# Diametro di foratura per filettature

## Filettatura metrica regolare ISO DIN 336

| ø nominale | passo P | ø foro | ø di nocciolo madrevite min | ø di nocciolo madrevite max |
|---|---|---|---|---|
| | (mm) | (mm) | (mm) | (mm) |
| M 1 | 0,25 | **0,75** | 0,729 | - |
| M 1,1 | 0,25 | **0,85** | 0,829 | - |
| M 1,2 | 0,25 | **0,95** | 0,929 | - |
| M 1,4 | 0,30 | **1,10** | 1,075 | - |
| M 1,6 | 0,35 | **1,25** | 1,221 | 1,321 |
| M 1,8 | 0,35 | **1,45** | 1,421 | 1,521 |
| M 2 | 0,40 | **1,60** | 1,567 | 1,679 |
| M 2,2 | 0,45 | **1,75** | 1,713 | 1,838 |
| M 2,5 | 0,45 | **2,05** | 2,013 | 2,138 |
| M 3 | 0,50 | **2,50** | 2,459 | 2,599 |
| M 3,5 | 0,60 | **2,90** | 2,850 | 3,010 |
| M 4 | 0,70 | **3,30** | 3,242 | 3,422 |
| M 4,5 | 0,75 | **3,70** | 3,688 | 3,878 |
| M 5 | 0,80 | **4,20** | 4,134 | 4,334 |
| M 6 | 1,00 | **5,00** | 4,917 | 5,153 |
| M 7 | 1,00 | **6,00** | 5,917 | 6,153 |
| M 8 | 1,25 | **6,80** | 6,647 | 6,912 |
| M 9 | 1,25 | **7,80** | 7,647 | 7,912 |
| M 10 | 1,50 | **8,50** | 8,376 | 8,676 |
| M 11 | 1,50 | **9,50** | 9,376 | 9,676 |
| M 12 | 1,75 | **10,20** | 10,106 | 10,441 |
| M 14 | 2,00 | **12,00** | 11,835 | 12,210 |
| M 16 | 2,00 | **14,00** | 13,835 | 14,210 |
| M 18 | 2,50 | **15,50** | 15,294 | 15,744 |
| M 20 | 2,50 | **17,50** | 17,294 | 17,744 |
| M 22 | 2,50 | **19,50** | 19,294 | 19,744 |
| M 24 | 3,00 | **21,00** | 20,752 | 21,252 |
| M 27 | 3,00 | **24,00** | 23,752 | 24,252 |
| M 30 | 3,50 | **26,50** | 26,211 | 26,771 |
| M 33 | 3,50 | **29,50** | 29,211 | 29,771 |
| M 36 | 4,00 | **32,00** | 31,670 | 32,270 |
| M 39 | 4,00 | **35,00** | 34,670 | 35,270 |
| M 42 | 4,50 | **37,50** | 37,129 | 37,799 |
| M 45 | 4,50 | **40,50** | 40,129 | 40,799 |
| M 48 | 5,00 | **43,00** | 42,587 | 43,297 |
| M 52 | 5,00 | **47,00** | 46,587 | 47,287 |
| M 56 | 5,50 | **50,50** | 50,046 | 50,796 |

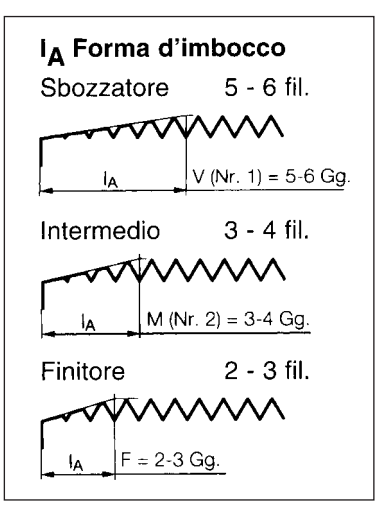
## Filettatura metrica fine ISO DIN 336

| ø nominale | x | passo P | ø foro | ø di nocciolo madrevite min | ø di nocciolo madrevite max |
|---|---|---|---|---|---|
| | | (mm) | (mm) | (mm) | (mm) |
| M 2,5 | x | 0,35 | **2,15** | 2,121 | 2,221 |
| M 3 | x | 0,35 | **2,65** | 2,621 | 2,721 |
| M 3,5 | x | 0,35 | **3,15** | 3,121 | 3,221 |
| M 4 | x | 0,50 | **3,50** | 3,459 | 3,599 |
| M 4,5 | x | 0,50 | **4,00** | 3,959 | 4,099 |
| M 5 | x | 0,50 | **4,50** | 4,459 | 4,599 |
| M 5,5 | x | 0,50 | **5,00** | 4,959 | 5,099 |
| M 6,0 | x | 0,75 | **5,20** | 5,188 | 5,378 |
| M 7,0 | x | 0,75 | **6,20** | 6,188 | 6,378 |
| M 8,0 | x | 0,75 | **7,20** | 7,188 | 7,378 |
| M 8,0 | x | 1,00 | **7,00** | 6,917 | 7,153 |
| M 9,0 | x | 0,75 | **8,20** | 8,188 | 8,378 |
| M 9,0 | x | 1,00 | **8,00** | 7,917 | 8,153 |
| M 10 | x | 0,75 | **9,20** | 9,188 | 9,378 |
| M 10 | x | 1,00 | **9,00** | 8,917 | 9,153 |
| M 10 | x | 1,25 | **8,80** | 8,647 | 8,912 |
| M 11 | x | 0,75 | **10,20** | 10,188 | 10,378 |
| M 11 | x | 1,00 | **10,00** | 9,917 | 10,153 |
| M 12 | x | 1,00 | **11,00** | 10,917 | 11,153 |
| M 12 | x | 1,25 | **10,80** | 10,647 | 10,912 |
| M 12 | x | 1,50 | **10,50** | 10,376 | 10,676 |
| M 14 | x | 1,00 | **13,00** | 12,917 | 13,153 |
| M 14 | x | 1,25 | **12,80** | 12,647 | 12,912 |
| M 14 | x | 1,50 | **12,50** | 12,376 | 12,676 |
| M 15 | x | 1,00 | **14,00** | 13,917 | 14,153 |
| M 15 | x | 1,50 | **13,50** | 13,376 | 13,676 |
| M 16 | x | 1,00 | **15,00** | 14,197 | 15,153 |
| M 16 | x | 1,50 | **14,50** | 14,376 | 14,676 |
| M 17 | x | 1,00 | **16,00** | 15,917 | 16,153 |
| M 17 | x | 1,50 | **15,50** | 15,376 | 15,676 |
| M 18 | x | 1,00 | **17,70** | 16,917 | 17,153 |
| M 18 | x | 1,50 | **16,50** | 13,376 | 16,670 |
| M 18 | x | 2,00 | **16,00** | 15,835 | 16,210 |
| M 20 | x | 1,00 | **19,00** | 18,917 | 19,153 |
| M 20 | x | 1,50 | **18,50** | 18,376 | 18,676 |
| M 20 | x | 2,00 | **18,00** | 17,835 | 18,210 |
| M 22 | x | 1,00 | **21,00** | 20,917 | 21,153 |
| M 22 | x | 1,50 | **20,50** | 20,376 | 20,676 |
| M 22 | x | 2,00 | **20,00** | 19,835 | 20,210 |
| M 24 | x | 1,00 | **23,00** | 22,917 | 23,153 |
| M 24 | x | 1,50 | **22,50** | 22,376 | 22,676 |
| M 24 | x | 2,00 | **22,00** | 21,835 | 22,210 |
| M 25 | x | 1,00 | **24,00** | 23,917 | 24,153 |
| M 25 | x | 1,50 | **23,50** | 23,376 | 23,676 |
| M 25 | x | 2,00 | **23,00** | 23,835 | 23,210 |
| M 27 | x | 1,00 | **26,00** | 25,917 | 26,153 |
| M 27 | x | 1,50 | **25,50** | 25,376 | 25,676 |
| M 27 | x | 2,00 | **25,00** | 24,835 | 25,210 |
| M 28 | x | 1,00 | **27,00** | 26,917 | 27,153 |
| M 28 | x | 1,50 | **26,50** | 26,376 | 26,678 |
| M 28 | x | 2,00 | **26,00** | 25,853 | 26,210 |
| M 30 | x | 1,00 | **29,00** | 28,917 | 29,153 |
| M 30 | x | 1,50 | **28,35** | 26,676 | 28,676 |
| M 30 | x | 2,00 | **28,00** | 27,835 | 28,210 |
| M 30 | x | 3,00 | **27,00** | 26,752 | 27,252 |
| M 32 | x | 1,50 | **30,50** | 30,376 | 30,676 |
| M 32 | x | 2,00 | **30,00** | 29,835 | 30,210 |
| M 33 | x | 1,50 | **31,50** | 31,376 | 31,676 |
| M 33 | x | 2,00 | **31,00** | 30,835 | 31,210 |
| M 33 | x | 3,00 | **30,00** | 29,752 | 30,252 |
| M 35 | x | 1,50 | **33,50** | 33,376 | 33,676 |
| M 36 | x | 1,50 | **34,50** | 34,376 | 34,676 |

## Filettatura UNC DIN 336 (ISO 5864)

| ø nominale | | passo P per pollice | ø foro | ø di nocciolo madrevite min | ø di nocciolo madrevite max |
|---|---|---|---|---|---|
| | | | (mm) | (mm) | (mm) |
| N° 1 | - | 64 | **1,50** | 1,425 | 1,582 |
| N° 2 | - | 56 | **1,85** | 1,694 | 1,872 |
| N° 3 | - | 48 | **2,10** | 1,941 | 2,146 |
| N° 4 | - | 40 | **2,35** | 2,385 | 2,156 |
| N° 5 | - | 40 | **2,65** | 2,697 | 2,487 |
| N° 6 | - | 32 | **2,85** | 2,642 | 2,896 |
| N° 8 | - | 32 | **3,50** | 3,302 | 3,531 |
| N° 10 | - | 24 | **3,90** | 3,683 | 3,962 |
| N° 12 | - | 24 | **4,50** | 4,343 | 4,597 |
| 1/4 | - | 20 | **5,10** | 4,976 | 5,268 |
| 5/16 | - | 18 | **6,60** | 6,411 | 6,734 |
| 3/8 | - | 16 | **8,00** | 7,805 | 8,164 |
| 7/16 | - | 14 | **9,40** | 9,149 | 9,550 |
| 1/2 | - | 13 | **10,80** | 10,584 | 11,013 |
| 9/16 | - | 12 | **12,20** | 11,996 | 12,456 |
| 5/8 | - | 11 | **13,50** | 13,376 | 13,868 |
| 3/4 | - | 10 | **16,50** | 16,299 | 16,833 |
| 7/8 | - | 9 | **19,50** | 19,169 | 19,748 |
| 1 | - | 8 | **22,25** | 21,963 | 22,598 |
| 1 1/8 | - | 7 | **25,00** | 24,648 | 25,349 |
| 1 1/4 | - | 7 | **28,00** | 27,823 | 28,542 |
| 1 3/8 | - | 6 | **30,75** | 30,343 | 21,120 |
| 1 1/2 | - | 6 | **34,00** | 33,518 | 34,295 |
| 1 3/4 | - | 5 | **39,50** | 38,951 | 39,814 |
| 2 | - | 4,5 | **45,00** | 44,689 | 45,598 |

## Schema d'imbocco dei filetti nei maschi a mano



# Diametro di foratura per filettature

| Filettatura UNF DIN 336 (ISO 5864) | | | | | | Filettatura BSW (Whitworth) | | | | | Filettatura Gas | | | | | Filettatura Pg | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ø nominale | | passo P per pollice | | ø **foro** (mm) | ø di nocciolo madrevite min (mm) | ø di nocciolo madrevite max (mm) | ø nominale | passo P per pollice | ø **foro** (mm) | ø di nocciolo madrevite min (mm) | ø di nocciolo madrevite max (mm) | ø nominale | passo P per pollice | ø **foro** (mm) | ø di nocciolo madrevite min (mm) | ø di nocciolo madrevite max (mm) | ø nominale | passo P per pollice | ø **foro** (mm) | ø di nocciolo madrevite min (mm) | ø di nocciolo madrevite max (mm) |
| N° 1 | - | 72 | **1,55** | 1,473 | 1,613 | W 1/8 | 40 | **2,50** | - | - | G 1/16 | 28 | **6,80** | 6,561 | 6,843 | Pg 7,0 | 20 | **11,40** | 11,280 | 11,430 |
| N° 2 | - | 64 | **1,90** | 1,755 | 1,913 | W 5/32 | 32 | **3,20** | - | - | G 1/8 | 28 | **8,80** | 8,566 | 8,848 | Pg 9,0 | 18 | **14,00** | 13,860 | 14,010 |
| N° 3 | - | 56 | **2,15** | 2,024 | 2,170 | W 3/16 | 24 | **3,60** | - | - | G 1/4 | 19 | **11,80** | 11,445 | 11,890 | Pg 11,0 | 18 | **17,30** | 17,260 | 17,410 |
| N° 4 | - | 48 | **2,40** | 2,271 | 2,459 | W 1/4 | 20 | **5,10** | 4,744 | 5,224 | G 3/8 | 19 | **15,58** | 15,395 | 14,950 | Pg 13,5 | 18 | **19,00** | 19,060 | 19,210 |
| N° 5 | - | 44 | **2,70** | 2,550 | 2,741 | W 5/16 | 18 | **6,50** | 6,151 | 6,661 | G 1/2 | 14 | **19,00** | 18,631 | 19,172 | Pg 16,0 | 18 | **21,30** | 21,160 | 21,310 |
| N° 6 | - | 40 | **2,95** | 2,819 | 3,023 | W 3/8 | 16 | **7,90** | 7,512 | 8,052 | G 5/8 | 14 | **21,00** | 20,587 | 21,128 | Pg 21,0 | 16 | **26,90** | 26,780 | 27,030 |
| N° 8 | - | 36 | **3,50** | 3,404 | 3,607 | W 7/16 | 14 | **9,20** | 8,809 | 9,379 | G 3/4 | 14 | **24,50** | 24,117 | 24,658 | Pg 29,0 | 16 | **35,50** | 35,480 | 35,730 |
| N° 10 | - | 32 | **4,10** | 3,962 | 4,116 | W 1/2 | 12 | **10,50** | 10,015 | 10,610 | G 7/8 | 14 | **28,25** | 27,877 | 28,418 | Pg 36,0 | 16 | **45,50** | 45,480 | 45,730 |
| N° 12 | - | 28 | **4,70** | 4,496 | 4,724 | W 5/8 | 11 | **13,50** | 12,948 | 13,598 | G 1 | 11 | **30,75** | 30,291 | 30,931 | Pg 42,0 | 16 | **52,50** | 52,480 | 52,730 |
| 1/4 | - | 28 | **5,50** | 5,367 | 5,580 | W 3/4 | 10 | **16,25** | 15,831 | 16,538 | G 1 1/8 | 11 | **35,50** | 34,939 | 35,579 | Pg 48,0 | 16 | **57,80** | 57,780 | 58,030 |
| 5/16 | - | 24 | **6,90** | 6,792 | 7,038 | W 7/8 | 9 | **19,25** | 18,647 | 19,411 | G 1 1/4 | 11 | **39,50** | 38,952 | 39,592 | | | | | |
| 3/8 | - | 24 | **8,50** | 8,379 | 8,626 | W 1 | 8 | **22,00** | 21,375 | 22,185 | G 1 1/2 | 11 | **45,25** | 44,845 | 45,485 | | | | | |
| 7/16 | - | 20 | **9,90** | 9,739 | 10,030 | W 1 1/8 | 7 | **24,50** | 23,976 | 24,879 | G 1 3/4 | 11 | **51,00** | 50,788 | 51,428 | | | | | |
| 1/2 | - | 20 | **11,50** | 11,326 | 11,618 | W 1 1/4 | 7 | **27,75** | 27,151 | 28,054 | G 2 | 11 | **57,00** | 56,656 | 57,296 | | | | | |
| 9/16 | - | 18 | **12,90** | 12,761 | 13,084 | W 1 3/8 | 6 | **30,50** | 29,558 | 30,555 | | | | | | | | | | |
| 5/8 | - | 18 | **14,50** | 14,348 | 14,671 | W 1 1/2 | 6 | **33,50** | 32,733 | 33,730 | | | | | | | | | | |
| 3/4 | - | 16 | **17,50** | 17,330 | 17,689 | W 1 5/8 | 5 | **35,50** | 34,834 | 35,921 | | | | | | | | | | |
| 7/8 | - | 14 | **20,40** | 20,262 | 20,663 | W 1 3/4 | 5 | **39,00** | 38,009 | 39,096 | | | | | | | | | | |
| 1 | - | 12 | **23,25** | 23,109 | 23,569 | W 2 | 4,5 | **44,50** | 43,643 | 44,823 | | | | | | | | | | |
| 1 1/8 | - | 12 | **26,50** | 26,284 | 26,744 | | | | | | | | | | | | | | | |
| 1 1/4 | - | 12 | **29,50** | 29,459 | 29,919 | | | | | | | | | | | | | | | |
| 1 3/8 | - | 12 | **32,75** | 32,634 | 33,094 | | | | | | | | | | | | | | | |
| 1 1/2 | - | 12 | **36,00** | 35,809 | 36,269 | | | | | | | | | | | | | | | |

# Tabella di conversione della velocità di taglio, in n° di giri al minuto, in funzione del diametro del maschio

| ø = M (mm) | Velocità di taglio (VC) m/min | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 15 | 20 | 25 | 30 | 40 | 50 | 60 |
| | N° giri/min | | | | | | | | | | | | | | | |
| **1** | 318 | 637 | 955 | 1274 | 1592 | 1911 | 2548 | 3185 | 3822 | 4777 | 6369 | 7962 | 9554 | 12739 | 15924 | 19108 |
| **2** | 159 | 318 | 478 | 637 | 796 | 955 | 1274 | 1592 | 1911 | 2389 | 3185 | 3981 | 4777 | 6369 | 7962 | 9554 |
| **3** | 106 | 212 | 318 | 425 | 531 | 637 | 849 | 1062 | 1274 | 1592 | 2123 | 2654 | 3185 | 4246 | 5308 | 6369 |
| **4** | 80 | 159 | 239 | 318 | 396 | 478 | 637 | 796 | 955 | 1194 | 1592 | 1990 | 2389 | 3185 | 3981 | 4777 |
| **5** | 64 | 127 | 191 | 255 | 318 | 382 | 510 | 637 | 764 | 955 | 1274 | 1592 | 1911 | 2548 | 3185 | 3822 |
| **6** | 53 | 106 | 159 | 210 | 265 | 318 | 425 | 531 | 637 | 796 | 1062 | 1327 | 1592 | 2123 | 2654 | 3185 |
| **8** | 40 | 80 | 119 | 159 | 199 | 239 | 318 | 398 | 478 | 597 | 796 | 995 | 1194 | 1592 | 1990 | 2389 |
| **10** | 32 | 64 | 96 | 127 | 159 | 191 | 255 | 318 | 382 | 478 | 637 | 796 | 955 | 1274 | 1592 | 1911 |
| **12** | 27 | 53 | 80 | 106 | 133 | 159 | 212 | 265 | 318 | 398 | 531 | 663 | 796 | 1062 | 1327 | 1592 |
| **14** | 23 | 45 | 68 | 91 | 114 | 136 | 182 | 227 | 273 | 341 | 455 | 569 | 682 | 910 | 1137 | 1365 |
| **16** | 20 | 40 | 60 | 80 | 100 | 119 | 159 | 199 | 239 | 299 | 398 | 498 | 597 | 796 | 995 | 1194 |
| **18** | 18 | 35 | 53 | 71 | 88 | 106 | 142 | 177 | 212 | 265 | 354 | 442 | 531 | 708 | 885 | 1062 |
| **20** | 16 | 32 | 48 | 64 | 80 | 96 | 127 | 159 | 191 | 239 | 318 | 398 | 478 | 637 | 796 | 955 |
| **25** | 13 | 25 | 38 | 51 | 64 | 76 | 102 | 127 | 153 | 191 | 255 | 318 | 382 | 510 | 637 | 764 |
| **30** | 11 | 21 | 32 | 42 | 53 | 64 | 85 | 106 | 127 | 159 | 212 | 265 | 318 | 425 | 531 | 637 |
| **35** | 9 | 18 | 27 | 36 | 45 | 55 | 73 | 91 | 109 | 136 | 182 | 227 | 273 | 364 | 455 | 546 |
| **40** | 8 | 16 | 24 | 32 | 40 | 48 | 64 | 80 | 96 | 119 | 159 | 199 | 239 | 318 | 398 | 478 |
| **45** | 7 | 14 | 21 | 28 | 35 | 42 | 57 | 71 | 85 | 106 | 142 | 177 | 212 | 283 | 354 | 425 |
| **50** | 6 | 13 | 19 | 25 | 32 | 38 | 51 | 64 | 76 | 96 | 127 | 159 | 191 | 255 | 318 | 382 |