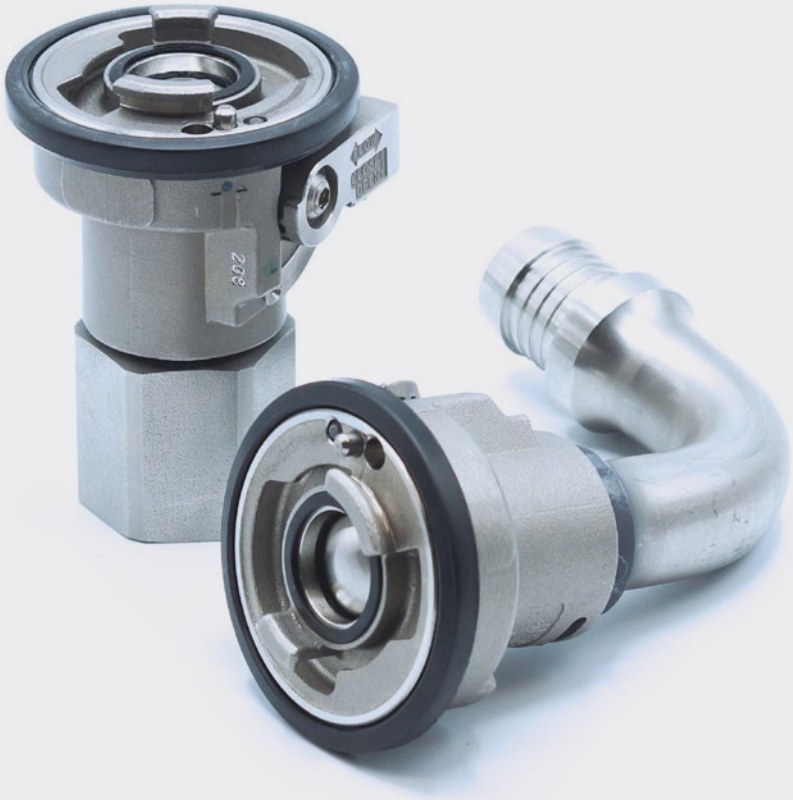
Fact sheet



Danfoss Hansen®
FD83 Series Coupling

Danfoss Hansen® FD83 Series Coupling

Danfoss Hansen´s FD83 coupling is designed for fluid transfer and electronics cooling applications where full flow, fluid compatibility and safety are essential.

The FD83 identical halves include two interlock features to eliminate spills and ensure maximum safety. Valves cannot be opened until the coupling halves are mated and coupling halves cannot be disconnected until both halves are closed.

Product Features

- Dual interlock safety feature eliminates accidental opening of coupling when disconnected with the use of a patented locking pin design and lever handle
- Design provides reliable performance and no spillage during maintenance or service
- Standard seal material: EPDM-P (Peroxide cured)
- Standard body material: 303 stainless steel
- Full flow coupling
- Identical coupling halves
- Maintenance and service friendly
- Passivated 303 stainless steel material provides broad fluid compatibility
- Wide range of terminal end options
- Operation temperature range: -3°C min (26.6°F), 60°C max (140°F)*
- All wetted o-rings/seals are qualified/ certified as per IEC/UL 62368-1 G.15.2.3

Physical characteristics

Couplin Size	Max operating pressure Connected		Disconnected Half				Min burst pressure Connected		Disconnected Half				Rated Flow		Fluid Loss	Cv Value
(in)	(bar)	(psi)	(bar)	(psi)	(bar)	(psi)	(bar)	(psi)	(bar)	(psi)	(bar)	(psi)	(lpm)	(gpm)	cc. max.	
1	10	150	10	150	10	150	20	300	20	300	20	300	189	50	5.0	30
2	10	150	10	150	10	150	20	300	20	300	20	300	800	211	12	127

Applications & Markets

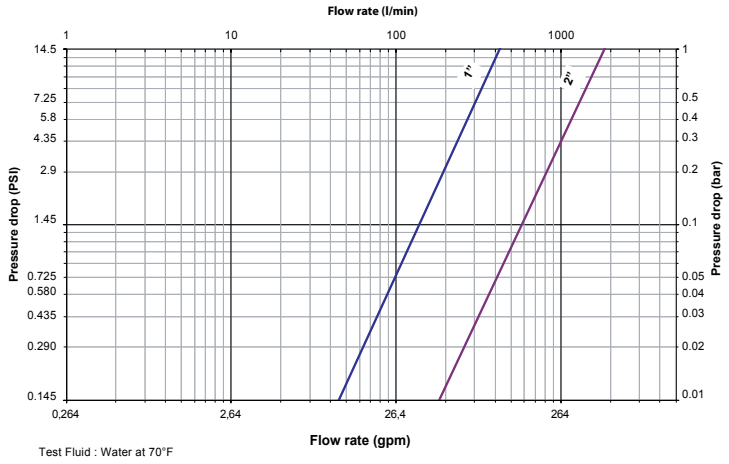
- Data Centers
- Thermal Management Systems
- Industrial Fluid Transfer
- Not intended for two-phase cooling

Seal Elastomer Data*

Seal Elastomer	Operation Temperature Range C°	F°
EPDM-P (Peroxide Cured)	-40C° to 150C°	-40F° to 302F°

*For reference only, based on Danfoss recommended temperatures.
Contact Danfoss technical support for further information on fluid compatibility.

Flow Data



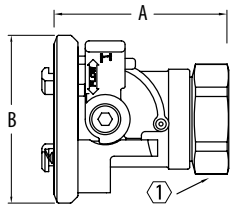


Figure 1

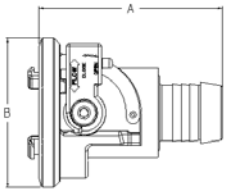


Figure 2

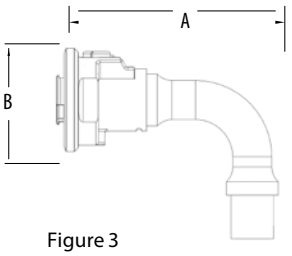


Figure 3

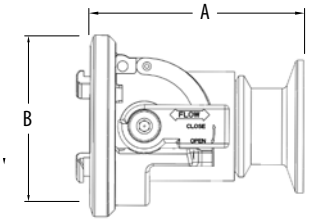


Figure 4

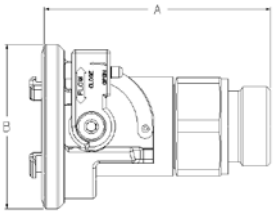


Figure 5

Dimensions

Part number	Order number	Body Size	Port Size	Thread	Type	Dimensions						
						Fig.	A		B		Hex	
						n°	(mm)	(in)	(mm)	(in)	(mm)	(in)
FD83-2052-16-16	FD83-2052-16-16	1	1	1-11-½	Female NPTF	1	95.5	3.76	71.6	2.82	41	1.63
FD83-2052-12-16	FD83-2052-12-16	1	¾	¾-14	Female NPTF	1	70.1	2.76	71.6	2.82	41	1.63
FD83-2046-16-16	FD83-2046-16-16	1	1	NA	1″ Hose Barb EHW194 hose	2	84.2	3.31	71.6	2.82	-	-
FD83-2092-16-16	FD83-2092-16-16	1	1	NA	1″ Hose Barb 90° EHW194 hose	3	125	4.92	71.6	2.82	-	-
FD83-2096-16-16	FD83-2096-16-16	1	1	1 5⁄16-12	Male ORB ISO 11926-3	5	95.5	3.76	71.6	2.82	41	1.63
FD83-2140-16-16	FD83-2140-16-16	1	1	G1-11	Male BSPP ISO 1179-3	5	95.5	3.76	71.6	2.82	41	1.63
FD83-2126-16-16	FD83-2126-16-16	1	1	G1-11	Female BSPP ISO 1179-1	1	84.3	3.32	71.6	2.82	41	1.63
FD83-2128-16-16	FD83-2128-16-16	1	1	NA	Sanitary Flange 1″-DIN32676/ISO2852	4	79.6	3.13	71.6	2.82	-	-
FD83-2126-32-32	FD83-2126-32-32	2	2	G2-11	Female BSPP ISO 1179-1	1	112.0	4.43	105.3	4.15	70	2.76
FD83-2046-32-32	11349026	2	2	NA	2″ Hose barb EHW194 hose	2	156.8	6.17	105.3	4.15	-	-
FD83-2046-24-32	11349477	2	1 ½	NA	1 1/2″ Hose Barb EHW194 hose	2	149.8	5.90	105.3	4.15	-	-
FD83-2046-20-32	11349492	2	1 ¼	NA	1 1/4″ Hose Barb EHW194 hose	2	141.6	5.57	105.3	4.15	-	-
FD83-2128-32-32	FD83-2128-32-32	2	2	NA	Sanitary Flange 2″-DIN32676/ISO2852	4	102.4	4.03	105.3	4.15	-	-
FD83-2052-32-32	FD83-2052-32-32	2	2	2-11-½	Female NPT	1	112.6	4.43	105.3	4.15	70	2.76

Other end connections available upon request.

Explore our solutions
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