YINGSHI

PRECISION

液冷快插接头

UQD & UQDB

产品手册 / PRODUCT CATALOG



标准产品 · 定制连接方案

STANDARD PRODUCTS / CUSTOM CONNECTION SOLUTIONS

www.ysprecision.com

连接热管理系统的关键环节

Connections for thermal management

盈时 UQD 与 UQDB 系列面向热管理系统的流体连接需求，提供红、蓝颜色识别，并支持材料、外形、尾端安装尺寸与软管集成定制。

Yingshi UQD and UQDB connectors support fluid connections in thermal management systems, with red/blue identification and options for materials, housing, end connections and hose integration.





产品特点 / PRODUCT FEATURES

高流量、无泄漏设计；优化内部阀芯以降低流阻，插头与插座顺畅连接。
High-flow, leak-free design; an optimized valve core reduces flow resistance and supports smooth engagement.

结构设计 / ENGINEERING

双密封圈、钢珠锁紧与内部长导向结构，兼顾密封与机械应力要求。
Dual O-rings, ball locking and an extended internal guide address sealing and mechanical loads.

开发与验证 / DEVELOPMENT

结合热阻与流阻仿真优化，并通过配套测试设备验证产品。

Thermal/flow simulation and dedicated testing support development and verification.

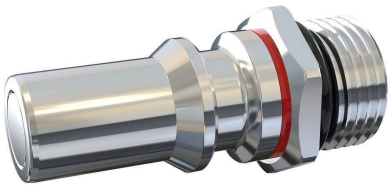
定制支持 / CUSTOMIZATION

按应用讨论材料、外形、尾端安装尺寸与软管集成。
Discuss application-specific materials, housings, end dimensions and integrated hose connections.

设计与流量 / Design & flow: 按 OCP 标准设计；额定流量超出指定流量要求至少 25%。
Designed to OCP standards; rated flow exceeds the specified flow requirement by at least 25%.

UQD 技术参数

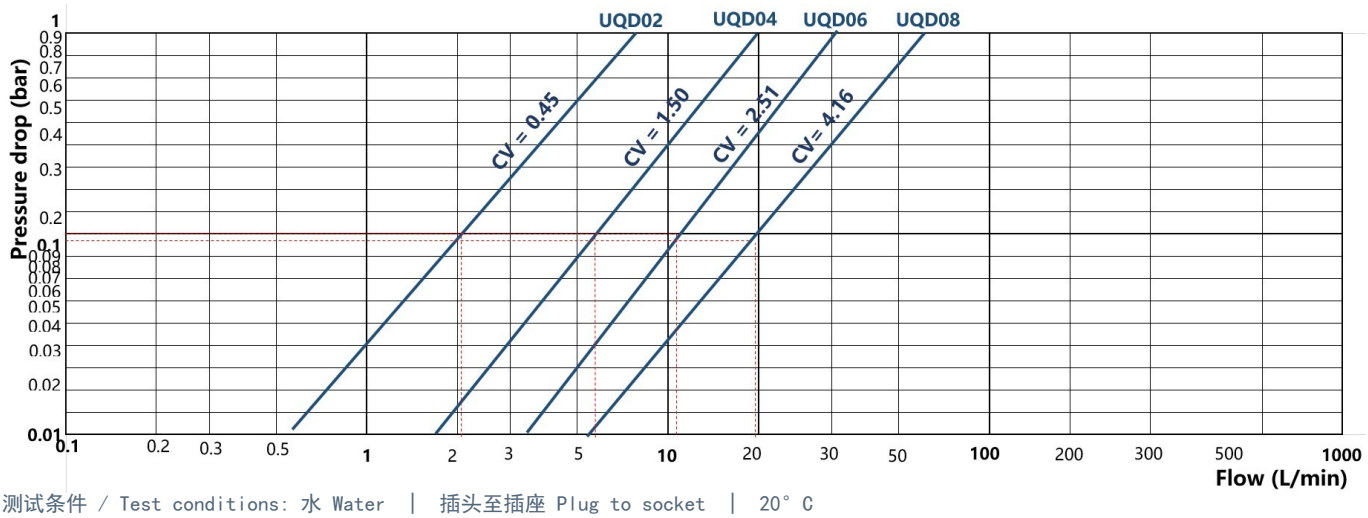
Technical specifications





型号 / Model	UQD02	UQD04	UQD06	UQD08
通径 / Bore size (mm)	03	05	07	10
最大工作压力 / Max. operating pressure (psi)	100	100	100	100
额定流量 / Flow rating (L/min)	2.082	6.433	11.356	17.791
流体溢出 / Fluid loss (ml)	≤0.010	≤0.015	≤0.020	≤0.030
不带压最大插合力 / Max. coupling force at 0 psi (N)	50	55	90	120
机械寿命 / Mechanical life	5000 次 / 5000 cycles			
工作温度 / Operating temperature	-40° C to +125° C			
主要材料 / Main materials	Body: SUS304L Seals: EPDM			

流量曲线 / PRESSURE DROP & FLOW RATE

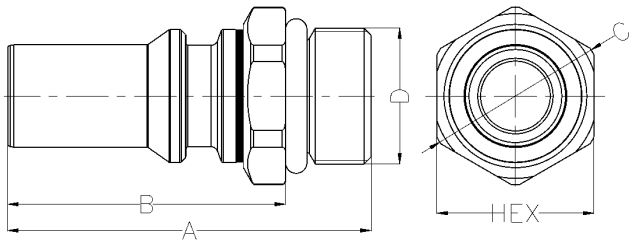


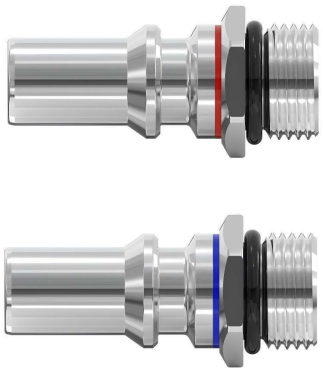
测试条件 / Test conditions: 水 Water | 插头至插座 Plug to socket | 20° C

UQD 插头尺寸

Plug dimensions

尺寸示意 / DIMENSION DRAWING





单位 / Units: mm

型号 / Model	A	B	C	D / Thread	HEX	备注 Remarks
UQD02	35	27	15.5	7/16-20 UNF-2A	14	SAE04
UQD02	35	27	15.5	G1/8	14	/
UQD04	45.4	35.4	19	9/16-18 UNF-2A	17	SAE06
UQD04	45.4	35.4	19	G1/4	17	/
UQD06	50.9	38.9	25	3/4-16 UNF-2A	22	SAE08
UQD06	50.9	38.9	25	G3/8	22	/
UQD08	54.9	42.9	28	7/8-14 UNF-2A	25	SAE10
UQD08	54.9	42.9	28	G1/2	25	/

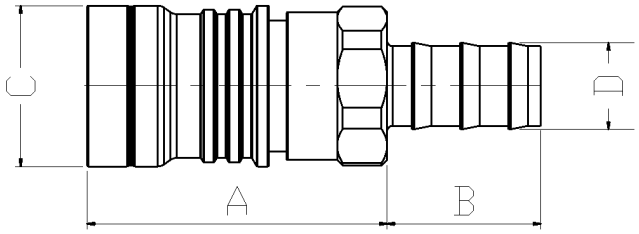
尺寸代号与上方图示对应。

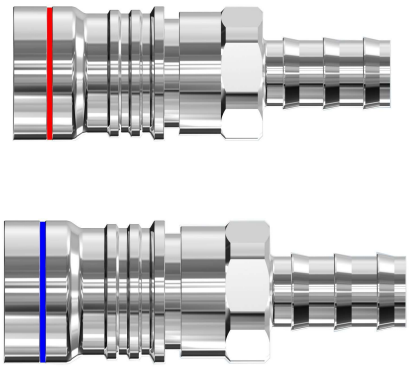
Dimension references correspond to the drawing above.

UQD 插座尺寸

Socket dimensions

尺寸示意 / DIMENSION DRAWING





单位 / Units: mm

型号 / Model	A	B	C	D	软管适配 / Hose
UQD02	41	20	18.5	8.8	1/4 inch EPDM
UQD04	46.4	24.5	24.5	12	3/8 inch EPDM
UQD06	55.5	27	28	15.2	1/2 inch EPDM
UQD08	66.5	30	32	18.6	5/8 inch EPDM

尺寸代号与上方图示对应。

Dimension references correspond to the drawing above.

UQDB 技术参数

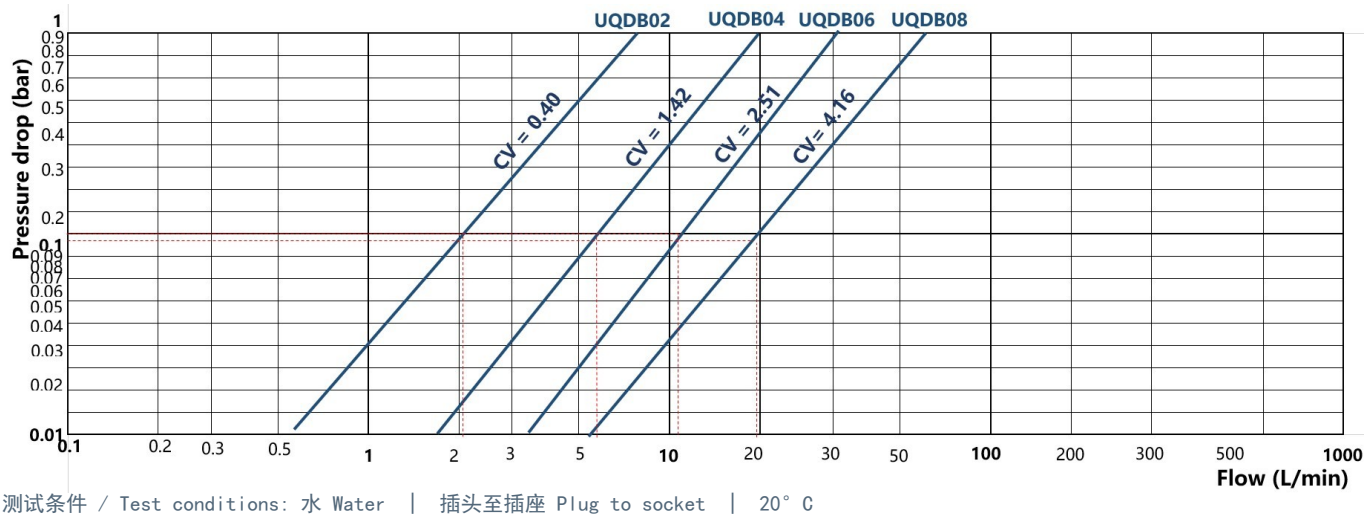
Technical specifications





型号 / Model	UQDB02	UQDB04	UQDB06	UQDB08
通径 / Bore size (mm)	03	05	07	10
最大工作压力 / Max. operating pressure (psi)	100	100	100	100
额定流量 / Flow rating (L/min)	2.082	6.433	11.356	17.791
流体溢出 / Fluid loss (ml)	≤0.010	≤0.015	≤0.020	≤0.030
不带压最大插合力 / Max. coupling force at 0 psi (N)	65	75	95	120
机械寿命 / Mechanical life	5000 次 / 5000 cycles			
工作温度 / Operating temperature	-40° C to +125° C			
主要材料 / Main materials	Body: SUS304L Seals: EPDM			

流量曲线 / PRESSURE DROP & FLOW RATE

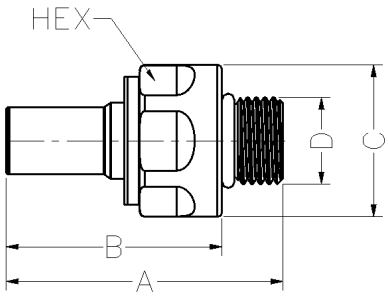


测试条件 / Test conditions: 水 Water | 插头至插座 Plug to socket | 20° C

UQDB 插头尺寸

Plug dimensions

尺寸示意 / DIMENSION DRAWING





单位 / Units: mm

型号 / Model	A	B	C	D / Thread	HEX	备注 Remarks
UQDB02	36	27	21	7/16-20 UNF-2A	19	SAE04
UQDB02	36	27	21	G1/8	19	/
UQDB04	45.4	35.4	25	9/16-18 UNF-2A	23	SAE06
UQDB04	45.4	35.4	25	G1/4	23	/
UQDB06	50.9	38.9	27	3/4-16 UNF-2A	26	SAE08
UQDB06	50.9	38.9	27	G3/8	26	/
UQDB08	58.9	42.9	31	7/8-14 UNF-2A	29	SAE10
UQDB08	58.9	42.9	31	G1/2	29	/

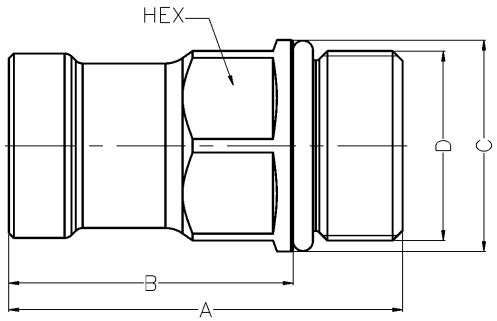
尺寸代号与上方图示对应。

Dimension references correspond to the drawing above.

UQDB 插座尺寸

Socket dimensions

尺寸示意 / DIMENSION DRAWING





单位 / Units: mm

型号 / Model	A	B	C	D / Thread	HEX	备注 Remarks
UQDB02	33.62	23.62	25	9/16-18 UNF-2A	17	SAE06
UQDB04	39.5	28.5	28	3/4-16 UNF-2A	19	SAE08
UQDB06	43.75	31.75	31	7/8-14 UNF-2A	24	SAE10
UQDB08	47.56	35.56	31	1-1/16-12 UNF-2A	27	SAE12

尺寸代号与上方图示对应。

Dimension references correspond to the drawing above.

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连接需求，从这里开始。

Let’s discuss your connection requirements.

请提供型号、接口、介质、温度压力、安装空间与数量。
Share the model, interface, fluid, pressure/temperature, installation space and quantity.

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