



# Four-year maintenance cycles

F 4Y<sup>®</sup>, VIALOX<sup>®</sup> NAV<sup>®</sup> 4Y<sup>®</sup>,  
VIALOX<sup>®</sup> NAV<sup>®</sup> SUPER 4Y<sup>®</sup>



SEE THE WORLD IN A NEW LIGHT



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## All good things come in fours: 4Y<sup>®</sup> lamps from OSRAM





**Many major events take place only every four years: Olympic Games, the World Cup, elections ...**

Thanks to innovative 4Y® lamps from OSRAM, replacing lamps in outdoor installations and street lighting is no longer an everyday event. With VIALOX® NAV® 4Y® and NAV® SUPER 4Y® high pressure sodium lamps and now with F 4Y® 26 mm T8 fluorescent lamps, the relamping cycle can be extended to four years.\*

**Relamping interval extended. Premature failures reduced. Costs dramatically cut.**

Every lamp that needs replacing in an outdoor installation costs a great deal of time and money. Increasing the life of the lamps and reducing the premature failures therefore have a major influence on overall lighting costs.

Innovative 4Y® lamps score highly on both counts. Firstly, their reliability has been increased to 16,000 hours (corresponding to around four years of use in an outdoor installation) and secondly the failures has been reduced up to 5% after 16,000 hours.\*

VIALOX® NAV® 4Y®, VIALOX® NAV® SUPER 4Y® and F 4Y® from OSRAM therefore represent enormous potential savings. Switching from a three year relamping cycle to a four year cycle reduces the average annual relamping costs by around 35%.

*\* See also the Technical data on the back page*



# The choice is yours

**OSRAM offers a wide range of 4Y® lamps for high-intensity and cost-effective outdoor and street lighting:**

**Relamping can be synchronised with the recommended maintenance cycle of four years.**

## F 4Y® **NEW**

The best possible addition to the successful VIALOX® NAV® 4Y® and NAV® SUPER 4Y® high pressure sodium lamps:

- New type of 26 mm fluorescent lamp (T8) for outdoor lighting with conventional control gear
- Thanks to the same high level of reliability and long life, F 4Y® lamps also allow a four-year relamping and maintenance cycle
- The failure rate after 16,000 hours is only 5% with a rated average life of 24,000 hours

- Optimised for operation on CCG/LLG with a new gas filling and a cathode that can withstand higher loads
- Simple direct replacement for comparable T8 fluorescent lamps

### Other benefits:

- High luminous flux
- High luminous efficacy
- Very good colour rendering (R<sub>a</sub> 80-89)
- Cool White (4000 K) and Warm White (3000 K) light colours

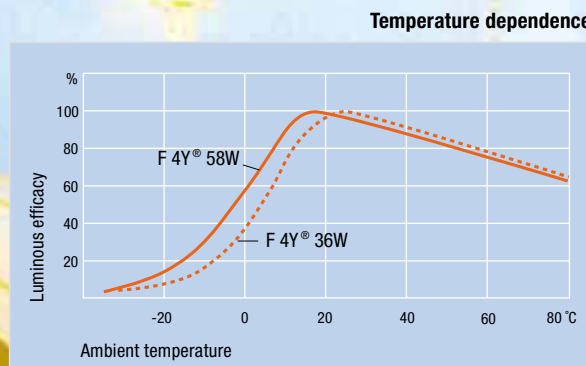
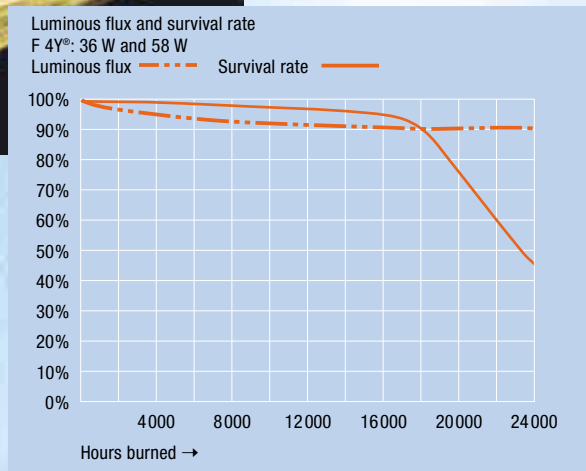
F 4Y® lamps have been developed specially for a variety of high intensity applications in street lighting and wherever access for changing lamps is difficult (e.g. in factories with high ceilings)



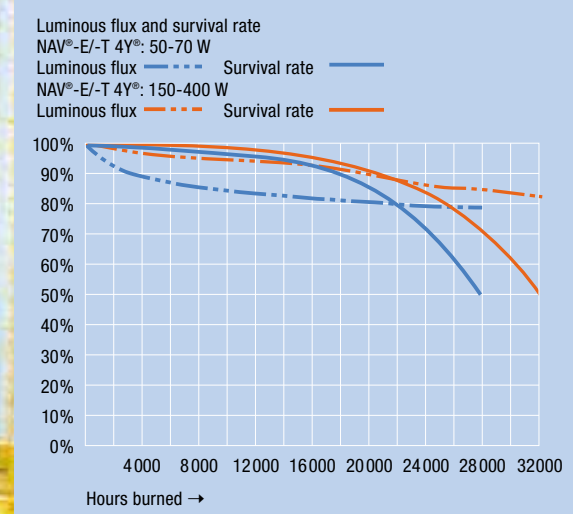
**4 YEARS  
LONGLIFE**



F 4Y®



VIALOX® NAV® 4Y®





**4 YEARS  
LONGLIFE**

**VIALOX® NAV® SUPER 4Y®**

VIALOX® NAV® SUPER 4Y® lamps are the brightest and most economical high pressure sodium lamps:

- Up to 20% higher luminous efficacy (up to 150 lm/W) than standard NAV® 4Y® lamps
- The same colour properties and applications as standard NAV® 4Y® lamps

**Practical advantages over NAV® 4Y® lamps:**

- **Existing installations:** Higher lighting level for the same energy costs
- **New installations:** Smaller number of luminaires and lamps, hence lower investment and operating costs



**4 YEARS  
LONGLIFE**



**VIALOX® NAV® 4Y®**

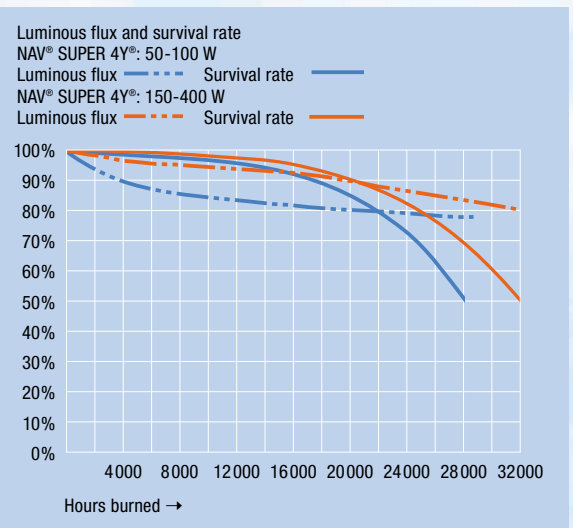
high pressure sodium lamps have set new standards in reliability and economy:

- New technology prevents gas leakage at the electrode entrants
- Laser welding guarantees exact positioning of the electrodes
- Improved high density ceramic considerably reduces sodium diffusion

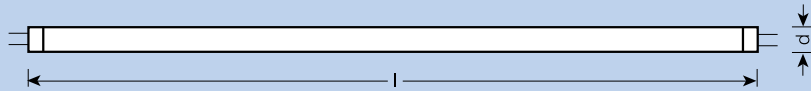
- Optimised support structure with patented shock absorber ensures the arc-tube is securely supported and reduces failures due to shock or violent vibrations

VIALOX® NAV® 4Y® lamps are therefore recommended for illuminating bridges, railway lines, major thoroughfares, tunnels and factories in heavy industry.

**VIALOX® NAV® SUPER 4Y®**

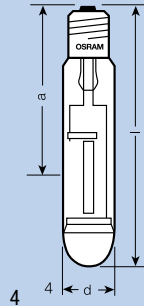
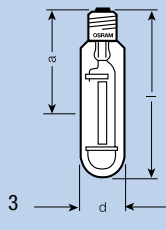
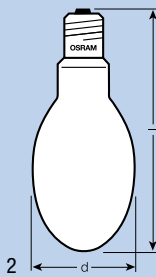
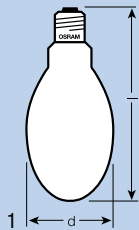


## Technical data



Dimensions in mm

| Type                          |                | F 4Y®<br>36 W            | F 4Y®<br>36 W            | F 4Y®<br>58 W            | F 4Y®<br>58 W            |
|-------------------------------|----------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Product reference             |                | F 4Y 36 W/840            | F 4Y 36 W/830            | F 4Y 58 W/840            | F 4Y 58 W/830            |
| Product number                | EAN            | 4050300<br>623542        | 4050300<br>623528        | 4050300<br>623580        | 4050300<br>623566        |
| Luminous flux on CCG          | lm             | 3200                     | 3200                     | 5000                     | 5000                     |
| Colour temperature            | K              | 4000                     | 3000                     | 4000                     | 3000                     |
| Light colour/colour rendering | R <sub>a</sub> | LUMILUX Cool White/80-89 | LUMILUX Warm White/80-89 | LUMILUX Cool White/80-89 | LUMILUX Warm White/80-89 |
| Rated average life*           | h              | 24000                    | 24000                    | 24000                    | 24000                    |
| Failure level after 16,000 h  | %              | 5                        | 5                        | 5                        | 5                        |
| Diameter d                    | mm             | 26                       | 26                       | 26                       | 26                       |
| Length l                      | mm             | 1200                     | 1200                     | 1500                     | 1500                     |
| Base                          |                | G13                      | G13                      | G13                      | G13                      |
| Standard pack                 | pcs            | 25                       | 25                       | 25                       | 25                       |



Dimensions in mm

| Type                         |      | Ellipsoidal, coated |         |         |         |         | Tubular, clear   |         |         |         | with internal igniter |         |
|------------------------------|------|---------------------|---------|---------|---------|---------|------------------|---------|---------|---------|-----------------------|---------|
|                              |      | NAV-E 4Y<br>50 W    | 70 W    | 150 W   | 250 W   | 400 W   | NAV-T 4Y<br>70 W | 150 W   | 250 W   | 400 W   | 50 W/I                | 70 W/I  |
| Product reference            |      | 4050300             | 4050300 | 4050300 | 4050300 | 4050300 | 4050300          | 4050300 | 4050300 | 4050300 | 4050300               | 4050300 |
| Product number               | EAN  | 577678              | 577692  | 577555  | 577579  | 577593  | 579061           | 577616  | 577630  | 577654  | 606033                | 606019  |
| Luminous flux                | lm   | 3500                | 5600    | 14000   | 25000   | 47000   | 5900             | 14500   | 27000   | 48000   | 3500                  | 5600    |
| Lamp luminous efficacy       | lm/W | 70                  | 80      | 93      | 100     | 118     | 84               | 97      | 108     | 120     | 70                    | 80      |
| Rated average life*          | h    | 28000               | 28000   | 32000   | 32000   | 32000   | 28000            | 32000   | 32000   | 32000   | 24000                 | 24000   |
| Failure level after 16,000 h | %    | 8                   | 8       | 5       | 5       | 5       | 8                | 5       | 5       | 5       | 12                    | 12      |
| Light centre length a        | mm   | –                   | –       | –       | –       | –       | 104              | 132     | 158     | 175     | –                     | –       |
| Diameter d                   | mm   | 70                  | 70      | 90      | 90      | 120     | 37               | 46      | 46      | 46      | 70                    | 70      |
| Length max. l                | mm   | 156                 | 156     | 226     | 226     | 290     | 156              | 211     | 257     | 285     | 156                   | 156     |
| Fig. no.                     |      | 1                   | 1       | 1       | 1       | 1       | 3                | 4       | 4       | 4       | 1                     | 1       |

| Type                         |      | Ellipsoidal, coated    |         |         |         | Tubular, clear         |         |         |         |         |         |         |
|------------------------------|------|------------------------|---------|---------|---------|------------------------|---------|---------|---------|---------|---------|---------|
|                              |      | NAV-E SUPER 4Y,<br>100 | 150     | 250     | 400     | NAV-T SUPER 4Y<br>50 W | 70 W    | 100 W   | 150 W   | 250 W   | 400 W   | 600 W   |
| Product reference            |      | 4050300                | 4050300 | 4050300 | 4050300 | 4050300                | 4050300 | 4050300 | 4050300 | 4050300 | 4050300 | 4050300 |
| Product number               | EAN  | 015774                 | 024370  | 024387  | 024394  | 024325                 | 015736  | 015743  | 024400  | 024417  | 281179  | 275772  |
| Luminous flux                | lm   | 9500                   | 17000   | 32000   | 54000   | 4400                   | 6500    | 10000   | 17200   | 33000   | 55000   | 90000   |
| Lamp luminous efficacy       | lm/W | 95                     | 109     | 123     | 132     | 81                     | 93      | 100     | 112     | 127     | 138     | 150     |
| Rated average life*          | h    | 28000                  | 32000   | 32000   | 32000   | 28000                  | 28000   | 28000   | 32000   | 32000   | 32000   | 32000   |
| Failure level after 16,000 h | %    | 8                      | 5       | 5       | 5       | 8                      | 8       | 8       | 5       | 5       | 5       | 5       |
| Light centre length a        | mm   | –                      | –       | –       | –       | 104                    | 104     | 132     | 132     | 158     | 175     | 175     |
| Diameter d                   | mm   | 75                     | 90      | 90      | 120     | 37                     | 37      | 46      | 46      | 46      | 46      | 46      |
| Length max. l                | mm   | 186                    | 226     | 226     | 290     | 156                    | 156     | 211     | 211     | 257     | 285     | 285     |
| Fig. no.                     |      | 2                      | 2       | 2       | 2       | 3                      | 3       | 4       | 4       | 4       | 4       | 4       |

\* 50% failure

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