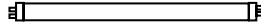


This Is An Original Product From Fulham Co., Inc.

**Description:** WORKHORSE Specifier Grade Series Electronic Ballast, Drop In Replacement For Magnetic Ballast, Parallel Lamp Operation, THD Less Than 10%

**This Ballast Will Operate Following Lamps:**

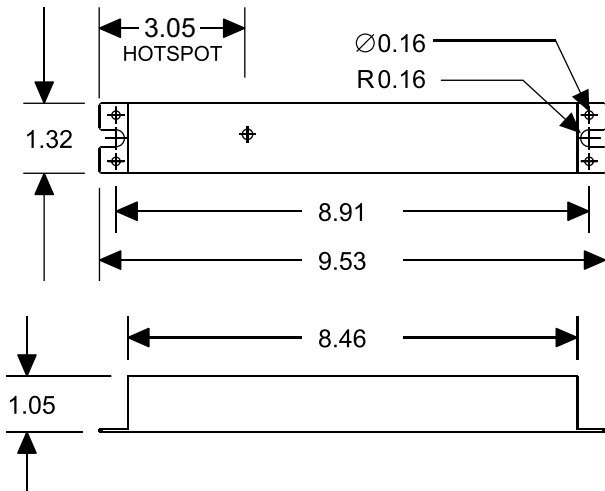


F17T8, F25T8, F32T8/25, F32T8/28,  
 F32T8/30, FBO28T8, FBO31T8,  
 FBO32T8, F32T8 F32T8, F40T8

**ELECTRICAL DATA**

INPUT VOLT	120V ± 10%, 50/60Hz								
LAMP WATTS/TYPE	F25T8	F32T8/25	F32T8/28	F32T8/30	FBO28T8	FBO31T8	FBO32T8	F32T8	F40T8
LAMPS OPERATED	2 (TWO)								
INPUT WATTS	50	51	54	59	54	61	63	63	78
LINE CURRENT	0.42	0.43	0.45	0.48	0.45	0.51	0.53	0.53	0.65
POWER FACTOR	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98
BALLAST FACTOR	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.95
BALLAST EFFICACY FACTOR	1.96	1.95	1.83	1.67	1.83	1.62	1.57	1.57	1.22
THD	≤ 10%	≤ 10%	≤ 10%	≤ 10%	≤ 10%	≤ 10%	≤ 10%	≤ 10%	≤ 10%
CURRENT CREST FACTOR	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7
EMI/RFI COMPLIANCE	FCC PART 18-A (NON-CONSUMER)								
SOUND RATING	"A"								
BALLAST TYPE	INSTANT START								
VOLTAGE TRANSIENTS	ANSI C82.11-2005								
INPUT/PROTECTION	FUSE								
OUTPUT/PROTECTION	-								
MIN. STATING TEMP.	-18°C (0°F)								
MAX. CASE TEMP.	90°C (194°F)								
TYPE "HL" APPROVAL	APPROVED FOR HAZARDOUS LOCATION								
ENERGY STAR 4.0	-								
APPROVALS/CLASS	UL/cUL LISTED. CLASS P, 1 OUTDOOR								
REMOTE MOUNTING	18 FT MAX.								

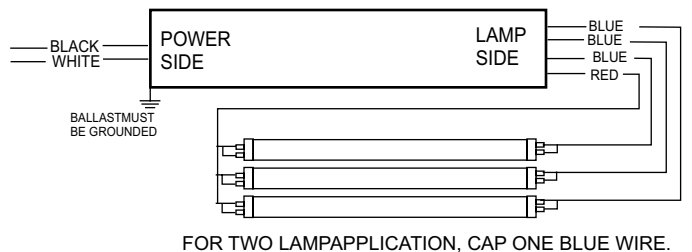
**MECHANICAL DATA**



Where : L = Length, W = Width, H = Height

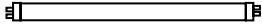
**WIRING DIAGRAMS**

WIRE	BLACK	WHITE	RED	BLUE	YELLOW	BROWN
	25±1"	25±1"	46±1"	31±1"	-	-



NOTE: This Ballast Must Be Grounded.

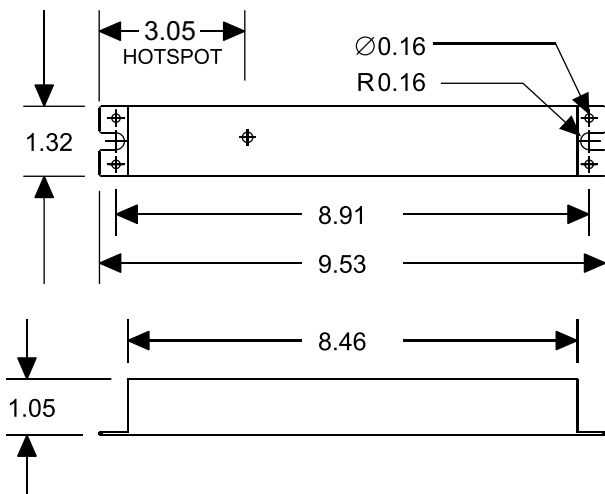
This Is An Original Product From Fulham Co., Inc.

<b>Description:</b> WORKHORSE Specifier Grade Series Electronic Ballast, Drop In Replacement For Magnetic Ballast, Parallel Lamp Operation, THD Less Than 10%
<b>This Ballast Will Operate Following Lamps:</b>

F17T8, F25T8, F32T8/25, F32T8/28, F32T8/30, FBO28T8, FBO31T8, FBO32T8, F32T8 F32T8, F40T8

**ELECTRICAL DATA**

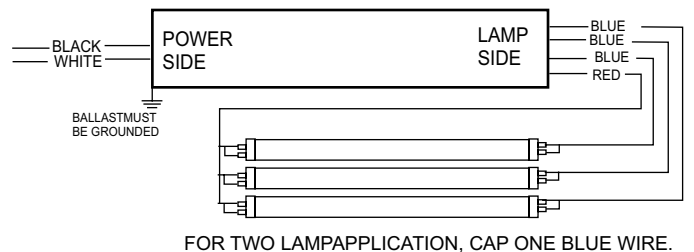
INPUT VOLT	120V ± 10%, 50/60Hz								
LAMP WATTS/TYPE	F17T8	F25T8	F32T8/25	F32T8/28	F32T8/30	FBO28T8	FBO31T8	FBO32T8	F32T8
LAMPS OPERATED	3 (THREE)								
INPUT WATTS	45	68	68	72	79	72	80	85	85
LINE CURRENT	0.38	0.56	0.56	0.60	0.65	0.60	0.67	0.71	0.71
POWER FACTOR	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98
BALLAST FACTOR	0.92	0.90	0.90	0.88	0.88	0.88	0.88	0.88	0.88
BALLAST EFFICACY FACTOR	2.04	1.32	1.32	1.22	1.11	1.22	1.10	1.04	1.04
THD	≤ 10%	≤ 10%	≤ 10%	≤ 10%	≤ 10%	≤ 10%	≤ 10%	≤ 10%	≤ 10%
CURRENT CREST FACTOR	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7
EMI/RFI COMPLIANCE	FCC PART 18-A (NON-CONSUMER)								
SOUND RATING	"A"								
BALLAST TYPE	INSTANT START								
VOLTAGE TRANSIENTS	ANSI C82.11-2005								
INPUT/PROTECTION	FUSE								
OUTPUT/PROTECTION	-								
MIN. STATING TEMP.	-18°C (0°F)								
MAX. CASE TEMP.	90°C (194°F)								
TYPE "HL" APPROVAL	APPROVED FOR HAZARDOUS LOCATION								
ENERGY STAR 4.0	-								
APPROVALS/CLASS	UL/cUL LISTED. CLASS P, 1 OUTDOOR								
REMOTE MOUNTING	18 FT MAX.								

**MECHANICAL DATA**



**WIRING DIAGRAMS**

WIRE	BLACK	WHITE	RED	BLUE	YELLOW	BROWN
	25±1"	25±1"	46±1"	31±1"	-	-

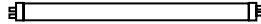


**NOTE: This Ballast Must Be Grounded.**

This Is An Original Product From Fulham Co., Inc.

**Description:** WORKHORSE Specifer Grade Series Electronic Ballast, Drop In Replacement  
 For Magnetic Ballast, Parallel Lamp Operation, THD Less Than 10%

**This Ballast Will Operate Following Lamps:**

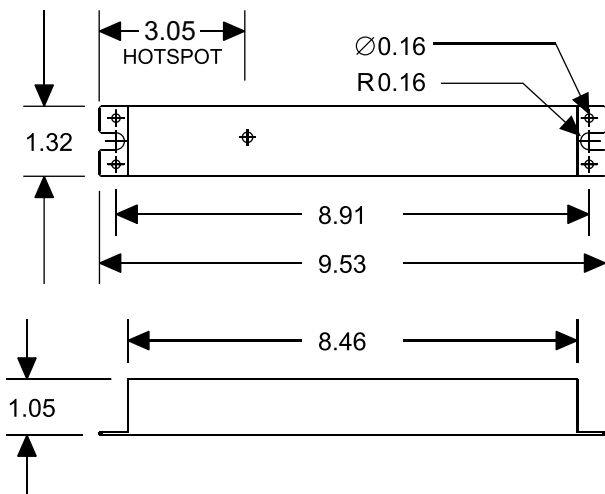


F17T8, F25T8, F32T8/25, F32T8/28,  
 F32T8/30, FBO28T8, FBO31T8,  
 FBO32T8, F32T8 F32T8, F40T8

**ELECTRICAL DATA**

INPUT VOLT	230V ± 10%, 50/60Hz								
LAMP WATTS/TYPE	F25T8	F32T8/25	F32T8/28	F32T8/30	FBO28T8	FBO31T8	FBO32T8	F32T8	F40T8
LAMPS OPERATED	2 (TWO)								
INPUT WATTS	50	51	53	58	53	60	63	63	77
LINE CURRENT	0.23	0.23	0.24	0.26	0.24	0.27	0.28	0.28	0.35
POWER FACTOR	≥ 0.96	≥ 0.97	≥ 0.97	≥ 0.97	≥ 0.97	≥ 0.97	≥ 0.97	≥ 0.97	≥ 0.97
BALLAST FACTOR	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99
BALLAST EFFICACY FACTOR	1.96	1.95	1.86	1.70	1.86	1.65	1.57	1.57	1.23
THD	≤ 15%	≤ 15%	≤ 15%	≤ 15%	≤ 15%	≤ 15%	≤ 15%	≤ 15%	≤ 15%
CURRENT CREST FACTOR	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7
EMI/RFI COMPLIANCE	FCC PART 18-A (NON-CONSUMER)								
SOUND RATING	"A"								
BALLAST TYPE	INSTANT START								
VOLTAGE TRANSIENTS	ANSI C82.11-2005								
INPUT/PROTECTION	FUSE								
OUTPUT/PROTECTION	-								
MIN. STATING TEMP.	-18°C (0°F)								
MAX. CASE TEMP.	90°C (194°F)								
TYPE "HL" APPROVAL	APPROVED FOR HAZARDOUS LOCATION								
ENERGY STAR 4.0	-								
APPROVALS/CLASS	UL/cUL LISTED. CLASS P, 1 OUTDOOR								
REMOTE MOUNTING	18 FT MAX.								

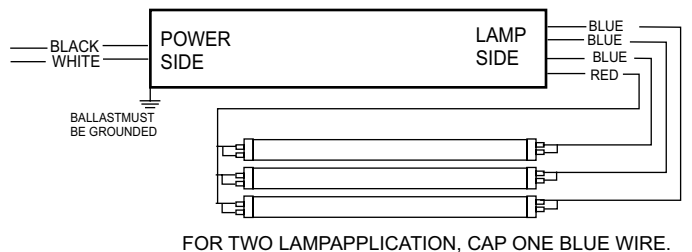
**MECHANICAL DATA**



Where : L = Length, W = Width, H = Height

**WIRING DIAGRAMS**

WIRE	BLACK	WHITE	RED	BLUE	YELLOW	BROWN
	25±1"	25±1"	46±1"	31±1"	-	-

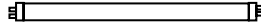


**NOTE:** This Ballast Must Be Grounded.

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**Description:** WORKHORSE Specifier Grade Series Electronic Ballast, Drop In Replacement For Magnetic Ballast, Parallel Lamp Operation, THD Less Than 10%

**This Ballast Will Operate Following Lamps:**

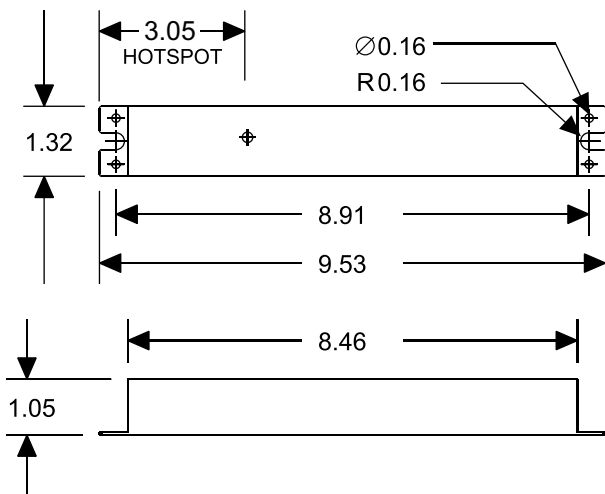


F17T8, F25T8, F32T8/25, F32T8/28,  
 F32T8/30, FBO28T8, FBO31T8,  
 FBO32T8, F32T8 F32T8, F40T8

**ELECTRICAL DATA**

INPUT VOLT	230V ± 10%, 50/60Hz								
LAMP WATTS/TYPE	F17T8	F25T8	F32T8/25	F32T8/28	F32T8/30	FBO28T8	FBO31T8	FBO32T8	F32T8
LAMPS OPERATED	3 (THREE)								
INPUT WATTS	45	66	68	70	77	70	79	83	83
LINE CURRENT	0.20	0.30	0.30	0.31	0.34	0.31	0.35	0.37	0.37
POWER FACTOR	≥ 0.96	≥ 0.97	≥ 0.97	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98
BALLAST FACTOR	0.92	0.90	0.90	0.88	0.88	0.88	0.88	0.88	0.88
BALLAST EFFICACY FACTOR	2.04	1.38	1.32	1.25	1.14	1.25	1.11	1.06	1.06
THD	≤ 15%	≤ 15%	≤ 15%	≤ 15%	≤ 15%	≤ 15%	≤ 10%	≤ 10%	≤ 10%
CURRENT CREST FACTOR	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7
EMI/RFI COMPLIANCE	FCC PART 18-A (NON-CONSUMER)								
SOUND RATING	"A"								
BALLAST TYPE	INSTANT START								
VOLTAGE TRANSIENTS	ANSI C82.11-2005								
INPUT/PROTECTION	FUSE								
OUTPUT/PROTECTION	-								
MIN. STATING TEMP.	-18°C (0°F)								
MAX. CASE TEMP.	90°C (194°F)								
TYPE "HL" APPROVAL	APPROVED FOR HAZARDOUS LOCATION								
ENERGY STAR 4.0	-								
APPROVALS/CLASS	UL/cUL LISTED. CLASS P, 1 OUTDOOR								
REMOTE MOUNTING	18 FT MAX.								

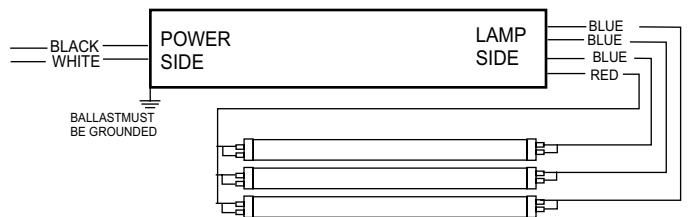
**MECHANICAL DATA**



Where : L = Length, W = Width, H = Height

**WIRING DIAGRAMS**

WIRE	BLACK	WHITE	RED	BLUE	YELLOW	BROWN
	25±1"	25±1"	46±1"	31±1"	-	-



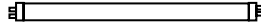
FOR TWO LAMP APPLICATION, CAP ONE BLUE WIRE.

NOTE: This Ballast Must Be Grounded.

This Is An Original Product From Fulham Co., Inc.

**Description:** WORKHORSE Specifier Grade Series Electronic Ballast, Drop In Replacement For Magnetic Ballast, Parallel Lamp Operation, THD Less Than 10%

**This Ballast Will Operate Following Lamps:**

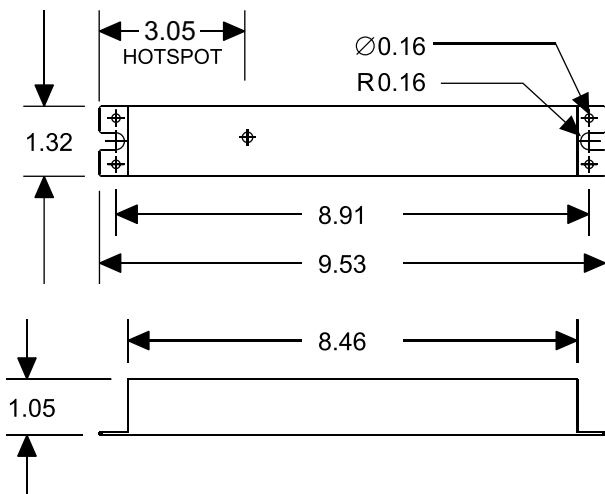


F17T8, F25T8, F32T8/25, F32T8/28,  
 F32T8/30, FBO28T8, FBO31T8,  
 FBO32T8, F32T8 F32T8, F40T8

**ELECTRICAL DATA**

INPUT VOLT	277V ± 10%, 50/60Hz								
LAMP WATTS/TYPE	F25T8	F32T8/25	F32T8/28	F32T8/30	FBO28T8	FBO31T8	FBO32T8	F32T8	F40T8
LAMPS OPERATED	2 (TWO)								
INPUT WATTS	50	51	53	58	53	60	63	63	77
LINE CURRENT	0.18	0.19	0.20	0.21	0.20	0.22	0.24	0.24	0.29
POWER FACTOR	≥ 0.96	≥ 0.97	≥ 0.97	≥ 0.97	≥ 0.97	≥ 0.97	≥ 0.97	≥ 0.97	≥ 0.97
BALLAST FACTOR	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99
BALLAST EFFICACY FACTOR	1.96	1.95	1.86	1.70	1.86	1.65	1.57	1.57	1.23
THD	≤ 15%	≤ 15%	≤ 15%	≤ 15%	≤ 15%	≤ 15%	≤ 15%	≤ 15%	≤ 15%
CURRENT CREST FACTOR	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7
EMI/RFI COMPLIANCE	FCC PART 18-A (NON-CONSUMER)								
SOUND RATING	"A"								
BALLAST TYPE	INSTANT START								
VOLTAGE TRANSIENTS	ANSI C82.11-2005								
INPUT/PROTECTION	FUSE								
OUTPUT/PROTECTION	-								
MIN. STATING TEMP.	-18°C (0°F)								
MAX. CASE TEMP.	90°C (194°F)								
TYPE "HL" APPROVAL	APPROVED FOR HAZARDOUS LOCATION								
ENERGY STAR 4.0	-								
APPROVALS/CLASS	UL/cUL LISTED. CLASS P, 1 OUTDOOR								
REMOTE MOUNTING	18 FT MAX.								

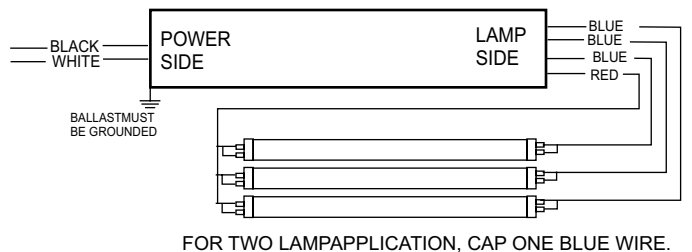
**MECHANICAL DATA**



Where : L = Length, W = Width, H = Height

**WIRING DIAGRAMS**

WIRE	BLACK	WHITE	RED	BLUE	YELLOW	BROWN
LENGTH-INCHES	25±1"	25±1"	46±1" <small>Height</small>	31±1"	-	-

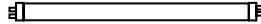


NOTE: This Ballast Must Be Grounded.

This Is An Original Product From Fulham Co., Inc.

**Description:** WORKHORSE Specifier Grade Series Electronic Ballast, Drop In Replacement  
 For Magnetic Ballast, Parallel Lamp Operation, THD Less Than 10%

**This Ballast Will Operate Following Lamps:**

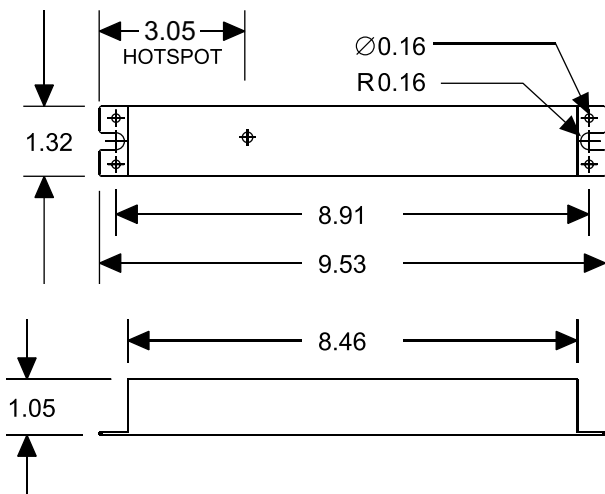


F17T8, F25T8, F32T8/25, F32T8/28,  
 F32T8/30, FBO28T8, FBO31T8,  
 FBO32T8, F32T8 F32T8, F40T8

**ELECTRICAL DATA**

INPUT VOLT	277V ± 10%, 50/60Hz								
LAMP WATTS/TYPE	F17T8	F25T8	F32T8/25	F32T8/28	F32T8/30	FBO28T8	FBO31T8	FBO32T8	F32T8
LAMPS OPERATED	3 (THREE)								
INPUT WATTS	45	66	68	70	77	70	79	83	83
LINE CURRENT	0.17	0.24	0.25	0.26	0.28	0.26	0.29	0.31	0.31
POWER FACTOR	≥ 0.96	≥ 0.97	≥ 0.97	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98
BALLAST FACTOR	0.92	0.90	0.90	0.88	0.88	0.88	0.88	0.88	0.88
BALLAST EFFICACY FACTOR	2.04	1.38	1.32	1.25	1.14	1.25	1.11	1.06	1.06
THD	≤ 15%	≤ 15%	≤ 15%	≤ 15%	≤ 15%	≤ 15%	≤ 10%	≤ 10%	≤ 10%
CURRENT CREST FACTOR	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7	≤ 1.7
EMI/RFI COMPLIANCE	FCC PART 18-A (NON-CONSUMER)								
SOUND RATING	"A"								
BALLAST TYPE	INSTANT START								
VOLTAGE TRANSIENTS	ANSI C82.11-2005								
INPUT/PROTECTION	FUSE								
OUTPUT/PROTECTION	-								
MIN. STATING TEMP.	-18°C (0°F)								
MAX. CASE TEMP.	90°C (194°F)								
TYPE "HL" APPROVAL	APPROVED FOR HAZARDOUS LOCATION								
ENERGY STAR 4.0	-								
APPROVALS/CLASS	UL/cUL LISTED. CLASS P, 1 OUTDOOR								
REMOTE MOUNTING	18 FT MAX.								

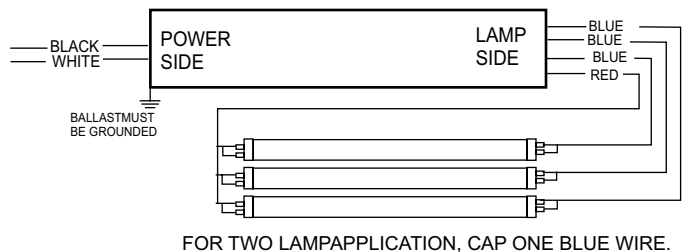
**MECHANICAL DATA**



Where : L = Length, W = Width, H = Height

**WIRING DIAGRAMS**

WIRE	BLACK	WHITE	RED	BLUE	YELLOW	BROWN
	25±1"	25±1"	46±1"	31±1"	-	-



NOTE: This Ballast Must Be Grounded.