

# Helical Gears

## Materials

Steel - Parallel Axis

STD : Steel 214M15/045M10

2.5 MOD

17°45'H.A.

ALTERNATIVE : Brass, Tufnol or Delrin

20° P.A.

SPECIALS : up to Ø750 mm



| TORQUE CHECK<br>50 teeth x 1000 rpm | 214M15<br>303S21  | 214M15<br>Cse/HD | Brass  | Tufnol |       |
|-------------------------------------|-------------------|------------------|--------|--------|-------|
| variations<br>at back               | <b>TORQUE Nm.</b> | 66.17            | 261.76 | 33.00  | 23.63 |
|                                     | <b>K.W.</b>       | 6.94             | 27.43  | 3.47   | 2.48  |

Helical Gears Parallel Axis Steel MOD 2.5

RH 17°45'

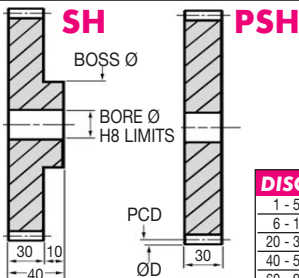


LH 17°45'

LH runs with RH

Popular sizes in stock.

Any two part numbers of this pitch will run together.



### DISCOUNTS

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

| PART NUMBER | TEETH | PCD (mm) | ØD (mm) | BOSS Ø (mm) | BORE Ø (mm) | WEIGHT (kg) |       | PRICE EACH 1 - 5 |        |
|-------------|-------|----------|---------|-------------|-------------|-------------|-------|------------------|--------|
|             |       |          |         |             |             | SH          | PSH   | SH               | PSH    |
| SH2.5-9     | 9     | 26.25    | 31.25   | 30          | 12          | 0.144       | 0.098 | £19.94           | £13.17 |
| SH2.5-10    | 10    | 26.25    | 31.25   | 30          | 12          | 0.144       | 0.098 | £19.96           | £13.20 |
| SH2.5-11    | 11    | 28.88    | 33.88   | 30          | 12          | 0.170       | 0.124 | £19.97           | £13.21 |
| SH2.5-12    | 12    | 31.50    | 36.50   | 30          | 15          | 0.179       | 0.138 | £19.98           | £13.23 |
| SH2.5-13    | 13    | 34.13    | 39.13   | 30          | 15          | 0.210       | 0.169 | £20.44           | £14.00 |
| SH2.5-14    | 14    | 36.75    | 41.75   | 30          | 15          | 0.244       | 0.203 | £21.39           | £14.73 |
| SH2.5-15    | 15    | 39.38    | 44.38   | 30          | 15          | 0.280       | 0.239 | £22.73           | £16.21 |
| SH2.5-16    | 16    | 42.00    | 47.00   | 30          | 15          | 0.318       | 0.277 | £24.08           | £17.70 |
| SH2.5-17    | 17    | 44.63    | 49.63   | 30          | 15          | 0.359       | 0.319 | £24.56           | £18.42 |
| SH2.5-18    | 18    | 47.25    | 52.25   | 30          | 15          | 0.403       | 0.362 | £25.44           | £19.19 |
| SH2.5-19    | 19    | 49.88    | 54.88   | 30          | 15          | 0.449       | 0.408 | £26.13           | £19.96 |
| SH2.5-20    | 20    | 52.50    | 57.50   | 40          | 20          | 0.497       | 0.425 | £27.06           | £20.77 |
| SH2.5-21    | 21    | 55.13    | 60.13   | 40          | 20          | 0.548       | 0.476 | £27.73           | £21.55 |
| SH2.5-22    | 22    | 57.75    | 62.75   | 40          | 20          | 0.601       | 0.529 | £28.72           | £22.33 |
| SH2.5-23    | 23    | 60.38    | 65.38   | 40          | 20          | 0.657       | 0.585 | £29.44           | £23.10 |
| SH2.5-24    | 24    | 63.00    | 68.00   | 40          | 20          | 0.716       | 0.643 | £30.30           | £23.86 |
| SH2.5-25    | 25    | 65.63    | 70.63   | 40          | 20          | 0.777       | 0.704 | £31.94           | £25.44 |
| SH2.5-26    | 26    | 68.25    | 73.25   | 45          | 20          | 0.865       | 0.768 | £33.55           | £27.05 |
| SH2.5-27    | 27    | 70.88    | 75.88   | 45          | 20          | 0.931       | 0.834 | £34.24           | £27.88 |
| SH2.5-28    | 28    | 73.50    | 78.50   | 45          | 20          | 1.000       | 0.902 | £35.19           | £28.61 |
| SH2.5-29    | 29    | 76.13    | 81.13   | 45          | 20          | 1.071       | 0.973 | £36.32           | £30.14 |
| SH2.5-30    | 30    | 78.75    | 83.75   | 45          | 20          | 1.144       | 1.046 | £37.56           | £31.54 |
| SH2.5-31    | 31    | 81.38    | 86.38   | 45          | 20          | 1.220       | 1.122 | £38.48           | £33.05 |

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Unit 14, Foxwood Industrial Park, Foxwood Road, Chesterfield, Derbyshire S41 9RN

Telephone +44(0)1246 268080

Fax +44(0)1246 260003

| PART NUMBER | TEETH | PCD (mm) | ØD (mm) | BOSS Ø (mm) | BORE Ø (mm) | WEIGHT (kg) |        | PRICE EACH 1 - 5 |         |
|-------------|-------|----------|---------|-------------|-------------|-------------|--------|------------------|---------|
|             |       |          |         |             |             | SH          | PSH    | SH               | PSH     |
| SH2.5-32    | 32    | 84.00    | 89.00   | 45          | 20          | 1.298       | 1.200  | £39.80           | £34.53  |
| SH2.5-33    | 33    | 86.63    | 91.63   | 45          | 20          | 1.379       | 1.281  | £40.28           | £35.51  |
| SH2.5-34    | 34    | 89.25    | 94.25   | 45          | 20          | 1.462       | 1.364  | £41.27           | £36.49  |
| SH2.5-35    | 35    | 91.88    | 96.88   | 45          | 20          | 1.548       | 1.450  | £42.22           | £37.44  |
| SH2.5-36    | 36    | 94.50    | 99.50   | 45          | 20          | 1.636       | 1.538  | £44.49           | £40.46  |
| SH2.5-37    | 37    | 97.13    | 102.13  | 45          | 20          | 1.727       | 1.629  | £45.10           | £41.14  |
| SH2.5-38    | 38    | 99.75    | 104.75  | 45          | 20          | 1.820       | 1.722  | £46.37           | £41.85  |
| SH2.5-39    | 39    | 102.38   | 107.38  | 45          | 20          | 1.915       | 1.818  | £47.05           | £42.56  |
| SH2.5-40    | 40    | 105.00   | 110.00  | 50          | 20          | 2.042       | 1.916  | £48.20           | £43.27  |
| SH2.5-41    | 41    | 107.63   | 112.63  | 50          | 20          | 2.143       | 2.017  | £49.36           | £43.84  |
| SH2.5-42    | 42    | 110.25   | 115.25  | 50          | 20          | 2.246       | 2.119  | £50.14           | £44.39  |
| SH2.5-43    | 43    | 112.88   | 117.88  | 50          | 20          | 2.351       | 2.225  | £50.65           | £45.01  |
| SH2.5-44    | 44    | 115.50   | 120.50  | 50          | 20          | 2.459       | 2.333  | £51.24           | £45.52  |
| SH2.5-45    | 45    | 118.13   | 123.13  | 50          | 20          | 2.570       | 2.444  | £51.90           | £46.13  |
| SH2.5-46    | 46    | 120.75   | 125.75  | 50          | 20          | 2.683       | 2.557  | £53.10           | £47.05  |
| SH2.5-47    | 47    | 123.38   | 128.38  | 50          | 20          | 2.799       | 2.673  | £54.13           | £48.01  |
| SH2.5-48    | 48    | 126.00   | 131.00  | 50          | 20          | 2.917       | 2.790  | £55.60           | £48.93  |
| SH2.5-49    | 49    | 128.63   | 133.63  | 50          | 20          | 3.037       | 2.911  | £57.12           | £50.37  |
| SH2.5-50    | 50    | 131.25   | 136.25  | 50          | 20          | 3.160       | 3.034  | £58.67           | £51.72  |
| SH2.5-51    | 51    | 133.88   | 138.88  | 50          | 20          | 3.286       | 3.160  | £58.92           | £52.43  |
| SH2.5-52    | 52    | 136.50   | 141.50  | 50          | 20          | 3.413       | 3.287  | £59.17           | £53.17  |
| SH2.5-53    | 53    | 139.13   | 144.13  | 50          | 20          | 3.544       | 3.418  | £60.59           | £53.85  |
| SH2.5-54    | 54    | 141.75   | 146.75  | 50          | 20          | 3.677       | 3.551  | £61.21           | £54.54  |
| SH2.5-55    | 55    | 144.38   | 149.38  | 50          | 20          | 3.813       | 3.686  | £67.16           | £57.38  |
| SH2.5-56    | 56    | 147.00   | 152.00  | 50          | 20          | 3.950       | 3.824  | £68.33           | £57.91  |
| SH2.5-57    | 57    | 149.63   | 154.63  | 50          | 20          | 4.091       | 3.965  | £69.57           | £58.47  |
| SH2.5-58    | 58    | 152.25   | 157.25  | 50          | 20          | 4.233       | 4.107  | £70.54           | £59.00  |
| SH2.5-59    | 59    | 154.88   | 159.88  | 50          | 20          | 4.379       | 4.253  | £71.63           | £59.58  |
| SH2.5-60    | 60    | 157.50   | 162.50  | 50          | 20          | 4.527       | 4.400  | £72.80           | £60.12  |
| SH2.5-62    | 62    | 162.75   | 167.75  | 50          | 20          | 4.830       | 4.704  | £82.45           | £71.97  |
| SH2.5-64    | 64    | 168.00   | 173.00  | 50          | 20          | 5.143       | 5.017  | £93.07           | £83.73  |
| SH2.5-65    | 65    | 170.63   | 175.63  | 50          | 20          | 5.303       | 5.177  | £99.73           | £89.41  |
| SH2.5-66    | 66    | 173.25   | 178.25  | 50          | 20          | 5.466       | 5.340  | £109.66          | £92.28  |
| SH2.5-68    | 68    | 178.50   | 183.50  | 50          | 20          | 5.799       | 5.673  | £114.51          | £95.30  |
| SH2.5-70    | 70    | 183.75   | 188.75  | 50          | 20          | 6.142       | 6.016  | £121.43          | £100.96 |
| SH2.5-71    | 71    | 186.38   | 191.38  | 50          | 20          | 6.317       | 6.191  | £128.84          | £107.34 |
| SH2.5-72    | 72    | 189.00   | 194.00  | 50          | 20          | 6.495       | 6.368  | £136.65          | £113.90 |
| SH2.5-73    | 73    | 191.63   | 196.63  | 50          | 20          | 6.675       | 6.549  | £141.70          | £118.05 |
| SH2.5-74    | 74    | 194.25   | 199.25  | 50          | 20          | 6.857       | 6.731  | £147.33          | £122.72 |
| SH2.5-75    | 75    | 196.88   | 201.88  | 50          | 20          | 7.043       | 6.917  | £152.95          | £127.43 |
| SH2.5-76    | 76    | 199.50   | 204.50  | 50          | 20          | 7.230       | 7.104  | £158.56          | £132.09 |
| SH2.5-78    | 78    | 204.75   | 209.75  | 50          | 20          | 7.613       | 7.487  | £161.43          | £134.54 |
| SH2.5-80    | 80    | 210.00   | 215.00  | 50          | 20          | 8.005       | 7.879  | £164.29          | £136.91 |
| SH2.5-86    | 86    | 225.75   | 230.75  | 50          | 20          | 9.243       | 9.117  | £167.45          | £139.50 |
| SH2.5-90    | 90    | 236.25   | 241.25  | 50          | 20          | 10.117      | 9.991  | £183.17          | £152.61 |
| SH2.5-96    | 96    | 252.00   | 257.00  | 50          | 20          | 11.504      | 11.378 | £197.18          | £164.29 |
| SH2.5-98    | 98    | 257.25   | 262.25  | 50          | 20          | 11.986      | 11.860 | £208.50          | £173.75 |
| SH2.5-100   | 100   | 262.50   | 267.50  | 50          | 20          | 12.478      | 12.352 | £233.99          | £195.01 |
| SH2.5-105   | 105   | 275.63   | 280.63  | 50          | 20          | 13.752      | 13.626 | £253.81          | £211.47 |
| SH2.5-110   | 110   | 288.75   | 293.75  | 50          | 20          | 15.087      | 14.961 | £269.40          | £224.49 |
| SH2.5-115   | 115   | 301.88   | 306.88  | 100         | 20          | 16.936      | 16.359 | £293.50          | £244.57 |

**Helical Gears Parallel Axis Steel MOD 2.5**

**Up to Ø750 mm**

*Please consult Technical for larger sizes.*



# Helical Gears

Plastic - Parallel Axis

**2.5 MOD** 17°45' H.A.  
20° P.A.

Materials

STD : White Delrin  
(fully machined)

SPECIALS : up to Ø750 mm



| TORQUE CHECK        |            |       |
|---------------------|------------|-------|
| 50 teeth x 1000 rpm |            |       |
| variations at back  | TORQUE Nm. | 12.00 |

RH 17°45'

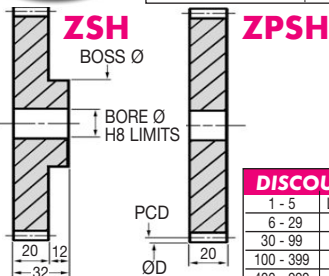


LH 17°45'

RH runs with LH

Popular sizes in stock.

Any two part numbers of this pitch will run together.



## DISCOUNTS

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

| PART NUMBER | TEETH | PCD (mm) | ØD (mm) | BOSS Ø (mm) | BORE Ø (mm) | WEIGHT (kg) | PRICE EACH 1 - 5 |        |        |
|-------------|-------|----------|---------|-------------|-------------|-------------|------------------|--------|--------|
|             |       |          |         |             |             |             | ZSH              | ZPSH   |        |
| ZSH2.5-9    | 9     | 26.25    | 31.25   | 30          | 10          | 0.113       | 0.071            | £11.11 | £8.43  |
| ZSH2.5-10   | 10    | 26.25    | 31.25   | 30          | 10          | 0.113       | 0.071            | £11.12 | £8.44  |
| ZSH2.5-11   | 11    | 28.88    | 33.88   | 30          | 10          | 0.140       | 0.088            | £11.13 | £8.45  |
| ZSH2.5-12   | 12    | 31.50    | 36.50   | 30          | 12          | 0.132       | 0.102            | £11.14 | £8.46  |
| ZSH2.5-13   | 13    | 34.13    | 39.13   | 30          | 12          | 0.159       | 0.123            | £12.87 | £9.84  |
| ZSH2.5-14   | 14    | 36.75    | 41.75   | 30          | 12          | 0.188       | 0.145            | £13.45 | £10.30 |
| ZSH2.5-15   | 15    | 39.38    | 44.38   | 30          | 12          | 0.202       | 0.169            | £13.48 | £10.97 |
| ZSH2.5-16   | 16    | 42.00    | 47.00   | 30          | 12          | 0.234       | 0.195            | £15.14 | £11.60 |
| ZSH2.5-17   | 17    | 44.63    | 49.63   | 30          | 12          | 0.266       | 0.222            | £18.53 | £14.23 |
| ZSH2.5-18   | 18    | 47.25    | 52.25   | 30          | 12          | 0.301       | 0.251            | £19.25 | £14.73 |
| ZSH2.5-19   | 19    | 49.88    | 54.88   | 30          | 12          | 0.338       | 0.282            | £19.77 | £15.14 |
| ZSH2.5-20   | 20    | 52.50    | 57.50   | 30          | 12          | 0.376       | 0.314            | £20.46 | £15.41 |
| ZSH2.5-21   | 21    | 55.13    | 60.13   | 30          | 12          | 0.417       | 0.348            | £23.75 | £18.22 |
| ZSH2.5-22   | 22    | 57.75    | 62.75   | 30          | 12          | 0.460       | 0.384            | £24.58 | £18.84 |
| ZSH2.5-23   | 23    | 60.38    | 65.38   | 30          | 12          | 0.505       | 0.421            | £25.23 | £19.33 |
| ZSH2.5-24   | 24    | 63.00    | 68.00   | 30          | 12          | 0.552       | 0.460            | £26.04 | £19.93 |
| ZSH2.5-25   | 25    | 65.63    | 70.63   | 30          | 12          | 0.580       | 0.500            | £27.37 | £20.99 |
| ZSH2.5-26   | 26    | 68.25    | 73.25   | 30          | 12          | 0.597       | 0.543            | £28.75 | £22.05 |
| ZSH2.5-27   | 27    | 70.88    | 75.88   | 30          | 12          | 0.641       | 0.587            | £31.11 | £23.87 |
| ZSH2.5-28   | 28    | 73.50    | 78.50   | 35          | 15          | 0.694       | 0.622            | £31.92 | £24.51 |
| ZSH2.5-29   | 29    | 76.13    | 81.13   | 35          | 15          | 0.742       | 0.670            | £32.96 | £25.27 |
| ZSH2.5-30   | 30    | 78.75    | 83.75   | 35          | 15          | 0.791       | 0.718            | £34.10 | £26.11 |
| ZSH2.5-31   | 31    | 81.38    | 86.38   | 35          | 15          | 0.841       | 0.769            | £34.92 | £26.80 |

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Unit 14, Foxwood Industrial Park, Foxwood Road, Chesterfield, Derbyshire S41 9RN

Telephone +44(0)1246 268080

Fax +44(0)1246 260003

| PART NUMBER | TEETH | PCD (mm) | ØD (mm) | BOSS Ø (mm) | BORE Ø (mm) | WEIGHT (kg) |       | PRICE EACH 1 - 5 |         |
|-------------|-------|----------|---------|-------------|-------------|-------------|-------|------------------|---------|
|             |       |          |         |             |             | ZSH         | ZPSH  | ZSH              | ZPSH    |
| ZSH2.5-32   | 32    | 84.00    | 89.00   | 35          | 15          | 0.893       | 0.821 | £40.16           | £30.82  |
| ZSH2.5-33   | 33    | 86.63    | 91.63   | 35          | 15          | 0.947       | 0.875 | £40.66           | £31.19  |
| ZSH2.5-34   | 34    | 89.25    | 94.25   | 35          | 15          | 1.003       | 0.930 | £41.64           | £31.92  |
| ZSH2.5-35   | 35    | 91.88    | 96.88   | 35          | 15          | 1.060       | 0.988 | £42.60           | £32.67  |
| ZSH2.5-36   | 36    | 94.50    | 99.50   | 45          | 17          | 1.164       | 1.039 | £44.84           | £34.49  |
| ZSH2.5-37   | 37    | 97.13    | 102.13  | 45          | 17          | 1.224       | 1.099 | £45.51           | £34.90  |
| ZSH2.5-38   | 38    | 99.75    | 104.75  | 45          | 17          | 1.286       | 1.161 | £46.80           | £35.86  |
| ZSH2.5-39   | 39    | 102.38   | 107.38  | 45          | 17          | 1.350       | 1.225 | £47.37           | £36.42  |
| ZSH2.5-40   | 40    | 105.00   | 110.00  | 45          | 17          | 1.416       | 1.290 | £48.62           | £37.33  |
| ZSH2.5-41   | 41    | 107.63   | 112.63  | 45          | 17          | 1.483       | 1.358 | £49.79           | £38.21  |
| ZSH2.5-42   | 42    | 110.25   | 115.25  | 45          | 17          | 1.552       | 1.426 | £50.58           | £38.78  |
| ZSH2.5-43   | 43    | 112.88   | 117.88  | 45          | 17          | 1.622       | 1.497 | £51.09           | £39.19  |
| ZSH2.5-44   | 44    | 115.50   | 120.50  | 45          | 17          | 1.694       | 1.569 | £56.85           | £43.64  |
| ZSH2.5-45   | 45    | 118.13   | 123.13  | 45          | 17          | 1.768       | 1.643 | £57.60           | £44.24  |
| ZSH2.5-46   | 46    | 120.75   | 125.75  | 45          | 17          | 1.843       | 1.718 | £58.96           | £45.24  |
| ZSH2.5-47   | 47    | 123.38   | 128.38  | 45          | 17          | 1.920       | 1.795 | £60.09           | £46.09  |
| ZSH2.5-48   | 48    | 126.00   | 131.00  | 45          | 17          | 1.999       | 1.874 | £61.71           | £47.34  |
| ZSH2.5-49   | 49    | 128.63   | 133.63  | 45          | 17          | 2.079       | 1.954 | £63.37           | £48.62  |
| ZSH2.5-50   | 50    | 131.25   | 136.25  | 45          | 17          | 2.161       | 2.036 | £65.12           | £49.96  |
| ZSH2.5-51   | 51    | 133.88   | 138.88  | 45          | 17          | 2.245       | 2.120 | £65.67           | £50.39  |
| ZSH2.5-52   | 52    | 136.50   | 141.50  | 45          | 17          | 2.330       | 2.205 | £65.68           | £50.40  |
| ZSH2.5-53   | 53    | 139.13   | 144.13  | 45          | 17          | 2.417       | 2.292 | £73.34           | £56.30  |
| ZSH2.5-54   | 54    | 141.75   | 146.75  | 45          | 17          | 2.506       | 2.380 | £74.15           | £58.83  |
| ZSH2.5-55   | 55    | 144.38   | 149.38  | 45          | 17          | 2.596       | 2.471 | £81.17           | £62.37  |
| ZSH2.5-56   | 56    | 147.00   | 152.00  | 45          | 17          | 2.688       | 2.563 | £82.74           | £63.45  |
| ZSH2.5-57   | 57    | 149.63   | 154.63  | 60          | 20          | 2.874       | 2.643 | £84.25           | £64.64  |
| ZSH2.5-58   | 58    | 152.25   | 157.25  | 60          | 20          | 2.969       | 2.738 | £94.02           | £72.96  |
| ZSH2.5-59   | 59    | 154.88   | 159.88  | 60          | 20          | 3.066       | 2.835 | £95.77           | £73.30  |
| ZSH2.5-60   | 60    | 157.50   | 162.50  | 60          | 20          | 3.164       | 2.934 | £108.08          | £83.00  |
| ZSH2.5-62   | 62    | 162.75   | 167.75  | 60          | 20          | 3.367       | 3.136 | £122.16          | £93.68  |
| ZSH2.5-64   | 64    | 168.00   | 173.00  | 60          | 20          | 3.575       | 3.344 | £130.82          | £100.43 |
| ZSH2.5-65   | 65    | 170.63   | 175.63  | 60          | 20          | 3.682       | 3.451 | £143.87          | £110.37 |
| ZSH2.5-66   | 66    | 173.25   | 178.25  | 60          | 20          | 3.791       | 3.560 | £150.20          | £115.26 |
| ZSH2.5-68   | 68    | 178.50   | 183.50  | 60          | 20          | 4.013       | 3.782 | £159.37          | £122.16 |
| ZSH2.5-70   | 70    | 183.75   | 188.75  | 60          | 20          | 4.241       | 4.010 | £169.02          | £129.69 |
| ZSH2.5-71   | 71    | 186.38   | 191.38  | 60          | 20          | 4.358       | 4.127 | £179.21          | £137.54 |
| ZSH2.5-72   | 72    | 189.00   | 194.00  | 60          | 20          | 4.476       | 4.246 | £185.88          | £142.62 |
| ZSH2.5-73   | 73    | 191.63   | 196.63  | 60          | 20          | 4.597       | 4.366 | £222.98          | £171.11 |
| ZSH2.5-74   | 74    | 194.25   | 199.25  | 60          | 20          | 4.718       | 4.487 | £231.56          | £177.79 |
| ZSH2.5-75   | 75    | 196.88   | 201.88  | 60          | 20          | 4.842       | 4.611 | £240.03          | £185.39 |

**Up to Ø750 mm**

**'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.*

