

Overview

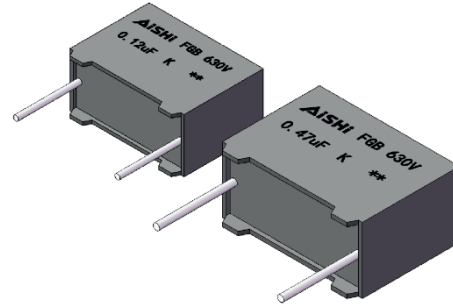
The FGB series is constructed of metallized polypropylene film encapsulated in plastic cases, sealed with epoxy resin.

Applications

Widely used in high current and high frequency applications, DC/AC and pulse circuits and ballast & compacts lamps

Features

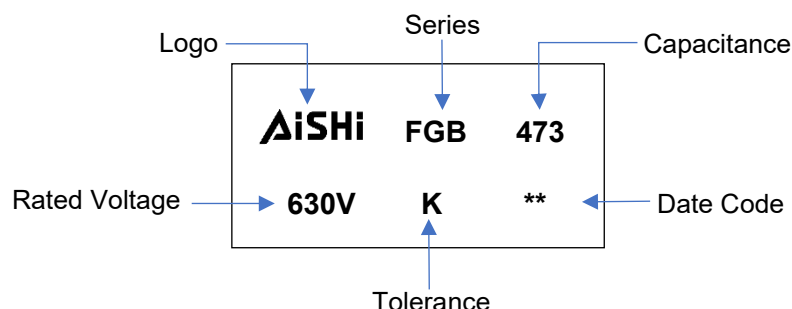
- High ripple current
- Self-healing property
- Low losses
- High contact reliability
- Suitable for high frequency applications



General Technical Data

Dielectric	Metallized Polypropylene Film
Voltage Range	100Vdc ~ 630Vdc
Capacitance Range	0.01uF ~ 82uF
Capacitance Tolerance	±5% or ±10% at +25°C
Operating Temperature Range	-40°C ~ +105°C (85°C ~105°C, decreasing factor 1.25% per °C for Rated Voltage)
Climatic Category	40/105/56 IEC 60068-1
Dissipation Factor	0.0010 (25°C, 1KHz)
Insulation Resistance	R between leads, for C ≤ 0.33 μF at 100 V; 1 min > 30 000 MΩ RC between leads, for C > 0.33 μF at 100 V; 1 min > 10 000 MΩ*μF

Marking



Manufacturing Date Code

Year	Code	Month	Code
2018	A	Jan	1
2019	B	Feb	2
2020	C	Mar	3
2021	D	Apr	4
2022	E	May	5
2023	F	Jun	6

Year	Code	Month	Code
2024	G	Jul	7
2025	H	Aug	8
2026	J	Sep	9
2027	K	Oct	A
2028	L	Nov	N
2029	M	Dec	D

Part Number System

F	GB	2G	K	105	F26	2FL	5
Capacitor Type	Series	Voltage (VDC)	Tolerance	Capacitance (pF)	Size Code	Terminal Code	Lead Length Code
F = Film	DC Film, Metallized PP Film	100=1K 250=2E 400=2G 630=2L	J = $\pm 5\%$ K = $\pm 10\%$	First two digits = significant figures. Third digit = Number of zeros.	Refer to Size Code Table	Refer to Terminal Code Table	Refer to Lead Length Code Table

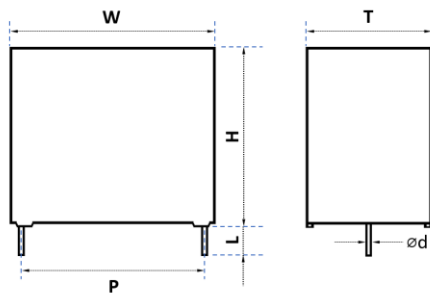
Terminal Code

Digit One (Lead/Terminal Type)		Digit Two (Lead Space)		Digit Three (Lead Ipsilateral)	
2 leads for long	L	10.0mm	C	N/A	L
2 leads for straight cut	2	12.5mm	D		
2 leads for forming cut	E	15.0mm	E		
2 leads for taping forming	T	22.5mm	F		
2 leads for taping straight	V	27.5mm	G		
		37.5mm	K		

Lead Length Code

Lead Length	
20mm min	L
35mm min	B
3.2mm	1
3.5mm	2
3.0mm	3
4.0mm	4
5.0mm	5
7.0mm	7
Taping	T
N/A	N

Dimension (mm)



Size Code Table (mm)

Size Code	Dimension						Pitch		Lead Wire	
	W	Tolerance	H	Tolerance	T	Tolerance	P	Tolerance	Ød	Tolerance
C13	13.0	0.5	11.0	0.5	5.0	0.5	10.0	0.5	0.6	0.05
C16	13.0	0.5	12.0	0.5	6.0	0.5	10.0	0.5	0.6	0.05
E14	18.0	0.5	11.0	0.5	5.0	0.5	15.0	0.5	0.6	0.05
E17	18.0	0.5	12.0	0.5	6.0	0.5	15.0	0.5	0.6	0.05
E29	18.0	0.5	13.5	0.5	7.5	0.5	15.0	0.5	0.8	0.05
E34	18.0	0.5	14.5	0.5	8.5	0.5	15.0	0.5	0.8	0.05
E43	18.0	0.5	16.0	0.5	10.0	0.5	15.0	0.5	0.8	0.05
E47	18.0	0.5	19.0	0.5	11.0	0.5	15.0	0.5	0.8	0.05
F20	26.0	0.5	17.0	0.5	8.5	0.5	22.5	0.5	0.8	0.05
F24	26.0	0.5	19.0	0.5	10.0	0.5	22.5	0.5	0.8	0.05
F26	26.0	0.5	20.0	0.5	11.0	0.5	22.5	0.5	0.8	0.05
F29	26.0	0.5	23.0	0.5	13.0	0.5	22.5	0.5	0.8	0.05
G18	32.0	0.8	20.0	0.8	11.0	0.8	27.5	0.5	0.8	0.05
G21	32.0	0.8	22.0	0.8	13.0	0.8	27.5	0.5	0.8	0.05
G22	32.0	0.8	24.5	0.8	13.0	0.8	27.5	0.5	0.8	0.05
G26	32.0	0.8	28.0	0.8	14.0	0.8	27.5	0.5	0.8	0.05
G34	32.0	0.8	33.0	0.8	18.0	0.8	27.5	0.5	0.8	0.05
G37	32.0	0.8	31.0	0.8	21.0	0.8	27.5	0.5	0.8	0.05
G40	32.0	0.8	37.0	0.8	22.0	0.8	27.5	0.5	0.8	0.05
K21	42.0	1.0	32.0	1.0	19.0	1.0	37.5	0.5	1.0	0.05
K24	42.0	1.0	40.0	1.0	20.0	1.0	37.5	0.5	1.0	0.05
K32	42.0	1.0	44.0	1.0	24.0	1.0	37.5	0.5	1.0	0.05
K42	42.0	1.0	45.0	1.0	30.0	1.0	37.5	0.5	1.0	0.05

Metallized Polypropylene Film Capacitors

FGB Series - 100 ~ 630VDC (DC & Pulse Applications)

Rating and Part Number

Vdc	Vac	Cap Value μF	Dimensions				Peak Current A	dv/dt V/us	Lead Wire mm	Part Number
			W mm	H mm	T mm	P mm				
100	50	0.1	13.0	11.0	5.0	10.0	18.0	180	0.6	FGB1KK104C132CL5
100	50	0.12	13.0	11.0	5.0	10.0	21.6	180	0.6	FGB1KK124C132CL5
100	50	0.15	13.0	11.0	5.0	10.0	27.0	180	0.6	FGB1KK154C132CL5
100	50	0.18	13.0	12.0	6.0	10.0	32.4	180	0.6	FGB1KK184C162CL5
100	50	0.22	13.0	12.0	6.0	10.0	39.6	180	0.6	FGB1KK224C162CL5
100	50	0.27	18.0	12.0	6.0	15.0	27.0	100	0.6	FGB1KK274E172EL5
100	50	0.33	18.0	12.0	6.0	15.0	33.0	100	0.6	FGB1KK334E172EL5
100	50	0.39	18.0	13.5	7.5	15.0	39.0	100	0.8	FGB1KK394E292EL5
100	50	0.47	18.0	13.5	7.5	15.0	47.0	100	0.8	FGB1KK474E292EL5
100	50	0.56	18.0	14.5	8.5	15.0	56.0	100	0.8	FGB1KK564E342EL5
100	50	0.68	18.0	14.5	8.5	15.0	68.0	100	0.8	FGB1KK684E342EL5
100	50	0.82	18.0	16.0	10.0	15.0	82.0	100	0.8	FGB1KK824E432EL5
100	50	1.0	18.0	16.0	10.0	15.0	100.0	100	0.8	FGB1KK105E432EL5
100	50	1.2	26.0	17.0	8.5	22.5	72.0	60	0.8	FGB1KK125F202FL5
100	50	1.5	26.0	19.0	10.0	22.5	90.0	60	0.8	FGB1KK155F242FL5
100	50	1.8	26.0	19.0	10.0	22.5	108.0	60	0.8	FGB1KK185F242FL5
100	50	2.2	32.0	20.0	11.0	27.5	110.0	50	0.8	FGB1KK225G182GL5
100	50	2.7	32.0	20.0	11.0	27.5	135.0	50	0.8	FGB1KK275G182GL5
100	50	3.3	32.0	22.0	13.0	27.5	165.0	50	0.8	FGB1KK335G212GL5
100	50	3.9	32.0	22.0	13.0	27.5	195.0	50	0.8	FGB1KK395G212GL5
100	50	4.7	32.0	24.5	13.0	27.5	235.0	50	0.8	FGB1KK475G222GL5
100	50	5.6	32.0	28.0	14.0	27.5	280.0	50	0.8	FGB1KK565G262GL5
100	50	68	32.0	33.0	18.0	27.5	3400.0	50	0.8	FGB1KK685G342GL5
100	50	82	32.0	33.0	18.0	27.5	4100.0	50	0.8	FGB1KK825G342GL5
100	50	10	32.0	31.0	21.0	27.5	500.0	50	0.8	FGB1KK106G372GL5
100	50	10	32.0	37.0	22.0	27.5	500.0	50	0.8	FGB1KK106G402GL5
100	50	12	32.0	37.0	22.0	27.5	600.0	50	0.8	FGB1KK126G402GL5
100	50	12	42.0	32.0	19.0	37.5	420.0	35	1.0	FGB1KK126K212KL5
100	50	15	42.0	40.0	20.0	37.5	525.0	35	1.0	FGB1KK156K242KL5
100	50	18	42.0	40.0	20.0	37.5	630.0	35	1.0	FGB1KK186K242KL5
100	50	22	42.0	44.0	24.0	37.5	770.0	35	1.0	FGB1KK226K322KL5
100	50	27	42.0	45.0	30.0	37.5	945.0	35	1.0	FGB1KK276K422KL5
100	50	33	42.0	45.0	30.0	37.5	1155.0	35	1.0	FGB1KK336K422KL5
250	160	0.033	13.0	11.0	5.0	10.0	18.2	550	0.6	FGB2EK333C132CL5
250	160	0.039	13.0	11.0	5.0	10.0	21.5	550	0.6	FGB2EK393C132CL5
250	160	0.047	13.0	11.0	5.0	10.0	25.9	550	0.6	FGB2EK473C132CL5
250	160	0.056	13.0	11.0	5.0	10.0	30.8	550	0.6	FGB2EK563C132CL5
250	160	0.068	13.0	11.0	5.0	10.0	37.4	550	0.6	FGB2EK683C132CL5
250	160	0.082	13.0	11.0	5.0	10.0	45.1	550	0.6	FGB2EK823C132CL5
250	160	0.1	13.0	11.0	5.0	10.0	55.0	550	0.6	FGB2EK104C132CL5
250	160	0.12	13.0	12.0	6.0	10.0	66.0	550	0.6	FGB2EK124C162CL5
250	160	0.15	13.0	12.0	6.0	10.0	82.5	550	0.6	FGB2EK154C162CL5
250	160	0.18	18.0	11.0	5.0	15.0	54.0	300	0.6	FGB2EK184E142EL5
250	160	0.22	18.0	11.0	5.0	15.0	66.0	300	0.6	FGB2EK224E142EL5
250	160	0.27	18.0	12.0	6.0	15.0	81.0	300	0.6	FGB2EK274E172EL5
250	160	0.33	18.0	12.0	6.0	15.0	99.0	300	0.6	FGB2EK334E172EL5
250	160	0.39	18.0	13.5	7.5	15.0	117.0	300	0.8	FGB2EK394E292EL5
250	160	0.47	18.0	13.5	7.5	15.0	141.0	300	0.8	FGB2EK474E292EL5

Metallized Polypropylene Film Capacitors

FGB Series - 100 ~ 630VDC (DC & Pulse Applications)

Rating and Part Number

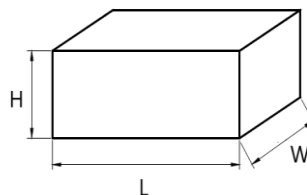
Vdc	Vac	Cap Value μF	Dimensions				Peak Current A	dv/dt V/us	Lead Wire mm	Part Number
			W mm	H mm	T mm	P mm				
250	160	0.56	18.0	13.5	7.5	15.0	168.0	300	0.8	FGB2EK564E292EL5
250	160	0.68	18.0	14.5	8.5	15.0	204.0	300	0.8	FGB2EK684E342EL5
250	160	0.82	18.0	16.0	10.0	15.0	246.0	300	0.8	FGB2EK824E432EL5
250	160	1.2	18.0	16.0	10.0	15.0	360.0	300	0.8	FGB2EK105E432EL5
250	160	1.2	18.0	19.0	11.0	15.0	360.0	300	0.8	FGB2EK125E472EL5
250	160	1.2	26.0	17.0	8.5	22.5	150.0	125	0.8	FGB2EK125F202FL5
250	160	1.5	26.0	19.0	10.0	22.5	187.5	125	0.8	FGB2EK155F242FL5
250	160	1.8	26.0	19.0	10.0	22.5	225.0	125	0.8	FGB2EK185F242FL5
250	160	2.2	26.0	20.0	11.0	22.5	275.0	125	0.8	FGB2EK225F262FL5
250	160	2.7	26.0	23.0	13.0	22.5	337.5	125	0.8	FGB2EK275F292FL5
250	160	3.3	26.0	23.0	13.0	22.5	412.5	125	0.8	FGB2EK335F292FL5
250	160	3.9	32.0	22.0	13.0	27.5	390.0	100	0.8	FGB2EK395G212GL5
250	160	4.7	32.0	24.5	13.0	27.5	470.0	100	0.8	FGB2EK475G222GL5
250	160	5.6	32.0	28.0	14.0	27.5	560.0	100	0.8	FGB2EK565G262GL5
250	160	6.8	32.0	33.0	18.0	27.5	680.0	100	0.8	FGB2EK685G342GL5
250	160	8.2	32.0	33.0	18.0	27.5	820.0	100	0.8	FGB2EK825G342GL5
250	160	10	32.0	37.0	22.0	27.5	1000.0	100	0.8	FGB2EK106G402GL5
250	160	12	42.0	32.0	19.0	37.5	480.0	40	1.0	FGB2EK126K212KL5
250	160	15	42.0	40.0	20.0	37.5	600.0	40	1.0	FGB2EK156K242KL5
250	160	22	42.0	44.0	24.0	37.5	880.0	40	1.0	FGB2EK226K322KL5
250	160	30	42.0	45.0	30.0	37.5	1200.0	40	1.0	FGB2EK306K422KL5
400	220	0.015	13.0	11.0	5.0	10.0	18.0	1200	0.6	FGB2GK153C132CL5
400	220	0.018	13.0	11.0	5.0	10.0	21.6	1200	0.6	FGB2GK183C132CL5
400	220	0.022	13.0	11.0	5.0	10.0	26.4	1200	0.6	FGB2GK223C132CL5
400	220	0.027	13.0	11.0	5.0	10.0	32.4	1200	0.6	FGB2GK273C132CL5
400	220	0.033	13.0	11.0	5.0	10.0	39.6	1200	0.6	FGB2GK333C132CL5
400	220	0.039	13.0	11.0	5.0	10.0	46.8	1200	0.6	FGB2GK393C132CL5
400	220	0.047	13.0	11.0	5.0	10.0	56.4	1200	0.6	FGB2GK473C132CL5
400	220	0.056	13.0	12.0	6.0	10.0	67.2	1200	0.6	FGB2GK563C162CL5
400	220	0.068	13.0	12.0	6.0	10.0	81.6	1200	0.6	FGB2GK683C162CL5
400	220	0.082	18.0	11.0	5.0	15.0	65.6	800	0.6	FGB2GK823E142EL5
400	220	0.1	18.0	11.0	5.0	15.0	80.0	800	0.6	FGB2GK104E142EL5
400	220	0.12	18.0	12.0	6.0	15.0	96.0	800	0.6	FGB2GK124E172EL5
400	220	0.15	18.0	12.0	6.0	15.0	120.0	800	0.6	FGB2GK154E172EL5
400	220	0.18	18.0	13.5	7.5	15.0	144.0	800	0.8	FGB2GK184E292EL5
400	220	0.22	18.0	13.5	7.5	15.0	176.0	800	0.8	FGB2GK224E292EL5
400	220	0.27	18.0	13.5	7.5	15.0	216.0	800	0.8	FGB2GK274E292EL5
400	220	0.33	18.0	14.5	8.5	15.0	264.0	800	0.8	FGB2GK334E342EL5
400	220	0.39	18.0	16.0	10.0	15.0	312.0	800	0.8	FGB2GK394E432EL5
400	220	0.47	18.0	16.0	10.0	15.0	376.0	800	0.8	FGB2GK474E432EL5
400	220	0.56	18.0	19.0	11.0	15.0	448.0	800	0.8	FGB2GK564E472EL5
400	220	0.68	26.0	19.0	10.0	22.5	204.0	300	0.8	FGB2GK684F242FL5
400	220	0.82	26.0	19.0	10.0	22.5	246.0	300	0.8	FGB2GK824F242FL5
400	220	1.0	26.0	20.0	11.0	22.5	300.0	300	0.8	FGB2GK105F262FL5
400	220	1.2	26.0	23.0	13.0	22.5	360.0	300	0.8	FGB2GK125F292FL5
400	220	1.5	26.0	23.0	13.0	22.5	450.0	300	0.8	FGB2GK155F292FL5
400	220	1.8	32.0	22.0	13.0	27.5	234.0	130	0.8	FGB2GK185G212GL5
400	220	2.2	32.0	24.5	13.0	27.5	286.0	130	0.8	FGB2GK225G222GL5

Rating and Part Number

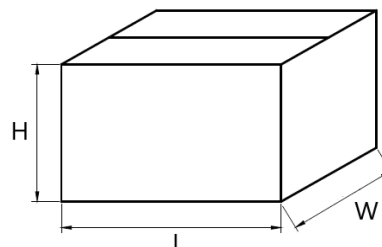
Vdc	Vac	Cap Value μF	Dimensions				Peak Current A	dv/dt V/us	Lead Wire mm	Part Number
			W mm	H mm	T mm	P mm				
400	220	2.7	32.0	28.0	14.0	27.5	351.0	130	0.8	FGB2GK275G262GL5
400	220	3.3	32.0	33.0	18.0	27.5	429.0	130	0.8	FGB2GK335G342GL5
400	220	3.9	32.0	33.0	18.0	27.5	507.0	130	0.8	FGB2GK395G342GL5
400	220	4.7	32.0	37.0	22.0	27.5	611.0	130	0.8	FGB2GK475G402GL5
400	220	5.6	42.0	32.0	19.0	37.5	392.0	70	1.0	FGB2GK565K212KL5
400	220	6.8	42.0	40.0	20.0	37.5	476.0	70	1.0	FGB2GK685K242KL5
400	220	8.2	42.0	40.0	20.0	37.5	574.0	70	1.0	FGB2GK825K242KL5
400	220	10	42.0	44.0	24.0	37.5	700.0	70	1.0	FGB2GK106K322KL5
400	220	12	42.0	45.0	30.0	37.5	840.0	70	1.0	FGB2GK126K422KL5
630	250	0.01	13.0	11.0	5.0	10.0	15.0	1500	0.6	FGB2LK103C132CL5
630	250	0.012	13.0	11.0	5.0	10.0	18.0	1500	0.6	FGB2LK123C132CL5
630	250	0.015	13.0	11.0	5.0	10.0	22.5	1500	0.6	FGB2LK153C132CL5
630	250	0.018	13.0	11.0	5.0	10.0	27.0	1500	0.6	FGB2LK183C132CL5
630	250	0.022	13.0	12.0	6.0	10.0	33.0	1500	0.6	FGB2LK223C162CL5
630	250	0.027	18.0	11.0	5.0	15.0	27.0	1000	0.6	FGB2LK273E142EL5
630	250	0.033	18.0	11.0	5.0	15.0	33.0	1000	0.6	FGB2LK333E142EL5
630	250	0.039	18.0	11.0	5.0	15.0	39.0	1000	0.6	FGB2LK393E142EL5
630	250	0.047	18.0	11.0	5.0	15.0	47.0	1000	0.6	FGB2LK473E142EL5
630	250	0.056	18.0	11.0	5.0	15.0	56.0	1000	0.6	FGB2LK563E142EL5
630	250	0.068	18.0	12.0	6.0	15.0	68.0	1000	0.6	FGB2LK683E172EL5
630	250	0.082	18.0	12.0	6.0	15.0	82.0	1000	0.6	FGB2LK823E172EL5
630	250	0.1	18.0	13.5	7.5	15.0	100.0	1000	0.8	FGB2LK104E292EL5
630	250	0.12	18.0	13.5	7.5	15.0	120.0	1000	0.8	FGB2LK124E292EL5
630	250	0.15	18.0	14.5	8.5	15.0	150.0	1000	0.8	FGB2LK154E342EL5
630	250	0.18	18.0	16.0	10.0	15.0	180.0	1000	0.8	FGB2LK184E432EL5
630	250	0.22	18.0	16.0	10.0	15.0	220.0	1000	0.8	FGB2LK224E432EL5
630	250	0.27	18.0	19.0	11.0	15.0	270.0	1000	0.8	FGB2LK274E472EL5
630	250	0.33	18.0	19.0	11.0	15.0	330.0	1000	0.8	FGB2LK334E472EL5
630	250	0.39	26.0	19.0	10.0	22.5	156.0	400	0.8	FGB2LK394F242FL5
630	250	0.47	26.0	20.0	11.0	22.5	188.0	400	0.8	FGB2LK474F262FL5
630	250	0.56	26.0	20.0	11.0	22.5	224.0	400	0.8	FGB2LK564F262FL5
630	250	0.68	26.0	23.0	13.0	22.5	272.0	400	0.8	FGB2LK684F292FL5
630	250	0.82	32.0	22.0	13.0	27.5	147.6	180	0.8	FGB2LK824G212GL5
630	250	10	32.0	22.0	13.0	27.5	1800.0	180	0.8	FGB2LK105G212GL5
630	250	12	32.0	28.0	14.0	27.5	2160.0	180	0.8	FGB2LK125G262GL5
630	250	1.5	32.0	28.0	14.0	27.5	270.0	180	0.8	FGB2LK155G262GL5
630	250	1.8	32.0	33.0	18.0	27.5	324.0	180	0.8	FGB2LK185G342GL5
630	250	2.2	32.0	33.0	18.0	27.5	396.0	180	0.8	FGB2LK225G342GL5
630	250	2.7	32.0	37.0	22.0	27.5	486.0	180	0.8	FGB2LK275G402GL5
630	250	3.3	42.0	32.0	19.0	37.5	297.0	90	1.0	FGB2LK335K212KL5
630	250	3.9	42.0	40.0	20.0	37.5	351.0	90	1.0	FGB2LK395K242KL5
630	250	4.7	42.0	40.0	20.0	37.5	423.0	90	1.0	FGB2LK475K242KL5
630	250	5.6	42.0	44.0	24.0	37.5	504.0	90	1.0	FGB2LK565K322KL5
630	250	6.8	42.0	45.0	30.0	37.5	612.0	90	1.0	FGB2LK685K422KL5

Packaging Information

Inner Box Specifications (Dimensions)			
Box #	L ±3mm	W±3mm	H ±3mm
# 1	331	331	35
# 2	331	331	60
# 3	331	331	80
# 4	350	170	35
# 5	350	170	60
# 6	350	170	80



Outer Box Specifications (Dimensions)			
Box #	L ±5mm	W±5mm	H ±5mm
# 1	350	340	265
# 2	370	360	350



Packaging Quantity

Pitch	Size Code	Dimension			Packaging Quantity		
		W	H	T	Long Leads	Short Leads	Ammo Pack
10	C13	13	11	5	1,200	1,488	680
	C16	13	12	6	1,200	1,224	560
15	E14	18	11	5	800	1,054	680
	E17	18	12	6	800	867	560
	E29	18	13.5	7.5	800	697	450
	E34	18	14.5	8.5	600	612	390
	E43	18	16	10	600	527	340
	E47	18	19	11	600	476	300
22.5	F20	26	17	8.5		432	250
	F24	26	19	10		372	210
	F26	26	20	11		336	190
	F29	26	23	13		276	160
27.5	G18	32	20	11		280	190
	G21	32	22	13		230	160
	G22	32	24.5	13		230	160
	G26	32	28	14		220	150
	G34	32	33	18		170	110
	G37	32	31	21		140	90
	G40	32	37	22		140	90
37.5	K21	42	32	19		112	
	K24	42	40	20		105	
	K32	42	44	24		91	
	K42	42	45	30		70	