

**Table D, (Metric)**  
**Tolerances by grade for lots balls**

| Tolerances in micrometers |                                         |            |                                           |                                                 |       |                            |
|---------------------------|-----------------------------------------|------------|-------------------------------------------|-------------------------------------------------|-------|----------------------------|
| Ball<br>Grade<br>diameter | Alllowable<br>lot diameter<br>Variation |            | Nominal<br>ball<br>deviation<br>tolerance | Allowable<br>ball gage<br>marking<br>$\Delta_s$ |       | Container<br><br>Increment |
|                           |                                         |            |                                           |                                                 |       |                            |
|                           | $V_{DWL}$                               |            |                                           | high                                            | low   |                            |
| 3                         | 0,13                                    |            |                                           | +0,75                                           | -0,75 | 0,25                       |
| 5                         | 0,25                                    |            |                                           | +1,25                                           | -1    | 0,25                       |
| 10                        | 0,5                                     |            |                                           | +1,25                                           | -1    | 0,25                       |
| 16                        | 0,8                                     |            |                                           | +1,25                                           | -1    | 0,25                       |
| 24                        | 1,2                                     |            |                                           | +2,5                                            | -2,5  | 0,25                       |
| 48                        | 2,4                                     | x          | x                                         |                                                 |       | 1,25                       |
| 100                       | 5                                       | $\pm 12,5$ | x                                         |                                                 |       | x                          |
| 200                       | 10                                      | $\pm 25$   | x                                         |                                                 |       | x                          |
| 500                       | 25                                      | $\pm 50$   | x                                         |                                                 |       | x                          |
| 1000                      | 50                                      | $\pm 125$  | x                                         |                                                 |       | x                          |
| x: not applicable         |                                         |            |                                           |                                                 |       |                            |

**Table D, (Inch)**  
**Tolerances by grade for lot of balls**

| Tolerances in micrometers |                                         |            |                                           |                                                 |       |                            |
|---------------------------|-----------------------------------------|------------|-------------------------------------------|-------------------------------------------------|-------|----------------------------|
| Ball<br>Grade<br>diameter | Alllowable<br>lot diameter<br>Variation |            | Nominal<br>ball<br>deviation<br>tolerance | Allowable<br>ball gage<br>marking<br>$\Delta_s$ |       | Container<br><br>Increment |
|                           |                                         |            |                                           |                                                 |       |                            |
|                           | $V_{DWL}$                               |            |                                           | high                                            | low   |                            |
| 3                         | 5                                       | x          |                                           | +0,75                                           | -0,75 | 0,25                       |
| 5                         | 10                                      | x          |                                           | +1,25                                           | -1    | 0,25                       |
| 10                        | 20                                      | x          |                                           | +1,25                                           | -1    | 0,25                       |
| 16                        | 32                                      | x          |                                           | +1,25                                           | -1    | 0,25                       |
| 24                        | 48                                      | x          |                                           | +2,5                                            | -2,5  | 0,25                       |
| 48                        | 96                                      | x          |                                           |                                                 | x     | 50                         |
| 100                       | 200                                     | $\pm 500$  |                                           |                                                 | x     | x                          |
| 200                       | 400                                     | $\pm 1000$ |                                           |                                                 | x     | x                          |
| 500                       | 1000                                    | $\pm 2000$ |                                           |                                                 | x     | x                          |
| 1000                      | 2000                                    | $\pm 5000$ |                                           |                                                 | x     | x                          |
| x: not applicable         |                                         |            |                                           |                                                 |       |                            |