

ALGEMENE KENMERKEN:

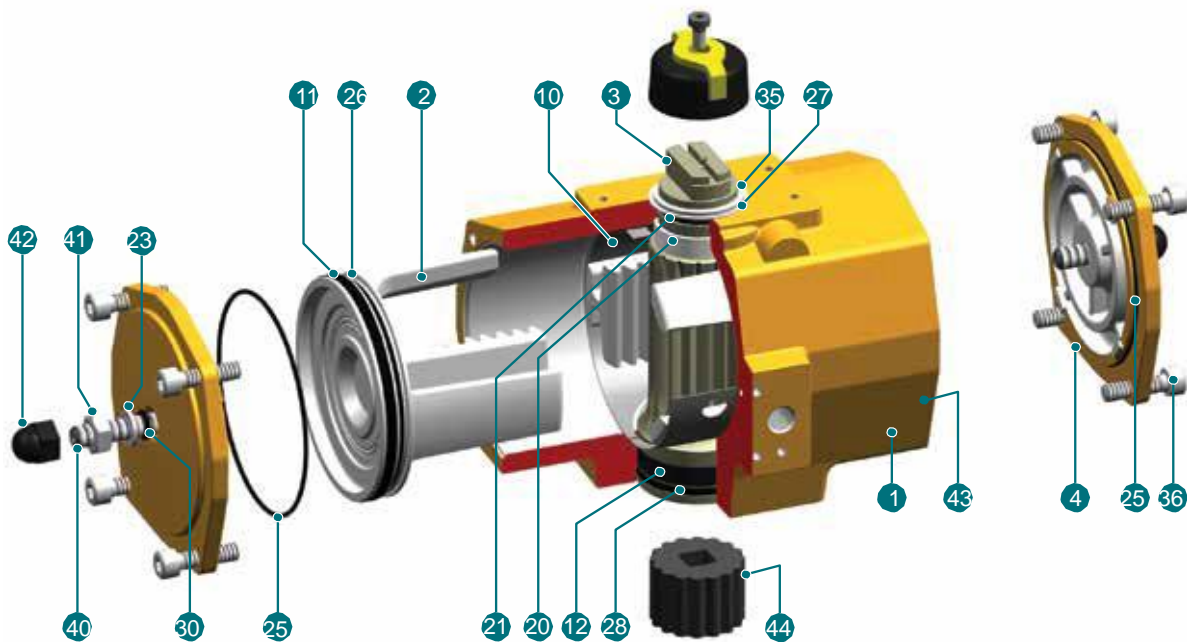
- Rack & pinion pneumaat
- Slagregeling: 0°~90° +1°/-10° (0~80°... 91°)
- Werktemperatuur: -30 °C ~ 100 °C
- Stuurdruk: 3 ~ 8 bar
- Koppeling volgens ISO 5211 en DIN 3337
- Opbouw van magneetventielen volgens Namur Std.
- Opbouw van naderingschakelaars volgens Namur

FIGUUR:

- PD:** dubbelwerkend
PE: enkelwerkend, normaal gesloten
PEO: enkelwerkend, normaal open



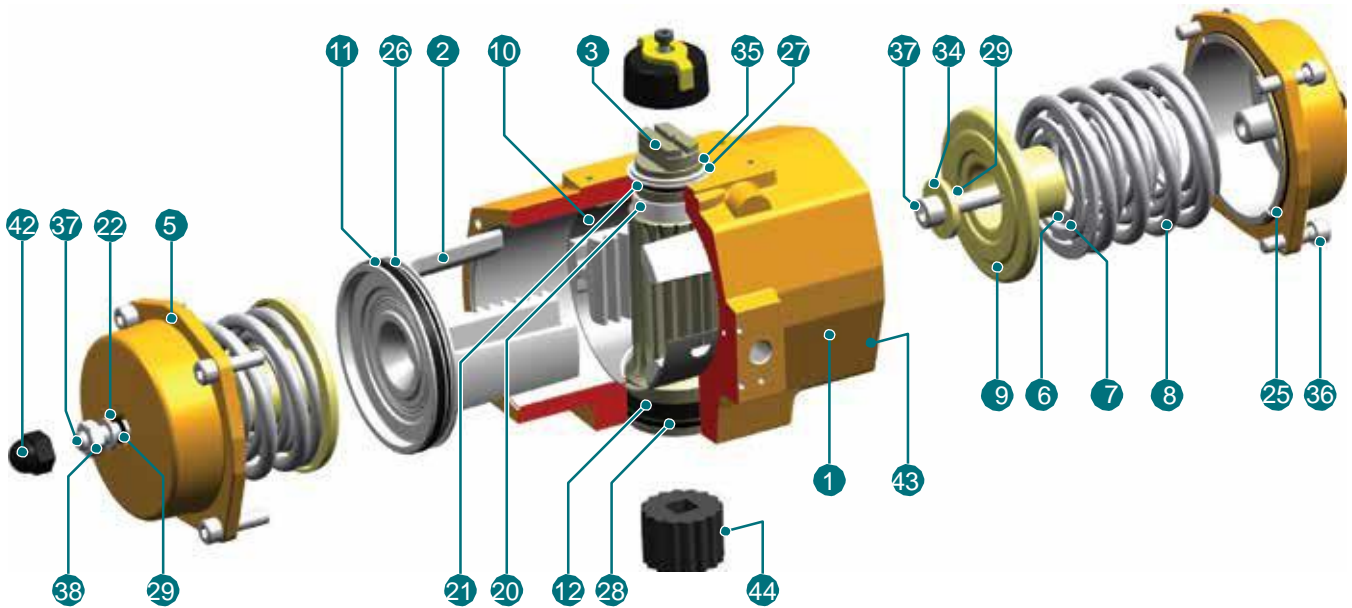
| ONTWERP | |
|-----------------------------|--------------------------------|
| Opbouw van magneetventielen | NAMUR Std. |
| Opbouw van toebehoren | NAMUR VDI, NAMUR VDE 3845 Std. |
| Aansluiting | ISO 5211, DIN 3337 |
| TESTEN EN CERTIFICATEN | |
| Veiligheid | ATEX II 2 GD, SIL3 |
| Kwaliteit | CE/PED, ISO9001 |



MATERIALEN:

| Pos. | Omschrijving | Materiaal |
|------|----------------------|---------------------|
| 1 | Huis | Gegoten aluminium |
| 2 | Zuiger | Gegoten aluminium |
| 3 | Aandrijfas | Aluminium |
| 4 | Deksel | Gegoten aluminium |
| 10 | Geleideband - huis | Nylatron |
| 11 | Geleideband - zuiger | Koolstofgevuld PTFE |
| 12 | Lagerbus | Nylatron |
| 20 | Lagerbus | Delrin |
| 21 | Afdichtring | Nitril |
| 23 | Sluitplaat | Nylon |
| 25 | O-ring - deksel | Nitril |
| 26 | O-ring - zuiger | Nitril |
| 27 | O-ring | ZEDEX 100 K |
| 28 | O-ring | Nitril |
| 30 | O-ring | Nitril |
| 35 | Borgring | Veerstaal |
| 36 | Dekselbout | Roestvaststaal |
| 40 | Bout | Roestvaststaal |
| 41 | Moer | Roestvaststaal |
| 42 | Moerbeschermkap | Polyethyleen |
| 43 | O-ring | Nitril |
| 44 | Insert | Aluminiumlegering |

Wijzigingen voorbehouden

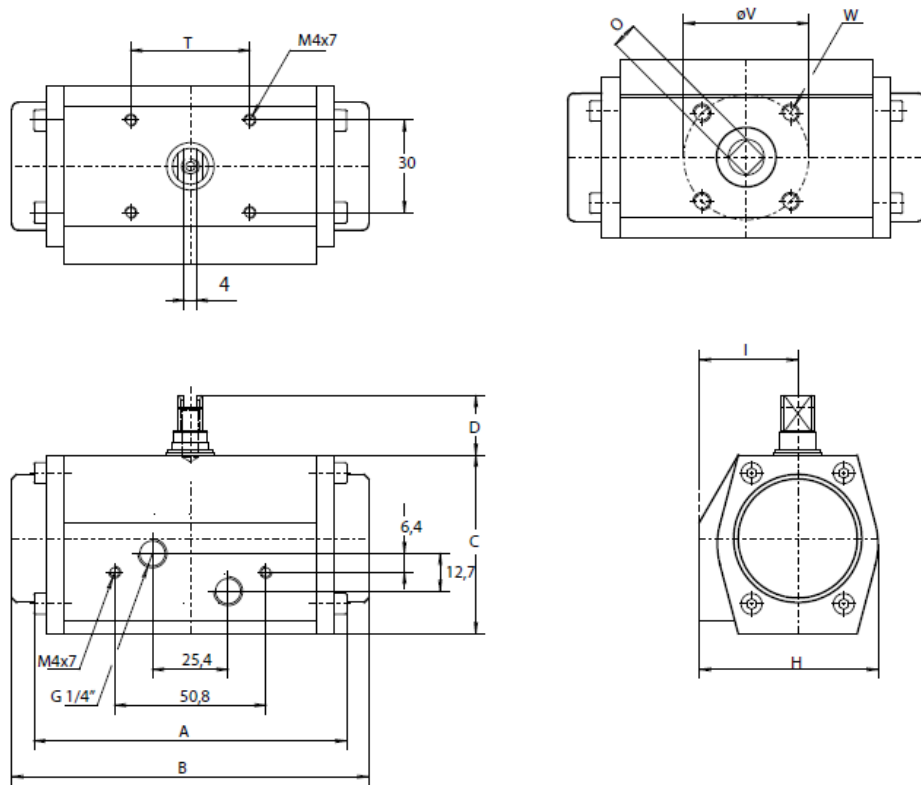


MATERIALEN:

| Pos. | Omschrijving | Materiaal |
|------|----------------------|---------------------|
| 1 | Huis | Gegoten aluminium |
| 2 | Zuiger | Gegoten aluminium |
| 3 | Aandrijfas | Aluminium |
| 5 | Deksel | Gegoten aluminium |
| 6 | Veer - binnen | Veerstaal |
| 7 | Veer - midden | Veerstaal |
| 8 | Veer - buiten | Veerstaal |
| 9 | Veerhouder | Staal |
| 10 | Geleideband - huis | Nylatron |
| 11 | Geleideband - zuiger | Koolstofgevuld PTFE |
| 12 | Lagerbus | Nylatron |
| 20 | Lagerbus | Delrin |
| 21 | Afdichtring | Nitril |
| 22 | Sluitplaat | Nylon |
| 25 | O-ring - deksel | Nitril |
| 26 | O-ring - zuiger | Nitril |
| 27 | O-ring | ZEDEX 100 K |
| 28 | O-ring | Nitril |
| 29 | O-ring | Nitril |
| 34 | Afdichtring | Staal |
| 35 | Borgring | Veerstaal |
| 36 | Dekselbout | Roestvaststaal |
| 37 | Bout | Roestvaststaal |
| 38 | Moer | Roestvaststaal |
| 42 | Moerbeschermkap | Polyethyleen |
| 43 | O-ring | Nitril / Staal |
| 44 | Insert | Aluminiumlegering |

Wijzigingen voorbehouden

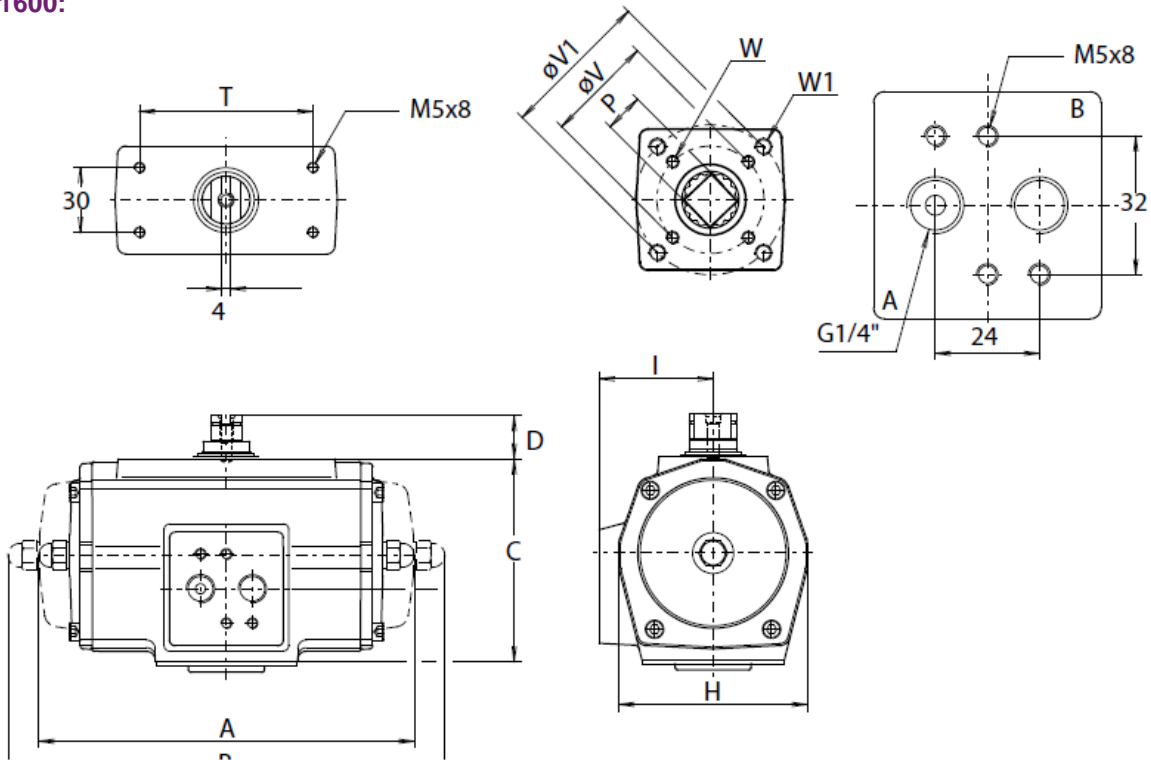
TYPE 12:



AFMETINGEN: (mm)

| TYPE | A | B | C | D | H | I | O | T | ISO 5211 | ϕV | W | kg |
|------|-----|-----|----|----|----|----|---|----|----------|----------|------|----|
| 0012 | 103 | 118 | 60 | 20 | 60 | 33 | 9 | 40 | F04 | 42 | M6x8 | |

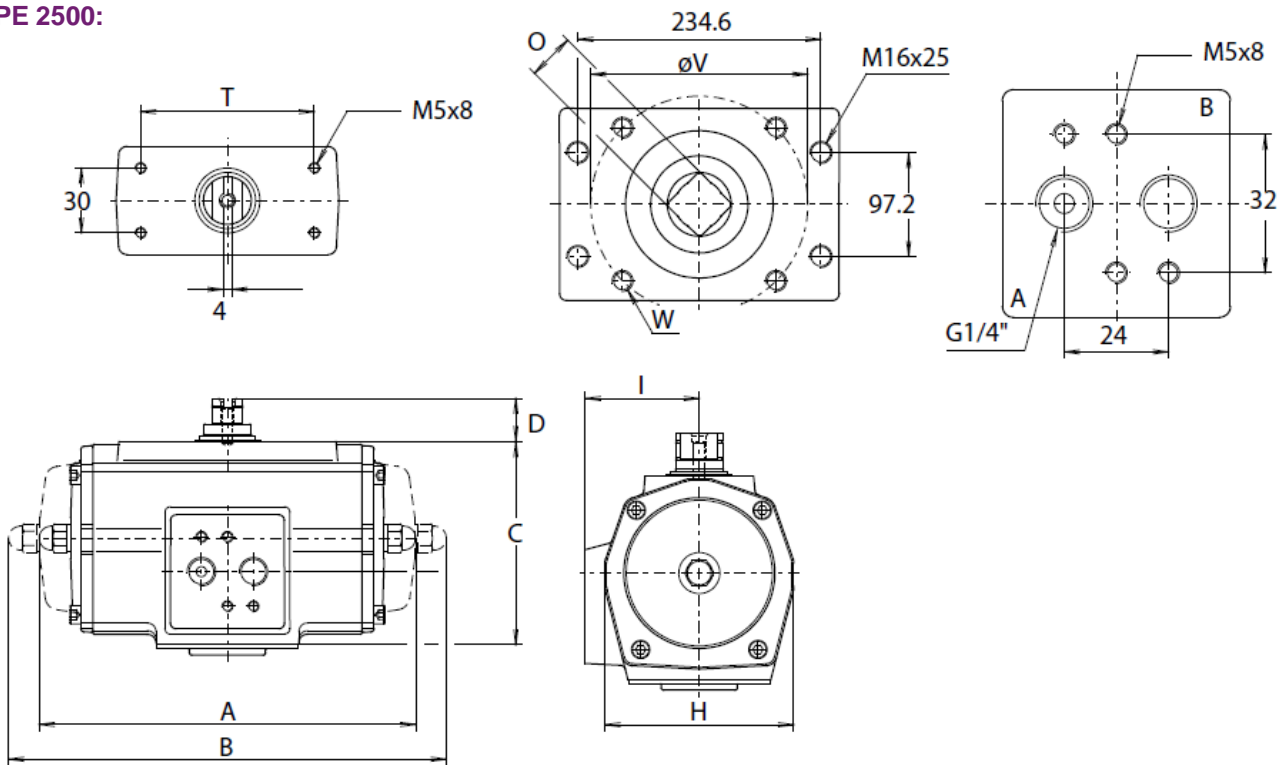
TYPE 25-1600:



AFMETINGEN: (mm)

| TYPE | A | B | C | D | H | I | P | T | ISO 5211 | ØV / ØV1 | W / W1 | kg |
|------|-----|-----|-----|----|-----|-----|----|-----|----------|----------|--------|----|
| 0025 | 159 | 172 | 80 | 20 | 74 | 46 | 11 | 80 | F03 | 36 | M5x8 | |
| | | | | | | | | | F05 | 50 | M6x10 | |
| 0040 | 180 | 204 | 93 | 20 | 86 | 53 | 14 | 80 | F05 | 50 | M6x10 | |
| | | | | | | | | | F07 | 70 | M8x13 | |
| 0065 | 199 | 249 | 105 | 20 | 98 | 58 | 14 | 80 | F05 | 50 | M6x10 | |
| | | | | | | | | | F07 | 70 | M8x13 | |
| 0100 | 221 | 267 | 118 | 20 | 108 | 63 | 17 | 80 | F05 | 50 | M6x10 | |
| | | | | | | | | | F07 | 70 | M8x13 | |
| 0150 | 254 | 310 | 140 | 20 | 121 | 70 | 17 | 80 | F07 | 70 | M8x13 | |
| | | | | | | | | | F10 | 102 | M10x16 | |
| 0200 | 283 | 360 | 143 | 20 | 128 | 73 | 22 | 80 | F07 | 70 | M8x13 | |
| | | | | | | | | | F10 | 102 | M10x16 | |
| 0350 | 305 | 387 | 181 | 20 | 173 | 95 | 22 | 80 | F07 | 70 | M8x13 | |
| | | | | | | | | | F10 | 102 | M10x16 | |
| 0600 | 387 | 477 | 220 | 30 | 207 | 113 | 27 | 130 | F10 | 102 | M10x16 | |
| | | | | | | | | | F12 | 125 | M12x20 | |
| 0900 | 424 | 517 | 259 | 30 | 231 | 126 | 36 | 130 | F10 | 102 | M10x16 | |
| | | | | | | | | | F14 | 140 | M16x25 | |
| 1600 | 516 | 637 | 297 | 30 | 265 | 142 | 46 | 130 | F16 | 165 | M20x30 | |

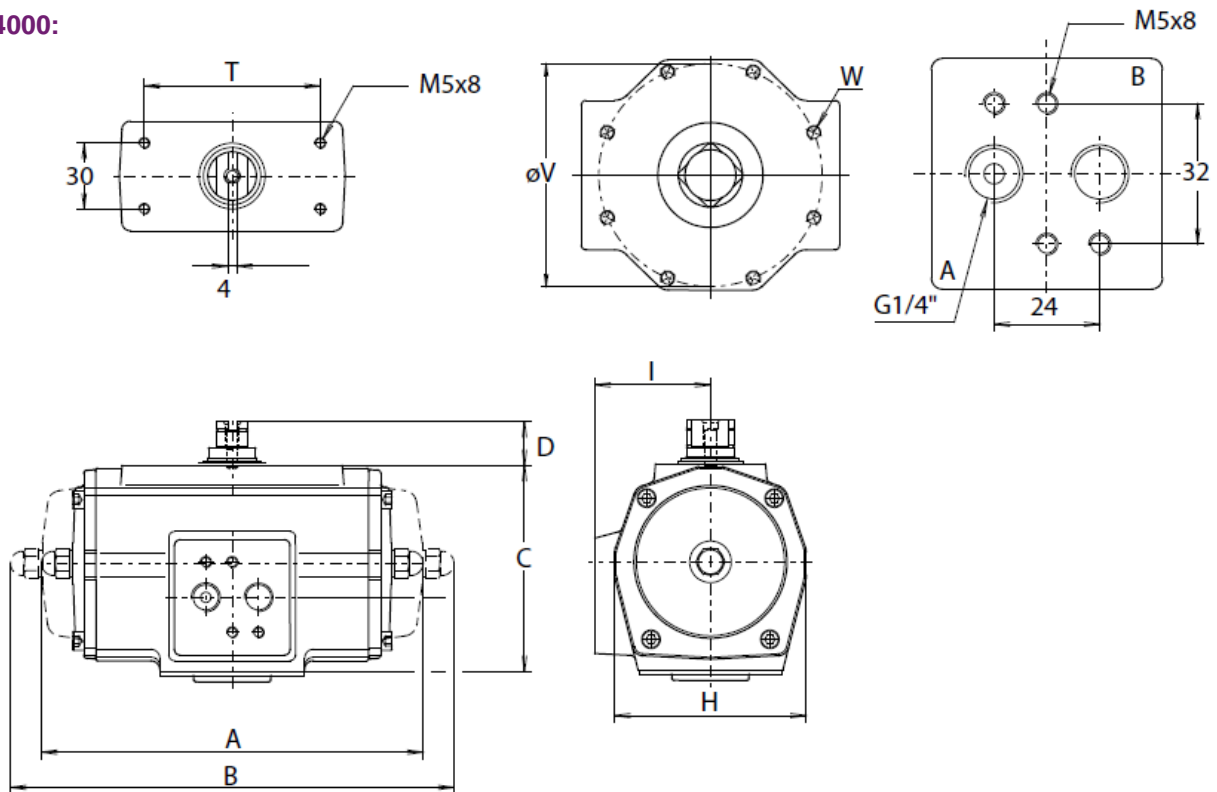
TYPE 2500:



AFMETINGEN: (mm)

| TYPE | A | B | C | D | H | I | O | T | ISO 5211 | ØV | W | kg |
|------|-----|-----|-----|----|-----|-----|----|-----|----------|-----|--------|----|
| 2500 | 378 | 570 | 356 | 30 | 350 | 183 | 46 | 130 | F16 | 165 | M20x30 | |

TYPE 4000:



AFMETINGEN: (mm)

| TYPE | A | B | C | D | H | I | O | T | ISO 5211 | ØV | W | kg |
|------|-----|-----|-----|----|-----|-----|----|-----|----------|-----|--------|----|
| 4000 | 502 | 834 | 380 | 30 | 380 | 200 | 55 | 130 | F25 | 254 | M16x25 | |

| TYPE PD | Draaimoment voor dubbelwerkende pneumatische bediening in Nm | | | | | | | | | | | | | | | | | | | | Kg | | |
|------------|--|-----|-------|-----|---------|-----|-------|-----|---------|-----|-------|-----|---------|-----|-------|-----|---------|-----|-------|-----|------|-------|------|
| | 2 bar | | 3 bar | | 3,5 bar | | 4 bar | | 4,5 bar | | 5 bar | | 5,5 bar | | 6 bar | | 6,5 bar | | 7 bar | | | 8 bar | |
| | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | | 0° | 90° |
| 12 | 5 | | 7 | | 9 | | 10 | | 11 | | 12 | | 13 | | 15 | | 16 | | 17 | | 20 | | 0,6 |
| 25 | 9 | | 13 | | 16 | | 18 | | 20 | | 23 | | 25 | | 27 | | 29 | | 32 | | 36 | | 1,3 |
| 40 | 17 | | 25 | | 29 | | 34 | | 38 | | 42 | | 47 | | 51 | | 55 | | 59 | | 68 | | 1,8 |
| 65 | 25 | | 38 | | 45 | | 51 | | 58 | | 64 | | 71 | | 77 | | 84 | | 90 | | 104 | | 2,4 |
| 100 | 38 | | 57 | | 66 | | 76 | | 86 | | 95 | | 105 | | 115 | | 124 | | 134 | | 153 | | 3,1 |
| 150 | 60 | | 91 | | 106 | | 122 | | 137 | | 153 | | 168 | | 183 | | 199 | | 214 | | 245 | | 4,8 |
| 200 | 82 | | 124 | | 146 | | 167 | | 188 | | 209 | | 230 | | 251 | | 272 | | 293 | | 335 | | 5,8 |
| 350 | 143 | | 216 | | 253 | | 290 | | 326 | | 363 | | 400 | | 436 | | 473 | | 510 | | 583 | | 10,4 |
| 600 | 243 | | 368 | | 430 | | 492 | | 554 | | 617 | | 679 | | 741 | | 804 | | 866 | | 991 | | 19,4 |
| 950 | 363 | | 549 | | 642 | | 735 | | 828 | | 921 | | 1014 | | 1107 | | 1200 | | 1293 | | 1479 | | 26,4 |
| 1600 | 600 | | 907 | | 1061 | | 1214 | | 1368 | | 1522 | | 1676 | | 1829 | | 1983 | | 2137 | | 2444 | | 42,7 |
| 2500 | 958 | | 1449 | | 1694 | | 1940 | | 2186 | | 2431 | | 2677 | | 2922 | | 3168 | | 3413 | | 3904 | | 56,8 |
| 4000 | 1623 | | 2456 | | 2872 | | 3289 | | 3705 | | 4121 | | 4537 | | 4954 | | 5370 | | 5786 | | 6619 | | 86,6 |

| TYPE PE | Verenpakket | Draaimoment voor enkelwerkende pneumatische bediening in Nm | | | | | | | | | | | | | | | | Veerslag | | Kg |
|---------|-------------|---|-----|---------|-----|-------|-----|---------|-----|------------|-----|---------|-----|-------|-----|-------|-----|----------|-------|-----|
| | | 3 bar | | 3,5 bar | | 4 bar | | 4,5 bar | | 5 bar | | 5,5 bar | | 6 bar | | 7 bar | | EINDE | START | |
| | | 0° | 90° | 90° | 90° | 90° | 90° | 90° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | | | |
| 12 | 2 | - | - | 4 | 1 | 5 | 2 | 6 | 4 | 8 | 5 | 9 | 6 | 10 | 8 | 13 | 10 | 5 | 7 | 0,7 |
| | 2 | 9 | 6 | 12 | 9 | 14 | 11 | 16 | 13 | 19 | 16 | 21 | 18 | 24 | 21 | 29 | 25 | 4 | 7 | |
| | 3 | 7 | 2 | 9 | 5 | 12 | 7 | 14 | 9 | 16 | 12 | 19 | 14 | 21 | 17 | 26 | 21 | 7 | 11 | |
| 25 | 4 | - | - | - | - | 9 | 3 | 11 | 5 | 14 | 8 | 16 | 10 | 19 | 13 | 23 | 17 | 9 | 14 | 1,7 |
| | 5 | - | - | - | - | - | - | - | - | 11 | 4 | 14 | 6 | 16 | 8 | 21 | 13 | 11 | 18 | |
| | 6 | - | - | - | - | - | - | - | - | - | - | - | - | 14 | 4 | 18 | 9 | 13 | 21 | |
| | 2 | 17 | 12 | 22 | 16 | 26 | 21 | 31 | 25 | 35 | 30 | 40 | 34 | 44 | 39 | 53 | 48 | 8 | 13 | |
| | 3 | 12 | 4 | 17 | 8 | 22 | 13 | 26 | 18 | 31 | 22 | 35 | 27 | 40 | 31 | 49 | 40 | 12 | 20 | |
| 40 | 4 | - | - | - | - | 17 | 5 | 21 | 10 | 26 | 14 | 30 | 19 | 35 | 23 | 44 | 33 | 17 | 26 | 2,4 |
| | 5 | - | - | - | - | - | - | - | - | 21 | 7 | 26 | 11 | 30 | 16 | 39 | 25 | 21 | 33 | |
| | 6 | - | - | - | - | - | - | - | - | - | - | - | - | 25 | 8 | 34 | 17 | 25 | 40 | |
| | 2 | 26 | 17 | 32 | 23 | 39 | 30 | 46 | 37 | 53 | 44 | 60 | 51 | 67 | 58 | 81 | 72 | 13 | 21 | |
| | 3 | 18 | 5 | 25 | 11 | 32 | 18 | 39 | 25 | 46 | 32 | 52 | 39 | 59 | 46 | 73 | 60 | 20 | 32 | |
| 65 | 4 | - | - | - | - | 24 | 6 | 31 | 13 | 38 | 20 | 45 | 27 | 52 | 34 | 66 | 48 | 26 | 42 | 3,6 |
| | 5 | - | - | - | - | - | - | - | - | 30 | 8 | 37 | 15 | 44 | 22 | 58 | 36 | 33 | 53 | |
| | 6 | - | - | - | - | - | - | - | - | - | - | - | - | 37 | 10 | 50 | 23 | 40 | 63 | |
| | 2 | 39 | 27 | 49 | 37 | 60 | 47 | 70 | 57 | 80 | 67 | 90 | 78 | 100 | 88 | 121 | 108 | 18 | 29 | |
| | 3 | 29 | 10 | 39 | 20 | 49 | 30 | 59 | 41 | 70 | 51 | 80 | 61 | 90 | 71 | 110 | 92 | 27 | 44 | |
| 100 | 4 | - | - | - | - | 39 | 14 | 49 | 24 | 59 | 34 | 69 | 44 | 80 | 54 | 100 | 75 | 37 | 58 | 4,6 |
| | 5 | - | - | - | - | - | - | - | - | 49 | 17 | 59 | 27 | 69 | 38 | 89 | 58 | 46 | 73 | |
| | 6 | - | - | - | - | - | - | - | - | - | - | - | - | 59 | 21 | 79 | 41 | 55 | 88 | |
| | 2 | 63 | 41 | 79 | 58 | 95 | 74 | 112 | 90 | 128 | 107 | 144 | 123 | 161 | 139 | 193 | 172 | 29 | 48 | |
| | 3 | 46 | 14 | 62 | 30 | 79 | 47 | 95 | 63 | 111 | 79 | 128 | 96 | 144 | 112 | 177 | 145 | 44 | 72 | |
| 150 | 4 | - | - | - | - | 62 | 19 | 78 | 36 | 95 | 52 | 111 | 68 | 127 | 85 | 160 | 117 | 58 | 95 | 6,9 |
| | 5 | - | - | - | - | - | - | - | - | 78 | 24 | 94 | 41 | 110 | 57 | 143 | 90 | 73 | 119 | |
| | 6 | - | - | - | - | - | - | - | - | - | - | - | - | 94 | 30 | 126 | 62 | 88 | 143 | |
| | 2 | 85 | 57 | 107 | 79 | 130 | 101 | 152 | 124 | 174 | 146 | 197 | 169 | 219 | 191 | 264 | 236 | 41 | 65 | |
| | 3 | 62 | 19 | 84 | 42 | 106 | 64 | 129 | 86 | 151 | 109 | 173 | 131 | 196 | 153 | 240 | 198 | 61 | 98 | |
| 200 | 4 | - | - | - | - | 83 | 26 | 105 | 49 | 127 | 71 | 150 | 93 | 172 | 116 | 217 | 160 | 82 | 131 | 9,1 |
| | 5 | - | - | - | - | - | - | - | - | 104 | 33 | 126 | 56 | 149 | 78 | 193 | 123 | 102 | 164 | |
| | 6 | - | - | - | - | - | - | - | - | - | - | - | - | 125 | 41 | 170 | 85 | 123 | 196 | |

| | | Draaimoment voor enkelwerkende pneumatische bediening in Nm | | | | | | | | | | | | | | | | Veerslag | | Kg | |
|---------|--------------|---|------|---------|------|-------|------|---------|------|-------|------|---------|------|-------|------|-------|------|----------|-------|------|--|
| TYPE PE | Veren-pakket | 3 bar | | 3,5 bar | | 4 bar | | 4,5 bar | | 5 bar | | 5,5 bar | | 6 bar | | 7 bar | | EINDE | START | | |
| | | 0° | 90° | 90° | 90° | 90° | 90° | 90° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | 0° | 90° | | | | |
| | 2 | 144 | 96 | 183 | 135 | 221 | 174 | 260 | 213 | 299 | 252 | 338 | 290 | 377 | 329 | 454 | 407 | 74 | 116 | | |
| | 3 | 101 | 30 | 140 | 68 | 179 | 107 | 217 | 146 | 256 | 185 | 295 | 224 | 334 | 263 | 412 | 340 | 112 | 174 | | |
| | 350 | 4 | - | - | - | - | 136 | 41 | 175 | 80 | 214 | 118 | 252 | 157 | 291 | 196 | 369 | 274 | 149 | | |
| | 5 | - | - | - | - | - | - | - | - | 171 | 52 | 210 | 91 | 249 | 130 | 326 | 207 | 186 | 289 | | |
| | 6 | - | - | - | - | - | - | - | - | - | - | - | - | 206 | 63 | 283 | 141 | 223 | 347 | | |
| | 2 | 249 | 166 | 315 | 232 | 381 | 298 | 447 | 364 | 513 | 430 | 579 | 496 | 645 | 562 | 777 | 694 | 122 | 195 | | |
| | 3 | 179 | 54 | 245 | 120 | 311 | 186 | 377 | 252 | 443 | 318 | 509 | 384 | 575 | 450 | 707 | 582 | 183 | 292 | | |
| | 600 | 4 | - | - | - | - | 240 | 74 | 306 | 140 | 372 | 206 | 438 | 272 | 504 | 338 | 636 | 470 | 245 | | |
| | 5 | - | - | - | - | - | - | - | - | 302 | 94 | 368 | 160 | 434 | 226 | 566 | 358 | 306 | 487 | | |
| | 6 | - | - | - | - | - | - | - | - | - | - | - | - | 364 | 114 | 496 | 246 | 367 | 584 | | |
| | 2 | 375 | 249 | 474 | 347 | 572 | 446 | 671 | 544 | 769 | 643 | 868 | 741 | 966 | 840 | 1163 | 1037 | 179 | 290 | | |
| | 3 | 272 | 82 | 371 | 181 | 469 | 279 | 568 | 378 | 666 | 476 | 765 | 575 | 863 | 673 | 1060 | 870 | 269 | 434 | | |
| | 950 | 4 | - | - | - | - | 366 | 113 | 465 | 211 | 563 | 310 | 662 | 408 | 760 | 507 | 957 | 704 | 359 | | |
| | 5 | - | - | - | - | - | - | - | - | 460 | 143 | 559 | 242 | 657 | 340 | 854 | 537 | 448 | 724 | | |
| | 6 | - | - | - | - | - | - | - | - | - | - | - | - | 554 | 174 | 751 | 371 | 538 | 869 | | |
| | 2 | 617 | 416 | 780 | 579 | 943 | 742 | 1106 | 905 | 1269 | 1068 | 1432 | 1231 | 1594 | 1394 | 1920 | 1719 | 299 | 474 | | |
| | 3 | 445 | 144 | 608 | 307 | 771 | 470 | 934 | 633 | 1097 | 796 | 1260 | 959 | 1423 | 1121 | 1748 | 1447 | 449 | 711 | | |
| | 1600 | 4 | - | - | - | - | 599 | 198 | 762 | 361 | 925 | 523 | 1088 | 686 | 1251 | 849 | 1577 | 1175 | 598 | | |
| | 5 | - | - | - | - | - | - | - | - | 753 | 251 | 916 | 414 | 1079 | 577 | 1405 | 903 | 748 | 1184 | | |
| | 6 | - | - | - | - | - | - | - | - | - | - | - | - | 907 | 305 | 1233 | 630 | 897 | 1421 | | |
| | 6 | 896 | 602 | 1142 | 848 | 1387 | 1093 | 1633 | 1339 | 1879 | 1585 | 2124 | 1830 | 2370 | 2076 | 2861 | 2567 | 497 | 792 | | |
| | 8 | 712 | 320 | 958 | 566 | 1203 | 811 | 1449 | 1057 | 1694 | 1302 | 1940 | 1548 | 2186 | 1794 | 2677 | 2285 | 663 | 1056 | | |
| | 10 | - | - | 774 | 284 | 1019 | 529 | 1265 | 775 | 1510 | 1020 | 1756 | 1266 | 2001 | 1511 | 2492 | 2002 | 829 | 1321 | 88,2 | |
| | 12 | - | - | - | - | 835 | 247 | 1081 | 492 | 1326 | 738 | 1572 | 984 | 1817 | 1229 | 2308 | 1720 | 995 | 1585 | | |
| | 14 | - | - | - | - | - | - | - | - | 1142 | 456 | 1387 | 701 | 1633 | 947 | 2124 | 1438 | 1160 | 1849 | | |
| | 6 | 1524 | 1028 | 1940 | 1444 | 2356 | 1860 | 2772 | 2276 | 3189 | 2693 | 3605 | 3109 | 4021 | 3525 | 4854 | 4358 | 839 | 1337 | | |
| | 8 | 1213 | 551 | 1629 | 968 | 2045 | 1384 | 2462 | 1800 | 2878 | 2216 | 3294 | 2633 | 3710 | 3049 | 4543 | 3882 | 1119 | 1783 | | |
| | 4000 | 10 | - | - | 1318 | 491 | 1734 | 908 | 2151 | 1324 | 2567 | 1740 | 2983 | 2157 | 3400 | 2573 | 4232 | 3405 | 1399 | | |
| | 12 | - | - | - | - | 1424 | 431 | 1840 | 848 | 2256 | 1264 | 2672 | 1680 | 3089 | 2097 | 3921 | 2929 | 1679 | 2674 | | |
| | 14 | - | - | - | - | - | - | - | - | 1945 | 788 | 2362 | 1204 | 2778 | 1620 | 3610 | 2453 | 1958 | 3120 | | |

| TYPE | Luchtvolume (l) | | Bedrijfstijd (s) |
|------|-----------------|---------|------------------|
| | Openen | Sluiten | |
| 12 | 0,1 | 0,1 | 0,4 |
| 25 | 0,1 | 0,1 | 0,5 |
| 40 | 0,2 | 0,2 | 0,7 |
| 65 | 0,3 | 0,4 | 1,1 |
| 100 | 0,4 | 0,5 | 1,2 |
| 150 | 0,73 | 0,65 | 1,8 |
| 200 | 0,8 | 1 | 2,3 |
| 350 | 1,8 | 1,9 | 3,6 |
| 600 | 2,9 | 3,1 | 4,5 |
| 950 | 4,7 | 4,9 | 5,4 |
| 1600 | 7,3 | 8 | 6,9 |
| 2500 | 8 | 9,3 | 7,0 |
| 4000 | 13,5 | 17,5 | 12,0 |

Gebruiksduur is gemiddeld met aandrijving onder belasting en gemonteerd magneetventiel

Het luchtverbruik is het vrij luchtvolume bij 1 atm