ENGINEERING
TOMORROW

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

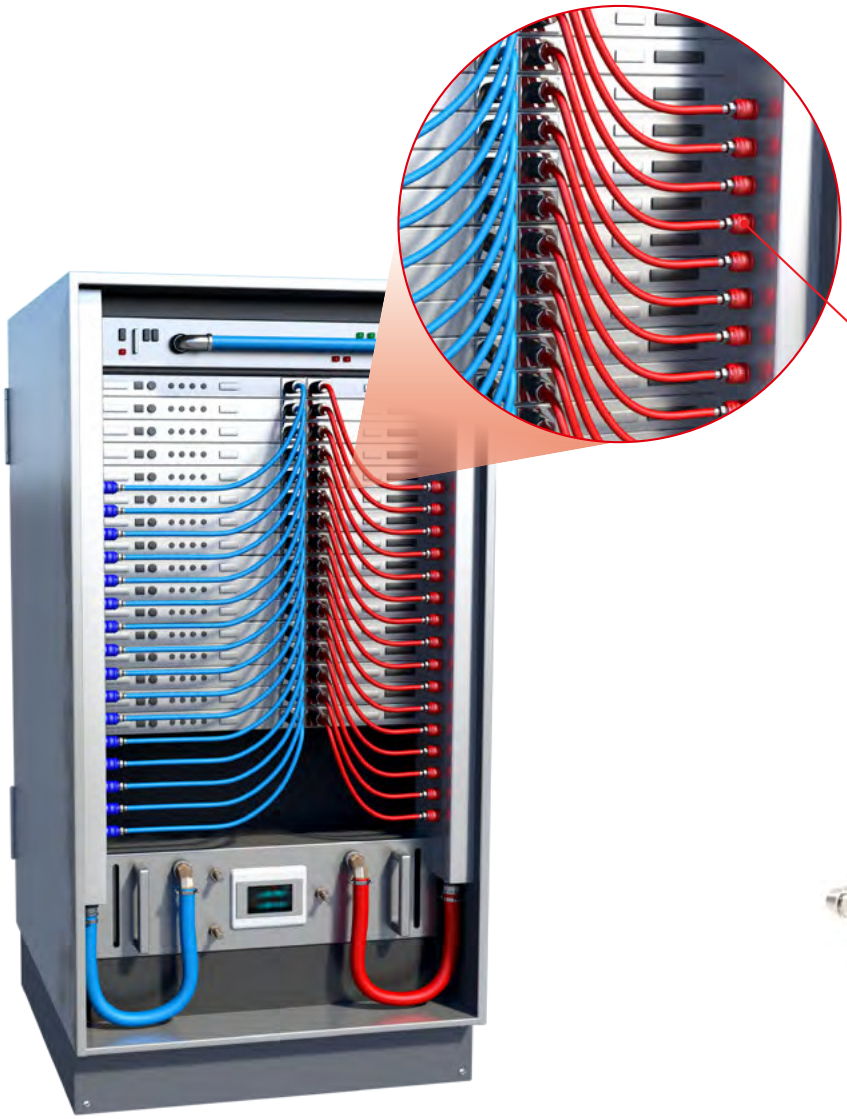
- Designed per OCP (Open Compute Project) UQD specification
- Push-to-connect design
- High flow and no spillage
- Double shut off - flat face valves
- Exceeds OCP flow ratings at least by 25% resulting in reduction in overall energy consumption
- Best in class force to connect
- Standard material: 303 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
- Compact socket versions for sizes -02, -04, -06 to better fit in data center applications
- 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
- QR code identification to help track parts

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.

Size	Body Size	Nominal Flow Dia-meter	Max operating pressure						Min burst pressure						Rated Flow*		Cv Value	Air Inclu-sion	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	3.16	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	6.3	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	7.9	6.9	100	6.9	100	6.9	100	20.7	300	20.7	300	20.7	300	11.4	3.0	2.34	0.011	0.016
UQD08	1/2	10	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

* Defined per OCP specifications, Rated Flow is the reference flow rate used to measure pressure drop and determine the published Cv (flow coefficient)

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

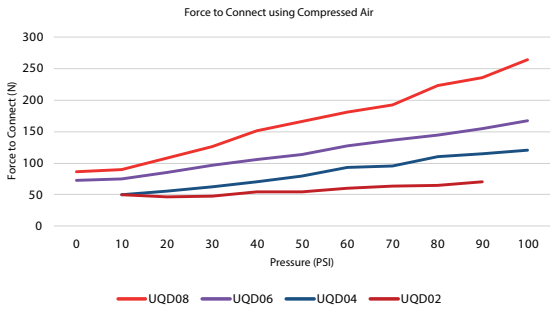
Applications & Markets

- Liquid cooling application
- Data center application

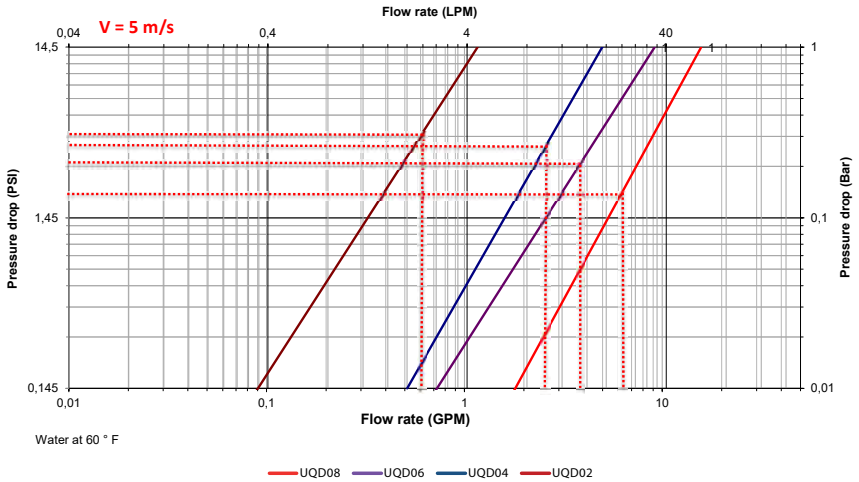
Seal Elastomer Data

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



Size	Flow at 5m/s (lpm)	Flow at 5 m/s (gpm)
UQD02	2.4	0.62
UQD04	9.4	2.5
UQD06	14.7	3.9
UQD08	23.6	6.2

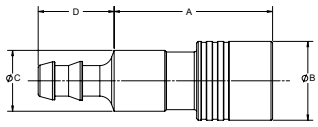


Figure 1
Push on socketless fitting

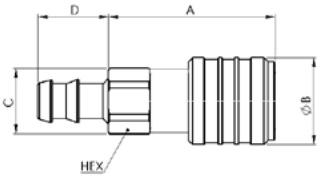


Figure 2
Push on socketless fitting

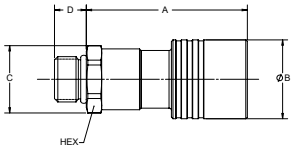


Figure 3
Male ORB

Socket (Female) part

UQD	Part number	Order number	Details			Dimensions									
			Thread / end size		Fig.	A		B		C		D		Hex	
			Hose Tail	ORB	n°	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)
UQD02	2UQS25HABLS11 2UQS25HARDS11	2UQS25HABLS11 2UQS25HARDS11	1/4	–	1	38.4	1.51	18.5	0.73	14.0	0.55	19.1	0.75	-	-
UQD04	4UQS37HABLS11 4UQS37HARDS11	4UQS37HABLS11 4UQS37HARDS11	3/8	–	1	49.5	1.95	24.6	0.97	19.0	0.75	23.7	0.93	-	-
	4UQS25HABLS11 4UQS25HARDS11	4UQS25HABLS11 4UQS25HARDS11	1/4	–	1	51.2	2.01	24.6	0.97	19.0	0.75	22	0.87	-	-
	4UQS56ORMBLS11 4UQS56ORMRDS11	4UQS56ORMBLS11 4UQS56ORMRDS11	–	9/16	3	50.3	1.98	24.6	0.97	21	0.83	9.9	0.39	19	0.75
UQD06	6UQS50HABLS11 6UQS50HARDS11	6UQS50HABLS11 6UQS50HARDS11	1/2	–	1	52.3	2.06	27.8	1.10	23	0.9	25.8	1.01	-	-
	6UQS75ORMBLS11 6UQS75ORMRDS11	11348377 11348376	–	3/4	3	52.5	2.06	27.9	1.09	22	0.87	11.1	0.44	22	0.86
UQD08	8UQS62HABL 8UQS62HARD	8UQS62HABL 8UQS62HARD	5/8	–	2	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

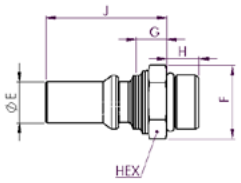


Figure 4
Male ORB ISO 11926-3

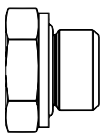


Figure 5
ISO 1179-3

Plug (Male) part

UQD	Part number	Order 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	2UQP43ORMBL 2UQP43ORMRD	-	7/16-20	4	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	2UQP12MBSBL 2UQP12MBSRD	1/8	-	5	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	4UQP56ORMBL 4UQP56ORMRD	-	9/16-18	4	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	4UQP37MBSBL 4UQP37MBSRD	3/8	-	5	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	6UQP75ORMBL 6UQP75ORMRD	-	3/4-16	4	14.3	0.56	25.40	1.00	10	0.39	11.1	0.44	41.6	1.64	22	0.87
	6UQP37MBSBL 6UQP37MBSRD	6UQP37MBSBL 6UQP37MBSRD	3/8	-	5	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	8UQP87ORMBL 8UQP87ORMRD	-	7/8-14	4	17.48	0.69	31.18	1.23	12	0.47	12.7	0.50	47.6	1.87	27	1.06
	8UQP50MBSBL 8UQP50MBSRD	8UQP50MBSBL 8UQP50MBSRD	1/2	-	5	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