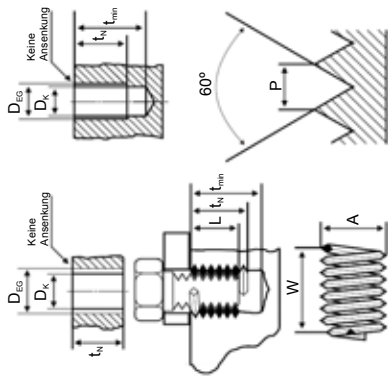


## Typ 110-M

### EG-Gewindeinsatz mit Schraubensicherung



d = Gewinde Nenn Durchmesser

P = Steigung

D<sub>EG</sub> = Außendurchmesser des EG-Aufnahmegewindes

D<sub>K</sub> = Kerndurchmesser nach dem Gewindeschneiden

L = Länge des EG-Einsatzes im eingebauten Zustand 'nutzbare Gewindelänge'

t<sub>min</sub> = Mindesterknochentiefe

t<sub>h</sub> = Vollausgeschnittene nutzbare Gewindeteile Nennlänge des Einsatzes

W = Windungszahl vor dem Einbau

A = Außendurchmesser des EG-Einsatzes vor dem Einbau

## Befestigungssysteme

EG-Einsätze entsprechen allen nationalen und internationalen Normen, die für Gewindeinsätze gelten.



**Hinweis für den Wert D<sub>K</sub>:**  
hier handelt es sich bekanntlich um Erfahrungswerte. Die Genauigkeit des Kerndurchmessers D<sub>K</sub> nach dem Gewindeschneiden kann weit gestreut sein, da eine Anzahl bekannter Faktoren hierfür bestimmend sind.

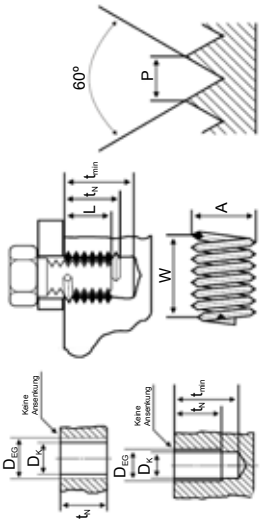
Wichtig und wesentlich ist, dass die angegebenen Toleranzwerte nach D<sub>K</sub>-Tabelle erreicht werden.

| Gewinde Nenn - Ø | Steigung P | empf. Spiralbohrer B Ø | Kerndurchmesser D <sub>K</sub> |       | Kernlochtiefe t <sub>min</sub> |       |       |       |       |       | Vollausgeschnittene nutzbare Gewindeteile |       |        |       |       |        | Länge des eingeb. Einsatzes L |       |        |        |       |        | Windungszahl vor dem Einbau W |        |       |       |        |       | Außendurchmesser EG vor dem Einbau A |       |        |       |       |       |        |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
|------------------|------------|------------------------|--------------------------------|-------|--------------------------------|-------|-------|-------|-------|-------|---|-------|--------|-------|-------|--------|-------------------------------|-------|--------|--------|-------|--------|-------------------------------|--------|-------|-------|--------|-------|--------------------------------------|-------|--------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
|                  |            |                        | min.                           | max.  | 1d                             | 1,5d  | 2d    | 2,5d  | 3d    | 3d    | 1d  | 1,5d  | 2d     | 2,5d  | 3d    | 1d     | 1,5d                          | 2d    | 2,5d   | 3d     | 1d    | 1,5d   | 2d                            | 2,5d   | 3d    | min.  | max.   |       |                                      |       |        |       |       |       |        |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| M2,5             | 0,40       | 2,10                   | 2,09                           | 2,18  | 3,60                           | 4,60  | 5,60  | 6,60  | 7,60  | 8,60  | 9,60                                      | 10,60 | 11,60  | 12,60 | 13,60 | 14,60  | 15,60                         | 16,60 | 17,60  | 18,60  | 19,60 | 20,60  | 21,60                         | 22,60  | 23,60 | 24,60 | 25,60  | 26,60 | 27,60                                | 28,60 | 29,60  | 30,60 | 31,60 | 32,60 | 33,60  | 34,60 | 35,60 | 36,60 | 37,60 | 38,60 | 39,60 | 40,60  | 41,60 | 42,60 | 43,60 | 44,60 | 45,60 | 46,60 | 47,60 | 48,60 | 49,60 | 50,60  | 51,60 | 52,60 | 53,60 | 54,60 | 55,60 | 56,60 | 57,60 | 58,60 | 59,60 | 60,60 | 61,60 | 62,60 | 63,60 | 64,60 | 65,60 | 66,60  | 67,60 | 68,60 | 69,60 | 70,60 | 71,60 | 72,60 | 73,60 | 74,60 | 75,60 | 76,60 | 77,60 | 78,60 | 79,60  | 80,60 | 81,60 | 82,60 | 83,60 | 84,60 | 85,60 | 86,60 | 87,60 | 88,60 | 89,60 | 90,60 | 91,60 | 92,60 | 93,60 | 94,60 | 95,60 | 96,60 | 97,60 | 98,60 | 99,60 | 100,60 |
| M3               | 0,45       | 2,60                   | 2,60                           | 2,70  | 5,10                           | 6,35  | 7,60  | 8,85  | 10,10 | 11,35 | 12,60                                     | 13,85 | 15,10  | 16,35 | 17,60 | 18,85  | 20,10                         | 21,35 | 22,60  | 23,85  | 25,10 | 26,35  | 27,60                         | 28,85  | 30,10 | 31,35 | 32,60  | 33,85 | 35,10                                | 36,35 | 37,60  | 38,85 | 40,10 | 41,35 | 42,60  | 43,85 | 45,10 | 46,35 | 47,60 | 48,85 | 50,10 | 51,35  | 52,60 | 53,85 | 55,10 | 56,35 | 57,60 | 58,85 | 60,10 | 61,35 | 62,60 | 63,85  | 65,10 | 66,35 | 67,60 | 68,85 | 70,10 | 71,35 | 72,60 | 73,85 | 75,10 | 76,35 | 77,60 | 78,85 | 80,10 | 81,35 | 82,60 | 83,85  | 85,10 | 86,35 | 87,60 | 88,85 | 90,10 | 91,35 | 92,60 | 93,85 | 95,10 | 96,35 | 97,60 | 98,85 | 100,10 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| M3,5             | 0,50       | 3,20                   | 3,11                           | 3,22  | 5,80                           | 7,30  | 8,80  | 10,30 | 11,80 | 13,30 | 14,80                                     | 16,30 | 17,80  | 19,30 | 20,80 | 22,30  | 23,80                         | 25,30 | 26,80  | 28,30  | 29,80 | 31,30  | 32,80                         | 34,30  | 35,80 | 37,30 | 38,80  | 40,30 | 41,80                                | 43,30 | 44,80  | 46,30 | 47,80 | 49,30 | 50,80  | 52,30 | 53,80 | 55,30 | 56,80 | 58,30 | 59,80 | 61,30  | 62,80 | 64,30 | 65,80 | 67,30 | 68,80 | 70,30 | 71,80 | 73,30 | 74,80 | 76,30  | 77,80 | 79,30 | 80,80 | 82,30 | 83,80 | 85,30 | 86,80 | 88,30 | 89,80 | 91,30 | 92,80 | 94,30 | 95,80 | 97,30 | 98,80 | 100,30 |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| M4               | 0,70       | 4,20                   | 4,15                           | 4,29  | 7,80                           | 9,80  | 11,80 | 13,80 | 15,80 | 17,80 | 19,80                                     | 21,80 | 23,80  | 25,80 | 27,80 | 29,80  | 31,80                         | 33,80 | 35,80  | 37,80  | 39,80 | 41,80  | 43,80                         | 45,80  | 47,80 | 49,80 | 51,80  | 53,80 | 55,80                                | 57,80 | 59,80  | 61,80 | 63,80 | 65,80 | 67,80  | 69,80 | 71,80 | 73,80 | 75,80 | 77,80 | 79,80 | 81,80  | 83,80 | 85,80 | 87,80 | 89,80 | 91,80 | 93,80 | 95,80 | 97,80 | 99,80 | 101,80 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| M5               | 0,80       | 5,20                   | 5,17                           | 5,33  | 9,20                           | 11,70 | 14,20 | 16,70 | 19,20 | 21,70 | 24,20                                     | 26,70 | 29,20  | 31,70 | 34,20 | 36,70  | 39,20                         | 41,70 | 44,20  | 46,70  | 49,20 | 51,70  | 54,20                         | 56,70  | 59,20 | 61,70 | 64,20  | 66,70 | 69,20                                | 71,70 | 74,20  | 76,70 | 79,20 | 81,70 | 84,20  | 86,70 | 89,20 | 91,70 | 94,20 | 96,70 | 99,20 | 101,70 |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| M6               | 1,00       | 6,30                   | 6,22                           | 6,41  | 11,20                          | 14,20 | 17,20 | 20,20 | 23,20 | 26,20 | 29,20                                     | 32,20 | 35,20  | 38,20 | 41,20 | 44,20  | 47,20                         | 50,20 | 53,20  | 56,20  | 59,20 | 62,20  | 65,20                         | 68,20  | 71,20 | 74,20 | 77,20  | 80,20 | 83,20                                | 86,20 | 89,20  | 92,20 | 95,20 | 98,20 | 101,20 |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| M7               | 1,00       | 7,30                   | 7,22                           | 7,41  | 12,10                          | 15,60 | 19,10 | 22,60 | 26,10 | 29,60 | 33,10                                     | 36,60 | 40,10  | 43,60 | 47,10 | 50,60  | 54,10                         | 57,60 | 61,10  | 64,60  | 68,10 | 71,60  | 75,10                         | 78,60  | 82,10 | 85,60 | 89,10  | 92,60 | 96,10                                | 99,60 | 103,10 |       |       |       |        |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| M8               | 1,25       | 8,40                   | 8,27                           | 8,48  | 14,20                          | 18,20 | 22,20 | 26,20 | 30,20 | 34,20 | 38,20                                     | 42,20 | 46,20  | 50,20 | 54,20 | 58,20  | 62,20                         | 66,20 | 70,20  | 74,20  | 78,20 | 82,20  | 86,20                         | 90,20  | 94,20 | 98,20 | 102,20 |       |                                      |       |        |       |       |       |        |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| M9               | 1,25       | 9,40                   | 9,27                           | 9,48  | 15,20                          | 19,70 | 24,20 | 28,70 | 33,20 | 37,70 | 42,20                                     | 46,70 | 51,20  | 55,70 | 60,20 | 64,70  | 69,20                         | 73,70 | 78,20  | 82,70  | 87,20 | 91,70  | 96,20                         | 100,70 |       |       |        |       |                                      |       |        |       |       |       |        |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| M10              | 1,50       | 10,50                  | 10,32                          | 10,56 | 17,30                          | 22,30 | 27,30 | 32,30 | 37,30 | 42,30 | 47,30                                     | 52,30 | 57,30  | 62,30 | 67,30 | 72,30  | 77,30                         | 82,30 | 87,30  | 92,30  | 97,30 | 102,30 |                               |        |       |       |        |       |                                      |       |        |       |       |       |        |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| M11              | 1,50       | 11,50                  | 11,32                          | 11,56 | 18,30                          | 23,80 | 29,30 | 34,80 | 40,30 | 45,80 | 51,30                                     | 56,80 | 62,30  | 67,80 | 73,30 | 78,80  | 84,30                         | 89,80 | 95,30  | 100,80 |       |        |                               |        |       |       |        |       |                                      |       |        |       |       |       |        |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| M12              | 1,75       | 12,50                  | 12,38                          | 12,64 | 20,30                          | 26,30 | 32,30 | 38,30 | 44,30 | 50,30 | 56,30                                     | 62,30 | 68,30  | 74,30 | 80,30 | 86,30  | 92,30                         | 98,30 | 104,30 |        |       |        |                               |        |       |       |        |       |                                      |       |        |       |       |       |        |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| M14              | 2,00       | 14,50                  | 14,43                          | 14,73 | 23,30                          | 30,30 | 37,30 | 44,30 | 51,30 | 58,30 | 65,30                                     | 72,30 | 79,30  | 86,30 | 93,30 | 100,30 |                               |       |        |        |       |        |                               |        |       |       |        |       |                                      |       |        |       |       |       |        |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| M16              | 2,00       | 16,50                  | 16,43                          | 16,73 | 25,30                          | 33,30 | 41,30 | 49,30 | 57,30 | 65,30 | 73,30                                     | 81,30 | 89,30  | 97,30 |       |        |                               |       |        |        |       |        |                               |        |       |       |        |       |                                      |       |        |       |       |       |        |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| M18              | 2,50       | 18,75                  | 18,54                          | 18,90 | 29,20                          | 38,20 | 47,20 | 56,20 | 64,20 | 73,20 | 82,20                                     | 91,20 | 100,20 |       |       |        |                               |       |        |        |       |        |                               |        |       |       |        |       |                                      |       |        |       |       |       |        |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| M20              | 2,50       | 20,75                  | 20,54                          | 20,90 | 31,20                          | 41,20 | 51,20 | 61,20 | 71,20 | 81,20 | 91,20                                     |       |        |       |       |        |                               |       |        |        |       |        |                               |        |       |       |        |       |                                      |       |        |       |       |       |        |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| M22              | 2,50       | 22,75                  | 22,54                          | 22,90 | 33,20                          | 44,20 | 55,20 | 66,20 | 77,20 | 88,20 |   |       |        |       |       |        |                               |       |        |        |       |        |                               |        |       |       |        |       |                                      |       |        |       |       |       |        |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| M24              | 3,00       | 24,75                  | 24,65                          | 25,05 | 37,10                          | 49,10 | 61,10 | 73,10 | 85,10 | 97,10 |   |       |        |       |       |        |                               |       |        |        |       |        |                               |        |       |       |        |       |                                      |       |        |       |       |       |        |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| M27              | 3,00       | 27,75                  | 27,65                          | 28,05 | 40,10                          | 53,60 | 67,10 | 80,60 | 94,10 |       |   |       |        |       |       |        |                               |       |        |        |       |        |                               |        |       |       |        |       |                                      |       |        |       |       |       |        |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| M30              | 3,50       | 31,00                  | 30,76                          | 31,21 | 45,30                          | 60,30 | 75,30 | 90,30 |       |       |   |       |        |       |       |        |                               |       |        |        |       |        |                               |        |       |       |        |       |                                      |       |        |       |       |       |        |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| M33              | 3,50       | 34,00                  | 33,76                          | 34,21 | 48,20                          | 64,20 | 80,20 |       |       |       |   |       |        |       |       |        |                               |       |        |        |       |        |                               |        |       |       |        |       |                                      |       |        |       |       |       |        |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| M36              | 4,00       | 37,00                  | 36,87                          | 37,34 | 52,80                          | 70,80 | 88,80 |       |       |       |   |       |        |       |       |        |                               |       |        |        |       |        |                               |        |       |       |        |       |                                      |       |        |       |       |       |        |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| M39              | 4,00       | 40,00                  | 39,87                          | 40,34 | 58,80                          | 78,80 | 98,80 |       |       |       |   |       |        |       |       |        |                               |       |        |        |       |        |                               |        |       |       |        |       |                                      |       |        |       |       |       |        |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| M42              | 4,50       | 43,00                  | 42,98                          | 43,50 | 63,00                          | 84,00 |       |       |       |       |   |       |        |       |       |        |                               |       |        |        |       |        |                               |        |       |       |        |       |                                      |       |        |       |       |       |        |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |
| M45              | 4,50       | 46,00                  | 45,98                          | 46,50 | 68,00                          | 90,00 |       |       |       |       |   |       |        |       |       |        |                               |       |        |        |       |        |                               |        |       |       |        |       |                                      |       |        |       |       |       |        |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |

# Gewindeinsätze

## Typ 110-MF

EG-Gewindeinsatz mit Schraubensicherung



EG-Einsätze entsprechen allen nationalen und internationalen Normen, die für Gewindeinsätze gelten.

### Hinweis für den Wert D<sub>K</sub>:

hier handelt es sich bekanntlich um Erfahrungswerte. Die Genauigkeit des Kerndurchmesserwertes D<sub>K</sub> nach dem Gewindeschneiden kann weit gestreut sein, da eine Anzahl bekannter Faktoren hierfür bestimmend sind. Wichtig und wesentlich ist, dass die angegebenen Toleranzwerte nach D<sub>K</sub>-Tabelle erreicht werden.

- d = Gewinde Nenndurchmesser
- P = Steigung
- D<sub>EG</sub> = Außendurchmesser des EG-Aufnahmegewindes
- D<sub>K</sub> = Kerndurchmesser nach dem Gewindeschneiden
- L = Länge des EG-Einsatzes im eingebauten Zustand „nutzbare Gewindelänge“
- t<sub>min</sub> = Mindkerntiefe
- t<sub>0</sub> = Vollausgeschnittene nutzbare Gewindetiefe Nennlänge des Einsatzes
- W = Windungszahl vor dem Einbau
- A = Außendurchmesser des EG-Einsatzes vor dem Einbau



# Befestigungssysteme



| d        | Zündkerzengewinde |       |        | D <sub>K</sub> |        |     | Nennlänge |      |      |      |      |
|----------|-------------------|-------|--------|----------------|--------|-----|-----------|------|------|------|------|
|          | P                 | B Ø   | L      | min.           | max.   | 8,4 | 10        | 10,5 | 12,4 | 16,4 | 18,0 |
| M10x1    | 1,00              | 10,25 | 10,07  | 10,271         | 10,407 | -   | 10,0      | -    | -    | -    | -    |
| M12x1,25 | 1,25              | 12,25 | 12,271 | 12,483         | 12,717 | -   | -         | 10,5 | -    | -    | 18,0 |
| M14x1,25 | 1,25              | 14,25 | 14,271 | 14,483         | 14,717 | 8,4 | -         | 10,5 | 12,4 | 16,4 | -    |

| Gewinde Nenn-Ø | Steigung P | empf. Spiralbohrer B Ø | Kerndurchmesser D <sub>K</sub> |       | Kerntiefe t <sub>min</sub> |       |        | Nennlänge des Einsatzes l <sub>N</sub> |        |       | Länge des eingeb. Einsatzes L |       |        | Windungszahl vor dem Einbau W |       |       | Außendurchmesser EG vor dem Einbau A |        |        |       |       |       |       |       |       |       |
|----------------|------------|------------------------|--------------------------------|-------|----------------------------|-------|--------|--|--------|-------|-------------------------------|-------|--------|-------------------------------|-------|-------|--------------------------------------|--------|--------|-------|-------|-------|-------|-------|-------|-------|
|                |            |                        | min.                           | max.  | 1d                         | 1,5d  | 2d     | 2,5d                                   | 3d     | 1d    | 1,5d                          | 2d    | 2,5d   | 3d                            | 1d    | 1,5d  | 2d                                   | 2,5d   | 3d     | min.  | max.  |       |       |       |       |       |
| M8x1           | 1,00       | 8,30                   | 8,22                           | 8,41  | 13,00                      | 17,00 | 21,00  | 25,00                                  | 29,00  | 8,00  | 12,00                         | 16,00 | 20,00  | 24,00                         | 7,00  | 11,00 | 15,00                                | 19,00  | 23,00  | 6,10  | 9,50  | 12,90 | 16,30 | 19,90 | 9,85  | 10,10 |
| M10x1          | 1,00       | 10,25                  | 10,22                          | 10,41 | 15,00                      | 20,00 | 25,00  | 30,00                                  | 35,00  | 10,00 | 15,00                         | 20,00 | 25,00  | 30,00                         | 9,00  | 14,00 | 19,00                                | 24,00  | 29,00  | 7,60  | 12,10 | 16,30 | 20,70 | 25,00 | 12,10 | 12,50 |
| M10x1,25       | 1,25       | 10,40                  | 10,27                          | 10,48 | 16,20                      | 21,20 | 26,20  | 31,20                                  | 36,20  | 10,00 | 15,00                         | 20,00 | 25,00  | 30,00                         | 8,80  | 13,80 | 18,80                                | 23,80  | 28,80  | 8,00  | 9,70  | 13,10 | 16,90 | 20,10 | 12,10 | 12,50 |
| M12x1          | 1,00       | 12,30                  | 12,22                          | 12,41 | 17,20                      | 23,20 | 29,20  | 35,20                                  | 41,20  | 12,00 | 18,00                         | 24,00 | 30,00  | 36,00                         | 11,00 | 17,00 | 23,00                                | 29,00  | 35,00  | 9,30  | 14,50 | 19,50 | 24,80 | 30,00 | 14,40 | 14,80 |
| M12x1,25       | 1,25       | 12,40                  | 12,27                          | 12,48 | 18,20                      | 24,20 | 30,20  | 36,20                                  | 42,20  | 12,00 | 18,00                         | 24,00 | 30,00  | 36,00                         | 10,80 | 16,80 | 22,80                                | 28,80  | 34,80  | 9,40  | 11,60 | 15,90 | 20,70 | 24,80 | 14,40 | 14,80 |
| M12x1,5        | 1,50       | 12,50                  | 12,32                          | 12,56 | 19,30                      | 25,30 | 31,30  | 37,30                                  | 43,30  | 12,00 | 18,00                         | 24,00 | 30,00  | 36,00                         | 10,50 | 16,50 | 22,50                                | 28,50  | 34,50  | 9,50  | 11,90 | 16,30 | 21,10 | 25,00 | 14,40 | 14,80 |
| M14x1,25       | 1,25       | 14,40                  | 14,27                          | 14,48 | 20,20                      | 27,20 | 34,20  | 41,20                                  | 48,20  | 14,00 | 21,00                         | 28,00 | 35,00  | 42,00                         | 12,80 | 19,80 | 26,80                                | 33,80  | 40,80  | 8,40  | 13,30 | 18,20 | 23,10 | 28,00 | 16,80 | 17,70 |
| M14x1,5        | 1,50       | 14,50                  | 14,32                          | 14,56 | 21,30                      | 28,30 | 35,30  | 42,30                                  | 49,30  | 14,00 | 21,00                         | 28,00 | 35,00  | 42,00                         | 12,50 | 19,50 | 26,50                                | 33,50  | 40,50  | 8,00  | 11,20 | 15,30 | 19,00 | 23,20 | 16,80 | 17,70 |
| M16x1,5        | 1,50       | 16,50                  | 16,32                          | 16,56 | 23,30                      | 31,30 | 39,30  | 47,30                                  | 55,30  | 16,00 | 24,00                         | 32,00 | 40,00  | 48,00                         | 14,50 | 22,50 | 30,50                                | 38,50  | 46,50  | 7,10  | 11,20 | 15,30 | 19,00 | 23,20 | 19,00 | 19,90 |
| M18x1,5        | 1,50       | 18,50                  | 18,32                          | 18,56 | 25,30                      | 34,30 | 43,30  | 52,30                                  | 61,30  | 18,00 | 27,00                         | 36,00 | 45,00  | 54,00                         | 16,50 | 25,50 | 34,50                                | 43,50  | 52,50  | 9,50  | 14,90 | 20,20 | 25,40 | 30,60 | 19,00 | 19,90 |
| M18x2          | 2,00       | 18,50                  | 18,43                          | 18,73 | 27,30                      | 36,30 | 45,30  | 54,30                                  | 62,00  | 18,00 | 27,00                         | 36,00 | 45,00  | 54,00                         | 16,00 | 25,00 | 34,00                                | 43,00  | 52,00  | 7,10  | 11,20 | 15,10 | 19,10 | 23,20 | 21,50 | 22,00 |
| M20x1,5        | 1,50       | 20,50                  | 20,32                          | 20,56 | 27,30                      | 37,30 | 47,30  | 57,30                                  | 67,00  | 20,00 | 30,00                         | 40,00 | 50,00  | 60,00                         | 18,50 | 28,50 | 38,50                                | 48,50  | 58,50  | 8,00  | 12,50 | 16,70 | 22,40 | 28,20 | 23,70 | 24,20 |
| M20x2          | 2,00       | 20,50                  | 20,43                          | 20,73 | 29,30                      | 39,30 | 49,30  | 59,30                                  | 69,00  | 20,00 | 30,00                         | 40,00 | 50,00  | 60,00                         | 18,00 | 28,00 | 38,00                                | 48,00  | 58,00  | 8,00  | 12,50 | 16,80 | 22,40 | 28,20 | 23,70 | 24,20 |
| M22x1,5        | 1,50       | 22,50                  | 22,32                          | 22,56 | 29,30                      | 40,30 | 51,30  | 62,30                                  | 73,30  | 22,00 | 33,00                         | 44,00 | 55,00  | 66,00                         | 20,50 | 31,50 | 42,50                                | 53,50  | 64,50  | 8,00  | 13,00 | 17,70 | 23,40 | 29,20 | 26,30 | 26,80 |
| M22x2          | 2,00       | 22,50                  | 22,43                          | 22,73 | 31,30                      | 42,30 | 53,30  | 64,30                                  | 75,30  | 22,00 | 33,00                         | 44,00 | 55,00  | 66,00                         | 20,00 | 31,00 | 42,00                                | 53,00  | 64,00  | 8,70  | 13,60 | 18,40 | 24,20 | 30,00 | 26,30 | 26,80 |
| M24x1,5        | 1,50       | 24,50                  | 24,32                          | 24,56 | 31,30                      | 43,30 | 55,30  | 67,30                                  | 79,30  | 24,00 | 36,00                         | 48,00 | 60,00  | 72,00                         | 22,50 | 34,50 | 46,50                                | 58,50  | 70,50  | 12,90 | 19,80 | 26,70 | 33,60 | 40,50 | 28,60 | 29,10 |
| M24x2          | 2,00       | 24,50                  | 24,43                          | 24,73 | 33,30                      | 45,30 | 57,30  | 69,30                                  | 81,30  | 24,00 | 36,00                         | 48,00 | 60,00  | 72,00                         | 22,00 | 34,00 | 46,00                                | 58,00  | 70,00  | 9,60  | 15,00 | 20,20 | 25,40 | 30,60 | 28,60 | 29,10 |
| M26x1,5        | 1,50       | 26,50                  | 26,32                          | 26,56 | 33,30                      | 46,30 | 59,30  | 72,30                                  | 85,30  | 26,00 | 39,00                         | 52,00 | 65,00  | 78,00                         | 24,50 | 37,50 | 50,50                                | 63,50  | 76,50  | 14,00 | 21,60 | 29,10 | 36,60 | 44,10 | 31,00 | 31,50 |
| M27x1,5        | 1,50       | 27,50                  | 27,32                          | 27,56 | 34,30                      | 48,30 | 62,30  | 76,30                                  | 90,30  | 27,00 | 40,50                         | 54,00 | 67,50  | 81,00                         | 25,50 | 39,00 | 52,50                                | 66,00  | 79,50  | 14,60 | 22,60 | 30,00 | 37,40 | 44,80 | 32,20 | 32,70 |
| M27x2          | 2,00       | 27,50                  | 27,43                          | 27,73 | 36,30                      | 50,30 | 64,30  | 78,30                                  | 92,30  | 27,00 | 40,50                         | 54,00 | 67,50  | 81,00                         | 25,00 | 38,50 | 52,00                                | 65,50  | 79,00  | 10,80 | 16,80 | 22,60 | 28,40 | 34,20 | 32,20 | 32,70 |
| M28x1,5        | 1,50       | 28,50                  | 28,32                          | 28,56 | 35,30                      | 49,30 | 63,30  | 77,30                                  | 91,30  | 28,00 | 42,00                         | 56,00 | 70,00  | 84,00                         | 26,50 | 40,50 | 54,50                                | 68,50  | 82,50  | 15,20 | 23,30 | 31,40 | 39,50 | 47,60 | 33,10 | 33,60 |
| M30x1,5        | 1,50       | 30,50                  | 30,22                          | 30,56 | 37,30                      | 52,30 | 67,30  | 82,30                                  | 97,30  | 30,00 | 45,00                         | 60,00 | 75,00  | 90,00                         | 28,50 | 43,50 | 58,50                                | 73,50  | 88,50  | 16,50 | 25,30 | 34,00 | 42,80 | 51,60 | 35,20 | 35,70 |
| M30x2          | 2,00       | 30,50                  | 30,43                          | 30,73 | 39,30                      | 54,30 | 69,30  | 84,30                                  | 99,30  | 30,00 | 45,00                         | 60,00 | 75,00  | 90,00                         | 28,00 | 43,00 | 58,00                                | 73,00  | 88,00  | 12,30 | 19,00 | 25,50 | 32,00 | 38,50 | 35,20 | 35,70 |
| M33x2          | 2,00       | 33,50                  | 33,43                          | 33,73 | 42,30                      | 58,30 | 74,30  | 90,30                                  | 106,30 | 33,00 | 49,50                         | 66,00 | 82,50  | 99,00                         | 31,00 | 47,50 | 64,00                                | 80,50  | 97,00  | 13,70 | 21,20 | 28,40 | 35,60 | 42,80 | 38,30 | 38,80 |
| M34x1,5        | 1,50       | 34,50                  | 34,32                          | 34,56 | 41,30                      | 58,30 | 75,30  | 92,30                                  | 109,30 | 34,00 | 51,00                         | 68,00 | 85,00  | 102,00                        | 32,50 | 49,50 | 66,50                                | 83,50  | 100,50 | 19,40 | 29,00 | 39,50 | 50,00 | 60,50 | 39,10 | 39,60 |
| M36x1,5        | 1,50       | 36,50                  | 36,32                          | 36,56 | 43,30                      | 61,30 | 79,30  | 97,30                                  | 115,30 | 36,00 | 54,00                         | 72,00 | 90,00  | 108,00                        | 34,50 | 52,50 | 70,50                                | 88,50  | 106,50 | 18,80 | 26,70 | 37,80 | 48,90 | 60,00 | 42,10 | 42,60 |
| M36x2          | 2,00       | 36,50                  | 36,43                          | 36,73 | 45,30                      | 63,30 | 81,30  | 99,30                                  | 117,30 | 36,00 | 54,00                         | 72,00 | 90,00  | 108,00                        | 34,00 | 52,00 | 70,00                                | 88,00  | 106,00 | 14,10 | 21,90 | 31,10 | 40,30 | 49,50 | 42,10 | 42,60 |
| M36x3          | 3,00       | 37,00                  | 36,65                          | 37,05 | 49,10                      | 67,10 | 85,10  | 103,10                                 | 121,10 | 36,00 | 54,00                         | 72,00 | 90,00  | 108,00                        | 33,00 | 51,00 | 69,00                                | 87,00  | 105,00 | 9,90  | 15,30 | 20,50 | 25,70 | 30,90 | 42,10 | 42,60 |
| M39x3          | 3,00       | 40,00                  | 39,65                          | 40,05 | 52,10                      | 71,10 | 90,10  | 109,10                                 | 128,10 | 36,00 | 55,00                         | 74,00 | 93,00  | 112,00                        | 36,00 | 55,00 | 74,00                                | 93,00  | 112,00 | 10,80 | 16,80 | 22,50 | 28,20 | 33,90 | 45,10 | 45,60 |
| M42x3          | 3,00       | 43,00                  | 42,65                          | 43,05 | 55,10                      | 76,10 | 97,10  | 118,10                                 | 139,10 | 42,00 | 63,00                         | 84,00 | 105,00 | 126,00                        | 39,00 | 60,00 | 81,00                                | 102,00 | 123,00 | 11,70 | 18,10 | 24,00 | 29,90 | 35,80 | 48,50 | 49,00 |
| M45x3          | 3,00       | 46,00                  | 45,65                          | 46,05 | 58,10                      | 80,10 | 103,10 | 127,10                                 | 151,10 | 45,00 | 67,50                         | 90,00 | 112,50 | 135,00                        | 42,00 | 64,50 | 87,00                                | 109,50 | 132,00 | 12,50 | 19,30 | 26,20 | 33,10 | 40,00 | 52,00 | 52,50 |

Sonderausführungen auf Anfrage

## 3B-Befestigungssysteme - alles für eine feste Verbindung