Installation Instructions for the 6 1/2" to 12" ELSN Rotary Joint

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Introduction

Read all of the instructions before proceeding.

Refer to Kadant Johnson assembly drawing for part identification and to drawing A37640 for torque specifications. For easy identification, parts used in individual steps are often accompanied with their position in the assembly drawing [e.g. gasket (8B)]. Tighten all fasteners in a star pattern. Certified drawings are available upon request. Dimensions are for reference only and subject to change.



Safety

This safety symbol alerts you to risk of death or injury if the instructions are not followed. In all steps, death or injury may result if the machine is not de-energized, depressurized, cooled, and stopped. Death or injury may occur if the product is operated with a fluid type or at a pressure, temperature, or speed that do not meet its specifications. Death or injury may occur if heavy parts and pinch hazards are not handled properly. Follow your company's safety procedures.

Step 1

Remove existing equipment from the roll. Install the journal flange using a new gasket.





Step 2

Remove the head and flanged head (2 and 2A) from the rotary joint. Do not separate the two pieces. Remove the packing gland (10), cap screws (10A), and packing (35) from the rotary joint.



Important: Check that the horizontal pipe is straight and true to prevent excess wear and breakage.

Step 3

Slide the nipple flange (5) over the rotary joint nipple (4) with the taper facing out. Place the split wedges (55) into the recess of the nipple. Slide the nipple flange over the wedges.



Step 4

Place metal gasket (8Q) into the journal flange. Lift the rotary joint up, slide it over the horizontal pipe and into the journal flange. Secure to studs with nuts. An even gap of 1/8" to 3/16" (3 to 5 mm) should remain in between the journal flange and nipple flange.



Step 5

Reinstall the packing and packing gland. Secure with the cap screws and safety wire provided.



Step 6

Reattach the head/flanged head assembly and gasket.



Step 7

Connect piping to rotary joint using Kadant Johnson flexible metal hose.

Important: Refer to Flexible Hose Installation.

Recommended Minimum Hose Lengths			
Hose Diameter	Minimum Length		
4"	28" (700 mm)		
5"	30" (750mm)		
6"	33" (850mm)		
8"	36" (900mm)		
10"	40" (1000mm)		

Step 8

Install anti-rotation device.

Important: Refer to Anti Rotation Rod Installation.

Recommended Sizes for Anti- Rotation Rods			
Joint Size	Model Number	Rod Size Up To 250 psi (17 bar)	
6.50"	1050	1.25" 4140 Steel Bar	
8.75"	1150	2.38" 4140 Steel Bar	
10"	1200	1.75" 4140 Steel Bar	
12"	1400	2.50" 4140 Steel Bar	

Step 9

Check the rotary joint regularly to determine seal wear. Locate the shoulder on the nipple. As the seal ring wears, the shoulder will become more visible. Refer to the image and maximum seal wear table.

MAXIMUM SEAL RING WEAR			
Joint Size	Model Number	Seal Wear	
6.50"	1050	0.70" (18mm)	
8.75"	1150	0.75" (19 mm)	



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The Kadant Johnson Warranty

Kadant Johnson products are built to a high standard of quality. Performance is what you desire: that is what we provide. Kadant Johnson products are warranted against defects in materials and workmanship for a period of one year after the date of shipment. It is expressly understood and agreed that the limit of Kadant Johnson's liability shall, at Kadant Johnson's sole option, be the repair or resupply of a like quantity of non-defective product.

Kadant Johnson rotary joints and accessories could be subject to European Pressure Equipment Directive 2014/68/EU (PED). Modifications or changes to rotary joints and/or accessories are only permitted upon approval of Kadant Johnson. Only genuine Kadant parts and original accessories will ensure the safety of these assemblies. The use of other than original parts voids the warranty and will lead to forfeiture of the declaration of conformity and will invalidate any liability for damages cause thereby.