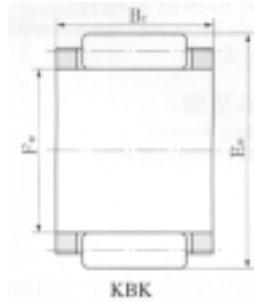


Needle Roller and Cage Assemblies
 For Piston Pin of Engine Connecting Rod
 KBK Series



| Shaft Diameter | Bearing Designation | Mass (g) | Boundary Dimensions | | | Basic Load Rating | |
|----------------|---------------------|----------|---------------------|----|------|-------------------|--------|
| | | | | | | Dynamic | Static |
| | KBK | (g) | Fw | Ew | Bc | Cr(N) | Cor(N) |
| 9 | KBK9x13x12.5 | 4.9 | 9 | 13 | 12.5 | 5100 | 5500 |
| 10 | KBK10x13x14.5 | 5.1 | 10 | 13 | 14.5 | 4600 | 6000 |
| | KBK10x14x13 | 5.9 | 10 | 14 | 13 | 5100 | 5800 |
| 12 | KBK12x15x13 | 4.6 | 12 | 15 | 13 | 4800 | 7000 |
| | KBK12x15x15 | 5.6 | 12 | 15 | 15 | 5100 | 7100 |
| | KBK12x15x17.5 | 6.5 | 12 | 15 | 17.5 | 6500 | 9900 |
| | KBK12x16x13 | 6.7 | 12 | 16 | 13 | 6100 | 7000 |
| | KBK12x16x16 | 8.5 | 12 | 16 | 16 | 6800 | 8900 |
| 13 | KBK13x17x14.5 | 7.1 | 13 | 17 | 14.5 | 7100 | 9500 |
| | KBK13x17x17.5 | 8.6 | 13 | 17 | 17.5 | 8600 | 11100 |
| 14 | KBK14x18x13 | 7.6 | 14 | 18 | 13 | 6200 | 8400 |
| | KBK14x18x14.5 | 8 | 14 | 18 | 14.5 | 6200 | 8400 |
| | KBK14x18x17 | 10.1 | 14 | 18 | 17 | 8500 | 11100 |
| | KBK14x18x21 | 10.8 | 14 | 18 | 21 | 11000 | 15000 |
| 15 | KBK15x19x20 | 12.9 | 15 | 19 | 20 | 10000 | 13500 |
| 16 | KBK16x20x20 | 13.5 | 16 | 20 | 20 | 10500 | 14000 |
| 18 | KBK18x22x22 | 17 | 18 | 22 | 22 | 12000 | 18500 |
| | KBK18x22x24 | 18.5 | 18 | 22 | 24 | 12500 | 21000 |
| | KBK18x22x25 | 19.2 | 18 | 22 | 25 | 12000 | 20000 |
| 20 | KBK20x24x30 | 22.1 | 20 | 24 | 30 | 13000 | 24000 |
| | KBK20x25x22 | 19.5 | 20 | 25 | 22 | 13600 | 21000 |