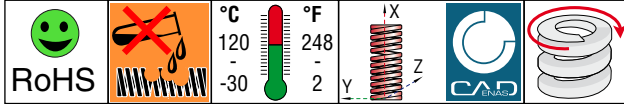
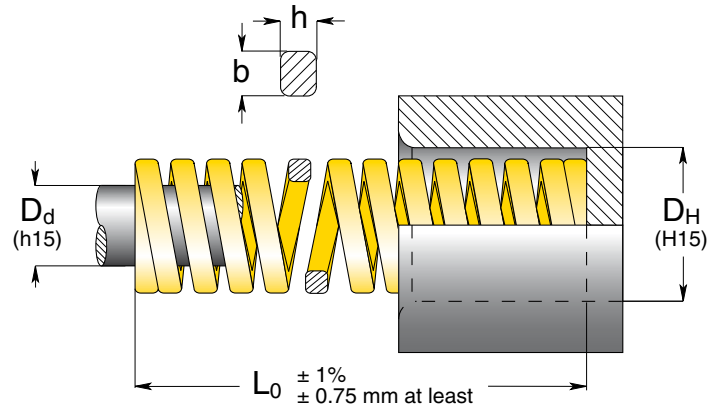


- IT** Molle carico extra-forte
- EN** Extra-strong load springs
- DE** Federn für höchste Spannung
- FR** Ressorts charge extra-forte
- ES** Muelles carga extra-fuerte
- PT** Molas carga extra-forte



| Code              | D <sub>H</sub> D <sub>d</sub> |              | L <sub>0</sub> | R               | A                  | B                  | C                    | D                  | E             | Pcs  |      |      |      |    |
|-------------------|-------------------------------|--------------|----------------|-----------------|--------------------|--------------------|----------------------|--------------------|---------------|------|------|------|------|----|
|                   | Hole Diameter                 | Rod Diameter |                |                 |                    |                    |                      |                    |               |      |      |      |      |    |
|                   | b x h                         |              | Free Length    | Spring Constant | 17% L <sub>0</sub> | 20% L <sub>0</sub> | 22.5% L <sub>0</sub> | 25% L <sub>0</sub> | approx.       |      |      |      |      |    |
|                   | mm                            | mm           | mm             | ± 10% N/mm      | + 3.000.000 mm N   | ~ 1.500.000 mm N   | 300 - 500.000 mm N   | 100 - 200.000 mm N | do not use mm |      |      |      |      |    |
| <b>G 10 - 025</b> | 10                            | 5            | 25             | 36.8            | 4.3                | 158                | 5.0                  | 184                | 5.6           | 207  | 6.3  | 232  | 7.7  | 50 |
| <b>G 10 - 032</b> |                               |              | 32             | 27.9            | 5.4                | 151                | 6.4                  | 179                | 7.2           | 201  | 8.0  | 223  | 10.6 | 50 |
| <b>G 10 - 038</b> |                               |              | 38             | 23.7            | 6.5                | 154                | 7.6                  | 180                | 8.6           | 203  | 9.5  | 225  | 12.6 | 50 |
| <b>G 10 - 044</b> |                               |              | 44             | 19.2            | 7.5                | 144                | 8.8                  | 169                | 9.9           | 190  | 11.0 | 211  | 13.8 | 50 |
| <b>G 10 - 051</b> |                               |              | 51             | 16.5            | 8.7                | 144                | 10.2                 | 168                | 11.5          | 189  | 12.8 | 211  | 16.2 | 25 |
| <b>G 10 - 064</b> |                               |              | 64             | 13.2            | 10.9               | 144                | 12.8                 | 169                | 14.4          | 190  | 16.0 | 211  | 20.4 | 25 |
| <b>G 10 - 076</b> |                               |              | 76             | 10.9            | 12.9               | 141                | 15.2                 | 166                | 17.1          | 186  | 19.0 | 207  | 25.2 | 25 |
| <b>G 10 - 305</b> | 1.9 x 1.6                     |              | 305            | 2.6             | 51.9               | 135                | 61.0                 | 159                | 68.6          | 178  | 76.3 | 198  | 111  | 10 |
| <b>G 13 - 025</b> | 12.5                          | 6.3          | 25             | 58.5            | 4.3                | 252                | 5.0                  | 293                | 5.6           | 329  | 6.3  | 369  | 8.1  | 50 |
| <b>G 13 - 032</b> |                               |              | 32             | 43.9            | 5.4                | 237                | 6.4                  | 281                | 7.2           | 316  | 8.0  | 351  | 9.9  | 50 |
| <b>G 13 - 038</b> |                               |              | 38             | 36.0            | 6.5                | 234                | 7.6                  | 274                | 8.6           | 308  | 9.5  | 342  | 12.9 | 50 |
| <b>G 13 - 044</b> |                               |              | 44             | 30.3            | 7.5                | 227                | 8.8                  | 267                | 9.9           | 300  | 11.0 | 333  | 14.1 | 25 |
| <b>G 13 - 051</b> |                               |              | 51             | 26.2            | 8.7                | 228                | 10.2                 | 267                | 11.5          | 301  | 12.8 | 335  | 17.4 | 25 |
| <b>G 13 - 064</b> |                               |              | 64             | 21.2            | 10.9               | 231                | 12.8                 | 271                | 14.4          | 305  | 16.0 | 339  | 21.0 | 25 |
| <b>G 13 - 076</b> |                               |              | 76             | 17.1            | 12.9               | 221                | 15.2                 | 260                | 17.1          | 292  | 19.0 | 325  | 26.4 | 25 |
| <b>G 13 - 089</b> | 89                            | 14.5         | 15.1           | 219             | 17.8               | 258                | 20.0                 | 290                | 22.3          | 323  | 31.5 | 20   |      |    |
| <b>G 13 - 102</b> | 102                           | 12.7         | 17.3           | 220             | 20.4               | 259                | 23.0                 | 291                | 25.5          | 324  | 36.0 | 10   |      |    |
| <b>G 13 - 305</b> | 2.6 x 2.0                     |              | 305            | 4.3             | 51.9               | 223                | 61.0                 | 262                | 68.6          | 295  | 76.3 | 328  | 111  | 10 |
| <b>G 16 - 025</b> | 16                            | 8            | 25             | 118             | 4.3                | 507                | 5.0                  | 590                | 5.6           | 664  | 6.3  | 743  | 8.5  | 50 |
| <b>G 16 - 032</b> |                               |              | 32             | 89.0            | 5.4                | 481                | 6.4                  | 570                | 7.2           | 641  | 8.0  | 712  | 11.0 | 50 |
| <b>G 16 - 038</b> |                               |              | 38             | 72.1            | 6.5                | 469                | 7.6                  | 548                | 8.6           | 616  | 9.5  | 685  | 13.2 | 25 |
| <b>G 16 - 044</b> |                               |              | 44             | 60.9            | 7.5                | 457                | 8.8                  | 536                | 9.9           | 603  | 11.0 | 670  | 14.7 | 25 |
| <b>G 16 - 051</b> |                               |              | 51             | 52.3            | 8.7                | 455                | 10.2                 | 533                | 11.5          | 600  | 12.8 | 669  | 17.7 | 25 |
| <b>G 16 - 064</b> |                               |              | 64             | 41.2            | 10.9               | 449                | 12.8                 | 527                | 14.4          | 593  | 16.0 | 659  | 21.9 | 25 |
| <b>G 16 - 076</b> |                               |              | 76             | 34.1            | 12.9               | 440                | 15.2                 | 518                | 17.1          | 583  | 19.0 | 648  | 27.8 | 20 |
| <b>G 16 - 089</b> | 89                            | 29.5         | 15.1           | 445             | 17.8               | 525                | 20.0                 | 591                | 22.3          | 658  | 31.2 | 20   |      |    |
| <b>G 16 - 102</b> | 102                           | 25.6         | 17.3           | 443             | 20.4               | 522                | 23.0                 | 588                | 25.5          | 653  | 37.9 | 20   |      |    |
| <b>G 16 - 115</b> | 115                           | 22.4         | 19.6           | 439             | 23.0               | 515                | 25.9                 | 580                | 28.8          | 645  | 44.5 | 10   |      |    |
| <b>G 16 - 305</b> | 3.2 x 2.9                     |              | 305            | 8.4             | 51.9               | 436                | 61.0                 | 512                | 68.6          | 576  | 76.3 | 641  | 113  | 10 |
| <b>G 20 - 025</b> | 20                            | 10           | 25             | 293             | 4.3                | 1260               | 5.0                  | 1465               | 5.6           | 1648 | 6.3  | 1846 | 6.9  | 50 |
| <b>G 20 - 032</b> |                               |              | 32             | 224             | 5.4                | 1210               | 6.4                  | 1434               | 7.2           | 1613 | 8.0  | 1792 | 9.4  | 50 |
| <b>G 20 - 038</b> |                               |              | 38             | 177             | 6.5                | 1151               | 7.6                  | 1345               | 8.6           | 1513 | 9.5  | 1682 | 12.0 | 25 |
| <b>G 20 - 044</b> |                               |              | 44             | 149             | 7.5                | 1118               | 8.8                  | 1311               | 9.9           | 1475 | 11.0 | 1639 | 13.5 | 25 |
| <b>G 20 - 051</b> |                               |              | 51             | 128             | 8.7                | 1114               | 10.2                 | 1306               | 11.5          | 1469 | 12.8 | 1638 | 16.2 | 25 |
| <b>G 20 - 064</b> |                               |              | 64             | 99.0            | 10.9               | 1079               | 12.8                 | 1267               | 14.4          | 1426 | 16.0 | 1584 | 21.2 | 25 |
| <b>G 20 - 076</b> |                               |              | 76             | 81.7            | 12.9               | 1054               | 15.2                 | 1242               | 17.1          | 1397 | 19.0 | 1552 | 24.7 | 25 |
| <b>G 20 - 089</b> | 89                            | 69.5         | 15.1           | 1049            | 17.8               | 1237               | 20.0                 | 1392               | 22.3          | 1550 | 28.8 | 20   |      |    |
| <b>G 20 - 102</b> | 102                           | 60.6         | 17.3           | 1048            | 20.4               | 1236               | 23.0                 | 1391               | 25.5          | 1545 | 34.8 | 20   |      |    |
| <b>G 20 - 115</b> | 115                           | 53.0         | 19.6           | 1039            | 23.0               | 1219               | 25.9                 | 1371               | 28.8          | 1526 | 39.0 | 10   |      |    |
| <b>G 20 - 127</b> | 127                           | 47.5         | 21.6           | 1026            | 25.4               | 1207               | 28.6                 | 1357               | 31.8          | 1511 | 43.0 | 10   |      |    |
| <b>G 20 - 139</b> | 139                           | 43.0         | 23.8           | 1023            | 28.0               | 1204               | 31.3                 | 1345               | 35.0          | 1505 | 45.3 | 10   |      |    |
| <b>G 20 - 152</b> | 152                           | 39.0         | 25.8           | 1006            | 30.4               | 1186               | 34.2                 | 1334               | 38.0          | 1482 | 50.4 | 10   |      |    |
| <b>G 20 - 305</b> | 4.1 x 3.8                     |              | 305            | 21.2            | 51.9               | 1100               | 61.0                 | 1293               | 68.6          | 1455 | 76.3 | 1618 | 103  | 10 |

| Code       | D <sub>H</sub> | D <sub>d</sub> | L <sub>0</sub> | R               | A                  |       | B                  |       | C                    |       | D                  |       | E       | Pcs   |      |      |
|------------|----------------|----------------|----------------|-----------------|--------------------|-------|--------------------|-------|----------------------|-------|--------------------|-------|---------|-------|------|------|
|            | Hole Diameter  | Rod Diameter   | Free Length    | Spring Constant | 17% L <sub>0</sub> |       | 20% L <sub>0</sub> |       | 22.5% L <sub>0</sub> |       | 25% L <sub>0</sub> |       | approx. |       |      |      |
|            | b x h          |                | ± 10%          | ± 3.000.000     | ~ 1.500.000        |       | 300 - 500.000      |       | 100 - 200.000        |       | do not use         |       |         |       |      |      |
|            | mm             | mm             | mm             | N/mm            | mm                 | N     | mm                 | N     | mm                   | N     | mm                 | N     | mm      |       |      |      |
| G 25 - 025 | 25             | 12.5           | 25             | 459             | 4.3                | 1974  | 5.0                | 2295  | 5.6                  | 2582  | 6.3                | 2892  | 7.3     | 50    |      |      |
| G 25 - 032 |                |                | 32             | 374             | 5.4                | 2020  | 6.4                | 2394  | 7.2                  | 2693  | 8.0                | 2992  | 10.7    | 25    |      |      |
| G 25 - 038 |                |                | 38             | 300             | 6.5                | 1950  | 7.6                | 2280  | 8.6                  | 2580  | 9.5                | 2850  | 12.0    | 25    |      |      |
| G 25 - 044 |                |                | 44             | 244             | 7.5                | 1830  | 8.8                | 2147  | 9.9                  | 2416  | 11.0               | 2684  | 14.4    | 25    |      |      |
| G 25 - 051 |                |                | 51             | 208             | 8.7                | 1810  | 10.2               | 2122  | 11.5                 | 2392  | 12.8               | 2662  | 17.4    | 25    |      |      |
| G 25 - 064 |                |                | 64             | 161             | 10.9               | 1755  | 12.8               | 2061  | 14.4                 | 2318  | 16.0               | 2576  | 21.4    | 25    |      |      |
| G 25 - 076 |                |                | 76             | 131             | 12.9               | 1690  | 15.2               | 1991  | 17.1                 | 2240  | 19.0               | 2489  | 26.9    | 20    |      |      |
| G 25 - 089 |                |                | 89             | 111             | 15.1               | 1676  | 17.8               | 1976  | 20.0                 | 2220  | 22.3               | 2475  | 30.9    | 20    |      |      |
| G 25 - 102 |                |                | 102            | 96.3            | 17.3               | 1666  | 20.4               | 1965  | 23.0                 | 2210  | 25.5               | 2456  | 36.7    | 20    |      |      |
| G 25 - 115 |                |                | 115            | 85.7            | 19.6               | 1680  | 23.0               | 1971  | 25.9                 | 2217  | 28.8               | 2468  | 40.3    | 10    |      |      |
| G 25 - 127 |                |                | 127            | 76.3            | 21.6               | 1648  | 25.4               | 1938  | 28.6                 | 2180  | 31.8               | 2426  | 45.1    | 10    |      |      |
| G 25 - 139 |                |                | 139            | 68.9            | 23.8               | 1571  | 28.0               | 1848  | 31.3                 | 2066  | 35.0               | 2310  | 47.6    | 10    |      |      |
| G 25 - 152 |                |                | 152            | 63.5            | 25.8               | 1638  | 30.4               | 1930  | 34.2                 | 2172  | 38.0               | 2413  | 53.5    | 10    |      |      |
| G 25 - 178 |                |                | 178            | 53.9            | 30.3               | 1633  | 35.6               | 1919  | 40.1                 | 2159  | 44.5               | 2399  | 63.9    | 10    |      |      |
| G 25 - 203 | 203            | 47.0           | 34.5           | 1622            | 40.6               | 1908  | 45.7               | 2147  | 50.8                 | 2388  | 70.2               | 10    |         |       |      |      |
| G 25 - 305 | 5.4 x 4.6      | 305            | 30.9           | 51.9            | 1604               | 61.0  | 1885               | 68.6  | 2121                 | 76.3  | 2358               | 110   | 5       |       |      |      |
| G 32 - 038 | 32             | 16             | 38             | 480             | 6.5                | 3120  | 7.6                | 3648  | 8.6                  | 4560  | 9.5                | 5018  | 11.4    | 20    |      |      |
| G 32 - 044 |                |                | 44             | 390             | 7.5                | 2925  | 8.8                | 3432  | 9.9                  | 3861  | 11.0               | 4290  | 13.7    | 20    |      |      |
| G 32 - 051 |                |                | 51             | 320             | 8.7                | 2784  | 10.2               | 3264  | 11.5                 | 3680  | 12.8               | 4096  | 15.6    | 20    |      |      |
| G 32 - 064 |                |                | 64             | 269             | 10.9               | 2934  | 12.8               | 3446  | 14.4                 | 3876  | 16.0               | 4307  | 20.0    | 20    |      |      |
| G 32 - 076 |                |                | 76             | 219             | 12.9               | 2825  | 15.2               | 3329  | 17.1                 | 3745  | 19.0               | 4161  | 24.4    | 20    |      |      |
| G 32 - 089 |                |                | 89             | 180             | 15.1               | 2723  | 17.8               | 3209  | 20.0                 | 3611  | 22.3               | 4021  | 29.7    | 10    |      |      |
| G 32 - 102 |                |                | 102            | 155             | 17.3               | 2682  | 20.4               | 3162  | 23.0                 | 3557  | 25.5               | 3953  | 35.1    | 10    |      |      |
| G 32 - 115 |                |                | 115            | 140             | 19.6               | 2744  | 23.0               | 3220  | 25.9                 | 3623  | 28.8               | 4032  | 39.0    | 10    |      |      |
| G 32 - 127 |                |                | 127            | 124             | 21.6               | 2678  | 25.4               | 3150  | 28.6                 | 3543  | 31.8               | 3943  | 42.8    | 10    |      |      |
| G 32 - 139 |                |                | 139            | 112             | 23.8               | 2673  | 28.0               | 3144  | 31.3                 | 3512  | 35.0               | 3931  | 48.6    | 10    |      |      |
| G 32 - 152 |                |                | 152            | 102             | 25.8               | 2632  | 30.4               | 3101  | 34.2                 | 3488  | 38.0               | 3876  | 52.4    | 10    |      |      |
| G 32 - 178 |                |                | 178            | 88.2            | 30.3               | 2672  | 35.6               | 3140  | 40.1                 | 3532  | 44.5               | 3925  | 60.9    | 5     |      |      |
| G 32 - 203 |                |                | 203            | 76.0            | 34.5               | 2622  | 40.6               | 3086  | 45.7                 | 3471  | 50.8               | 3861  | 69.2    | 5     |      |      |
| G 32 - 254 |                |                | 254            | 60.8            | 43.2               | 2627  | 50.8               | 3089  | 57.2                 | 3475  | 63.5               | 3861  | 88.1    | 5     |      |      |
| G 32 - 305 | 7.3 x 5.9      | 305            | 49.0           | 51.9            | 2543               | 61.0  | 2989               | 68.6  | 3363                 | 76.3  | 3739               | 104   | 5       |       |      |      |
| G 40 - 051 | 40             | 20             | 51             | 628             | 8.7                | 5464  | 10.2               | 6406  | 11.5                 | 7206  | 12.8               | 8038  | 15.0    | 20    |      |      |
| G 40 - 064 |                |                | 64             | 487             | 10.9               | 5308  | 12.8               | 6234  | 14.4                 | 7013  | 16.0               | 7792  | 19.5    | 10    |      |      |
| G 40 - 076 |                |                | 76             | 379             | 12.9               | 4889  | 15.2               | 5761  | 17.1                 | 6481  | 19.0               | 7201  | 23.3    | 10    |      |      |
| G 40 - 089 |                |                | 89             | 321             | 15.1               | 4847  | 17.8               | 5714  | 20.0                 | 6428  | 22.3               | 7158  | 26.7    | 10    |      |      |
| G 40 - 102 |                |                | 102            | 281             | 17.3               | 4861  | 20.4               | 5732  | 23.0                 | 6449  | 25.5               | 7166  | 33.8    | 10    |      |      |
| G 40 - 115 |                |                | 115            | 245             | 19.6               | 4802  | 23.0               | 5635  | 25.9                 | 6339  | 28.8               | 7056  | 36.2    | 10    |      |      |
| G 40 - 127 |                |                | 127            | 221             | 21.6               | 4774  | 25.4               | 5613  | 28.6                 | 6315  | 31.8               | 7028  | 40.7    | 5     |      |      |
| G 40 - 139 |                |                | 139            | 190             | 23.8               | 4522  | 28.0               | 5320  | 31.3                 | 5942  | 35.0               | 6650  | 44.5    | 5     |      |      |
| G 40 - 152 |                |                | 152            | 168             | 25.8               | 4334  | 30.4               | 5107  | 34.2                 | 5746  | 38.0               | 6384  | 49.6    | 5     |      |      |
| G 40 - 178 |                |                | 178            | 146             | 30.3               | 4424  | 35.6               | 5198  | 40.1                 | 5847  | 44.5               | 6497  | 59.9    | 5     |      |      |
| G 40 - 203 |                |                | 203            | 132             | 34.5               | 4554  | 40.6               | 5359  | 45.7                 | 6029  | 50.8               | 6706  | 67.1    | 5     |      |      |
| G 40 - 254 |                |                | 254            | 107             | 43.2               | 4622  | 50.8               | 5436  | 57.2                 | 6115  | 63.5               | 6795  | 86.3    | 2     |      |      |
| G 40 - 305 |                |                | 8.4 x 7.5      | 305             | 87.8               | 51.9  | 4557               | 61.0  | 5356                 | 68.6  | 6025               | 76.3  | 6699    | 104   | 2    |      |
| G 50 - 064 |                |                | 50             | 25              | 64                 | 709   | 10.9               | 7728  | 12.8                 | 9075  | 14.4               | 10210 | 16.0    | 11344 | 19.3 | 5    |
| G 50 - 076 | 76             | 572            |                |                 | 12.9               | 7379  | 15.2               | 8694  | 17.1                 | 9781  | 19.0               | 10868 | 24.2    | 5     |      |      |
| G 50 - 089 | 89             | 475            |                |                 | 15.1               | 7173  | 17.8               | 8455  | 20.0                 | 9512  | 22.3               | 10593 | 28.0    | 5     |      |      |
| G 50 - 102 | 102            | 405            |                |                 | 17.3               | 7007  | 20.4               | 8262  | 23.0                 | 9295  | 25.5               | 10328 | 33.5    | 5     |      |      |
| G 50 - 115 | 115            | 352            |                |                 | 19.6               | 6899  | 23.0               | 8096  | 25.9                 | 9108  | 28.8               | 10138 | 38.6    | 5     |      |      |
| G 50 - 127 | 127            | 316            |                |                 | 21.6               | 6826  | 25.4               | 8026  | 28.6                 | 9030  | 31.8               | 10049 | 41.4    | 5     |      |      |
| G 50 - 139 | 139            | 289            |                |                 | 23.8               | 6878  | 28.0               | 8092  | 31.3                 | 9046  | 35.0               | 10115 | 47.3    | 5     |      |      |
| G 50 - 152 | 152            | 239            |                |                 | 25.8               | 6166  | 30.4               | 7266  | 34.2                 | 8174  | 38.0               | 9082  | 50.2    | 2     |      |      |
| G 50 - 178 | 178            | 215            |                |                 | 30.3               | 6515  | 35.6               | 7654  | 40.1                 | 8611  | 44.5               | 9568  | 61.1    | 2     |      |      |
| G 50 - 203 | 203            | 187            |                |                 | 34.5               | 6452  | 40.6               | 7592  | 45.7                 | 8541  | 50.8               | 9500  | 67.7    | 2     |      |      |
| G 50 - 254 | 254            | 153            |                |                 | 43.2               | 6610  | 50.8               | 7772  | 57.2                 | 8744  | 63.5               | 9716  | 87.0    | 2     |      |      |
| G 50 - 305 | 11.5 x 9.0     | 305            |                |                 | 127                | 51.9  | 6591               | 61.0  | 7747                 | 68.6  | 8715               | 76.3  | 9690    | 104   | 2    |      |
| G 63 - 076 | 63             | 38             |                |                 | 76                 | 952   | 12.9               | 12280 | 15.2                 | 14470 | -                  | -     | -       | -     | 15.5 | 5    |
| G 63 - 089 |                |                |                |                 | 89                 | 819   | 15.1               | 12360 | 17.8                 | 14580 | -                  | -     | -       | -     | -    | 20.0 |
| G 63 - 102 |                |                | 102            | 700             | 17.3               | 12110 | 20.4               | 14280 | 23.0                 | 16065 | 25.5               | 17850 | 30.7    | 5     |      |      |
| G 63 - 115 |                |                | 115            | 620             | 19.6               | 12152 | 23.0               | 14260 | 25.9                 | 16043 | 28.8               | 17860 | 34.9    | 5     |      |      |
| G 63 - 127 |                |                | 127            | 565             | 21.6               | 12204 | 25.4               | 14351 | 28.6                 | 16145 | 31.8               | 17967 | 38.0    | 2     |      |      |
| G 63 - 152 |                |                | 152            | 458             | 25.8               | 11816 | 30.4               | 13923 | 34.2                 | 15664 | 38.0               | 17404 | 47.2    | 2     |      |      |
| G 63 - 178 |                |                | 178            | 384             | 30.3               | 11635 | 35.6               | 13670 | 40.1                 | 15379 | 44.5               | 17088 | 55.8    | 2     |      |      |
| G 63 - 203 |                |                | 203            | 337             | 34.5               | 11627 | 40.6               | 13682 | 45.7                 | 15392 | 50.8               | 17120 | 64.8    | 2     |      |      |
| G 63 - 254 |                |                | 254            | 263             | 43.2               | 11362 | 50.8               | 13360 | 57.2                 | 15030 | 63.5               | 16701 | 86.7    | 2     |      |      |
| G 63 - 305 |                |                | 11.6 x 14.9    | 305             | 218                | 51.9  | 11314              | 61.0  | 13298                | 68.6  | 14960              | 76.3  | 16633   | 106   | 2    |      |

Estimated life 100.000 cycles

