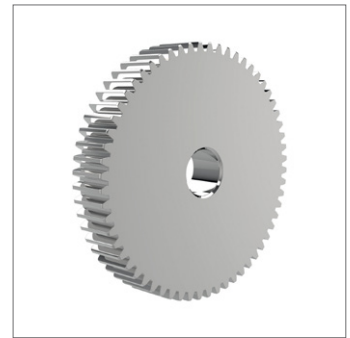
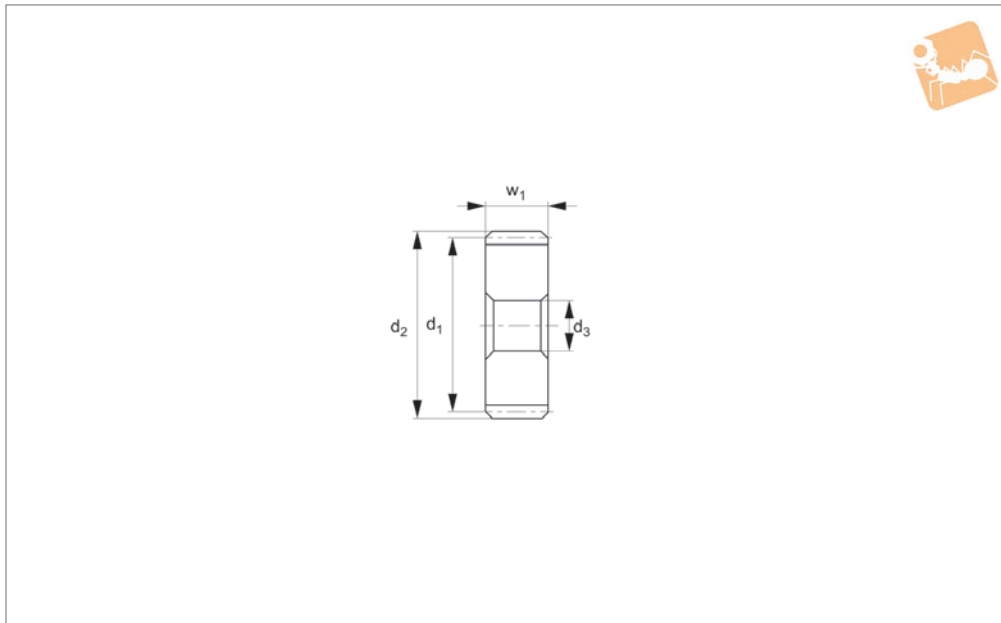




# Spur Gears - Module 1.25

carbon steel - 14-120 teeth



**R5180**

STANDARD SPUR GEARS

### Material

Carbon steel (ISO C45).  
Accuracy to JIS B 1702-1 (ISO) class 8- 9.

### Technical Notes

20° pressure angle, full depth tooth.  
Amount of backlash when assembling gears = 0,05 - 0,125mm.

### Tips

Module 1.25 for gears with 8-11 teeth see R5181, for gears with 8-10 teeth see R5180, for gears with 12-17 teeth see R5183, for gears with 18-120 teeth see R5185.  
Max. allowable torque (Nm) is based on

standard operating conditions (see technical pages) with a safety factor of 1.2. For non standard applications apply a suitable safety factor depending on frequency of use, type of working etc.

| Order No.        | Module | No. of teeth z | Pitch dia. $d_1$ | $d_2$ | $w_1$ | $d_3$<br>tol. H7 | Torque<br>Nm<br>max. | Weight<br>g |
|------------------|--------|----------------|------------------|-------|-------|------------------|----------------------|-------------|
| R5180.125-014-15 | m 1.25 | 14             | 17.5             | 20.0  | 15    | 6                | 9.91                 | 25.0        |
| R5180.125-015-15 | m 1.25 | 15             | 18.8             | 21.3  | 15    | 6                | 11.10                | 29.2        |
| R5180.125-016-15 | m 1.25 | 16             | 20.0             | 22.5  | 15    | 6                | 12.32                | 33.7        |
| R5180.125-017-15 | m 1.25 | 17             | 21.3             | 23.8  | 15    | 6                | 13.56                | 38.4        |
| R5180.125-018-10 | m 1.25 | 18             | 22.5             | 25.0  | 10    | 6                | 9.87                 | 29.0        |
| R5180.125-018-15 | m 1.25 | 18             | 22.5             | 25.0  | 15    | 8                | 14.81                | 40.9        |
| R5180.125-019-10 | m 1.25 | 19             | 23.8             | 26.3  | 10    | 6                | 10.73                | 32.6        |
| R5180.125-019-15 | m 1.25 | 19             | 23.8             | 26.3  | 15    | 8                | 16.10                | 46.3        |
| R5180.125-020-10 | m 1.25 | 20             | 25.0             | 27.5  | 10    | 8                | 11.59                | 34.6        |
| R5180.125-020-15 | m 1.25 | 20             | 25               | 27.5  | 15    | 10               | 17.39                | 48.6        |
| R5180.125-021-10 | m 1.25 | 21             | 26.3             | 28.8  | 10    | 8                | 12.46                | 38.5        |
| R5180.125-021-15 | m 1.25 | 21             | 26.3             | 28.8  | 15    | 10               | 18.69                | 54.5        |
| R5180.125-022-10 | m 1.25 | 22             | 27.5             | 30.0  | 10    | 8                | 13.34                | 42.7        |
| R5180.125-022-15 | m 1.25 | 22             | 27.5             | 30.0  | 15    | 10               | 20.01                | 60.7        |
| R5180.125-023-10 | m 1.25 | 23             | 28.8             | 31.3  | 10    | 8                | 14.23                | 47.0        |
| R5180.125-023-15 | m 1.25 | 23             | 28.8             | 31.3  | 15    | 10               | 21.34                | 67.2        |
| R5180.125-024-10 | m 1.25 | 24             | 30.0             | 32.5  | 10    | 8                | 15.11                | 51.5        |
| R5180.125-024-15 | m 1.25 | 24             | 30.0             | 32.5  | 15    | 10               | 22.67                | 74.0        |
| R5180.125-025-10 | m 1.25 | 25             | 31.3             | 33.8  | 10    | 8                | 16.01                | 56.3        |
| R5180.125-025-15 | m 1.25 | 25             | 31.3             | 33.8  | 15    | 10               | 24.02                | 81.1        |
| R5180.125-026-10 | m 1.25 | 26             | 32.5             | 35.0  | 10    | 8                | 16.92                | 61.2        |
| R5180.125-026-15 | m 1.25 | 26             | 32.5             | 35.0  | 15    | 10               | 25.38                | 88.4        |
| R5180.125-027-10 | m 1.25 | 27             | 33.8             | 36.3  | 10    | 8                | 17.83                | 66.3        |
| R5180.125-027-15 | m 1.25 | 27             | 33.8             | 36.3  | 15    | 10               | 26.75                | 96.1        |
| R5180.125-028-10 | m 1.25 | 28             | 35.0             | 37.5  | 10    | 8                | 18.14                | 71.6        |
| R5180.125-028-15 | m 1.25 | 28             | 35.0             | 37.5  | 15    | 10               | 27.69                | 104.0       |
| R5180.125-029-10 | m 1.25 | 29             | 36.3             | 38.8  | 10    | 8                | 19.10                | 77.1        |
| R5180.125-029-15 | m 1.25 | 29             | 36.3             | 38.8  | 15    | 10               | 28.65                | 112.3       |
| R5180.125-030-10 | m 1.25 | 30             | 37.5             | 40.0  | 10    | 8                | 20.05                | 82.8        |



| Order No.        | Module | No. of teeth z | Pitch dia. $d_1$ | $d_2$ | $w_1$ | $d_3$<br>tol. H7 | Torque<br>Nm<br>max. | Weight<br>g |
|------------------|--------|----------------|------------------|-------|-------|------------------|----------------------|-------------|
| R5180.125-030-15 | m 1.25 | 30             | 37.5             | 40.0  | 15    | 10               | 30.56                | 120.8       |
| R5180.125-032-08 | m 1.25 | 32             | 40.0             | 42.5  | 8     | 10               | 17.19                | 74.0        |
| R5180.125-032-13 | m 1.25 | 32             | 40.0             | 42.5  | 13    | 12               | 28.65                | 116.7       |
| R5180.125-034-08 | m 1.25 | 34             | 42.5             | 45.0  | 8     | 10               | 19.10                | 84.2        |
| R5180.125-034-13 | m 1.25 | 34             | 42.5             | 45.0  | 13    | 12               | 31.51                | 133.2       |
| R5180.125-035-08 | m 1.25 | 35             | 43.8             | 46.3  | 8     | 10               | 20.05                | 89.5        |
| R5180.125-035-13 | m 1.25 | 35             | 43.8             | 46.3  | 13    | 12               | 32.47                | 141.9       |
| R5180.125-036-08 | m 1.25 | 36             | 45.0             | 47.5  | 8     | 10               | 20.05                | 95.0        |
| R5180.125-036-13 | m 1.25 | 36             | 45.0             | 47.5  | 13    | 12               | 33.42                | 150.8       |
| R5180.125-038-08 | m 1.25 | 38             | 47.5             | 50.0  | 8     | 10               | 21.96                | 106.4       |
| R5180.125-038-13 | m 1.25 | 38             | 47.5             | 50.0  | 13    | 12               | 36.29                | 169.3       |
| R5180.125-040-08 | m 1.25 | 40             | 50.0             | 52.5  | 8     | 10               | 23.87                | 118.4       |
| R5180.125-040-13 | m 1.25 | 40             | 50.0             | 52.5  | 13    | 12               | 38.20                | 188.8       |
| R5180.125-042-08 | m 1.25 | 42             | 52.5             | 55.0  | 8     | 10               | 24.83                | 131.0       |
| R5180.125-042-13 | m 1.25 | 42             | 52.5             | 55.0  | 13    | 12               | 41.06                | 209.4       |
| R5180.125-044-08 | m 1.25 | 44             | 55.0             | 57.5  | 8     | 10               | 26.74                | 144.3       |
| R5180.125-044-13 | m 1.25 | 44             | 55.0             | 57.5  | 13    | 12               | 43.93                | 230.9       |
| R5180.125-045-08 | m 1.25 | 45             | 56.3             | 58.8  | 8     | 10               | 27.69                | 151.1       |
| R5180.125-045-13 | m 1.25 | 45             | 56.3             | 58.8  | 13    | 12               | 44.88                | 242.1       |
| R5180.125-046-08 | m 1.25 | 46             | 57.5             | 60.0  | 8     | 10               | 27.69                | 158.1       |
| R5180.125-046-13 | m 1.25 | 46             | 57.5             | 60.0  | 13    | 12               | 45.84                | 253.5       |
| R5180.125-048-08 | m 1.25 | 48             | 60.0             | 62.5  | 8     | 10               | 29.60                | 172.6       |
| R5180.125-048-13 | m 1.25 | 48             | 60.0             | 62.5  | 13    | 12               | 48.70                | 277.0       |
| R5180.125-050-08 | m 1.25 | 50             | 62.5             | 65.0  | 8     | 12               | 29.60                | 185.6       |
| R5180.125-050-13 | m 1.25 | 50             | 62.5             | 65.0  | 13    | 14               | 48.70                | 297.4       |
| R5180.125-052-08 | m 1.25 | 52             | 65.0             | 67.5  | 8     | 12               | 32.47                | 201.3       |
| R5180.125-052-13 | m 1.25 | 52             | 65.0             | 67.5  | 13    | 14               | 53.48                | 322.9       |
| R5180.125-054-08 | m 1.25 | 54             | 67.5             | 70.0  | 8     | 12               | 34.38                | 217.6       |
| R5180.125-054-13 | m 1.25 | 54             | 67.5             | 70.0  | 13    | 14               | 56.34                | 349.5       |
| R5180.125-055-08 | m 1.25 | 55             | 68.8             | 71.3  | 8     | 12               | 35.33                | 226.0       |
| R5180.125-055-13 | m 1.25 | 55             | 68.8             | 71.3  | 13    | 14               | 57.30                | 363.1       |
| R5180.125-056-08 | m 1.25 | 56             | 70.0             | 72.5  | 8     | 12               | 36.29                | 234.6       |
| R5180.125-056-13 | m 1.25 | 56             | 70.0             | 72.5  | 13    | 14               | 59.21                | 377.0       |
| R5180.125-058-08 | m 1.25 | 58             | 72.5             | 75.0  | 8     | 12               | 37.24                | 252.2       |
| R5180.125-058-13 | m 1.25 | 58             | 72.5             | 75.0  | 13    | 14               | 61.12                | 405.6       |
| R5180.125-060-08 | m 1.25 | 60             | 75.0             | 77.5  | 8     | 12               | 39.15                | 270.3       |
| R5180.125-060-13 | m 1.25 | 60             | 75.0             | 77.5  | 13    | 14               | 63.98                | 435.1       |
| R5180.125-062-08 | m 1.25 | 62             | 77.5             | 80.0  | 8     | 12               | 41.06                | 289.1       |
| R5180.125-062-13 | m 1.25 | 62             | 77.5             | 80.0  | 13    | 14               | 66.85                | 465.7       |
| R5180.125-064-08 | m 1.25 | 64             | 80.0             | 82.5  | 8     | 12               | 42.02                | 308.6       |
| R5180.125-064-13 | m 1.25 | 64             | 80.0             | 82.5  | 13    | 14               | 68.76                | 497.2       |
| R5180.125-065-08 | m 1.25 | 65             | 81.3             | 83.8  | 8     | 12               | 42.97                | 318.5       |
| R5180.125-065-13 | m 1.25 | 65             | 81.3             | 83.8  | 13    | 14               | 70.67                | 513.4       |
| R5180.125-066-08 | m 1.25 | 66             | 82.5             | 85.0  | 8     | 12               | 43.93                | 328.6       |
| R5180.125-066-13 | m 1.25 | 66             | 82.5             | 85.0  | 13    | 14               | 71.62                | 529.8       |
| R5180.125-068-08 | m 1.25 | 68             | 85.0             | 87.5  | 8     | 12               | 45.84                | 349.3       |
| R5180.125-068-13 | m 1.25 | 68             | 85.0             | 87.5  | 13    | 14               | 74.49                | 563.4       |
| R5180.125-070-08 | m 1.25 | 70             | 87.5             | 90.0  | 8     | 14               | 46.79                | 368.0       |
| R5180.125-070-13 | m 1.25 | 70             | 87.5             | 90.0  | 13    | 16               | 76.40                | 593.1       |
| R5180.125-072-08 | m 1.25 | 72             | 90.0             | 92.5  | 8     | 14               | 48.70                | 389.8       |
| R5180.125-072-13 | m 1.25 | 72             | 90.0             | 92.5  | 13    | 16               | 80.22                | 628.7       |
| R5180.125-075-08 | m 1.25 | 75             | 93.8             | 96.3  | 8     | 14               | 51.57                | 423.8       |
| R5180.125-075-13 | m 1.25 | 75             | 93.8             | 96.3  | 13    | 16               | 84.04                | 683.9       |
| R5180.125-080-08 | m 1.25 | 80             | 100.0            | 102.5 | 8     | 14               | 55.39                | 483.6       |
| R5180.125-080-13 | m 1.25 | 80             | 100.0            | 102.5 | 13    | 16               | 90.72                | 781.0       |
| R5180.125-084-08 | m 1.25 | 84             | 105.0            | 107.5 | 8     | 14               | 58.25                | 530.0       |
| R5180.125-084-13 | m 1.25 | 84             | 105.0            | 107.5 | 13    | 16               | 95.50                | 860.0       |
| R5180.125-085-08 | m 1.25 | 85             | 106.3            | 108.8 | 8     | 14               | 59.21                | 550.0       |
| R5180.125-085-13 | m 1.25 | 85             | 106.3            | 108.8 | 13    | 16               | 96.45                | 880.0       |
| R5180.125-090-08 | m 1.25 | 90             | 112.5            | 115.0 | 8     | 16               | 63.03                | 610.0       |
| R5180.125-090-13 | m 1.25 | 90             | 112.5            | 115.0 | 13    | 18               | 103.14               | 990.0       |
| R5180.125-095-08 | m 1.25 | 95             | 118.8            | 121.3 | 8     | 16               | 66.85                | 680.0       |
| R5180.125-095-13 | m 1.25 | 95             | 118.8            | 121.3 | 13    | 18               | 109.82               | 1100.0      |
| R5180.125-096-08 | m 1.25 | 96             | 120.0            | 122.5 | 8     | 16               | 67.80                | 700.0       |
| R5180.125-096-13 | m 1.25 | 96             | 120.0            | 122.5 | 13    | 18               | 110.78               | 1130.0      |
| R5180.125-100-08 | m 1.25 | 100            | 125.0            | 127.5 | 8     | 16               | 71.62                | 760.0       |
| R5180.125-100-13 | m 1.25 | 100            | 125.0            | 127.5 | 13    | 18               | 116.51               | 1230.0      |



# Spur Gears - Module 1.25

carbon steel - 14-120 teeth



## Standard Spur Gears

| Order No.               | Module        | No. of teeth z | Pitch dia. $d_1$ | $d_2$ | $w_1$ | $d_3$<br>tol. H7 | Torque<br>Nm<br>max. | Weight<br>g |
|-------------------------|---------------|----------------|------------------|-------|-------|------------------|----------------------|-------------|
| <b>R5180.125-105-08</b> | <i>m</i> 1.25 | 105            | 131.3            | 133.8 | 8     | 16               | 75.44                | 840.0       |
| <b>R5180.125-105-13</b> | <i>m</i> 1.25 | 105            | 131.3            | 133.8 | 13    | 18               | 123.19               | 1350.0      |
| <b>R5180.125-110-08</b> | <i>m</i> 1.25 | 110            | 137.5            | 140.0 | 8     | 18               | 79.26                | 920.0       |
| <b>R5180.125-110-13</b> | <i>m</i> 1.25 | 110            | 137.5            | 140.0 | 13    | 20               | 129.88               | 1480.0      |
| <b>R5180.125-115-08</b> | <i>m</i> 1.25 | 115            | 143.8            | 146.3 | 8     | 18               | 84.04                | 1000.0      |
| <b>R5180.125-115-13</b> | <i>m</i> 1.25 | 115            | 143.8            | 146.3 | 13    | 20               | 136.56               | 1620.0      |
| <b>R5180.125-120-08</b> | <i>m</i> 1.25 | 120            | 150.0            | 152.5 | 8     | 18               | 87.86                | 1090.0      |
| <b>R5180.125-120-13</b> | <i>m</i> 1.25 | 120            | 150.0            | 152.5 | 13    | 20               | 142.29               | 1770.0      |