

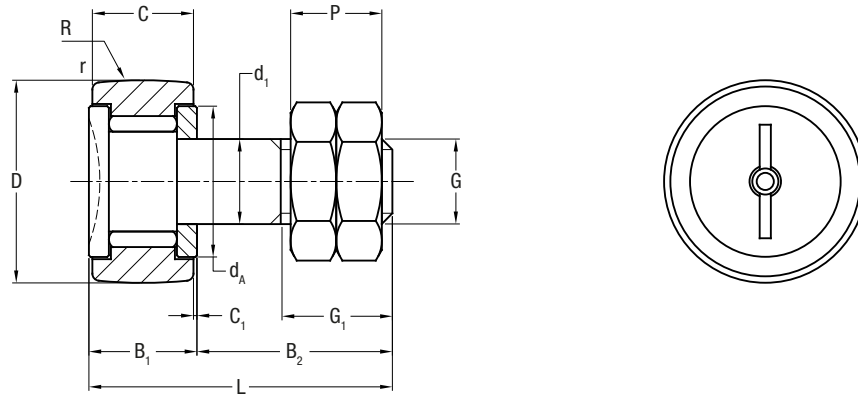
# CAM FOLLOWERS WITH STUD

## TYPE GC ..MINI

# 3.1

Full complement needle rollers with outer diameter to 15mm.

GC, GCL series without seal.



| Ø outer D<br>mm | Designation <sup>1)</sup><br>GC, GCL | d <sub>1</sub> <sup>2)</sup><br>mm | L<br>mm | B <sub>1</sub><br>mm | B <sub>2</sub><br>mm | Threading G<br>mm | G <sub>1</sub><br>mm | C<br>mm | C <sub>1</sub><br>mm | d <sub>A</sub><br>mm | r<br>mm | R <sup>3)</sup><br>mm |
|-----------------|--------------------------------------|------------------------------------|---------|----------------------|----------------------|-------------------|----------------------|---------|----------------------|----------------------|---------|-----------------------|
| 10              | 10                                   | 4                                  | 19.5    | 8.5                  | 11                   | M4x0.7            | 6                    | 8       | 0.25                 | 8.4                  | 0.2     | 130                   |
| 11              | 11                                   | 4                                  | 19.5    | 8.5                  | 11                   | M4x0.7            | 6                    | 8       | 0.25                 | 8.4                  | 0.2     | 130                   |
| 12              | 12                                   | 5                                  | 22.5    | 9.5                  | 13                   | M5x0.8            | 7                    | 9       | 0.25                 | 10.3                 | 0.2     | 130                   |
| 13              | 13                                   | 5                                  | 22.5    | 9.5                  | 13                   | M5x0.8            | 7                    | 9       | 0.25                 | 10.3                 | 0.2     | 130                   |
| 14              | 14                                   | 6                                  | 26      | 10                   | 16                   | M6x1              | 8                    | 9       | 0.25                 | 11.8                 | 0.3     | 130                   |
| 15              | 15                                   | 6                                  | 26      | 10                   | 16                   | M6x1              | 8                    | 9       | 0.25                 | 11.8                 | 0.3     | 130                   |

1) Cam follower with stud designation

GC.. Concentric cam follower with stud with convex outer ring

GCL.. Concentric cam follower with stud with cylindrical outer ring

2) Hole diameter for assembly d<sub>1</sub> H7

3) Convex radius for GC version..

# CAM FOLLOWERS WITH STUD

## GC ..MINI

# 3.1



| P<br>mm | Load coefficients (N) |                     |                       | Speed limit with<br>grease (min <sup>-1</sup> ) | Weight<br>Kg | Clamping torque<br>Nm | Ø outer D<br>mm |
|---------|-----------------------|---------------------|-----------------------|-------------------------------------------------|--------------|-----------------------|-----------------|
|         | C <sub>w</sub>        | Din. F <sub>r</sub> | Stat. F <sub>or</sub> |                                                 |              |                       |                 |
| 6       | 2100                  | 520                 | 960                   | 7500                                            | 0.006        | 0.9                   | 10              |
| 6       | 2400                  | 520                 | 960                   | 7400                                            | 0.007        | 0.9                   | 11              |
| 5.4     | 2900                  | 900                 | 1700                  | 6000                                            | 0.011        | 1.8                   | 12              |
| 5.4     | 3200                  | 900                 | 1700                  | 6000                                            | 0.011        | 1.8                   | 13              |
| 6.4     | 3400                  | 1500                | 2800                  | 5500                                            | 0.016        | 3                     | 14              |
| 6.4     | 3600                  | 1500                | 2800                  | 5500                                            | 0.018        | 3                     | 15              |

The concentric cam followers with stud in the GC Mini series are supplied with two clamping nuts.

# CAM FOLLOWERS WITH STUD

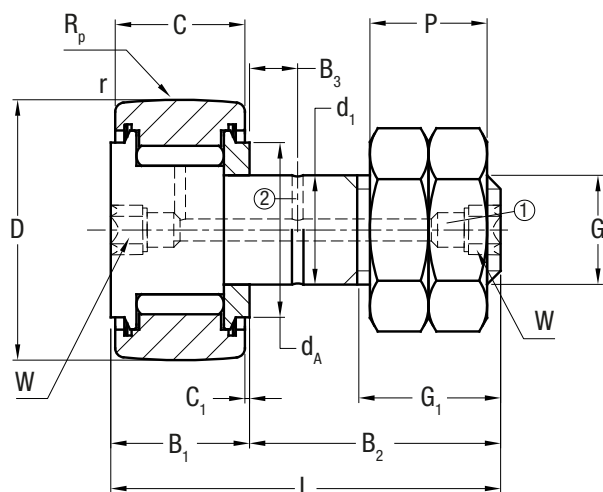
## TYPE GC .. SW

# 3.2

Full complement needle rollers with outer diameter from 16 to 90 mm



See page 47 for details on stainless steel versions.



Bore hole ① starting from D=22 mm

Bore hole ② starting from D=30 mm

| Ø outer D<br>mm | Designation <sup>1)</sup> | d <sub>1</sub> <sup>2)</sup><br>mm | L<br>mm | B <sub>1</sub><br>mm | B <sub>2</sub><br>mm | Threading G<br>mm | G <sub>1</sub><br>mm | C<br>mm | C <sub>1</sub><br>mm | d <sub>A</sub><br>mm | B <sub>3</sub><br>mm | r<br>mm | R <sub>p</sub> <sup>3)</sup><br>mm |
|-----------------|---------------------------|------------------------------------|---------|----------------------|----------------------|-------------------|----------------------|---------|----------------------|----------------------|----------------------|---------|------------------------------------|
|                 | GC .. SW                  |                                    |         |                      |                      |                   |                      |         |                      |                      |                      |         |                                    |
| 16              | 16                        | 6                                  | 28,2    | 12,2                 | 16,5                 | M6x1              | 8                    | 11      | 0,6                  | 13,3                 |                      | 0,3     | 500                                |
| 19              | 19                        | 8                                  | 32,2    | 12,2                 | 20,5                 | M8x1.25           | 10                   | 11      | 0,6                  | 15,3                 |                      | 0,3     | 500                                |
| 22              | 22                        | 10                                 | 36,2    | 13,2                 | 23,5                 | M10x1.25          | 12                   | 12      | 0,6                  | 18,2                 |                      | 0,3     | 600                                |
| 24              | 24                        | 10                                 | 36,2    | 13,2                 | 23,5                 | M10x1.25          | 12                   | 12      | 0,6                  | 18,2                 |                      | 0,3     | 600                                |
| 26              | 26                        | 10                                 | 36,2    | 13,2                 | 23,5                 | M10x1.25          | 12                   | 12      | 0,6                  | 20,8                 |                      | 0,3     | 600                                |
| 28              | 28                        | 10                                 | 36,2    | 13,2                 | 23,5                 | M10x1.25          | 12                   | 12      | 0,6                  | 20,8                 |                      | 0,3     | 600                                |
| 30              | 30                        | 12                                 | 40,2    | 15,2                 | 25,5                 | M12x1.5           | 13                   | 14      | 0,6                  | 24,8                 | 6                    | 0,6     | 700                                |
| 32              | 32                        | 12                                 | 40,2    | 15,2                 | 25,5                 | M12x1.5           | 13                   | 14      | 0,6                  | 24,8                 | 6                    | 0,6     | 700                                |
| 35              | 35                        | 16                                 | 52,2    | 19,6                 | 33                   | M16x1.5           | 17                   | 18      | 0,8                  | 28,8                 | 8                    | 0,6     | 800                                |
| 40              | 40                        | 18                                 | 58,1    | 21,6                 | 37                   | M18x1.5           | 19                   | 20      | 0,8                  | 33,8                 | 8                    | 1       | 1000                               |
| 47              | 47                        | 20                                 | 66,1    | 25,6                 | 41                   | M20x1.5           | 21                   | 24      | 0,8                  | 38,7                 | 9                    | 1       | 1200                               |
| 52              | 52                        | 20                                 | 66,1    | 25,6                 | 41                   | M20x1.5           | 21                   | 24      | 0,8                  | 38,7                 | 9                    | 1       | 1200                               |
| 62              | 62                        | 24                                 | 80,1    | 30,6                 | 50                   | M24x1.5           | 25                   | 29      | 0,8                  | 52                   | 11                   | 1       | 1500                               |
| 72              | 72                        | 24                                 | 80,1    | 30,6                 | 50                   | M24x1.5           | 25                   | 29      | 0,8                  | 52                   | 11                   | 1       | 1500                               |
| 80              | 80                        | 30                                 | 100     | 37                   | 63,5                 | M30x1.5           | 32                   | 35      | 1                    | 68                   | 15                   | 1       | 1700                               |
| 85              | 85 <sup>9)</sup>          | 30                                 | 100     | 37                   | 63,5                 | M30x1.5           | 32                   | 35      | 1                    | 68                   | 15                   | 1       | 1700                               |
| 90              | 90                        | 30                                 | 100     | 37                   | 63,5                 | M30x1.5           | 32                   | 35      | 1                    | 68                   | 15                   | 1       | 1700                               |

1) Cam follower with stud designation

GC..SW Concentric cam follower with stud optimised profile outer ring

GCL..SW Concentric cam follower with stud cylindrical outer ring (product available on request)

GCR.. Cam follower with stud with eccentric collar

No suffix Without seal

Suffix ..EE With plastic seal, ex. GC40EESW

Suffix ..EEM With metal seal, ex. GC40EEMSW

2) Hole diameter for assembly of concentric cam follower without stud: d<sub>1</sub> H7

3) Convex radius in the central part to contact pressure calculation

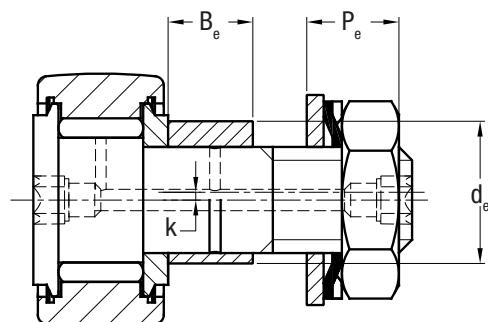
# CAM FOLLOWERS WITH STUD

## TYPE GC .. SW

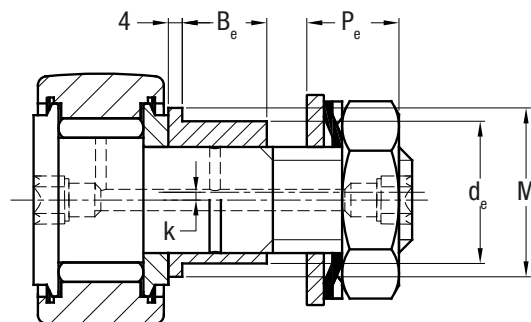
# 3.2



See page 47 for details  
on stainless steel versions.



from GCR16SW to GCR52SW



from GCR62SW to GCR90SW

| W<br>mm | P <sup>7)</sup><br>mm | Eccentric bearing          |                       |                       |                         |                         | Load coefficients (N) <sup>6)</sup> |          |            | Greasing speed limit<br>with grease (min <sup>-1</sup> ) | Weight with nuts<br>and washers<br>Kg | Clamping<br>torque Nm | Ø outer D<br>mm |
|---------|-----------------------|----------------------------|-----------------------|-----------------------|-------------------------|-------------------------|-------------------------------------|----------|------------|----------------------------------------------------------|---------------------------------------|-----------------------|-----------------|
|         |                       | d_e <sup>4) 5)</sup><br>mm | k <sup>5)</sup><br>mm | M <sup>5)</sup><br>mm | B_e <sup>5)</sup><br>mm | P_e <sup>8)</sup><br>mm | C_w                                 | Din. F_r | Stat. F_or |                                                          |                                       |                       |                 |
| 4       | 6,4                   | 9                          | 0,5                   |                       | 8                       | 5,6                     | 4900                                | 1200     | 2300       | 5000                                                     | 0,024                                 | 3                     | 16              |
| 4       | 8                     | 11                         | 0,5                   |                       | 10                      | 6,4                     | 5600                                | 2900     | 5400       | 4100                                                     | 0,039                                 | 8                     | 19              |
| 4       | 10                    | 14                         | 1                     |                       | 11                      | 7,9                     | 6900                                | 5300     | 9400       | 3400                                                     | 0,057                                 | 20                    | 22              |
| 4       | 10                    | 14                         | 1                     |                       | 11                      | 7,9                     | 7600                                | 5300     | 9800       | 3400                                                     | 0,072                                 | 20                    | 24              |
| 4       | 10                    | 14                         | 1                     |                       | 11                      | 7,9                     | 8600                                | 5300     | 9800       | 3000                                                     | 0,08                                  | 20                    | 26              |
| 4       | 10                    | 14                         | 1                     |                       | 11                      | 7,9                     | 9200                                | 5300     | 9800       | 3000                                                     | 0,088                                 | 20                    | 28              |
| 6       | 12                    | 16                         | 1                     |                       | 11                      | 9,5                     | 13000                               | 7900     | 15000      | 2600                                                     | 0,118                                 | 26                    | 30              |
| 6       | 12                    | 16                         | 1                     |                       | 11                      | 9,5                     | 13000                               | 7900     | 15000      | 2600                                                     | 0,126                                 | 26                    | 32              |
| 10      | 16                    | 21                         | 1,5                   |                       | 14                      | 12,2                    | 18000                               | 14000    | 23000      | 2100                                                     | 0,22                                  | 64                    | 35              |
| 12      | 18                    | 24                         | 1,5                   |                       | 16                      | 13,4                    | 22000                               | 19000    | 34000      | 1800                                                     | 0,321                                 | 90                    | 40              |
| 14      | 20                    | 27                         | 2                     |                       | 17,5                    | 14,4                    | 27000                               | 22000    | 35000      | 1500                                                     | 0,5                                   | 120                   | 47              |
| 14      | 20                    | 27                         | 2                     |                       | 17,5                    | 14,4                    | 33000                               | 22000    | 40000      | 1500                                                     | 0,568                                 | 120                   | 52              |
| 12      | 24                    | 36                         | 3                     | 44                    | 18                      | 17,5                    | 42000                               | 31000    | 58000      | 1200                                                     | 1,035                                 | 220                   | 62              |
| 12      | 24                    | 36                         | 3                     | 44                    | 18                      | 17,5                    | 46000                               | 31000    | 58000      | 1200                                                     | 1,278                                 | 220                   | 72              |
| 14      | 30                    | 42                         | 3                     | 50                    | 27                      | 20,6                    | 58000                               | 50000    | 93000      | 900                                                      | 2,074                                 | 450                   | 80              |
| 14      | 30                    | 42                         | 3                     | 50                    | 27                      | 20,6                    | 61000                               | 50000    | 93000      | 900                                                      | 2,235                                 | 450                   | 85              |
| 14      | 30                    | 42                         | 3                     | 50                    | 27                      | 20,6                    | 63000                               | 50000    | 93000      | 900                                                      | 2,435                                 | 450                   | 90              |

4) Hole diameter for assembly of the eccentric cam follower without stud: d\_e H7

5) Dimensions of the eccentric bearing.

6) Fr and For load for cam follower without stud, with no eccentric collar.

7) The GC concentric cam followers with stud are supplied with two clamping nuts.

8) GCR eccentric cam followers with stud are supplied with eccentric bearing already fitted, clamping nut, cogged washer and support surface washer.

9) Product available on request