

Crossed Helical Gears *Materials*

Steel Crossed Axis @ 90° STD : Steel 214M15/045M10

45°H.A. ALTERNATIVE : Brass, Tufnol or Delrin

24 DP

20° P.A.

SPECIAL TEETH : between 9 - 150

| TORQUE CHECK 50 teeth x 1000 rpm | 214M15 303S21 | 214M15 Cse/HD | Brass | Tufnol | |
|-------------------------------------|------------------|------------------|-------|--------|-------|
| variations at back | TORQUE Nm. | 0.867 | 5.698 | 0.434 | 0.310 |
| | K.W. | 0.091 | 0.597 | 0.045 | 0.032 |



RH 45°



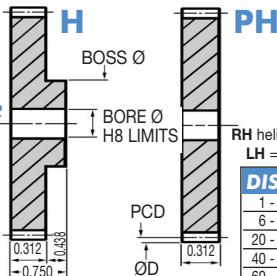
LH available
on request.

RH 45°

RH runs with RH

Popular sizes in stock.

Any two part numbers of this pitch will run together.



RH helix is standard.
LH = price + 33%.

DISCOUNTS

| | List Price |
|-----------|------------|
| 1 - 5 | |
| 6 - 19 | - 12% |
| 20 - 39 | - 25% |
| 40 - 59 | - 33% |
| 60 - 99 | - 37% |
| 100 - 200 | - 42% |

| PART NUMBER | TEETH | PCD (ins) | ØD (ins) | BOSS Ø (ins) | BORE Ø (ins) | PRICE EACH 1 - 5 | H | PH |
|-------------|-------|-----------|----------|--------------|--------------|------------------|--------|----|
| H24-9 | 9 | 0.589 | 0.673 | 0.562 | 0.250 | £10.81 | £9.82 | |
| H24-10 | 10 | 0.589 | 0.673 | 0.562 | 0.250 | £10.82 | £10.32 | |
| H24-11 | 11 | 0.648 | 0.732 | 0.562 | 0.375 | £11.30 | £10.65 | |
| H24-12 | 12 | 0.707 | 0.790 | 0.562 | 0.375 | £11.50 | £10.87 | |
| H24-13 | 13 | 0.766 | 0.849 | 0.562 | 0.375 | £12.06 | £11.47 | |
| H24-14 | 14 | 0.825 | 0.908 | 0.562 | 0.375 | £12.23 | £11.84 | |
| H24-15 | 15 | 0.884 | 0.967 | 0.750 | 0.375 | £12.75 | £11.89 | |
| H24-16 | 16 | 0.943 | 1.026 | 0.750 | 0.375 | £12.95 | £11.91 | |
| H24-17 | 17 | 1.002 | 1.085 | 0.750 | 0.375 | £13.19 | £12.06 | |
| H24-18 | 18 | 1.061 | 1.144 | 0.750 | 0.375 | £14.61 | £12.23 | |
| H24-19 | 19 | 1.120 | 1.203 | 0.750 | 0.375 | £14.82 | £12.34 | |
| H24-20 | 20 | 1.179 | 1.262 | 1.000 | 0.500 | £15.18 | £12.56 | |
| H24-21 | 21 | 1.237 | 1.321 | 1.000 | 0.500 | £15.41 | £12.66 | |
| H24-22 | 22 | 1.296 | 1.380 | 1.000 | 0.500 | £15.87 | £12.78 | |
| H24-23 | 23 | 1.355 | 1.439 | 1.000 | 0.500 | £16.13 | £12.84 | |
| H24-24 | 24 | 1.414 | 1.498 | 1.000 | 0.500 | £16.27 | £12.95 | |
| H24-25 | 25 | 1.473 | 1.556 | 1.000 | 0.500 | £16.49 | £13.09 | |
| H24-26 | 26 | 1.532 | 1.615 | 1.000 | 0.500 | £16.68 | £13.14 | |
| H24-27 | 27 | 1.591 | 1.674 | 1.000 | 0.500 | £16.90 | £13.26 | |
| H24-28 | 28 | 1.650 | 1.733 | 1.000 | 0.500 | £16.94 | £13.37 | |
| H24-29 | 29 | 1.709 | 1.792 | 1.000 | 0.500 | £17.06 | £13.41 | |
| H24-30 | 30 | 1.768 | 1.851 | 1.000 | 0.500 | £17.28 | £13.61 | |
| H24-31 | 31 | 1.827 | 1.910 | 1.000 | 0.500 | £17.37 | £13.75 | |

Helical Gears Crossed Axis Steel DP 24

25.54



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| PART NUMBER | TEETH | PCD (ins) | ØD (ins) | BOSS Ø (ins) | BORE Ø (ins) | PRICE EACH 1 - 5 | |
|-------------|-------|-----------|----------|--------------|--------------|------------------|--------|
| | | | | | | H | PH |
| H24-32 | 32 | 1.886 | 1.969 | 1.000 | 0.500 | £17.87 | £14.08 |
| H24-33 | 33 | 1.945 | 2.028 | 1.000 | 0.500 | £18.24 | £14.33 |
| H24-34 | 34 | 2.003 | 2.087 | 1.000 | 0.500 | £18.69 | £14.50 |
| H24-35 | 35 | 2.062 | 2.146 | 1.000 | 0.500 | £20.24 | £14.90 |
| H24-36 | 36 | 2.121 | 2.205 | 1.250 | 0.625 | £20.56 | £15.14 |
| H24-37 | 37 | 2.180 | 2.264 | 1.250 | 0.625 | £20.70 | £15.61 |
| H24-38 | 38 | 2.239 | 2.323 | 1.250 | 0.625 | £20.95 | £15.90 |
| H24-39 | 39 | 2.298 | 2.381 | 1.250 | 0.625 | £21.70 | £16.29 |
| H24-40 | 40 | 2.357 | 2.440 | 1.250 | 0.625 | £22.12 | £16.60 |
| H24-41 | 41 | 2.416 | 2.499 | 1.250 | 0.625 | £22.49 | £16.83 |
| H24-42 | 42 | 2.475 | 2.558 | 1.250 | 0.625 | £23.31 | £17.29 |
| H24-43 | 43 | 2.534 | 2.617 | 1.250 | 0.625 | £23.84 | £17.62 |
| H24-44 | 44 | 2.593 | 2.676 | 1.250 | 0.625 | £24.24 | £17.90 |
| H24-45 | 45 | 2.652 | 2.735 | 1.250 | 0.625 | £24.77 | £18.13 |
| H24-46 | 46 | 2.711 | 2.794 | 1.250 | 0.625 | £25.12 | £18.30 |
| H24-47 | 47 | 2.770 | 2.853 | 1.250 | 0.625 | £25.96 | £18.79 |
| H24-48 | 48 | 2.828 | 2.912 | 1.250 | 0.625 | £26.00 | £18.87 |
| H24-49 | 49 | 2.887 | 2.971 | 1.250 | 0.625 | £26.37 | £19.13 |
| H24-50 | 50 | 2.946 | 3.030 | 1.250 | 0.625 | £26.66 | £19.36 |
| H24-51 | 51 | 3.005 | 3.089 | 1.250 | 0.625 | £26.95 | £19.41 |
| H24-52 | 52 | 3.064 | 3.147 | 1.250 | 0.625 | £27.33 | £19.98 |
| H24-53 | 53 | 3.123 | 3.206 | 1.250 | 0.625 | £27.69 | £20.42 |
| H24-54 | 54 | 3.182 | 3.265 | 1.250 | 0.625 | £28.13 | £20.69 |
| H24-55 | 55 | 3.241 | 3.324 | 1.250 | 0.625 | £28.15 | £20.73 |
| H24-56 | 56 | 3.300 | 3.383 | 1.250 | 0.625 | £28.69 | £21.21 |
| H24-57 | 57 | 3.359 | 3.442 | 1.250 | 0.625 | £29.33 | £22.99 |
| H24-58 | 58 | 3.418 | 3.501 | 1.250 | 0.625 | £29.38 | £23.00 |
| H24-59 | 59 | 3.477 | 3.560 | 1.250 | 0.625 | £29.43 | £23.06 |
| H24-60 | 60 | 3.536 | 3.619 | 1.250 | 0.625 | £31.01 | £23.84 |
| H24-61 | 61 | 3.594 | 3.678 | 1.250 | 0.625 | £31.06 | £23.88 |
| H24-62 | 62 | 3.653 | 3.737 | 1.250 | 0.625 | £31.11 | £23.92 |
| H24-63 | 63 | 3.712 | 3.796 | 1.250 | 0.625 | £32.78 | £25.12 |
| H24-64 | 64 | 3.771 | 3.855 | 1.250 | 0.625 | £37.40 | £27.02 |
| H24-65 | 65 | 3.830 | 3.913 | 1.250 | 0.625 | £37.41 | £27.04 |
| H24-66 | 66 | 3.889 | 3.972 | 1.250 | 0.625 | £37.44 | £27.07 |
| H24-68 | 68 | 4.007 | 4.090 | 1.250 | 0.625 | £41.34 | £29.32 |
| H24-70 | 70 | 4.125 | 4.208 | 1.250 | 0.625 | £41.39 | £29.38 |
| H24-72 | 72 | 4.243 | 4.326 | 1.250 | 0.625 | £43.93 | £35.28 |
| H24-73 | 73 | 4.302 | 4.385 | 1.250 | 0.625 | £43.99 | £35.30 |
| H24-74 | 74 | 4.360 | 4.444 | 1.250 | 0.625 | £44.02 | £35.67 |
| H24-76 | 76 | 4.478 | 4.562 | 1.250 | 0.625 | £44.10 | £35.98 |
| H24-78 | 78 | 4.596 | 4.680 | 1.575 | 0.625 | £44.14 | £36.34 |
| H24-80 | 80 | 4.714 | 4.797 | 1.575 | 0.625 | £46.59 | £37.31 |
| H24-84 | 84 | 4.950 | 5.033 | 1.575 | 0.625 | £46.66 | £37.35 |
| H24-88 | 88 | 5.185 | 5.269 | 1.575 | 0.625 | £51.40 | £41.13 |
| H24-90 | 90 | 5.303 | 5.387 | 1.575 | 0.625 | £54.97 | £44.62 |
| H24-96 | 96 | 5.657 | 5.740 | 1.575 | 0.625 | £57.66 | £49.63 |
| H24-100 | 100 | 5.893 | 5.976 | 1.575 | 0.625 | £61.46 | £53.12 |
| H24-112 | 112 | 6.600 | 6.683 | 1.575 | 0.625 | £68.48 | £60.44 |
| H24-120 | 120 | 7.071 | 7.154 | 1.575 | 0.625 | £71.96 | £63.11 |
| H24-130 | 130 | 7.660 | 7.744 | 1.575 | 0.625 | £78.49 | £70.23 |
| H24-150 | 150 | 8.839 | 8.922 | 1.575 | 0.625 | £89.06 | £82.08 |

Gears with a greater number of teeth than listed are subject to different face widths, boss and bore. Please consult Technical for sizes.



Crossed Helical Gears Materials

Plastic Crossed Axis @ 90°

STD : White Delrin
(fully machined)

24 DP

45° H.A.
20° P.A.

SPECIAL TEETH : between 9 - 90



| TORQUE CHECK | |
|---------------------|-----------------|
| 50 teeth x 1000 rpm | |
| variations at back | TORQUE Nm. 0.18 |



RH 45°



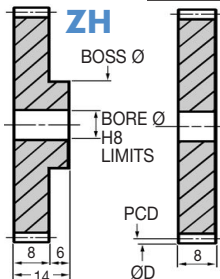
LH available on request.

RH 45°

RH runs with RH

Popular sizes in stock.

Any two part numbers of this pitch will run together.



ZPH

RH helix is standard.
LH = price + 33%.

DISCOUNTS

| | List Price |
|-------------|------------|
| 1 - 5 | |
| 6 - 29 | - 22% |
| 30 - 99 | - 44% |
| 100 - 399 | - 47% |
| 400 - 999 | - 50% |
| 1000 - 5000 | - 53% |

Helical Gears Crossed Axis Plastic DP 24

| PART NUMBER | TEETH | PCD (ins) | ØD (ins) | BOSS Ø (ins) | BORE Ø (mm) | PRICE EACH 1 - 5 | |
|-------------|-------|-----------|----------|--------------|-------------|------------------|-------|
| | | | | | | ZH | ZPH |
| ZH24-9 | 9 | 0.589 | 0.673 | 0.472 | 4 | £5.46 | £4.09 |
| ZH24-10 | 10 | 0.589 | 0.673 | 0.472 | 4 | £5.46 | £4.14 |
| ZH24-11 | 11 | 0.648 | 0.732 | 0.472 | 4 | £5.67 | £4.28 |
| ZH24-12 | 12 | 0.707 | 0.790 | 0.590 | 6 | £5.79 | £4.38 |
| ZH24-13 | 13 | 0.766 | 0.849 | 0.590 | 6 | £6.04 | £4.59 |
| ZH24-14 | 14 | 0.825 | 0.908 | 0.590 | 6 | £6.14 | £4.73 |
| ZH24-15 | 15 | 0.884 | 0.967 | 0.708 | 6 | £6.38 | £4.83 |
| ZH24-16 | 16 | 0.943 | 1.026 | 0.708 | 6 | £6.43 | £4.97 |
| ZH24-17 | 17 | 1.002 | 1.085 | 0.708 | 6 | £6.65 | £5.06 |
| ZH24-18 | 18 | 1.061 | 1.144 | 0.708 | 6 | £7.31 | £5.54 |
| ZH24-19 | 19 | 1.120 | 1.203 | 0.708 | 6 | £8.18 | £6.30 |
| ZH24-20 | 20 | 1.179 | 1.262 | 0.708 | 6 | £8.36 | £6.40 |
| ZH24-21 | 21 | 1.237 | 1.321 | 0.708 | 6 | £8.50 | £6.50 |
| ZH24-22 | 22 | 1.296 | 1.380 | 0.708 | 6 | £8.73 | £6.71 |
| ZH24-23 | 23 | 1.355 | 1.439 | 0.708 | 6 | £8.88 | £6.77 |
| ZH24-24 | 24 | 1.414 | 1.498 | 0.708 | 6 | £8.96 | £6.87 |
| ZH24-25 | 25 | 1.473 | 1.556 | 0.708 | 6 | £9.08 | £6.99 |
| ZH24-26 | 26 | 1.532 | 1.615 | 0.708 | 6 | £9.21 | £7.02 |
| ZH24-27 | 27 | 1.591 | 1.674 | 0.708 | 6 | £9.26 | £7.10 |
| ZH24-28 | 28 | 1.650 | 1.733 | 0.708 | 6 | £9.32 | £7.14 |
| ZH24-29 | 29 | 1.709 | 1.792 | 0.708 | 6 | £9.40 | £7.27 |
| ZH24-30 | 30 | 1.768 | 1.851 | 0.708 | 6 | £9.55 | £7.28 |
| ZH24-31 | 31 | 1.827 | 1.910 | 0.708 | 6 | £9.60 | £7.36 |

25.56



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| PART NUMBER | TEETH | PCD (ins) | ØD (ins) | BOSS Ø (ins) | BORE Ø (mm) | PRICE EACH 1 - 5 ZH | ZPH |
|-------------|-------|-----------|----------|--------------|-------------|---------------------|--------|
| ZH24-32 | 32 | 1.886 | 1.969 | 0.708 | 6 | £9.86 | £7.49 |
| ZH24-33 | 33 | 1.945 | 2.028 | 0.708 | 6 | £13.78 | £10.54 |
| ZH24-34 | 34 | 2.003 | 2.087 | 0.708 | 6 | £14.08 | £10.79 |
| ZH24-35 | 35 | 2.062 | 2.146 | 0.708 | 6 | £15.36 | £11.73 |
| ZH24-36 | 36 | 2.121 | 2.205 | 0.866 | 8 | £15.48 | £11.85 |
| ZH24-37 | 37 | 2.180 | 2.264 | 0.866 | 8 | £15.68 | £11.96 |
| ZH24-38 | 38 | 2.239 | 2.323 | 0.866 | 8 | £15.82 | £12.09 |
| ZH24-39 | 39 | 2.298 | 2.381 | 0.866 | 8 | £18.61 | £14.27 |
| ZH24-40 | 40 | 2.357 | 2.440 | 0.866 | 8 | £18.98 | £14.50 |
| ZH24-41 | 41 | 2.416 | 2.499 | 0.866 | 8 | £19.33 | £14.78 |
| ZH24-42 | 42 | 2.475 | 2.558 | 0.866 | 8 | £20.00 | £15.36 |
| ZH24-43 | 43 | 2.534 | 2.617 | 0.866 | 8 | £20.42 | £15.69 |
| ZH24-44 | 44 | 2.593 | 2.676 | 0.866 | 8 | £20.82 | £15.93 |
| ZH24-45 | 45 | 2.652 | 2.735 | 0.866 | 8 | £21.24 | £16.25 |
| ZH24-46 | 46 | 2.711 | 2.794 | 0.866 | 8 | £21.52 | £16.53 |
| ZH24-47 | 47 | 2.770 | 2.853 | 0.866 | 8 | £22.29 | £17.02 |
| ZH24-48 | 48 | 2.828 | 2.912 | 0.866 | 8 | £22.31 | £17.06 |
| ZH24-49 | 49 | 2.887 | 2.971 | 0.866 | 8 | £23.92 | £18.37 |
| ZH24-50 | 50 | 2.946 | 3.030 | 0.866 | 8 | £24.22 | £18.55 |
| ZH24-51 | 51 | 3.005 | 3.089 | 0.866 | 8 | £24.46 | £18.74 |
| ZH24-52 | 52 | 3.064 | 3.147 | 0.866 | 8 | £24.81 | £19.00 |
| ZH24-53 | 53 | 3.123 | 3.206 | 0.866 | 8 | £25.13 | £19.25 |
| ZH24-54 | 54 | 3.182 | 3.265 | 0.866 | 8 | £25.58 | £19.59 |
| ZH24-55 | 55 | 3.241 | 3.324 | 0.866 | 8 | £25.59 | £19.61 |
| ZH24-56 | 56 | 3.300 | 3.383 | 0.866 | 8 | £26.09 | £19.95 |
| ZH24-57 | 57 | 3.359 | 3.442 | 0.866 | 8 | £26.67 | £20.47 |
| ZH24-58 | 58 | 3.418 | 3.501 | 0.866 | 8 | £26.70 | £20.55 |
| ZH24-59 | 59 | 3.477 | 3.560 | 0.866 | 8 | £29.69 | £22.79 |
| ZH24-60 | 60 | 3.536 | 3.619 | 0.866 | 8 | £31.32 | £23.92 |
| ZH24-61 | 61 | 3.594 | 3.678 | 0.866 | 8 | £31.35 | £24.02 |
| ZH24-62 | 62 | 3.653 | 3.737 | 0.866 | 8 | £31.35 | £24.07 |
| ZH24-63 | 63 | 3.712 | 3.796 | 0.866 | 8 | £33.07 | £25.36 |
| ZH24-64 | 64 | 3.771 | 3.855 | 0.866 | 8 | £37.52 | £28.94 |
| ZH24-65 | 65 | 3.830 | 3.913 | 0.866 | 8 | £37.79 | £28.97 |
| ZH24-66 | 66 | 3.889 | 3.972 | 0.866 | 8 | £41.63 | £31.90 |
| ZH24-68 | 68 | 4.007 | 4.090 | 0.866 | 10 | £45.95 | £35.19 |
| ZH24-70 | 70 | 4.125 | 4.208 | 0.866 | 10 | £48.76 | £35.26 |
| ZH24-72 | 72 | 4.243 | 4.326 | 0.866 | 10 | £48.80 | £37.40 |
| ZH24-73 | 73 | 4.302 | 4.385 | 0.866 | 10 | £48.83 | £37.44 |
| ZH24-74 | 74 | 4.360 | 4.444 | 0.866 | 10 | £48.90 | £37.47 |
| ZH24-76 | 76 | 4.478 | 4.562 | 0.866 | 10 | £48.93 | £37.49 |
| ZH24-78 | 78 | 4.596 | 4.680 | 0.866 | 10 | £48.97 | £37.52 |
| ZH24-80 | 80 | 4.714 | 4.797 | 0.866 | 10 | £56.58 | £43.35 |
| ZH24-84 | 84 | 4.950 | 5.033 | 1.023 | 12 | £73.89 | £60.73 |
| ZH24-90 | 90 | 5.303 | 5.387 | 1.023 | 12 | £95.15 | £81.96 |

'Never Knowingly Outpriced'

Gears with a greater number of teeth than listed are subject to different face widths, boss and bore. Please consult Technical for sizes.

