Lubrication is of prime importance for roller chains, because it greatly influences its service life, especially in modern high-speed chain drives. Therefore, the use of highly efficient lubrication is required.

**Effect of Lubrication**
When lubricant is applied clearances among pin, bush and roller, oil film is formed to prevent wear on parts and serve as a cushion, and absorbs heat generated in chain.
Recommended lubricant is high-quality mineral oil.

**Recommended Lubricants**

| Lubrication method | A · B | | | | C | | | |
|---|---|---|---|---|---|---|---|---|
| Temp (℃) / KCM chain NO. | −10〜0 | 0〜40 | 40〜50 | 50〜60 | −10〜0 | 0〜40 | 40〜50 | 50〜60 |
| KCM25〜50 | SAE10W | SAE20W | SAE30 | SAE40 | SAE10W | SAE20W | SAE30 | SAE40 |
| KCM60〜80 | SAE20W | SAE30 | SAE40 | SAE50 | SAE10W | SAE20W | SAE30 | SAE40 |
| KCM100 | SAE20W | SAE30 | SAE40 | SAE50 | SAE20W | SAE30 | SAE40 | SAE50 |
| KCM120以上 | SAE30 | SAE40 | SAE50 | | SAE20W | SAE30 | SAE40 | SAE50 |

**Lubrication Methods (These also appear in Power Transmission Capacity tables)**

| Lubrication method | Illustration | Lubrication intervals and Lubricant amount | Remarks |
|---|---|---|---|
| A | Manual lubrication once a day  | Periodic lubrication using oil feeder or brush, at least on full roller | Feed lubricant to chain while turning it slowly. Here, continuously apply oil 3 to 4 times on full roller chain length. Also, take care that your hand or cloth is not caught by chain drive. At start of lubrication, be careful that excessive oil will not splash. |
| | Drip lubrication  | Supply oil at 5 to 30 oil drops per minute. | It is recommended to provide simple casing against oil splash. |
| B | Oil bath lubrication  | Chain is submerged in oil at depth of 10mm. | Be careful to completely clean inside oil container before use to remove foreign matter such as dirt. Also, pay attention to oil temperature. |
| | Rotating disc lubrication  | Rotating disc splashes oil on roller chain. Disc submerging depth is about 20mm, and its circumferential speed is 200m mim or higher. | |
| C | Forced circulation lubrication  oil pump | It is required to maintain proper oil amount to avoid overheating. | Be careful to completely clean inside oil container before use to remove foreign matter such as dirt. |