

Specifications

Instant Start

- Ballast shall have a five-year warranty
 - Ballast shall be UL certified
 - Ballast shall be sound rated Class A
 - Ballast shall be Class P Type 1 Outdoor
 - Ballast shall have a Lamp Current Crest Factor of <1.7
 - Ballast shall withstand line transients as specified in ANSI C62.41-1991
 - Ballast shall comply with the limits of FCC Part 18C Class A
 - Ballast shall have a lamp operating frequency greater than 40KHz
 - Ballast shall have a 0 F minimum lamp starting temperature for primary lamp
 - Ballast shall be Instant Start
 - Ballast shall be Parallel Lamp Operation
 - Ballast shall have a minimum Power Factor of 98% for primary lamp operation
 - Ballast shall operate within a +/- 10% of the ballast specified line voltage at an input frequency of 50Hz or 60Hz
 - Ballast shall have a maximum case hot spot temperature of 90°C

Rapid Start

- Ballast shall have a five year warranty
 - Ballast shall be UL certified
 - Ballast shall be sound rated Class A
 - Ballast shall be Class P Type 1 Outdoor
 - Ballast shall have a Lamp Current Crest Factor of <1.7
 - Ballast shall withstand line transients as specified in ANSI C62.41-1991
 - Ballast shall comply with the limits of FCC Part 18C Class A
 - Ballast shall have a lamp operating frequency greater than 20kHz
 - Ballast shall have a 32° F/ 0° C minimum lamp starting temperature for primary lamp
 - Ballast shall be potted
 - Ballast shall be Rapid Start
 - Ballast shall be Series Lamp Operation
 - Ballast shall have minimum Power Factor of 98% for primary lamp operation
 - Ballast shall operate within +/- 10% of the ballast specified line voltage at 60Hz
 - Ballast shall have a maximum case hot spot temperature of 90°C

T5 Program Rapid Start

- Ballast with a maximum case temperature of 90°C shall have a three-year warranty
 - Ballast with a maximum case temperature of 70°C shall have a five-year warranty
 - Ballast shall be UL listed
 - Ballast shall be sound rated Class A
 - Ballast shall be Class P Type 1 Outdoor
 - Ballast shall have a Lamp Current Crest Factor of <1.7
 - Ballast shall withstand line transients as specified in ANSI C62.41-1991
 - Ballast shall comply with the limits of FCC Part 18C Class A
 - Ballast shall have a lamp operating frequency of 40kHz
 - Ballast shall have a 0° F minimum lamp starting temperature for primary lamp
 - Ballast shall be Program Rapid Start
 - Ballast shall be Series Lamp Operation
 - Ballast shall have end-of-life protection
 - Ballast shall have a 0°F minimum starting temperature
 - Ballast shall have minimum Power Factor of 98% for primary lamp operation
 - Ballast shall operate within +/- 10% of the ballast specified line voltage at 60Hz
 - Ballast shall operate at a maximum case hot spot temperature of 90°C

Rapid Start – Residential Rated

- Ballast shall have a five year warranty
 - Ballast shall be UL certified
 - Ballast shall be sound rated Class A
 - Ballast shall be Class P Type 1 Outdoor
 - Ballast shall have a Lamp Current Crest Factor of <1.7
 - Ballast shall withstand line transients as specified in ANSI C62.41-1991
 - Ballast shall comply with the limits of FCC Part 18C Class B (residential)
 - Ballast shall have a lamp operating frequency greater than 40KHz
 - Ballast shall have a 0 F minimum lamp starting temperature for primary lamp
 - Ballast shall be Instant Start
 - Ballast shall be Parallel Lamp Operation
 - Ballast shall have a minimum Power Factor of 98% for primary lamp operation
 - Ballast shall operate within a +/- 10% of the ballast specified line voltage at an input frequency of 60Hz
 - Ballast shall have a maximum case hot spot temperature of 90 C

Instant Start CFL/ Long Twin Tube

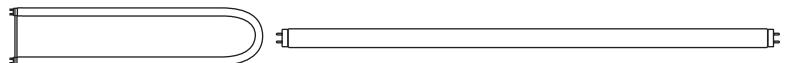
- Ballast shall have a five-year warranty
 - Ballast shall be UL listed
 - Ballast shall be sound rated Class A
 - Ballast shall be Class P Type 1 Outdoor
 - Ballast shall have a Lamp Current Crest Factor of <1.7
 - Ballast shall withstand line transients as specified in ANSI C62.41-1991
 - Ballast shall comply with the limits of FCC Part 18C Class A
 - Ballast shall have a lamp operating frequency greater than 20kHz
 - Ballast shall have a 0° F minimum lamp starting temperature for primary lamp
 - Ballast shall be potted
 - Ballast shall be Rapid Start
 - Ballast shall be Series Lamp Operation
 - Ballast shall have minimum Power Factor of 99% for primary lamp operation
 - Ballast shall operate within +/- 10% of the ballast specified line voltage at 60Hz
 - Ballast shall have a maximum case hot spot temperature of 90° C

T8 Program Rapid Start

- Ballast shall have a five year warranty
 - Ballast shall be UL listed
 - Ballast shall be sound rated Class A
 - Ballast shall be Class P Type 1 Outdoor
 - Ballast shall have a Lamp Current Crest Factor of <1.7
 - Ballast shall withstand line transients as specified in ANSI C62.41-2002
 - Ballast shall comply with the limits of FCC Part 18C Class A
 - Ballast shall have a lamp operating frequency of 40kHz
 - Ballast shall have a 0° F minimum lamp starting temperature for primary lamp
 - Ballast shall be Program Start
 - Ballast shall be Series Lamp Operation
 - Ballast shall have minimum Power Factor of 98% for primary lamp operation
 - Ballast shall operate within +/- 10% of the ballast specified line voltage at 60Hz
 - Ballast shall operate at a maximum case hot spot temperature of 90°C

FLUORESCENT ELECTRONIC BALLAST

F32T8, FB31T8, FB32T8/6
Primary Lamp Design



Electronic Ballast

Compact Fluorescent Ballasts

HID

Ballast Factor	Number of Lamps per Ballast	Lamp Watts	Ballast Model Number	Line Voltage	Line Current (amps)	Input Watts (ANSI)	Total Harmonic Distortion Rating	Ballast Factor (ANSI)	Ballast Efficacy Factor	Wir./Dim Diag Pg. 29-30
Standard Power	2	32	E2/32IS-120MC	120	0.49	57	<20%	0.85	1.49	2/A2
	2	32	EP2/32IS/MV/MC	120	0.50	60	<10%	0.87	1.45	2/A2
	2	32	EP2/32IS/MV/MC	277	0.21	59	<10%	0.87	1.47	2/A2
	2	32	EP2/32IS/MV/MC/HE	120	0.46	55	<10%	0.89	1.62	2/A3
	2	32	EP2/32IS/MV/MC/HE	277	0.20	54	<10%	0.89	1.65	2/A3
	2	32	EP2/32PRS/MV/MC/HE	120	0.48	57	<10%	0.88	1.54	7/A3
	2	32	EP2/32PRS/MV/MC/HE	277	0.21	56	<10%	0.88	1.57	7/A3
Low Power	2	32	EPL2/32IS/MV/MC/HE	120	0.40	49	<10%	0.78	1.59	2/A3
	2	32	EPL2/32IS/MV/MC/HE	277	0.18	48	<15%	0.78	1.63	2/A3
High Power	2	32	EPH2/32IS/MV/MC/HE	120	0.62	74	<10%	1.18	1.59	2/A2
	2	32	EPH2/32IS/MV/MC/HE	277	0.27	73	<10%	1.18	1.62	2/A2
Standard Power	3	32	EP3/32IS/MV/MC/HE	120	0.71	85	<10%	0.88	1.04	3/A2
	3	32	EP3/32IS/MV/MC/HE	277	0.31	83	<10%	0.88	1.06	3/A2
Low Power	3	32	EPL3/32IS/MV/MC	120	0.64	76	<10%	0.78	1.03	3/A2
	3	32	EPL3/32IS/MV/MC	277	0.27	74	<10%	0.78	1.05	3/A2
	3	32	EPL3/32IS/MV/SC/HE	120	0.63	72	<10%	0.75	1.04	3/A1
	3	32	EPL3/32IS/MV/SC/HE	277	0.26	72	<10%	0.75	1.04	3/A1
High Power	3	32	EPH3/32IS/MV/MC/HE	120	0.91	109	<10%	1.18	1.08	3/A2
	3	32	EPH3/32IS/MV/MC/HE	277	0.39	107	<10%	1.18	1.10	3/A2
Standard Power	4	32	EP4/32IS/MV/MC/HE	120	0.93	110	<10%	0.88	0.80	4/A2
	4	32	EP4/32IS/MV/MC/HE	277	0.40	108	<10%	0.88	0.81	4/A2
	4	32	EP4/32PPRS/MV/SC/HE	120	0.95	114	<10%	0.86	0.75	9/A11
	4	32	EP4/32PPRS/MV/SC/HE	277	0.42	114	<10%	0.86	0.76	9/A11
Low Power	4	32	EPL4/32IS/MV/MC/HE	120	0.82	98	<10%	0.77	0.79	4/A2
	4	32	EPL4/32IS/MV/MC/HE	277	0.35	96	<10%	0.77	0.80	4/A2
High Power	4	32	EPH4/32IS/MV/SC/HE	120	1.24	145	<10%	1.16	0.80	4/A8
	4	32	EPH4/32IS/MV/SC/HE	277	0.53	144	<10%	1.16	0.81	4/A8

F32T8, FB31T8, FB32T8/6
One Lamp Out



Ballast Factor	Number of Lamps per Ballast	Lamp Watts	Ballast Model Number	Line Voltage	Line Current (amps)	Input Watts (ANSI)	Total Harmonic Distortion Rating	Ballast Factor (ANSI)	Ballast Efficacy Factor	Wir./Dim Diag Pg. 29-30
Standard Power	1	32	E2/32IS-120MC	120	0.31	38	<30%	1.11	2.92	2/A2
	1	32	EP2/32IS/MV/MC	120	0.33	39	<10%	1.00	2.56	2/A2
	1	32	EP2/32IS/MV/MC	277	0.14	39	<10%	1.00	2.56	2/A2
	1	32	EP2/32IS/MV/MC/HE	120	0.29	35	<10%	1.08	3.09	2/A3
	1	32	EP2/32IS/MV/MC/HE	277	0.13	34	<15%	1.08	3.18	2/A3
Low Power	1	32	EPL2/32IS/MV/MC/HE	120	0.26	31	<10%	0.93	3.00	2/A3
	1	32	EPL2/32IS/MV/MC/HE	277	0.12	30	<15%	0.93	3.10	2/A3
High Power	1	32	EPH2/32IS/MV/MC/HE	120	0.37	45	<10%	1.37	3.04	2/A2
	1	32	EPH2/32IS/MV/MC/HE	277	0.17	45	<15%	1.37	3.04	2/A2
Standard Power	2	32	EP3/32IS/MV/MC/HE	120	0.53	63	<10%	0.99	1.57	3/A2
	2	32	EP3/32IS/MV/MC/HE	277	0.24	63	<15%	0.99	1.57	3/A2
Low Power	2	32	EPL3/32IS/MV/MC	120	0.49	58	<10%	0.92	1.59	3/A2
	2	32	EPL3/32IS/MV/MC	277	0.21	57	<15%	0.92	1.61	3/A2
	2	32	EPL3/32IS/MV/SC/HE	120	0.46	55	<10%	0.85	1.55	3/A1
	2	32	EPL3/32IS/MV/SC/HE	277	0.20	54	<10%	0.85	1.57	3/A1
High Power	2	32	EPH3/32IS/MV/MC/HE	120	0.69	81	<10%	1.27	1.57	3/A2
	2	32	EPH3/32IS/MV/MC/HE	277	0.30	80	<10%	1.27	1.59	3/A2
Standard Power	3	32	EP4/32IS/MV/MC/HE	120	0.77	92	<10%	0.96	1.04	4/A2
	3	32	EP4/32IS/MV/MC/HE	277	0.34	89	<10%	0.96	1.08	4/A2
	3	32	EP4/32PPRS/MV/SC/HE	120	0.79	95	<10%	0.92	0.97	10/11
	3	32	EP4/32PPRS/MV/SC/HE	277	0.35	95	<10%	0.93	0.99	10/11
Low Power	3	32	EPL4/32IS/MV/MC/HE	120	0.68	81	<10%	0.82	1.01	4/A2
	3	32	EPL4/32IS/MV/MC/HE	277	0.29	80	<10%	0.82	1.03	4/A2
High Power	3	32	EPH4/32IS/MV/SC/HE	120	1.01	120	<10%	1.24	1.03	4/A8
	3	32	EPH4/32IS/MV/SC/HE	277	0.44	120	<10%	1.24	1.03	4/A8

Electronic Ballast

Fluorescent Compact Ballasts

HID

FLUORESCENT ELECTRONIC BALLAST

F25T8/ES, F32T8/ES(25W)



Electronic Ballast

Compact Fluorescent Ballasts

HID

Ballast Factor	Number of Lamps per Ballast	Lamp Watts	Ballast Model Number	Line Voltage	Line Current (amps)	Input Watts (ANSI)	Total Harmonic Distortion Rating	Ballast Factor (ANSI)	Ballast Efficacy Factor	Wir./Dim Diag Pg. 29-30
Standard Power	2	25	EP2/32IS/MV/MC	120	0.39	47	<10%	0.89	1.88	2/A2
	2	25	EP2/32IS/MV/MC	277	0.17	46	<10%	0.89	1.89	2/A2
	2	25	EP2/32IS/MV/MC/HE	120	0.39	46	<10%	0.89	1.93	2/A3
	2	25	EP2/32IS/MV/MC/HE	277	0.17	45	<15%	0.89	1.98	2/A3
	2	25	EP2/32PRS/MV/MC/HE	120	0.42	50	<10%	1.00	2.00	7/A3
	2	25	EP2/32PRS/MV/MC/HE	277	0.18	49	<10%	1.00	2.04	7/A3
Low Power	2	25	EPL2/32IS/MV/MC/HE	120	0.33	39	<10%	0.78	2.00	2/A3
	2	25	EPL2/32IS/MV/MC/HE	277	0.14	38	<15%	0.78	2.05	2/A3
High Power	2	25	EPH2/32IS/MV/MC/HE	120	0.53	63	<10%	1.18	1.87	2/A2
	2	25	EPH2/32IS/MV/MC/HE	277	0.23	62	<15%	1.18	1.90	2/A2
Standard Power	3	25	EP3/32IS/MV/MC/HE	120	0.56	68	<10%	0.90	1.32	3/A2
	3	25	EP3/32IS/MV/MC/HE	277	0.25	68	<15%	0.90	1.32	3/A2
Low Power	3	25	EPL3/32IS/MV/MC	120	0.53	63	<10%	0.85	1.35	3/A2
	3	25	EPL3/32IS/MV/MC	277	0.23	61	<15%	0.85	1.39	3/A2
	3	25	EPL3/32IS/MV/SC/HE	120	0.49	58	<10%	0.75	1.29	3/A1
	3	25	EPL3/32IS/MV/SC/HE	277	0.21	57	<10%	0.75	1.32	3/A1
High Power	3	25	EPH3/32IS/MV/MC/HE	120	0.72	86	<10%	1.20	1.40	3/A2
	3	25	EPH3/32IS/MV/MC/HE	277	0.32	85	<10%	1.20	1.41	3/A2
Standard Power	4	25	EP4/32IS/MV/MC/HE	120	0.74	88	<10%	0.88	1.00	4/A2
	4	25	EP4/32IS/MV/MC/HE	277	0.33	88	<10%	0.88	1.00	4/A2
	4	25	EP4/32PPRS/MV/SC/HE	120	0.77	93	<10%	0.89	0.96	9/A11
	4	25	EP4/32PPRS/MV/SC/HE	277	0.34	93	<10%	0.89	0.96	9/A11
Low Power	4	25	EPL4/32IS/MV/MC/HE	120	0.69	82	<10%	0.78	0.95	4/A2
	4	25	EPL4/32IS/MV/MC/HE	277	0.30	81	<10%	0.78	0.96	4/A2
High Power	4	25	EPH4/32IS/MV/SC/HE	120	0.91	108	<10%	1.16	1.07	4/A8
	4	25	EPH4/32IS/MV/SC/HE	277	0.40	109	<10%	1.16	1.06	4/A8

F25T8/ES, F32T8/ES(25W)
One Lamp Out



Ballast Factor	Number of Lamps per Ballast	Lamp Watts	Ballast Model Number	Line Voltage	Line Current (amps)	Input Watts (ANSI)	Total Harmonic Distortion Rating	Ballast Factor (ANSI)	Ballast Efficacy Factor	Wir./Dim Diag Pg. 29-30
Standard Power	1	25	EP2/32IS/MV/MC	120	0.24	29	<10%	1.07	3.68	2/A2
	1	25	EP2/32IS/MV/MC	277	0.105	28	<15%	1.07	3.69	2/A2
	1	25	EP2/32IS/MV/MC/HE	120	0.24	29	<10%	1.08	3.72	2/A3
	1	25	EP2/32IS/MV/MC/HE	277	0.11	29	<15%	1.08	3.72	2/A3
Low Power	1	25	EPL2/32IS/MV/MC/HE	120	0.21	25	<10%	0.93	3.72	2/A3
	1	25	EPL2/32IS/MV/MC/HE	277	0.10	23	<20%	0.93	4.04	2/A3
High Power	1	25	EPH2/32IS/MV/MC/HE	120	0.32	38	<10%	1.38	3.63	2/A2
	1	25	EPH2/32IS/MV/MC/HE	277	0.15	38	<15%	1.38	3.63	2/A2
Standard Power	2	25	EP3/32IS/MV/MC/HE	120	0.43	51	<10%	1.00	1.96	3/A2
	2	25	EP3/32IS/MV/MC/HE	277	0.19	51	<15%	1.00	1.96	3/A2
Low Power	2	25	EPL3/32IS/MV/MC	120	0.41	48	<10%	0.95	1.98	3/A2
	2	25	EPL3/32IS/MV/MC	277	0.18	47	<15%	0.92	1.96	3/A2
	2	25	EPL3/32IS/MV/SC/HE	120	0.36	43	<10%	0.84	1.95	3/A1
	2	25	EPL3/32IS/MV/SC/HE	277	0.16	43	<11%	0.84	1.95	3/A1
High Power	2	25	EPH3/32IS/MV/MC/HE	120	0.56	67	<10%	1.28	1.91	3/A2
	2	25	EPH3/32IS/MV/MC/HE	277	0.25	66	<15%	1.28	1.94	3/A2
Standard Power	3	25	EP4/32IS/MV/MC/HE	120	0.62	74	<10%	0.96	1.30	4/A2
	3	25	EP4/32IS/MV/MC/HE	277	0.27	73	<10%	0.96	1.32	4/A2
	3	25	EP4/32PPRS/MV/SC/HE	120	0.64	76	<10%	0.94	1.23	10/11
	3	25	EP4/32PPRS/MV/SC/HE	277	0.28	76	<10%	0.94	1.24	10/11
Low Power	3	25	EPL4/32IS/MV/MC/HE	120	0.57	68	<10%	0.84	1.24	4/A2
	3	25	EPL4/32IS/MV/MC/HE	277	0.25	66	<15%	0.84	1.27	4/A2
High Power	3	25	EPH4/32IS/MV/SC/HE	120	0.77	92	<10%	1.24	1.35	4/A8
	3	25	EPH4/32IS/MV/SC/HE	277	0.34	93	<10%	1.24	1.33	4/A8

Electronic Ballast

Fluorescent Compact Ballasts

HID

FLUORESCENT ELECTRONIC BALLAST

F28T8/ES, F32T8/ES(28W)



Electronic Ballast

Compact Fluorescent Ballasts

HID

	Ballast Factor	Number of Lamps per Ballast	Lamp Watts	Ballast Model Number	Line Voltage	Line Current (amps)	Input Watts (ANSI)	Total Harmonic Distortion Rating	Ballast Factor (ANSI)	Ballast Efficacy Factor	Wir./Dim Diag Pg. 29-30
Standard Power	2	28	EP2/32IS/MV/MC	120	0.41	49	<10%	0.89	1.81	2/A2	
	2	28	EP2/32IS/MV/MC	277	0.18	48	<10%	0.89	1.85	2/A2	
	2	28	EP2/32IS/MV/MC/HE	120	0.41	49	<10%	0.89	1.82	2/A3	
	2	28	EP2/32IS/MV/MC/HE	277	0.18	47	<15%	0.89	1.89	2/A3	
	2	28	EP2/32PRS/MV/MC/HE	120	0.44	52	<10%	0.90	1.73	7/A3	
	2	28	EP2/32PRS/MV/MC/HE	277	0.19	51	<10%	0.90	1.76	7/A3	
Low Power	2	28	EPL2/32IS/MV/MC/HE	120	0.35	41	<10%	0.78	1.90	2/A3	
	2	28	EPL2/32IS/MV/MC/HE	277	0.15	41	<15%	0.78	1.90	2/A3	
High Power	2	28	EPH2/32IS/MV/MC/HE	120	0.54	64	<10%	1.18	1.84	2/A2	
	2	28	EPH2/32IS/MV/MC/HE	277	0.24	63	<15%	1.18	1.87	2/A2	
Standard Power	3	28	EP3/32IS/MV/MC/HE	120	0.60	72	<10%	0.88	1.22	3/A2	
	3	28	EP3/32IS/MV/MC/HE	277	0.26	70	<15%	0.88	1.26	3/A2	
	3	28	EP3/32IS/MV/MC/HE	120	0.60	72	<10%	0.88	1.22	3/A2	
	3	28	EP3/32IS/MV/MC/HE	277	0.26	70	<15%	0.88	1.26	3/A2	
Low Power	3	28	EPL3/32IS/MV/MC	120	0.55	64	<10%	0.81	1.27	3/A2	
	3	28	EPL3/32IS/MV/MC	277	0.24	63	<15%	0.81	1.29	3/A2	
	3	28	EPL3/32IS/MV/SC/HE	120	0.52	62	<10%	0.75	1.21	3/A1	
	3	28	EPL3/32IS/MV/SC/HE	277	0.22	62	<10%	0.75	1.21	3/A1	
High Power	3	28	EPH3/32IS/MV/MC/HE	120	0.78	93	<10%	1.18	1.27	3/A2	
	3	28	EPH3/32IS/MV/MC/HE	277	0.34	92	<10%	1.18	1.28	3/A2	
Standard Power	4	28	EP4/32IS/MV/MC/HE	120	0.79	94	<10%	0.88	0.94	4/A2	
	4	28	EP4/32IS/MV/MC/HE	277	0.35	94	<10%	0.88	0.94	4/A2	
	4	28	EP4/32PPRS/MV/SC/HE	120	0.84	100	<10%	0.85	0.85	9/A11	
	4	28	EP4/32PPRS/MV/SC/HE	277	0.37	100	<10%	0.86	0.86	9/A11	
Low Power	4	28	EPL4/32IS/MV/MC/HE	120	0.71	84	<10%	0.77	0.92	4/A2	
	4	28	EPL4/32IS/MV/MC/HE	277	0.31	84	<10%	0.77	0.92	4/A2	
High Power	4	28	EPH4/32IS/MV/SC/HE	120	0.98	116	<10%	1.16	1.00	4/A8	
	4	28	EPH4/32IS/MV/SC/HE	277	0.42	115	<10%	1.16	1.01	4/A8	

F28T8/ES, F32T8/ES(28W)
One Lamp Out



Ballast Factor	Number of Lamps per Ballast	Lamp Watts	Ballast Model Number	Line Voltage	Line Current (amps)	Input Watts (ANSI)	Total Harmonic Distortion Rating	Ballast Factor (ANSI)	Ballast Efficacy Factor	Wir./Dim Diag Pg. 29-30
Standard Power	1	28	EP2/32IS/MV/MC	120	0.26	31	<10%	1.07	3.45	2/A2
	1	28	EP2/32IS/MV/MC	277	0.12	31	<15%	1.07	3.46	2/A2
	1	28	EP2/32IS/MV/MC/HE	120	0.25	30	<10%	1.08	3.60	2/A3
	1	28	EP2/32IS/MV/MC/HE	277	0.11	29	<15%	1.08	3.72	2/A3
Low Power	1	28	EPL2/32IS/MV/MC/HE	120	0.22	26	<10%	0.93	3.58	2/A3
	1	28	EPL2/32IS/MV/MC/HE	277	0.10	24	<20%	0.93	3.88	2/A3
High Power	1	28	EPH2/32IS/MV/MC/HE	120	0.33	39	<10%	1.38	3.54	2/A2
	1	28	EPH2/32IS/MV/MC/HE	277	0.15	39	<15%	1.38	3.54	2/A2
Standard Power	2	28	EP3/32IS/MV/MC/HE	120	0.45	54	<10%	0.99	1.83	3/A2
	2	28	EP3/32IS/MV/MC/HE	277	0.20	53	<15%	0.99	1.87	3/A2
Low Power	2	28	EPL3/32IS/MV/MC	120	0.42	49	<10%	0.92	1.88	3/A2
	2	28	EPL3/32IS/MV/MC	277	0.19	48	<15%	0.92	1.92	3/A2
	2	28	EPL3/32IS/MV/SC/HE	120	0.40	48	<10%	0.84	1.75	3/A1
	2	28	EPL3/32IS/MV/SC/HE	277	0.17	47	<11%	0.84	1.79	3/A1
High Power	2	28	EPH3/32IS/MV/MC/HE	120	0.59	70	<10%	1.27	1.81	3/A2
	2	28	EPH3/32IS/MV/MC/HE	277	0.26	69	<15%	1.27	1.84	3/A2
Standard Power	3	28	EP4/32IS/MV/MC/HE	120	0.65	77	<10%	0.96	1.25	4/A2
	3	28	EP4/32IS/MV/MC/HE	277	0.29	77	<10%	0.96	1.25	4/A2
	3	28	EP4/32PPRS/MV/SC/HE	120	0.70	83	<10%	0.92	1.11	10/11
	3	28	EP4/32PPRS/MV/SC/HE	277	0.31	83	<12%	0.93	1.12	10/11
Low Power	3	28	EPL4/32IS/MV/MC/HE	120	0.59	70	<10%	0.82	1.17	4/A2
	3	28	EPL4/32IS/MV/MC/HE	277	0.26	70	<10%	0.82	1.17	4/A2
High Power	3	28	EPH4/32IS/MV/SC/HE	120	0.80	95	<10%	1.24	1.31	4/A8
	3	28	EPH4/32IS/MV/SC/HE	277	0.36	98	<10%	1.24	1.27	4/A8

Electronic Ballast

Fluorescent Compact Ballasts

HID

FLUORESCENT ELECTRONIC BALLAST

F30T8/ES, F32T8/ES(30W)



Electronic Ballast

Compact Fluorescent Ballasts

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Ballast Factor	Number of Lamps per Ballast	Lamp Watts	Ballast Model Number	Line Voltage	Line Current (amps)	Input Watts (ANSI)	Total Harmonic Distortion Rating	Ballast Factor (ANSI)	Ballast Efficacy Factor	Wir./Dim Diag Pg. 29-30
Standard Power	2	30	E2/32IS-120MC	120	0.45	54	<20%	0.87	1.61	2/A2
	2	30	EP2/32IS/MV/MC	277	0.20	55	<10%	0.87	1.58	2/A2
	2	30	EP2/32IS/MV/MC	120	0.47	56	<10%	0.87	1.55	2/A2
	2	30	EP2/32IS/MV/MC/HE	120	0.44	51	<10%	0.89	1.75	2/A3
	2	30	EP2/32IS/MV/MC/HE	277	0.19	51	<15%	0.89	1.75	2/A3
	2	30	EP2/32PRS/MV/MC/HE	120	0.45	54	<10%	0.90	1.67	7/A3
	2	30	EP2/32PRS/MV/MC/HE	277	0.20	53	<10%	0.90	1.70	7/A3
Low Power	2	30	EPL2/32IS/MV/MC/HE	120	0.38	45	<10%	0.78	1.73	2/A3
	2	30	EPL2/32IS/MV/MC/HE	277	0.17	46	<15%	0.78	1.70	2/A3
High Power	2	30	EPH2/32IS/MV/MC/HE	120	0.58	69	<10%	1.18	1.71	2/A2
	2	30	EPH2/32IS/MV/MC/HE	277	0.25	69	<15%	1.18	1.71	2/A2
Standard Power	3	30	EP3/32IS/MV/MC/HE	120	0.65	79	<10%	0.88	1.11	3/A2
	3	30	EP3/32IS/MV/MC/HE	277	0.28	77	<15%	0.88	1.14	3/A2
Low Power	3	30	EPL3/32IS/MV/MC	120	0.60	71	<10%	0.81	1.14	3/A2
	3	30	EPL3/32IS/MV/MC	277	0.26	70	<15%	0.81	1.16	3/A2
	3	30	EPL3/32IS/MV/SC/HE	120	0.57	69	<10%	0.75	1.09	3/A1
	3	30	EPL3/32IS/MV/SC/HE	277	0.24	68	<10%	0.75	1.10	3/A1
High Power	3	30	EPH3/32IS/MV/MC/HE	120	0.84	99	<10%	1.18	1.19	3/A2
	3	30	EPH3/32IS/MV/MC/HE	277	0.37	99	<10%	1.18	1.19	3/A2
Standard Power	4	30	EP4/32IS/MV/MC/HE	120	0.85	101	<10%	0.88	0.87	4/A2
	4	30	EP4/32IS/MV/MC/HE	277	0.37	100	<10%	0.88	0.88	4/A2
	4	30	EP4/32PPRS/MV/SC/HE	120	0.87	104	<10%	0.83	0.80	9/A11
	4	30	EP4/32PPRS/MV/SC/HE	277	0.38	104	<10%	0.84	0.80	9/A11
Low Power	4	30	EPL4/32IS/MV/MC/HE	120	0.76	90	<10%	0.77	0.86	4/A2
	4	30	EPL4/32IS/MV/MC/HE	277	0.33	89	<10%	0.77	0.87	4/A2
High Power	4	30	EPH4/32IS/MV/SC/HE	120	1.01	120	<10%	1.16	0.97	4/A8
	4	30	EPH4/32IS/MV/SC/HE	277	0.44	120	<10%	1.16	0.97	4/A8

F30T8/ES, F32T8/ES(30W)
One Lamp Out



Ballast Factor	Number of Lamps per Ballast	Lamp Watts	Ballast Model Number	Line Voltage	Line Current (amps)	Input Watts (ANSI)	Total Harmonic Distortion Rating	Ballast Factor (ANSI)	Ballast Efficacy Factor	Wir./Dim Diag Pg. 29-30
Standard Power	1	30	EP2/32IS/MV/MC	120	0.31	37	<10%	1.00	2.70	2/A2
	1	30	EP2/32IS/MV/MC	277	0.13	37	<11%	1.00	2.70	2/A2
	1	30	EP2/32IS/MV/MC/HE	120	0.27	31	<10%	1.08	3.48	2/A3
	1	30	EP2/32IS/MV/MC/HE	277	0.12	30	<15%	1.08	3.60	2/A3
Low Power	1	30	EPL2/32IS/MV/MC/HE	120	0.24	28	<10%	0.93	3.32	2/A3
	1	30	EPL2/32IS/MV/MC/HE	277	0.11	28	<15%	0.93	3.32	2/A3
High Power	1	30	EPH2/32IS/MV/MC/HE	120	0.36	44	<10%	1.38	3.14	2/A2
	1	30	EPH2/32IS/MV/MC/HE	277	0.16	44	<15%	1.38	3.14	2/A2
Standard Power	2	30	EP3/32IS/MV/MC/HE	120	0.48	59	<10%	0.99	1.68	3/A2
	2	30	EP3/32IS/MV/MC/HE	277	0.21	58	<15%	0.99	1.71	3/A2
Low Power	2	30	EPL3/32IS/MV/MC	120	0.45	54	<10%	0.92	1.70	3/A2
	2	30	EPL3/32IS/MV/MC	277	0.20	53	<15%	0.92	1.74	3/A2
	2	30	EPL3/32IS/MV/SC/HE	120	0.44	52	<10%	0.84	1.62	3/A1
	2	30	EPL3/32IS/MV/SC/HE	277	0.19	52	<11%	0.84	1.62	3/A1
High Power	2	30	EPH3/32IS/MV/MC/HE	120	0.64	76	<10%	1.27	1.67	3/A2
	2	30	EPH3/32IS/MV/MC/HE	277	0.28	75	<15%	1.27	1.69	3/A2
Standard Power	3	30	EP4/32IS/MV/MC/HE	120	0.71	84	<10%	0.96	1.14	4/A2
	3	30	EP4/32IS/MV/MC/HE	277	0.31	84	<10%	0.96	1.14	4/A2
	3	30	EP4/32PPRS/MV/SC/HE	120	0.72	86	<10%	0.88	1.03	10/11
	3	30	EP4/32PPRS/MV/SC/HE	277	0.32	86	<10%	0.89	1.03	10/11
Low Power	3	30	EPL4/32IS/MV/MC/HE	120	0.63	75	<10%	0.82	1.09	4/A2
	3	30	EPL4/32IS/MV/MC/HE	277	0.28	74	<10%	0.82	1.11	4/A2
High Power	3	30	EPH4/32IS/MV/SC/HE	120	0.88	105	<10%	1.24	1.18	4/A8
	3	30	EPH4/32IS/MV/SC/HE	277	0.37	101	<10%	1.24	1.23	4/A8

Electronic Ballast

Fluorescent Compact Ballasts

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FLUORESCENT ELECTRONIC BALLAST

F17T8, FB17T8



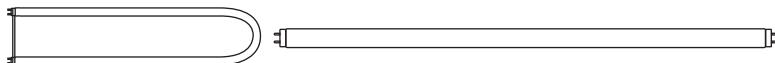
Electronic Ballast

Compact Fluorescent Ballasts

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Ballast Factor	Number of Lamps per Ballast	Lamp Watts	Ballast Model Number	Line Voltage	Line Current (amps)	Input Watts (ANSI)	Total Harmonic Distortion Rating	Ballast Factor (ANSI)	Ballast Efficacy Factor	Wir./Dim Diag Pg. 29-30
Standard Power	2	17	E2/32IS-120MC	120	0.30	34	<30%	0.92	2.71	2/A2
	2	17	EP2/32IS/MV/MC	120	0.28	34	<10%	0.89	2.62	2/A2
	2	17	EP2/32IS/MV/MC	277	0.13	34	<12%	0.89	2.62	2/A2
	2	17	EP2/32IS/MV/MC/HE	120	0.25	28	<10%	0.91	3.25	2/A3
	2	17	EP2/32IS/MV/MC/HE	277	0.11	28	<15%	0.91	3.25	2/A3
Low Power	2	17	EPL2/32IS/MV/MC	120	0.21	25	<10%	0.84	3.36	2/A2
	2	17	EPL2/32IS/MV/MC	277	0.10	25	<15%	0.84	3.36	2/A2
	2	17	EPL2/32IS/MV/MC/HE	120	0.21	25	<10%	0.80	3.20	2/A3
	2	17	EPL2/32IS/MV/MC/HE	277	0.09	23	<20%	0.80	3.48	2/A3
High Power	2	17	EPH2/32IS/MV/MC/HE	120	0.33	39	<10%	1.23	3.15	2/A2
	2	17	EPH2/32IS/MV/MC/HE	277	0.15	39	<15%	1.23	3.15	2/A2
Standard Power	3	17	EP3/32IS/MV/MC/HE	120	0.38	45	<10%	0.92	2.04	3/A2
	3	17	EP3/32IS/MV/MC/HE	277	0.17	45	<15%	0.92	2.04	3/A2
Low Power	3	17	EPL3/32IS/MV/MC	120	0.37	43	<10%	0.86	1.95	3/A2
	3	17	EPL3/32IS/MV/MC	277	0.16	43	<15%	0.86	2.00	3/A2
	3	17	EPL3/32IS/MV/SC/HE	120	0.34	41	<10%	0.80	1.95	3/A1
	3	17	EPL3/32IS/MV/SC/HE	277	0.15	40	<12%	0.80	2.00	3/A1
High Power	3	17	EPH3/32IS/MV/MC/HE	120	0.49	58	<10%	1.23	2.12	3/A2
	3	17	EPH3/32IS/MV/MC/HE	277	0.22	57	<10%	1.23	2.15	3/A2
Standard Power	4	17	EP4/32IS/MV/MC/HE	120	0.49	59	<10%	0.93	1.58	4/A2
	4	17	EP4/32IS/MV/MC/HE	277	0.22	58	<10%	0.93	1.60	4/A2
	4	17	EP4/32PPRS/MV/SC/HE	120	0.52	63	<10%	0.87	1.39	9/A11
	4	17	EP4/32PPRS/MV/SC/HE	277	0.24	63	<12%	0.89	1.41	9/A11
Low Power	4	17	EPL4/32IS/MV/MC/HE	120	0.46	54	<10%	0.79	1.46	4/A2
	4	17	EPL4/32IS/MV/MC/HE	277	0.19	52	<10%	0.79	1.52	4/A2
High Power	4	17	EPH4/32IS/MV/SC/HE	120	0.63	75	<10%	1.18	1.57	4/A8
	4	17	EPH4/32IS/MV/SC/HE	277	0.29	79	<10%	1.18	1.49	4/A8

F17T8, FB17T8
One Lamp Out



Ballast Factor	Number of Lamps per Ballast	Lamp Watts	Ballast Model Number	Line Voltage	Line Current (amps)	Input Watts (ANSI)	Total Harmonic Distortion Rating	Ballast Factor (ANSI)	Ballast Efficacy Factor	Wir./Dim Diag Pg. 29-30
Standard Power	1	17	EP2/32IS/MV/MC	120	0.18	22	<10%	1.10	4.95	2/A2
	1	17	EP2/32IS/MV/MC	277	0.08	21	<15%	1.10	5.18	2/A2
	1	17	EP2/32IS/MV/MC/HE	120	0.16	21	<10%	1.10	5.24	2/A3
	1	17	EP2/32IS/MV/MC/HE	277	0.09	21	<15%	1.10	5.24	2/A3
Low Power	1	17	EPL2/32IS/MV/MC/HE	120	0.14	17	<10%	0.96	5.65	2/A3
	1	17	EPL2/32IS/MV/MC/HE	277	0.08	16	<20%	0.96	6.00	2/A3
High Power	1	17	EPH2/32IS/MV/MC/HE	120	0.22	25	<10%	1.42	5.68	2/A2
	1	17	EPH2/32IS/MV/MC/HE	277	0.11	25	<15%	1.42	5.68	2/A2
Low Power	2	17	EPL3/32IS/MV/SC/HE	120	0.27	31	<12%	0.87	2.81	3/A1
	2	17	EPL3/32IS/MV/SC/HE	277	0.12	31	<15%	0.87	2.81	3/A1
Standard Power	3	17	EP4/32PPRS/MV/SC/HE	120	0.45	53	<10%	0.94	1.77	10/11
	3	17	EP4/32PPRS/MV/SC/HE	277	0.21	53	<15%	0.94	1.78	10/11
High Power	3	17	EPH4/32IS/MV/SC/HE	120	0.52	62	<10%	1.27	2.05	4/A8
	3	17	EPH4/32IS/MV/SC/HE	277	0.24	66	<10%	1.27	1.92	4/A8

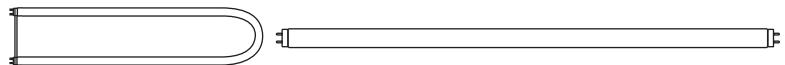
Electronic Ballast

Fluorescent Compact Ballasts

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FLUORESCENT ELECTRONIC BALLAST

F25T8, FB25T8



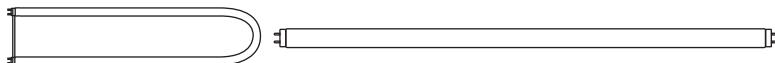
Electronic Ballast

Compact Fluorescent Ballasts

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Ballast Factor	Number of Lamps per Ballast	Lamp Watts	Ballast Model Number	Line Voltage	Line Current (amps)	Input Watts (ANSI)	Total Harmonic Distortion Rating	Ballast Factor (ANSI)	Ballast Efficacy Factor	Wir./Dim Diag Pg. 29-30
Standard Power	2	25	E2/32IS-120MC	120	0.38	49	<25%	0.90	1.84	2/A2
	2	25	EP2/32IS/MV/MC	120	0.40	47	<10%	0.88	1.87	2/A2
	2	25	EP2/32IS/MV/MC	277	0.17	47	<10%	0.89	1.87	2/A2
	2	25	EP2/32IS/MV/MC/HE	120	0.36	42	<10%	0.89	2.12	2/A3
	2	25	EP2/32IS/MV/MC/HE	277	0.16	41	<15%	0.89	2.17	2/A3
Low Power	2	25	EPL2/32IS/MV/MC/HE	120	0.31	37	<10%	0.79	2.14	2/A3
	2	25	EPL2/32IS/MV/MC/HE	277	0.13	35	<15%	0.79	2.26	2/A3
High Power	2	25	EPH2/32IS/MV/MC/HE	120	0.45	54	<10%	1.20	2.22	2/A2
	2	25	EPH2/32IS/MV/MC/HE	277	0.20	54	<15%	1.20	2.22	2/A2
Standard Power	3	25	EP3/32IS/MV/MC/HE	120	0.56	68	<10%	0.90	1.32	3/A2
	3	25	EP3/32IS/MV/MC/HE	277	0.24	66	<15%	0.90	1.36	3/A2
Low Power	3	25	EPL3/32IS/MV/MC	120	0.51	60	<10%	0.82	1.37	3/A2
	3	25	EPL3/32IS/MV/MC	277	0.22	58	<15%	0.82	1.41	3/A2
	3	25	EPL3/32IS/MV/SC/HE	120	0.49	58	<10%	0.78	1.34	3/A1
	3	25	EPL3/32IS/MV/SC/HE	277	0.21	57	<10%	0.78	1.37	3/A1
High Power	3	25	EPH3/32IS/MV/MC/HE	120	0.69	81	<10%	1.20	1.48	3/A2
	3	25	EPH3/32IS/MV/MC/HE	277	0.30	81	<10%	1.20	1.48	3/A2
Standard Power	4	25	EP4/32IS/MV/MC/HE	120	0.72	87	<10%	0.89	1.02	4/A2
	4	25	EP4/32IS/MV/MC/HE	277	0.32	85	<10%	0.89	1.05	4/A2
	4	25	EP4/32PPRS/MV/SC/HE	120	0.74	88	<10%	0.84	0.96	9/A11
	4	25	EP4/32PPRS/MV/SC/HE	277	0.33	88	<10%	0.85	0.97	9/A11
Low Power	4	25	EPL4/32IS/MV/MC/HE	120	0.64	76	<10%	0.78	1.03	4/A2
	4	25	EPL4/32IS/MV/MC/HE	277	0.27	74	<10%	0.78	1.05	4/A2
	4	25	EPL4/32IS/MV/SC/HE	120	0.65	77	<10%	0.78	1.01	4/A1
	4	25	EPL4/32IS/MV/SC/HE	277	0.28	76	<10%	0.78	1.03	4/A1
High Power	4	25	EPH4/32IS/MV/SC/HE	120	0.92	109	<10%	1.17	1.07	4/A8
	4	25	EPH4/32IS/MV/SC/HE	277	0.40	109	<10%	1.17	1.07	4/A8

F25T8, FB25T8
One Lamp Out



Ballast Factor	Number of Lamps per Ballast	Lamp Watts	Ballast Model Number	Line Voltage	Line Current (amps)	Input Watts (ANSI)	Total Harmonic Distortion Rating	Ballast Factor (ANSI)	Ballast Efficacy Factor	Wir./Dim Diag Pg. 29-30
Standard Power	1	25	EP2/32IS/MV/MC	120	0.26	32	<10%	1.01	3.16	2/A2
	1	25	EP2/32IS/MV/MC	277	0.12	32	<10%	1.01	3.16	2/A2
	1	25	EP2/32IS/MV/MC/HE	120	0.23	26	<10%	1.08	4.15	2/A3
	1	25	EP2/32IS/MV/MC/HE	277	0.10	26	<15%	1.08	4.15	2/A3
Low Power	1	25	EPL2/32IS/MV/MC/HE	120	0.20	24	<10%	0.95	3.96	2/A3
	1	25	EPL2/32IS/MV/MC/HE	277	0.09	22	<20%	0.95	4.32	2/A3
High Power	1	25	EPH2/32IS/MV/MC/HE	120	0.28	33	<10%	1.23	3.73	2/A2
	1	25	EPH2/32IS/MV/MC/HE	277	0.13	33	<15%	1.23	3.73	2/A2
Standard Power	2	25	EP3/32IS/MV/MC/HE	120	0.42	50	<10%	1.00	2.00	3/A2
	2	25	EP3/32IS/MV/MC/HE	277	0.18	50	<15%	1.00	2.00	3/A2
Low Power	2	25	EPL3/32IS/MV/SC/HE	120	0.37	44	<10%	0.86	1.95	3/A1
	2	25	EPL3/32IS/MV/SC/HE	277	0.16	44	<15%	0.86	1.95	3/A1
High Power	2	25	EPH3/32IS/MV/MC/HE	120	0.55	65	<10%	1.28	1.97	3/A2
	2	25	EPH3/32IS/MV/MC/HE	277	0.25	65	<15%	1.28	1.97	3/A2
Standard Power	3	25	EP4/32PPRS/MV/SC/HE	120	0.62	74	<10%	0.90	1.21	10/11
	3	25	EP4/32PPRS/MV/SC/HE	277	0.28	74	<12%	0.90	1.21	10/11
Low Power	3	25	EPL4/32IS/MV/MC/HE	120	0.53	62	<10%	0.84	1.35	4/A2
	3	25	EPL4/32IS/MV/MC/HE	277	0.22	61	<15%	0.84	1.38	4/A2
High Power	3	25	EPH4/32IS/MV/SC/HE	120	0.75	89	<10%	1.26	1.42	4/A8
	3	25	EPH4/32IS/MV/SC/HE	277	0.32	87	<10%	1.26	1.45	4/A8

Electronic Ballast

Fluorescent Compact Ballasts

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FLUORESCENT ELECTRONIC BALLAST

F40T8

One Lamp Out



Electronic Ballast

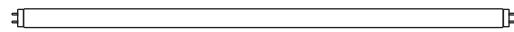
Compact Fluorescent Ballasts

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Ballast Factor	Number of Lamps per Ballast	Lamp Watts	Ballast Model Number	Line Voltage	Line Current (amps)	Input Watts (ANSI)	Total Harmonic Distortion Rating	Ballast Factor (ANSI)	Ballast Efficacy Factor	Wir./Dim Diag Pg. 29-30
Standard Power	1	40	E2/32IS-120MC	120	0.48	45	<30%	1.00	2.22	2/A2
	1	40	EP2/32IS/MV/MC	120	0.39	47	<10%	0.99	2.11	2/A2
	1	40	EP2/32IS/MV/MC	277	0.17	46	<10%	0.99	2.15	2/A2
	1	40	EP2/32IS/MV/MC/HE	120	0.35	44	<10%	1.00	2.27	2/A3
	1	40	EP2/32IS/MV/MC/HE	277	0.16	43	<15%	1.00	2.33	2/A3
Low Power	1	40	EPL2/32IS/MV/MC	120	0.35	41	<10%	0.89	2.17	2/A2
	1	40	EPL2/32IS/MV/MC	277	0.15	40	<15%	0.89	2.23	2/A2
	1	40	EPL2/32IS/MV/MC/HE	120	0.30	35	<10%	0.90	2.57	2/A3
	1	40	EPL2/32IS/MV/MC/HE	277	0.13	35	<15%	0.90	2.57	2/A3
High Power	1	40	EPH2/32IS/MV/MC/HE	120	0.45	54	<10%	1.26	2.33	2/A2
	1	40	EPH2/32IS/MV/MC/HE	277	0.20	54	<15%	1.26	2.33	2/A2
Standard Power	2	40	EP3/32IS/MV/MC/HE	120	0.65	78	<10%	0.95	1.22	3/A2
	2	40	EP3/32IS/MV/MC/HE	277	0.29	77	<15%	0.95	1.23	3/A2
	2	40	EP3/32IS/MV/MC/HE	120	0.65	78	<10%	0.95	1.22	3/A2
	2	40	EP3/32IS/MV/MC/HE	277	0.29	77	<15%	0.95	1.23	3/A2
Low Power	2	40	EPL3/32IS/MV/MC	120	0.60	71	<10%	0.87	1.23	3/A2
	2	40	EPL3/32IS/MV/MC	277	0.26	70	<15%	0.87	1.24	3/A2
	2	40	EPL3/32IS/MV/SC/HE	120	0.58	68	<10%	0.84	1.24	3/A1
Low Power	2	40	EPL3/32IS/MV/SC/HE	277	0.25	67	<10%	0.84	1.25	3/A1
High Power	2	40	EPH3/32IS/MV/MC/HE	120	0.84	100	<10%	1.26	1.26	3/A2
	2	40	EPH3/32IS/MV/MC/HE	277	0.36	98	<10%	1.26	1.29	3/A2
Standard Power	3	40	EP4/32IS/MV/MC/HE	120	0.77	92	<10%	0.96	1.04	4/A2
	3	40	EP4/32IS/MV/MC/HE	277	0.41	109	<10%	0.96	0.88	4/A2
	3	3	EP4/32PPRS/MV/SC/HE	120	0.93	111	<10%	0.88	0.80	10/A11
	3	3	EP4/32PPRS/MV/SC/HE	277	0.41	111	<10%	0.89	0.80	10/A11
Low Power	3	40	EPL4/32IS/MV/MC/HE	120	0.82	98	<10%	0.82	0.85	4/A2
	3	40	EPL4/32IS/MV/MC/HE	277	0.35	96	<10%	0.82	0.85	4/A2
High Power	3	40	EPH4/32IS/MV/SC/HE	120	1.22	143	<10%	1.25	0.87	4/A8
	3	40	EPH4/32IS/MV/SC/HE	277	0.51	139	<10%	1.25	0.90	4/A8

F96T8

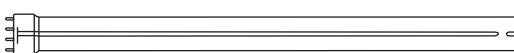
Primary lamp Design



Ballast Factor	Number of Lamps per Ballast	Lamp Watts	Ballast Model Number	Line Voltage	Line Current (amps)	Input Watts (ANSI)	Total Harmonic Distortion Rating	Ballast Factor (ANSI)	Ballast Efficacy Factor	Wir./Dim Diag Pg. 29-30
Standard Power	2	59	EP2/59IS/MV/MC/HE	120	0.93	111	<10%	0.92	0.83	2/A3
	2	59	EP2/59IS/MV/MC/HE	277	0.40	109	<10%	0.92	0.84	2/A3

FT40W/2G11

Primary lamp Design



Ballast Factor	Number of Lamps per Ballast	Lamp Watts	Ballast Model Number	Line Voltage	Line Current (amps)	Input Watts (ANSI)	Total Harmonic Distortion Rating	Ballast Factor (ANSI)	Ballast Efficacy Factor	Wir./Dim Diag Pg. 29-30
Standard Power	2	40	EP2/40IS-TT/MV/SC	120	0.56	67	<10%	0.84	1.25	5/A1
	2	40	EP2/40IS-TT/MV/SC	277	0.24	65	<10%	0.84	1.29	5/A1

F28T5

Primary Lamp Design



Ballast Factor	Number of Lamps per Ballast	Lamp Watts	Ballast Model Number	Line Voltage	Line Current (amps)	Input Watts (ANSI)	Total Harmonic Distortion Rating	Ballast Factor (ANSI)	Ballast Efficacy Factor	Wir./Dim Diag Pg. 29-30
Standard Power	2	28	EP2/28T5/PRS/MV	120	0.56	67	<10%	1.05	1.57	6/A12
	2	28	EP2/28T5/PRS/MV	277	0.24	67	<10%	1.05	1.57	6/A12
	1	28	EP2/28T5/PRS/MV	120	0.28	34	<10%	1.07	3.15	6/A12
	1	28	EP2/28T5/PRS/MV	277	0.13	34	<12%	1.07	3.15	6/A12

F21T5

Standard Power	2	49	EP2/28T5/PRS/MV	120	0.38	46	<10%	0.94	2.04	6/A12
	2	49	EP2/28T5/PRS/MV	277	0.17	46	<12%	0.94	2.04	6/A12
	1	49	EP2/28T5/PRS/MV	120	0.20	24	<10%	0.97	4.04	6/A12
	1	49	EP2/28T5/PRS/MV	277	0.10	25	<12%	1.02	4.08	6/A12

F14T5

Standard Power	2	55	EP2/28T5/PRS/MV	120	0.25	30	<10%	0.92	3.06	6/A12
	2	55	EP2/28T5/PRS/MV	277	0.12	31	<12%	0.94	3.03	6/A12
	1	55	EP2/28T5/PRS/MV	120	0.14	17	<10%	1.00	5.88	6/A12
	1	55	EP2/28T5/PRS/MV	277	0.07	17	<15%	1.00	5.88	6/A12

Electronic Ballast

Fluorescent Compact Ballasts

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FLUORESCENT ELECTRONIC BALLAST

F39T5/HO Primary Lamp Design



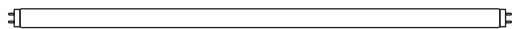
Electronic Ballast

Compact Fluorescent Ballasts

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Ballast Factor	Number of Lamps per Ballast	Lamp Watts	Ballast Model Number	Line Voltage	Line Current (amps)	Input Watts (ANSI)	Total Harmonic Distortion Rating	Ballast Factor (ANSI)	Ballast Efficacy Factor	Wir./Dim Diag Pg. 29-30
Standard Power	2	39	EP2/39HO/PRS/MV	120	0.78	90	<10%	1.00	1.11	6/A12
	2	39	EP2/39HO/PRS/MV	277	0.34	89	<10%	1.00	1.12	6/A12
	1	39	EP2/39HO/PRS/MV	120	0.39	49	<10%	1.03	2.23	6/A12
	1	39	EP2/39HO/PRS/MV	277	0.18	47	<12%	1.06	2.25	6/A12
F24T5/HO										
Standard Power	2	24	EP2/39HO/PRS/MV	120	0.50	59	<10%	1.08	1.83	6/A12
	2	24	EP2/39HO/PRS/MV	277	0.22	59	<10%	1.08	1.83	6/A12
	1	24	EP2/39HO/PRS/MV	120	0.25	30	<10%	1.10	3.66	6/A12
	1	24	EP2/39HO/PRS/MV	277	0.12	30	<15%	1.10	3.66	6/A12
FC12T5 40W										
Standard Power	2	40	EP2/39HO/PRS/MV	120	0.78	93	<10%	1.02	1.09	6/A12
	2	40	EP2/39HO/PRS/MV	277	0.34	92	<10%	1.01	1.09	6/A12
	1	40	EP2/39HO/PRS/MV	120	0.41	49	<10%	1.07	2.18	6/A12
	1	40	EP2/39HO/PRS/MV	277	0.19	50	<12%	1.10	2.18	6/A12
FC9T5 22W										
Standard Power	2	22	EP2/39HO/PRS/MV	120	0.53	63	<10%	1.25	1.98	6/A12
	2	22	EP2/39HO/PRS/MV	277	0.23	63	<10%	1.25	1.98	6/A12
	1	22	EP2/39HO/PRS/MV	120	0.28	33	<10%	1.31	3.97	6/A12
	1	22	EP2/39HO/PRS/MV	277	0.13	33	<12%	1.31	3.97	6/A12
FT36W/2G11										
Standard Power	2	36	EP2/39HO/PRS/MV	120	0.60	72	<10%	0.87	1.20	6/A12
	2	36	EP2/39HO/PRS/MV	277	0.26	71	<10%	0.87	1.22	6/A12
	1	36	EP2/39HO/PRS/MV	120	0.32	38	<10%	0.92	2.42	6/A12
	1	36	EP2/39HO/PRS/MV	277	0.14	38	<10%	0.92	2.42	6/A12
FT24W/2G11										
Standard Power	2	24	EP2/39HO/PRS/MV	120	0.45	54	<10%	0.99	1.83	6/A12
	2	24	EP2/39HO/PRS/MV	277	0.20	55	<10%	0.99	1.80	6/A12
	1	24	EP2/39HO/PRS/MV	120	0.25	30	<10%	1.09	3.63	6/A12
	1	24	EP2/39HO/PRS/MV	277	0.12	30	<15%	1.09	3.63	6/A12
FT40W/2G11										
Standard Power	1	40	EP2/39HO/PRS/MV	120	0.42	50	<10%	1.09	2.18	6/A12
	1	40	EP2/39HO/PRS/MV	277	0.19	50	<12%	1.09	2.18	6/A12
FC9T5 + FC12T5										
Standard Power	1+1	22/40	EP2/39HO/PRS/MV	120	0.57	68	<10%	0.96	1.41	6/A12
	1+1	22/40	EP2/39HO/PRS/MV	277	0.25	68	<10%	0.96	1.41	6/A12

F54T5/HO Primary Lamp Design



Ballast Factor	Number of Lamps per Ballast	Lamp Watts	Ballast Model Number	Line Voltage	Line Current (amps)	Input Watts (ANSI)	Total Harmonic Distortion Rating	Ballast Factor (ANSI)	Ballast Efficacy Factor	Wir./Dim Diag Pg. 29-30
Standard Power	2	54	EP2/54HO/PRS/MV/W/MC	120	1.00	120	<10%	1.00	0.80	7/A3
	2	54	EP2/54HO/PRS/MV/W/MC	277	0.43	117	<10%	1.00	0.80	7/A3
	1	54	EP2/54HO/PRS/MV/W/MC	120	0.52	62	<10%	1.03	1.60	8/A3
	1	54	EP2/54HO/PRS/MV/W/MC	277	0.23	62	<20%	1.03	1.60	8/A3
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F54T5HO/ES										
Standard Power	2	49	EP2/54HO/PRS/MV/W/MC	120	0.88	106	<10%	0.99	0.90	7/A3
	2	49	EP2/54HO/PRS/MV/W/MC	277	0.38	105	<10%	0.98	0.90	7/A3
	1	49	EP2/54HO/PRS/MV/W/MC	120	0.44	53	<10%	0.90	1.60	8/A3
	1	49	EP2/54HO/PRS/MV/W/MC	277	0.21	58	<10%	1.04	1.70	8/A3
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FC12T5/HO										
Standard Power	2	55	EP2/54HO/PRS/MV/W/MC	120	0.87	106	<10%	0.86	0.80	7/A3
	2	55	EP2/54HO/PRS/MV/W/MC	277	0.37	103	<10%	0.86	0.80	7/A3
	1	55	EP2/54HO/PRS/MV/W/MC	120	0.45	55	<10%	0.88	1.60	8/A3
	1	55	EP2/54HO/PRS/MV/W/MC	277	0.20	55	<20%	0.88	1.60	8/A3
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FT55W/2G11										
Standard Power	2	55	EP2/54HO/PRS/MV/W/MC	120	0.94	112	<10%	0.91	0.80	7/A3
	2	55	EP2/54HO/PRS/MV/W/MC	277	0.40	109	<10%	0.91	0.80	7/A3
	1	55	EP2/54HO/PRS/MV/W/MC	120	0.51	58	<10%	0.93	1.60	8/A3
	1	55	EP2/54HO/PRS/MV/W/MC	277	0.22	58	<20%	0.93	1.60	8/A3
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FT50W/2G11										
Standard Power	2	50	EP2/54HO/PRS/MV/W/MC	120	1.01	118	<10%	1.12	0.90	7/A3
	2	50	EP2/54HO/PRS/MV/W/MC	277	0.43	115	<10%	1.12	0.90	7/A3
	1	50	EP2/54HO/PRS/MV/W/MC	120	0.52	61	<10%	1.15	1.80	8/A3
	1	50	EP2/54HO/PRS/MV/W/MC	277	0.23	61	<20%	0.90	1.80	8/A3



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Electronic Ballast

Fluorescent Compact Ballasts

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FLUORESCENT ELECTRONIC BALLAST

F40T12

Primary Lamp Design



Electronic Ballast

Ballast Factor	Number of Lamps per Ballast	Lamp Watts	Ballast Model Number	Line Voltage	Line Current (amps)	Input Watts (ANSI)	Total Harmonic Distortion Rating	Ballast Factor (ANSI)	Ballast Efficacy Factor	Wir./Dim Diag Pg. 29-30
Standard Power	2	40	EP2/40RS/MV/MC	120	.62	72	<10%	0.85	1.18	1/A3
	2	40	EP2/40RS/MV/MC	277	.26	70	<10%	0.85	1.21	1/A3
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F34T12										
Standard Power	2	34	EP2/40RS/MV/MC	120	.55	62	<10%	0.85	1.37	1/A3
	2	34	EP2/40RS/MV/MC	277	0.23	61	<10%	0.85	1.39	1/A3
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F30T12										
Standard Power	2	30	EP2/40RS/MV/MC	120	0.48	58	<10%	0.93	1.60	1/A3
	2	30	EP2/40RS/MV/MC	277	0.20	56	<10%	0.93	1.66	1/A3
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F25T12										
Standard Power	2	25	EP2/40RS/MV/MC	120	0.58	70	<10%	1.10	1.57	1/A3
	2	25	EP2/40RS/MV/MC	277	0.24	69	<10%	1.10	1.59	1/A3

HID



F96T12/HO

Primary Lamp Design

Ballast Factor	Number of Lamps per Ballast	Lamp Watts	Ballast Model Number	Line Voltage	Line Current (amps)	Input Watts (ANSI)	Total Harmonic Distortion Rating	Ballast Factor (ANSI)	Ballast Efficacy Factor	Wir./Dim Diag Pg. 29-30
Standard Power	2	110	EP2/110RS/MV/SC 	120	1.54	185	<10%	0.88	0.48	1/A9
	2	110	EP2/110RS/MV/SC 	277	0.66	180	<10%	0.88	0.49	1/A9
	1	110	EP2/110RS/MV/SC 	120	0.80	96	<10%	0.91	0.95	1/A9
	1	110	EP2/110RS/MV/SC 	277	0.37	95	<10%	0.91	0.96	1/A9

F96T12HO/ES

Standard Power	2	95	EP2/110RS/MV/SC 	120	1.38	165	<10%	0.88	0.53	1/A9
	2	95	EP2/110RS/MV/SC 	277	0.60	162	<10%	0.88	0.54	1/A9
	1	95	EP2/110RS/MV/SC 	120	0.74	88	<10%	0.91	1.03	1/A9
	1	95	EP2/110RS/MV/SC 	277	0.32	86	<15%	0.91	1.04	1/A9

F72T12/HO

Standard Power	2	85	EP2/110RS/MV/SC 	120	1.17	140	<10%	0.85	0.61	1/A9
	2	85	EP2/110RS/MV/SC 	277	0.50	137	<10%	0.85	0.62	1/A9

F60T12/HO

Standard Power	2	75	EP2/110RS/MV/SC 	120	0.98	117	<10%	0.82	0.62	1/A9
	2	75	EP2/110RS/MV/SC 	277	0.42	114	<10%	0.82	0.70	1/A9

F48T12/HO

Standard Power	2	60	EP2/110RS/MV/SC 	120	0.80	96	<10%	0.83	0.86	1/A9
	2	60	EP2/110RS/MV/SC 	277	0.34	94	<10%	0.83	0.87	1/A9

Electronic Ballast

Fluorescent Compact Ballasts

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FLUORESCENT ELECTRONIC BALLAST

F96T12

Primary Lamp Design



Electronic Ballast

Compact Fluorescent Ballasts

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Ballast Factor	Number of Lamps per Ballast	Lamp Watts	Ballast Model Number	Line Voltage	Line Current (amps)	Input Watts (ANSI)	Total Harmonic Distortion Rating	Ballast Factor (ANSI)	Ballast Efficacy Factor	Wir./Dim Diag Pg. 29-30
Standard Power	2	75	EP2/75IS/MV/SC	120	1.12	133	<10%	0.90	0.68	2/A10
	2	75	E2/75IS-120MC	120	1.13	135	<10%	0.88	0.65	2/A8
	2	75	EP2/75IS/MV/SC	277	0.49	135	<10%	0.90	0.67	2/A10
	1	75	EP2/75IS/MV/SC	120	0.70	83	<10%	1.00	1.20	2/A10
	2	75	E2/75IS-120MC	120	0.68	82	<10%	1.02	1.24	2/A8
	1	75	EP2/75IS/MV/SC	277	0.31	84	<10%	1.00	1.19	2/A10
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F96T12ES										
Standard Power	2	60	EP2/75IS/MV/SC	120	0.95	113	<10%	0.90	0.80	2/A10
	2	60	E2/75IS-120MC	120	0.88	105	<10%	0.88	0.84	2/A8
	2	60	EP2/75IS/MV/SC	277	0.42	115	<10%	0.90	0.78	2/A10
	1	60	EP2/75IS/MV/SC	120	0.60	71	<10%	1.05	1.48	2/A10
	2	60	E2/75IS-120MC	120	0.54	64	<10%	1.00	1.56	2/A8
	1	60	EP2/75IS/MV/SC	277	0.26	72	<10%	1.05	1.46	2/A10
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F72T12										
Standard Power	2	55	EP2/75IS/MV/SC	120	0.92	107	<10%	0.90	0.84	2/A10
	2	55	E2/75IS-120MC	120	0.85	106	<10%	0.90	0.85	2/A8
	2	55	EP2/75IS/MV/SC	277	0.39	107	<10%	0.90	0.48	2/A10
	1	55	EP2/75IS/MV/SC	120	0.60	66	<10%	1.04	1.58	2/A10
	2	55	E2/75IS-120MC	120	0.54	64	<10%	1.02	1.63	2/A8
	1	55	EP2/75IS/MV/SC	277	0.25	66	<10%	1.04	1.58	2/A10
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F48T12										
Standard Power	2	39	EP2/75IS/MV/SC	120	0.68	76	<10%	0.95	1.25	2/A10
	2	39	EP2/75IS/MV/SC	277	0.29	76	<10%	0.95	1.25	2/A10
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F48T12ES										
Standard Power	2	32	EP2/75IS/MV/SC	120	0.60	64	<10%	0.95	1.48	2/A10
	2	32	EP2/75IS/MV/SC	277	0.25	64	<10%	0.95	1.48	2/A10



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