# **LED LAMP**

# **VIVID Series**



# LED T8 TUBE **Ballast Bypass**









5-year limited warranty for DLC listed 3-year limited warranty for non-DLC\*\*\*

Operating temperature range -20°C ~ +45°C

### T8BPSP4

Bypass, shatterprotect, double-ended & single-ended/ single-ended



FLICKER Flicker exists in most light sources, but with varying levels. For LED Type B tubes, it all comes down to the driver. Our unique driver design ensures the minimal level of flicker, so that provides high-quality light for maximum eye comfort and performance.



### T8BP4/BP6

Bypass, double-ended & single-ended/ double-ended



### T8BPSP4/R17d

Bypass, shatterprotect, double-ended, base: R17d, 8ft

### T8BPSP4/ Fa8

Bypass, shatterprotect, double-ended, base: Fa8, 8ft



### Features & Benefits

cUL listed, DLC approved\*, flicker-free\* PET film, shatterprotect1 (except T8BP)

External ballast not required, use existing lamp holders (non-shunted / shunted)

Both double-ended and single-ended/ double-ended/ single-ended installation\*

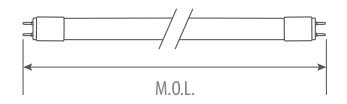
Our safety features allow for installation as well as misapplication protection<sup>2</sup>

NSF/ANSI2 certified\*\* (except T8BP)

Beam angle 220° (T8BP), 180° (T8DFSP4)

50,000 hour life (L70), High CRI (82+), 120-277V/ 347V\*

## **Dimensional Drawing**



# Ordering Information Example: VIV-T8BPSP4/9W/30/F/DE

Family Name	Lamp Type	Wattage	ατ	Frost	Installation
VIV (Vivid)	T8BPSP4 (Bypass, shatterprotect, double-ended & single-ended/ single-ended) T8BPSP4/FF (Bypass, shatterprotect, flicker free, double-ended & single-ended/ single-ended) T8BPSP4/F83 (Bypass, shatterprotect, double-ended, base: Fa8, 8ft) T8BPSP4/R17d (Bypass, shatterprotect, double-ended, base: R17d, 8ft) T8BP6 (Bypass, double-ended) T8BP4 (Bypass, double-ended & single-ended)	9W, 10.5W, 12W, 15W, 18W, 22W, 30W 10.5W 42W 42W 12W, 15W 15W	30 (3000K) 35 (3500K) 40 (4000K) 50 (5000K)	F (Frost)	DE (Single & double-ended/ double-ended) Blank (Single-ended)

### **Product Specification**

Ordering	DIG		W ++ (W)	V I: 00				Beam	667/10	601	M.O.L.	Case
Code	DLC	Model Number	Watts (W)	Voltage (V)	Initial Lumen (lm)	Base	Hour Rating	Angle	CCT(K)	CRI	(inch)	QTY.
T8 Bypass S	ShatterProt	ect IV, Flicker Free, 50000hrs, Double-ended & Single-e	ended									
1752404	-	VIV-T8BPSP4/FF/10.5W/40/F/DE (4FT)	10.5	120-277	1700	G13	50,000	180°	4000	82	48	25
T8 Bypass S	hatterProt	ect IV, 50000hrs, Double-ended & Single-ended, DLC										
1752205	-	VIV-T8BPSP4/9W/30/F/DE (2FT)	9	120-277	1125	G13	50,000	180°	3000	82	24	8
1752301	-	VIV-T8BPSP4/9W/35/F/DE (2FT)	9	120-277	1125	G13	50,000	180°	3500	82	24	8
1752403	-	VIV-T8BPSP4/9W/40/F/DE (2FT)	9	120-277	1200	G13	50,000	180°	4000	82	24	8
1752502	-	VIV-T8BPSP4/9W/50/F/DE (2FT)	9	120-277	1200	G13	50,000	180°	5000	82	24	8
1752204	-	VIV-T8BPSP4/12W/30/F/DE/3FT	12	120-277	1450	G13	50,000	180°	3000	82	36	8
1752300	-	VIV-T8BPSP4/12W/35/F/DE/3FT	12	120-277	1450	G13	50,000	180°	3500	82	36	8
1752401	-	VIV-T8BPSP4/12W/40/F/DE/3FT	12	120-277	1500	G13	50,000	180°	4000	82	36	8
1752501	-	VIV-T8BPSP4/12W/50/F/DE/3FT	12	120-277	1550	G13	50,000	180°	5000	82	36	8
1762893	Υ	VIV-T8BPSP4/10.5W/40/F/DE (4FT)	10.5	120-277	1700	G13	50,000	180°	4000	82	48	25
1762558	Υ	VIV-T8BPSP4/10.5W/50/F/DE (4FT)	10.5	120-277	1700	G13	50,000	180°	5000	82	48	25
1762892	-	VIV-T8BP4/15W/40/F/DE (4FT)	15	120-277	1750	G13	50,000	220°	4000	82	48	25

<sup>\*\*\*</sup>Please check the "Turolight LED Limited Warranty" for details

<sup>\*</sup>For applicable models, see product specification below

<sup>\* \*</sup> Need to work with NSF certified lighting fixtures

<sup>&</sup>lt;sup>1</sup> Shatterprotect utilizes PET film to reduce the unexpected risk of shattering <sup>2</sup>Contact your local Turolight representative for detail

# LEDT8TUBE

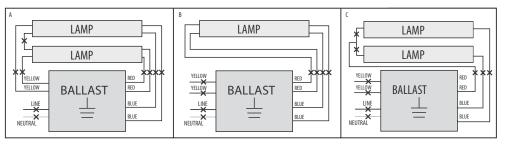
# **Ballast Bypass**

Ordering Code	DLC	Model Number	Watts (W)	Voltage (V)	Initial Lumen (Im)	Base	Hour Rating	Beam Angle	CCT(K)	CRI	M.O.L. (inch)	Case QTY.
1763440	-	VIV-T8BPSP4/18W/40/F/DE (4FT)	18	120-277	2200	G13	50,000	180°	4000	82	48	25
1763518	-	VIV-T8BPSP4/18W/50/F/DE (4FT)	18	120-277	2200	G13	50,000	180°	5000	82	48	25
T8 Bypass V	/I 50000hrs	, Double-ended, DLC										
1752220	-	VIV-T8BP6/12W/30/F/DE (4FT)	12	120-277	1700	G13	50,000	220°	3000	82	48	25
1752308	Υ	VIV-T8BP6/12W/35/F/DE (4FT)	12	120-277	1800	G13	50,000	220°	3500	82	48	25
1752418	Υ	VIV-T8BP6/12W/40/F/DE (4FT)	12	120-277	1800	G13	50,000	220°	4000	82	48	25
1752512	Υ	VIV-T8BP6/12W/50/F/DE (4FT)	12	120-277	1800	G13	50,000	220°	5000	82	48	25
1752221		VIV-T8BP6/15W/30/F/DE (4FT)	15	120-277	2100	G13	50,000	220°	3000	82	48	25
1752309	Υ	VIV-T8BP6/15W/35/F/DE (4FT)	15	120-277	2200	G13	50,000	220°	3500	82	48	25
1752419	Υ	VIV-T8BP6/15W/40/F/DE (4FT)	15	120-277	2200	G13	50,000	220°	4000	82	48	25
1752513	Υ	VIV-T8BP6/15W/50/F/DE (4FT)	15	120-277	2200	G13	50,000	220°	5000	82	48	25
T8 Bypass S	hatterProt	ect IV, 50000hrs, Double-ended, 347V, DLC										
1752206	Υ	VIV-T8BPSP4/15W/30/F/DE/347V (4FT)	15	347V	2200	G13	50,000	180°	3000	82	48	25
1752302	Υ	VIV-T8BPSP4/15W/35/F/DE/347V (4FT)	15	347V	2200	G13	50,000	180°	3500	82	48	25
1752400	Υ	VIV-T8BPSP4/15W/40/F/DE/347V (4FT)	15	347V	2200	G13	50,000	180°	4000	82	48	25
1752500	Υ	VIV-T8BPSP4/15W/50/F/DE/347V (4FT)	15	347V	2200	G13	50,000	180°	5000	82	48	25
T8 Bypass S	ShatterProt	ect IV, 8FT, 50000hrs, Double-ended										
1755400	Υ	VIV-T8BPSP4/Fa8/42W/40/F/DE (8FT)	42	120-277	5400	Fa8	50,000	180°	4000	82	96	8
1755500	Υ	VIV-T8BPSP4/Fa8/42W/50/F/DE (8FT)	42	120-277	5500	Fa8	50,000	180°	5000	82	96	8
1755401	-	VIV-T8BPSP4/R17d/42W/40/F/DE (8FT)	42	120-277	5400	R17d	50,000	180°	4000	82	96	8
1755501	-	VIV-T8BPSP4/R17d/42W/50/F/DE (8FT)	42	120-277	5500	R17d	50,000	180°	5000	82	96	8
T8 Bypass S	ShatterProt	ect IV, 8FT, 50000hrs, Double-ended, 347V										
1755402	Υ	VIV-T8BPSP4/Fa8/42W/40/F/DE/347V (8FT)	42	347V	5400	Fa8	50,000	180°	4000	82	96	8
1755502	Υ	VIV-T8BPSP4/Fa8/42W/50/F/DE/347V (8FT)	42	347V	5500	Fa8	50,000	180°	5000	82	96	8
1755403	-	VIV-T8BPSP4/R17d/42W/40/F/DE/347V (8FT)	42	347V	5400	R17d	50,000	180°	4000	82	96	8
1755503		VIV-T8BPSP4/R17d/42W/50/F/DE/347V (8FT)	42	347V	5500	R17d	50,000	180°	5000	82	96	8
T8 Bypass I	V, 5FT & 6F	T, 50000hrs, Single-ended										
1764412	-	VIV-T8BPSP4/22W/40/F/5FT	22	120-277	2600	G13	50,000	180°	4000	82	60	8
1764510	-	VIV-T8BPSP4/22W/50/F/5FT	22	120-277	2600	G13	50,000	220°	5000	82	60	8
1764411	-	VIV-T8BPSP4/30W/40/F/6FT	30	120-277	3400	G13	50,000	220°	4000	82	72	8
1764511	-	VIV-T8BPSP4/30W/50/F/6FT	30	120-277	3500	G13	50,000	220°	5000	82	72	8

# LED T8 TUBE

# **Ballast Bypass**

## Installation Guide Typical Ballast Configurations



🗙 Indicates Where to Cut Existing Wiring

Typical Non-Shunted Lampholder

Connect wires directly to these terminals

### **Removing Existing Fluorescent System**

- 1. Disconnect power from fixture.
- 2. Remove fluorescent lamp(s).
- 3. Remove lens and wiring compartment, if applicable.
- 4. Cut all wires connected to the ballast as shown in Diagrams A, B, and C.
- Identify what type of lampholders are in fixture. Double-Ended wiring installations of VIV-T8BPSP4/DE tube can be used with shunted G13 or nonshunted G13 lampholders (with instructions to externally shunt). See Figures 1 and 2.

# Installing the Lamps-<u>Double Ended</u>

- I. Confirm that power is still disconnected from fixture.
- II. Make sure fixture is properly grounded.
- III. Follow step 1 for single lamp application or steps 2 & 3 for multiple lamp application, based on the number of lamps in the fixture:

### Single Lamp

 From AC wires, connect line (L) to Side A lampholder and neutral (N) to Side B lampholder. If only one lamp is being installed, proceed to step 4.



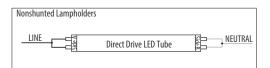


Figure 2

# Multiple Lamps

- 2. Follow the steps above for single lamp connection to connect the first lamp.
- Connect the terminals from the first lamp to the matching terminals on the lampholder of the second lamp with line and neutral wires as shown below. Continue daisy-chain connection for each additional lamp.
- Complete all electrical connections with appropriate connectors/wire nuts as needed, per all local and national electrical codes.

# NOTE: There should not be any exposed wires from sockets left unconnected.

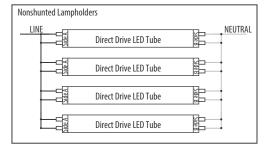
- 5. Replace wiring compartment cover.
- $6. \, In stall \, all \, of \, the \, VIV\text{-}T8BPSP4/DE \, tubes. \, In stall \, LED$

tubes so that the LEDs are pointed in the proper direction for illumination, and install any lens or diffuser as applicable.

Shunted Lampholders

7. Apply power to fixture and check for illumination.

# Direct Drive LED Tube Direct Drive LED Tube Direct Drive LED Tube Direct Drive LED Tube



## Installing the Lamps-Single Ended (Non-Shunted)

- 1. Read all WARNING/CAUTIONS before continuing this section.
- 2. Ensure fixture is 120-277V.
- 3. Disconnect power at the source.
- 4. Remove lens if applicable, remove cover and fluorescent tubes.
- 5. Cut all wires that connect ballast. Properly discard ballast or cap off wires.
- 6. Replace lamp holders at power end with supplied non-shunted lamp holders.
  7. Connect hot wire from power source into supplied non-shunted Lamp Holder "Hot In".
- 8. Connect neutral wire from power source into supplied non-shunted Lamp Holder "Neutral In".
- 9. If installing multiple lamps, continue reading. Otherwise skip to section 14.
- 10. Connect separate hot wire into "Hot Out" from primary source lamp holder and connect that wire into "Hot In" on the adjacent tube.
- 11. Connect separate neutral wire into "Neutral Out" from primary source lamp holder and connect that wire into "Neutral In" on the adjacent tube.
- 12. Continue this process for additional lamps.
- 13. Do not wire opposite end of lamp holder.

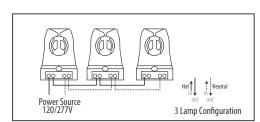
Typical Shunted Lampholders

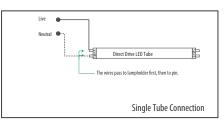
Internal Shunt

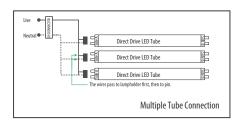
External Shunt

Figure 1

- 14. Install lamp with the Turolight logo (driver side) into the wired end.
- 15. Visibly affix "Modification Sticker" and reinstall housing cover and lens if applicable.
- 16. Return power back to source and installation is now completed.







Note: The luminaire shall only mount max. 4 tubes.



# LED T8 TUBE

# **Ballast Bypass**

# Installation Guide T8BPSP48FT

STEP 1: Shut off power before work.

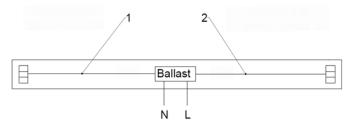
STEP 2: Remove the existing fluorescent tube(s), open the ballast cover.

STEP 3: Disconnect luminaire supply wirings L and N to branch circuit shown

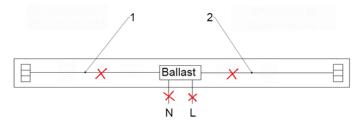


STEP 4: Original circuit as shown in Figure 2, cut lamp holder leads "1" and "2" as shown in Figure 3. Note: Ballast must be retained in place.

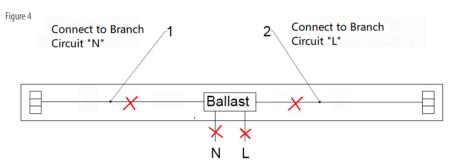






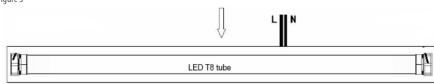


STEP 5: Connect "Lead 1" to N and "Lead 2" to L as shown in Fig. 4.



STEP 6: Attach the Luminaire Marking Label to the luminaire. Install ballast cover (if applicable) back on Luminaire as shown in Figure 5.





STEP 7: Turn on the AC power source, LED Tube will light.

The wiring of two lamps is the same as above

