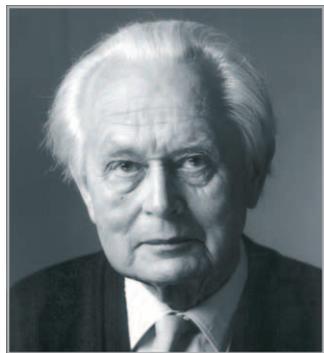


Piet Hein

a shining example



Piet Hein was born December 16, 1905 in Copenhagen. In his 90-year life, he managed to accomplish more than most people only dare dream about.

He was best known perhaps for the invention of the SuperEllipse conceived to Sergels Torg in Stockholm. Since then the design has been used for many things, e.g. Mexico Stadium, the SuperEllipse table, design products and much more.

Piet Hein is just as famous for his small poems, which he called for 'grooks'. The first grook was written in April 1940 and targeted at the occupying power. It was the beginning of the world-famous grooks. During the years he made 8000 of its kind and they have been translated into many languages.

Piet Hein had many talents and he tested them all during his life; artist, scientist, designer, debater, and much more. Piet Hein was one of a kind. A shining example.





400 koordinatpar
til Superellipser:
 $x^{\frac{5}{2}} + y^{\frac{5}{2}} = 1$.

| | |
|----------|----------|
| 0, 15849 | 0, 99599 |
| 0, 20913 | 0, 99195 |
| 0, 24595 | 0, 98789 |
| 0, 27595 | 0, 98380 |
| 0, 30171 | 0, 97969 |
| 0, 32453 | 0, 97555 |
| 0, 34517 | 0, 97139 |
| 0, 36411 | 0, 96720 |
| 0, 38168 | 0, 96298 |
| 0, 39811 | 0, 95873 |
| 0, 41358 | 0, 95446 |
| 0, 42823 | 0, 95015 |
| 0, 44216 | 0, 94582 |
| 0, 45546 | 0, 94145 |
| 0, 46821 | 0, 93706 |
| 0, 48045 | 0, 93264 |
| 0, 49224 | 0, 92818 |
| 0, 50363 | 0, 92369 |
| 0, 51464 | 0, 91917 |
| 0, 52531 | 0, 91461 |
| 0, 53566 | 0, 91002 |
| 0, 54570 | 0, 90539 |
| 0, 55543 | 0, 90073 |
| 0, 56505 | 0, 89604 |
| 0, 57435 | 0, 89130 |
| 0, 58343 | 0, 88653 |

Tallene i 1. kolonne
opfattes som y-koor-
dinator og tallene
udfor disse i 2.
kolonne som x-koor-
dinator. Derved fås
koordinater til punk-
ter i 1. oktant.

Derefter ombyttes
x og y. Derved fås
koordinater til punk-
ter i 2. oktant, og
sammen 1. kvadrant.

Derefter gentages
det samme idet
enten x-koordinaten
eller y-koordinaten
eller begge koordinater
tages negativt. Der-
ved fås koordinater
til punkter i de
øvrige 3 kvadranter,
i alt 400 koordi-
nat par.

Even in Piet Hein's early years, he was not like anyone else. He was always in the process of think-tanks, challenging the established and well-known. Most Danes know Piet Hein's grooks; those curious little poems that affect the many facets of life in a provoking and inspiring way. Most Danes are also aware of Piet Hein's SuperEllipse which was originally conceived as a solution to the urban challenge of Sergels Torg in Stockholm. Later on the SuperEllipse was used for a unique table design from which most Danes may have enjoyed a meal at one or more occasions.

Piet Hein was born 16.12.1905 in Copenhagen as the only child of engineer Hjalmar Hein and ophthalmologist Estrid Hein. Together with a partner the father had a company, Hein & Moller-Holst. Here he used his skills as an inventor, which among other things resulted in the invention of the Hein-Holst lifts. The mother was one of the very first women doctors in Scandinavia. She was politically active and she held the chair in several social commissions of the People's Confederation. It is indicated that Piet Hein had a rather unusual childhood. In the age of 5-7 the young Piet assisted his mother, for instance at an eye surgery on a nanny. The girl had been operated on her blind eye a few weeks earlier and now stood little Piet on a chair and held the nanny's empty eye cavity open, while the mother pulled wires out of the eye cave wall.

Piet Hein began drawing at an early age. The first drawings, still preserved to this very day, are from when he was 5 years old. He graduated from the Metropolitan School in 1924 and continued to study philosophy. Later he went to Stockholm, where he was admitted to the Royal Swedish School of Art, where Albert Engström, among others, was his teacher. While he attended school in Stockholm, he lived with his aunt and uncle, Emma and Erik Scavenius.

After his stay in Sweden his talent for exact sciences were to be tested. He began to study physics and epistemology at the University of Copenhagen, and he studied and worked at the Niels Bohr Institute. Later on it was the practical application of engineering, which enticed him. He made various inventions which he patented, he worked scientifically in association with different companies - and began to use more time on writing. He once stated that from that time on, he spent 50% of his time writing and 50% on science.

Piet Hein had many talents and he tested them all during his life. He was in contact with the big boys within science, including Albert Einstein, Niels Bohr, and Norbert

Weiner, who was a dear friend to him. Piet Hein was honorary doctorate at several universities, including Yale University, and many of his inventions have been put into production. He became world famous with his SuperEllipse and won numerous prizes, including the Danish Design Council Award and the Tietgen Medal.

Throughout his life Piet Hein was interested in minority issues and peace between the major nations, a position which he demonstrated with his famous grook: Co-existence or no existence. For 20 years he was a member of the Open Door Board. He was the co-founder of the League for Tolerance and chairman of the Danish branch of World Movement for World Federation.

In the early 1950s Piet Hein spent much of his time in the USA. Among other things he made cartoons for The New Yorker. He also worked freelance for the Danish paper Politiken and sent home articles of popular sciences dealing with everything from the world's biggest magnetic field to the hat radio, and Einstein, who was a close friend of his.

Piet Hein had a special interest in light and lamps. At the age of just 25 years old he produced what he called the isolux-plane, through a targeted mathematical thinking. He used this invention to design the RA lamp which, with huge success and attention, was presented in the Journal of Physics in 1932 and at the invention fair in Forum in 1933.

Later, other lamps were introduced. Best known is perhaps the Sinus lamp, which gradually has achieved a classic status. The lamp, in the shape we know it today, was introduced on the Danish market in 1995 on Piet Hein's goth birthday; an almost floating lamp sculpture designed in frosted white glass and manufactured to the highest quality.

What is so special by Piet Hein's lamps, is the unique link between science and art, between design and engineering. The design process of all Piet Hein lamps was a scientific and technical challenge. Piet Hein wanted to do something better than the already existing. Once the technical idea was outlined, Piet Hein added his artistic talent into the work, creating beautiful, simple and harmonious solutions. In this way Piet Hein's lamps possess exactly what any lamp designer seeks to achieve in his work: Beautiful design and perfect light. And these elements do not eclipse each other. That is what makes Piet Hein's lamps absolutely unique. Beautiful design and perfect light.

flora folio

Fig. 1

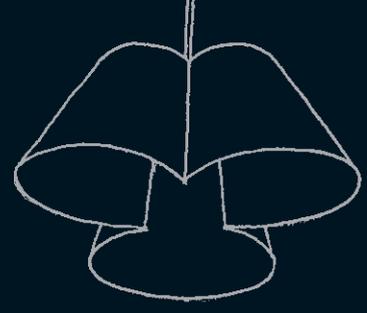


Fig. 2

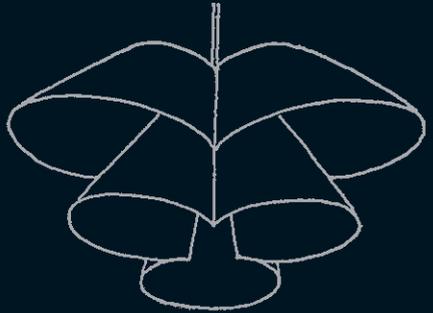
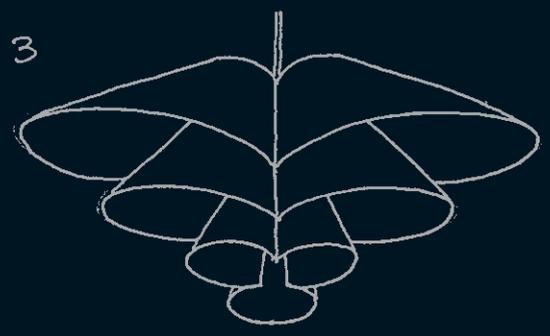


Fig. 3



23.2.1969
Piet Hein



Florafolielampen,
3-delt etageskærmsystem,
skærmene af plastik eller et metal.
Udført med 7 etager.
Jeg har hele tiden i det for, at den
skulle udføres også med færre skærm-
etager, f. 5 - 3 og 1.

Flora Folio is an exceptionally beautiful pendant for a large room. Almost like a big flower the shades fold out like leaves and create on the one hand, a beautiful characteristic shape and on the other side a perfect reflection of light. The white shades, matte on the inside and half white on the outside, are attached to extruded aluminum in a super elliptic shape. And the light source is perfectly shielded by a slightly frosted glass cylinder. In this way the lamp will provide a beautiful light regardless of which light source is used, e.g. an energy-saving fluorescent tube or a bright halogen spot.

Item no.: 60 666

Colour: White

Light source: 200 Watt (E27)

Dimensions: Ø 60 cm H 65 cm

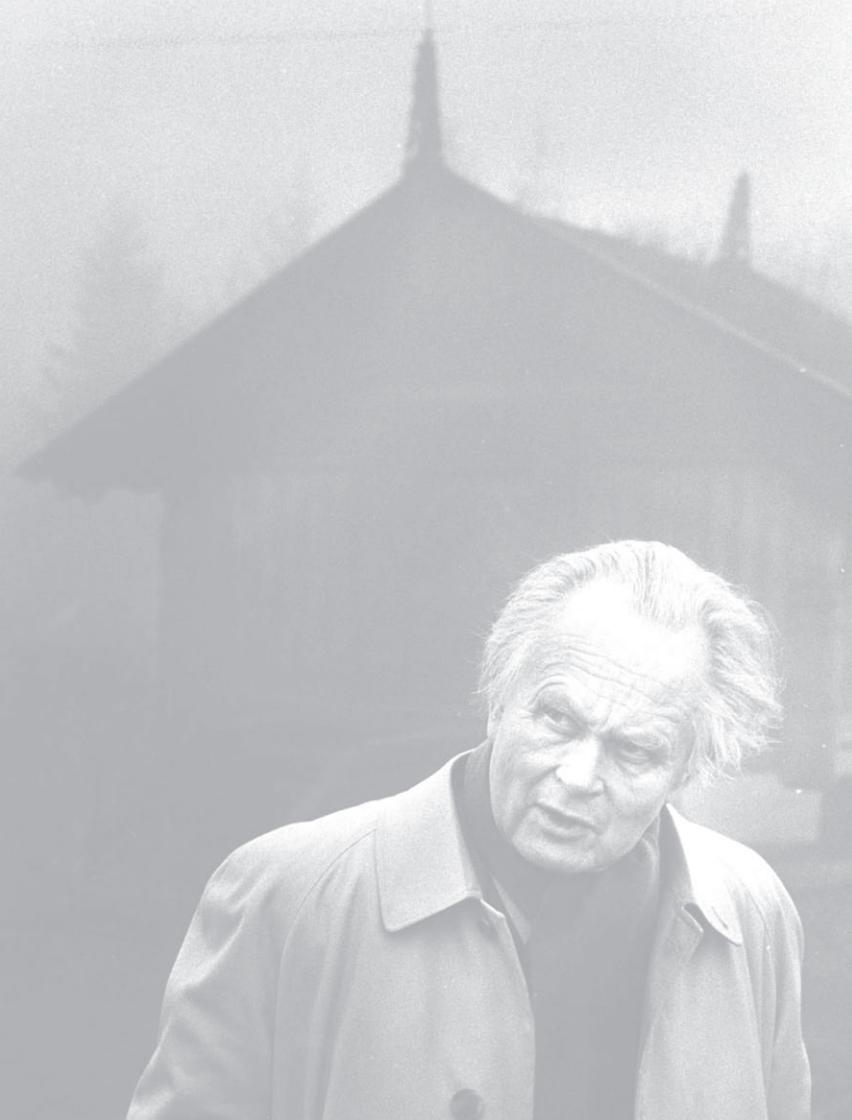
Incl. 6 meter black textile cord





1 FO! - De Flyvende Tallerkner lander. December 1979.

sinus



Sinus is the epitome of harmony: The sinus node is the part of the heart, which harmonises the heartbeat. In music the sinus note is totally clean without overtones. And then there is Piet Hein's Sinus lamp; hovering, simple design with smooth and optimum light in the room as well as on the table.

When Piet Hein designed the Sinus lamp in 1967 the aim was to produce a lamp based on the sinus curve. Piet Hein defined this goal both from the sinus curve's mathematical harmonic dimensions as well as from its ideal properties of lightning.

Piet Hein saw the sinus curve as a symbol of the world's many wonderful, living kinds, and he wrote a tribute to this in his famous grook:

That the straight line is straight
Is its nature and fate,
 But for my taste a bit of a minus.
I should welcome a World
With the straight lines more curled
 Designed in the sign of the Sinus.

Today the Sinus lamp is a classic like, for instance, the SuperEllipse table. Together the two products form a perfect table with a perfect light. It is an architectural symbiosis that emphasises Piet Hein's creative way of thinking. The Sinus lamp exists as pendant in three sizes: 33, 44 and 55 cm. The two smallest sizes are also available as table lamps. The table lamp design is based on one of Piet Hein's wonderful drawings; the landing of flying saucers. Nevertheless, no little green men with antennas come out of the Sinus table lamp. Instead beautiful and soft light creates harmony and atmosphere in the room.

The Sinus lamp is design and engineering in an optimum combination.



Item no.: 60 302 (Ø33) / 60 303 (Ø44) / 60 301 (Ø55)
Colour: White
Light source: 40/40/60 Watt (Gg)
Dimensions: Ø 33 cm / 44 cm / 55 cm H 8 cm
Incl. 3 meter white textile cord



pendant

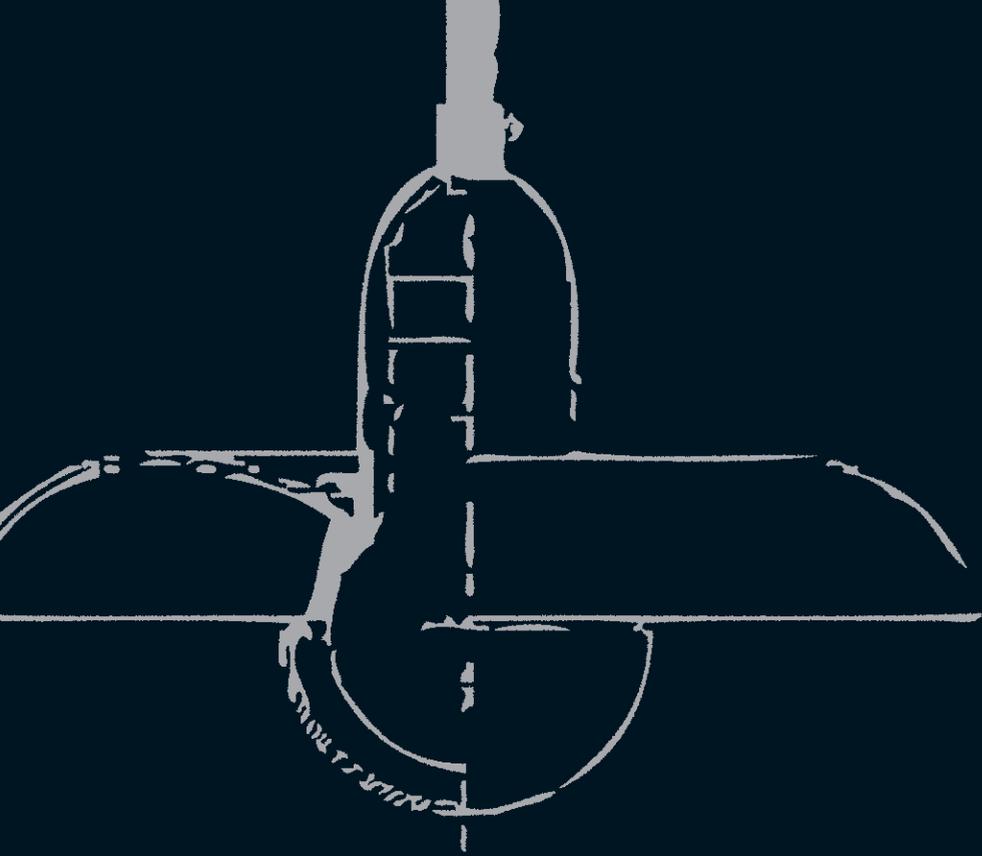
Sinus is produced in frosted white opal glass and shaped by use of a unique styling method. The super elliptic inner screen ensures perfect light on the table, while the Sinus shade stands as an almost hovering sculptural form in space.



Item no.: 60 305 (Ø33) / 60 304 (Ø44)
Colour: White
Light source: 40 Watt (Gg)
Dimensions: Ø 33 cm H 33 cm / Ø 44 cm H 44 cm
Incl. 3 meter red textile cord with a switch/dimmer



table



RA

$$R(a) = \sqrt{\sin(2a + v)} \cdot C_1$$

lamp

The Ra lamp is one of Piet Hein's first inventions. It was designed back in 1931 when Piet Hein was only 25 years old. Where many other lamps were designed from a desire of shape, Piet Hein's starting point was - as so often before - of more scientific character. The young Piet Hein got inspired by the discovery of a space geometric phenomenon; curved surfaces in space with an unexpected feature. Thoughts led to the design of the Ra lamp, and now - more than 75 years later - it can hardly be more up-to-date in its shape and with its impressive harmonic and virtually anti-dazzle light.



Ø25cm

Item no.: 60 421 / 60 430 / 60 423 / 60 428

Colour: Opal glass and white metal / black metal / chrome metal

Light source: 40 Watt (E14)

Dimensions: Ø 25 cm H 14 cm

Incl. 3 meter black textile cord

Ø40cm

Item no.: 60 401 / 60 410 / 60 403 / 60 408

Colour: Opal glass and white metal / black metal / chrome metal

Light source: 75 Watt (E27)

Dimensions: Ø 25 cm H 22 cm

Incl. 3 meter black textile cord



pendant



table

Ø25cm

Item no.: 60 441 / 60 450 / 60 443 / 60 448

Colour: Opal glass and white metal / black metal / chrome metal

Light source: 40 Watt (Gg)

Dimensions: Ø 25 cm H 34,5 cm

Incl. 3 meter black cord with a switch

Ø40cm

Item no.: 60 461 / 60 470 / 60 463 / 60 468

Colour: Opal glass and white metal / black metal / chrome metal

Light source: 60 Watt (E27)

Dimensions: Ø 25 cm H 56 cm

Incl. 3 meter black cord with a switch

In Journal of Physics from 1932 Piet Hein examines the mathematical principles for the Ra lamp shade. Here he identifies the formula:

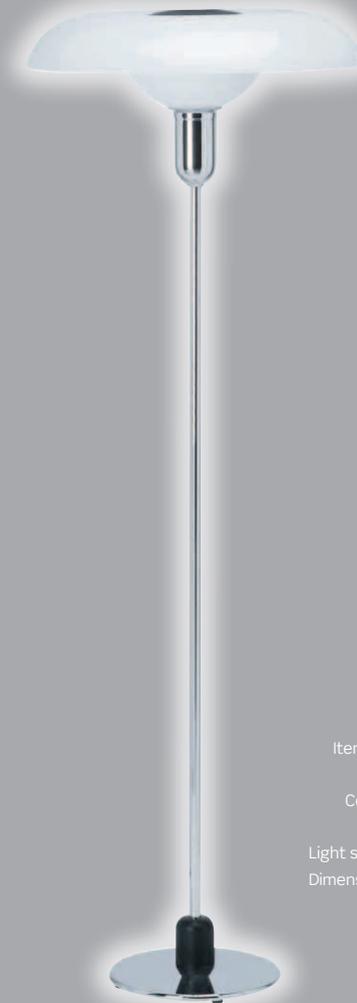
$$R(a) = \sqrt{\sin(2a + v)} \cdot C_1$$

...giving the desired result (with the following note attached: "In this case, the system of all surfaces arisen at the turning of Lemniskate, and with a dual point light source around a centre-line is attempted. In all other cases, surface equation can be solved, e.g. in a geometric way, with any desired approximation".

And so you could go on with Piet Hein's intelligent descriptions and calculations made during the development of the Ra lamp. But as Piet Hein said to himself in one of his grooks: "There is one art, no more, no less: to do all things with artlessness".

So of course all the technical calculations are interesting and relevant from a technical point of view with regard to illumination, but what is just as significant and interesting is how the lamp is perceived in everyday life and how it performs in the room.

And this is where Piet Hein's Ra lamp had come into its own; steady anti-dazzle light that throws the proper shadows, as Piet Hein used to say. Big soft shadows shaping the room combined with small square shadows, e.g. from a pencil when it approaches the paper, provide a precise orientation. For not only light creates space – so do the shadows to a great extent!



FLOOR

Ø40 cm

Item no.: 60 481 / 60 480 /
60 483 / 60 488

Colour: Opal glass and white metal /
black metal / chrome metal

Light source: 60 Watt (E27)

Dimensions: Ø 40 cm H 120 cm
Incl. 3 meter black
cord with a switch



$$\frac{x^n}{a} + \frac{y^n}{b} = 1$$

super

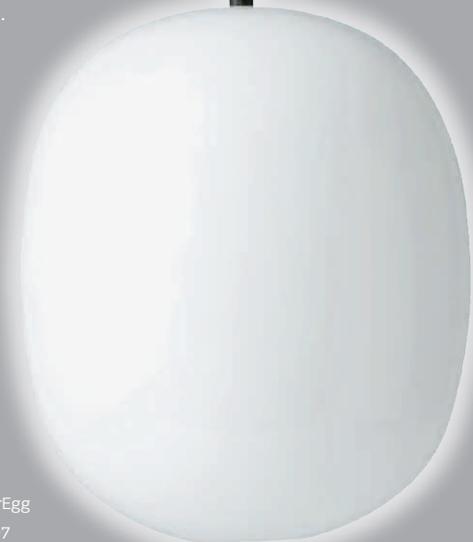
ellipse®

Man is a part of civilisation on all sides, indoors and outdoors, surrounded by a deep conflict between two ancient ways to shape things: The rectangular and the circular. Cars on circular wheels, steered by hands on circular steering wheels, moving along streets, which intersect in a right-angled network. Houses in right angles. By right-angled or circular tables we eat of circular plates and drink from glass with a circular cross section. We pay rectangular bills with rectangular notes and circular coins, etc. Piet Hein asked himself the intriguing question: Which geometric shape between these opposing trends is the prettiest?



Piet Hein's question originates from an assignment he got from the Stockholm City Council in 1959. What kind of roundabout would you establish on a site in the middle of downtown Stockholm called Sergels Torg? A square would have the advantage that the roundabout would be parallel to the roadsides. A circle would be more obvious if you wanted to get traffic to flow easily. Piet Hein looked for a combined shape which should be well defined and had to follow a mathematical reusable principle. Piet Hein invented the SuperEllipse.

If you twist a SuperEllipse around one of its symmetry axes, you will get a SuperEgg. It is beautifully shaped over the geometric shape of the SuperEllipse. The SuperEgg brings out the best in light and gives the lamp a beautiful and controlled light, almost without glare.



SuperEgg
Item no.: 60 667
Colour: Opal glass
Light source: 40 Watt (Gg)
Dimensions: Ø 12.4 cm H 14.8 cm
Incl. 3 meter black textile cord



Super 90/115
Item no.: E 90: 60 599 / 60 590 / 60 591
Ø 115: 60 589 / 60 580 / 60 581
Colour: Opal glass, white metal, black metal
Light source: 40 Watt (Gg)
Dimensions: Ø 9 cm H 9 cm / Ø 11.5 cm H 11.5 cm
Incl. 3 meter black textile cord

super

lamps

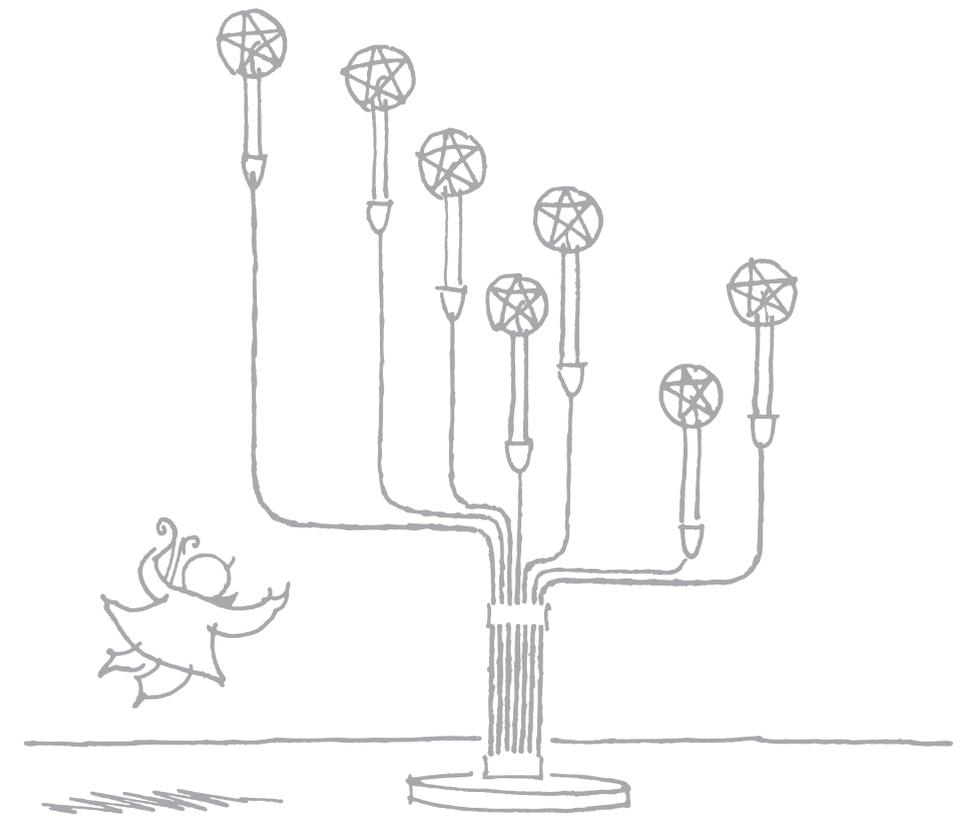


Super 215
Item no.: 60 570 / 60 563
Colour: White / black
Light source: 40 Watt (Gg)
Dimensions: Ø 21.5 cm H 18 cm
Incl. 3 meter black textile cord





Piet Hein's diversity and artistic curiosity has resulted in a comprehensive collection of exciting products. Super elliptic bowls and dishes. Candlesticks. Sundial, books, furniture and games are just a few examples...



Piet Hein Trading ApS

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