

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

When lubricant is applied to 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.

## Effect of Lubrication

### Recommended Lubricants

Lubrication method Temp (°C)	A · B				C			
	-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				
KCM100					SAE20W	SAE30	SAE40	SAE50
KCM120以上	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/min or higher.	
C	Forced circulation lubrication 	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.