



# LED Tube Ballast Compatibility

Last Updated 26 April 2023



# Will My Ballast Work with LED Tubes?

## Yes

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Electronic Instant Start

Electronic Programmed Start

Magnetic Ballasts

## No

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All Others

Note: If your ballast is failing or not compatible, consider Hybrid Type A/B or Direct Wire Type B tubes that eliminate the ballast.

# How to identify your LED Tube?

## Tube Diameter

All LED Tubes, regardless of driver type, have a designation for their size using the letter “T” and then a number which is the diameter of the LED tube measured in eighths of an inch.

T5	5/8”	diameter
T8	1”	diameter
T12	1-1/2”	diameter

This is the easiest first step to help narrow the identity of the LED tube you have

## Information on Tube Label / Back of Package

On the LED Tube there will be a label that will face “up” when the tube is installed



This label has the **Lamp description** on it – it starts with “LED” and will include the size of the lamp - “T8” in this instance

**\*OR\*** – on the back of the package, there will be information near the UPC code that has the Product Code (PC) and the **Package Description**



**Either the Lamp Description, Package Description, or Product Code (PC) can be used to identify your lamp**

# What category of LED tube types do I look under?

## Type A LED Tube

### (Standard – T5 or T8)

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Each LED tube is outfitted with an internal driver, and these lamps run on existing LFL electronic instant-start or programmed start ballast.

Type A LED Tubes are ideal for those seeking high energy savings with minimal installation time. Convert your existing linear fluorescent fixture to LED lighting without needing a comprehensive reinstall.

## Type A LED Tube

### (Universal – T8 or T12)

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Each LED tube is outfitted with an internal driver, and these lamps run on existing LFL electronic instant-start, electronic programmed start ballast, or older magnetic ballasts.

The Universal tubes are used for older installations where you do not know if a T8 or T12 bulb was present and what kind of ballast may be in the fixture.

## Type A/B LED Tube

### (Hybrid - Ballast Bypass – T8)

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Each LED tube is outfitted with an internal driver, and these lamps run on existing LFL electronic instant-start or programmed start ballast.

**HOWEVER** – these tubes can also be used as a Type B lamp, where they can be used in a fixture that is re-wired to bypass the ballast. These tubes can also run directly from line voltage.

**Either the Lamp Description, Package Description, or Product Code (PC) can be used to identify your lamp**

# What table for compatibility should I look under?

## T8 LED Tube - Standard Type A (List 1 of 4)

### Consumer

Lamp Description	Package Description	GE Lighting Product Code	Lowes Product Code	Sold?
LED15ET8/835-V6P	LED15ET8/835-V6P	35896	1570051	Online
LED15ET8/840-V6P	LED15ET8/840-V6P	35900	1570082	Online
LED15ET8/850-V6P	LED15ET8/850-V6P	35911	1570024	Online
LED15ET8/865-V6P	LED15ET8/865-V6P	35913	1570147	Online
LED12ET8/G/4/850	LED12ET8/G/4/850	43293	1570067	Online
LED18ET8/G/4/GROW/F	LED18ET8/G/4/GROW/B-1	93129193	1412126	In-Store
LEDUB83CCT15T8G4U	LED18ET8/G/4/GROW/F-1	93129194	1412131	In-Store
LED83CCT11ET8G18	LED83CCT11ET8G18-LT	93129271	2565465	In-Store
LED83CCT9ET8G2	LED83CCT10ET5G2-LT	93129272	2565468	In-Store
LED83CCT12ET8G3	LED83CCT9ET8G2-LT	93129273	2565467	In-Store
LED83CCT15T8G4U	LED83CCT12ET8G3-LT	93129274	2565469	In-Store
LED83CCT15ET8G4	LED83CCT15T8G4U-LT2	93129275	2565453	In-Store
LED15ET8/G/4/840	LED83CCT15ET8G4-LT2	93129276	2565452	In-Store
LEDUB83CCT15T8G4U	LEDUB83CCT15T8G4U-LT	93129283	2565472	In-Store
LED15ET8/G/4/865	LED15ET8/G/4/840/20PKL	93129294	2565445	In-Store
LED18ET8/G/4/GROW/B	LED15ET8/G/4/865/20PKL	93129295	2565444	In-Store
LED20ET8G-4-840-2T	LED20ET8G-4-840-2T	93130858	5190535	In-Store
LED20ET8G-4-865-2T	LED20ET8G-4-865-2T	93130859	5190534	In-Store

**Use Table #1 on following pages**

## T8 LED Tube - Standard Type A (List 2 of 4)

### Commercial

Lamp Description	Package Description	Product Code	Lowes Product Code	Sold?
LED13ET8G4/835US	LED13ET8G4/835US	21344	1570049	Online
LED13ET8G4/840US	LED13ET8G4/840US	21373	1570065	Online
LED13ET8G4/850US	LED13ET8G4/850US	21377	1570033	Online
LED12ET8/3/835	LED12ET8/3/835	26544	1570138	Online
LED12ET8/3/840	LED12ET8/3/840	26625	1570094	Online
LED12ET8/3/850	LED12ET8/3/850	26627	1570162	Online
LED9ET8/2/835	LED9ET8/2/835	26635	1570093	Online
LED9ET8/2/840	LED9ET8/2/840	26648	1570026	Online
LED9ET8/2/850	LED9ET8/2/850	26676	1570112	Online
LED18ET8/4/830	LED18ET8/4/830	31550	1570097	Online
LED9ET8/2/830	LED9ET8/2/830	31557	1570104	Online
LED18ET8/G/4/830	LED18ET8/G/4/830	35767	1570151	Online
LED18ET8/G/4/835	LED18ET8/G/4/835	35768	1570164	Online
LED18ET8/G/4/840	LED18ET8/G/4/840	35769	1360753	Online
LED18ET8/G/4/850	LED18ET8/G/4/850	35772	1570122	Online
LED18ET8/G/4/865	LED18ET8/G/4/865	35773	1570143	Online

**Use Table #2 on following pages**

# What table for compatibility should I look under?

## T8 LED Tube - Standard Type A (List 3 of 4)

### Commercial

Lamp Description	Package Description	Product Code	Lowes Product Code	Sold?
LED8ET8/G/2/830	LED8ET8/G/2/830	35775	1570091	Online
LED8ET8/G/2/835	LED8ET8/G/2/835	35776	1570139	Online
LED8ET8/G/2/840	LED8ET8/G/2/840	35778	1570064	Online
LED8ET8/G/2/850	LED8ET8/G/2/850	35779	1570154	Online
LED11ET8/G/3/830	LED11ET8/G/3/830	35783	1570059	Online
LED11ET8/G/3/835	LED11ET8/G/3/835	35784	1570086	Online
LED11ET8/G/3/840	LED11ET8/G/3/840	35788	1570163	Online
LED11ET8/G/3/850	LED11ET8/G/3/850	35789	1570156	Online
LED15ET8/G/4/830	LED15ET8/G/4/830	35790	1570043	Online
LED15ET8/G/4/835	LED15ET8/G/4/835	35791	1360748	Online
LED15ET8/G/4/840	LED15ET8/G/4/840	35793	1360749	Online
LED15ET8/G/4/850	LED15ET8/G/4/850	35797	1360750	Online
LED15ET8/G/4/865	LED15ET8/G/4/865	35798	1570133	Online
LED13ET8/U6/830	LED13ET8/U6/830	43120	1570161	Online
LED13ET8/U6/835	LED13ET8/U6/835	43125	1570016	Online
LED13ET8/U6/850	LED13ET8/U6/850	43130	1570006	Online

**Use Table #2 on following pages**

## T8 LED Tube - Standard Type A (List 4 of 4)

### Commercial

Lamp Description	Package Description	Product Code	Lowes Product Code	Sold?
LED12ET8/4/830	LED12ET8/4/830	61218	1570002	Online
LED12ET8/4/835	LED12ET8/4/835	61223	1570109	Online
LED12ET8/4/840	LED12ET8/4/840	61271	1570001	Online
LED12ET8/4/850	LED12ET8/4/850	61327	1570075	Online
LED12ET8/4/865	LED12ET8/4/865	61329	1570028	Online
LED15ET8/4/830	LED15ET8/4/830	62399	1570032	Online
LED15ET8/4/835	LED15ET8/4/835	62401	1570073	Online
LED15ET8/4/840	LED15ET8/4/840	62402	1570057	Online
LED15ET8/4/850	LED15ET8/4/850	62409	1570068	Online
LED15ET8/4/865	LED15ET8/4/865	62410	1570008	Online
LED18ET8/4/835	LED18ET8/4/835	93133	1570150	Online
LED18ET8/4/840	LED18ET8/4/840	93135	1360751	Online
LED18ET8/4/850	LED18ET8/4/850	93140	1360752	Online

**Use Table #2 on following pages**

# What table for compatibility should I look under?

## T8 LED Tube - Type A/B Hybrid

Can either be used as a Type A with Ballast or a Type B with Ballast removed

Lamp Description	Package Description	GE Lighting Product Code	Lowes Product Code	Sold?
LEDAB15T8G4840	LEDAB15T8G4840-LT1	93129277	2565451	In-Store
LEDAB15T8G4840	LEDAB15T8G4840-LT10	93129278	2565448	In-Store
LEDAB15T8G4865	LEDAB15T8G4865-LT1	93129280	2565450	In-Store
LEDAB15T8G4865	LEDAB15T8G4865-LT10	93129279	2565446	In-Store
LED15ABT8G-4-3CC	LED15ABT8G-4-3CC-2T	93130867	5190530	In-Store
LED15ABT8G-4-3CC	LED15ABT8G-4-3CC-10	93130868	5190529	In-Store

**Use Table #1 on following pages**

## T8 LED Tube - Universal Type A

There is an electronic or magnetic ballast in the fixture (Usually replacing old T12 bulbs with newer T8 bulbs)

Lamp Description	Package Description	GE Lighting Product Code	Lowes Product Code	Sold?
LED15ET8G4U840	LED15ET8GU840/4/2PKLT	93129209	1608290	In-Store
LED15ET8G4U865	LED15ET8GU865/4/2PKLT	93129332	1608288	In-Store
LED7UT8G-2-3CC	LED7UT8G-2-3CC-1T	93130864	5190538	In-Store

**Use Table #3 on following pages**

## T5 LED Tube - Standard Type A (List 1 of 2)

### Consumer

Lamp Description	Package Description	Product Code	Lowes Product Code	Sold?
LED83CCT6ET5G1	LED83CCT6ET5G1-LT	93129284	2565464	In-Store
LED83CCT7ET5G21	LED83CCT7ET5G21-LT	93129285	2565466	In-Store
LED83CCT10ET5G2	LED83CCT10ET5G2-LT	93129272	2565468	In-Store
LED28ET5GHO-4-3CC	LED32ET5GHO-4-3CC-1T	93130860	5190536	In-Store

**Use Table #4 on following pages**

## T5 LED Tube - Standard Type A (List 2 of 2)

### Commercial

Lamp Description	Package Description	Product Code	Lowes Product Code	Sold?
LED26ET5/G/4/835	LED26ET5/G/4/835	19221	1570058	Online
LED26ET5/G/4/850	LED26ET5/G/4/850	19348	1570098	Online

**Use Table #5 on following pages**

# Table #1 – T8 LED Tube – Type A or Type A/B Hybrid - Page 1 of 2

## IMPORTANT NOTICE:

This list is based on testing performed using a stable AC power supply under laboratory conditions, which may not be representative of particular end-use conditions. While each ballast model listed has undergone testing, some may have undergone revisions that may change operating parameters and impact lamp performance. Applications and conditions of use are many and varied and beyond our control, so purchasers and users should make their own determinations as to the suitability of a lamp-ballast combination for their own particular application and use. Compatibility may also extend to ballasts beyond this list, so performing an on-site test before installation is recommended. Contact a sales representative if the ballast to be used is not listed in the table. Information is subject to change without notice.

Manufacturer	Model Information	Input Voltage	Compatible?
CDL	E232120MRSLP	120V	
GE	GE432MAX-N/ULTRA	120-277V	
GE	G232-120-RES	120V	
GE	GE 232MAXP90-S60 (1 BLACK LINE ON)	120-277V	
GE	GE 232MAXP90-S60 (2 BLACK LINE ON)	120-277V	
GE	GE132MAX-G-N	120-277V	
GE	GE132MAX-L/ULTRA	120-277V	
GE	GE132MAX-L/ULTRA	120-277V	
GE	GE132MAX-N/ULTRA	120-277V	
GE	GE132MAXP-H/ULTRA	120-277V	
GE	GE132MAXP-L/ULTRA	120-277V	
GE	GE132MAXP-N/ULTRA	120-277V	
GE	GE-132-MV-N/M	120-277V	
GE	GE132-MVPS-H	120-277V	
GE	GE132-MVPS-L	120-277V	
GE	GE132MVPS-L-S30	120-277V	
GE	GE-132-MV-PS-N		
GE	GE132MVPS-N-S03	120-277V	
GE	GE132MVPS-N-S30	120-277V	
GE	GE132MVPS-N-V03	120-277V	
GE	GE132-N-347	347V	
GE	GE232-120RES	120V	
GE	GE232-120RESDIYB	120V	
GE	GE232MAX90-S60	120-277V	
GE	GE232MAX-G-347	347V	
GE	GE232MAX-G-L	120-277V	
GE	GE232MAX-L/ULTRA	120-277V	
GE	GE232MAX-N/ULTRA	120-277V	
GE	GE232MAXP347-H	347V	
GE	GE232MAXP347-L	347V	
GE	GE232MAXP347-N	347V	
GE	GE232MAXP480-H	480V	
GE	GE232MAXP90-V60	120-277V	

Manufacturer	Model Information	Input Voltage	Compatible?
GE	GE232MAXP-H/ULTRA	120-277V	
GE	GE232MAXP-N/ULTRA	120-277V	
GE	GE232MAXP-N+	120-277V	
GE	GE232MV-H	120-277V	
GE	GE232-MV-N/M	120-277V	
GE	GE232MVPS-L-S30	120-277V	
GE	GE-232-MV-PS-N	120-277V	
GE	GE232MVPS-N-S30	120-277V	
GE	GE232MVPSN-V03	120-277V	
GE	GE232PS347-H	347V	
GE	GE232PS347-L	120-277V	
GE	GE232PS347-N	347V	
GE	GE240PSMVN-DIYB	120-277V	
GE	GE332MAX347-H	347V	
GE	GE332MAX90-V60	120-277V	
GE	GE332MAX-G-347	347V	
GE	GE332MAX-G-H	120-277V	
GE	GE332MAX-G-L	120-277V	
GE	GE332MAX-G-N	120-277V	
GE	GE332MAX-H/ULTRA	120-277V	
GE	GE332MAXP347-N	347V	
GE	GE332MAXP480-H	480V	
GE	GE332MAXP90-S60	120-277V	
GE	GE332MAXP-H/ULTRA	120-277V	
GE	GE332MAXP-L/ULTRA	120-277V	
GE	GE332MAXP-N/ULTRA	120-277V	
GE	GE332MAXP-N+	120-277V	
GE	GE332MAXP-N-GEN1	120-277V	
GE	GE332MV-H	120-277V	
GE	GE-332-MVPS-H	120-277V	
GE	GE332MVPSH-V03	120-277V	
GE	GE332-MVPS-L	120-277V	
GE	GE332-MVPS-N	120-277V	

Manufacturer	Model Information	Input Voltage	Compatible?
GE	GE332MVPS-N-V03	120-277V	
GE	GE-332-MVPS-XL	120-277V	
GE	GE332PS347-N	347V	
GE	GE432-120-RES	120V	
GE	GE432-120RES-B	120-277V	
GE	GE432MAX347-N	347V	
GE	GE432MAX480-H	480V	
GE	GE432MAX90-S60	120-277V	
GE	GE432MAX90-V60	120-277V	
GE	GE432MAX-G-347	347V	
GE	GE432MAX-G-L	120-277V	
GE	GE432MAX-G-N	120-277V	
GE	GE432MAX-H/Ultra	120-277V	
GE	GE432MAXP347-H	347V	
GE	GE432MAXP347-L	347V	
GE	GE432MAXP347-N	347V	
GE	GE432MAXP-L/ULTRA	120-277V	
GE	GE432MAXP-N/ULTRA	120-277V	
GE	GE432MAXP-N+	120-277V	
GE	GE432MV-H	120-277V	
GE	GE432MV-N	120-277V	
GE	GE432-MV-N/M	120-277V	
GE	GE432MVPS-H	120-277V	
GE	GE432MVPSH-V03	120-277V	
GE	GE432-MVPS-L	120-277V	
GE	GE432-MVPS-N	120-277V	
GE	GE432MVPS-N-V03	120-277V	
GE	GE432PS347-N	347V	
GE	GE632MAXP-H90	120-277V	
GE	GE632MAXP-H90-S60	120-277V	
GE	GE632MAXP-H90-V60	120-277V	
HATCH	HL232AIS/34/HE/W	347V	
HATCH	HL232AIS/UV/HE/W	120-277V	

	Compatible
	Not Compatible
	Not Tested



# Table #1 – T8 LED Tube – Type A or Type A/B Hybrid - Page 2 of 2

## IMPORTANT NOTICE:

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Manufacturer	Model Information	Input Voltage	Compatible?
HATCH	HL232APS/UV/HE/W	120-277V	
HATCH	HL232BIS/UV/HE/W	120-277V	
HATCH	HL232BPS/UV/HE/W	120-277V	
HATCH	HL332AIS/UV/HE/W	120-277V	
HATCH	HL332APS/UV/HE/W	120-277V	
HATCH	HL332BPS/UV/HE/W	120-277V	
HATCH	HL332CPS/UV/HE/W	120-277V	
HATCH	HL432AIS/34/HEW	347V	
HATCH	HL432APS/UV/HE/W	120-277V	
HATCH	HL432BIS/UV/HE/W	120-277V	
HATCH	HL432BPS/UV/HE/W	120-277V	
HOWARD	EP3/32IS/MV/MC/HE	120-277V	
HOWARD	EP4/32IS/MV/MC/HE	120-277V	
HOWARD	EP2/32IS/MV/MC/HE	120-277V	
KEYSTONE	KTEB-232RIS-1-TP-SL	120V	
KEYSTONE	KTEB-240-1-TP/E	120V	
OSRAM	QHE 1X32T8/UNV ISN-SC	120-277V	
OSRAM	QHE 2X32T8/347 ISN-SC	347V	
OSRAM	QHE 2X32T8/UNV ISL-SC	120-277V	
OSRAM	QHE 2X32T8/UNV ISN-SC	120-277V	
OSRAM	QHE 2X32T8/UNV ISN-SC	120-277V	
OSRAM	QHE 2X32T8/UNV/ DIM-TC	120-277V	
OSRAM	QHE 2X32T8/UNV/HDIM10/SC	120-277V	
OSRAM	QHE 3X32T8/UNV ISL-SC	120-277V	
OSRAM	QHE 3X32T8/UNV ISN-SC	120-277V	
OSRAM	QHE 4X32T8/UNV ISL-SC	120-277V	
OSRAM	QHE 4X32T8/UNV ISN-SC	120-277V	
OSRAM	QHE 4X32T8/UNV PSN-SC	120-277V	
OSRAM	QT 3X32 T8/277	277V	
OSRAM	QT 3X32 T8/277 ISN-SC	277V	
OSRAM	QTP 1X32T8/UNV ISN-SC	120-277V	
OSRAM	QTP 2X32T8/UNV ISN-SC	120-277V	

Manufacturer	Model Information	Input Voltage	Compatible?
OSRAM	QTP 3X32T8/UNV ISN-SC	120-277V	
OSRAM	QTP 3X32T8/UNV ISN-SC	120-277V	
PHILIPS	IOP-3PSP32-SC	120-277V	
PHILIPS	Centium ICN-2P32-N	120-277V	
PHILIPS	GOPA-2P32-SC	347V	
PHILIPS	GOPA-4P32-SC	347V	
PHILIPS	ICN-1P32-N	120-277V	
PHILIPS	ICN-2P32-N	120-277V	
PHILIPS	ICN-3P32-N	120-277V	
PHILIPS	ICN-4P32-N	120-277V	
PHILIPS	IOP-3PSP32-LW-SC	120-277V	
PHILIPS	IOP-4P32-N	120-277V	
PHILIPS	IOP-4PSP32-SC	120-277V	
PHILIPS	IOPA-1P32--HL-N	120-277V	
PHILIPS	IOPA-1P32-N	120-277V	
PHILIPS	IOPA-2P32-HL-N	120-277V	
PHILIPS	IOPA-2P32-N	120-277V	
PHILIPS	IOPA-3P32-N	120-277V	
PHILIPS	IOPA-3P32-SC	120-277V	
PHILIPS	IOPA-4P32-N	120-277V	
PHILIPS	IZT-132-SC	120-277V	
PHILIPS	IZT-2PSP32-SC		
PHILIPS	IZT-2S32-SC	120-277V	
PHILIPS	IZT-3C32-SC	120-277V	
PHILIPS	IZT-3S32-SC		
PHILIPS	Optanium IOP-2P32HL-SC	120-277V	
PHILIPS	Optanium IOPA-2P32HL-SC	120-277V	
PHILIPS	Optanium IOPA-2P32-LW-N	120-277V	
PHILIPS	REB-2P32-N	120-277V	
PHILIPS	REB-4P32-SC	120V	
PHILIPS	REZ-2S32-SC	120-277V	
SYLVANIA	QTP 4X32T8/UNV ISN-SC	120-277V	
SYLVANIA	QTP 4X32T8/UNV PSX-SC	120-277V	

Manufacturer	Model Information	Input Voltage	Compatible?
SYLVANIA	QTP 2X32T8/UNV ISH-SC	120-277V	
SYLVANIA	QTP 2x32T8/UNV ISH-SC	120-277V	
SYLVANIA	QTP 2X32T8/UNV ISL-SC	120-277V	
SYLVANIA	QTP 2X32T8/UNV ISN-SC	120-277V	
SYLVANIA	QTP 3X32T8/UNV PSX-SC	120-277V	
SYLVANIA	QTP 4X32T8/UNV ISN-SC	120-277V	
SYLVANIA	QHE 3X32T8/UNV PSX-SC	120-277V	
SYLVANIA	QTP1X32T8/UNV PSX-TC	120-277V	
ULTRASAVE	UT232347	347V	
ULTRASAVE	UT432347	347V	
Universal	432IUNVEL-A	120-277V	
Universal	B132I120RH-A	120V	
Universal	B132IUNVEL-N	120-277V	
Universal	B132IUNVHE-N	120-277V	
Universal	B132IUNVHP-N	120-277V	
Universal	B232IUNVEL-N	120-277V	
Universal	B232IUNVHE-A	120-277V	
Universal	B232IUNVHEH-A	120-277V	
Universal	B232IUNVHE-N	120-277V	
Universal	B232IUNVHP-N	120-277V	
Universal	B232PUNVHE-B	120-277V	
Universal	B332IUNVEL-A	120-277V	
Universal	B332IUNVEL-A	120-277V	
Universal	B332IUNVHE-A	120-277V	
Universal	B332IUNVHP-A	120-277V	
Universal	B432IUNVHE-A	120-277V	
Universal	B432IUNVHP-A	120-277V	
UTILITECH	MODEL#YZ-240	120V	

	Compatible
	Not Compatible
	Not Tested

# Table #2 – T8 LED Tube – Type A – Commercial – Page 1 of 3

## IMPORTANT NOTICE:

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Manufacturer	Model Information	# of Tubes	Ballast Factor	Start Type	Volts	4ft ET8	3ft ET8	2ft ET8
General Electric	GE132MAX-L/ULTRA	1	L	Instant	UNV			
General Electric	GE132MAXP-L/ULTRA	1	L	Instant	UNV			
General Electric	GE132-MVPS-L	1	L	Program	UNV			
General Electric	GE132MV-N	1	N	Instant	UNV			
General Electric	GE132MAX-G-N	1	N	Instant	UNV			
General Electric	GE132MAXP-N/ULTRA	1	N	Instant	UNV			
General Electric	GE132MV-PS-N	1	N	Program	UNV			
General Electric	GE132MVPS-N-S30	1	N	Program	UNV			
General Electric	GE132MVPS-N-V03	1	N	Program	UNV			
General Electric	GE132-N-347	1	N	Instant	347			
General Electric	GE132MAXP-H/ULTRA	1	H	Program	UNV			
Osram Sylvania	QTP 1x32T8/UNV PSX-TC	1	L	Program	UNV			
Osram Sylvania	QHE 1x32T8/UNV ISN-SC	1	N	Instant	UNV			
Osram Sylvania	QTP 1x32T8/UNV ISN-SC	1	N	Instant	UNV			
Philips Advance	ICN-1P32-N	1	N	Instant	UNV			
Philips Advance	IOPA-1P32-N	1	N	Instant	UNV			
Philips Advance	IOPA-1P32-HL-N	1	H	Instant	UNV			
Universal	B132IUNVEL-N	1	L	Instant	UNV			
Universal	B132IUNVHE-N	1	N	Instant	UNV			
Universal	B132IUNVHP-N	1	N	Instant	UNV			
General Electric	GE-232-MVPS-XL	2	XL	Program	UNV			
General Electric	GE232MAX-G-L	2	L	Instant	UNV			
General Electric	GE232MAXP-L/ULTRA	2	L	Instant	UNV			
General Electric	GE232-MVPS-L	2	L	Program	UNV			
General Electric	GE232MVPS-L-S30	2	L	Program	UNV			
General Electric	GE232MAXP347-L	2	L	Instant	347			
General Electric	GE232PS347-L	2	L	Program	347			
General Electric	GE232-120-RES	2	N	Instant	120			
General Electric	GE232MAX-G-N	2	N	Instant	UNV			
General Electric	GE232MAXP347-N	2	N	Instant	347			

Manufacturer	Model Information	# of Tubes	Ballast Factor	Start Type	Volts	4ft ET8	3ft ET8	2ft ET8
General Electric	GE232MAXP-N/ULTRA	2	N	Instant	UNV			
General Electric	GE232MAX-N/AMP	2	N	Instant	UNV			
General Electric	GE232MV-N	2	N	Instant	UNV			
General Electric	GE232-120RES-DIY	2	N	Instant	UNV			
General Electric	GE-232-MV-PS-N	2	N	Program	UNV			
General Electric	GE232MVPS-N-S30	2	N	Program	UNV			
General Electric	GE232MVPS-N-V03	2	N	Program	UNV			
General Electric	GE232PS347-N	2	N	Program	347			
General Electric	GE232-N-347	2	N	Instant	347			
General Electric	GE232MAX-G-N-347	2	N	Instant	347			
General Electric	GE232MAXP-N+	2	N+	Instant	UNV			
General Electric	GE232MAX-G-H	2	H	Instant	UNV			
General Electric	GE232MAXP90-S60	2	H	Instant	UNV			
General Electric	GE232MAXP-H/ULTRA	2	H	Instant	UNV			
General Electric	GE232MV-H	2	H	Instant	UNV			
General Electric	GE232-MV-PS-H	2	H	Program	UNV			
General Electric	GE232MVPSH-V03	2	H	Program	UNV			
General Electric	GE232PS347-H	2	H	Program	347			
Fusion	FB232MVE-N	2	N	Instant	UNV			
Fusion	FB232347E-N	2	N	Instant	347			
Hatch	HL232AIS/UV/HE/W	2	L	Instant	UNV			
Hatch	HL232APS/UV/HE/W	2	L	Program	UNV			
Hatch	HL232AIS/34/HE/W	2	L	Instant	347			
Hatch	HL232BIS/UV/HE/W	2	N	Instant	UNV			
Hatch	HL232BPS/UV/HE/W	2	N	Program	UNV			
Hatch	HL232CPS/UV/HE/W	2	H	Program	UNV			
Howard	EP2/32IS/MV/MC/HE	2	N	Instant	UNV			
Osram Sylvania	QHE 2x32T8/UNV ISL-SC	2	L	Instant	UNV			
Osram Sylvania	QTP 2x32T8/UNV ISL-SC	2	L	Instant	UNV			
Osram Sylvania	QT 2 x 32/347 LP	2	L	Instant	347			



Compatible



Not Compatible



Use with caution-high/low watts

# Table #2 – T8 LED Tube – Type A – Commercial – Page 2 of 3

## IMPORTANT NOTICE:

This list is based on testing performed using a stable AC power supply under laboratory conditions, which may not be representative of particular end-use conditions. While each ballast model listed has undergone testing, some may have undergone revisions that may change operating parameters and impact lamp performance. Applications and conditions of use are many and varied and beyond our control, so purchasers and users should make their own determinations as to the suitability of a lamp-ballast combination for their own particular application and use. Compatibility may also extend to ballasts beyond this list, so performing an on-site test before installation is recommended. Contact a sales representative if the ballast to be used is not listed in the table. Information is subject to change without notice.

Manufacturer	Model Information	# of Tubes	Ballast Factor	Start Type	Volts	4ft ET8	3ft ET8	2ft ET8
Osram Sylvania	QT2x32 T8/347 ISN-SC	2	N	Instant	347			
Osram Sylvania	QHE 2x32T8/347 ISN-SC	2	N	Instant	347			
Osram Sylvania	QHE 2x32T8/UNV ISN-SC	2	N	Instant	UNV			
Osram Sylvania	QTP 2x32T8/UNV ISN-SC	2	N	Instant	UNV			
Osram Sylvania	QTP 2x32T8/UNV ISH-SC	2	H	Instant	UNV			
Philips Advance	IOPA-2P32-LW-N	2	L	Instant	UNV			
Philips Advance	GOPA-2P32-SC	2	N	Instant	347			
Philips Advance	ICN-2P32-N	2	N	Instant	UNV			
Philips Advance	REB-2P32-SC	2	N	Instant	120			
Philips Advance	REB-2P32-N	2	N	Instant	120			
Philips Advance	IOPA-2P32-N	2	N	Instant	UNV			
Philips Advance	IZT-2S32-SC	2	N	Program	UNV			
Philips Advance	REZ-2S32-SC	2	N	Program	120			
Philips Advance	IZT-2PSP32-SC	2	N	Program	UNV			
Philips Advance	IOP-2P32HL-SC	2	H	Instant	UNV			
Philips Advance	IOPA-2P32HL-SC	2	H	Instant	UNV			
Ultrasave	UT232347	2	N	Instant	347			
Universal	B232IUNVEL-N	2	L	Instant	UNV			
Universal	B232IUNVHE-N	2	N	Instant	UNV			
Universal	B232IUNVHP-N	2	N	instant	UNV			
Universal	B232PUNVHE-B	2	N	Instant	UNV			
Universal	B232I277RH-A	2	N	Instant	277			
Universal	B232IUNVHEH-A	2	H	Instant	UNV			
General Electric	GE-332-MVPS-XL	3	XL	Program	UNV			
General Electric	GE332MAX-G-L	3	L	Instant	UNV			
General Electric	GE332MAXP-L/ULTRA	3	L	Instant	UNV			
General Electric	GE332-MVPS-L	3	L	Program	UNV			
General Electric	GE332MAX-G-N	3	N	Instant	UNV			
General Electric	GE332MV-N	3	N	Instant	UNV			
General Electric	GE332MAXP-N/ULTRA	3	N	Instant	UNV			

Manufacturer	Model Information	# of Tubes	Ballast Factor	Start Type	Volts	4ft ET8	3ft ET8	2ft ET8
General Electric	GE332MAX-N-GEN1	3	N	Instant	UNV			
General Electric	GE332MAXP-N-GEN1	3	N	Instant	UNV			
General Electric	GE332MAX-N/AMP	3	N	Instant	UNV			
General Electric	GE332-MVPS-N	3	N	Program	UNV			
General Electric	GE332MVPSN-V03	3	N	Program	UNV			
General Electric	GE332PS347-N	3	N	Program	347			
General Electric	GE332MAX-G-347	3	N	Instant	347			
General Electric	GE332MAX-G-H	3	H	Instant	UNV			
General Electric	GE332MAXP-H/ULTRA	3	H	Instant	UNV			
General Electric	GE332MAXPH-42T	3	H	Instant	UNV			
General Electric	GE332MVPSH-V03	3	H	Program	UNV			
General Electric	GE332MAXP90-V60	3	H	Instant	UNV			
General Electric	GE332MAXP90-S60	3	H	Instant	UNV			
General Electric	GE332MAX347-H	3	H	Instant	347			
Fusion	FB332MVE	3	N	Instant	UNV			
Hatch	HL332AIS/UV/HE/W	3	L	Instant	UNV			
Hatch	HL332APS/UV/HE/W	3	L	Program	UNV			
Hatch	HL332BPS/UV/HE/W	3	N	Program	UNV			
Hatch	HL332CPS/UV/HE/W	3	H	Program	UNV			
Howard	EP3/32IS/MV/MC/HE	3	N	Instant	UNV			
Osram Sylvania	QHE 3x32T8/UNV ISL-SC	3	L	Instant	UNV			
Osram Sylvania	QHE 3x32T8/UNV PSX-SC	3	L	Program	UNV			
Osram Sylvania	QTP 3x32T8/UNV PSX-SC	3	L	Program	UNV			
Osram Sylvania	QHE 3x32T8/UNV ISN-SC	3	N	Instant	UNV			
Osram Sylvania	QTP 3x32T8/UNV ISN-SC	3	N	Instant	UNV			
Philips Advance	IOP-3PSP32-LW-SC	3	L	Program	UNV			
Philips Advance	ICN-3P32-N	3	N	Instant	UNV			
Philips Advance	IOPA-3P32-N	3	N	Instant	UNV			
Philips Advance	IOP-3PSP32-SC	3	N	Program	UNV			
Universal	B332IUNVEL-A	3	L	Instant	UNV			



Compatible



Not Compatible



Use with caution-high/low watts

# Table #2 – T8 LED Tube – Type A – Commercial – Page 3 of 3

## IMPORTANT NOTICE:

This list is based on testing performed using a stable AC power supply under laboratory conditions, which may not be representative of particular end-use conditions. While each ballast model listed has undergone testing, some may have undergone revisions that may change operating parameters and impact lamp performance. Applications and conditions of use are many and varied and beyond our control, so purchasers and users should make their own determinations as to the suitability of a lamp-ballast combination for their own particular application and use. Compatibility may also extend to ballasts beyond this list, so performing an on-site test before installation is recommended. Contact a sales representative if the ballast to be used is not listed in the table. Information is subject to change without notice.

Manufacturer	Model Information	# of Tubes	Ballast Factor	Start Type	Volts	4ft ET8	3ft ET8	2ft ET8
Universal	B332IUNVHE-A	3	N	Instant	UNV			
Universal	B332IUNVHP-A	3	N	Instant	UNV			
Universal	B332IHRVHB-E	3	H	Instant	480			
General Electric	GE432MAX-G-L	4	L	Instant	UNV			
General Electric	GE432MAXP-L/ULTRA	4	L	Instant	UNV			
General Electric	GE432MAXP347-L	4	L	Instant	347			
General Electric	GE432-MVPS-L	4	L	Program	UNV			
General Electric	GE432-120-RES	4	N	Instant	120			
General Electric	GE432MAX347-N	4	N	Instant	347			
General Electric	GE432MAX-G-N	4	N	Instant	UNV			
General Electric	GE432MAXP-N/ULTRA	4	N	Instant	UNV			
General Electric	GE432MV-N	4	N	Instant	UNV			
General Electric	GE432-MVPS-N	4	N	Program	UNV			
General Electric	GE432MVPS-N-V03W	4	N	Program	UNV			
General Electric	GE432MAXP-N+	4	N+	Instant	UNV			
General Electric	GE432MAX-G-H	4	H	Instant	UNV			
General Electric	GE432MAXP347-H	4	H	Instant	347			
General Electric	GE432MAXP-H/ULTRA	4	H	Instant	UNV			
General Electric	GE432MVPS-H	4	H	Instant	UNV			
General Electric	GE432MVPS-H-V03	4	H	Program	UNV			
General Electric	GE432MAXP90-V60	4	H	Instant	UNV			
Fusion	FB432MVE-N	4	N	Instant	UNV			
Fusion	FB432347E-N	4	N	Instant	347			
Hatch	HL432APS/UV/HE/W	4	L	Program	UNV			
Hatch	HL432AIS/34/HE/W	4	L	Instant	347			
Hatch	HL432BIS/UV/HE/W	4	N	Instant	UNV			
Hatch	HL432BPS/UV/HE/W	4	N	Program	UNV			
Howard	EP4/32IS/MV/MC/HE	4	N	Instant	UNV			
Osram Sylvania	QHE 4x32T8/UNV ISL-SC	4	L	Instant	UNV			
Osram Sylvania	QHE 4x32T8/UNV ISN-SC	4	N	Instant	UNV			

Manufacturer	Model Information	# of Tubes	Ballast Factor	Start Type	Volts	4ft ET8	3ft ET8	2ft ET8
Osram Sylvania	QTP 4x32T8/UNV ISN-SC	4	N	Instant	UNV			
Osram Sylvania	QHE 4x32T8/UNV PSN-SC	4	N	Program	UNV			
Philips Advance	IOP-4PSP32-LW-SC	4	L	Program	UNV			
Philips Advance	GOPA-4P32-SC	4	N	Instant	347			
Philips Advance	ICN-4P32-N	4	N	Instant	UNV			
Philips Advance	IOP-4P32-N	4	N	Instant	UNV			
Philips Advance	IOPA-4P32-N	4	N	Instant	UNV			
Philips Advance	REB-4P32-SC	4	N	Instant	120			
Philips Advance	IOP-4PSP32-SC	4	N	Program	UNV			
Ultrasave	UT432347	4	N	Instant	347			
Universal	B432IUNVEL-A	4	L	Instant	UNV			
Universal	B432IUNVHE-A	4	N	Instant	UNV			
Universal	B432IUNVHP-A	4	N	Instant	UNV			



Compatible



Not Compatible



Use with caution-high/low watts

# Table #3 – T8 LED Tube - Universal Type A


## IMPORTANT NOTICE:

This list is based on testing performed using a stable AC power supply under laboratory conditions, which may not be representative of particular end-use conditions. While each ballast model listed has undergone testing, some may have undergone revisions that may change operating parameters and impact lamp performance. Applications and conditions of use are many and varied and beyond our control, so purchasers and users should make their own determinations as to the suitability of a lamp-ballast combination for their own particular application and use. Compatibility may also extend to ballasts beyond this list, so performing an on-site test before installation is recommended. Contact a sales representative if the ballast to be used is not listed in the table. Information is subject to change without notice.

Manufacturer	Ballast Type	Model Information	Type	Input Voltage	# Lamps	Compatible?
ACCUPRO	T8	AP-RS-232IS-120	Electronic	120V/60HZ	1/2	
ADVANCE	T8	Cat NO.RK-2S32-TP	Magnetic	120V/60HZ	1/2	
CDL	T8	#E232120MRSLP	Electronic	120V/60HZ	1/2	
GE	T8	GE132MAX-G-N	Electronic	120-277V/60HZ	1	
GE	T8	GE132MAX-N/ULTRA	Electronic	120-277V/60HZ	1	
GE	T8	GE232-120RES-B	Electronic	120V/60HZ	1/2	
GE	T8	GE332MAXP-N+	Electronic	120-277V/60HZ	1/2/3	
GE	T8	GE432-120RES-B	Electronic	120V/60HZ	1/2/3/4	
GE	T8	GE432MAXP-N+	Electronic	120-277V/60HZ	1/2/3/4	
HOWARD	T8	EL 3 32IS-277	Electronic	277V/60HZ	1/2/3	
Keystone	T8	KTEB-232RIS-1-TP-SL	Electronic	120V/60HZ	1/2	
Lights of America	T8	8045E-WH	Electronic	120V/60HZ	1/2	
Robertson	T8	SEN434P	Magnetic	120V/60HZ	1/2/3/4	
SYLVANIA	T8	QUICKTRONIC® QT 3*32 T8/277 ISN-SC	Electronic	277V/60HZ	1/2/3	
TraidUniversal	T8	C240SI277RH	Electronic	277V/60HZ	1/2	
Universal	T8	Cat NO.731-L-TC-P	Magnetic	120V/60HZ	1/2	

Manufacturer	Ballast Type	Model Information	Type	Input Voltage	# Lamps	Compatible?
ADVANCE	T12	Cat NO.R-2S40-1-TP	Magnetic	120V/60HZ	1/2	
GE	T12	458-L-SLH-TC-P	Magnetic	277V/60HZ	1	
GE	T12	8G1075	Magnetic	120V/60HZ	1	
GE	T12	GE240PSMVN-DIYB	Electronic	120-277V/60HZ	1/2	
GE	T12	GE240RES120-B	Electronic	120V/60HZ	1/2	
Keystone	T12	KTEB-240-1-TP /E	Electronic	120V/60HZ	1/2	
Magnetek	T12	413-C-TC-P	Magnetic	120V/60HZ	1	
Magnetek	T12	446-L-SLH-TC-P	Magnetic	120V/60HZ	1/2	
Magnetek	T12	458-L-SLH-TC-P	Magnetic	277V/60HZ	1	
Osram	T12	QTP 2*40T12/UNV RS SC	Electronic	120-277V/60HZ	1/2	
Robertson	T12	CAT.NO.ES-240-120-TP	Magnetic	120V/60HZ	1/2	
SOLA	T12	E420-F-234 IC	Magnetic	120V/60HZ	1/2	
Utilitech	T12	#YZ-240	Electronic	120V/60HZ	1/2	
VF	T12	8G3905W	Magnetic	120V/60HZ	1/2	

 Compatible

 Not Compatible

 Not Tested

# Table #4 – T5 LED Tube - Standard Type A - Consumer

## IMPORTANT NOTICE:

This list is based on testing performed using a stable AC power supply under laboratory conditions, which may not be representative of particular end-use conditions. While each ballast model listed has undergone testing, some may have undergone revisions that may change operating parameters and impact lamp performance. Applications and conditions of use are many and varied and beyond our control, so purchasers and users should make their own determinations as to the suitability of a lamp-ballast combination for their own particular application and use. Compatibility may also extend to ballasts beyond this list, so performing an on-site test before installation is recommended. Contact a sales representative if the ballast to be used is not listed in the table. Information is subject to change without notice.

Manufacturer	Model Information	Input Voltage	2ft Compatible	1.75ft Compatible	1ft Compatible
GE	GE228MVPS-MC	120-277V/60HZ	Compatible	Compatible	Compatible
GE	GE228MVPS-MC-H	120-277V/60HZ	Compatible	Compatible	Compatible
GE	GE28T5/2-120-RES	120V/60HZ	Compatible	Compatible	Compatible
GE	GE 28T5-120-RES	120V/60HZ	Compatible	Compatible	Compatible
GE	GE228MVPS-N-S35	120-277V/60HZ	Compatible	Compatible	Compatible
PHILIPS	ICN-2S28-T	120-277V/60HZ	Compatible	Compatible	Compatible
PHILIPS	ICN-2S28-N	120-277V/60HZ	Not Compatible	Not Compatible	Compatible
PHILIPS	ICN-2S28-D	120-277V/60HZ	Not Compatible	Not Compatible	Not Compatible
OSRAM	QTP 1x28T5/UNV PSN	120-277V/60HZ	Compatible	Compatible	Not Compatible
OSRAM/SYLVANIA	QTP 2x28T5/UNV PSN	120-277V/60HZ	Compatible	Compatible	Compatible
OSRAM	QHES 2x28T5/UNVPS90-SC	120-277V/60HZ	Not Compatible	Compatible	Not Tested
ROBERTSON	PSA228T5MV	120-277V/60HZ	Not Compatible	Not Compatible	Not Compatible
Universal	B228PUNV-N	120-277V/60HZ	Compatible	Compatible	Compatible
HUAFENG	ENP-T5-28-S2SC	120-277V/60HZ	Not Compatible	Not Compatible	Not Compatible
KEystone	KTEB-228-1-TP-PH-SL/B	120V/60HZ	Compatible	Compatible	Not Compatible
GE	GE 21T5-120-RES	120V/60HZ	Compatible	Compatible	Compatible
LUTRON	EHDT514MU110	120-277V/60HZ	Compatible	Compatible	Not Tested

Compatible	Compatible
Not Compatible	Not Compatible
Not Tested	Not Tested



# Table #5 – T5 LED Tube - Standard Type A - Commercial

## IMPORTANT NOTICE:

This list is based on testing performed using a stable AC power supply under laboratory conditions, which may not be representative of particular end-use conditions. While each ballast model listed has undergone testing, some may have undergone revisions that may change operating parameters and impact lamp performance. Applications and conditions of use are many and varied and beyond our control, so purchasers and users should make their own determinations as to the suitability of a lamp-ballast combination for their own particular application and use. Compatibility may also extend to ballasts beyond this list, so performing an on-site test before installation is recommended. Contact a sales representative if the ballast to be used is not listed in the table. Information is subject to change without notice.

Manufacturer	Model Information	# of Tubes	Compatible?
General Electric	GE254MVPS90-A	2	Compatible
General Electric	GE254MVPS90-A-DIY	2	Compatible
General Electric	GE254MVPS-A	2	Not Compatible
General Electric	GE254MVPS-D	2	Compatible
General Electric	GE254MVPS-D-1	2	Compatible
General Electric	GE254PS347/480-F	2	Compatible
General Electric	GE254PS347-F	2	Compatible
Halco	EP254HO/PS/MV/MC	2	Compatible
Keystone	KTEB-254HO-UV-PS-SL	2	Compatible
Osram Sylvania	QTP 1x54T5HO/UNV PSN	1	Compatible
Osram Sylvania	QHE 2x54HO/UNV PSN HT	2	Compatible
Osram Sylvania	QHE 2x54T5 HO/UNV PSN	2	Compatible
Osram Sylvania	QHE 2x54T5HO/347-480 PSN HT	2	Not Compatible
Osram Sylvania	QHE2x54 T5HO/347-480 PSN HT	2	Not Compatible
Osram Sylvania	QTP 2x54T5HO/UNV PSN	2	Compatible
Osram Sylvania	QTP 2x54T5HO/347-480 PSN HT	2	Compatible
Philips Advance	HCN-2S54-90C-WL	2	Compatible
Philips Advance	ICN-2S54-90C	2	Compatible
Philips Advance	ICN-2S54-90C-N	2	Compatible
Philips Advance	ICN-2S54-90C-T	2	Compatible
Philips Advance	ICN-2S54-N	2	Compatible

Manufacturer	Model Information	# of Tubes	Compatible?
Philips Advance	ICN-2S54-T	2	Compatible
Philips Advance	ICRP-2PSP54-90C	2	Not Compatible
Philips Advance	IOP-2PSP54-SC	2	Compatible
Sunpark	U-2/54T5HO	2	Compatible
Ultrasave	ER254347HT-W	2	Compatible
Universal	B254PUNV-D	2	Not Compatible
General Electric	GE454MVPS90-E	4	Compatible
General Electric	GE454MVPS90-E-S	4	Compatible
General Electric	GE454MVPS90-F	4	Full load only
General Electric	GE454MVPS90-F-DIY	4	Full load only
General Electric	GE454PS347/480-E	4	Compatible
General Electric	GE454PS347-E	4	Compatible
Keystone	KTEB-454HO-UV-PS	4	Compatible
Osram Sylvania	QHE 4x54T5HO/UNV PSN HT SCL	4	Compatible
Osram Sylvania	QTP4x54T5HO UNV PSN HT W	4	Compatible
Philips Advance	HCN-4S54-90C-2LS-G	4	Compatible
Philips Advance	ICN-4S54-90C-2LS-G	4	Not Compatible
Philips Advance	ICRP-4PSP54-90C	4	Not Compatible
Philips Advance	IOP-4PSP54-2LS-G	4	Not Compatible
Universal	B454 PUNV-E	4	Not Compatible
Universal	B454 PUNVHB-E	4	Not Compatible

	Compatible
	Not Compatible
	See Notes