

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

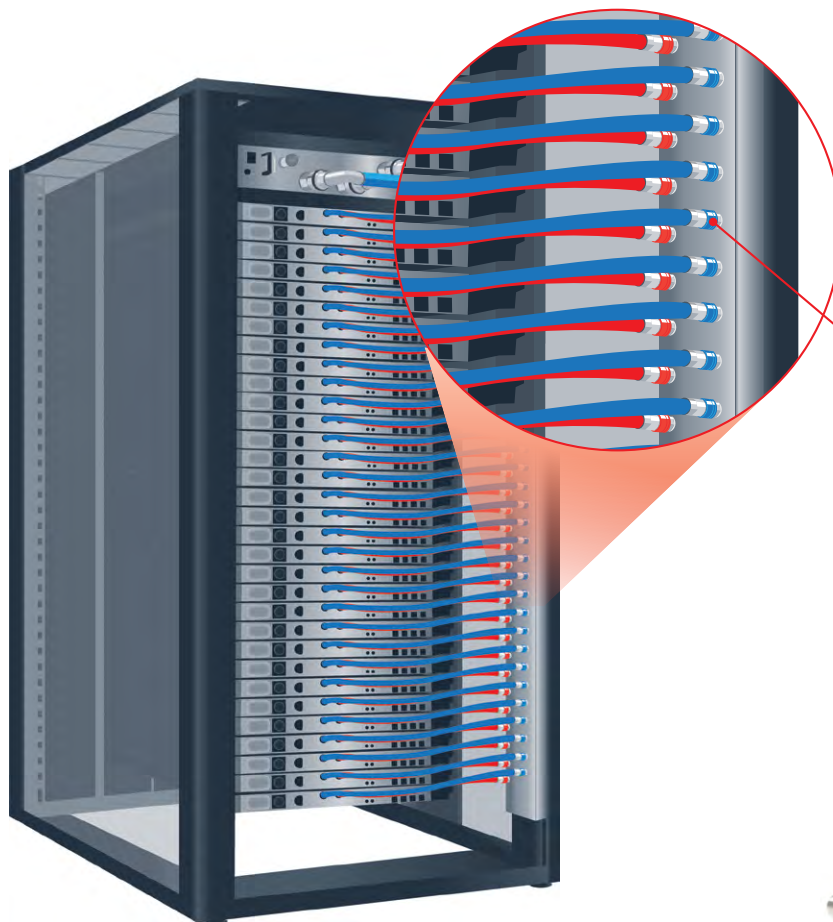
- Designed per OCP (Open Compute Project) UQD specification
- Push-to-connect design
- High flow and no spillage
- Double shut off - flat face valves
- Exceeds OCP flow ratings at least by 25% resulting in reduction in overall energy consumption
- Best in class force to connect
- Standard material: 303 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.



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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		lpm	gpm					
	(in)	(mm)	(bar)	(psi)	(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	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

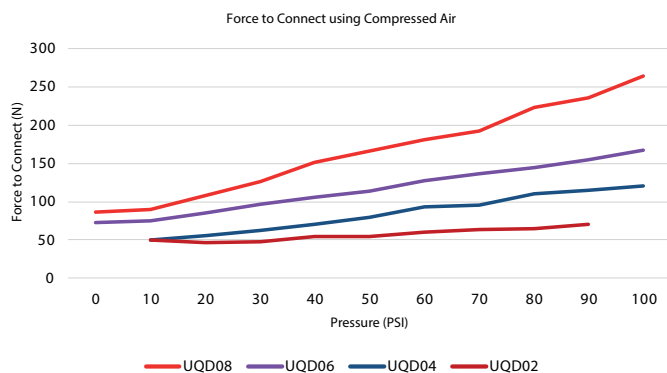
Applications & Markets

- Liquid cooling application
- Data center application

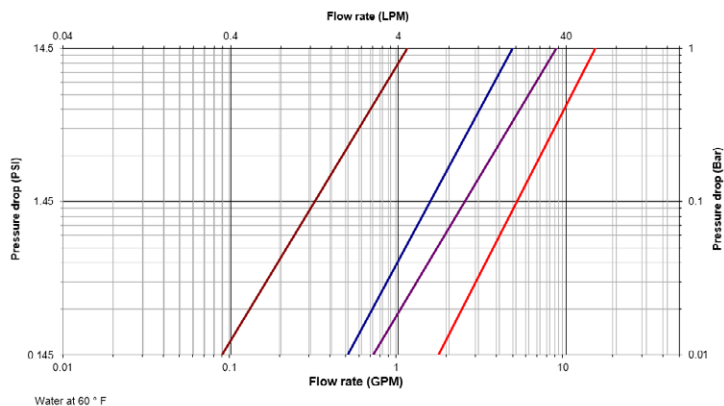
Seal Elastomer Data

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



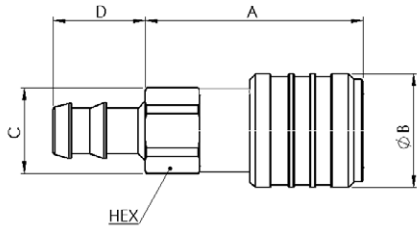


Figure 1

Push on socketless fitting

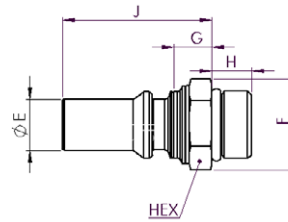


Figure 2

Male ORB ISO 11926-3

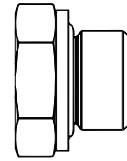


Figure 3

ISO 1179-3

UQD	Part number	Details		Dimensions									
		Thread / end size		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	4UQS37HABL11 4UQS37HARD11	3/8	1	49.5	1.95	24.6	0.97	9	0.36	23.7	0.93	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

UQD	Part number	Details			Dimensions											
		Thread / end size		Fig.	E		F		G		H		J		Hex	
		BSP	ORB	n°	(mm)	(in)	(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
	2UQP12MBSBL 2UQP12MBSRD	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
	4UQP37MBSBL 4UQP37MBSRD	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
	6UQP37MBSBL 6UQP37MBSRD	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

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