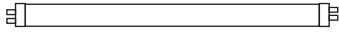


SPECIFICATION SHEET : **WHSG7-120-T12HO**

This Is An Original Product From Fulham Co., Inc

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

This Ballast Will Operate Following Lamps.

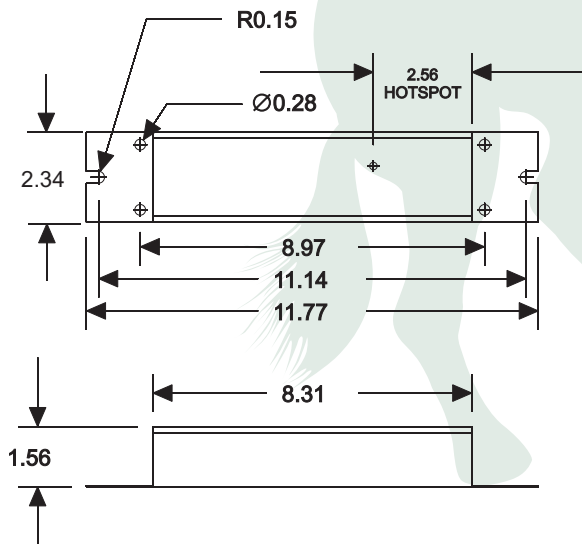


**F96T12HO, F96T12/ES/HO, F72T12HO
F60T12HO, F48T12HO**

ELECTRICAL DATA

INPUT VOLT: 120V $\pm$ 10%, 50/60Hz							
LAMP WATTS/TYPE	F96T12HO	F96T12/ES/HO	-	-	-	-	-
LAMPS OPERATED	1						
INPUT WATTS	108	90					
LINE CURRENT:	0.90	0.76					
POWER FACTOR	0.99	0.99					
BALLAST FACTOR	0.96	0.95					
EFFICACY FACTOR	0.89	1.05					
THD	3%	3%					
CURRENT CREST FACTOR	< 2.5						
EMI/RFI COMPLIANCE	FCC PART 18-A (NON-CONSUMER)						
SOUND RATING	" A "						
BALLAST TYPE	RAPID START						
VOLTAGE TRANSIENTS	ANSI C82.11 - 1993						
INPUT/PROTECTION	FUSE						
OUTPUT/PROTECTION	-						
MIN. STARTING TEMP	- 18 °C (0 ° F)						
MAX. CASE TEMP	70 °C (158 ° 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.						

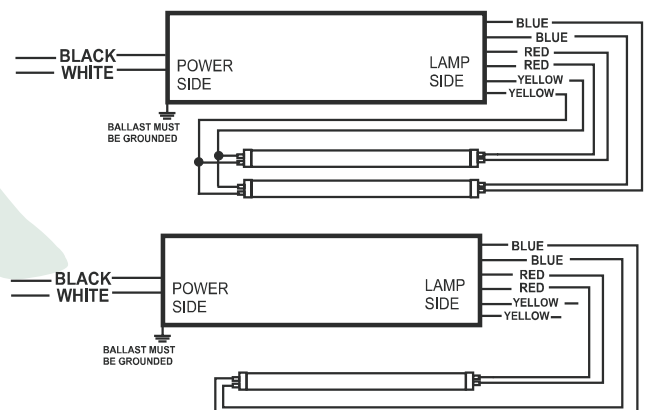
MECHANICAL DATA



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

WIRING DIAGRAMS

WIRE	BLACK	WHITE	RED	BLUE	YELLOW	BROWN
LENGTH - INCHES	22 $\pm$ 1"	22 $\pm$ 1"	46 $\pm$ 1"	46 $\pm$ 1"	70 $\pm$ 1"	



NOTE : This Ballast Case Must Be Grounded

Fulham Co., Inc extends limited warranty only to the original purchaser or to the first user for the period of **5 years** from the date of manufacture as indicated by the date code stamped on each product and when properly installed and under normal conditions of use. For additional warranty guide line, please refer to our Complete Product Catalog OR call Customer Service at 1-323-599-5000.

DUE TO A PROGRAM OF CONTINUOUS IMPROVEMENT, FULHAM Co., INC RESERVES THE RIGHT TO MAKE ANY VARIATION IN DESIGN OR CONSTRUCTION TO THE EQUIPMENT DESCRIBED.

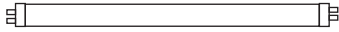
Address : 12705 South Van Ness Ave., Hawthorne, CA 90250 Tel.: 1-323-599-5000, Fax.: 1-323-754-9060. Website: www.fulham.com 02-2006-150-1 rev A

SPECIFICATION SHEET : **WHSG7-120-T12HO**

This Is An Original Product From Fulham Co., Inc

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

This Ballast Will Operate Following Lamps.

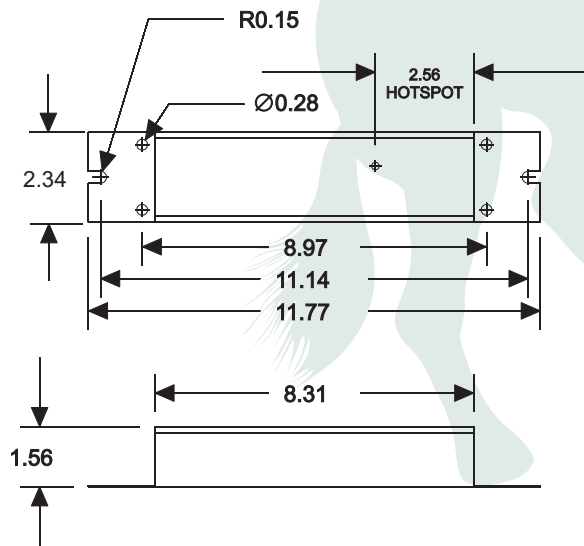


**F96T12HO, F96T12/ES/HO, F72T12HO
F60T12HO, F48T12HO**

ELECTRICAL DATA

INPUT VOLT: 120V $\pm$ 10%, 50/60Hz							
LAMP WATTS/TYPE	F96T12HO	F72T12HO	F60T12HO	F48T12HO	F96T12/ES/HO	-	-
LAMPS OPERATED	2						
INPUT WATTS	200	157	140	114	167		
LINE CURRENT:	1.67	1.31	1.17	0.96	1.40		
POWER FACTOR	0.99	0.99	0.99	0.99	0.99		
BALLAST FACTOR	0.89	1.00	1.04	1.02	0.88		
EFFICACY FACTOR	0.44	0.64	0.74	0.89	0.53		
THD	2%	3%	3%	3%	3%		
CURRENT CREST FACTOR	< 2.5						
EMI/RFI COMPLIANCE	FCC PART 18-A (NON-CONSUMER)						
SOUND RATING	" A "						
BALLAST TYPE	RAPID START						
VOLTAGE TRANSIENTS	ANSI C82.11 - 1993						
INPUT/PROTECTION	FUSE						
OUTPUT/PROTECTION	-						
MIN. STARTING TEMP	- 18 °C (0 ° F)						
MAX. CASE TEMP	70 °C (158 ° 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.						

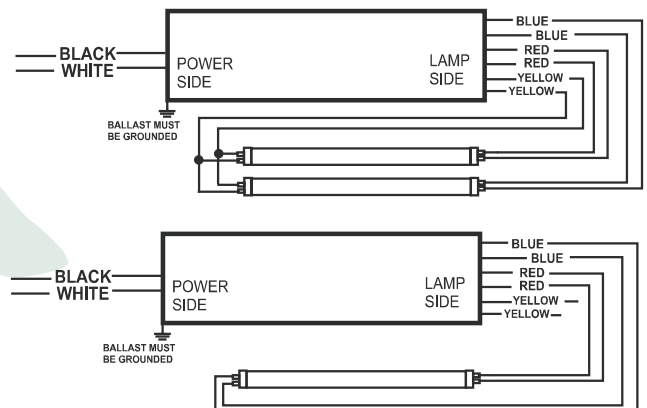
MECHANICAL DATA



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

WIRING DIAGRAMS

WIRE	BLACK	WHITE	RED	BLUE	YELLOW	BROWN
LENGTH - INCHES	22 $\pm$ 1"	22 $\pm$ 1"	46 $\pm$ 1"	46 $\pm$ 1"	70 $\pm$ 1"	



NOTE : This Ballast Case Must Be Grounded

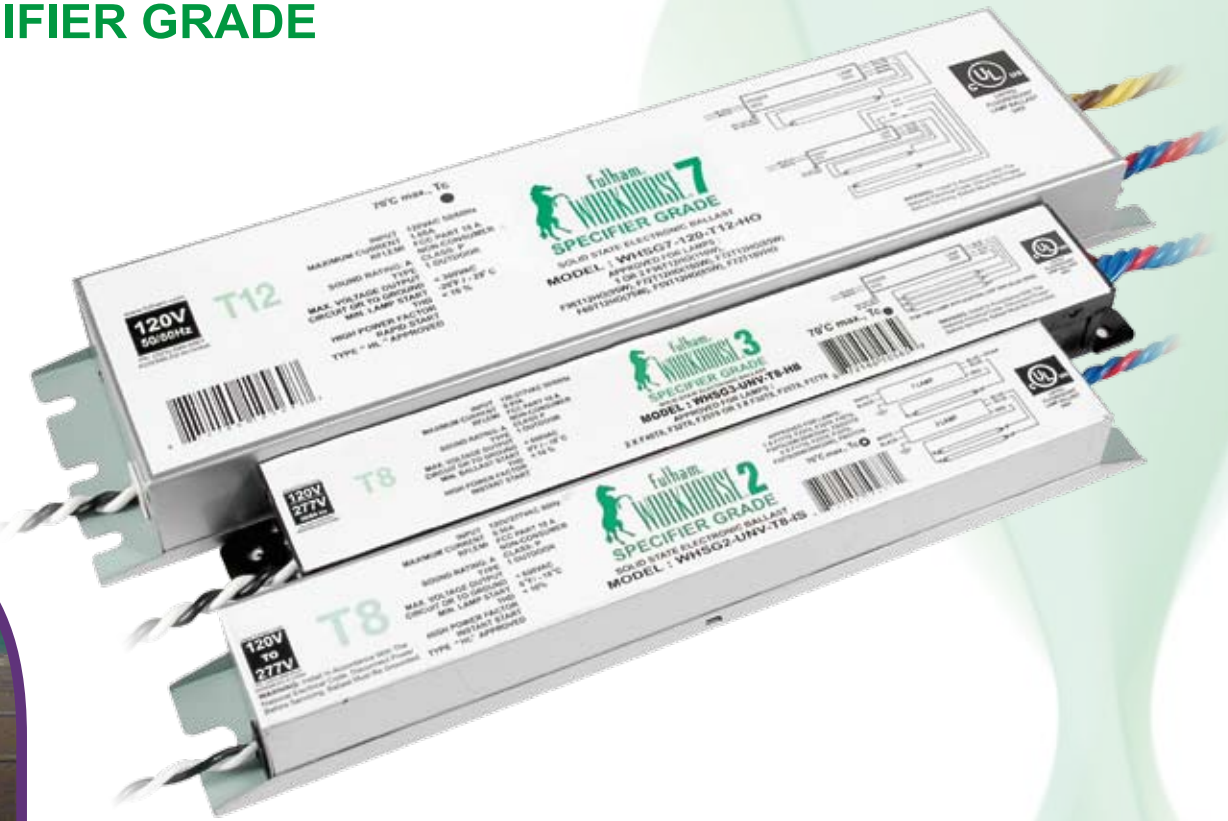
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DUE TO A PROGRAM OF CONTINUOUS IMPROVEMENT, FULHAM Co., INC RESERVES THE RIGHT TO MAKE ANY VARIATION IN DESIGN OR CONSTRUCTION TO THE EQUIPMENT DESCRIBED.

Address : 12705 South Van Ness Ave., Hawthorne, CA 90250 Tel.: 1-323-599-5000, Fax.: 1-323-754-9060. Website: www.fulham.com 02-2006-150-2 rev A



FLUORESCENT IN-FIXTURE
T8, T12 ELECTRONIC BALLASTS



BALLAST SPECIFICATIONS FOR WHSG T8 & T12HO HIGH POWER FACTOR

Power Factor:	98.5 % Min.	Min. Starting Temp. :	0° F, (-18° C)
ATHD:	Less than 10%	Protection:	Class P Inherent Thermal Protection
EMI: FCC CFR Title 47 Part 18 non-consumer		Ballast Size:	T8: H 1.2" x W 1.7" x L 9.5" (H 30mm x W 43mm x L 240mm)
Ballast Factor:.	>.87 as ANSI specified		T12HO: H 1.5" x W 3" x L 11.75" (H 38mm x W 76mm x L 268mm)
Lamp CF:	< 1.7		
Starting Method:	T8: Instant Start T12HO: Modified Rapid Start	Ballast weight:	T8: 1.5 lb (700g) T12HO: 4.0 lbs (1.8 kg)
Regulatory Approvals:	UL & cUL Listed Type1 or Type 2		



Advanced Features:

- Drop In Replacement for Magnetic Ballasts
- Parallel Lamp Operation
- Series Lamp Operation for CG5 & CG6
- Specifier Grade = < 10%THD

Applications:

- Offices
- Schools
- Residential
- Hotels
- Apartments
- Retirement Complexes
- Industrial
- Retail Stores

UNIVERSAL
VOLTAGE
120V
50/60 Hz

Model Number	# of Lamps	Lamp Type / Designation
WORKHORSE SPECIFIER GRADE: Universal Voltage for T8 - (IS) < 10% THD		
WHSG1-UNV-T8-IS	1 x	F17T8, F25T8, F32T8, F40T8, FBO31T8, F32T8/30, F32T8/28, F32T8/25
WHSG2-UNV-T8-IS	1 x 2 x	F17T8, F25T8, F32T8, F40T8, FBO31T8, F32T8/30, F32T8/28, F32T8/25 F17T8, F25T8, F32T8, FBO31T8, F32T8/30, F32T8/28, F32T8/25
WHSG3-UNV-T8-IS	2 x 3 x	F25T8, F32T8, F40T8 F17T8, F25T8, F32T8
WHSG4-UNV-T8-IS	3 x 4 x	F25T8, F32T8, F40T8 F17T8, F25T8, F32T8
WHSG8-UNV-T8SL	1 x 2 x	F96T8, F96T8HO, F96T8
WORKHORSE SPECIFIER GRADE: Universal Voltage for High and Low Ballast Factor T8 Applications		
WHSG2-UNV-T8-LB	1 x 2 x	F25T8, F32T8, F40T8, FBO31T8, F32T8/30, F32T8/28, F32T8/25 F17T8, F25T8, F32T8, FBO31T8, F32T8/30, F32T8/28, F32T8/25
WHSG2-UNV-T8-HB	1 x 2 x	F32T8, F40T8, FBO31T8, F32T8/30, F32T8/28, F32T8/25 F32T8, FBO31T8, F32T8/30, F32T8/28, F32T8/25
WHSG3-UNV-T8-LB	2 x 3 x	F32T8, F40T8 F17T8, F25T8, F32T8
WHSG3-UNV-T8-HB	2 x 3 x	F25T8, F32T8, F40T8 F17T8, F25T8, F32T8
WHSG4-UNV-T8-LB	3 x 4 x	F25T8, F32T8, F40T8 F17T8, F25T8, F32T8
WORKHORSE SPECIFIER GRADE: Dedicated Voltage for T12HO - (RS) <10%ATHD		
WHSG7-120-T12HO	1 x 2 x	F96T12HO, F96T12/ESH0 F96T12HO, F72T12HO, F60T12HO, F48T12HO, F96T12/ES/HO

1 WHSG UNV 1

Model No. WHSG1-UNV-T8-IS	
Input Voltage:	120v~277v 50/60 Hz
Input Power:	37W
Maximum Current	.30 AMP
Black/White Wires	24 Inches
Red Wires	46 Inches
Blue Wires	32 Inches
Case Qty	25

2 WHSG UNV 2

Model No. WHSG2-UNV-T8-IS	
Input Voltage:	120v~277v 50/60 Hz
Input Power:	59W
Maximum Current	.50 AMP
Black/White Wires	24 Inches
Red Wires	46 Inches
Blue Wires	32 Inches
Case Qty	25

3 WHSG UNV 3

Model No. WHSG3-UNV-T8-IS	
Input Voltage:	120v~277v 50/60 Hz
Input Power:	85W
Maximum Current	.71 AMP
Black/White Wires	24 Inches
Red Wires	46 Inches
Blue Wires	32 Inches
Case Qty	25

4 WHSG UNV 4

Model No. WHSG4-UNV-T8-IS	
Input Voltage:	120v~277v 50/60 Hz
Input Power:	112W
Maximum Current	.93 AMP
Black/White Wires	28 Inches
Red/Blue Wires	30 Inches
Yellow Wires	46 Inches
Case Qty	25

7 WHSG 120 7

Model No. WHSG7-120-T12-HO	
Input Voltage:	120v 50/60 Hz
Input Power:	200W
Maximum Current	1.67 AMP
Black/White Wires	22 Inches
Red/Blue Wires	46 Inches
Yellow Wires	70 Inches
Case Qty	10

8 WHSG UNV 8

Model No. WHSG8-UNV-T8-IS	
Input Voltage:	120v~277v 50/60 Hz
Input Power:	109W
Maximum Current	.91 AMP
Black/White Wires	25 Inches
Red Wire	79 Inches
Blue Wires	46 Inches
Case Qty	25

2 WHSG UNV HB 2

Model No. WHSG2-UNV-T8-HB	
Input Voltage:	120v~277v 50/60 Hz
Input Power:	74W
Maximum Current	.62 AMP
Black/White Wires	24 Inches
Red Wire	46 Inches
Blue Wires	32 Inches
Case Qty	25

2 WHSG UNV LB 2

Model No. WHSG2-UNV-T8-LB	
Input Voltage:	120v~277v 50/60 Hz
Input Power:	52W
Maximum Current	.44 AMP
Black/White Wires	24 Inches
Red Wire	46 Inches
Blue Wires	32 Inches
Case Qty	25

3 WHSG UNV HB 3

Model No. WHSG3-UNV-T8-HB	
Input Voltage:	120v~277v 50/60 Hz
Input Power:	104W
Maximum Current	.91 AMP
Black/White Wires	24 Inches
Red Wire	46 Inches
Blue Wires	32 Inches
Case Qty	25

3 WHSG UNV LB 3

Model No. WHSG3-UNV-T8-LB	
Input Voltage:	120v~277v 50/60 Hz
Input Power:	76W
Maximum Current	.64 AMP
Black/White Wires	24 Inches
Red Wire	46 Inches
Blue Wires	32 Inches
Case Qty	25

4 WHSG UNV LB 4

Model No. WHSG4-UNV-T8-LB	
Input Voltage:	120v~277v 50/60 Hz
Input Power:	98W
Maximum Current	.82 AMP
Black/White Wires	24 Inches
Red Wire	46 Inches
Blue Wires	32 Inches
Case Qty	25