

PU Linear AT20 Aramid

TBPU000170

General information

| | |
|-----------------------------|--|
| Productgroup | Timing Belts, PU Linear |
| Industry segment | General industry; Wood; Building materials: Stone & ceramics, Bricks & tiles |
| Main product feature | Positive drive, Wear resistant |

Belt construction

| | |
|---------------------------|--------------|
| Tension member | Aramid |
| Body material | polyurethane |
| Tooth side surface | polyurethane |
| Back side surface | polyurethane |

Characteristics

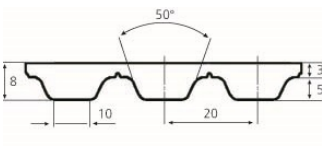
| | |
|---------------------------------|------|
| Food Grade (FG) | No |
| Anti-static (AS) | No |
| Oil & Fat resistance | Good |

Technical data

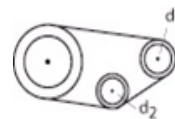
| | | | | |
|--------------------------------|----------------------------|---------------------|-------------|-------------|
| Tooth | profile | | AT20 | |
| | pitch | | 20 mm | 0.787 in. |
| Hardness body material | according to ISO 868 | | 92A Shore | |
| Belt thickness | | | 8 mm | 0.315 in. |
| Coefficient of friction | tooth side to steel | dynamic | 0.5 | |
| | | static | 0.6 | |
| Operating temperature | continuous | from/to | -10 / 80 °C | 14 / 176 °F |
| Minimum pulley diameter | A) without counter flexing | number of teeth, t1 | 18 | |
| | | d1 | 115.6 mm | 4.551 in. |
| | | d2 | 115.6 mm | 4.551 in. |
| | B) with counter flexing | number of teeth, t1 | 18 | |
| | | d1 | 180 mm | 7.087 in. |
| | | d2 | 180 mm | 7.087 in. |
| Endless length | minimum | | 1200 mm | 47.244 in. |
| Manufacturing length | standard | | 100000 mm | 328.084 ft. |

Reference image(s)

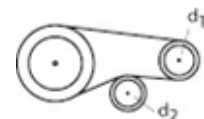
Side view



A) without counter flexing



B) with counter flexing



Fabrication

This information on the fabrication options is general, please contact Ammeraal Beltech for the specific fabrication possibilities of the timing belt of your choice.

Open end, prepared splice, spliced endless with mechanical fastener or a pin joint fastener.

Cleats welded or mechanically attached, metal teeth, guides welded or glued.

Covers can be welded, glued, coated or vulkanized onto the back side of the timing belt.

Thermoplastic covers can be embossed. Perforations, lateral and longitudinal slots, lateral and longitudinal profiles

Additional Information

Tooth profile according to standard: metric ISO 17396 , imperial ISO 5296-1, curvilinear ISO 13050, depending on the belt type.

The information on this data sheet apply to a temperature of approx. 20 °C (68 °F) unless otherwise stated.

Consult our specialists for further information like technical calculations. Instructions regarding joining, storage & maintenance and tracking & tensioning.

Belt load

| Standard belt width [mm] | Allow. tensile load Linear open end & Torque [N] | Allow. tensile load Linear welded endless [N] | Breaking force [N] | Spring force [N] | Weight [kg/m] |
|--------------------------|--|--|--------------------|------------------|---------------|
|--------------------------|--|--|--------------------|------------------|---------------|

Tooth load

| Speed rpm [1/min] | Specific tooth force [N/mm] | Specific power [W/mm] | Specific torque [Ncm/mm] |
|-------------------|-----------------------------|-----------------------|--------------------------|
|-------------------|-----------------------------|-----------------------|--------------------------|

Pulley load

| Number of teeth | outer Ø [mm] | Effective Ø [mm] | Ø with flanges [mm] | Max. bore [mm] | Number of teeth | outer Ø [mm] | Effective Ø [mm] | Ø with flanges [mm] | Max. bore [mm] |
|-----------------|--------------|------------------|---------------------|----------------|-----------------|--------------|------------------|---------------------|----------------|
| 18 | 111.75 | 114.59 | 122 | 86 | 70 | 442.78 | 445.63 | 453 | 412 |
| 19 | 118.12 | 120.96 | 128 | 93 | 71 | 449.15 | 452.00 | 459 | 419 |
| 20 | 124.48 | 127.32 | 134 | 100 | 72 | 455.52 | 458.37 | 465 | 425 |
| 21 | 130.85 | 133.69 | 141 | 105 | 73 | 461.88 | 464.73 | 472 | 431 |
| 22 | 137.22 | 140.06 | 147 | 112 | 74 | 468.25 | 471.01 | 478 | 438 |
| 23 | 143.58 | 146.42 | 153 | 118 | 75 | 474.61 | 477.46 | 485 | 444 |
| 24 | 149.95 | 152.79 | 160 | 125 | 76 | 480.98 | 483.83 | 491 | 450 |
| 25 | 156.32 | 159.16 | 166 | 131 | 77 | 487.35 | 490.20 | 497 | 457 |
| 26 | 162.68 | 165.52 | 173 | 137 | 78 | 493.71 | 496.56 | 504 | 463 |
| 27 | 169.05 | 171.89 | 179 | 144 | 79 | 500.08 | 502.93 | 510 | 470 |
| 28 | 175.41 | 178.25 | 185 | 150 | 80 | 506.45 | 509.30 | 516 | 476 |
| 29 | 181.78 | 184.62 | 192 | 156 | 81 | 512.81 | 515.66 | 523 | 482 |
| 30 | 188.15 | 190.99 | 198 | 163 | 82 | 519.18 | 522.03 | 529 | 489 |
| 31 | 194.51 | 197.35 | 204 | 169 | 83 | 525.54 | 528.39 | 535 | 495 |
| 32 | 200.88 | 203.72 | 211 | 175 | 84 | 531.91 | 534.76 | 542 | 501 |
| 33 | 207.24 | 210.08 | 217 | 182 | 85 | 538.28 | 541.13 | 548 | 503 |
| 34 | 213.61 | 216.45 | 224 | 188 | 86 | 544.64 | 547.49 | 555 | 509 |
| 35 | 219.98 | 222.82 | 230 | 195 | 87 | 551.01 | 553.86 | 561 | 516 |
| 36 | 226.34 | 229.18 | 236 | 201 | 88 | 557.38 | 560.23 | 567 | 522 |
| 37 | 232.71 | 235.55 | 243 | 207 | 89 | 563.74 | 566.59 | 574 | 528 |
| 38 | 239.08 | 241.92 | 249 | 214 | 90 | 570.11 | 572.96 | 580 | 535 |
| 39 | 245.44 | 248.28 | 255 | 220 | 91 | 576.47 | 579.32 | 586 | 541 |
| 40 | 251.81 | 254.65 | 262 | 226 | 92 | 582.84 | 585.69 | 593 | 548 |
| 41 | 258.17 | 261.01 | 268 | 233 | 93 | 589.21 | 592.06 | 599 | 554 |
| 42 | 264.54 | 267.38 | 274 | 239 | 94 | 595.57 | 598.42 | 605 | 580 |
| 43 | 270.91 | 273.75 | 281 | 245 | 95 | 601.94 | 604.79 | 612 | 566 |
| 44 | 277.27 | 280.11 | 287 | 252 | 96 | 608.31 | 611.16 | 618 | 573 |
| 45 | 283.64 | 286.48 | 294 | 258 | 97 | 614.67 | 617.52 | 625 | 579 |
| 46 | 290.01 | 292.85 | 300 | 265 | 98 | 621.04 | 623.89 | 631 | 586 |
| 47 | 296.37 | 299.21 | 306 | 271 | 99 | 627.40 | 630.25 | 637 | 592 |
| 48 | 302.74 | 305.58 | 313 | 278 | 100 | 633.77 | 636.62 | 644 | 598 |
| 49 | 309.10 | 311.94 | 319 | 284 | 101 | 640.14 | 642.99 | 650 | 605 |
| 50 | 315.47 | 318.31 | 325 | 290 | 102 | 646.50 | 649.35 | 656 | 611 |
| 51 | 321.84 | 324.68 | 332 | 296 | 103 | 652.87 | 655.72 | 663 | 617 |
| 52 | 328.20 | 331.04 | 338 | 303 | 104 | 659.23 | 662.08 | 669 | 624 |
| 53 | 334.57 | 337.41 | 344 | 310 | 105 | 665.60 | 668.45 | 676 | 630 |
| 54 | 340.93 | 343.77 | 351 | 315 | 106 | 671.97 | 674.82 | 682 | 636 |
| 55 | 347.30 | 350.14 | 357 | 322 | 107 | 678.33 | 681.18 | 688 | 643 |
| 56 | 353.67 | 356.51 | 364 | 328 | 108 | 684.70 | 687.55 | 695 | 649 |
| 57 | 360.03 | 362.87 | 370 | 335 | 109 | 691.07 | 693.92 | 701 | 656 |
| 58 | 366.40 | 369.24 | 376 | 341 | 110 | 697.43 | 700.28 | 707 | 662 |
| 59 | 372.77 | 375.61 | 383 | 347 | 111 | 703.80 | 706.65 | 714 | 663 |
| 60 | 379.13 | 381.97 | 389 | 354 | 112 | 710.16 | 713.01 | 720 | 670 |
| 61 | 385.50 | 388.34 | 395 | 360 | 113 | 716.53 | 719.38 | 726 | 676 |
| 62 | 391.86 | 394.70 | 402 | 366 | 114 | 722.90 | 725.75 | 733 | 682 |
| 63 | 398.23 | 401.07 | 408 | 373 | 115 | 729.26 | 732.11 | 739 | 688 |
| 64 | 404.60 | 407.44 | 414 | 379 | 116 | 735.63 | 738.48 | 746 | 694 |
| 65 | 410.96 | 413.80 | 421 | 385 | 117 | 742.00 | 744.85 | 752 | 700 |
| 66 | 417.33 | 420.17 | 427 | 392 | 118 | 748.36 | 751.21 | 758 | 707 |
| 67 | 423.70 | 426.54 | 434 | 398 | 119 | 754.73 | 757.58 | 765 | 714 |
| 68 | 430.05 | 432.90 | 440 | 405 | 120 | 761.09 | 763.94 | 771 | 720 |
| 69 | 436.42 | 439.27 | 446 | 406 | | | | | |

Standard