

ALBERTO FREY BIDDING
& CONSULTING
CITY OF ALBUQUERQUE
NEW MEXICO



SECTION 7 Airport, City, & Emergency Bldg

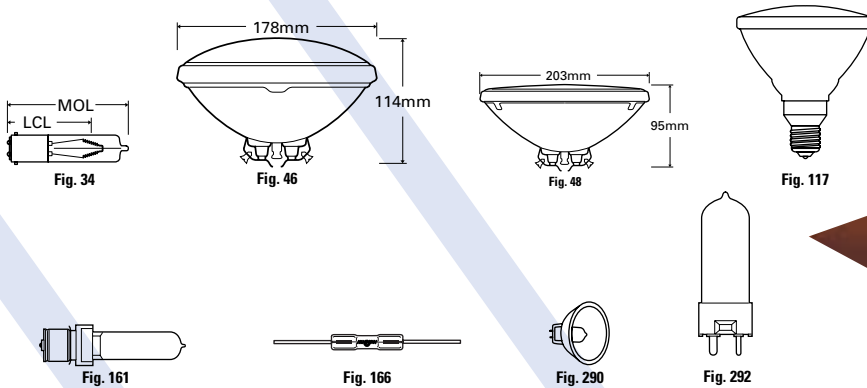
Airport Lighting

FEATURES

- Series design lamps used in runways and taxiways, which are rated by amps
- Substitution of "standard" lamps in series circuits can lead to unsatisfactory performance and FAA non-conformance
- Many parallel devices use "standard" lamps; beacons use Q PAR lamps (see Directional Section)

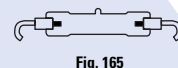
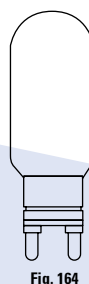
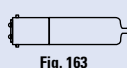
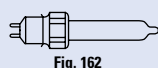
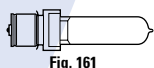
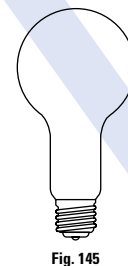
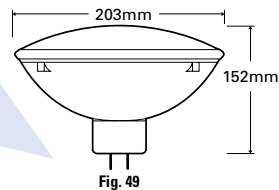
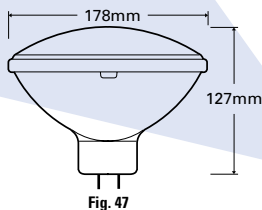
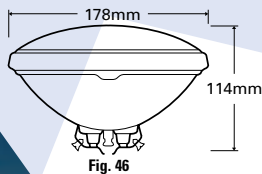
APPLICATIONS

- Airport Runway/Taxiway
- Airport Edgelights, Centerline, Touchdown Zone, Turn-Off
- Civil and Military Airports



Watts	Volts/Amps (A)	Order Code	Description	Case Qty.	Bulb	Base	Filament Type	LCL (in)	MOL (in)	MOL (mm)	Lumens	Color Temp.	CBCP	Life	Burn Position	Filament Dimension (in)	Additional Information	Footnotes	Figure Number
Airfield/Airport																			
30	6.6A	23294 6.6A/T10/1P		60	T10	P28s Med Pf	C-2V	1.50	3.93		400			1000	BD		Clear		161
		11478 EXL		24	T3.5	GZ9.5 2-Pin	C-8	1.00	1.75		375	2900		1000	HD	.05 x .13		64	292
		23522 EZA		20	MR16	GX5.3 2-Pin	C-8		1.75			2900	4500	1000	HD			64	290
32	6.6A	41783 EZA/4		20	MR16	Wire Term	C-8		1.75			2900		1000	HD				64
36	6.0A	35336 THE 436 6A 36W		10	MR11	Leads	CC-6												
40	120	15921 40T10P		60	T10	P28s Med Pf	CC-2V	1.50	3.93		400			1000	BD		Clear		161
45	6.6A	23310 6.6A/PAR56/5		12	PAR56	Scr w Term	C-8		4.50		700			1000			Stippled cover		46
		23295 6.6A/T10P		60	T10	P28s Med Pf	C-2V	1.50	3.93		675			1000	BD		Clear		161
		15937 45PAR38/6.6		12	PAR38	E26 Med Skirt	C-6		5.31				1750	800			Flood		117
		76663 AF6/2 6.6A 45W		100		Prefocus Mycalex Cap	Flat Grid			54	760			600			Order 10076663		
		11482 EXM		24	T3.5	GZ9.5 2-Pin	C-8	1.00	1.75		750	2950		1000	HD	.06 x .19		64	292
		23071 EZC		20	MR16	GX5.3 2-Pin	C-8		1.75			2950		1000	HD			64	290
		23847 Q6 6A/T2 1/2/1CL		12	T2.5	Special	C-8		1.75	44	710			1000			Clear		152 166
		41541 Q45T4/CL		12	T4	GY16 2-Pin PreFoc	C-6	1.54	2.50		835			500	BD		Clear		151 162
		14473 Q45T4/CL/DCR		12	T4	D.C.Prefocus	C-6	1.06	2.60		845	2850		500					34
65	6.6A	32917 Q65T2 1/2/1CL		200	T2.5	Special	C-8				1200			1000					166
100	6.6A	76664 AF6/5T 6.6A 100W		100		Prefocus Cap Mycalex	Flat Grid			60	2100			600			Order 12076664		
120	6	39395 120PAR		12	PAR64	Scr w Term	C-6		4.00		780		180000	3000			Transmissometer. VN spot	20	48
		6.6A 10099 EVV UNIT		24	T4	GZ9.5 2-Pin	C-6 Oval	1.54	2.50		3150	3200		500	BD	.25 x .12		64	292
150	6.6A	11427 EWR UNIT		24	T4	GZ9.5 2-Pin	C-6 Oval	1.54	2.50		4100	3200		500	BD	.25 x .16		64	292

Airport, City, & Emergency Bldg SECTION 7



Watts	Volts/Amps (A)	Order Code	Description	Case Qty.	Bulb	Base	Filament Type	LCL (in)	MOL (in)	MOL (mm)	Lumens	Color Temp.	CBCP	Life	Burn Position	Filament Dimension (in)	Additional Information	Footnotes	Figure Number
Airfield/Airport (Continued)																			
200	6.6A	23298 6.6A/T14P		24	T14	P28s Med Pf	C-13	2.18	5.75		4900				BD		Clear		161
		76666 AF7/2 6.6A 200W		100		Prefocus Mycalex Cap	Flat Grid			54	4800			600			Order 16076666		
		15243 EZL UNIT		24	T4	GZ9.5 2-Pin	C-6 Oval	1.54	2.50		5000	3100		500	BD	.28 x .19		64	292
		38271 Q6.6A/PAR56/2		12	PAR56	GX16d Mog End Pr	CC-6		5.00	127			16000	1000	BDTH			154	47
		33279 Q6.6A PAR56/3		12	PAR56	Scrw Term	CC-6		4.50	114			200000	1000	BDTH			154	46
		18309 Q6.6A/PAR56/4		12	PAR56	GX16d Mog End Pr	CC-6		5.00					600	BDTH		Prismatic Lens	154	47
		13224 Q6.6A/PAR 64/2P		6	PAR64	GX16d Mog End Pr	CC-6		4.50	114				2000				154	49
		23857 Q6.6A/T4/5CL		12	T4	Spec 1" Ribbon	CC-8		3.00	76	5000			500			Clear	152	165
		23860 Q6.6AT4/DCR		12	T4	Ba15d D C Bay	CC-6	1.06	2.50	64	5150			500			Clear, Ringed	153	163
		40702 Q200T4/CL		12	T4	GY16 2-Pin PreFoc	CC-6	1.54	2.50		4500			500	BD		Clear	151	162
204	6.6A	23300 6.6A/T14/2P		24	T14	P28s Med Pf	C-13	2.18	5.75		4220			500	BD		Clear		161
300	6.6A	13223 Q6.6A/PAR 64/3P		6	PAR64	GX16d Mog End Pr	CC-6		4.50	114				2000	BDTH			154	49
	20A	32861 Q20A/PAR56/2		12	PAR56	Scrw Term	CC-6		4.50	114			200000	500	A			157	46
		15482 Q20A/PAR56/C		12	PAR56	GX16d Mog End Pr	CC-6		5.00	127				500	A		Teflon Coated	158	47
499	20A	23863 Q20A/PAR56/3		12	PAR56	Scrw Term	CC-6		4.50	114			330000	500	BDTH			154	46
500	20A	15485 Q20A/PAR56/1/C		12	PAR56	GX16d Mog End Pr	CC-6		5.00	127				500	A		Teflon Coated	155	47
		39071 Q500T8/1CL		20	T8	Spec 1" Ribbon	CC-8	2.50	4.25		13400	3200		500	BH		Special bulb	156	165
620	120	21950 620PS40P		24	PS40	P40s Mog Pf	C-9	5.68	10.06		11200			3000			Clear		145
	130	21952 620PS40P		24	PS40	P40s Mog Pf	C-9	5.68	10.06		11200			3000			Clear		145
1000	120	22429 1M/T20BP		12	T20	G38 Mog BiPost	C-13	4.00	9.50		22000			500	BD		Clear-Beacon, HRG	20	164
1200	115	22524 1200T20		12	T20	G38 Mog BiPost	CC-8	4.00	9.50		29600			750	BD		Clear-Beacon, HRG	20,	164
																		30,	89

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Sign

FEATURES

- Clear and colors, with long life, up to 8000 hrs
- Rugged filament construction to reduce premature failure from shock and vibration
- Brass base to minimize freezing in sockets
- In 130 volts; operate at 120V for additional 2x+ life (but 25% less output)

APPLICATIONS

- Marquee Lighting
- Scoreboards
- Time/Temperature Signs
- Message Centers



Fig. 137



Fig. 139

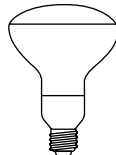


Fig. 149



Fig. 152



Fig. 167

Watts	Volts	Order Code	Description	Case Qty.	Bulb	Base	Filament Type	LCL (in)	MOL (in)	Lumens	CBCP	Beam Spread	Life (hrs)	Burn Position	Additional Information	Footnotes	Figure Number
10	130	12185 10S11N		120	S11	Inter	C-7A	1.62	2.31	80			1000		Clear	60	137
11	130	12575 11S14		120	S14	Med	C-9	2.50	3.50	76			3000		Clear	60	167
		12589 11S14/IF		120	S14	Med	C-9	2.50	3.50	76			3000		I.F.	60	167
		12621 11S14/R		120	S14	Med	C-9	2.50	3.50				3000		Red	60	167
		12632 11S14/Y		120	S14	Med	C-9	2.50	3.50				3000		Yellow	60	167
15	130	19317 15A/GR/CL/8		120	A15	Med	C-9	2.37	3.50				8000		Clear Group Replacement		152
		16215 15A15/CL/BB		120	A15	Med	C-9	2.37	3.50	110			3000		Clear	60	152
		11137 15S14/GR/CL/8		120	S14	Med	C-9	2.50	3.50	90			8000		Clear Group Replacement	60	167
30	130	14129 30A15		120	A15	Med	C-9	2.37	3.50	215			5000		I.F. Changing Message Sign	60	152
		15291 30A15/CL		120	A15	Med	C-9	2.37	3.50	215			5000		Clear Changing Message Sign	60	152
		19358 30A15/8		120	A15	Med	C-9	2.37	3.50	180			8000		I.F.	60	152
		46849 30R20/6		30	R20	Med	C-9		3.93	150			6000	BDTH	Reflector Spot - Light I.F. - Flashing Message	60	149
33	130	42626 33A19/5		120	A19	Med	C-9		3.87	270			2500		Clear-Changing Message Sign. Group Replacement	60	139
50	130	46852 50R20/6		30	R20	Med	C-9		3.93	400	420	45	6000	BDTH	Reflector Spot - Light I.F. - Flashing Message Sign	57, 59, 90	149



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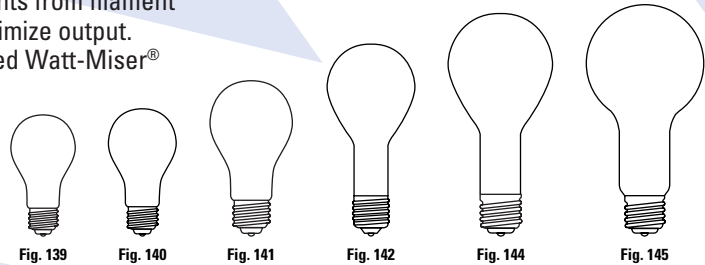
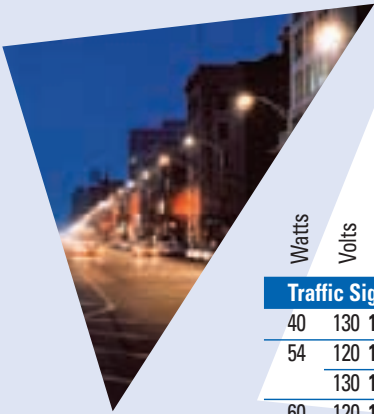
Traffic Signals

FEATURES

- Rugged construction for shock and vibration resistance
- Long life, up to rated 8000 hours. Built in reflector disk in many types.
- Brass bases to prevent “freezing” in the socket for faster, safer replacement
- Built in fuse to protect other components from filament “arc-out.” Built-in reflector disk to optimize output.
- Available in energy saving Krypton filled Watt-Miser®

APPLICATIONS

- Traffic Signals



Watts	Volts	Order Code	Description	Case Qty.	Bulb	Base	Filament Type	LCL (in)	MOL (in)	Lumens	Life (hrs)	Burn Position	Additional Information	Footnotes Figure Number
Traffic Signals														
40	130	15554	40A/TS	120	A21	Med	C-9	2.43	4.37	380	2000	BDTH	Clear	60 140
54	120	17960	60A21/54WM/TS	120	A21	Med	C-11V	2.43	4.37	530	8000	BDTH	Watt-Miser®. Clear. Krypton	60 140
		17961	60A21/54WM/TS	120	A21	Med	C-11V	2.43	4.37	530	8000	BDTH	Watt-Miser®. Clear. Krypton	60 140
60	120	17968	69A21/60WM/TS	120	A21	Med	C-11V	2.43	4.37	610	8000	BDTH	Watt-Miser®. Clear. Krypton	60 140
		17969	69A21/60WM/TS	120	A21	Med	C-11V	2.43	4.37	610	8000	BDTH	Watt-Miser®. Clear. Krypton	60 140
67	120	38551	67A21/TS	120	A21	Med	C-9	2.43	4.37	635	8000	BDTH	Clear	60 140
		38552	67A21/TS	120	A21	Med	C-9	2.43	4.37	635	8000	BDTH	Clear	60 140
		38553	67A21/TS	120	A21	Med	C-9	2.43	4.37	635	8000	BDTH	Clear	60 140
69	120	17323	69A21/TS	120	A21	Med	C-9	2.43	4.37	675	8000	BDTH	Clear	60 140
		17325	69A21/TS	120	A21	Med	C-9	2.43	4.37	675	8000	BDTH	Clear	60 140
75	120	36473	75PAR46/TS	12	PAR46	3 Prong	CC-6		3.87	700	6000			20
90	125	17972	100A21/90WM/TS	120	A21	Med	C-11V	2.43	4.37	1040	8000	BDTH	Watt-Miser®. Clear. Krypton	60 140
100	130	18365	100A21/TS	120	A21	Med	C-9	2.43	4.37	1280	3000		Clear. Rated Watts: 98.	60 140
116	120	19008	116A21/TS	120	A21	Med	C-9	2.43	4.37	1280	8000	BDTH	Clear	60 140
		19009	116A21/TS	120	A21	Med	C-9	2.43	4.37	1280	8000	BDTH	Clear	60 140
		19010	116A21/TS	120	A21	Med	C-9	2.43	4.37	1280	8000	BDTH	Clear	60 140
135	120	17973	150A21/135WM/TS	120	A21	Med	C-11V	3.00	4.68	1750	7000	BDTH	Watt-Miser®. Clear. Krypton	60 140
		17974	150A21/135WM/TS	120	A21	Med	C-11V	3.00	4.68	1750	7000	BDTH	Watt-Miser®. Clear. Krypton	60 140
150	115	35327	150PAR46/TS	12	PAR46	3 Prong	CC-6		4.00	1750	6000	H		20
Lumen Rated Traffic Signal														
165	120	20094	1950L/P25/TS	60	P25	Med	C-9	3.00	4.75	1950	8000		Clear	60 142
		20096	1950L/P25/TS	60	P25	Med	C-9	3.00	4.75	1950	8000		Clear	60 142
		20097	1950L/P25/TS	60	P25	Med	C-9	3.00	4.75	1950	8000		Clear	60 142
High Volt Traffic Signal														
40	230	35218	40A1/CL/E27	100	A19	E27				230	3000			139
		91293	40A1/EXTR/CL/E27	100	A19	E27				230	3000			139
60	230	35239	60A1/CL/E27	100	A19	E27				380	3000			139
		91294	60A1/EXTR/CL/E27	100	A19	E27				380	3000			139
65	240	35240	65A1/CL/E27	100	A19	E27				400	3000			139
70	230	35239	70A1/CL/E27	100	A19	E27				420	3000			139
100	230	35246	100A1/CL/E27	15	A19	E27				830	3000			139
150	230	35245	150A1/CL/E27	15	A19	E27				1250	3000			139
Multiple Street Lighting														
105	125	42392	105A23/12	120	A23	Med	C-9	4.43	5.93	12000			Clear	60 141
189	130	19939	189PS25/64	60	PS25	Med	C-9	5.25	6.93	3000			Clear	60 142
205	125	42663	205PS25/12	60	PS25	Med	C-9	5.25	6.93	12000			Clear	60 142
295	125	20772	295PS35/58	24	PS35	Mog	C-9	7.00	9.37	3000			Clear	60 144
327	125	21307	327PS35	24	PS35	Mog	C-9	7.00	9.37	6000			Clear	60 144
405	120	21408	405PS40/54	24	PS40	Mog	C-9	7.00	9.75	6850	3000		Clear	60 145

SECTION 7 Airport, City, & Emergency Bldg

Emergency Building Lighting

FEATURES

- Low voltage, battery driven, low power consumption lighting for emergency exit signs
- In PAR36 sealed beams with flood lenses and small miniature lamps
- Sorted by watts and then volts

APPLICATIONS

- Emergency Building Lighting
- Lanterns

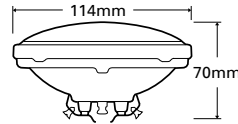


Fig. 42

Watts	Volts	Order Code	Description	Case Qty.	Bulb	Base	Filament Type	MOL (in)	MBCP	10% Spread H	10% Spread V	Life (hrs)	Additional Information	Footnotes	Figure Number
Emergency Building Lighting – Sealed Beam															
6	6	44924 H7556	12 PAR36	Screw Terminals	C-6	2.75	400	30	20	50	77	42			
7.2	6	11421 7672-1	12 PAR36	Slip-on Terminals	C-6	2.75	350	30	20	50					
8	6	41865 7613	12 PAR36	Screw Terminals	C-6	2.75	400	30	20	50				42	
		45101 7613-1	12 PAR36	Slip-on Terminals	C-6	2.75	400	30	20	50					
		43564 H7551	12 PAR36	Screw Terminals	C-6	2.75	550	30	20	50	77	42			
12		44642 H7555	12 PAR36	Screw Terminals	C-6	2.75	550	30	20	50	77	42			
10	6	43567 H7552	12 PAR36	Screw Terminals	C-6	2.75	650	30	20	50	77	42			
12	6	43570 H7553	12 PAR36	Screw Terminals	C-6	2.75	850	30	20	50	77	42			
	6.4	39585 4042	12 PAR36	Screw Terminals	C-6	2.75	1100	45	20	150				42	
	12	40588 4044	12 PAR36	Screw Terminals	C-6	2.75	1100	50	25	150				42	
		10540 4044-1	12 PAR36	Slip-on Terminals	C-6	2.75	1100	50	25	150					
		12720 H7557	12 PAR36	Screw Terminals	C-6	2.75	850	30	20	50	77	42			
18	6.4	24339 4014	12 PAR36	Screw Terminals	C-6	2.75	1500	50	25	200				42	
20	6	43574 H7554 Bulk	60 PAR36	Screw Terminals	C-6	2.75	1400	30	20	50	77	42			
25	12.8	37046 4446	12 PAR36	Screw Terminals	C-6	2.75	400	80	80	300				42	



Fig. 168



Fig. 169



Fig. 170

Watts	Volts	Order Code	Description	Case Qty.	Bulb	Base	Filament Type	LCL (in)	MOL (in)	MSCP	Amps	Life (hrs)	Additional Information	Footnotes	Figure Number
Emergency Building Lighting – Miniature															
3	6	44756 909	50 T-5	Wedge	C-2R	0.81	1.49	3	.62A	50				168	
3.5	4	44769 914	50 T-5	Wedge	C-6	0.75	1.49	3.5	.90A	50				168	
		6.15 15731 149	1000 T-3 1/4	Wedge	C-2R	0.56	1.06	3.5	.53A	15				169	
5.4	6	16975 939	50 T-5	Wedge	C-2R	0.81	1.49	5.4	.90A	50				168	
7.5	4	13483 926	50 T-5	Wedge	C-2R	0.81	1.49	7.5	1.80A	50				168	
8	6	13485 927	50 T-5	Wedge	C-2R	0.81	1.49	8	1.20A	50				168	
9	6	43760 784	10 T-2 1/4	G-4 Two Pin	C-6	0.77	1.00	9	1.00A	50			76, 120	170	
11	12	44771 915	50 T-5	Wedge	C-2R	0.81	1.49	11	.75A	50				168	
12	6	44754 908	50 T-5	Wedge	C-2R	0.81	1.49	12	1.50A	50				168	
13	6	43762 785	10 T-2 1/4	G-4 Two Pin	C-6	0.77	1.00	13	1.33A	50			76, 120	170	
		12 12723 774	10 T-2 1/4	G-4 Two Pin	C-6	0.77	1.00	13	.67A	50			76, 120	170	
15	6	23684 963	4000 T-5	Wedge	C-2R	0.81	1.49	15	2.00A	50				168	
19	6	43764 786	10 T-2 1/4	G-4 Two Pin	C-6	0.77	1.00	19	2.00A	50			76, 120	170	
22	12	44500 783	10 T-2 1/4	G-4 Two Pin	C-6	0.77	1.00	22	1.00A	50			76, 120	170	

Lamp stocking color code: EU Only, EU and NA, NA Only