

Fact sheet

Danfoss Hansen® Universal Quick Disconnect Blind-Mate (UQDB)

One partner, every solution



Danfoss Hansen **Universal Quick Disconnect Blind-Mate (UQDB)** has been designed with OCP (Open Compute Project) community to set industry standard for thermal management application in data centers.

This quick disconnect coupling is available in 4 different sizes (as the UQD: -02/-04/-06/-08) and complies with OCP specification requirements.

Danfoss UQDB offers a self-alignment feature to help connect in location with limited access or visibility and guarantees 100% helium-leak testing on every coupling.

Product Features

- Designed per OCP UQDB specifications
- "Blind-connection" thanks to self- alignment feature with radial compensation of 1 mm
- Push-to-connect design
- Direct connection between servers and manifolds
- High flow and reduced pressure drop for an improved system efficiency
- Flat-face dry break design to avoid spillage during connection/ disconnection
- Sizes available: -02/-04/-06/-08*
- High reliability and 100% helium-leak tested
- Standard material: 303 stainless steel for excellent corrosion resistance
- Standard seal material: EPDM for excellent fluid compatibility
- Terminal ends are ORB
- Operating temperature: up to +100°C
- Working pressure: min. 10 bar
- QR code marking to help identify and track production parts

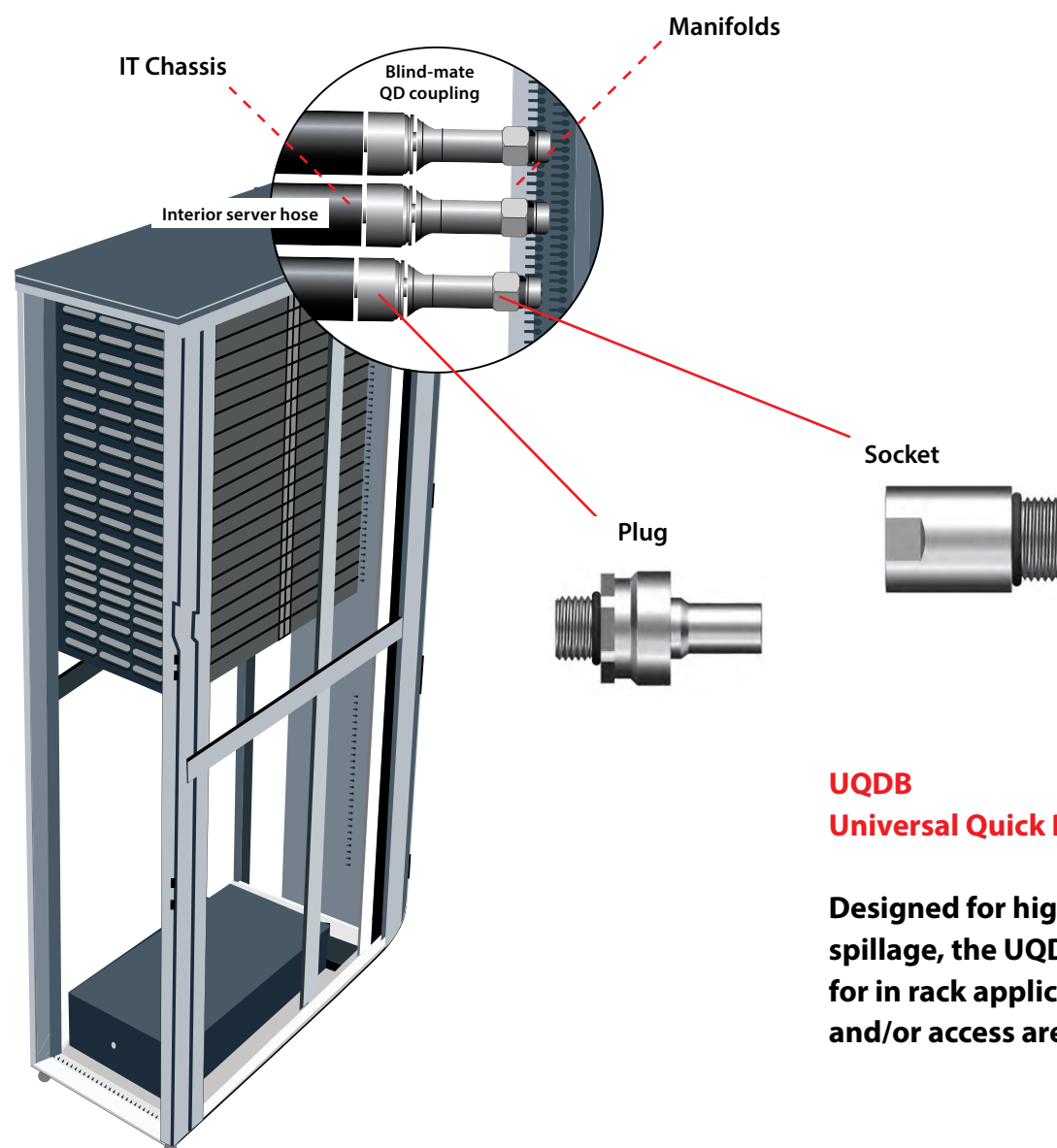
* to be launched

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.



UQDB **Universal Quick Disconnect Blind-Mate**

Designed for high flow rate and no spillage, the UQDB coupling is perfect for in rack applications where visibility and/or access are limited

Physical characteristics

Size	Body Size	Nominal Flow Diameter	Max operating pressure						Min burst pressure						Rated Flow		Cv Value	Air Inclusion	Fluid Loss	Misalignment (radial)
			Connected		Socket / Female Half		Plug / Male Half		Connected		Socket / Female Half		Plug / Male Half		(lpm)	(gpm)	-	cc. max.	cc. max.	(mm)
	(in)	(mm)	(bar)	(psi)	(bar)	(psi)	(bar)	(psi)	(bar)	(psi)	(bar)	(psi)	(bar)	(psi)						
UQDB02	1/8	2.8	20	290	20	290	20	290	60	870	60	870	60	870	2.1	0.55	0.31	0.004	0.02	1
UQDB04	1/4	5.5	16	232	16	232	16	232	48	696	48	696	48	696	6.4	1.7	1.22	0.004	0.025	1
UQDB06	3/8	6.3	10	145	10	145	10	145	30	435	30	435	30	435	11.36	3	2.23	0.007	0.035	1

Applications & Markets

- Direct-to-chip liquid cooling
- Thermal management

Seal Elastomer Data

Seal Elastomer	Operation Temperature Range	
	C°	F°
EPDM	-40°C +150°C	-40°F +302°F

Size	Performance Parameters			
	Plug Recommended	Torque	Socket	Torque
	ORB Size	N.m	Recommended ORB Size	N.m
UQDB02	7/16-20 UNF-2A	9-10	9/16-18 UNF-2A	15-17
UQDB04	9/16-18 UNF-2A	15-17	3/4-16 UNF-2A	25-28
UQDB06	3/4-16 UNF-2A	25-28	7/8-14 UNF-2A	30-33
UQDB08	7/8-14 UNF-2A	30-33	1 1/16-12 UNF-2A	48-53

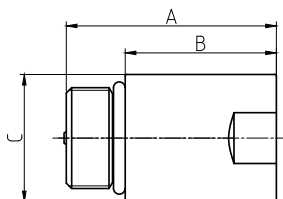


Figure 1
Socket

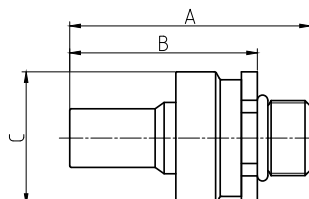
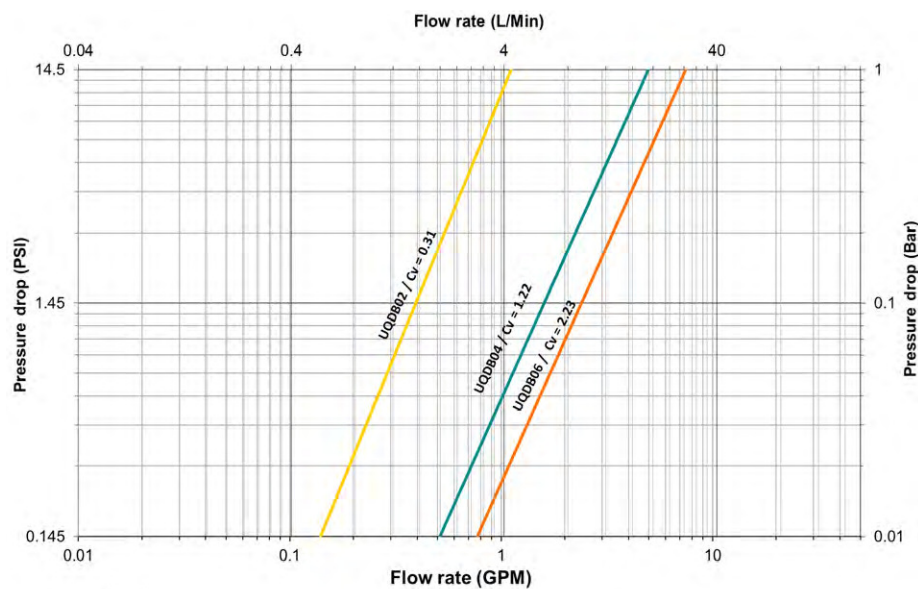


Figure 2
Plug

Dimensions

OCP UQDB size	Part number	Part	Details		Dimensions						E2E length
			Thread/size	Fig.	A		B		C		
			ORB	n°	(mm)	(in)	(mm)	(in)	(mm)	(in)	
UQDB02	2UQBS56ORM	Socket	9/16"-18	1	33.6	1.32	23.6	0.93	20	0.79	35.8-37.2
UQDB02	2UQBP44ORM	Plug	7/16"-20	2	36.1	1.42	27	1.06	20	0.79	
UQDB04	4UQBS75ORM	Socket	3/4"-16	1	39.6	1.55	28.5	1.12	23.6	0.92	44.0 - 45.4
UQDB04	4UQBP56ORM	Plug	9/16"-18	2	45.32	1.78	35.3	1.39	25	0.98	
UQDB06	6UQBS87ORM	Socket	7/8"-14	1	44.4	1.74	31.7	1.24	28.4	1.11	47.5 - 48.9
UQDB06	6UQBP75ORM	Plug	3/4" -16	2	49.9	1.96	38.9	1.53	28.4	1.11	



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