



Katalog części i elementów maszyn TULEJE SAMOCENTRUJĄCE

3 - 4

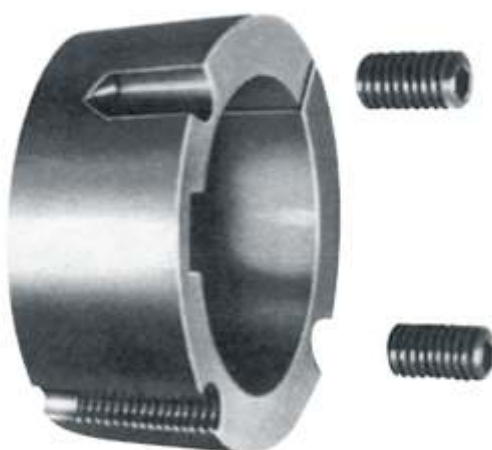
Tuleje Taper Bush



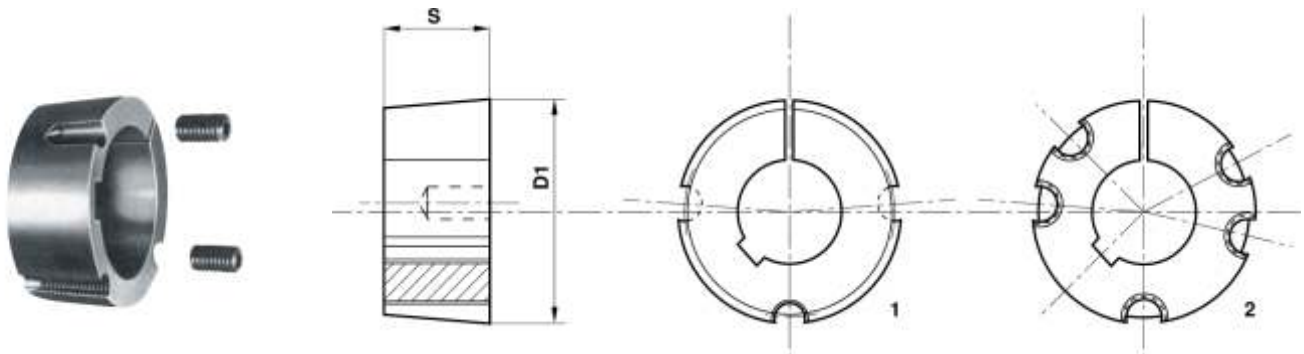
5 - 8

Elementy blokujące - pierścienie rozprężno-zaciskowe





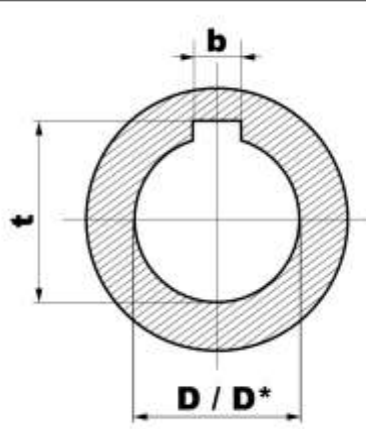
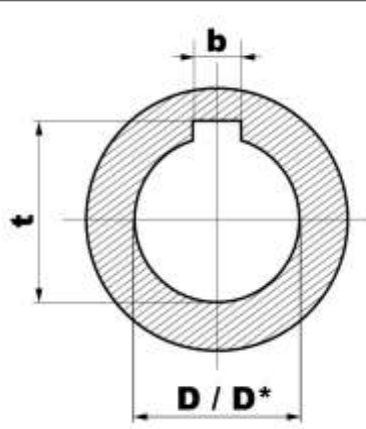
TULEJE TAPER BUSH



Mat. eliw EN-GJL-250 UNI EN 1561

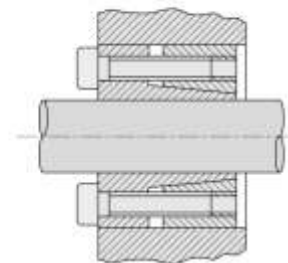
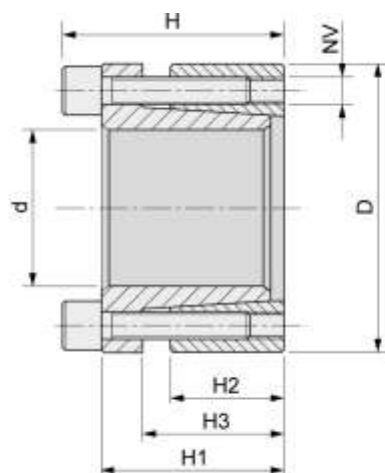
Rozmiary otworów dost. pne z magazynu

| TYP | BORE (ISO E 8) | Przenoszony moment obrotowy Nm | RUBY | D1 | TYP | S | MASA |
|------|--|--------------------------------|---------------|-------|-----|-------|-------|
| 1008 | 9 10 11 12 14 15 16 18 19 20 22 24* 25* | 136 | 1/4" x 1/2" | 35,0 | 1 | 22,3 | 0,16 |
| 1108 | 9 10 11 12 14 15 16 18 19 20 22 24 25 28* | 147 | 1/4" x 1/2" | 38,0 | 1 | 22,3 | 0,16 |
| 1210 | 11 12 14 15 16 18 19 20 22 24 25 28 30 32 | 407 | 3/8" x 5/8" | 47,5 | 1 | 25,4 | 0,32 |
| 1215 | 14 19 20 24 25 28 | 407 | 3/8" x 5/8" | 47,5 | 1 | 38,1 | 0,50 |
| 1610 | 14 15 16 18 19 20 22 24 25 28 30 32 35 38 40 42* | 486 | 3/8" x 5/8" | 57,0 | 1 | 25,4 | 0,41 |
| 1615 | 14 16 18 19 20 22 24 25 28 30 32 35 38 40 42* | 486 | 3/8" x 5/8" | 57,0 | 1 | 38,1 | 0,60 |
| 2012 | 14 16 18 19 20 22 24 25 28 30 32 35 38 40 42 45 48 50 | 808 | 7/16" x 7/8" | 70,0 | 1 | 31,8 | 0,75 |
| 2517 | 16 18 19 20 22 24 25 28 30 32 35 38 40 42 45 48 50 55 60 65* | 1310 | 1/2" x 1" | 85,5 | 1 | 44,5 | 1,06 |
| 3020 | 25 28 30 32 35 38 40 42 45 48 50 55 60 65 70 75 | 2710 | 5/8" x 1 1/4" | 108,0 | 1 | 50,8 | 2,50 |
| 3030 | 35 38 40 42 45 48 50 55 60 65 70 75 | 2710 | 5/8" x 1 1/4" | 108,0 | 1 | 76,2 | 3,75 |
| 3525 | 35 38 40 42 45 48 50 55 60 65 70 75 80 85 90 | 5060 | 1/2" x 1 1/2" | 127,0 | 2 | 64,9 | 4,20 |
| 3535 | 35 38 40 42 45 48 50 55 60 65 70 75 80 85 90 | 5060 | 1/2" x 1 1/2" | 127,0 | 2 | 88,9 | 5,13 |
| 4030 | 40 42 45 48 50 55 60 65 70 75 80 85 90 100 | 8740 | 5/8" x 1 1/4" | 146,0 | 2 | 76,2 | 6,75 |
| 4040 | 40 42 45 48 50 55 60 65 70 75 80 85 90 95 100 | 8740 | 5/8" x 1 3/4" | 146,0 | 2 | 101,6 | 7,68 |
| 4545 | 55 60 65 70 75 80 85 90 95 100 | 12400 | 3/4" x 2" | 162,0 | 2 | 115,0 | 10,56 |
| 5040 | 70 75 80 85 90 95 100 105 110 115 120 125 | 14200 | 7/8" x 2 1/4" | 177,6 | 2 | 101,6 | 14,20 |
| 5050 | 70 75 80 85 90 95 100 105 110 115 120 125 | 14200 | 7/8" x 2 1/4" | 177,6 | 2 | 127,0 | 15,17 |

| Over | D | | b | Js9 | t |  | WYMIARY WPUSTÓW | | | | |
|------|-----|-----|----|---------|---------|--|-----------------|---------|---------|---|---------|
| | to | 12 | | | | | D* | b | t | | |
| » | 10 | 12 | 4 | ±0,015 | D + 1,8 |  | 24* | 8 | D + 1,3 | | |
| » | 12 | 17 | 5 | | D + 2,3 | | | | | | |
| » | 17 | 22 | 6 | | D + 2,8 | | | | | | |
| » | 22 | 30 | 8 | D + 3,3 | ±0,018 | | | | | | |
| » | 30 | 38 | 10 | D + 3,3 | | | | | | | |
| » | 38 | 44 | 12 | D + 3,3 | | | | | | | |
| » | 44 | 50 | 14 | ±0,021 | D + 3,8 | 25* | 8 | D + 1,3 | | | |
| » | 50 | 58 | 16 | | D + 4,3 | | | | | | |
| » | 58 | 65 | 18 | | D + 4,4 | | | | | | |
| » | 65 | 75 | 20 | ±0,026 | D + 4,9 | | | | 28* | 8 | D + 1,3 |
| » | 75 | 85 | 22 | | D + 5,4 | | | | | | |
| » | 85 | 95 | 25 | | D + 5,4 | | | | | | |
| » | 95 | 110 | 28 | ±0,031 | D + 6,4 | 42* | 12 | D + 1,3 | | | |
| » | 110 | 130 | 32 | | D + 7,4 | | | | | | |
| » | | | | | D + 7,4 | | | | | | |



ELEMENTY BLOKUJĄCE - PIERŚCIENIE ROZPRĘŻNO-ZACISKKOWE

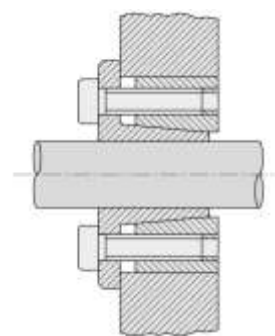
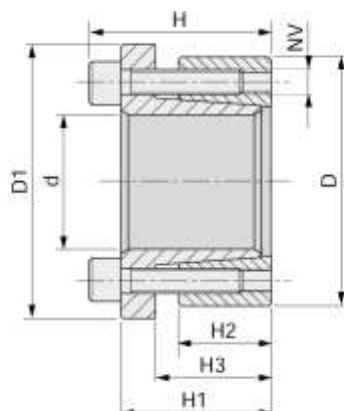


Seria
KLAA/BK13/RCK13/203

Mat. C45 E - UNI EN 10083-1
Wymiary przed zamontowaniem

| Wymiary (mm) | | | | | | Siła Docisku | | | Odblokowanie | | Moment obrotowy | | | |
|--------------|-----|----|----|----|----|-----------------|---------|-------|-----------------|-------|-----------------|----------------------------|------------|----------------------------|
| d | D | H | H1 | H2 | H3 | NV typ śruby | Tv (Nm) | Śruby | NV typ śruby | Śruby | Mt (Nm) | Pa (N/mm ²) | Ta (kN) | Pm (N/mm ²) |
| 19 | 47 | 34 | 28 | 17 | 22 | M6x20 | 14 | 5 | M6 | 3 | 355 | 280 | 31 | 120 |
| 20 | 47 | 34 | 28 | 17 | 22 | M6x20 | 14 | 5 | M6 | 3 | 360 | 280 | 33 | 120 |
| 22 | 47 | 34 | 28 | 17 | 22 | M6x20 | 14 | 5 | M6 | 3 | 400 | 268 | 33 | 123 |
| 24 | 50 | 34 | 28 | 17 | 22 | M6x20 | 14 | 6 | M6 | 3 | 440 | 243 | 36 | 120 |
| 25 | 50 | 34 | 28 | 17 | 22 | M6x20 | 14 | 6 | M6 | 3 | 560 | 280 | 36 | 138 |
| 28 | 55 | 34 | 28 | 17 | 22 | M6x20 | 14 | 6 | M6 | 3 | 625 | 250 | 36 | 128 |
| 30 | 55 | 34 | 28 | 17 | 22 | M6x20 | 14 | 6 | M6 | 3 | 650 | 235 | 36 | 128 |
| 32 | 60 | 34 | 28 | 17 | 22 | M6x20 | 14 | 8 | M6 | 4 | 950 | 290 | 50 | 150 |
| 35 | 60 | 34 | 28 | 17 | 22 | M6x20 | 14 | 8 | M6 | 4 | 1050 | 268 | 50 | 150 |
| 38 | 65 | 34 | 28 | 17 | 22 | M6x20 | 14 | 8 | M6 | 4 | 1140 | 252 | 50 | 146 |
| 40 | 65 | 34 | 28 | 17 | 22 | M6x20 | 14 | 8 | M6 | 4 | 1200 | 232 | 50 | 146 |
| 45 | 75 | 41 | 33 | 20 | 25 | M8x25 | 35 | 7 | M8 | 3 | 2180 | 285 | 70 | 168 |
| 50 | 80 | 41 | 33 | 20 | 25 | M8x25 | 35 | 7 | M8 | 3 | 2430 | 258 | 85 | 158 |
| 55 | 85 | 41 | 33 | 20 | 25 | M8x25 | 35 | 8 | M8 | 4 | 3050 | 268 | 85 | 173 |
| 60 | 90 | 41 | 33 | 20 | 25 | M8x25 | 35 | 8 | M8 | 4 | 3350 | 243 | 85 | 163 |
| 65 | 95 | 41 | 33 | 20 | 25 | M8x25 | 35 | 9 | M8 | 3 | 4080 | 253 | 85 | 173 |
| 70 | 110 | 50 | 40 | 24 | 30 | M10x30 | 70 | 8 | M10 | 4 | 6280 | 278 | 119 | 178 |
| 75 | 115 | 50 | 40 | 24 | 30 | M10x30 | 70 | 8 | M10 | 4 | 6680 | 258 | 119 | 168 |
| 80 | 120 | 50 | 40 | 24 | 30 | M10x30 | 70 | 8 | M10 | 4 | 7130 | 248 | 119 | 168 |
| 85 | 125 | 50 | 40 | 24 | 30 | M10x30 | 70 | 9 | M10 | 3 | 8750 | 258 | 132 | 178 |
| 90 | 130 | 50 | 40 | 24 | 30 | M10x30 | 70 | 9 | M10 | 3 | 9080 | 248 | 132 | 168 |
| 95 | 135 | 50 | 40 | 24 | 30 | M10x30 | 70 | 10 | M10 | 4 | 10580 | 258 | 132 | 178 |
| 100 | 145 | 56 | 44 | 26 | 32 | M12x35 | 125 | 8 | M12 | 4 | 13380 | 268 | 170 | 188 |
| 110 | 155 | 56 | 44 | 26 | 32 | M12x35 | 125 | 8 | M12 | 4 | 14580 | 238 | 170 | 178 |
| 120 | 165 | 56 | 44 | 26 | 32 | M12x35 | 12 | 9 | M12 | 4 | 17880 | 248 | 200 | 178 |
| 130 | 180 | 64 | 52 | 34 | 40 | M12x35 | 190 | 12 | M12 | 6 | 25950 | 238 | 270 | 168 |
| 140 | 190 | 68 | 54 | 34 | 40 | M14x40 | 190 | 9 | M14 | 4 | 26950 | 208 | 270 | 148 |
| 150 | 200 | 68 | 54 | 34 | 40 | M14x40 | 190 | 12 | M14 | 5 | 32950 | 228 | 320 | 168 |

ELEMENTY BLOKUJĄCE - PIERŚCIENIE ROZPRĘŻNO-ZACISKKOWE

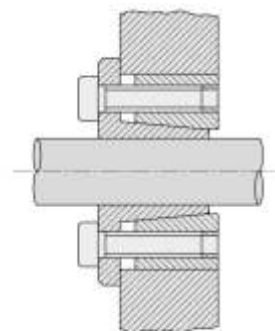
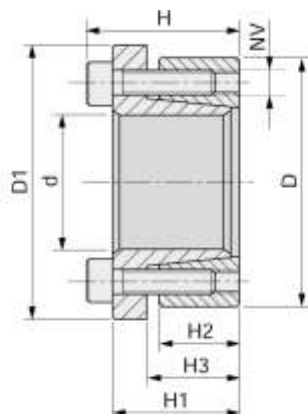


Seria
KLAB/BK16/RCK16/206

Mat. C45 E - UNI EN 10083-1
Wymiary przed zamontowaniem

| Wymiary (mm) | | | | | | | Siła Docisku | | | Odblokowanie | | Moment obrotowy | | | |
|--------------|-----|-----|----|----|----|----|-----------------|---------|-------|-----------------|-------|-----------------|----------------------------|------------|----------------------------|
| d | D | D1 | H | H1 | H2 | H3 | NV typ śruby | Tv (Nm) | Śruby | NV typ śruby | Śruby | Mt (Nm) | Pa (N/mm ²) | Ta (kN) | Pm (N/mm ²) |
| 19 | 47 | 56 | 34 | 28 | 17 | 22 | M6x20 | 14 | 5 | M6 | 3 | 274 | 215 | 28 | 93 |
| 20 | 47 | 56 | 34 | 28 | 17 | 22 | M6x20 | 14 | 5 | M6 | 3 | 284 | 215 | 32 | 93 |
| 22 | 47 | 56 | 34 | 28 | 17 | 22 | M6x20 | 14 | 5 | M6 | 3 | 314 | 196 | 32 | 93 |
| 24 | 50 | 59 | 34 | 28 | 17 | 22 | M6x20 | 14 | 6 | M6 | 3 | 401 | 215 | 32 | 107 |
| 25 | 50 | 59 | 34 | 28 | 17 | 22 | M6x20 | 14 | 6 | M6 | 3 | 441 | 210 | 34 | 107 |
| 28 | 55 | 64 | 34 | 28 | 17 | 22 | M6x20 | 14 | 6 | M6 | 3 | 490 | 196 | 34 | 98 |
| 30 | 55 | 64 | 34 | 28 | 17 | 22 | M6x20 | 14 | 6 | M6 | 3 | 529 | 186 | 34 | 98 |
| 32 | 60 | 69 | 34 | 28 | 17 | 22 | M6x20 | 14 | 8 | M6 | 4 | 755 | 210 | 46 | 112 |
| 35 | 60 | 69 | 34 | 28 | 17 | 22 | M6x20 | 14 | 8 | M6 | 4 | 824 | 186 | 46 | 107 |
| 38 | 65 | 74 | 34 | 28 | 17 | 22 | M6x20 | 14 | 8 | M6 | 4 | 892 | 191 | 46 | 112 |
| 40 | 65 | 74 | 34 | 28 | 17 | 22 | M6x20 | 14 | 8 | M6 | 4 | 941 | 186 | 46 | 102 |
| 45 | 75 | 84 | 41 | 33 | 20 | 25 | M8x25 | 35 | 7 | M8 | 3 | 1716 | 225 | 64 | 132 |
| 50 | 80 | 89 | 41 | 33 | 20 | 25 | M8x25 | 35 | 7 | M8 | 3 | 1893 | 205 | 85 | 127 |
| 55 | 85 | 94 | 41 | 33 | 20 | 25 | M8x25 | 35 | 8 | M8 | 4 | 2403 | 210 | 85 | 132 |
| 60 | 90 | 99 | 41 | 33 | 20 | 25 | M8x25 | 35 | 8 | M8 | 4 | 2648 | 186 | 85 | 122 |
| 65 | 95 | 104 | 41 | 33 | 20 | 25 | M8x25 | 35 | 9 | M8 | 3 | 3188 | 196 | 85 | 132 |
| 70 | 110 | 119 | 50 | 40 | 24 | 30 | M10x30 | 70 | 8 | M10 | 4 | 4905 | 215 | 119 | 137 |
| 75 | 115 | 124 | 50 | 40 | 24 | 30 | M10x30 | 70 | 8 | M10 | 4 | 5150 | 195 | 119 | 127 |
| 80 | 120 | 129 | 50 | 40 | 24 | 30 | M10x30 | 70 | 8 | M10 | 4 | 5490 | 185 | 119 | 122 |
| 85 | 125 | 134 | 50 | 40 | 24 | 30 | M10x30 | 70 | 9 | M10 | 3 | 6620 | 195 | 132 | 132 |
| 90 | 130 | 139 | 50 | 40 | 24 | 30 | M10x30 | 70 | 9 | M10 | 3 | 6960 | 185 | 132 | 127 |
| 95 | 135 | 144 | 50 | 40 | 24 | 30 | M10x30 | 70 | 10 | M10 | 4 | 8190 | 195 | 132 | 137 |
| 100 | 145 | 154 | 56 | 44 | 26 | 32 | M12x35 | 125 | 8 | M12 | 4 | 10100 | 205 | 170 | 145 |
| 110 | 155 | 164 | 56 | 44 | 26 | 32 | M12x35 | 125 | 8 | M12 | 4 | 11030 | 190 | 170 | 135 |
| 120 | 165 | 174 | 56 | 44 | 26 | 32 | M12x35 | 12 | 9 | M12 | 4 | 13600 | 205 | 200 | 142 |
| 130 | 180 | 189 | 64 | 52 | 34 | 40 | M12x35 | 190 | 12 | M12 | 6 | 19000 | 186 | 270 | 137 |
| 140 | 190 | 199 | 68 | 54 | 34 | 40 | M14x40 | 190 | 9 | M14 | 4 | 21800 | 177 | 270 | 127 |
| 150 | 200 | 209 | 68 | 54 | 34 | 40 | M14x40 | 190 | 12 | M14 | 5 | 25600 | 185 | 320 | 137 |

ELEMENTY BLOKUJĄCE - PIERŚCIENIE ROZPRĘŻNO-ZACISKKOWE

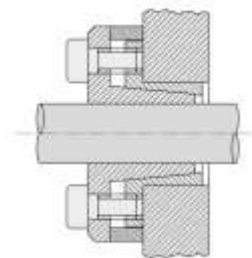
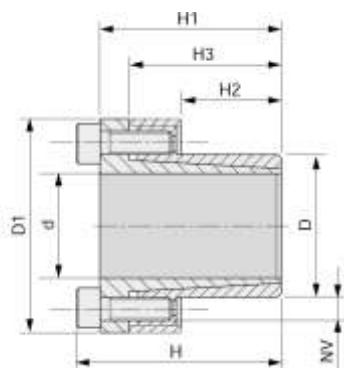


Seria
KLBB/BK15/RCK15/256

Mat. C45 E - UNI EN 10083-1
Wymiary przed zamontowaniem

| Wymiary (mm) | | | | | | | Siła Docisku | | | Odblokowanie | | Moment obrotowy | | | |
|--------------|----|----|----|----|----|----|-----------------|---------|-------|-----------------|-------|-----------------|----------------------------|------------|----------------------------|
| d | D | D1 | H | H1 | H2 | H3 | NV typ śruby | Tv (Nm) | Śruby | NV typ śruby | Śruby | Mt (Nm) | Pa (N/mm ²) | Ta (kN) | Pm (N/mm ²) |
| 14 | 55 | 62 | 38 | 30 | 17 | 22 | M8x25 | 42 | 4 | M8 | 2 | 290 | 460 | 40 | 110 |
| 16 | 55 | 62 | 38 | 30 | 17 | 22 | M8x25 | 42 | 4 | M8 | 2 | 330 | 400 | 40 | 110 |
| 18 | 55 | 62 | 38 | 30 | 17 | 22 | M8x25 | 42 | 4 | M8 | 2 | 370 | 360 | 40 | 110 |
| 19 | 55 | 62 | 38 | 30 | 17 | 22 | M8x25 | 42 | 4 | M8 | 2 | 390 | 340 | 40 | 110 |
| 20 | 55 | 62 | 38 | 30 | 17 | 22 | M8x25 | 42 | 4 | M8 | 2 | 410 | 320 | 40 | 110 |
| 22 | 55 | 62 | 38 | 30 | 17 | 22 | M8x25 | 42 | 4 | M8 | 2 | 450 | 290 | 40 | 110 |
| 24 | 55 | 62 | 38 | 30 | 17 | 22 | M8x25 | 42 | 4 | M8 | 2 | 490 | 270 | 40 | 110 |
| 25 | 55 | 62 | 38 | 30 | 17 | 22 | M8x25 | 42 | 4 | M8 | 2 | 510 | 260 | 40 | 110 |
| 28 | 55 | 62 | 38 | 30 | 17 | 22 | M8x25 | 42 | 4 | M8 | 2 | 570 | 230 | 40 | 110 |
| 30 | 55 | 62 | 38 | 30 | 17 | 22 | M8x25 | 42 | 4 | M8 | 2 | 610 | 220 | 40 | 110 |
| 24 | 65 | 72 | 38 | 30 | 17 | 22 | M8x25 | 42 | 5 | M8 | 3 | 610 | 330 | 50 | 120 |
| 25 | 65 | 72 | 38 | 30 | 17 | 22 | M8x25 | 42 | 5 | M8 | 3 | 640 | 320 | 50 | 120 |
| 28 | 65 | 72 | 38 | 30 | 17 | 22 | M8x25 | 42 | 5 | M8 | 3 | 710 | 290 | 50 | 120 |
| 30 | 65 | 72 | 38 | 30 | 17 | 22 | M8x25 | 42 | 5 | M8 | 3 | 770 | 270 | 50 | 120 |
| 32 | 65 | 72 | 38 | 30 | 17 | 22 | M8x25 | 42 | 5 | M8 | 3 | 820 | 250 | 50 | 120 |
| 33 | 65 | 72 | 38 | 30 | 17 | 22 | M8x25 | 42 | 5 | M8 | 3 | 850 | 240 | 50 | 120 |
| 35 | 65 | 72 | 38 | 30 | 17 | 22 | M8x25 | 42 | 5 | M8 | 3 | 890 | 230 | 50 | 120 |
| 38 | 65 | 72 | 38 | 30 | 17 | 22 | M8x25 | 42 | 5 | M8 | 3 | 970 | 210 | 50 | 120 |
| 40 | 65 | 72 | 38 | 30 | 17 | 22 | M8x25 | 42 | 5 | M8 | 3 | 1020 | 200 | 50 | 120 |
| 30 | 80 | 87 | 41 | 33 | 20 | 25 | M8x25 | 42 | 7 | M8 | 3 | 1070 | 320 | 70 | 110 |
| 32 | 80 | 87 | 41 | 33 | 20 | 25 | M8x25 | 42 | 7 | M8 | 3 | 1140 | 300 | 70 | 110 |
| 33 | 80 | 87 | 41 | 33 | 20 | 25 | M8x25 | 42 | 7 | M8 | 3 | 1180 | 280 | 70 | 110 |
| 35 | 80 | 87 | 41 | 33 | 20 | 25 | M8x25 | 42 | 7 | M8 | 3 | 1250 | 270 | 60 | 110 |
| 38 | 80 | 87 | 41 | 33 | 20 | 25 | M8x25 | 42 | 7 | M8 | 3 | 1350 | 250 | 60 | 110 |
| 40 | 80 | 87 | 41 | 33 | 20 | 25 | M8x25 | 42 | 7 | M8 | 3 | 1420 | 240 | 70 | 110 |
| 42 | 80 | 87 | 41 | 33 | 20 | 25 | M8x25 | 42 | 7 | M8 | 3 | 1500 | 230 | 70 | 110 |
| 45 | 80 | 87 | 41 | 33 | 20 | 25 | M8x25 | 42 | 7 | M8 | 3 | 1600 | 210 | 60 | 110 |
| 48 | 80 | 87 | 41 | 33 | 20 | 25 | M8x25 | 42 | 7 | M8 | 3 | 1710 | 200 | 70 | 110 |
| 50 | 80 | 87 | 41 | 33 | 20 | 25 | M8x25 | 42 | 7 | M8 | 3 | 1780 | 190 | 60 | 110 |

ELEMENTY BLOKUJĄCE - PIERŚCIENIE ROZPRĘŻNO-ZACISKKOWE

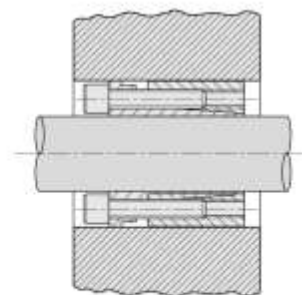
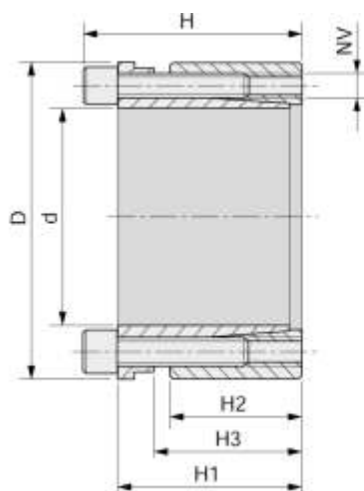


Seria
KLCC/BK80/RCK80/250

Mat. C45 E - UNI EN 10083-1
Wymiary przed zamontowaniem

| Wymiary (mm) | | | | | | | Siła Docisku | | | Odblokowanie | | Moment obrotowy | | | |
|--------------|-----|-----|-----|-----|----|-----|-----------------|---------|-------|-----------------|-------|-----------------|----------------------------|------------|----------------------------|
| d | D | D1 | H | H1 | H2 | H3 | NV typ śruby | Tv (Nm) | Śruby | NV typ śruby | Śruby | Mt (Nm) | Pa (N/mm ²) | Ta (kN) | Pm (N/mm ²) |
| 8 | 15 | 28 | 28 | 24 | 12 | 21 | M4x12 | 5,2 | 4 | M4 | 3 | 30 | 190 | 7,19 | 105 |
| 9 | 16 | 32 | 31 | 27 | 14 | 23 | M4x12 | 5,2 | 4 | M4 | 3 | 32 | 150 | 7,19 | 92 |
| 10 | 16 | 32 | 31 | 27 | 14 | 23 | M4x12 | 5,2 | 4 | M4 | 3 | 40 | 140 | 9 | 90 |
| 11 | 18 | 34 | 31 | 27 | 14 | 23 | M4x12 | 5,2 | 4 | M4 | 3 | 50 | 175 | 9 | 107 |
| 12 | 18 | 34 | 31 | 27 | 14 | 23 | M4x12 | 5,2 | 4 | M4 | 3 | 55 | 161 | 9 | 107 |
| 14 | 23 | 39 | 31 | 27 | 14 | 23 | M4x12 | 5,2 | 4 | M4 | 3 | 64 | 137 | 9 | 84 |
| 15 | 24 | 45 | 42 | 36 | 16 | 29 | M6x18 | 17 | 3 | M6 | 3 | 99 | 162 | 13 | 101 |
| 16 | 24 | 45 | 42 | 36 | 16 | 29 | M6x18 | 17 | 3 | M6 | 2 | 105 | 152 | 13 | 101 |
| 18 | 26 | 47 | 44 | 38 | 18 | 31 | M6x18 | 17 | 4 | M6 | 2 | 158 | 160 | 18 | 111 |
| 19 | 27 | 48 | 44 | 38 | 18 | 31 | M6x18 | 17 | 4 | M6 | 3 | 167 | 151 | 18 | 107 |
| 20 | 28 | 49 | 44 | 38 | 18 | 31 | M6x18 | 17 | 4 | M6 | 3 | 176 | 144 | 21 | 103 |
| 22 | 32 | 54 | 51 | 45 | 25 | 38 | M6x18 | 17 | 4 | M6 | 3 | 232 | 113 | 21 | 78 |
| 24 | 34 | 56 | 51 | 45 | 25 | 38 | M6x18 | 17 | 4 | M6 | 3 | 253 | 103 | 21 | 73 |
| 25 | 34 | 56 | 51 | 45 | 25 | 38 | M6x18 | 17 | 4 | M6 | 3 | 263 | 99 | 21 | 73 |
| 28 | 39 | 61 | 51 | 45 | 25 | 38 | M6x18 | 17 | 5 | M6 | 3 | 368 | 111 | 31 | 80 |
| 30 | 41 | 63 | 51 | 45 | 25 | 38 | M6x18 | 17 | 6 | M6 | 3 | 474 | 124 | 31 | 910 |
| 32 | 43 | 65 | 56 | 50 | 30 | 43 | M6x18 | 17 | 6 | M6 | 3 | 505 | 97 | 31 | 72 |
| 35 | 47 | 69 | 56 | 50 | 30 | 43 | M6x18 | 17 | 8 | M6 | 4 | 737 | 119 | 42 | 88 |
| 38 | 50 | 72 | 56 | 50 | 30 | 43 | M6x18 | 17 | 8 | M6 | 4 | 800 | 109 | 42 | 83 |
| 40 | 53 | 75 | 58 | 52 | 32 | 45 | M6x18 | 17 | 9 | M6 | 4 | 947 | 109 | 53 | 82 |
| 42 | 55 | 77 | 58 | 52 | 32 | 45 | M6x18 | 42 | 9 | M6 | 4 | 994 | 104 | 78 | 79 |
| 45 | 59 | 85 | 72 | 64 | 40 | 56 | M8x22 | 42 | 8 | M8 | 4 | 1750 | 127 | 78 | 97 |
| 48 | 62 | 88 | 72 | 64 | 40 | 56 | M8x22 | 42 | 8 | M8 | 4 | 1867 | 119 | 78 | 92 |
| 50 | 65 | 92 | 82 | 74 | 50 | 66 | M8x22 | 42 | 10 | M8 | 5 | 2431 | 115 | 97 | 98 |
| 55 | 71 | 98 | 82 | 74 | 50 | 66 | M8x22 | 42 | 10 | M8 | 5 | 2674 | 104 | 97 | 81 |
| 60 | 77 | 104 | 82 | 74 | 50 | 66 | M8x22 | 42 | 10 | M8 | 5 | 2917 | 96 | 97 | 74 |
| 65 | 84 | 111 | 82 | 74 | 50 | 66 | M8x22 | 42 | 10 | M8 | 5 | 3160 | 88 | 97 | 69 |
| 70 | 90 | 122 | 101 | 91 | 60 | 80 | M10x25 | 84 | 8 | M10 | 4 | 4322 | 87 | 123 | 67 |
| 75 | 95 | 126 | 101 | 91 | 60 | 80 | M10x25 | 84 | 9 | M10 | 4 | 6171 | 93 | 197 | 74 |
| 80 | 100 | 131 | 106 | 96 | 65 | 85 | M10x25 | 84 | 12 | M10 | 5 | 7899 | 97 | 237 | 77 |
| 85 | 106 | 137 | 106 | 96 | 65 | 85 | M10x25 | 84 | 12 | M10 | 5 | 8393 | 91 | 237 | 73 |
| 90 | 112 | 143 | 106 | 96 | 65 | 85 | M10x25 | 84 | 14 | M10 | 6 | 10367 | 100 | 276 | 51 |
| 95 | 120 | 153 | 106 | 96 | 65 | 85 | M10x25 | 84 | 14 | M10 | 6 | 10943 | 95 | 276 | 75 |
| 100 | 125 | 162 | 114 | 102 | 65 | 89 | M12x30 | 145 | 12 | M12 | 5 | 14520 | 114 | 348 | 91 |
| 110 | 140 | 177 | 119 | 107 | 70 | 94 | M12x30 | 145 | 12 | M12 | 5 | 15972 | 96 | 348 | 75 |
| 120 | 155 | 195 | 139 | 127 | 90 | 114 | M12x30 | 145 | 16 | M12 | 7 | 23232 | 91 | 465 | 71 |
| 130 | 165 | 205 | 139 | 127 | 90 | 114 | M12x30 | 145 | 16 | M12 | 7 | 25168 | 84 | 465 | 66 |
| 140 | 175 | 215 | 139 | 127 | 90 | 114 | M12x30 | 145 | 16 | M12 | 7 | 27104 | 78 | 465 | 63 |
| 150 | 185 | 225 | 139 | 127 | 90 | 114 | M12x30 | 145 | 16 | M12 | 7 | 29041 | 73 | 465 | 59 |

ELEMENTY BLOKUJĄCE - PIERŚCIENIE ROZPRĘŻNO-ZACISKKOWE

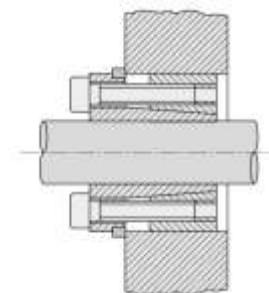
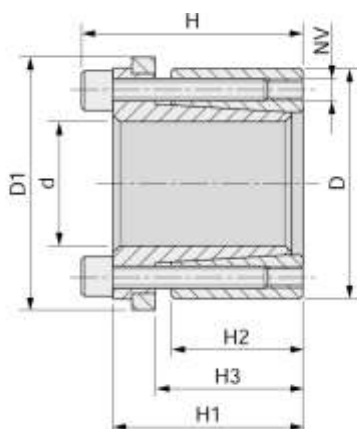


Seria
KLDA/BK70/RCK70/200

Mat. C45 E - UNI EN 10083-1
Wymiary przed zamontowaniem

| Wymiary (mm) | | | | | | Siła Docisku | | | Odblokowanie | | Moment obrotowy | | | |
|--------------|-----|----|----|----|----|-----------------|---------|-------|-----------------|-------|-----------------|----------------------------|------------|----------------------------|
| d | D | H | H1 | H2 | H3 | NV typ śruby | Tv (Nm) | Śruby | NV typ śruby | Śruby | Mt (Nm) | Pa (N/mm ²) | Ta (KN) | Pm (N/mm ²) |
| 19 | 47 | 45 | 39 | 26 | 31 | M6x25 | 17 | 4 | M6 | 2 | 353 | 228 | 30,6 | 98 |
| 20 | 47 | 45 | 39 | 26 | 31 | M6x25 | 17 | 4 | M6 | 2 | 382 | 226 | 33,4 | 98 |
| 22 | 47 | 45 | 39 | 26 | 31 | M6x25 | 17 | 4 | M6 | 2 | 431 | 215 | 33,4 | 93 |
| 24 | 50 | 45 | 39 | 26 | 31 | M6x25 | 17 | 6 | M6 | 3 | 519 | 215 | 50,2 | 102 |
| 25 | 50 | 45 | 39 | 26 | 31 | M6x25 | 17 | 6 | M6 | 3 | 578 | 225 | 50,2 | 102 |
| 28 | 55 | 45 | 39 | 26 | 31 | M6x25 | 17 | 6 | M6 | 3 | 686 | 215 | 50,2 | 107 |
| 30 | 55 | 45 | 39 | 26 | 31 | M6x25 | 17 | 6 | M6 | 3 | 745 | 196 | 50,2 | 117 |
| 32 | 60 | 45 | 39 | 26 | 31 | M6x25 | 17 | 8 | M6 | 4 | 912 | 225 | 66,9 | 111 |
| 35 | 60 | 45 | 39 | 26 | 31 | M6x25 | 17 | 8 | M6 | 4 | 1010 | 196 | 66,9 | 116 |
| 38 | 65 | 45 | 39 | 26 | 31 | M6x25 | 17 | 8 | M6 | 4 | 1216 | 205 | 66,9 | 121 |
| 40 | 65 | 45 | 39 | 26 | 31 | M6x25 | 17 | 8 | M6 | 4 | 1323 | 196 | 66,9 | 122 |
| 42 | 70 | 55 | 47 | 30 | 36 | M8x30 | 41 | 6 | M8 | 3 | 2128 | 232 | 66,9 | 137 |
| 45 | 70 | 55 | 47 | 30 | 36 | M8x30 | 41 | 6 | M8 | 3 | 2304 | 232 | 92,1 | 137 |
| 48 | 80 | 55 | 47 | 30 | 36 | M8x30 | 41 | 6 | M8 | 3 | 2461 | 213 | 110,0 | 132 |
| 50 | 80 | 55 | 47 | 30 | 36 | M8x30 | 41 | 6 | M8 | 3 | 2530 | 213 | 122,8 | 132 |
| 55 | 85 | 55 | 47 | 30 | 36 | M8x30 | 41 | 8 | M8 | 4 | 3138 | 218 | 122,8 | 142 |
| 60 | 90 | 55 | 47 | 30 | 36 | M8x30 | 41 | 8 | M8 | 4 | 3314 | 194 | 122,8 | 153 |
| 65 | 95 | 55 | 47 | 30 | 36 | M8x30 | 41 | 8 | M8 | 4 | 4079 | 208 | 122,8 | 137 |
| 70 | 110 | 67 | 57 | 40 | 46 | M8x30 | 83 | 8 | M10 | 4 | 6707 | 220 | 193,5 | 140 |
| 75 | 115 | 72 | 62 | 40 | 46 | M10x35 | 83 | 8 | M10 | 4 | 7354 | 205 | 193,5 | 135 |
| 80 | 120 | 72 | 62 | 40 | 46 | M10x35 | 83 | 8 | M10 | 4 | 7943 | 196 | 193,5 | 127 |
| 85 | 125 | 72 | 62 | 40 | 46 | M10x35 | 83 | 10 | M10 | 4 | 9512 | 205 | 241,9 | 142 |
| 90 | 130 | 72 | 62 | 40 | 46 | M10x35 | 83 | 10 | M10 | 4 | 10100 | 196 | 241,9 | 135 |
| 95 | 135 | 72 | 62 | 40 | 46 | M10x35 | 83 | 10 | M10 | 4 | 11865 | 205 | 241,9 | 145 |
| 100 | 145 | 89 | 77 | 46 | 52 | M12x45 | 145 | 8 | M12 | 4 | 15396 | 211 | 282,8 | 145 |
| 110 | 155 | 89 | 77 | 46 | 52 | M12x45 | 145 | 8 | M12 | 4 | 16867 | 192 | 282,8 | 136 |
| 120 | 165 | 89 | 77 | 46 | 52 | M12x45 | 145 | 10 | M120 | 4 | 22064 | 211 | 353,6 | 152 |
| 130 | 180 | 89 | 77 | 46 | 52 | M12x45 | 145 | 12 | M12 | 4 | 23535 | 192 | 424,3 | 137 |
| 140 | 190 | 98 | 84 | 51 | 59 | M14x45 | 230 | 8 | M14 | 4 | 30210 | 192 | 448,5 | 142 |
| 150 | 200 | 98 | 84 | 51 | 59 | M14x45 | 230 | 10 | M14 | 5 | 36440 | 201 | 489,0 | 150 |

ELEMENTY BLOKUJĄCE - PIERŚCIENIE ROZPRĘŻNO-ZACISKKOWE

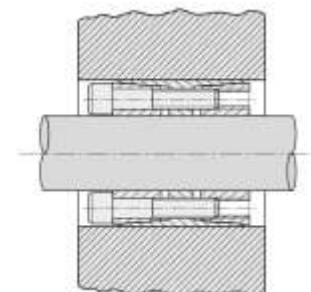
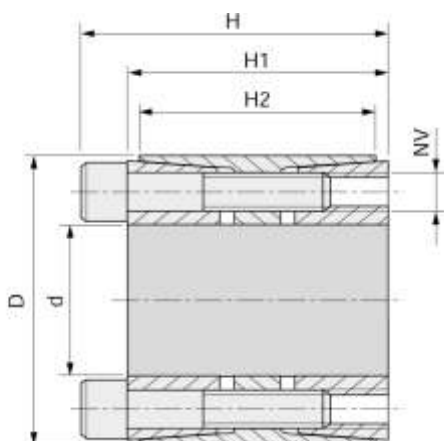


Seria
KLDB/BK71/RCK71/201

Mat. C45 E - UNI EN 10083-1
Wymiary przed zamontowaniem

| Wymiary (mm) | | | | | | | Siła Docisku | | | Odblokowanie | | Moment obrotowy | | | |
|--------------|-----|-----|----|----|----|----|-----------------|---------|-------|-----------------|-------|-----------------|----------------------------|------------|----------------------------|
| d | D | D1 | H | H1 | H2 | H3 | NV typ śruby | Tv (Nm) | Śruby | NV typ śruby | Śruby | Mt (Nm) | Pa (N/mm ²) | Ta (kN) | Pm (N/mm ²) |
| 19 | 47 | 53 | 45 | 39 | 26 | 31 | M6x25 | 17 | 4 | M6 | 2 | 294 | 228 | 19,8 | 96 |
| 20 | 47 | 53 | 45 | 39 | 26 | 31 | M6x25 | 17 | 4 | M6 | 2 | 313 | 226 | 23,4 | 96 |
| 22 | 47 | 53 | 45 | 39 | 26 | 31 | M6x25 | 17 | 4 | M6 | 2 | 362 | 206 | 23,4 | 97 |
| 24 | 50 | 56 | 45 | 39 | 26 | 31 | M6x25 | 17 | 6 | M6 | 3 | 421 | 206 | 35,1 | 100 |
| 25 | 50 | 56 | 45 | 39 | 26 | 31 | M6x25 | 17 | 6 | M6 | 3 | 470 | 221 | 35,1 | 110 |
| 28 | 55 | 61 | 45 | 39 | 26 | 31 | M6x25 | 17 | 6 | M6 | 3 | 578 | 202 | 35,1 | 105 |
| 30 | 55 | 61 | 45 | 39 | 26 | 31 | M6x25 | 17 | 6 | M6 | 3 | 637 | 221 | 35,1 | 118 |
| 32 | 60 | 66 | 45 | 39 | 26 | 31 | M6x25 | 17 | 8 | M6 | 4 | 784 | 197 | 46,8 | 114 |
| 35 | 60 | 66 | 45 | 39 | 26 | 31 | M6x25 | 17 | 8 | M6 | 4 | 843 | 202 | 46,8 | 118 |
| 38 | 65 | 71 | 45 | 39 | 26 | 31 | M6x25 | 17 | 8 | M6 | 4 | 1010 | 197 | 46,8 | 121 |
| 40 | 65 | 71 | 45 | 39 | 26 | 31 | M6x25 | 17 | 8 | M6 | 4 | 1108 | 234 | 46,8 | 143 |
| 42 | 75 | 81 | 55 | 47 | 30 | 36 | M8x30 | 41 | 6 | M8 | 3 | 1892 | 216 | 46,8 | 135 |
| 45 | 75 | 81 | 55 | 47 | 30 | 36 | M8x30 | 41 | 6 | M8 | 3 | 1912 | 216 | 64,4 | 135 |
| 48 | 80 | 86 | 55 | 47 | 30 | 36 | M8x30 | 41 | 6 | M8 | 3 | 2137 | 221 | 73,6 | 142 |
| 50 | 80 | 86 | 55 | 47 | 30 | 36 | M8x30 | 41 | 6 | M8 | 3 | 2167 | 221 | 86 | 143 |
| 55 | 85 | 91 | 55 | 47 | 30 | 36 | M8x30 | 41 | 8 | M8 | 4 | 2677 | 221 | 86 | 143 |
| 60 | 90 | 96 | 55 | 47 | 30 | 36 | M8x30 | 41 | 8 | M8 | 4 | 2853 | 197 | 86 | 131 |
| 65 | 95 | 101 | 55 | 47 | 30 | 36 | M8x30 | 41 | 8 | M8 | 4 | 3500 | 206 | 86 | 142 |
| 70 | 110 | 116 | 67 | 57 | 40 | 46 | M10x35 | 83 | 8 | M10 | 4 | 5717 | 221 | 135 | 142 |
| 75 | 115 | 121 | 72 | 62 | 40 | 46 | M10x35 | 83 | 8 | M10 | 4 | 6207 | 216 | 135 | 148 |
| 80 | 120 | 126 | 72 | 62 | 40 | 46 | M10x35 | 83 | 8 | M10 | 4 | 6707 | 198 | 135 | 139 |
| 85 | 125 | 131 | 72 | 62 | 40 | 46 | M10x35 | 83 | 10 | M10 | 4 | 8002 | 216 | 169 | 157 |
| 90 | 130 | 136 | 72 | 62 | 40 | 46 | M10x35 | 83 | 10 | M10 | 4 | 8502 | 197 | 169 | 143 |
| 95 | 135 | 141 | 72 | 62 | 40 | 46 | M10x35 | 83 | 10 | M10 | 4 | 10002 | 187 | 169 | 138 |
| 100 | 145 | 151 | 89 | 77 | 46 | 52 | M12x45 | 145 | 8 | M12 | 4 | 13336 | 197 | 198 | 148 |
| 110 | 155 | 161 | 89 | 77 | 46 | 52 | M12x45 | 145 | 8 | M12 | 4 | 14582 | 197 | 198 | 178 |
| 120 | 165 | 171 | 89 | 77 | 46 | 52 | M12x45 | 145 | 10 | M12 | 4 | 19083 | 216 | 248 | 158 |
| 130 | 180 | 186 | 89 | 77 | 46 | 52 | M12x45 | 145 | 12 | M12 | 4 | 20417 | 198 | 297 | 143 |
| 140 | 190 | 196 | 98 | 84 | 51 | 59 | M12x45 | 230 | 8 | M12 | 4 | 24920 | 188 | 342 | 138 |
| 150 | 200 | 206 | 98 | 84 | 51 | 59 | M12x45 | 230 | 10 | M12 | 5 | 30130 | 198 | 342 | 149 |

ELEMENTY BLOKUJĄCE - PIERŚCIENIE ROZPRĘŻNO-ZACISKKOWE



Seria
KLEE/BK11/RCK11/400

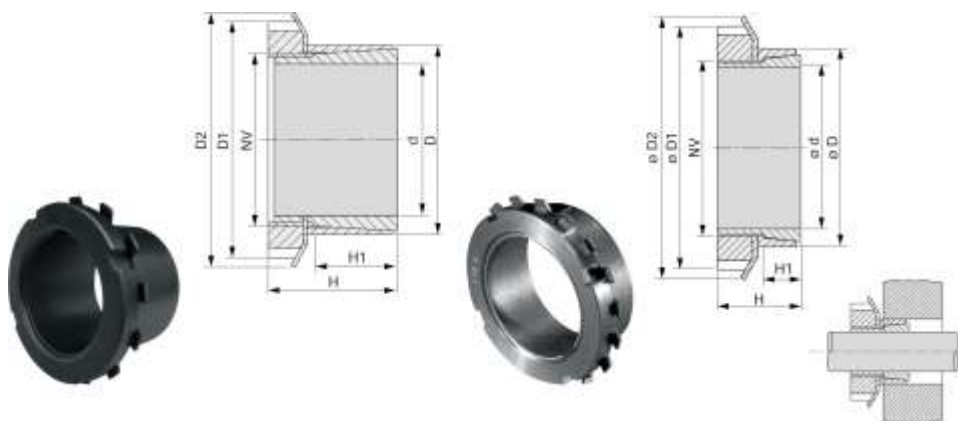
Mat. C45 E - UNI EN 10083-1
Wymiary przed zamontowaniem

| Wymiary (mm) | | | | | Siła Docisku | | | Odblokowanie | | Moment obrotowy | | | |
|--------------|-----|-----|-----|-----|-----------------|---------|-------|-----------------|-------|-----------------|----------------------------|------------|----------------------------|
| d | D | H | H1 | H2 | NV typ śruby | Tv (Nm) | Śruby | NV typ śruby | Śruby | Mt (Nm) | Pa (N/mm ²) | Ta (kN) | Pm (N/mm ²) |
| 25 | 55 | 46 | 40 | 32 | M6x35 | 17,5 | 6 | M6 | 3 | 750 | 250 | 70 | 130 |
| 28 | 55 | 46 | 40 | 32 | M6x35 | 17,5 | 6 | M6 | 3 | 830 | 220 | 70 | 120 |
| 30 | 55 | 46 | 40 | 32 | M6x35 | 17,5 | 6 | M6 | 3 | 890 | 210 | 70 | 120 |
| 35 | 60 | 60 | 54 | 44 | M6x45 | 17,5 | 7 | M6 | 3 | 1220 | 150 | 80 | 90 |
| 38 | 75 | 62 | 54 | 44 | M8x50 | 42 | 7 | M8 | 3 | 2270 | 240 | 130 | 120 |
| 40 | 75 | 62 | 54 | 44 | M8x50 | 42 | 7 | M8 | 3 | 2390 | 230 | 130 | 140 |
| 42 | 75 | 62 | 54 | 44 | M8x50 | 42 | 7 | M8 | 3 | 2510 | 220 | 130 | 120 |
| 45 | 75 | 62 | 54 | 44 | M8x50 | 42 | 7 | M8 | 3 | 2690 | 200 | 130 | 120 |
| 48 | 80 | 72 | 64 | 56 | M8x55 | 42 | 8 | M8 | 4 | 3270 | 220 | 150 | 130 |
| 50 | 80 | 72 | 64 | 56 | M8x55 | 42 | 8 | M8 | 4 | 3410 | 170 | 150 | 110 |
| 55 | 85 | 72 | 64 | 56 | M8x55 | 42 | 9 | M8 | 4 | 4220 | 170 | 170 | 110 |
| 60 | 90 | 72 | 64 | 56 | M8x55 | 42 | 10 | M8 | 4 | 5110 | 170 | 180 | 120 |
| 65 | 95 | 72 | 64 | 56 | M8x55 | 42 | 10 | M8 | 4 | 5540 | 160 | 190 | 110 |
| 70 | 110 | 88 | 78 | 70 | M10x60 | 85 | 10 | M10 | 4 | 10150 | 200 | 310 | 130 |
| 75 | 115 | 88 | 78 | 70 | M10x60 | 85 | 10 | M10 | 4 | 10870 | 190 | 320 | 120 |
| 80 | 120 | 88 | 78 | 70 | M10x60 | 85 | 11 | M10 | 4 | 12760 | 190 | 340 | 130 |
| 85 | 125 | 88 | 78 | 70 | M10x60 | 85 | 12 | M10 | 5 | 14790 | 200 | 380 | 140 |
| 90 | 130 | 88 | 78 | 70 | M10x60 | 85 | 12 | M10 | 5 | 15660 | 190 | 380 | 130 |
| 95 | 135 | 88 | 78 | 70 | M10x60 | 85 | 12 | M10 | 5 | 16530 | 180 | 380 | 130 |
| 100 | 145 | 112 | 100 | 90 | M12x80 | 145 | 12 | M12 | 4 | 23250 | 180 | 510 | 120 |
| 110 | 155 | 112 | 100 | 90 | M12x80 | 145 | 12 | M12 | 5 | 27900 | 170 | 530 | 130 |
| 120 | 165 | 112 | 100 | 90 | M12x80 | 145 | 14 | M12 | 6 | 35510 | 190 | 650 | 140 |
| 130 | 180 | 130 | 116 | 104 | M14x90 | 235 | 12 | M14 | 5 | 45130 | 180 | 770 | 130 |
| 140 | 190 | 130 | 116 | 104 | M14x90 | 235 | 14 | M14 | 7 | 56700 | 190 | 870 | 140 |
| 150 | 200 | 130 | 116 | 104 | M14x90 | 235 | 15 | M14 | 7 | 65090 | 190 | 940 | 140 |
| 160 | 210 | 130 | 116 | 104 | M14x90 | 235 | 16 | M14 | 7 | 74060 | 190 | 1000 | 150 |
| 170 | 225 | 164 | 148 | 134 | M16x120 | 360 | 14 | M16 | 7 | 95240 | 170 | 1220 | 130 |
| 180 | 235 | 164 | 148 | 134 | M16x120 | 360 | 16 | M16 | 7 | 108050 | 170 | 1290 | 130 |
| 190 | 250 | 164 | 148 | 134 | M16x120 | 360 | 16 | M16 | 7 | 121650 | 170 | 1360 | 130 |
| 200 | 260 | 164 | 148 | 134 | M16x120 | 360 | 16 | M16 | 7 | 128060 | 160 | 1350 | 130 |
| 220 | 285 | 164 | 148 | 134 | M16x120 | 360 | 18 | M16 | 8 | 158470 | 170 | 1580 | 130 |

ELEMENTY BLOKUJĄCE - PIERŚCIENIE ROZPRĘŻNO-ZACISKKOWE

Seria
KLFF/BK55/RCK55/125

Mat. C45 E - UNI EN 10083-1
Wymiary przed zamontowaniem



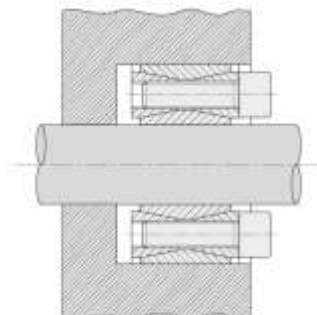
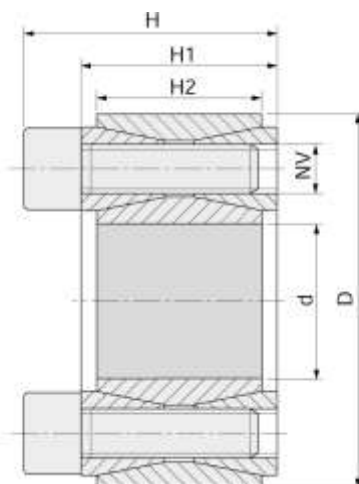
| Wymiary (mm) | | | | | | Siła Docisku | | Moment obrotowy | | | |
|--------------|----|----|----|----|----|-----------------|---------|-----------------|----------------------------|------------|----------------------------|
| d | D | D1 | D2 | H | H1 | NV typ śruby | Tv (Nm) | Mt (Nm) | Pa (N/mm ²) | Ta (kN) | Pm (N/mm ²) |
| 15 | 25 | 32 | 34 | 31 | 20 | M20x1 | 95 | 77 | 94 | 9 | 55 |
| 18 | 30 | 38 | 41 | 33 | 21 | M25x1,5 | 160 | 125 | 98 | 13 | 59 |
| 19 | 30 | 38 | 41 | 33 | 21 | M25x1,5 | 160 | 132 | 93 | 13 | 59 |
| 20 | 30 | 38 | 41 | 33 | 21 | M25x1,5 | 160 | 139 | 88 | 13 | 59 |
| 24 | 35 | 45 | 48 | 38 | 25 | M30x1,5 | 220 | 202 | 74 | 15 | 51 |
| 25 | 35 | 45 | 48 | 38 | 25 | M30x1,5 | 220 | 210 | 71 | 15 | 51 |
| 28 | 40 | 52 | 55 | 44 | 28 | M35x1,5 | 340 | 312 | 76 | 20 | 53 |
| 30 | 40 | 52 | 55 | 44 | 28 | M35x1,5 | 340 | 335 | 71 | 20 | 53 |
| 35 | 45 | 58 | 61 | 45 | 28 | M40x1,5 | 480 | 483 | 75 | 25 | 58 |
| 40 | 50 | 65 | 67 | 46 | 28 | M45x1,5 | 680 | 696 | 82 | 31 | 66 |
| 45 | 55 | 70 | 73 | 47 | 28 | M50x1,5 | 870 | 902 | 84 | 36 | 69 |
| 50 | 60 | 75 | 81 | 47 | 28 | M55x2 | 970 | 1014 | 77 | 37 | 64 |
| 55 | 65 | 80 | 87 | 48 | 28 | M60x2 | 1100 | 1158 | 73 | 38 | 61 |
| 60 | 70 | 85 | 93 | 50 | 28 | M65x2 | 1300 | 1379 | 73 | 41 | 62 |

Seria
KLFC/BK55/RCK55/125

Mat. C45 E - UNI EN 10083-1
Wymiary przed zamontowaniem

| Wymiary (mm) | | | | | | Siła Docisku | | Moment obrotowy | | | |
|--------------|----|----|-----|------|------|-----------------|---------|-----------------|----------------------------|------------|----------------------------|
| d | D | D1 | D2 | H | H1 | NV typ śruby | Tv (Nm) | Mt (Nm) | Pa (N/mm ²) | Ta (kN) | Pm (N/mm ²) |
| 14 | 25 | 32 | 34 | 17 | 6,5 | M20x1 | 95 | 52 | 241 | 7 | 135 |
| 15 | 25 | 32 | 34 | 17 | 6,5 | M20x1 | 95 | 56 | 225 | 7 | 135 |
| 16 | 25 | 32 | 34 | 17 | 6,5 | M20x1 | 95 | 60 | 211 | 7 | 135 |
| 18 | 30 | 38 | 41 | 17,5 | 6,5 | M25x1,5 | 160 | 91 | 256 | 10 | 154 |
| 19 | 30 | 38 | 41 | 18 | 6,5 | M25x1,5 | 160 | 96 | 242 | 10 | 154 |
| 20 | 30 | 38 | 41 | 18 | 6,5 | M25x1,5 | 160 | 102 | 230 | 10 | 154 |
| 24 | 35 | 45 | 48 | 18 | 6,5 | M30x1,5 | 220 | 139 | 218 | 12 | 150 |
| 25 | 35 | 45 | 48 | 18 | 6,5 | M30x1,5 | 220 | 144 | 210 | 12 | 150 |
| 28 | 40 | 52 | 55 | 18 | 6,5 | M35x1,5 | 340 | 215 | 248 | 15 | 174 |
| 30 | 40 | 52 | 55 | 20 | 8 | M35x1,5 | 340 | 230 | 188 | 15 | 141 |
| 35 | 45 | 58 | 61 | 22 | 8 | M40x1,5 | 480 | 331 | 199 | 19 | 155 |
| 40 | 50 | 65 | 67 | 25 | 10 | M45x1,5 | 680 | 477 | 176 | 24 | 141 |
| 45 | 55 | 70 | 73 | 26 | 10 | M50x1,5 | 870 | 617 | 180 | 27 | 147 |
| 48 | 60 | 75 | 81 | 26 | 10 | M55x2 | 970 | 669 | 171 | 28 | 137 |
| 50 | 60 | 75 | 81 | 26 | 10 | M55x2 | 970 | 697 | 164 | 28 | 137 |
| 55 | 65 | 80 | 87 | 27 | 12 | M60x2 | 1100 | 796 | 129 | 29 | 109 |
| 60 | 70 | 85 | 93 | 29 | 12 | M65x2 | 1300 | 946 | 129 | 32 | 111 |
| 70 | 84 | 98 | 104 | 31,5 | 13,5 | M75x2 | 2000 | 1433 | 128 | 41 | 106 |

ELEMENTY BLOKUJĄCE - PIERŚCIENIE ROZPRĘŻNO-ZACISKKOWE

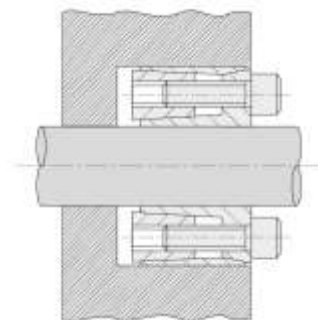
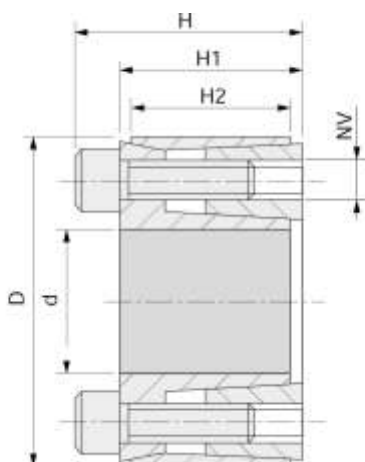


Seria
KLG/BK40/RCK40/100

Mat. C45 E - UNI EN 10083-1
Wymiary przed zamontowaniem

| Wymiary (mm) | | | | | Siła Docisku | | | Odblokowanie | | Moment obrotowy | | | |
|--------------|-----|----|----|----|-----------------|---------|-------|-----------------|-------|-----------------|----------------------------|------------|----------------------------|
| d | D | H | H1 | H2 | NV typ śruby | Tv (Nm) | Śruby | NV typ śruby | Śruby | Mt (Nm) | Pa (N/mm ²) | Ta (kN) | Pm (N/mm ²) |
| 19 | 47 | 26 | 20 | 17 | M6x18 | 16 | 8 | M8 | 2 | 260 | 220 | 26,8 | 93 |
| 20 | 47 | 26 | 20 | 17 | M6x18 | 16 | 8 | M8 | 2 | 268 | 210 | 26,8 | 93 |
| 22 | 47 | 26 | 20 | 17 | M6x18 | 16 | 8 | M8 | 2 | 283 | 207 | 26,8 | 96 |
| 24 | 50 | 26 | 20 | 17 | M6x18 | 16 | 9 | M8 | 3 | 361 | 206 | 30,1 | 103 |
| 25 | 50 | 26 | 20 | 17 | M6x18 | 16 | 9 | M8 | 3 | 376 | 206 | 30,1 | 103 |
| 28 | 55 | 26 | 20 | 17 | M6x18 | 16 | 10 | M8 | 3 | 420 | 204 | 33,5 | 103 |
| 30 | 55 | 26 | 20 | 17 | M6x18 | 16 | 10 | M8 | 3 | 450 | 190 | 33,5 | 103 |
| 32 | 60 | 26 | 20 | 17 | M6x18 | 16 | 12 | M8 | 4 | 643 | 214 | 40,2 | 114 |
| 35 | 60 | 26 | 20 | 17 | M6x18 | 16 | 12 | M8 | 4 | 703 | 196 | 40,2 | 114 |
| 38 | 65 | 26 | 20 | 17 | M6x18 | 16 | 14 | M8 | 4 | 891 | 204 | 46,9 | 122 |
| 40 | 65 | 26 | 20 | 17 | M6x18 | 16 | 14 | M8 | 4 | 938 | 200 | 46,9 | 122 |
| 42 | 75 | 32 | 24 | 20 | M8x22 | 38 | 12 | M10 | 4 | 1537 | 228 | 73,2 | 125 |
| 45 | 75 | 32 | 24 | 20 | M8x22 | 38 | 12 | M10 | 4 | 1647 | 208 | 73,2 | 125 |
| 48 | 80 | 32 | 24 | 20 | M8x22 | 38 | 12 | M10 | 4 | 1756 | 190 | 73,2 | 110 |
| 50 | 80 | 32 | 24 | 20 | M8x22 | 38 | 12 | M10 | 4 | 1830 | 189 | 73,2 | 115 |
| 55 | 85 | 32 | 24 | 20 | M8x22 | 38 | 14 | M10 | 4 | 2348 | 200 | 85,4 | 130 |
| 60 | 90 | 32 | 24 | 20 | M8x22 | 38 | 14 | M10 | 4 | 2560 | 180 | 85,4 | 122 |
| 65 | 95 | 32 | 24 | 20 | M8x22 | 38 | 16 | M10 | 4 | 3170 | 191 | 97,6 | 130 |
| 70 | 110 | 38 | 28 | 24 | M10x25 | 75 | 14 | M12 | 4 | 4700 | 211 | 134,4 | 132 |
| 75 | 115 | 38 | 28 | 24 | M10x25 | 75 | 14 | M12 | 4 | 5000 | 194 | 134,4 | 128 |
| 80 | 120 | 38 | 28 | 24 | M10x25 | 75 | 14 | M12 | 4 | 5300 | 182 | 134,4 | 124 |
| 85 | 125 | 38 | 28 | 24 | M10x25 | 75 | 16 | M12 | 4 | 6500 | 196 | 153,6 | 133 |
| 90 | 130 | 38 | 28 | 24 | M10x25 | 75 | 16 | M12 | 4 | 6900 | 181 | 153,6 | 128 |
| 95 | 135 | 38 | 28 | 24 | M10x25 | 75 | 18 | M12 | 4 | 8200 | 196 | 172,8 | 139 |
| 100 | 145 | 45 | 33 | 26 | M12x35 | 130 | 14 | M14 | 4 | 9870 | 196 | 197,4 | 139 |
| 110 | 155 | 45 | 33 | 26 | M12x35 | 130 | 14 | M14 | 4 | 10800 | 181 | 187,4 | 128 |
| 120 | 165 | 45 | 33 | 26 | M12x35 | 130 | 16 | M14 | 4 | 13500 | 187 | 225,6 | 139 |
| 130 | 180 | 50 | 40 | 34 | M12x35 | 130 | 20 | M14 | 4 | 18300 | 168 | 282 | 119 |
| 140 | 190 | 50 | 40 | 34 | M12x35 | 130 | 22 | M14 | 4 | 21700 | 168 | 310,1 | 128 |
| 150 | 200 | 50 | 40 | 34 | M12x35 | 130 | 24 | M14 | 4 | 25300 | 170 | 338,4 | 128 |
| 160 | 210 | 50 | 40 | 34 | M12x35 | 130 | 26 | M14 | 4 | 29300 | 171 | 366,6 | 132 |
| 170 | 225 | 58 | 44 | 38 | M14x40 | 207 | 22 | M16 | 4 | 33000 | 162 | 389 | 123 |
| 180 | 235 | 58 | 44 | 38 | M14x40 | 207 | 24 | M16 | 4 | 38000 | 168 | 424 | 128 |
| 190 | 250 | 66 | 52 | 46 | M14x45 | 207 | 28 | M16 | 4 | 47000 | 154 | 495 | 114 |
| 200 | 260 | 66 | 52 | 46 | M14x45 | 207 | 30 | M16 | 4 | 53000 | 157 | 531 | 118 |

ELEMENTY BLOKUJĄCE - PIERŚCIENIE ROZPRĘŻNO-ZACISKKOWE

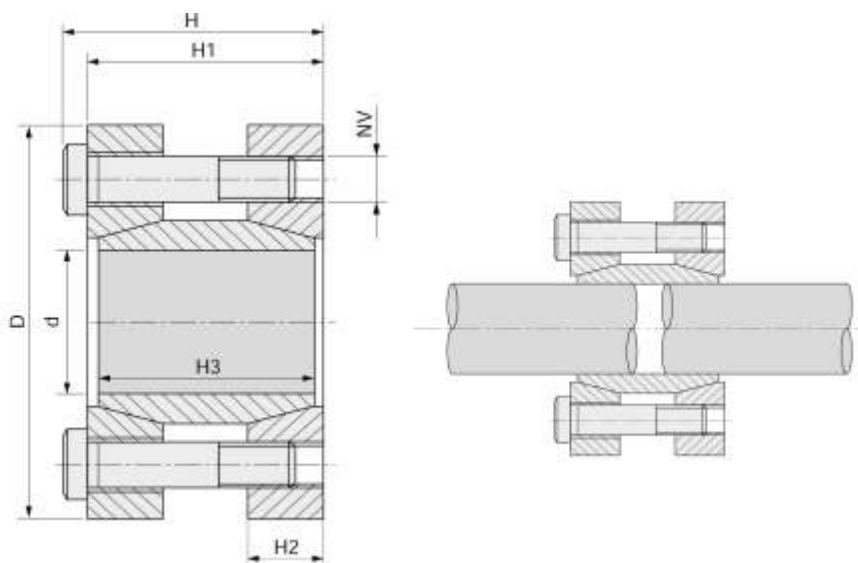


Seria
KLHH/BK45/RCK45/90

Mat. C45 E - UNI EN 10083-1
Wymiary przed zamontowaniem

| Wymiary (mm) | | | | | Siła Docisku | | | Odblokowanie | | Moment obrotowy | | | |
|--------------|-----|------|------|------|-----------------|---------|-------|-----------------|-------|-----------------|----------------------------|------------|----------------------------|
| d | D | H | H1 | H2 | NV typ śruby | Tv (Nm) | Śruby | NV typ śruby | Śruby | Mt (Nm) | Pa (N/mm ²) | Ta (KN) | Pm (N/mm ²) |
| 18 | 40 | 24 | 18,5 | 14,7 | M6x16 | 17,5 | 4 | M6 | 2 | 200 | 260 | 0 | 120 |
| 19 | 41 | 24 | 18 | 14,7 | M6x16 | 17,5 | 4 | M6 | 2 | 210 | 260 | 0 | 120 |
| 20 | 42 | 24 | 18 | 14,7 | M6x16 | 17,5 | 4 | M6 | 2 | 240 | 250 | 0 | 120 |
| 24 | 46 | 24 | 18 | 14,7 | M6x16 | 17,5 | 6 | M6 | 3 | 290 | 250 | 0 | 120 |
| 25 | 47 | 24 | 18 | 14,7 | M6x16 | 17,5 | 6 | M6 | 3 | 330 | 230 | 0 | 120 |
| 28 | 50 | 24 | 18 | 14,7 | M6x16 | 17,5 | 6 | M6 | 3 | 370 | 220 | 0 | 120 |
| 30 | 52 | 24 | 18 | 14,7 | M6x16 | 17,5 | 6 | M6 | 3 | 430 | 210 | 0 | 120 |
| 35 | 57 | 27,5 | 21,5 | 18 | M6x18 | 17,5 | 6 | M6 | 3 | 610 | 170 | 0 | 100 |
| 38 | 60 | 27,5 | 21,5 | 18 | M6x18 | 17,5 | 8 | M6 | 4 | 380 | 170 | 0 | 100 |
| 40 | 62 | 27,5 | 21,5 | 18 | M6x18 | 17,5 | 8 | M6 | 4 | 780 | 170 | 0 | 100 |
| 42 | 70 | 36 | 28 | 23,5 | M8x25 | 42 | 8 | M8 | 4 | 1480 | 190 | 0 | 110 |
| 45 | 73 | 36 | 28 | 23,5 | M8x25 | 42 | 8 | M8 | 4 | 1500 | 210 | 0 | 130 |
| 48 | 76 | 36 | 28 | 23,5 | M8x25 | 42 | 8 | M8 | 4 | 1550 | 210 | 0 | 130 |
| 50 | 78 | 36 | 28 | 23,5 | M8x25 | 42 | 8 | M8 | 4 | 1650 | 190 | 0 | 120 |
| 55 | 83 | 36 | 28 | 23,5 | M8x25 | 42 | 8 | M8 | 4 | 2000 | 190 | 0 | 120 |
| 60 | 88 | 36 | 28 | 23,5 | M8x25 | 42 | 8 | M8 | 4 | 2350 | 190 | 0 | 120 |
| 70 | 105 | 45 | 35 | 30 | M10x40 | 42 | 8 | M10 | 4 | 3900 | 180 | 0 | 120 |
| 80 | 115 | 45 | 35 | 30 | M10x40 | 85 | 8 | M10 | 4 | 4800 | 170 | 0 | 120 |

ELEMENTY BLOKUJĄCE - PIERŚCIENIE ROZPRĘŻNO-ZACISKKOWE

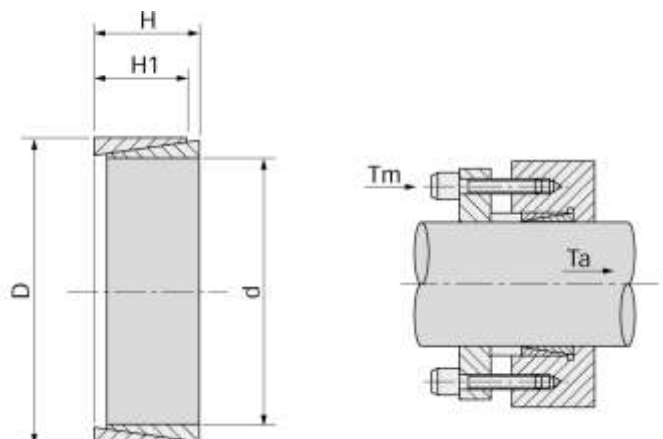


Seria
KLMM/BK95/RCK95/700

Mat. C45 E - UNI EN 10083-1
Wymiary przed zamontowaniem

| Wymiary (mm) | | | | | | Siła Docisku | | | Moment obrotowy | | | |
|--------------|-----|-----|-----|------|----|-----------------|---------|-------|-----------------|----------------------------|------------|----------------------------|
| d | D | H | H1 | H2 | H3 | NV typ śruby | Tv (Nm) | Śruby | Mt (Nm) | Pa (N/mm ²) | Ta (kN) | Pm (N/mm ²) |
| 17 | 50 | 56 | 50 | 16,0 | 44 | M6x45 | 17 | 4 | 179 | 166 | 21 | |
| 18 | 50 | 56 | 50 | 16,0 | 44 | M6x45 | 17 | 4 | 190 | 157 | 21 | |
| 19 | 50 | 56 | 50 | 16,0 | 44 | M6x45 | 17 | 4 | 200 | 149 | 21 | |
| 20 | 50 | 56 | 50 | 16,0 | 44 | M6x45 | 17 | 4 | 211 | 141 | 21 | |
| 24 | 55 | 66 | 60 | 18,5 | 54 | M6x55 | 17 | 6 | 378 | 144 | 32 | |
| 25 | 55 | 66 | 60 | 18,5 | 54 | M6x55 | 17 | 6 | 394 | 138 | 32 | |
| 28 | 60 | 66 | 60 | 18,5 | 54 | M6x55 | 17 | 6 | 442 | 123 | 32 | |
| 30 | 60 | 66 | 60 | 18,5 | 54 | M6x55 | 17 | 6 | 473 | 115 | 32 | |
| 32 | 63 | 66 | 60 | 18,5 | 54 | M6x55 | 17 | 6 | 505 | 108 | 32 | |
| 35 | 75 | 83 | 75 | 22,0 | 67 | M8x70 | 42 | 4 | 682 | 98 | 39 | |
| 38 | 75 | 83 | 75 | 22,0 | 67 | M8x70 | 42 | 4 | 741 | 90 | 39 | |
| 40 | 75 | 83 | 75 | 22,0 | 67 | M8x70 | 42 | 4 | 780 | 86 | 39 | |
| 42 | 78 | 83 | 75 | 22,0 | 67 | M8x70 | 42 | 4 | 819 | 82 | 39 | |
| 45 | 85 | 93 | 85 | 24,5 | 76 | M8x80 | 42 | 6 | 1317 | 101 | 59 | |
| 48 | 90 | 93 | 85 | 24,5 | 76 | M8x80 | 42 | 6 | 1405 | 95 | 59 | |
| 50 | 90 | 93 | 85 | 24,5 | 76 | M8x80 | 42 | 6 | 1463 | 91 | 59 | |
| 55 | 94 | 93 | 85 | 24,5 | 76 | M8x80 | 42 | 8 | 2147 | 110 | 78 | |
| 60 | 100 | 93 | 85 | 24,5 | 76 | M8x80 | 42 | 8 | 2343 | 101 | 78 | |
| 65 | 105 | 093 | 85 | 24,5 | 76 | M8x80 | 42 | 8 | 2538 | 93 | 78 | |
| 70 | 115 | 110 | 100 | 29,0 | 90 | M10x95 | 83 | 8 | 4321 | 116 | 123 | |

ELEMENTY BLOKUJĄCE - PIERŚCIENIE ROZPRĘŻNO-ZACISKOWE



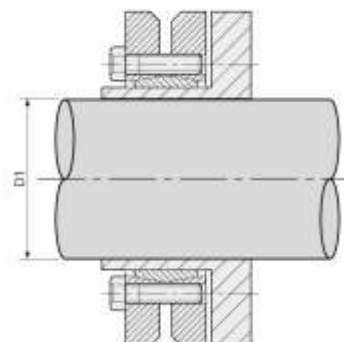
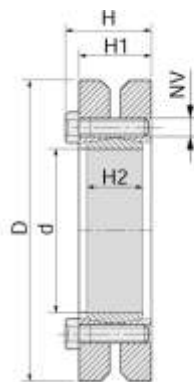
Seria
KLNN/BK50/RCK50/150

Mat. C45 E - UNI EN 10083-1
Wymiary przed zamontowaniem

| d | Wymiary (mm) | | | Moment obrotowy | | | | |
|-----|--------------|------|------|-----------------|---------|---------|-------------------------|-------------------------|
| | D | H | H1 | Mt (Nm) | Ta (kN) | Tm (kN) | Pa (N/mm ²) | Pm (N/mm ²) |
| 8 | 11 | 4,5 | 3,7 | 4,2 | 1,06 | 5,0 | 100 | 70 |
| 9 | 12 | 4,5 | 3,7 | 5,8 | 1,29 | 13,3 | 100 | 79 |
| 10 | 13 | 4,5 | 3,7 | 7,6 | 1,53 | 14,4 | 100 | 86 |
| 12 | 15 | 4,5 | 3,7 | 9,9 | 1,65 | 14,5 | 100 | 80 |
| 14 | 18 | 6,3 | 5,3 | 18,9 | 2,70 | 23,8 | 100 | 77 |
| 15 | 19 | 6,3 | 5,3 | 22,1 | 2,94 | 24,3 | 100 | 79 |
| 16 | 20 | 6,3 | 5,3 | 25,4 | 3,18 | 24,5 | 100 | 81 |
| 18 | 22 | 6,3 | 5,3 | 31,8 | 3,53 | 25,3 | 100 | 82 |
| 19 | 24 | 6,3 | 5,3 | 35,8 | 3,76 | 29,7 | 100 | 80 |
| 20 | 25 | 6,3 | 5,3 | 38,8 | 3,88 | 30,1 | 100 | 79 |
| 22 | 26 | 6,3 | 5,3 | 47,9 | 4,35 | 28,9 | 100 | 86 |
| 24 | 28 | 6,3 | 5,3 | 56,4 | 4,70 | 30,0 | 100 | 86 |
| 25 | 30 | 6,3 | 5,3 | 61,7 | 4,94 | 32,4 | 100 | 84 |
| 28 | 32 | 6,3 | 5,3 | 77,4 | 5,53 | 32,6 | 100 | 88 |
| 30 | 35 | 6,3 | 5,3 | 88,2 | 5,88 | 35,5 | 100 | 86 |
| 32 | 36 | 6,3 | 5,3 | 100,0 | 6,23 | 36,7 | 100 | 88 |
| 35 | 40 | 7,0 | 6,0 | 136,0 | 7,76 | 45,7 | 100 | 88 |
| 38 | 44 | 7,0 | 6,0 | 151,0 | 8,47 | 49,7 | 100 | 87 |
| 40 | 45 | 8,0 | 6,6 | 195,0 | 9,80 | 58,8 | 100 | 89 |
| 42 | 48 | 8,0 | 6,6 | 215,0 | 10,20 | 62,6 | 100 | 87 |
| 45 | 52 | 10,0 | 8,6 | 323,0 | 14,30 | 92,2 | 100 | 87 |
| 48 | 55 | 10,0 | 8,6 | 367,0 | 15,30 | 94,6 | 100 | 88 |
| 50 | 57 | 10,0 | 8,6 | 397,0 | 15,90 | 96,5 | 100 | 88 |
| 55 | 62 | 10,0 | 8,6 | 479,0 | 17,40 | 101,8 | 100 | 88 |
| 60 | 68 | 12,0 | 10,4 | 691,0 | 23,00 | 133,4 | 100 | 88 |
| 65 | 73 | 12,0 | 10,4 | 814,0 | 25,00 | 140,4 | 100 | 89 |
| 70 | 79 | 14,0 | 12,2 | 1107,0 | 31,60 | 176,0 | 100 | 89 |
| 75 | 84 | 14,0 | 12,2 | 1266,0 | 33,80 | 189,6 | 100 | 89 |
| 80 | 91 | 17,0 | 15,0 | 1769,0 | 44,20 | 251,0 | 100 | 89 |
| 90 | 101 | 17,0 | 15,0 | 2244,0 | 49,90 | 272,4 | 100 | 89 |
| 100 | 114 | 21,0 | 18,7 | 3452,0 | 69,00 | 377,7 | 100 | 89 |
| 110 | 124 | 21,0 | 18,7 | 4178,0 | 76,00 | 415,0 | 100 | 89 |
| 120 | 134 | 21,0 | 18,7 | 4967,0 | 82,80 | 440,2 | 100 | 89 |
| 130 | 148 | 28,0 | 25,3 | 7896,0 | 121,00 | 654,2 | 100 | 89 |
| 140 | 158 | 28,0 | 25,3 | 9146,0 | 131,00 | 689,0 | 100 | 89 |
| 150 | 168 | 28,0 | 25,3 | 10505,0 | 140,00 | 727,5 | 100 | 89 |

ELEMENTY BLOKUJĄCE - PIERŚCIENIE ROZPRĘŻNO-ZACISKKOWE

Seria
KLPP/BK19/RCK19/603



Mat. C45 E - UNI EN 10083-1
Wymiary przed zamontowaniem

| Wymiary (mm) | | | | | | Siła Docisku | | | Moment obrotowy | | |
|--------------|-----|-----|------|------|----|-----------------|---------|-------|-----------------|------------|----------------------------|
| d | D | D1 | H | H1 | H2 | NV typ śruby | Tv (Nm) | Śruby | Mt (Nm) | Ta (kN) | Pa (N/mm ²) |
| 24 | 50 | 19 | 23,0 | 19,5 | 14 | M5x18 | 4 | 6 | 216 | 23,0 | 272 |
| | | 20 | | | | | | | 265 | 27,0 | |
| | | 21 | | | | | | | 314 | 30,0 | |
| 30 | 60 | 24 | 25,0 | 21,5 | 16 | M5x18 | 4 | 7 | 372 | 31,0 | 221 |
| | | 25 | | | | | | | 421 | 34,0 | |
| | | 26 | | | | | | | 461 | 36,0 | |
| 36 | 72 | 26 | 27,5 | 23,5 | 18 | M6x20 | 12 | 5 | 471 | 36,3 | 292 |
| | | 28 | | | | | | | 550 | 39,3 | |
| | | 30 | | | | | | | 713 | 47,5 | |
| 44 | 80 | 32 | 29,5 | 25,5 | 20 | M6x20 | 12 | 7 | 925 | 57,8 | 301 |
| | | 35 | | | | | | | 1175 | 67,1 | |
| | | 36 | | | | | | | 1275 | 70,8 | |
| 50 | 90 | 38 | 31,5 | 27,5 | 22 | M6x25 | 0 | 8 | 1313 | 69,1 | 275 |
| | | 40 | | | | | | | 1638 | 84,9 | |
| | | 42 | | | | | | | 1925 | 91,7 | |
| 55 | 100 | 42 | 34,5 | 30,5 | 23 | M6x25 | 12 | 8 | 1450 | 69,0 | 239 |
| | | 45 | | | | | | | 1900 | 84,4 | |
| | | 48 | | | | | | | 2350 | 97,9 | |
| 62 | 110 | 48 | 34,5 | 30,5 | 23 | M6x25 | 12 | 10 | 2775 | 116,0 | 265 |
| | | 50 | | | | | | | 3275 | 131,0 | |
| | | 52 | | | | | | | 3613 | 139,0 | |
| 68 | 115 | 50 | 34,5 | 30,5 | 23 | M6x25 | 12 | 10 | 2500 | 100,0 | 242 |
| | | 55 | | | | | | | 3125 | 114,0 | |
| | | 60 | | | | | | | 3938 | 131,0 | |
| 75 | 138 | 55 | 37,8 | 32,5 | 25 | M8x30 | 30 | 7 | 3125 | 114,0 | 259 |
| | | 60 | | | | | | | 4000 | 133,0 | |
| | | 65 | | | | | | | 4938 | 152,0 | |
| 80 | 145 | 60 | 37,8 | 32,5 | 25 | M8x30 | 30 | 7 | 4000 | 133,0 | 243 |
| | | 65 | | | | | | | 4875 | 150,0 | |
| | | 70 | | | | | | | 5750 | 164,0 | |
| 90 | 155 | 65 | 44,3 | 39,0 | 30 | M8x35 | 30 | 10 | 5938 | 183,0 | 257 |
| | | 70 | | | | | | | 7500 | 214,0 | |
| | | 75 | | | | | | | 9063 | 242,0 | |
| 100 | 170 | 70 | 49,3 | 44,0 | 34 | M8x35 | 30 | 12 | 8625 | 246,0 | 245 |
| | | 75 | | | | | | | 9375 | 250,0 | |
| | | 80 | | | | | | | 11250 | 281,0 | |
| 110 | 185 | 75 | 56,4 | 50,0 | 39 | M10x40 | 59 | 9 | 9000 | 240,0 | 232 |
| | | 80 | | | | | | | 11250 | 281,0 | |
| | | 85 | | | | | | | 13500 | 318,0 | |
| 125 | 215 | 85 | 60,4 | 54,0 | 42 | M10x40 | 59 | 12 | 13750 | 324,0 | 253 |
| | | 90 | | | | | | | 16250 | 361,0 | |
| | | 95 | | | | | | | 18750 | 395,0 | |
| 140 | 230 | 95 | 68,0 | 60,5 | 46 | M12x45 | 100 | 10 | 18875 | 397,0 | 251 |
| | | 100 | | | | | | | 22000 | 440,0 | |
| | | 105 | | | | | | | 25125 | 479,0 | |
| 155 | 265 | 105 | 72,0 | 64,5 | 50 | M12x50 | 100 | 12 | 27500 | 524,0 | 250 |
| | | 110 | | | | | | | 31250 | 568,0 | |
| | | 115 | | | | | | | 35000 | 609,0 | |
| 165 | 290 | 115 | 81,0 | 71,0 | 56 | M16x55 | 250 | 8 | 38750 | 674,0 | 263 |
| | | 120 | | | | | | | 43750 | 729,0 | |
| | | 125 | | | | | | | 48750 | 780,0 | |