# NANOTTICA ES ABS




## ... energy saver, exceptional efficiency, ceiling height from 3.5 to 8 m, chemically resistant, MultiLumen.

### USE

Compared to its basic version, Nanottica ES ABS boasts **lower energy consumption**, which translates into considerably **higher luminous efficacy (lm/W).**

The fitting is highly recommended for **illumination of premises where workers' visual precision is of paramount importance.** These include workshops where fine assembly work is performed as well as craft workshops and visual inspection areas.

The fitting's standard beam angle makes it a great choice for premises with a fitting installation height of **3.5 to 8 m**. In addition to indoor spaces, it is designed for agricultural buildings and other spaces with chemically aggressive environments due to ammonia fumes, lye fumes, alkali and hot water (hydrolysis). The fitting is primarily intended for large **agricultural premises and industrial halls such as farms, stables, production plants and warehouses, car washes and laboratories** with no explosion hazard. IP69-rated and HACCP-compliant, the fitting's design also makes it suitable for the food industry.

The fitting´s base is made of ABS and diffuser of AC, resulting in their **exceptional chemical resistance**. Emissions in the environment of use may reduce the usability of the plastics; for more information see page 421.

### ADVANTAGES

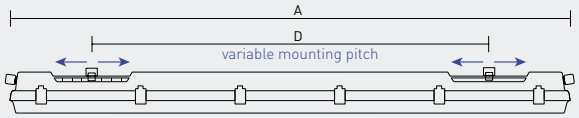
- Maximum light fitting efficiency: **173 lm/W**
- Patented optics ensures absolute control over light beam distribution
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from ta = -25 °C to **ta = 50 °C**
- Lifetime: 50 000 hours / L90B10
- Lifetime: 100 000 hours / L80B10
- High **chemical resistance**
- **Variable suspension pitch,** optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- **MultiLumen (ML)** function enables simple switching between up to four luminous fluxes via driver's DIP switch.
- Optional throughwiring (up to 7 wires inside the light fitting)
- Standard model CRI > 80: 4000 K
- On request CRI > 80: 3000 K, 5000 K, 6500 K
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K
- Optional delivery in dimmable version
- Certificates: **EPD, DLG, HACCP**

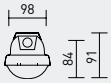
# NANOTTICA ES ABS, ABSc



## TECHNICKÝ POPIS

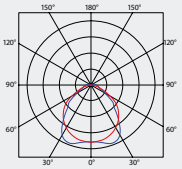
- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: ta = 0-40 °C for version with emergency back-up M3hAt
- Lifetime: 50 000 hours / L90B10
- Lifetime: 100 000 hours / L80B10
- Maximum light fitting efficiency: **173 lm/W**
- Optimum luminaire installation height **from 3.5 to 8 m**
- **CRI > 80: 4000 K** – standard
- CRI > 80: 3000 K, 5000 K, 6500 K - on request
- CRI > 90: 3000 K, 4000 K, 5000 K, 6500 K - on request
- **MultiLumen (ML):** luminous flux variable in up to 4 steps. In the standard version preset maximum luminous flux.
- MacAdam = 3 SDCM
- Diffuser: **transparent AC with nanooptics** (high chemical resistance, UV stability)
- Body: dark grey ABS (high chemical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Mounting clips:** stainless steel, stainless steel hooks included
- Clips: polyamide + 15 % glass fibre or stainless steel + polyamide
- Sealing: polyurethane (PUR), foamed body groove
- Cable glands: screwed PG 13.5
- Terminal block: screwless, three-pole (basic version), or screwed
- The values stated for power consumption and luminous flux are in a tolerance of ± 7.5 %




| UGR EVALUATED FOR | |
|---|---|
| X = 4 H, Y = 8 H | S = 0.25 H |
| Reflectivity | 70/50/20 |

NANOTTICA 1.5ft ES ABS




| Type | Max. ambient temperature [°C] | Luminous flux of LED modules [lm] | Preselected Step 1 of MultiLumen function: Luminous flux of light fitting [lm] | Power consumption [W] | System efficacy [lm/W] | UGR Longitudinal/ transverse | Net weight [kg] | A [mm] | D [mm] |
|---|---|---|---|---|---|---|---|---|---|
| Up to ambient temperature ta = 50 °C - body dark grey ABS - diffusor with nanooptics (standard beam angle), transparent acrylate | | | | | | | | | |
| NANOTTICA 1.2ft ES ABS 1600/840 | 50 | 1740 | 1530 | 9,4 | 163 | 20.0 / 21.0 | 0,9 | 615 | 110 - 370 |
| NANOTTICA 1.2ft ES ABS 2200/840 * | 45 | 2390 | 2100 | 13,0 | 162 | 21.1 / 22.1 | 0,9 | 615 | 110 - 370 |
| NANOTTICA 1.4ft ES ABS 3200/840 | 50 | 3300 | 2900 | 17,4 | 167 | 19.9 / 21.1 | 1,7 | 1175 | 700 - 960 |
| NANOTTICA 1.4ft ES ABS 4400/840 * | 45 | 4550 | 4000 | 24,1 | 166 | 21.1 / 22.2 | 1,7 | 1175 | 700 - 960 |
| NANOTTICA 1.4ft ES ABS 6400/840 * | 45 | 6500 | 5720 | 34,0 | 168 | 22.3 / 23.4 | 1,7 | 1175 | 700 - 960 |
| NANOTTICA 1.5ft ES ABS 4000/840 | 50 | 4030 | 3550 | 20,6 | 172 | 19.9 / 21.1 | 2,0 | 1455 | 970 - 1230 |
| NANOTTICA 1.5ft ES ABS 5500/840 * | 45 | 5530 | 4870 | 28,9 | 169 | 21.0 / 22.2 | 2,0 | 1455 | 970 - 1230 |
| NANOTTICA 1.5ft ES ABS 8000/840 * | 45 | 8020 | 7060 | 41,4 | 171 | 22.3 / 23.5 | 2,0 | 1455 | 970 - 1230 |

*) Also available with MultiLumen function:

| Type | MultiLumen function: Step 2 Luminous flux of light fitting [lm] | Step 2 Power consumption [W] | Step 2 System efficacy [lm/W] | Step 3 Luminous flux of light fitting [lm] | Step 3 Power consumption [W] | Step 3 System efficacy [lm/W] | Step 4 Luminous flux of light fitting [lm] | Step 4 Power consumption [W] | Step 4 System efficacy [lm/W] |
|---|---|---|---|---|---|---|---|---|---|
| NANOTTICA 1.2ft ES ABS 2200/840 ML | 1820 | 11,3 | 161 | 1530 | 9,4 | 163 | 1220 | 7,6 | 161 |
| NANOTTICA 1.4ft ES ABS 4400/840 ML | 3460 | 20,8 | 166 | 2900 | 17,4 | 167 | 2340 | 14,2 | 165 |
| NANOTTICA 1.4ft ES ABS 6400/840 ML | 4940 | 29,0 | 170 | 4150 | 24,3 | 171 | 3350 | 19,7 | 170 |
| NANOTTICA 1.5ft ES ABS 5500/840 ML | 4210 | 24,6 | 171 | 3550 | 20,6 | 172 | 2860 | 16,5 | 173 |
| NANOTTICA 1.5ft ES ABS 8000/840 ML | 6110 | 35,4 | 173 | 5130 | 29,6 | 173 | 4140 | 23,9 | 173 |

## NANOTTICA ES ABS

| Code | Type |
|---|---|
| 102823 | NANOTTICA 1.2ft ES ABS 1600/840 |
| 102824 | NANOTTICA 1.2ft ES ABS 2200/840 ML |
| 102826 | NANOTTICA 1.4ft ES ABS 3200/840 |
| 102827 | NANOTTICA 1.4ft ES ABS 4400/840 ML |
| 102828 | NANOTTICA 1.4ft ES ABS 6400/840 ML |
| 102830 | NANOTTICA 1.5ft ES ABS 4000/840 |
| 102831 | NANOTTICA 1.5ft ES ABS 5500/840 ML |
| 102832 | NANOTTICA 1.5ft ES ABS 8000/840 ML |

Non-dimmable driver - plastic clips

| 1F | 3F | M3hAt | 3F M3hAt |
|---|---|---|---|
| 102834 | 102845 | x | x |
| 102835 | 102846 | x | x |
| 102837 | 102848 | 108594 | 108596 |
| 102838 | 102849 | 108634 | 108635 |
| 102839 | 102850 | 108666 | 108667 |
| 102841 | 102852 | 108618 | 108619 |
| 102842 | 102853 | 108650 | 108651 |
| 102843 | 102854 | 108682 | 108683 |

## NANOTTICA ES ABSc

Non-dimmable driver - stainless clips (c)

| Code | Type | 1F | 3F | M3hAt | 3F M3hAt |
|---|---|---|---|---|---|
| 102891 | NANOTTICA 1.2ft ES ABSc 1600/840 | 102902 | 102913 | x | x |
| 102892 | NANOTTICA 1.2ft ES ABSc 2200/840 ML | 102903 | 102914 | x | x |
| 102894 | NANOTTICA 1.4ft ES ABSc 3200/840 | 102905 | 102916 | 108598 | 108600 |
| 102895 | NANOTTICA 1.4ft ES ABSc 4400/840 ML | 102906 | 102917 | 108636 | 108637 |
| 102896 | NANOTTICA 1.4ft ES ABSc 6400/840 ML | 102907 | 102918 | 108668 | 108669 |
| 102898 | NANOTTICA 1.5ft ES ABSc 4000/840 | 102909 | 102920 | 108620 | 108621 |
| 102899 | NANOTTICA 1.5ft ES ABSc 5500/840 ML | 102910 | 102921 | 108652 | 108653 |
| 102900 | NANOTTICA 1.5ft ES ABSc 8000/840 ML | 102911 | 102922 | 108684 | 108685 |

## NANOTTICA ES ABS DALI

Digital dimmable driver DALI - plastic clips

| Code | Type | 1F | 3F | M3hAt | 3F M3hAt |
|---|---|---|---|---|---|
| 102959 | NANOTTICA 1.2ft ES ABS 1600/840 DALI | 102970 | x | x | x |
| 102960 | NANOTTICA 1.2ft ES ABS 2200/840 DALI | 102971 | x | x | x |
| 102962 | NANOTTICA 1.4ft ES ABS 3200/840 DALI | 102973 | 102984 | 108602 | 108604 |
| 102963 | NANOTTICA 1.4ft ES ABS 4400/840 DALI | 102974 | 102985 | 108638 | 108639 |
| 102964 | NANOTTICA 1.4ft ES ABS 6400/840 DALI | 102975 | 102986 | 108670 | 108671 |
| 102966 | NANOTTICA 1.5ft ES ABS 4000/840 DALI | 102977 | 102988 | 108622 | 108623 |
| 102967 | NANOTTICA 1.5ft ES ABS 5500/840 DALI | 102978 | 102989 | 108654 | 108655 |
| 102968 | NANOTTICA 1.5ft ES ABS 8000/840 DALI | 102979 | 102990 | 108686 | 108687 |

## NANOTTICA ES ABSc DALI

Digital dimmable driver DALI - stainless clips (c)

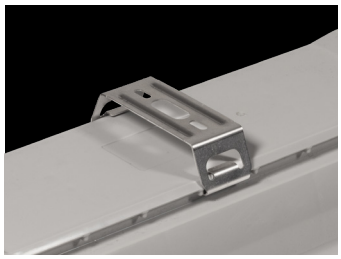
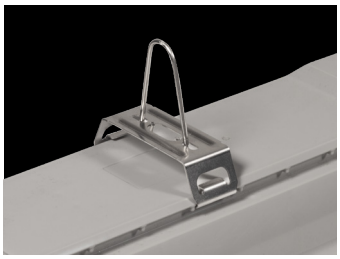
| Code | Type | 1F | 3F | M3hAt | 3F M3hAt |
|---|---|---|---|---|---|
| 103027 | NANOTTICA 1.2ft ES ABSc 1600/840 DALI | 103038 | x | x | x |
| 103028 | NANOTTICA 1.2ft ES ABSc 2200/840 DALI | 103039 | x | x | x |
| 103030 | NANOTTICA 1.4ft ES ABSc 3200/840 DALI | 103041 | 103052 | 108606 | 108608 |
| 103031 | NANOTTICA 1.4ft ES ABSc 4400/840 DALI | 103042 | 103053 | 108640 | 108641 |
| 103032 | NANOTTICA 1.4ft ES ABSc 6400/840 DALI | 103043 | 103054 | 108672 | 108673 |
| 103034 | NANOTTICA 1.5ft ES ABSc 4000/840 DALI | 103045 | 103056 | 108624 | 108625 |
| 103035 | NANOTTICA 1.5ft ES ABSc 5500/840 DALI | 103046 | 103057 | 108656 | 108657 |
| 103036 | NANOTTICA 1.5ft ES ABSc 8000/840 DALI | 103047 | 103058 | 108688 | 108689 |

### LEGEND

**1F** - 1-phase 3 core through-wiring in the luminaire
**3F** - 3-phase 5 core through-wiring in the luminaire
**M3hAt** - emergency back-up source with 3 hour operating time for maintained emergency illumination with battery autotest
**3F M3hAt** - 3-phase 5 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)
**DALI** - version with digital dimmable driver DALI
**DALI 1F** - 1-phase 5 core through-wiring in the luminaire
**DALI 3F** - 3-phase 7 core through-wiring in the luminaire
**DALI 3F M3hAt** - 3-phase 7 core through-wiring in the luminaire (L3 used for emergency unit unswitched power supply)

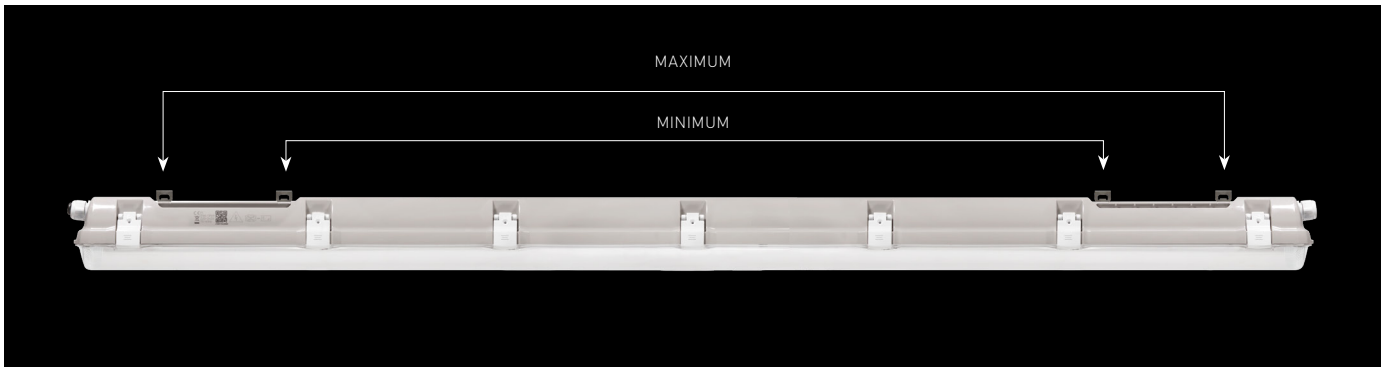
## LIGHT FITTING ATTACHMENT

a) Directly to a ceiling or a wall with the use of screws and stainless brackets
b) Suspension with the use of stainless hooks
c) Attachment with the use of side hangers to the wall - is not included in accessories


## VARIABLE INSTALLATION PITCH

NANOTTICA ES ABS




## LIGHT FITTING DETAILED VIEW

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