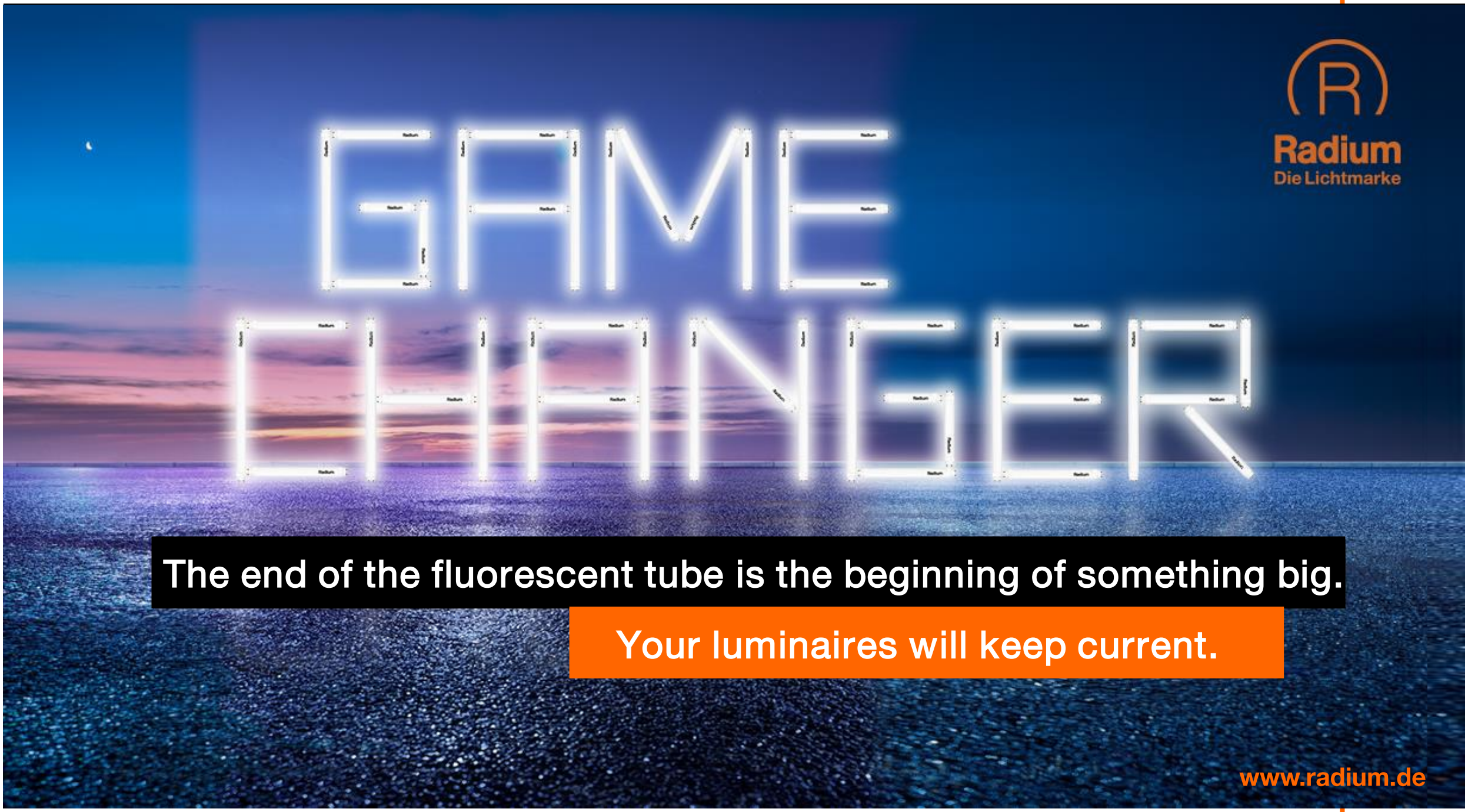

GAME
CHANGER
Radium
Die Lichtmarke
The end of the fluorescent tube is the beginning of something big.
Your luminaires will keep current.
www.radium.de

Radium LED T5 Neo.

Brings light into the future.

- ✓ Increase in efficiency: up to 192 lm/W
- ✓ Super bright: up to 6,200 lm per lamp
- ✓ Extremely long service life: up to 90,000h L70B10
- ✓ 5 years guarantee
- ✓ future-proof by DALI control
- ✓ flicker-free
- ✓ dimmable
- ✓ suitable for Emergency power
- ✓ Low-priced
- ✓ TÜV certified

LED T5 Neo.

That's how it works!

Unique product concept: robust, external Radium driver instead of integrated mini-driver.

Radium LED T5 Neo

+ Very high efficiency up to 192 lm/W
+ High luminous flux up to 6,200 lm
+ Flicker-free lighting

+

Radium LED Driver

+ One Radium LED Neo driver DALI can control up to 4 Radium LED T5 Neo.
+ External driver creates space for high quality technical components which are not usable in mini driver format.
+ High reliability
+ No compatibility check

DALI-Capable & Dimmable.

Dare the jump into the future with existing luminaires.

A unique product concept like there is no other on the market.

- Radium DALI2 Driver make your LED tubes controllable via DALI.
- Integration into an IoT network.
- LED T5 Neo luminous flux can be adjusted to one's own needs.
- Before installation, use the driver to determine whether less or more light is required than before the conversion.
- Dimmability of the LED tubes by operation with these LED drivers – in order to adjust the brightness of your system according to your wishes.

LED T5 Neo.

Convincing even in comparison with classic retrofit solutions.

Advantages LED Tube

- Retrofit - easy replacement without changing the luminaire if the ECG is compatible.
- Inexpensive

VS.

Advantages LED T5 Neo

- Dimmable via DALI or Push&DIM*
- Suitable for emergency power
- Higher efficiency and lifetime
- Higher and flexibly adjustable luminous flux
- Flicker free light
- No compatibility problems
- Components of higher quality / even higher reliability

* Mit Radium DALI Treibern

LED T5 Neo.

Comparison with LED luminaires.

Advantages LED luminaire

- Possibly better beam control
- Consists entirely of new and "unused" components
- Possibly more modern design

Advantages LED T5 Neo

- Much more sustainable due to keeping the old luminaires/ fixtures/holders and due to the choice of materials
- Significantly cheaper in purchasing
- No commitment to one luminaire manufacturer
- Less effort (driver replacement vs. uninstalling luminaires and installing completely new luminaire system)
- Easier and cheaper replacement of components

Comparable

- Efficiency
- Illuminance
- Product life

VS.

One lamp for everything.

Adjustable luminous flux, modular functionality.

Cost consciousness, efficiency and resource conservation are practically woven into the DNA of the Radium LED T5 Neo. Witness the many advantages:

- **Optimized, highly efficient storage** thanks to the modular system of driver and lamp, as well as variable luminous flux
- **Sustainable and resource-saving** by modernizing and continued use of existing luminaires
- **Short delivery times** when converting to Radium LED T5 Neo instead of long waiting times when ordering new LED luminaires

Radium LED T5 Neo.

Use the LED advantage against high electricity costs.

- Around 50% lower energy consumption than conventional fluorescent tubes with the same luminous flux (in some luminaires even up to 80%)
- Further reduction of power consumption possible through efficient lighting management: via DALI, Push&DIM or setting the luminous flux directly on the driver

Radium LED T5 Neo lasts longer: reduce maintenance intervals.

- 90,000 light hours provide almost 10 years of non-stop illumination (LED T5 Neo and driver)
- 5 years guarantee on drivers and LED tubes

LED T5 Neo.

Portfolio.

– 5 –
YEARS
GUARANTEE

Features

Exactly like the original:

- Same Design & Material
- Same Style
- Just as bright
- **Dimmable and emergency power capable**

Better than the original:

- Very efficient with up to **192 lm/W**
- **90,000 h (L70)** main service life
- **Luminous flux** can be **adjusted flexibly**
- Less types but more flexibility
- **220°** beam angle

1

	Type	W	lm		
1	**LED T5 NEO 14/24**	5.7 – 10.0	960 – 1,800	G5	830/840/865*
1	LED T5 NEO 21/39*	10.1 – 17.9	1,670 – 3,150	G5	830/840/865*
1	**LED T5 NEO 28/54**	13.8 – 24.5	2,350 – 4,400	G5	830/840/865*
1	**LED T5 NEO 35/49**	13.2 – 23.4	2,270 – 4,300	G5	830/840/865*
1	**LED T5 NEO 49/80**	19.2 – 33.9	3,320 – 6,200	G5	830/840/865*

* LED T5 NEO 21/39 as well as all T5 Neo in light color 865 **only available on request**!

LED T5 Neo.

Technical Information 549mm.

– 5 – YEARS GUARANTEE

Features

- LED tube as a replacement for 14W or 24W T5 fluorescent lamps
- Same design, same material and same brightness for the perfect LED replacement
- Adjustable operating current via DipSwitch on separate LED driver
- Highest reliability and lifetime
  - 60,000h L80B10
  - 90,000h L70B10
- Super efficient with more than 50% energy savings

14/24W Replacement			3000K		4000K		6500K	
mA	V	W	lm/W	lm	lm/W	lm	lm/W	lm
350	28.5	10.0	162	1,620	180	1,800	180	1,800
300	28.5	8.6	163	1,400	180	1,550	180	1,550
250	28.5	7.1	166	1,180	183	1,300	183	1,300
200	28.5	5.7	168	960	186	1,060	186	1,060

LED T5 Neo.

Technical Information 849mm*.

– 5 – YEARS GUARANTEE

Features

- LED tube as a replacement for 21W or 39W T5 fluorescent lamps
- Same design, same material and same brightness for the perfect LED replacement
- Adjustable operating current via DipSwitch on separate LED driver
- Highest reliability and lifetime
  - 60,000h L80B10
  - 90,000h L70B10
- Super efficient with more than 50% energy savings

21/39W* Replacement			3000K		4000K		6500K	
mA	V	W	lm/W	lm	lm/W	lm	lm/W	lm
350	51.1	17.9	159	2,840	176	3,150	176	3,150
300	50.9	15.3	161	2,460	178	2,730	178	2,730
250	50.7	12.7	163	2,070	181	2,300	181	2,300
200	50.5	10.1	165	1,670	183	1,850	183	1,850

* LED T5 NEO 21/39 **only available on request**!

LED T5 Neo.

Technical Information 1149mm.

– 5 – YEARS GUARANTEE

Features

- LED tube as a replacement for 28W or 54W T5 fluorescent lamps
- Same design, same material and same brightness for the perfect LED replacement
- Adjustable operating current via DipSwitch on separate LED driver
- Highest reliability and lifetime
  - 60,000h L80B10
  - 90.000h L70B10
- Super efficient with more than 50% energy savings

28/54W Replacement			3000K		4000K		6500K	
mA	V	W	lm/W	lm	lm/W	lm	lm/W	lm
350	70.0	24.5	163	4,000	180	4,400	180	4,400
300	69.7	20.9	165	3,440	182	3,800	182	3,800
250	69.3	17.3	168	2,900	185	3,200	185	3,200
200	69.0	13.8	170	2,350	188	2,600	188	2,600

LED T5 Neo.

Technical Information 1449mm.

– 5 – YEARS GUARANTEE

Features

- LED tube as a replacement for 35W or 49W T5 fluorescent lamps
- Same design, same material and same brightness for the perfect LED replacement
- Adjustable operating current via DipSwitch on separate LED driver
- Highest reliability and lifetime
  - 60,000h L80B10
  - 90.000h L70B10
- Super efficient with more than 50% energy savings

35/49W Replacement			3000K		4000K		6500K	
mA	V	W	lm/W	lm	lm/W	lm	lm/W	lm
350	66.9	23.4	165	3,870	184	4,300	184	4,300
300	66.6	20.0	167	3,340	185	3,700	185	3,700
250	66.3	16.6	169	2,800	188	3,110	188	3,110
200	66.0	13.2	172	2,270	191	2,520	191	2,520

LED T5 Neo.

Technical Information 1449mm.

– 5 – YEARS GUARANTEE

Features

- LED tube as a replacement for 49W or 80W T5 fluorescent lamps
- Same design, same material and same brightness for the perfect LED replacement
- Adjustable operating current via DipSwitch on separate LED driver
- Highest reliability and lifetime
  - 60,000h L80B10
  - 90.000h L70B10
- Super efficient with more than 50% energy savings

49/80W Replacement			3000K		4000K		6500K	
mA	V	W	lm/W	lm	lm/W	lm	lm/W	lm
350	96.9	33.9	165	5,600	183	6,200	183	6,200
300	96.6	29.0	167	4,830	185	5,360	185	5,360
250	96.3	24.1	169	4,080	188	4,520	188	4,520
200	96.0	19.2	173	3,320	192	3,680	192	3,680

LED T5 Neo.

Radium DALI Driver.

Features

- **Dimmable** via DALI or Push&DIM
- Adjustable output current via dip switch
- High efficiency: 90-92%
- Protection class I
- **Flicker-free**
- Very long lifetime of up to **100,000 h**
- **Emergency power capable (EL)**
- **ENEC certified**

	DRIVER DALI 15/200-350	DRIVER DALI 37/200-350	DRIVER DALI 75/200-350
Max. Power (W)	14,7	37	75
Efficiency (%)	≥84	≥90	≥92
Output current (mA)	100, 150, …., 350	200, 250, 300, 350	200, 250, 300, 350
Output voltage (V DC)	16 – 42	46 – 185	54 – 240
Mains voltage (V AC)	220 - 240	220 - 240	220 - 240
Lifetime (h)	100,000	100,000	100,000
Guarantee	5 years	5 years	5 years
Material	Metal	Metal	Metal
Ambient temperature (°C)	-30°C…+50°C	-30°C…+50°C	-30°C…+50°C
Dimensions (mm)	195x30x21	195x30x21	245x30x21
Dimming interface	DALI 2.0, Push&DIM	DALI 2.0, Push&DIM	DALI 2, Push&DIM
Emergency power	CE, ENEC, DALI 2.0	CE, ENEC, DALI 2.0, EL	CE, ENEC, DALI 2.0, EL

LED T5 Neo.

Radium Driver ON/OFF.

Features

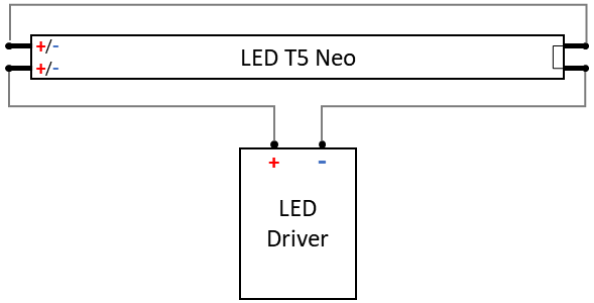
- High efficiency 93%
- Adjustable output current via dip switch
- Protection class I
- **Flickerfree**
- Very long lifetime of up to **70,000 h**
- **Emergency power capable (EL)**
- Strong price-performance ratio
- **ENEC** zertifiziert

	DRIVER 20/200-350	DRIVER 40/200-350	DRIVER 60/200-350	DRIVER 80/200-350
Max. Power (W)	20	40	60	80
Efficiency (%)	≥85	≥90	≥91	≥93
Output current (mA)	200, 250, 300, 350	200, 250, 300, 350	200, 250, 300, 350	200, 250, 300, 350
Output voltage (V DC)	25 – 57	58 – 114	115 – 172	170 – 230
Mains voltage (V AC)	220 - 240	220 - 240	220 - 240	220 - 240
Lifetime (h)	70,000	70,000	70,000	70,000
Guarantee	5 years	5 years	5 years	5 years
Material	Metal	Metal	Metal	Metal
Ambient temperature (°C)	-30°C…+50°C	-30°C…+50°C	-30°C…+50°C	-30°C…+50°C
Dimensions (mm)	156x30x21	156x30x21	195x30x21	245x30x21
Emergency power	CE, ENEC, EL	CE, ENEC, EL	CE, ENEC, EL	CE, ENEC, EL

LED T5 Neo.

Adjustability.

- All drivers (DALI and ON/OFF) can be set to 350, 300, 250 & 200mA
- The current setting allows one T5 Neo to replace two fluorescent lamp wattages (e.g. 35 & 49W)
- This reduces the number of types and the storage complexity (15 instead of 24)
- The customer can choose the preferred power and brightness during installation



1 to 4 LED T5 Neo can be operated on one LED driver

LED T5 NEO 35/49	W	lm	lm/W	Note
350mA	23.4	4,300	184	~ 1:1 Replacement of the **49W** fluorescent lamp
300mA	20.0	3,700	185	~ Same illuminance as **49W** fluorescent lamp
250mA	16.6	3,110	188	~ 1:1 Replacement of the **35W** fluorescent lamp
200mA	13.2	2,520	191	~ Same illuminance as **35W** fluorescent lamp

LED T5 Neo.

DALI Driver mapping.

- Depending on the tube-driver combination, 1-4 LED T5 Neo tubes can be operated on one LED driver
- Each LED T5 Neo tube is fed from one side, whereby it does not matter which PIN is + and which is –
- The PINs on the opposite side of the tube are bridged
- The wiring with the required LED driver can either be done on one socket only or you wire both sockets so it doesn't matter how around you put them (see Wiring)

OTDA4030	DRIVER DALI 15W/100-350mA IP20
OTDA4439	DRIVER DALI 37W/200-350mA IP20
OTDA4441	DRIVER DALI 75W/200-350mA IP20

DALI Driver mapping		1. Lamp	2. Lamp	3. Lamp	4. Lamp
LED T5 NEO 14/24	350mA	10,0 W	20,0 W	30,0 W	40,0 W
	300mA	8,6 W	17,2 W	25,8 W	34,4 W
	250mA	7,1 W	14,2 W	21,3 W	28,4 W
	200mA	5,7 W	11,4 W	17,1 W	22,8 W
LED T5 NEO 21/39	350mA	17,9 W	35,8 W	53,7 W	71,6 W
	300mA	15,3 W	30,6 W	45,9 W	61,2 W
	250mA	12,7 W	25,4 W	38,1 W	50,8 W
	200mA	10,1 W	20,2 W	30,3 W	40,4 W
LED T5 NEO 28/54	350mA	24,5 W	49,0 W	73,5 W	
	300mA	20,9 W	41,8 W	62,7 W	
	250mA	17,3 W	34,6 W	51,9 W	
	200mA	13,8 W	27,6 W	41,4 W	
LED T5 NEO 35/49	350mA	23,4 W	46,8 W	70,2 W	
	300mA	20,0 W	39,9 W	59,9 W	
	250mA	16,6 W	33,1 W	49,7 W	
	200mA	13,2 W	26,4 W	39,6 W	
LED T5 NEO 49/80	350mA	33,9 W	67,8 W		
	300mA	29,0 W	57,9 W		
	250mA	24,1 W	48,1 W		
	200mA	19,2 W	38,4 W		

LED T5 Neo.

ON/OFF Driver mapping.

- Depending on the tube-driver combination, 1-4 LED T5 Neo tubes can be operated on one LED driver
- Each LED T5 Neo tube is fed from one side, whereby it does not matter which PIN is + and which is –
- The PINs on the opposite side of the tube are bridged
- The wiring with the required LED driver can either be done on one socket only or you wire both sockets so it doesn't matter how around you put them (see Wiring)

OTNA4435	DRIVER 20W/200-350mA IP20
OTNA4436	DRIVER 40W/200-350mA IP20
OTNA4437	DRIVER 60W/200-350mA IP20
OTNA4438	DRIVER 80W/200-350mA IP20

Driver mapping		1. Lamp	2. Lamp	3. Lamp	4. Lamp
LED T5 NEO 14/24	350mA	10,0 W	20,0 W	30,0 W	40,0 W
	300mA	8,6 W	17,2 W	25,8 W	34,4 W
	250mA	7,1 W	14,2 W	21,3 W	28,4 W
	200mA	5,7 W	11,4 W	17,1 W	22,8 W
LED T5 NEO 21/39	350mA	17,9 W	35,8 W	53,7 W	71,6 W
	300mA	15,3 W	30,6 W	45,9 W	61,2 W
	250mA	12,7 W	25,4 W	38,1 W	50,8 W
	200mA	10,1 W	20,2 W	30,3 W	40,4 W
LED T5 NEO 28/54	350mA	24,5 W	49,0 W	73,5 W	
	300mA	20,9 W	41,8 W	62,7 W	
	250mA	17,3 W	34,6 W	51,9 W	
	200mA	13,8 W	27,6 W	41,4 W	
LED T5 NEO 35/49	350mA	23,4 W	46,8 W	70,2 W	
	300mA	20,0 W	39,9 W	59,9 W	
	250mA	16,6 W	33,1 W	49,7 W	
	200mA	13,2 W	26,4 W	39,6 W	
LED T5 NEO 49/80	350mA	33,9 W	67,8 W		
	300mA	29,0 W	57,9 W		
	250mA	24,1 W	48,1 W		
	200mA	19,2 W	38,4 W		

LED T5 Neo.

Wiring.

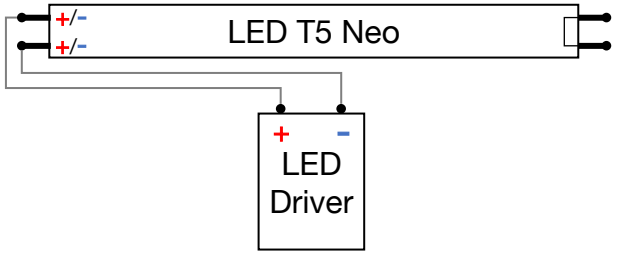
One-sided Connection

- Low wiring effort, as the tube is only connected to the marked side
- If the T5 Neo is inserted the wrong way around, it will not work, but there will be no damage to the LED tube or the driver

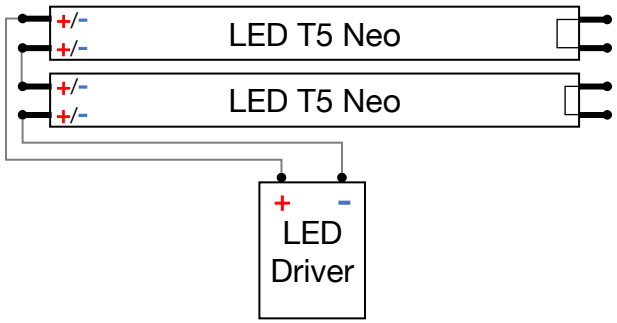
Double-sided Connection (recommended)

- Somewhat higher wiring effort, since the tube is connected on both sides
- When converting an ECG luminaire, no new cables need to be pulled out even when connecting both sides
- The tube always works, no matter how it is inserted into the socket

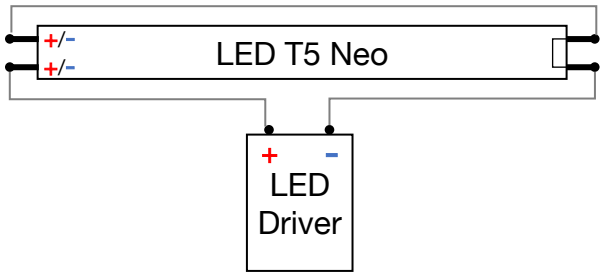
Single-flame Operation, one-sided Connection



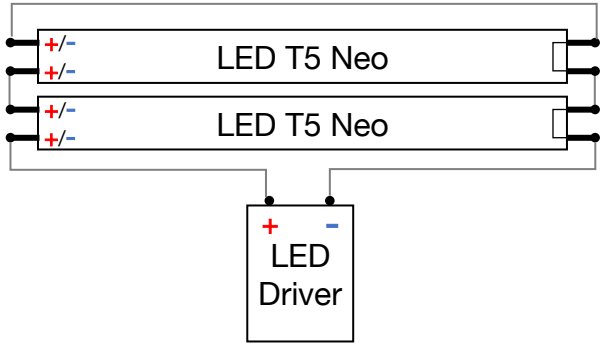
Two-flame Operation, one-sided Connection



Single-flame Operation, double-sided Connection



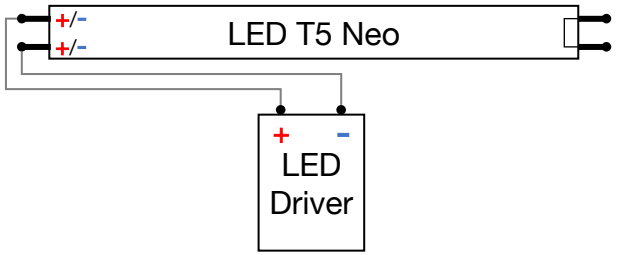
Two-flame Operation, double-sided Connection



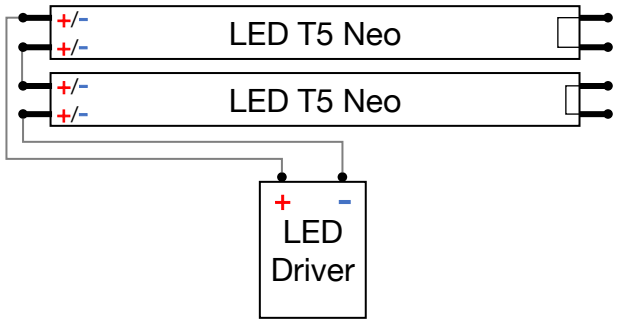
LED T5 Neo.

Wiring single- to four-flame.

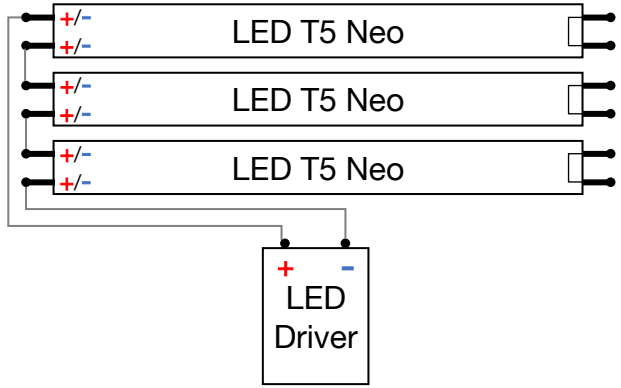
1-flame Operation, one-sided Connection



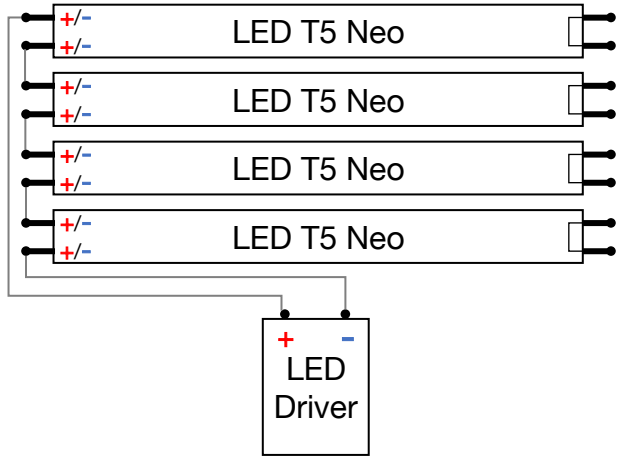
2-flame Operation, one-sided Connection



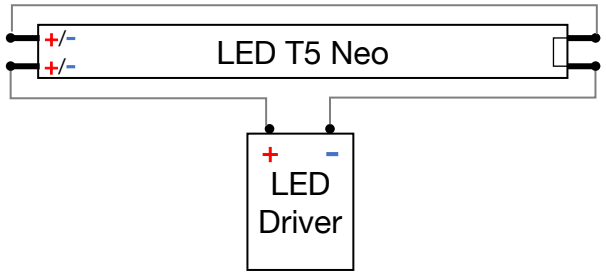
3-flame Operation, one-sided Connection



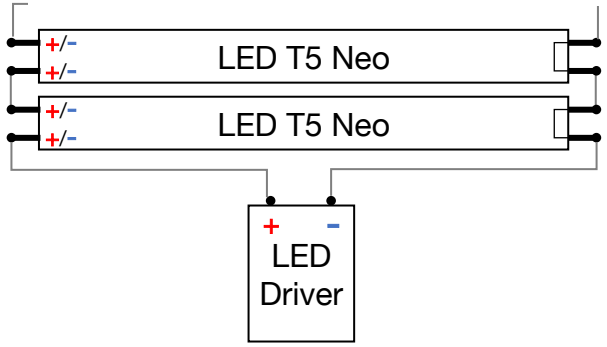
4-flame Operation, one-sided Connection



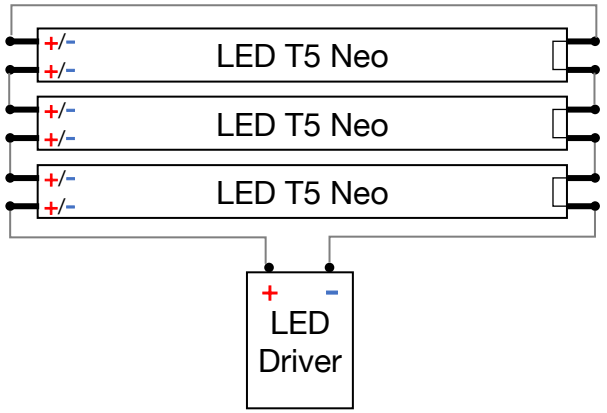
1-flame Operation, double-sided Connection



2-flam Operation, double-sided Connection



3-flame Operation, double-sided Connection



4-flame Operation, double-sided Connection