



Installation and Maintenance Instructions for Models KK, KK-1K - KK-2K, KK-2GD, KK-2GD1K bore size 15-40 mm Clutch

Power Transmission Solutions
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FORM
 PS-740-0001
 4146-004E
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⚠ WARNING

- Read and follow all instructions carefully.
- Disconnect and lock-out power before installation and maintenance. Working on or near energized equipment can result in severe injury or death.
- Do not operate equipment without guards in place. Exposed equipment can result in severe injury or death.

⚠ CAUTION

- Periodic inspections should be performed. Failure to perform proper maintenance can result in premature product failure and personal injury.
- All electrical work should be performed by qualified personnel and compliant with local and national electrical codes.

A. Preinstallation

Position clutch so that overrunning direction is compatible to requirements of mechanism. Check shaft and bore of housing for correct dimensions to insure press fit on both I. D. and O. D. of clutch. (n 6 tolerance on shaft and N 6 for housing bore).

Model No.	Recommended shaft dia. (mm)*, (n6)	Recommended housing dia. (mm)*, (N6)
KK15/KK15-2GD	+0.023	-0.012
	+0.012	-0.028
KK17/KK17-2GD	+0.023	-0.012
	+0.012	-0.028
KK20/KK20-2GD	+0.028	-0.012
	+0.015	-0.028
KK25/KK25-2GD	+0.028	-0.014
	+0.015	-0.033
KK30/KK30-2GD	+0.028	-0.014
	+0.015	-0.033
KK35/KK35-2GD	+0.033	-0.014
	+0.017	-0.033
KK40/KK40-2GD	+0.033	-0.014
	+0.017	-0.033

*Note: To convert mm to inches, divide by 25.4

Model No.	Recommended shaft dia. (mm)*, (n6)	Recommended housing dia. (mm)*, (N6)			
		KK15-1K, KK15-2GD1K		KK15-2K	
KK15-1K/KK15-2K/ KK15-2GD1K	15	-0.008	-0.012	35	-0.002
		-0.028	-0.028	35	-0.018
KK17-1K/KK17-2K/ KK17-2GD1K	17	-0.008	-0.012	40	-0.002
		-0.028	-0.028	40	-0.018
KK20-1K/KK20-2K/ KK20-2GD1K	20	-0.010	-0.012	47	-0.003
		-0.031	-0.028	47	-0.022
KK25-1K/KK25-2K/ KK25-2GD1K	25	-0.010	-0.014	52	-0.003
		-0.031	-0.033	52	-0.022
KK30-1K/KK30-2K/ KK30-2GD1K	30	-0.010	-0.014	62	-0.003
		-0.031	-0.033	62	-0.022
KK35-1K/KK35-2K/ KK35-2GD1K	35	-0.012	-0.014	72	-0.006
		-0.037	-0.033	72	-0.025
KK40-1K/KK40-2K/ KK40-2GD1K	40	-0.012	-0.014	80	-0.006
		-0.037	-0.033	80	-0.025

*Note: To convert mm to inches, divide by 25.4

B. Installation

1. The arrow on the inner race indicates the direction of inner race engagement.
2. Install to the housing of sprocket, gear, etc.
 - For press fit types (KK, KK-1K, KK-2GD, KK-2GD1K); Press outer race
 - For keyed outer race type (KK-2K); Use the key provided to secure the housing and clutch, because the fit is neither press nor loose. Then, install ball bearing. Never use a setscrew on outer race to fix the key because it may deform the outer race.
3. Installation to shaft
 - For press fit types (KK, KK-2GD); Press housing (clutch is already installed) to the shaft by applying force to the inner race of clutch.
 - For keyed inner race types (KK-1K, KK-2K, KK-2GD1K); Use the key provided to install to the shaft.

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4. Key and keyway
 Standard key and keyway are DIN6885.3. However, the depth of inner keyways for KK25-1K, KK25-2K and KK25-2GD1K are 0.5mm shallower than standard. So, the depth of shaft keyway should be 0.5mm deeper. Standard inner race key and keyway for KK40-1K, KK40-2K and KK40-2GD1K are DIN6885.1.
5. When pressing clutch to the shaft and housing, do not press inner race or outer race separately but press them simultaneously.
6. Refer to the catalog for key dimensions.
7. The clutch is an integral assembly and cannot be taken apart for installation. As the torque is transmitted only by friction contact and the N 6 tolerance for housing bore could under some conditions produce slight clearance, the application of Loctite Bearing Mount is recommended. If use of adhesive is not possible, the outer race of the clutch can be locked into position by axial clamping.

CAUTION: Do not hammer on the clutch assembly during installation as damage to the ball races can occur. Particular care should always be taken to make sure that even pressure is applied only to the race with interference fit.

C. After Installation

1. Check clutch for smoothness of operation under overrunning condition.

D. Lubrication

1. The clutch is prelubricated with grease. If oil lubrication is required, wash out the clutch with mineral spirits or kerosene before installation.
2. The following lubricants are recommended:

Oil:

Multi-purpose automatic transmission fluid.

Grease:

+20°F to 125°F (max. ambient temp.). Use premium ball bearing grease NLGI #1, #2, or ISO 100 or equivalent.

Notice: Do not use lubricants of the EP Type (extreme pressure characteristics) or those containing slippery additives such as molybdenum disulfide and graphite.

E. Maintenance

1. Periodically inspect clutch for adequacy of lubrication.

Note: Consult Application Engineering at 1-800-626-2093 when applying this unit as a backstop to prevent reverse rotation of an induction motor.

F. General Information

1. Application Engineering: 1-800-626-2093.

CAUTION: Do not use the clutch above its torque or speed ratings. Do not attempt to take this clutch apart.

