

Fact sheet

Danfoss Hansen® Universal Quick Disconnect (UQD)

One partner, every solution



Danfoss Hansen UQD is designed for thermal management applications, available in 4 sizes and has 2 color options. It complies with OCP (Open Compute Project) and exceeds requirements of specified performance characteristics. Danfoss UQD offers color identification (red and blue) and guarantees 100% helium-leak testing.

Product Features

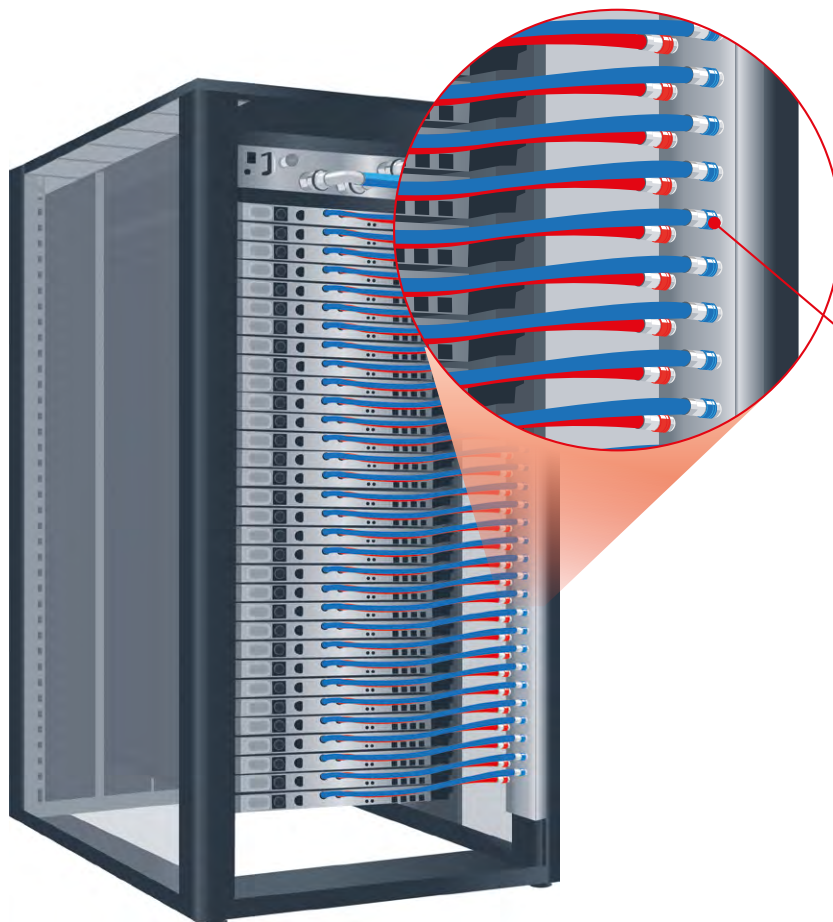
- Designed per OCP (Open Compute Project) UQD specification
- Push-to-connect design
- High flow and no spillage
- Double shut off - flat face valves
- Exceeds OCP flow ratings at least by 25% resulting in reduction in overall energy consumption
- Best in class force to connect
- Standard material: 303, 304 stainless steel provides broad fluid compatibility
- Standard seal material: EPDM
- Color anodized aluminum sleeves
- Color coded (red/blue) sleeves on socket and O-rings on plug
- Wide range of terminal end options: ORB, BSPP on plug and push on hose on socket. Additional configurations available upon request
- Operating temperature -40°C to +150°C
- Typical working pressure: 6.9 Bar, up to 20 bar for smaller sizes

Solutions to your **liquid cooling challenges**

Inner Rack Solutions

Danfoss' direct-to-chip cooling solutions extend into the racks through efficient routing of flexible, kink-free hoses, and leak free, helium-tested couplings.

Danfoss has a **comprehensive portfolio of premium fluid conveyance products** to meet your thermal management system needs.



UQD
Universal quick disconnect coupling

Designed for high flow rate and no spillage, the UQD coupling is perfect for in-rack applications with smaller hose lines.



Fact sheet | Danfoss Universal Quick Disconnect (UQD)

Size	Body Size	Nominal Flow Diameter	Max operating pressure						Min burst pressure						Rated Flow	Cv Value	Air Inclusion	Fluid Loss	
			Connected		Socket / Female Half		Plug / Male Half		Connected		Socket / Female Half		Plug / Male Half						
	(in)	(mm)	(bar)	(psi)	(bar)	(psi)	(bar)	(psi)	(bar)	(psi)	(bar)	(psi)	(bar)	(psi)	(lpm)	(gpm)	-	cc. max.	cc. max.
UQD02	1/8	2.8	20	290	20	290	20	290	60	870	60	870	60	870	2.1	0.6	0.33	0.004	0.007
UQD04	1/4	5.5	16	232	16	232	16	232	48	696	48	696	48	696	6.4	1.7	1.37	0.024	0.01
UQD06	3/8	6.3	6.9	100	6.9	100	6.9	100	20.7	300	20.7	300	20.7	300	11.4	3.0	2.37	0.027	0.022
UQD08	1/2	8.9	6.9	100	6.9	100	6.9	100	20.7	300	20.7	300	20.7	300	17.8	4.7	5.32	0.029	0.03

Size	Performance Parameters					
	Force to Connect		Recommended Torque			
	N	lb	ORB size	N-m	BSP Size	N-m
UQD02	48	10.79	7/16-20	11-12	1/8"	8-9
UQD04	50	11.24	9/16-18	18-20	3/8"	18-20
UQD06	73	16.41	3/4-16	52-57	3/8"	18-20
UQD08	87	19.56	7/8-14	58-64	1/2"	34-37

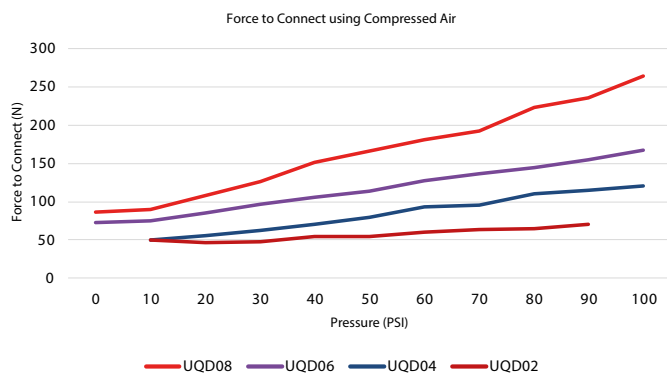
Applications & Markets

- Liquid cooling application
- Data center application

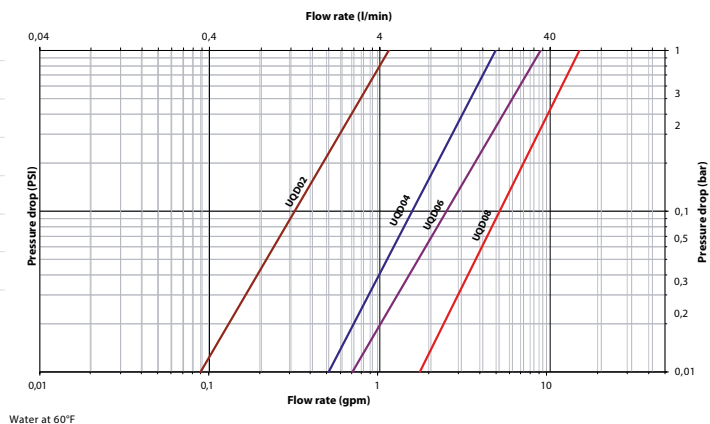
Seal Elastomer Data

Seal Elastomer	P/N Code	Operation Temperature Range	
		C°	F°
EPDM	-	-40°C +150°C	-40°F +302°F

Force to Connect Vs Pressure



Flow Data



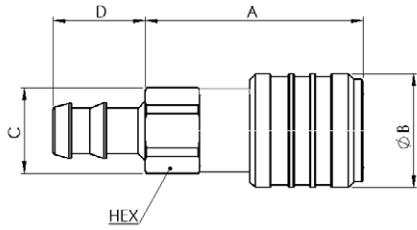


Figure 1

Push on socketless fitting

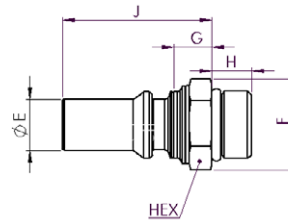


Figure 2

Male ORB ISO 11926-3

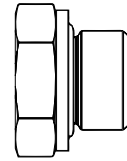


Figure 3

ISO 1179-3

UQD	Part number	Details		Dimensions									
		Thread / end size	Fig.	A		B		C		D		Hex	
		Hose Tail	n°	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)
UQD02	2UQS25HABL* 2UQS25HARD*	1/4	1	46.2	1.82	23	0.91	15.5	0.61	19	0.75	14	0.55
UQD04	4UQS37HABL* 4UQS37HARD*	3/8	1	60.7	2.39	28.7	1.13	20	0.79	22	0.87	18	0.71
UQD06	6UQS50HABL* 6UQS50HARD*	1/2	1	61.1	2.41	31.7	1.25	24	0.94	25.8	1.02	22	0.87
UQD08	8UQS62HABL 8UQS62HARD	5/8	1	68.4	2.69	35	1.38	30	1.18	39	1.54	27	1.06

Note 1: To obtain connected length of coupling, add dimensions A (Fig. 1) and G (Fig. 2) together.

Note 2: For color options, RD suffix corresponds to RED and BL suffix to BLUE

*For EMEA, China and APAC region UQD02, UQD04 and UQD06 need to be ordered with Prefix "ML" (eg. ML2UQP43ORMBL)

UQD	Part number	Details			Dimensions											
		Thread / end size	Fig.	n°	E		F		G		H		J		Hex	
		BSP	ORB		(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)		
UQD02	2UQP43ORMBL* 2UQP43ORMRD*	-	7/16-20	2	6.65	0.26	16.17	0.64	8.7	0.34	9.1	0.36	29.3	1.15	14	0.55
	ML2UQP12MBSBL ML2UQP12MBSRD	1/8	-	3	6.65	0.26	17.32	0.68	8.7	0.34	8	0.31	30.4	1.20	15	0.59
UQD04	4UQP56ORMBL* 4UQP56ORMRD*	-	9/16-18	2	11.07	0.44	19.63	0.77	9.8	0.39	9.9	0.39	37.9	1.49	17	0.67
	ML4UQP37MBSBL ML4UQP37MBSRD	3/8	-	3	11.07	0.44	25.40	1.00	9.8	0.39	11.2	0.44	37.9	1.49	22	0.87
UQD06	6UQP75ORMBL* 6UQP75ORMRD*	-	3/4-16	2	14.3	0.56	25.40	1.00	10	0.39	11.1	0.44	41.6	1.64	22	0.87
	ML6UQP37MBSBL ML6UQP37MBSRD	3/8	-	3	14.3	0.56	25.40	1.00	10	0.39	11.2	0.44	41.6	1.64	22	0.87
UQD08	8UQP87ORMBL 8UQP87ORMRD	-	7/8-14	2	17.48	0.69	31.18	1.23	12	0.47	12.7	0.50	47.6	1.87	27	1.06
	8UQP50MBSBL 8UQP50MBSRD	1/2	-	3	17.48	0.69	34.64	1.36	12	0.47	14.5	0.57	47.6	1.87	30	1.18

Note 1: To obtain connected length of coupling, add dimensions A (Fig. 1) and G (Fig. 2) together.

Note 2: For color options, RD suffix corresponds to RED and BL suffix to BLUE

*For EMEA, China and APAC region UQD02, UQD04 and UQD06 need to be ordered with Prefix "ML" (eg. ML2UQP43ORMBL).

Danfoss can accept no responsibility for possible errors in catalogs, brochures, and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequent changes being necessary in specifications already agreed. All trademarks in this material are the property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.