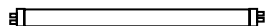


# SPECIFICATION SHEET: WHSG3-UNV-T8-HB

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:**

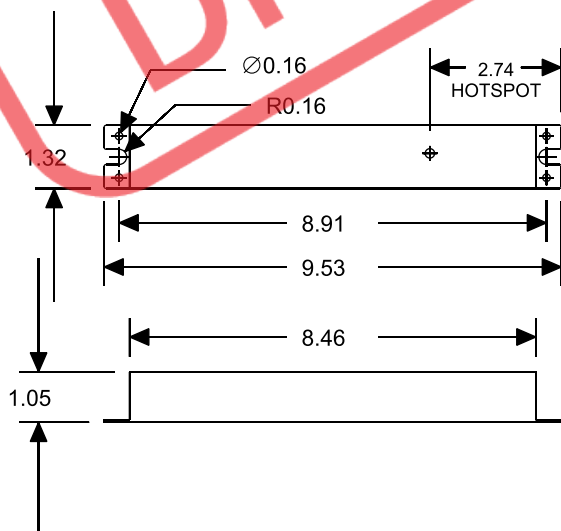


F17T8, F25T8, F32T8/25, F32T8/28,  
 F32T8/30, FBO28T8, FBO31T8,  
 FBO32T8, F32T8 F32T8, F40T8

## ELECTRICAL DATA

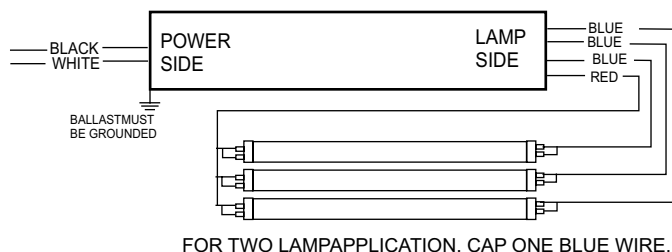
INPUT VOLT	120V ± 10%, 50/60Hz								
LAMP WATTS/TYPE	F25T8	F32T8/25	F32T8/28	F32T8/30	FBO28T8	FBO31T8	FBO32T8	F32T8	F40T8
LAMPS OPERATED	2 (TWO)								
INPUT WATTS	65	67	70	76	69	80	81	81	100
LINE CURRENT	0.55	0.56	0.59	0.64	0.59	0.67	0.69	0.69	0.84
POWER FACTOR	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98
BALLAST FACTOR	1.28	1.28	1.27	1.27	1.27	1.27	1.27	1.27	1.26
BALLAST EFFICACY FACTOR	1.96	1.90	1.80	1.67	1.83	1.57	1.54	1.54	1.26
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								

## MECHANICAL DATA



## WIRING DIAGRAMS

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



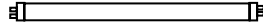
NOTE: This Ballast Must Be Grounded.

# SPECIFICATION SHEET: WHSG3-UNV-T8-HB

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:**

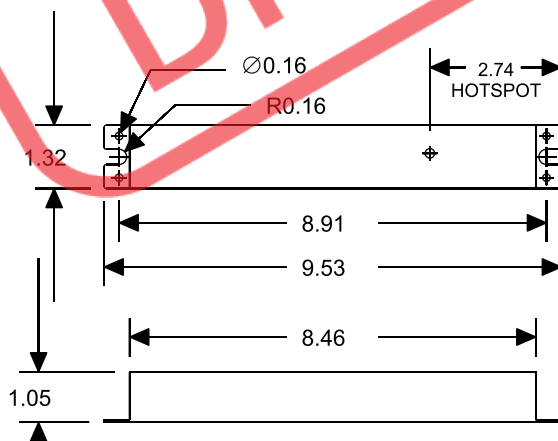


F17T8, F25T8, F32T8/25, F32T8/28,  
F32T8/30, FBO28T8, FBO31T8,  
FBO32T8, F32T8 F32T8, F40T8

## ELECTRICAL DATA

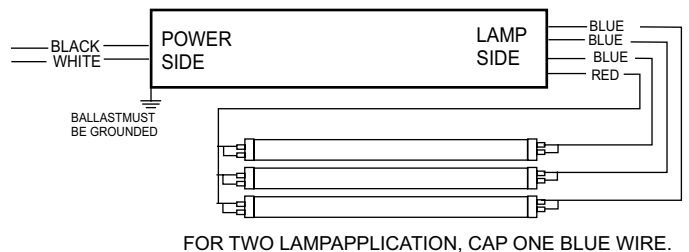
INPUT VOLT	120V ± 10%, 50/60Hz								
LAMP WATTS/TYPE	F17T8	F25T8	F32T8/25	F32T8/28	F32T8/30	FBO28T8	FBO31T8	FBO32T8	F32T8
LAMPS OPERATED	3 (THREE)								
INPUT WATTS	58	81	86	93	99	93	101	109	109
LINE CURRENT	0.49	0.69	0.72	0.78	0.84	0.78	0.85	0.91	0.91
POWER FACTOR	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98
BALLAST FACTOR	1.23	1.20	1.20	1.18	1.18	1.18	1.18	1.18	1.18
BALLAST EFFICACY FACTOR	2.10	1.45	1.37	1.25	1.18	1.25	1.15	1.06	1.06
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								

## MECHANICAL DATA



## WIRING DIAGRAMS

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



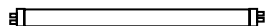
NOTE: This Ballast Must Be Grounded.

# SPECIFICATION SHEET: WHSG3-UNV-T8-HB

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:**

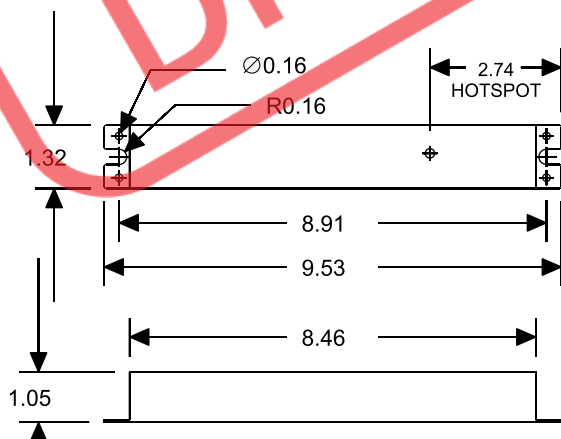


F17T8, F25T8, F32T8/25, F32T8/28,  
F32T8/30, FBO28T8, FBO31T8,  
FBO32T8, F32T8 F32T8, F40T8

## ELECTRICAL DATA

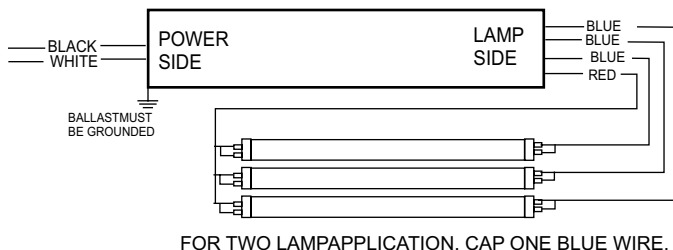
INPUT VOLT	230V ± 10%, 50/60Hz								
LAMP WATTS/TYPE	F25T8	F32T8/25	F32T8/28	F32T8/30	FBO28T8	FBO31T8	FBO32T8	F32T8	F40T8
LAMPS OPERATED	2 (TWO)								
INPUT WATTS	65	66	69	75	69	79	80	80	98
LINE CURRENT	0.29	0.30	0.31	0.34	0.31	0.35	0.35	0.35	0.43
POWER FACTOR	≥ 0.97	≥ 0.97	≥ 0.97	≥ 0.97	≥ 0.97	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98
BALLAST FACTOR	1.28	1.28	1.27	1.27	1.27	1.27	1.27	1.27	1.26
BALLAST EFFICACY FACTOR	1.96	1.93	1.84	1.68	1.84	1.60	1.56	1.56	1.28
THD	≤ 15%	≤ 15%	≤ 15%	≤ 15%	≤ 15%	≤ 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								

## MECHANICAL DATA



## WIRING DIAGRAMS

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

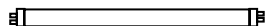


# SPECIFICATION SHEET: WHSG3-UNV-T8-HB

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:**

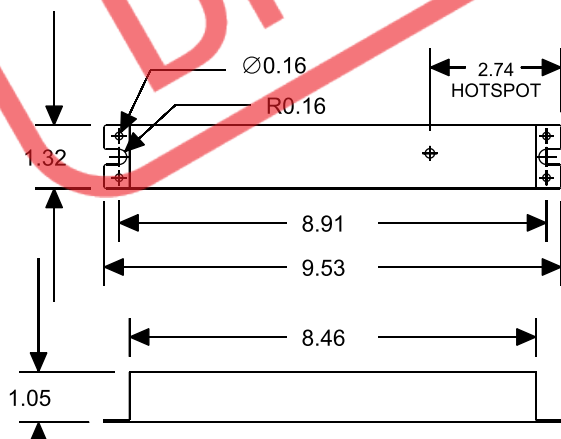


F17T8, F25T8, F32T8/25, F32T8/28,  
F32T8/30, FBO28T8, FBO31T8,  
FBO32T8, F32T8 F32T8, F40T8

## ELECTRICAL DATA

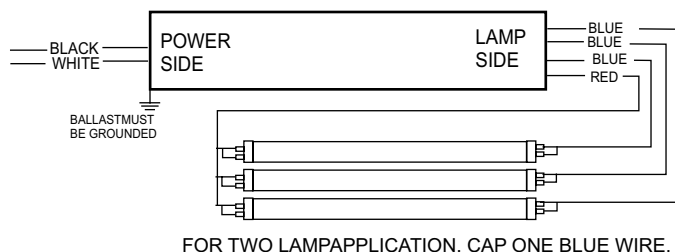
INPUT VOLT	230V ± 10%, 50/60Hz								
LAMP WATTS/TYPE	F17T8	F25T8	F32T8/25	F32T8/28	F32T8/30	FBO28T8	FBO31T8	FBO32T8	F32T8
LAMPS OPERATED	3 (THREE)								
INPUT WATTS	57	81	85	92	99	92	101	107	107
LINE CURRENT	0.25	0.36	0.38	0.41	0.44	0.41	0.45	0.47	0.47
POWER FACTOR	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98
BALLAST FACTOR	1.23	1.20	1.20	1.18	1.18	1.18	1.18	1.18	1.18
BALLAST EFFICACY FACTOR	2.15	1.46	1.40	1.27	1.19	1.27	1.16	1.08	1.08
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								

## MECHANICAL DATA



## WIRING DIAGRAMS

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



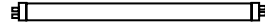
NOTE: This Ballast Must Be Grounded.

# SPECIFICATION SHEET: WHSG3-UNV-T8-HB

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:**

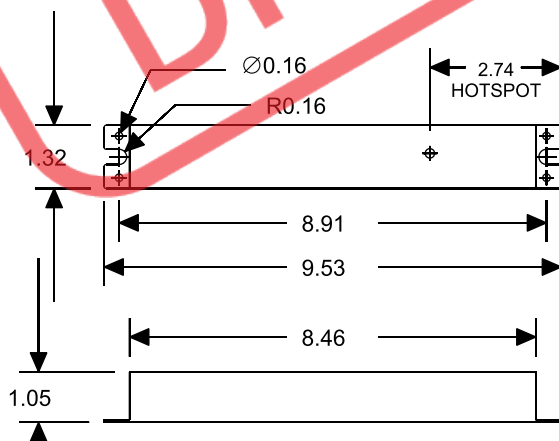


F17T8, F25T8, F32T8/25, F32T8/28,  
F32T8/30, FBO28T8, FBO31T8,  
FBO32T8, F32T8 F32T8, F40T8

## ELECTRICAL DATA

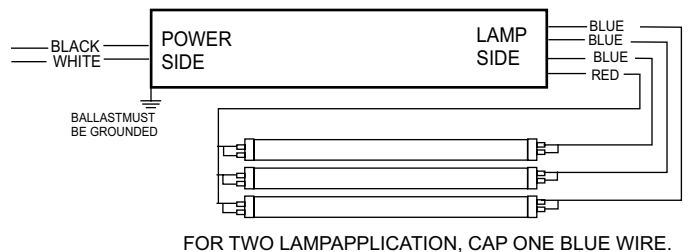
INPUT VOLT	277V ± 10%, 50/60Hz								
LAMP WATTS/TYPE	F25T8	F32T8/25	F32T8/28	F32T8/30	FBO28T8	FBO31T8	FBO32T8	F32T8	F40T8
LAMPS OPERATED	2 (TWO)								
INPUT WATTS	65	66	69	75	69	79	80	80	98
LINE CURRENT	0.25	0.245	0.26	0.28	0.26	0.29	0.30	0.30	0.36
POWER FACTOR	≥ 0.97	≥ 0.97	≥ 0.97	≥ 0.97	≥ 0.97	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98
BALLAST FACTOR	1.28	1.28	1.27	1.27	1.27	1.27	1.27	1.27	1.26
BALLAST EFFICACY FACTOR	1.96	1.93	1.84	1.68	1.84	1.60	1.56	1.56	1.28
THD	≤ 15%	≤ 15%	≤ 15%	≤ 15%	≤ 15%	≤ 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								

## MECHANICAL DATA



## WIRING DIAGRAMS

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



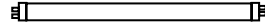
NOTE: This Ballast Must Be Grounded.

# SPECIFICATION SHEET: WHSG3-UNV-T8-HB

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:**

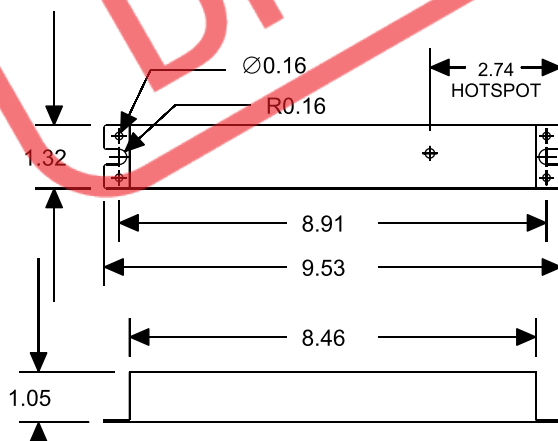


F17T8, F25T8, F32T8/25, F32T8/28,  
 F32T8/30, FBO28T8, FBO31T8,  
 FBO32T8, F32T8 F32T8, F40T8

## 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	57	81	85	92	99	92	101	107	107
LINE CURRENT	0.22	0.30	0.32	0.34	0.37	0.34	0.38	0.39	0.39
POWER FACTOR	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98
BALLAST FACTOR	1.23	1.20	1.20	1.18	1.18	1.18	1.18	1.18	1.18
BALLAST EFFICACY FACTOR	2.15	1.46	1.40	1.27	1.19	1.27	1.16	1.08	1.08
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								

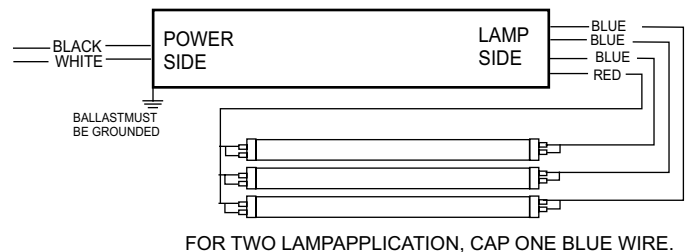
## MECHANICAL DATA



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.