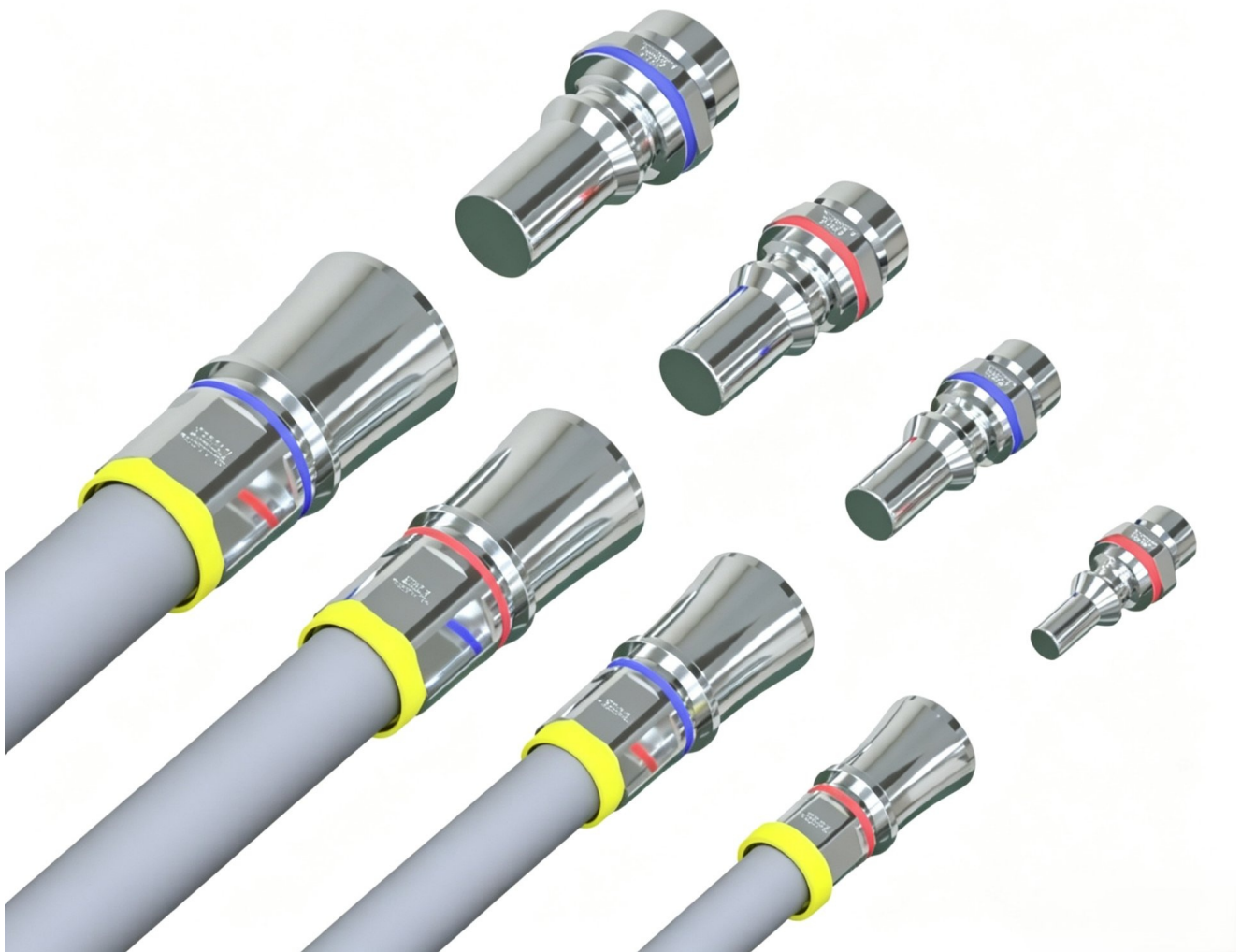




LIQUID COOLING SOLUTIONS

Liquid Cooling UQD Series

Universal Quick Disconnect Couplings for HPC
and Data Center Liquid Cooling



UQD02

3.2 mm

UQD04

6.4 mm

UQD06

9.5 mm

UQD08

12.7 mm

OCP compliant

| Flat face, **dripless**

| **All stainless steel**

The Universal Standard for Fast, Efficient Disconnect in Liquid Cooling

RENHOTEC offers four sizes of UQD — **UQD02, UQD04, UQD06 and UQD08** — designed for liquid cooling applications in HPC and data centers. UQD is a standard initiated by Intel and developed as an open standard within OCP (Open Compute Project).

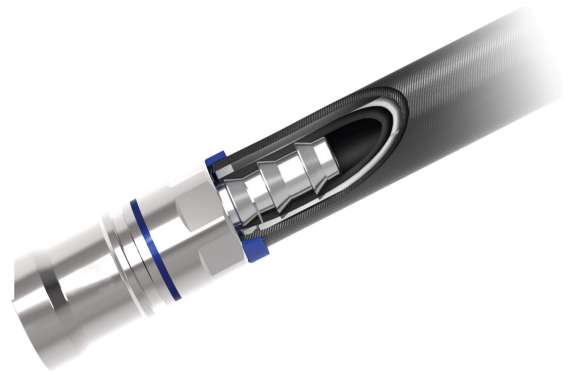
Because it is an open standard, products from any manufacturer connect with each other as long as they follow the UQD specification. Backed by RENHOTEC's high-precision manufacturing and long experience in widely applied, high-quality quick disconnect couplings, our UQD series is guaranteed to meet or exceed the standard specification.

Key features

- Dripless design that minimizes air ingress on connection
- EPDM rubber dual seal rings — redundant sealing, no leak risk
- All-stainless-steel construction for broad fluid compatibility
- Meets or exceeds the UQD standard specification
- Compact design, suited to any liquid cooling application
- Hot swappable — connect and disconnect under pressure

No clamps or ferrules — push-to-lock hose and hose barb

The UQD standard specifies a push-to-lock hose-barb connection. Push-to-lock hose delivers a fast, reliable, leak-free connection without ferrules or hose clamps. The hose barb is specially designed so that the hose locks simply by pushing it onto the barb. A plastic retaining ring ensures the hose is correctly seated on the barb for a safe, leak-free connection.



Cutaway view — flat-face, dripless coupling with EPDM dual seal rings

UQD02

3.2 mm

UNF 7/16-20 · 1/4" ID hose

UQD04

6.4 mm

UNF 9/16-18 · 3/8" ID hose

UQD06

9.5 mm

UNF 3/4-16 · 1/2" ID hose

UQD08

12.7 mm

UNF 7/8-14 · 5/8" ID hose

UQD 02 Series

Liquid cooling | Flat face | Dripless | Stainless steel



The universal quick disconnect coupling (UQD02) is a global standard developed for quick disconnect couplings under OCP (Open Compute Project). UQD is an Intel initiative aimed at developing open-standard, non-spill quick disconnect couplings for data center liquid cooling.

Nominal bore **3.2 mm**

Max. working pressure **10 bar**

Body material	304 stainless steel
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Seal material	EPDM (dual seal rings)
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UQD02	Part No	Bore (mm)	Mating interface	Color ring
	UQD02S- ()	3.2	Female thread UNF 7/16-20 2B	● Blue
	UQD02S- ()	3.2	Female thread UNF 7/16-20 2B	● Red
	UQD02P- ()	3.2	For 1/4" ID hose	● Blue
	UQD02P- ()	3.2	For 1/4" ID hose	● Red
	UQD02P- ()	3.2	Female thread UNF 7/16-20 2B	● Blue
	UQD02P- ()	3.2	Female thread UNF 7/16-20 2B	● Red

Dimension drawings are reproduced from the standard product drawing and carry original annotations. Color ring options: Blue / Red. Other colors available on request.

UQD 06 Series

Liquid cooling | Flat face | Dripless | Stainless steel

The universal quick disconnect coupling (UQD06) is a global standard developed for quick disconnect couplings under OCP (Open Compute Project). UQD is an Intel initiative aimed at developing open-standard, non-spill quick disconnect couplings for data center liquid cooling.

Key features

- Flat-face, dripless design — minimal air ingress and no fluid loss on disconnect
- EPDM dual seal rings for redundant, leak-free sealing
- All-stainless-steel 304 construction for broad coolant compatibility
- Hot swappable — safe connect and disconnect under pressure

Nominal bore 9.5 mm

Max. working pressure **10 bar**

Body material **304 stainless steel**

Seal material **EPDM (dual seal rings)**

Hose bore 1/2" ID

Thread **UNF 3/4-16 2B**

UQD06	Part No	Bore (mm)	Mating interface	Color ring
	UQD06S- ()	9.5	Female thread UNF 3/4-16 2B	● Blue
	UQD06S- ()	9.5	Female thread UNF 3/4-16 2B	● Red
	UQD06P- ()	9.5	For 1/2" ID hose	● Blue
	UQD06P- ()	9.5	For 1/2" ID hose	● Red
	UQD06P- ()	9.5	Female thread UNF 3/4-16 2B	● Blue
	UQD06P- ()	9.5	Female thread UNF 3/4-16 2B	● Red

Dimension drawings are reproduced from the standard product drawing and carry original annotations. Color ring options: Blue / Red. Other colors available on request.

UQD 08 Series

Liquid cooling | Flat face | Dripless | Stainless steel

The universal quick disconnect coupling (UQD08) is a global standard developed for quick disconnect couplings under OCP (Open Compute Project). UQD is an Intel initiative aimed at developing open-standard, non-spill quick disconnect couplings for data center liquid cooling.

Key features

- Flat-face, dripless design — minimal air ingress and no fluid loss on disconnect
- EPDM dual seal rings for redundant, leak-free sealing
- All-stainless-steel 304 construction for broad coolant compatibility
- Hot swappable — safe connect and disconnect under pressure

Nominal bore **12.7 mm**

Max. working pressure **10 bar**

Body material **304 stainless steel**

Seal material **EPDM (dual seal rings)**

Hose bore 5/8" ID

Thread **UNF 7/8-14 2B**

UQD08	Part No	Bore (mm)	Mating interface	Color ring
	UQD08S- ()	12.7	Female thread UNF 7/8-14 2B	Blue
	UQD08S- ()	12.7	Female thread UNF 7/8-14 2B	Red
	UQD08P- ()	12.7	For 5/8" ID hose	Blue
	UQD08P- ()	12.7	For 5/8" ID hose	Red
	UQD08P- ()	12.7	Female thread UNF 7/8-14 2B	Blue
	UQD08P- ()	12.7	Female thread UNF 7/8-14 2B	Red

Dimension drawings are reproduced from the standard product drawing and carry original annotations. Color ring options: Blue / Red. Other colors available on request.

UQD Custom Solutions

Non-standard development & multi-color coding

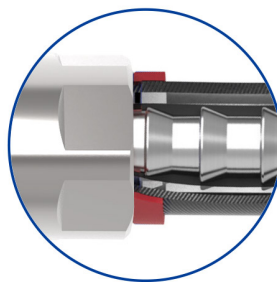


- A dedicated custom-engineering team provides professional technical development support
- EPDM rubber dual seal rings — redundant sealing design, with custom seal materials available
- 316L professional grade and 304 economy grade available (other materials on request)
- Multi-color system coding available as a custom option (multi-color coding optional)
- High-quality and economy hose options available (multiple hose options)
- Custom development available



Seal ring material

Customizable to requirement



Retaining ring color coding

Customizable to requirement



Color ring coding

Customizable to requirement

Custom development? If you need a non-standard solution, contact us — our custom engineering team provides free technical support around the clock.