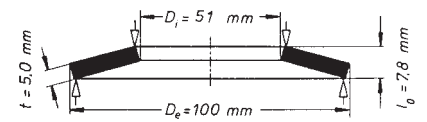
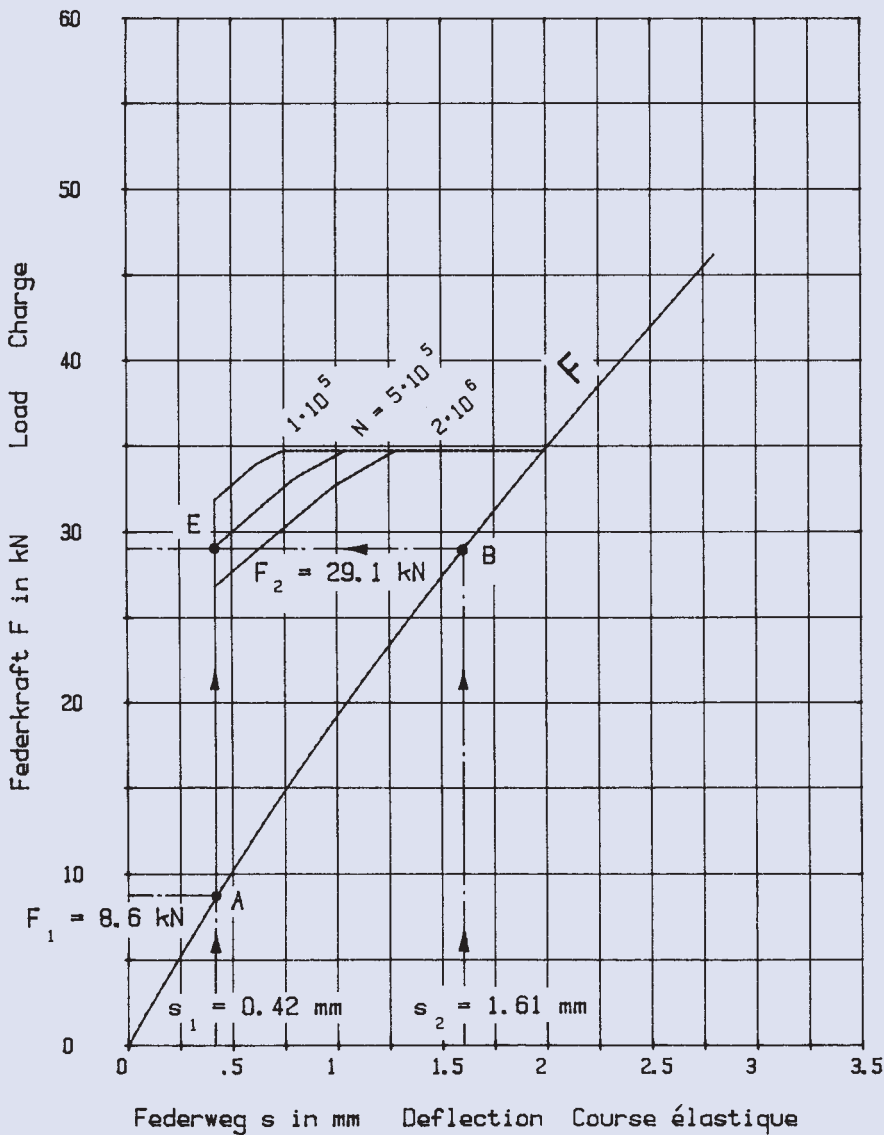
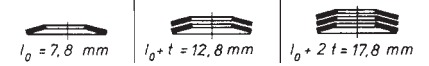


100 x 51 x 5,0

GR 2



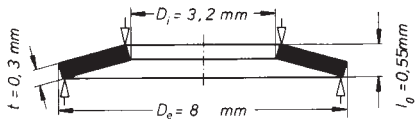
$h_0 = 2,8 \text{ mm}$        $D_e/D_i = 1,96$   
 $t = 5,0 \text{ mm}$        $D_e/t = 20$   
 $h_0/t = 0,56$        $m = 228,081 \text{ g}$



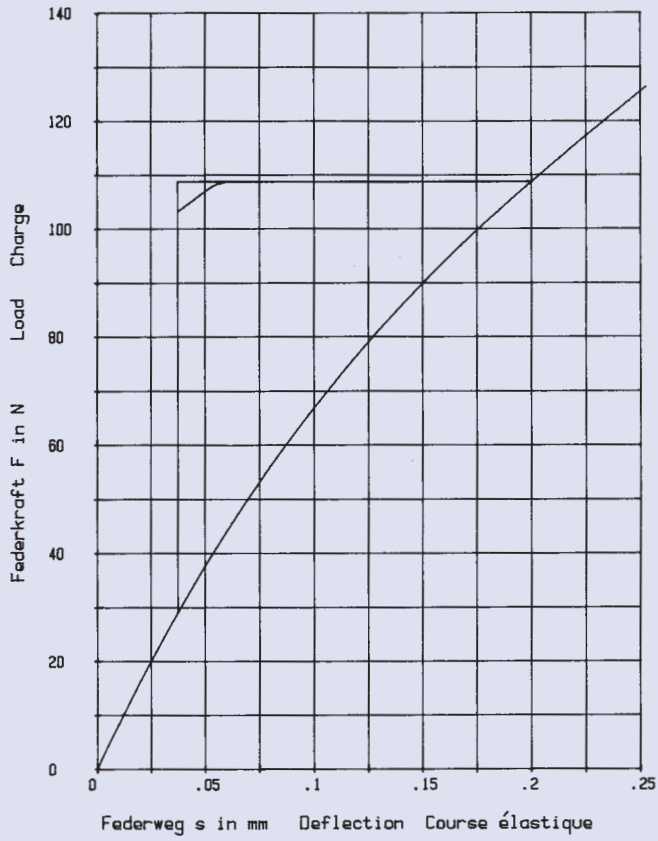
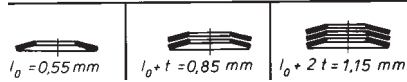
probability. It can also be shown from the diagram that a preload deflection of  $s_1 = 0,64 \text{ mm} = 0,23 \cdot h_0$  is required to achieve the fatigue life of  $N = 2 \cdot 10^6$  load cycles while maintaining a deflection of  $s_2 = 1,61 \text{ mm}$ .

8 x 3,2 x 0,3

GR 1

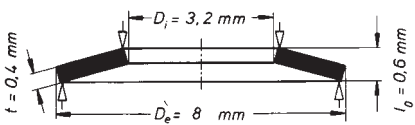


$h_0 = 0,25 \text{ mm}$        $D_e / D_i = 2,5$   
 $t = 0,3 \text{ mm}$        $D_e / t = 26,666$   
 $h_0 / t = 0,833$        $m = 0,099 \text{ g}$

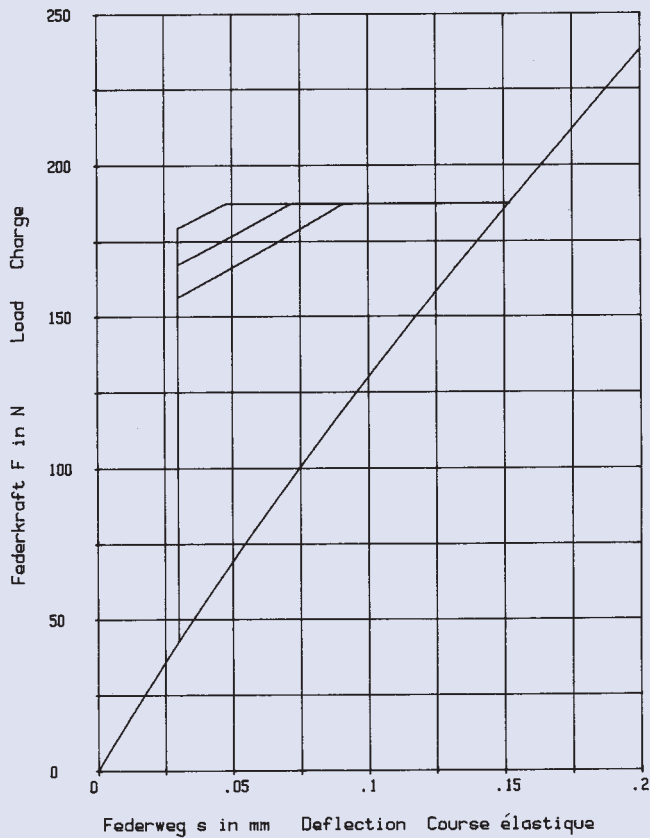
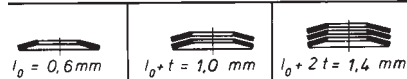


8 x 3,2 x 0,4

GR 1

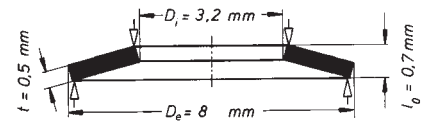
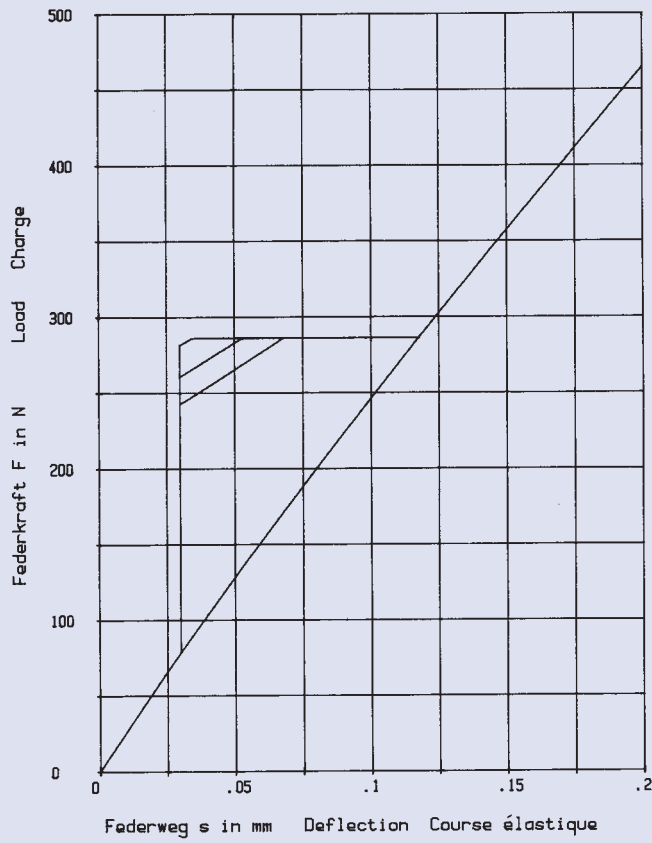


$h_0 = 0,2 \text{ mm}$        $D_e / D_i = 2,5$   
 $t = 0,4 \text{ mm}$        $D_e / t = 20$   
 $h_0 / t = 0,5$        $m = 0,133 \text{ g}$

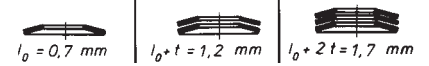


**8 x 3,2 x 0,5**

**GR 1**

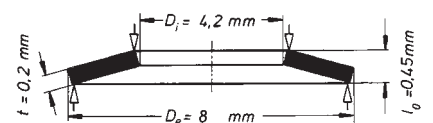
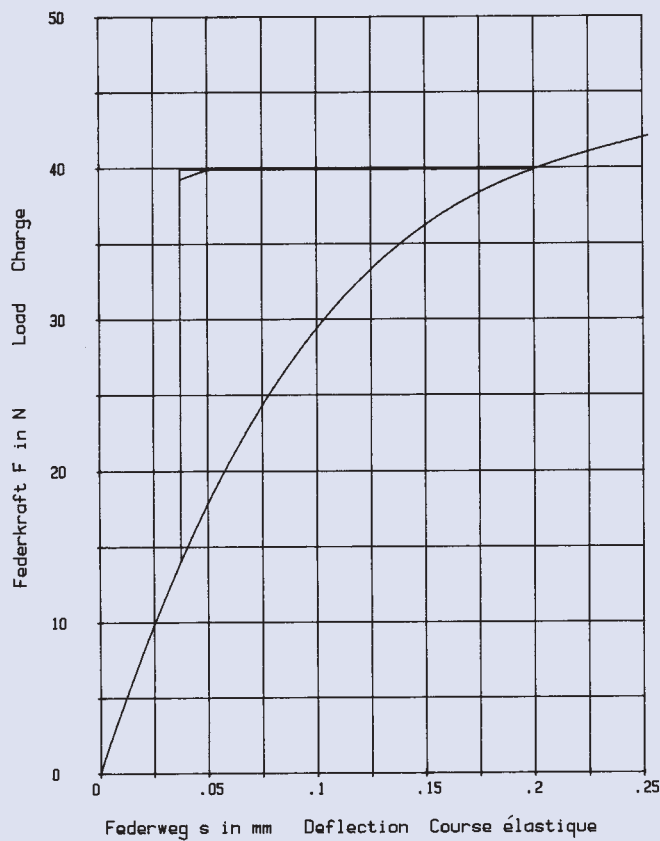


$$\begin{aligned}
 h_0 &= 0,2 \text{ mm} & D_e/D_i &= 2,5 \\
 t &= 0,5 \text{ mm} & D_e/t &= 16 \\
 h_0/t &= 0,4 & m &= 0,166 \text{ g}
 \end{aligned}$$

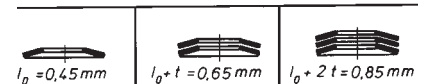


**8 x 4,2 x 0,2**

**GR 1, DIN 2093 – C 8**

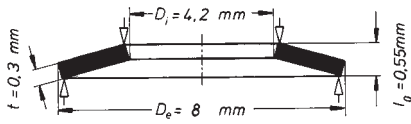


$$\begin{aligned}
 h_0 &= 0,25 \text{ mm} & D_e/D_i &= 1,904 \\
 t &= 0,2 \text{ mm} & D_e/t &= 40 \\
 h_0/t &= 1,25 & m &= 0,057 \text{ g}
 \end{aligned}$$

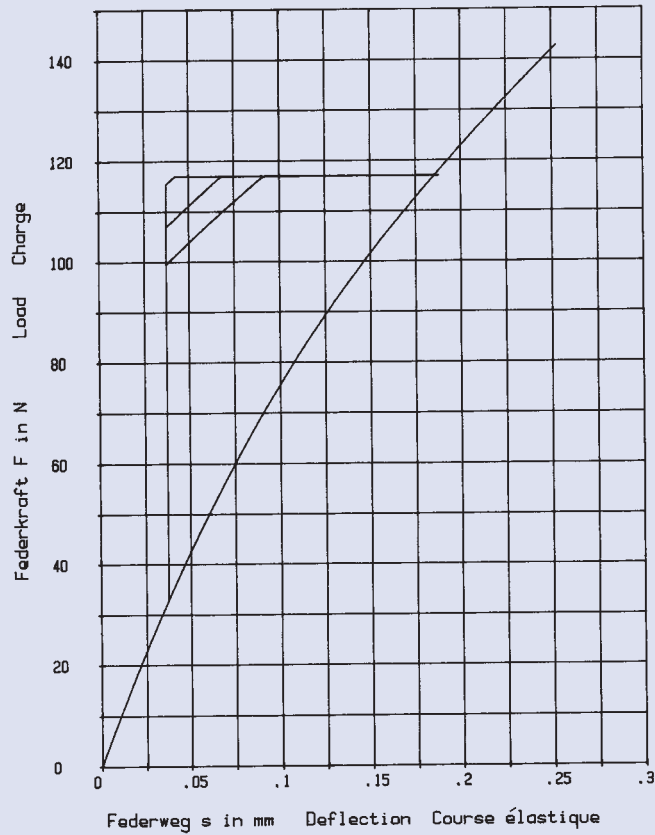
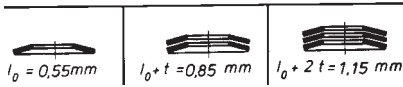


8 x 4,2 x 0,3

GR 1, DIN 2093 – B 8

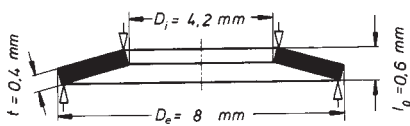


$h_0 = 0,25 \text{ mm}$        $D_e / D_i = 1,904$   
 $t = 0,3 \text{ mm}$        $D_e / t = 26,666$   
 $h_0 / t = 0,833$        $m = 0,086 \text{ g}$

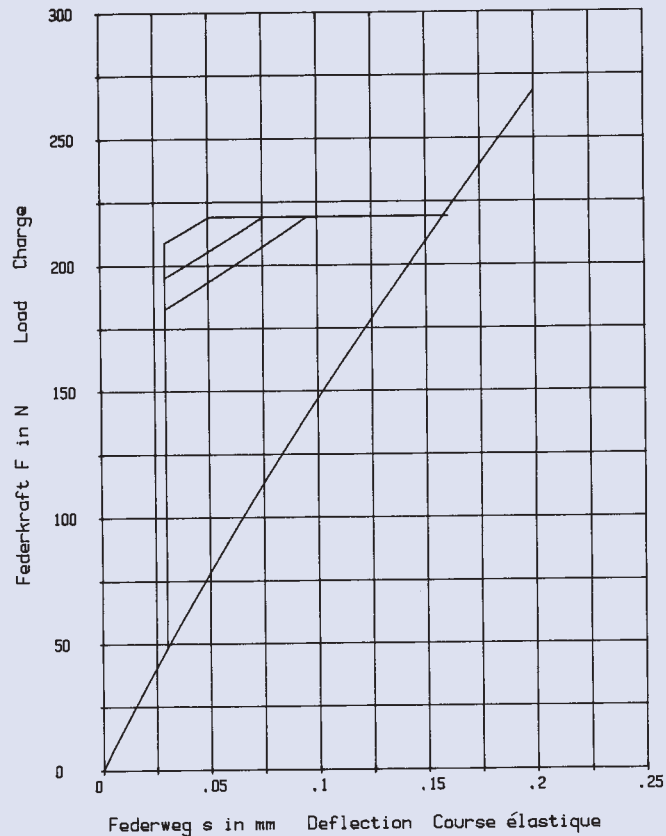
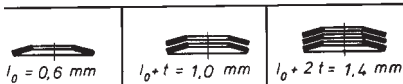


8 x 4,2 x 0,4

GR 1, DIN 2093 – A 8

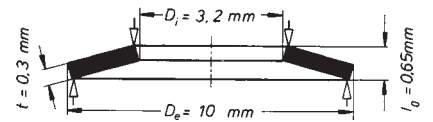
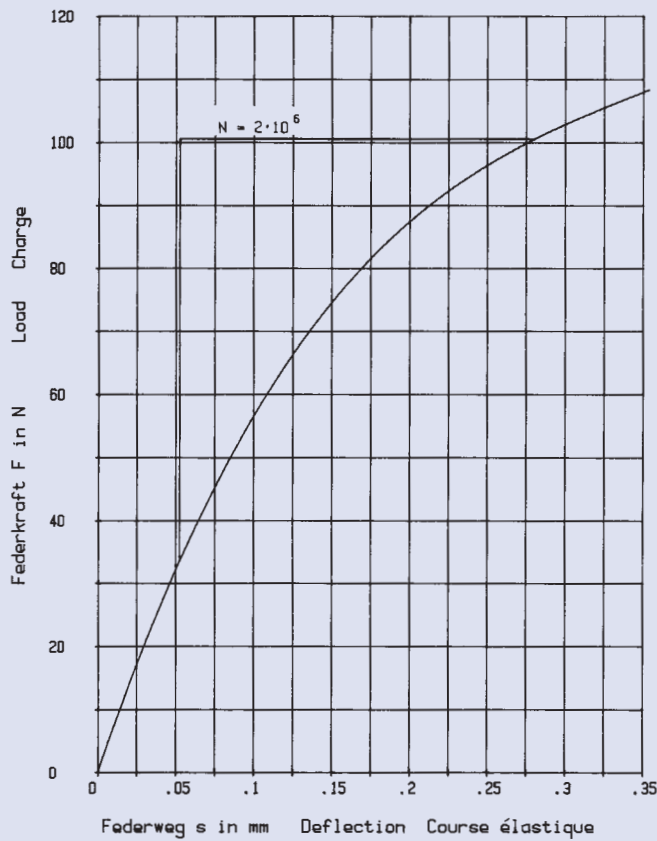


$h_0 = 0,2 \text{ mm}$        $D_e / D_i = 1,904$   
 $t = 0,4 \text{ mm}$        $D_e / t = 20$   
 $h_0 / t = 0,5$        $m = 0,114 \text{ g}$

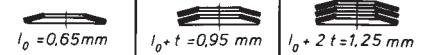


10 x 3,2 x 0,3

GR 1

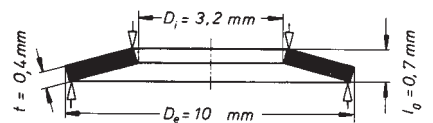
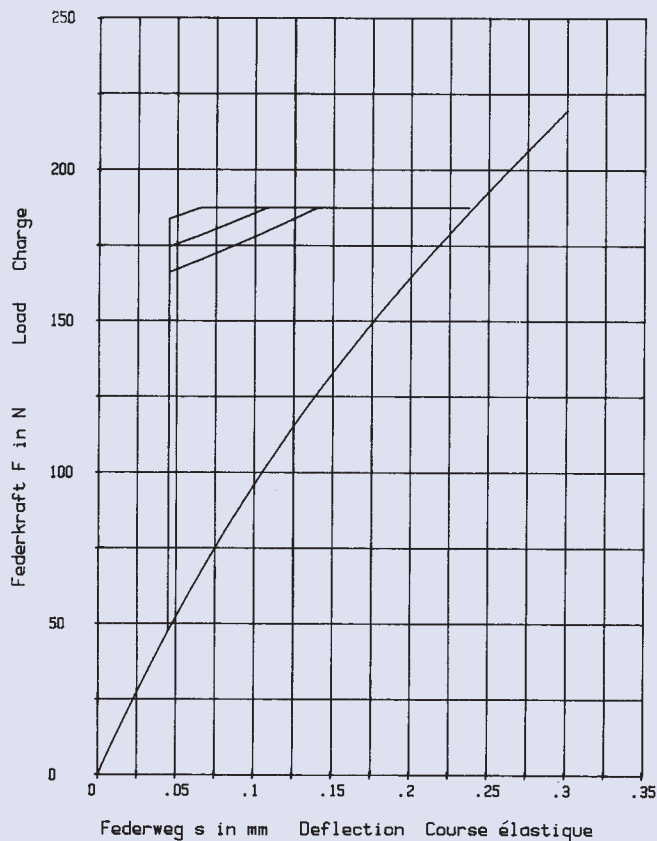


$h_0 = 0,35 \text{ mm}$        $D_e / D_i = 3,125$   
 $t = 0,3 \text{ mm}$        $D_e / t = 33,333$   
 $h_0 / t = 1,166$        $m = 0,166 \text{ g}$



10 x 3,2 x 0,4

GR 1

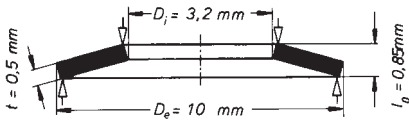


$h_0 = 0,3 \text{ mm}$        $D_e / D_i = 3,125$   
 $t = 0,4 \text{ mm}$        $D_e / t = 25$   
 $h_0 / t = 0,75$        $m = 0,221 \text{ g}$

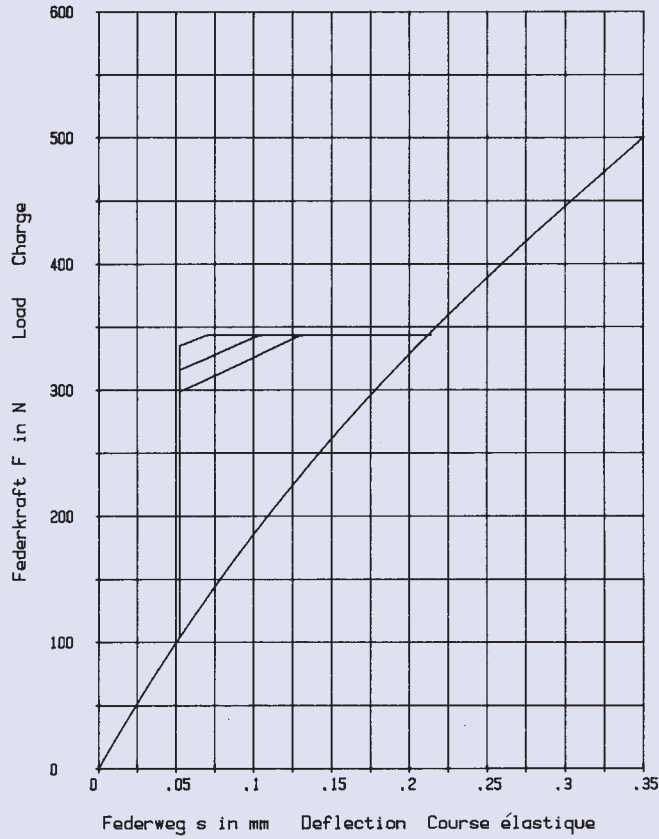
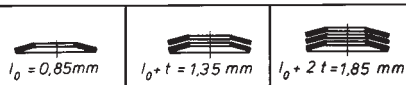


10 x 3,2 x 0,5

GR 1

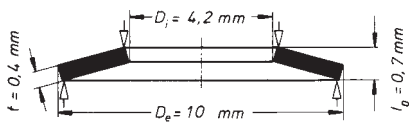


$h_0 = 0,35 \text{ mm}$        $D_e / D_i = 3,125$   
 $t = 0,5 \text{ mm}$        $D_e / t = 20$   
 $h_0 / t = 0,7$        $m = 0,277 \text{ g}$

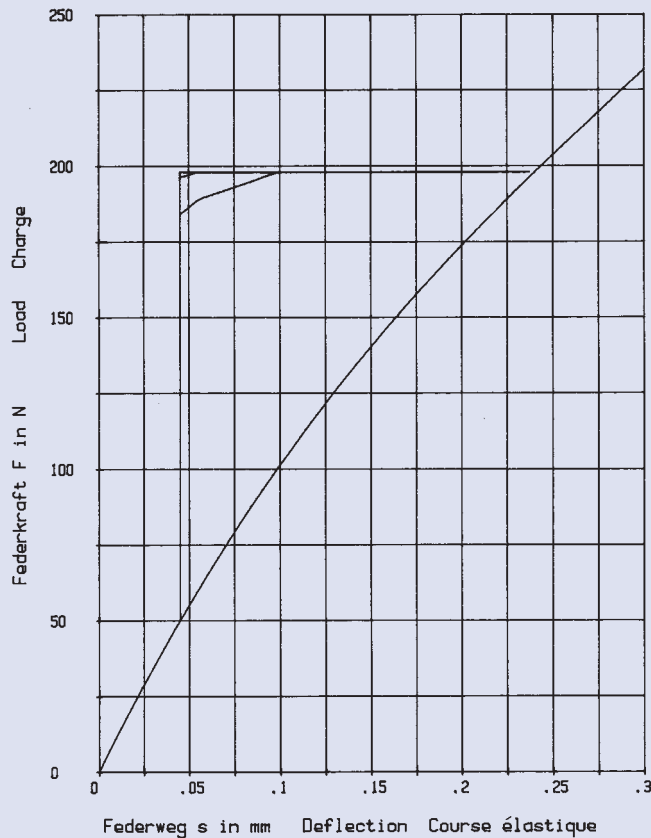
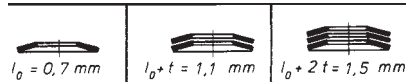


10 x 4,2 x 0,4

GR 1

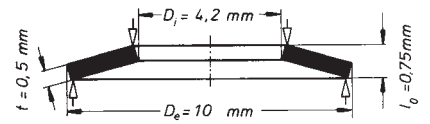
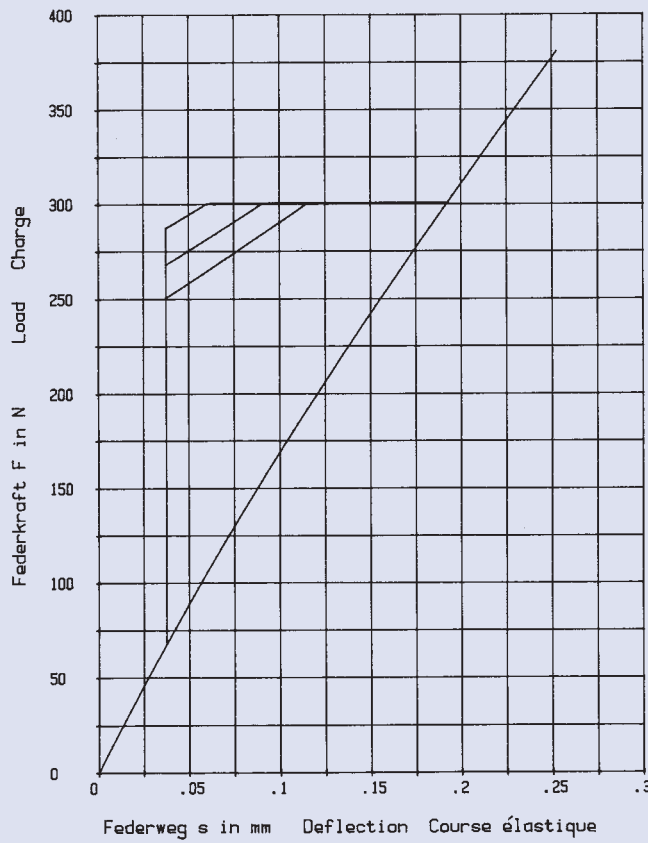


$h_0 = 0,3 \text{ mm}$        $D_e / D_i = 2,38$   
 $t = 0,4 \text{ mm}$        $D_e / t = 25$   
 $h_0 / t = 0,75$        $m = 0,203 \text{ g}$

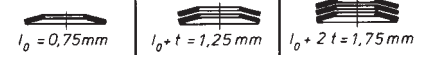


## 10 x 4,2 x 0,5

GR 1

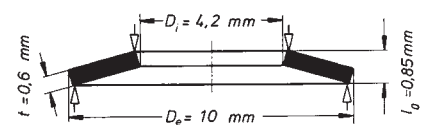
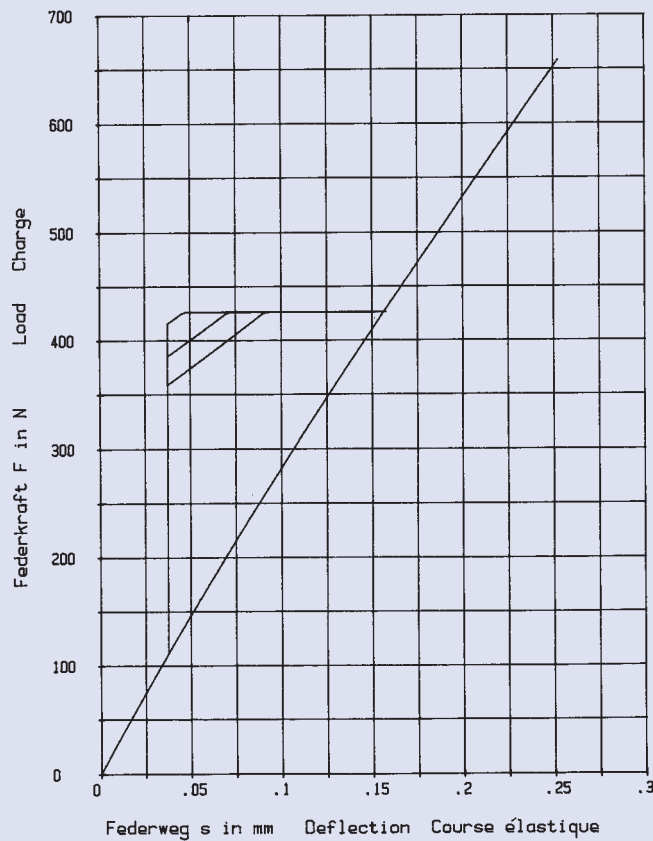


$$\begin{aligned}
 h_0 &= 0,25 \text{ mm} & D_e / D_i &= 2,38 \\
 t &= 0,5 \text{ mm} & D_e / t &= 20 \\
 h_0 / t &= 0,5 & m &= 0,254 \text{ g}
 \end{aligned}$$



## 10 x 4,2 x 0,6

GR 1

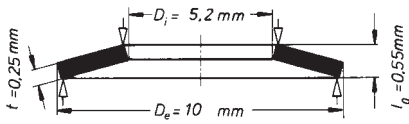


$$\begin{aligned}
 h_0 &= 0,25 \text{ mm} & D_e / D_i &= 2,38 \\
 t &= 0,6 \text{ mm} & D_e / t &= 16,666 \\
 h_0 / t &= 0,416 & m &= 0,304 \text{ g}
 \end{aligned}$$

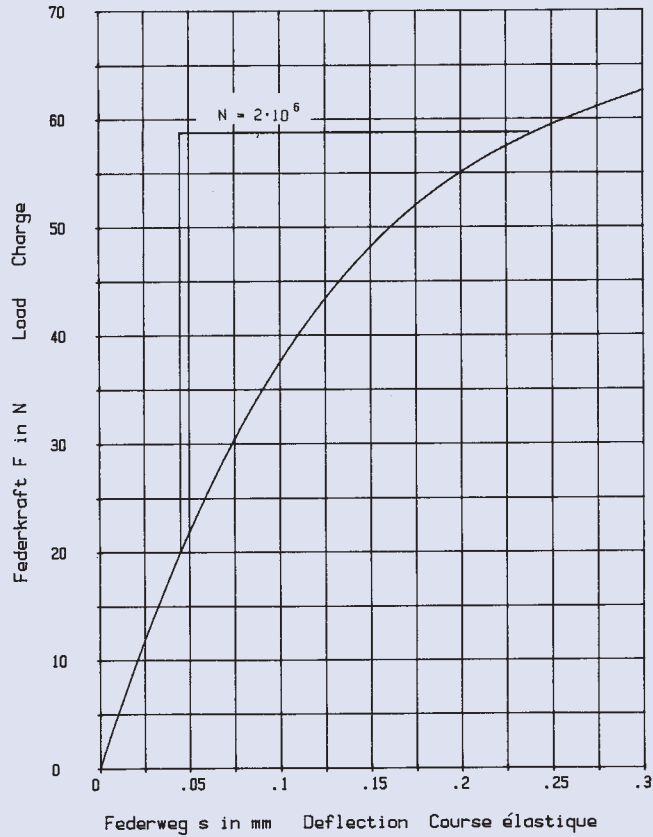
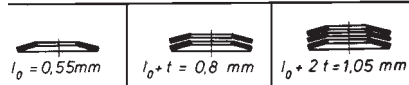


10 x 5,2 x 0,25

GR 1, DIN 2093 – C 10

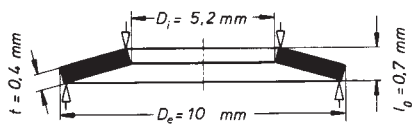


$h_0 = 0,3 \text{ mm}$        $D_e/D_i = 1,923$   
 $t = 0,25 \text{ mm}$        $D_e/t = 40$   
 $h_0/t = 1,2$            $m = 0,112 \text{ g}$

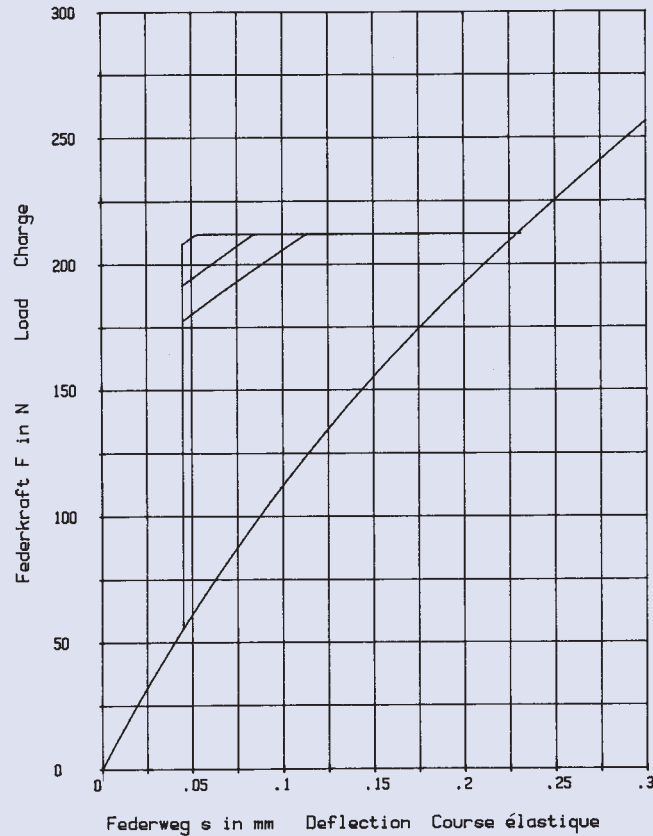
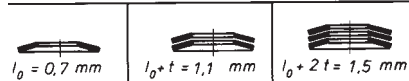


10 x 5,2 x 0,4

GR 1, DIN 2093 – B 10



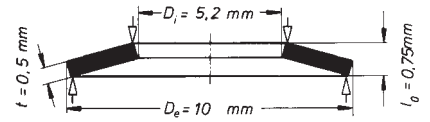
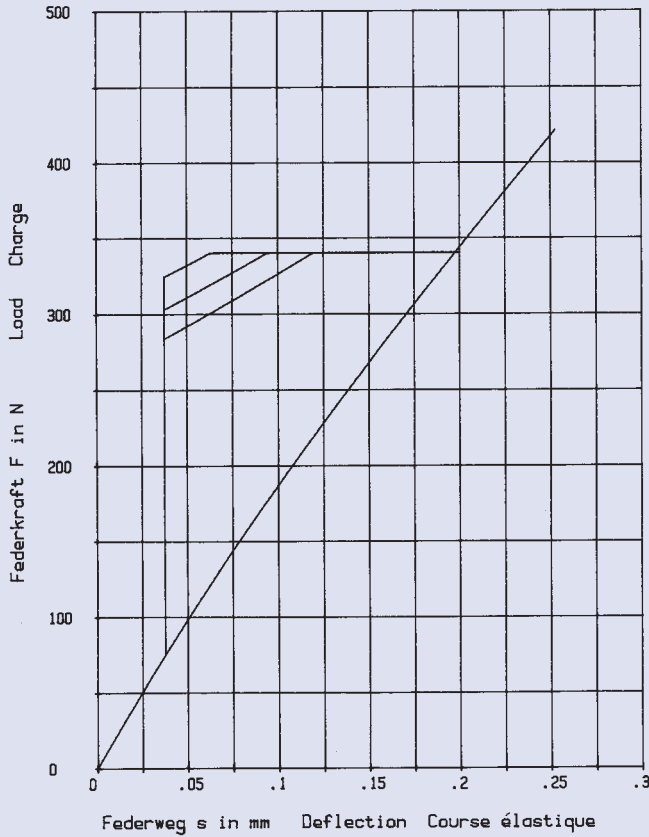
$h_0 = 0,3 \text{ mm}$        $D_e/D_i = 1,923$   
 $t = 0,4 \text{ mm}$        $D_e/t = 25$   
 $h_0/t = 0,75$        $m = 0,18 \text{ g}$



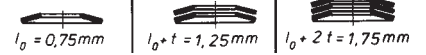


10 x 5,2 x 0,5

GR 1, DIN 2093 – A 10

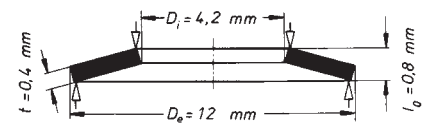
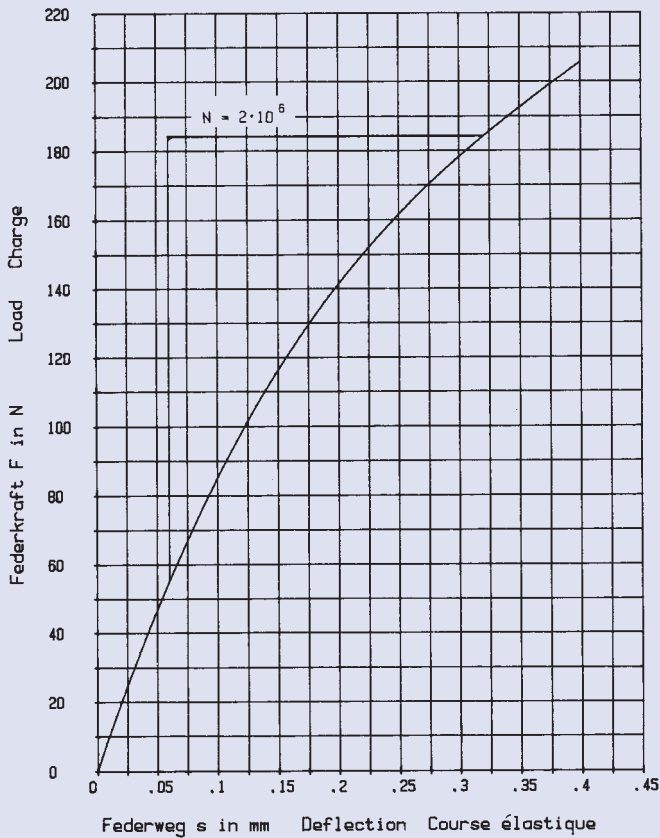


$h_0 = 0,25 \text{ mm}$        $D_e / D_i = 1,923$   
 $t = 0,5 \text{ mm}$        $D_e / t = 20$   
 $h_0 / t = 0,5$        $m = 0,225 \text{ g}$

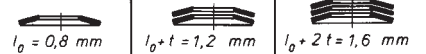


12 x 4,2 x 0,4

GR 1

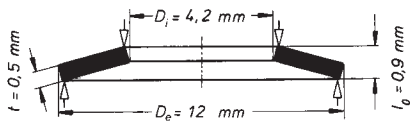


$h_0 = 0,4 \text{ mm}$        $D_e / D_i = 2,857$   
 $t = 0,4 \text{ mm}$        $D_e / t = 30$   
 $h_0 / t = 1$        $m = 0,311 \text{ g}$

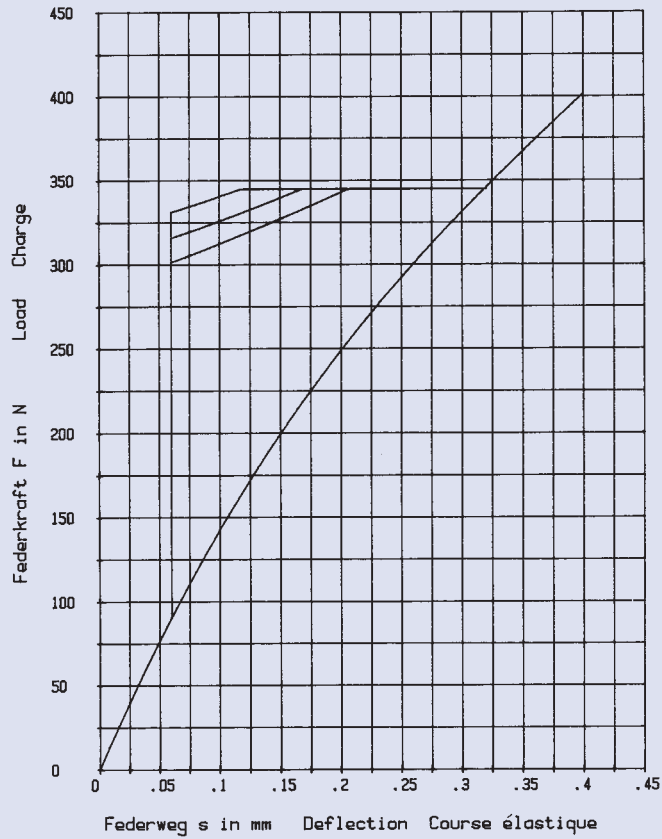
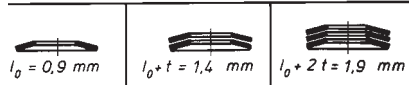


12 x 4,2 x 0,5

GR 1

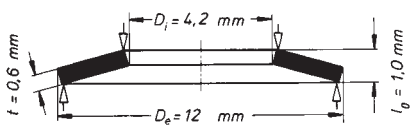


$h_0 = 0,4 \text{ mm}$        $D_e / D_i = 2,857$   
 $t = 0,5 \text{ mm}$        $D_e / t = 24$   
 $h_0 / t = 0,8$        $m = 0,389 \text{ g}$

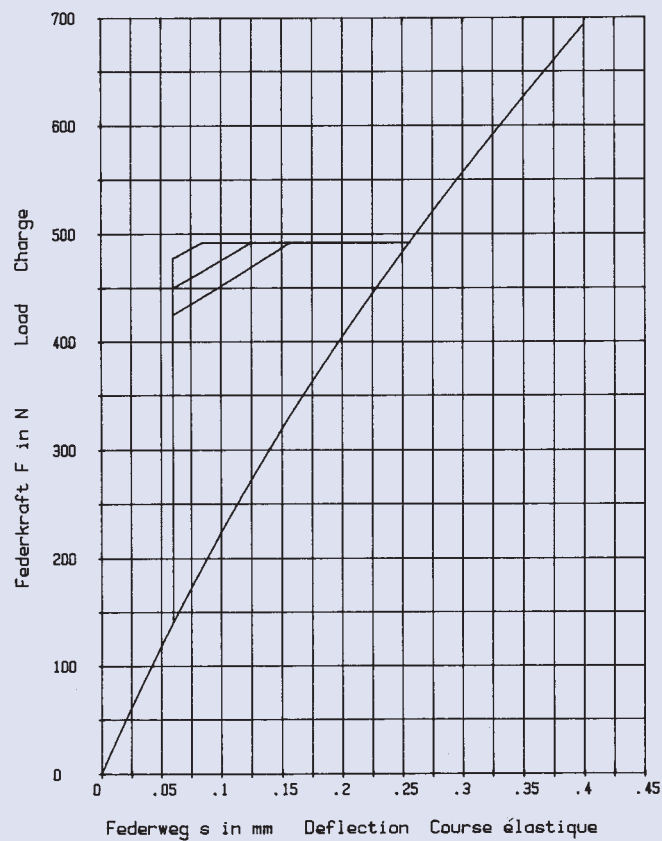
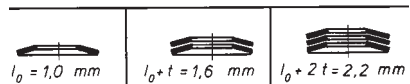


12 x 4,2 x 0,6

GR 1

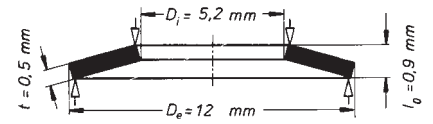
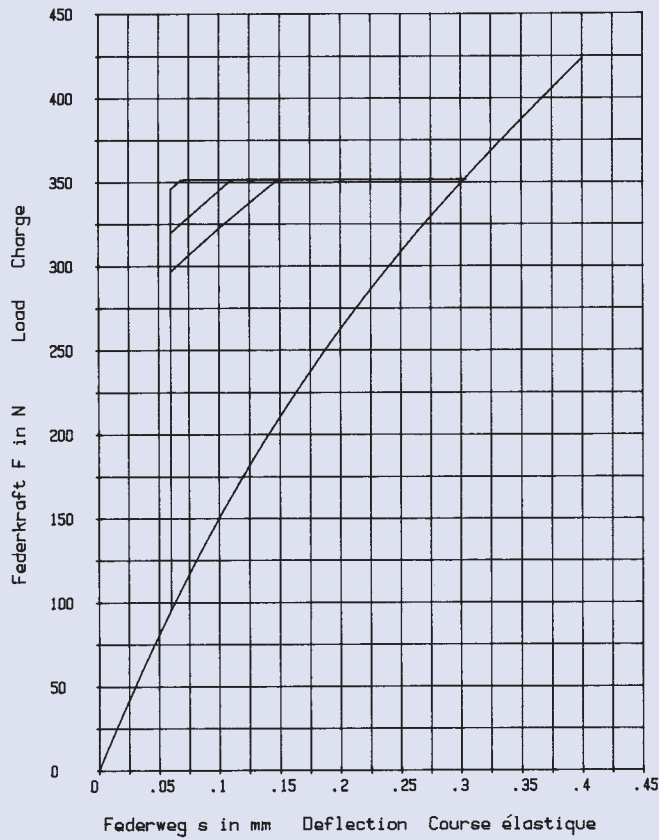


$h_0 = 0,4 \text{ mm}$        $D_e / D_i = 2,857$   
 $t = 0,6 \text{ mm}$        $D_e / t = 20$   
 $h_0 / t = 0,666$        $m = 0,467 \text{ g}$

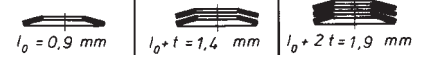


12 x 5,2 x 0,5

GR 1

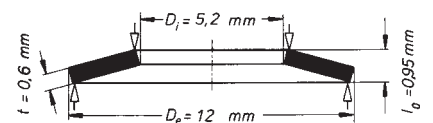
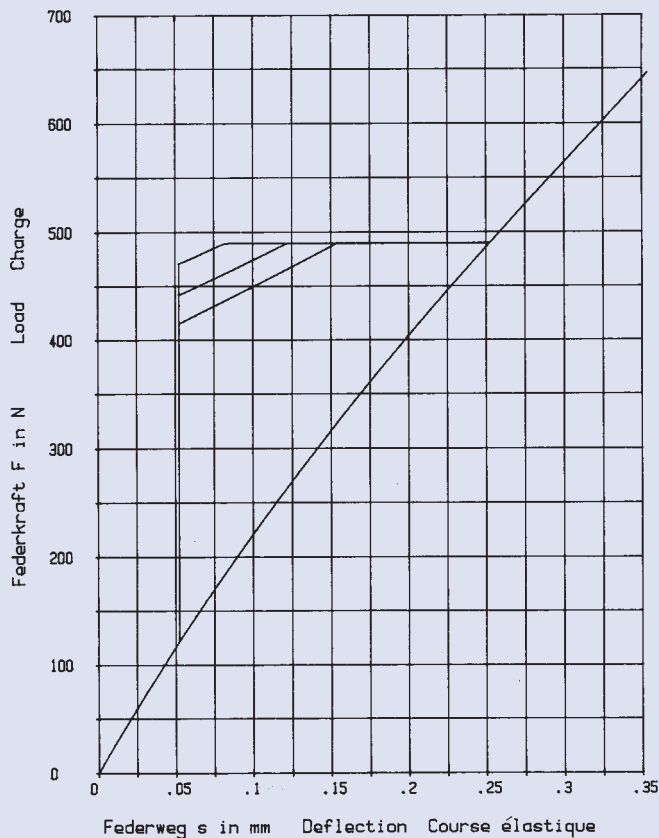


$h_0 = 0,4 \text{ mm}$                        $D_e / D_i = 2,307$   
 $t = 0,5 \text{ mm}$                           $D_e / t = 24$   
 $h_0 / t = 0,8$                               $m = 0,360 \text{ g}$

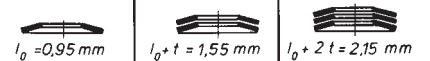


12 x 5,2 x 0,6

GR 1

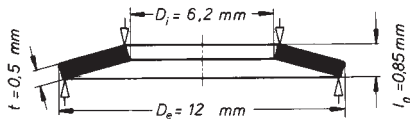


$h_0 = 0,35 \text{ mm}$                        $D_e / D_i = 2,307$   
 $t = 0,6 \text{ mm}$                           $D_e / t = 20$   
 $h_0 / t = 0,583$                           $m = 0,432 \text{ g}$

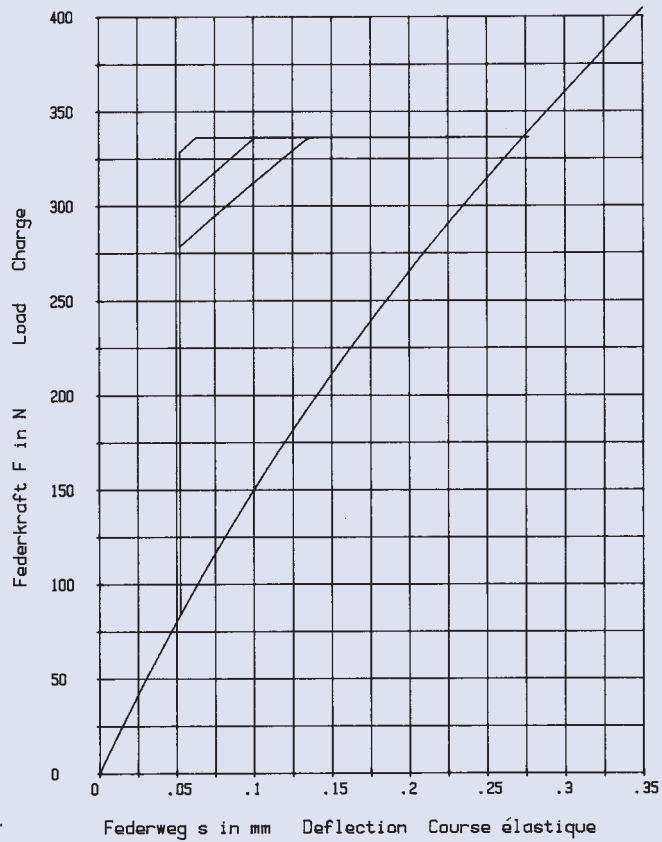
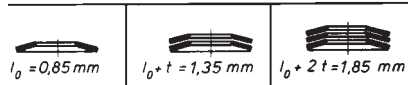


12 x 6,2 x 0,5

GR 1

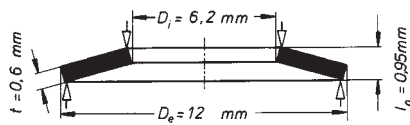


$h_0 = 0,35 \text{ mm}$        $D_e / D_i = 1,935$   
 $t = 0,5 \text{ mm}$        $D_e / t = 24$   
 $h_0 / t = 0,7$        $m = 0,325 \text{ g}$

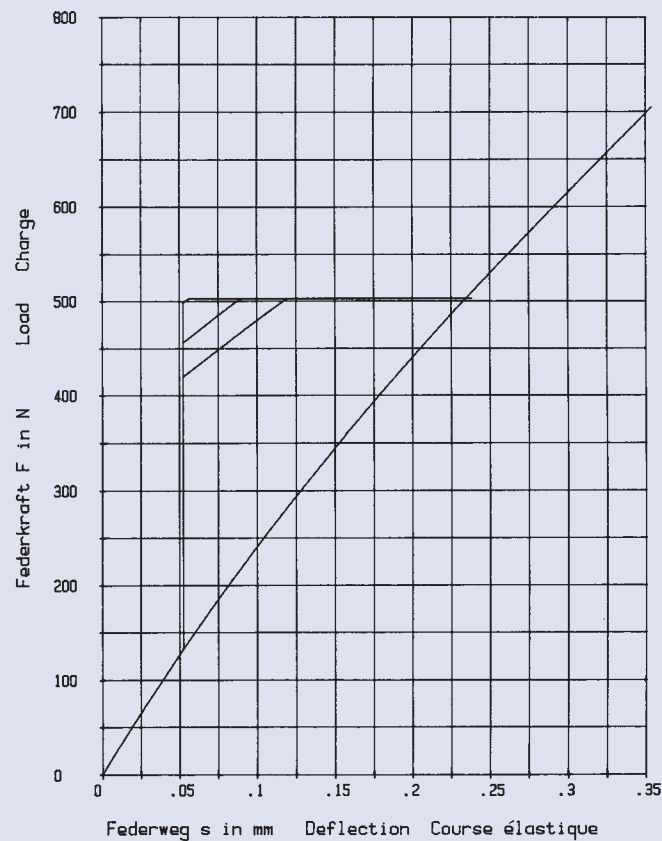
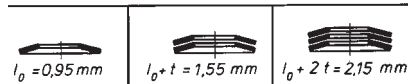


12 x 6,2 x 0,6

GR 1

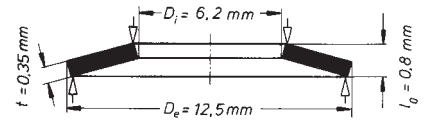
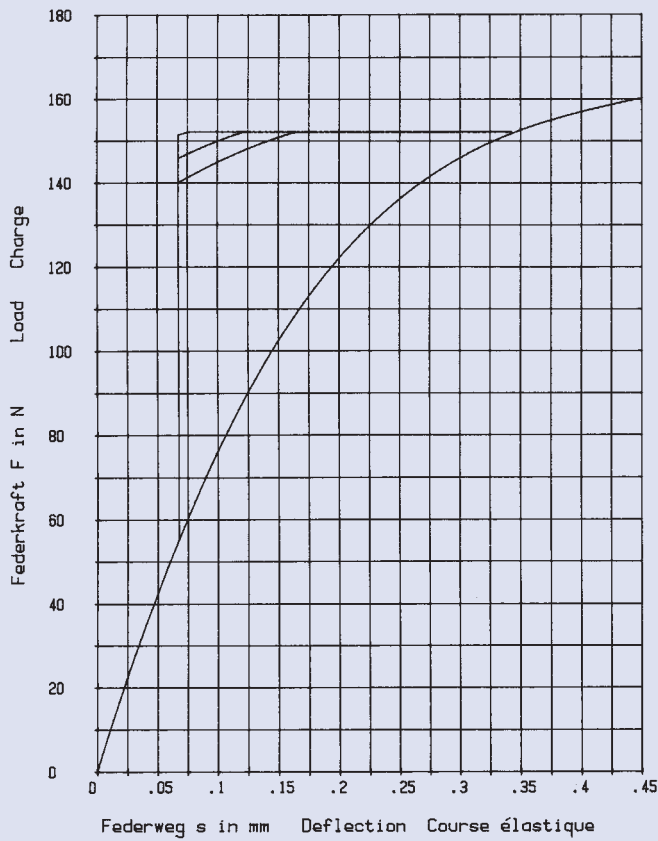


$h_0 = 0,35 \text{ mm}$        $D_e / D_i = 1,935$   
 $t = 0,6 \text{ mm}$        $D_e / t = 20$   
 $h_0 / t = 0,583$        $m = 0,390 \text{ g}$

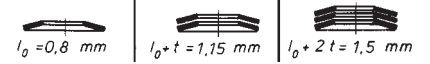


12,5 x 6,2 x 0,35

GR 1, DIN 2093 – C 12,5

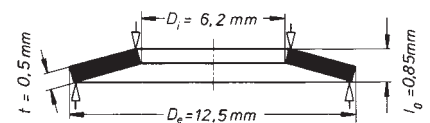
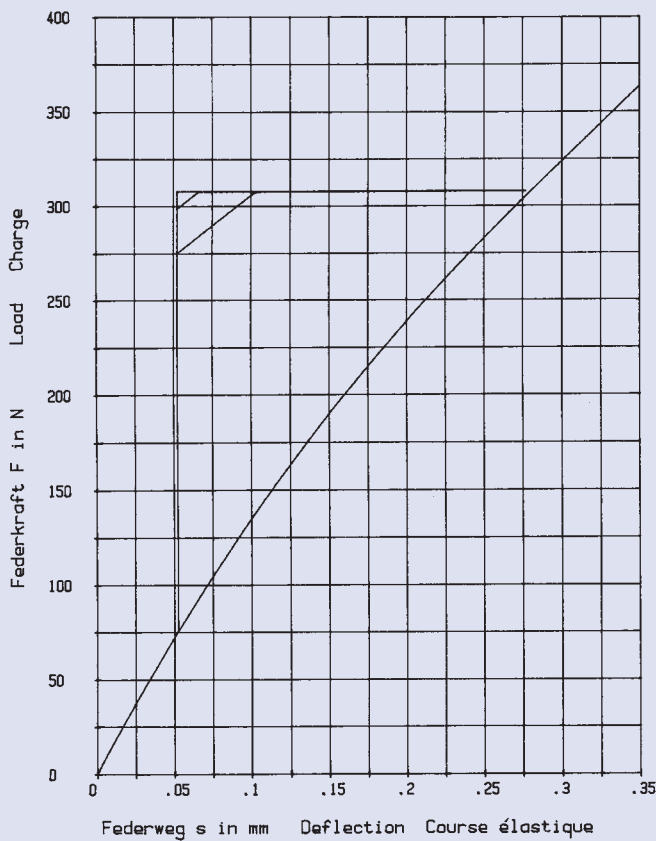


$$\begin{aligned}
 h_0 &= 0,45 \text{ mm} & D_e / D_i &= 2,016 \\
 t &= 0,35 \text{ mm} & D_e / t &= 35,714 \\
 h_0 / t &= 1,285 & m &= 0,254 \text{ g}
 \end{aligned}$$

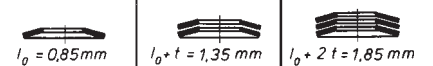


12,5 x 6,2 x 0,5

GR 1, DIN 2093 – B 12,5

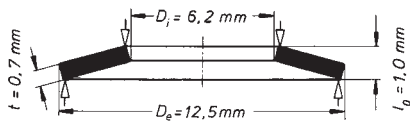


$$\begin{aligned}
 h_0 &= 0,35 \text{ mm} & D_e / D_i &= 2,016 \\
 t &= 0,5 \text{ mm} & D_e / t &= 25 \\
 h_0 / t &= 0,7 & m &= 0,363 \text{ g}
 \end{aligned}$$

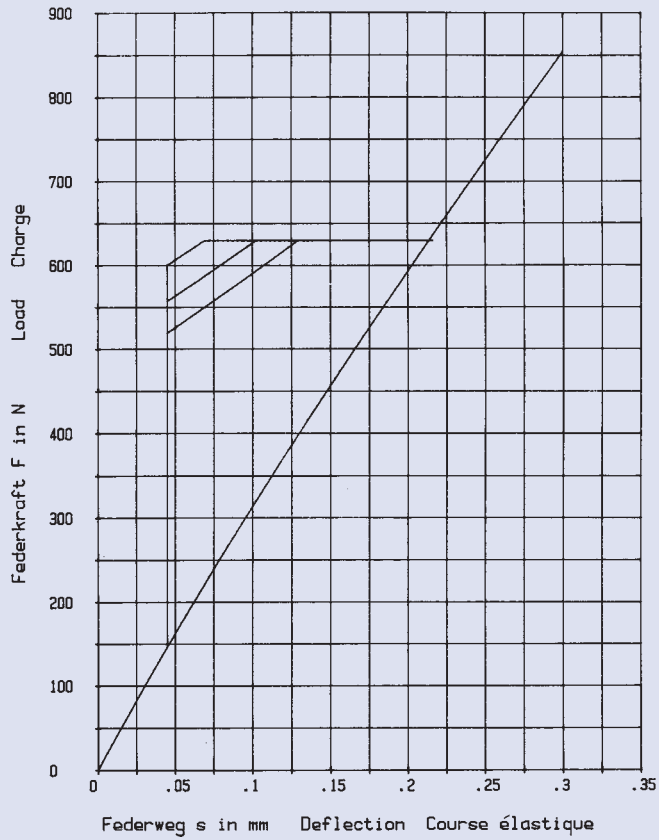
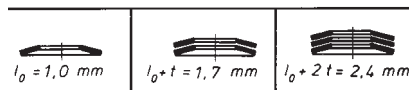


12,5 x 6,2 x 0,7

GR 1, DIN 2093 – A 12,5

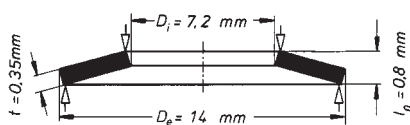


$h_0 = 0,3 \text{ mm}$        $D_e/D_i = 2,016$   
 $t = 0,7 \text{ mm}$        $D_e/t = 17,857$   
 $h_0/t = 0,428$        $m = 0,508 \text{ g}$

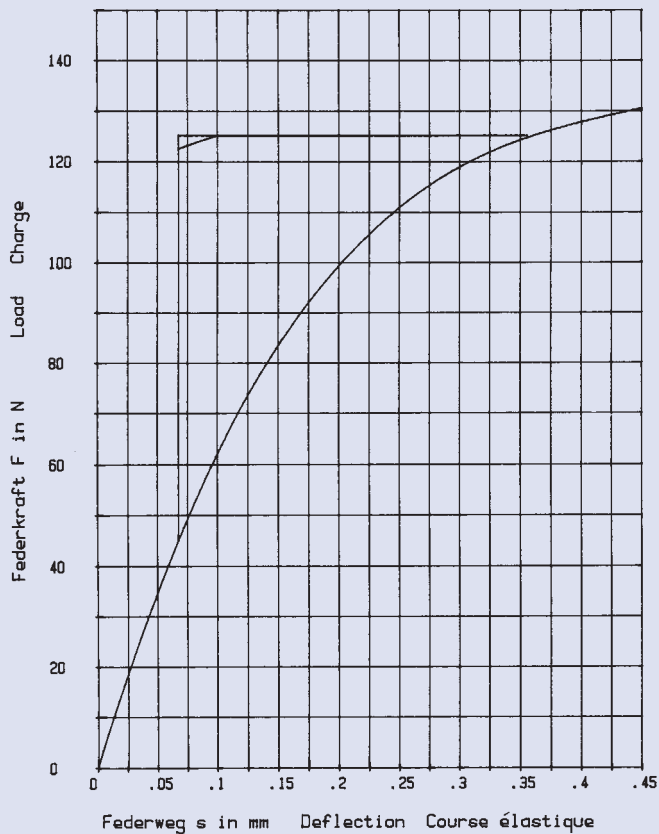
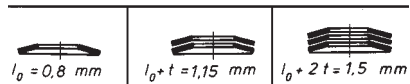


14 x 7,2 x 0,35

GR 1, DIN 2093 – C 14

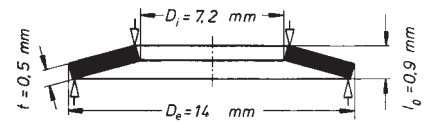


$h_0 = 0,45 \text{ mm}$        $D_e/D_i = 1,944$   
 $t = 0,35 \text{ mm}$        $D_e/t = 40$   
 $h_0/t = 1,285$        $m = 0,311 \text{ g}$

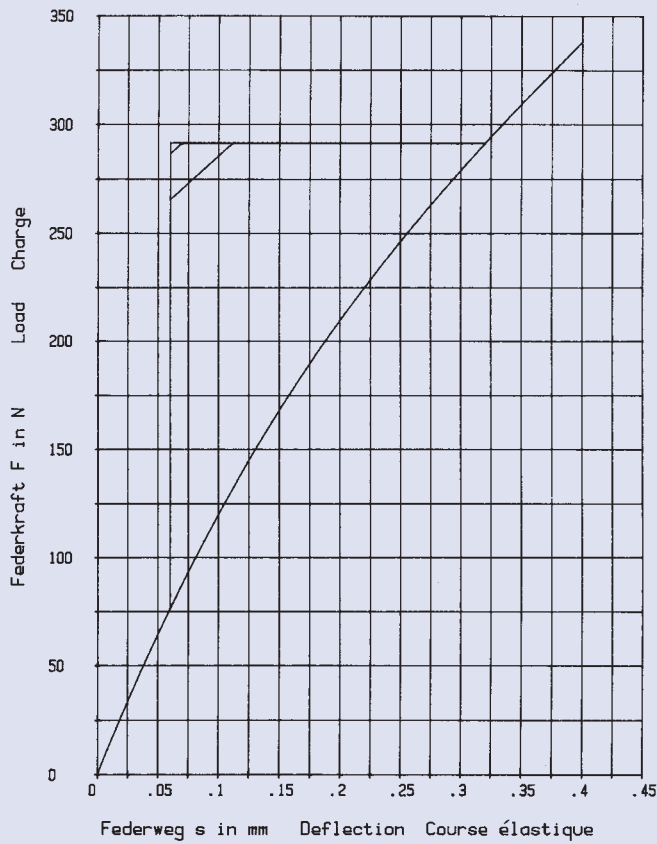
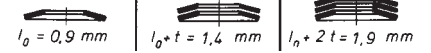


**14 x 7,2 x 0,5**

**GR 1, DIN 2093 – B 14**

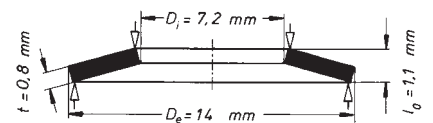


$$\begin{aligned}
 h_0 &= 0,4 \text{ mm} & D_e/D_i &= 1,944 \\
 t &= 0,5 \text{ mm} & D_e/t &= 28 \\
 h_0/t &= 0,8 & m &= 0,444 \text{ g}
 \end{aligned}$$

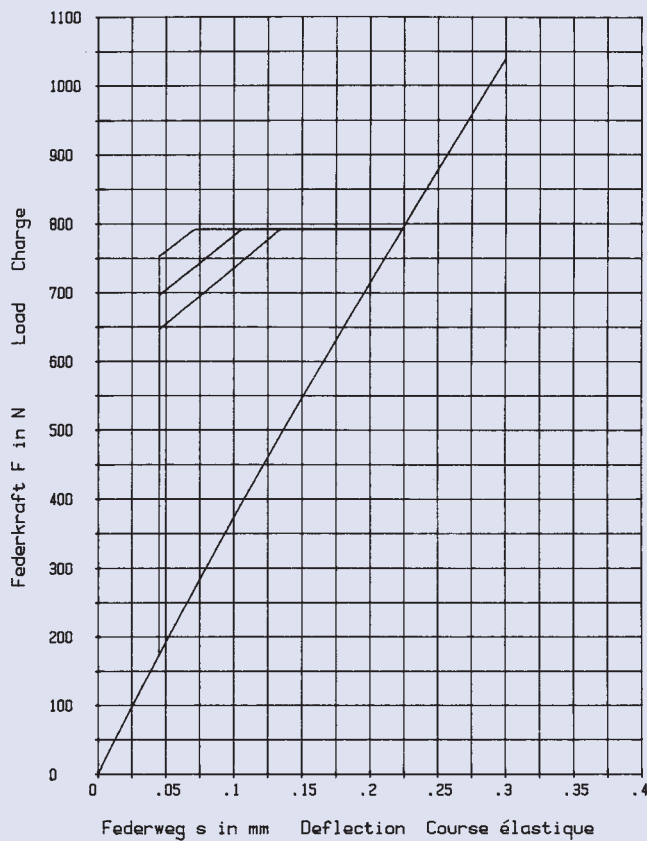
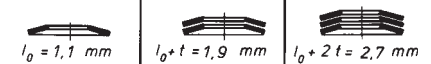


**14 x 7,2 x 0,8**

**GR 1, DIN 2093 – A 14**

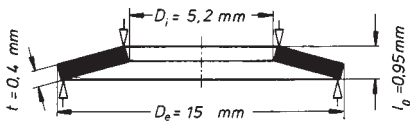


$$\begin{aligned}
 h_0 &= 0,3 \text{ mm} & D_e/D_i &= 1,944 \\
 t &= 0,8 \text{ mm} & D_e/t &= 17,5 \\
 h_0/t &= 0,375 & m &= 0,711 \text{ g}
 \end{aligned}$$

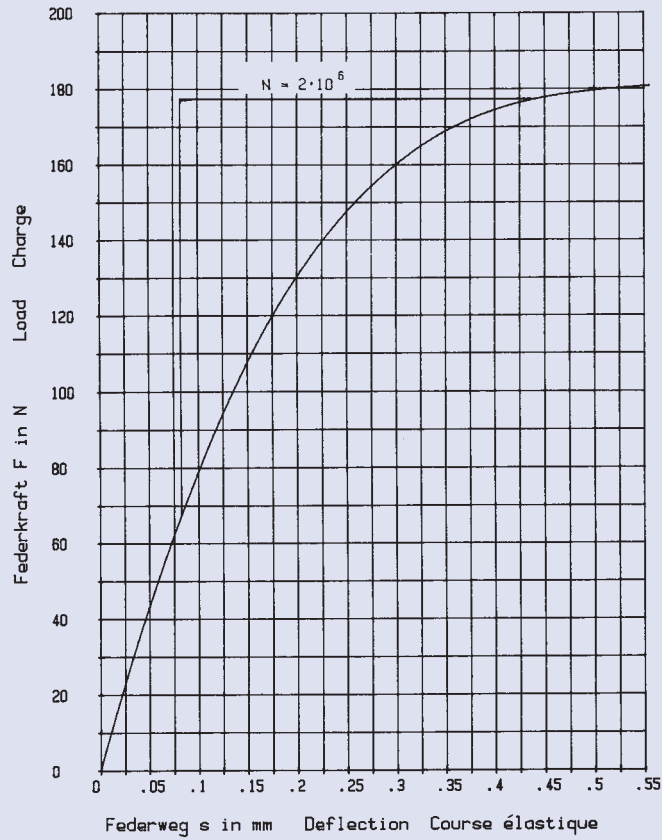
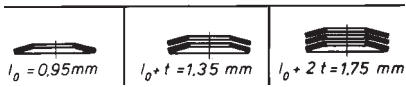


15 x 5,2 x 0,4

GR 1

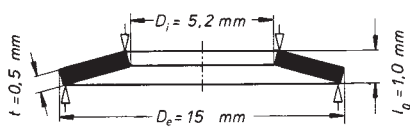


$h_0 = 0,55 \text{ mm}$        $D_e / D_i = 2,884$   
 $t = 0,4 \text{ mm}$        $D_e / t = 37,5$   
 $h_0 / t = 1,375$        $m = 0,488 \text{ g}$

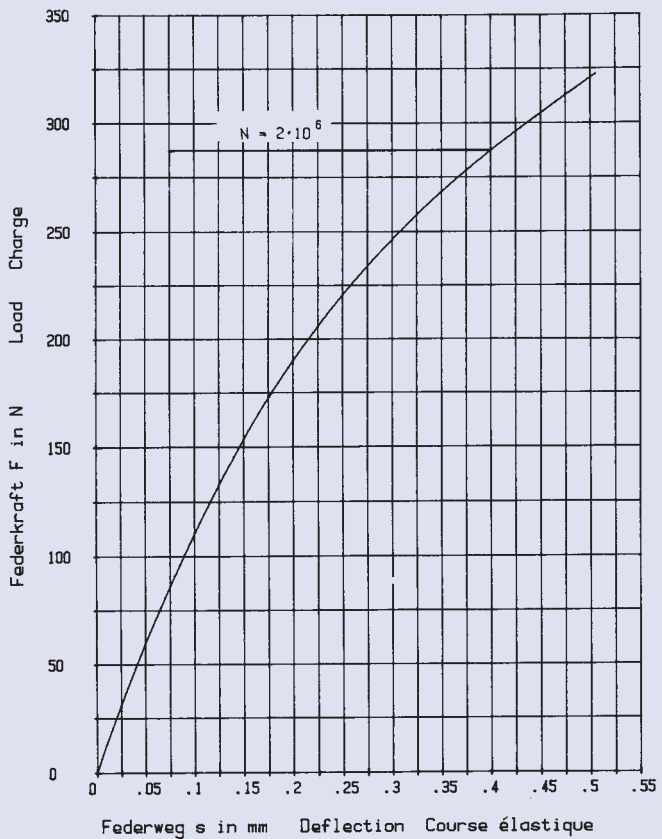
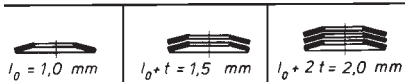


15 x 5,2 x 0,5

GR 1



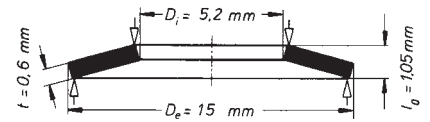
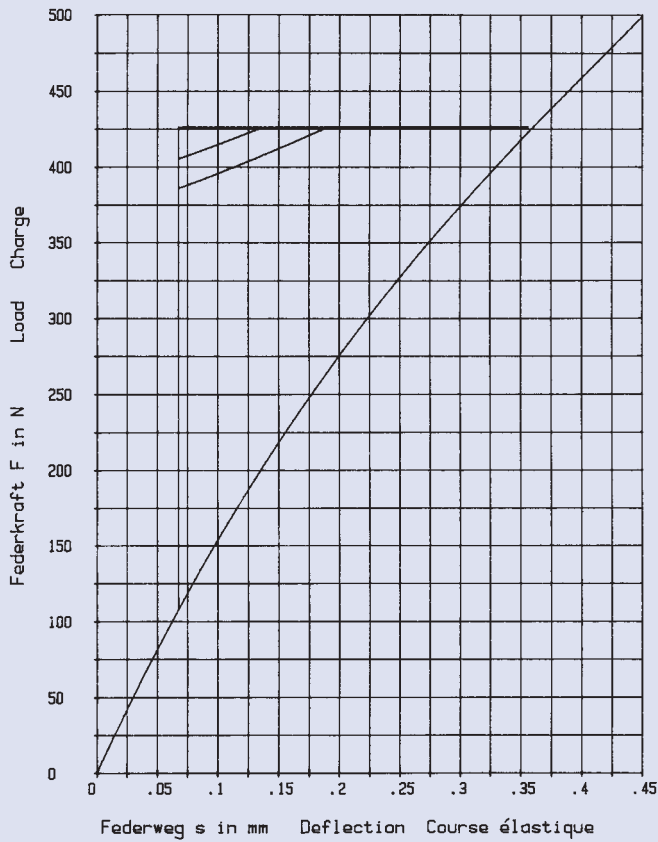
$h_0 = 0,5 \text{ mm}$        $D_e / D_i = 2,884$   
 $t = 0,5 \text{ mm}$        $D_e / t = 30$   
 $h_0 / t = 1,0$        $m = 0,610 \text{ g}$





15 x 5,2 x 0,6

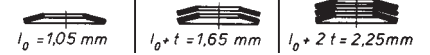
GR 1



$$h_0 = 0,45 \text{ mm} \quad D_e / D_i = 2,884$$

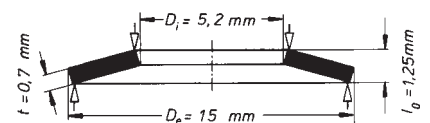
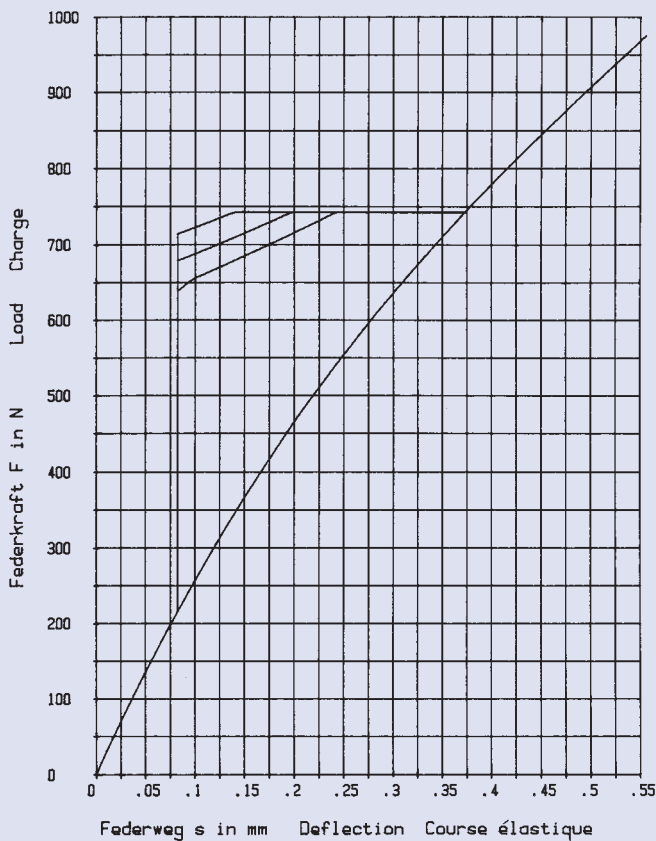
$$t = 0,6 \text{ mm} \quad D_e / t = 25$$

$$h_0 / t = 0,75 \quad m = 0,732 \text{ g}$$



15 x 5,2 x 0,7

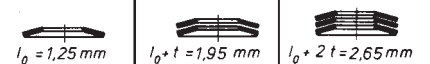
GR 1



$$h_0 = 0,55 \text{ mm} \quad D_e / D_i = 2,884$$

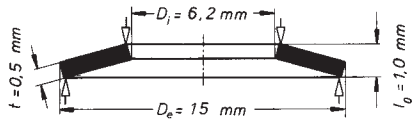
$$t = 0,7 \text{ mm} \quad D_e / t = 21,428$$

$$h_0 / t = 0,785 \quad m = 0,854 \text{ g}$$

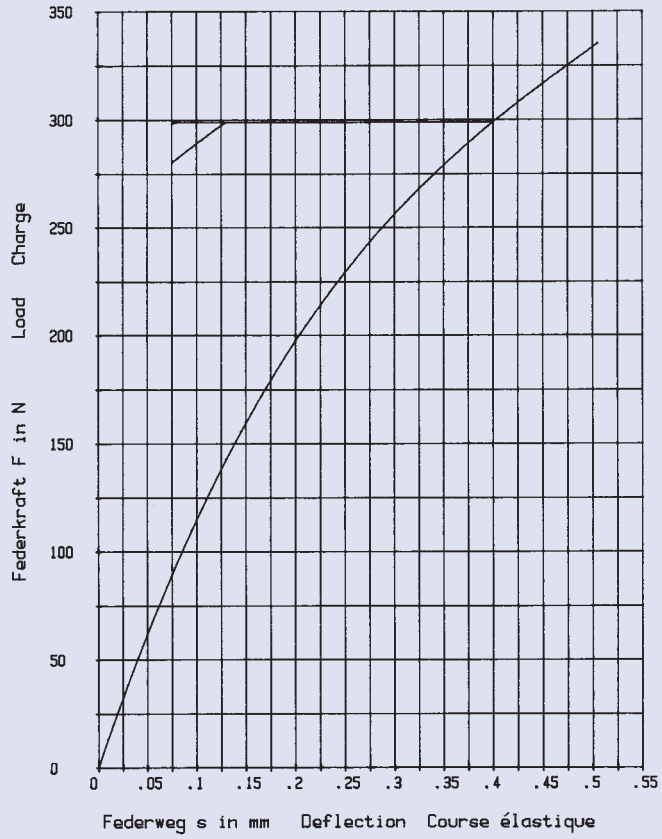
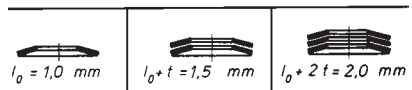


15 x 6,2 x 0,5

GR 1

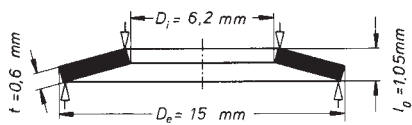


$h_0 = 0,5 \text{ mm}$        $D_e / D_i = 2,419$   
 $t = 0,5 \text{ mm}$        $D_e / t = 30$   
 $h_0 / t = 1,0$        $m = 0,575 \text{ g}$

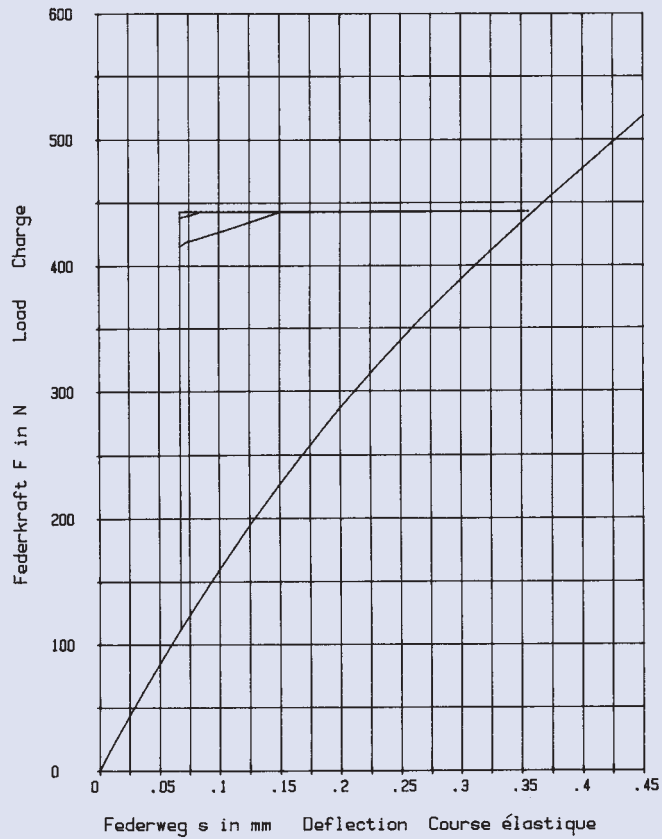
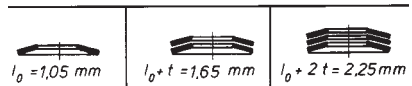


15 x 6,2 x 0,6

GR 1

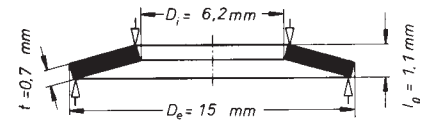
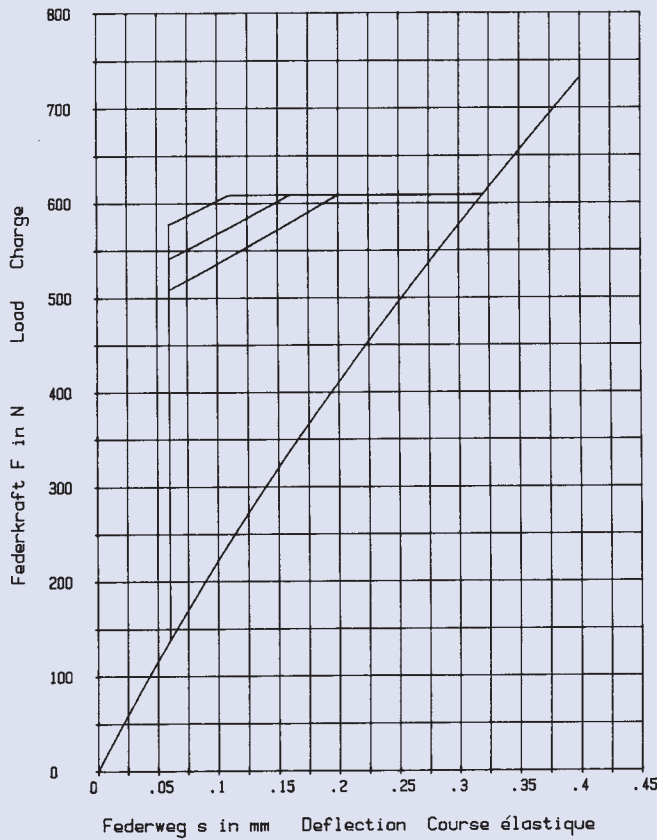


$h_0 = 0,45 \text{ mm}$        $D_e / D_i = 2,419$   
 $t = 0,6 \text{ mm}$        $D_e / t = 25$   
 $h_0 / t = 0,75$        $m = 0,690 \text{ g}$

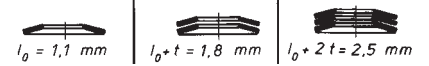


15 x 6,2 x 0,7

GR 1

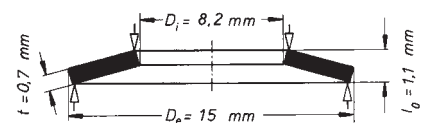
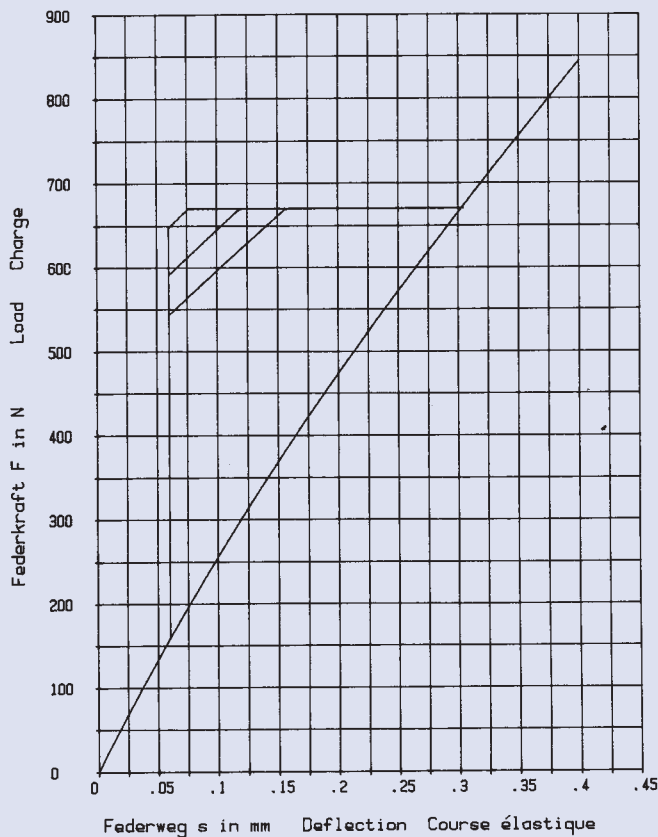


$$\begin{aligned}
 h_0 &= 0,4 \text{ mm} & D_e/D_i &= 2,419 \\
 t &= 0,7 \text{ mm} & D_e/t &= 21,428 \\
 h_0/t &= 0,571 & m &= 0,805 \text{ g}
 \end{aligned}$$

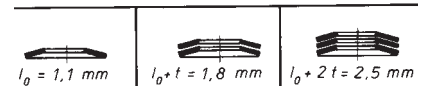


15 x 8,2 x 0,7

GR 1

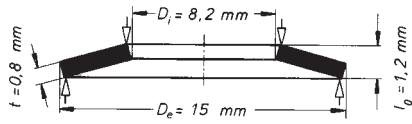


$$\begin{aligned}
 h_0 &= 0,4 \text{ mm} & D_e/D_i &= 1,829 \\
 t &= 0,7 \text{ mm} & D_e/t &= 21,428 \\
 h_0/t &= 0,571 & m &= 0,681 \text{ g}
 \end{aligned}$$

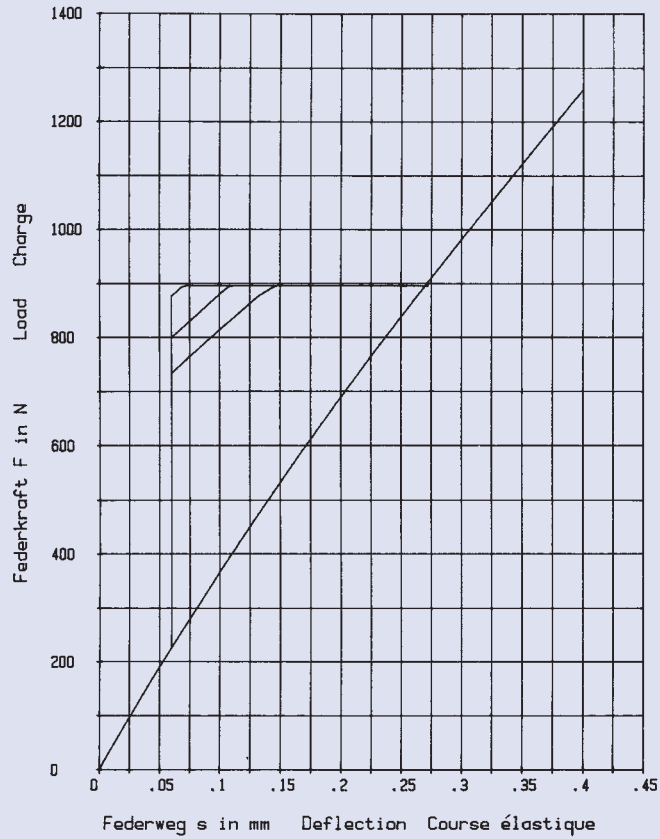
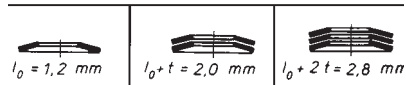


15 x 8,2 x 0,8

GR 1

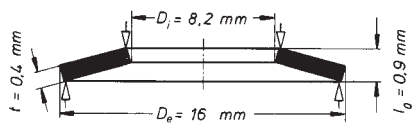


$h_0 = 0,4 \text{ mm}$        $D_e/D_i = 1,829$   
 $t = 0,8 \text{ mm}$        $D_e/t = 18,75$   
 $h_0/t = 0,5$        $m = 0,778 \text{ g}$

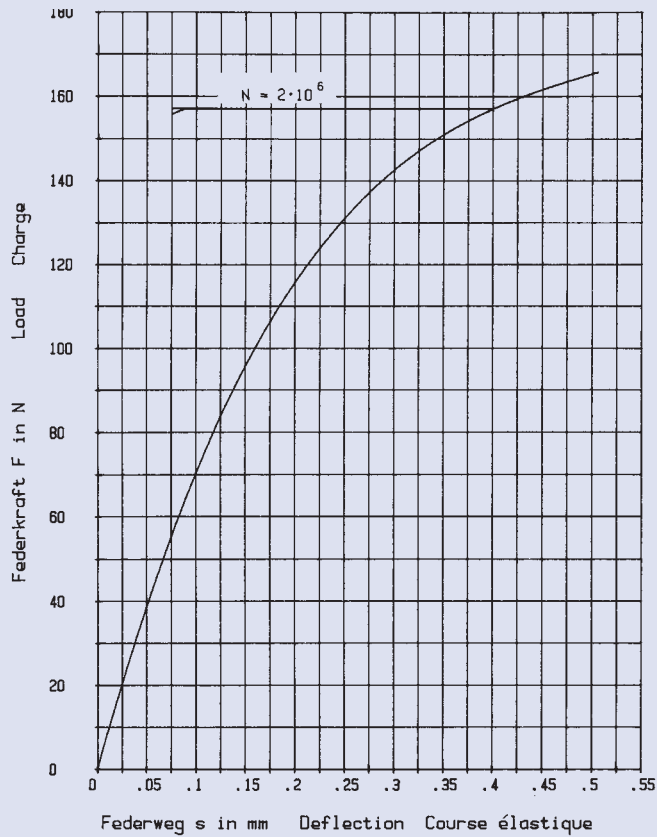
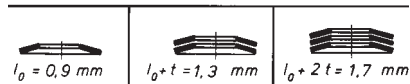


16 x 8,2 x 0,4

GR 1, DIN 2093 – C 16

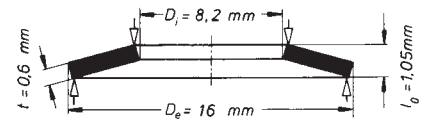
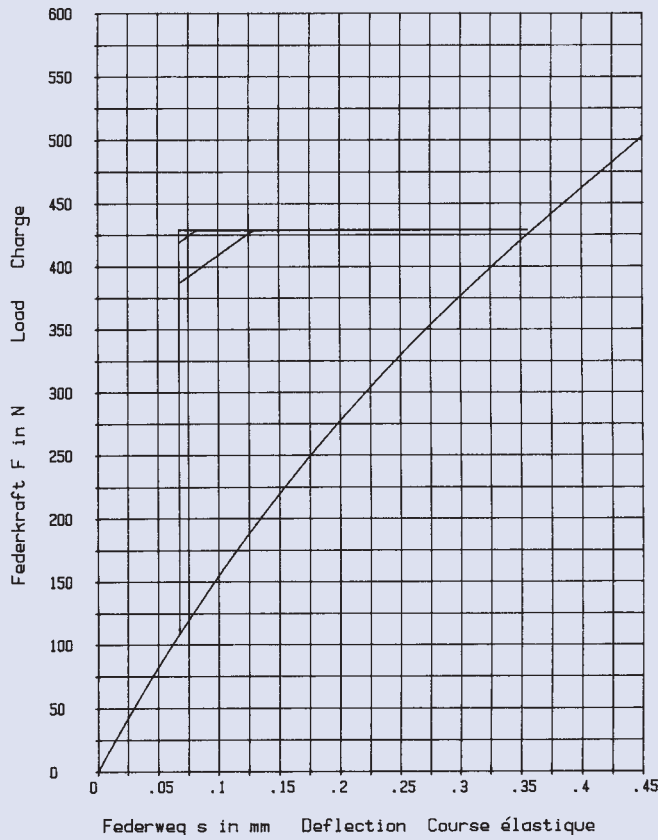


$h_0 = 0,5 \text{ mm}$        $D_e/D_i = 1,951$   
 $t = 0,4 \text{ mm}$        $D_e/t = 40$   
 $h_0/t = 1,25$        $m = 0,465 \text{ g}$



16 x 8,2 x 0,6

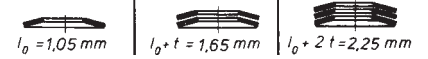
GR 1, DIN 2093 – B 16



$$h_0 = 0,45 \text{ mm} \quad D_e / D_1 = 1,951$$

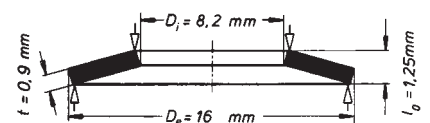
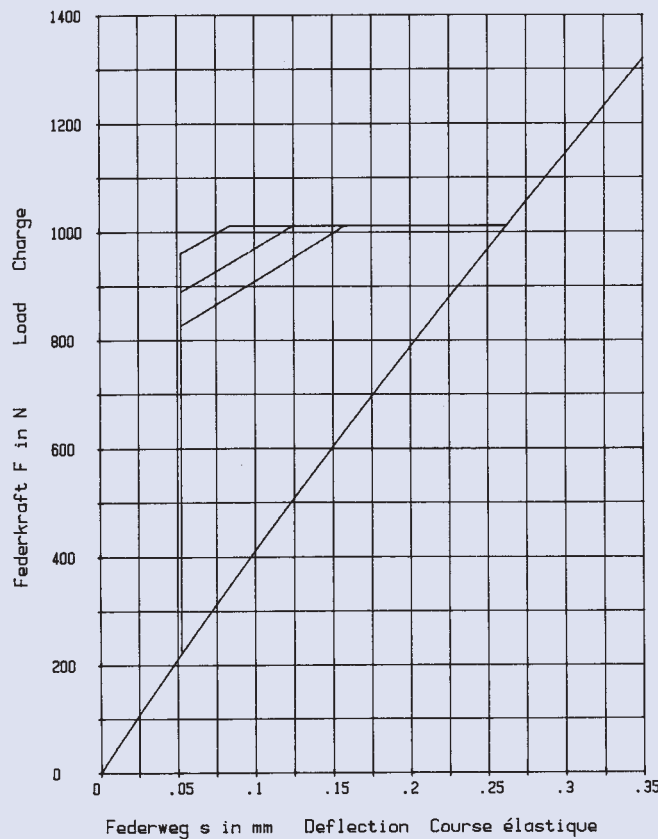
$$t = 0,6 \text{ mm} \quad D_e / t = 26,666$$

$$h_0 / t = 0,75 \quad m = 0,698 \text{ g}$$



16 x 8,2 x 0,9

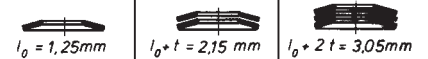
GR 1, DIN 2093 – A 16



$$h_0 = 0,35 \text{ mm} \quad D_e / D_1 = 1,951$$

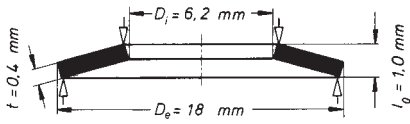
$$t = 0,9 \text{ mm} \quad D_e / t = 17,777$$

$$h_0 / t = 0,388 \quad m = 1,047 \text{ g}$$

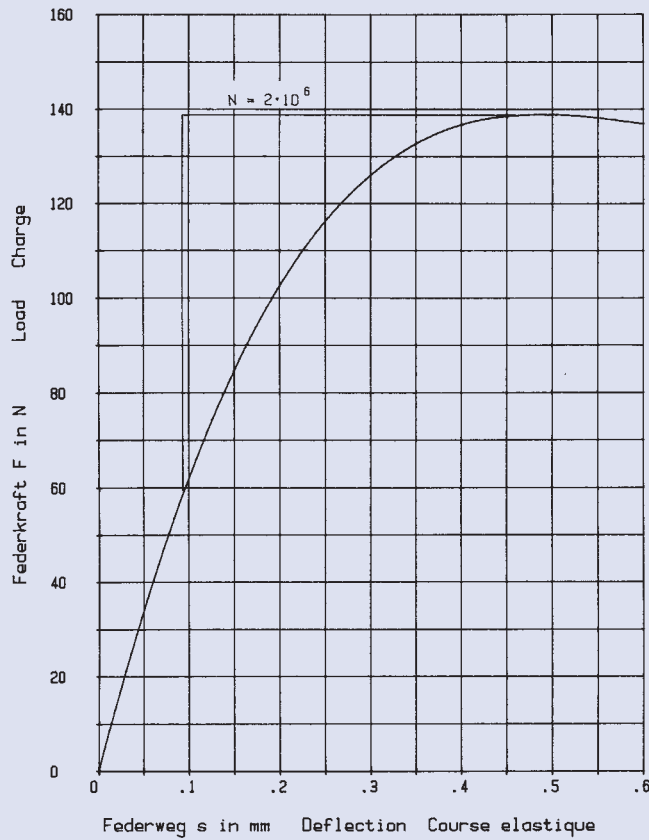
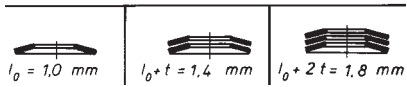


18 x 6,2 x 0,4

GR 1

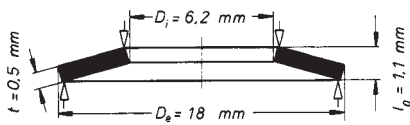


$h_0 = 0.6 \text{ mm}$        $D_e / D_i = 2.903$   
 $t = 0.4 \text{ mm}$        $D_e / t = 45$   
 $h_0 / t = 1.5$        $m = 0.704 \text{ g}$

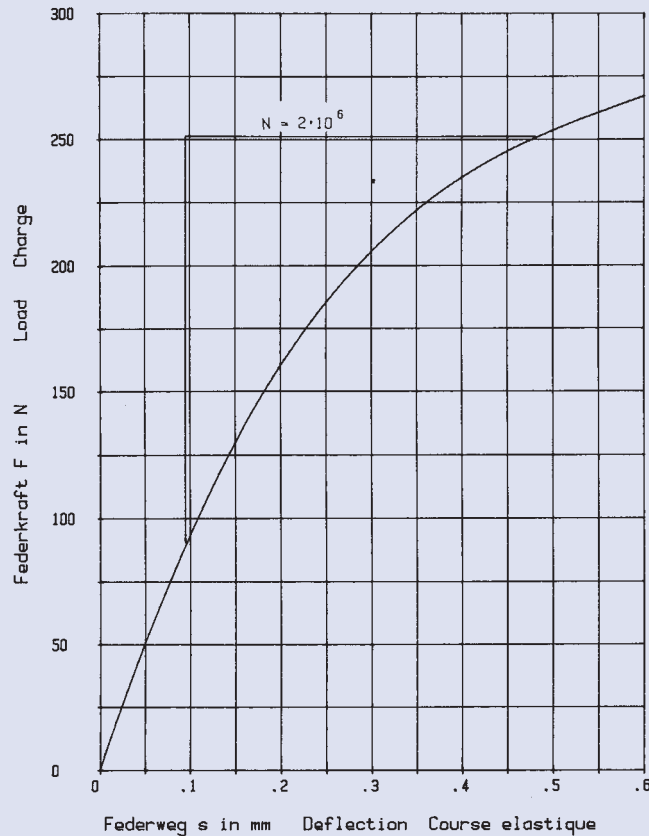
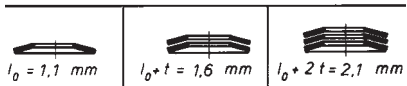


18 x 6,2 x 0,5

GR 1

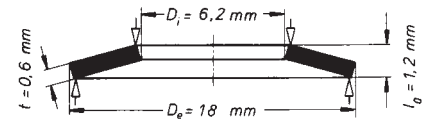
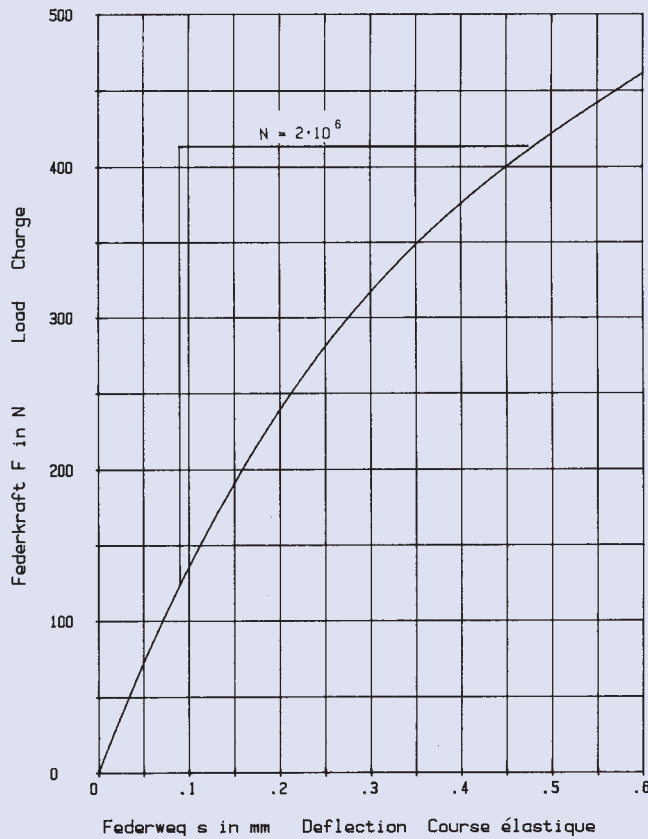


$h_0 = 0.6 \text{ mm}$        $D_e / D_i = 2.903$   
 $t = 0.5 \text{ mm}$        $D_e / t = 36$   
 $h_0 / t = 1.2$        $m = 0.88 \text{ g}$



18 x 6,2 x 0,6

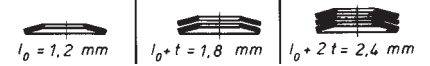
GR 1



$$h_0 = 0,6 \text{ mm} \quad D_e/D_i = 2,903$$

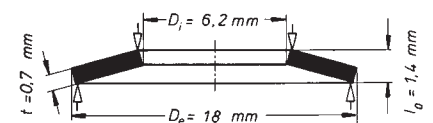
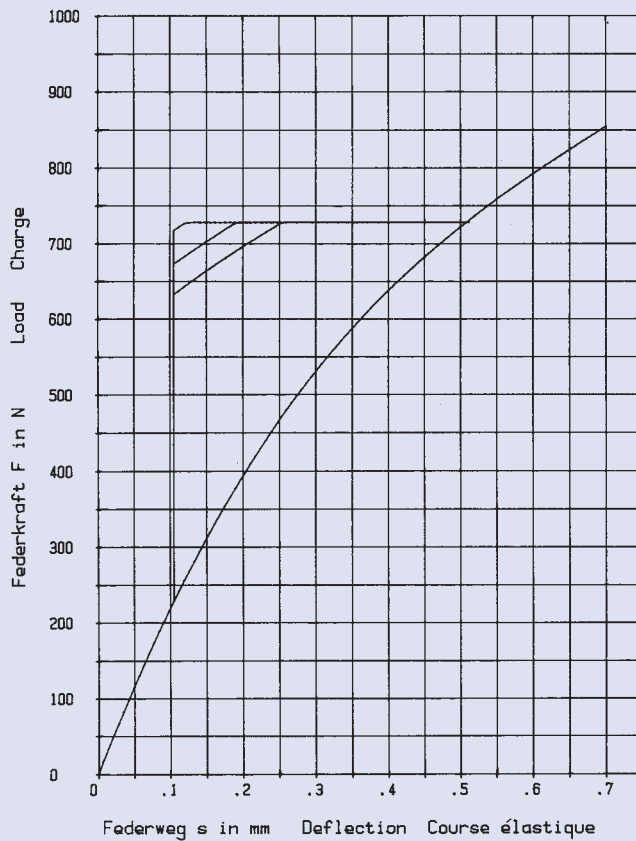
$$t = 0,6 \text{ mm} \quad D_e/t = 30$$

$$h_0/t = 1,0 \quad m = 1,056 \text{ g}$$



18 x 6,2 x 0,7

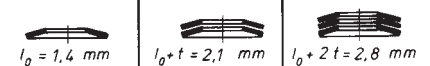
GR 1



$$h_0 = 0,7 \text{ mm} \quad D_e/D_i = 2,903$$

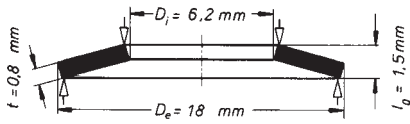
$$t = 0,7 \text{ mm} \quad D_e/t = 25,714$$

$$h_0/t = 1,0 \quad m = 1,232 \text{ g}$$

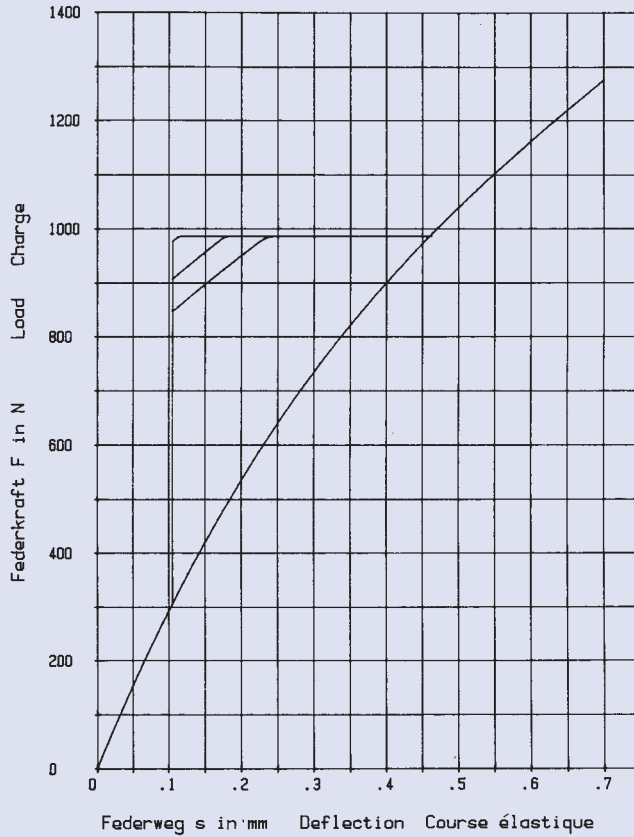
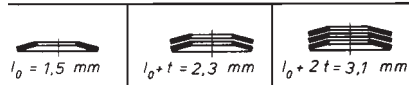


18 x 6,2 x 0,8

GR 1

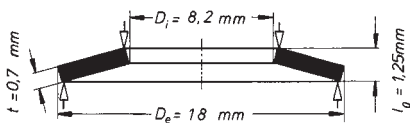


$h_0 = 0,7 \text{ mm}$        $D_e / D_i = 2,903$   
 $t = 0,8 \text{ mm}$        $D_e / t = 22,5$   
 $h_0 / t = 0,875$        $m = 1,408 \text{ g}$

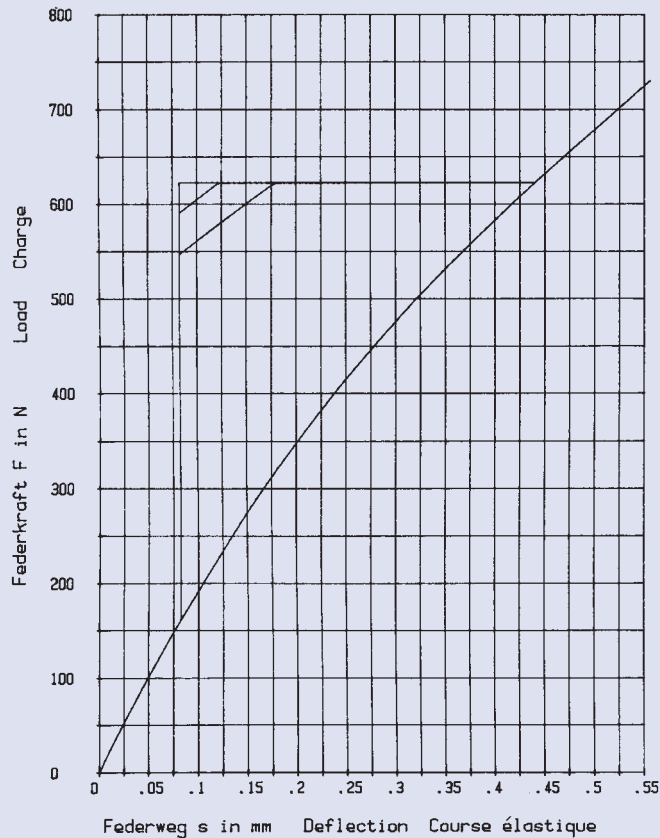
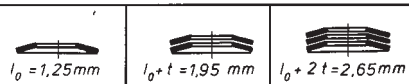


18 x 8,2 x 0,7

GR 1



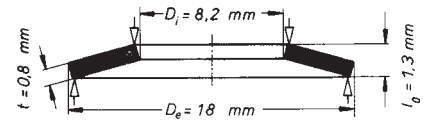
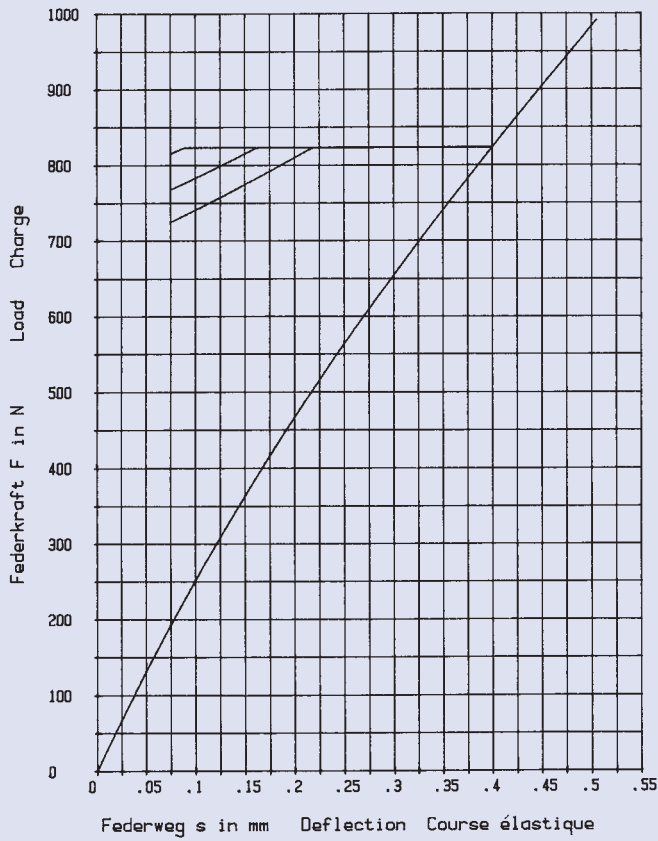
$h_0 = 0,55 \text{ mm}$        $D_e / D_i = 2,195$   
 $t = 0,7 \text{ mm}$        $D_e / t = 25,714$   
 $h_0 / t = 0,785$        $m = 1,108 \text{ g}$



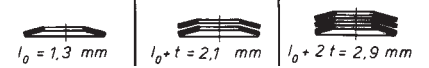


18 x 8,2 x 0,8

GR 1

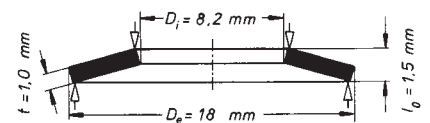
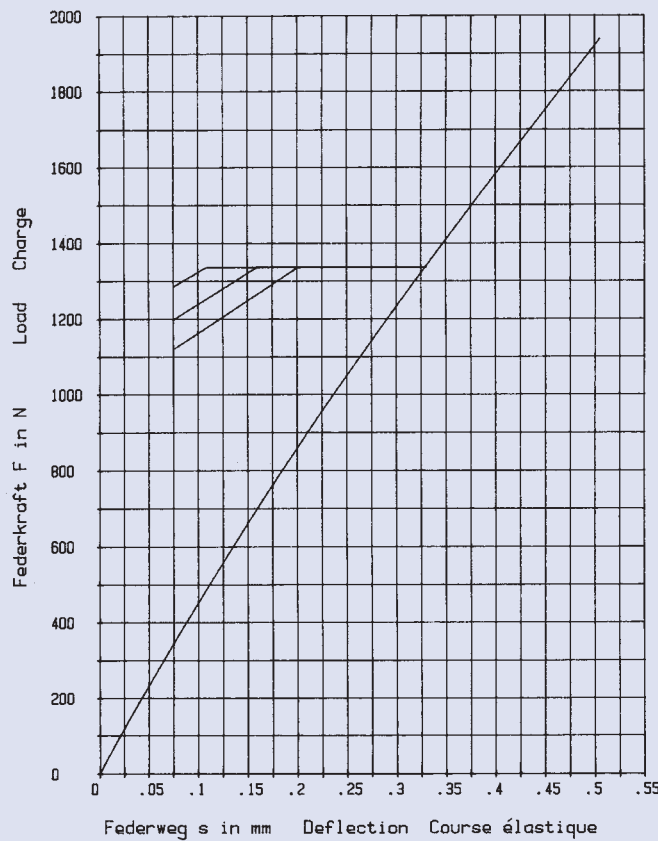


$h_0 = 0,5 \text{ mm}$        $D_e / D_i = 2,195$   
 $t = 0,8 \text{ mm}$        $D_e / t = 22,5$   
 $h_0 / t = 0,625$        $m = 1,266 \text{ g}$

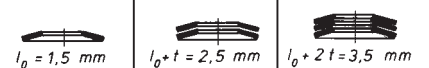


18 x 8,2 x 1,0

GR 1

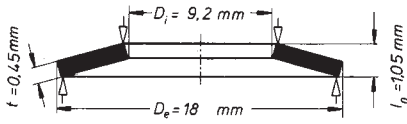


$h_0 = 0,5 \text{ mm}$        $D_e / D_i = 2,195$   
 $t = 1,0 \text{ mm}$        $D_e / t = 18$   
 $h_0 / t = 0,5$        $m = 1,582 \text{ g}$

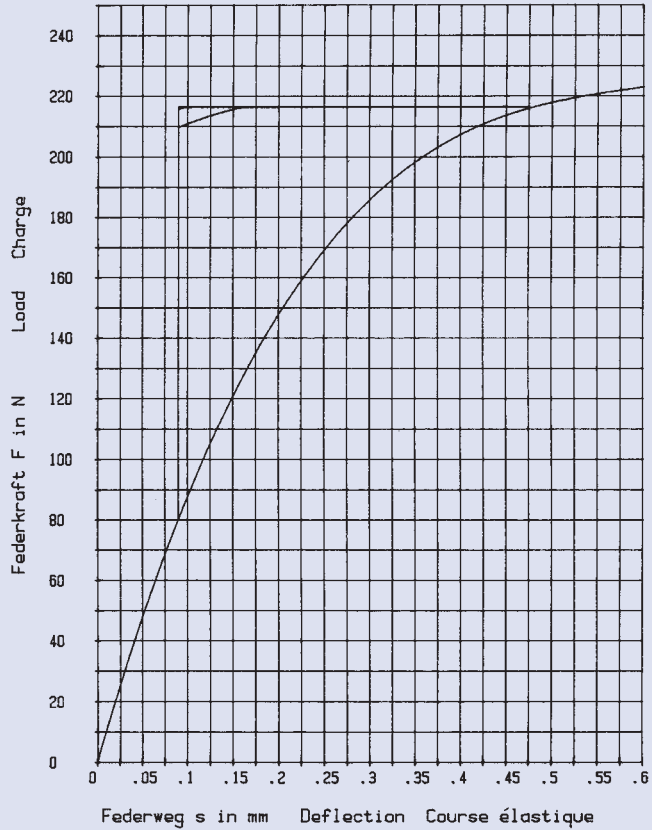
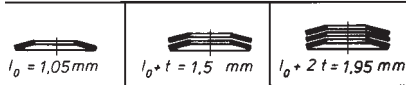


18 x 9,2 x 0,45

GR 1, DIN 2093 – C 18

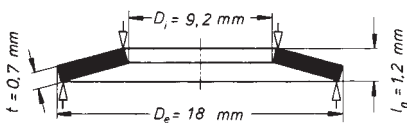


$h_0 = 0,6 \text{ mm}$        $D_e/D_i = 1,956$   
 $t = 0,45 \text{ mm}$        $D_e/t = 40$   
 $h_0/t = 1,333$        $m = 0,664 \text{ g}$

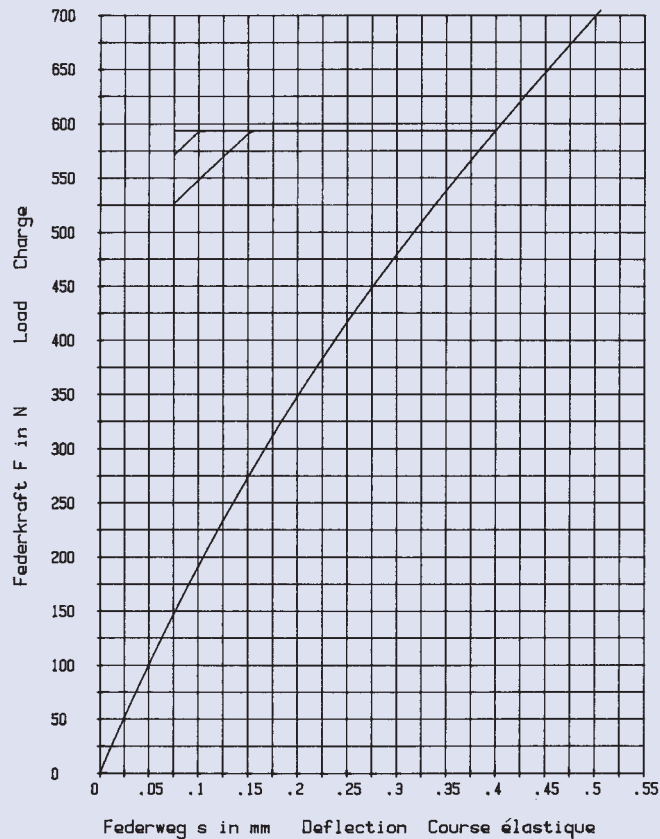
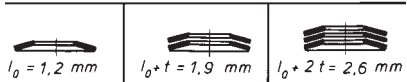


18 x 9,2 x 0,7

GR 1, DIN 2093 – B 18

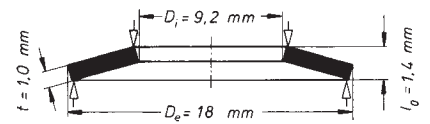
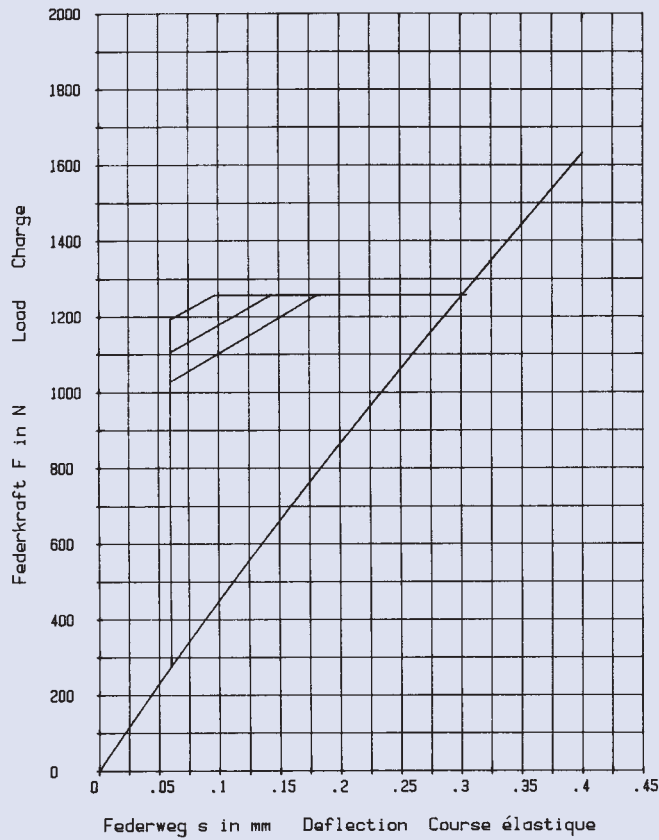


$h_0 = 0,5 \text{ mm}$        $D_e/D_i = 1,956$   
 $t = 0,7 \text{ mm}$        $D_e/t = 25,714$   
 $h_0/t = 0,714$        $m = 1,033 \text{ g}$



**18 x 9,2 x 1,0**

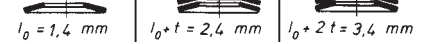
**GR 1, DIN 2093 – A 18**



$$h_0 = 0,4 \text{ mm} \quad D_e / D_i = 1,956$$

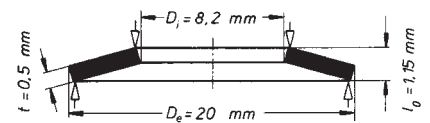
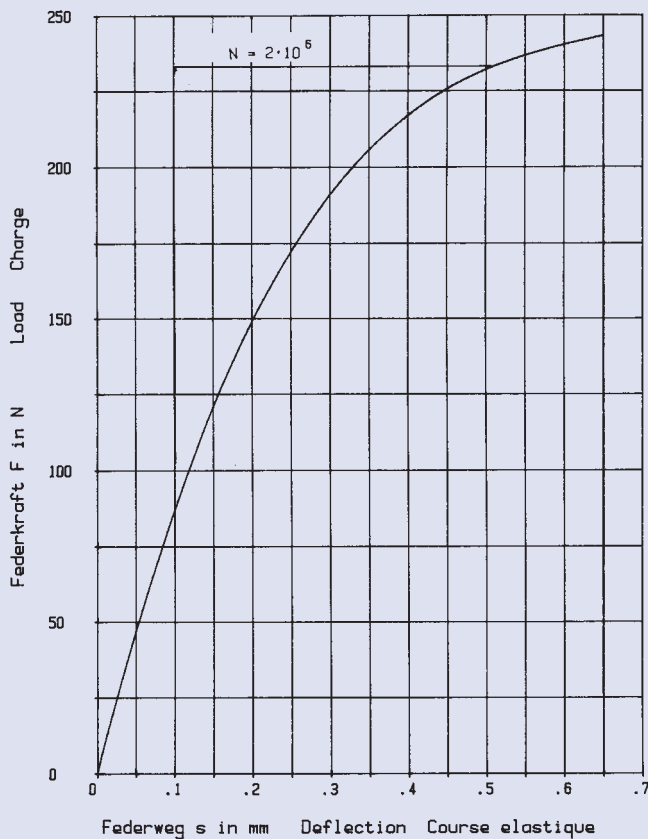
$$t = 1,0 \text{ mm} \quad D_e / t = 18$$

$$h_0 / t = 0,4 \quad m = 1,476 \text{ g}$$



**20 x 8,2 x 0,5**

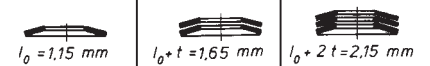
**GR 1**



$$h_0 = 0,65 \text{ mm} \quad D_e / D_i = 2,439$$

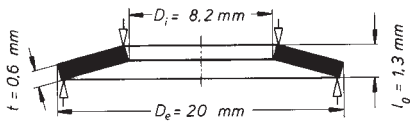
$$t = 0,5 \text{ mm} \quad D_e / t = 40$$

$$h_0 / t = 1,3 \quad m = 1,026 \text{ g}$$

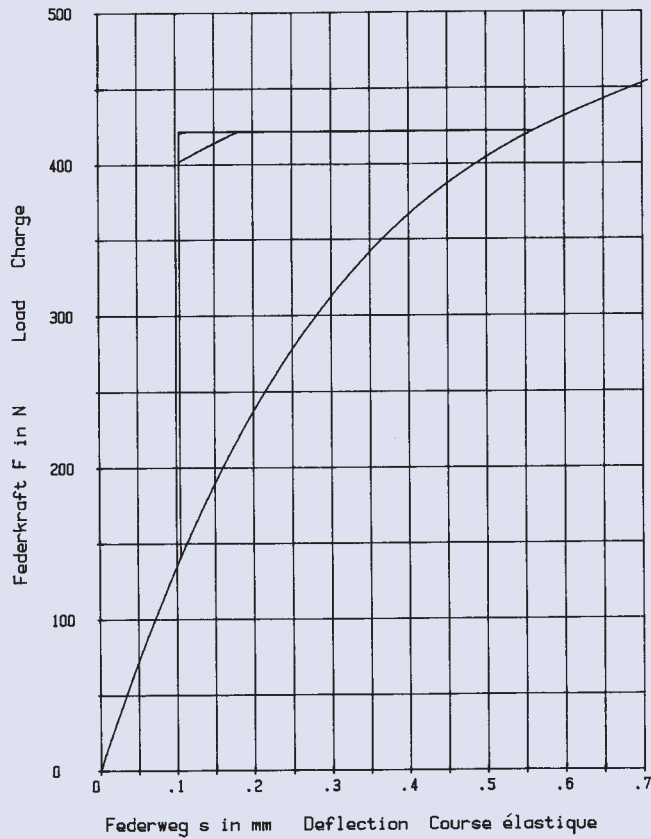
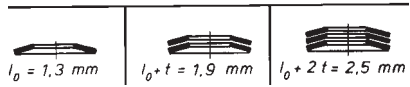


20 x 8,2 x 0,6

GR 1

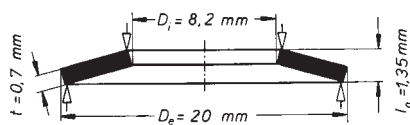


$h_0 = 0,7 \text{ mm}$        $D_e / D_i = 2,439$   
 $t = 0,6 \text{ mm}$        $D_e / t = 33,333$   
 $h_0 / t = 1,166$        $m = 1,231 \text{ g}$

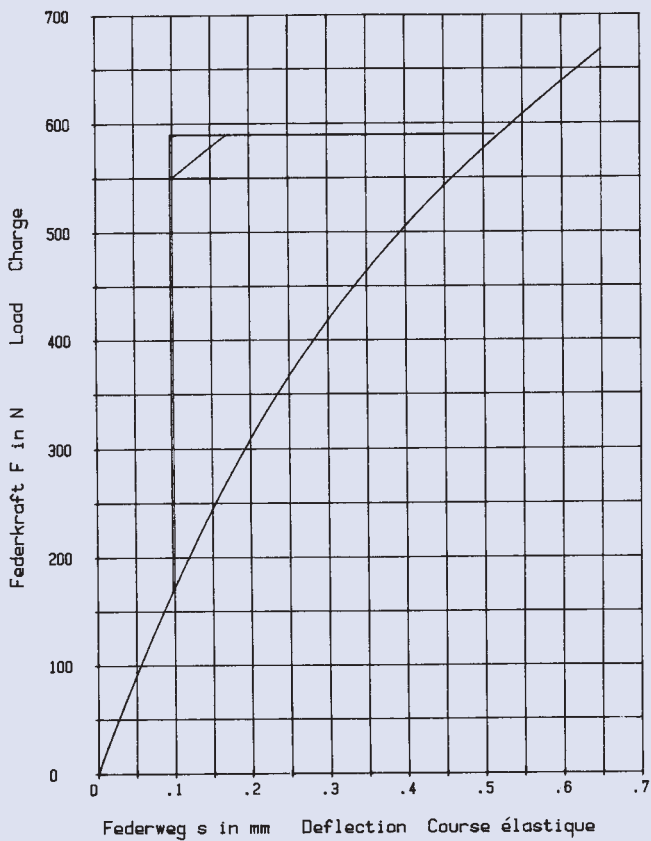
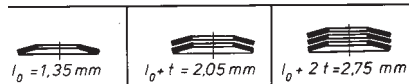


20 x 8,2 x 0,7

GR 1

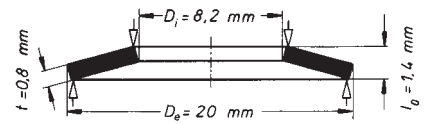
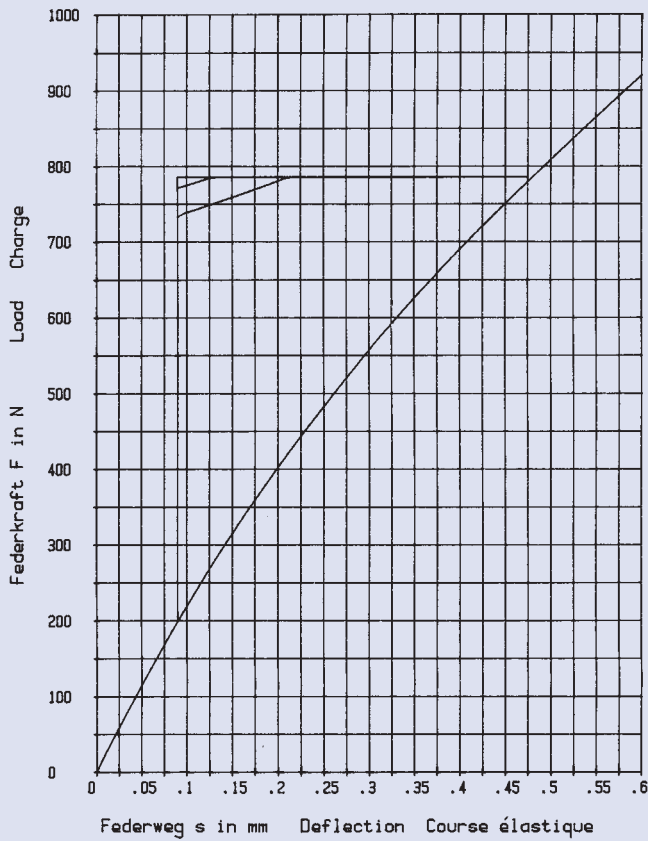


$h_0 = 0,65 \text{ mm}$        $D_e / D_i = 2,439$   
 $t = 0,7 \text{ mm}$        $D_e / t = 28,571$   
 $h_0 / t = 0,928$        $m = 1,436 \text{ g}$

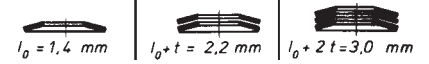


20 x 8,2 x 0,8

GR 1

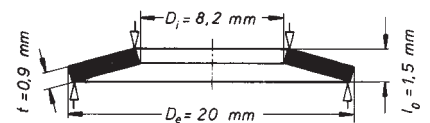
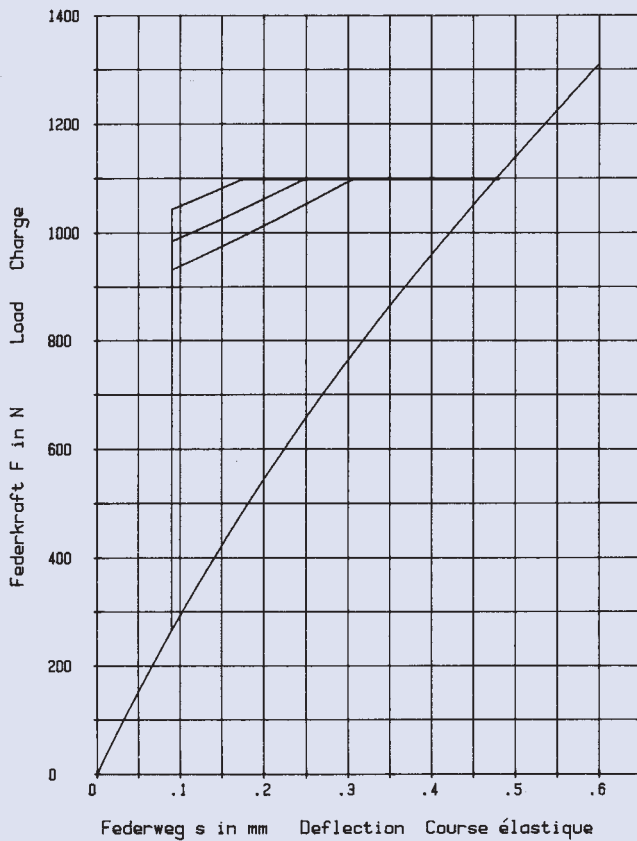


$$\begin{aligned}
 h_0 &= 0,6 \text{ mm} & D_e/D_i &= 2,439 \\
 t &= 0,8 \text{ mm} & D_e/t &= 25 \\
 h_0/t &= 0,75 & m &= 1,641 \text{ g}
 \end{aligned}$$

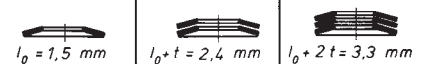


20 x 8,2 x 0,9

GR 1

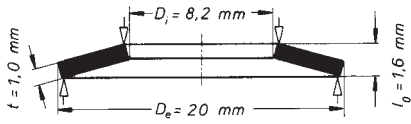


$$\begin{aligned}
 h_0 &= 0,6 \text{ mm} & D_e/D_i &= 2,439 \\
 t &= 0,9 \text{ mm} & D_e/t &= 22,222 \\
 h_0/t &= 0,666 & m &= 1,846 \text{ g}
 \end{aligned}$$

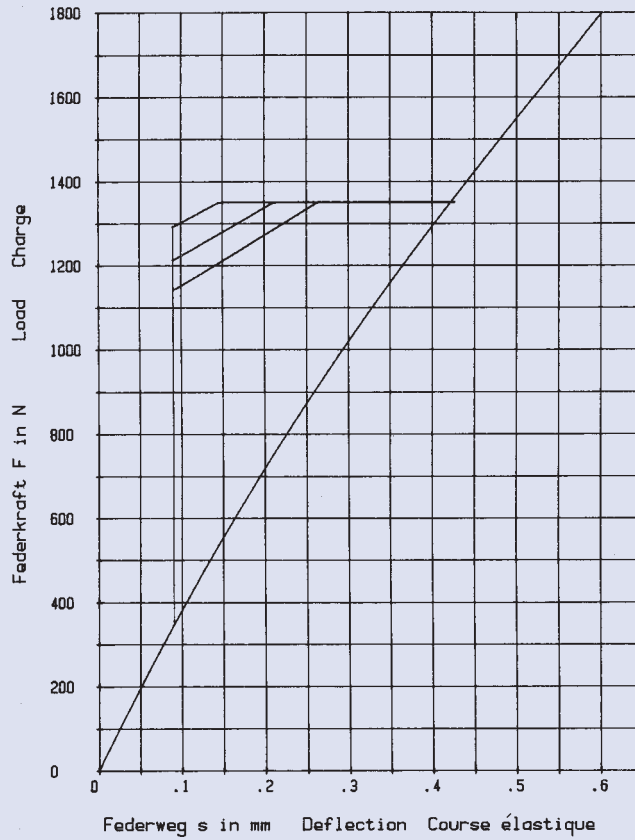
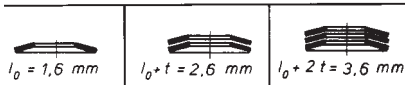


20 x 8,2 x 1,0

GR 1

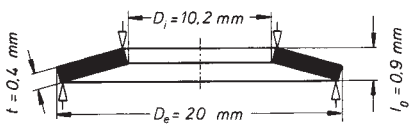


$h_0 = 0,6 \text{ mm}$        $D_e/D_i = 2,439$   
 $t = 1,0 \text{ mm}$        $D_e/t = 20$   
 $h_0/t = 0,6$        $m = 2,051 \text{ g}$

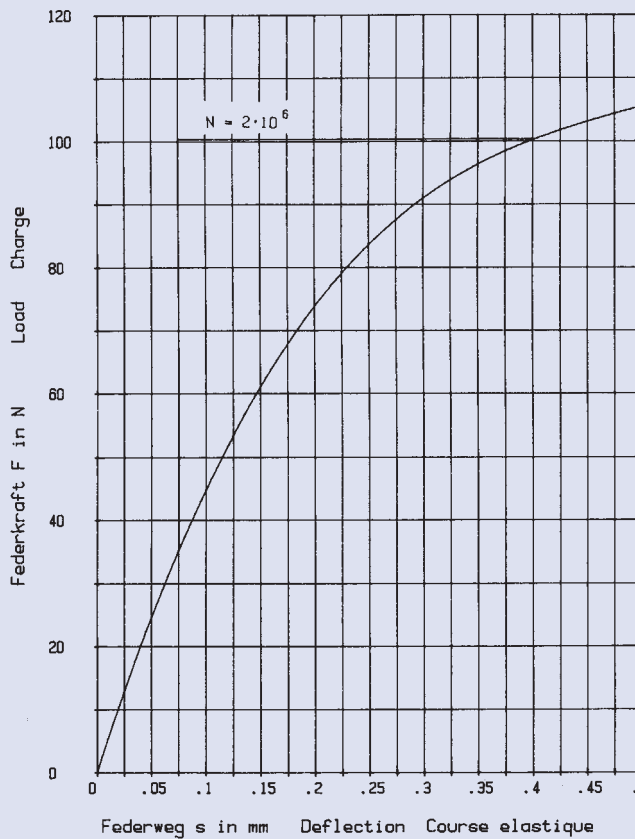
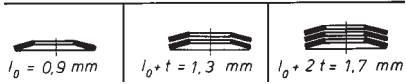


20 x 10,2 x 0,4

GR 1

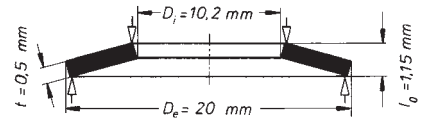
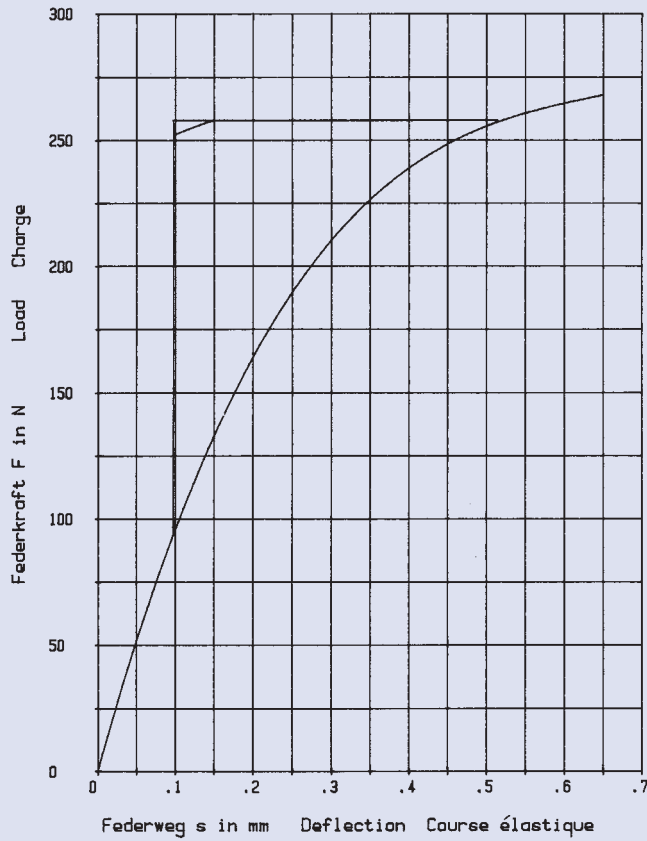


$h_0 = 0,5 \text{ mm}$        $D_e/D_i = 1,96$   
 $t = 0,4 \text{ mm}$        $D_e/t = 50$   
 $h_0/t = 1,25$        $m = 0,73 \text{ g}$

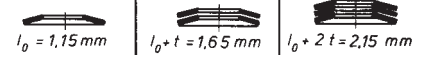


20 x 10,2 x 0,5

GR 1, DIN 2093 – C 20

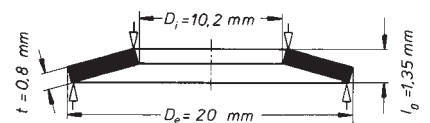
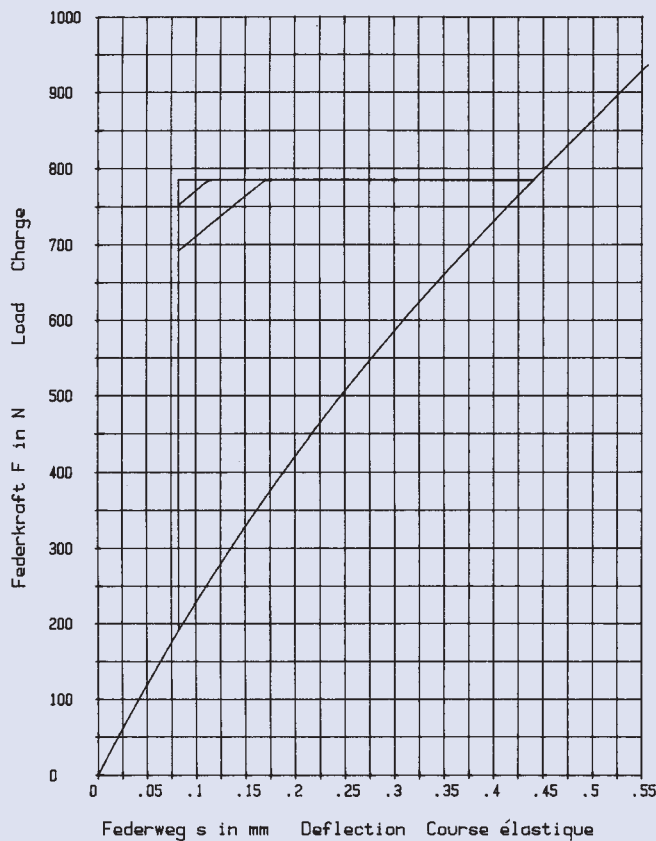


$$\begin{aligned}
 h_0 &= 0,65 \text{ mm} & D_e / D_i &= 1,96 \\
 t &= 0,5 \text{ mm} & D_e / t &= 40 \\
 h_0 / t &= 1,3 & m &= 0,912 \text{ g}
 \end{aligned}$$

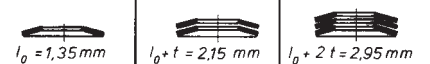


20 x 10,2 x 0,8

GR 1, DIN 2093 – B 20

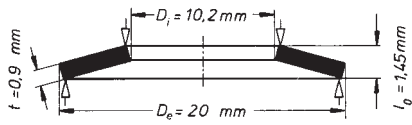


$$\begin{aligned}
 h_0 &= 0,55 \text{ mm} & D_e / D_i &= 1,96 \\
 t &= 0,8 \text{ mm} & D_e / t &= 25 \\
 h_0 / t &= 0,687 & m &= 1,46 \text{ g}
 \end{aligned}$$

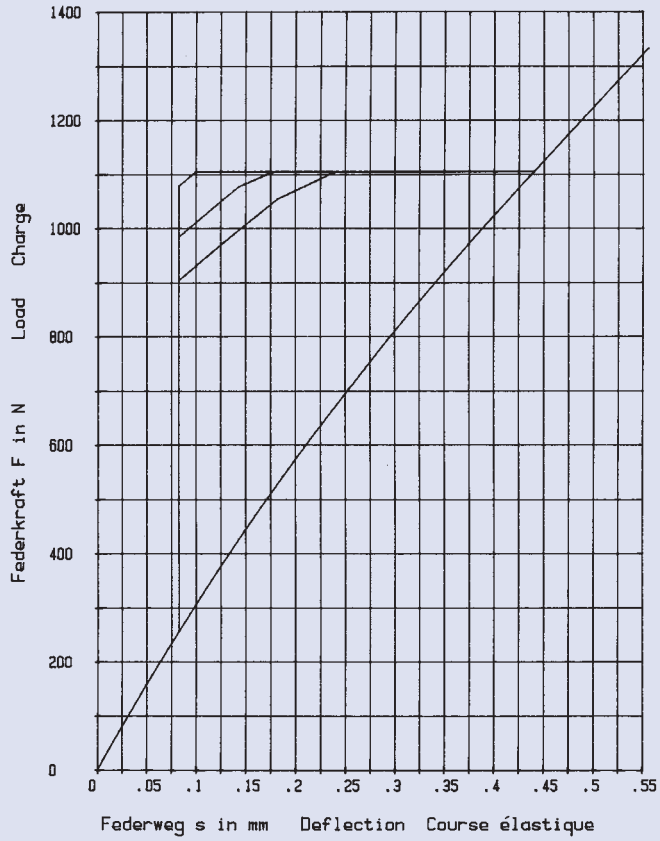
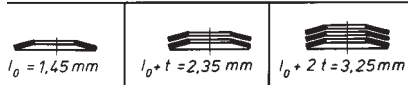


20 x 10,2 x 0,9

GR 1

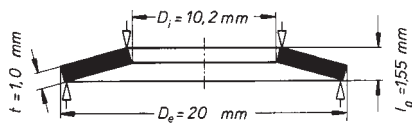


$h_0 = 0,55 \text{ mm}$        $D_e / D_i = 1,96$   
 $t = 0,9 \text{ mm}$        $D_e / t = 22,222$   
 $h_0 / t = 0,611$        $m = 1,642 \text{ g}$

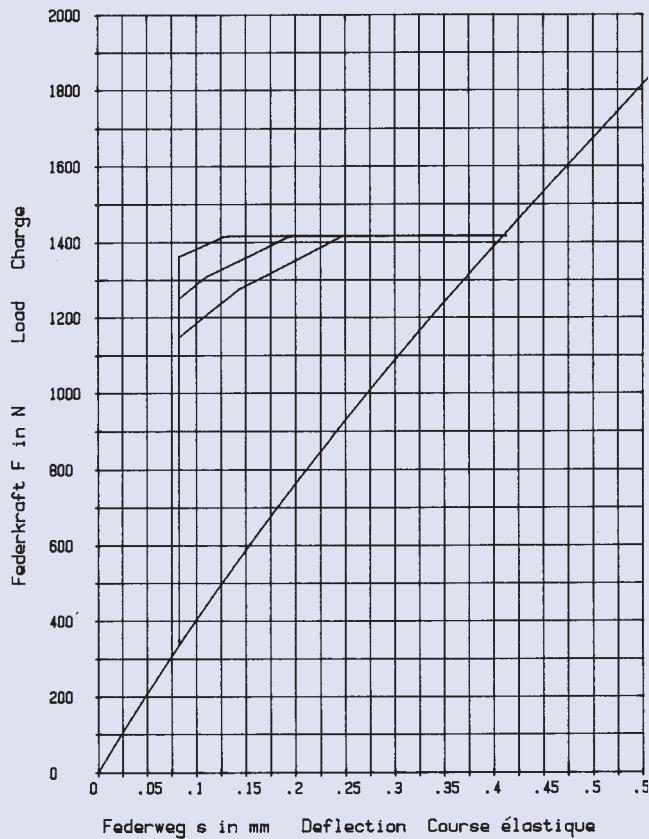
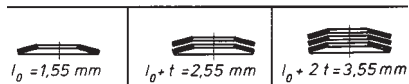


20 x 10,2 x 1,0

GR 1



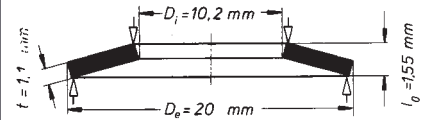
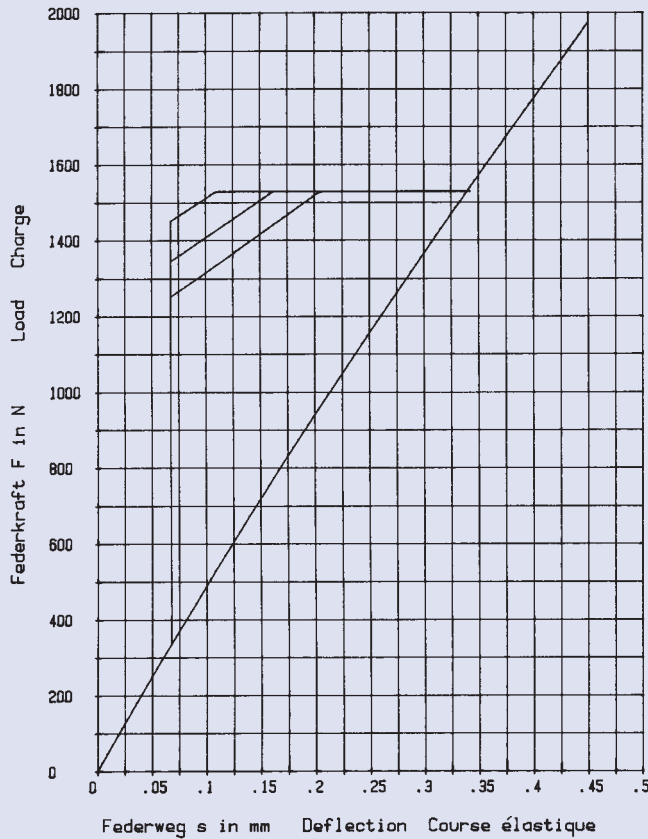
$h_0 = 0,55 \text{ mm}$        $D_e / D_i = 1,96$   
 $t = 1,0 \text{ mm}$        $D_e / t = 20$   
 $h_0 / t = 0,55$        $m = 1,824 \text{ g}$



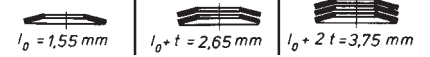


20 x 10,2 x 1,1

GR 1, DIN 2093 – A 20

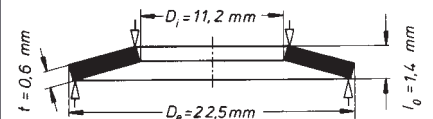
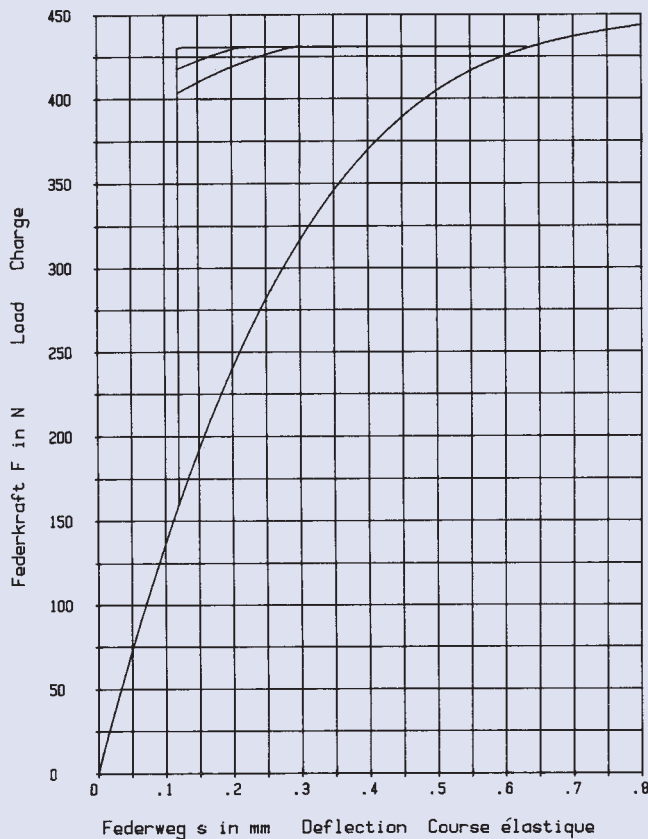


$h_0 = 0,45 \text{ mm}$        $D_e / D_i = 1,96$   
 $t = 1,1 \text{ mm}$        $D_e / t = 18,181$   
 $h_0 / t = 0,409$        $m = 2,007 \text{ g}$

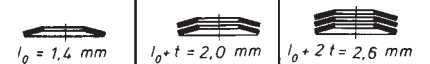


22,5 x 11,2 x 0,6

GR 1, DIN 2093 – C 22,5

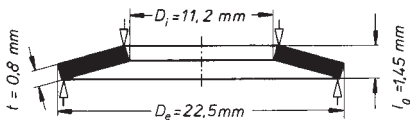


$h_0 = 0,8 \text{ mm}$        $D_e / D_i = 2,008$   
 $t = 0,6 \text{ mm}$        $D_e / t = 37,5$   
 $h_0 / t = 1,333$        $m = 1,409 \text{ g}$

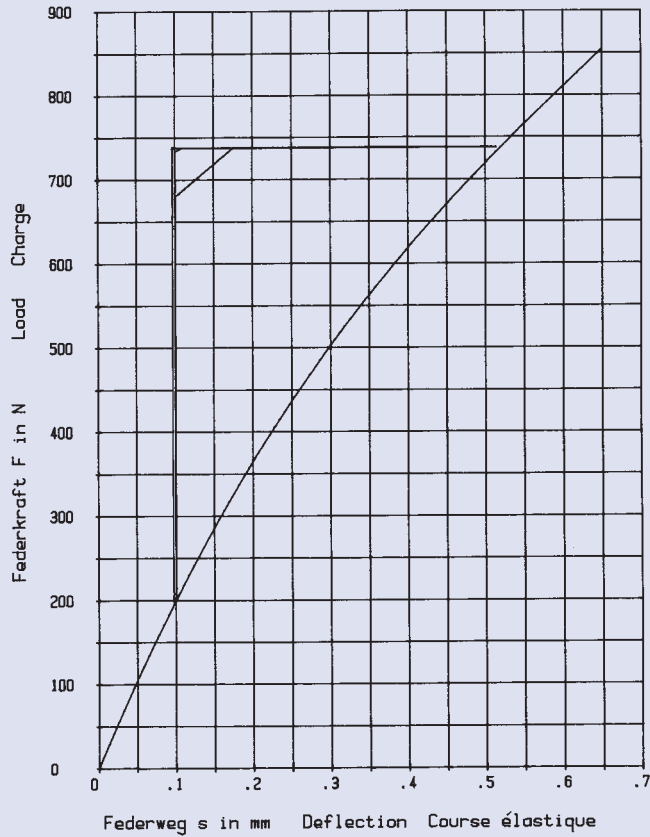
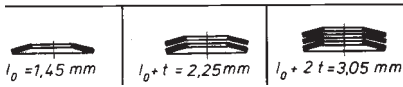


22,5 x 11,2 x 0,8

GR 1, DIN 2093 – B 22,5

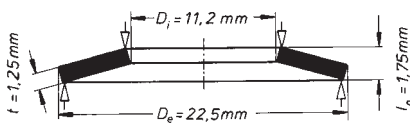


$h_0 = 0,65 \text{ mm}$        $D_e / D_1 = 2,008$   
 $t = 0,8 \text{ mm}$        $D_e / t = 28,125$   
 $h_0 / t = 0,812$        $m = 1,878 \text{ g}$

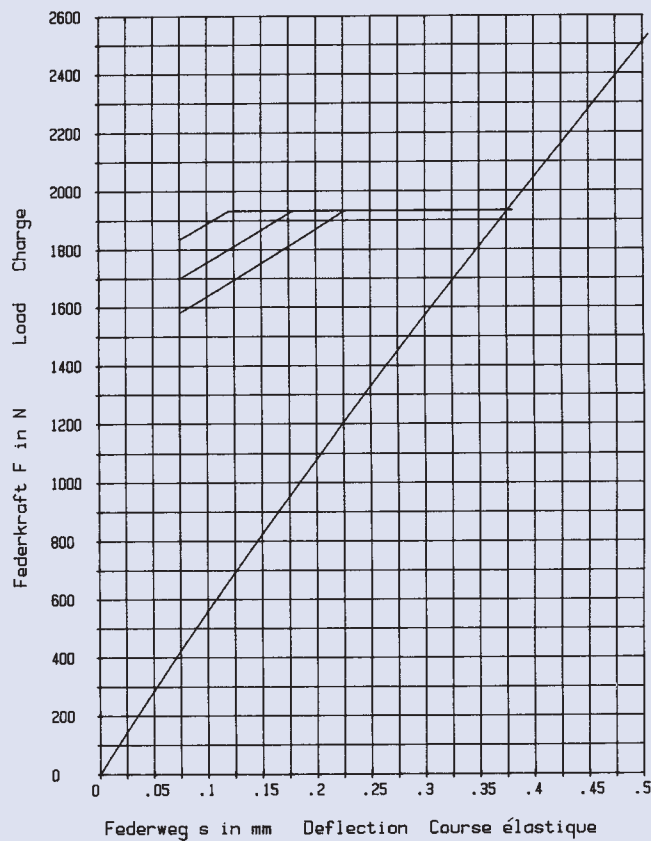
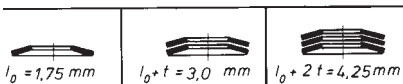


22,5 x 11,2 x 1,25

GR 1, DIN 2093 – A 22,5

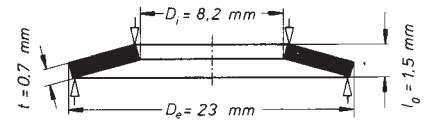
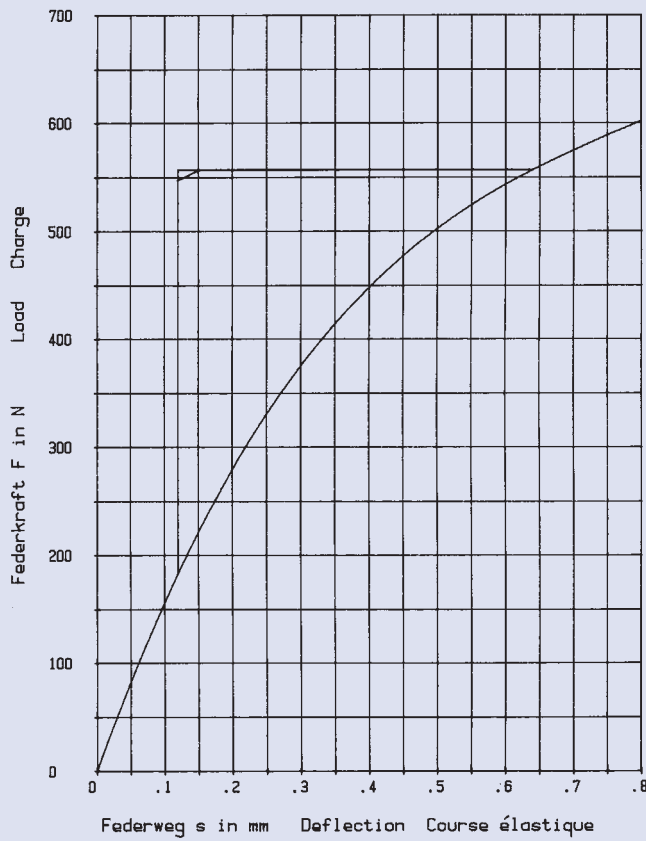


$h_0 = 0,5 \text{ mm}$        $D_e / D_1 = 2,008$   
 $t = 1,25 \text{ mm}$        $D_e / t = 18$   
 $h_0 / t = 0,4$        $m = 2,935 \text{ g}$

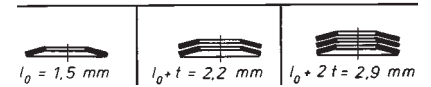


**23 x 8,2 x 0,7**

**GR 1**

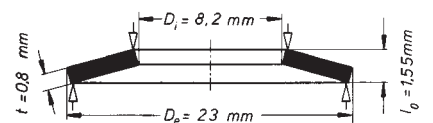
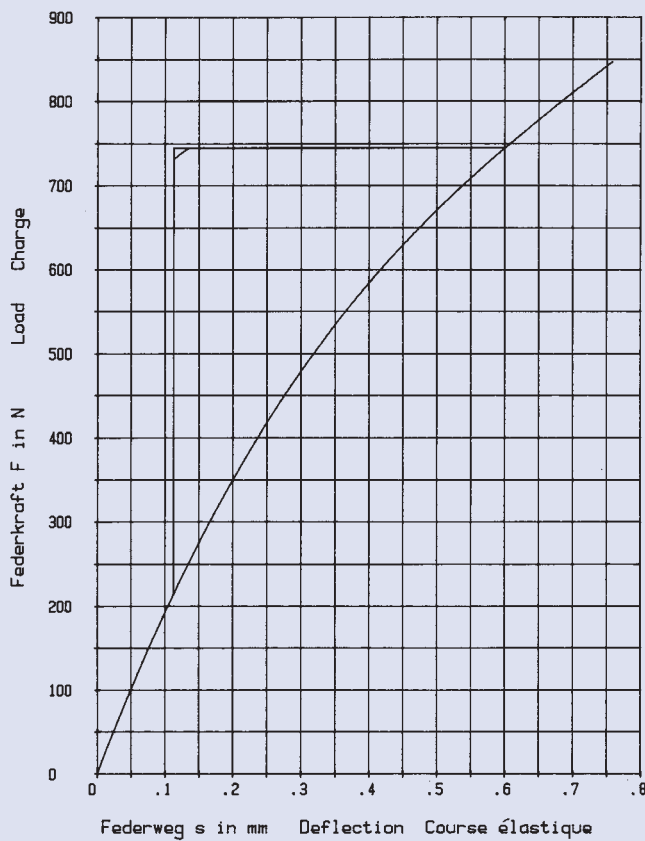


$$\begin{aligned}
 h_0 &= 0,8 \text{ mm} & D_0/D_1 &= 2,804 \\
 t &= 0,7 \text{ mm} & D_0/t &= 32,857 \\
 h_0/t &= 1,142 & m &= 1,993 \text{ g}
 \end{aligned}$$

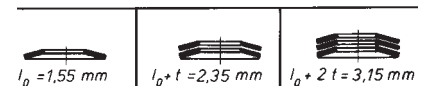


**23 x 8,2 x 0,8**

**GR 1**

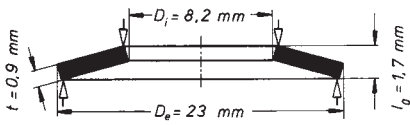


$$\begin{aligned}
 h_0 &= 0,75 \text{ mm} & D_0/D_1 &= 2,804 \\
 t &= 0,8 \text{ mm} & D_0/t &= 28,75 \\
 h_0/t &= 0,937 & m &= 2,277 \text{ g}
 \end{aligned}$$

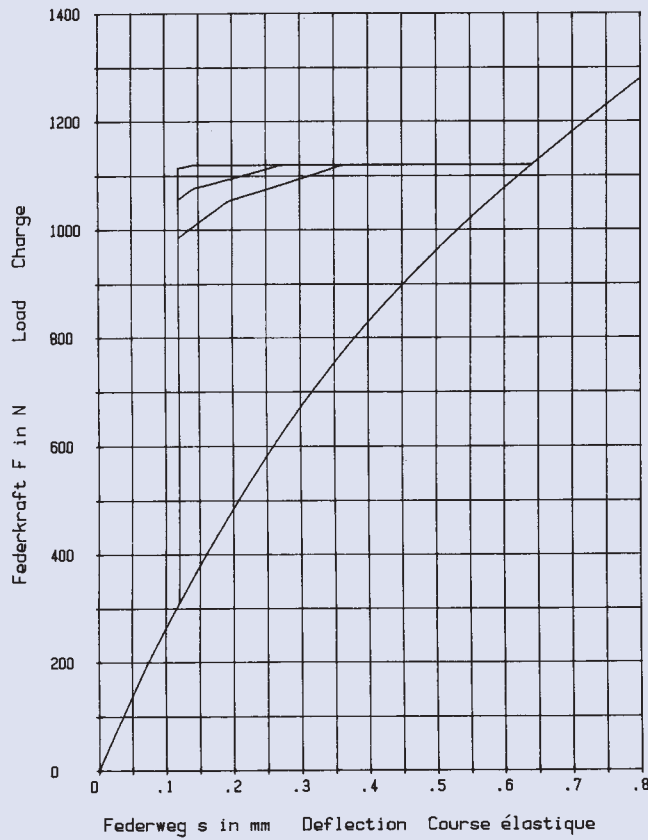
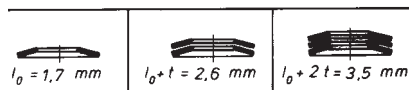


23 x 8,2 x 0,9

GR 1

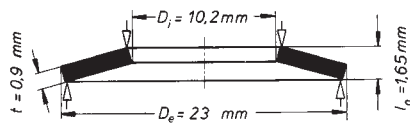


$h_0 = 0,8 \text{ mm}$        $D_e/D_i = 2,804$   
 $t = 0,9 \text{ mm}$        $D_e/t = 25,555$   
 $h_0/t = 0,888$        $m = 2,561 \text{ g}$

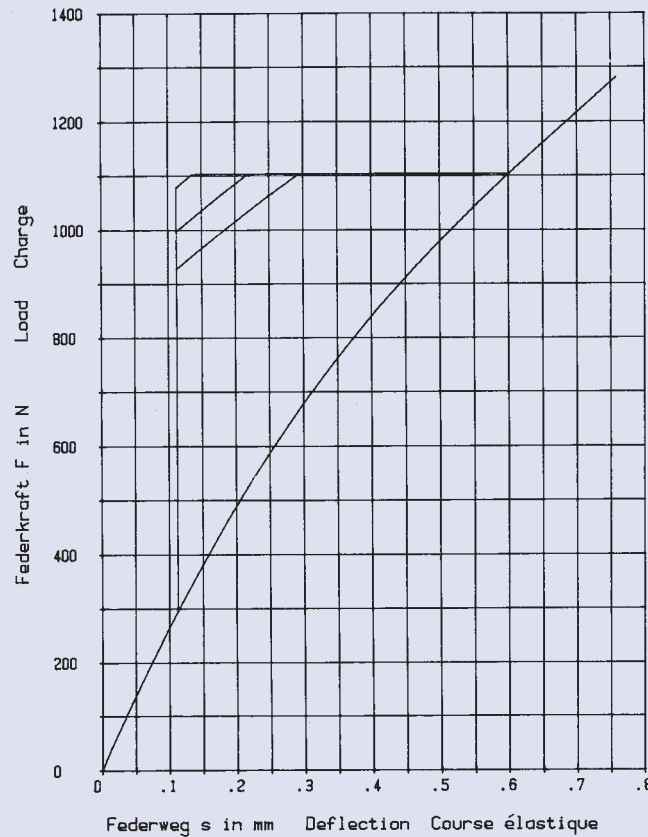
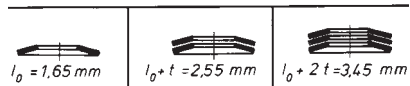


23 x 10,2 x 0,9

GR 1

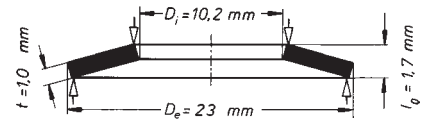
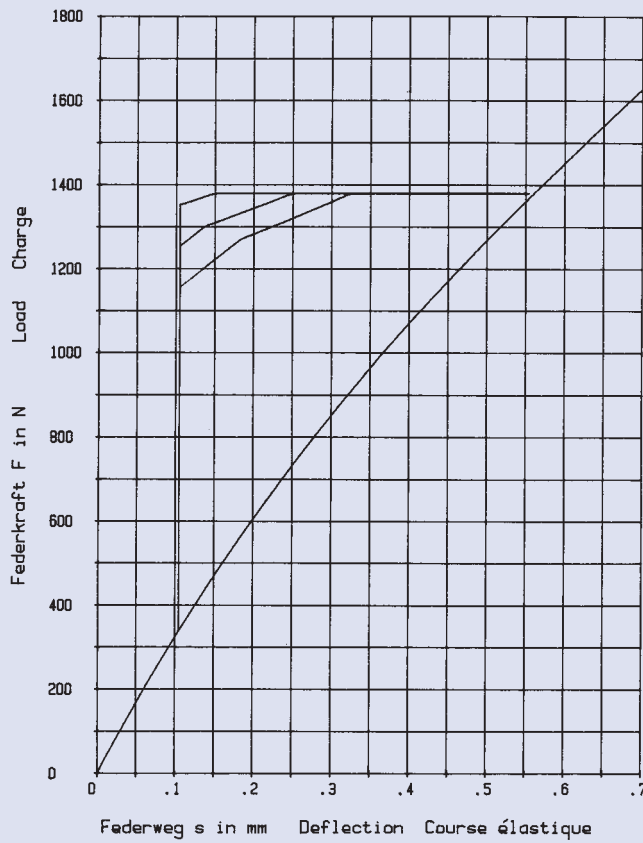


$h_0 = 0,75 \text{ mm}$        $D_e/D_i = 2,254$   
 $t = 0,9 \text{ mm}$        $D_e/t = 25,555$   
 $h_0/t = 0,833$        $m = 2,357 \text{ g}$



**23 x 10,2 x 1,0**

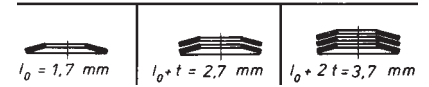
**GR 1**



$$h_0 = 0,7 \text{ mm} \quad D_e / D_i = 2,254$$

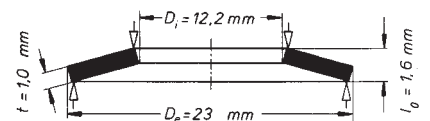
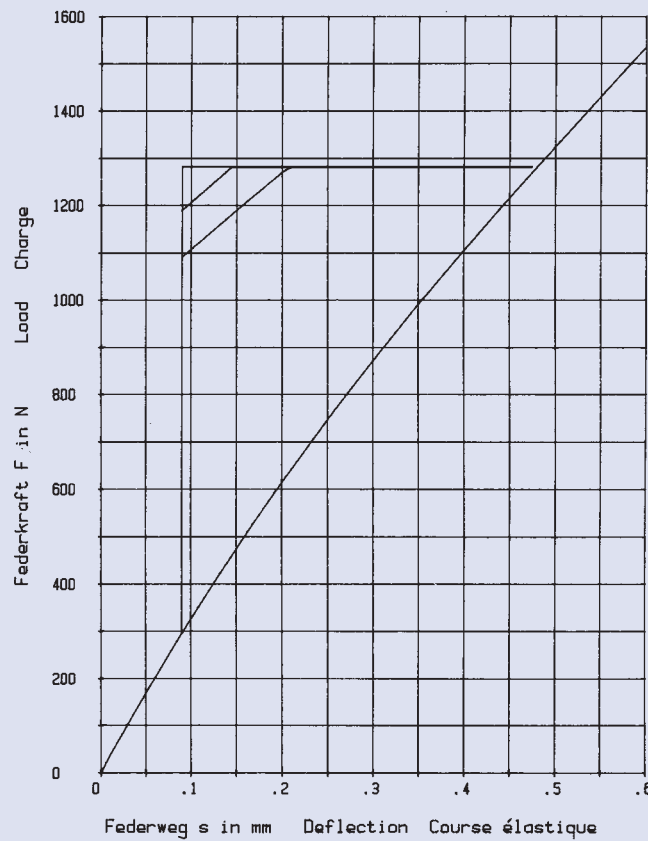
$$t = 1,0 \text{ mm} \quad D_e / t = 23$$

$$h_0 / t = 0,7 \quad m = 2,619 \text{ g}$$



**23 x 12,2 x 1,0**

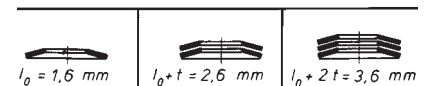
**GR 1**



$$h_0 = 0,6 \text{ mm} \quad D_e / D_i = 1,885$$

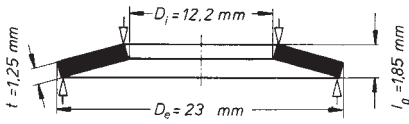
$$t = 1,0 \text{ mm} \quad D_e / t = 23$$

$$h_0 / t = 0,6 \quad m = 2,343 \text{ g}$$

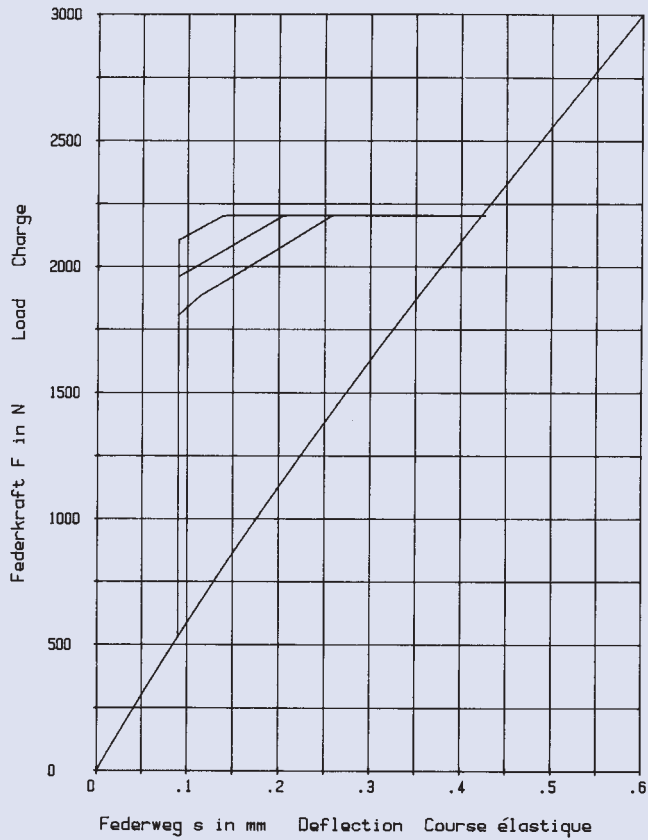
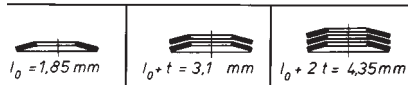


23 x 12,2 x 1,25

GR 2

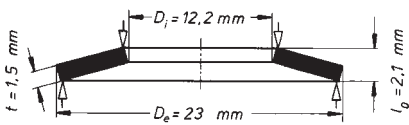


$h_0 = 0,6 \text{ mm}$        $D_e / D_i = 1,885$   
 $t = 1,25 \text{ mm}$        $D_e / t = 18,4$   
 $h_0 / t = 0,48$        $m = 2,929 \text{ g}$

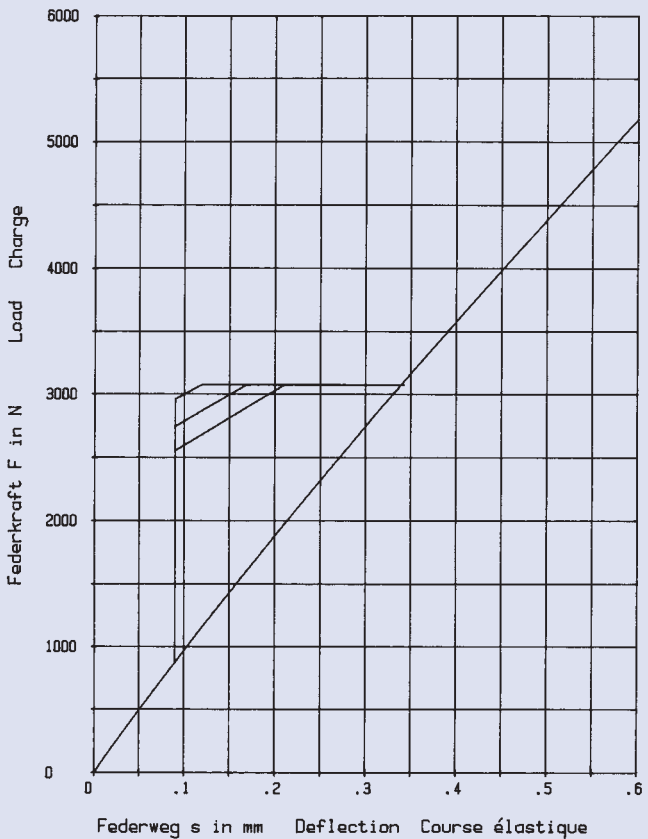
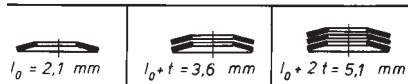


23 x 12,2 x 1,5

GR 2

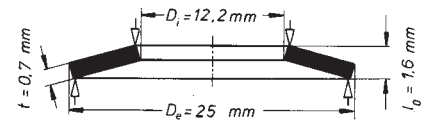
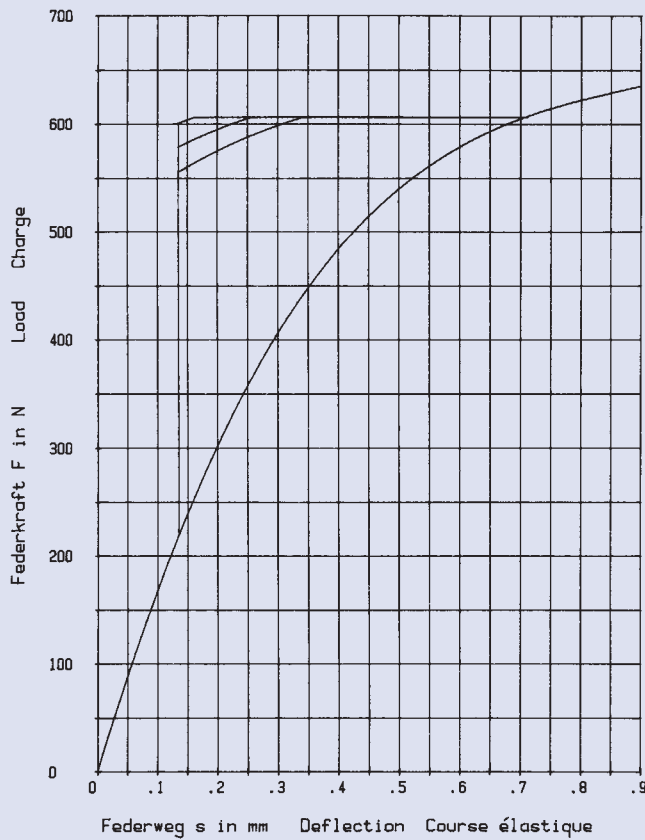


$h_0 = 0,6 \text{ mm}$        $D_e / D_i = 1,885$   
 $t = 1,5 \text{ mm}$        $D_e / t = 15,333$   
 $h_0 / t = 0,4$        $m = 3,514 \text{ g}$

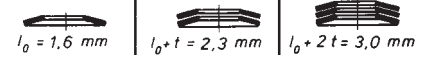


**25 x 12,2 x 0,7**

**GR 1, DIN 2093 – C 25**

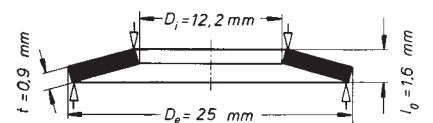
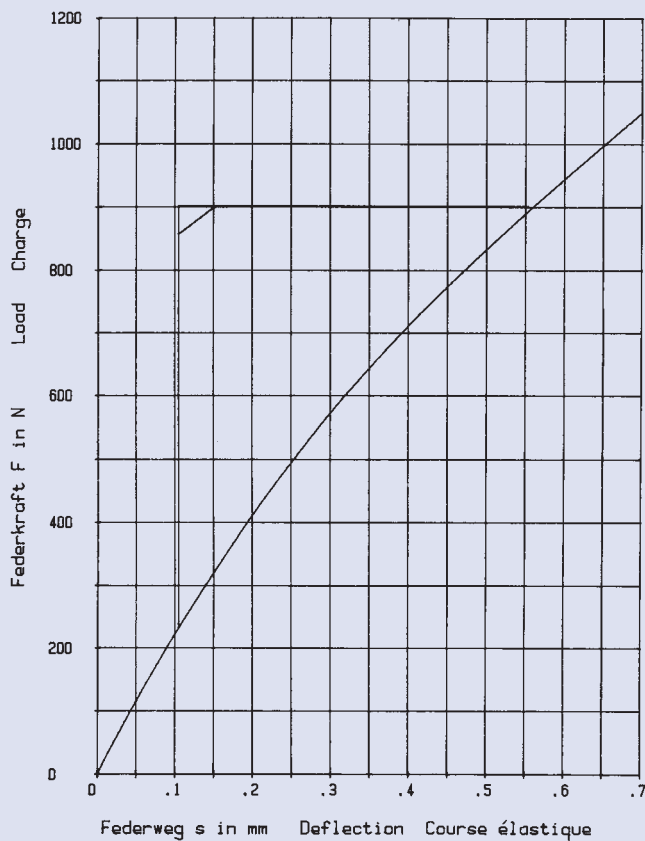


$$\begin{aligned}
 h_0 &= 0,9 \text{ mm} & D_e/D_i &= 2,049 \\
 t &= 0,7 \text{ mm} & D_e/t &= 35,714 \\
 h_0/t &= 1,285 & m &= 2,055 \text{ g}
 \end{aligned}$$

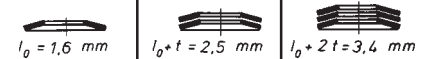


**25 x 12,2 x 0,9**

**GR 1, DIN 2093 – B 25**

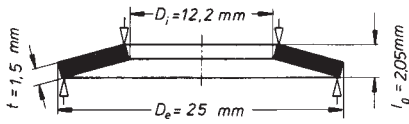


$$\begin{aligned}
 h_0 &= 0,7 \text{ mm} & D_e/D_i &= 2,049 \\
 t &= 0,9 \text{ mm} & D_e/t &= 27,777 \\
 h_0/t &= 0,777 & m &= 2,642 \text{ g}
 \end{aligned}$$

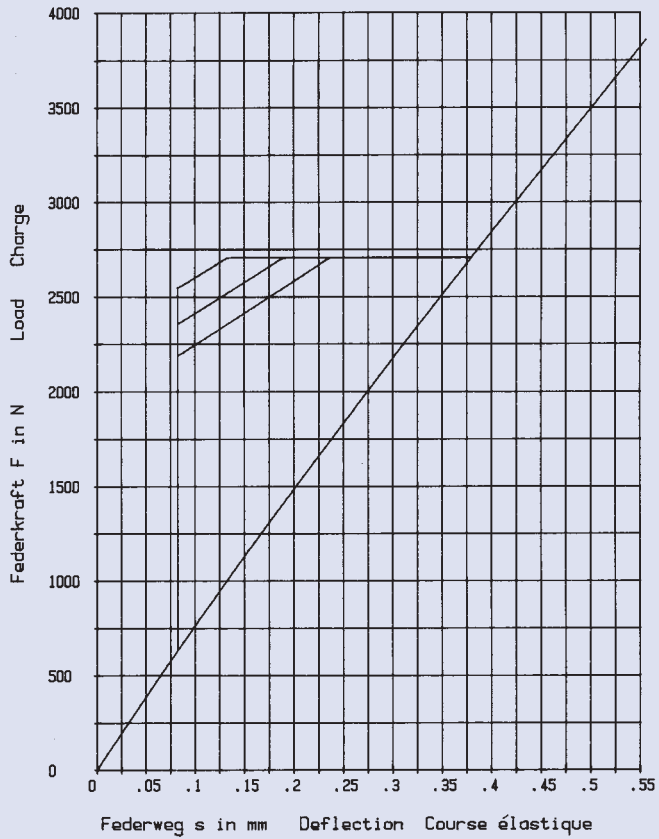
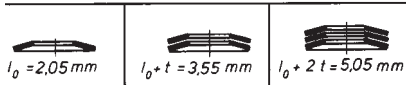


25 x 12,2 x 1,5

GR 2, DIN 2093 – A 25

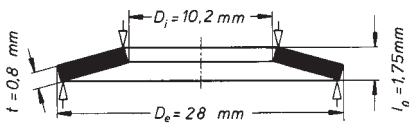


$h_0 = 0,55 \text{ mm}$        $D_e / D_i = 2,049$   
 $t = 1,5 \text{ mm}$        $D_e / t = 16,666$   
 $h_0 / t = 0,366$        $m = 4,403 \text{ g}$

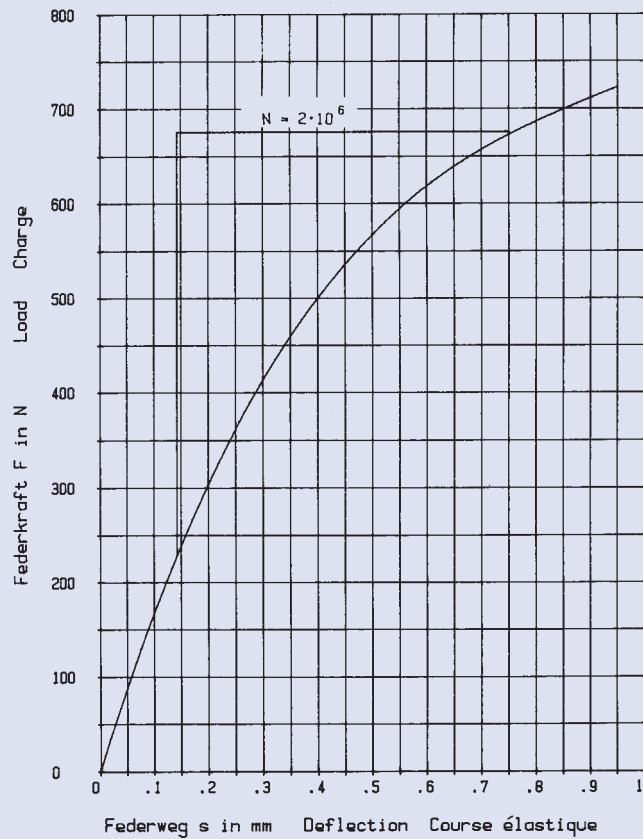
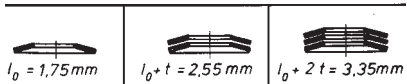


28 x 10,2 x 0,8

GR 1



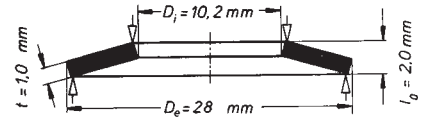
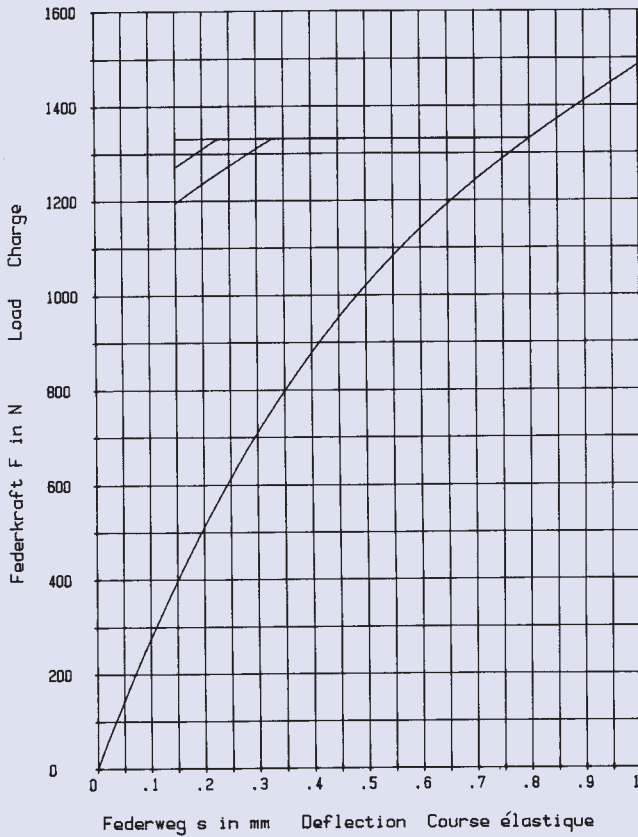
$h_0 = 0,95 \text{ mm}$        $D_e / D_i = 2,745$   
 $t = 0,8 \text{ mm}$        $D_e / t = 35$   
 $h_0 / t = 1,187$        $m = 3,354 \text{ g}$



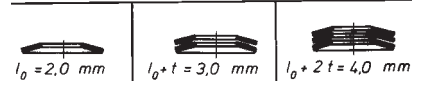


28 x 10,2 x 1,0

GR 1

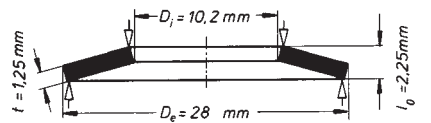
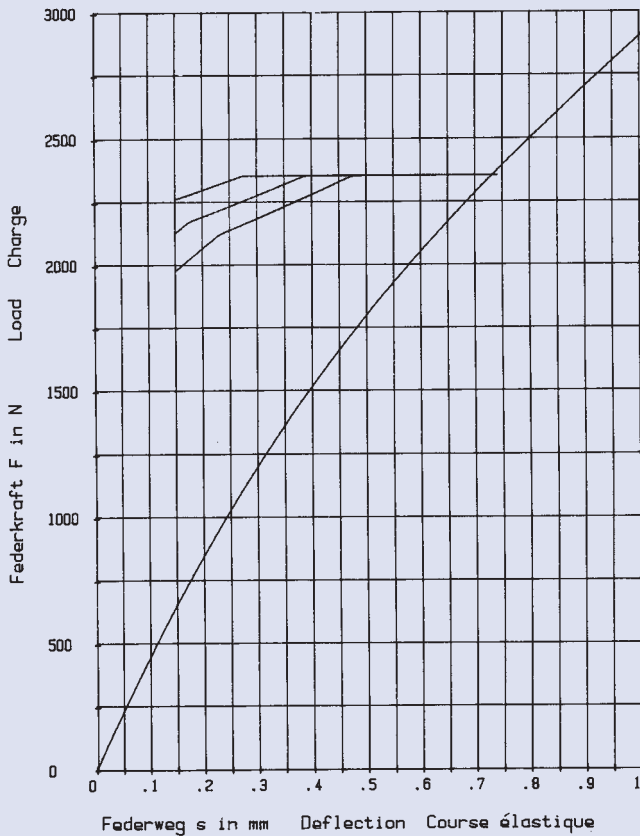


$h_0 = 1,0 \text{ mm}$        $D_e / D_1 = 2,745$   
 $t = 1,0 \text{ mm}$        $D_e / t = 28$   
 $h_0 / t = 1,0$        $m = 4,191 \text{ g}$

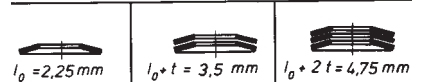


28 x 10,2 x 1,25

GR 2

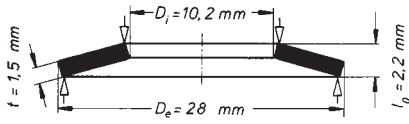


$h_0 = 1,0 \text{ mm}$        $D_e / D_1 = 2,745$   
 $t = 1,25 \text{ mm}$        $D_e / t = 22,4$   
 $h_0 / t = 0,8$        $m = 5,238 \text{ g}$

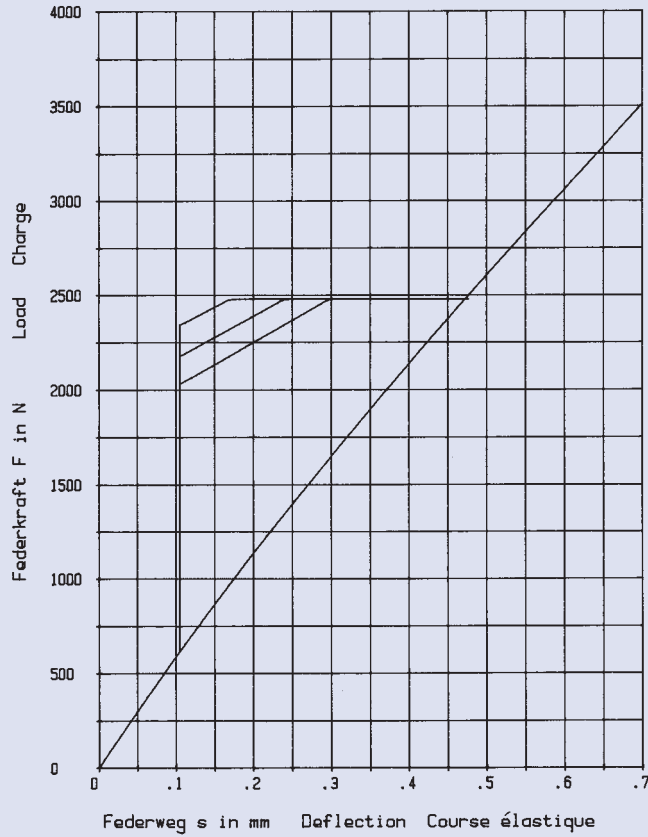
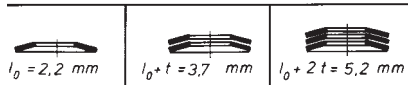


28 x 10,2 x 1,5

GR 2

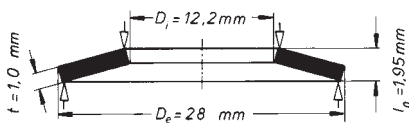


$h_0 = 0,7 \text{ mm}$        $D_e / D_i = 2,745$   
 $t = 1,5 \text{ mm}$        $D_e / t = 18,666$   
 $h_0 / t = 0,466$        $m = 6,286 \text{ g}$

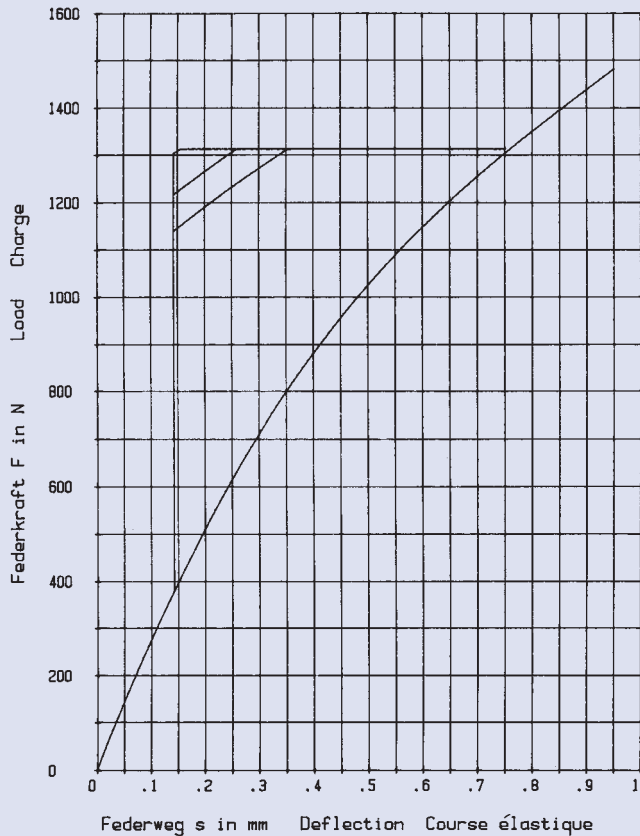
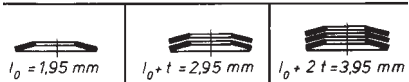


28 x 12,2 x 1,0

GR 1

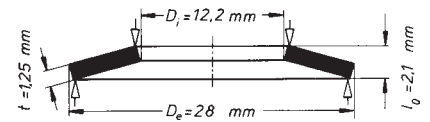
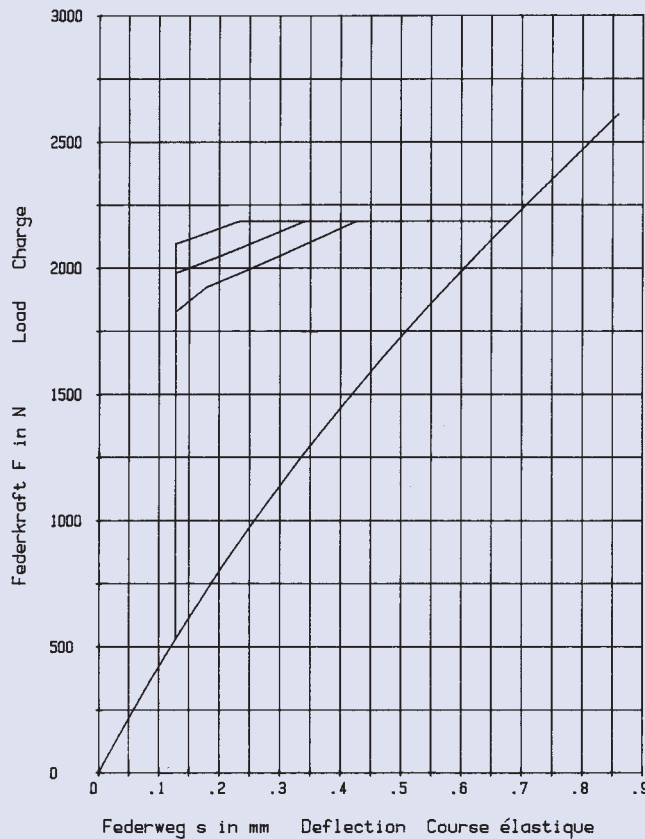


$h_0 = 0,95 \text{ mm}$        $D_e / D_i = 2,295$   
 $t = 1,0 \text{ mm}$        $D_e / t = 28$   
 $h_0 / t = 0,95$        $m = 3,914 \text{ g}$



28 x 12,2 x 1,25

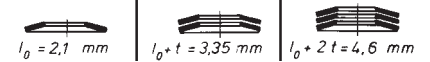
GR 2



$$h_0 = 0,85 \text{ mm} \quad D_e / D_i = 2,295$$

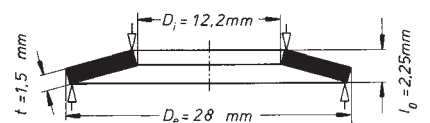
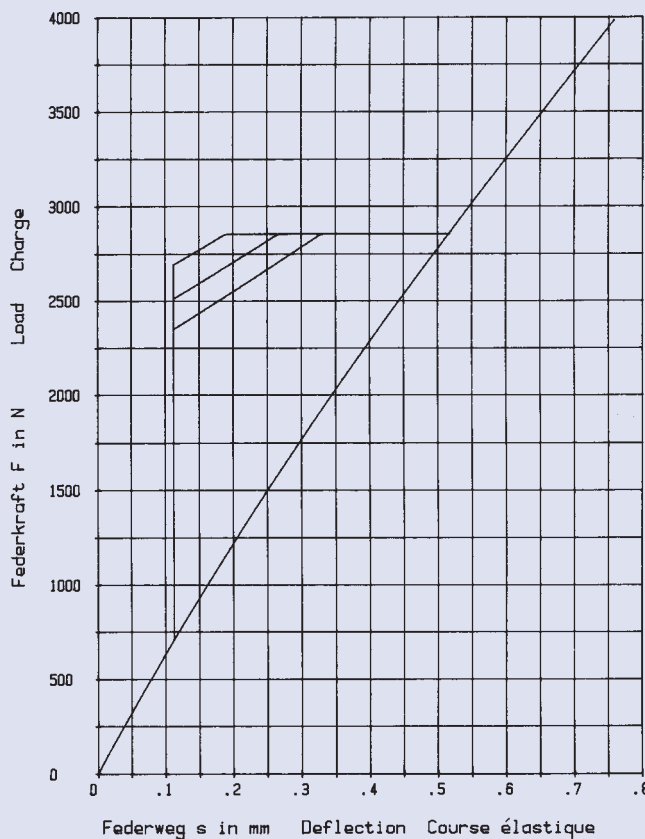
$$t = 1,25 \text{ mm} \quad D_e / t = 22,4$$

$$h_0 / t = 0,68 \quad m = 4,893 \text{ g}$$



28 x 12,2 x 1,5

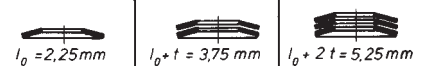
GR 2



$$h_0 = 0,75 \text{ mm} \quad D_e / D_i = 2,295$$

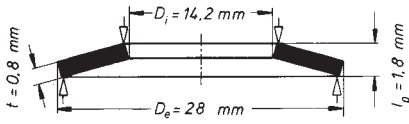
$$t = 1,5 \text{ mm} \quad D_e / t = 18,666$$

$$h_0 / t = 0,5 \quad m = 5,872 \text{ g}$$

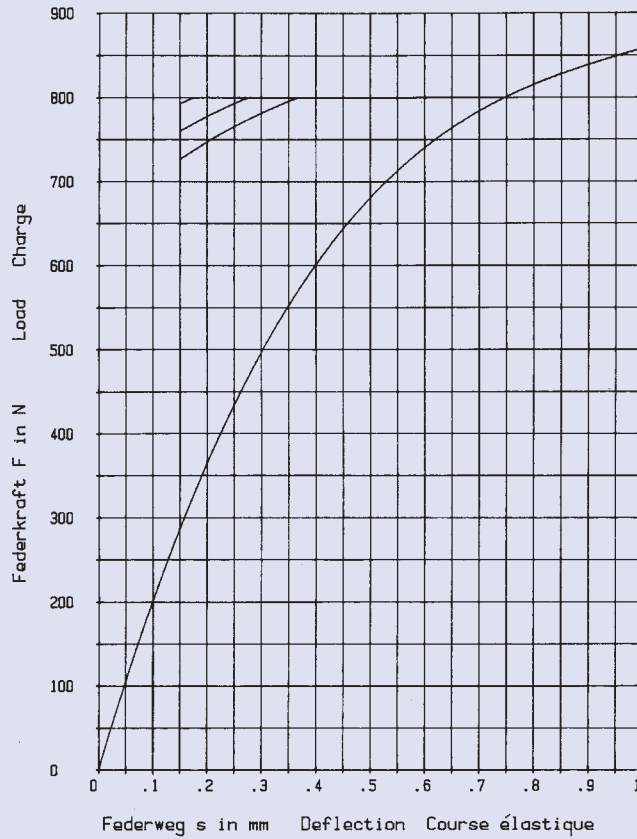
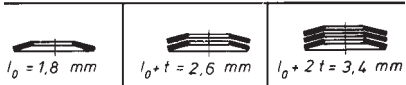


28 x 14,2 x 0,8

GR 1, DIN 2093 – C 28

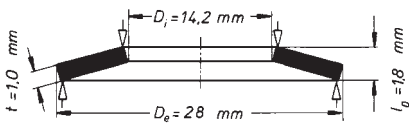


$h_0 = 1,0 \text{ mm}$        $D_e / D_i = 1,971$   
 $t = 0,8 \text{ mm}$        $D_e / t = 35$   
 $h_0 / t = 1,25$        $m = 2,872 \text{ g}$

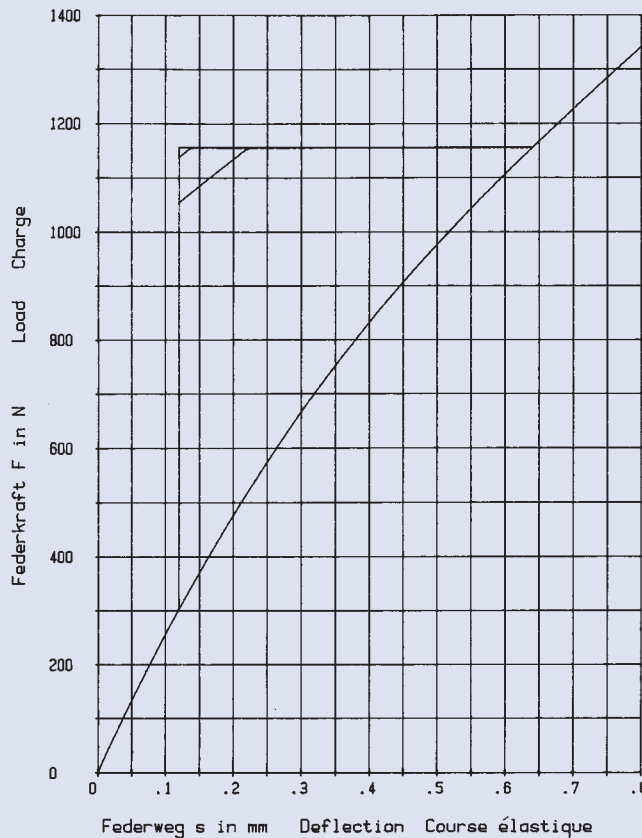
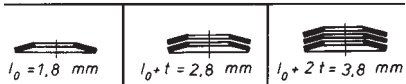


28 x 14,2 x 1,0

GR 1, DIN 2093 – B 28

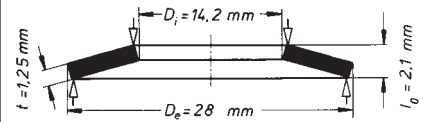
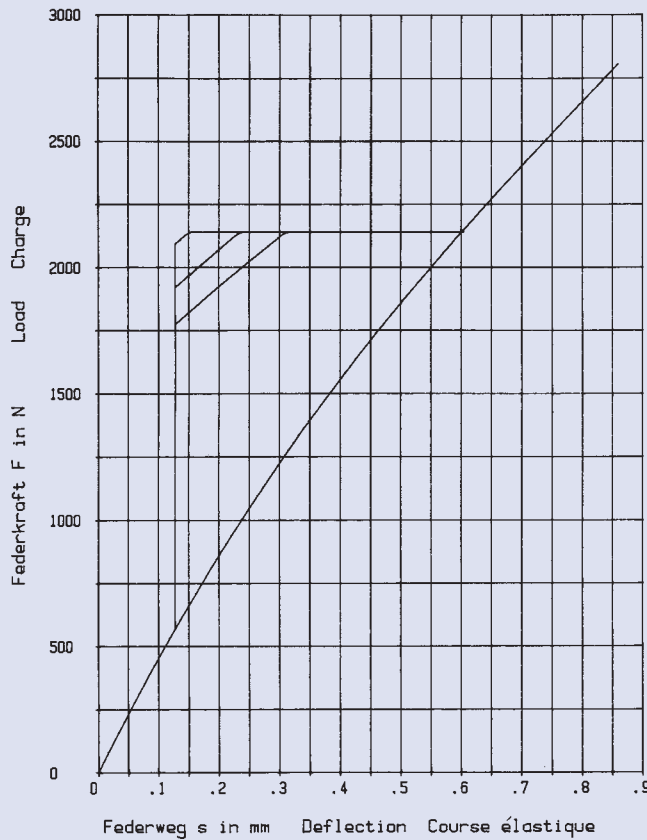


$h_0 = 0,8 \text{ mm}$        $D_e / D_i = 1,971$   
 $t = 1,0 \text{ mm}$        $D_e / t = 28$   
 $h_0 / t = 0,8$        $m = 3,59 \text{ g}$



28 x 14,2 x 1,25

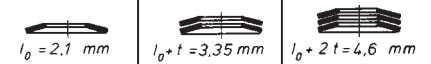
GR 2



$$h_0 = 0,85 \text{ mm} \quad D_e / D_i = 1,971$$

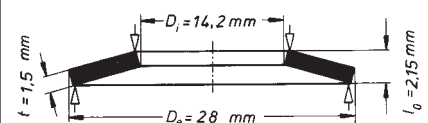
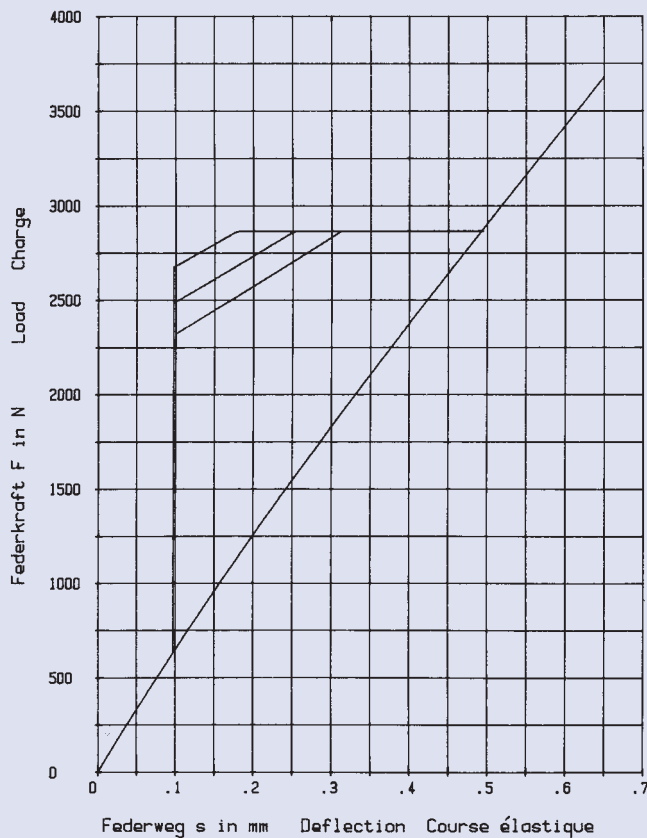
$$t = 1,25 \text{ mm} \quad D_e / t = 22,4$$

$$h_0 / t = 0,68 \quad m = 4,486 \text{ g}$$



28 x 14,2 x 1,5

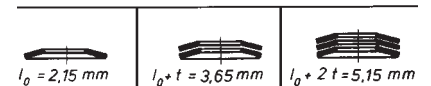
GR 2, DIN 2093 – A 28



$$h_0 = 0,65 \text{ mm} \quad D_e / D_i = 1,971$$

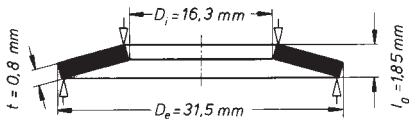
$$t = 1,5 \text{ mm} \quad D_e / t = 18,666$$

$$h_0 / t = 0,433 \quad m = 5,386 \text{ g}$$

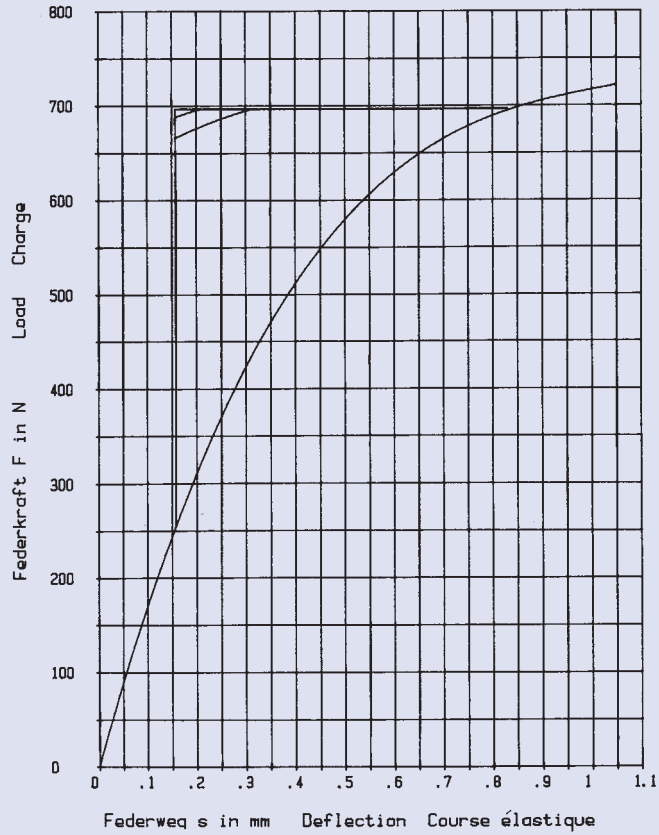
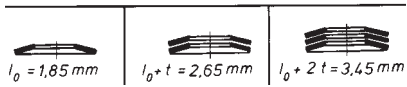


31,5 x 16,3 x 0,8

GR 1, DIN 2093 – C 31,5

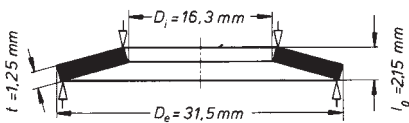


$h_0 = 1,05 \text{ mm}$        $D_e / D_i = 1,932$   
 $t = 0,8 \text{ mm}$        $D_e / t = 39,375$   
 $h_0 / t = 1,312$        $m = 3,583 \text{ g}$

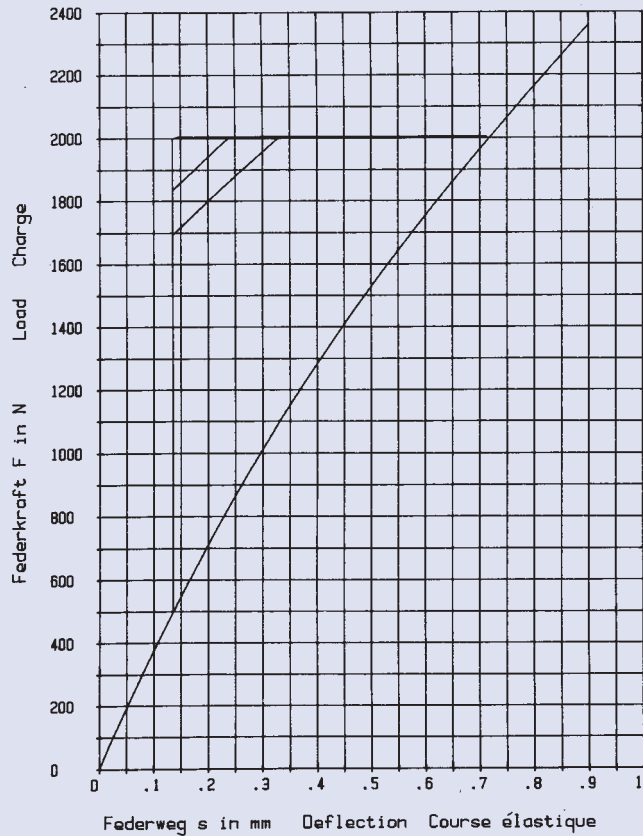
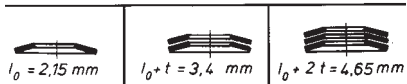


31,5 x 16,3 x 1,25

GR 2, DIN 2093 – B 31,5

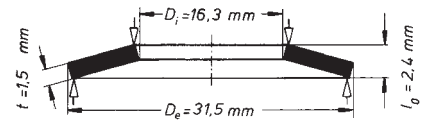
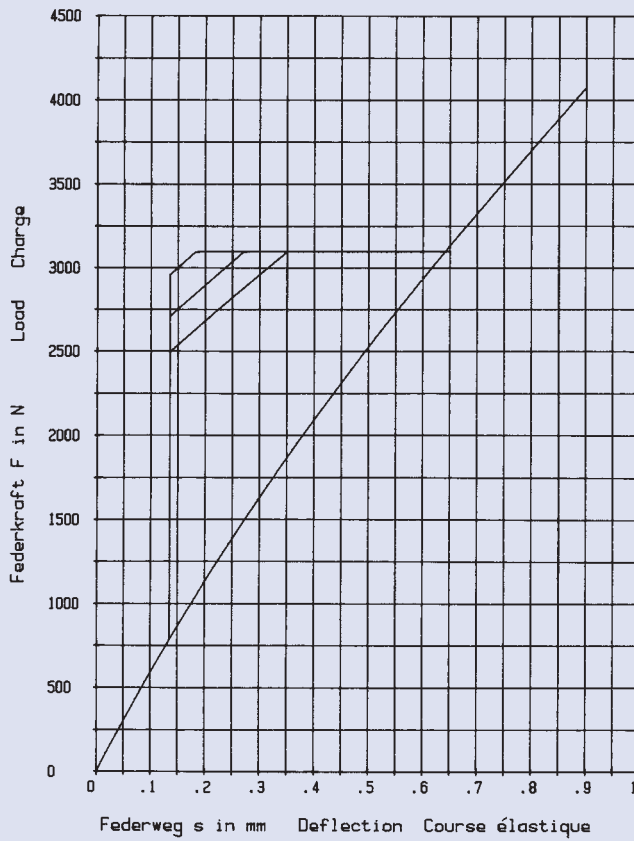


$h_0 = 0,9 \text{ mm}$        $D_e / D_i = 1,932$   
 $t = 1,25 \text{ mm}$        $D_e / t = 25,2$   
 $h_0 / t = 0,72$        $m = 5,599 \text{ g}$

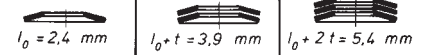


**31,5 x 16,3 x 1,5**

**GR 2**

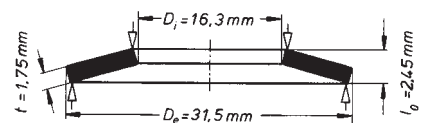
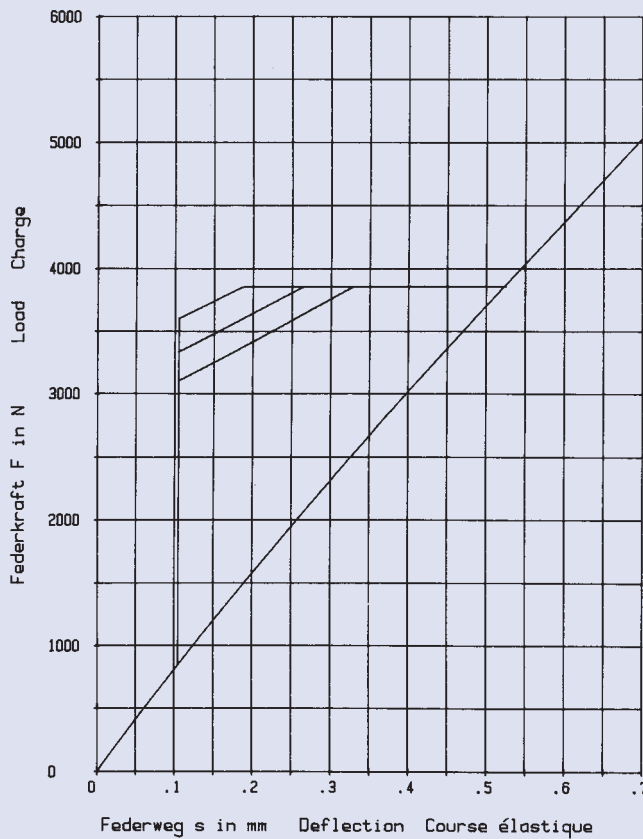


$$\begin{aligned}
 h_0 &= 0,9 \text{ mm} & D_e/D_i &= 1,932 \\
 t &= 1,5 \text{ mm} & D_e/t &= 21 \\
 h_0/t &= 0,6 & m &= 6,717 \text{ g}
 \end{aligned}$$

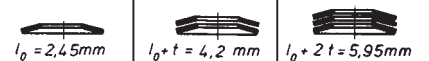


**31,5 x 16,3 x 1,75**

**GR 2, DIN 2093 – A 31,5**

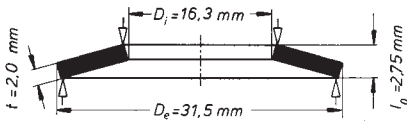


$$\begin{aligned}
 h_0 &= 0,7 \text{ mm} & D_e/D_i &= 1,932 \\
 t &= 1,75 \text{ mm} & D_e/t &= 18 \\
 h_0/t &= 0,4 & m &= 7,839 \text{ g}
 \end{aligned}$$

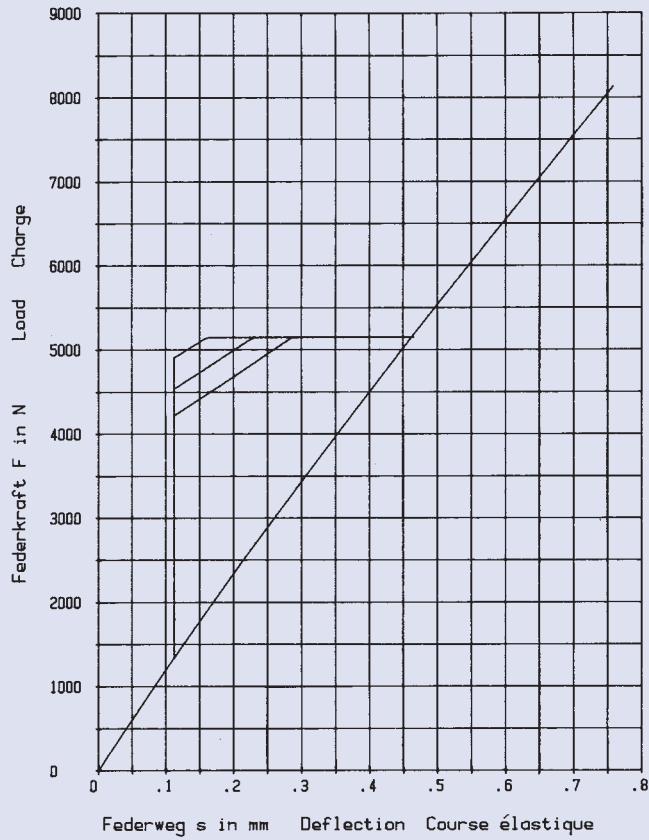
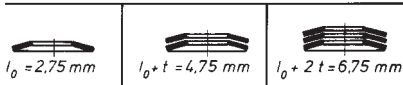


31,5 x 16,3 x 2,0

GR 2

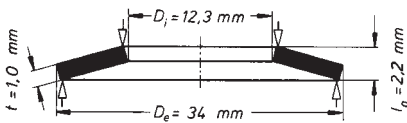


$h_0 = 0,75 \text{ mm}$        $D_e / D_i = 1,932$   
 $t = 2,0 \text{ mm}$        $D_e / t = 15,75$   
 $h_0 / t = 0,375$        $m = 8,956 \text{ g}$

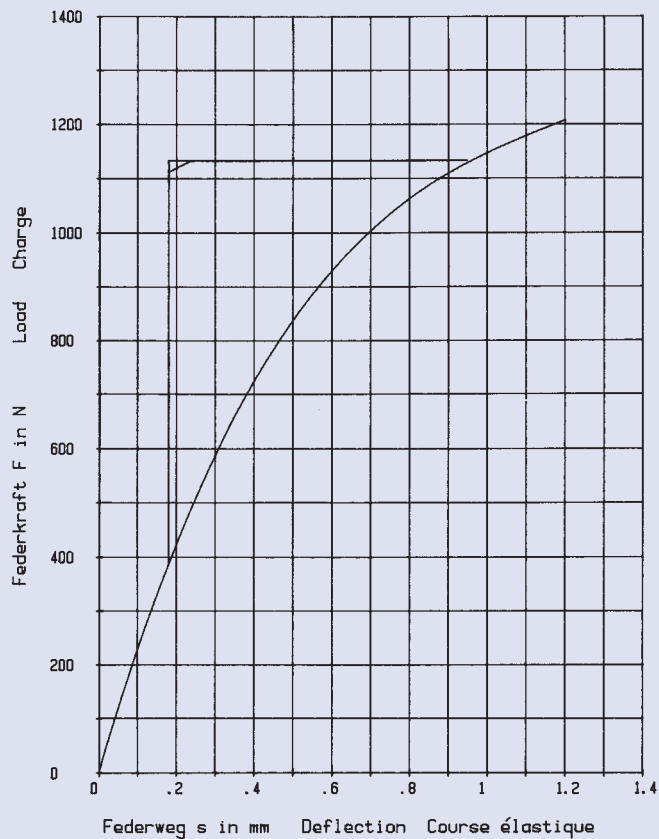
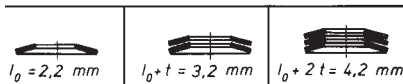


34 x 12,3 x 1,0

GR 2



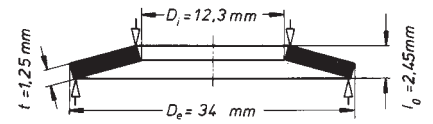
$h_0 = 1,2 \text{ mm}$        $D_e / D_i = 2,764$   
 $t = 1,0 \text{ mm}$        $D_e / t = 34$   
 $h_0 / t = 1,2$        $m = 6,194 \text{ g}$



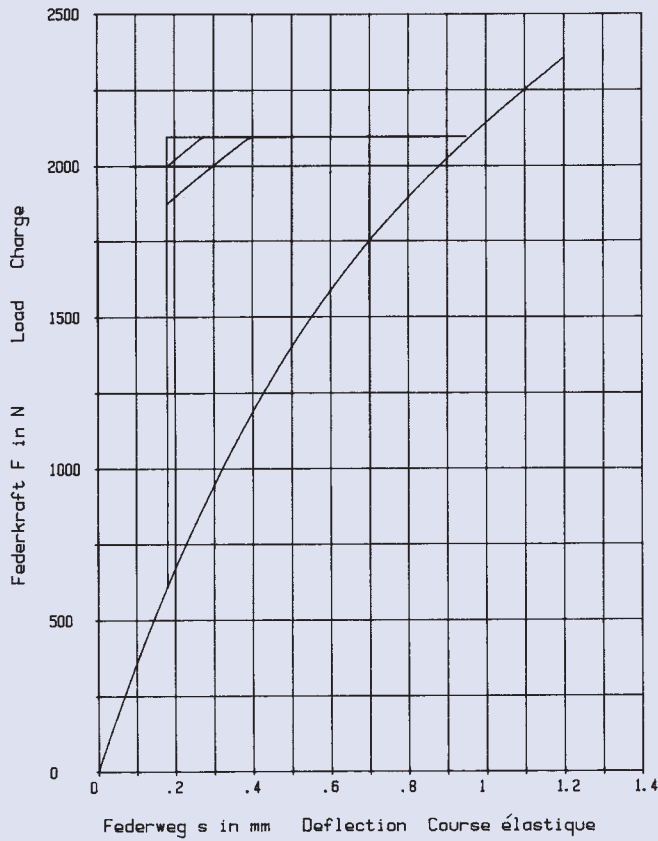
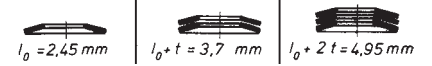


**34 x 12,3 x 1,25**

**GR 2**

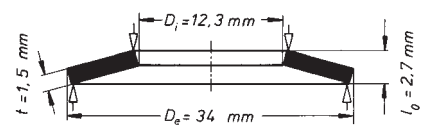


$$\begin{aligned}
 h_0 &= 1,2 \text{ mm} & D_e/D_i &= 2,764 \\
 t &= 1,25 \text{ mm} & D_e/t &= 27,2 \\
 h_0/t &= 0,96 & m &= 7,743 \text{ g}
 \end{aligned}$$

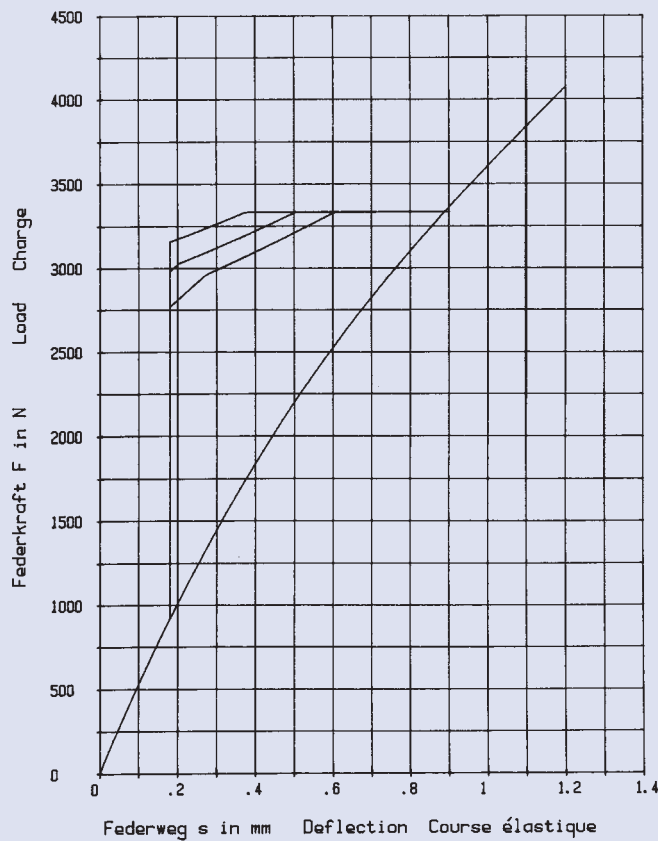
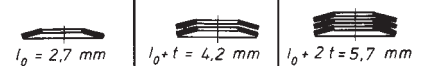


**34 x 12,3 x 1,5**

**GR 2**

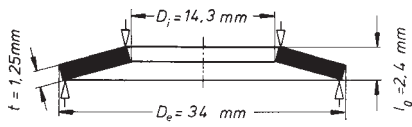


$$\begin{aligned}
 h_0 &= 1,2 \text{ mm} & D_e/D_i &= 2,764 \\
 t &= 1,5 \text{ mm} & D_e/t &= 22,666 \\
 h_0/t &= 0,8 & m &= 9,288 \text{ g}
 \end{aligned}$$

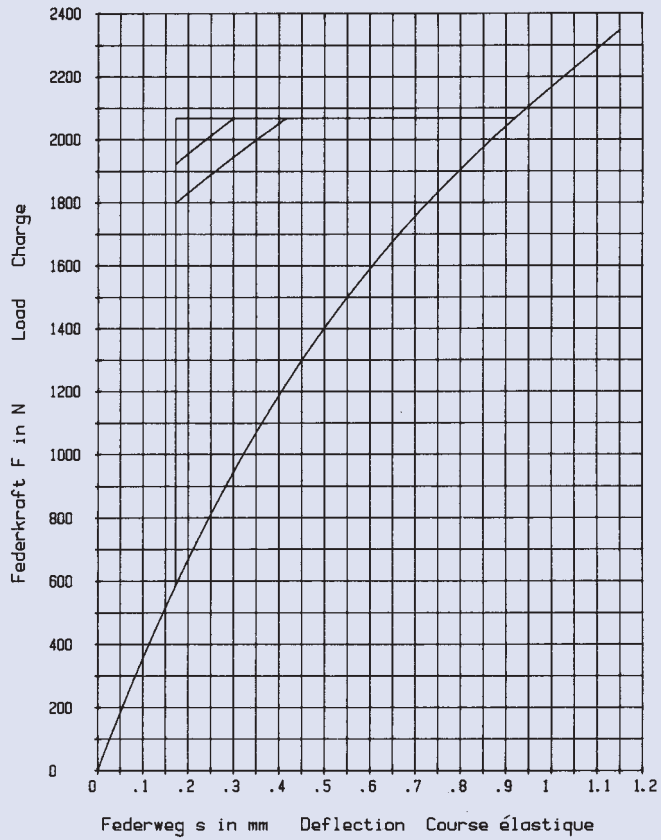
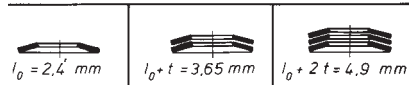


34 x 14,3 x 1,25

GR 2

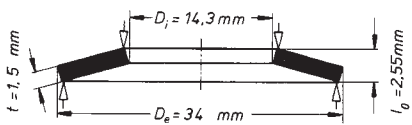


$h_0 = 1,15 \text{ mm}$        $D_e / D_i = 2,377$   
 $t = 1,25 \text{ mm}$        $D_e / t = 27,2$   
 $h_0 / t = 0,92$        $m = 7,33 \text{ g}$

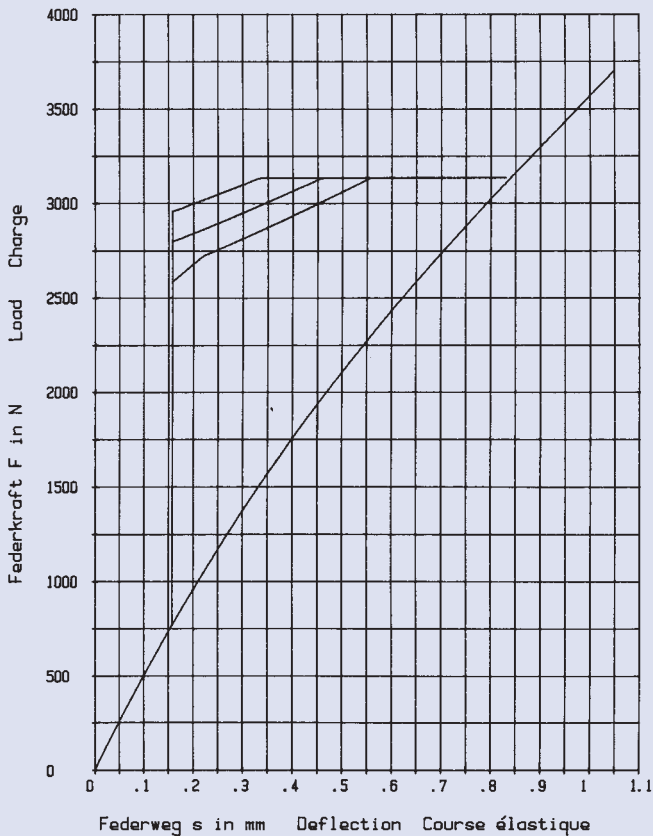
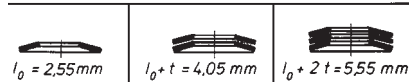


34 x 14,3 x 1,5

GR 2

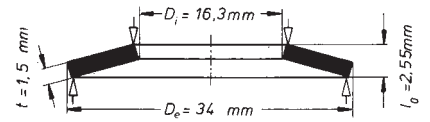
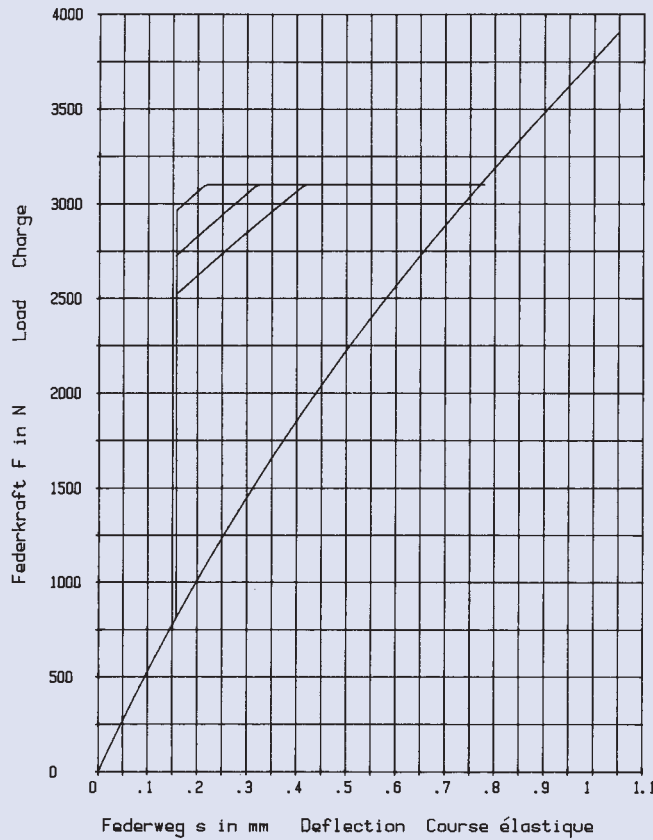


$h_0 = 1,05 \text{ mm}$        $D_e / D_i = 2,377$   
 $t = 1,5 \text{ mm}$        $D_e / t = 22,666$   
 $h_0 / t = 0,7$        $m = 8,799 \text{ g}$

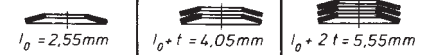


**34 x 16,3 x 1,5**

**GR 2**

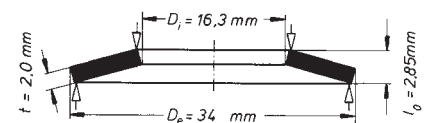
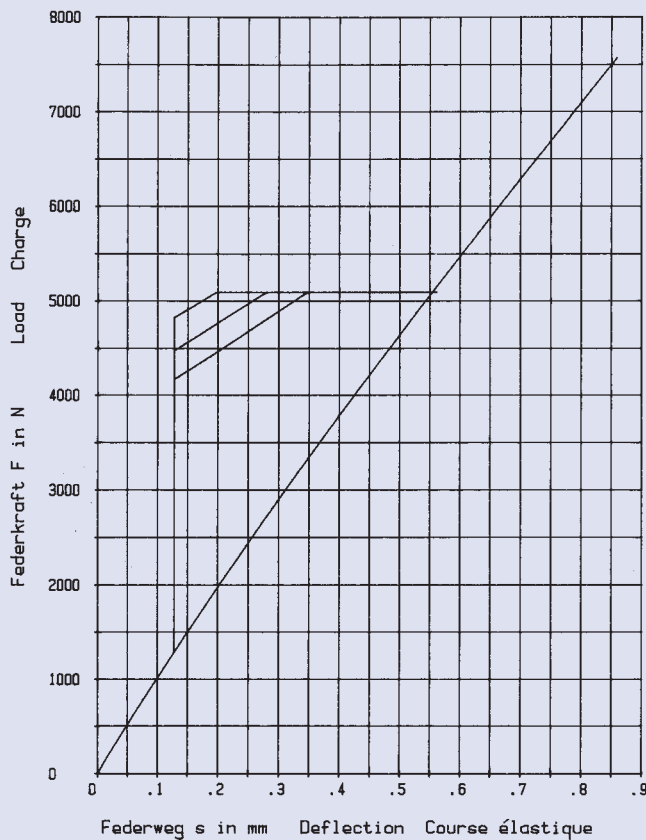


$$\begin{aligned}
 h_0 &= 1,05 \text{ mm} & D_e / D_i &= 2,085 \\
 t &= 1,5 \text{ mm} & D_e / t &= 22,666 \\
 h_0 / t &= 0,7 & m &= 8,233 \text{ g}
 \end{aligned}$$

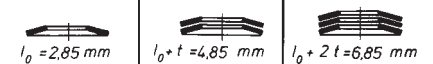


**34 x 16,3 x 2,0**

**GR 2**

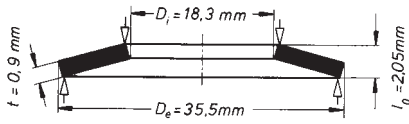


$$\begin{aligned}
 h_0 &= 0,85 \text{ mm} & D_e / D_i &= 2,085 \\
 t &= 2,0 \text{ mm} & D_e / t &= 17 \\
 h_0 / t &= 0,425 & m &= 10,978 \text{ g}
 \end{aligned}$$

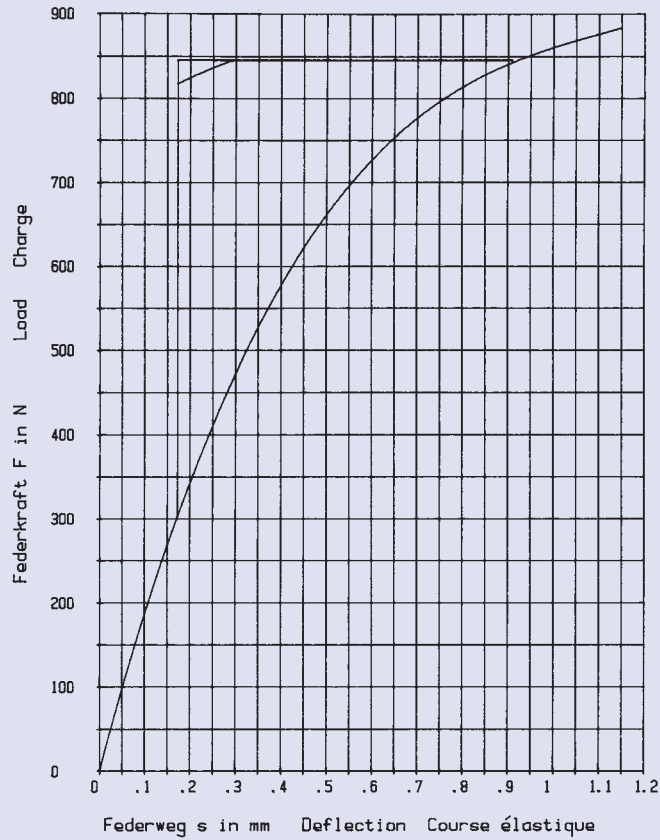
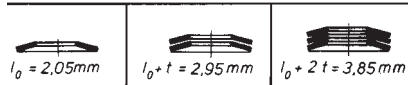


35,5 x 18,3 x 0,9

GR 1, DIN 2093 – C 35,5

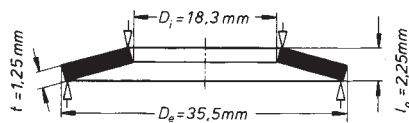


$h_0 = 1,15 \text{ mm}$        $D_e / D_i = 1,939$   
 $t = 0,9 \text{ mm}$        $D_e / t = 39,444$   
 $h_0 / t = 1,277$        $m = 5,134 \text{ g}$

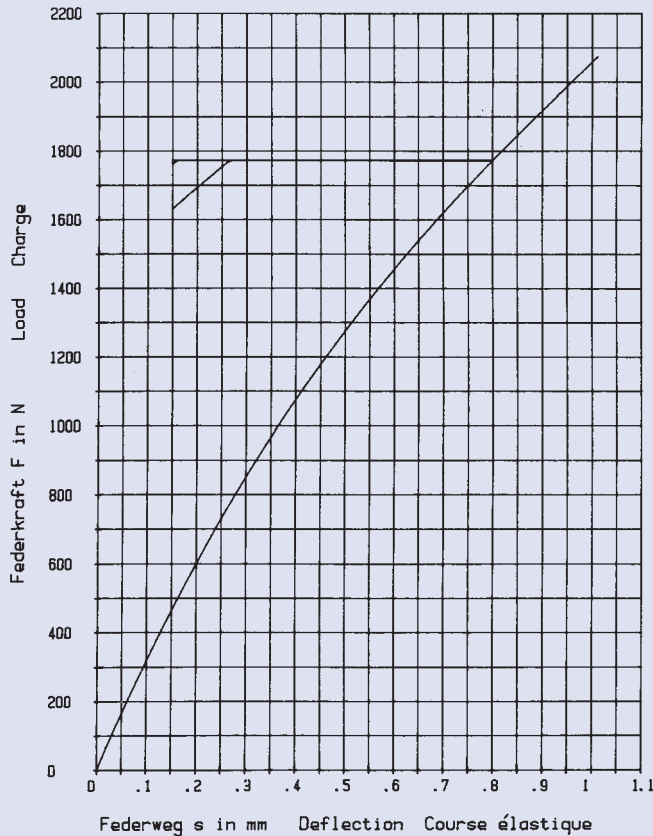
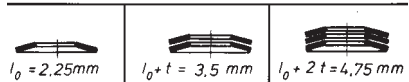


35,5 x 18,3 x 1,25

GR 2, DIN 2093 – B 35,5

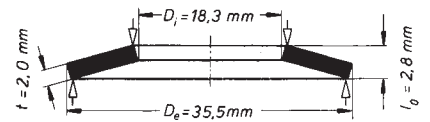
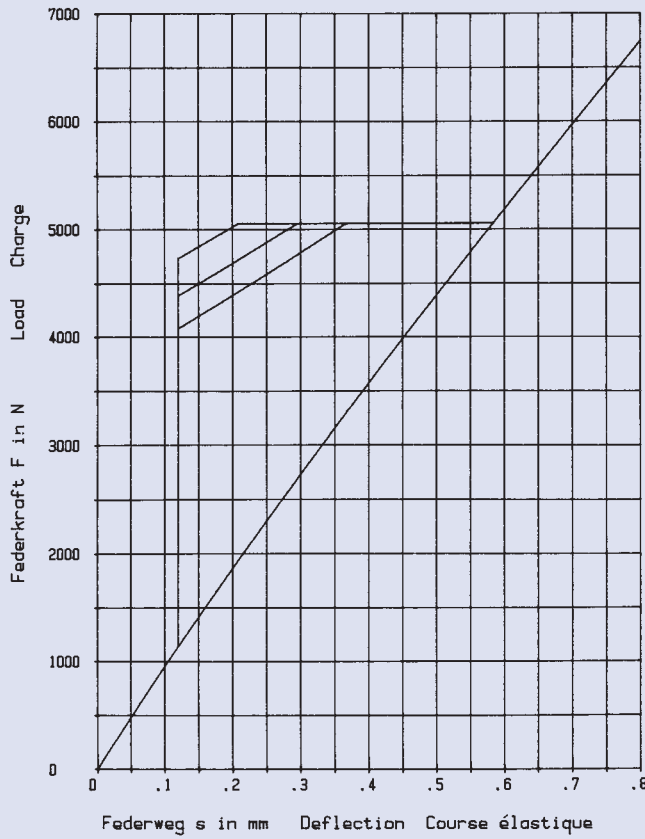


$h_0 = 1,0 \text{ mm}$        $D_e / D_i = 1,939$   
 $t = 1,25 \text{ mm}$        $D_e / t = 28,4$   
 $h_0 / t = 0,8$        $m = 7,131 \text{ g}$



35,5 x 18,3 x 2,0

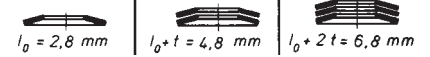
GR 2, DIN 2093 – A 35,5



$$h_0 = 0,8 \text{ mm} \quad D_e / D_i = 1,939$$

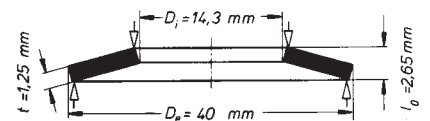
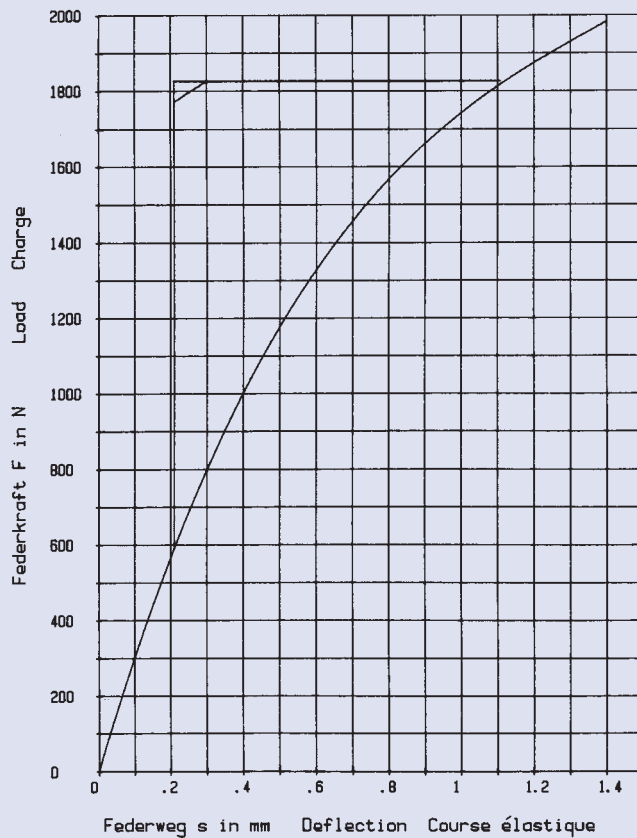
$$t = 2,0 \text{ mm} \quad D_e / t = 17,75$$

$$h_0 / t = 0,4 \quad m = 11,41 \text{ g}$$



40 x 14,3 x 1,25

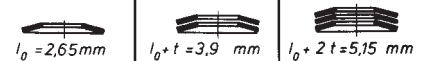
GR 2



$$h_0 = 1,4 \text{ mm} \quad D_e / D_i = 2,797$$

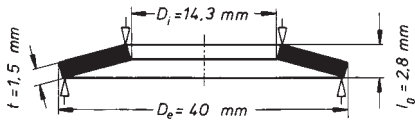
$$t = 1,25 \text{ mm} \quad D_e / t = 32$$

$$h_0 / t = 1,12 \quad m = 10,755 \text{ g}$$

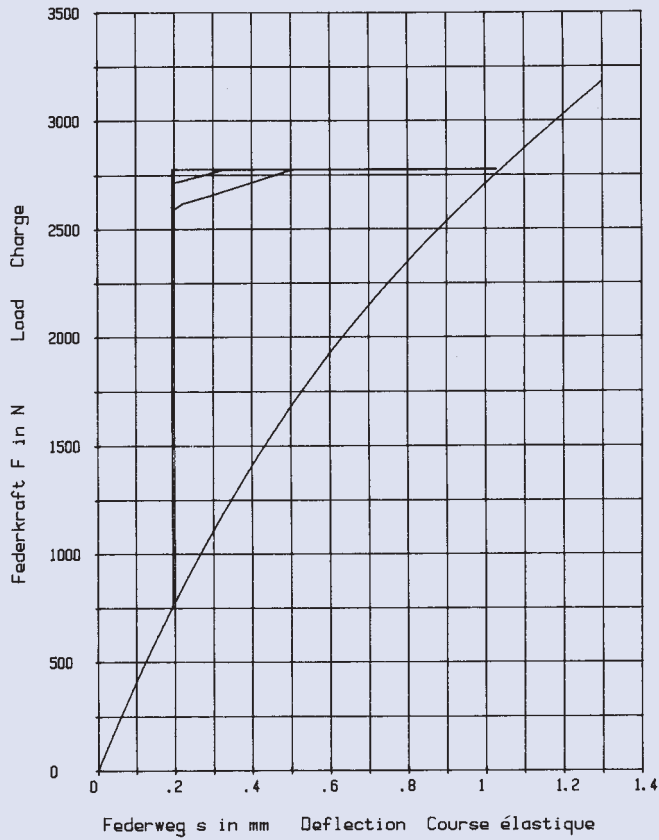
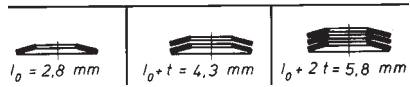


40 x 14,3 x 1,5

GR 2

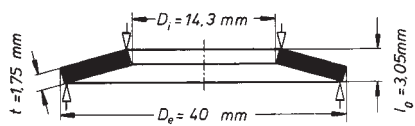


$h_0 = 1.3 \text{ mm}$        $D_o / D_i = 2.797$   
 $t = 1.5 \text{ mm}$        $D_o / t = 26.666$   
 $h_0 / t = 0.866$        $m = 12.905 \text{ g}$

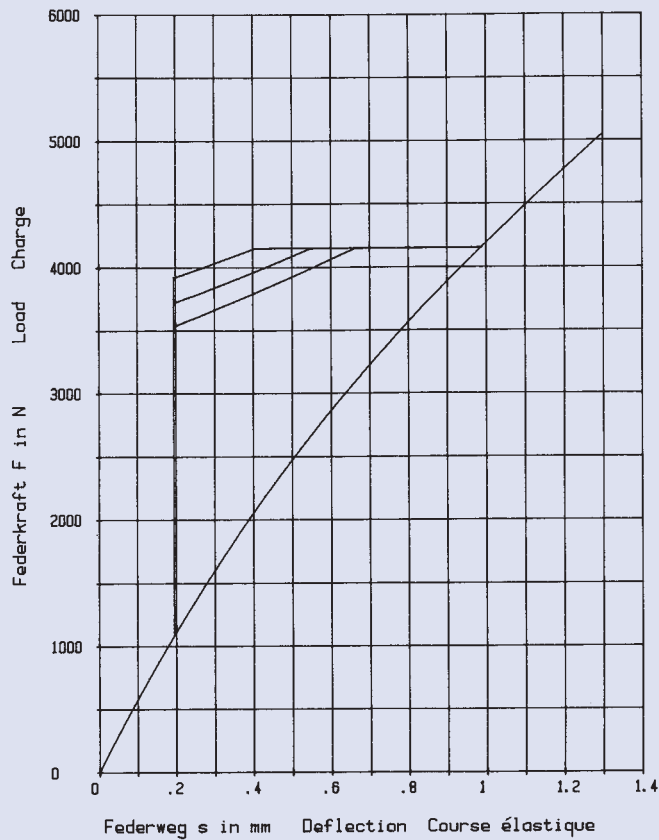
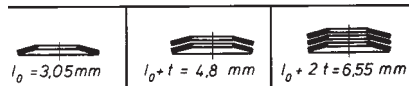


40 x 14,3 x 1,75

GR 2

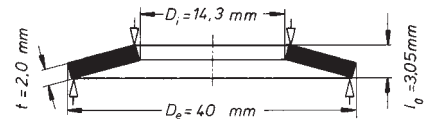
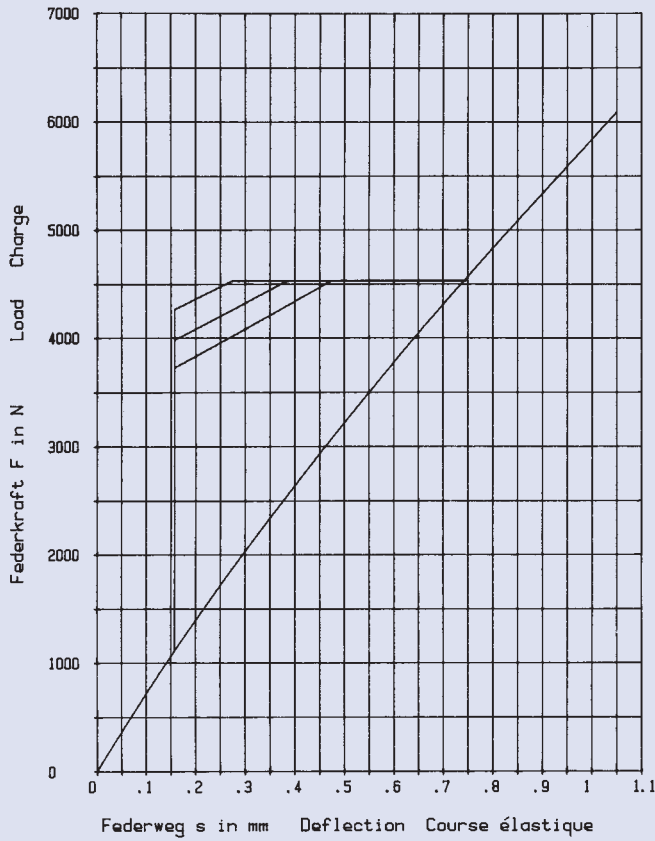


$h_0 = 1.3 \text{ mm}$        $D_o / D_i = 2.797$   
 $t = 1.75 \text{ mm}$        $D_o / t = 22.857$   
 $h_0 / t = 0.742$        $m = 15.056 \text{ g}$

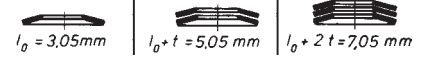


40 x 14,3 x 2,0

GR 2

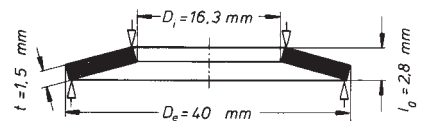
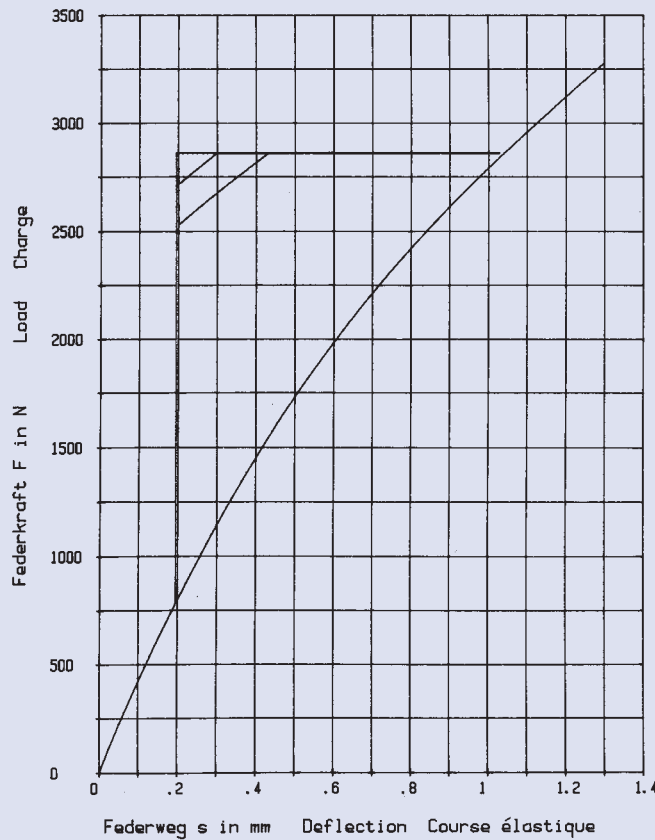


$h_0 = 1,05 \text{ mm}$        $D_e / D_i = 2,797$   
 $t = 2,0 \text{ mm}$        $D_e / t = 20$   
 $h_0 / t = 0,525$        $m = 17,207 \text{ g}$

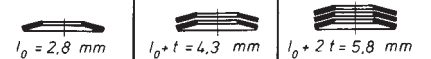


40 x 16,3 x 1,5

GR 2

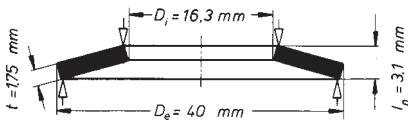


$h_0 = 1,3 \text{ mm}$        $D_e / D_i = 2,453$   
 $t = 1,5 \text{ mm}$        $D_e / t = 26,666$   
 $h_0 / t = 0,866$        $m = 12,339 \text{ g}$

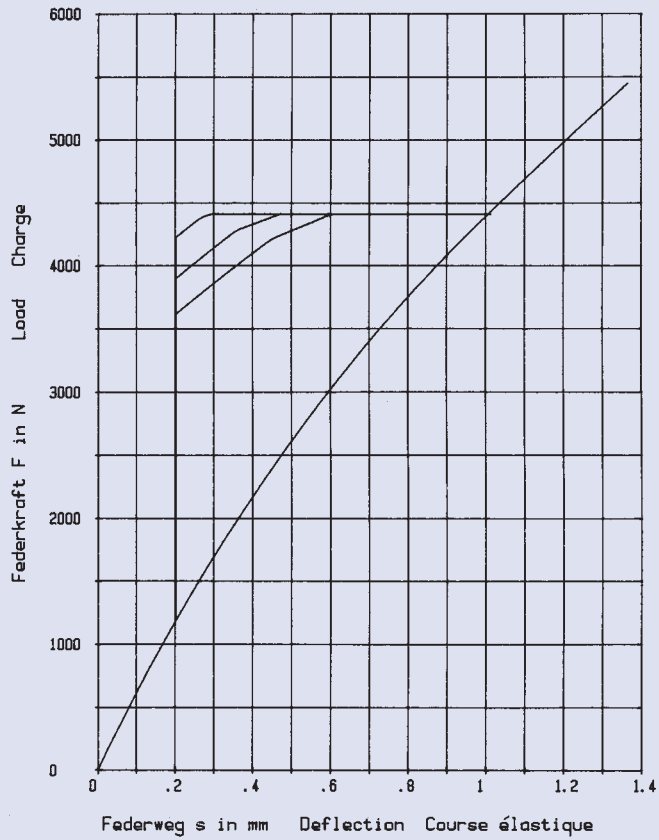
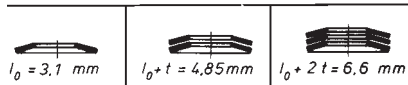


40 x 16,3 x 1,75

GR 2

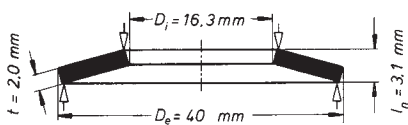


$h_0 = 1,35 \text{ mm}$        $D_e / D_i = 2,453$   
 $t = 1,75 \text{ mm}$        $D_e / t = 22,857$   
 $h_0 / t = 0,771$        $m = 14,396 \text{ g}$

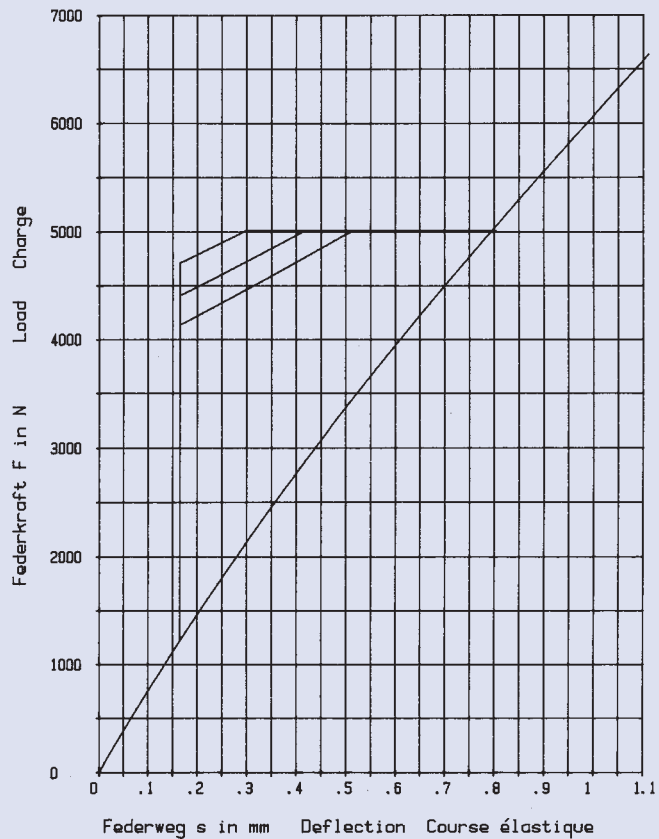
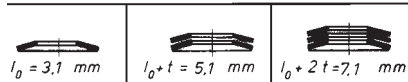


40 x 16,3 x 2,0

GR 2



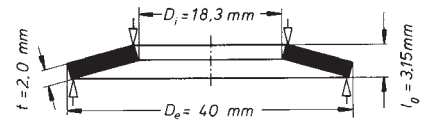
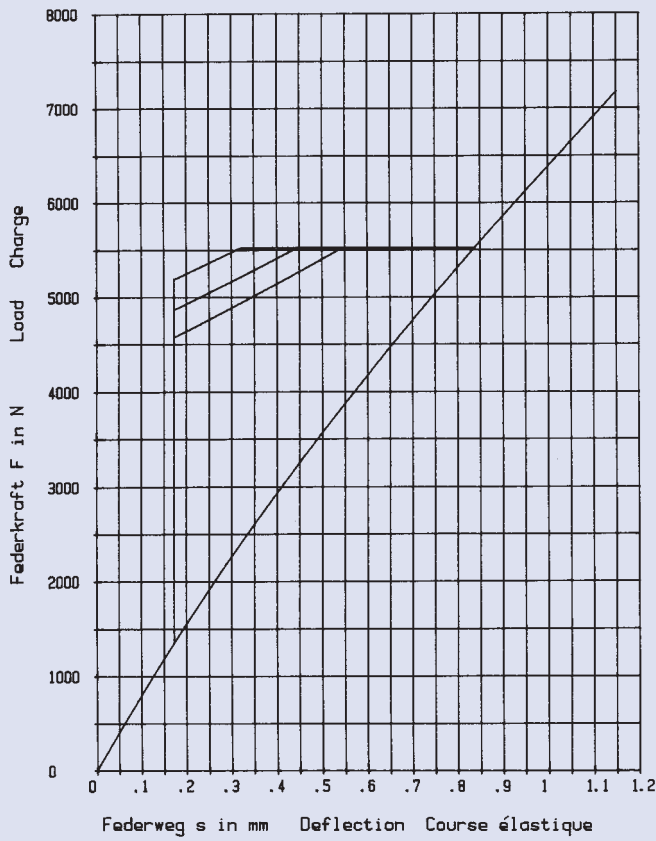
$h_0 = 1,1 \text{ mm}$        $D_e / D_i = 2,453$   
 $t = 2,0 \text{ mm}$        $D_e / t = 20$   
 $h_0 / t = 0,55$        $m = 16,499 \text{ g}$





40 x 18,3 x 2,0

GR 2

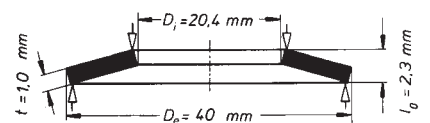
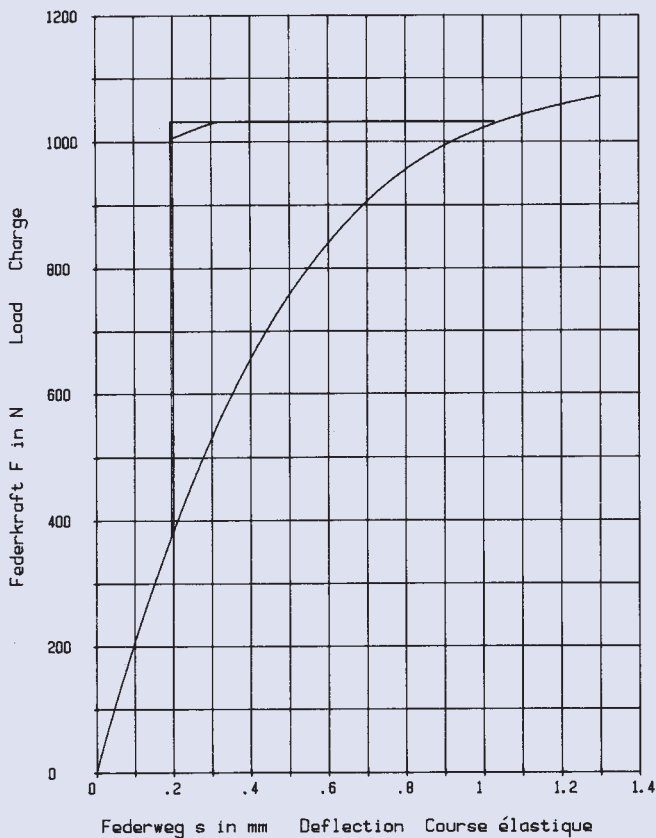


$h_0 = 1,15 \text{ mm}$        $D_e / D_i = 2,185$   
 $t = 2,0 \text{ mm}$        $D_e / t = 20$   
 $h_0 / t = 0,575$        $m = 15,599 \text{ g}$

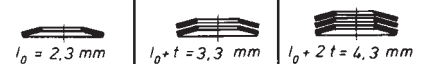


40 x 20,4 x 1,0

GR 1, DIN 2093 – C 40

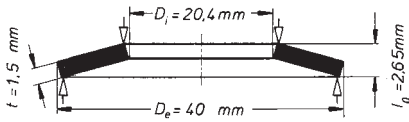


$h_0 = 1,3 \text{ mm}$        $D_e / D_i = 1,96$   
 $t = 1,0 \text{ mm}$        $D_e / t = 40$   
 $h_0 / t = 1,3$        $m = 7,299 \text{ g}$

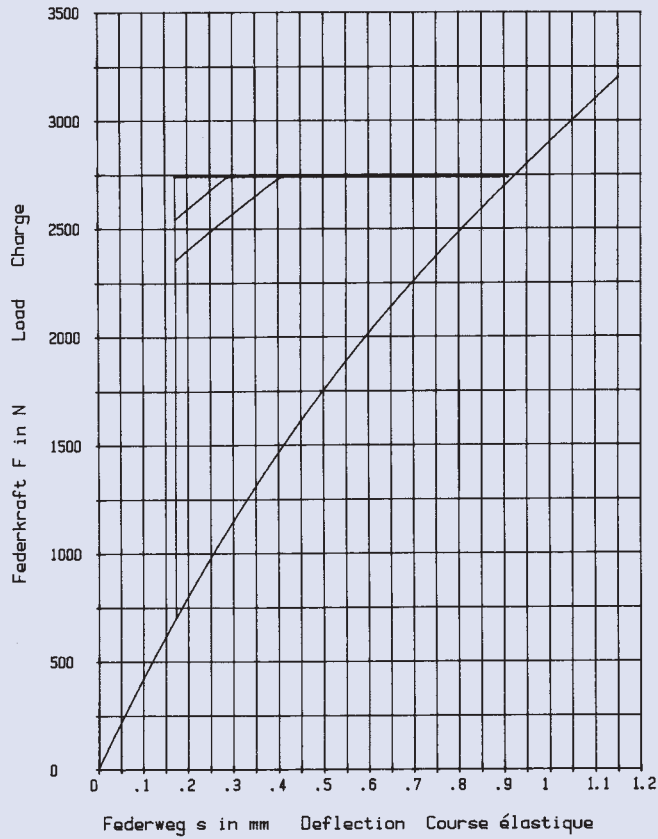
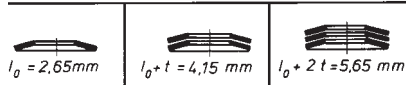


40 x 20,4 x 1,5

GR 2, DIN 2093 – B 40

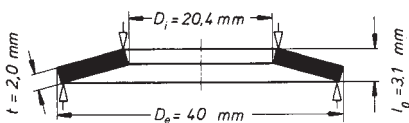


$h_0 = 1,15 \text{ mm}$        $D_e / D_i = 1,96$   
 $t = 1,5 \text{ mm}$        $D_e / t = 26,666$   
 $h_0 / t = 0,766$        $m = 10,948 \text{ g}$

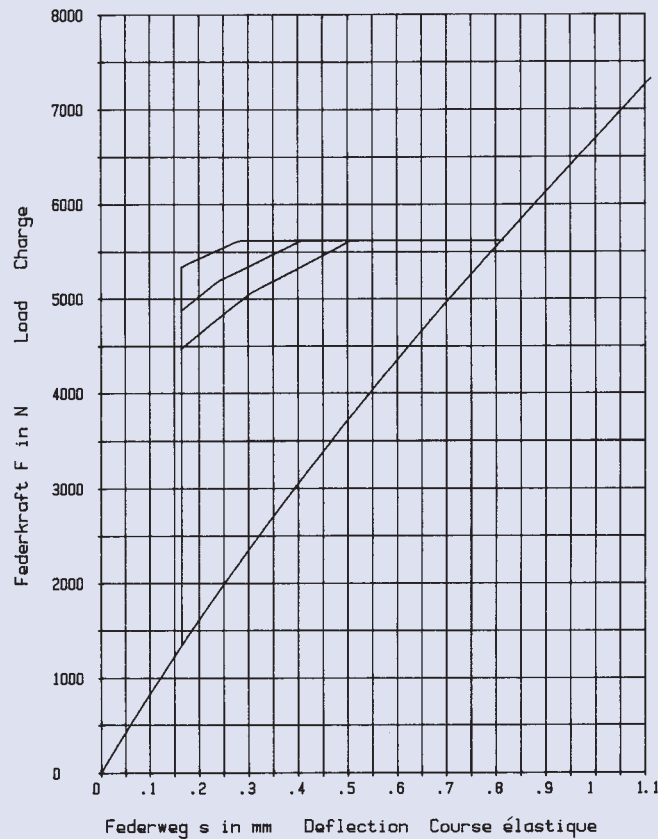
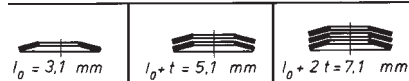


40 x 20,4 x 2,0

GR 2

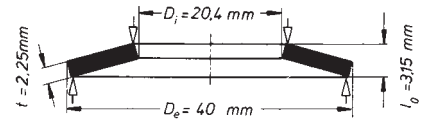
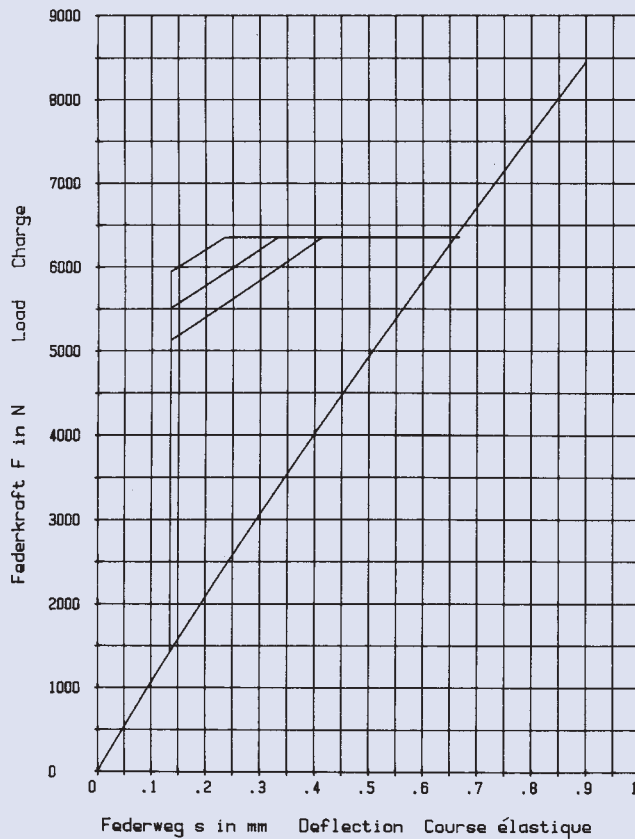


$h_0 = 1,1 \text{ mm}$        $D_e / D_i = 1,96$   
 $t = 2,0 \text{ mm}$        $D_e / t = 20$   
 $h_0 / t = 0,55$        $m = 14,597 \text{ g}$

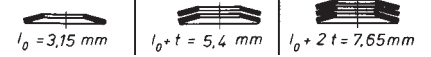


**40 x 20,4 x 2,25**

**GR 2, DIN 2093 – A 40**

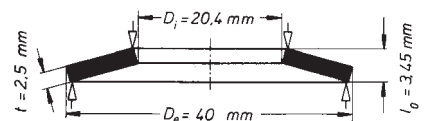
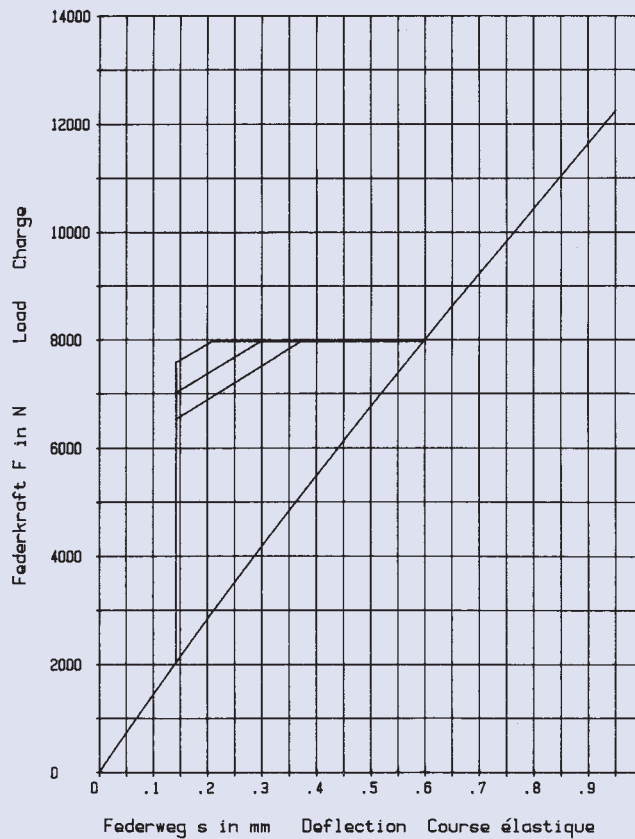


$$\begin{aligned}
 h_0 &= 0,9 \text{ mm} & D_e/D_i &= 1,96 \\
 t &= 2,25 \text{ mm} & D_e/t &= 17,777 \\
 h_0/t &= 0,4 & m &= 16,422 \text{ g}
 \end{aligned}$$

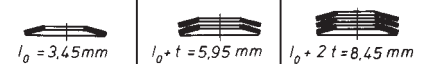


**40 x 20,4 x 2,5**

**GR 2**

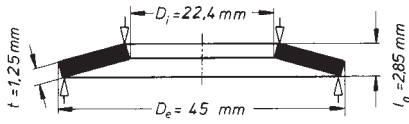


$$\begin{aligned}
 h_0 &= 0,95 \text{ mm} & D_e/D_i &= 1,96 \\
 t &= 2,5 \text{ mm} & D_e/t &= 16 \\
 h_0/t &= 0,38 & m &= 18,246 \text{ g}
 \end{aligned}$$

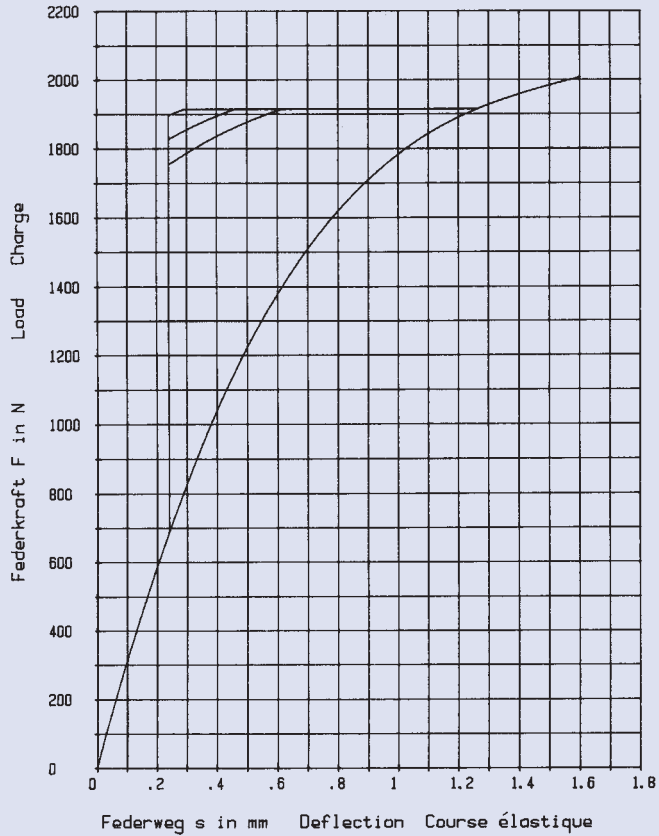
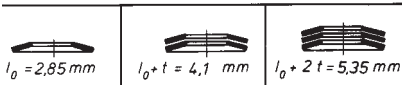


45 x 22,4 x 1,25

GR 2, DIN 2093 – C 45

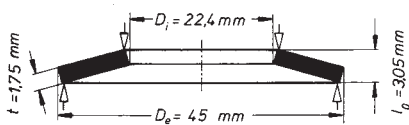


$h_0 = 1,6 \text{ mm}$        $D_e / D_i = 2,008$   
 $t = 1,25 \text{ mm}$        $D_e / t = 36$   
 $h_0 / t = 1,28$        $m = 11,739 \text{ g}$

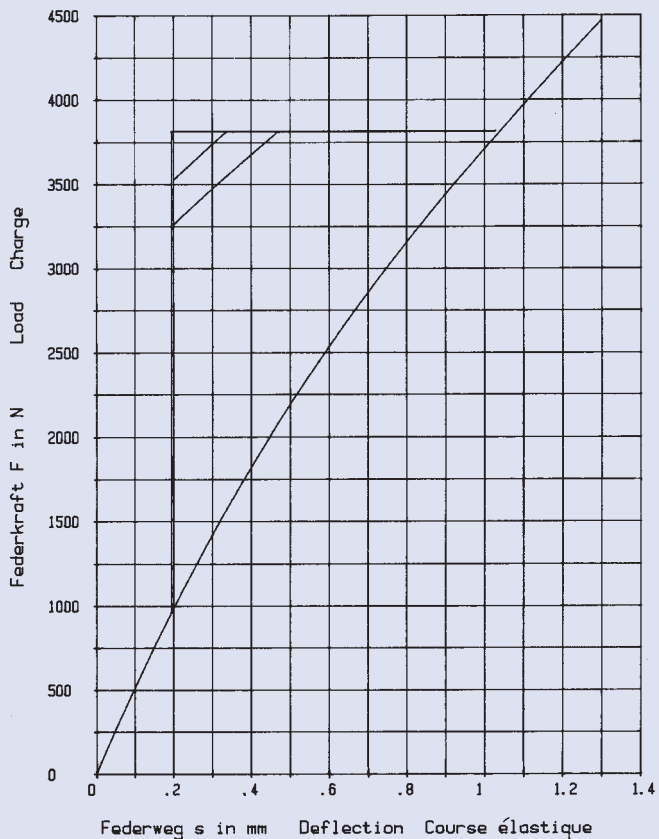
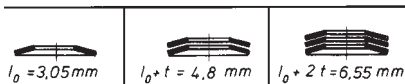


45 x 22,4 x 1,75

GR 2, DIN 2093 – B 45

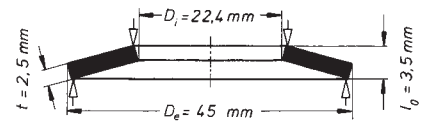
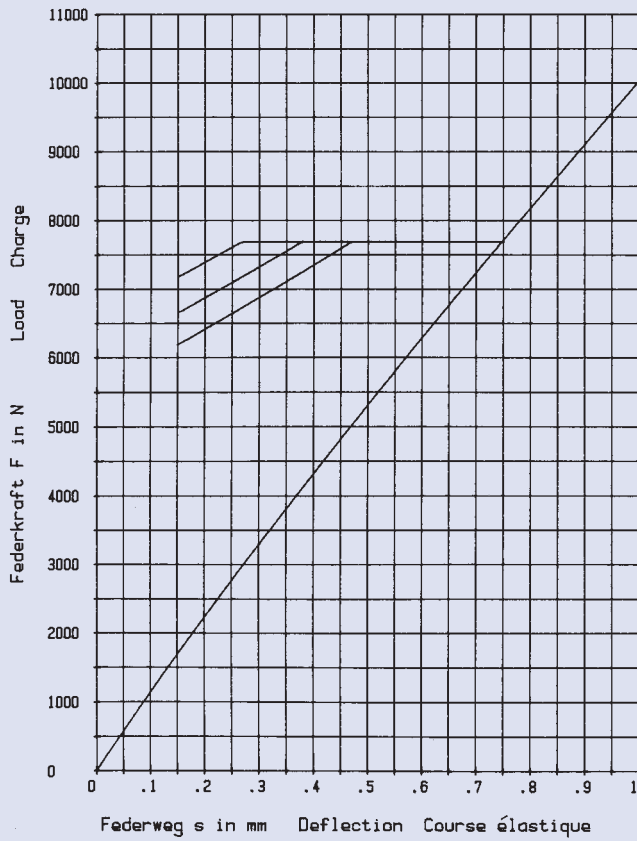


$h_0 = 1,3 \text{ mm}$        $D_e / D_i = 2,008$   
 $t = 1,75 \text{ mm}$        $D_e / t = 25,714$   
 $h_0 / t = 0,742$        $m = 16,434 \text{ g}$

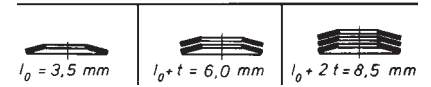


45 x 22,4 x 2,5

GR 2, DIN 2093 – A 45

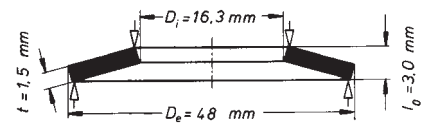
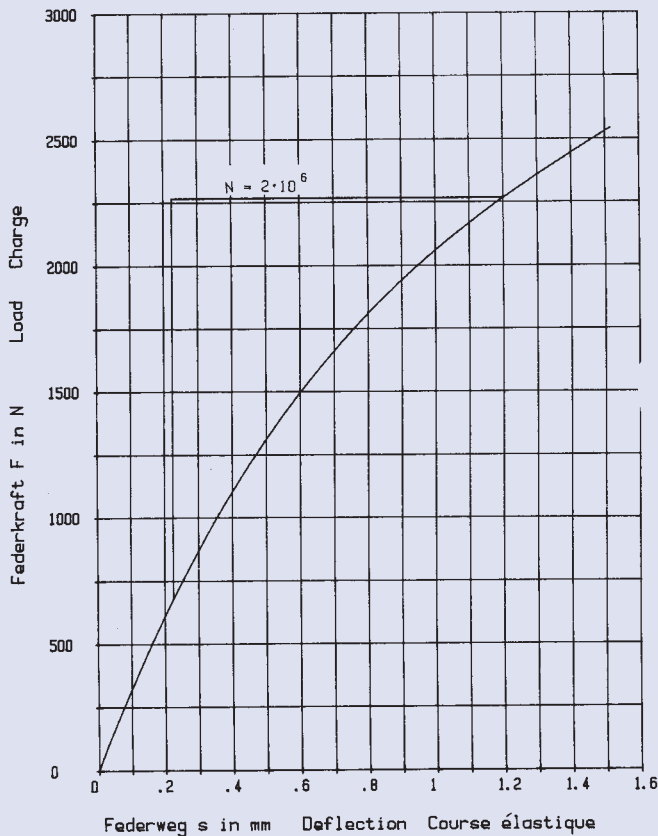


$h_0 = 1,0 \text{ mm}$        $D_e/D_i = 2,008$   
 $t = 2,5 \text{ mm}$        $D_e/t = 18$   
 $h_0/t = 0,4$        $m = 23,478 \text{ g}$

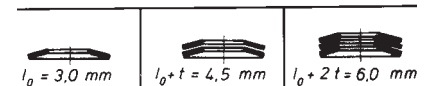


48 x 16,3 x 1,5

GR 2

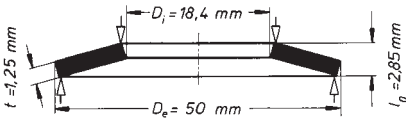


$h_0 = 1,5 \text{ mm}$        $D_e/D_i = 2,944$   
 $t = 1,5 \text{ mm}$        $D_e/t = 32$   
 $h_0/t = 1,0$        $m = 18,85 \text{ g}$

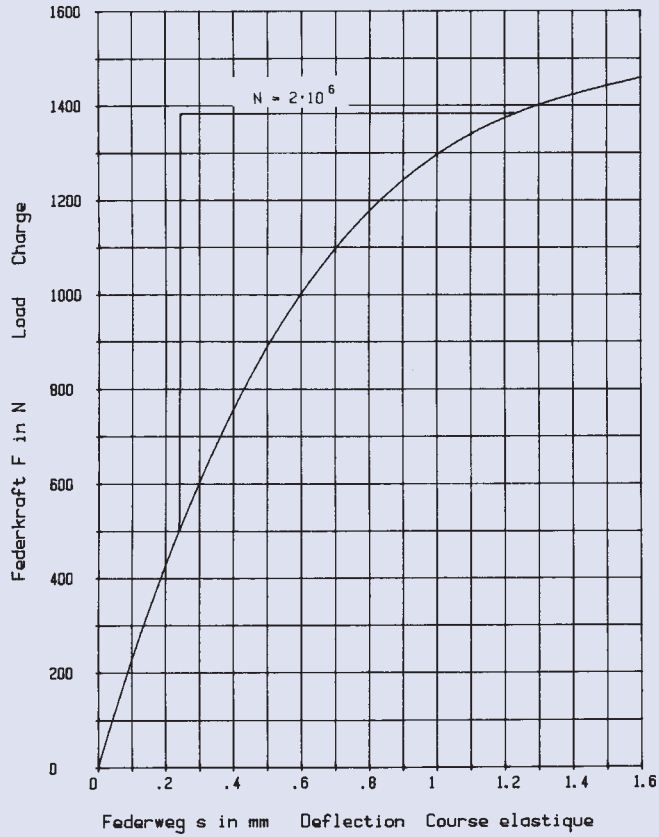
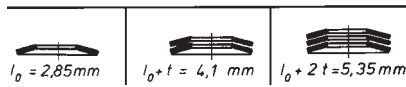


50 x 18,4 x 1,25

GR 2

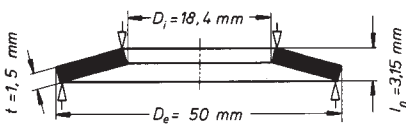


$h_0 = 1,6 \text{ mm}$        $D_e / D_i = 2,717$   
 $t = 1,25 \text{ mm}$        $D_e / t = 40$   
 $h_0 / t = 1,28$        $m = 16,657 \text{ g}$

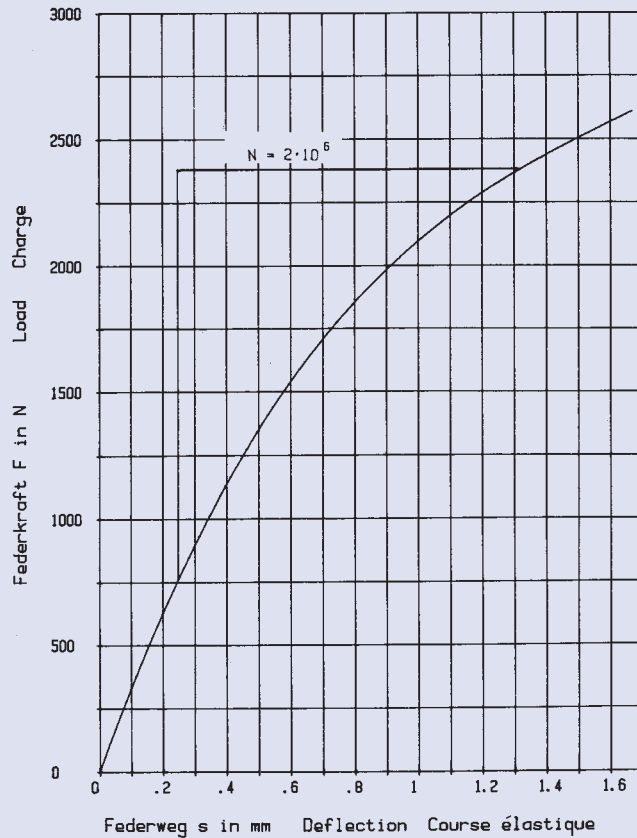
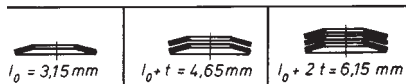


50 x 18,4 x 1,5

GR 2

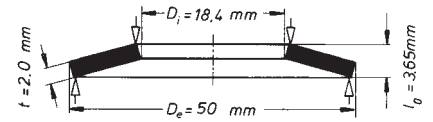
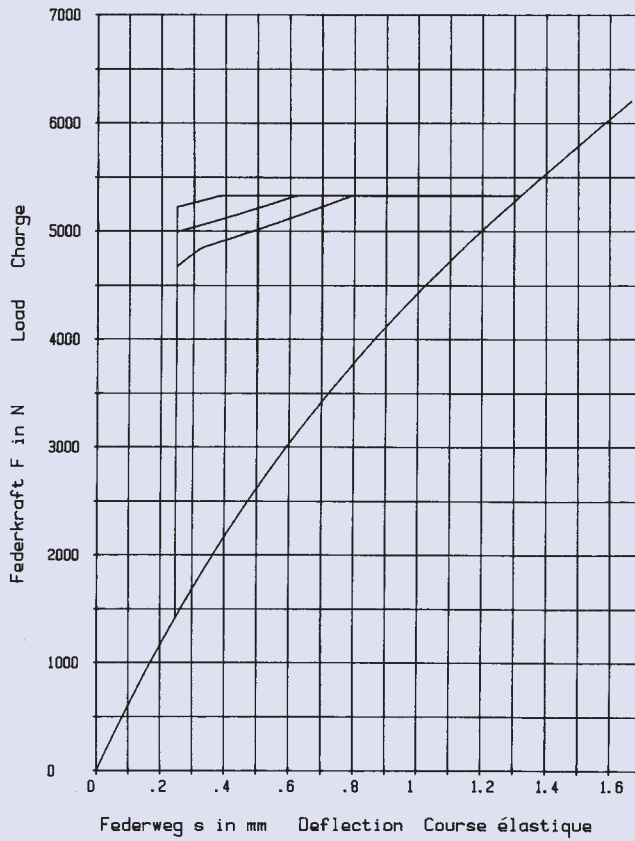


$h_0 = 1,65 \text{ mm}$        $D_e / D_i = 2,717$   
 $t = 1,5 \text{ mm}$        $D_e / t = 33,333$   
 $h_0 / t = 1,1$        $m = 19,988 \text{ g}$



## 50 x 18,4 x 2,0

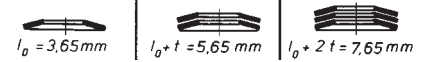
GR 2



$$h_0 = 1,65 \text{ mm} \quad D_e / D_i = 2,717$$

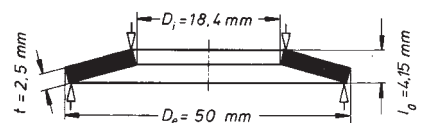
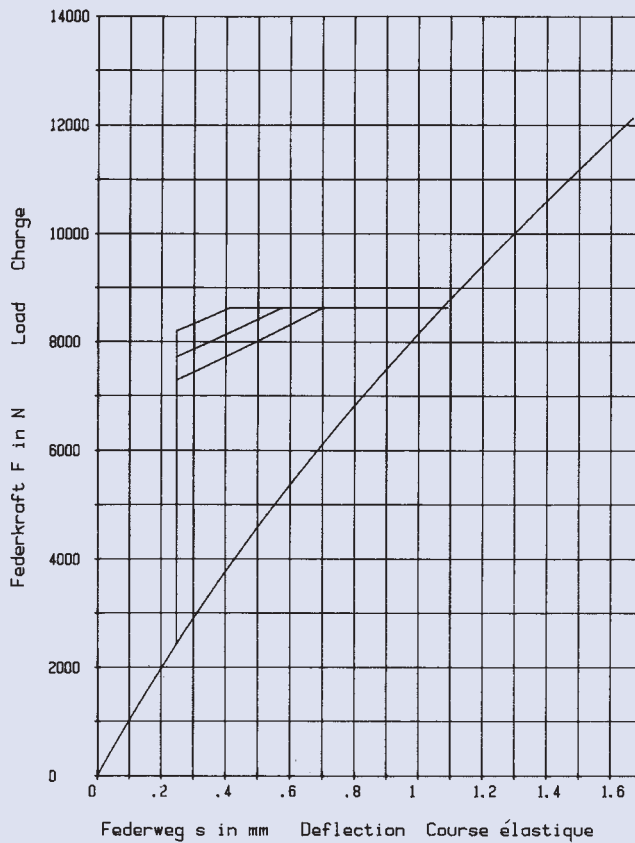
$$t = 2,0 \text{ mm} \quad D_e / t = 25$$

$$h_0 / t = 0,825 \quad m = 26,651 \text{ g}$$



## 50 x 18,4 x 2,5

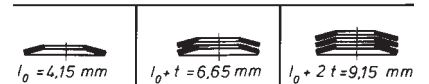
GR 2



$$h_0 = 1,65 \text{ mm} \quad D_e / D_i = 2,717$$

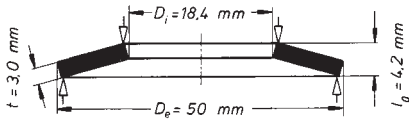
$$t = 2,5 \text{ mm} \quad D_e / t = 20$$

$$h_0 / t = 0,66 \quad m = 33,314 \text{ g}$$

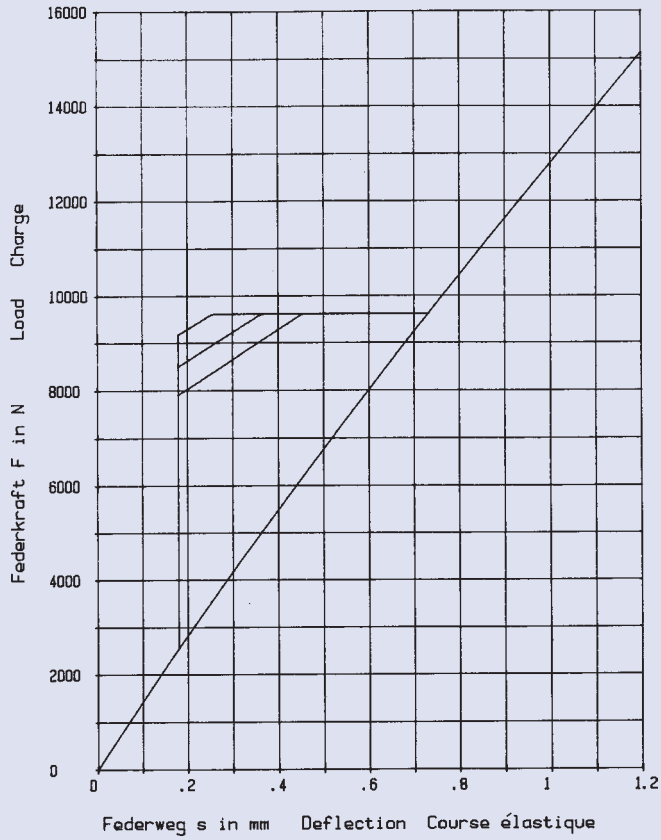
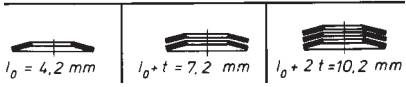


50 x 18,4 x 3,0

GR 2

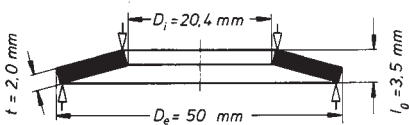


$h_0 = 1,2 \text{ mm}$        $D_e / D_i = 2,717$   
 $t = 3,0 \text{ mm}$        $D_e / t = 16,666$   
 $h_0 / t = 0,4$        $m = 39,977 \text{ g}$

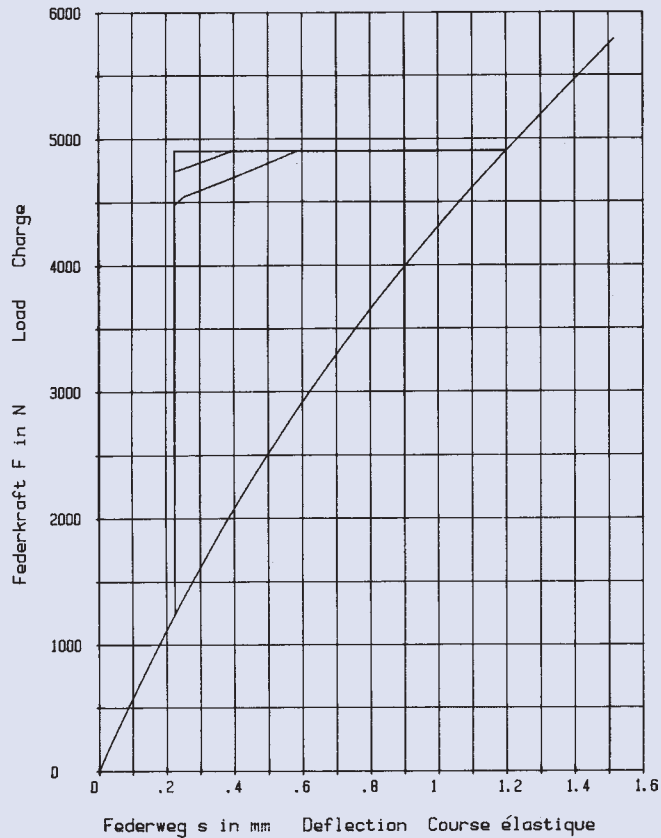
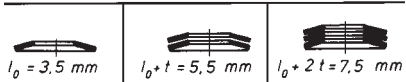


50 x 20,4 x 2,0

GR 2



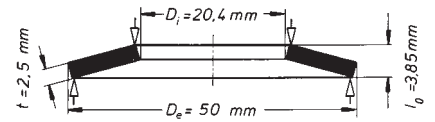
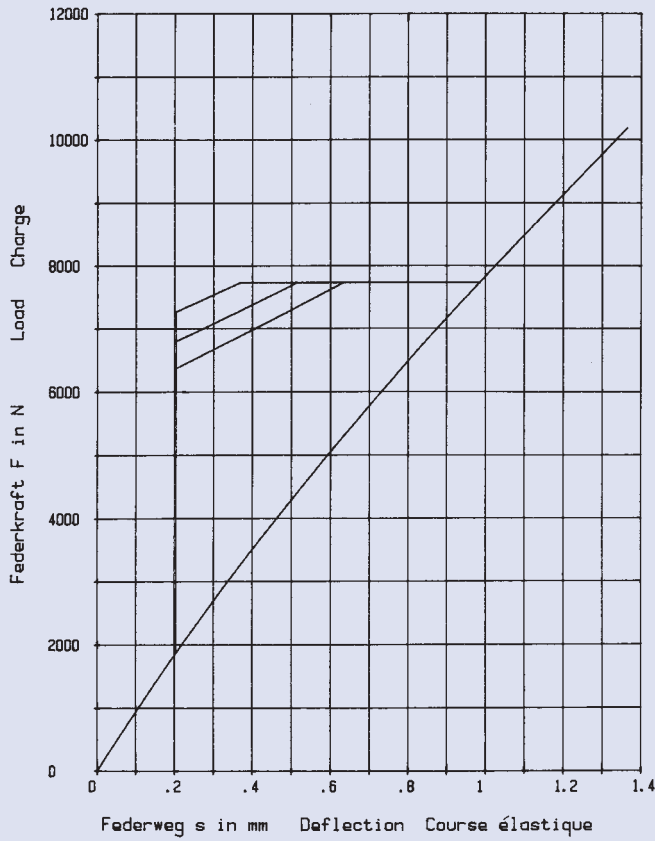
$h_0 = 1,5 \text{ mm}$        $D_e / D_i = 2,45$   
 $t = 2,0 \text{ mm}$        $D_e / t = 25$   
 $h_0 / t = 0,75$        $m = 25,695 \text{ g}$





50 x 20,4 x 2,5

GR 2

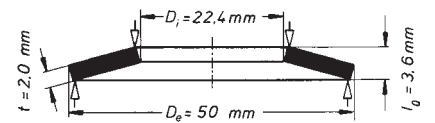
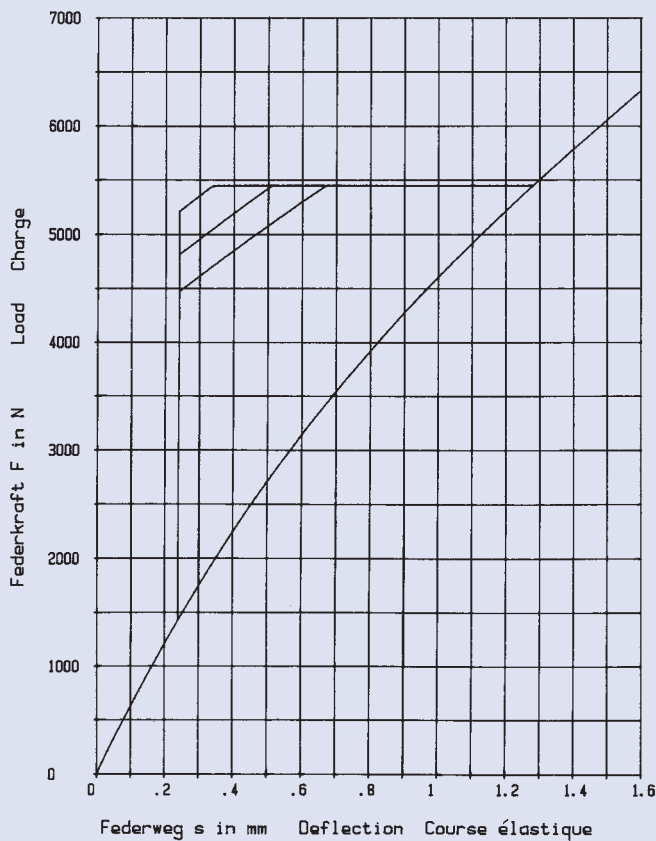


$h_0 = 1,35 \text{ mm}$        $D_e / D_i = 2,45$   
 $t = 2,5 \text{ mm}$        $D_e / t = 20$   
 $h_0 / t = 0,54$        $m = 32,118 \text{ g}$

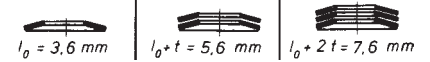


50 x 22,4 x 2,0

GR 2

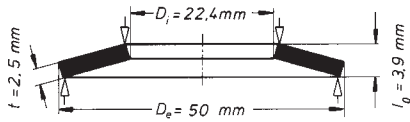


$h_0 = 1,6 \text{ mm}$        $D_e / D_i = 2,232$   
 $t = 2,0 \text{ mm}$        $D_e / t = 25$   
 $h_0 / t = 0,8$        $m = 24,639 \text{ g}$

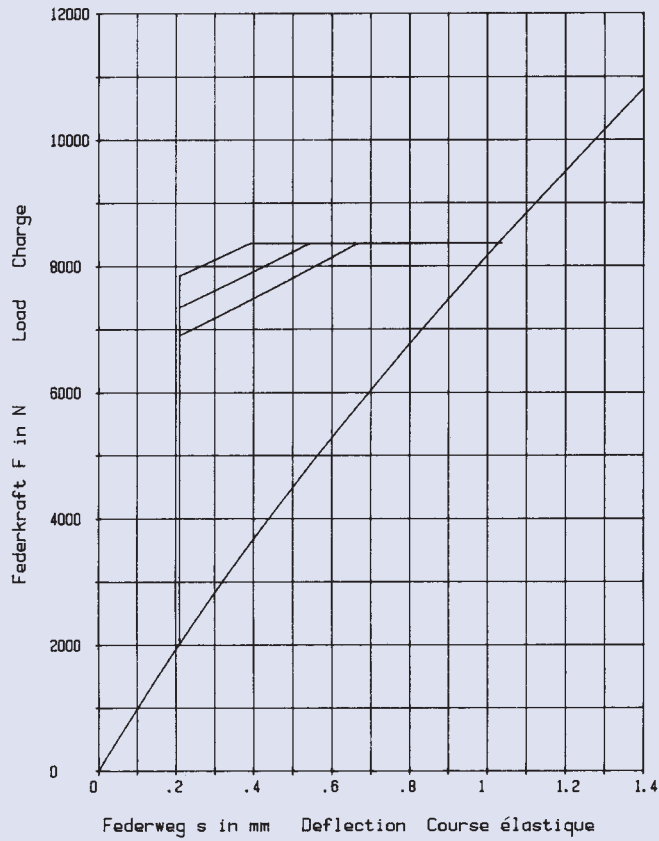
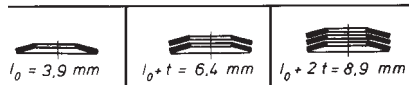


50 x 22,4 x 2,5

GR 2

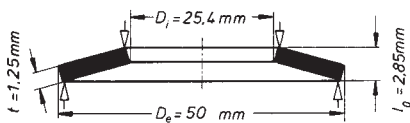


$h_0 = 1,4 \text{ mm}$        $D_e/D_i = 2,232$   
 $t = 2,5 \text{ mm}$        $D_e/t = 20$   
 $h_0/t = 0,56$        $m = 30,8 \text{ g}$

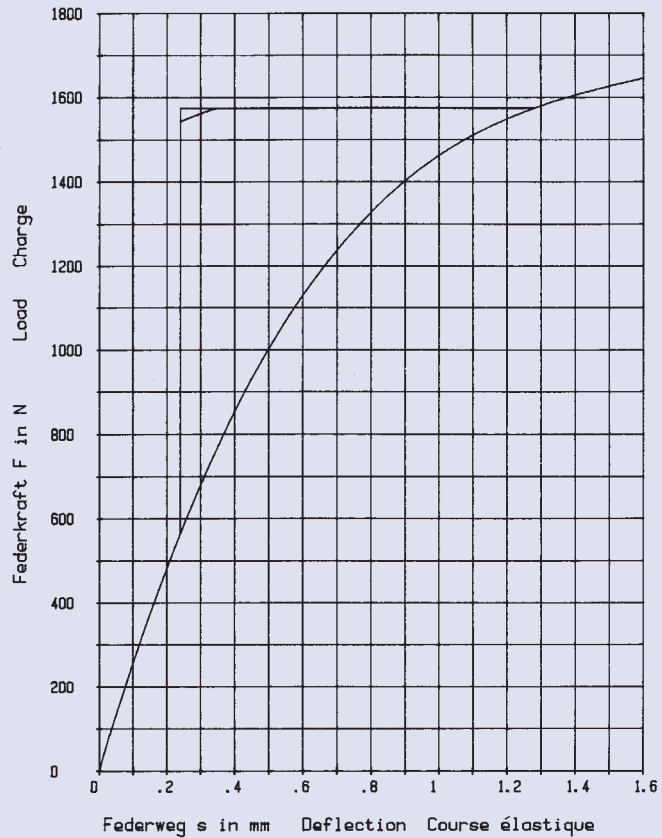
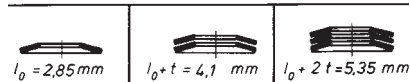


50 x 25,4 x 1,25

GR 2, DIN 2093 – C 50

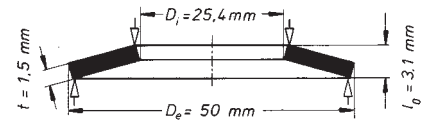
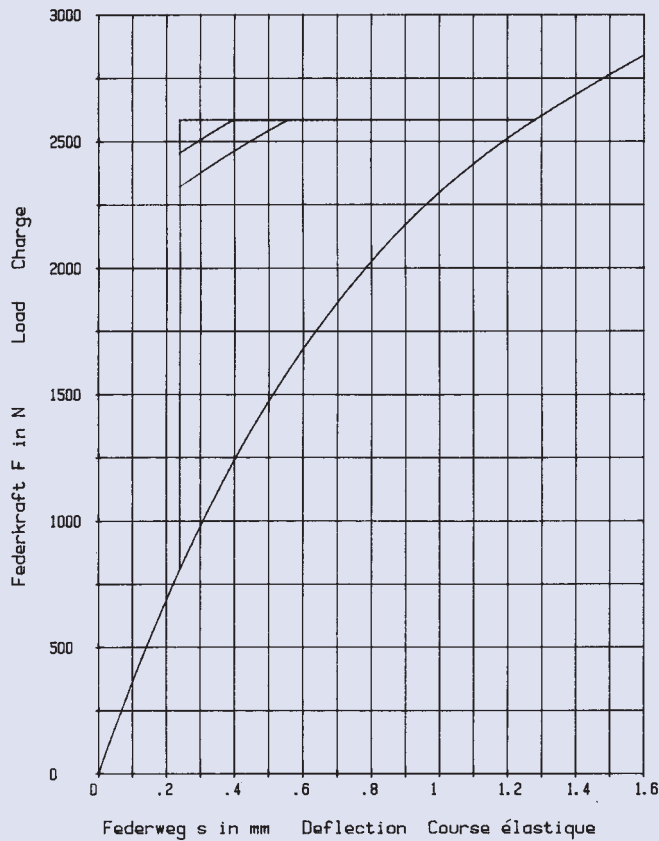


$h_0 = 1,6 \text{ mm}$        $D_e/D_i = 1,968$   
 $t = 1,25 \text{ mm}$        $D_e/t = 40$   
 $h_0/t = 1,28$        $m = 14,294 \text{ g}$

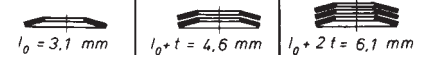


50 x 25,4 x 1,5

GR 2

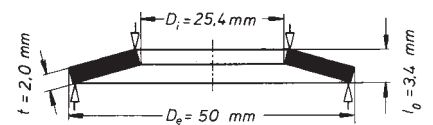
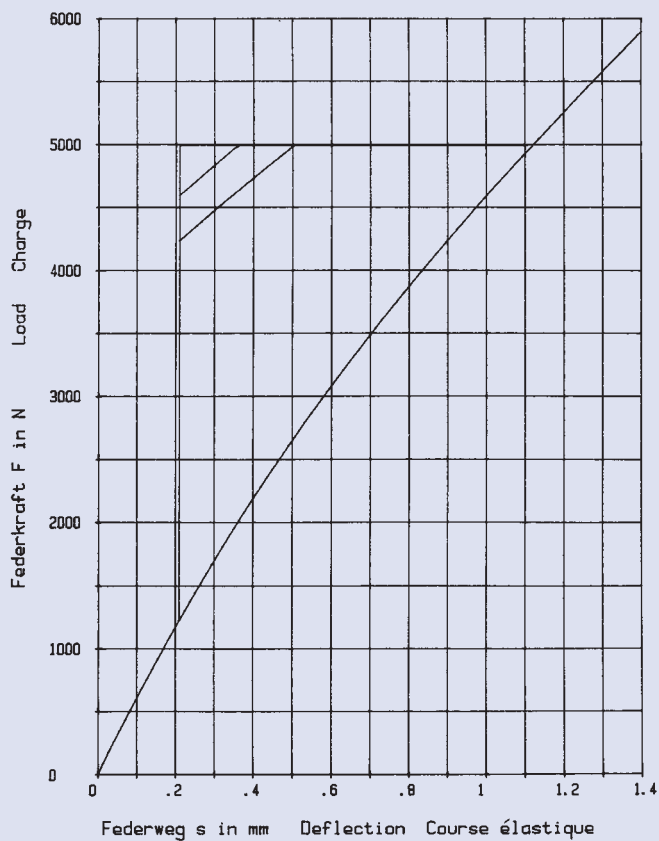


$h_0 = 1.6 \text{ mm}$        $D_e/D_i = 1.968$   
 $t = 1.5 \text{ mm}$        $D_e/t = 33.333$   
 $h_0/t = 1.066$        $m = 17.153 \text{ g}$

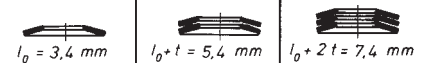


50 x 25,4 x 2,0

GR 2, DIN 2093 – B 50

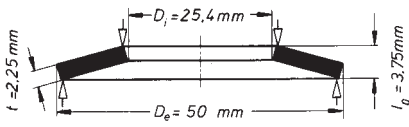


$h_0 = 1.4 \text{ mm}$        $D_e/D_i = 1.968$   
 $t = 2.0 \text{ mm}$        $D_e/t = 25$   
 $h_0/t = 0.7$        $m = 22.871 \text{ g}$

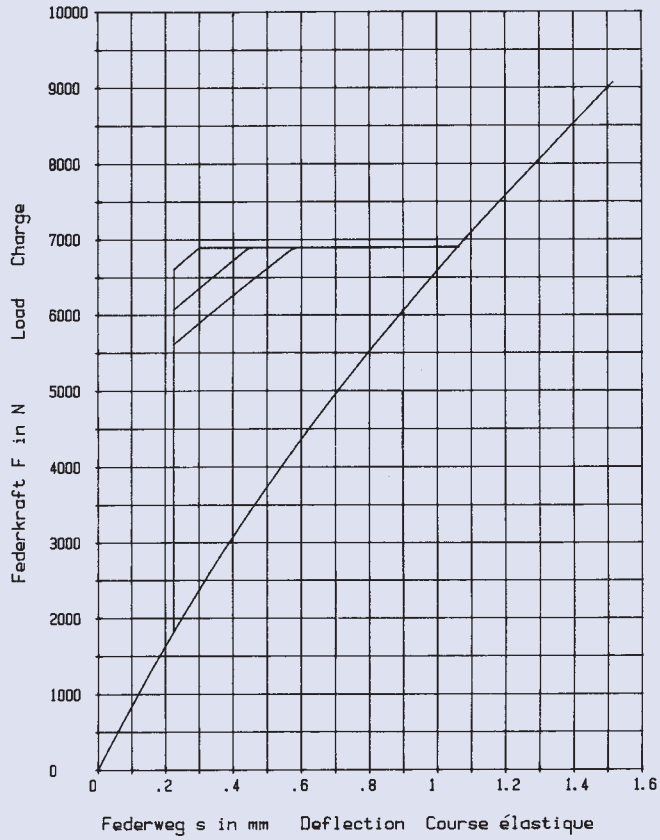
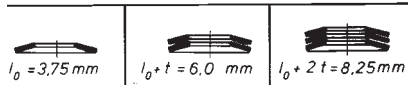


50 x 25,4 x 2,25

GR 2

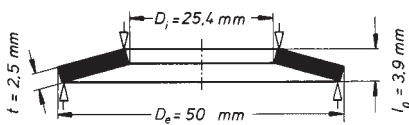


$h_0 = 1,5 \text{ mm}$        $D_e/D_i = 1,968$   
 $t = 2,25 \text{ mm}$        $D_e/t = 22,222$   
 $h_0/t = 0,666$        $m = 25,73 \text{ g}$

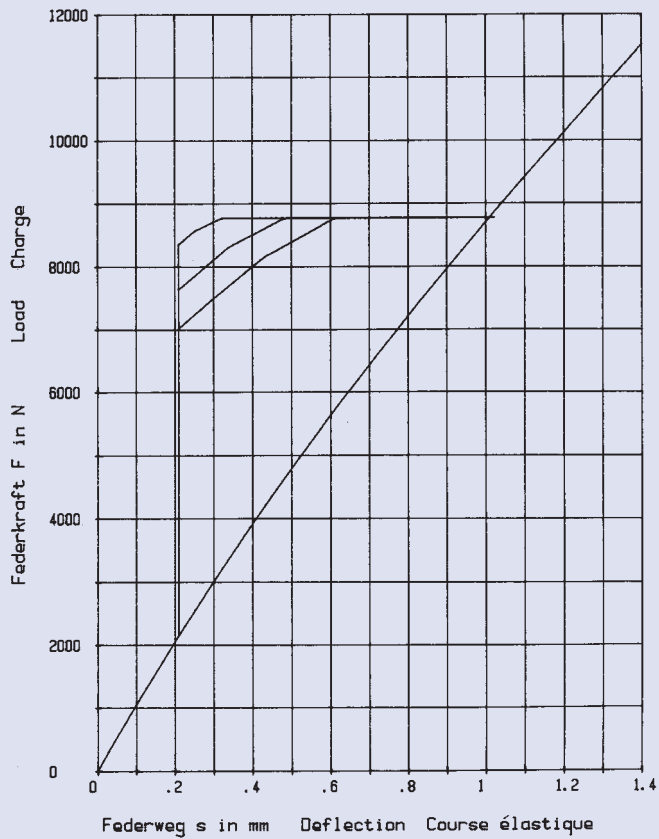
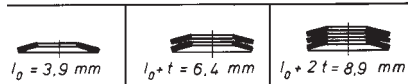


50 x 25,4 x 2,5

GR 2

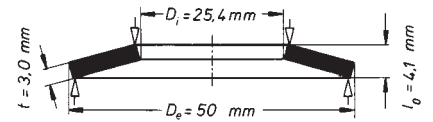
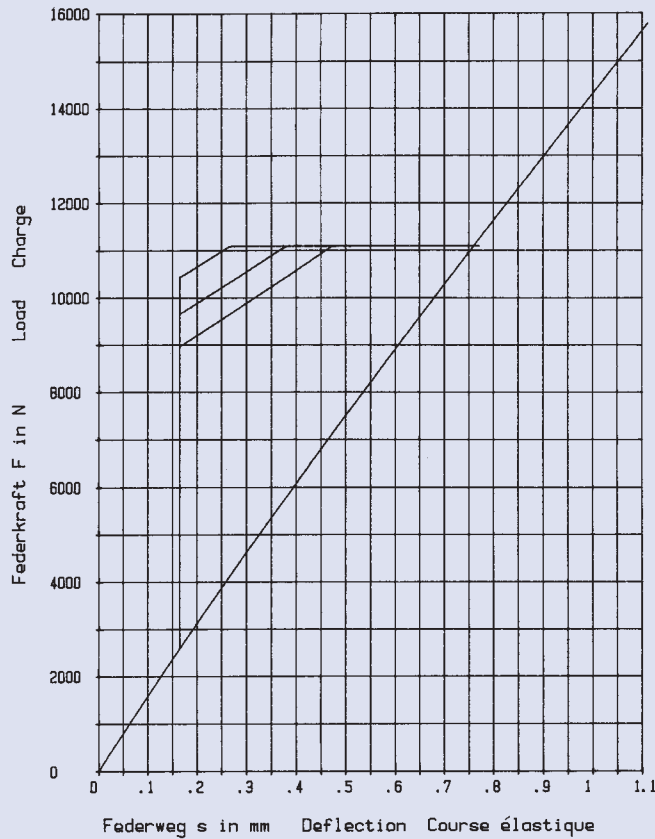


$h_0 = 1,4 \text{ mm}$        $D_e/D_i = 1,968$   
 $t = 2,5 \text{ mm}$        $D_e/t = 20$   
 $h_0/t = 0,56$        $m = 28,589 \text{ g}$

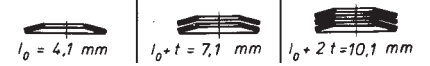


**50 x 25,4 x 3,0**

**GR 2, DIN 2093 – A 50**

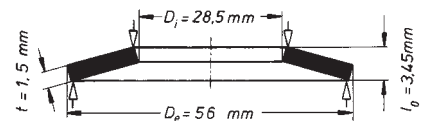
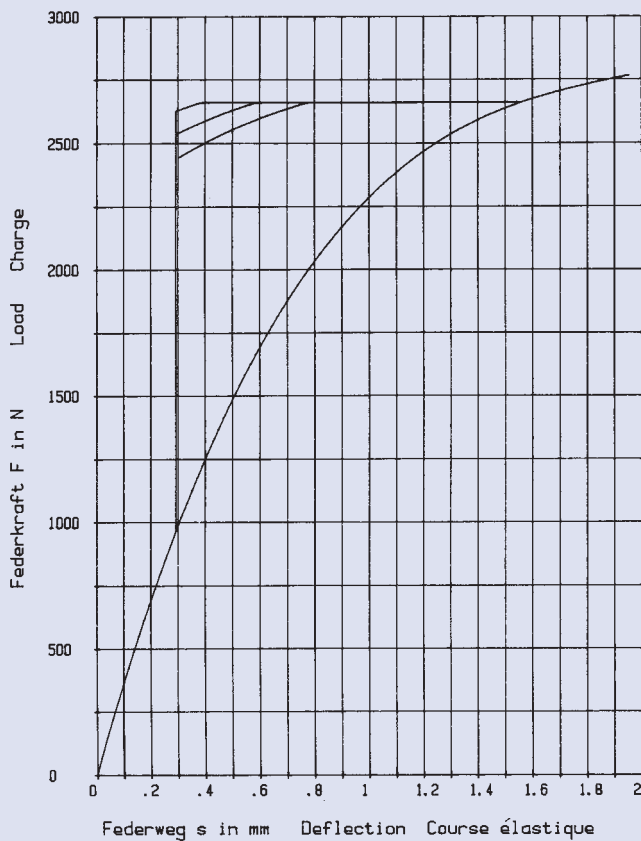


$h_0 = 1,1 \text{ mm}$      $D_e / D_i = 1,968$   
 $t = 3,0 \text{ mm}$      $D_e / t = 16,666$   
 $h_0 / t = 0,366$      $m = 34,306 \text{ g}$

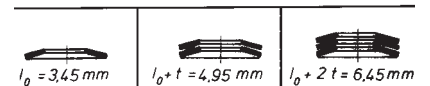


**56 x 28,5 x 1,5**

**GR 2, DIN 2093 – C 56**

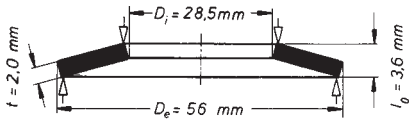


$h_0 = 1,95 \text{ mm}$      $D_e / D_i = 1,964$   
 $t = 1,5 \text{ mm}$      $D_e / t = 37,333$   
 $h_0 / t = 1,3$      $m = 21,489 \text{ g}$

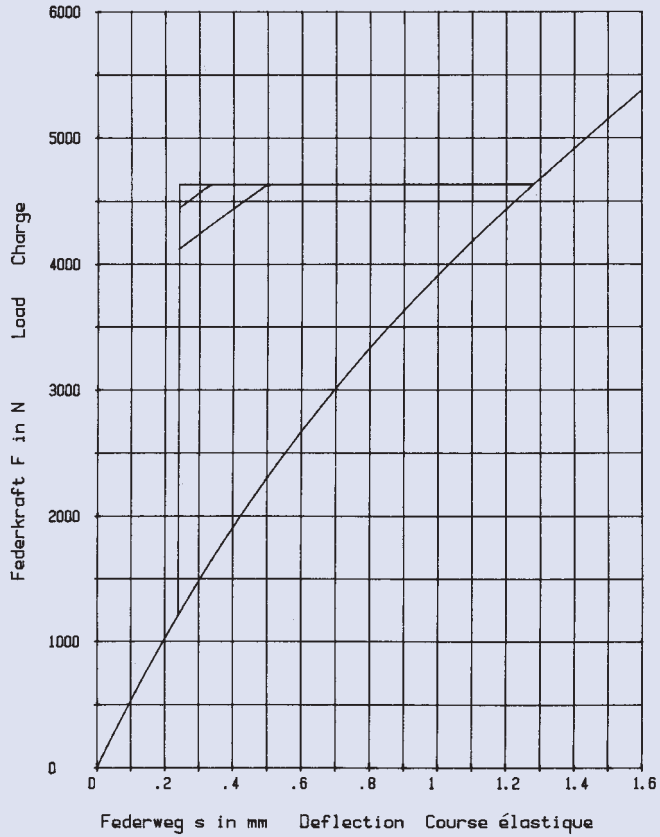
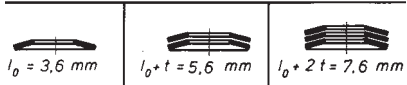


56 x 28,5 x 2,0

GR 2, DIN 2093 – B 56

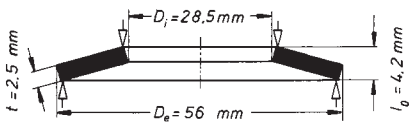


$h_0 = 1,6 \text{ mm}$        $D_e/D_i = 1,964$   
 $t = 2,0 \text{ mm}$        $D_e/t = 28$   
 $h_0/t = 0,8$        $m = 28,653 \text{ g}$

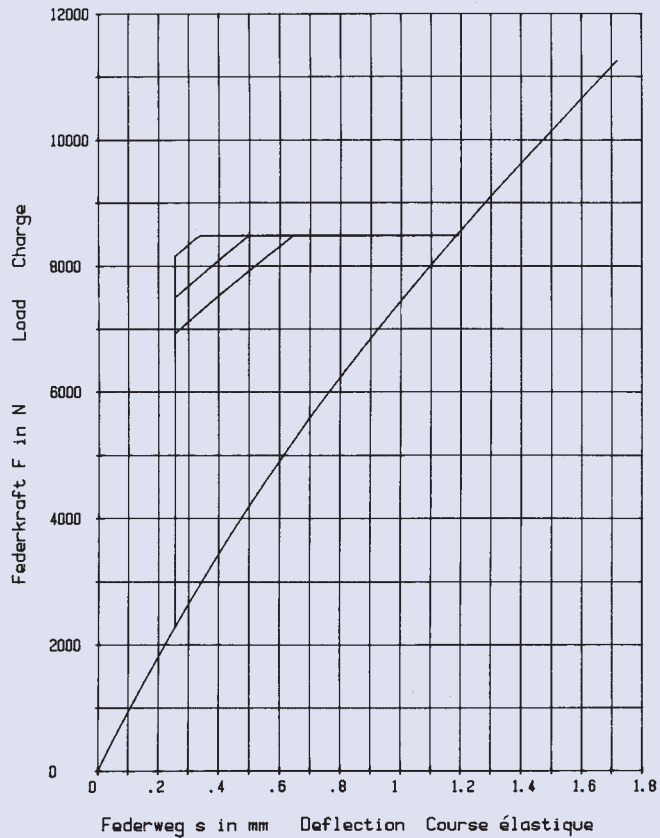
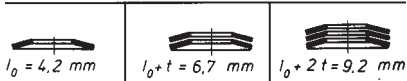


56 x 28,5 x 2,5

GR 2

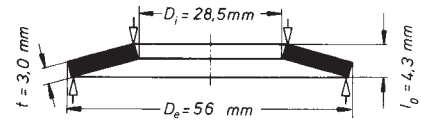
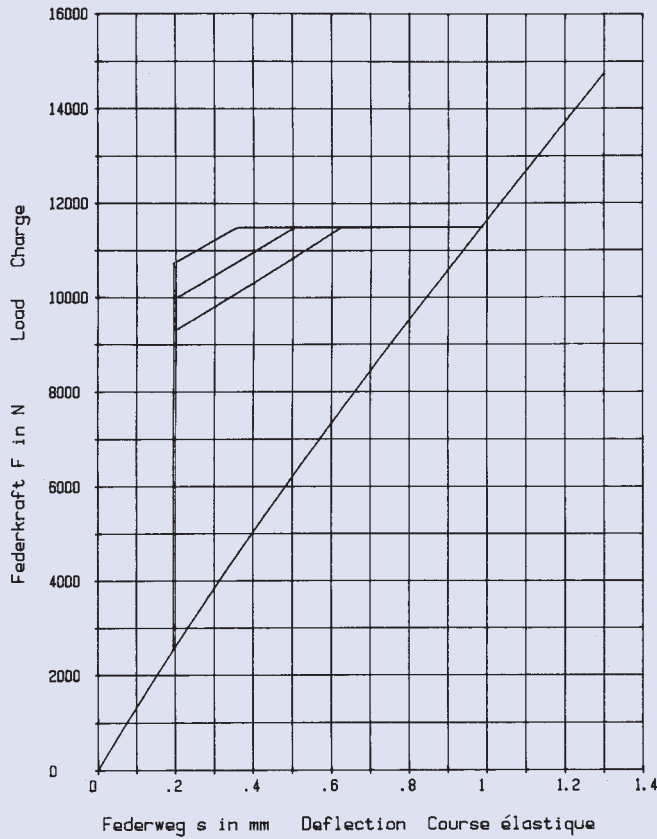


$h_0 = 1,7 \text{ mm}$        $D_e/D_i = 1,964$   
 $t = 2,5 \text{ mm}$        $D_e/t = 22,4$   
 $h_0/t = 0,68$        $m = 35,816 \text{ g}$



**56 x 28,5 x 3,0**

**GR 2, DIN 2093 – A 56**



$$h_0 = 1,3 \text{ mm} \quad D_e / D_1 = 1,964$$

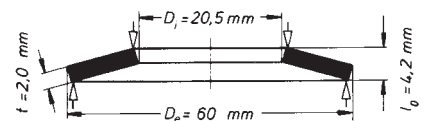
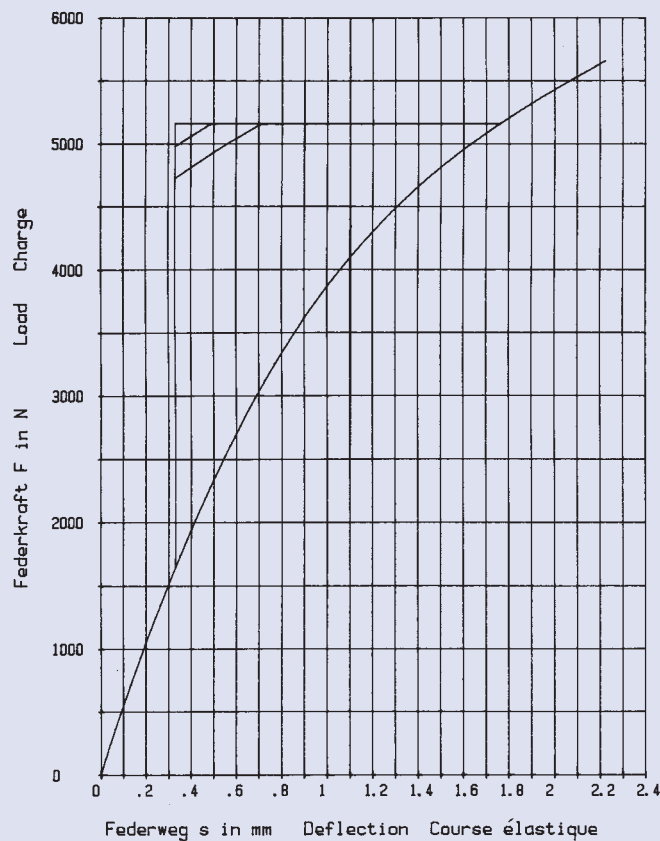
$$t = 3,0 \text{ mm} \quad D_e / t = 18,666$$

$$h_0 / t = 0,433 \quad m = 42,979 \text{ g}$$



**60 x 20,5 x 2,0**

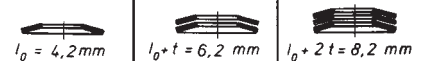
**GR 2**



$$h_0 = 2,2 \text{ mm} \quad D_e / D_1 = 2,926$$

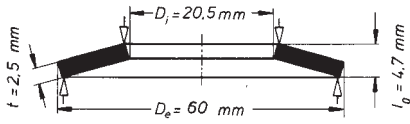
$$t = 2,0 \text{ mm} \quad D_e / t = 30$$

$$h_0 / t = 1,1 \quad m = 39,208 \text{ g}$$

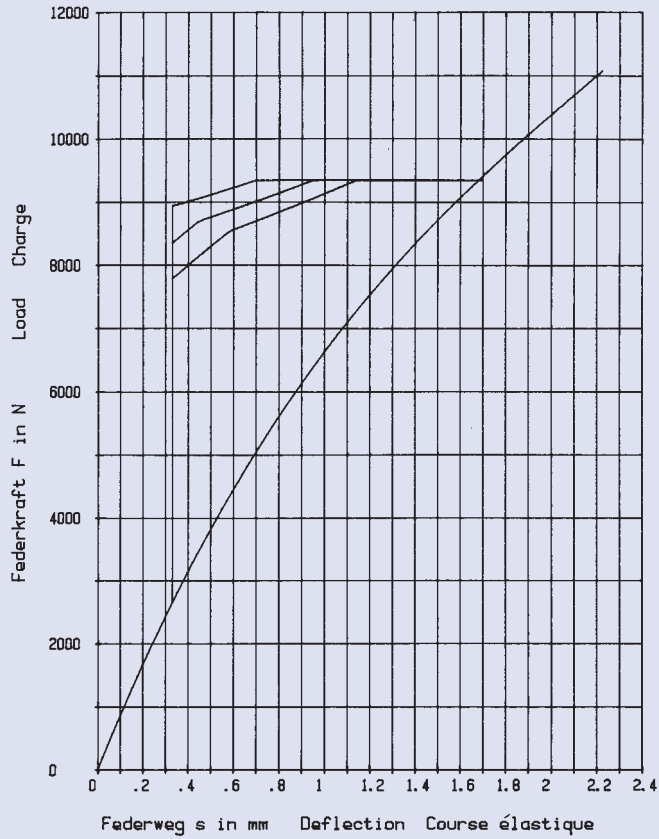
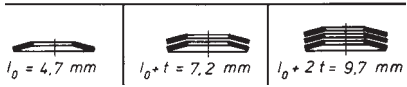


60 x 20,5 x 2,5

GR 2

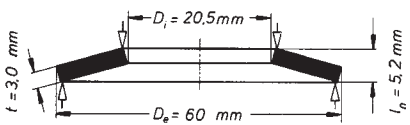


$h_0 = 2,2 \text{ mm}$        $D_e/D_i = 2,926$   
 $t = 2,5 \text{ mm}$        $D_e/t = 24$   
 $h_0/t = 0,88$        $m = 49,0 \text{ g}$

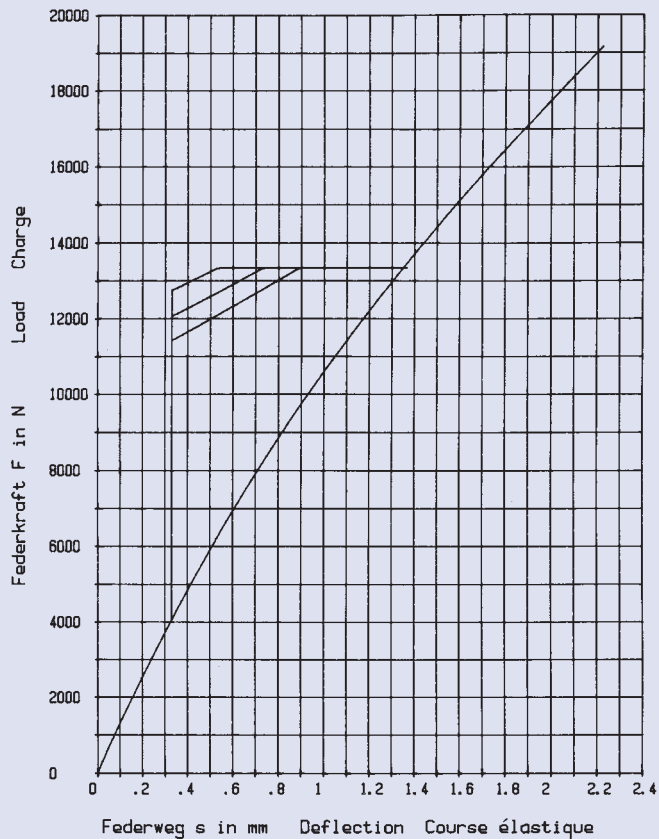
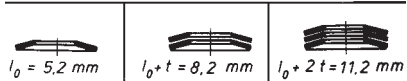


60 x 20,5 x 3,0

GR 2



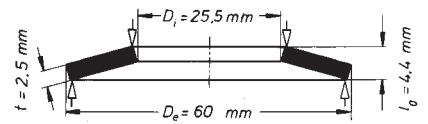
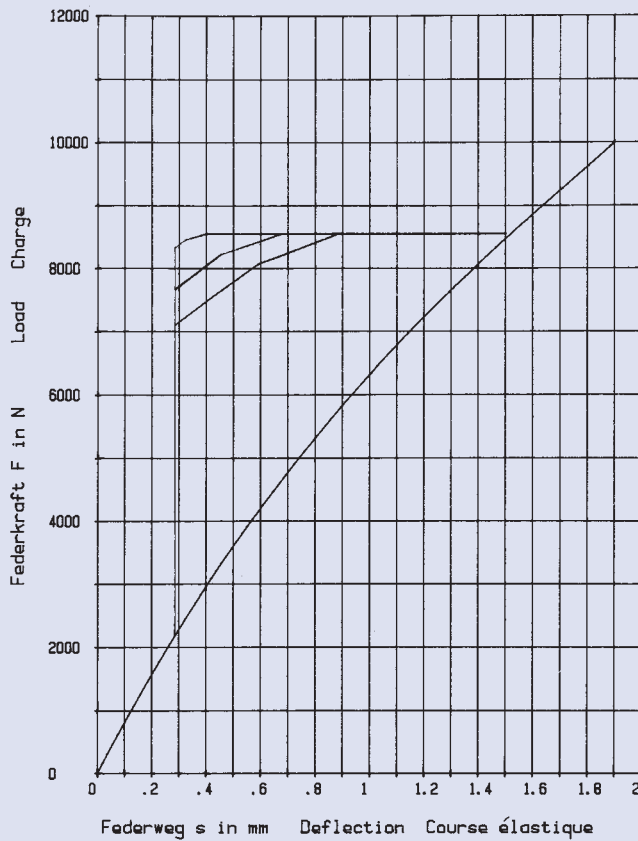
$h_0 = 2,2 \text{ mm}$        $D_e/D_i = 2,926$   
 $t = 3,0 \text{ mm}$        $D_e/t = 20$   
 $h_0/t = 0,733$        $m = 58,811 \text{ g}$





60 x 25,5 x 2,5

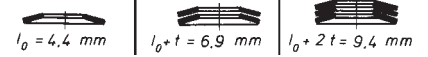
GR 2



$$h_0 = 1,9 \text{ mm} \quad D_e / D_i = 2,352$$

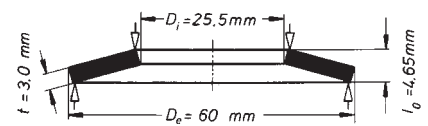
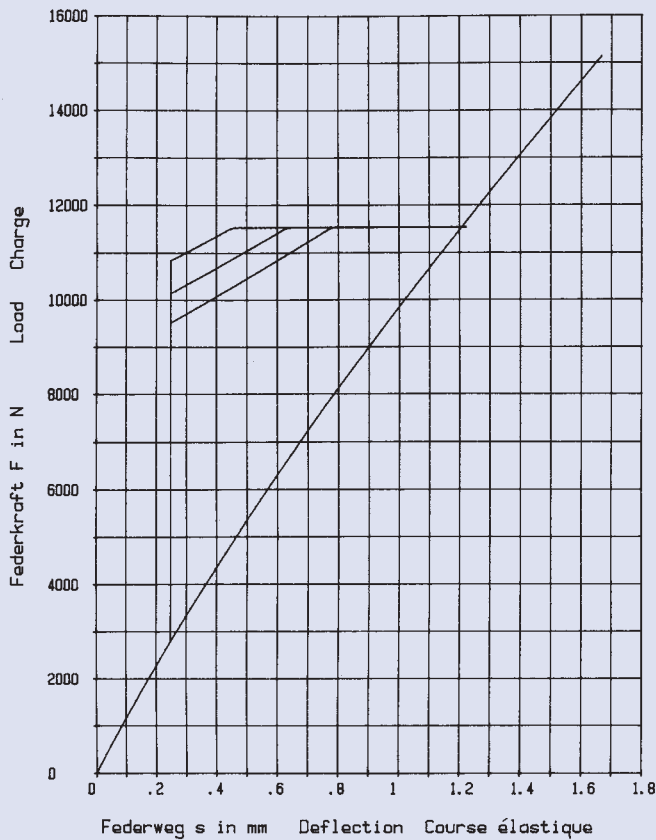
$$t = 2,5 \text{ mm} \quad D_e / t = 24$$

$$h_0 / t = 0,76 \quad m = 45,464 \text{ g}$$



60 x 25,5 x 3,0

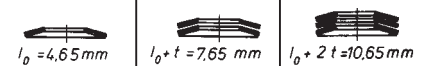
GR 2



$$h_0 = 1,65 \text{ mm} \quad D_e / D_i = 2,352$$

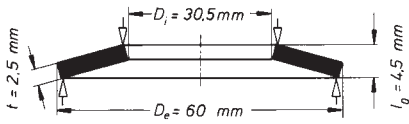
$$t = 3,0 \text{ mm} \quad D_e / t = 20$$

$$h_0 / t = 0,55 \quad m = 54,557 \text{ g}$$

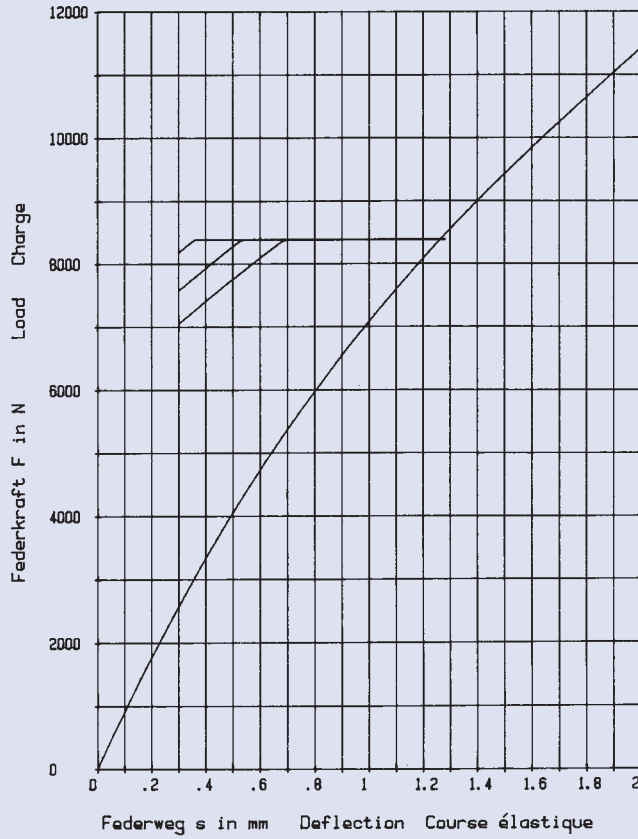
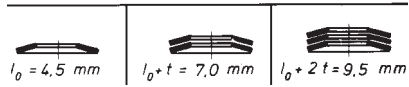


60 x 30,5 x 2,5

GR 2

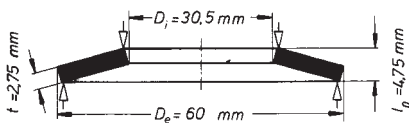


$h_0 = 2.0 \text{ mm}$        $D_e / D_1 = 1.967$   
 $t = 2.5 \text{ mm}$        $D_e / t = 24$   
 $h_0 / t = 0.8$        $m = 41.149 \text{ g}$

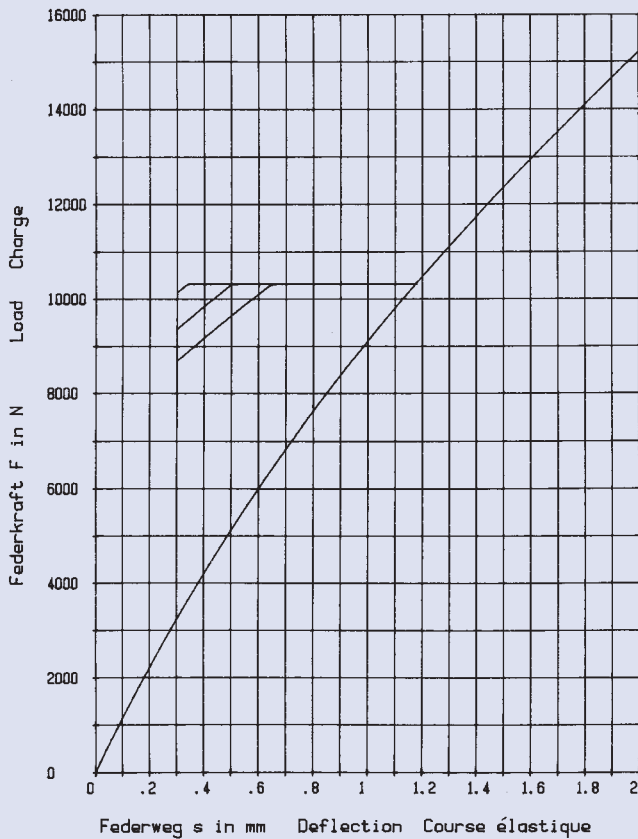
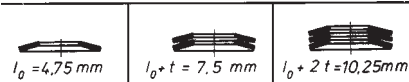


60 x 30,5 x 2,75

GR 2

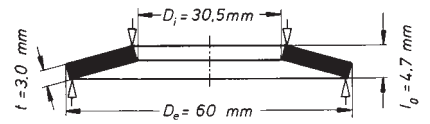
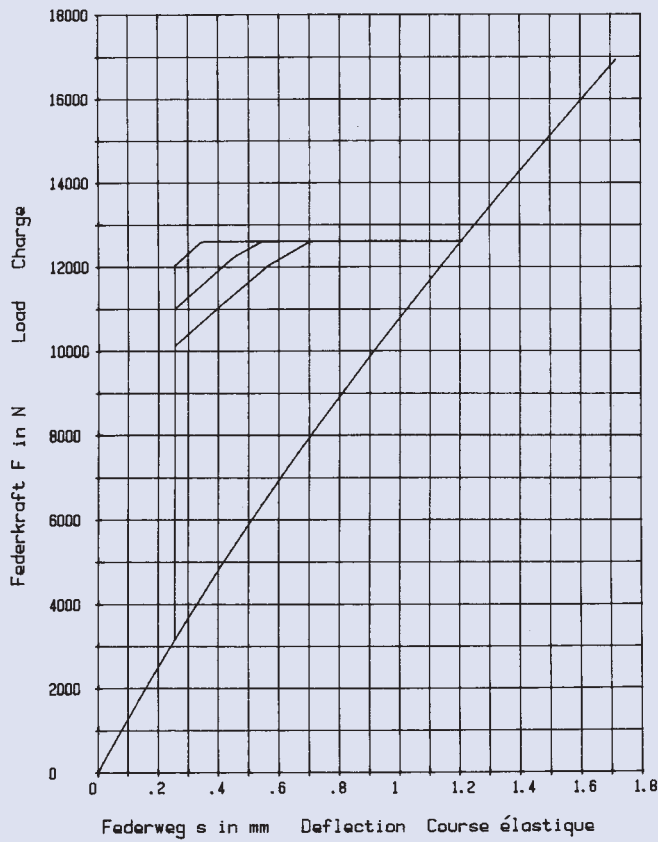


$h_0 = 2.0 \text{ mm}$        $D_e / D_1 = 1.967$   
 $t = 2.75 \text{ mm}$        $D_e / t = 21.818$   
 $h_0 / t = 0.727$        $m = 45.264 \text{ g}$



60 x 30,5 x 3,0

GR 2



$$h_0 = 1,7 \text{ mm} \quad D_e / D_i = 1,967$$

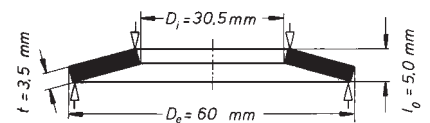
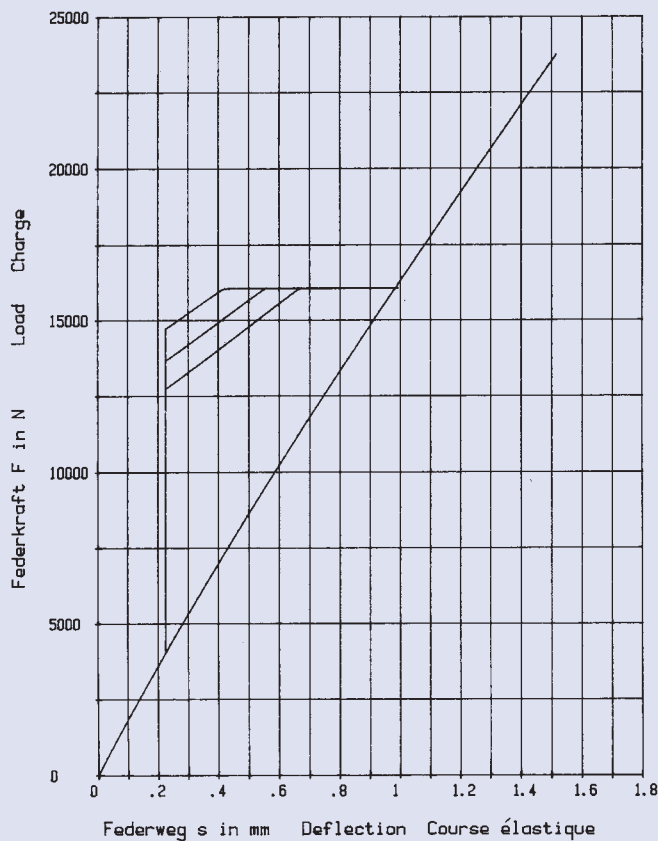
$$t = 3,0 \text{ mm} \quad D_e / t = 20$$

$$h_0 / t = 0,566 \quad m = 49,379 \text{ g}$$



60 x 30,5 x 3,5

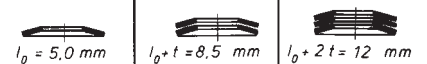
GR 2



$$h_0 = 1,5 \text{ mm} \quad D_e / D_i = 1,967$$

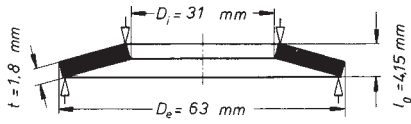
$$t = 3,5 \text{ mm} \quad D_e / t = 17,142$$

$$h_0 / t = 0,428 \quad m = 57,608 \text{ g}$$

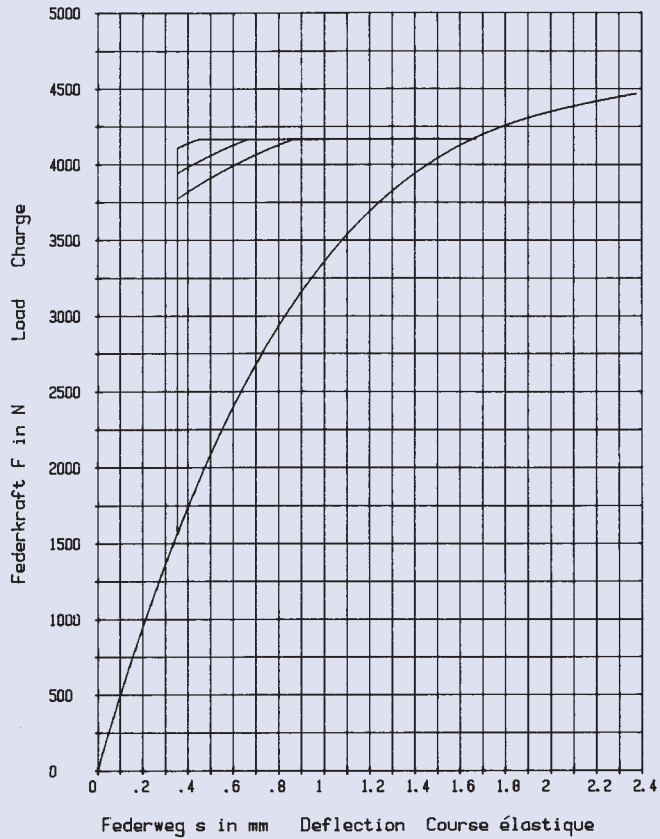
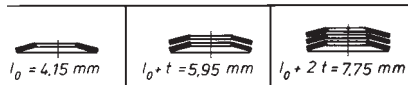


63 x 31 x 1,8

GR 2, DIN 2093 – C 63

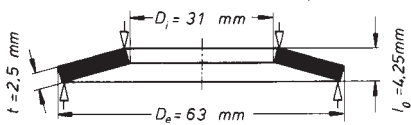


$h_0 = 2,35 \text{ mm}$        $D_e / D_i = 2,032$   
 $t = 1,8 \text{ mm}$        $D_e / t = 35$   
 $h_0 / t = 1,305$        $m = 33,381 \text{ g}$

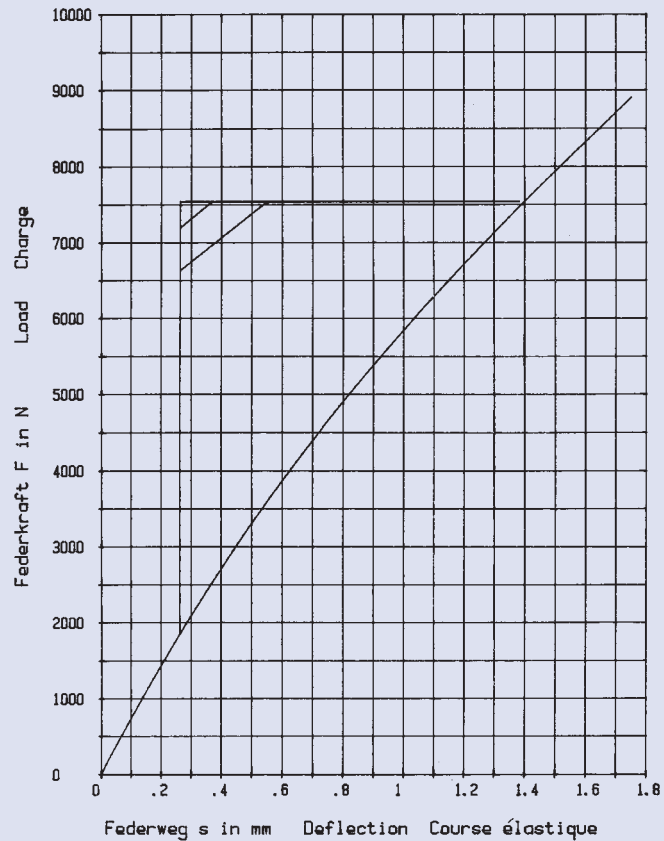
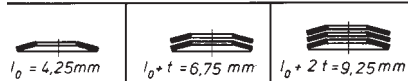


63 x 31 x 2,5

GR 2, DIN 2093 – B 63

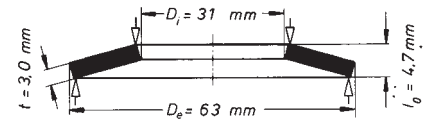
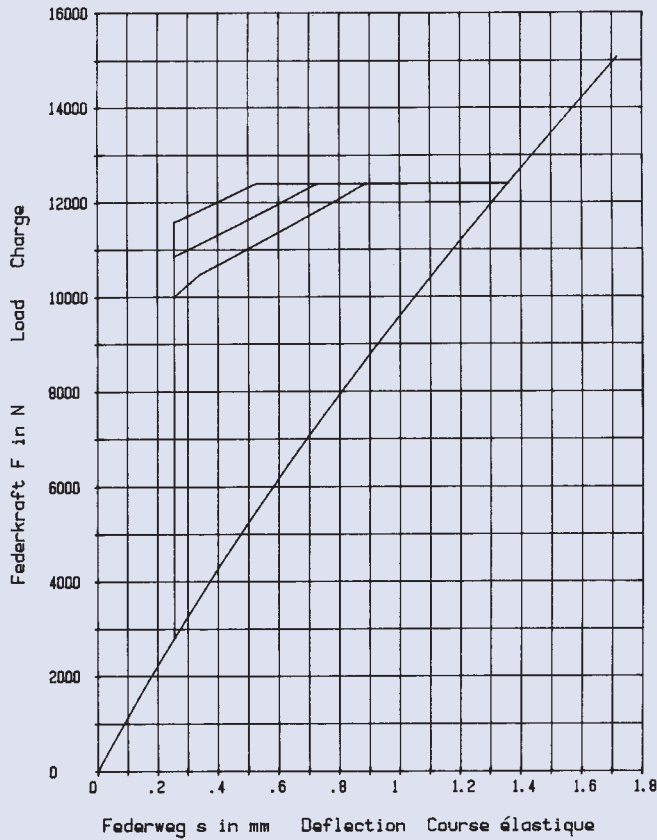


$h_0 = 1,75 \text{ mm}$        $D_e / D_i = 2,032$   
 $t = 2,5 \text{ mm}$        $D_e / t = 25,2$   
 $h_0 / t = 0,7$        $m = 46,362 \text{ g}$



## 63 x 31 x 3,0

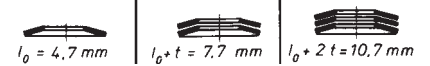
GR 2



$$h_0 = 1.7 \text{ mm} \quad D_e/D_1 = 2.032$$

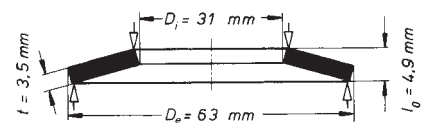
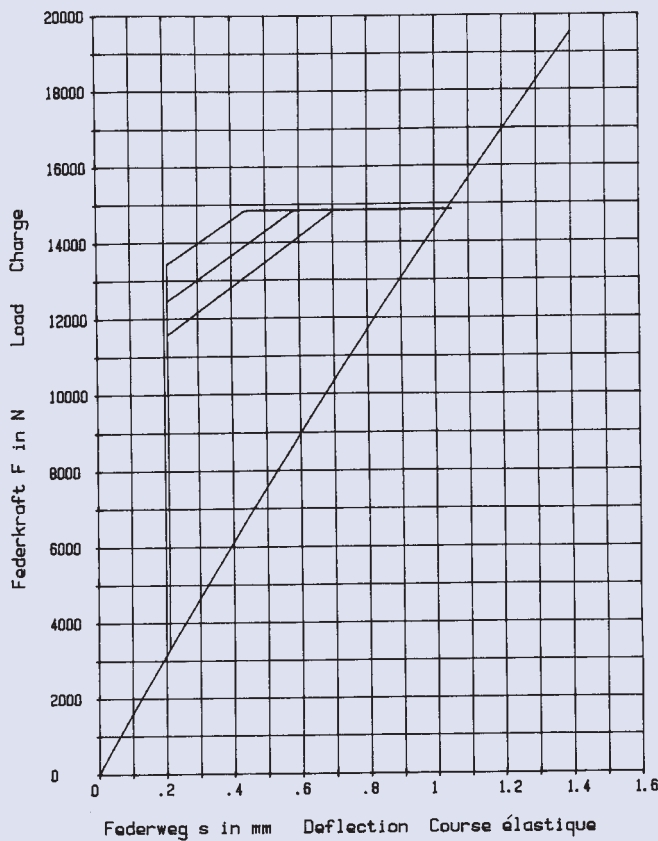
$$t = 3.0 \text{ mm} \quad D_e/t = 21$$

$$h_0/t = 0.566 \quad m = 55.635 \text{ g}$$



## 63 x 31 x 3,5

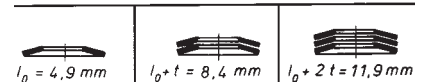
GR 2, DIN 2093 – A 63



$$h_0 = 1.4 \text{ mm} \quad D_e/D_1 = 2.032$$

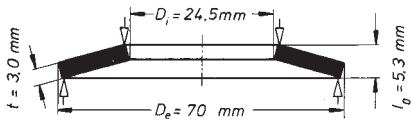
$$t = 3.5 \text{ mm} \quad D_e/t = 18$$

$$h_0/t = 0.4 \quad m = 64.907 \text{ g}$$

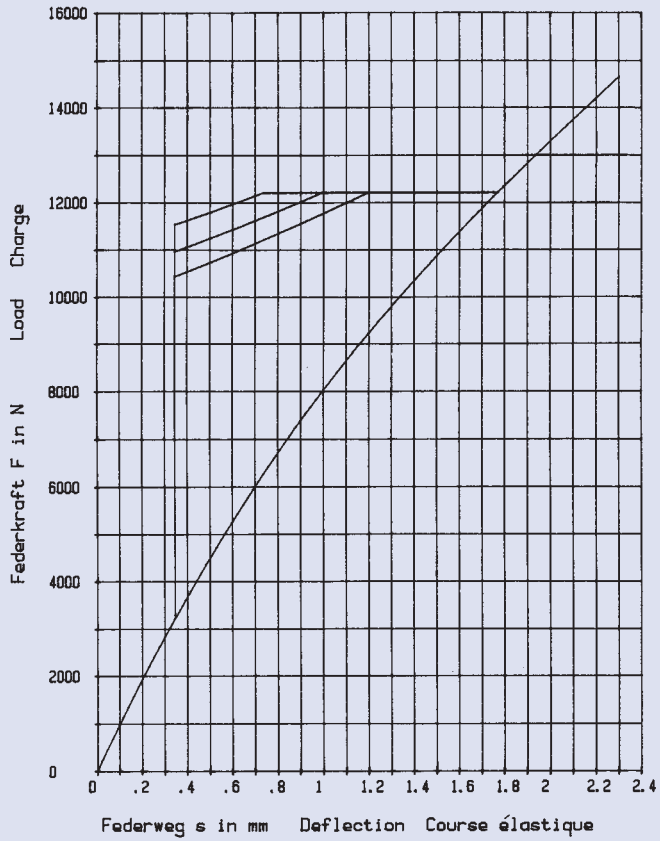
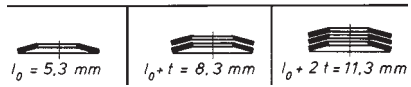


70 x 24,5 x 3,0

GR 2

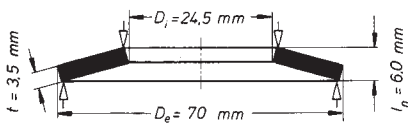


$h_0 = 2.3 \text{ mm}$        $D_e/D_i = 2.857$   
 $t = 3.0 \text{ mm}$        $D_e/t = 23.333$   
 $h_0/t = 0.766$        $m = 79.526 \text{ g}$

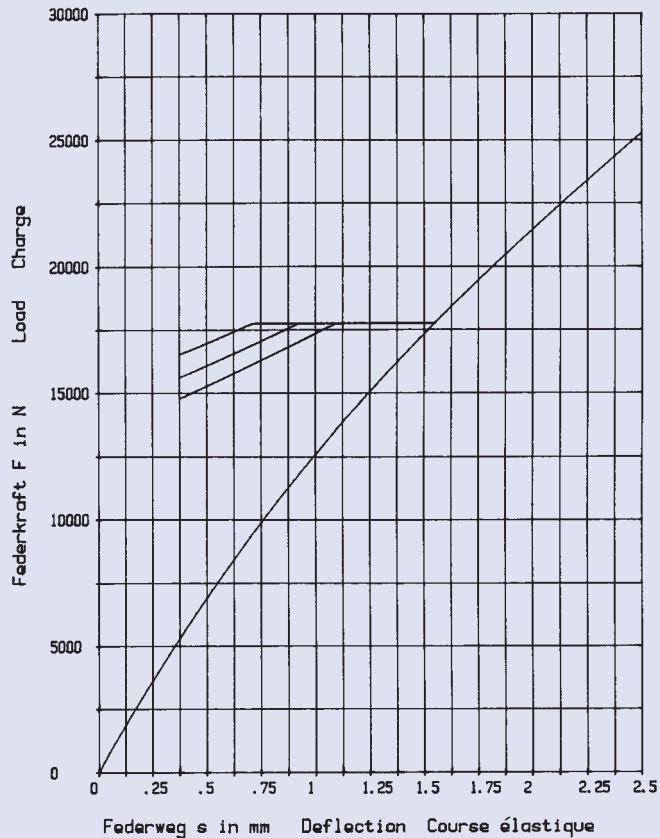
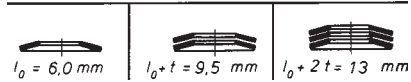


70 x 24,5 x 3,5

GR 2

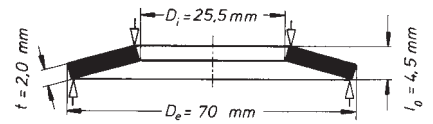
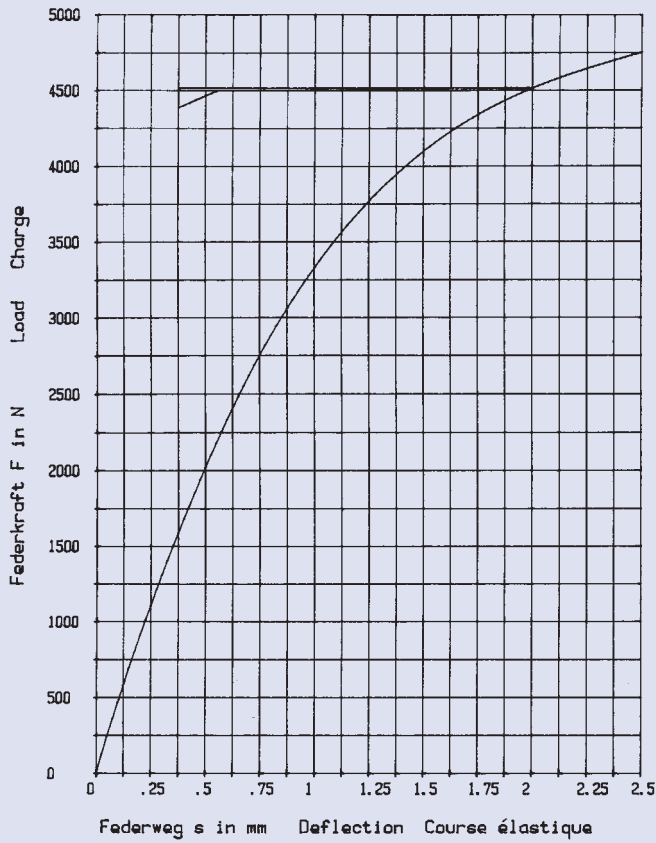


$h_0 = 2.5 \text{ mm}$        $D_e/D_i = 2.857$   
 $t = 3.5 \text{ mm}$        $D_e/t = 20$   
 $h_0/t = 0.714$        $m = 92.781 \text{ g}$

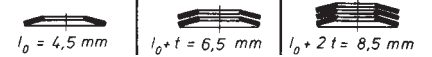


## 70 x 25,5 x 2,0

GR 2

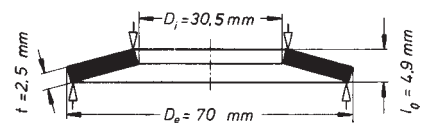
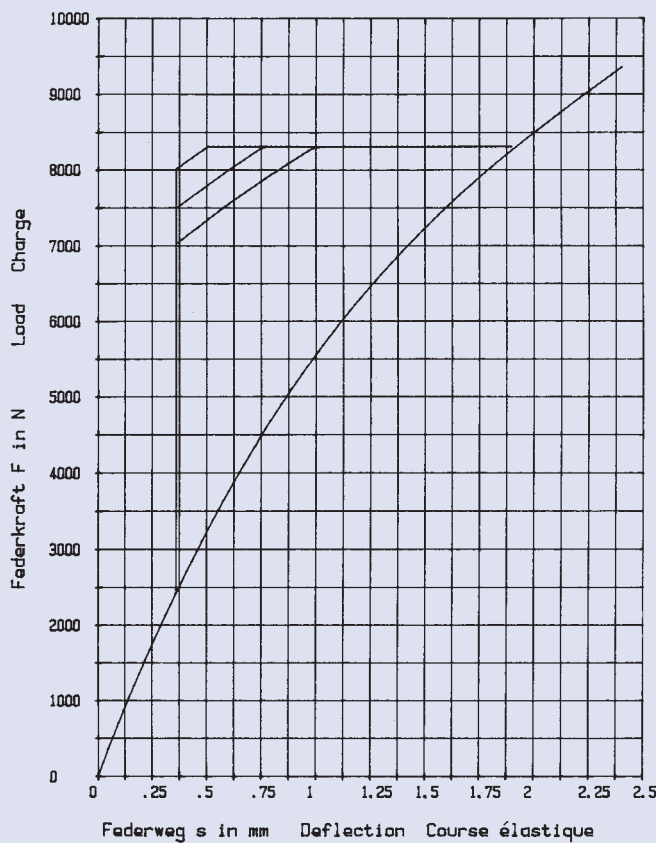


$$\begin{aligned}
 h_0 &= 2,5 \text{ mm} & D_e/D_i &= 2,745 \\
 t &= 2,0 \text{ mm} & D_e/t &= 35 \\
 h_0/t &= 1,25 & m &= 52,401 \text{ g}
 \end{aligned}$$



## 70 x 30,5 x 2,5

GR 2

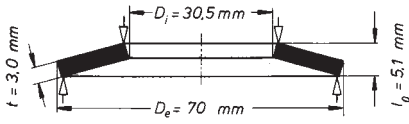


$$\begin{aligned}
 h_0 &= 2,4 \text{ mm} & D_e/D_i &= 2,295 \\
 t &= 2,5 \text{ mm} & D_e/t &= 28 \\
 h_0/t &= 0,96 & m &= 61,186 \text{ g}
 \end{aligned}$$

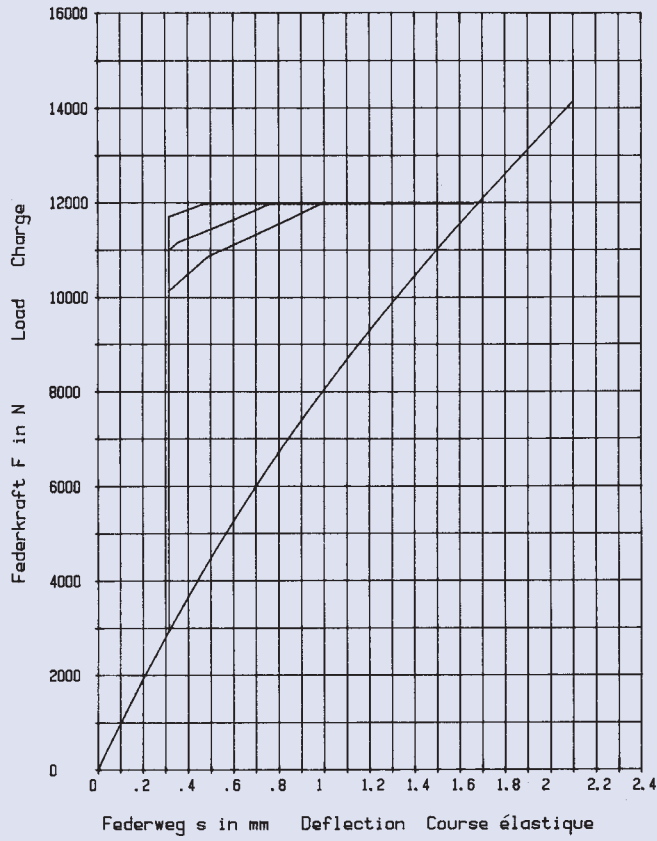
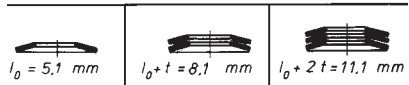


70 x 30,5 x 3,0

GR 2

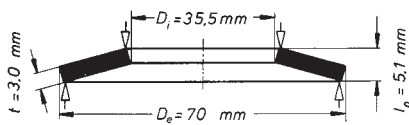


$h_0 = 2,1 \text{ mm}$        $D_e/D_i = 2,295$   
 $t = 3,0 \text{ mm}$        $D_e/t = 23,333$   
 $h_0/t = 0,7$        $m = 73,423 \text{ g}$

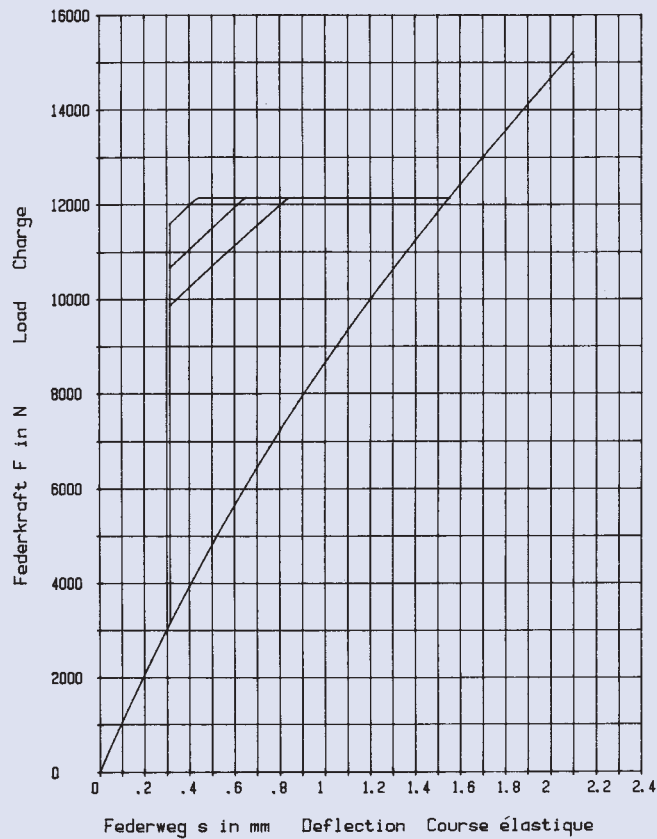
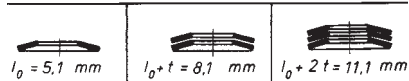


70 x 35,5 x 3,0

GR 2



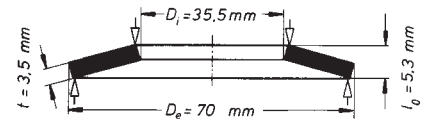
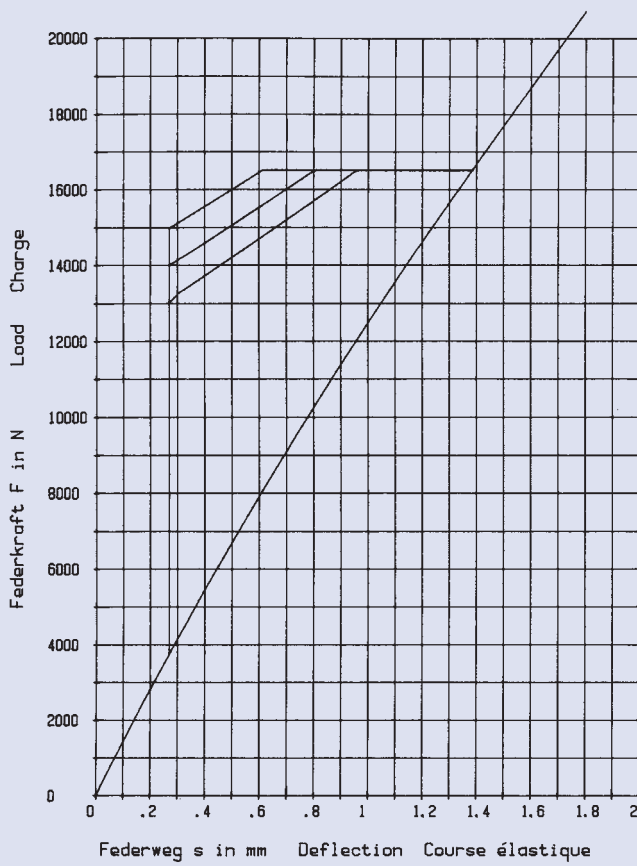
$h_0 = 2,1 \text{ mm}$        $D_e/D_i = 1,971$   
 $t = 3,0 \text{ mm}$        $D_e/t = 23,333$   
 $h_0/t = 0,7$        $m = 67,319 \text{ g}$



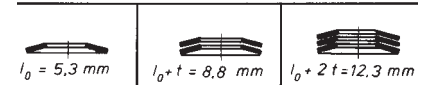


70 x 35,5 x 3,5

GR 2

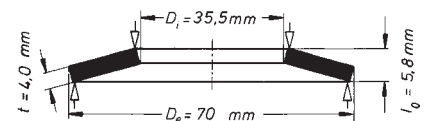
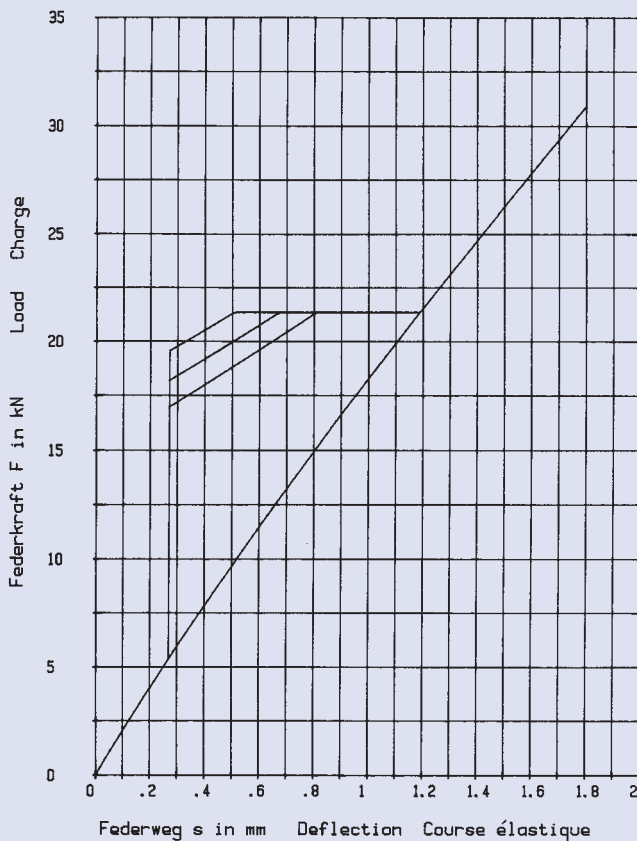


$h_0 = 1,8 \text{ mm}$        $D_e/D_i = 1,971$   
 $t = 3,5 \text{ mm}$        $D_e/t = 20$   
 $h_0/t = 0,514$        $m = 70,539 \text{ g}$

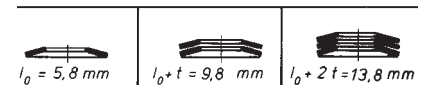


70 x 35,5 x 4,0

GR 2

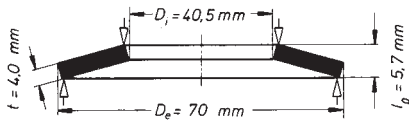


$h_0 = 1,8 \text{ mm}$        $D_e/D_i = 1,971$   
 $t = 4,0 \text{ mm}$        $D_e/t = 17,5$   
 $h_0/t = 0,45$        $m = 89,759 \text{ g}$

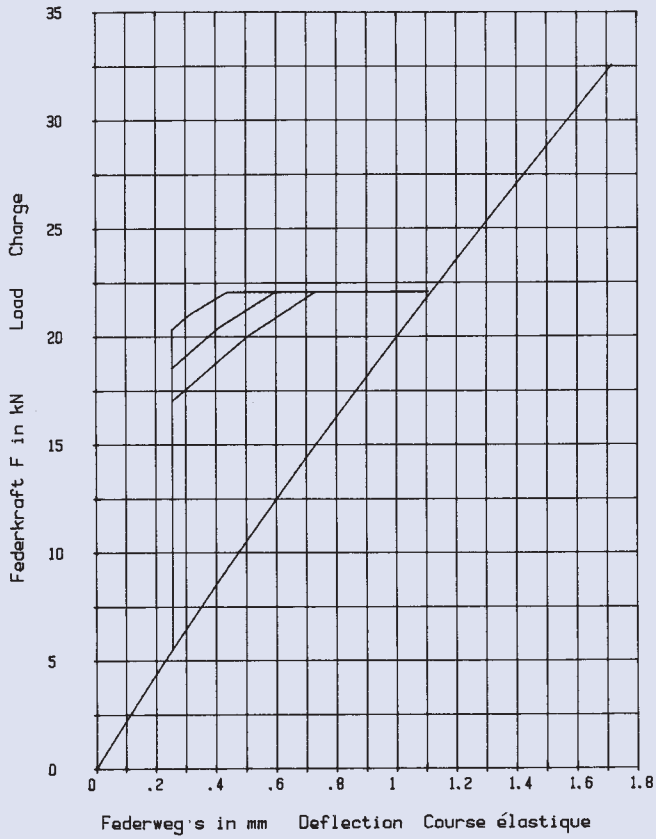
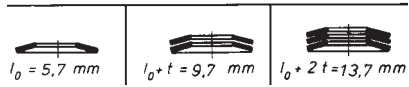


70 x 40,5 x 4,0

GR 2

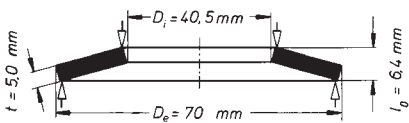


$h_0 = 1,7 \text{ mm}$        $D_e/D_i = 1,728$   
 $t = 4,0 \text{ mm}$        $D_e/t = 17,5$   
 $h_0/t = 0,425$        $m = 80,388 \text{ g}$

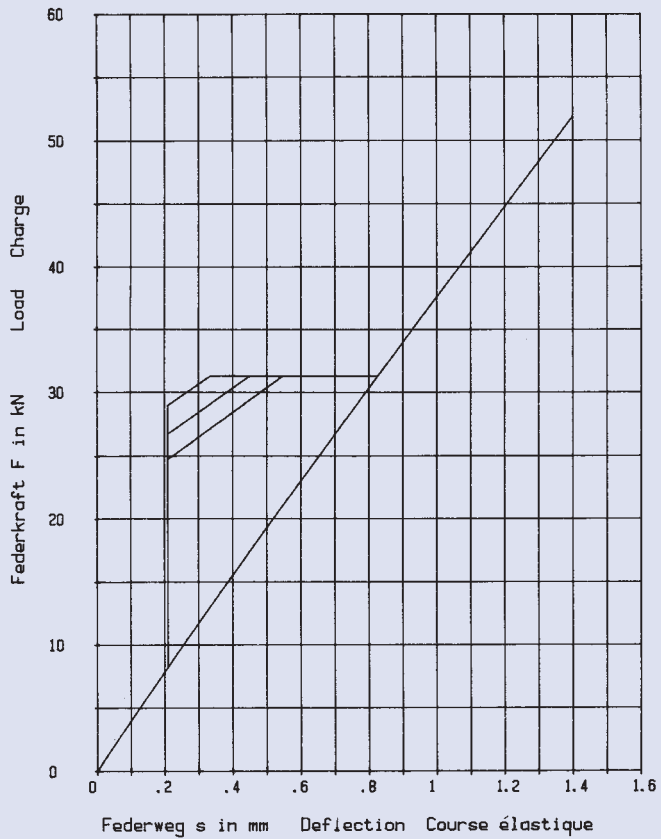
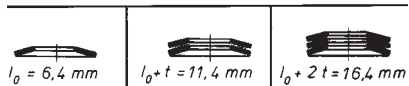


70 x 40,5 x 5,0

GR 2

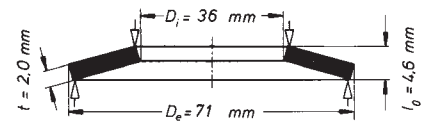
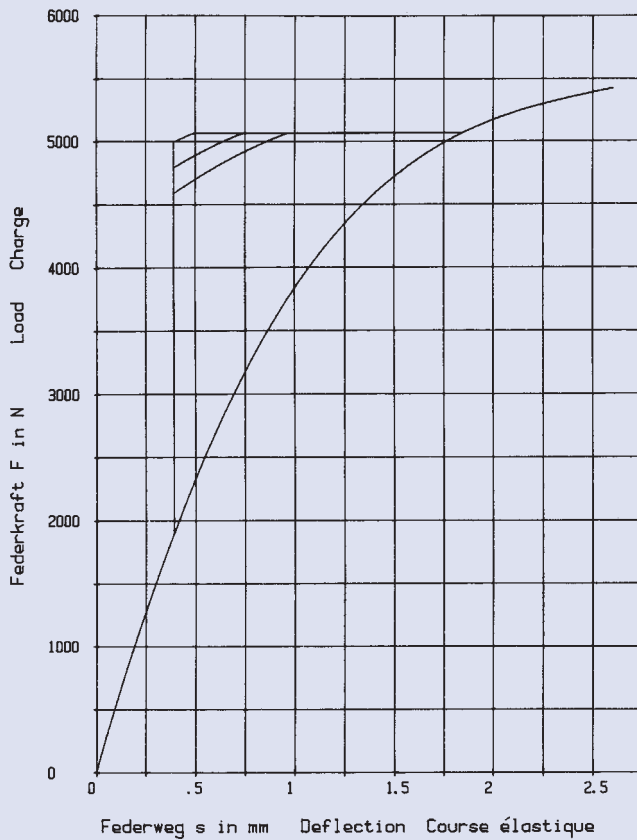


$h_0 = 1,4 \text{ mm}$        $D_e/D_i = 1,728$   
 $t = 5,0 \text{ mm}$        $D_e/t = 14$   
 $h_0/t = 0,28$        $m = 100,485 \text{ g}$

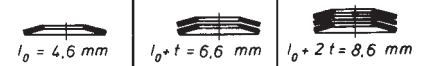


**71 x 36 x 2,0**

**GR 2, DIN 2093 – C 71**

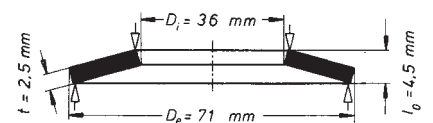
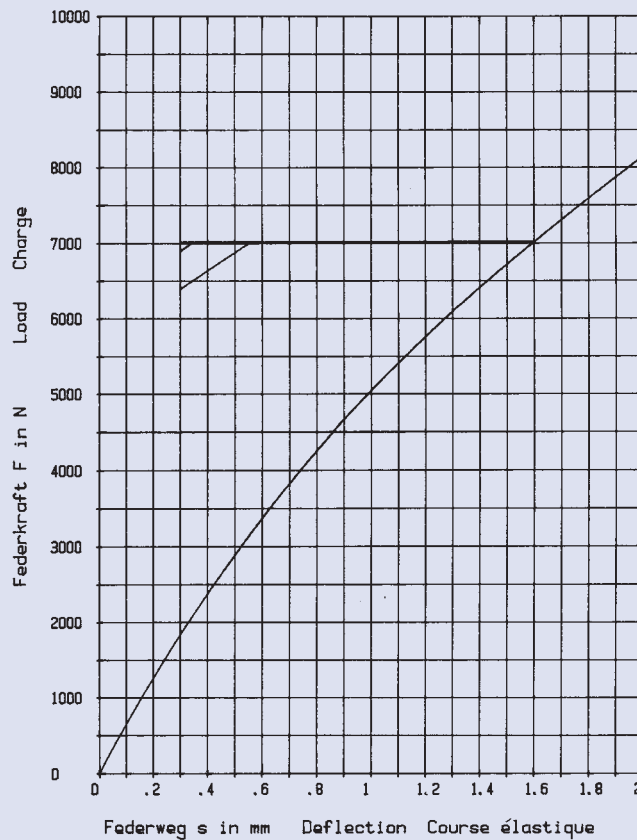


$h_0 = 2,6 \text{ mm}$        $D_e/D_i = 1,972$   
 $t = 2,0 \text{ mm}$        $D_e/t = 35,5$   
 $h_0/t = 1,3$        $m = 46,177 \text{ g}$

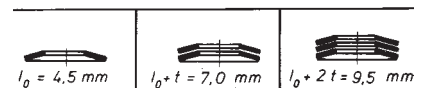


**71 x 36 x 2,5**

**GR 2, DIN 2093 – B 71**

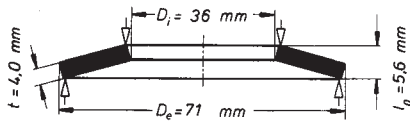


$h_0 = 2,0 \text{ mm}$        $D_e/D_i = 1,972$   
 $t = 2,5 \text{ mm}$        $D_e/t = 28,4$   
 $h_0/t = 0,8$        $m = 57,722 \text{ g}$

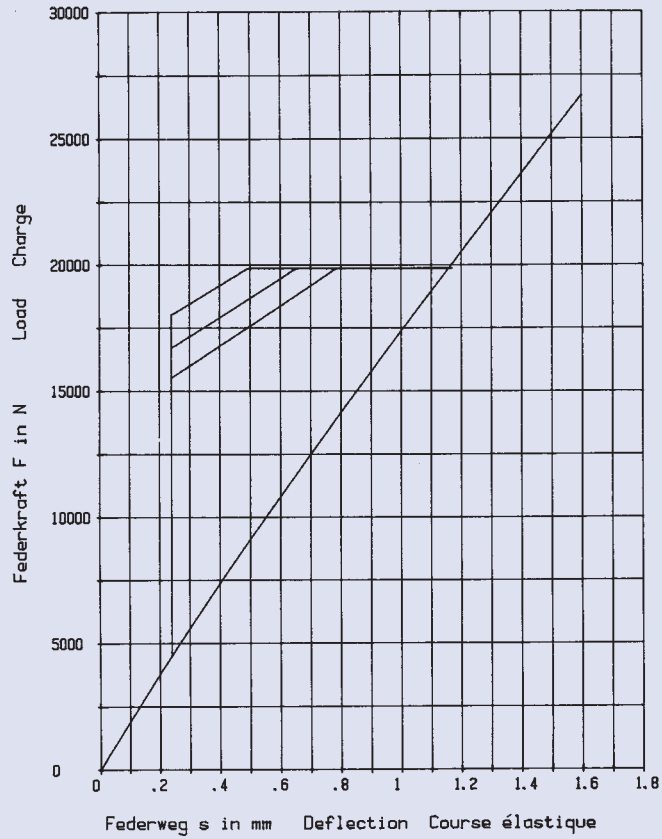
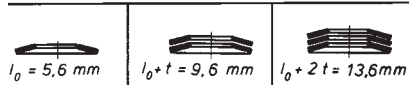


71 x 36 x 4,0

GR 2, DIN 2093 – A 71

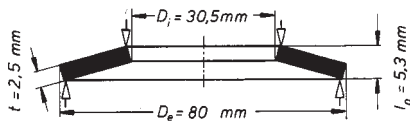


$h_0 = 1,6 \text{ mm}$        $D_e / D_i = 1,972$   
 $t = 4,0 \text{ mm}$        $D_e / t = 17,75$   
 $h_0 / t = 0,4$        $m = 92,355 \text{ g}$

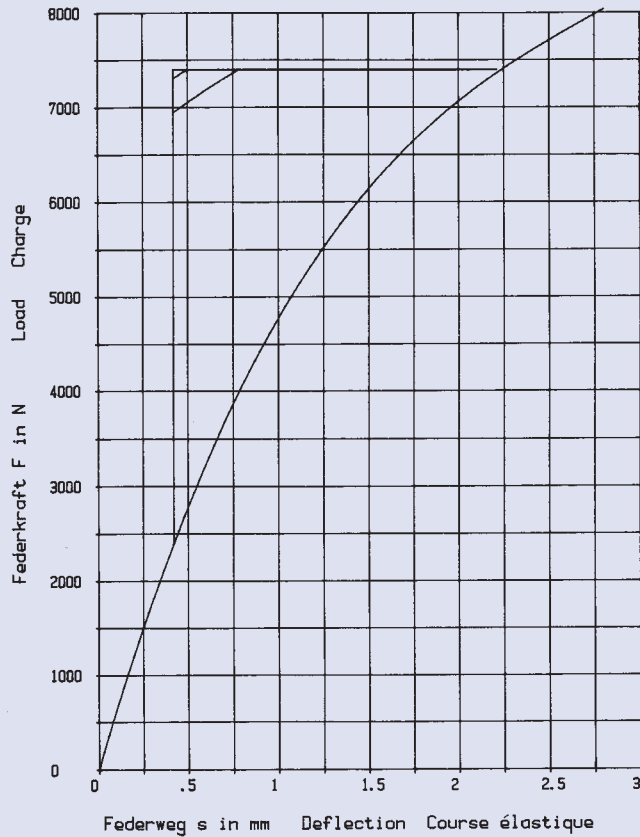
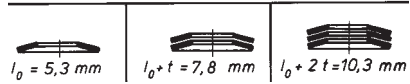


80 x 30,5 x 2,5

GR 2

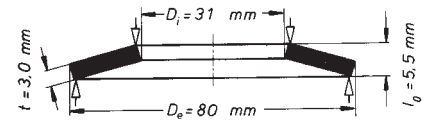
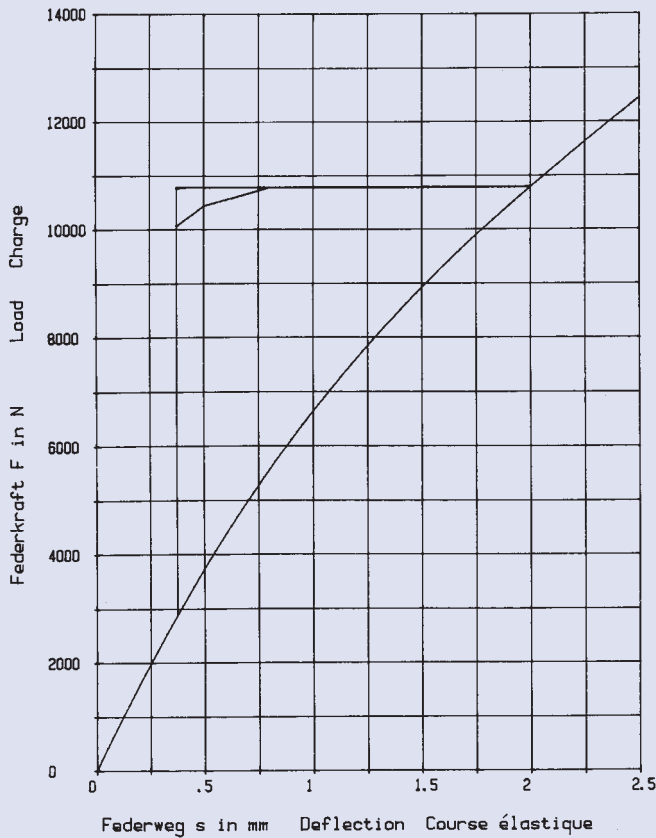


$h_0 = 2,8 \text{ mm}$        $D_e / D_i = 2,622$   
 $t = 2,5 \text{ mm}$        $D_e / t = 32$   
 $h_0 / t = 1,12$        $m = 84,305 \text{ g}$

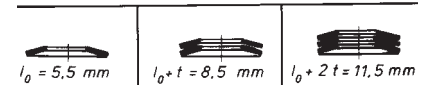


80 x 31 x 3,0

GR 2

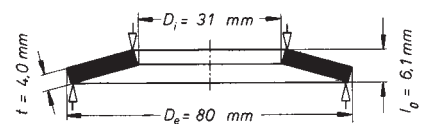
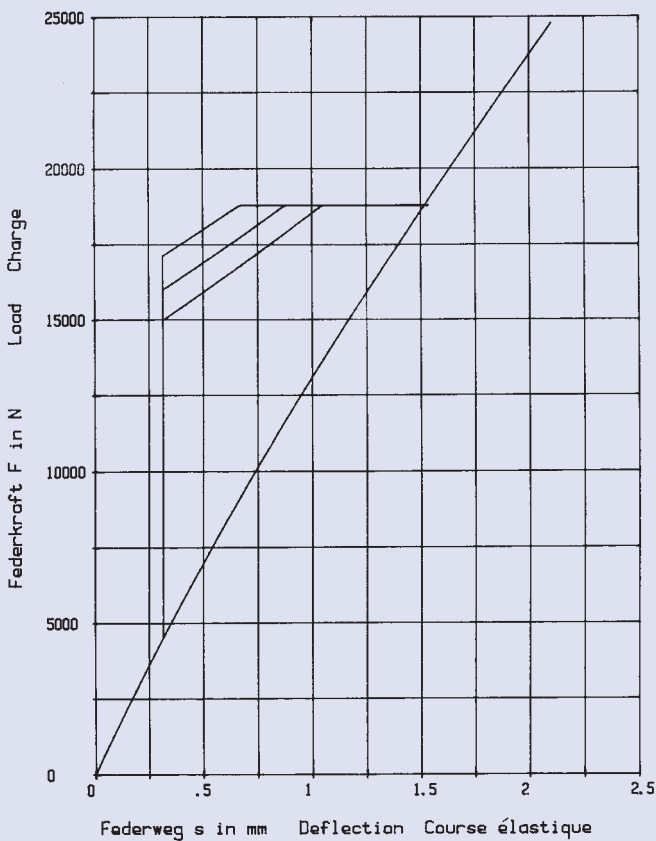


$h_0 = 2,5 \text{ mm}$        $D_e/D_i = 2,58$   
 $t = 3,0 \text{ mm}$        $D_e/t = 26,666$   
 $h_0/t = 0,833$        $m = 100,60 \text{ g}$

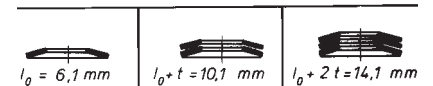


80 x 31 x 4,0

GR 2

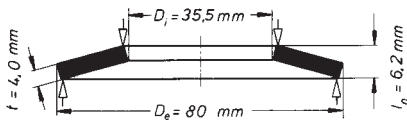


$h_0 = 2,1 \text{ mm}$        $D_e/D_i = 2,58$   
 $t = 4,0 \text{ mm}$        $D_e/t = 20$   
 $h_0/t = 0,525$        $m = 134,13 \text{ g}$

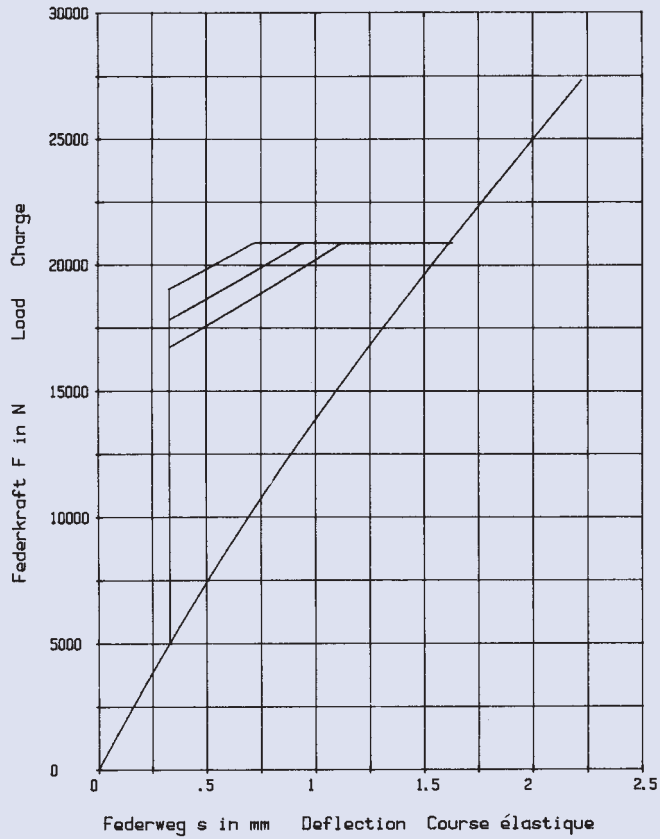
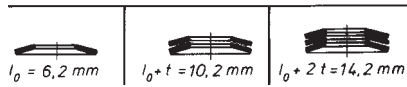


80 x 35,5 x 4,0

GR 2

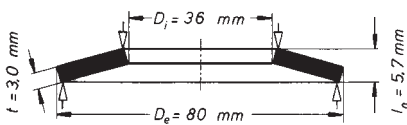


$h_0 = 2,2 \text{ mm}$        $D_e/D_i = 2,253$   
 $t = 4,0 \text{ mm}$        $D_e/t = 20$   
 $h_0/t = 0,55$        $m = 126,75 \text{ g}$

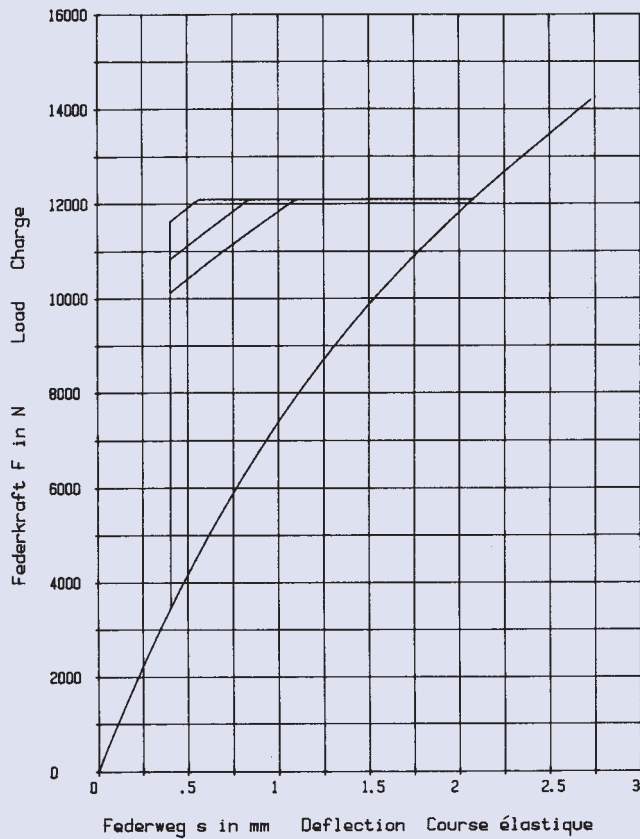
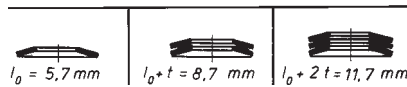


80 x 36 x 3,0

GR 2

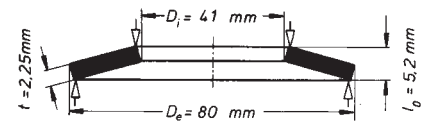
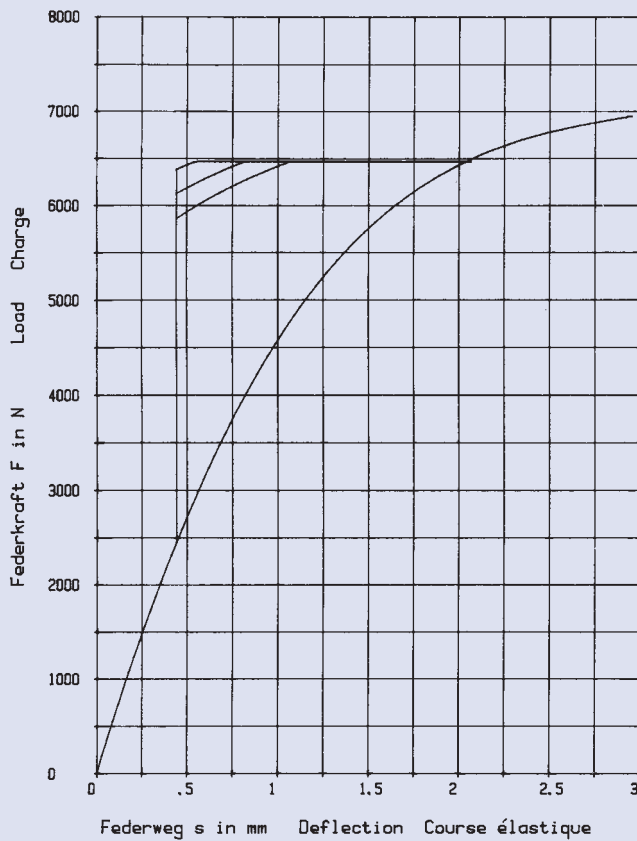


$h_0 = 2,7 \text{ mm}$        $D_e/D_i = 2,222$   
 $t = 3,0 \text{ mm}$        $D_e/t = 26,666$   
 $h_0/t = 0,9$        $m = 94,401 \text{ g}$

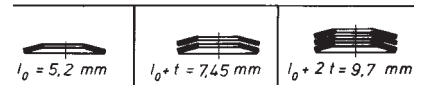


**80 x 41 x 2,25**

**GR 2, DIN 2093 – C 80**

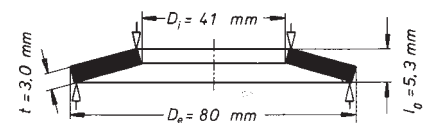
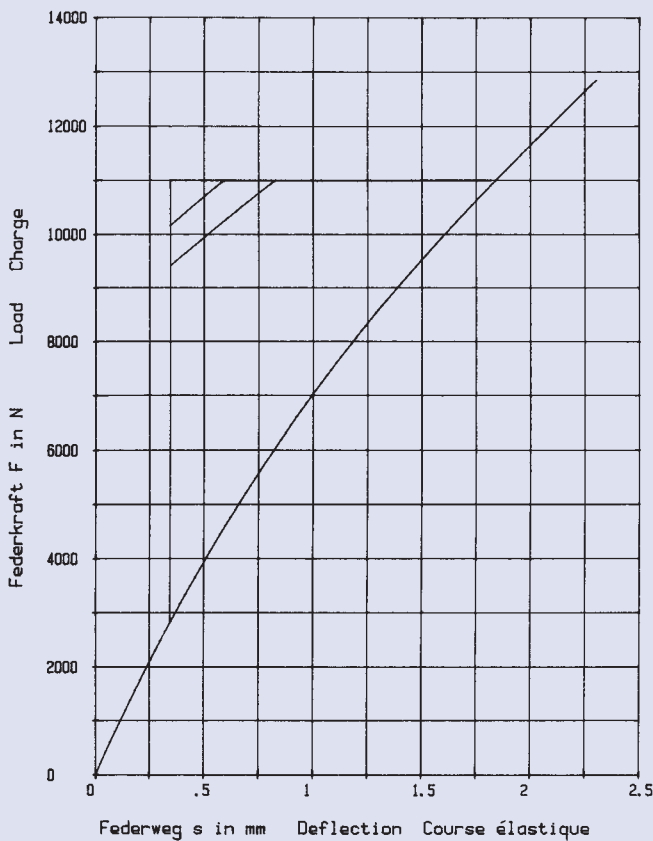


$h_0 = 2,95 \text{ mm}$        $D_e/D_i = 1,951$   
 $t = 2,25 \text{ mm}$        $D_e/t = 35,555$   
 $h_0/t = 1,311$        $m = 65,460 \text{ g}$



**80 x 41 x 3,0**

**GR 2, DIN 2093 – B 80**

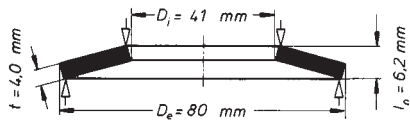


$h_0 = 2,3 \text{ mm}$        $D_e/D_i = 1,951$   
 $t = 3,0 \text{ mm}$        $D_e/t = 26,666$   
 $h_0/t = 0,766$        $m = 87,281 \text{ g}$

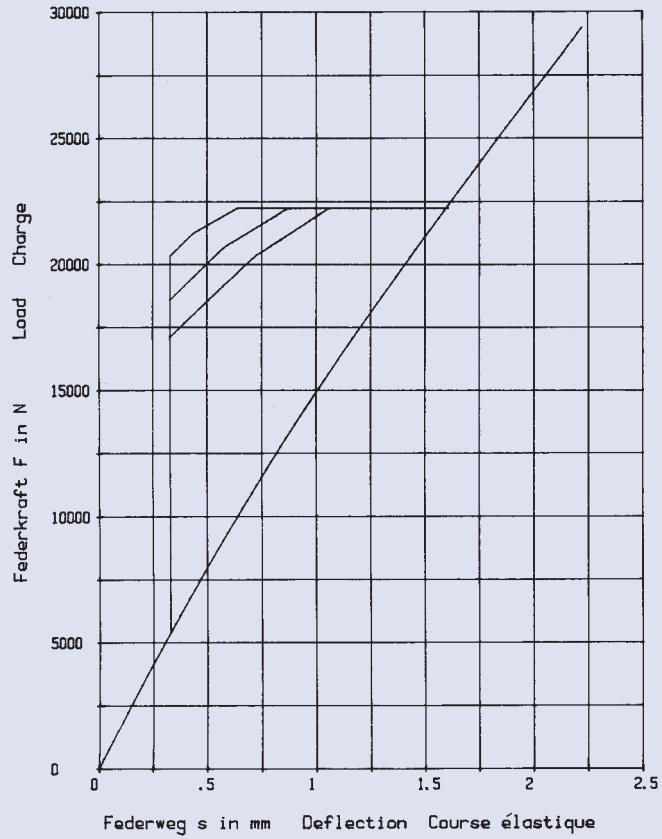
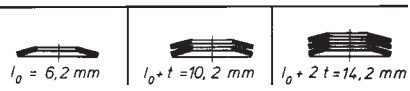


80 x 41 x 4,0

GR 2

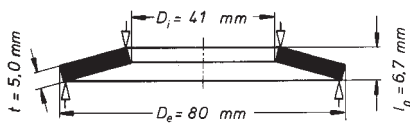


$h_0 = 2,2 \text{ mm}$        $D_e/D_1 = 1,951$   
 $t = 4,0 \text{ mm}$        $D_e/t = 20$   
 $h_0/t = 0,55$        $m = 116,374 \text{ g}$

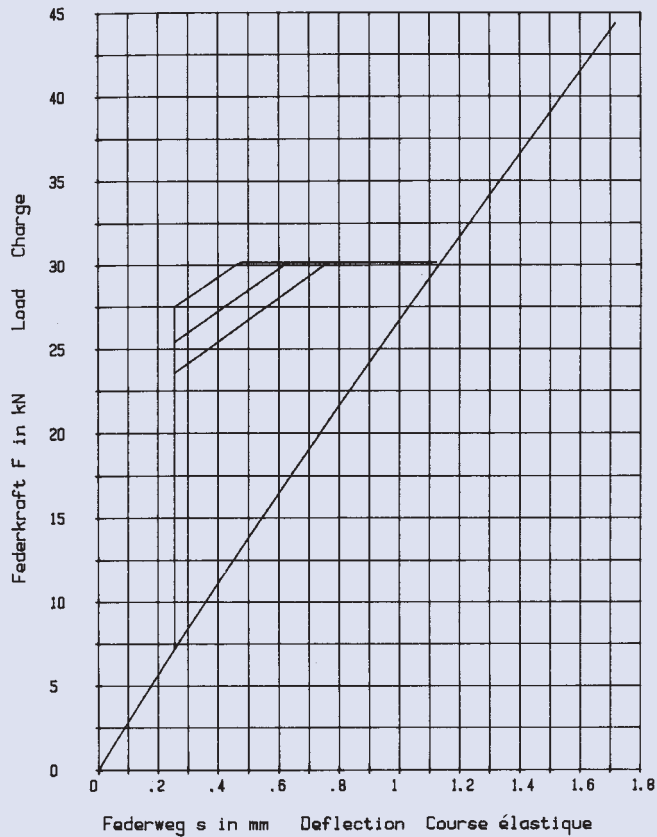
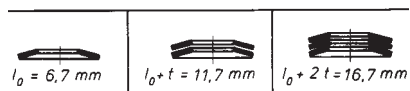


80 x 41 x 5,0

GR 2, DIN 2093 – A 80



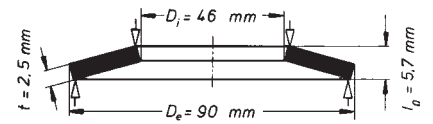
$h_0 = 1,7 \text{ mm}$        $D_e/D_1 = 1,951$   
 $t = 5,0 \text{ mm}$        $D_e/t = 16$   
 $h_0/t = 0,34$        $m = 145,468 \text{ g}$



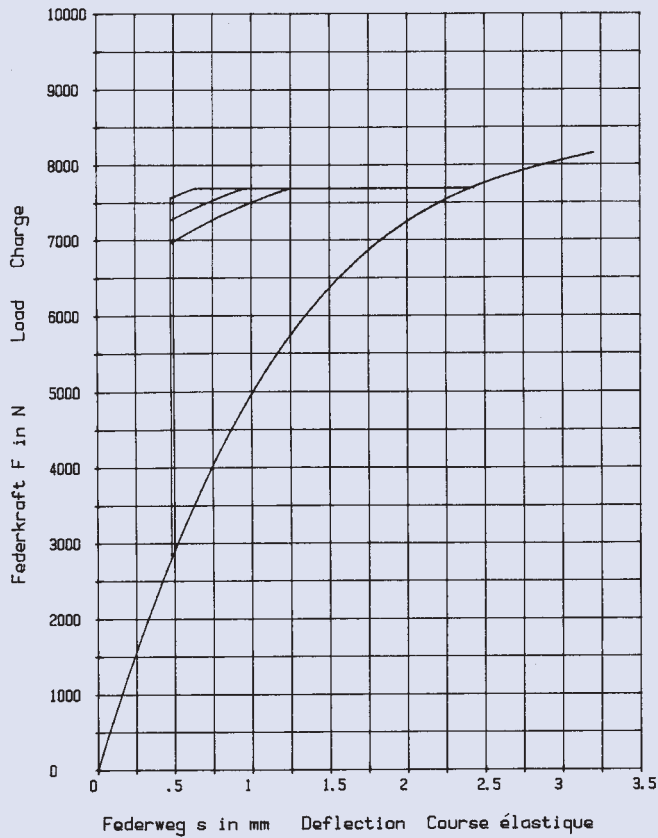


## 90 x 46 x 2,5

### GR 2, DIN 2093 – C 90

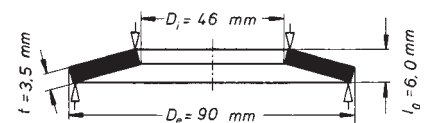


$$\begin{aligned}
 h_0 &= 3,2 \text{ mm} & D_e/D_1 &= 1,956 \\
 t &= 2,5 \text{ mm} & D_e/t &= 36 \\
 h_0/t &= 1,28 & m &= 92,231 \text{ g}
 \end{aligned}$$

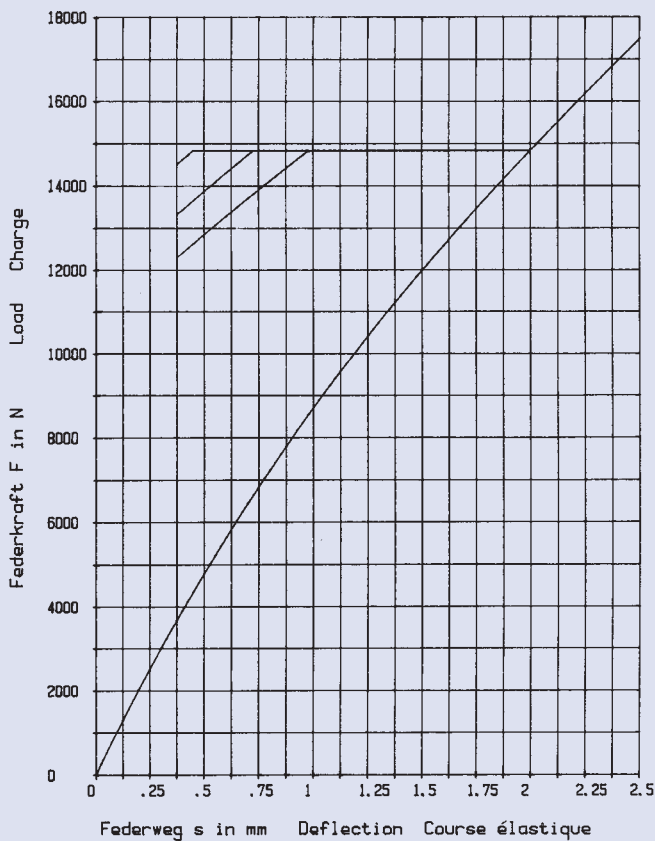


## 90 x 46 x 3,5

### GR 2, DIN 2093 – B 90

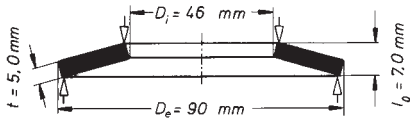


$$\begin{aligned}
 h_0 &= 2,5 \text{ mm} & D_e/D_1 &= 1,956 \\
 t &= 3,5 \text{ mm} & D_e/t &= 25,714 \\
 h_0/t &= 0,714 & m &= 129,124 \text{ g}
 \end{aligned}$$

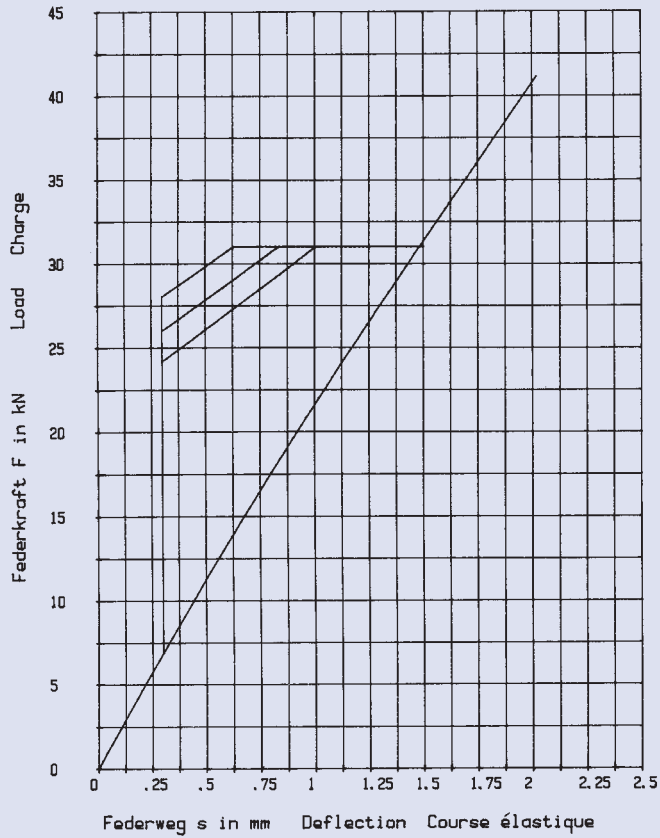
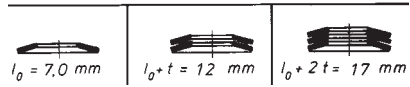


90 x 46 x 5,0

GR 2, DIN 2093 – A 90

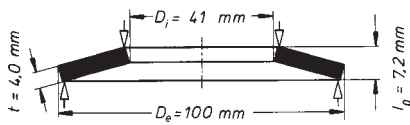


$h_0 = 2,0 \text{ mm}$        $D_e / D_i = 1,956$   
 $t = 5,0 \text{ mm}$        $D_e / t = 18$   
 $h_0 / t = 0,4$        $m = 184,463 \text{ g}$

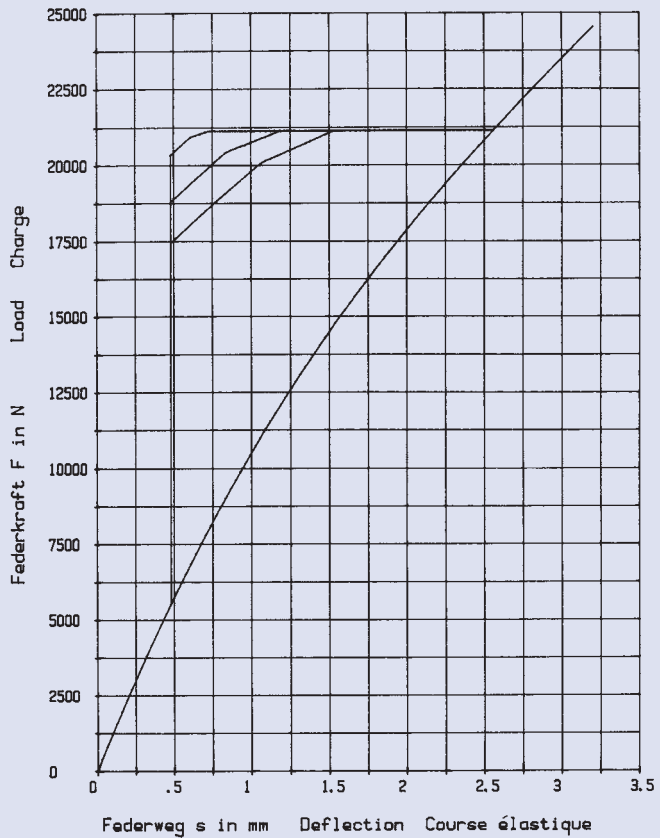
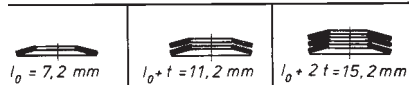


100 x 41 x 4,0

GR 2

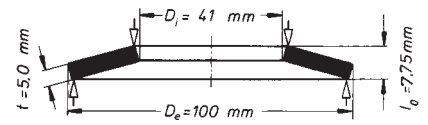
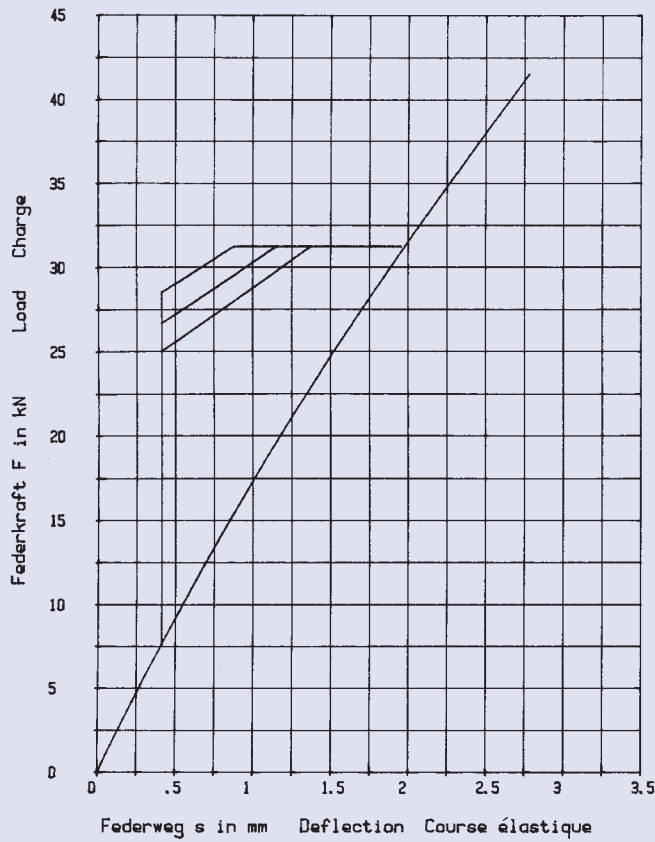


$h_0 = 3,2 \text{ mm}$        $D_e / D_i = 2,439$   
 $t = 4,0 \text{ mm}$        $D_e / t = 25$   
 $h_0 / t = 0,8$        $m = 205,153 \text{ g}$



**100 x 41 x 5,0**

**GR 2**

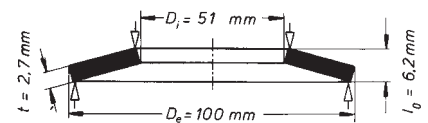
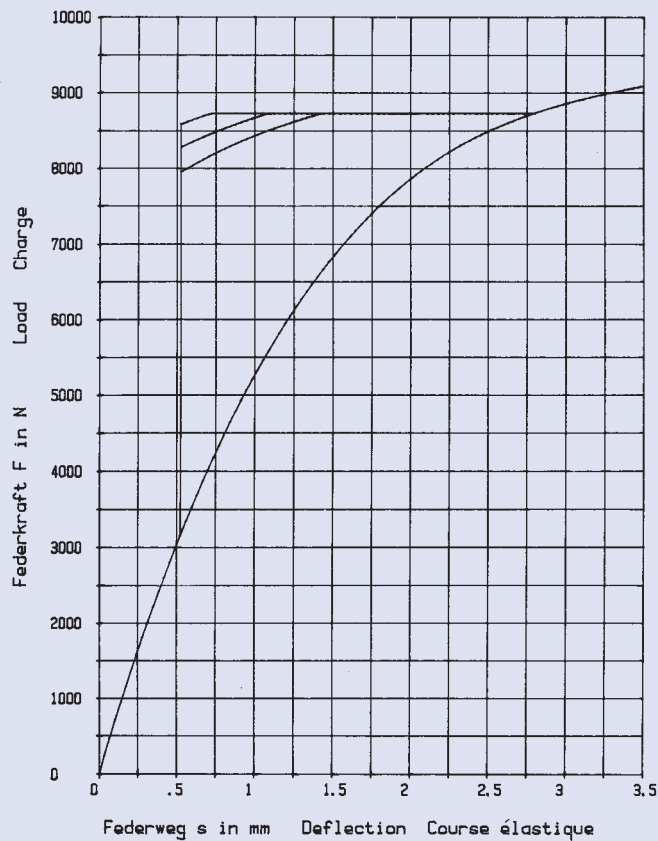


$h_0 = 2,75 \text{ mm}$        $D_e / D_i = 2,439$   
 $t = 5,0 \text{ mm}$        $D_e / t = 20$   
 $h_0 / t = 0,55$        $m = 256,441 \text{ g}$

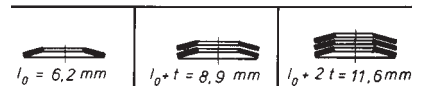


**100 x 51 x 2,7**

**GR 2, DIN 2093 – C 100**

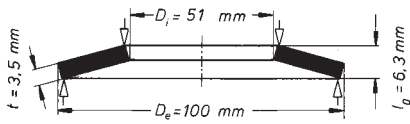


$h_0 = 3,5 \text{ mm}$        $D_e / D_i = 1,96$   
 $t = 2,7 \text{ mm}$        $D_e / t = 37,037$   
 $h_0 / t = 1,296$        $m = 123,164 \text{ g}$

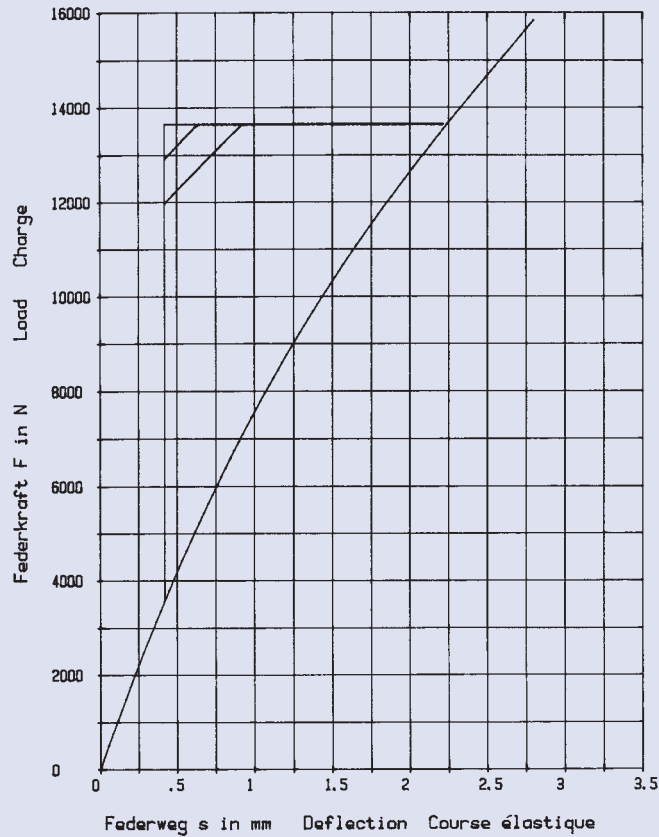
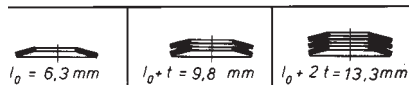


100 x 51 x 3,5

GR 2, DIN 2093 – B 100

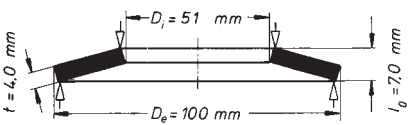


$h_0 = 2,8 \text{ mm}$        $D_e/D_i = 1,96$   
 $t = 3,5 \text{ mm}$        $D_e/t = 28,571$   
 $h_0/t = 0,8$        $m = 159,657 \text{ g}$

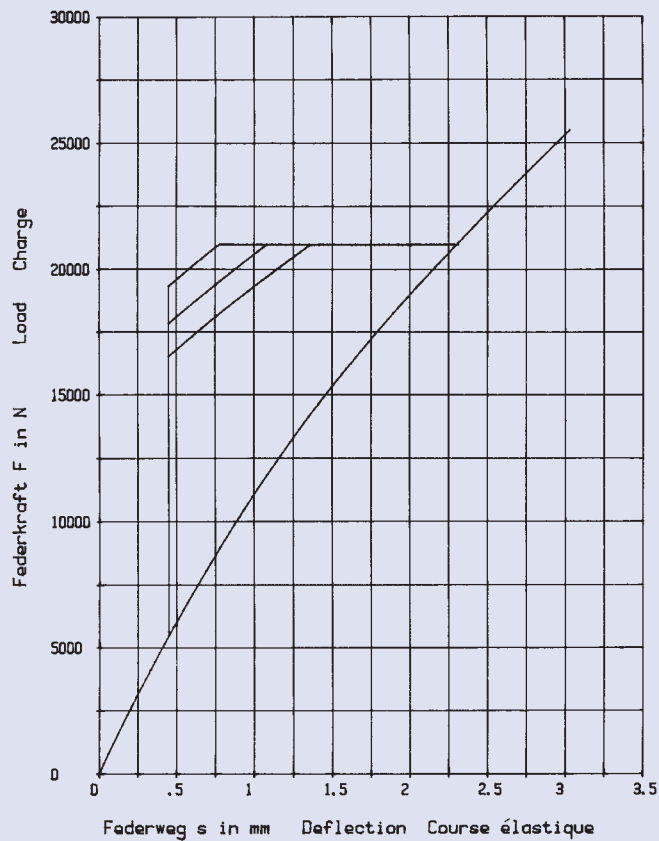
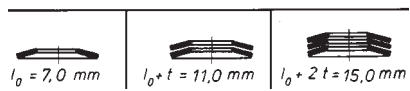


100 x 51 x 4,0

GR 2

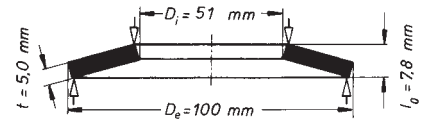
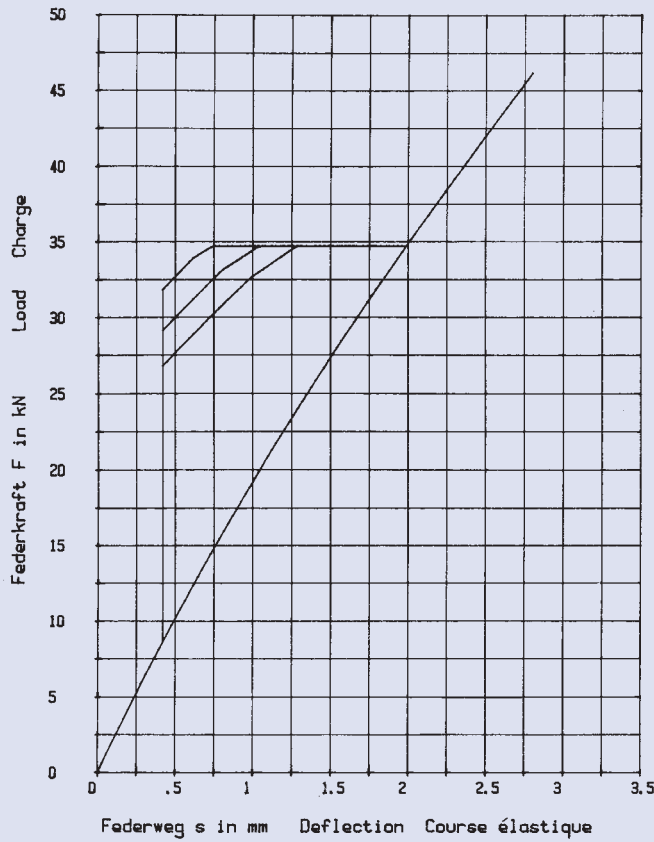


$h_0 = 3,0 \text{ mm}$        $D_e/D_i = 1,96$   
 $t = 4,0 \text{ mm}$        $D_e/t = 25$   
 $h_0/t = 0,75$        $m = 182,465 \text{ g}$

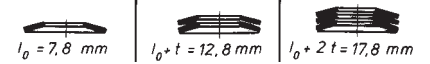


100 x 51 x 5,0

GR 2

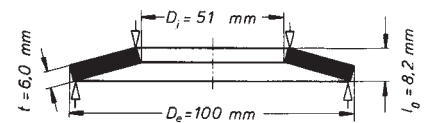
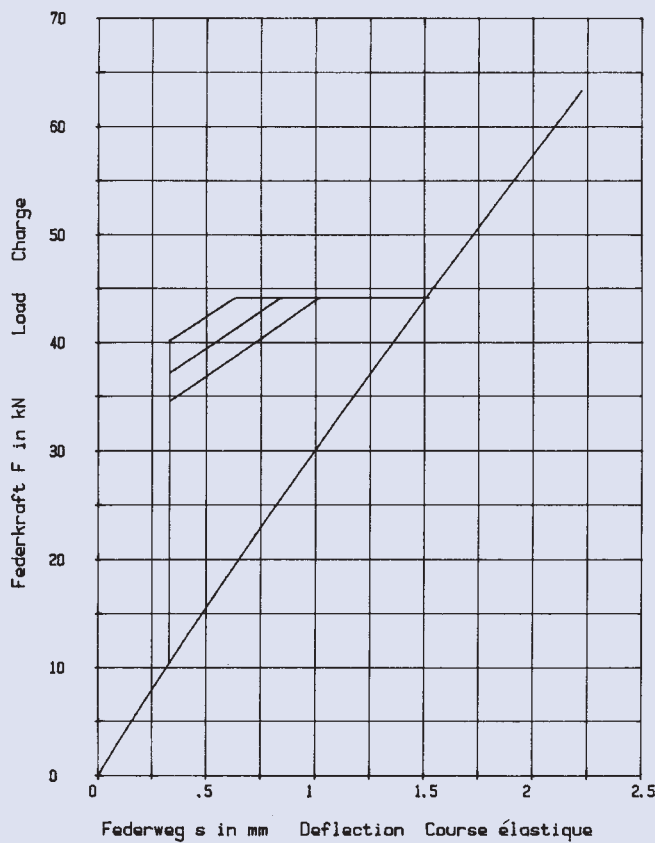


$h_0 = 2,8 \text{ mm}$        $D_e/D_i = 1,96$   
 $t = 5,0 \text{ mm}$        $D_e/t = 20$   
 $h_0/t = 0,56$        $m = 228,081 \text{ g}$

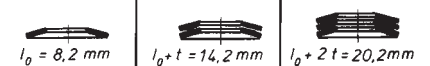


100 x 51 x 6,0

GR 2, DIN 2093 – A 100

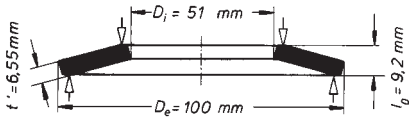


$h_0 = 2,2 \text{ mm}$        $D_e/D_i = 1,96$   
 $t = 6,0 \text{ mm}$        $D_e/t = 16,666$   
 $h_0/t = 0,366$        $m = 273,698 \text{ g}$

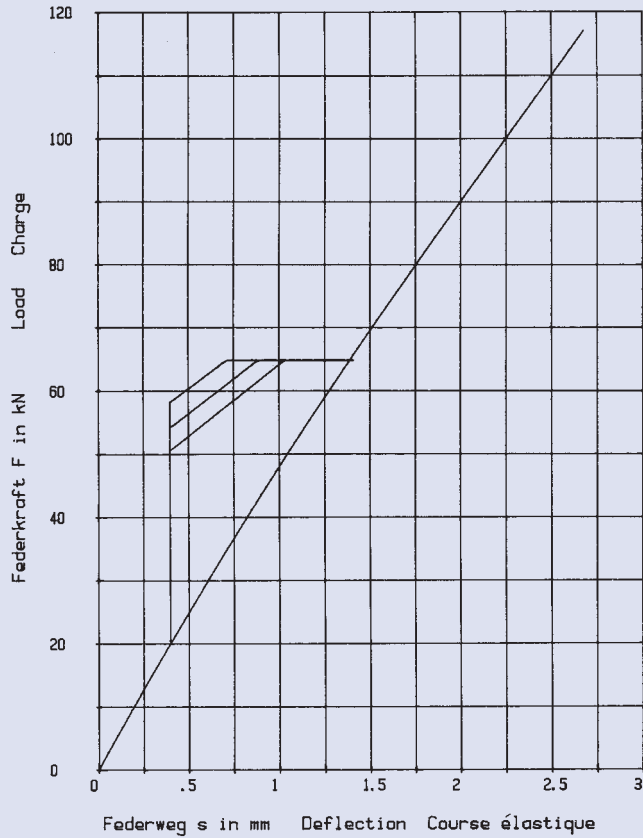
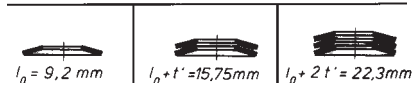


100 x 51 x 7,0

GR 3

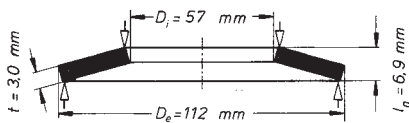


$h_0 = 2,2 \text{ mm}$      $D_e / D_i = 1,96$      $h'_0 = 2,65 \text{ mm}$   
 $t = 7,0 \text{ mm}$      $D_e / t = 14,285$      $t' / t = 0,935$   
 $h_0 / t = 0,314$      $m = 298,79 \text{ g}$      $h'_0 / t' = 0,405$

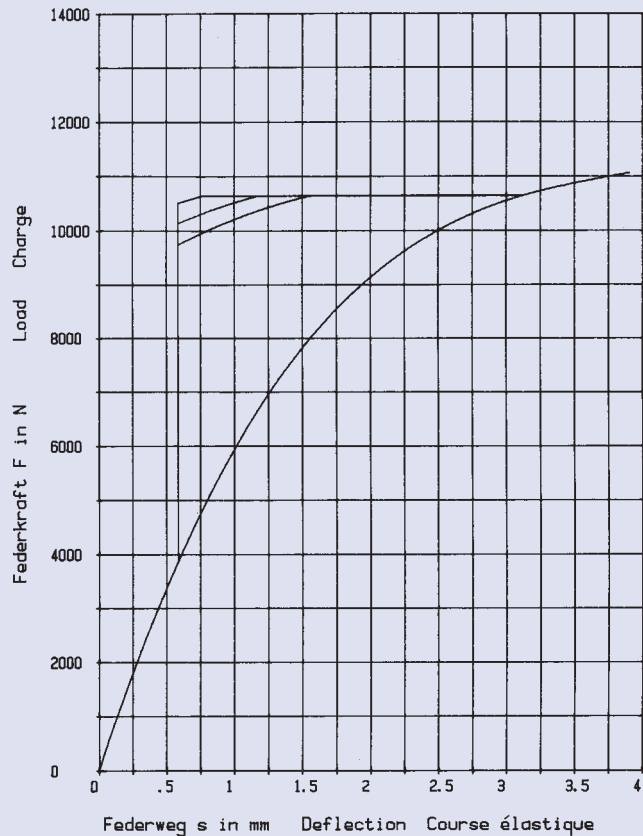
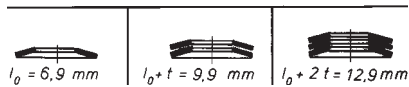


112 x 57 x 3,0

GR 2, DIN 2093 – C 112

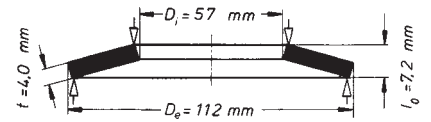


$h_0 = 3,9 \text{ mm}$      $D_e / D_i = 1,964$   
 $t = 3,0 \text{ mm}$      $D_e / t = 37,333$   
 $h_0 / t = 1,3$      $m = 171,917 \text{ g}$

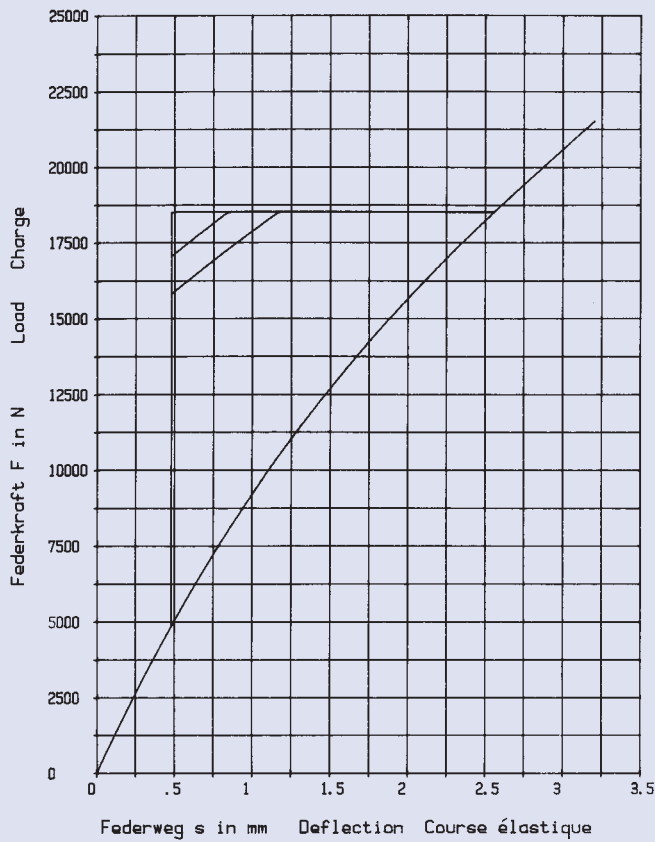
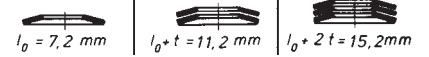


## 112 x 57 x 4,0

### GR 2, DIN 2093 – B 112

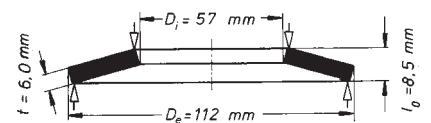


$$\begin{aligned}
 h_0 &= 3,2 \text{ mm} & D_e/D_i &= 1,964 \\
 t &= 4,0 \text{ mm} & D_e/t &= 28 \\
 h_0/t &= 0,8 & m &= 229,222 \text{ g}
 \end{aligned}$$

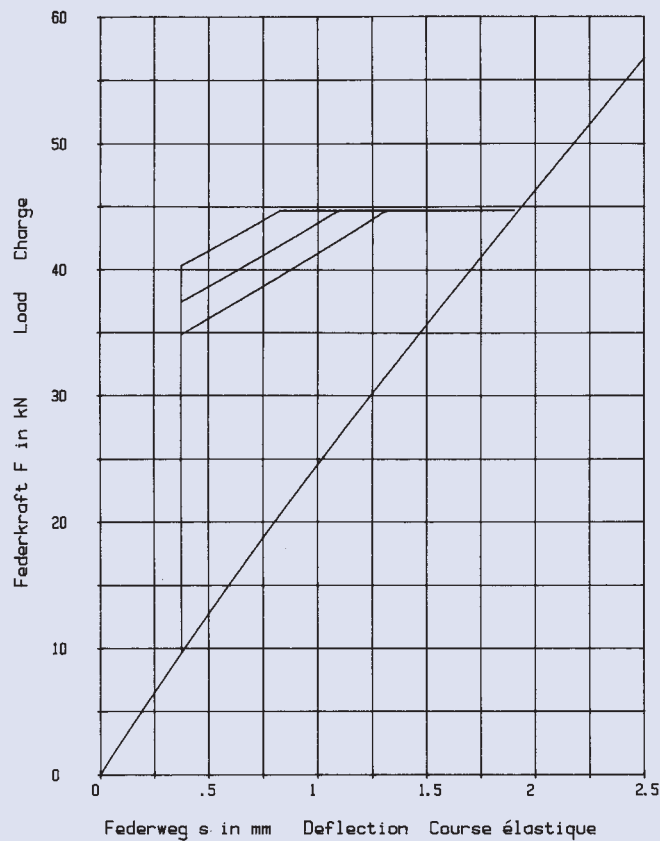
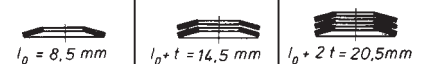


## 112 x 57 x 6,0

### GR 2, DIN 2093 – A 112

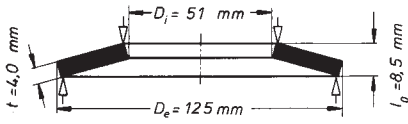


$$\begin{aligned}
 h_0 &= 2,5 \text{ mm} & D_e/D_i &= 1,964 \\
 t &= 6,0 \text{ mm} & D_e/t &= 18,666 \\
 h_0/t &= 0,416 & m &= 343,833 \text{ g}
 \end{aligned}$$

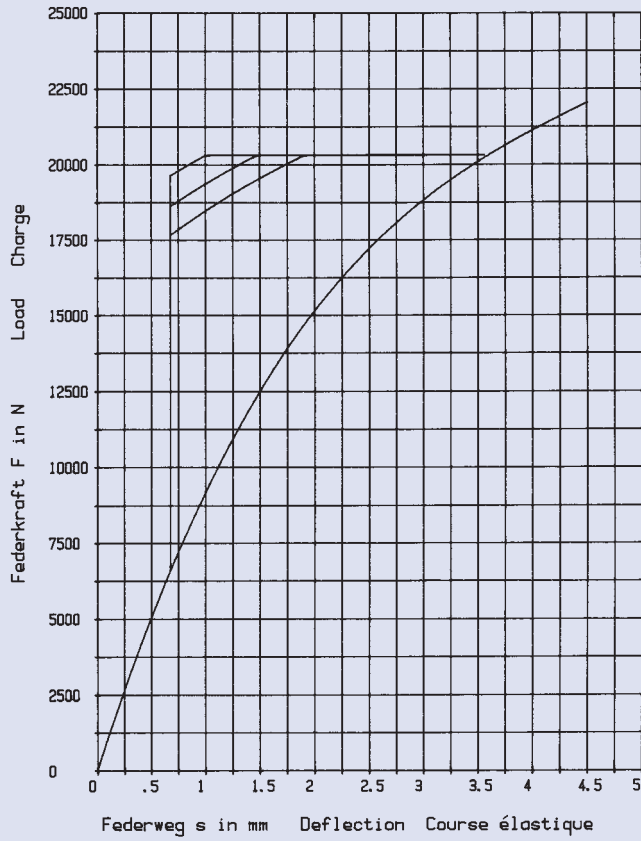
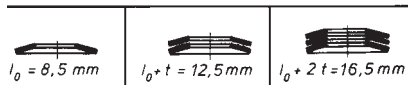


125 x 51 x 4,0

GR 2

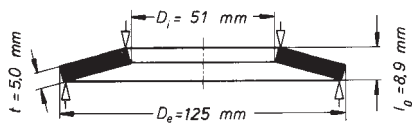


$h_0 = 4,5 \text{ mm}$        $D_e / D_i = 2,45$   
 $t = 4,0 \text{ mm}$        $D_e / t = 31,25$   
 $h_0 / t = 1,125$        $m = 321,18 \text{ g}$

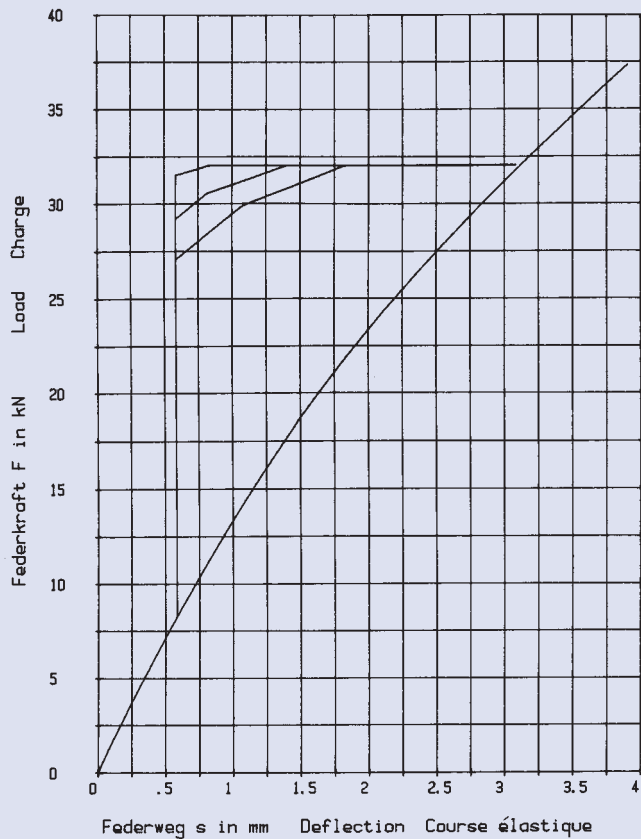
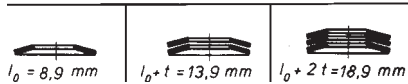


125 x 51 x 5,0

GR 2



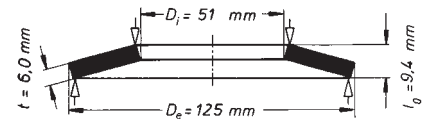
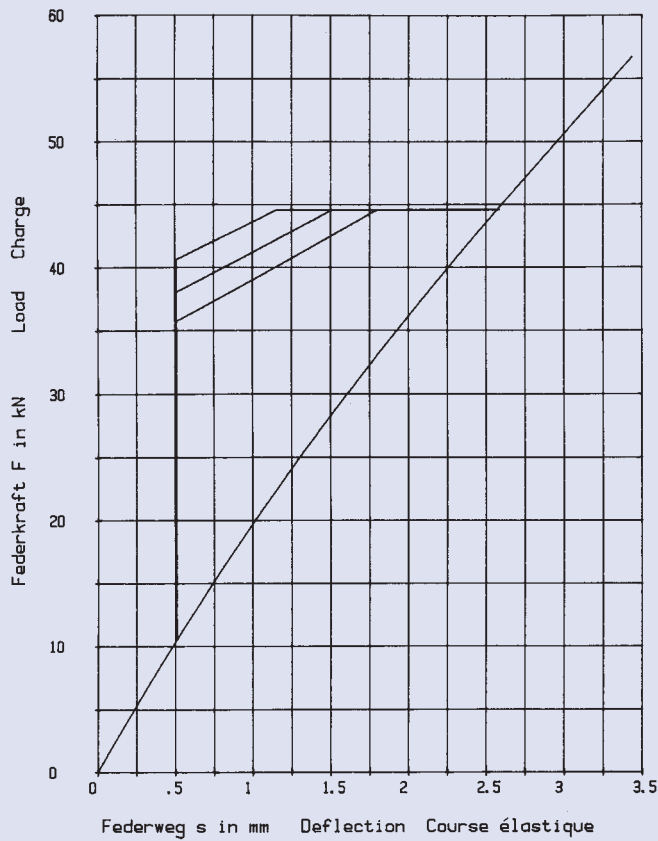
$h_0 = 3,9 \text{ mm}$        $D_e / D_i = 2,45$   
 $t = 5,0 \text{ mm}$        $D_e / t = 25$   
 $h_0 / t = 0,78$        $m = 401,478 \text{ g}$



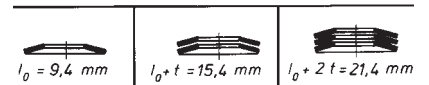


125 x 51 x 6,0

GR 2

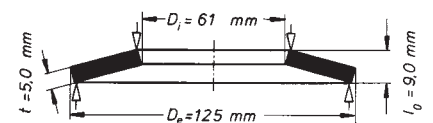
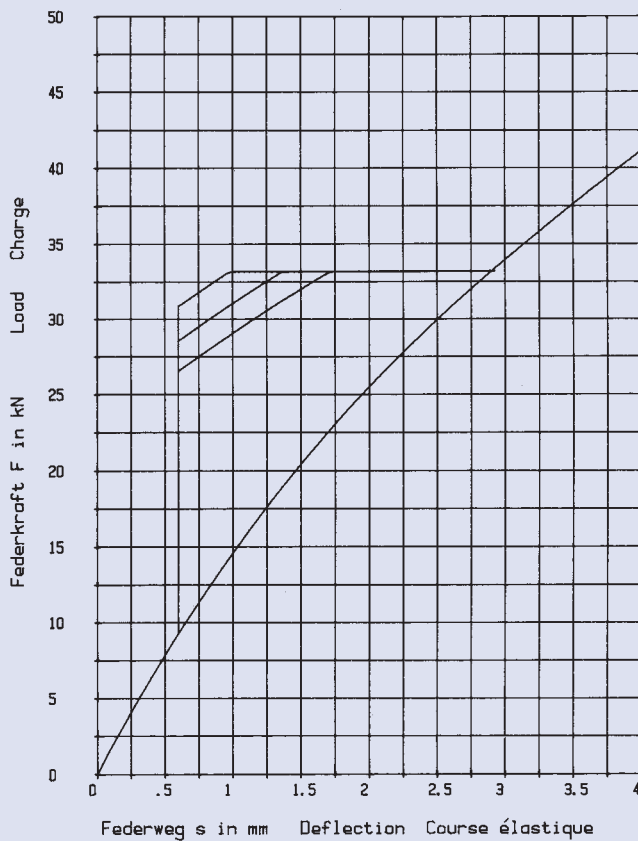


$h_0 = 3,4 \text{ mm}$        $D_e/D_i = 2,45$   
 $t = 6,0 \text{ mm}$        $D_e/t = 20,833$   
 $h_0/t = 0,566$        $m = 4,81,773 \text{ g}$

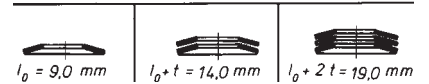


125 x 61 x 5,0

GR 2

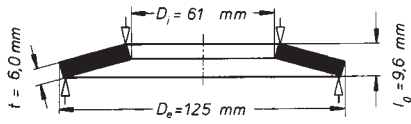


$h_0 = 4,0 \text{ mm}$        $D_e/D_i = 2,049$   
 $t = 5,0 \text{ mm}$        $D_e/t = 25$   
 $h_0/t = 0,8$        $m = 366,953 \text{ g}$

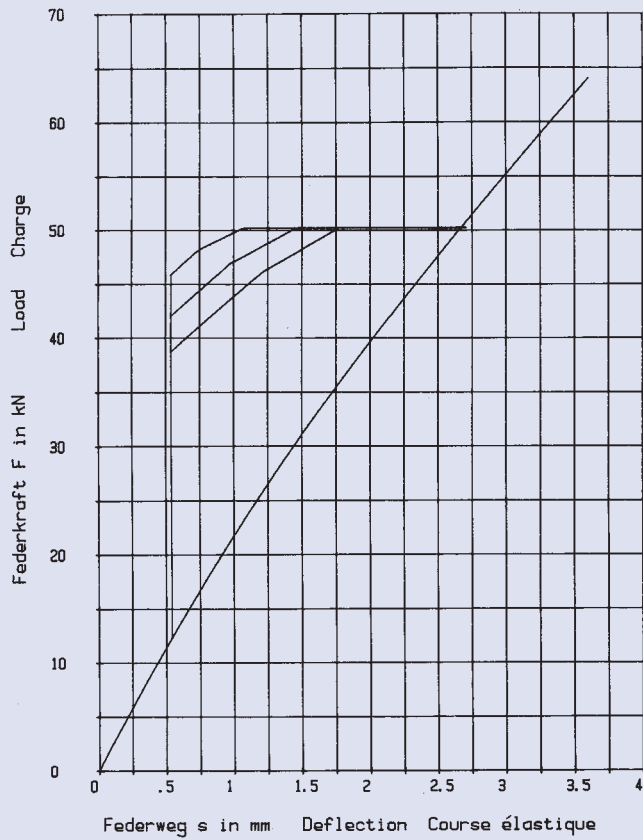
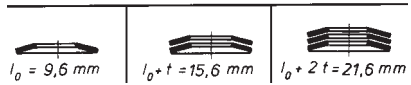


125 x 61 x 6,0

GR 2

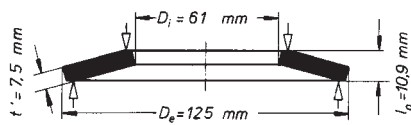


$h_0 = 3,6 \text{ mm}$        $D_e / D_i = 2,049$   
 $t = 6,0 \text{ mm}$        $D_e / t = 20,833$   
 $h_0 / t = 0,5$        $m = 440,343 \text{ g}$

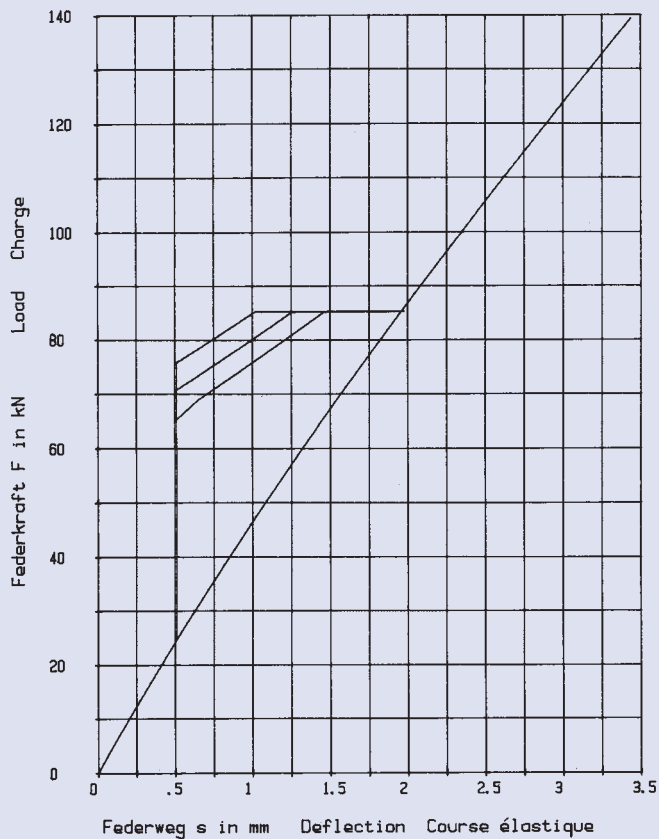
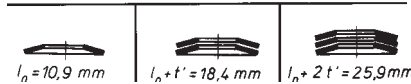


125 x 61 x 8,0

GR 3

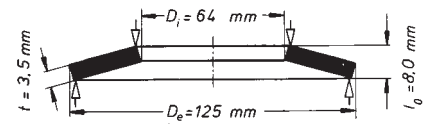


$h_0 = 2,9 \text{ mm}$        $D_e / D_i = 2,049$        $h_0' = 3,4 \text{ mm}$   
 $t = 8,0 \text{ mm}$        $D_e / t = 15,625$        $t' / t = 0,937$   
 $h_0 / t = 0,362$        $m = 550,43 \text{ g}$        $h_0' / t' = 0,453$

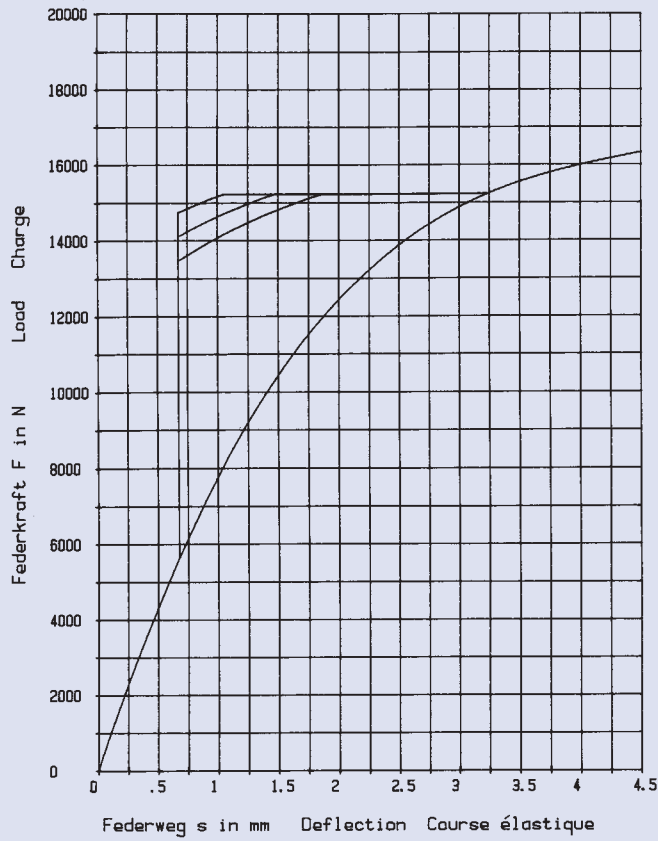
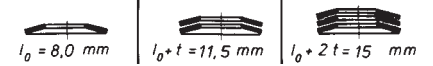


## 125 x 64 x 3,5

### GR 2, DIN 2093 – C 125

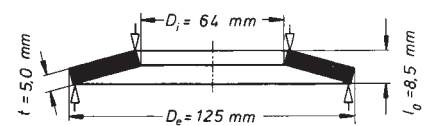


$$\begin{aligned}
 h_0 &= 4,5 \text{ mm} & D_e/D_i &= 1,953 \\
 t &= 3,5 \text{ mm} & D_e/t &= 35,714 \\
 h_0/t &= 1,285 & m &= 248,775 \text{ g}
 \end{aligned}$$

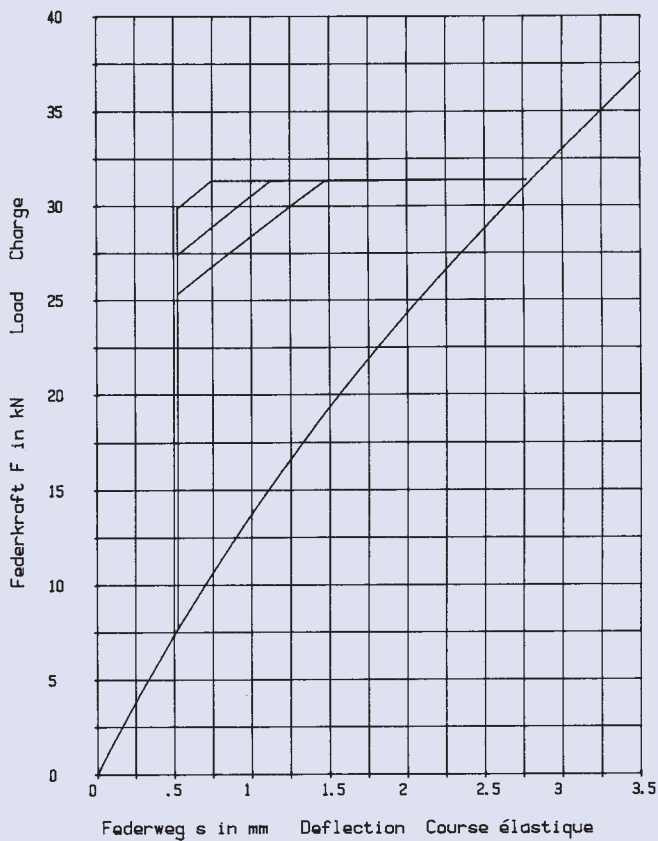
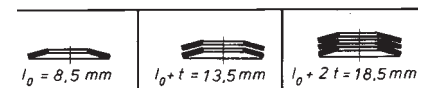


## 125 x 64 x 5,0

### GR 2, DIN 2093 – B 125

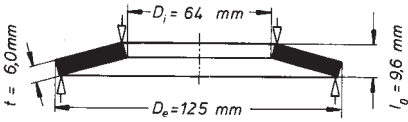


$$\begin{aligned}
 h_0 &= 3,5 \text{ mm} & D_e/D_i &= 1,953 \\
 t &= 5,0 \text{ mm} & D_e/t &= 25 \\
 h_0/t &= 0,7 & m &= 355,393 \text{ g}
 \end{aligned}$$

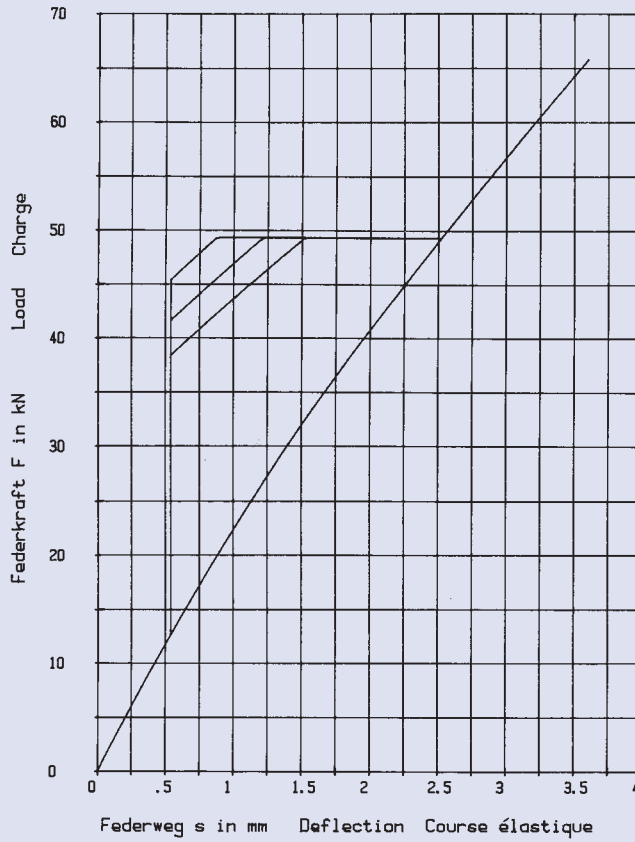
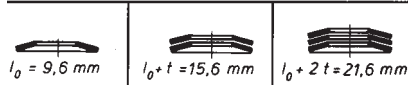


125 x 64 x 6,0

GR 2

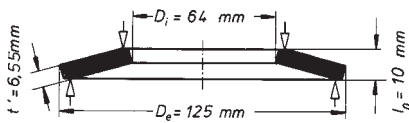


$h_0 = 3,6 \text{ mm}$        $D_e / D_i = 1,953$   
 $t = 6,0 \text{ mm}$        $D_e / t = 20,833$   
 $h_0 / t = 0,6$        $m = 426,471 \text{ g}$

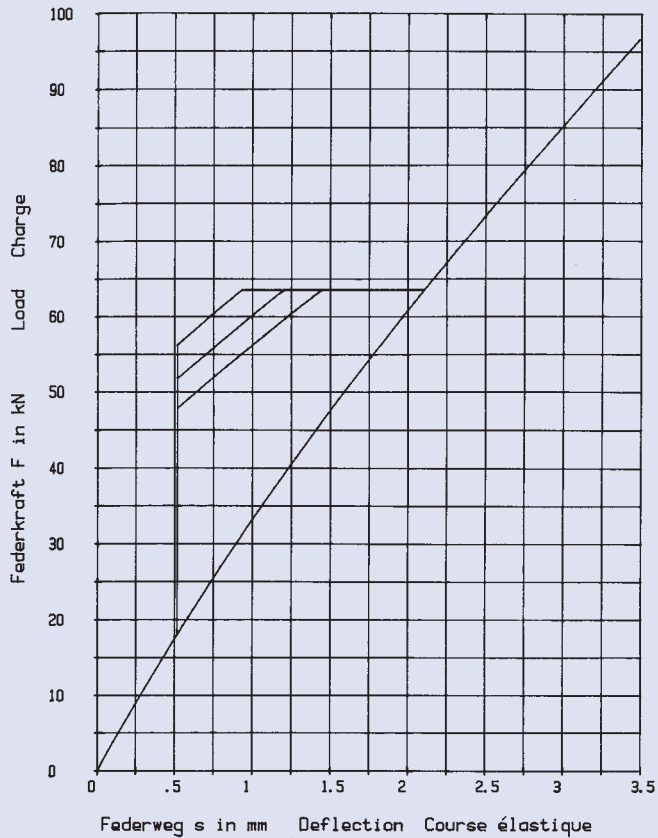
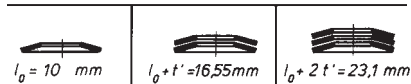


125 x 64 x 7,0

GR 3

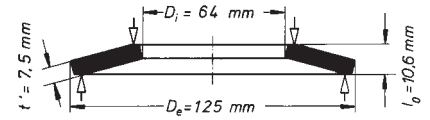
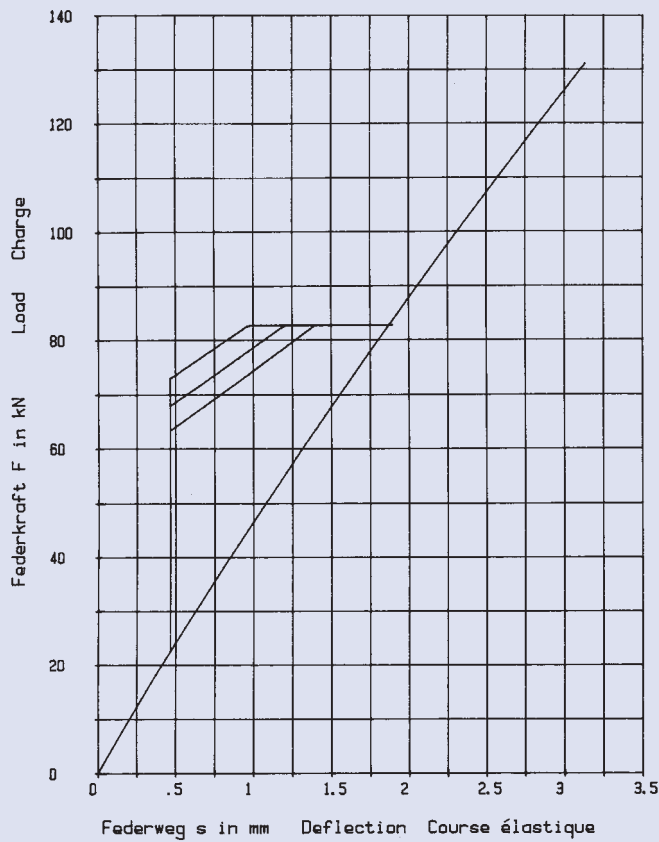


$h_0 = 3,0 \text{ mm}$        $D_e / D_i = 1,953$        $h'_0 = 3,45 \text{ mm}$   
 $t = 7,0 \text{ mm}$        $D_e / t = 17,857$        $t' / t = 0,935$   
 $h_0 / t = 0,428$        $m = 465,56 \text{ g}$        $h'_0 / t' = 0,527$

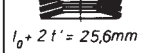
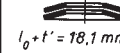
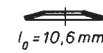


## 125 x 64 x 8,0

### GR 3, DIN 2093 – A 125

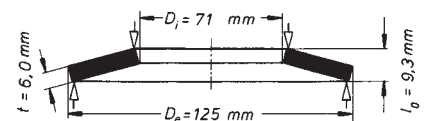
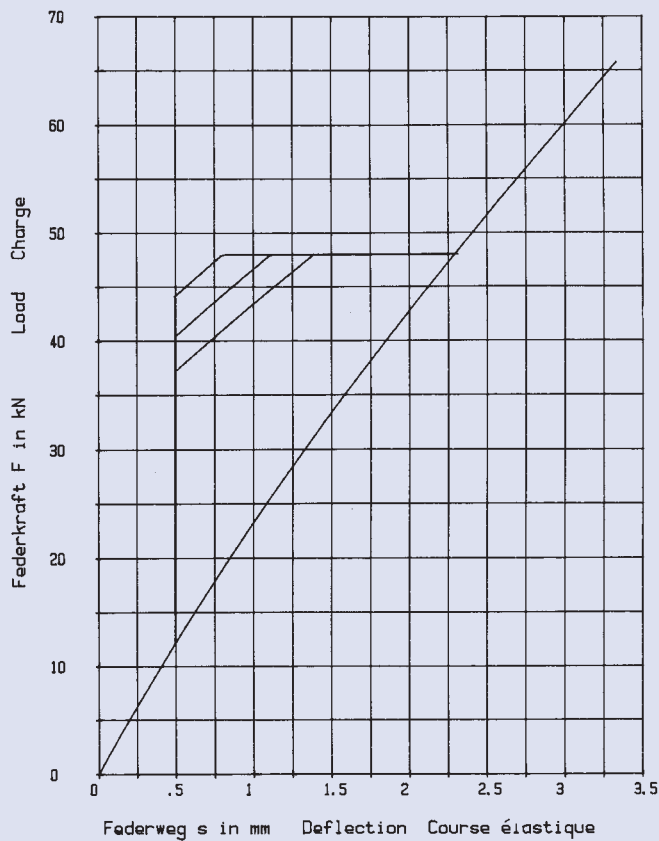


$h_0 = 2,6 \text{ mm}$	$D_e / D_i = 1,953$	$h'_0 = 3,1 \text{ mm}$
$t = 8,0 \text{ mm}$	$D_e / t = 15,625$	$t' / t = 0,937$
$h_0 / t = 0,325$	$m = 533,089 \text{ g}$	$h'_0 / t' = 0,413$

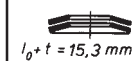
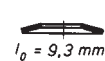


## 125 x 71 x 6,0

### GR 2

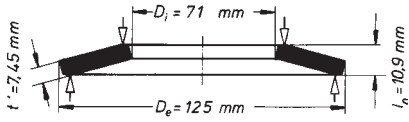


$h_0 = 3,3 \text{ mm}$	$D_e / D_i = 1,76$
$t = 6,0 \text{ mm}$	$D_e / t = 20,833$
$h_0 / t = 0,55$	$m = 391,515 \text{ g}$

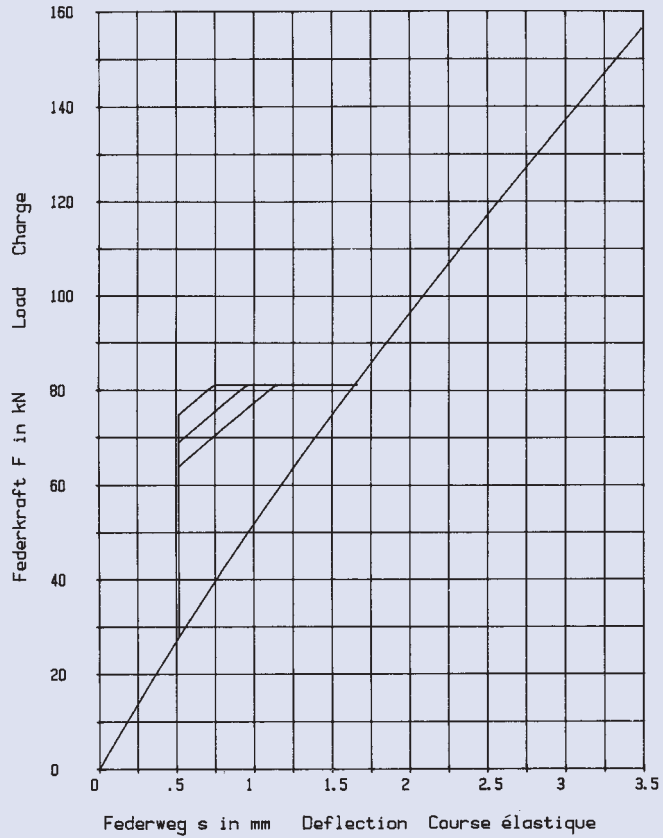
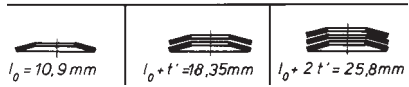


125 x 71 x 8,0

GR 3

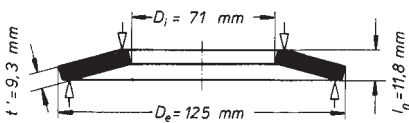


$t = 2,9 \text{ mm}$      $D_e / D_1 = 1,76$      $h'_0 = 3,45 \text{ mm}$   
 $t = 8,0 \text{ mm}$      $D_e / t = 15,625$      $t' / t = 0,931$   
 $l_0 / t = 0,362$      $m = 4,86,13 \text{ g}$      $h'_0 / t' = 0,463$

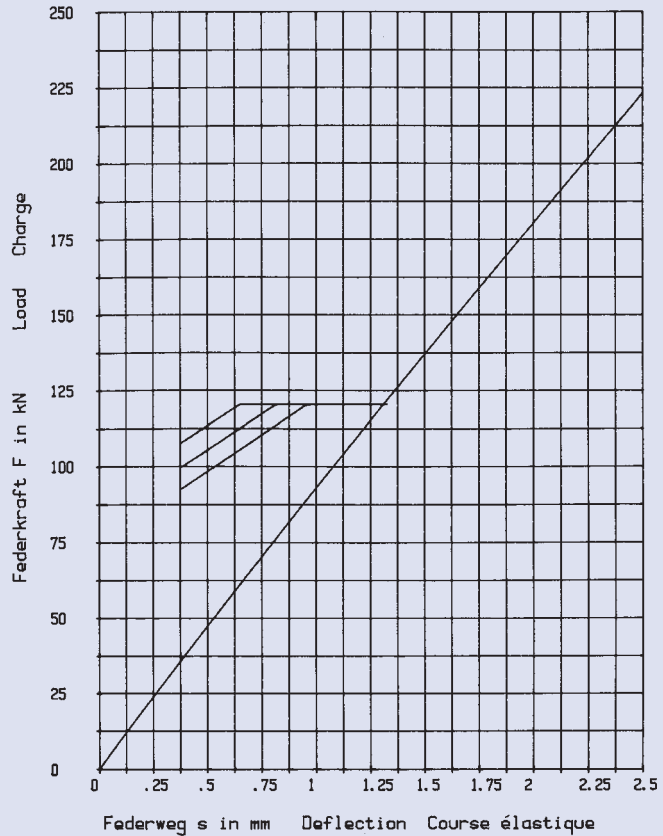
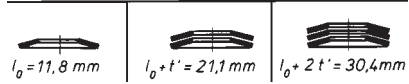


125 x 71 x 10

GR 3

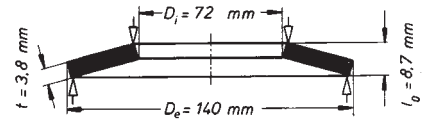
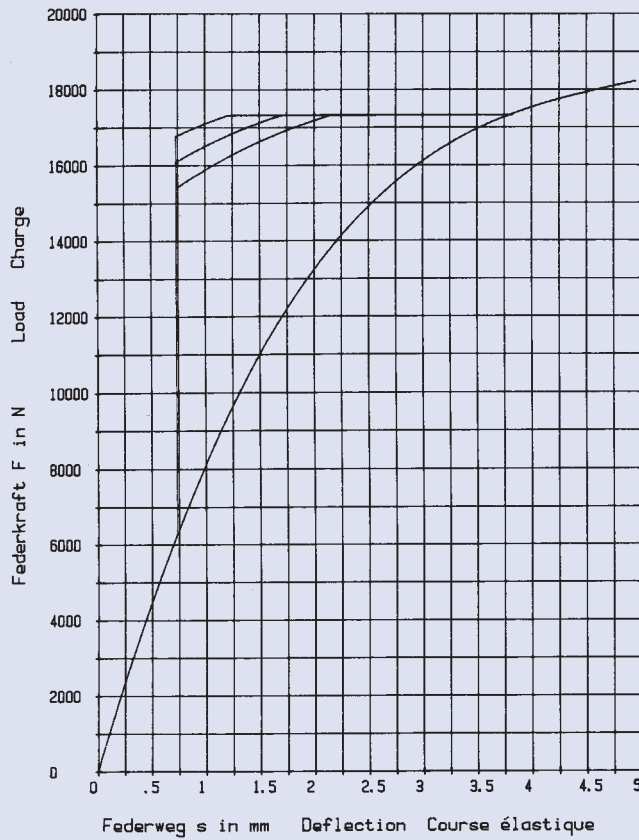


$t = 1,8 \text{ mm}$      $D_e / D_1 = 1,76$      $h'_0 = 2,5 \text{ mm}$   
 $t = 10 \text{ mm}$      $D_e / t = 12,5$      $t' / t = 0,93$   
 $l_0 / t = 0,18$      $m = 606,85 \text{ g}$      $h'_0 / t' = 0,269$



140 x 72 x 3,8

GR 2, DIN 2093 – C 140

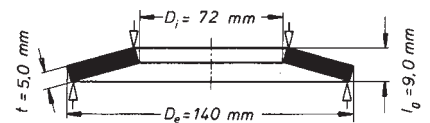
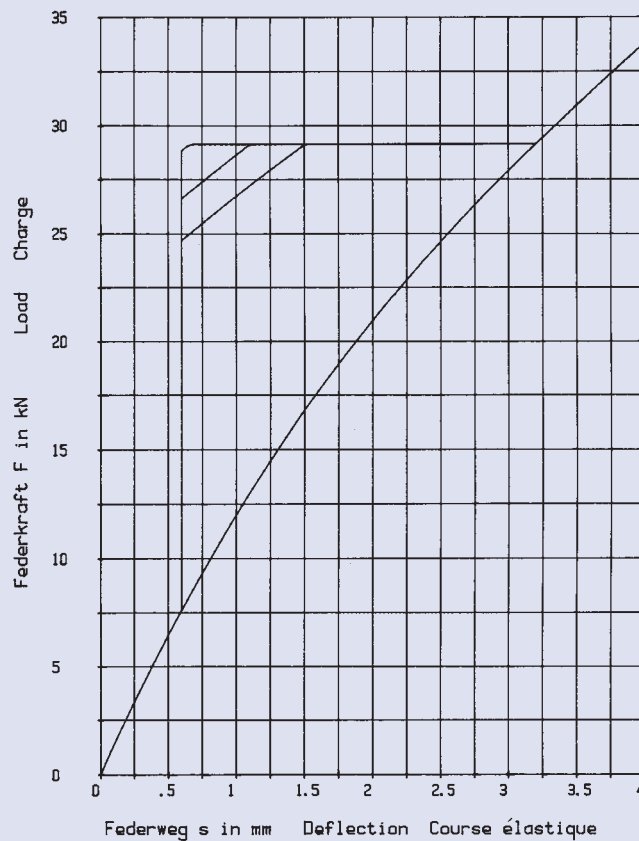


$h_0 = 4,9 \text{ mm}$        $D_e / D_i = 1,944$   
 $t = 3,8 \text{ mm}$        $D_e / t = 36,842$   
 $h_0 / t = 1,289$        $m = 337,734 \text{ g}$



140 x 72 x 5,0

GR 2, DIN 2093 – B 140

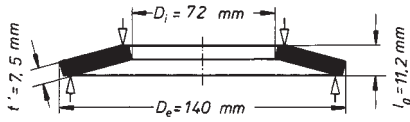


$h_0 = 4,0 \text{ mm}$        $D_e / D_i = 1,944$   
 $t = 5,0 \text{ mm}$        $D_e / t = 28$   
 $h_0 / t = 0,8$        $m = 444,388 \text{ g}$

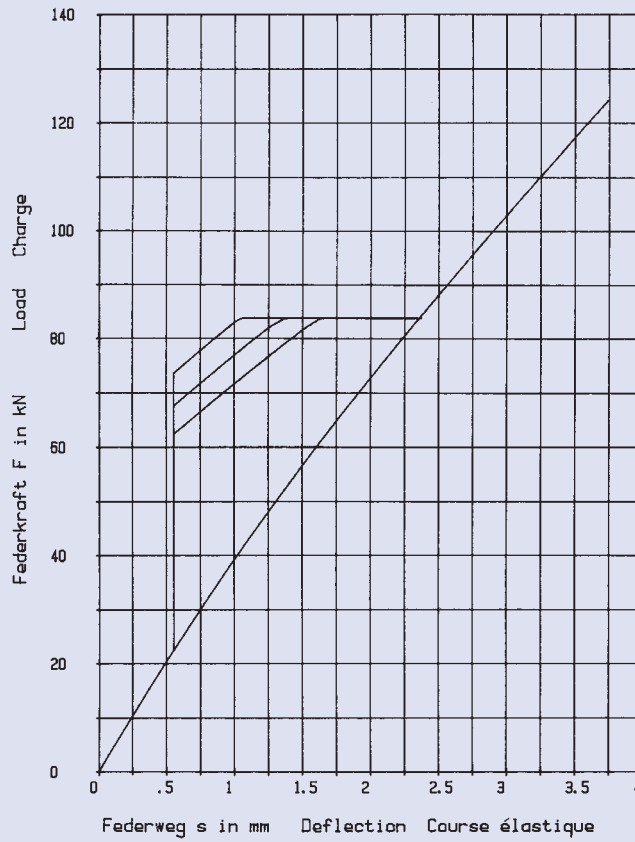
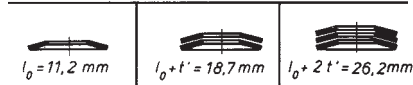


140 x 72 x 8,0

GR 3, DIN 2093 – A 140

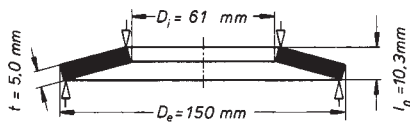


$h_0 = 3,2 \text{ mm}$      $D_e / D_i = 1,944$      $h'_0 = 3,7 \text{ mm}$   
 $t = 8,0 \text{ mm}$      $D_e / t = 17,5$      $t' / t = 0,937$   
 $h_0 / t = 0,4$      $m = 666,581 \text{ g}$      $h'_0 / t' = 0,493$

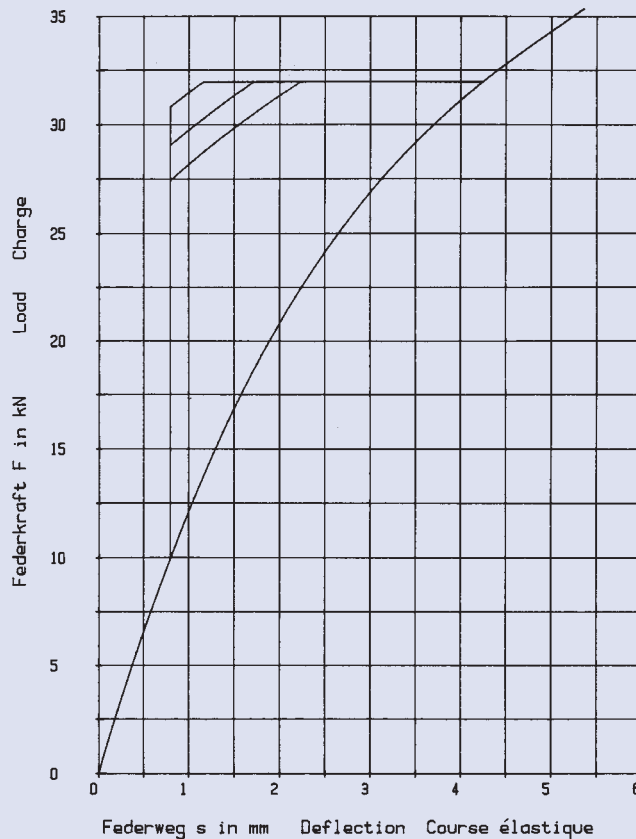
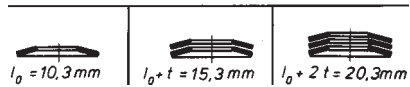


150 x 61 x 5,0

GR 2



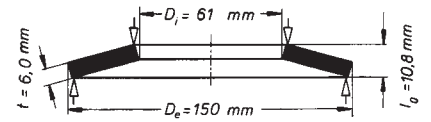
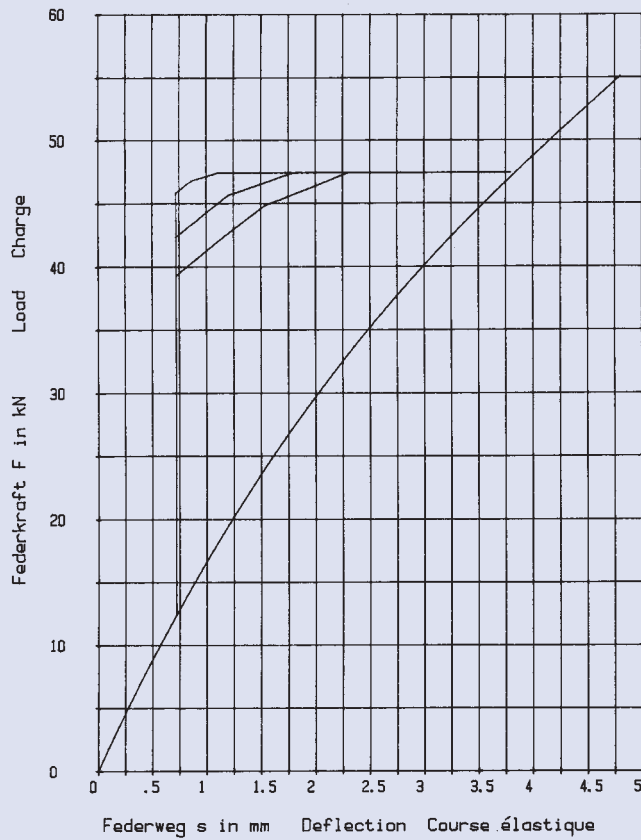
$h_0 = 5,3 \text{ mm}$      $D_e / D_i = 2,459$   
 $t = 5,0 \text{ mm}$      $D_e / t = 30$   
 $h_0 / t = 1,06$      $m = 578,881 \text{ g}$



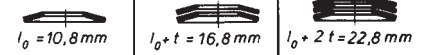


## 150 x 61 x 6,0

GR 2

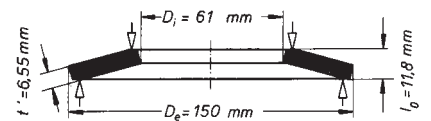
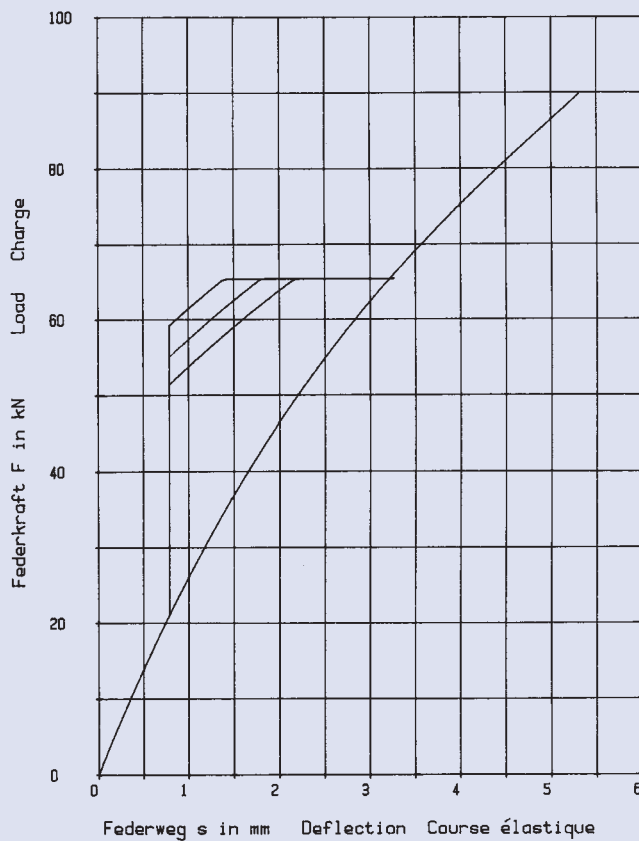


$$\begin{aligned}
 h_0 &= 4,8 \text{ mm} & D_e/D_i &= 2,459 \\
 t &= 6,0 \text{ mm} & D_e/t &= 25 \\
 h_0/t &= 0,8 & m &= 694,658 \text{ g}
 \end{aligned}$$

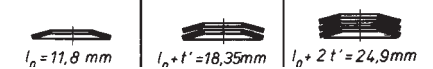


## 150 x 61 x 7,0

GR 3

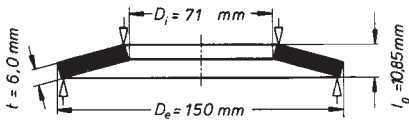


$$\begin{aligned}
 h_0 &= 4,8 \text{ mm} & D_e/D_i &= 2,459 & h_0' &= 5,25 \text{ mm} \\
 t &= 7,0 \text{ mm} & D_e/t &= 21,428 & t'/t &= 0,935 \\
 h_0/t &= 0,685 & m &= 758,34 \text{ g} & h_0'/t' &= 0,802
 \end{aligned}$$

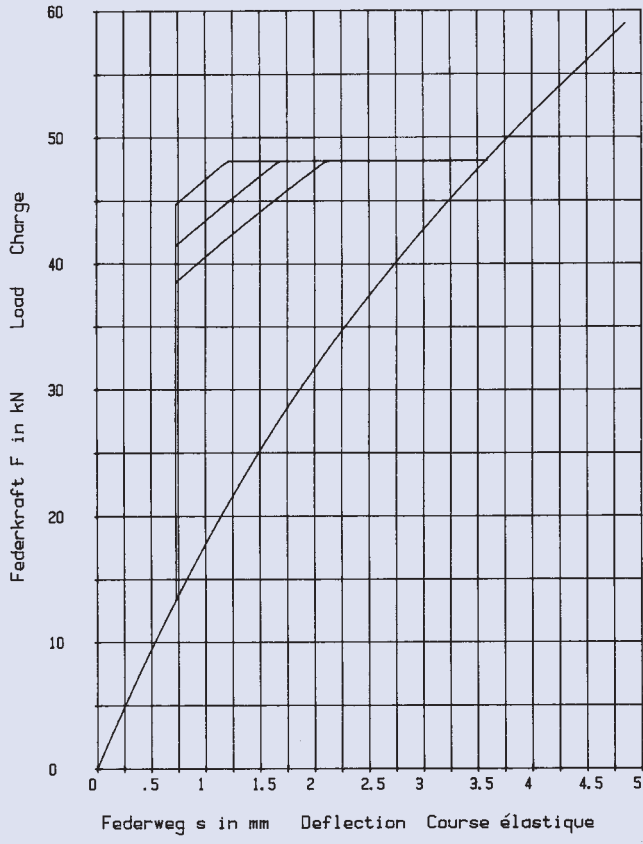
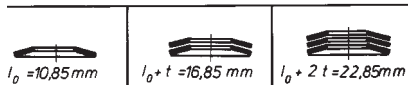


150 x 71 x 6,0

GR 2

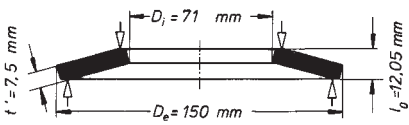


$h_0 = 4,85 \text{ mm}$        $D_e / D_i = 2,112$   
 $t = 6,0 \text{ mm}$        $D_e / t = 25$   
 $h_0 / t = 0,808$        $m = 645,029 \text{ g}$

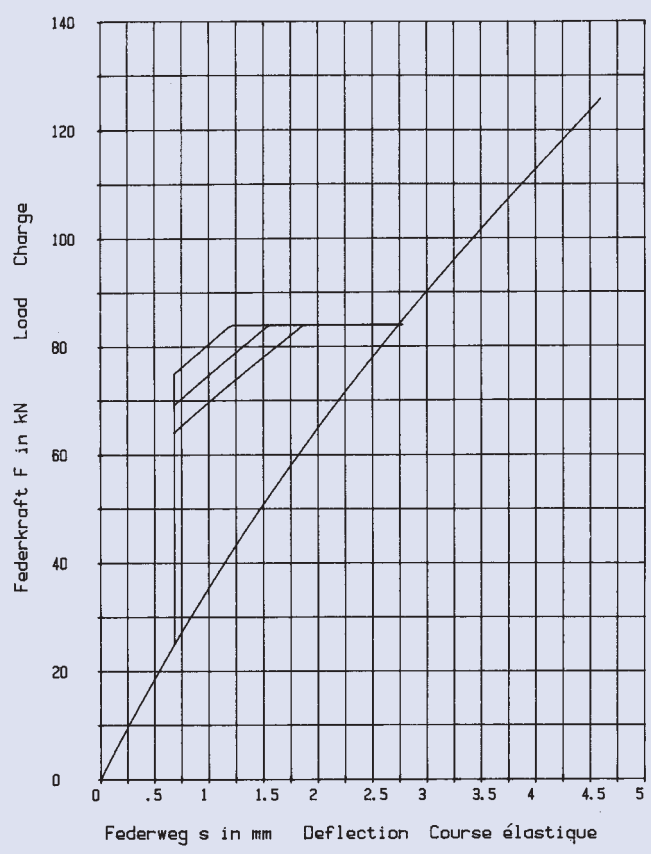
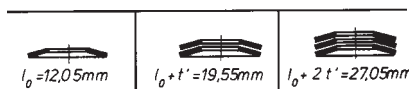


150 x 71 x 8,0

GR 3

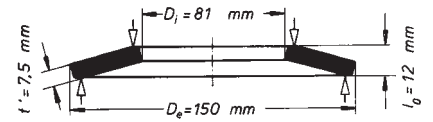
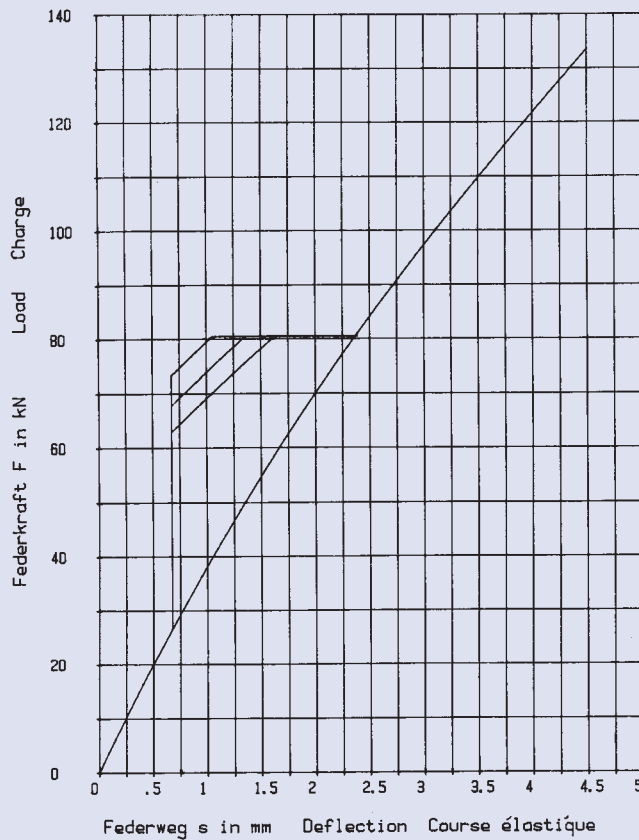


$h_0 = 4,05 \text{ mm}$        $D_e / D_i = 2,112$        $h'_0 = 4,55 \text{ mm}$   
 $t = 8,0 \text{ mm}$        $D_e / t = 18,75$        $t' / t = 0,937$   
 $h_0 / t = 0,506$        $m = 807,29 \text{ g}$        $h'_0 / t' = 0,607$

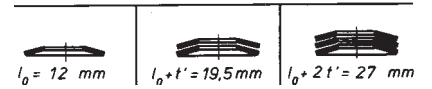


## 150 x 81 x 8,0

GR 3

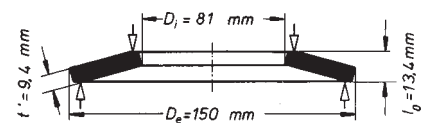
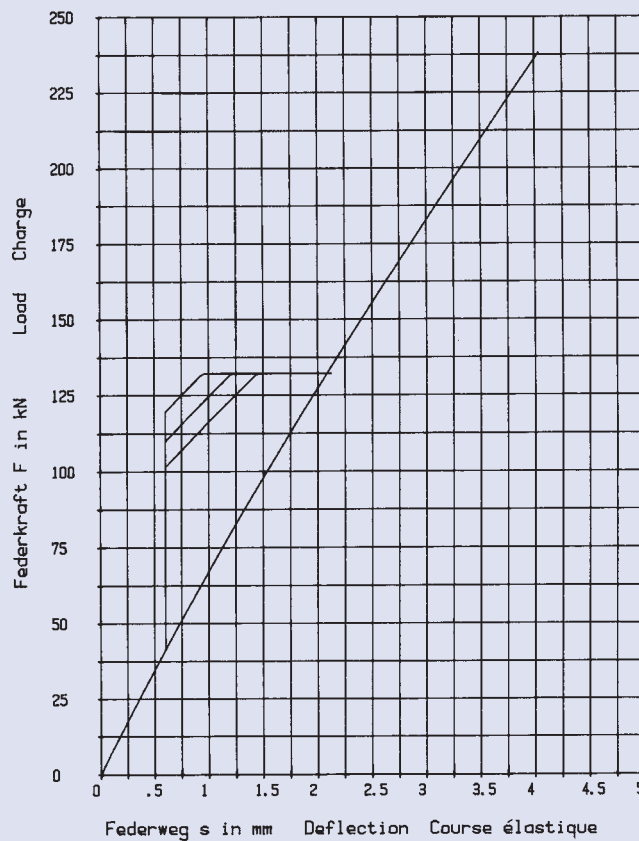


$h_0 = 4,0 \text{ mm}$	$D_e / D_1 = 1,851$	$h'_0 = 4,5 \text{ mm}$
$t = 8,0 \text{ mm}$	$D_e / t = 18,75$	$t' / t = 0,937$
$h_0 / t = 0,5$	$m = 737 \text{ g}$	$h'_0 / t' = 0,6$

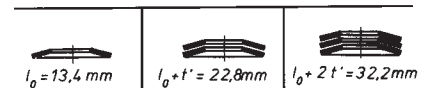


## 150 x 81 x 10

GR 3

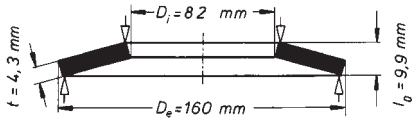


$h_0 = 3,4 \text{ mm}$	$D_e / D_1 = 1,851$	$h'_0 = 4,0 \text{ mm}$
$t = 10 \text{ mm}$	$D_e / t = 15$	$t' / t = 0,94$
$h_0 / t = 0,34$	$m = 923,71 \text{ g}$	$h'_0 / t' = 0,426$

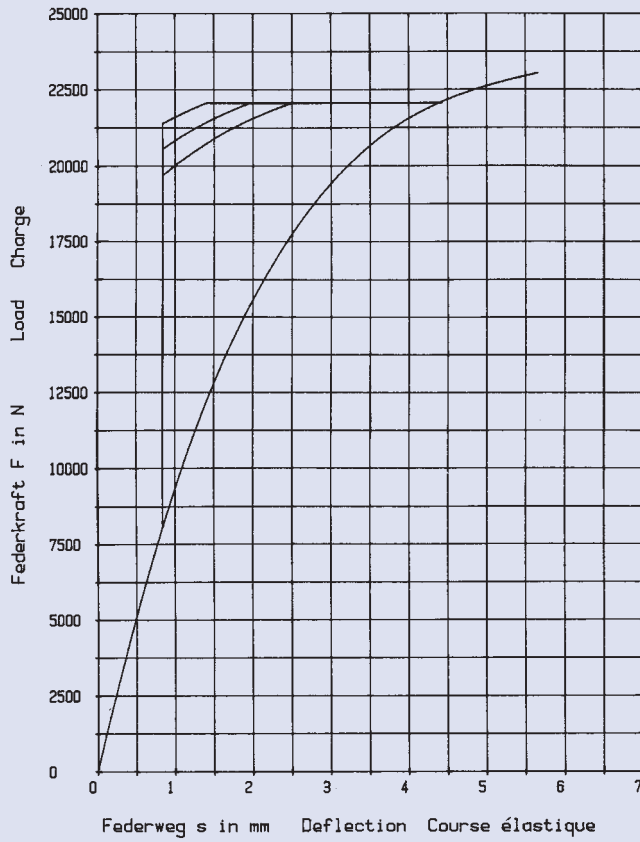
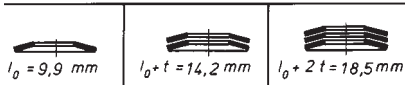


160 x 82 x 4,3

GR 2, DIN 2093 – C 160

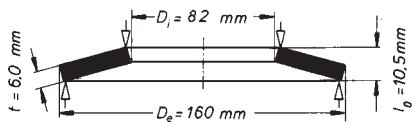


$h_0 = 5,6 \text{ mm}$        $D_e / D_i = 1,951$   
 $t = 4,3 \text{ mm}$        $D_e / t = 37,209$   
 $h_0 / t = 1,302$        $m = 500,409 \text{ g}$

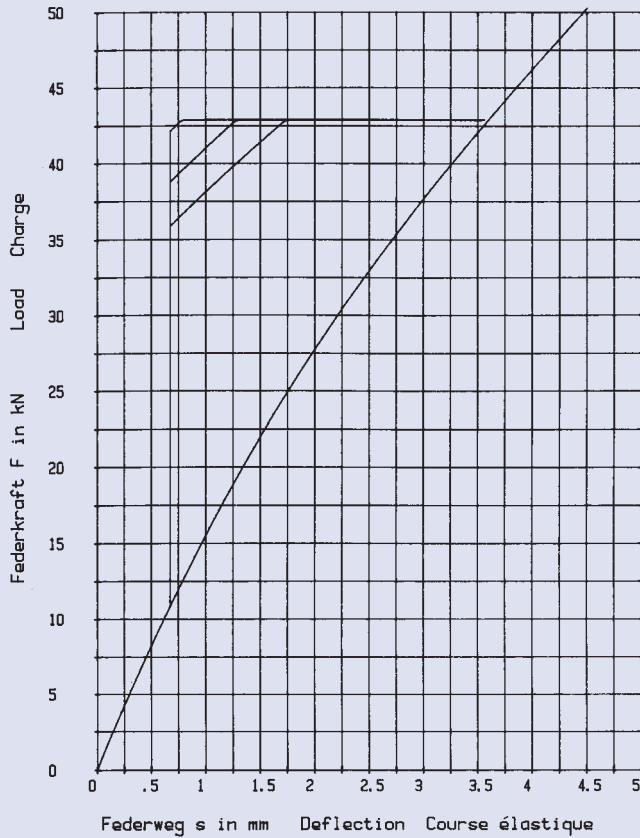
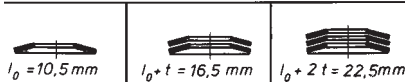


160 x 82 x 6,0

GR 2, DIN 2093 – B 160

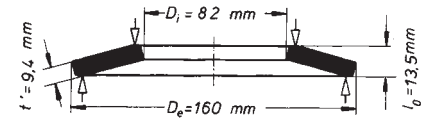
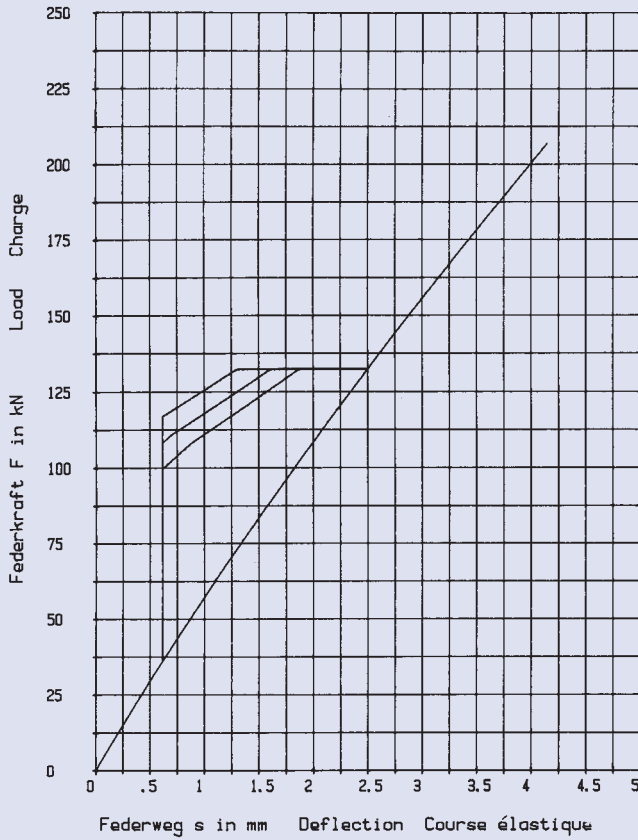


$h_0 = 4,5 \text{ mm}$        $D_e / D_i = 1,951$   
 $t = 6,0 \text{ mm}$        $D_e / t = 26,666$   
 $h_0 / t = 0,75$        $m = 698,246 \text{ g}$



160 x 82 x 10

GR 3, DIN 2093 – A 160

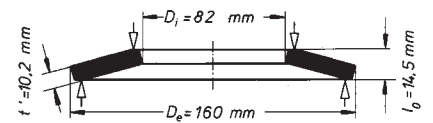
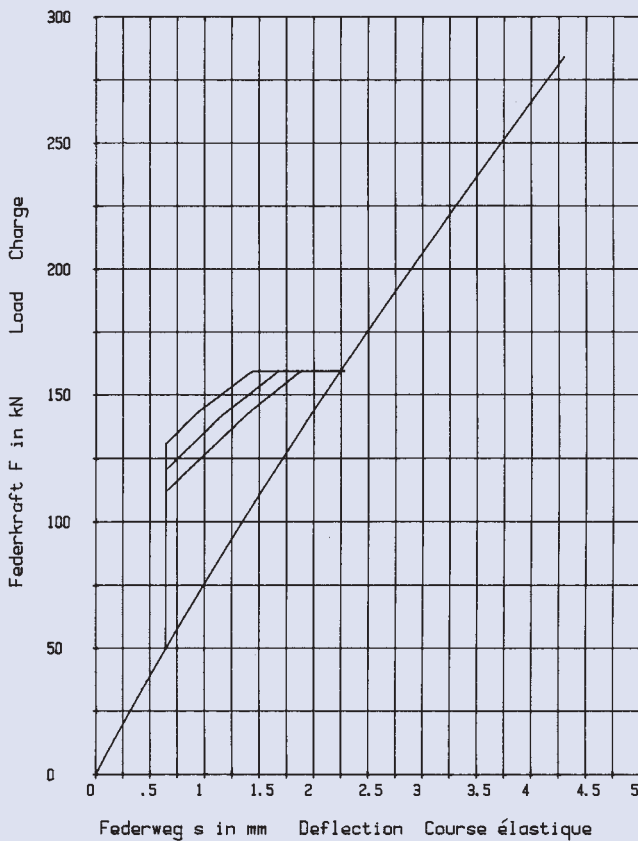


$h_0 = 3,5 \text{ mm}$      $D_e / D_1 = 1,951$      $h_0' = 4,1 \text{ mm}$   
 $t = 10 \text{ mm}$      $D_e / t = 16$      $t' / t = 0,94$   
 $h_0 / t = 0,35$      $m = 1,094 \text{ kg}$      $h_0' / t' = 0,436$

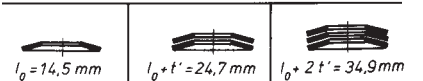


160 x 82 x 11

GR 3

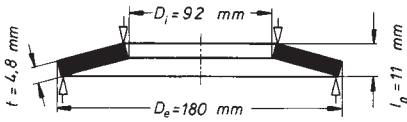


$h_0 = 3,5 \text{ mm}$      $D_e / D_1 = 1,951$      $h_0' = 4,3 \text{ mm}$   
 $t = 11 \text{ mm}$      $D_e / t = 14,545$      $t' / t = 0,927$   
 $h_0 / t = 0,318$      $m = 1,187 \text{ kg}$      $h_0' / t' = 0,422$

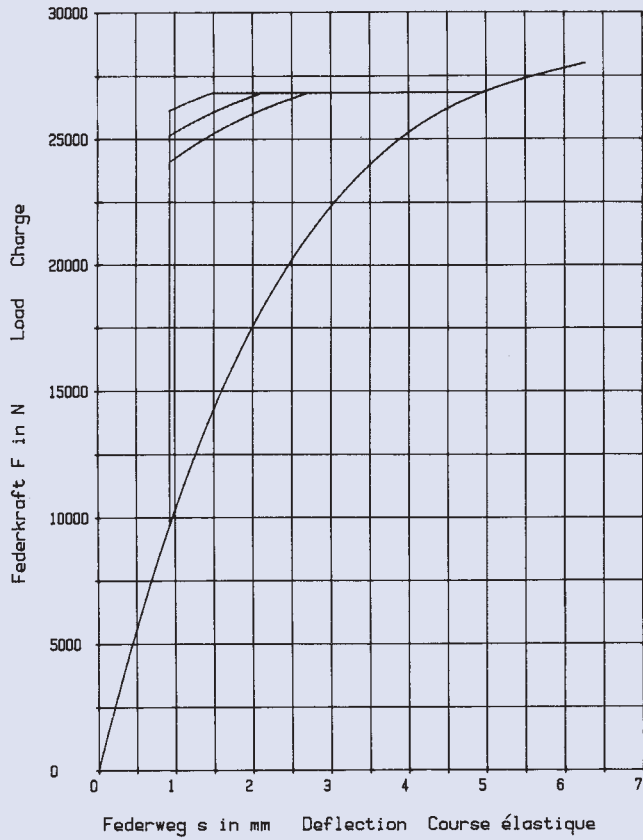
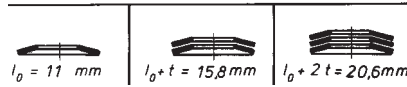


180 x 92 x 4,8

GR 2, DIN 2093 – C 180

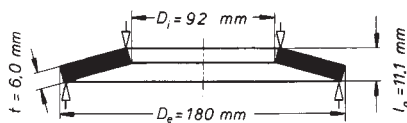


$h_0 = 6,2 \text{ mm}$        $D_e / D_1 = 1,956$   
 $t = 4,8 \text{ mm}$        $D_e / t = 37,5$   
 $h_0 / t = 1,291$        $m = 708,337 \text{ g}$

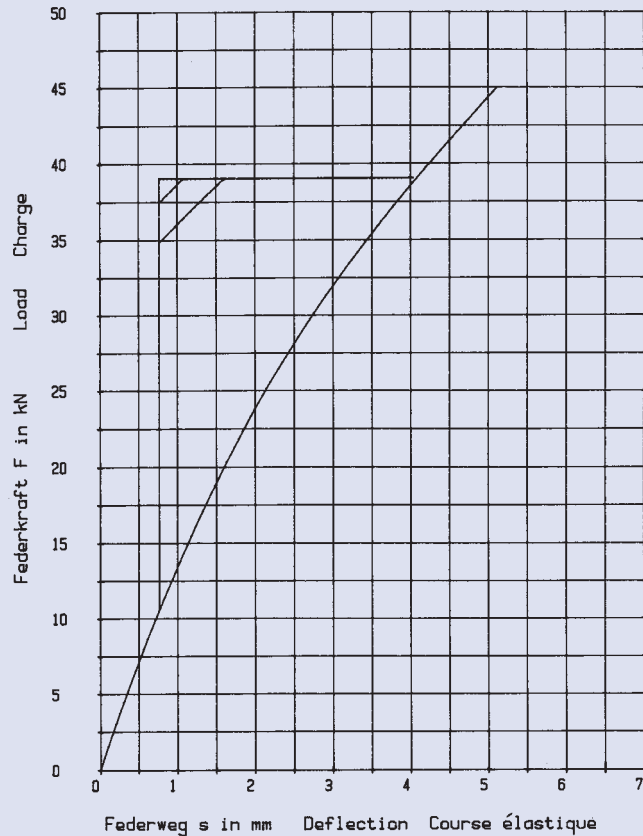
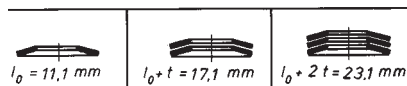


180 x 92 x 6,0

GR 2, DIN 2093 – B 180

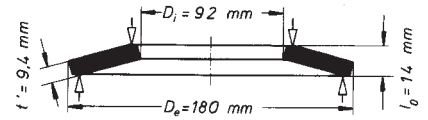
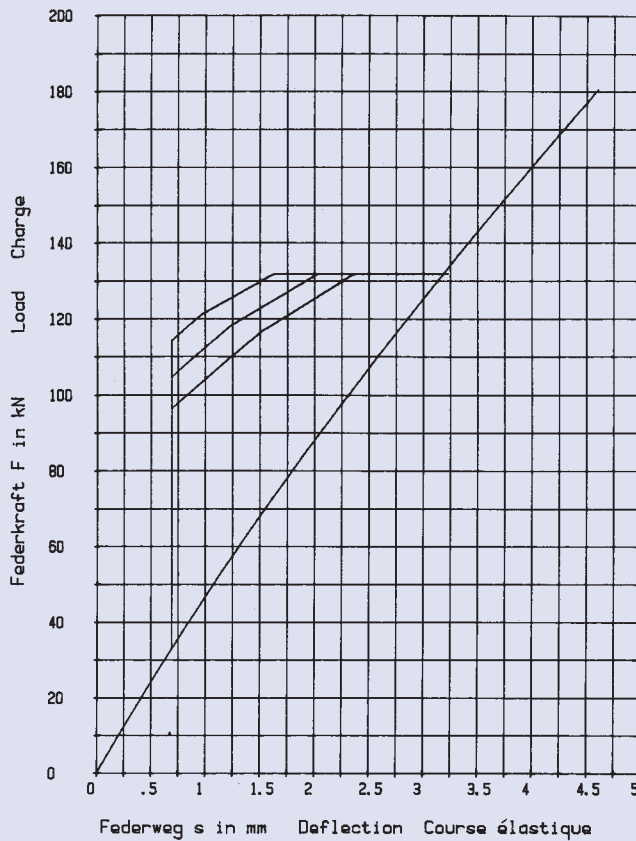


$h_0 = 5,1 \text{ mm}$        $D_e / D_1 = 1,956$   
 $t = 6,0 \text{ mm}$        $D_e / t = 30$   
 $h_0 / t = 0,85$        $m = 885,421 \text{ g}$

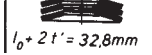
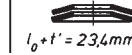
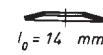


## 180 x 92 x 10

### GR 3, DIN 2093 – A 180

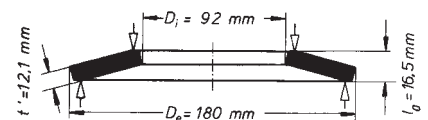
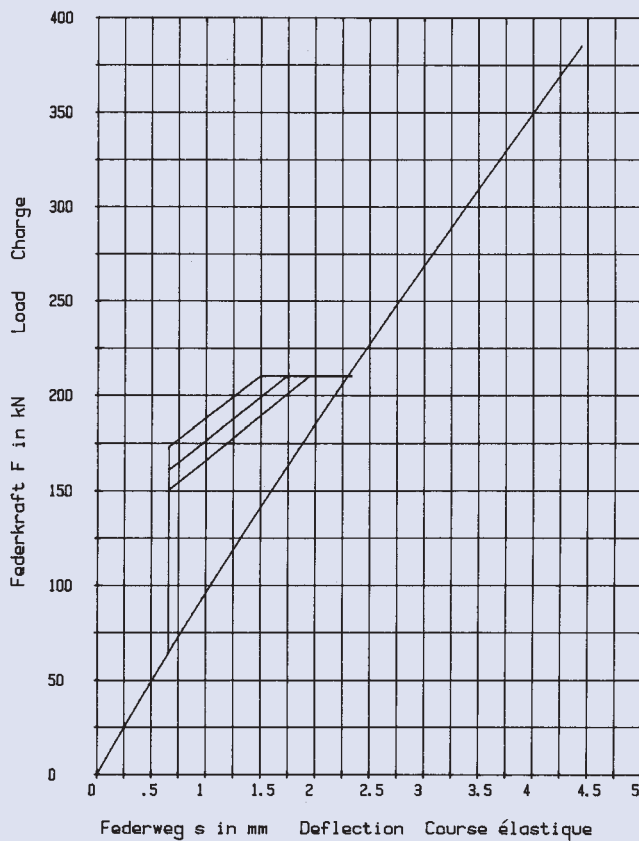


$h_0 = 4,0 \text{ mm}$	$D_e / D_i = 1,956$	$h'_0 = 4,6 \text{ mm}$
$t = 10 \text{ mm}$	$D_e / t = 18$	$t' / t = 0,94$
$h_0 / t = 0,4$	$m = 1,387 \text{ kg}$	$h'_0 / t' = 0,489$

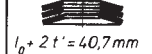
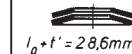
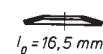


## 180 x 92 x 13

### GR 3

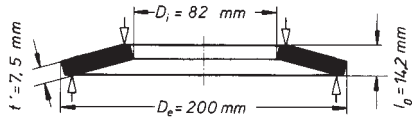


$h_0 = 3,5 \text{ mm}$	$D_e / D_i = 1,956$	$h'_0 = 4,4 \text{ mm}$
$t = 13 \text{ mm}$	$D_e / t = 13,846$	$t' / t = 0,93$
$h_0 / t = 0,269$	$m = 1,786 \text{ kg}$	$h'_0 / t' = 0,364$

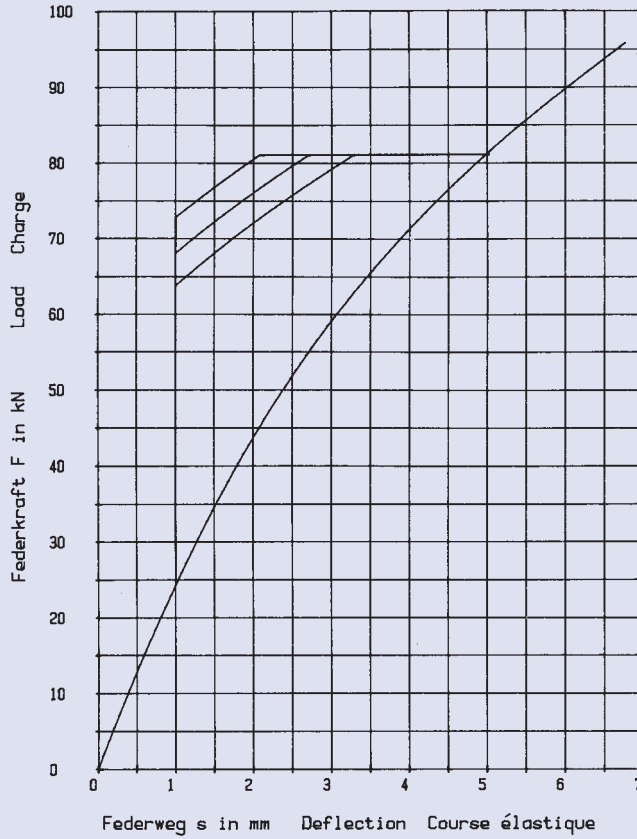
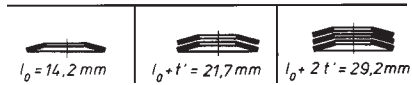


200 x 82 x 8,0

GR 3

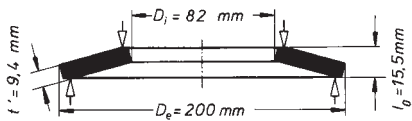


$h_0 = 6,2 \text{ mm}$      $D_e / D_i = 2,439$      $h'_0 = 6,7 \text{ mm}$   
 $t = 8,0 \text{ mm}$      $D_e / t = 25$      $t' / t = 0,937$   
 $h_0 / t = 0,775$      $m = 1,539 \text{ kg}$      $h'_0 / t' = 0,893$

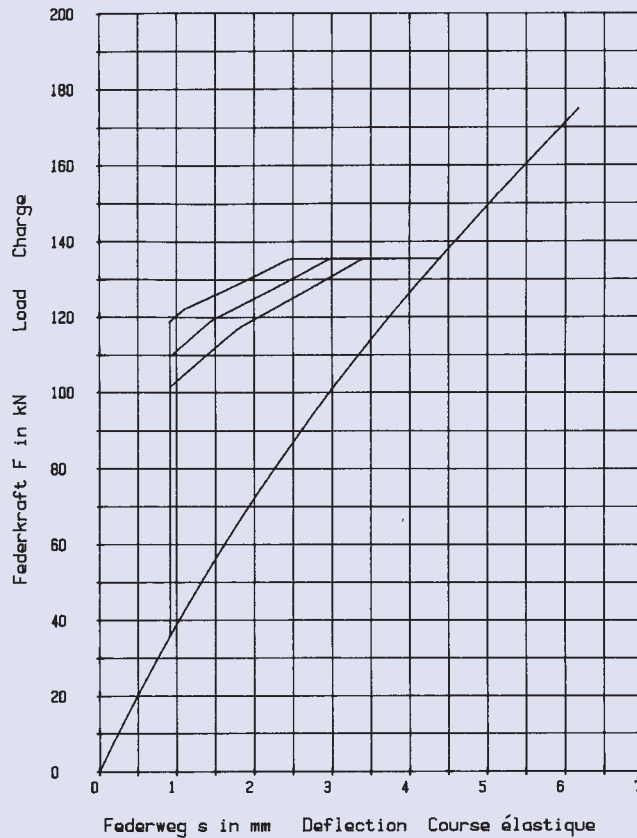
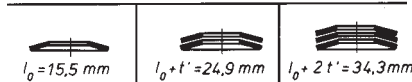


200 x 82 x 10

GR 3



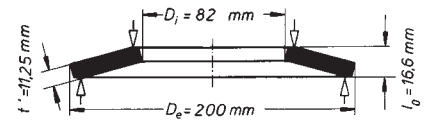
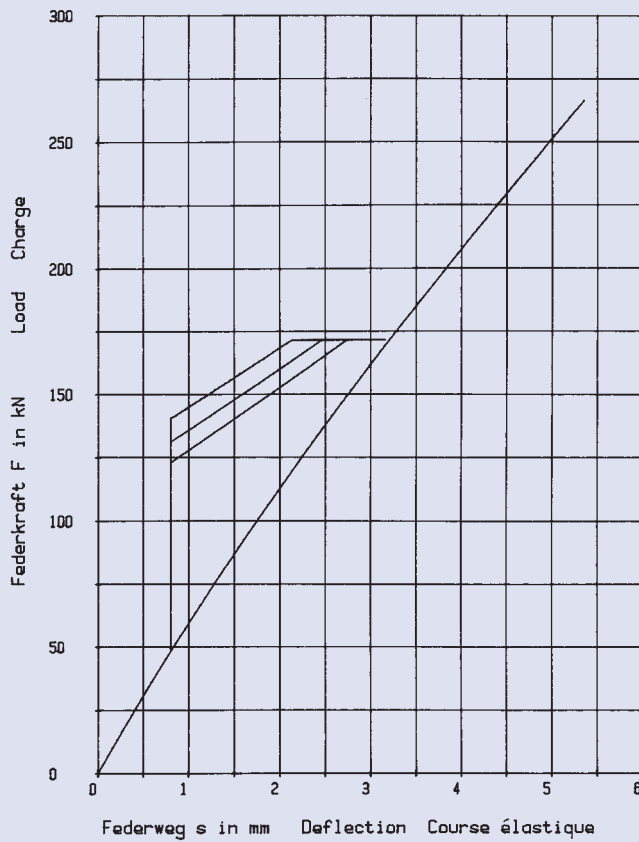
$h_0 = 5,5 \text{ mm}$      $D_e / D_i = 2,439$      $h'_0 = 6,1 \text{ mm}$   
 $t = 10 \text{ mm}$      $D_e / t = 20$      $t' / t = 0,94$   
 $h_0 / t = 0,55$      $m = 1,928 \text{ kg}$      $h'_0 / t' = 0,649$



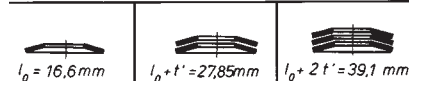


## 200 x 82 x 12

GR 3

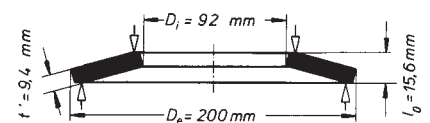
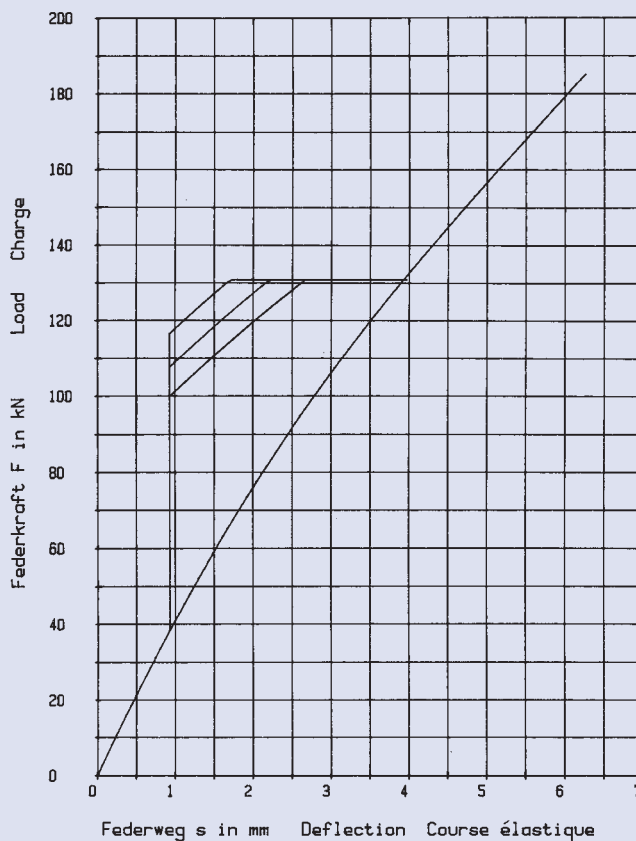


$h_0 = 4,6 \text{ mm}$	$D_e / D_i = 2,439$	$h'_0 = 5,35 \text{ mm}$
$t = 12 \text{ mm}$	$D_e / t = 16,667$	$t' / t = 0,937$
$h_0 / t = 0,383$	$m = 2,308 \text{ kg}$	$h'_0 / t' = 0,476$

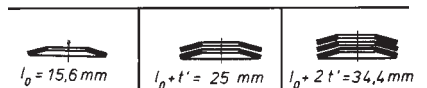


## 200 x 92 x 10

GR 3

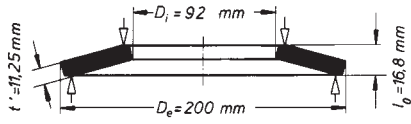


$h_0 = 5,6 \text{ mm}$	$D_e / D_i = 2,173$	$h'_0 = 6,2 \text{ mm}$
$t = 10 \text{ mm}$	$D_e / t = 20$	$t' / t = 0,94$
$h_0 / t = 0,56$	$m = 1,828 \text{ kg}$	$h'_0 / t' = 0,66$

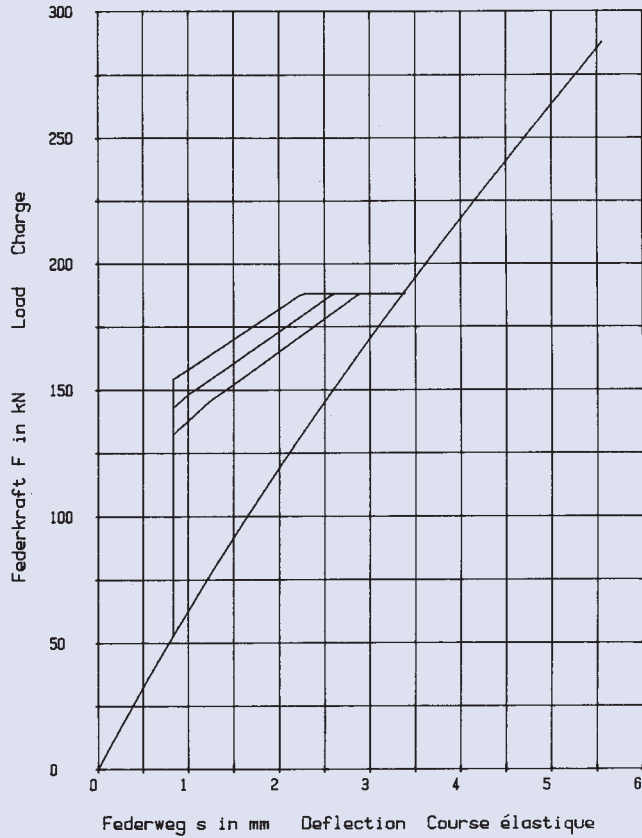
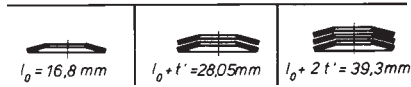


200 x 92 x 12

GR 3

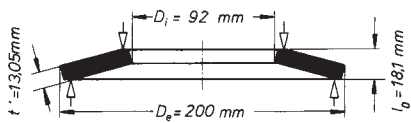


$h_0 = 4,8 \text{ mm}$      $D_e / D_i = 2,173$      $h_0' = 5,55 \text{ mm}$   
 $t = 12 \text{ mm}$      $D_e / t = 16,667$      $t' / t = 0,937$   
 $h_0 / t = 0,4$      $m = 2,187$      $h_0' / t' = 0,493$

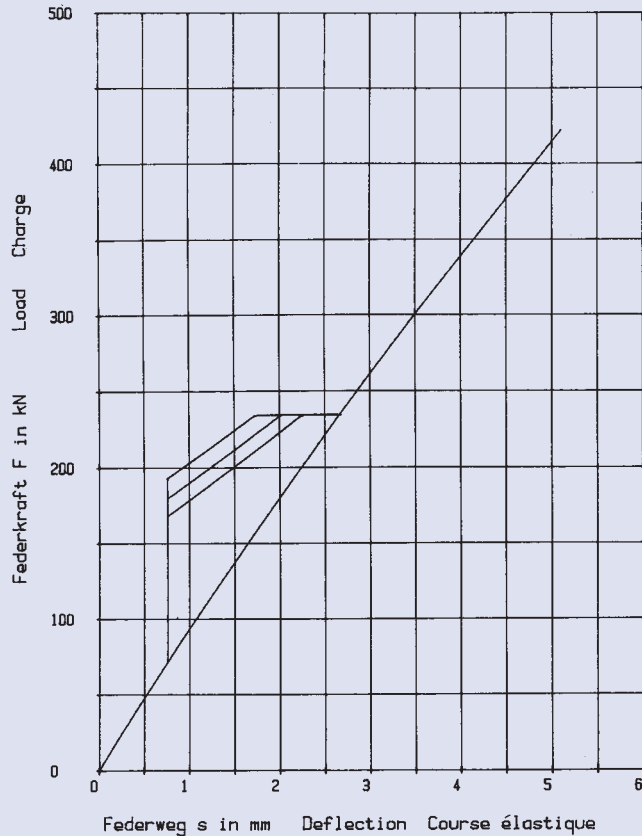
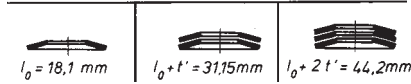


200 x 92 x 14

GR 3

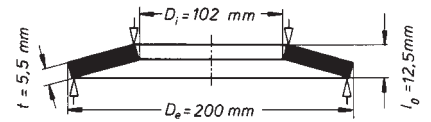


$h_0 = 4,1 \text{ mm}$      $D_e / D_i = 2,173$      $h_0' = 5,05 \text{ mm}$   
 $t = 14 \text{ mm}$      $D_e / t = 14,285$      $t' / t = 0,932$   
 $h_0 / t = 0,292$      $m = 2,537 \text{ kg}$      $h_0' / t' = 0,387$

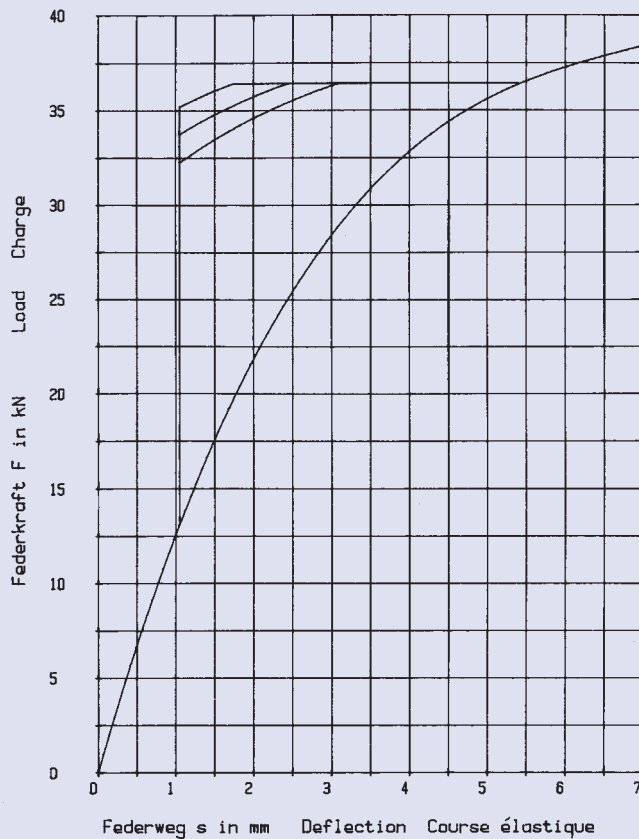
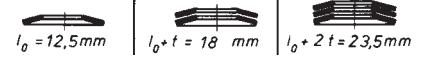


## 200 x 102 x 5,5

### GR 2, DIN 2093 – C 200

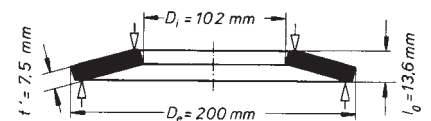


$$\begin{aligned}
 h_0 &= 7,0 \text{ mm} & D_e / D_i &= 1,96 \\
 t &= 5,5 \text{ mm} & D_e / t &= 36,363 \\
 h_0 / t &= 1,272 & m &= 1,004 \text{ kg}
 \end{aligned}$$

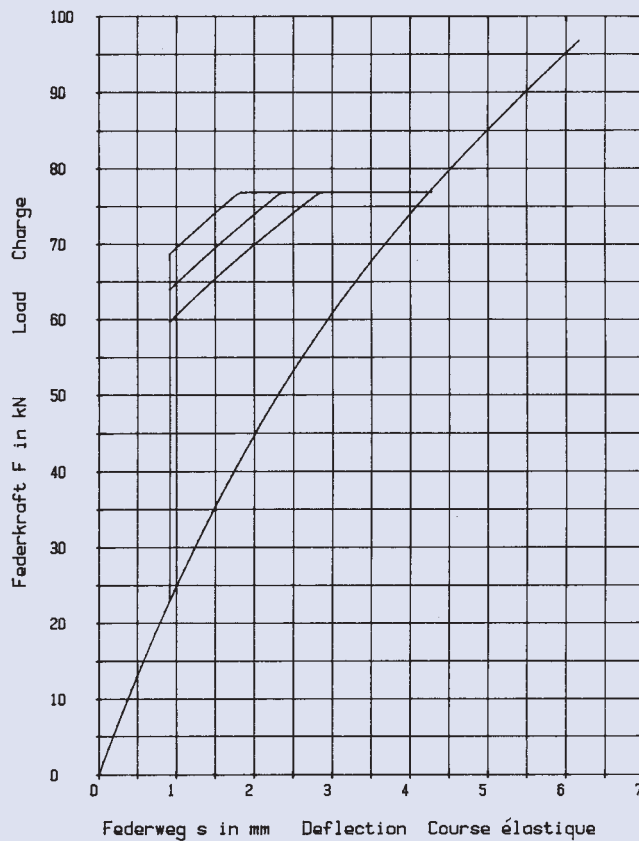
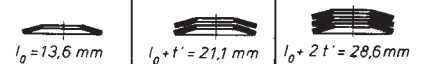


## 200 x 102 x 8,0

### GR 3, DIN 2093 – B 200

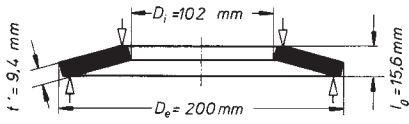


$$\begin{aligned}
 h_0 &= 5,6 \text{ mm} & D_e / D_i &= 1,96 & h'_0 &= 6,1 \text{ mm} \\
 t &= 8,0 \text{ mm} & D_e / t &= 25 & t' / t &= 0,937 \\
 h_0 / t &= 0,7 & m &= 1,368 \text{ kg} & h'_0 / t' &= 0,813
 \end{aligned}$$

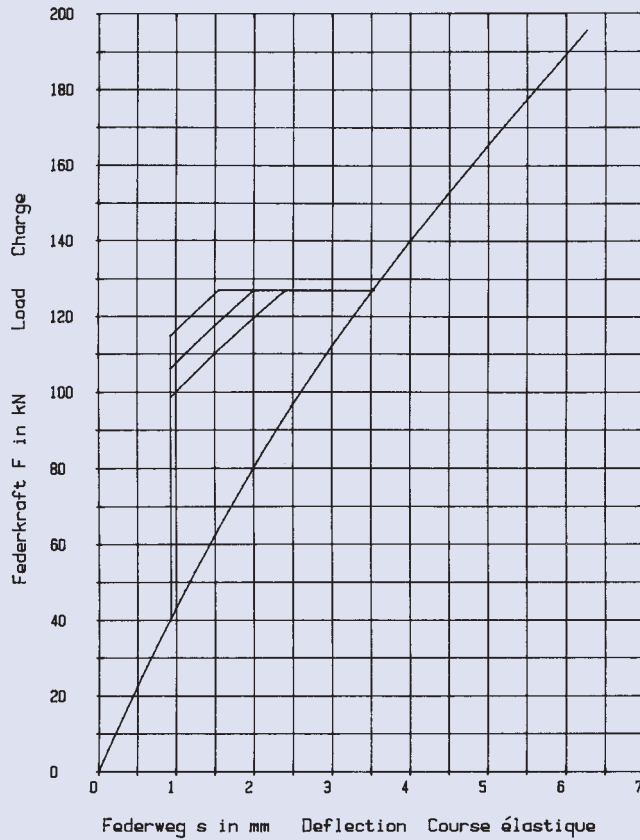
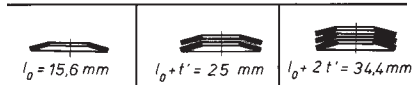


200 x 102 x 10

GR 3

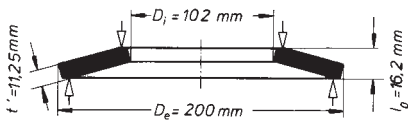


$h_0 = 5,6 \text{ mm}$	$D_e / D_i = 1,96$	$h_0' = 6,2 \text{ mm}$
$t = 10 \text{ mm}$	$D_e / t = 20$	$t' / t = 0,94$
$h_0 / t = 0,56$	$m = 1,716 \text{ kg}$	$h_0' / t' = 0,66$

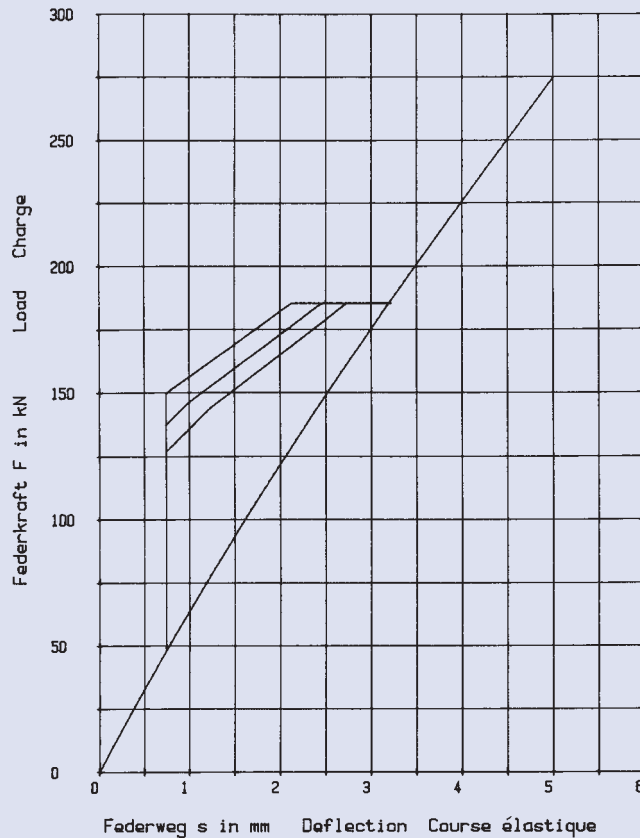
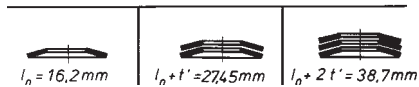


200 x 102 x 12

GR 3, DIN 2093 – A 200

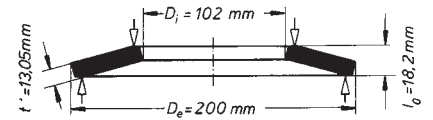
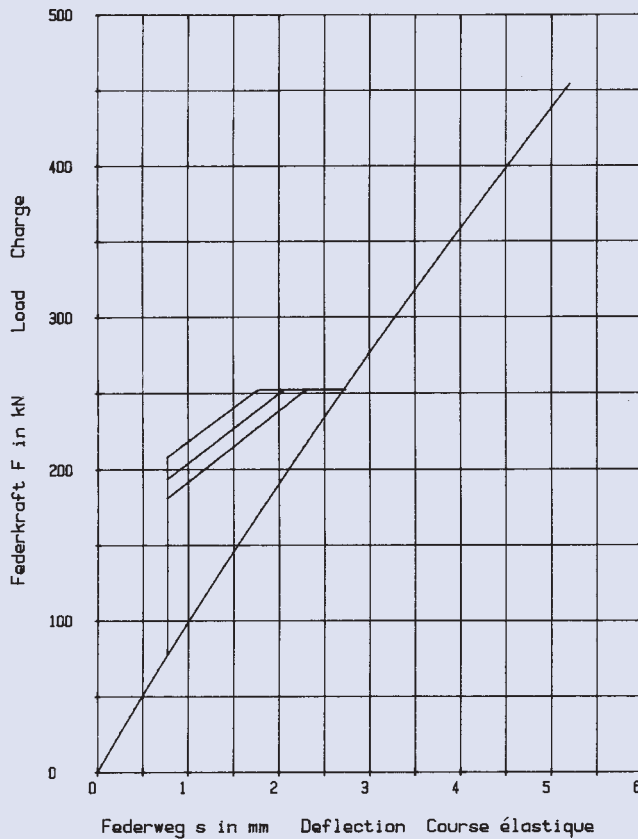


$h_0 = 4,2 \text{ mm}$	$D_e / D_i = 1,96$	$h_0' = 4,95 \text{ mm}$
$t = 12 \text{ mm}$	$D_e / t = 16,666$	$t' / t = 0,937$
$h_0 / t = 0,35$	$m = 2,053 \text{ kg}$	$h_0' / t' = 0,44$

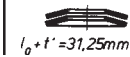
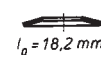


## 200 x 102 x 14

GR 3

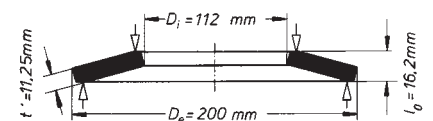
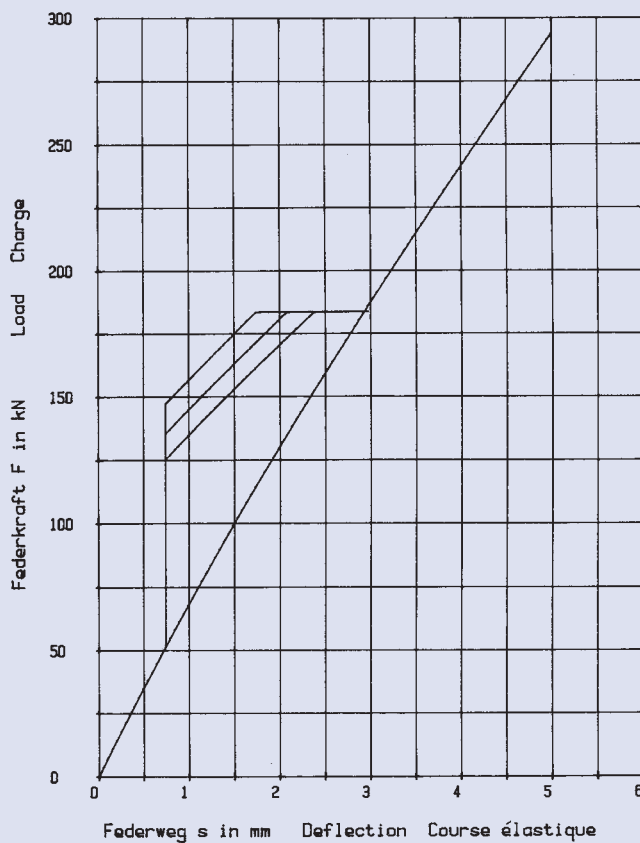


$h_0 = 4,2 \text{ mm}$	$D_0 / D_1 = 1,96$	$h'_0 = 5,15 \text{ mm}$
$t = 14 \text{ mm}$	$D_0 / t = 14,285$	$t' / t = 0,932$
$h_0 / t = 0,3$	$m = 2,381 \text{ kg}$	$h'_0 / t' = 0,395$

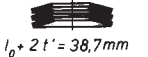
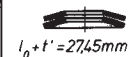
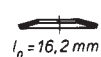


## 200 x 112 x 12

GR 3

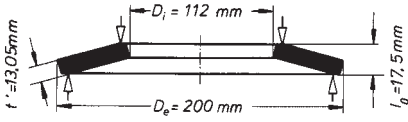


$h_0 = 4,2 \text{ mm}$	$D_0 / D_1 = 1,785$	$h'_0 = 4,95 \text{ mm}$
$t = 12 \text{ mm}$	$D_0 / t = 16,667$	$t' / t = 0,937$
$h_0 / t = 0,35$	$m = 1,904 \text{ kg}$	$h'_0 / t' = 0,44$

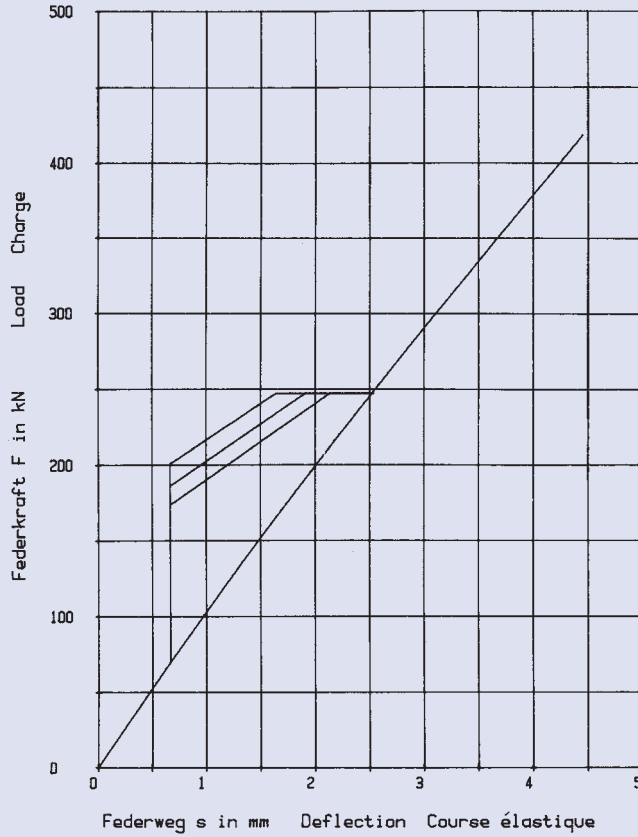
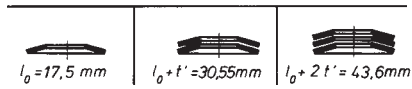


200 x 112 x 14

GR 3

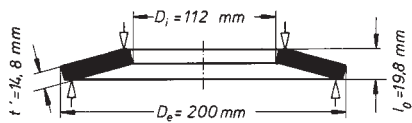


$h_0 = 3,5 \text{ mm}$      $D_e / D_i = 1,785$      $h'_0 = 4,45 \text{ mm}$   
 $t = 14 \text{ mm}$      $D_e / t = 14,285$      $t' / t = 0,932$   
 $h_0 / t = 0,25$      $m = 2,209 \text{ kg}$      $h'_0 / t' = 0,341$

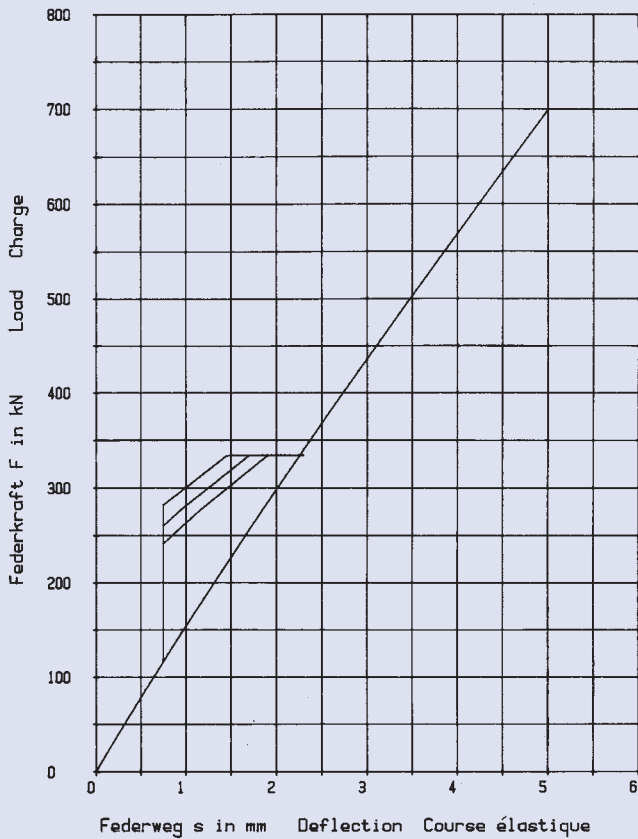
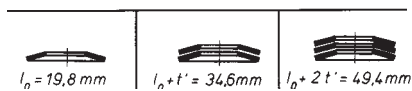


200 x 112 x 16

GR 3

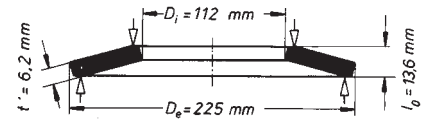
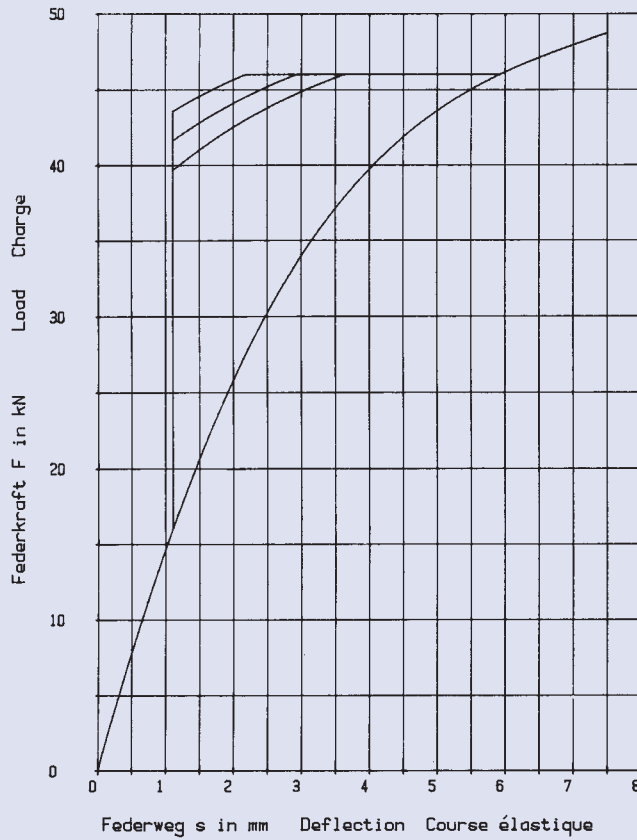


$h_0 = 3,8 \text{ mm}$      $D_e / D_i = 1,785$      $h'_0 = 5,0 \text{ mm}$   
 $t = 16 \text{ mm}$      $D_e / t = 12,5$      $t' / t = 0,925$   
 $h_0 / t = 0,237$      $m = 2,505 \text{ kg}$      $h'_0 / t' = 0,338$

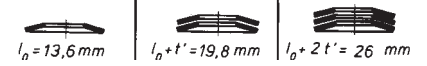


225 x 112 x 6,5

GR 3, DIN 2093 – C 225

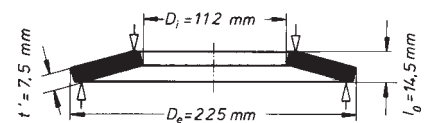
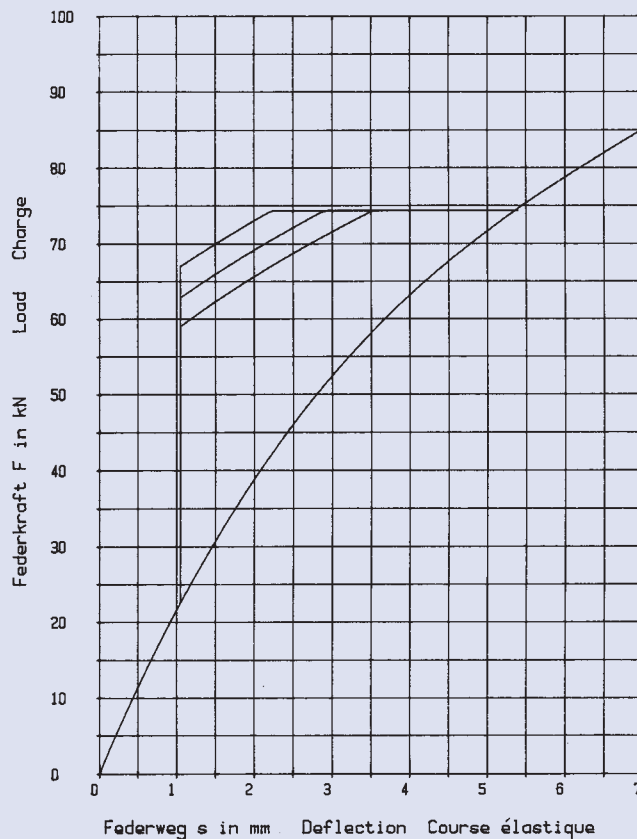


$h_0 = 7,1 \text{ mm}$	$D_e / D_1 = 2,008$	$h'_0 = 7,4 \text{ mm}$
$t = 6,5 \text{ mm}$	$D_e / t = 34,615$	$t' / t = 0,953$
$h_0 / t = 1,092$	$m = 1,455 \text{ kg}$	$h'_0 / t' = 1,194$

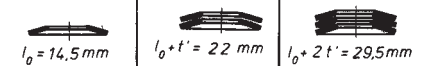


225 x 112 x 8,0

GR 3, DIN 2093 – B 225

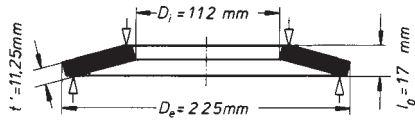


$h_0 = 6,5 \text{ mm}$	$D_e / D_1 = 2,008$	$h'_0 = 7,0 \text{ mm}$
$t = 8,0 \text{ mm}$	$D_e / t = 28,125$	$t' / t = 0,937$
$h_0 / t = 0,812$	$m = 1,761 \text{ kg}$	$h'_0 / t' = 0,933$

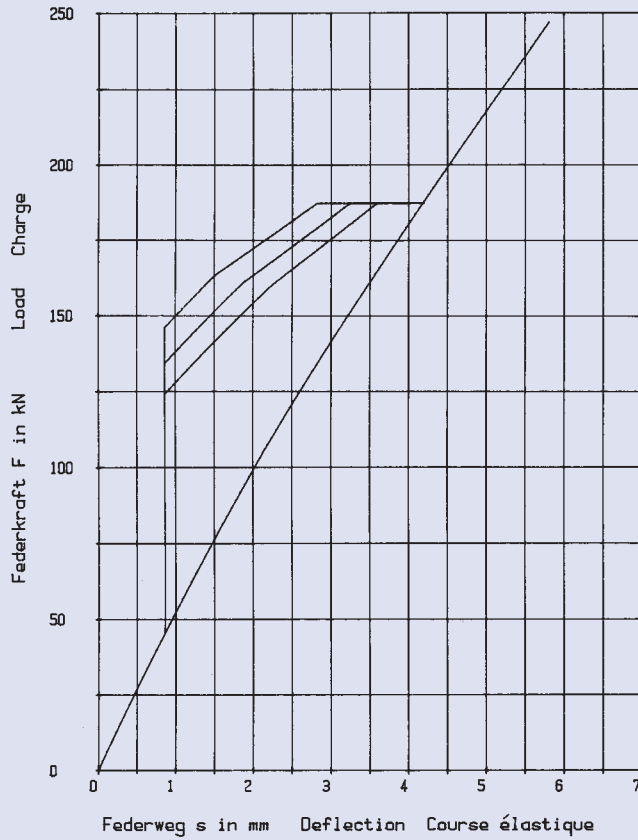
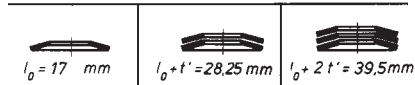


225 x 112 x 12

GR 3, DIN 2093 – A 225

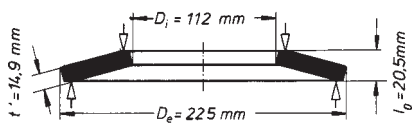


$h_0 = 5,0 \text{ mm}$	$D_e / D_i = 2,008$	$h'_0 = 5,75 \text{ mm}$
$t = 12 \text{ mm}$	$D_e / t = 18,75$	$t' / t = 0,937$
$h_0 / t = 0,416$	$m = 2,641 \text{ kg}$	$h'_0 / t' = 0,511$

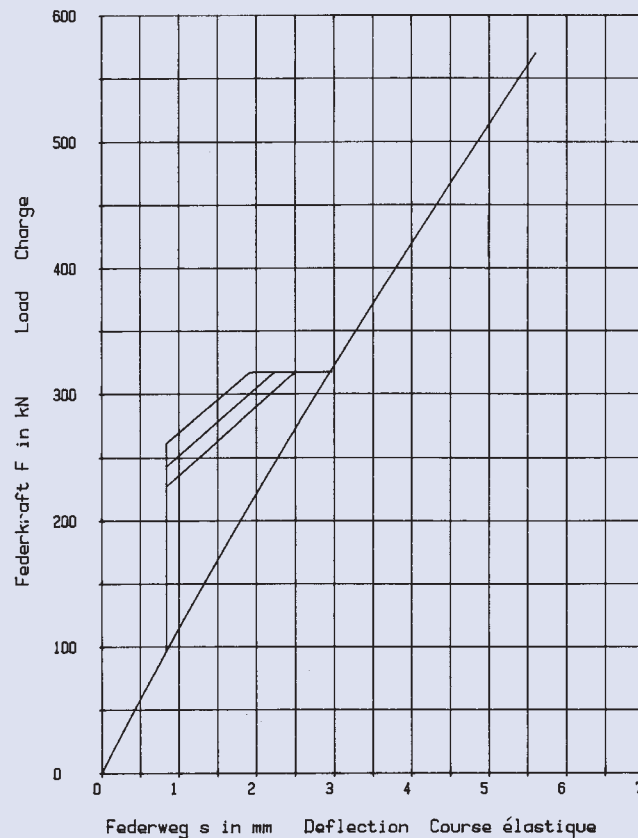
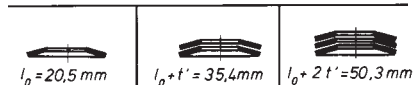


225 x 112 x 16

GR 3



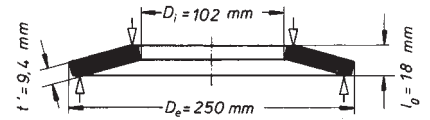
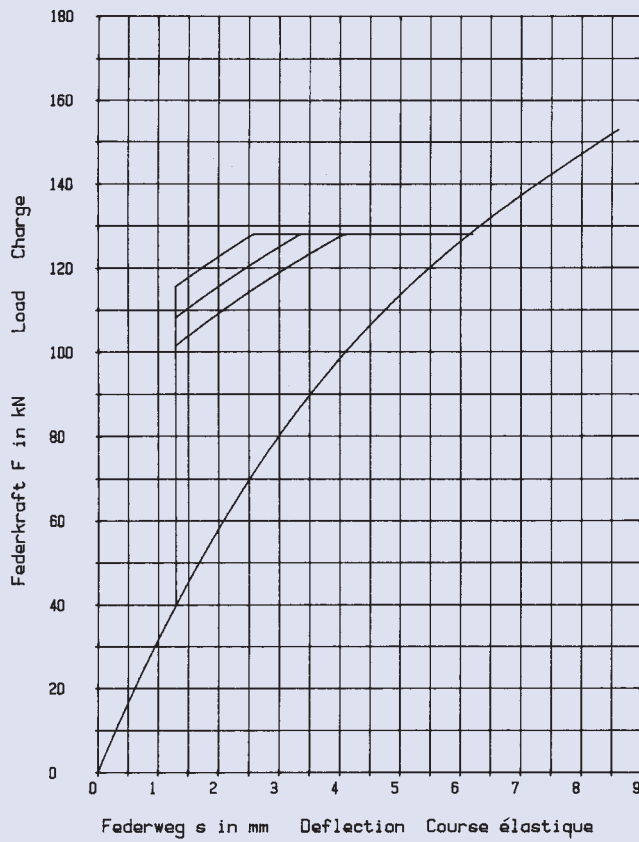
$h_0 = 4,5 \text{ mm}$	$D_e / D_i = 2,008$	$h'_0 = 5,6 \text{ mm}$
$t = 16 \text{ mm}$	$D_e / t = 14,062$	$t' / t = 0,931$
$h_0 / t = 0,281$	$m = 3,498 \text{ kg}$	$h'_0 / t' = 0,376$



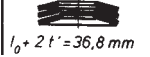
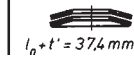
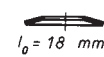


## 250 x 102 x 10

GR 3

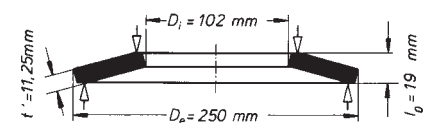
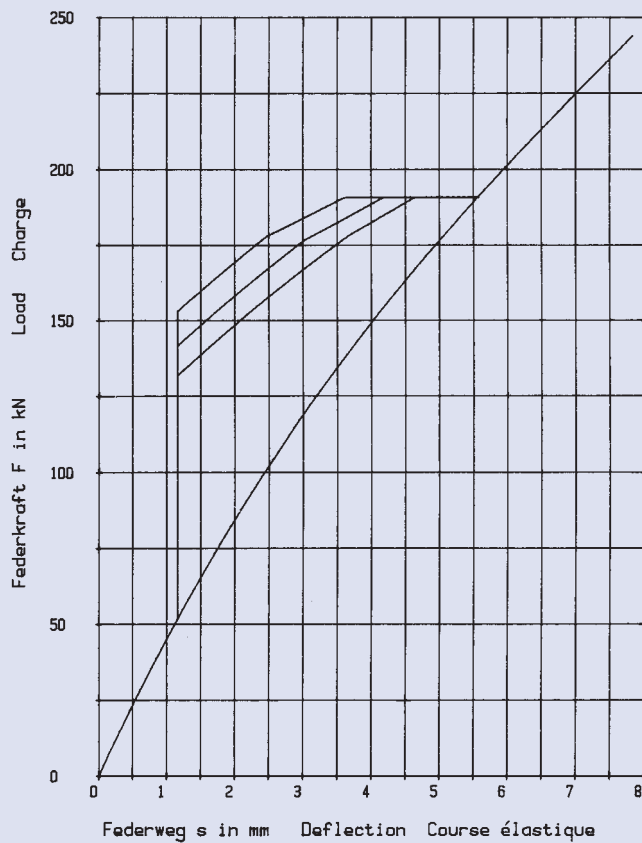


$h_0 = 8,0 \text{ mm}$      $D_e / D_i = 2,45$      $h'_0 = 8,6 \text{ mm}$   
 $t = 10 \text{ mm}$      $D_e / t = 25$      $t' / t = 0,94$   
 $h_0 / t = 0,8$      $m = 3,019 \text{ kg}$      $h'_0 / t' = 0,915$

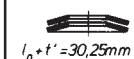
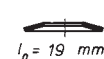


## 250 x 102 x 12

GR 3

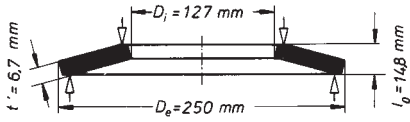


$h_0 = 7,0 \text{ mm}$      $D_e / D_i = 2,45$      $h'_0 = 7,75 \text{ mm}$   
 $t = 12 \text{ mm}$      $D_e / t = 20,833$      $t' / t = 0,937$   
 $h_0 / t = 0,583$      $m = 3,613 \text{ kg}$      $h'_0 / t' = 0,689$

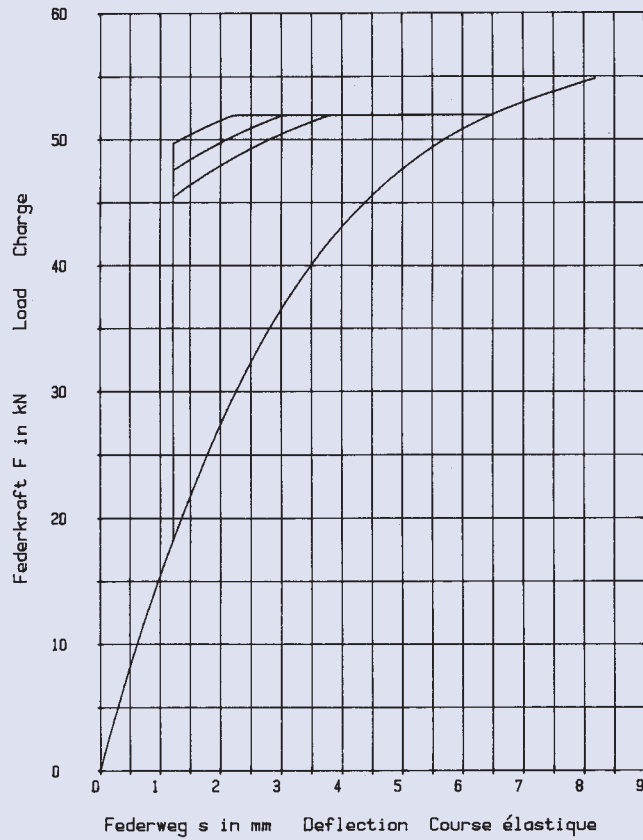
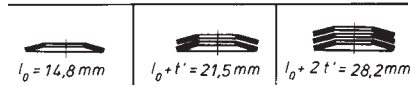


250 x 127 x 7,0

GR 3, DIN 2093 – C 250

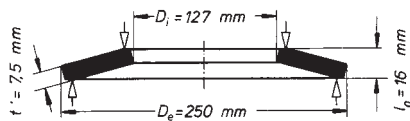


$h_0 = 7,8 \text{ mm}$	$D_e / D_1 = 1,968$	$h'_0 = 8,1 \text{ mm}$
$t = 7,0 \text{ mm}$	$D_e / t = 35,714$	$t' / t = 0,957$
$h_0 / t = 1,114$	$m = 1,915 \text{ kg}$	$h'_0 / t' = 1,209$

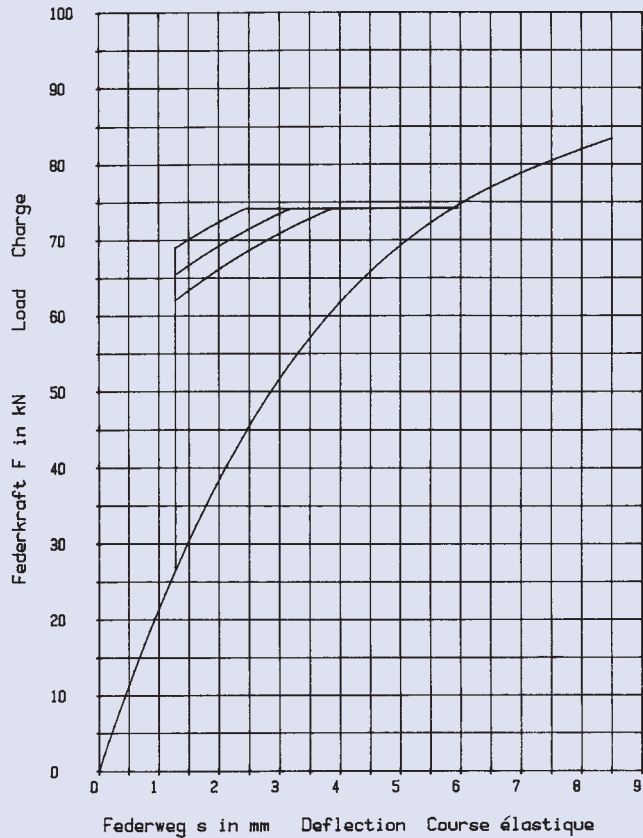
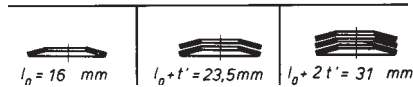


250 x 127 x 8,0

GR 3

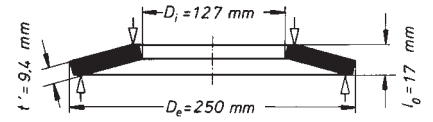
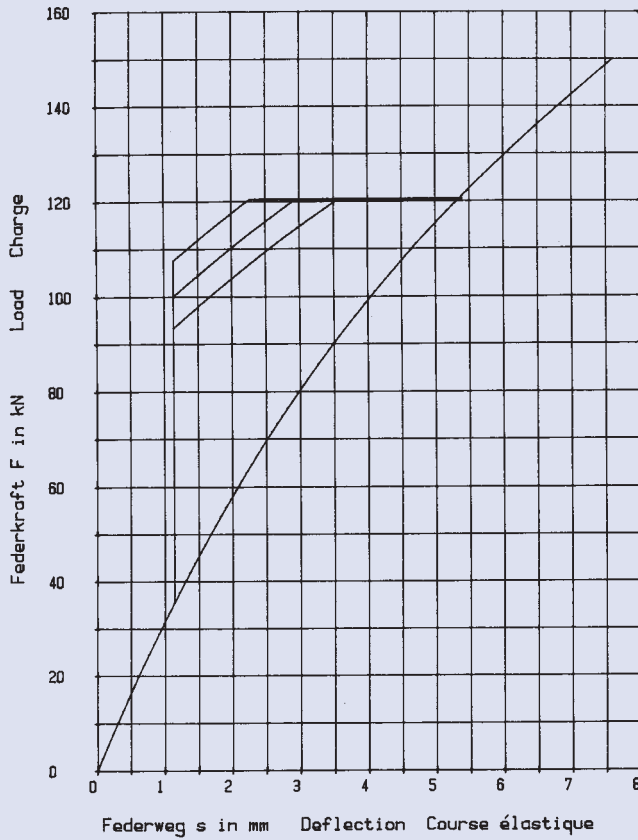


$h_0 = 8,0 \text{ mm}$	$D_e / D_1 = 1,968$	$h'_0 = 8,5 \text{ mm}$
$t = 8,0 \text{ mm}$	$D_e / t = 31,25$	$t' / t = 0,937$
$h_0 / t = 1,0$	$m = 2,144 \text{ kg}$	$h'_0 / t' = 1,133$

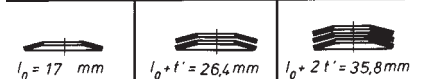


250 x 127 x 10

GR 3, DIN 2093 – B 250

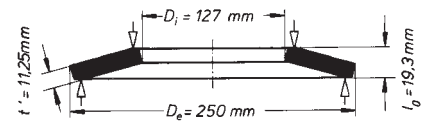
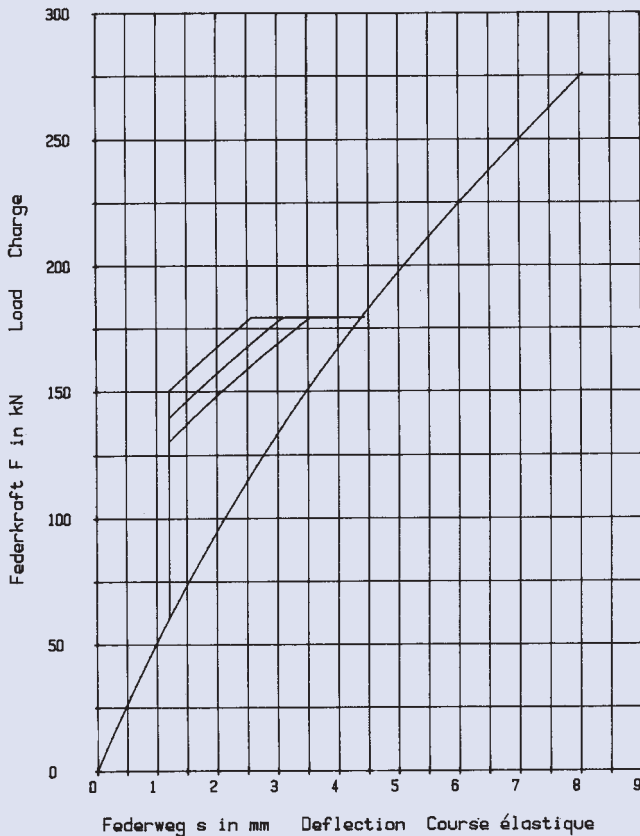


$h_0 = 7,0 \text{ mm}$	$D_e / D_i = 1,968$	$h'_0 = 7,6 \text{ mm}$
$t = 10 \text{ mm}$	$D_e / t = 25$	$t' / t = 0,94$
$h_0 / t = 0,7$	$m = 2,687 \text{ kg}$	$h'_0 / t' = 0,809$

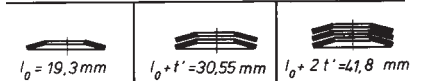


250 x 127 x 12

GR 3

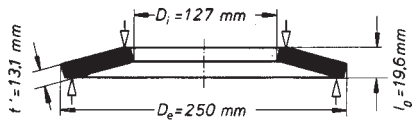


$h_0 = 7,3 \text{ mm}$	$D_e / D_i = 1,968$	$h'_0 = 8,05 \text{ mm}$
$t = 12 \text{ mm}$	$D_e / t = 20,833$	$t' / t = 0,937$
$h_0 / t = 0,608$	$m = 3,216 \text{ kg}$	$h'_0 / t' = 0,716$

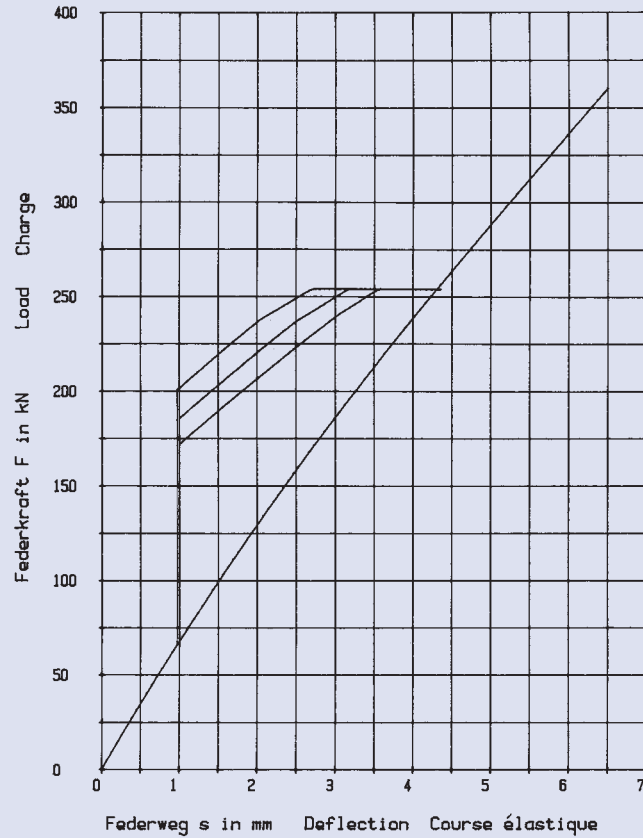
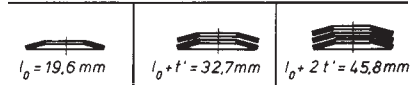


250 x 127 x 14

GR 3, DIN 2093 – A 250

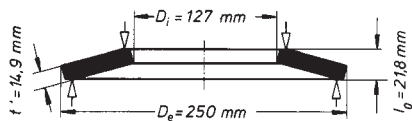


$h_0 = 5,6 \text{ mm}$      $D_e / D_i = 1,968$      $h'_0 = 6,5 \text{ mm}$   
 $t = 14 \text{ mm}$      $D_e / t = 17,857$      $t' / t = 0,935$   
 $h_0 / t = 0,4$      $m = 3,745 \text{ kg}$      $h'_0 / t' = 0,496$



250 x 127 x 16

GR 3



$h_0 = 5,8 \text{ mm}$      $D_e / D_i = 1,968$      $h'_0 = 6,9 \text{ mm}$   
 $t = 16 \text{ mm}$      $D_e / t = 15,625$      $t' / t = 0,931$   
 $h_0 / t = 0,362$      $m = 4,260 \text{ kg}$      $h'_0 / t' = 0,463$

