

# FBN60B

## Order Product Code

**FBN60B20D20**

TYPE No. of Teeth  $\phi D^{H7}$   
Sprocket No.

- Chain .....No.60
- Chain Pitch .....(P) 19.05 mm
- Roller Link Inner Width .....(W) 12.70 mm
- Roller Outside Diameter .....(Dr) 11.91 mm
- Tooth Width .....(T) 11.7 mm



1 Sprockets with a ★ symbol for BD have a channel in the boss exterior.

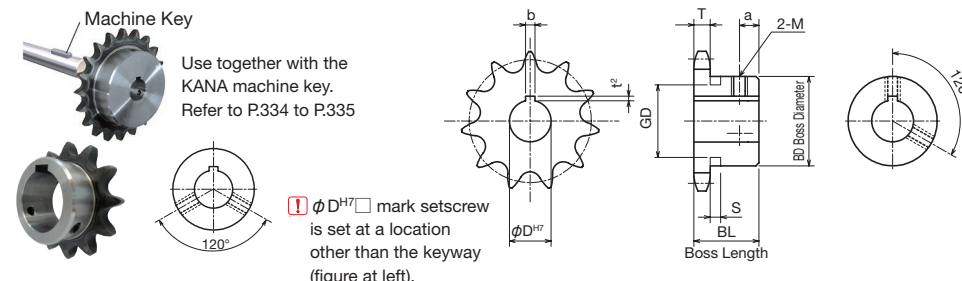
| No. of Teeth | S   | GD |
|--------------|-----|----|
| 9            |     | 32 |
| 10           | 8.0 | 37 |
| 11           |     | 45 |

- m Carbon Structural Steel
- h High-frequency Hardened Teeth

| TYPE         | FBN60B       |               |                         |    |      |        |     |    |   |           |  |
|--------------|--------------|---------------|-------------------------|----|------|--------|-----|----|---|-----------|--|
| Product Code | No. of Teeth | $\phi D^{H7}$ | Keyway b×t <sup>2</sup> | M  | Do   | Dp     | BD  | BL | a | Weight kg |  |
| FBN60B9D19   | 9            | 19            | 6×2.8                   | 6  | 63.0 | 55.698 | ★43 | 32 | 6 | 0.40      |  |
| FBN60B9D20   | 9            | 20            | 6×2.8                   | 6  | 63.0 | 55.698 | ★43 | 32 | 6 | 0.40      |  |
| FBN60B9D22   | 9            | 22            | 6×2.8                   | 6  | 63.0 | 55.698 | ★43 | 32 | 6 | 0.40      |  |
| FBN60B9D24   | 9            | 24            | 8×3.3                   | 8  | 63.0 | 55.698 | ★43 | 32 | 6 | 0.40      |  |
| FBN60B10D19  | 10           | 19            | 6×2.8                   | 6  | 68.0 | 61.647 | ★49 | 32 | 6 | 0.49      |  |
| FBN60B10D20  | 10           | 20            | 6×2.8                   | 6  | 68.0 | 61.647 | ★49 | 32 | 6 | 0.49      |  |
| FBN60B10D22  | 10           | 22            | 6×2.8                   | 6  | 68.0 | 61.647 | ★49 | 32 | 6 | 0.49      |  |
| FBN60B10D24  | 10           | 24            | 8×3.3                   | 8  | 68.0 | 61.647 | ★49 | 32 | 6 | 0.49      |  |
| FBN60B10D25  | 10           | 25            | 8×3.3                   | 8  | 68.0 | 61.647 | ★49 | 32 | 6 | 0.49      |  |
| FBN60B10D28  | 10           | 28            | 8×3.3                   | 8  | 68.0 | 61.647 | ★49 | 32 | 6 | 0.49      |  |
| FBN60B10D30  | 10           | 30            | 8×3.3                   | 8  | 68.0 | 61.647 | ★49 | 32 | 6 | 0.49      |  |
| FBN60B11D19  | 11           | 19            | 6×2.8                   | 6  | 76.0 | 67.617 | ★51 | 32 | 6 | 0.60      |  |
| FBN60B11D20  | 11           | 20            | 6×2.8                   | 6  | 76.0 | 67.617 | ★51 | 32 | 6 | 0.60      |  |
| FBN60B11D22  | 11           | 22            | 6×2.8                   | 6  | 76.0 | 67.617 | ★51 | 32 | 6 | 0.60      |  |
| FBN60B11D24  | 11           | 24            | 8×3.3                   | 8  | 76.0 | 67.617 | ★51 | 32 | 6 | 0.60      |  |
| FBN60B11D25  | 11           | 25            | 8×3.3                   | 8  | 76.0 | 67.617 | ★51 | 32 | 6 | 0.60      |  |
| FBN60B11D28  | 11           | 28            | 8×3.3                   | 8  | 76.0 | 67.617 | ★51 | 32 | 6 | 0.60      |  |
| FBN60B11D30  | 11           | 30            | 8×3.3                   | 8  | 76.0 | 67.617 | ★51 | 32 | 6 | 0.60      |  |
| FBN60B11D32  | 11           | 32            | 10×3.3                  | 8  | 76.0 | 67.617 | ★51 | 32 | 6 | 0.60      |  |
| FBN60B12D18  | 12           | 18            | 6×2.8                   | 6  | 83.0 | 73.604 | 51  | 32 | 8 | 0.69      |  |
| FBN60B12D19  | 12           | 19            | 6×2.8                   | 6  | 83.0 | 73.604 | 51  | 32 | 8 | 0.69      |  |
| FBN60B12D20  | 12           | 20            | 6×2.8                   | 6  | 83.0 | 73.604 | 51  | 32 | 8 | 0.69      |  |
| FBN60B12D22  | 12           | 22            | 6×2.8                   | 6  | 83.0 | 73.604 | 51  | 32 | 8 | 0.69      |  |
| FBN60B12D24  | 12           | 24            | 8×3.3                   | 8  | 83.0 | 73.604 | 51  | 32 | 8 | 0.69      |  |
| FBN60B12D25  | 12           | 25            | 8×3.3                   | 8  | 83.0 | 73.604 | 51  | 32 | 8 | 0.69      |  |
| FBN60B12D28  | 12           | 28            | 8×3.3                   | 8  | 83.0 | 73.604 | 51  | 32 | 8 | 0.69      |  |
| FBN60B12D30  | 12           | 30            | 8×3.3                   | 8  | 83.0 | 73.604 | 51  | 32 | 8 | 0.69      |  |
| FBN60B12D32  | 12           | 32            | 10×3.3                  | 8  | 83.0 | 73.604 | 51  | 32 | 8 | 0.69      |  |
| FBN60B12D35  | 12           | 35            | 10×3.3                  | ★6 | 83.0 | 73.604 | 51  | 32 | 8 | 0.69      |  |
| FBN60B13D19  | 13           | 19            | 6×2.8                   | 6  | 89.0 | 79.602 | 57  | 32 | 8 | 0.81      |  |
| FBN60B13D20  | 13           | 20            | 6×2.8                   | 6  | 89.0 | 79.602 | 57  | 32 | 8 | 0.81      |  |
| FBN60B13D22  | 13           | 22            | 6×2.8                   | 6  | 89.0 | 79.602 | 57  | 32 | 8 | 0.81      |  |
| FBN60B13D24  | 13           | 24            | 8×3.3                   | 8  | 89.0 | 79.602 | 57  | 32 | 8 | 0.81      |  |
| FBN60B13D25  | 13           | 25            | 8×3.3                   | 8  | 89.0 | 79.602 | 57  | 32 | 8 | 0.81      |  |
| FBN60B13D28  | 13           | 28            | 8×3.3                   | 8  | 89.0 | 79.602 | 57  | 32 | 8 | 0.81      |  |
| FBN60B13D30  | 13           | 30            | 8×3.3                   | 8  | 89.0 | 79.602 | 57  | 32 | 8 | 0.81      |  |
| FBN60B13D32  | 13           | 32            | 10×3.3                  | 8  | 89.0 | 79.602 | 57  | 32 | 8 | 0.81      |  |
| FBN60B13D35  | 13           | 35            | 10×3.3                  | 8  | 89.0 | 79.602 | 57  | 32 | 8 | 0.81      |  |
| FBN60B13D38  | 13           | 38            | 10×3.3                  | 8  | 89.0 | 79.602 | 57  | 32 | 8 | 0.81      |  |

\*M is a set screw. ★ The seal set screws differ from the usual due to the boss type.

## FBN Finished Bore Sprocket New JIS Keyway Specification



| TYPE         | FBN60B       |               |                         |    |       |        |    |    |   |           |  |
|--------------|--------------|---------------|-------------------------|----|-------|--------|----|----|---|-----------|--|
| Product Code | No. of Teeth | $\phi D^{H7}$ | Keyway b×t <sup>2</sup> | M  | Do    | Dp     | BD | BL | a | Weight kg |  |
| FBN60B13D40  | 13           | 40            | 12×3.3                  | 8  | 89.0  | 79.602 | 57 | 32 | 8 | 0.81      |  |
| FBN60B14D17  | 14           | 17            | 5×2.3                   | 6  | 95.0  | 85.610 | 62 | 32 | 8 | 0.96      |  |
| FBN60B14D19  | 14           | 19            | 6×2.8                   | 6  | 95.0  | 85.610 | 62 | 32 | 8 | 0.96      |  |
| FBN60B14D20  | 14           | 20            | 6×2.8                   | 6  | 95.0  | 85.610 | 62 | 32 | 8 | 0.96      |  |
| FBN60B14D22  | 14           | 22            | 6×2.8                   | 6  | 95.0  | 85.610 | 62 | 32 | 8 | 0.96      |  |
| FBN60B14D24  | 14           | 24            | 8×3.3                   | 8  | 95.0  | 85.610 | 62 | 32 | 8 | 0.96      |  |
| FBN60B14D25  | 14           | 25            | 8×3.3                   | 8  | 95.0  | 85.610 | 62 | 32 | 8 | 0.96      |  |
| FBN60B14D28  | 14           | 28            | 8×3.3                   | 8  | 95.0  | 85.610 | 62 | 32 | 8 | 0.96      |  |
| FBN60B14D30  | 14           | 30            | 8×3.3                   | 8  | 95.0  | 85.610 | 62 | 32 | 8 | 0.96      |  |
| FBN60B14D32  | 14           | 32            | 10×3.3                  | 8  | 95.0  | 85.610 | 62 | 32 | 8 | 0.96      |  |
| FBN60B14D35  | 14           | 35            | 10×3.3                  | 8  | 95.0  | 85.610 | 62 | 32 | 8 | 0.96      |  |
| FBN60B14D38  | 14           | 38            | 10×3.3                  | 8  | 95.0  | 85.610 | 62 | 32 | 8 | 0.96      |  |
| FBN60B14D40  | 14           | 40            | 12×3.3                  | 8  | 95.0  | 85.610 | 62 | 32 | 8 | 0.96      |  |
| FBN60B15D18  | 15           | 18            | 6×2.8                   | 6  | 101.0 | 91.625 | 68 | 32 | 8 | 1.10      |  |
| FBN60B15D19  | 15           | 19            | 6×2.8                   | 6  | 101.0 | 91.625 | 68 | 32 | 8 | 1.10      |  |
| FBN60B15D20  | 15           | 20            | 6×2.8                   | 6  | 101.0 | 91.625 | 68 | 32 | 8 | 1.10      |  |
| FBN60B15D22  | 15           | 22            | 6×2.8                   | 6  | 101.0 | 91.625 | 68 | 32 | 8 | 1.10      |  |
| FBN60B15D24  | 15           | 24            | 8×3.3                   | 8  | 101.0 | 91.625 | 68 | 32 | 8 | 1.10      |  |
| FBN60B15D25  | 15           | 25            | 8×3.3                   | 8  | 101.0 | 91.625 | 68 | 32 | 8 | 1.10      |  |
| FBN60B15D28  | 15           | 28            | 8×3.3                   | 8  | 101.0 | 91.625 | 68 | 32 | 8 | 1.10      |  |
| FBN60B15D30  | 15           | 30            | 8×3.3                   | 8  | 101.0 | 91.625 | 68 | 32 | 8 | 1.10      |  |
| FBN60B15D32  | 15           | 32            | 10×3.3                  | 8  | 101.0 | 91.625 | 68 | 32 | 8 | 1.10      |  |
| FBN60B15D35  | 15           | 35            | 10×3.3                  | 8  | 101.0 | 91.625 | 68 | 32 | 8 | 1.10      |  |
| FBN60B15D38  | 15           | 38            | 10×3.3                  | 8  | 101.0 | 91.625 | 68 | 32 | 8 | 1.10      |  |
| FBN60B15D40  | 15           | 40            | 12×3.3                  | 8  | 101.0 | 91.625 | 68 | 32 | 8 | 1.10      |  |
| FBN60B15D42  | 15           | 42            | 12×3.3                  | 8  | 101.0 | 91.625 | 68 | 32 | 8 | 1.10      |  |
| FBN60B15D45  | 15           | 45            | 14×3.8                  | 10 | 101.0 | 91.625 | 68 | 32 | 8 | 1.10      |  |
| FBN60B16D19  | 16           | 19            | 6×2.8                   | 6  | 107.0 | 97.647 | 73 | 32 | 8 | 1.30      |  |
| FBN60B16D20  | 16           | 20            | 6×2.8                   | 6  | 107.0 | 97.647 | 73 | 32 | 8 | 1.30      |  |
| FBN60B16D22  | 16           | 22            | 6×2.8                   | 6  | 107.0 | 97.647 | 73 | 32 | 8 | 1.30      |  |
| FBN60B16D24  | 16           | 24            | 8×3.3                   | 8  | 107.0 | 97.647 | 73 | 32 | 8 | 1.30      |  |
| FBN60B16D25  | 16           | 25            | 8×3.3                   | 8  | 107.0 | 97.647 | 73 | 32 | 8 | 1.30      |  |
| FBN60B16D28  | 16           | 28            | 8×3.3                   | 8  | 107.0 | 97.647 | 73 | 32 | 8 | 1.30      |  |
| FBN60B16D30  | 16           | 30            | 8×3.3                   | 8  | 107.0 | 97.647 | 73 | 32 | 8 | 1.30      |  |
| FBN60B16D32  | 16           | 32            | 10×3.3                  | 8  | 107.0 | 97.647 | 73 | 32 | 8 | 1.30      |  |
| FBN60B16D35  | 16           | 35            | 10×3.3                  | 8  | 107.0 | 97.647 | 73 | 32 | 8 | 1.30      |  |
| FBN60B16D38  | 16           | 38            | 10×3.3                  | 8  | 107.0 | 97.647 | 73 | 32 | 8 | 1.30      |  |
| FBN60B16D40  | 16           | 40            | 12×3.3                  | 8  | 107.0 | 97.647 | 73 | 32 | 8 | 1.30      |  |
| FBN60B16D42  | 16           | 42            | 12×3.3                  | 8  | 107.0 | 97.647 | 73 | 32 | 8 | 1.30      |  |

\*M is a set screw. ★ The seal set screws differ from the usual due to the boss type.

# FBN60B

## Order Product Code

**FBN60B20D20**

TYPE No. of Teeth  $\phi D^{H7}$   
Sprocket No.

- Chain .....No.60
- Chain Pitch .....(P) 19.05 mm
- Roller Link Inner Width .....(W) 12.70 mm
- Roller Outside Diameter .....(Dr) 11.91 mm
- Tooth Width .....(T) 11.7 mm



1 Sprockets with a ★ symbol for BD have a channel in the boss exterior.

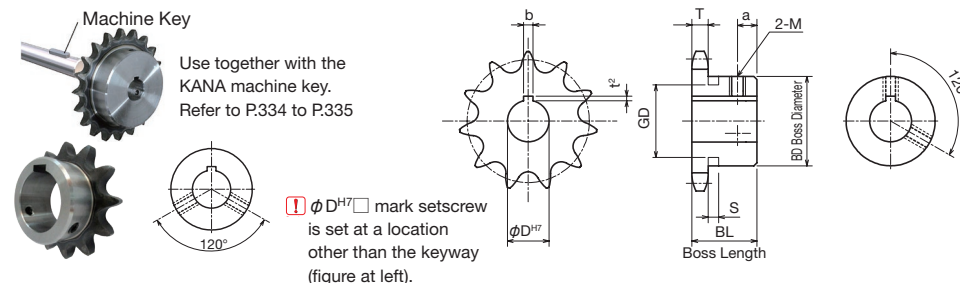
| No. of Teeth | S   | GD |
|--------------|-----|----|
| 9            |     | 32 |
| 10           | 8.0 | 37 |
| 11           |     | 45 |

- m Carbon Structural Steel
- h High-frequency Hardened Teeth

| TYPE         | FBN60B       |               |                         |    |       |         |    |    |    |           |  |
|--------------|--------------|---------------|-------------------------|----|-------|---------|----|----|----|-----------|--|
| Product Code | No. of Teeth | $\phi D^{H7}$ | Keyway b×t <sup>2</sup> | M  | Do    | Dp      | BD | BL | a  | Weight kg |  |
| FBN60B16D45  | 16           | 45            | 14×3.8                  | 10 | 107.0 | 97.647  | 73 | 32 | 8  | 1.30      |  |
| FBN60B16D48  | 16           | 48            | 14×3.8                  | 10 | 107.0 | 97.647  | 73 | 32 | 8  | 1.30      |  |
| FBN60B16D50  | 16           | 50            | 14×3.8                  | 10 | 107.0 | 97.647  | 73 | 32 | 8  | 1.30      |  |
| FBN60B17D19  | 17           | 19            | 6×2.8                   | 6  | 113.0 | 103.674 | 73 | 32 | 8  | 1.40      |  |
| FBN60B17D20  | 17           | 20            | 6×2.8                   | 6  | 113.0 | 103.674 | 73 | 32 | 8  | 1.40      |  |
| FBN60B17D22  | 17           | 22            | 6×2.8                   | 6  | 113.0 | 103.674 | 73 | 32 | 8  | 1.40      |  |
| FBN60B17D24  | 17           | 24            | 8×3.3                   | 8  | 113.0 | 103.674 | 73 | 32 | 8  | 1.40      |  |
| FBN60B17D25  | 17           | 25            | 8×3.3                   | 8  | 113.0 | 103.674 | 73 | 32 | 8  | 1.40      |  |
| FBN60B17D28  | 17           | 28            | 8×3.3                   | 8  | 113.0 | 103.674 | 73 | 32 | 8  | 1.40      |  |
| FBN60B17D30  | 17           | 30            | 8×3.3                   | 8  | 113.0 | 103.674 | 73 | 32 | 8  | 1.40      |  |
| FBN60B17D32  | 17           | 32            | 10×3.3                  | 8  | 113.0 | 103.674 | 73 | 32 | 8  | 1.40      |  |
| FBN60B17D35  | 17           | 35            | 10×3.3                  | 8  | 113.0 | 103.674 | 73 | 32 | 8  | 1.40      |  |
| FBN60B17D38  | 17           | 38            | 10×3.3                  | 8  | 113.0 | 103.674 | 73 | 32 | 8  | 1.40      |  |
| FBN60B17D40  | 17           | 40            | 12×3.3                  | 8  | 113.0 | 103.674 | 73 | 32 | 8  | 1.40      |  |
| FBN60B17D42  | 17           | 42            | 12×3.3                  | 8  | 113.0 | 103.674 | 73 | 32 | 8  | 1.40      |  |
| FBN60B17D45  | 17           | 45            | 14×3.8                  | 10 | 113.0 | 103.674 | 73 | 32 | 8  | 1.40      |  |
| FBN60B17D48  | 17           | 48            | 14×3.8                  | 10 | 113.0 | 103.674 | 73 | 32 | 8  | 1.40      |  |
| FBN60B17D50  | 17           | 50            | 14×3.8                  | 10 | 113.0 | 103.674 | 73 | 32 | 8  | 1.40      |  |
| FBN60B18D19  | 18           | 19            | 6×2.8                   | 6  | 119.0 | 109.705 | 83 | 40 | 12 | 2.00      |  |
| FBN60B18D20  | 18           | 20            | 6×2.8                   | 6  | 119.0 | 109.705 | 83 | 40 | 12 | 2.00      |  |
| FBN60B18D22  | 18           | 22            | 6×2.8                   | 6  | 119.0 | 109.705 | 83 | 40 | 12 | 2.00      |  |
| FBN60B18D24  | 18           | 24            | 8×3.3                   | 8  | 119.0 | 109.705 | 83 | 40 | 12 | 2.00      |  |
| FBN60B18D25  | 18           | 25            | 8×3.3                   | 8  | 119.0 | 109.705 | 83 | 40 | 12 | 2.00      |  |
| FBN60B18D28  | 18           | 28            | 8×3.3                   | 8  | 119.0 | 109.705 | 83 | 40 | 12 | 2.00      |  |
| FBN60B18D30  | 18           | 30            | 8×3.3                   | 8  | 119.0 | 109.705 | 83 | 40 | 12 | 2.00      |  |
| FBN60B18D32  | 18           | 32            | 10×3.3                  | 8  | 119.0 | 109.705 | 83 | 40 | 12 | 2.00      |  |
| FBN60B18D35  | 18           | 35            | 10×3.3                  | 8  | 119.0 | 109.705 | 83 | 40 | 12 | 2.00      |  |
| FBN60B18D38  | 18           | 38            | 10×3.3                  | 8  | 119.0 | 109.705 | 83 | 40 | 12 | 2.00      |  |
| FBN60B18D40  | 18           | 40            | 12×3.3                  | 8  | 119.0 | 109.705 | 83 | 40 | 12 | 2.00      |  |
| FBN60B18D42  | 18           | 42            | 12×3.3                  | 8  | 119.0 | 109.705 | 83 | 40 | 12 | 2.00      |  |
| FBN60B18D45  | 18           | 45            | 14×3.8                  | 10 | 119.0 | 109.705 | 83 | 40 | 12 | 2.00      |  |
| FBN60B18D48  | 18           | 48            | 14×3.8                  | 10 | 119.0 | 109.705 | 83 | 40 | 12 | 2.00      |  |
| FBN60B18D50  | 18           | 50            | 14×3.8                  | 10 | 119.0 | 109.705 | 83 | 40 | 12 | 2.00      |  |
| FBN60B18D55  | 18           | 55            | 16×4.3                  | 12 | 119.0 | 109.705 | 83 | 40 | 12 | 2.00      |  |
| FBN60B19D19  | 19           | 19            | 6×2.8                   | 6  | 126.0 | 115.739 | 83 | 40 | 12 | 2.10      |  |
| FBN60B19D20  | 19           | 20            | 6×2.8                   | 6  | 126.0 | 115.739 | 83 | 40 | 12 | 2.10      |  |
| FBN60B19D22  | 19           | 22            | 6×2.8                   | 6  | 126.0 | 115.739 | 83 | 40 | 12 | 2.10      |  |
| FBN60B19D24  | 19           | 24            | 8×3.3                   | 8  | 126.0 | 115.739 | 83 | 40 | 12 | 2.10      |  |
| FBN60B19D25  | 19           | 25            | 8×3.3                   | 8  | 126.0 | 115.739 | 83 | 40 | 12 | 2.10      |  |

\*M is a set screw. \* The seal set screws differ from the usual due to the boss type.

## FBN Finished Bore Sprocket New JIS Keyway Specification



| TYPE         | FBN60B       |               |                         |    |       |         |    |    |    |           |  |
|--------------|--------------|---------------|-------------------------|----|-------|---------|----|----|----|-----------|--|
| Product Code | No. of Teeth | $\phi D^{H7}$ | Keyway b×t <sup>2</sup> | M  | Do    | Dp      | BD | BL | a  | Weight kg |  |
| FBN60B19D28  | 19           | 28            | 8×3.3                   | 8  | 126.0 | 115.739 | 83 | 40 | 12 | 2.10      |  |
| FBN60B19D30  | 19           | 30            | 8×3.3                   | 8  | 126.0 | 115.739 | 83 | 40 | 12 | 2.10      |  |
| FBN60B19D32  | 19           | 32            | 10×3.3                  | 8  | 126.0 | 115.739 | 83 | 40 | 12 | 2.10      |  |
| FBN60B19D35  | 19           | 35            | 10×3.3                  | 8  | 126.0 | 115.739 | 83 | 40 | 12 | 2.10      |  |
| FBN60B19D38  | 19           | 38            | 10×3.3                  | 8  | 126.0 | 115.739 | 83 | 40 | 12 | 2.10      |  |
| FBN60B19D40  | 19           | 40            | 12×3.3                  | 8  | 126.0 | 115.739 | 83 | 40 | 12 | 2.10      |  |
| FBN60B19D42  | 19           | 42            | 12×3.3                  | 8  | 126.0 | 115.739 | 83 | 40 | 12 | 2.10      |  |
| FBN60B19D45  | 19           | 45            | 14×3.8                  | 10 | 126.0 | 115.739 | 83 | 40 | 12 | 2.10      |  |
| FBN60B19D48  | 19           | 48            | 14×3.8                  | 10 | 126.0 | 115.739 | 83 | 40 | 12 | 2.10      |  |
| FBN60B19D50  | 19           | 50            | 14×3.8                  | 10 | 126.0 | 115.739 | 83 | 40 | 12 | 2.10      |  |
| FBN60B19D55  | 19           | 55            | 16×4.3                  | 12 | 126.0 | 115.739 | 83 | 40 | 12 | 2.10      |  |
| FBN60B20D19  | 20           | 19            | 6×2.8                   | 6  | 132.0 | 121.776 | 83 | 40 | 12 | 2.20      |  |
| FBN60B20D20  | 20           | 20            | 6×2.8                   | 6  | 132.0 | 121.776 | 83 | 40 | 12 | 2.20      |  |
| FBN60B20D22  | 20           | 22            | 6×2.8                   | 6  | 132.0 | 121.776 | 83 | 40 | 12 | 2.20      |  |
| FBN60B20D24  | 20           | 24            | 8×3.3                   | 8  | 132.0 | 121.776 | 83 | 40 | 12 | 2.20      |  |
| FBN60B20D25  | 20           | 25            | 8×3.3                   | 8  | 132.0 | 121.776 | 83 | 40 | 12 | 2.20      |  |
| FBN60B20D28  | 20           | 28            | 8×3.3                   | 8  | 132.0 | 121.776 | 83 | 40 | 12 | 2.20      |  |
| FBN60B20D30  | 20           | 30            | 8×3.3                   | 8  | 132.0 | 121.776 | 83 | 40 | 12 | 2.20      |  |
| FBN60B20D32  | 20           | 32            | 10×3.3                  | 8  | 132.0 | 121.776 | 83 | 40 | 12 | 2.20      |  |
| FBN60B20D35  | 20           | 35            | 10×3.3                  | 8  | 132.0 | 121.776 | 83 | 40 | 12 | 2.20      |  |
| FBN60B20D38  | 20           | 38            | 10×3.3                  | 8  | 132.0 | 121.776 | 83 | 40 | 12 | 2.20      |  |
| FBN60B20D40  | 20           | 40            | 12×3.3                  | 8  | 132.0 | 121.776 | 83 | 40 | 12 | 2.20      |  |
| FBN60B20D42  | 20           | 42            | 12×3.3                  | 8  | 132.0 | 121.776 | 83 | 40 | 12 | 2.20      |  |
| FBN60B20D45  | 20           | 45            | 14×3.8                  | 10 | 132.0 | 121.776 | 83 | 40 | 12 | 2.20      |  |
| FBN60B20D48  | 20           | 48            | 14×3.8                  | 10 | 132.0 | 121.776 | 83 | 40 | 12 | 2.20      |  |
| FBN60B20D50  | 20           | 50            | 14×3.8                  | 10 | 132.0 | 121.776 | 83 | 40 | 12 | 2.20      |  |
| FBN60B20D55  | 20           | 55            | 16×4.3                  | 12 | 132.0 | 121.776 | 83 | 40 | 12 | 2.20      |  |
| FBN60B21D20  | 21           | 20            | 6×2.8                   | 6  | 138.0 | 127.816 | 83 | 40 | 12 | 2.30      |  |
| FBN60B21D22  | 21           | 22            | 6×2.8                   | 6  | 138.0 | 127.816 | 83 | 40 | 12 | 2.30      |  |
| FBN60B21D24  | 21           | 24            | 8×3.3                   | 8  | 138.0 | 127.816 | 83 | 40 | 12 | 2.30      |  |
| FBN60B21D25  | 21           | 25            | 8×3.3                   | 8  | 138.0 | 127.816 | 83 | 40 | 12 | 2.30      |  |
| FBN60B21D28  | 21           | 28            | 8×3.3                   | 8  | 138.0 | 127.816 | 83 | 40 | 12 | 2.30      |  |
| FBN60B21D30  | 21           | 30            | 8×3.3                   | 8  | 138.0 | 127.816 | 83 | 40 | 12 | 2.30      |  |
| FBN60B21D32  | 21           | 32            | 10×3.3                  | 8  | 138.0 | 127.816 | 83 | 40 | 12 | 2.30      |  |
| FBN60B21D35  | 21           | 35            | 10×3.3                  | 8  | 138.0 | 127.816 | 83 | 40 | 12 | 2.30      |  |
| FBN60B21D38  | 21           | 38            | 10×3.3                  | 8  | 138.0 | 127.816 | 83 | 40 | 12 | 2.30      |  |
| FBN60B21D40  | 21           | 40            | 12×3.3                  | 8  | 138.0 | 127.816 | 83 | 40 | 12 | 2.30      |  |
| FBN60B21D42  | 21           | 42            | 12×3.3                  | 8  | 138.0 | 127.816 | 83 | 40 | 12 | 2.30      |  |
| FBN60B21D45  | 21           | 45            | 14×3.8                  | 10 | 138.0 | 127.816 | 83 | 40 | 12 | 2.30      |  |

\*M is a set screw. \* The seal set screws differ from the usual due to the boss type.

# FBN60B

## Order Product Code

**FBN60B20D20**

TYPE No. of Teeth  $\phi D^{H7}$   
Sprocket No.

- Chain .....No.60
- Chain Pitch .....(P) 19.05 mm
- Roller Link Inner Width .....(W) 12.70 mm
- Roller Outside Diameter .....(Dr) 11.91 mm
- Tooth Width .....(T) 11.7 mm



1 Sprockets with a ★ symbol for BD have a channel in the boss exterior.

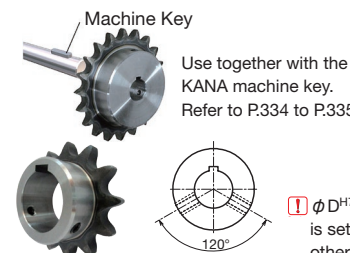
| No. of Teeth | S   | GD |
|--------------|-----|----|
| 9            |     | 32 |
| 10           | 8.0 | 37 |
| 11           |     | 45 |

**m** Carbon Structural Steel  
**h** High-frequency Hardened Teeth

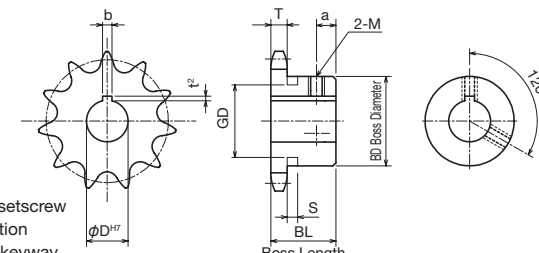
| TYPE         | FBN60B       |               |                         |    |       |         |    |    |    |           |
|--------------|--------------|---------------|-------------------------|----|-------|---------|----|----|----|-----------|
| Product Code | No. of Teeth | $\phi D^{H7}$ | Keyway b×t <sup>2</sup> | M  | Do    | Dp      | BD | BL | a  | Weight kg |
| FBN60B21D48  | 21           | 48            | 14×3.8                  | 10 | 138.0 | 127.816 | 83 | 40 | 12 | 2.30      |
| FBN60B21D50  | 21           | 50            | 14×3.8                  | 10 | 138.0 | 127.816 | 83 | 40 | 12 | 2.30      |
| FBN60B21D55  | 21           | 55            | 16×4.3                  | 12 | 138.0 | 127.816 | 83 | 40 | 12 | 2.30      |
| FBN60B22D20  | 22           | 20            | 6×2.8                   | 6  | 144.0 | 133.858 | 83 | 40 | 12 | 2.50      |
| FBN60B22D22  | 22           | 22            | 6×2.8                   | 6  | 144.0 | 133.858 | 83 | 40 | 12 | 2.50      |
| FBN60B22D24  | 22           | 24            | 8×3.3                   | 8  | 144.0 | 133.858 | 83 | 40 | 12 | 2.50      |
| FBN60B22D25  | 22           | 25            | 8×3.3                   | 8  | 144.0 | 133.858 | 83 | 40 | 12 | 2.50      |
| FBN60B22D28  | 22           | 28            | 8×3.3                   | 8  | 144.0 | 133.858 | 83 | 40 | 12 | 2.50      |
| FBN60B22D30  | 22           | 30            | 8×3.3                   | 8  | 144.0 | 133.858 | 83 | 40 | 12 | 2.50      |
| FBN60B22D32  | 22           | 32            | 10×3.3                  | 8  | 144.0 | 133.858 | 83 | 40 | 12 | 2.50      |
| FBN60B22D35  | 22           | 35            | 10×3.3                  | 8  | 144.0 | 133.858 | 83 | 40 | 12 | 2.50      |
| FBN60B22D38  | 22           | 38            | 10×3.3                  | 8  | 144.0 | 133.858 | 83 | 40 | 12 | 2.50      |
| FBN60B22D40  | 22           | 40            | 12×3.3                  | 8  | 144.0 | 133.858 | 83 | 40 | 12 | 2.50      |
| FBN60B22D42  | 22           | 42            | 12×3.3                  | 8  | 144.0 | 133.858 | 83 | 40 | 12 | 2.50      |
| FBN60B22D45  | 22           | 45            | 14×3.8                  | 10 | 144.0 | 133.858 | 83 | 40 | 12 | 2.50      |
| FBN60B22D48  | 22           | 48            | 14×3.8                  | 10 | 144.0 | 133.858 | 83 | 40 | 12 | 2.50      |
| FBN60B22D50  | 22           | 50            | 14×3.8                  | 10 | 144.0 | 133.858 | 83 | 40 | 12 | 2.50      |
| FBN60B22D55  | 22           | 55            | 16×4.3                  | 12 | 144.0 | 133.858 | 83 | 40 | 12 | 2.50      |
| FBN60B23D20  | 23           | 20            | 6×2.8                   | 6  | 150.0 | 139.902 | 83 | 40 | 12 | 2.50      |
| FBN60B23D22  | 23           | 22            | 6×2.8                   | 6  | 150.0 | 139.902 | 83 | 40 | 12 | 2.50      |
| FBN60B23D24  | 23           | 24            | 8×3.3                   | 8  | 150.0 | 139.902 | 83 | 40 | 12 | 2.50      |
| FBN60B23D25  | 23           | 25            | 8×3.3                   | 8  | 150.0 | 139.902 | 83 | 40 | 12 | 2.50      |
| FBN60B23D28  | 23           | 28            | 8×3.3                   | 8  | 150.0 | 139.902 | 83 | 40 | 12 | 2.50      |
| FBN60B23D30  | 23           | 30            | 8×3.3                   | 8  | 150.0 | 139.902 | 83 | 40 | 12 | 2.50      |
| FBN60B23D32  | 23           | 32            | 10×3.3                  | 8  | 150.0 | 139.902 | 83 | 40 | 12 | 2.50      |
| FBN60B23D35  | 23           | 35            | 10×3.3                  | 8  | 150.0 | 139.902 | 83 | 40 | 12 | 2.50      |
| FBN60B23D38  | 23           | 38            | 10×3.3                  | 8  | 150.0 | 139.902 | 83 | 40 | 12 | 2.50      |
| FBN60B23D40  | 23           | 40            | 12×3.3                  | 8  | 150.0 | 139.902 | 83 | 40 | 12 | 2.50      |
| FBN60B23D42  | 23           | 42            | 12×3.3                  | 8  | 150.0 | 139.902 | 83 | 40 | 12 | 2.50      |
| FBN60B23D45  | 23           | 45            | 14×3.8                  | 10 | 150.0 | 139.902 | 83 | 40 | 12 | 2.50      |
| FBN60B23D48  | 23           | 48            | 14×3.8                  | 10 | 150.0 | 139.902 | 83 | 40 | 12 | 2.50      |
| FBN60B23D50  | 23           | 50            | 14×3.8                  | 10 | 150.0 | 139.902 | 83 | 40 | 12 | 2.50      |
| FBN60B23D55  | 23           | 55            | 16×4.3                  | 12 | 150.0 | 139.902 | 83 | 40 | 12 | 2.50      |
| FBN60B24D20  | 24           | 20            | 6×2.8                   | 6  | 156.0 | 145.948 | 83 | 40 | 12 | 2.60      |
| FBN60B24D22  | 24           | 22            | 6×2.8                   | 6  | 156.0 | 145.948 | 83 | 40 | 12 | 2.60      |
| FBN60B24D24  | 24           | 24            | 8×3.3                   | 8  | 156.0 | 145.948 | 83 | 40 | 12 | 2.60      |
| FBN60B24D25  | 24           | 25            | 8×3.3                   | 8  | 156.0 | 145.948 | 83 | 40 | 12 | 2.60      |
| FBN60B24D28  | 24           | 28            | 8×3.3                   | 8  | 156.0 | 145.948 | 83 | 40 | 12 | 2.60      |
| FBN60B24D30  | 24           | 30            | 8×3.3                   | 8  | 156.0 | 145.948 | 83 | 40 | 12 | 2.60      |

\*M is a set screw. \* The seal set screws differ from the usual due to the boss type.

# FBN Finished Bore Sprocket New JIS Keyway Specification



1  $\phi D^{H7}$  mark setscrew is set at a location other than the keyway (figure at left).



| TYPE         | FBN60B       |               |                         |    |       |         |    |    |    |           |
|--------------|--------------|---------------|-------------------------|----|-------|---------|----|----|----|-----------|
| Product Code | No. of Teeth | $\phi D^{H7}$ | Keyway b×t <sup>2</sup> | M  | Do    | Dp      | BD | BL | a  | Weight kg |
| FBN60B24D32  | 24           | 32            | 10×3.3                  | 8  | 156.0 | 145.948 | 83 | 40 | 12 | 2.60      |
| FBN60B24D35  | 24           | 35            | 10×3.3                  | 8  | 156.0 | 145.948 | 83 | 40 | 12 | 2.60      |
| FBN60B24D38  | 24           | 38            | 10×3.3                  | 8  | 156.0 | 145.948 | 83 | 40 | 12 | 2.60      |
| FBN60B24D40  | 24           | 40            | 12×3.3                  | 8  | 156.0 | 145.948 | 83 | 40 | 12 | 2.60      |
| FBN60B24D42  | 24           | 42            | 12×3.3                  | 8  | 156.0 | 145.948 | 83 | 40 | 12 | 2.60      |
| FBN60B24D45  | 24           | 45            | 14×3.8                  | 10 | 156.0 | 145.948 | 83 | 40 | 12 | 2.60      |
| FBN60B24D48  | 24           | 48            | 14×3.8                  | 10 | 156.0 | 145.948 | 83 | 40 | 12 | 2.60      |
| FBN60B24D50  | 24           | 50            | 14×3.8                  | 10 | 156.0 | 145.948 | 83 | 40 | 12 | 2.60      |
| FBN60B24D55  | 24           | 55            | 16×4.3                  | 12 | 156.0 | 145.948 | 83 | 40 | 12 | 2.60      |
| FBN60B25D20  | 25           | 20            | 6×2.8                   | 6  | 162.0 | 151.995 | 83 | 40 | 12 | 2.70      |
| FBN60B25D22  | 25           | 22            | 6×2.8                   | 6  | 162.0 | 151.995 | 83 | 40 | 12 | 2.70      |
| FBN60B25D24  | 25           | 24            | 8×3.3                   | 8  | 162.0 | 151.995 | 83 | 40 | 12 | 2.70      |
| FBN60B25D25  | 25           | 25            | 8×3.3                   | 8  | 162.0 | 151.995 | 83 | 40 | 12 | 2.70      |
| FBN60B25D28  | 25           | 28            | 8×3.3                   | 8  | 162.0 | 151.995 | 83 | 40 | 12 | 2.70      |
| FBN60B25D30  | 25           | 30            | 8×3.3                   | 8  | 162.0 | 151.995 | 83 | 40 | 12 | 2.70      |
| FBN60B25D32  | 25           | 32            | 10×3.3                  | 8  | 162.0 | 151.995 | 83 | 40 | 12 | 2.70      |
| FBN60B25D35  | 25           | 35            | 10×3.3                  | 8  | 162.0 | 151.995 | 83 | 40 | 12 | 2.70      |
| FBN60B25D38  | 25           | 38            | 10×3.3                  | 8  | 162.0 | 151.995 | 83 | 40 | 12 | 2.70      |
| FBN60B25D40  | 25           | 40            | 12×3.3                  | 8  | 162.0 | 151.995 | 83 | 40 | 12 | 2.70      |
| FBN60B25D42  | 25           | 42            | 12×3.3                  | 8  | 162.0 | 151.995 | 83 | 40 | 12 | 2.70      |
| FBN60B25D45  | 25           | 45            | 14×3.8                  | 10 | 162.0 | 151.995 | 83 | 40 | 12 | 2.70      |
| FBN60B25D48  | 25           | 48            | 14×3.8                  | 10 | 162.0 | 151.995 | 83 | 40 | 12 | 2.70      |
| FBN60B25D50  | 25           | 50            | 14×3.8                  | 10 | 162.0 | 151.995 | 83 | 40 | 12 | 2.70      |
| FBN60B25D55  | 25           | 55            | 16×4.3                  | 12 | 162.0 | 151.995 | 83 | 40 | 12 | 2.70      |
| FBN60B26D20  | 26           | 20            | 6×2.8                   | 6  | 168.0 | 158.043 | 83 | 40 | 12 | 2.90      |
| FBN60B26D22  | 26           | 22            | 6×2.8                   | 6  | 168.0 | 158.043 | 83 | 40 | 12 | 2.90      |
| FBN60B26D24  | 26           | 24            | 8×3.3                   | 8  | 168.0 | 158.043 | 83 | 40 | 12 | 2.90      |
| FBN60B26D25  | 26           | 25            | 8×3.3                   | 8  | 168.0 | 158.043 | 83 | 40 | 12 | 2.90      |
| FBN60B26D28  | 26           | 28            | 8×3.3                   | 8  | 168.0 | 158.043 | 83 | 40 | 12 | 2.90      |
| FBN60B26D30  | 26           | 30            | 8×3.3                   | 8  | 168.0 | 158.043 | 83 | 40 | 12 | 2.90      |
| FBN60B26D32  | 26           | 32            | 10×3.3                  | 8  | 168.0 | 158.043 | 83 | 40 | 12 | 2.90      |
| FBN60B26D35  | 26           | 35            | 10×3.3                  | 8  | 168.0 | 158.043 | 83 | 40 | 12 | 2.90      |
| FBN60B26D38  | 26           | 38            | 10×3.3                  | 8  | 168.0 | 158.043 | 83 | 40 | 12 | 2.90      |
| FBN60B26D40  | 26           | 40            | 12×3.3                  | 8  | 168.0 | 158.043 | 83 | 40 | 12 | 2.90      |
| FBN60B26D42  | 26           | 42            | 12×3.3                  | 8  | 168.0 | 158.043 | 83 | 40 | 12 | 2.90      |
| FBN60B26D45  | 26           | 45            | 14×3.8                  | 10 | 168.0 | 158.043 | 83 | 40 | 12 | 2.90      |
| FBN60B26D48  | 26           | 48            | 14×3.8                  | 10 | 168.0 | 158.043 | 83 | 40 | 12 | 2.90      |
| FBN60B26D50  | 26           | 50            | 14×3.8                  | 10 | 168.0 | 158.043 | 83 | 40 | 12 | 2.90      |
| FBN60B26D55  | 26           | 55            | 16×4.3                  | 12 | 168.0 | 158.043 | 83 | 40 | 12 | 2.90      |

\*M is a set screw. \* The seal set screws differ from the usual due to the boss type.



# FBN60B

## Order Product Code

**FBN60B20D20**

TYPE No. of Teeth  $\phi D^{H7}$   
Sprocket No.

- Chain .....No.60
- Chain Pitch .....(P) 19.05 mm
- Roller Link Inner Width .....(W) 12.70 mm
- Roller Outside Diameter .....(Dr) 11.91 mm
- Tooth Width .....(T) 11.7 mm



1 Sprockets with a ★ symbol for BD have a channel in the boss exterior.

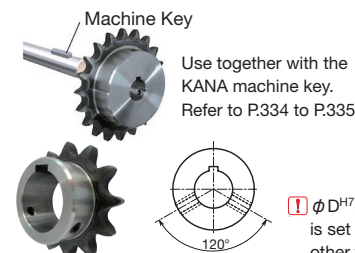
| No. of Teeth | S   | GD |
|--------------|-----|----|
| 9            |     | 32 |
| 10           | 8.0 | 37 |
| 11           |     | 45 |

- m Carbon Structural Steel
- h High-frequency Hardened Teeth

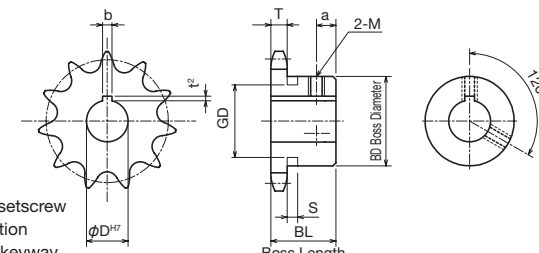
| TYPE         | FBN60B       |               |                         |    |       |         |    |    |    |           |
|--------------|--------------|---------------|-------------------------|----|-------|---------|----|----|----|-----------|
| Product Code | No. of Teeth | $\phi D^{H7}$ | Keyway b×t <sup>2</sup> | M  | Do    | Dp      | BD | BL | a  | Weight kg |
| FBN60B27D22  | 27           | 22            | 6×2.8                   | 6  | 174.0 | 164.093 | 83 | 40 | 12 | 3.00      |
| FBN60B27D24  | 27           | 24            | 8×3.3                   | 8  | 174.0 | 164.093 | 83 | 40 | 12 | 3.00      |
| FBN60B27D25  | 27           | 25            | 8×3.3                   | 8  | 174.0 | 164.093 | 83 | 40 | 12 | 3.00      |
| FBN60B27D28  | 27           | 28            | 8×3.3                   | 8  | 174.0 | 164.093 | 83 | 40 | 12 | 3.00      |
| FBN60B27D30  | 27           | 30            | 8×3.3                   | 8  | 174.0 | 164.093 | 83 | 40 | 12 | 3.00      |
| FBN60B27D32  | 27           | 32            | 10×3.3                  | 8  | 174.0 | 164.093 | 83 | 40 | 12 | 3.00      |
| FBN60B27D35  | 27           | 35            | 10×3.3                  | 8  | 174.0 | 164.093 | 83 | 40 | 12 | 3.00      |
| FBN60B27D38  | 27           | 38            | 10×3.3                  | 8  | 174.0 | 164.093 | 83 | 40 | 12 | 3.00      |
| FBN60B27D40  | 27           | 40            | 12×3.3                  | 8  | 174.0 | 164.093 | 83 | 40 | 12 | 3.00      |
| FBN60B27D42  | 27           | 42            | 12×3.3                  | 8  | 174.0 | 164.093 | 83 | 40 | 12 | 3.00      |
| FBN60B27D45  | 27           | 45            | 14×3.8                  | 10 | 174.0 | 164.093 | 83 | 40 | 12 | 3.00      |
| FBN60B27D48  | 27           | 48            | 14×3.8                  | 10 | 174.0 | 164.093 | 83 | 40 | 12 | 3.00      |
| FBN60B27D50  | 27           | 50            | 14×3.8                  | 10 | 174.0 | 164.093 | 83 | 40 | 12 | 3.00      |
| FBN60B28D22  | 28           | 22            | 6×2.8                   | 6  | 180.0 | 170.143 | 83 | 40 | 12 | 3.10      |
| FBN60B28D24  | 28           | 24            | 8×3.3                   | 8  | 180.0 | 170.143 | 83 | 40 | 12 | 3.10      |
| FBN60B28D25  | 28           | 25            | 8×3.3                   | 8  | 180.0 | 170.143 | 83 | 40 | 12 | 3.10      |
| FBN60B28D28  | 28           | 28            | 8×3.3                   | 8  | 180.0 | 170.143 | 83 | 40 | 12 | 3.10      |
| FBN60B28D30  | 28           | 30            | 8×3.3                   | 8  | 180.0 | 170.143 | 83 | 40 | 12 | 3.10      |
| FBN60B28D32  | 28           | 32            | 10×3.3                  | 8  | 180.0 | 170.143 | 83 | 40 | 12 | 3.10      |
| FBN60B28D35  | 28           | 35            | 10×3.3                  | 8  | 180.0 | 170.143 | 83 | 40 | 12 | 3.10      |
| FBN60B28D38  | 28           | 38            | 10×3.3                  | 8  | 180.0 | 170.143 | 83 | 40 | 12 | 3.10      |
| FBN60B28D40  | 28           | 40            | 12×3.3                  | 8  | 180.0 | 170.143 | 83 | 40 | 12 | 3.10      |
| FBN60B28D42  | 28           | 42            | 12×3.3                  | 8  | 180.0 | 170.143 | 83 | 40 | 12 | 3.10      |
| FBN60B28D45  | 28           | 45            | 14×3.8                  | 10 | 180.0 | 170.143 | 83 | 40 | 12 | 3.10      |
| FBN60B28D48  | 28           | 48            | 14×3.8                  | 10 | 180.0 | 170.143 | 83 | 40 | 12 | 3.10      |
| FBN60B28D50  | 28           | 50            | 14×3.8                  | 10 | 180.0 | 170.143 | 83 | 40 | 12 | 3.10      |
| FBN60B29D35  | 29           | 35            | 10×3.3                  | 8  | 187.0 | 176.195 | 83 | 40 | 12 | 3.30      |
| FBN60B30D22  | 30           | 22            | 6×2.8                   | 6  | 193.0 | 182.247 | 83 | 40 | 12 | 3.40      |
| FBN60B30D24  | 30           | 24            | 8×3.3                   | 8  | 193.0 | 182.247 | 83 | 40 | 12 | 3.40      |
| FBN60B30D25  | 30           | 25            | 8×3.3                   | 8  | 193.0 | 182.247 | 83 | 40 | 12 | 3.40      |
| FBN60B30D28  | 30           | 28            | 8×3.3                   | 8  | 193.0 | 182.247 | 83 | 40 | 12 | 3.40      |
| FBN60B30D30  | 30           | 30            | 8×3.3                   | 8  | 193.0 | 182.247 | 83 | 40 | 12 | 3.40      |
| FBN60B30D32  | 30           | 32            | 10×3.3                  | 8  | 193.0 | 182.247 | 83 | 40 | 12 | 3.40      |
| FBN60B30D35  | 30           | 35            | 10×3.3                  | 8  | 193.0 | 182.247 | 83 | 40 | 12 | 3.40      |
| FBN60B30D38  | 30           | 38            | 10×3.3                  | 8  | 193.0 | 182.247 | 83 | 40 | 12 | 3.40      |
| FBN60B30D40  | 30           | 40            | 12×3.3                  | 8  | 193.0 | 182.247 | 83 | 40 | 12 | 3.40      |
| FBN60B30D42  | 30           | 42            | 12×3.3                  | 8  | 193.0 | 182.247 | 83 | 40 | 12 | 3.40      |
| FBN60B30D45  | 30           | 45            | 14×3.8                  | 10 | 193.0 | 182.247 | 83 | 40 | 12 | 3.40      |

\*M is a set screw. \* The seal set screws differ from the usual due to the boss type.

## FBN Finished Bore Sprocket New JIS Keyway Specification



1  $\phi D^{H7}$  mark setscrew is set at a location other than the keyway (figure at left).



| TYPE         | FBN60B       |               |                         |    |       |         |    |    |    |           |
|--------------|--------------|---------------|-------------------------|----|-------|---------|----|----|----|-----------|
| Product Code | No. of Teeth | $\phi D^{H7}$ | Keyway b×t <sup>2</sup> | M  | Do    | Dp      | BD | BL | a  | Weight kg |
| FBN60B30D48  | 30           | 48            | 14×3.8                  | 10 | 193.0 | 182.247 | 83 | 40 | 12 | 3.40      |
| FBN60B30D50  | 30           | 50            | 14×3.8                  | 10 | 193.0 | 182.247 | 83 | 40 | 12 | 3.40      |
| FBN60B30D55  | 30           | 55            | 16×4.3                  | 12 | 193.0 | 182.247 | 83 | 40 | 12 | 3.40      |
| FBN60B31D40  | 31           | 40            | 12×3.3                  | 8  | 199.0 | 188.300 | 83 | 40 | 12 | 3.64      |
| FBN60B32D30  | 32           | 30            | 8×3.3                   | 8  | 205.0 | 194.354 | 83 | 40 | 12 | 3.80      |
| FBN60B32D32  | 32           | 32            | 10×3.3                  | 8  | 205.0 | 194.354 | 83 | 40 | 12 | 3.80      |
| FBN60B32D35  | 32           | 35            | 10×3.3                  | 8  | 205.0 | 194.354 | 83 | 40 | 12 | 3.80      |
| FBN60B32D40  | 32           | 40            | 12×3.3                  | 8  | 205.0 | 194.354 | 83 | 40 | 12 | 3.80      |
| FBN60B32D45  | 32           | 45            | 14×3.8                  | 10 | 205.0 | 194.354 | 83 | 40 | 12 | 3.80      |
| FBN60B32D50  | 32           | 50            | 14×3.8                  | 10 | 205.0 | 194.354 | 83 | 40 | 12 | 3.80      |
| FBN60B32D55  | 32           | 55            | 16×4.3                  | 12 | 205.0 | 194.354 | 83 | 40 | 12 | 3.80      |
| FBN60B33D35  | 33           | 35            | 10×3.3                  | 8  | 211.0 | 200.408 | 83 | 40 | 12 | 4.00      |
| FBN60B34D50  | 34           | 50            | 14×3.8                  | 10 | 217.0 | 206.463 | 83 | 40 | 12 | 4.15      |
| FBN60B35D30  | 35           | 30            | 8×3.3                   | 8  | 223.0 | 212.518 | 83 | 40 | 12 | 4.33      |
| FBN60B35D32  | 35           | 32            | 10×3.3                  | 8  | 223.0 | 212.518 | 83 | 40 | 12 | 4.33      |
| FBN60B35D35  | 35           | 35            | 10×3.3                  | 8  | 223.0 | 212.518 | 83 | 40 | 12 | 4.33      |
| FBN60B35D40  | 35           | 40            | 12×3.3                  | 8  | 223.0 | 212.518 | 83 | 40 | 12 | 4.33      |
| FBN60B35D45  | 35           | 45            | 14×3.8                  | 10 | 223.0 | 212.518 | 83 | 40 | 12 | 4.33      |
| FBN60B35D50  | 35           | 50            | 14×3.8                  | 10 | 223.0 | 212.518 | 83 | 40 | 12 | 4.33      |
| FBN60B35D55  | 35           | 55            | 16×4.3                  | 12 | 223.0 | 212.518 | 83 | 40 | 12 | 4.33      |
| FBN60B38D32  | 38           | 32            | 10×3.3                  | 8  | 241.0 | 230.687 | 83 | 40 | 12 | 4.90      |
| FBN60B38D35  | 38           | 35            | 10×3.3                  | 8  | 241.0 | 230.687 | 83 | 40 | 12 | 4.90      |
| FBN60B38D40  | 38           | 40            | 12×3.3                  | 8  | 241.0 | 230.687 | 83 | 40 | 12 | 4.90      |
| FBN60B38D45  | 38           | 45            | 14×3.8                  | 10 | 241.0 | 230.687 | 83 | 40 | 12 | 4.90      |
| FBN60B38D50  | 38           | 50            | 14×3.8                  | 10 | 241.0 | 230.687 | 83 | 40 | 12 | 4.90      |
| FBN60B38D55  | 38           | 55            | 16×4.3                  | 12 | 241.0 | 230.687 | 83 | 40 | 12 | 4.90      |
| FBN60B40D32  | 40           | 32            | 10×3.3                  | 8  | 253.0 | 242.802 | 83 | 40 | 12 | 5.30      |
| FBN60B40D35  | 40           | 35            | 10×3.3                  | 8  | 253.0 | 242.802 | 83 | 40 | 12 | 5.30      |
| FBN60B40D40  | 40           | 40            | 12×3.3                  | 8  | 253.0 | 242.802 | 83 | 40 | 12 | 5.30      |
| FBN60B40D45  | 40           | 45            | 14×3.8                  | 10 | 253.0 | 242.802 | 83 | 40 | 12 | 5.30      |
| FBN60B40D50  | 40           | 50            | 14×3.8                  | 10 | 253.0 | 242.802 | 83 | 40 | 12 | 5.30      |
| FBN60B40D55  | 40           | 55            | 16×4.3                  | 12 | 253.0 | 242.802 | 83 | 40 | 12 | 5.30      |
| FBN60B45D32  | 45           | 32            | 10×3.3                  | 8  | 284.0 | 273.093 | 93 | 45 | 12 | 7.10      |
| FBN60B45D35  | 45           | 35            | 10×3.3                  | 8  | 284.0 | 273.093 | 93 | 45 | 12 | 7.10      |
| FBN60B45D40  | 45           | 40            | 12×3.3                  | 8  | 284.0 | 273.093 | 93 | 45 | 12 | 7.10      |
| FBN60B45D45  | 45           | 45            | 14×3.8                  | 10 | 284.0 | 273.093 | 93 | 45 | 12 | 7.10      |
| FBN60B45D50  | 45           | 50            | 14×3.8                  | 10 | 284.0 | 273.093 | 93 | 45 | 12 | 7.10      |
| FBN60B45D55  | 45           | 55            | 16×4.3                  | 12 | 284.0 | 273.093 | 93 | 45 | 12 | 7.10      |

\*M is a set screw. \* The seal set screws differ from the usual due to the boss type.