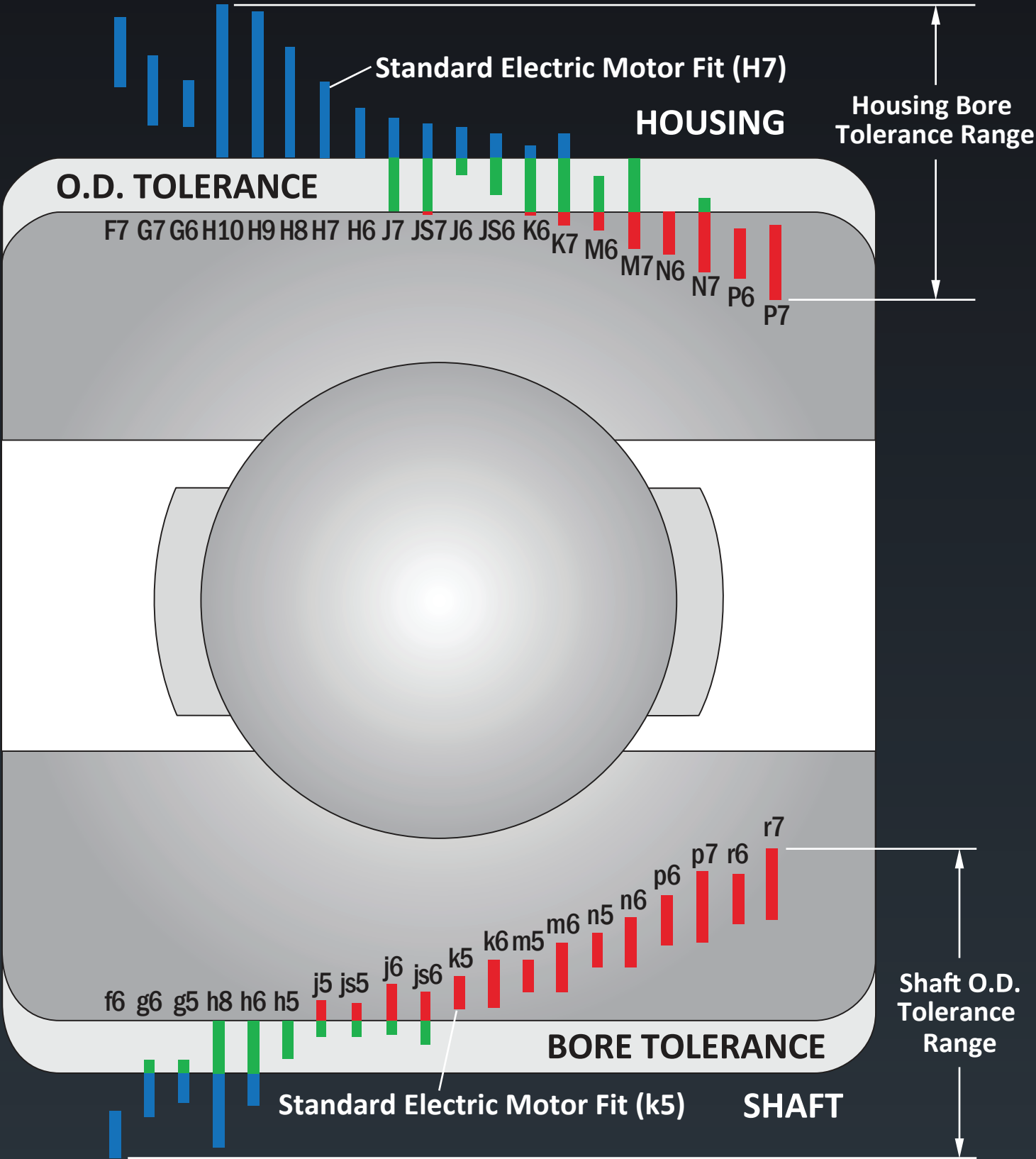


Shaft & Housing Fits

Red = Interference Green = Transition Blue = Clearance

| 6200 SERIES STANDARD ELECTRIC MOTOR FITS Shaft k5, Housing H7 | | | | |
|--|---------------------------|-----------|---------------------------|-----------|
| BEARING SIZE | SHAFT DIAMETER (ROTATING) | | HOUSING BORE (STATIONARY) | |
| | Max. (In) | Min. (In) | Max. (In) | Min. (In) |
| 6200 | .3940 | .3937 | 1.1819 | 1.1811 |
| 6201 | .4728 | .4725 | 1.2608 | 1.2598 |
| 6202 | .5909 | .5906 | 1.3789 | 1.3780 |
| 6203 | .6696 | .6693 | 1.5758 | 1.5748 |
| 6204 | .7878 | .7875 | 1.8514 | 1.8504 |
| 6205 | .9847 | .9843 | 2.0484 | 2.0472 |
| 6206 | 1.1815 | 1.1812 | 2.4421 | 2.4409 |
| 6207 | 1.3785 | 1.3780 | 2.8358 | 2.8346 |
| 6208 | 1.5753 | 1.5749 | 3.1508 | 3.1496 |
| 6209 | 1.7722 | 1.7717 | 3.3478 | 3.3465 |
| 6210 | 1.9690 | 1.9686 | 3.5447 | 3.5433 |
| 6211 | 2.1659 | 2.1654 | 3.9384 | 3.9370 |
| 6212 | 2.3628 | 2.3623 | 4.3321 | 4.3307 |
| 6213 | 2.5596 | 2.5591 | 4.7258 | 4.7244 |
| 6214 | 2.7565 | 2.7560 | 4.9228 | 4.9213 |
| 6215 | 2.9533 | 2.9528 | 5.1197 | 5.1181 |
| 6216 | 3.1502 | 3.1497 | 5.5134 | 5.5118 |
| 6217 | 3.3472 | 3.3466 | 5.9071 | 5.9055 |
| 6218 | 3.5440 | 3.5434 | 6.3008 | 6.2992 |
| 6219 | 3.7409 | 3.7403 | 6.6945 | 6.6929 |
| 6220 | 3.9377 | 3.9371 | 7.0882 | 7.0866 |



| 6300 SERIES STANDARD ELECTRIC MOTOR FITS Shaft k5, Housing H7 | | | | |
|--|---------------------------|-----------|---------------------------|-----------|
| BEARING SIZE | SHAFT DIAMETER (ROTATING) | | HOUSING BORE (STATIONARY) | |
| | Max. (In) | Min. (In) | Max. (In) | Min. (In) |
| 6300 | .3940 | .3937 | 1.3789 | 1.3780 |
| 6301 | .4728 | .4725 | 1.4577 | 1.4567 |
| 6302 | .5909 | .5906 | 1.6545 | 1.6535 |
| 6303 | .6696 | .6693 | 1.8514 | 1.8504 |
| 6304 | .7878 | .7875 | 2.0484 | 2.0472 |
| 6305 | .9847 | .9843 | 2.4421 | 2.4409 |
| 6306 | 1.1815 | 1.1812 | 2.8358 | 2.8346 |
| 6307 | 1.3785 | 1.3780 | 3.1508 | 3.1496 |
| 6308 | 1.5753 | 1.5749 | 3.5447 | 3.5433 |
| 6309 | 1.7722 | 1.7718 | 3.9384 | 3.9370 |
| 6310 | 1.9690 | 1.9686 | 4.3321 | 4.3307 |
| 6311 | 2.1659 | 2.1654 | 4.7258 | 4.7244 |
| 6312 | 2.3628 | 2.3623 | 5.1197 | 5.1181 |
| 6313 | 2.5596 | 2.5591 | 5.5134 | 5.5118 |
| 6314 | 2.7565 | 2.7560 | 5.9071 | 5.9055 |
| 6315 | 2.9533 | 2.9528 | 6.3008 | 6.2992 |
| 6316 | 3.1502 | 3.1497 | 6.6945 | 6.6929 |
| 6317 | 3.3472 | 3.3466 | 7.0882 | 7.0866 |
| 6318 | 3.5440 | 3.5434 | 7.4821 | 7.4803 |
| 6319 | 3.7409 | 3.7403 | 7.8758 | 7.8740 |
| 6320 | 3.9377 | 3.9371 | 8.4664 | 8.4646 |

| Operating Irregularities | | |
|---------------------------------------|--|--|
| Irregularities | Possible Causes | Corrective Action |
| NOISE | Abnormal load | Correction of fit, internal clearance, preload, position of housing shoulder |
| | Incorrect mounting | Correction of alignment of shaft and housing, accuracy of mounting method |
| | Insufficient or incorrect lubricant | Replenish lubricant or select correct lubricant |
| | Improper clearance | Replacement by low-noise bearings, reduction of bearing's internal clearance |
| | Skidding of balls | Adjustment of preload, reduction of bearing's internal clearance or adoption of softer grease |
| | Contact of rotating parts | Correction of labyrinth seal |
| | Flaws, corrosion or scratches on the raceways | Replacement of bearing, cleaning, improvement of seals, and usage of clean lubricant |
| | Brinelling | Replacement of bearing and careful handling thereafter |
| | Flaking in the raceways | Replacement of bearing |
| | Excessive clearance | Correction of fit, clearance and/or preload |
| Abnormal Temperature Rise | Intrusion of foreign particles | Replacement of bearing, cleaning, improvement of seals, or relubrication using clean lubricant |
| | Flaws or flaking on the ball surfaces | Replacement of bearing |
| | Excessive amount of lubricant | Reduce amount of lubricant, select stiffer grease |
| | Insufficient or incorrect lubricant | Replenish lubricant or select correct lubricant |
| | Abnormal load | Correction of fit, internal clearance, preload, position of housing shoulder |
| Vibration | Incorrect mounting | Correction of alignment of shaft and housing, accuracy of mounting, or mounting method |
| | Creep of fitted surfaces, excessive seal friction | Correct the seals, replacement of bearing, correction of fit or mounting |
| | Brinelling | Replacement of bearing and careful handling thereafter |
| | Flaking | Replacement of bearing |
| Leakage or Discoloration of Lubricant | Incorrect mounting | Correction of squareness between shaft and housing shoulder or side of spacer |
| | Intrusion of foreign particles | Replacement of bearing, cleaning, correction of seals |
| | Too much lubrication | Reduce amount of lubricant, select stiffer grease |
| | Penetration by foreign particles or other contaminants | Replace bearing or lubricant, clean housing and adjacent parts |