

Danfoss

**FD83 Full
Flow Dual
Interlock
Couplings**



Danfoss FD83 Full Flow Dual Interlock Couplings Instruction Manual

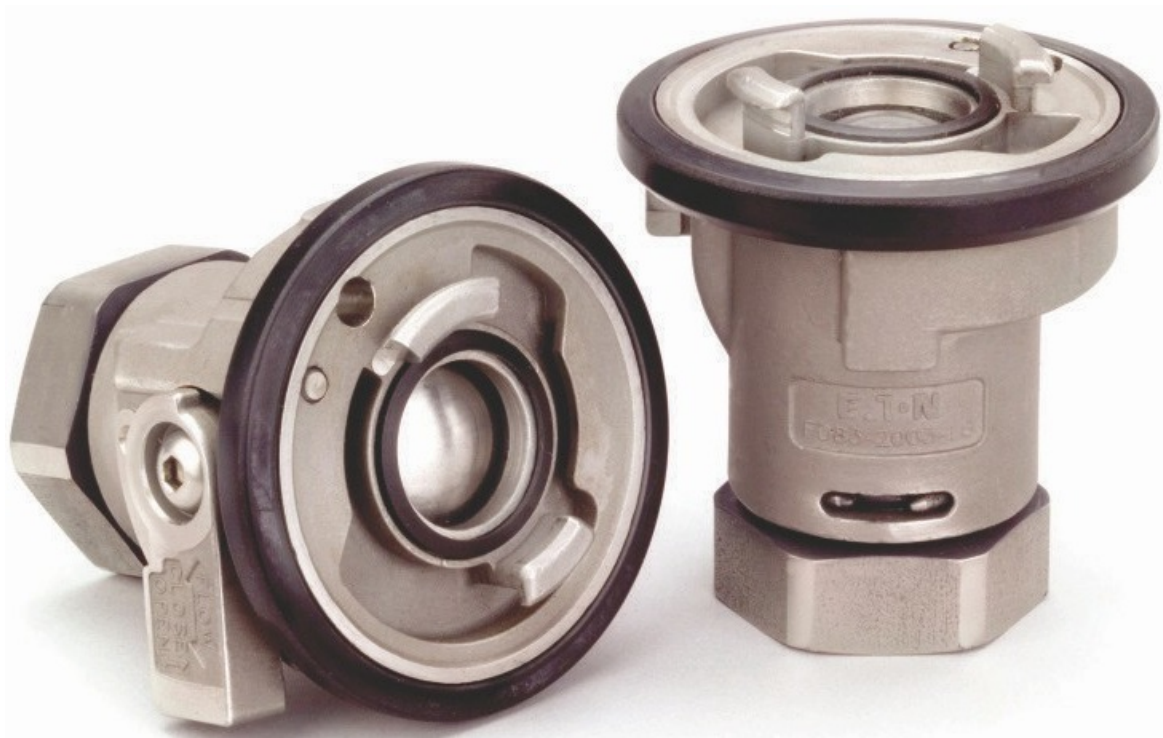
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Danfoss

Danfoss FD83 Full Flow Dual Interlock Couplings



Product Usage Instructions

Connecting Instructions

1. Align the lugs with the grooves on the mating coupling.
2. Push the parts together so the pins are compressed.
3. While continuing to push the parts together, twist the two couplings until the arrows align. The parts will click when fully engaged.
4. Compress the handle pin and twist it to open the 1st valve. Ensure proper valve sequence to prevent leaks.
5. Compress the handle pin and twist it to open the 2nd valve. Ensure proper valve sequence to prevent leaks.

Disconnecting Instructions

1. Close the handle on the same side as the flow direction first. Press the handle pin and twist until fully ejected.
2. Close the handle farthest from the flow direction last. Press the handle pin and twist until fully ejected.
3. Untwist the couplings until the lugs are free to disengage.
4. Pull the couplings apart.

Troubleshooting

- **Cannot connect couplings:** Apply lubricant to reduce friction between bodies.
- **Cannot rotate handle:** Manually push handle without activating pin to apply extra force.
- **Face seal replacement:** Do not re-assemble face seal if disassembled. Contact customer service for assistance.

FAQ

- **Q: Can I use any lubricant for troubleshooting?**

- **A:** Use FUCHS HP LUBE 09 or an equivalent lubricant. Do not use mineral-based lubricants.
- **Q: What should I do if the handle pins are not fully closed?**
 - **A:** Do not disconnect the couplings if the handle pins are not fully closed to prevent leaks. Ensure handle pins are fully ejected before disconnecting.

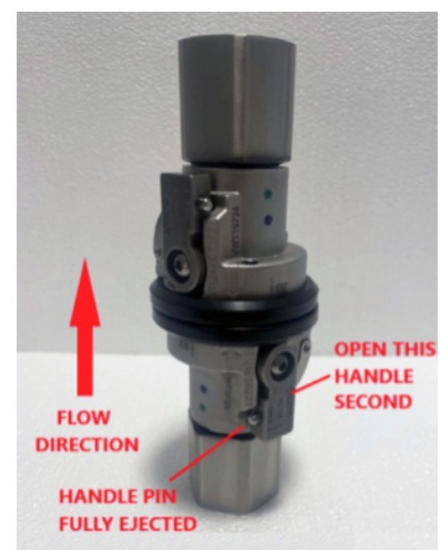
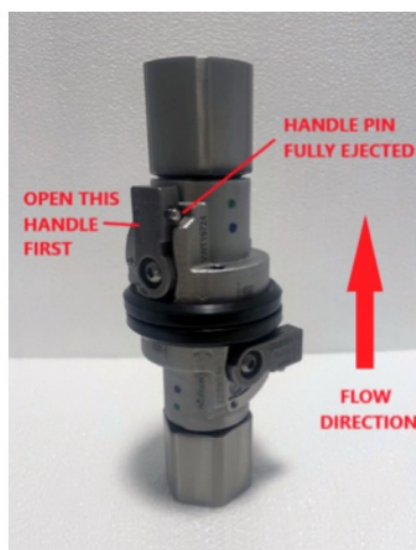
Connecting Instructions

Instructions for connecting a pair of FD83 Couplings.

1. Align the lugs with the grooves on the mating coupling.
2. Push the parts together so the pins are compressed.

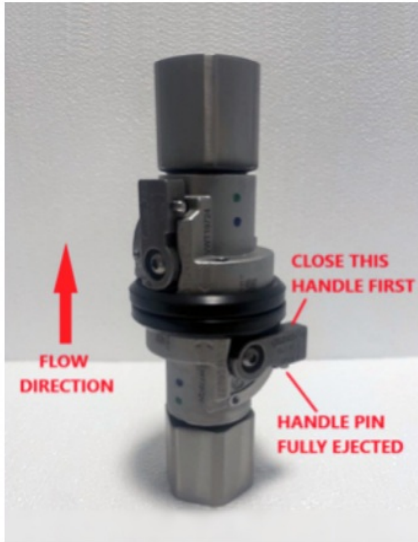


3. While continuing to push the parts together, twist the two couplings until the arrows align. The parts will “click” when fully engaged.
4. Compress the handle pin and twist it to open the 1st valve. The pin on the handle will fully eject when the valve is completely open. If there is pressure in the system, the coupling that the flow will reach last should be opened first.
5. Compress the handle pin and twist it to open the 2nd valve. The pin on the handle will fully eject when the valve is completely open. If there is pressure in the system, the coupling that the flow will reach first should be opened last.



Disconnecting Instructions

6. Close the handle that is on the same side as the flow direction first. Press the handle pin and twist the handle until the pin is fully ejected. If the pin is not fully ejected, the valve is still partially open and can leak if the couplings are disconnected.
7. Close the handle that is farthest from the flow direction last. Press the handle pin and twist the handle until the pin is fully ejected. If the pin is not fully ejected, the valve is still partially open and can leak if the couplings are disconnected.
8. Untwist the couplings until the lugs are free to disengage



9. Pull the couplings apart.



Note:

The couplings should not be disconnected if the handle pins are not fully closed with the handle pins fully ejected. If the couplings are disconnected with the handle partially open, it is possible for the valve to be opened and cause a leak.

Troubleshooting

Cannot connect couplings:

If the connection torque is too high (friction between bodies), faces can be lubricated as below. Use FUCHS HP LUBE 09 or equivalent (DO NOT USE mineral use based lubricants, or other product not compatible with EPDM material).



Area 1



Area 2



Area 3



Area 4

Cannot rotate handle while parts are connected and arrows are aligned:

After some time without use, grease used for lubrication can dry up and make first handle rotation difficult (ball valve is sticking on sealing). In that case:

1. Manually push the handle without activating the pin, to apply extra force. The handle will rotate at $\sim 1^\circ$, and the friction of ball valve will be reduced.
2. The handle can then be rotated per standard instructions



Face seal replacement

DO NOT re-assemble face seal (FD83-2121-32) if it is disassembled from its housing, for any reason (disassembly could damage sealing and create a leakage in the connected state). Assemble a new one (please contact customer service for further information), and lubricate it using FUCHS HP LUBE 09 or equivalent (DO NOT USE mineral use-based lubricants, or other product not compatible with EPDM material).

About

Danfoss Power Solutions

Danfoss Power Solutions is a global manufacturer and supplier of high-quality hydraulic and electric components. We specialize in providing state-of-the-art technology and solutions that excel in the harsh operating conditions of the mobile off-highway market as well as the marine sector. Building on our extensive application expertise, we work closely with you to ensure exceptional performance for a broad range of applications. We help you and other

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- Boston by Danfoss
- Danfoss Hansen
- Danfoss Waltech
- DCV directional control valves
- Electric converters
- Electric machines
- Electric motors
- Hydrostatic motors
- Hydrostatic pumps
- Orbital motors
- PLUS+1® controllers
- PLUS+1® displays and sensors
- PLUS+1® joysticks and pedals
- PLUS+1® operator interfaces
- PLUS+1® software services, support and training
- PLUS+1® software
- Position controls and sensors
- PVG proportional valves
- SEL by Danfoss
- Steering components and systems
- Synflex by Danfoss
- Telematics
- Weatherhead by Danfoss
- Winner by Danfoss

Go to www.danfoss.com for further product information.

Danfoss Power Solutions (US) Company

- 2800 East 13th Street
- Ames, IA 50010, USA
- Phone: +1 515 239 6000

Danfoss Power Solutions GmbH & Co. OHG

- Krokamp 35


- D-24539 Neumünster, Germany
- Phone: +49 4321 871 0
- Danfoss Power Solutions ApS
- Nordborgvej 81
- DK-6430 Nordborg, Denmark
- Phone: +45 7488 2222

Danfoss Power Solutions Trading (Shanghai) Co. Ltd.

- Building #22, No. 1000 Jin Hai Rd
- Jin Qiao, Pudong New District
- Shanghai, China 201206
- Phone: +86 21 3418 5200

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Documents / Resources

	<p>Danfoss FD83 Full Flow Dual Interlock Couplings [pdf] Instruction Manual FD83 Full Flow Dual Interlock Couplings, FD83, Full Flow Dual Interlock Couplings, Flow Dual Interlock Couplings, Dual Interlock Couplings, Interlock Couplings</p>
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References

- [Engineering Tomorrow | Danfoss](#)
- [User Manual](#)

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