

## HIGH-TEMP RADIAL INSERT BALL BEARINGS FAST SPEEDS



# High-temp Radial insert ball bearings and Housing units

Plummer block housing units

Flanged housing units

Take-up housing units

**Version:** 10/2023

*Every care has been taken to ensure the correctness of the information contained in this document but no liability can be accepted for any errors or omissions. Subject to change without prior notice.*

## GMW Radial Insert Ball Bearings and housing units

GMW offers Housing Units and Radial Insert Ball Bearings, which are suitable for high temperatures. Similar to our range of Deep Groove Ball Bearings, both normal Radial Insert Ball Bearings for fast speeds and high-temp versions for slow speeds are available.

Regardless of the used speed, all GMW Radial Insert Ball Bearings provide the following advantages:

- Radial clearance C3 or C4
- Material: AISI52100 steel
- Riveted sheet steel cage

GMW Radial Insert Ball Bearings can be delivered without housing or as unit including one of the following housing options:

- Plummer block housing (UCP)
- Two-bolt flanged housing (UCFL)
- Four-hole flanged housing (UCF)

### GMW Radial Insert Ball Bearings for fast speeds

#### T200 – The GMW Standard

Every T200 bearing is filled with suitable lubricant or available as sealed bearing and the following properties:

- Heat treatment of the bearing up to 200°C
- Increased radial clearance: (multiple of C3)
- High-quality lubricant (suitable up to 200°C)
- Two steel shields (2Z)

#### T250 – The GMW Standard

Every T250 bearing is filled with suitable lubricant or available as sealed bearing and comprises the following properties:

- Heat treatment of the bearing up to 250°C
- Increased radial clearance: (multiple of C3 or C4)
- High-quality lubricant (suitable up to 250°C)
- Two steel shields (2Z)

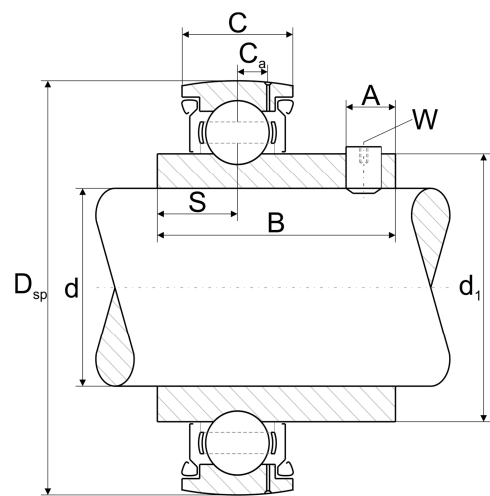
#### T250X – The GMW Upgrade

Every T250X bearing is filled with suitable lubricant or available as sealed bearing and comprises the following properties:

- Manganese Phosphate surface treatment DIN EN ISO9717 standard
- Increased radial clearance: (multiple of C4)
- Heat treatment of the bearing up to 250°C
- High-quality lubricant (suitable up to 250°C)
- Two steel shields (2Z)



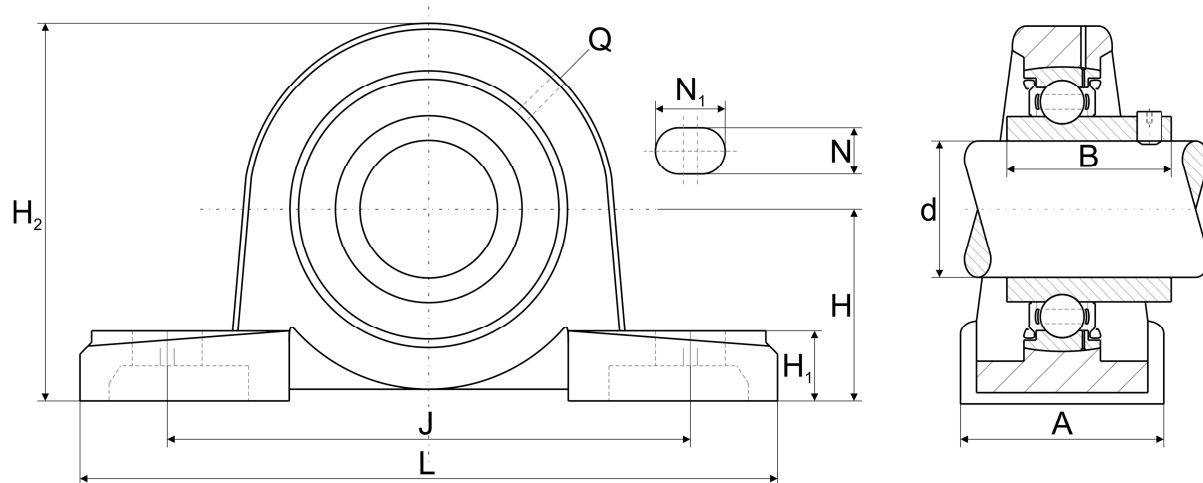
Radial Insert Ball Bearings



| GMW   | Dimensions |      |      |      |      |                |                |      |      | Load Ratings    |      | Max. Speed           |                      | Weight |
|-------|------------|------|------|------|------|----------------|----------------|------|------|-----------------|------|----------------------|----------------------|--------|
| Code  | d          | Dsp  | C    | B    | S    | d <sub>1</sub> | C <sub>a</sub> | A    | W    | C <sub>0r</sub> | Cr   | T200<br>T250         | T250X                |        |
|       | [mm]       | [mm] | [mm] | [mm] | [mm] | [mm]           | [mm]           | [mm] | [mm] | [kN]            | [kN] | [min <sup>-1</sup> ] | [min <sup>-1</sup> ] | ≈ [kg] |
| UC204 | 20         | 47   | 17   | 31,0 | 12,7 | 27,56          | 4,2            | 5    | 3    | 6,6             | 12,8 | 4 500                | 1 200                | 0,15   |
| UC205 | 25         | 52   | 17   | 34,1 | 14,3 | 33,83          | 4,2            | 5    | 3    | 7,8             | 14,0 | 3 900                | 1 120                | 0,20   |
| UC206 | 30         | 62   | 19   | 38,1 | 15,9 | 40,20          | 5,0            | 5    | 3    | 11,3            | 19,5 | 3 200                | 880                  | 0,31   |
| UC207 | 35         | 72   | 20   | 42,9 | 17,5 | 46,84          | 5,7            | 7    | 4    | 15,3            | 25,5 | 2 800                | 760                  | 0,47   |
| UC208 | 40         | 80   | 21   | 49,2 | 19,0 | 52,27          | 6,2            | 8    | 4    | 19,8            | 32,5 | 2 500                | 680                  | 0,62   |
| UC209 | 45         | 85   | 22   | 49,2 | 19,0 | 57,91          | 6,3            | 8    | 4    | 20,4            | 32,5 | 2 200                | 640                  | 0,69   |
| UC210 | 50         | 90   | 24   | 51,6 | 19,0 | 62,84          | 6,5            | 10   | 5    | 23,2            | 35,0 | 2 100                | 600                  | 0,80   |
| UC211 | 55         | 100  | 25   | 55,6 | 22,2 | 69,77          | 7,0            | 10   | 5    | 29,0            | 43,5 | 1 900                | 536                  | 1,07   |
| UC212 | 60         | 110  | 27   | 65,1 | 25,4 | 76,48          | 7,4            | 10   | 5    | 36,0            | 52,0 | 1 700                | 480                  | 1,49   |
| UC213 | 65         | 120  | 28   | 65,1 | 25,4 | 80,85          | 8,2            | 12   | 6    | 40,0            | 57,0 | 1 600                | 424                  | 1,73   |

(Remark: The weight applies for the bearing only without lubricant and shields)

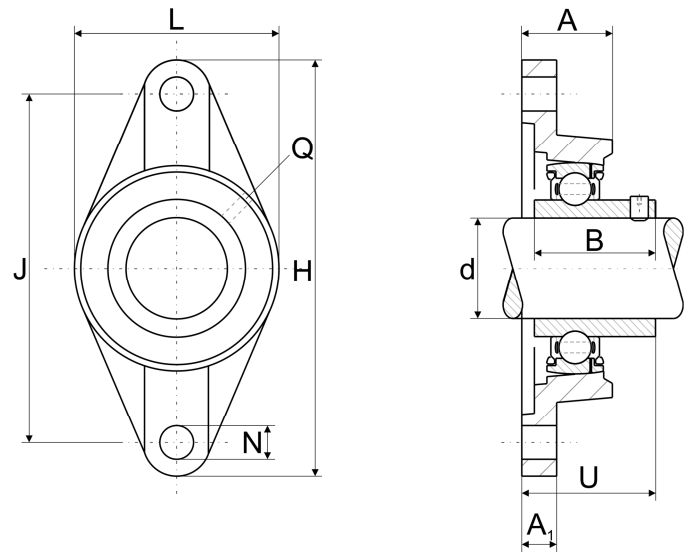
## UCP2XX Housing Units



| GMW    | Dimensions |      |      |      |      |                |                |      |                |      |    | Weight |
|--------|------------|------|------|------|------|----------------|----------------|------|----------------|------|----|--------|
| Code   | d          | H    | J    | L    | A    | H <sub>1</sub> | H <sub>2</sub> | N    | N <sub>1</sub> | B    | Q  | ≈ [kg] |
|        | [mm]       | [mm] | [mm] | [mm] | [mm] | [mm]           | [mm]           | [mm] | [mm]           | [mm] |    |        |
| UCP204 | 20         | 33,3 | 95   | 127  | 38   | 14             | 65             | 13   | 19             | 31,0 | M6 | 0,65   |
| UCP205 | 25         | 36,5 | 105  | 140  | 38   | 15             | 71             | 13   | 19             | 34,1 | M6 | 0,79   |
| UCP206 | 30         | 42,9 | 121  | 165  | 48   | 17             | 83             | 17   | 21             | 38,1 | M6 | 1,29   |
| UCP207 | 35         | 47,6 | 127  | 167  | 48   | 18             | 93             | 17   | 21             | 42,9 | M6 | 1,55   |
| UCP208 | 40         | 49,2 | 137  | 184  | 54   | 18             | 98             | 17   | 21             | 49,2 | M6 | 1,84   |
| UCP209 | 45         | 54,0 | 146  | 190  | 54   | 20             | 106            | 17   | 21             | 49,2 | M6 | 2,20   |
| UCP210 | 50         | 57,2 | 159  | 206  | 60   | 21             | 114            | 20   | 25             | 51,6 | M6 | 2,77   |
| UCP211 | 55         | 63,5 | 171  | 219  | 60   | 23             | 126            | 20   | 25             | 55,6 | M6 | 3,41   |
| UCP212 | 60         | 69,8 | 184  | 241  | 70   | 25             | 138            | 20   | 25             | 65,1 | M6 | 4,62   |
| UCP213 | 65         | 76,2 | 203  | 265  | 70   | 27             | 151            | 25   | 27             | 65,1 | M6 | 5,57   |

(Remark: The weight applies for the bearing only without lubricant and shields)

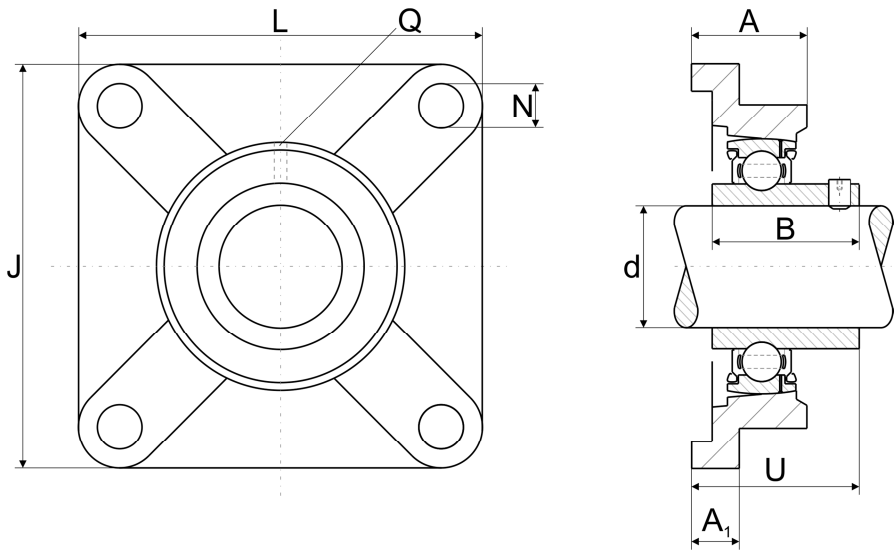
UCFL2XX Housing Units



| GMW     | Dimensions |      |      |      |      |                |      |      |      |    | Weight |
|---------|------------|------|------|------|------|----------------|------|------|------|----|--------|
| Code    | d          | H    | J    | L    | A    | A <sub>1</sub> | N    | B    | U    | Q  | ≈ [kg] |
|         | [mm]       | [mm] | [mm] | [mm] | [mm] | [mm]           | [mm] | [mm] | [mm] |    |        |
| UCFL204 | 20         | 113  | 90   | 60   | 25,5 | 12             | 12   | 31,0 | 33,3 | M6 | 0,42   |
| UCFL205 | 25         | 130  | 99   | 68   | 27   | 15             | 16   | 34,1 | 35,8 | M6 | 0,64   |
| UCFL206 | 30         | 148  | 117  | 80   | 31   | 14             | 16   | 38,1 | 40,2 | M6 | 0,88   |
| UCFL207 | 35         | 161  | 130  | 90   | 34   | 16             | 16   | 42,9 | 44,4 | M6 | 1,21   |
| UCFL208 | 40         | 175  | 144  | 100  | 36   | 16             | 16   | 49,2 | 51,2 | M6 | 1,48   |
| UCFL209 | 45         | 188  | 148  | 108  | 38   | 18             | 19   | 49,2 | 52,2 | M6 | 1,95   |
| UCFL210 | 50         | 197  | 157  | 115  | 40   | 18             | 19   | 51,6 | 54,6 | M6 | 2,23   |
| UCFL211 | 55         | 224  | 184  | 130  | 43   | 20             | 19   | 55,6 | 58,4 | M6 | 2,87   |
| UCFL212 | 60         | 250  | 202  | 140  | 48   | 20             | 23   | 65,1 | 68,7 | M6 | 3,96   |
| UCFL213 | 65         | 258  | 210  | 155  | 50   | 24             | 23   | 65,1 | 69,7 | M6 | 4,69   |

(Remark: The weight applies for the bearing only without lubricant and shields)

UCF2XX Housing Units



| GMW    | Dimensions |      |      |      |                |      |      |      |    | Weight |
|--------|------------|------|------|------|----------------|------|------|------|----|--------|
| Code   | d          | J    | L    | A    | A <sub>1</sub> | N    | B    | U    | Q  | ≈ [kg] |
|        | [mm]       | [mm] | [mm] | [mm] | [mm]           | [mm] | [mm] | [mm] |    |        |
| UCF204 | 20         | 64   | 86   | 25,5 | 12             | 12   | 31,0 | 33,3 | M6 | 0,57   |
| UCF205 | 25         | 70   | 95   | 27   | 14             | 12   | 34,1 | 35,8 | M6 | 0,85   |
| UCF206 | 30         | 83   | 108  | 31   | 14             | 12   | 38,1 | 40,2 | M6 | 1,11   |
| UCF207 | 35         | 92   | 117  | 34   | 16             | 14   | 42,9 | 44,4 | M6 | 1,50   |
| UCF208 | 40         | 102  | 130  | 36   | 16             | 16   | 49,2 | 51,2 | M6 | 1,91   |
| UCF209 | 45         | 105  | 137  | 38   | 18             | 16   | 49,2 | 52,2 | M6 | 2,30   |
| UCF210 | 50         | 111  | 143  | 40   | 18             | 16   | 51,6 | 54,6 | M6 | 2,56   |
| UCF211 | 55         | 130  | 163  | 43   | 20             | 19   | 55,6 | 58,4 | M6 | 3,31   |
| UCF212 | 60         | 141  | 175  | 48   | 20             | 19   | 65,1 | 68,7 | M6 | 4,25   |
| UCF213 | 65         | 149  | 187  | 50   | 20             | 19   | 65,1 | 69,7 | M6 | 4,91   |

(Remark: The weight applies for the bearing only without lubricant and shields)