

ServoClass®-HSN Coupling

Installation Instructions For ServoClass®-HSN Couplings

The ServoClass-HSN coupling is a high performance coupling designed for precision motion control applications. To maintain precise concentricity, the coupling is assembled at the factory to precise tolerances using special fixtures.

As a result, the ServoClass-HSN Coupling is not intended to be disassembled or repaired in the field.

Note: Avoid using in environment where oil, acid, alkali, ozone, chemical agent, etc. are used. Use and storage in direct sunlight may shorten element service life. Protect elements appropriately.

Note: If installing on a shaft that is not round, please contact the factory.

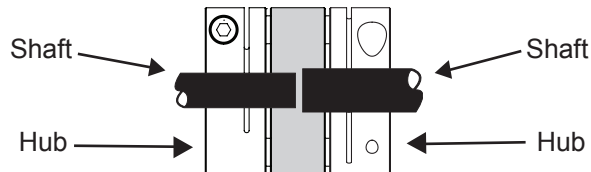
TOOLS REQUIRED

- Calibrated torque wrench
 - Hex socket set
 - Shaft alignment tools
 - Cleaning cloth
 - Caliper
- Align the drive shaft and the driven shaft before assembly; avoid excessive misalignment between the shafts when installing the coupling.
 - Examine shafts and clean if necessary. Shaft surface should be clean, free of lubricants, corrosion, burrs or galling, etc.
 - Loosen, but do not remove, the clamping screws on the coupling hubs.

Note: ServoClass-HSN hubs are designed to have a clearance fit with the shaft. Only apply light pressure to the hubs when installing as applying excessive force to the center element during installation may cause damage. If the hub does not slide easily onto the shaft, stop installation and check for burrs on the hub and shaft, then measure the hub bore and shaft diameter to verify there is clearance between them.

- Mount the ServoClass-HSN Coupling hub onto the driver shaft. It is recommended that you do not tighten the clamping screw at this point.

- Carefully slide the other shaft into the other hub of the Coupling. It is recommended that you do not tighten the clamping screw at this point.
- Confirm the alignment of the connected shafts by rotating and moving the coupling axially. If the coupling does not move freely, the shaft alignment needs to be improved.
- It is recommended that the shafts be in full contact with the entire length of the coupling hub. The shaft may extend into the interior of the coupling; however, the shaft (and keys, if used) must never touch or interface with the center element, opposite shaft or opposite hub. Transmittable torque may be compromised if shaft contact length is less than the length of the hub.



After positioning the coupling to the optimal shaft-hub engagement, tighten the clamp screws to the specified torque value (see table on page 2). A calibrated torque wrench is recommended for this operation.

The ServoClass-HSN Coupling is now ready for operation. Please contact the factory with any questions.

Note: Aligning the shafts as closely as possible at the time of initial installation will reduce noise and allow the coupling extra capacity for misalignments and loads which may occur during operation over the life of the connected equipment. Installing and operating coupling at higher misalignment is possible (see catalog ratings), but will generally reduce the life of the coupling. A laser alignment tool or dial indicator is recommended for the best shaft alignment. If not available, a straight edge and feeler gauges can be used.



Caution: Rotating equipment is potentially dangerous and should be properly guarded. It is the responsibility of the machine builder, user, or operator to follow all applicable safety codes and provide a suitable guard. Make sure the machine is “locked out” and cannot be accidentally started during installation or maintenance of coupling.

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Clamp Screw / Tightening Torque Table

Model	Clamp Screw Size	Tightening Torque	
		In. lb.	(Nm)
SN030R	M3.0	13	(1.5)
SN035R	M4.0	30	(3.4)
SN040R	M4.0	30	(3.4)
SN050R	M5.0	62	(7.0)

Note: Clamping screws are processed with solid lubrication. Applying adhesives, oil, or similar to the clamping screws is not necessary and can alter the clamping force - potentially damaging the clamping bolt and/or coupling. Anaerobic adhesives are not necessary and should be avoided as they can have adverse affects on the center element material.

Style of coupling is dependent on the size of the coupling and bore combination selected. Therefore, the coupling could be comprised of the hub combinations shown to the right.



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