

PENTRON® HO SUPERSAVER® ECOLOGIC®

High Output, Energy Saving T5 Linear Fluorescent Lamps



PENTRON HO SUPERSAVER T5 lamps operate on standard T5 HO programmed rapid start systems, in order to save energy over existing T5HO systems. When compared with existing 54W T5HO lamps, the 47W lamp offers energy savings of up to 13% while maintaining 92% of light output and the 50W lamp offers up to 7% energy savings with no loss in lumen output. At \$0.11/kWh and 4,000 hours of operation per year, the 7 to 13% savings translates to savings of \$7.04 to \$12.32 per fixture per year for a 4-lamp fixture. The 93% mean lumen rating of PENTRON HO SUPERSAVER lamps assures that light levels are maintained while energy is saved, over a very long life of up to 40,000 hours (12 hours/start). For maximum system efficacy and performance, consider pairing PENTRON HO SUPERSAVER lamps with QUICKTRONIC QHE high efficiency electronic ballasts.²

² For compatibility with QUICKTRONIC ballasts, please refer to the latest ballast specifications.

Key Features & Benefits

- Energy saving replacements for T5HO lamps
- Up to 13% energy savings with similar light levels
- Long life on programmed rapid start ballasts
 - 40,000 hours at 12 hours per start (FP54)
 - 30,000 hours at 3 hours per start
- Lead-free glass, TCLP & RoHS compliant¹
- 85 CRI
- Made in USA
- High efficacy
 - 21W: 95lm/W
 - 35W: 100lm/W
 - 50W: 100lm/W (5000K: 96lm/W)
 - 47W: 97lm/W (5000K: 93lm/W)
- QUICK 60+® system warranty when paired with QUICKTRONIC® electronic T5HO PROstart® ballasts

ECOLOGIC® is a comprehensive program of OSRAM SYLVANIA focused on addressing environmental issues at all stages of lamp life.

SYLVANIA PENTRON SUPERSAVER HO ECOLOGIC lamps pass the Federal Toxicity Characteristic Leaching Procedure (TCLP)¹ criteria for classification as non-hazardous waste in most states.

¹ TCLP test results are based on NEMA LL Series standards and are available on request. (Regulations may vary, check your local and state regulations.) Complies with European Union Restriction of Hazardous Substances Directive (Directive 2002/95/EC)



Product Offering

Description	Wattage	CCT
FP24/21W/800/HO/SS/ECO	21	3000K, 3500K, 4100K
FP39/35W/800/HO/SS/ECO	35	3000K, 3500K, 4100K
FP54/47W/800/HO/SS/ECO	47	3000K, 4100K, 5000K
FP54/50W/800/HO/SS/ECO	50	3000K, 3500K, 4100K, 5000K

Application Information

Applications

- Canopy
- Cove
- Facade
- High bay
- Security
- Signage
- Suspended direct/indirect

Fixtures

Contact your local fixture agent for available fixtures.

Application Notes

1. All PENTRON lamps are about 2" shorter than T8 and T12 bi-pin lamps.
2. Miniature bi-pin bases cannot be installed into T8 and T12 sockets.
3. Miniature bi-pin bases require UL Listed 600 Volt rated sockets.
4. PENTRON HO lamps require programmed rapid start electronic ballasts for T5 HO lamps, equipped with end-of-lamp life sensing circuit.
5. For compatibility with QUICKTRONIC ballasts, please refer to the latest ballast specifications.
6. Contact ballast manufacturer for compatibility with reduced-wattage lamps.



Specification Data

Fixture Description:

Type

Project/Job:

SYLVANIA lamp:

SYLVANIA ballast:

Notes:

Ordering Information

Item Number	Ordering Abbreviation	Watts	Bulb	Base	Avg. Rated Life (hrs.) 3 hrs/st	Avg. Rated Life (hrs.) 12 hrs/st	Initial Lumens @35°C	Mean Lumens* @35°C	lm/W	Initial Lumens @25°C	Mean Lumens* @25°C	CCT	CRI
20192	FP24/21W/830/HO/SS/ECO	21	T5	Mini Bi Pin	30,000	40,000	2,000	1,860	95	1,750	1,630	3000K	85
20193	FP24/21W/835/HO/SS/ECO	21	T5	Mini Bi Pin	30,000	40,000	2,000	1,860	95	1,750	1,630	3500K	85
20200	FP24/21W/841/HO/SS/ECO	21	T5	Mini Bi Pin	30,000	40,000	2,000	1,860	95	1,750	1,630	4100K	85
20188	FP39/35W/830/HO/SS/ECO	35	T5	Mini Bi Pin	30,000	40,000	3,500	3,255	100	3,100	2,885	3000K	85
20189	FP39/35W/835/HO/SS/ECO	35	T5	Mini Bi Pin	30,000	40,000	3,500	3,255	100	3,100	2,885	3500K	85
20190	FP39/35W/841/HO/SS/ECO	35	T5	Mini Bi Pin	30,000	40,000	3,500	3,255	100	3,100	2,885	4100K	85
20434	FP54/47W/830/HO/SS/ECO	47	T5	Mini Bi Pin	30,000	40,000	4,575	4,255	97	4,050	3,765	3000K	85
20447	FP54/47W/841/HO/SS/ECO	47	T5	Mini Bi Pin	30,000	40,000	4,575	4,255	97	4,050	3,765	4100K	85
20448	FP54/47W/850/HO/SS/ECO	47	T5	Mini Bi Pin	30,000	40,000	4,390	4,085	93	3,950	3,675	5000K	85
21070	FP54/50W/830/HO/SS/ECO	50	T5	Mini Bi Pin	30,000	40,000	5,000	4,650	100	4,450	4,140	3000K	85
21071	FP54/50W/835/HO/SS/ECO	50	T5	Mini Bi Pin	30,000	40,000	5,000	4,650	100	4,450	4,140	3500K	85
20964	FP54/50W/841/HO/SS/ECO	50	T5	Mini Bi Pin	30,000	40,000	5,000	4,650	100	4,450	4,140	4100K	85
21072	FP54/50W/850/HO/SS/ECO	50	T5	Mini Bi Pin	30,000	40,000	4,800	4,465	96	4,250	3,955	5000K	85

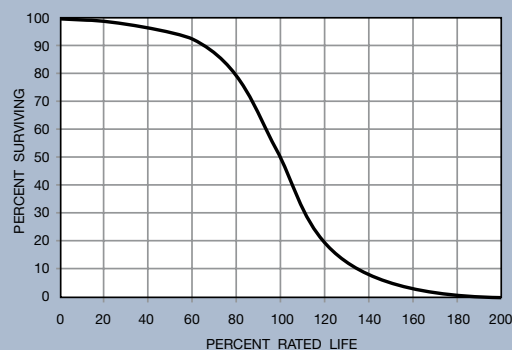
* Measured at 40% of rated life.

Ordering Guide

FP	54	/	50W	/	8	30	/	H0	/	SS	/	ECO
Fluorescent PENTRON®	Lamp Type		Wattage 21, 35, 47 or 50		CRI 85+ CRI	30 = 3000K CCT 35 = 3500K CCT 41 = 4100K CCT 50 = 5000K CCT		High Output		SUPERSAVER®		ECOLOGIC®

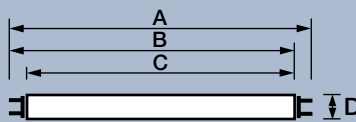
Technical Information

Lamp Mortality Curve



Lamp Dimensions

	(A) Max. Overall Length (in.)	(B) Base Face to Opposite Pin (in.)	(C) Max. Base Face to Base Face (in.)	(D) Max. Outside Diameter (in.)
FP24	22.17"	Min. 21.80" Max. 21.89"	21.61"	0.67"
FP39	33.98"	Min. 33.61" Max. 33.71"	33.43"	0.67"
FP54	45.80"	Min. 45.41" Max. 45.51"	45.24"	0.67"



Related Literature

For optimum system performance and warranty pair with these QUICKTRONIC Ballast Systems

QUICKTRONIC PROStart T5HO Universal Voltage (ECS228)
 QUICKTRONIC PROStart T5HO Universal Voltage High Ambient Temperature (ECS229)
 QUICKTRONIC PROStart T5HO 347V-480V High Ambient Temperature (ECS202)
 QUICKTRONIC PROStart T5HO Universal Voltage 0.80 Ballast Factor (ECS230)
 QUICK 60+® System Warranty (ECS140)

Sample Specification

Lamps shall be PENTRON HO SUPERSAVER ECO® T5 lamps (21W, 35W, 47W or 50W) having miniature bi-pin bases and a minimum of 93% lumen maintenance. Lamps shall have a correlated color temperature of (3000K, 3500K, 4100K, 5000K), a CRI of 85 and a life rating of 30,000 hours @ 3 hours per start. The PENTRON HO SUPERSAVER ECO lamps shall be operated on dedicated QUICKTRONIC® ballasts with complete system warranty from the manufacturer covering lamps and ballasts.

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SYLVANIA Lighting Services

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Mexico

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