

| Nominal Lamp Data | | | | | Catalog Number | Description | Color Code | Color Temp. | CRI | Lumens Initial | Avg. Rated Hours Life | VPE Pack |
|-------------------|------|------|--------|------|----------------|-------------------------------------------------|------------|-------------|-----|----------------|-----------------------|----------|
| Designation | Base | Watt | Length | Dia. | | | | | | | | |
| FO17/730 | G13 | 17 | 609.6 | 25.4 | 21849 | Dsgn 730 Octron RS | | 3000 | 75 | 1300 | 20000 | 30 |
| FO17/735 | G13 | 17 | 609.6 | 25.4 | 21832 | Dsgn 735 Octron RS | | 3500 | 75 | 1300 | 20000 | 30 |
| FO17/741 | G13 | 17 | 609.6 | 25.4 | 21831 | Dsgn 741 Octron RS | | 4100 | 75 | 1300 | 20000 | 30 |
| FO25/730 | G13 | 25 | 914.4 | 25.4 | 21851 | Dsgn 730 Octron RS | | 3000 | 75 | 2025 | 20000 | 30 |
| FO25/735 | G13 | 25 | 914.4 | 25.4 | 21817 | Dsgn 735 Octron RS | | 3500 | 75 | 2025 | 20000 | 30 |
| FO25/741 | G13 | 25 | 914.4 | 25.4 | 21829 | Dsgn 741 Octron RS | | 4100 | 75 | 2025 | 20000 | 30 |
| FO32/730 | G13 | 32 | 1219.2 | 25.4 | 21852 | Dsgn 730 Octron RS | | 3000 | 75 | 2800 | 20000 | 30 |
| FO32/735 | G13 | 32 | 1219.2 | 25.4 | 21823 | Dsgn 735 Octron RS | | 3500 | 75 | 2800 | 20000 | 30 |
| FO32/741 | G13 | 32 | 1219.2 | 25.4 | 21824 | Dsgn 741 Octron RS | | 4100 | 75 | 2800 | 20000 | 30 |
| FO32/750 | G13 | 32 | 1219.2 | 25.4 | 21809 | Dsgn 750 Octron RS | | 5000 | 75 | 2650 | 20000 | 30 |
| FO32/765 | G13 | 32 | 1219.2 | 25.4 | 21993 | D730 1 ⁵ / ₈ " Leg Octron | | 6500 | 75 | 2700 | 20000 | 30 |
| FO40/730 | G13 | 40 | 1524.0 | 25.4 | 21853 | Dsgn 730 Octron RS | | 3000 | 75 | 3550 | 20000 | 30 |
| FO40/735 | G13 | 40 | 1524.0 | 25.4 | 21820 | Dsgn 735 Octron RS | | 3500 | 75 | 3550 | 20000 | 30 |
| FO40/741 | G13 | 40 | 1524.0 | 25.4 | 21827 | Dsgn 741 Octron RS | | 4100 | 75 | 3550 | 20000 | 30 |
| FO96/730 | Fa8 | 59 | 2438.4 | 25.4 | 21854 | Dsgn 730 Octron RS | | 3000 | 75 | 5700 | 15000 | 24 |
| FO96/735 | Fa8 | 59 | 2438.4 | 25.4 | 21839 | Dsgn 735 Octron RS | | 3500 | 75 | 5700 | 15000 | 24 |
| FO96/741 | Fa8 | 59 | 2438.4 | 25.4 | 21840 | Dsgn 741 Octron RS | | 4100 | 75 | 5700 | 15000 | 24 |
| FO17/827 | G13 | 17 | 609.6 | 25.4 | 21978 | N/A | | 3000 | 82 | 1300 | 20000 | N/A |
| FO17/830 | G13 | 17 | 609.6 | 25.4 | 21882 | Dsgn 830 Octron RS | | 3000 | 82 | 1400 | 20000 | 30 |
| FO17/835 | G13 | 17 | 609.6 | 25.4 | 21883 | Dsgn 835 Octron RS | | 3500 | 82 | 1400 | 20000 | 30 |
| FO17/841 | G13 | 17 | 609.6 | 25.4 | 21884 | Dsgn 841 Octron RS | | 4100 | 82 | 1400 | 20000 | 30 |
| FO25/827 | G13 | 25 | 914.4 | 25.4 | 21979 | N/A | | 2700 | 82 | 2025 | 20000 | N/A |
| FO25/830 | G13 | 25 | 914.4 | 25.4 | 21886 | Dsgn 830 Octron RS | | 3000 | 82 | 2150 | 20000 | 30 |
| FO25/835 | G13 | 25 | 914.4 | 25.4 | 21887 | Dsgn 835 Octron RS | | 3500 | 82 | 2150 | 20000 | 30 |
| FO25/841 | G13 | 25 | 914.4 | 25.4 | 21888 | Dsgn 841 Octron RS | | 4100 | 82 | 2150 | 20000 | 30 |
| FO32/827 | G13 | 32 | 1219.2 | 25.4 | 21955 | N/A | | 2700 | 82 | 2800 | 20000 | N/A |
| FO32/830 | G13 | 32 | 1219.2 | 25.4 | 21890 | Dsgn 830 Octron RS | | 3000 | 82 | 2950 | 20000 | 30 |
| FO32/835 | G13 | 32 | 1219.2 | 25.4 | 21891 | Dsgn 835 Octron RS | | 3500 | 82 | 2950 | 20000 | 30 |
| FO32/841 | G13 | 32 | 1219.2 | 25.4 | 21892 | Dsgn 841 Octron RS | | 4100 | 82 | 2950 | 20000 | 30 |
| FO32/850 | G13 | 32 | 1219.2 | 25.4 | 21980 | N/A | | 5000 | 80 | 2950 | 20000 | N/A |
| FO40/830 | G13 | 40 | 1524.0 | 25.4 | 21893 | Dsgn 830 Octron RS | | 3000 | 82 | 3775 | 20000 | 30 |
| FO40/835 | G13 | 40 | 1524.0 | 25.4 | 21894 | Dsgn 835 Octron RS | | 3500 | 82 | 3775 | 20000 | 30 |
| FO40/841 | G13 | 40 | 1524.0 | 25.4 | 21895 | Dsgn 841 Octron RS | | 4100 | 82 | 3775 | 20000 | 30 |
| FO96/830 | Fa8 | 59 | 2438.4 | 25.4 | 21897 | Dsgn 830 Octron RS | | 3000 | 82 | 5900 | 15000 | 24 |
| FO96/835 | Fa8 | 59 | 2438.4 | 25.4 | 21898 | Dsgn 835 Octron RS | | 3500 | 82 | 5900 | 15000 | 24 |
| FO96/841 | Fa8 | 59 | 2438.4 | 25.4 | 21899 | Dsgn 841 Octron RS | | 4100 | 82 | 5900 | 15000 | 24 |
| FO96/850 | Fa8 | 59 | 2438.4 | 25.4 | 21795 | N/A | | 5000 | 80 | 5900 | 15000 | N/A |

Color Temperature

The correlated color temperature of a light source is expressed in Kelvins (K) and is a means of describing the appearance of chromaticity of the source itself. It describes the apparent whiteness of a lamp.

Sources having a low correlated color temperature (2700K to 3500K) are said to be "warm" in color such as Warm White, Warm White Deluxe, and Royal White. (Most incandescent lamps have a color temperature between 2700K and 3000K.) Fluorescent sources having higher correlated color temperature such as Cool White, Cool White Deluxe, or Daylight, are said to be "cool" in color. The correlated color temperature of the light source contributes greatly to the overall visual appearance of the lighted space.

Color Rendering Index (CRI)

Color Rendering Index is an international numbering system from 0-100 which indicates the relative color rendering quality of a light source when compared to a standard reference source of the same chromaticity. It expresses the degree to which color will appear "familiar" or "natural" under the light source being selected. In general, the higher the CRI number, the better the color rendering properties of the light source in question. The color rendering index of any two sources should only be compared if those sources have the same correlated color temperature.

Color Code - refer to the color code used in Germany.



OCTRON® Fluorescent Lamps

- Energy efficient linear T8
 - Retrofit for T12 lamps
 - Energy savings compared to T12
- 2700K, 3000K, 3500K, 4100K, 5000K and 6500K
 - * Not all colors available in all lengths/wattages
- 75 or 82 CRI
- 20,000-hour average rated life
- Operate on QUICKTRONIC™ Systems
 - System 32, 32 LP or 32 PLUS ballast for 2, 3, 4 & 5-foot (609.6, 914.4, 1219.2 & 1524.0mm) lamps
 - System 59 or 59 PLUS ballast for 8-ft (2438.4mm)

OCTRON® T8 lamps offer energy savings over all T12 lamps and improved lighting quality compared to T12 cool white lamps. When OCTRON lamps are operated on instant start electronic ballasts, system efficacy is maximized. OCTRON T8 lamps are designed to operate on standard, high and low power ballasts (140-270 mA lamp current), thus offering the choice to further reduce power consumption or maximize light output.

A system solution for the OCTRON fluorescent lighting systems is available using the QUICKTRONIC™ electronic ballasts.

Product Availability

| Wattage* | Nominal Length | Rated Lumens | |
|----------|----------------|-------------------------|------|
| | | 700 Series / 800 Series | |
| 17W | 609.0 | 1300 | 1400 |
| 25W | 914.4 | 2025 | 2150 |
| 32W | 1219.2 | 2800 | 2950 |
| 40W | 1524.0 | 3550 | 3775 |
| 59W | 2438.4 | 5700 | 5900 |

* Wattage when operated on RS magnetic ballast except for 59W lamp (IS only) Lower wattage with Instant Start Electronic Ballast. See technical data.

** Lumens for 3000, 3500, 4100K

System Comparisons

4 Foot (1219.2mm) System (2Lamps)

| Lamp Type | Ballast | Ballast Factor | System Wattage | System Lumens | Mean System Lumens | Mean System LPW | % Energy Savings vs F40/D41 |
|------------------|------------------------|----------------|----------------|---------------|--------------------|-----------------|-----------------------------|
| F40/D41 | Energy Saving Magnetic | 0.95 | 86 | 6080 | 5290 | 62 | 0% |
| F40/CW/SS | Energy Saving Magnetic | 0.88 | 72 | 4750 | 4040 | 56 | 16% |
| FO32/741 | System 32 | 0.9 | 59 | 5040 | 4540 | 77 | 31% |
| | System 32 LP | 0.77 | 51 | 4310 | 3880 | 76 | 40% |
| | System 32 PLUS | 1.2 | 78 | 6720 | 6050 | 78 | 9% |

Application Information

| Applications | Application Notes |
|--------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Office • Schools • Retail | <ul style="list-style-type: none"> • Lamps starting down to 0°F (-17.8°C, dependant on ballast). Operation below 50°F (10°C) may affect lumen output or lamp operation |
| <ul style="list-style-type: none"> • Hospitals • Other general lighting | <ul style="list-style-type: none"> • For cold temperature applications use in enclosed fixture or use tube guard to maximize lumen output |
| <ul style="list-style-type: none"> • 2700K for hospitality lighting • 6500K daylight alternative | <ul style="list-style-type: none"> • For rapid start operation, check with ballast manufacturer for ground plane requirement |
| | <ul style="list-style-type: none"> • For maximum energy savings, operate OCTRON lamps on electronic instant ballasts |

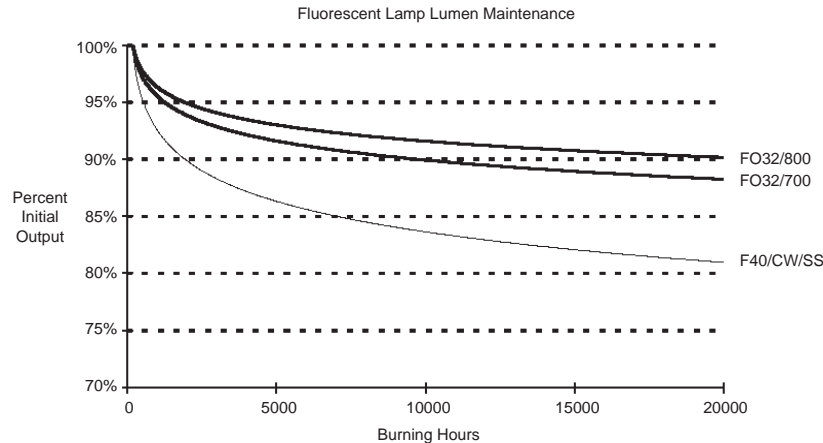
System Comparisons

8 Foot (2438.4mm) System (2Lamps)

| Lamp Type | Ballast | Ballast Factor | System Wattage | System Lumens | Mean System Lumens | Mean System LPW | % Energy Savings vs F96T12/CW/SS |
|------------------------|----------------|----------------|----------------|---------------|--------------------|-----------------|----------------------------------|
| F96T12CW/SS | Magnetic | 0.88 | 125 | 9500 | 8075 | 65 | 0% |
| FO96T8/700 | System 59 | 0.88 | 110 | 10030 | 9027 | 82 | 14% |
| FO96T12CW/HO/SS | Magnetic | 0.92 | 210 | 14720 | 11780 | 56 | 0% |
| FO96T8HO/700 | Electronic | 0.85 | 160 | 13770 | 12120 | 76 | 31% |
| FO96T8HO/800 | Electronic | 0.85 | 160 | 14110 | 12700 | 79 | 31% |
| FO96T8/700 | System 59 Plus | 1.19 | 155 | 13570 | 11940 | 77 | 35% |
| FO96T8/800 | System 59 Plus | 1.19 | 155 | 14040 | 12360 | 80 | 35% |

Dimensions

| Lamp Type | (A) Max. Overall Length | (B) Base Face to Opposite Pin | | (C) Max. Base Face to Base Face | (D) Max. Outside Diameter | |
|-------------|----------------------------|----------------------------------|--------|------------------------------------|------------------------------|--|
| FO17 | 604.0 | 594.4 | 596.9 | 589.8 | 27.9 | |
| FO25 | 908.8 | 899.2 | 901.7 | 894.6 | 27.9 | |
| FO32 | 1213.6 | 1204.0 | 1206.5 | 1199.4 | 27.9 | |
| FO40 | 1514.1 | 1504.7 | 1507.0 | 1499.9 | 27.9 | |
| FO96 | 2387.6 | 2372.9 | 2378.7 | 2369.8 | 27.9 | |



Technical Information

Electrical Characteristics 60 Hz Magnetic Rapid Start

| Lamp Type | Lamp Rated Power (wattage) | Lamp Current (mA) | Lamp Voltage (V) | Ballast Requirements | | | |
|-------------|----------------------------|-------------------|------------------|---------------------------|---------------------|----------------------|--------------------------|
| | | | | Open Circuit Voltage* (V) | Starting Time (sec) | Filament Voltage (V) | Max.Current Crest Factor |
| FO17 | 17 | 265 | 70 | 210 | 0.75-2.0 | 3.4-4.5 | 1.7 |
| FO25 | 25 | 265 | 100 | 260 | 0.75-2.0 | 3.4-4.5 | 1.7 |
| FO32 | 32 | 265 | 137 | 300 | 0.75-2.0 | 3.4-4.5 | 1.7 |
| FO40 | 40 | 265 | 172 | 385 | 0.75-2.0 | 3.4-4.5 | 1.7 |

* Minimum for 2-lamps in series. Starting at 50°F (10°C) and above.

Electrical Characteristics 25 kHz Electronic Instant Start

| Lamp Type | Lamp Rated Power (wattage) | Lamp Current (mA) | Lamp Voltage (V) | Ballast Requirements | | | |
|-------------|----------------------------|-------------------|------------------|---------------------------|---------------------------|----------------------|--------------------------|
| | | | | Open Circuit Voltage* (V) | Max. Starting Time (mSec) | Filament Voltage (V) | Max.Current Crest Factor |
| FO17 | 14 | 210 | 66 | 425 | 50 | N/A | 1.7 |
| FO25 | 21 | 210 | 101 | 425 | 50 | N/A | 1.7 |
| FO32 | 28 | 210 | 136 | 500 | 50 | N/A | 1.7 |
| FO40 | 35 | 210 | 172 | 575 | 50 | N/A | 1.7 |
| FO96 | 56 | 210 | 270 | 600 | 50 | N/A | 1.7 |

* Single lamp requirement.

Ordering Guide

| | | | |
|-------------|---------------------------------|-------------|-------------------------------------|
| FO | 17 | /8 | 27 |
| Fluorescent | Wattage | /7 = 75 CRI | 27 = 2700K; 30 = 3000K; 35 = 3500K; |
| OCTRON | 17, 25, 32, 40 or Length 96" | /8 = 82 CRI | 41 = 4000K; 50 = 5000K; 65 = 6500K |

Sample Specification

Lamp(s) shall be (an) OCTRON fluorescent lamps (FO17, FO25, FO32, FO40, or FO96) having (G13 medium bi-pin, Fa8 single pin) bases. Lamp(s) shall have a correlated color temperature of (2700K, 3000K, 3500K, 4100K, 5000K, or 6500K) and a CRI of (75 or 82). The OCTRON lamp(s) shall be operated on dedicated QUICKTRONIC™ (System 32, System 32LP, System 32 PLUS, System 59 or System 59 PLUS) with complete system warranty from the manufacturer covering lamps and ballast.