



# CALETTATORI - DATI TECNICI

## LOCKING ASSEMBLIES - TECHNICAL DATA

**Calcolo del minimo diametro esterno mozzo (DM)**  
 Calculation of the minimum outside diameter of hub (DM)

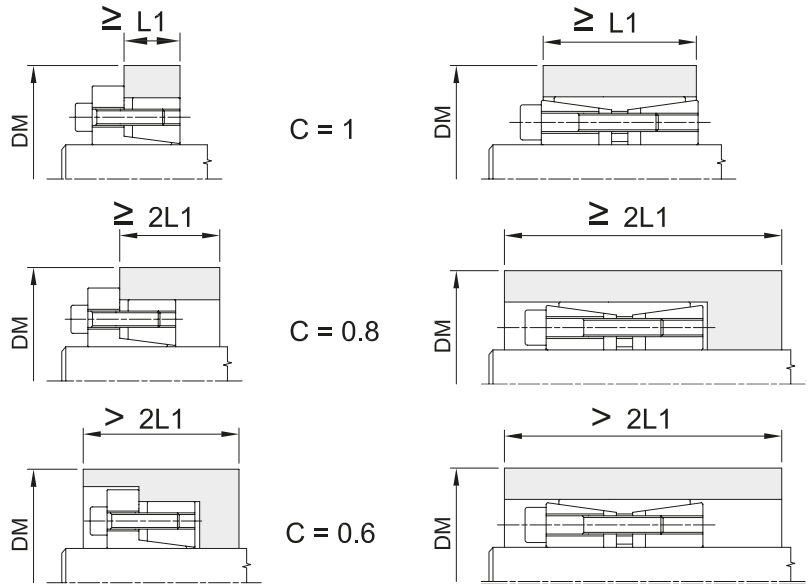
$$DM \geq D \cdot K$$

**D = diametro esterno calettatore (mm)**  
 outside diameter of locking assemle (mm)  
**K = coefficiente (vedi tabella)**  
 coefficient (see table)

**Per il calcolo del valore K, non riportato in tabella applicare la seguente formula:**  
 To calculate the "K" value not shown in the table, use the following formula:

$$K = \sqrt{\frac{\sigma_{0,2} + (C \cdot PN)}{\sigma_{0,2} - (C \cdot PN)}} \text{ (mm)}$$

$\sigma_{0,2}$  = **carico di snervamento del materiale (N/mm<sup>2</sup>)**  
 yield strength of the material (N/mm<sup>2</sup>)  
**C = fattore in funzione del tipo di applicazione**  
 factor depending on the type of the application  
**PN = pressione superficiale del mozzo**  
 surface pressure of the hub



**TABELLA DEL COEFFICIENTE "K" - COEFFICIENT "K" TABLE**

|  | GG-20 | GG-30<br>GTS-35<br>ALSi1MgMn | GGG-38<br>GS-400<br>St.42-3 | GGG-50<br>GS-500<br>C-40 | GGG-60<br>GS-600<br>C-45 | GGG-70<br>GS-70<br>C-60 |  |
|--|-------|------------------------------|-----------------------------|--------------------------|--------------------------|-------------------------|--|
|--|-------|------------------------------|-----------------------------|--------------------------|--------------------------|-------------------------|--|

**valori indicativi per il carico di snervamento  $\sigma_{0,2}$  in N/mm<sup>2</sup>**

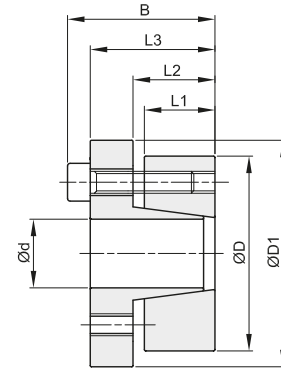
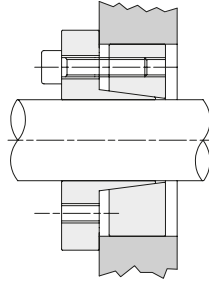
| pn<br>N/mm <sup>2</sup> | 150  |      |      | 200  |      |      | 250  |      |      | 300  |      |      | 350  |      |      | 400  |      |      | 450  |      |      | 600  |      |      |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                         | 0,6  | 0,8  | 1    | 0,6  | 0,8  | 1    | 0,6  | 0,8  | 1    | 0,6  | 0,8  | 1    | 0,6  | 0,8  | 1    | 0,6  | 0,8  | 1    | 0,6  | 0,8  | 1    | 0,6  | 0,8  | 1    |
| 60                      | 1,28 | 1,39 | 1,53 | 1,20 | 1,28 | 1,36 | 1,16 | 1,21 | 1,28 | 1,13 | 1,18 | 1,22 | 1,11 | 1,15 | 1,19 | 1,09 | 1,13 | 1,16 | 1,08 | 1,11 | 1,14 | 1,06 | 1,08 | 1,11 |
| 65                      | 1,30 | 1,44 | 1,59 | 1,22 | 1,30 | 1,40 | 1,17 | 1,24 | 1,30 | 1,14 | 1,19 | 1,25 | 1,12 | 1,16 | 1,21 | 1,10 | 1,14 | 1,18 | 1,09 | 1,12 | 1,16 | 1,07 | 1,09 | 1,11 |
| 70                      | 1,33 | 1,48 | 1,66 | 1,24 | 1,33 | 1,44 | 1,18 | 1,26 | 1,33 | 1,15 | 1,21 | 1,27 | 1,13 | 1,18 | 1,22 | 1,11 | 1,15 | 1,19 | 1,10 | 1,13 | 1,17 | 1,07 | 1,10 | 1,12 |
| 75                      | 1,36 | 1,53 | 1,73 | 1,26 | 1,36 | 1,48 | 1,20 | 1,28 | 1,36 | 1,16 | 1,22 | 1,29 | 1,14 | 1,19 | 1,24 | 1,12 | 1,16 | 1,21 | 1,11 | 1,14 | 1,18 | 1,08 | 1,11 | 1,13 |
| 80                      | 1,39 | 1,58 | 1,81 | 1,28 | 1,39 | 1,53 | 1,21 | 1,30 | 1,39 | 1,18 | 1,24 | 1,31 | 1,15 | 1,20 | 1,26 | 1,13 | 1,18 | 1,22 | 1,11 | 1,15 | 1,20 | 1,08 | 1,11 | 1,14 |
| 85                      | 1,42 | 1,63 | 1,90 | 1,30 | 1,42 | 1,57 | 1,23 | 1,32 | 1,42 | 1,19 | 1,26 | 1,34 | 1,16 | 1,22 | 1,28 | 1,14 | 1,19 | 1,24 | 1,12 | 1,16 | 1,21 | 1,09 | 1,12 | 1,15 |
| 90                      | 1,46 | 1,69 | 2,00 | 1,32 | 1,46 | 1,62 | 1,25 | 1,34 | 1,46 | 1,20 | 1,28 | 1,36 | 1,17 | 1,23 | 1,30 | 1,15 | 1,20 | 1,26 | 1,13 | 1,18 | 1,22 | 1,09 | 1,13 | 1,16 |
| 95                      | 1,49 | 1,75 | 2,11 | 1,34 | 1,49 | 1,68 | 1,26 | 1,37 | 1,49 | 1,21 | 1,30 | 1,39 | 1,18 | 1,25 | 1,32 | 1,15 | 1,21 | 1,27 | 1,14 | 1,19 | 1,24 | 1,10 | 1,14 | 1,17 |
| 100                     | 1,53 | 1,81 | 2,24 | 1,36 | 1,53 | 1,73 | 1,28 | 1,39 | 1,53 | 1,22 | 1,31 | 1,41 | 1,19 | 1,26 | 1,34 | 1,16 | 1,22 | 1,29 | 1,14 | 1,20 | 1,25 | 1,11 | 1,14 | 1,18 |
| 105                     | 1,56 | 1,88 | 2,38 | 1,39 | 1,56 | 1,79 | 1,29 | 1,42 | 1,56 | 1,24 | 1,23 | 1,44 | 1,20 | 1,28 | 1,36 | 1,17 | 1,24 | 1,31 | 1,15 | 1,21 | 1,27 | 1,11 | 1,15 | 1,19 |
| 110                     | 1,60 | 1,96 | 2,55 | 1,41 | 1,60 | 1,86 | 1,31 | 1,44 | 1,60 | 1,25 | 1,35 | 1,47 | 1,21 | 1,29 | 1,38 | 1,18 | 1,25 | 1,33 | 1,16 | 1,22 | 1,28 | 1,12 | 1,16 | 1,20 |
| 115                     | 1,64 | 2,04 | 2,75 | 1,43 | 1,64 | 1,93 | 1,33 | 1,47 | 1,64 | 1,26 | 1,37 | 1,50 | 1,22 | 1,31 | 1,41 | 1,19 | 1,26 | 1,34 | 1,17 | 1,23 | 1,30 | 1,12 | 1,17 | 1,21 |
| 120                     | 1,69 | 2,13 | 3,00 | 1,46 | 1,69 | 2,00 | 1,34 | 1,50 | 1,69 | 1,28 | 1,39 | 1,53 | 1,23 | 1,33 | 1,43 | 1,20 | 1,28 | 1,36 | 1,18 | 1,24 | 1,31 | 1,13 | 1,18 | 1,22 |
| 125                     | 1,73 | 2,24 | 3,32 | 1,48 | 1,73 | 2,08 | 1,36 | 1,53 | 1,73 | 1,29 | 1,41 | 1,56 | 1,24 | 1,34 | 1,45 | 1,21 | 1,29 | 1,38 | 1,18 | 1,25 | 1,33 | 1,13 | 1,18 | 1,24 |
| 130                     | 1,78 | 2,35 | 3,74 | 1,51 | 1,78 | 2,17 | 1,38 | 1,56 | 1,78 | 1,30 | 1,44 | 1,59 | 1,25 | 1,36 | 1,48 | 1,22 | 1,30 | 1,40 | 1,19 | 1,27 | 1,35 | 1,14 | 1,19 | 1,25 |
| 135                     | 1,83 | 2,48 | 4,36 | 1,54 | 1,83 | 2,27 | 1,40 | 1,59 | 1,83 | 1,32 | 1,46 | 1,62 | 1,27 | 1,38 | 1,50 | 1,23 | 1,32 | 1,42 | 1,20 | 1,28 | 1,36 | 1,15 | 1,20 | 1,26 |
| 140                     | 1,88 | 2,63 | 5,39 | 1,56 | 1,88 | 2,38 | 1,42 | 1,62 | 1,88 | 1,33 | 1,48 | 1,66 | 1,28 | 1,39 | 1,53 | 1,24 | 1,33 | 1,44 | 1,21 | 1,29 | 1,38 | 1,15 | 1,21 | 1,27 |
| 145                     | 1,94 | 2,80 | 7,68 | 1,59 | 1,94 | 2,50 | 1,44 | 1,65 | 1,94 | 1,35 | 1,50 | 1,69 | 1,29 | 1,41 | 1,55 | 1,25 | 1,35 | 1,46 | 1,22 | 1,30 | 1,40 | 1,16 | 1,22 | 1,28 |
| 150                     | 2,00 | 3,00 |      | 1,62 | 2,00 | 2,65 | 1,46 | 1,69 | 2,00 | 1,36 | 1,53 | 1,73 | 1,30 | 1,43 | 1,58 | 1,26 | 1,36 | 1,48 | 1,22 | 1,31 | 1,41 | 1,16 | 1,22 | 1,29 |
| 155                     | 2,06 | 3,25 |      | 1,65 | 2,06 | 2,81 | 1,48 | 1,72 | 2,06 | 1,38 | 1,55 | 1,77 | 1,31 | 1,45 | 1,61 | 1,27 | 1,38 | 1,51 | 1,23 | 1,33 | 1,43 | 1,17 | 1,23 | 1,30 |
| 160                     | 2,13 | 3,55 |      | 1,69 | 2,13 | 3,00 | 1,50 | 1,76 | 2,13 | 1,39 | 1,58 | 1,81 | 1,33 | 1,47 | 1,64 | 1,28 | 1,39 | 1,53 | 1,24 | 1,34 | 1,45 | 1,18 | 1,24 | 1,31 |
| 165                     | 2,21 | 3,96 |      | 1,72 | 2,21 | 3,23 | 1,52 | 1,80 | 2,21 | 1,41 | 1,60 | 1,86 | 1,34 | 1,49 | 1,67 | 1,29 | 1,41 | 1,55 | 1,25 | 1,35 | 1,47 | 1,18 | 1,25 | 1,33 |
| 170                     | 2,29 | 4,52 |      | 1,76 | 2,29 | 3,51 | 1,54 | 1,84 | 2,29 | 1,42 | 1,63 | 1,90 | 1,35 | 1,51 | 1,70 | 1,30 | 1,42 | 1,57 | 1,26 | 1,37 | 1,49 | 1,19 | 1,26 | 1,34 |
| 180                     | 2,40 | 7,00 |      | 1,83 | 2,48 | 4,36 | 1,59 | 1,93 | 2,48 | 1,46 | 1,69 | 2,00 | 1,38 | 1,55 | 1,77 | 1,32 | 1,46 | 1,62 | 1,28 | 1,39 | 1,53 | 1,20 | 1,28 | 1,36 |
| 190                     | 2,71 |      |      | 1,91 | 2,71 | 6,24 | 1,64 | 2,03 | 2,71 | 1,49 | 1,75 | 2,11 | 1,40 | 1,59 | 1,84 | 1,34 | 1,49 | 1,68 | 1,30 | 1,42 | 1,57 | 1,21 | 1,30 | 1,39 |
| 200                     | 3,00 |      |      | 2,00 | 3,00 |      | 1,69 | 2,13 | 3,00 | 1,53 | 1,81 | 2,24 | 1,43 | 1,64 | 1,91 | 1,36 | 1,53 | 1,73 | 1,31 | 1,45 | 1,61 | 1,22 | 1,31 | 1,41 |
| 210                     | 3,39 |      |      | 2,10 | 3,39 |      | 1,74 | 2,26 | 3,39 | 1,56 | 1,88 | 2,38 | 1,46 | 1,69 | 2,00 | 1,39 | 1,56 | 1,79 | 1,33 | 1,48 | 1,66 | 1,24 | 1,33 | 1,44 |
| 220                     | 3,96 |      |      | 2,21 | 3,96 |      | 1,80 | 2,40 | 3,96 | 1,60 | 1,96 | 2,55 | 1,49 | 1,74 | 2,09 | 1,41 | 1,60 | 1,86 | 1,35 | 1,51 | 1,71 | 1,25 | 1,35 | 1,47 |
| 230                     | 4,90 |      |      | 2,33 | 4,90 |      | 1,86 | 2,56 | 4,90 | 1,64 | 2,04 | 2,75 | 1,52 | 1,79 | 2,20 | 1,43 | 1,64 | 1,93 | 1,37 | 1,54 | 1,76 | 1,26 | 1,37 | 1,50 |
| 240                     | 7,00 |      |      | 2,48 | 7,00 |      | 1,93 | 2,76 | 7,00 | 1,69 | 2,13 | 3,00 | 1,55 | 1,85 | 2,32 | 1,46 | 1,69 | 2,00 | 1,39 | 1,58 | 1,81 | 1,28 | 1,39 | 1,53 |
| 250                     |      |      |      | 2,65 |      |      | 2,00 | 3,00 |      | 1,73 | 2,24 | 3,32 | 1,58 | 1,91 | 2,45 | 1,48 | 1,73 | 2,08 | 1,41 | 1,61 | 1,87 | 1,29 | 1,41 | 1,56 |
| 300                     |      |      |      | 4,36 |      |      | 2,48 | 7,00 |      | 2,00 | 3,00 |      | 1,77 | 2,32 | 3,61 | 1,62 | 2,00 | 2,65 | 1,53 | 1,81 | 2,24 | 1,36 | 1,53 | 1,73 |



# CALETTATORI AUTOCENTRANTI "BK 16" LOCKING ASSEMBLIES SELF-CENTERING "BK 16"

## Autocentrante

Momenti torcenti medio elevati  
Tolleranze: albero h8 - mozzo H8  
Superfici di contatto con rugosità:  $R_a$  max 16  $\mu\text{m}$   
Errore di concentricità: 0,02 mm  $\div$  0,04 mm  
Tempi di montaggio contenuti



| d x D<br>mm | codice      | L1<br>mm | L2<br>mm | L3<br>mm | B<br>mm | D1<br>mm | momento<br>torcente<br>Mt<br>Nm | forza<br>assiale<br>F ass.<br>KN | pressione<br>superficiale         |                                  | viti di serraggio     |                                    |      | Kg.  |
|-------------|-------------|----------|----------|----------|---------|----------|---------------------------------|----------------------------------|-----------------------------------|----------------------------------|-----------------------|------------------------------------|------|------|
|             |             |          |          |          |         |          |                                 |                                  | albero<br>pw<br>N/mm <sup>2</sup> | mozzo<br>pn<br>N/mm <sup>2</sup> | DIN 912<br>12,9<br>N° | coppia di<br>serraggio<br>Ms<br>Nm | tipo |      |
| 18 x 47     | BK016018047 | 17       | 22       | 28       | 34      | 56       | 230                             | 26                               | 246                               | 94                               | 5                     | M6x20                              | 17   | 0,30 |
| 19 x 47     | BK016019047 | 17       | 22       | 28       | 34      | 56       | 243                             | 26                               | 234                               | 94                               | 5                     | M6x20                              | 17   | 0,30 |
| 20 x 47     | BK016020047 | 17       | 22       | 28       | 34      | 56       | 256                             | 26                               | 222                               | 94                               | 5                     | M6x20                              | 17   | 0,30 |
| 22 x 47     | BK016022047 | 17       | 22       | 28       | 34      | 56       | 282                             | 26                               | 202                               | 94                               | 5                     | M6x20                              | 17   | 0,30 |
| 24 x 50     | BK016024050 | 17       | 22       | 28       | 34      | 59       | 368                             | 31                               | 222                               | 106                              | 6                     | M6x20                              | 17   | 0,30 |
| 25 x 50     | BK016025050 | 17       | 22       | 28       | 34      | 59       | 383                             | 31                               | 213                               | 106                              | 6                     | M6x20                              | 17   | 0,30 |
| 28 x 55     | BK016028055 | 17       | 22       | 28       | 34      | 64       | 429                             | 31                               | 190                               | 97                               | 6                     | M6x20                              | 17   | 0,40 |
| 30 x 55     | BK016030055 | 17       | 22       | 28       | 34      | 64       | 460                             | 31                               | 177                               | 97                               | 6                     | M6x20                              | 17   | 0,40 |
| 32 x 60     | BK016032060 | 17       | 22       | 28       | 34      | 69       | 655                             | 41                               | 222                               | 118                              | 8                     | M6x20                              | 17   | 0,40 |
| 35 x 60     | BK016035060 | 17       | 22       | 28       | 34      | 69       | 716                             | 41                               | 203                               | 118                              | 8                     | M6x20                              | 17   | 0,40 |
| 38 x 65     | BK016038065 | 17       | 22       | 28       | 34      | 74       | 778                             | 41                               | 187                               | 109                              | 8                     | M6x20                              | 17   | 0,50 |
| 40 x 65     | BK016040065 | 17       | 22       | 28       | 34      | 74       | 819                             | 41                               | 178                               | 109                              | 8                     | M6x20                              | 17   | 0,50 |
| 42 x 75     | BK016042075 | 20       | 25       | 33       | 41      | 84       | 1361                            | 65                               | 227                               | 127                              | 7                     | M8x25                              | 41   | 0,80 |
| 45 x 75     | BK016045075 | 20       | 25       | 33       | 41      | 84       | 1458                            | 65                               | 212                               | 127                              | 7                     | M8x25                              | 41   | 0,70 |
| 50 x 80     | BK016050080 | 20       | 25       | 33       | 41      | 89       | 1620                            | 65                               | 191                               | 119                              | 7                     | M8x25                              | 41   | 0,80 |
| 55 x 85     | BK016055085 | 20       | 25       | 33       | 41      | 94       | 2037                            | 74                               | 199                               | 129                              | 8                     | M8x25                              | 41   | 0,90 |
| 60 x 90     | BK016060090 | 20       | 25       | 33       | 41      | 99       | 2223                            | 74                               | 182                               | 121                              | 8                     | M8x25                              | 41   | 0,90 |
| 65 x 95     | BK016065095 | 20       | 25       | 33       | 41      | 104      | 2710                            | 83                               | 189                               | 126                              | 9                     | M8x25                              | 41   | 1,00 |
| 70 x 110    | BK016070110 | 24       | 30       | 40       | 50      | 119      | 4203                            | 120                              | 211                               | 134                              | 8                     | M10x30                             | 83   | 1,90 |
| 75 x 115    | BK016075115 | 24       | 30       | 40       | 50      | 124      | 4754                            | 120                              | 197                               | 128                              | 8                     | M10x30                             | 83   | 1,77 |
| 80 x 120    | BK016080120 | 24       | 30       | 40       | 50      | 129      | 4804                            | 120                              | 184                               | 123                              | 8                     | M10x30                             | 83   | 2,00 |
| 85 x 125    | BK016085125 | 24       | 30       | 40       | 50      | 134      | 5742                            | 135                              | 195                               | 133                              | 9                     | M10x30                             | 83   | 2,00 |
| 90 x 130    | BK016090130 | 24       | 30       | 40       | 50      | 139      | 6080                            | 135                              | 184                               | 128                              | 9                     | M10x30                             | 83   | 2,20 |
| 95 x 135    | BK016095135 | 24       | 30       | 40       | 50      | 144      | 7131                            | 150                              | 194                               | 137                              | 10                    | M10x30                             | 83   | 2,30 |
| 100 x 145   | BK016100145 | 26       | 32       | 44       | 56      | 154      | 8732                            | 175                              | 198                               | 137                              | 8                     | M12x35                             | 145  | 3,00 |
| 110 x 155   | BK016110155 | 26       | 32       | 44       | 56      | 164      | 9605                            | 175                              | 180                               | 128                              | 8                     | M12x35                             | 145  | 3,20 |
| 120 x 165   | BK016120165 | 26       | 32       | 44       | 56      | 174      | 11787                           | 196                              | 186                               | 135                              | 9                     | M12x35                             | 145  | 3,40 |
| 130 x 180   | BK016130180 | 34       | 40       | 52       | 64      | 189      | 17024                           | 262                              | 175                               | 126                              | 12                    | M12x35                             | 145  | 5,20 |
| 140 x 190   | BK016140190 | 34       | 40       | 54       | 68      | 199      | 18703                           | 267                              | 166                               | 122                              | 9                     | M14x40                             | 230  | 5,40 |
| 150 x 200   | BK016150200 | 34       | 40       | 54       | 68      | 209      | 22259                           | 297                              | 172                               | 129                              | 10                    | M14x40                             | 230  | 5,70 |
| 160 x 210   | BK016160210 | 34       | 40       | 54       | 68      | 219      | 26119                           | 326                              | 177                               | 135                              | 11                    | M14x40                             | 230  | 6,00 |
| 170 x 225   | BK016170225 | 44       | 50       | 64       | 78      | 234      | 30276                           | 356                              | 140                               | 106                              | 12                    | M14x40                             | 230  | 8,30 |
| 180 x 235   | BK016180235 | 44       | 50       | 64       | 78      | 244      | 32057                           | 356                              | 133                               | 102                              | 12                    | M14x40                             | 230  | 8,80 |