

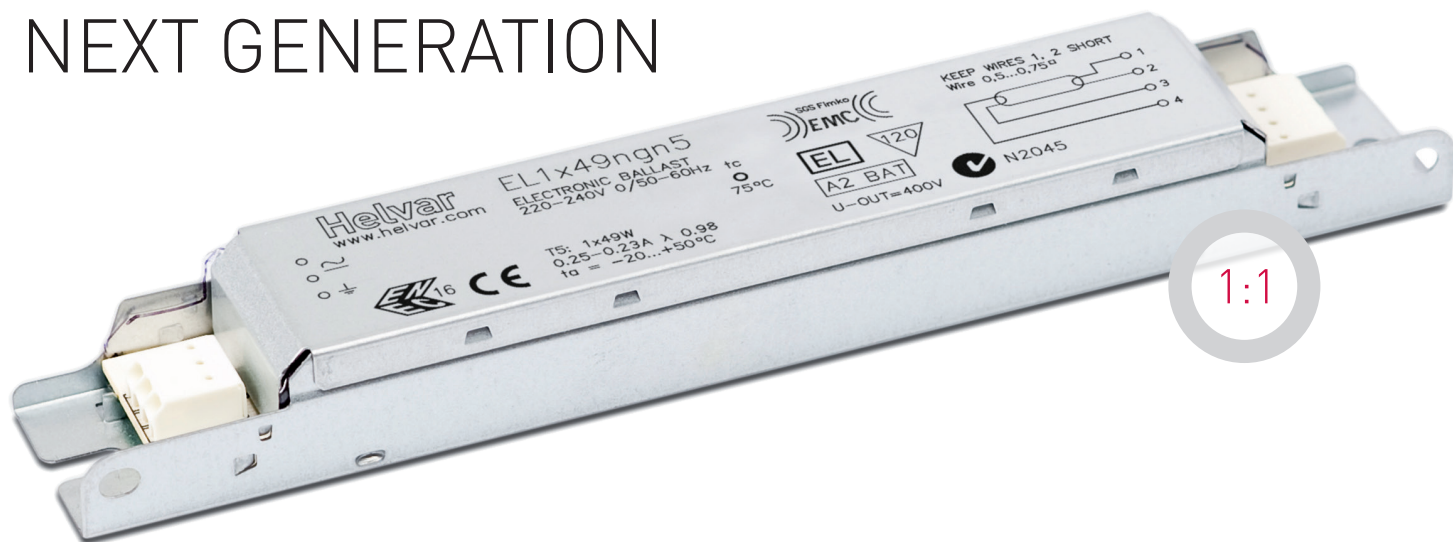
EL-ngn5 - the engine for light

Helvar

freedom in lighting



NEXT STEP - NEXT GENERATION



ENERGY EFFICIENCY in lighting is leading a fast increase in the use of electronic ballasts. To support this Helvar offers the user-friendly electronic ballast range EL-ngn5 for T5 lamps, both conventional and eco-lamps. EL-ngn5 ballast is a perfect choice to fulfil the need for high quality lighting with green values.

RELIABLE EFFICIENCY

To keep running costs at a minimum, long lamp and ballast lifetime is a necessity in many environments. The wide operational temperature range is designed to meet the challenging demands in applications like warehouses and parking halls.

Careful design of the circuit boards and intelligent choice of components give a solid basis for reliable ballast and lamp operation also in very challenging environments.

Energy savings are clear and measurable when using EL-ngn5 ballasts. The range fulfils the requirements of energy efficiency index EEL=A2 BAT.

SIZE DOES MATTER

The smallest EL-ngn5 ballast is only 190 mm in length; smaller than any other equivalent ballast in the market. The picture above is actually in real size. Smaller and lighter ballast give completely new possibilities for luminaire designs - and benefits in logistics, too.

Increasing production volumes in the luminaire market call for maximum cost efficiency in manufacturing. EL-ngn5 needs less wires to connect to speed up production and avoid mistakes in assembly.

GREEN VALUES

On top of our Eco-design principles we have been able to further reduce our ecological footprint. By using hot-dip galvanised steel in the ballast case, no chemical treatments are needed for the steel. The painting and use of related solvents have been removed and no oil is used in dry rolling of the ballast case.

Smaller products equals much more products per pallet - and that's less lorries on the road. With a minimum number of components in use the ballast weight is also reduced; lighter pallets makes lighter lorries, which means less CO₂ emissions. Small size makes the savings bigger.

KEY BENEFITS

- Extremely long lifetime
- Smallest size
- Low cost in operation
- Smaller environmental impact
- Simplest wiring



Highest energy efficiency index ensures low costs in operation.





Smallest size and lowest weight ensure reduced environmental footprint.



Most of the EL-ngn5 ballasts have the lifetime of > 100 000 hrs at 50 °C ambient temperature



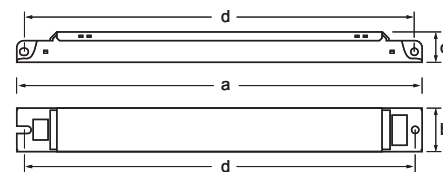
EL-ngn5 range offer robust performance with high efficiency.

Lamp type	W	No. of lamps	Ballast *	EEL	Dimensions	Weight (g)	Circuit power (W)	Mains current (A)	Lamp power (W)
	14	1	EL1x14-35ngn5	A2 BAT	1	127	15.5	0.08-0.06	13.7
	14	2	EL2x14-35ngn5	A2 BAT	2	204	31	0.16-0.15	13.7
	14	3	EL3/4x14ngn5	A2	2	204	46	0.22-0.19	13.7
	14	4	EL3/4x14ngn5	A2	2	204	62	0.29-0.26	13.7
	14	4	EL4x14ngn5	A2	2	190	63	0.30-0.26	13.7
	21	1	EL1x14-35ngn5	A2 BAT	1	127	23	0.12-0.10	20.7
	21	2	EL2x14-35ngn5	A2 BAT	2	204	45	0.22-0.19	20.7
	24	1	EL1x24ngn5	A2	1	130	25	0.12-0.11	22.5
	24	2	EL2x24ngn5	A2 BAT	2	193	49	0.24-0.21	22.5
	24	3	EL3/4x24ngn5	A2 BAT	2	208	73	0.34-0.30	22.5
	24	4	EL3/4x24ngn5	A2 BAT	2	208	97	0.44-0.40	22.5
	28	1	EL1x14-35ngn5	A2 BAT	1	127	30	0.15-0.12	27.8
	28	2	EL2x14-35ngn5	A2 BAT	2	204	60	0.29-0.25	27.8
	35	1	EL1x14-35ngn5	A2 BAT	1	127	38	0.18-0.16	34.7
	35	2	EL2x14-35ngn5	A2 BAT	2	204	75	0.35-0.31	34.7
	39	1	EL1x39/36ngn5	A2 BAT	1	130	42	0.19-0.18	38
	39	2	EL2x39/36ngn5	A2 BAT	2	195	81	0.36-0.32	38
	49	1	EL1x49ngn5	A2 BAT	1	130	55	0.25-0.23	49.3
	49	2	EL2x49ngn5	A2 BAT	2	211	105	0.50-0.45	49.3
	54	1	EL1x54ngn5	A2 BAT	1	130	58	0.26-0.24	53.8
	54	2	EL2x54ngn5	A2 BAT	2	206	115	0.53-0.48	53.8
	80	1	EL1x80ngn5	A2 BAT	2	192	86	0.42-0.36	80
	80	2	EL2x80ngn5	A2 BAT	3	300	170	0.80-0.73	80
	24	1	EL1x24ngn5	A2	1	130	25	0.12-0.11	22.5
	24	2	EL2x24ngn5	A2 BAT	2	193	49	0.24-0.21	22.5
	24	3	EL3/4x24ngn5	A2 BAT	2	208	73	0.34-0.30	22.5
	24	4	EL3/4x24ngn5	A2 BAT	2	208	97	0.44-0.40	22.5
	36	1	EL1x39/36ngn5	A2	1	130	35	0.16-0.15	32
	36	2	EL2x39/36ngn5	A2 BAT	2	195	69	0.32-0.29	32
	55	1	EL1x55ngn5 ¹⁾	A2 BAT	2	195	60	0.28-0.24	55
	55	2	EL2x55ngn5	A2 BAT	3	240	118	0.54-0.49	55
	80	1	EL1x80ngn5	A2 BAT	2	192	86	0.42-0.36	80
	80	2	EL2x80ngn5	A2 BAT	3	300	170	0.80-0.73	80

^{*)} EL-ngn5 also suitable for T5 eco-lamps ¹⁾ Also ENEC approved for 55 W T5-C lamps

DIMENSIONS

	1	2	3
Lenght 'a' (mm)	190	280	360
Width 'b' (mm)	30	30	30
Height 'c' (mm)	21	21	21
Length 'd' (mm)	180	270	350



CHARACTERISTICS

Max.temperature at tc point	75°C
Ambient temperature range	-20...+50°C
Storage temperature range	-40...+80°C
Maximum relative humidity	no condensation
Type of starting	Preheat (warm start)
Number of starts per lamp	> 50 000
Ignition time, typical	~1.0s
AC range	190-264 VAC
DC range (starting voltage >190VDC)	176-280 VDC
Over voltage duration	320 VAC, 1h
Power factor, typical	0.98
Earth leakage current	< 0.4 mA
Maximum working voltage (Uout)	400 V
Lifetime [90% survival]	60 000 h, at TC max
Max length of ballast to lamp wiring	2 m



Helvar is a specialist in energy-efficient components and solutions for lighting and lighting control systems.

Regardless of your location, Helvar is there to support you. Please visit our website to find your local Helvar office or representative.

www.helvar.com