

| <u>Sound</u> | <u>Other Indicators</u> | <u>Causes</u> |
|-----------------------------|--|---|
| <i>Hiss</i> | Small Bearings | Raceway, ball or roller surfaces are rough |
| <i>Buzz to Roar</i> | Loudness and pitch change with speed | Resonation Poor fit Bearing rings deformed Vibration of raceways, balls or rollers Brinelling |
| <i>Crunch</i> | Felt when bearing is rotated by hand | Scoring of raceway surfaces Scoring of balls or rollers Dust/Contamination |
| <i>Hum</i> | Disappears when power supply is shut off | Electromagnetic sound of motor |
| <i>Clatter</i> | Noticeable at low speeds, continuous at high speeds | Bumping in cage pockets due to insufficient lubricant |
| <i>Screech/Howl</i> | Occurs mainly on Cylindrical Roller bearings Sound changes with speed. Goes away temporarily with lubrication. | Large radial clearance. Poor lubrication |
| <i>Squeak</i> | Metal to Metal spalling sound. High pitch | Small clearance. |
| <i>Squeal</i> | Generated irregularly due to grating | Slipping of fitting surfaces |
| <i>Rustle</i> | Sound quality remains the same even if speed changes | Dirt or raceways, ball or roller surfaces are rough |
| <i>Growl</i> | Continuous at high speeds | Scoring on raceway, balls or rollers |
| <i>Quiet fizz or pop</i> | Generated irregularly on small bearings | Bursting sound of bubbles in grease |
| <i>Large sound pressure</i> | Large sound pressure | Rough raceway, roller or ball surfaces Raceways, rollers or balls deformed by wear Large internal clearance due to wear |