

# NANOTTICA ES TRS



... energy saver, exceptional efficiency and UGR, ceiling height from 3.5 to 8 m, impact resistant.

## USE

Compared to its basic version, **fully transparent** Nanottica ES TRS PC boasts considerably **lower UGR values** as well as **lower energy consumption**, the latter translating into considerably **higher luminous efficacy (lm/W)**.

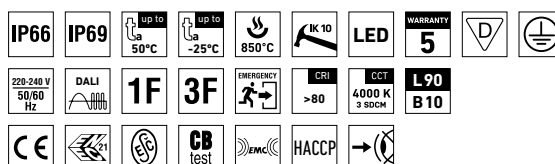
The fitting is highly recommended for **illumination of premises where workers' visual precision is of paramount importance**. These include workshops where fine assembly work is performed as well as craft workshops and visual inspection areas.

Its **standard beam angle** makes it a perfect choice for premises with an optimum luminaire installation height of **3.5 to 8 m**. It is designed for indoor spaces, **industrial premises, agricultural buildings, warehouses as well as sports facilities, transport hubs, car parks and garages, workshops and laboratories** with no explosion hazard. IP69-rated and HACCP-compliant, the fitting's design also makes it a great choice for the food industry.

Made of clear polycarbonate, the base and the diffuser boast **high impact and deformation resistance**. Emissions in the environment of use may reduce the usability of the plastics; for more information see page 321.

## ADVANTAGES

- Maximum light fitting efficiency: **168 lm/W**
- Patented optics ensures absolute control over light beam distribution
- Exceptionally low UGR values **range from 17.1 to 22.5**
- Light fitting protection **IP66 / IP69**
- High temperature resistance in a range from  $t_a = -25^\circ\text{C}$  to  $t_a = 50^\circ\text{C}$
- Lifetime: 50 000 hours / L90B10
- High **mechanical resistance IK10**
- **Variable suspension pitch**, optional installation of light fitting even on an existing structure on which the original light fittings were suspended
- **Multipurpose snap-in mounting clips – easy attachment** to a track lighting system with a width of 60 mm
- 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: **ESĈ, ENEC, CB, HACCP**



# NANOTTICA ES TRS PC, PCc



## TECHNICAL DESCRIPTION

- Light fitting protection: **IP66 / IP69**
- Maximum ambient temperature: **ta = 50 °C**
- Maximum ambient temperature: **ta = 0-25 °C** for version with emergency back-up M1h, M3h
- Lifetime: 50 000 hours / L90B10
- Maximum light fitting efficiency: **168 lm/W**
- **UGR ranging from 17.1 to 22.5**
- 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
- MacAdam = 3 SDCM
- Diffuser: **transparent PC with nanooptics** (high mechanical resistance, UV stability)
- Body: **transparent PC** (high mechanical resistance, UV stability)
- Reflector: steel sheet, white colour (RAL 9003)
- **Multipurpose 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 (standard), or rubber (SBS)
- 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

| Type  | Max. ambient temperature [°C] | Luminous flux of LED modules [lm] | 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 transparent polycarbonate - diffusor with nanooptics (standard beam angle), transparent polycarbonate |                               |                                   |                                     |                       |                        |                             |                 |        |            |
| NANOTTICA 1.2ft ES TRS PC 1300/840  | 50                            | 1330                              | 1250                                | 8                     | 156                    | 17.1 / 18.9                 | 0,9             | 615    | 110 - 370  |
| NANOTTICA 1.2ft ES TRS PC 1600/840  | 50                            | 1620                              | 1520                                | 10                    | 152                    | 17.8 / 19.5                 | 0,9             | 615    | 110 - 370  |
| NANOTTICA 1.2ft ES TRS PC 2200/840  | 45                            | 2230                              | 2100                                | 14                    | 150                    | 18.9 / 20.7                 | 0,9             | 615    | 110 - 370  |
| NANOTTICA 1.4ft ES TRS PC 2600/840  | 50                            | 2630                              | 2470                                | 16                    | 154                    | 17.3 / 19.3                 | 1,7             | 1175   | 700 - 960  |
| NANOTTICA 1.4ft ES TRS PC 3200/840  | 50                            | 3180                              | 2990                                | 20                    | 150                    | 18.0 / 20.0                 | 1,7             | 1175   | 700 - 960  |
| NANOTTICA 1.4ft ES TRS PC 4400/840  | 45                            | 4450                              | 4180                                | 27                    | 155                    | 19.1 / 21.1                 | 1,7             | 1175   | 700 - 960  |
| NANOTTICA 1.4ft ES TRS PC 6400/840  | 45                            | 6310                              | 5930                                | 38                    | 156                    | 20.4 / 22.4                 | 1,7             | 1175   | 700 - 960  |
| NANOTTICA 1.5ft ES TRS PC 3250/840  | 50                            | 3290                              | 3090                                | 20                    | 155                    | 17.3 / 19.4                 | 2,0             | 1455   | 970 - 1230 |
| NANOTTICA 1.5ft ES TRS PC 4000/840  | 50                            | 4050                              | 3810                                | 24                    | 159                    | 18.0 / 20.1                 | 2,0             | 1455   | 970 - 1230 |
| NANOTTICA 1.5ft ES TRS PC 5500/840  | 45                            | 5560                              | 5230                                | 33                    | 158                    | 19.1 / 21.2                 | 2,0             | 1455   | 970 - 1230 |
| NANOTTICA 1.5ft ES TRS PC 8000/840  | 45                            | 8020                              | 7540                                | 45                    | 168                    | 20.4 / 22.5                 | 2,0             | 1455   | 970 - 1230 |

## NANOTTICA ES TRS PC

| Code   | Type                               |
|--------|------------------------------------|
| 103134 | NANOTTICA 1.2ft ES TRS PC 1300/840 |
| 103135 | NANOTTICA 1.2ft ES TRS PC 1600/840 |
| 103136 | NANOTTICA 1.2ft ES TRS PC 2200/840 |
| 103137 | NANOTTICA 1.4ft ES TRS PC 2600/840 |
| 103138 | NANOTTICA 1.4ft ES TRS PC 3200/840 |
| 103139 | NANOTTICA 1.4ft ES TRS PC 4400/840 |
| 103140 | NANOTTICA 1.4ft ES TRS PC 6400/840 |
| 103141 | NANOTTICA 1.5ft ES TRS PC 3250/840 |
| 103142 | NANOTTICA 1.5ft ES TRS PC 4000/840 |
| 103143 | NANOTTICA 1.5ft ES TRS PC 5500/840 |
| 103144 | NANOTTICA 1.5ft ES TRS PC 8000/840 |

Non-dimmable driver - plastic clips

|        | 1F     | 3F     | M1h    | M3h    | 3F M1h | 3F M3h |
|--------|--------|--------|--------|--------|--------|--------|
| 103145 | 103156 | 103167 | x      | x      | x      | x      |
| 103146 | 103157 | 103168 | x      | x      | x      | x      |
| 103147 | 103158 | 103169 | x      | x      | x      | x      |
| 103148 | 103159 | 103170 | 103178 | 103186 | 103194 |        |
| 103149 | 103160 | 103171 | 103179 | 103187 | 103195 |        |
| 103150 | 103161 | 103172 | 103180 | 103188 | 103196 |        |
| 103151 | 103162 | 103173 | 103181 | 103189 | 103197 |        |
| 103152 | 103163 | 103174 | 103182 | 103190 | 103198 |        |
| 103153 | 103164 | 103175 | 103183 | 103191 | 103199 |        |
| 103154 | 103165 | 103176 | 103184 | 103192 | 103200 |        |
| 103155 | 103166 | 103177 | 103185 | 103193 | 103201 |        |

## NANOTTICA ES TRS PCc

| Code   | Type                                |
|--------|-------------------------------------|
| 103202 | NANOTTICA 1.2ft ES TRS PCc 1300/840 |
| 103203 | NANOTTICA 1.2ft ES TRS PCc 1600/840 |
| 103204 | NANOTTICA 1.2ft ES TRS PCc 2200/840 |
| 103205 | NANOTTICA 1.4ft ES TRS PCc 2600/840 |
| 103206 | NANOTTICA 1.4ft ES TRS PCc 3200/840 |
| 103207 | NANOTTICA 1.4ft ES TRS PCc 4400/840 |
| 103208 | NANOTTICA 1.4ft ES TRS PCc 6400/840 |
| 103209 | NANOTTICA 1.5ft ES TRS PCc 3250/840 |
| 103210 | NANOTTICA 1.5ft ES TRS PCc 4000/840 |
| 103211 | NANOTTICA 1.5ft ES TRS PCc 5500/840 |
| 103212 | NANOTTICA 1.5ft ES TRS PCc 8000/840 |

Non-dimmable driver - stainless clips (c)

|        | 1F     | 3F     | M1h    | M3h    | 3F M1h | 3F M3h |
|--------|--------|--------|--------|--------|--------|--------|
| 103213 | 103224 | 103235 | x      | x      | x      | x      |
| 103214 | 103225 | 103236 | x      | x      | x      | x      |
| 103215 | 103226 | 103237 | x      | x      | x      | x      |
| 103216 | 103227 | 103238 | 103246 | 103254 | 103262 |        |
| 103217 | 103228 | 103239 | 103247 | 103255 | 103263 |        |
| 103218 | 103229 | 103240 | 103248 | 103256 | 103264 |        |
| 103219 | 103230 | 103241 | 103249 | 103257 | 103265 |        |
| 103220 | 103231 | 103242 | 103250 | 103258 | 103266 |        |
| 103221 | 103232 | 103243 | 103251 | 103259 | 103267 |        |
| 103222 | 103233 | 103244 | 103252 | 103260 | 103268 |        |
| 103223 | 103234 | 103245 | 103253 | 103261 | 103269 |        |

NANOTTICA ES TRS PC DALI

| Code   | Type                                    |
|--------|---|
| 103270 | NANOTTICA 1.2ft ES TRS PC 1300/840 DALI |
| 103271 | NANOTTICA 1.2ft ES TRS PC 1600/840 DALI |
| 103272 | NANOTTICA 1.2ft ES TRS PC 2200/840 DALI |
| 103273 | NANOTTICA 1.4ft ES TRS PC 2600/840 DALI |
| 103274 | NANOTTICA 1.4ft ES TRS PC 3200/840 DALI |
| 103275 | NANOTTICA 1.4ft ES TRS PC 4400/840 DALI |
| 103276 | NANOTTICA 1.4ft ES TRS PC 6400/840 DALI |
| 103277 | NANOTTICA 1.5ft ES TRS PC 3250/840 DALI |
| 103278 | NANOTTICA 1.5ft ES TRS PC 4000/840 DALI |
| 103279 | NANOTTICA 1.5ft ES TRS PC 5500/840 DALI |
| 103280 | NANOTTICA 1.5ft ES TRS PC 8000/840 DALI |

Digital dimmable driver DALI - plastic clips

| 1F     | 3F     | M1h    | M3h    | 3F M1h | 3F M3h |
|--------|--------|--------|--------|--------|--------|
| 103281 | x      | 103303 | x      | x      | x      |
| 103282 | x      | 103304 | x      | x      | x      |
| 103283 | x      | 103305 | x      | x      | x      |
| 103284 | 103295 | 103306 | 103314 | 103322 | 103330 |
| 103285 | 103296 | 103307 | 103315 | 103323 | 103331 |
| 103286 | 103297 | 103308 | 103316 | 103324 | 103332 |
| 103287 | 103298 | 103309 | 103317 | 103325 | 103333 |
| 103288 | 103299 | 103310 | 103318 | 103326 | 103334 |
| 103289 | 103300 | 103311 | 103319 | 103327 | 103335 |
| 103290 | 103301 | 103312 | 103320 | 103328 | 103336 |
| 103291 | 103302 | 103313 | 103321 | 103329 | 103337 |

NANOTTICA ES TRS PCc DALI

| Code   | Type                                     |
|--------|--|
| 103338 | NANOTTICA 1.2ft ES TRS PCc 1300/840 DALI |
| 103339 | NANOTTICA 1.2ft ES TRS PCc 1600/840 DALI |
| 103340 | NANOTTICA 1.2ft ES TRS PCc 2200/840 DALI |
| 103341 | NANOTTICA 1.4ft ES TRS PCc 2600/840 DALI |
| 103342 | NANOTTICA 1.4ft ES TRS PCc 3200/840 DALI |
| 103343 | NANOTTICA 1.4ft ES TRS PCc 4400/840 DALI |
| 103344 | NANOTTICA 1.4ft ES TRS PCc 6400/840 DALI |
| 103345 | NANOTTICA 1.5ft ES TRS PCc 3250/840 DALI |
| 103346 | NANOTTICA 1.5ft ES TRS PCc 4000/840 DALI |
| 103347 | NANOTTICA 1.5ft ES TRS PCc 5500/840 DALI |
| 103348 | NANOTTICA 1.5ft ES TRS PCc 8000/840 DALI |

Digital dimmable driver DALI - stainless clips (c)

| 1F     | 3F     | M1h    | M3h    | 3F M1h | 3F M3h |
|--------|--------|--------|--------|--------|--------|
| 103349 | x      | 103371 | x      | x      | x      |
| 103350 | x      | 103372 | x      | x      | x      |
| 103351 | x      | 103373 | x      | x      | x      |
| 103352 | 103363 | 103374 | 103382 | 103390 | 103398 |
| 103353 | 103364 | 103375 | 103383 | 103391 | 103399 |
| 103354 | 103365 | 103376 | 103384 | 103392 | 103400 |
| 103355 | 103366 | 103377 | 103385 | 103393 | 103401 |
| 103356 | 103367 | 103378 | 103386 | 103394 | 103402 |
| 103357 | 103368 | 103379 | 103387 | 103395 | 103403 |
| 103358 | 103369 | 103380 | 103388 | 103396 | 103404 |
| 103359 | 103370 | 103381 | 103389 | 103397 | 103405 |

LEGEND

- 1F** 1-phase 3 core through-wiring in the luminaire
- 3F** 3-phase 5 core through-wiring in the luminaire
- M1h** emergency back-up source with 1 hour operating time for maintained emergency illumination
- M3h** emergency back-up source with 3 hour operating time for maintained emergency illumination
- 3F Mxh** 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 Mxh** 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) To be attached to a track lighting system with a width of 60 mm using stainless steel snap-in mounting clips
- d) Attachment with the use of side hangers to the wall



**VARIABLE INSTALLATION PITCH**

NANOTTICA ES TRS



**LIGHT FITTING DETAILED VIEW**

NANOTTICA ES TRS

