

PRODUCT CATALOGUE

Drive Solutions for Conveyor Applications



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1. Introduction to Santasalo conveyor gear unit series

In addition to standard bevel helical and helical D-series gear units, Santasalo offers two bevel helical gear unit series designed specifically for conveyors. The D3RSF.CV series gear units are designed for regular conveyor applications and the high thermal XO series gear units offer an explosion proof design with self align flange mount connection for electric motors.

Santasalo is fulfilling the most demanding needs of conveyor applications with these products. Our conveyor gear units can be delivered on a turnkey basis - from 3D planning, engineering and manufacturing complete with accessories through to start up and customer training.

High quality for process reliability

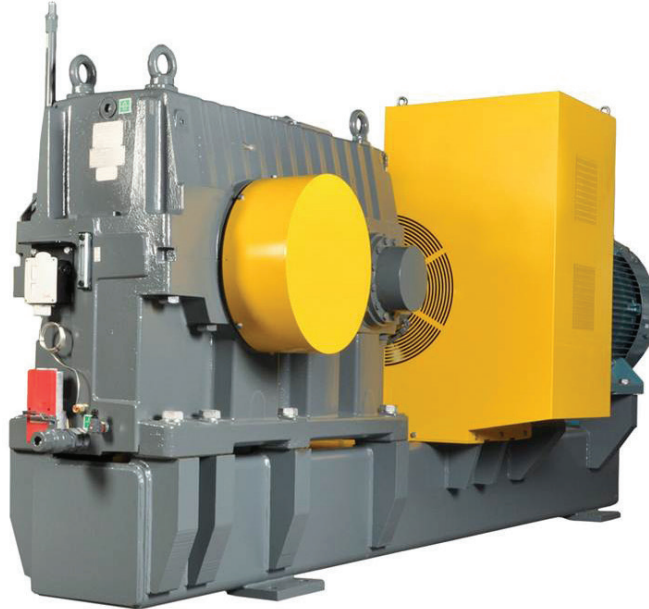
With our design expertise and manufacturing competence, we offer solutions to enhance process reliability. The Santasalo conveyor gear series are built on decades of experience in layout engineering, complete design of components and manufacturing of gear units for heavy-duty applications. All key manufacturing processes are performed in-house to ensure that all process stages achieve a consistently high level of quality. Reliability combined with easy maintenance contributes to maximum uptime and minimum downtime.

Life-cycle support for efficient process performance

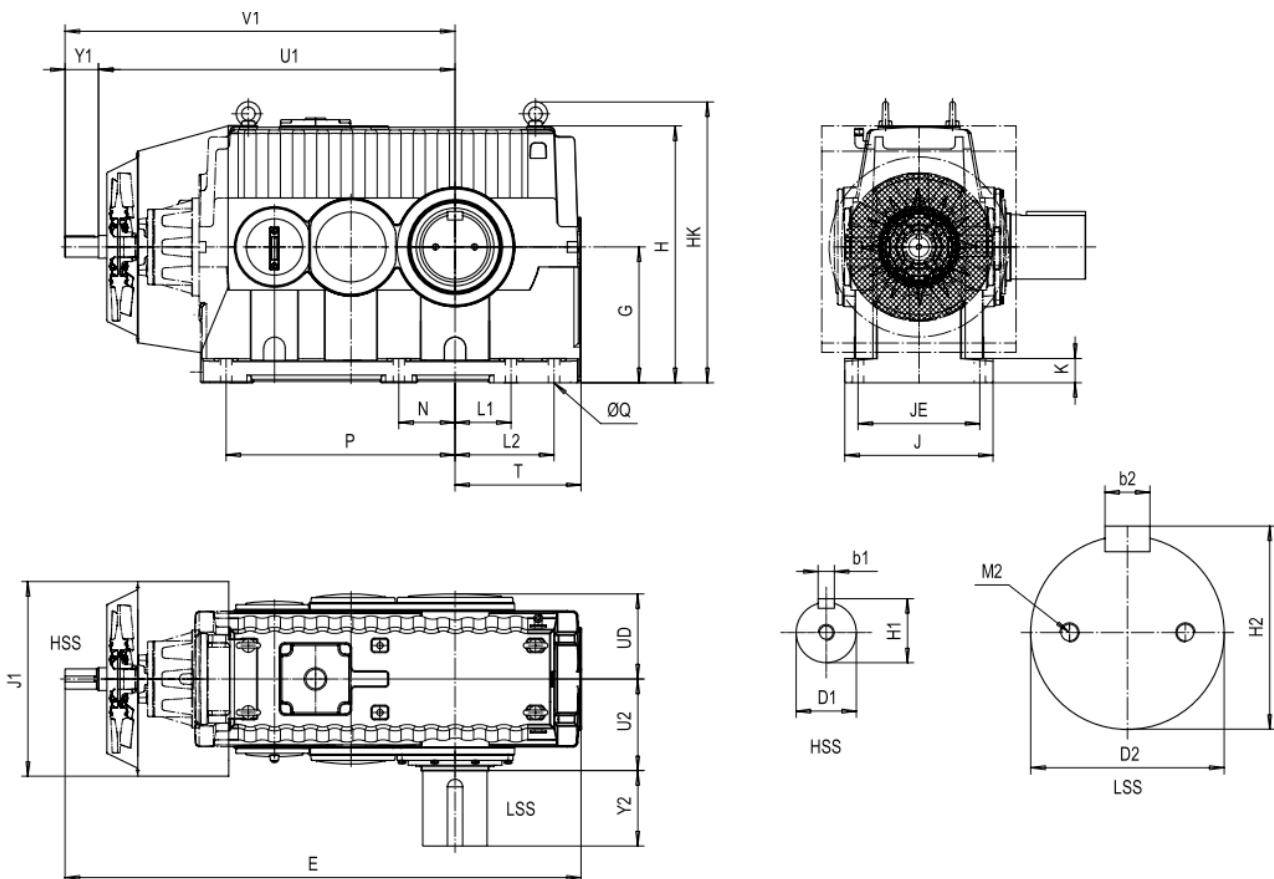
The Santasalo conveyor gear series incorporates flexible design features and comprehensive product support to reduce maintenance costs throughout the complete life-cycle of the mechanical drive solution.

To improve serviceability, features like a horizontal split plane design, correctly positioned lifting points and generously sized visual inspection covers are taken into account during engineering and design phases. Santasalo can be relied on for upgrades, rebuilds and spare parts according to original design specifications. Application manuals, comprehensive documentation and detailed histories of each gear unit serviced at one of our Santasalo Service Centres facilitate fast and efficient maintenance services.

2. Conveyor Gear Unit Series D3RSF50CV-D3RSF95CV



2.1 Gear Unit Dimensions



| Housing dimensions in mm | | | | | | | | | | | | | | |
|--------------------------|------|-----|------|------|-------|-----|----|-----|-----|-----|-----|-----|-----|----|
| Size | E | G | H | HK | J1 X) | J | K | JE | L1 | L2 | N | P | T | ØQ |
| 50 | 1450 | 350 | 660 | 731 | 600 | 396 | 65 | 330 | 148 | 245 | 148 | 600 | 325 | 28 |
| 60 | 1627 | 400 | 755 | 845 | 600 | 460 | 76 | 378 | 170 | 300 | 170 | 700 | 373 | 35 |
| 70 | 1809 | 460 | 870 | 960 | 725 | 506 | 82 | 416 | 194 | 322 | 194 | 800 | 427 | 35 |
| 80 | 1923 | 505 | 955 | 1045 | 725 | 552 | 90 | 454 | 209 | 369 | 209 | 853 | 470 | 42 |
| 90 | 2172 | 550 | 1040 | 1149 | 800 | 584 | 97 | 480 | 228 | 418 | 228 | 945 | 512 | 42 |
| 95 | 2317 | 500 | 980 | 1090 | 800 | 634 | 75 | 535 | 410 | - | 335 | 990 | 500 | 42 |

| LSS dimensions in mm | | | | | | | | | | | | |
|----------------------|-------------------------|-------|-----|-----|-----|----------------------|------|-----|-------|-----|-----|-----|
| Size | Solid shaft without key | | | | | Solid shaft with key | | | | | | |
| | D2 | M2 | Y2 | U2 | UD | D2 | b2 | H2 | M2 | Y2 | U2 | UD |
| 50 | 140h8 | M30 | 200 | 232 | 216 | 140m6 | 36h9 | 148 | M30 | 200 | 232 | 216 |
| 60 | 160h8 | M30 | 240 | 261 | 245 | 160m6 | 40h9 | 169 | M30 | 240 | 261 | 245 |
| 70 | 180h8 | M30 | 240 | 281 | 274 | 180m6 | 45h9 | 190 | M30 | 240 | 281 | 274 |
| 80 | 200h8 | 2xM20 | 280 | 315 | 290 | 200m6 | 45h9 | 210 | 2xM20 | 280 | 315 | 290 |
| 90 | 220h8 | 2xM20 | 280 | 337 | 314 | 220m6 | 50h9 | 231 | 2xM20 | 280 | 337 | 314 |
| 95 | 270h8 | 2xM24 | 350 | 390 | 367 | 270m6 | 63h9 | 287 | 2xM24 | 350 | 390 | 367 |

X) With sheet metal guards

| HSS dimensions in mm | | | | | | | | | | | | | Weight | Oil Capacity |
|----------------------|-------------------|-----|------|-------|------|------|------------------|------|-------|------|------|------|--------|--------------|
| Size | Ratio i=14 ... 56 | | | | | | Ratio i=63... 80 | | | | | | | |
| | U1 | Y1 | V1 | D1 | b1 | H1 | Y1 | V1 | D1 | b1 | H1 | kg | kg | l |
| 50 | 972 | 125 | 1097 | 75m6 | 20h9 | 79.5 | 125 | 1097 | 65m6 | 18h9 | 69 | 860 | 860 | 62 |
| 60 | 1129 | 150 | 1279 | 85m6 | 22h9 | 90 | 125 | 1254 | 75m6 | 20h9 | 79.5 | 1290 | 1290 | 92 |
| 70 | 1232 | 150 | 1382 | 90m6 | 25h9 | 95 | 150 | 1382 | 80m6 | 22h9 | 85 | 1900 | 1900 | 144 |
| 80 | 1328 | 150 | 1478 | 95m6 | 25h9 | 100 | 150 | 1478 | 85m6 | 22h9 | 90 | 2390 | 2390 | 185 |
| 90 | 1510 | 190 | 1700 | 100m6 | 28h9 | 106 | 150 | 1660 | 90m6 | 25h9 | 95 | 3170 | 3170 | 227 |
| 95 | 1602 | 215 | 1817 | 115m6 | 32h9 | 122 | 190 | 1792 | 100m6 | 28h9 | 106 | 3560 | 3560 | 220 |

2.2 Nominal mechanical power ratings

| Nominal power / kW, when FS=1 | | | | | | | | | | | | | | | | | |
|-------------------------------|-------------------------|------|------|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|
| | Nominal Ratio n1/rpm | 14 | 16 | 18 | 20 | 22.5 | 25 | 28 | 31.5 | 35.5 | 40 | 45 | 50 | 56 | 63 | 71 | 80 |
| D3RSF50CV | 1800 | 376 | 376 | 376 | 354 | 292 | 278 | 249 | 228 | 194 | 171 | 163 | 135 | 132 | 108 | 94.8 | 79.6 |
| | 1500 | 331 | 331 | 331 | 299 | 245 | 232 | 207 | 190 | 162 | 143 | 136 | 112 | 110 | 94.8 | 79.1 | 66.1 |
| | 1200 | 283 | 283 | 269 | 244 | 197 | 186 | 166 | 152 | 130 | 115 | 109 | 89.7 | 88 | 75.7 | 63.4 | 52.7 |
| | 1000 | 248 | 248 | 224 | 206 | 165 | 155 | 138 | 127 | 109 | 95.8 | 91 | 74.6 | 73.5 | 63 | 52.9 | 43.9 |
| D3RSF60CV | 1800 | 534 | 534 | 514 | 514 | 482 | 433 | 375 | 321 | 319 | 273 | 246 | 212 | 188 | 152 | 129 | 129 |
| | 1500 | 449 | 449 | 449 | 449 | 424 | 367 | 315 | 304 | 272 | 218 | 198 | 177 | 156 | 134 | 107 | 107 |
| | 1200 | 362 | 362 | 362 | 362 | 353 | 296 | 253 | 214 | 195 | 174 | 158 | 142 | 125 | 112 | 85.3 | 85.3 |
| | 1000 | 304 | 304 | 304 | 303 | 294 | 248 | 212 | 179 | 162 | 145 | 132 | 118 | 105 | 93.1 | 71 | 71 |
| D3RSF70CV | 1800 | 815 | 815 | 793 | 694 | 625 | 566 | 517 | 472 | 413 | 374 | 333 | 301 | 276 | 247 | 214 | 197 |
| | 1500 | 718 | 718 | 668 | 586 | 528 | 478 | 437 | 399 | 349 | 315 | 281 | 253 | 232 | 206 | 178 | 165 |
| | 1200 | 583 | 583 | 543 | 476 | 430 | 389 | 355 | 325 | 283 | 256 | 229 | 203 | 186 | 165 | 142 | 132 |
| | 1000 | 485 | 485 | 459 | 403 | 363 | 329 | 300 | 274 | 239 | 217 | 194 | 169 | 155 | 138 | 118 | 111 |
| D3RSF80CV | 1800 | 946 | 946 | 935 | 893 | 803 | 723 | 626 | 581 | 530 | 472 | 428 | 389 | 346 | 325 | 291 | 214 |
| | 1500 | 832 | 832 | 823 | 753 | 678 | 610 | 525 | 490 | 448 | 399 | 361 | 327 | 289 | 274 | 245 | 178 |
| | 1200 | 698 | 698 | 679 | 612 | 550 | 496 | 423 | 399 | 363 | 323 | 290 | 262 | 232 | 224 | 195 | 142 |
| | 1000 | 585 | 585 | 574 | 517 | 465 | 420 | 354 | 335 | 303 | 269 | 242 | 219 | 193 | 190 | 162 | 118 |
| D3RSF90CV | 1800 | | | | | | | | | | | | 481 | 445 | 445 | 311 | 228 |
| | 1500 | 1057 | 1057 | 1057 | 1015 | 949 | 858 | 746 | 663 | 609 | 543 | 479 | 405 | 372 | 372 | 259 | 189 |
| | 1200 | 854 | 854 | 854 | 854 | 758 | 686 | 597 | 530 | 487 | 434 | 383 | 327 | 299 | 298 | 206 | 151 |
| | 1000 | 716 | 716 | 716 | 716 | 631 | 571 | 497 | 442 | 406 | 362 | 320 | 276 | 250 | 248 | 172 | 125 |
| D3RSF95CV | 1800 | | | | | | | | | | | | | 657 | 607 | 541 | 422 |
| | 1500 | 1707 | 1594 | 1594 | 1594 | 1439 | 1282 | 1112 | 989 | 879 | 782 | 705 | 627 | 551 | 506 | 451 | 352 |
| | 1200 | 1460 | 1364 | 1364 | 1297 | 1152 | 1024 | 889 | 791 | 703 | 625 | 564 | 502 | 439 | 405 | 361 | 281 |
| | 1000 | 1273 | 1143 | 1138 | 1080 | 959 | 853 | 740 | 659 | 586 | 521 | 470 | 418 | 365 | 338 | 301 | 235 |

2.3 Nominal output torque

| Nominal output torque / kNm, when FS=1 / n1=1500 1/min | | | | | | | | | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 14.0 | 16.0 | 18.0 | 20.0 | 22.5 | 25.0 | 28.0 | 31.5 | 35.5 | 40.0 | 45.0 | 50.0 | 56.0 | 63.0 | 71.0 | 80.0 |
| D3RSF50CV | 27.6 | 31.2 | 35.6 | 36.6 | 34.4 | 36.2 | 36.2 | 36.2 | 34.8 | 38.1 | 36.2 | 34.2 | 37.9 | 36.6 | 34.6 | 32.6 |
| D3RSF60CV | 37.5 | 42.4 | 48.3 | 55.0 | 59.5 | 57.3 | 55.0 | 57.9 | 58.3 | 58.1 | 52.7 | 54.0 | 53.8 | 51.7 | 46.8 | 52.8 |
| D3RSF70CV | 60.0 | 67.7 | 71.8 | 71.7 | 74.1 | 74.6 | 76.3 | 76.0 | 74.9 | 83.9 | 74.8 | 77.3 | 80.0 | 79.5 | 77.9 | 81.5 |
| D3RSF80CV | 69.5 | 78.5 | 88.5 | 92.2 | 95.2 | 95.2 | 91.7 | 93.4 | 96.1 | 106.3 | 96.1 | 99.9 | 99.6 | 105.8 | 107.3 | 87.9 |
| D3RSF90CV | 88.3 | 99.7 | 113.6 | 124.2 | 133.2 | 133.9 | 130.3 | 126.3 | 130.6 | 144.6 | 127.6 | 123.7 | 128.3 | 143.6 | 113.4 | 93.3 |
| D3RSF95CV | 142.6 | 150.4 | 171.3 | 195.1 | 202.0 | 200.0 | 194.2 | 188.4 | 188.6 | 208.3 | 187.8 | 191.5 | 190.0 | 195.3 | 197.4 | 173.8 |

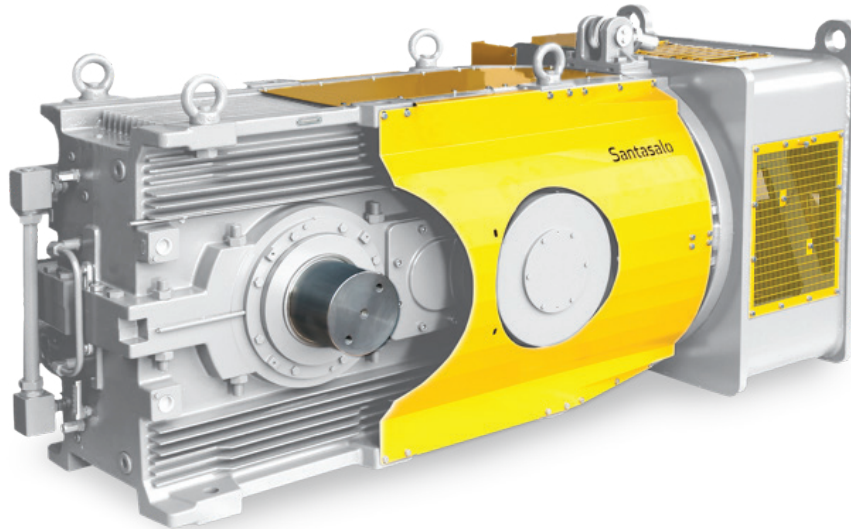
2.4 Exact gear ratios

| Nominal gear ratio | | | | | | | | | | | | | | | | |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 14 | 16 | 18 | 20 | 22.5 | 25 | 28 | 31.5 | 35.5 | 40 | 45 | 50 | 56 | 63 | 71 | 80 |
| D3RSF50CV | 13.730 | 15.508 | 17.666 | 20.118 | 23.076 | 25.647 | 28.707 | 31.316 | 35.260 | 43.776 | 43.776 | 50.191 | 56.667 | 63.445 | 71.952 | 81.177 |
| D3RSF60CV | 14.203 | 16.042 | 17.800 | 19.972 | 22.196 | 25.114 | 28.725 | 32.152 | 35.398 | 39.562 | 43.503 | 48.670 | 55.102 | 61.944 | 69.885 | 80.439 |
| D3RSF70CV | 14.069 | 15.800 | 17.609 | 20.217 | 22.612 | 25.528 | 28.149 | 31.047 | 35.342 | 39.381 | 44.586 | 50.311 | 55.102 | 61.944 | 69.885 | 80.439 |
| D3RSF80CV | 14.279 | 16.213 | 18.347 | 20.480 | 23.111 | 25.848 | 29.691 | 32.741 | 36.111 | 40.806 | 45.469 | 50.298 | 56.945 | 62.149 | 69.866 | 78.824 |
| D3RSF90CV | 14.216 | 16.150 | 18.063 | 20.168 | 23.121 | 25.554 | 29.354 | 33.065 | 35.957 | 40.360 | 45.741 | 49.653 | 56.945 | 63.953 | 71.752 | 81.111 |
| D3RSF95CV | 14.223 | 15.881 | 17.700 | 20.194 | 22.724 | 25.532 | 29.405 | 33.039 | 37.171 | 41.765 | 46.343 | 52.071 | 56.840 | 61.309 | 68.887 | 78.846 |

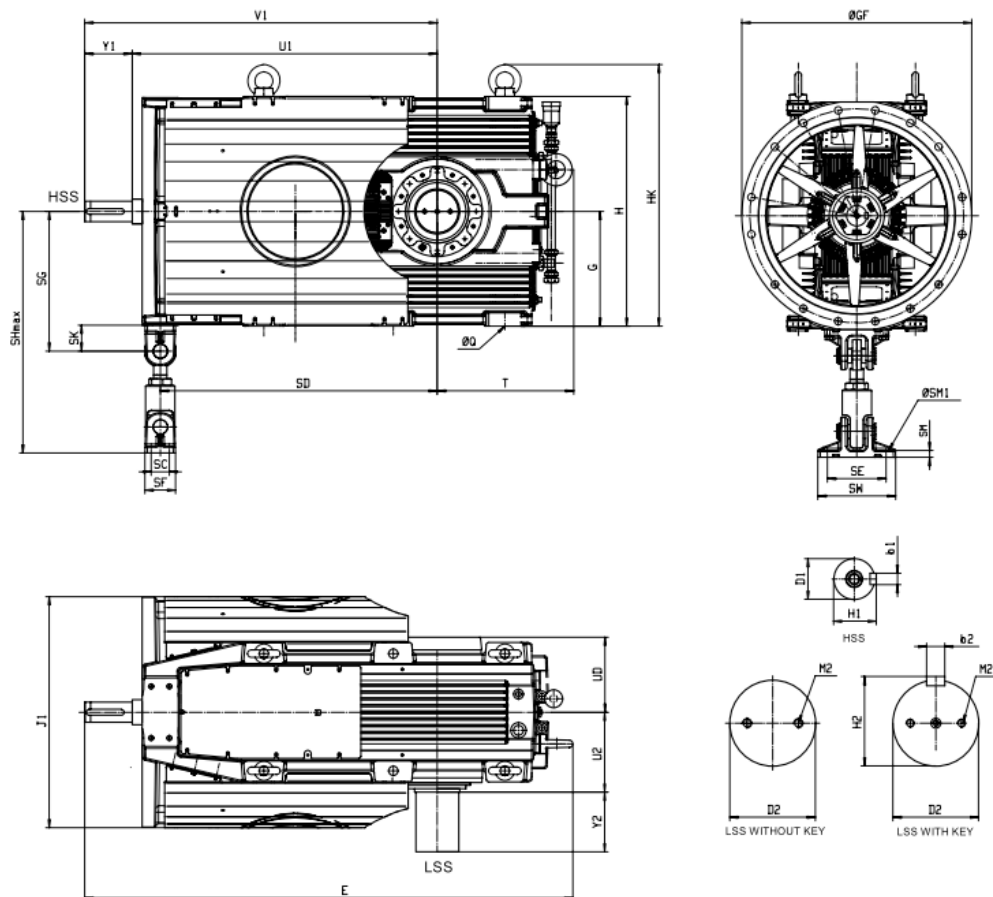
2.5 Thermal ratings

| Thermal ratings PTN in kW (n1=1500 1/min) Oil surface temperature in the sump 90 °C / Synthetic oil | | | | | | | | | | | | |
|---|--------------|-------|-------|-------|--------------|-------|-------|-------|--------------|-------|-------|-------|
| Gear ratio | in = 14...25 | | | | in = 28...45 | | | | in = 50...80 | | | |
| | 20 °C | 30 °C | 40 °C | 50 °C | 20 °C | 30 °C | 40 °C | 50 °C | 20 °C | 30 °C | 40 °C | 50 °C |
| D3RSF50CV | 270 | 216 | 162 | 107 | 286 | 232 | 178 | 124 | 298 | 244 | 190 | 136 |
| D3RSF60CV | 331 | 264 | 198 | 132 | 351 | 284 | 218 | 151 | 366 | 299 | 233 | 166 |
| D3RSF70CV | 401 | 320 | 240 | 159 | 425 | 344 | 264 | 183 | 442 | 362 | 282 | 201 |
| D3RSF80CV | 470 | 376 | 281 | 187 | 498 | 404 | 310 | 215 | 519 | 425 | 331 | 236 |
| D3RSF90CV | 557 | 445 | 334 | 222 | 591 | 479 | 367 | 255 | 616 | 504 | 392 | 280 |
| D3RSF95CV | 575 | 459 | 344 | 229 | 609 | 494 | 378 | 263 | 635 | 520 | 404 | 289 |

3. High thermal rating conveyor gear unit series D3RST50XO-D3RST110XO



3.1 Gear Unit Dimensions



| Housing dimensions in mm | | | | | | | | | | | | | | | Motor flange connection | | | |
|--------------------------|------|-----|-----|------|------|-------|-----|----|------|-----|-----|-----|-----|----|-------------------------|-----|------|-----|
| Size | E | EB | G | H | HK | J1 X) | J2 | K | P | L | N | T | JE | ØQ | ØS8 | E8 | ØGF | ØE6 |
| 60 | 1573 | 483 | 460 | 920 | 1030 | 880 | 520 | 55 | 650 | 280 | 170 | 570 | 450 | 35 | 26 | 840 | 900 | 780 |
| 70 | 1805 | 495 | 510 | 1020 | 1160 | 1030 | 620 | 65 | 770 | 300 | 195 | 600 | 520 | 42 | 33 | 950 | 1020 | 870 |
| 82 | 2006 | 556 | 530 | 1060 | 1200 | 1030 | 670 | 65 | 850 | 340 | 230 | 630 | 580 | 42 | 33 | 950 | 1020 | 870 |
| 110 | 3135 | 625 | 645 | 1290 | 1445 | 1520 | 820 | 95 | 1250 | 470 | 340 | 780 | 690 | 54 | 0 | 0 | 0 | 0 |

| LSS dimensions in mm | | | | | | | | | | | | | | | | |
|----------------------|-------------------------|-----|-----|-----|-----|----------------------|------|-------|-----|-----|-----|-----|-------------------------------|-------|------|------|
| Size | Solid shaft without key | | | | | Solid shaft with key | | | | | | | Motor flange connection XO110 | | | |
| | D2 | M2 | Y2 | U2 | UD | D2 | b2 | H2 | M2 | Y2 | U2 | UD | Y110 | ØE110 | h110 | W110 |
| 60 | 180h8 | M20 | 230 | 280 | 280 | 180m6 | 45h9 | 190 | M20 | 240 | 280 | 280 | 0 | 0 | 0 | 0 |
| 70 | 190h8 | M20 | 265 | 355 | 335 | 190m6 | 45h9 | 200 | M20 | 280 | 355 | 335 | 0 | 0 | 0 | 0 |
| 82 | 230h8 | M24 | 175 | 330 | 330 | 230m6 | 50h9 | 241 | M24 | 280 | 330 | 330 | 0 | 0 | 0 | 0 |
| 110 | 330h8 | M30 | 380 | 465 | 465 | 330m6 | 80h9 | 345.5 | M30 | 380 | 465 | 465 | 0 | 0 | 0 | 0 |

X) With sheet metal guards

| HSS dimensions in mm | | | | | | | | | | | | | | | | | | | |
|----------------------|------|-----|------|-------|------|-----|---|------|-----|-----|-----|---|----|-----|-----|-------|--------|--------------|-----|
| Size | | | | | | | Torque arm mounting bracket D3RHTXO, D3RSTXO | | | | | Standard torque arm D3RHTXO, D3RSTXO | | | | | Weight | Oil Capacity | |
| | U1 | Y1 | V1 | D1 | b1 | H1 | Ø0 | SD | SG | SK | SW | SM | SC | SF | SE | SHmax | ØSM1 | kg | l |
| 60 | 1215 | 205 | 1420 | 80m6 | 22h9 | 85 | 63 | 1020 | 565 | 115 | 345 | 30 | 80 | 135 | 260 | 1950 | 26 | 2160 | 100 |
| 70 | 1355 | 210 | 1565 | 90m6 | 25h9 | 95 | 63 | 1230 | 620 | 115 | 345 | 30 | 80 | 135 | 260 | 1950 | 26 | 3090 | 140 |
| 82 | 1495 | 210 | 1705 | 100m6 | 28h9 | 106 | 63 | 1380 | 625 | 115 | 345 | 30 | 80 | 135 | 260 | 1950 | 26 | 4100 | 150 |
| 110 | 2160 | 190 | 2350 | 110m6 | 28h9 | 116 | 63 | 1770 | 800 | 152 | 345 | 30 | 80 | 135 | 260 | 1800 | 26 | 9900 | 250 |

3.2 Nominal mechanical power ratings

| Nominal power / kW, when FS=1 | | | | | | | | | | | | | |
|-------------------------------|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| | Nominal Ratio n1/rpm | 10 | 11.2 | 12.5 | 14 | 16 | 18 | 20 | 22.5 | 25 | 28 | 31.5 | 35.5 |
| D3RST50XO | 1800 | 517 | 517 | 517 | 488 | 490 | 441 | 401 | 340 | 309 | 278 | 224 | 200 |
| | 1500 | 450 | 450 | 450 | 414 | 418 | 367 | 334 | 283 | 258 | 232 | 187 | 167 |
| | 1200 | 363 | 363 | 363 | 339 | 334 | 293 | 267 | 227 | 206 | 186 | 149 | 134 |
| | 1000 | 305 | 305 | 305 | 288 | 278 | 244 | 222 | 189 | 172 | 155 | 125 | 111 |
| D3RST60XO | 1800 | 763 | 763 | 763 | 739 | 739 | 696 | 675 | 537 | 515 | 463 | 359 | 322 |
| | 1500 | 636 | 636 | 636 | 636 | 636 | 586 | 562 | 447 | 429 | 386 | 299 | 269 |
| | 1200 | 509 | 509 | 509 | 509 | 509 | 469 | 449 | 357 | 343 | 308 | 239 | 215 |
| | 1000 | 424 | 424 | 424 | 424 | 424 | 390 | 374 | 298 | 286 | 257 | 200 | 179 |
| D3RST70XO | 1800 | 1213 | 1213 | 1213 | 1135 | 1077 | 987 | 908 | 778 | 712 | 655 | 562 | 481 |
| | 1500 | 1015 | 1015 | 1015 | 964 | 915 | 838 | 767 | 648 | 593 | 546 | 468 | 401 |
| | 1200 | 812 | 812 | 812 | 790 | 746 | 669 | 613 | 518 | 474 | 436 | 374 | 321 |
| | 1000 | 676 | 676 | 676 | 672 | 621 | 557 | 511 | 431 | 395 | 364 | 312 | 267 |
| D3RST82XO | 1800 | 1260 | 1260 | 1260 | 1260 | 1260 | 1253 | 1173 | 1018 | 970 | 881 | 847 | 716 |
| | 1500 | 1060 | 1060 | 1060 | 1060 | 1060 | 1060 | 995 | 848 | 823 | 748 | 719 | 596 |
| | 1200 | 852 | 852 | 852 | 852 | 852 | 852 | 814 | 678 | 674 | 613 | 589 | 477 |
| | 1000 | 710 | 710 | 710 | 710 | 710 | 710 | 692 | 565 | 565 | 521 | 500 | 398 |
| D3RST110XO | 1800 | 4031 | 4016 | 4003 | 4003 | 3810 | 3610 | 3060 | 2765 | 2300 | 2190 | 1770 | 1585 |
| | 1500 | 3425 | 3400 | 3400 | 3400 | 3230 | 3030 | 2540 | 2300 | 1940 | 1820 | 1470 | 1320 |
| | 1200 | 2793 | 2783 | 2774 | 2774 | 2625 | 2430 | 2030 | 1837 | 1570 | 1450 | 1175 | 1055 |
| | 1000 | 2358 | 2349 | 2342 | 2342 | 2210 | 2030 | 1690 | 1529 | 1320 | 1210 | 980 | 880 |

3.3 Nominal output torque

| Nominal output torque / kNm, when FS=1 / n1=1500 1/min | | | | | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 10.0 | 11.2 | 12.5 | 14.0 | 16.0 | 18.0 | 20.0 | 22.5 | 25.0 | 28.0 | 31.5 | 35.5 |
| D3RST50XO | 27.4 | 30.7 | 34.0 | 34.8 | 39.7 | 39.7 | 41.2 | 39.7 | 41.2 | 41.1 | 35.5 | 35.5 |
| D3RST60XO | 37.4 | 42.0 | 47.0 | 54.3 | 61.3 | 62.7 | 67.4 | 62.6 | 67.4 | 67.3 | 60.2 | 60.4 |
| D3RST70XO | 61.3 | 68.8 | 76.5 | 83.0 | 89.0 | 90.8 | 94.7 | 90.7 | 94.6 | 94.6 | 90.7 | 90.6 |
| D3RST82XO | 64.2 | 72.8 | 81.5 | 91.5 | 103.0 | 118.0 | 125.0 | 117.0 | 127.0 | 129.0 | 132.0 | 128.0 |
| D3RST110XO | 209.0 | 236.0 | 258.0 | 277.0 | 303.0 | 327.0 | 310.0 | 310.0 | 298.0 | 309.0 | 284.0 | 284.0 |

3.4 Exact gear ratios

| Nominal ratio | | | | | | | | | | | | |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 10.0 | 11.2 | 12.5 | 14.0 | 16.0 | 18.0 | 20.0 | 22.5 | 25.0 | 28.0 | 31.5 | 35.5 |
| D3RST50XO | 10.004 | 11.225 | 12.429 | 13.834 | 15.625 | 17.800 | 20.269 | 23.035 | 26.231 | 29.153 | 31.225 | 34.951 |
| D3RST60XO | 9.675 | 10.856 | 12.146 | 14.029 | 15.845 | 17.582 | 19.727 | 23.035 | 25.845 | 28.724 | 33.062 | 37.006 |
| D3RST70XO | 9.936 | 11.149 | 12.395 | 14.166 | 16.000 | 17.826 | 20.299 | 23.032 | 26.228 | 28.507 | 31.861 | 37.195 |
| D3RST82XO | 9.956 | 11.287 | 12.635 | 14.192 | 15.952 | 18.359 | 20.612 | 22.679 | 25.463 | 28.364 | 30.095 | 35.225 |
| D3RST110XO | 10.035 | 11.394 | 12.457 | 13.381 | 15.411 | 17.762 | 20.009 | 22.143 | 25.209 | 27.897 | 31.690 | 35.298 |

3.5 Thermal ratings

| Thermal ratings PTN in kW (n1=1500 1/min) Oil surface temperature in the sump 90 °C / Synthetic oil | | | | | | | | | | | | | |
|---|---------------|-------|-------|-------|--------------|-------|-------|-------|--------------|-------|-------|-------|-------|
| Gear ratio | in = 10...16 | | | | in = 18...25 | | | | in = 28...35 | | | | |
| | Ambient temp. | 20 °C | 25 °C | 40 °C | 50 °C | 20 °C | 30 °C | 40 °C | 50 °C | 20 °C | 30 °C | 40 °C | 50 °C |
| D3RST50XO | | 392 | 347 | 211 | 120 | 409 | 319 | 228 | 137 | 420 | 330 | 239 | 149 |
| D3RST60XO | | 532 | 409 | 286 | 163 | 555 | 432 | 309 | 186 | 570 | 447 | 325 | 202 |
| D3RST70XO | | 644 | 495 | 346 | 198 | 672 | 523 | 375 | 226 | 691 | 542 | 393 | 244 |
| D3RST82XO | | 747 | 574 | 402 | 229 | 779 | 607 | 434 | 262 | 801 | 628 | 455 | 283 |
| D3RST110XO | | 1680 | 1292 | 904 | 515 | 1754 | 1365 | 977 | 589 | 1801 | 1413 | 1025 | 637 |

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