60,0	42,0	31,0	26,0	19,0	15,0	12,0	7,0	5,0	4,0	
A412/32	NGA4120032HSOBA	101,0	68,0	54,0	44,0	33,0	25,0	20,0	12,0	8,9	7,0	
A412/50	NGA4120050HSOCA	144,0	101,0	81,0	67,0	51,0	40,0	31,0	19,0	13,6	10,7	
A412/65	NGA4120065HSOFA	170,0	116,0	92,0	76,0	58,0	49,0	42,0	24,0	17,3	13,8	
A412/85	NGA4120085HSOFB	229,0	166,0	137,0	113,0	85,0	66,0	52,0	32,0	22,8	18,0	
A412/90	NGA4120090HSOCA	245,0	177,0	145,0	118,0	89,0	68,0	54,0	34,0	24,5	19,0	
A412/100	NGA4120100HSOCA	253,0	183,0	149,0	121,0	91,0	69,0	54,0	34,0	25,4	19,6	
A412/120	NGA4120120HSOCA	333,0	228,0	175,0	146,0	112,0	91,0	71,0	41,0	29,5	23,4	
A412/180	NGA4120180HSOCA	439,0	322,0	258,0	217,0	162,0	123,0	96,0	64,0	46,1	36,4	

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		2	3	5	7	10	15	20	30	45	1	2	3
A406/165	NGA4060165HS0CA	1310	1263	1171	1096	1005	875	798	690	543	459	293	222
A412/5,5	NGA41205D5HS0RA	153	141	120	106	95	80	69	58	44	36	22	16
A412/8,5	NGA41208D5HS0RA	216	201	176	159	141	117	102	84	65	54	31	22
A412/12	NGA4120012HS0RA	252	239	219	203	185	157	141	115	89	75	38	29
A412/20	NGA4120020HS0BA	438	414	378	348	302	257	229	195	151	126	71	51
A412/32	NGA4120032HS0BA	680	634	580	532	483	414	366	304	234	194	128	92
A412/50	NGA4120050HS0CA	1149	1075	1002	949	876	785	699	590	458	376	193	139
A412/65	NGA4120065HS0FA	1440	1342	1221	1137	1025	867	759	635	482	396	239	175
A412/85	NGA4120085HS0FB	1311	1275	1230	1158	1071	953	865	761	592	495	324	233
A412/90	NGA4120090HS0CA	1686	1620	1493	1374	1243	1080	987	828	647	543	332	246
A412/100	NGA4120100HS0CA	1873	1792	1625	1482	1329	1144	1048	861	674	567	335	252
A412/120	NGA4120120HS0CA	2418	2254	1964	1773	1575	1385	1272	1109	914	745	410	300
A412/180	NGA4120180HS0CA	3475	3324	3112	2959	2679	2284	2011	1563	1215	1016	632	467

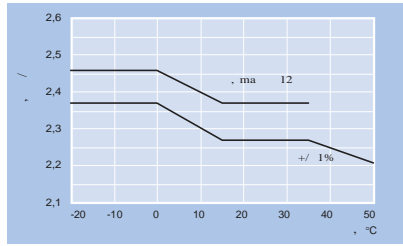
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A406/165	NGA4060165HS0CA	1622	1548	1414	1315	1184	1020	901	769	596	494	318	241
A412/5,5	NGA41205D5HS0RA	174	161	140	122	106	88	74	62	47	38	24	17
A412/8,5	NGA41208D5HS0RA	246	232	204	180	156	130	111	90	69	56	33	24
A412/12	NGA4120012HS0RA	314	292	258	235	208	177	153	125	96	79	42	31
A412/20	NGA4120020HS0BA	566	521	467	421	359	292	252	208	160	131	77	55
A412/32	NGA4120032HS0BA	826	764	677	622	562	468	403	332	252	207	135	98
A412/50	NGA4120050HS0CA	1385	1269	1135	1041	969	862	770	626	493	400	210	151
A412/65	NGA4120065HS0FA	1702	1601	1430	1296	1158	977	834	690	516	420	260	190
A412/85	NGA4120085HS0FB	1667	1573	1463	1375	1276	1082	960	804	637	527	352	253
A412/90	NGA4120090HS0CA	1940	1848	1706	1554	1395	1185	1062	891	692	574	360	267
A412/100	NGA4120100HS0CA	2076	1986	1828	1644	1454	1236	1112	935	719	597	364	274
A412/120	NGA4120120HS0CA	2958	2668	2286	2027	1769	1496	1346	1146	971	802	446	326
A412/180	NGA4120180HS0CA	4109	3898	3559	3336	3012	2595	2241	1756	1339	1105	687	507

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		2	3	5	7	10	15	20	30	45	1	2	3
A406/165	NGA4060165HS0CA	1850	1781	1629	1493	1356	1146	981	797	623	512	337	247
A412/5,5	NGA41205D5HS0RA	196	178	155	134	114	93	78	63	49	40	24	17
A412/8,5	NGA41208D5HS0RA	278	259	226	198	171	138	116	94	71	58	34	25
A412/12	NGA4120012HS0RA	355	331	296	262	233	193	164	131	99	74	45	33
A412/20	NGA4120020HS0BA	658	596	518	467	398	315	267	213	164	135	77	56
A412/32	NGA4120032HS0BA	959	881	776	691	613	509	431	350	263	215	139	99
A412/50	NGA4120050HS0CA	1591	1480	1293	1148	1032	923	819	653	511	413	215	152
A412/65	NGA4120065HS0FA	1968	1830	1620	1447	1268	1054	886	714	534	432	270	193
A412/85	NGA4120085HS0FB	1908	1826	1674	1532	1421	1200	1034	838	664	545	360	256
A412/90	NGA4120090HS0CA	2301	2185	1984	1796	1564	1299	1128	927	716	590	375	272
A412/100	NGA4120100HS0CA	2498	2364	2139	1928	1636	1348	1176	972	742	613	383	280
A412/120	NGA4120120HS0CA	3453	3084	2593	2262	1940	1610	1387	1176	997	829	460	329
A412/180	NGA4120180HS0CA	4556	4307	3950	3659	3316	2821	2399	1876	1414	1157	695	515

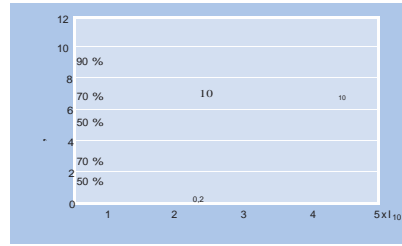
		1,70 / - ,											
		2	3	5	7	10	15	20	30	45	1	2	3
A406/165	NGA4060165HS0CA	1993	1913	1778	1636	1455	1230	1036	814	637	522	339	247
A412/5,5	NGA41205D5HS0RA	219	194	163	143	119	97	81	64	50	40	24	18
A412/8,5	NGA41208D5HS0RA	306	283	246	212	178	143	120	95	72	58	34	25
A412/12	NGA4120012HS0RA	394	366	323	286	247	203	170	135	101	82	45	33
A412/20	NGA4120020HS0BA	741	657	555	494	424	331	277	216	166	136	78	56
A412/32	NGA4120032HS0BA	1064	990	861	752	639	537	450	358	269	219	139	100
A412/50	NGA4120050HS0CA	1734	1584	1406	1234	1079	956	849	669	520	419	216	153
A412/65	NGA4120065HS0FA	2191	2009	1762	1570	1323	1100	916	723	541	437	270	194
A412/85	NGA4120085HS0FB	2076	1987	1837	1671	1510	1276	1084	862	679	554	362	256
A412/90	NGA4120090HS0CA	2553	2398	2177	1950	1670	1368	1172	945	727	598	375	273
A412/100	NGA4120100HS0CA	2792	2604	2347	2090	1749	1414	1216	987	752	620	385	282
A412/120	NGA4120120HS0CA	3821	3501	2938	2497	2090	1699	1441	1195	1008	840	454	330
A412/180	NGA4120180HS0CA	4990	4742	4298	3929	3477	2976	2503	1945	1455	1185	697	517

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		2	3	5	7	10	15	20	30	45	1	2	3
A406/165	NGA4060165HS0CA	2162	2055	1879	1734	1527	1278	1067	828	643	525	341	248
A412/5,5	NGA41205D5HS0RA	235	208	169	149	123	99	82	65	51	41	24	18
A412/8,5	NGA41208D5HS0RA	331	306	258	222	183	146	122	96	72	59	34	25
A412/12	NGA4120012HS0RA	436	399	348	304	255	209	174	136	102	83	45	33
A412/20	NGA4120020HS0BA	799	701	583	511	439	339	282	218	167	136	79	56
A412/32	NGA4120032HS0BA	1161	1069	916	801	667	554	462	362	273	221	139	100
A412/50	NGA4120050HS0CA	1931	1747	1480	1309	1120	991	866	677	524	422	217	153
A412/65	NGA4120065HS0FA	2419	2214	1874	1658	1371	1125	932	727	545	439	271	195
A412/85	NGA4120085HS0FB	2255	2139	1963	1770	1569	1326	1116	876	686	559	364	257
A412/90	NGA4120090HS0CA	2824	2598	2305	2067	1744	1415	1200	954	732	601	376	274
A412/100	NGA4120100HS0CA	3108	2827	2475	2216	1831	1459	1242	993	756	623	387	283
A412/120	NGA4120120HS0CA	4111	3798	3170	2682	2194	1757	1474	1205	1012	845	457	331
A412/180	NGA4120180HS0CA	5419	5099	4628	4163	3589	3074	2565	1978	1475	1198	700	518

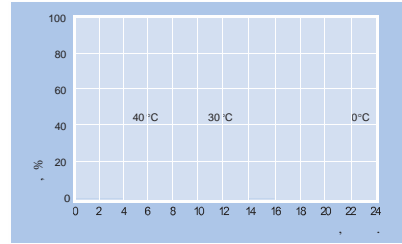
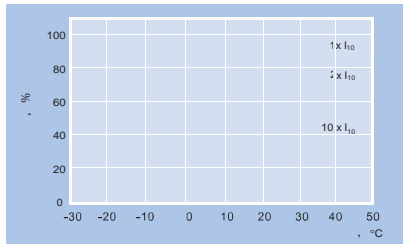
		1,60 / - ,											
		2	3	5	7	10	15	20	30	45	1	2	3
A406/165	NGA4060165HS0CA	2351	2202	1987	1828	1588	1308	1086	836	646	527	342	249
A412/5,5	NGA41205D5HS0RA	248	220	175	153	125	100	83	65	51	41	24	18
A412/8,5	NGA41208D5HS0RA	354	325	267	228	187	148	123	97	72	59	34	25
A412/12	NGA4120012HS0RA	474	424	358	317	263	213	176	137	102	83	45	33
A412/20	NGA4120020HS0BA	874	760	610	521	447	343	285	219	168	136	80	56
A412/32	NGA4120032HS0BA	1245	1143	952	835	687	565	469	366	276	223	140	101
A412/50	NGA4120050HS0CA	2216	1989	1583	1363	1151	1001	875	682	526	423	218	154
A412/65	NGA4120065HS0FA	2603	2402	1962	1713	1400	1137	940	729	547	440	272	196
A412/85	NGA4120085HS0FB	2431	2280	2058	1868	1609	1357	1136	885	690	562	365	257
A412/90	NGA4120090HS0CA	3046	2755	2398	2157	1793	1444	1217	961	736	604	377	275
A412/100	NGA4120100HS0CA	3354	2992	2567	2301	1885	1488	1258	999	759	625	388	284
A412/120	NGA4120120HS0CA	4297	3942	3330	2779	2260	1791	1494	1210	1014	847	459	332
A412/180	NGA4120180HS0CA	5825	5395	4832	4361	3701	3130	2599	1994	1484	1204	702	519



2,27 / 20 °C.



50%,70% 90% 20°C  
2,27 / .



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5,5 – 180 A

DIN 43 539 T5