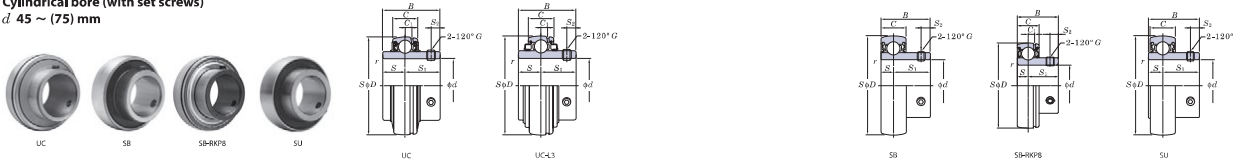


Ball Bearing Inserts

UC, SB, SB-RKP8, SU
Cylindrical bore (with set screws)
d 45 ~ (75) mm

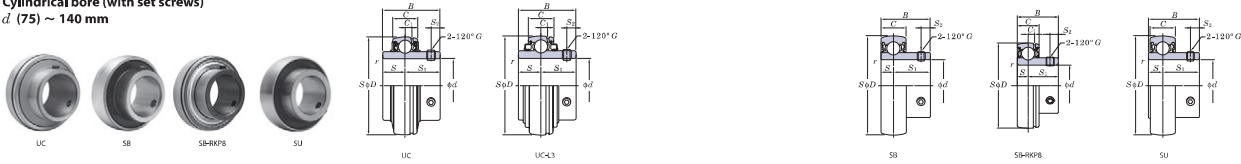


| Shaft Dia. mm inch | Dimensions | | | | | | | Basic Load Ratings | | | Factor | Bearing No. | | Dimensions | | | | | | | Set Screw Brg. Bore | | Mass kg | |
|--------------------------|------------|-------|------|----------|----------------|-----------------|----------------|--------------------|---------|----------------|--------|-------------|----------------|----------------|-------|------|-------|------|-------|------|---------------------|----------|------------|------|
| | D | B | C | r (min.) | C _r | C _{0r} | f ₀ | Standard | L3 Type | C ₁ | | S | S ₁ | S ₂ | mm | inch | mm | inch | mm | inch | | | | |
| 45 | 85 | 3.346 | 49.2 | 1.937 | 22 | 0.866 | 1.1 | 0.043 | 35.1 | 21.3 | 14.0 | UC209 | UC209L3 | 6 | 0.236 | 19 | 0.748 | 30.2 | 1.189 | 8 | 0.315 | M8x1 | — | 0.68 |
| | 90 | 3.543 | 51.6 | 2.031 | 24 | 0.945 | 1.1 | 0.043 | 35.1 | 23.3 | 14.4 | UCX09 | UCX09L3 | 6 | 0.236 | 19 | 0.748 | 32.6 | 1.283 | 9 | 0.354 | M10x1.25 | — | 0.95 |
| | 100 | 3.937 | 57 | 2.244 | 30 | 1.181 | 1.5 | 0.059 | 48.9 | 29.5 | 13.3 | UC309 | UC309L3 | 8.5 | 0.335 | 22 | 0.866 | 35 | 1.378 | 10 | 0.394 | M10x1.25 | — | 1.33 |
| 50 | 90 | 3.543 | 51.6 | 2.031 | 24 | 0.945 | 1.1 | 0.043 | 35.1 | 23.3 | 14.4 | UC210-30 | UC210-30L3 | 6 | 0.236 | 19 | 0.748 | 32.6 | 1.283 | 9 | 0.354 | — | 1/8-24UNF | 0.82 |
| | 100 | 3.937 | 55.6 | 2.189 | 25 | 0.984 | 1.1 | 0.043 | 43.4 | 29.4 | 14.4 | UC210-31 | UC210-31L3 | 7 | 0.276 | 22.2 | 0.874 | 33.4 | 1.315 | 9 | 0.354 | — | 1/8-24UNF | 1.22 |
| | 110 | 4.331 | 61 | 2.402 | 32 | 1.260 | 2 | 0.079 | 62.0 | 38.3 | 13.2 | UCX10 | UCX10L3 | 7 | 0.276 | 22.2 | 0.874 | 33.4 | 1.315 | 9 | 0.354 | M10x1.25 | — | 0.80 |
| 55 | 90 | 3.543 | 51.6 | 2.031 | 24 | 0.945 | 1.1 | 0.043 | 35.1 | 23.3 | 14.4 | UC210-32 | UC210-32L3 | 6 | 0.236 | 19 | 0.748 | 32.6 | 1.283 | 9 | 0.354 | — | 1/8-24UNF | 0.78 |
| | 100 | 3.937 | 55.6 | 2.189 | 25 | 0.984 | 1.1 | 0.043 | 43.4 | 29.4 | 14.4 | UCX10-32 | UCX10-32L3 | 7 | 0.276 | 22.2 | 0.874 | 33.4 | 1.315 | 9 | 0.354 | — | 1/8-24UNF | 1.26 |
| | 120 | 4.724 | 66 | 2.598 | 34 | 1.339 | 2 | 0.079 | 71.6 | 45.0 | 13.2 | UC311-32 | UC311-32L3 | 10 | 0.394 | 25 | 0.984 | 41 | 1.614 | 12 | 0.472 | M12x1.5 | — | 2.08 |
| 60 | 90 | 3.543 | 51.6 | 2.031 | 24 | 0.945 | 1.1 | 0.043 | 35.1 | 23.3 | 14.4 | UC211-34 | UC211-34L3 | 7 | 0.276 | 22.2 | 0.874 | 33.4 | 1.315 | 9 | 0.354 | — | 1/8-24UNF | 1.15 |
| | 100 | 3.937 | 55.6 | 2.189 | 25 | 0.984 | 1.5 | 0.059 | 43.4 | 29.4 | 14.4 | UC211 | UC211L3 | 7 | 0.276 | 22.2 | 0.874 | 33.4 | 1.315 | 9 | 0.354 | M10x1.25 | — | 1.11 |
| | 110 | 4.331 | 65.1 | 2.563 | 27 | 1.063 | 1.5 | 0.059 | 52.4 | 36.2 | 14.4 | UCX11 | UCX11L3 | 7.5 | 0.295 | 25.4 | 1.000 | 39.7 | 1.563 | 10.5 | 0.413 | M10x1.25 | — | 1.80 |
| 65 | 90 | 3.543 | 51.6 | 2.031 | 24 | 0.945 | 1.1 | 0.043 | 35.1 | 23.3 | 14.4 | UC211-35 | UC211-35L3 | 7 | 0.276 | 22.2 | 0.874 | 33.4 | 1.315 | 9 | 0.354 | — | 1/8-24UNF | 1.09 |
| | 100 | 3.937 | 55.6 | 2.189 | 25 | 0.984 | 1.5 | 0.059 | 52.4 | 36.2 | 14.4 | UCX11-35 | UCX11-35L3 | 7.5 | 0.295 | 25.4 | 1.000 | 39.7 | 1.563 | 10.5 | 0.413 | — | 1/8-24UNF | 1.78 |
| | 120 | 4.724 | 66 | 2.598 | 34 | 1.339 | 2 | 0.079 | 71.6 | 45.0 | 13.2 | UC311-35 | UC311-35L3 | 10 | 0.394 | 25 | 0.984 | 41 | 1.614 | 12 | 0.472 | M12x1.5 | — | 1.67 |
| 70 | 90 | 3.543 | 51.6 | 2.031 | 24 | 0.945 | 1.1 | 0.043 | 35.1 | 23.3 | 14.4 | UC211-36 | UC211-36L3 | 7.5 | 0.295 | 25.4 | 1.000 | 39.7 | 1.563 | 10.5 | 0.413 | — | 1/8-24UNF | 1.7 |
| | 100 | 3.937 | 55.6 | 2.189 | 25 | 0.984 | 1.5 | 0.059 | 52.4 | 36.2 | 14.4 | UC212-36 | UC212-36L3 | 7.5 | 0.295 | 25.4 | 1.000 | 39.7 | 1.563 | 10.5 | 0.413 | — | 1/8-24UNF | 1.67 |
| | 110 | 4.331 | 65.1 | 2.563 | 27 | 1.063 | 1.5 | 0.059 | 52.4 | 36.2 | 14.4 | UCX12 | UCX12L3 | 7.5 | 0.295 | 25.4 | 1.000 | 39.7 | 1.563 | 10.5 | 0.413 | M10x1.25 | — | 1.54 |
| 75 | 90 | 3.543 | 51.6 | 2.031 | 24 | 0.945 | 1.1 | 0.043 | 35.1 | 23.3 | 14.4 | UCX12 | UCX12L3 | 7.5 | 0.295 | 25.4 | 1.000 | 39.7 | 1.563 | 10.5 | 0.413 | — | 1/8-24UNF | 1.45 |
| | 100 | 3.937 | 55.6 | 2.189 | 25 | 0.984 | 1.5 | 0.059 | 52.4 | 36.2 | 14.4 | UCX12-39 | UCX12-39L3 | 7.5 | 0.295 | 25.4 | 1.000 | 39.7 | 1.563 | 10.5 | 0.413 | — | 1/2-20UNF | 1.95 |
| | 120 | 4.724 | 66 | 2.598 | 34 | 1.339 | 2 | 0.079 | 71.6 | 45.0 | 13.2 | UC312-39 | UC312-39L3 | 11.5 | 0.453 | 26 | 1.024 | 45 | 1.772 | 12 | 0.472 | M12x1.5 | — | 2.90 |
| 80 | 90 | 3.543 | 51.6 | 2.031 | 24 | 0.945 | 1.1 | 0.043 | 35.1 | 23.3 | 14.4 | UC212-38 | UC212-38L3 | 7.5 | 0.295 | 25.4 | 1.000 | 39.7 | 1.563 | 10.5 | 0.413 | — | 1/8-24UNF | 1.52 |
| | 100 | 3.937 | 55.6 | 2.189 | 25 | 0.984 | 1.5 | 0.059 | 52.4 | 36.2 | 14.4 | UC212-39 | UC212-39L3 | 7.5 | 0.295 | 25.4 | 1.000 | 39.7 | 1.563 | 10.5 | 0.413 | — | 1/8-24UNF | 1.45 |
| | 110 | 4.331 | 65.1 | 2.563 | 27 | 1.063 | 1.5 | 0.059 | 52.4 | 36.2 | 14.4 | UCX12-39 | UCX12-39L3 | 7.5 | 0.295 | 25.4 | 1.000 | 39.7 | 1.563 | 10.5 | 0.413 | — | 1/2-20UNF | 1.95 |
| 85 | 90 | 3.543 | 51.6 | 2.031 | 24 | 0.945 | 1.1 | 0.043 | 35.1 | 23.3 | 14.4 | UC213 | UC213L3 | 7.5 | 0.295 | 25.4 | 1.000 | 39.7 | 1.563 | 10.5 | 0.413 | M12x1.5 | — | 2.60 |
| | 100 | 3.937 | 55.6 | 2.189 | 25 | 0.984 | 1.5 | 0.059 | 52.4 | 36.2 | 14.4 | UC213-40 | UC213-40L3 | 9 | 0.354 | 30.2 | 1.189 | 44.4 | 1.748 | 12 | 0.472 | — | 1/2-20UNF | 2.61 |
| | 120 | 4.724 | 66 | 2.598 | 34 | 1.339 | 2 | 0.079 | 71.6 | 45.0 | 13.2 | UCX13-40 | UCX13-40L3 | 12 | 0.472 | 30 | 1.181 | 45 | 1.772 | 12 | 0.472 | M12x1.5 | — | 3.24 |
| 90 | 90 | 3.543 | 51.6 | 2.031 | 24 | 0.945 | 1.1 | 0.043 | 35.1 | 23.3 | 14.4 | UC213 | UC213L3 | 7.5 | 0.295 | 25.4 | 1.000 | 39.7 | 1.563 | 10.5 | 0.413 | M12x1.5 | — | 1.86 |
| | 100 | 3.937 | 55.6 | 2.189 | 25 | 0.984 | 1.5 | 0.059 | 52.4 | 36.2 | 14.4 | UCX13-40 | UCX13-40L3 | 9 | 0.354 | 30.2 | 1.189 | 44.4 | 1.748 | 12 | 0.472 | — | 1/2-20UNF | 2.06 |
| | 120 | 4.724 | 66 | 2.598 | 34 | 1.339 | 2 | 0.079 | 71.6 | 45.0 | 13.2 | UCX13-40 | UCX13-40L3 | 12 | 0.472 | 30 | 1.181 | 45 | 1.772 | 12 | 0.472 | M12x1.5 | — | 2.75 |
| 95 | 90 | 3.543 | 51.6 | 2.031 | 24 | 0.945 | 1.1 | 0.043 | 35.1 | 23.3 | 14.4 | UC214 | UC214L3 | 9 | 0.354 | 30.2 | 1.189 | 44.4 | 1.748 | 12 | 0.472 | M12x1.5 | — | 2.05 |
| | 100 | 3.937 | 55.6 | 2.189 | 25 | 0.984 | 1.5 | 0.059 | 52.4 | 36.2 | 14.4 | UCX14 | UCX14L3 | 9 | 0.354 | 30.2 | 1.189 | 44.4 | 1.748 | 12 | 0.472 | M12x1.5 | — | 2.74 |
| | 120 | 4.724 | 66 | 2.598 | 34 | 1.339 | 2 | 0.079 | 71.6 | 45.0 | 13.2 | UCX14 | UCX14L3 | 12.5 | 0.492 | 33 | 1.299 | 45 | 1.772 | 12 | 0.472 | M12x1.5 | — | 3.90 |
| 100 | 90 | 3.543 | 51.6 | 2.031 | 24 | 0.945 | 1.1 | 0.043 | 35.1 | 23.3 | 14.4 | UC215-47 | UC215-47L3 | 9 | 0.354 | 33.3 | 1.311 | 49.3 | 1.941 | 14 | 0.551 | — | 1/2-20UNF | 2.23 |
| | 100 | 3.937 | 55.6 | 2.189 | 25 | 0.984 | 1.5 | 0.059 | 52.4 | 36.2 | 14.4 | UCX15-47 | UCX15-47L3 | 9 | 0.354 | 33.3 | 1.311 | 49.3 | 1.941 | 14 | 0.551 | — | 1/2-20UNF | 3.43 |
| | 120 | 4.724 | 66 | 2.598 | 34 | 1.339 | 2 | 0.079 | 71.6 | 45.0 | 13.2 | UC315-47 | UC315-47L3 | 14.5 | 0.571 | 32 | 1.260 | 50 | 1.969 | 14 | 0.551 | M14x1.5 | — | 4.72 |
| 105 | 90 | 3.543 | 51.6 | 2.031 | 24 | 0.945 | 1.1 | 0.043 | 35.1 | 23.3 | 14.4 | UC215 | UC215L3 | 9 | 0.354 | 33.3 | 1.311 | 49.3 | 1.941 | 14 | 0.551 | M12x1.5 | — | 2.21 |
| | 100 | 3.937 | 55.6 | 2.189 | 25 | 0.984 | 1.5 | 0.059 | 52.4 | 36.2 | 14.4 | UCX15 | UCX15L3 | 9 | 0.354 | 33.3 | 1.311 | 49.3 | 1.941 | 14 | 0.551 | M12x1.5 | — | 3.41 |
| | 120 | 4.724 | 66 | 2.598 | 34 | 1.339 | 2 | 0.079 | 71.6 | 45.0 | 13.2 | UC315-48 | UC315-48L3 | 14.5 | 0.571 | 32 | 1.260 | 50 | 1.969 | 14 | 0.551 | M14x1.5 | — | 4.70 |
| 110 | 90 | 3.543 | 51.6 | 2.031 | 24 | 0.945 | 1.1 | 0.043 | 35.1 | 23.3 | 14.4 | UC215-48 | UC215-48L3 | 9 | 0.354 | 33.3 | 1.311 | 49.3 | 1.941 | 14 | 0.551 | — | 1/2-20UNF | 2.12 |
| | 100 | 3.937 | 55.6 | 2.189 | 25 | 0.984 | 1.5 | 0.059 | 52.4 | 36.2 | 14.4 | UCX15-48 | UCX15-48L3 | 9 | 0.354 | 33.3 | 1.311 | 49.3 | 1.941 | 14 | 0.551 | — | 1/2-20UNF | 3.32 |
| | 120 | 4.724 | 66 | 2.598 | 34 | 1.339 | 2 | 0.079 | 71.6 | 45.0 | 13.2 | UC315-48 | UC315-48L3 | 14.5 | 0.571 | 32 | 1.260 | 50 | 1.969 | 14 | 0.551 | M14x1.5 | — | 4.61 |

Remarks: 1. SU type product is the clean series ball bearing for unit.
2. From UC201 to 205 are the double seal type products (L2).

Ball Bearing Inserts

UC, SB, SB-RKP8, SU
Cylindrical bore (with set screws)
d (75) ~ 140 mm



| Shaft Dia. mm inch | Dimensions | | | | | | | Basic Load Ratings | | | Factor | Bearing No. | | Dimensions | | | | | | | | Set Screw Brg. Bore | | Mass kg |
|-----------------------|------------|--------|-------|----------|----------------|-----------------|----------------|--------------------|---------|----------------|--------|-------------|----------------|----------------|----------------|------|-------|------|-------|----|-------|---------------------|-----------|------------|
| | D | B | C | r (min.) | C _r | C _{0r} | f ₀ | Standard | L3 Type | C ₁ | | S | S ₁ | S ₂ | S ₃ | mm | inch | | | | | | | |
| 80 | 140 | 5.512 | 82.6 | 3.252 | 33 | 1.299 | 2 | 0.079 | 72.7 | 53.0 | 14.6 | UC216-50 | UC216-50L3 | 9 | 0.354 | 33.3 | 1.311 | 49.3 | 1.941 | 14 | 0.551 | — | 1/2-20UNF | 2.84 |
| | 140 | 5.512 | 82.6 | 3.252 | 33 | 1.299 | 2 | 0.079 | 72.7 | 53.0 | 14.6 | UC216 | UC216L3 | 9 | 0.354 | 33.3 | 1.311 | 49.3 | 1.941 | 14 | 0.551 | M12x1.5 | — | 2.79 |
| | 150 | 5.906 | 85.7 | 3.374 | 35 | 1.378 | 2 | 0.079 | 84.0 | 61.9 | 14.5 | UCX16 | UCX16L3 | 10 | 0.394 | 34.1 | 1.343 | 51.6 | 2.031 | 14 | 0.551 | M12x1.5 | — | 3.87 |
| 85 | 170 | 6.693 | 86 | 3.386 | 44 | 1.732 | 2.1 | 0.083 | 123 | 86.7 | 13.3 | UC316 | UC316L3 | 15 | 0.591 | 34 | 1.339 | 52 | 2.047 | 14 | 0.551 | M14x1.5 | — | 5.60 |
| | 150 | 5.906 | 85.7 | 3.374 | 35 | 1.378 | 2 | 0.079 | 84.0 | 61.9 | 14.5 | UC217 | UC217L3 | 10 | 0.394 | 34.1 | 1.343 | 51.6 | 2.031 | 14 | 0.551 | M12x1.5 | — | 3.45 |
| | 160 | 6.299 | 96 | 3.780 | 38 | 1.496 | 2 | 0.079 | 96.1 | 71.5 | 14.5 | UCX17 | UCX17L3 | 11 | 0.433 | 39.7 | 1.563 | 56.3 | 2.217 | 15 | 0.591 | M12x1.5 | — | 5.05 |
| 90 | 180 | 7.087 | 96 | 3.780 | 46 | 1.811 | 3 | 0.118 | 133 | 96.8 | 13.3 | UC317 | UC317L3 | 15 | 0.591 | 40 | 1.575 | 56 | 2.205 | 16 | 0.630 | M16x1.5 | — | 6.90 |
| | 160 | 6.299 | 96 | 3.780 | 38 | 1.496 | 2 | 0.079 | 96.1 | 71.5 | 14.5 | UCX17-55 | UCX17-55L3 | 11 | 0.433 | 39.7 | 1.563 | 56.3 | 2.217 | 15 | 0.591 | — | 1/2-20UNF | 4.80 |
| | 160 | 6.299 | 96 | 3.780 | 38 | 1.496 | 2 | 0.079 | 96.1 | 71.5 | 14.5 | UC218-56 | UC218-56L3 | 11 | 0.433 | 39.7 | 1.563 | 56.3 | 2.217 | 15 | 0.591 | — | 1/2-20UNF | 4.46 |
| 95 | 190 | 7.480 | 96 | 3.780 | 48 | 1.890 | 3 | 0.118 | 143 | 107 | 13.3 | UC318-56 | UC318-56L3 | 15.5 | 0.610 | 40 | 1.575 | 56 | 2.205 | 16 | 0.630 | M16x1.5 | — | 8.03 |
| | 160 | 6.299 | 96 | 3.780 | 38 | 1.496 | 2 | 0.079 | 96.1 | 71.5 | 14.5 | UC218 | UC218L3 | 11 | 0.433 | 39.7 | 1.563 | 56.3 | 2.217 | 15 | 0.591 | M12x1.5 | — | 4.35 |
| | 170 | 6.693 | 104 | 4.094 | 40 | 1.575 | 2 | 0.079 | 109 | 81.9 | 14.4 | UCX18 | — | 11.5 | 0.453 | 42.9 | 1.689 | 61.1 | 2.406 | 16 | 0.630 | M14x1.5 | — | 6.00 |
| 100 | 190 | 7.480 | 96 | 3.780 | 48 | 1.890 | 3 | 0.118 | 143 | 107 | 13.3 | UC318 | UC318L3 | 15.5 | 0.610 | 40 | 1.575 | 56 | 2.205 | 16 | 0.630 | M16x1.5 | — | 7.87 |
| | 200 | 7.874 | 103 | 4.055 | 50 | 1.969 | 3 | 0.118 | 153 | 119 | 13.3 | UC319 | UC319L3 | 16.5 | 0.650 | 41 | 1.614 | 62 | 2.441 | 18 | 0.709 | M16x1.5 | — | 8.91 |
| | 190 | 7.480 | 117.5 | 4.626 | 43 | 1.693 | 2.1 | 0.083 | 133 | 105 | 14.4 | UCX20 | — | 13 | 0.512 | 49.2 | 1.937 | 68.3 | 2.689 | 18 | 0.709 | M16x1.5 | — | 8.56 |
| 105 | 215 | 8.465 | 108 | 4.252 | 54 | 2.126 | 3 | 0.118 | 173 | 141 | 13.2 | UC320 | UC320L3 | 18 | 0.709 | 42 | 1.654 | 66 | 2.598 | 20 | 0.787 | M18x1.5 | — | 11.2 |
| | 190 | 7.480 | 117.5 | 4.626 | 43 | 1.693 | 2.1 | 0.083 | 133 | 105 | 14.4 | UCX20-63 | — | 13 | 0.512 | 49.2 | 1.937 | 68.3 | 2.689 | 18 | 0.709 | — | 1/2-18UNF | 8.56 |
| | 215 | 8.465 | 108 | 4.252 | 54 | 2.126 | 3 | 0.118 | 173 | 141 | 13.2 | UC320-63L3 | — | 18 | 0.709 | 42 | 1.654 | 66 | 2.598 | 20 | 0.787 | M18x1.5 | — | 11.2 |
| 110 | 190 | 7.480 | 117.5 | 4.626 | 43 | 1.693 | 2.1 | 0.083 | 133 | 105 | 14.4 | UCX20-64 | — | 13 | 0.512 | 49.2 | 1.937 | 68.3 | 2.689 | 18 | 0.709 | — | 1/2-18UNF | 8.33 |
| | 215 | 8.465 | 108 | 4.252 | 54 | 2.126 | 3 | 0.118 | 173 | 141 | 13.2 | UC320-64L3 | — | 18 | 0.709 | 42 | 1.654 | 66 | 2.598 | 20 | 0.787 | M18x1.5 | — | 11.0 |
| | 225 | 8.858 | 112 | 4.409 | 56 | 2.205 | 3 | 0.118 | 184 | 153 | 13.2 | UC321 | — | 19 | 0.748 | 44 | 1.732 | 68 | 2.677 | 20 | 0.787 | M18x1.5 | — | 12.7 |
| 120 | 240 | 9.449 | 117 | 4.606 | 60 | 2.362 | 3 | 0.118 | 205 | 180 | 13.2 | UC322 | UC322L3 | 20 | 0.787 | 46 | 1.811 | 71 | 2.795 | 20 | 0.787 | M18x1.5 | — | 15.1 |
| | 260 | 10.236 | 126 | 4.961 | 64 | 2.520 | 3 | 0.118 | 207 | 185 | 13.5 | UC324 | UC324L3 | 21 | 0.827 | 51 | 2.008 | 75 | 2.953 | 20 | 0.787 | M18x1.5 | — | 19.0 |
| | 280 | 11.024 | 135 | 5.315 | 68 | 2.677 | 4 | 0.157 | 229 | 214 | 13.6 | UC326 | UC326L3 | 22 | 0.866 | 54 | 2.126 | 81 | 3.189 | 20 | 0.787 | M20x1.5 | — | 23.6 |
| 140 | 300 | 11.811 | 145 | 5.709 | 72 | 2.835 | 4 | 0.157 | 253 | 246 | 13.6 | UC328 | UC328L3 | 23 | 0.906 | 59 | 2.323 | 86 | 3.386 | 20 | 0.787 | M20x1.5 | — | 29.4 |

Remarks 1. SU type product is the clean series ball bearing for unit.
2. From UC201 to 205 are the double seal type products (L2).