

# SPECIFIED TORQUE FOR STANDARD BOLTS

| Class | Diameter<br>mm | Pitch<br>mm | Specified torque  |        |            |                     |        |            |
|-------|----------------|-------------|-------------------|--------|------------|---------------------|--------|------------|
|       |                |             | Hexagon head bolt |        |            | Hexagon flange bolt |        |            |
|       |                |             | N·m               | kgf·cm | ft·lbf     | N·m                 | kgf·cm | ft·lbf     |
| 4T    | 6              | 1           | 5                 | 55     | 48 in.·lbf | 6                   | 60     | 52 in.·lbf |
|       | 8              | 1.25        | 12.5              | 130    | 9          | 14                  | 145    | 10         |
|       | 10             | 1.25        | 26                | 260    | 19         | 29                  | 290    | 21         |
|       | 12             | 1.25        | 47                | 480    | 35         | 53                  | 540    | 39         |
|       | 14             | 1.5         | 74                | 760    | 55         | 84                  | 850    | 61         |
|       | 16             | 1.5         | 115               | 1,150  | 83         | —                   | —      | —          |
| 5T    | 6              | 1           | 6.5               | 65     | 56 in.·lbf | 7.5                 | 75     | 65 in.·lbf |
|       | 8              | 1.25        | 15.5              | 160    | 12         | 17.5                | 175    | 13         |
|       | 10             | 1.25        | 32                | 330    | 24         | 36                  | 360    | 26         |
|       | 12             | 1.25        | 59                | 600    | 43         | 65                  | 670    | 48         |
|       | 14             | 1.5         | 91                | 930    | 67         | 100                 | 1,050  | 76         |
|       | 16             | 1.5         | 140               | 1,400  | 101        | —                   | —      | —          |
| 6T    | 6              | 1           | 8                 | 80     | 69 in.·lbf | 9                   | 90     | 78 in.·lbf |
|       | 8              | 1.25        | 19                | 195    | 14         | 21                  | 210    | 15         |
|       | 10             | 1.25        | 39                | 400    | 29         | 44                  | 440    | 32         |
|       | 12             | 1.25        | 71                | 730    | 53         | 80                  | 810    | 59         |
|       | 14             | 1.5         | 110               | 1,100  | 80         | 125                 | 1,250  | 90         |
|       | 16             | 1.5         | 170               | 1,750  | 127        | —                   | —      | —          |
| 7T    | 6              | 1           | 10.5              | 110    | 8          | 12                  | 120    | 9          |
|       | 8              | 1.25        | 25                | 260    | 19         | 28                  | 290    | 21         |
|       | 10             | 1.25        | 52                | 530    | 38         | 58                  | 590    | 43         |
|       | 12             | 1.25        | 95                | 970    | 70         | 105                 | 1,050  | 76         |
|       | 14             | 1.5         | 145               | 1,500  | 108        | 165                 | 1,700  | 123        |
|       | 16             | 1.5         | 230               | 2,300  | 166        | —                   | —      | —          |
| 8T    | 8              | 1.25        | 29                | 300    | 22         | 33                  | 330    | 24         |
|       | 10             | 1.25        | 61                | 620    | 45         | 68                  | 690    | 50         |
|       | 12             | 1.25        | 110               | 1,100  | 80         | 120                 | 1,250  | 90         |
| 9T    | 8              | 1.25        | 34                | 340    | 25         | 37                  | 380    | 27         |
|       | 10             | 1.25        | 70                | 710    | 51         | 78                  | 790    | 57         |
|       | 12             | 1.25        | 125               | 1,300  | 94         | 140                 | 1,450  | 105        |
| 10T   | 8              | 1.25        | 38                | 390    | 28         | 42                  | 430    | 31         |
|       | 10             | 1.25        | 78                | 800    | 58         | 88                  | 890    | 64         |
|       | 12             | 1.25        | 140               | 1,450  | 105        | 155                 | 1,600  | 116        |
| 11T   | 8              | 1.25        | 42                | 430    | 31         | 47                  | 480    | 35         |
|       | 10             | 1.25        | 87                | 890    | 64         | 97                  | 990    | 72         |
|       | 12             | 1.25        | 155               | 1,600  | 116        | 175                 | 1,800  | 130        |