



UNIVERSAL QUICK DISCONNECTS (UQD)

FAST, LEAK FREE CONNECTIONS FOR DATA CENTERS

Built for the future of liquid cooling, Foster Manufacturing's color-coded Universal Quick Disconnect (UQD) simplifies service and protects uptime. This flat face, no-spill coupling features color rings on each half for easy identification, an automatic locking sleeve for secure operation, and a compact design rated to 3000 psi for reliable performance in demanding environments.



Key Features

- OCP-compliant and interchangeable with standard products
- Color-coded design (blue for supply, red for return) ensures quick visual identification
- Built from SUS316L stainless steel for strength and corrosion resistance
- Available in 1/4", 3/8", 1/2", and 3/4" sizes
- Modular design supports scalable system growth

Performance & Safety

- Two-way shut-off valve prevents spills when disconnected
- Leak-free sealing protects sensitive electronics
- Locking pin and push/pull mechanism enable fast, reliable connection

Applications: Thermal management application, Liquid cooling application, data center application, AI server cooling application



UQD Information

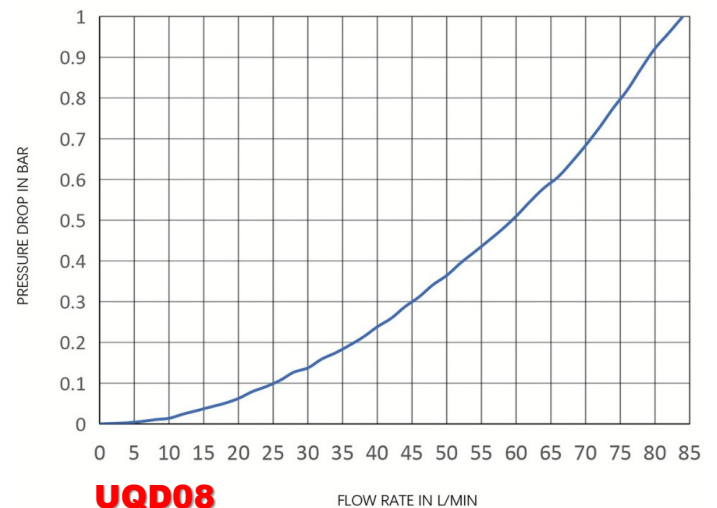
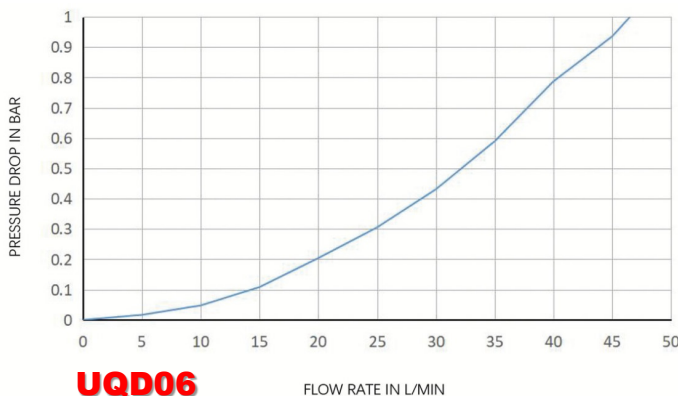
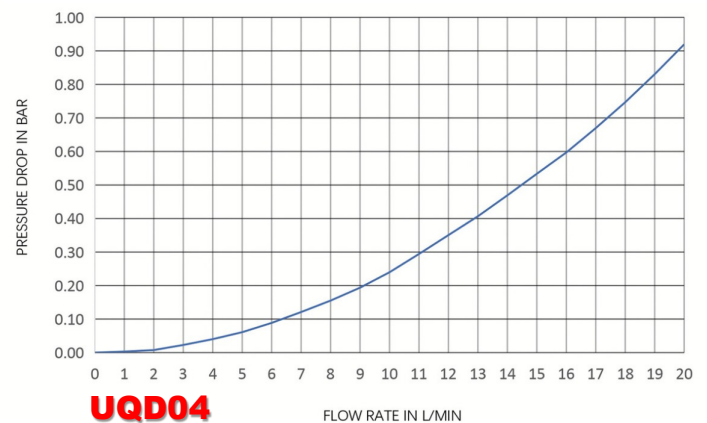
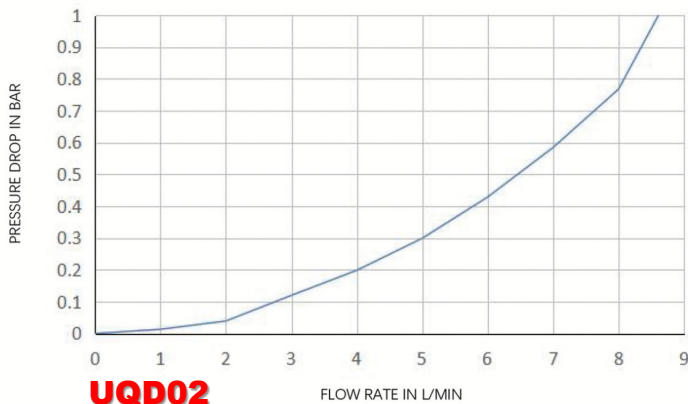
Serial	Size	Nominal diameter	Force to connect	Install Torque	Max. Flow Rate	Min. CV value	Fluid loss
		(mm)	(N)	(N.M)	(lpm)		(ml)
UQD02	DN03	3.2	38@0bar	15	8.6	0.25	<0.025
UQD04	DN05	6.4	44@0bar	25	20	2.01	<0.025
UQD06	DN07	9.5	54@0bar	25	46.5	2.98	<0.025
UQD08	DN10	12.7	70@0bar	35	84	5.15	<0.025

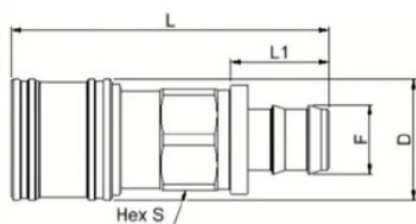
Max.Working pressure	20 bar
Min.Burst pressure	80 bar
Seal material	EPDM (HNBR / FVMQ other material can be chosen)
Working Temp.	-40°C - 120°C
Fluid	Deionized water / purified water / glycol water Propanediol water / fluorinated liquid

Flow Chart

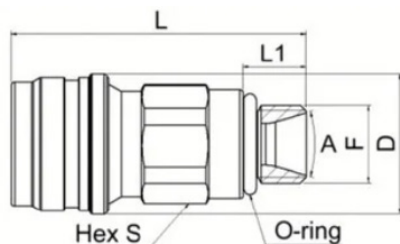
Condition: From Plug to Socket

Media: Water

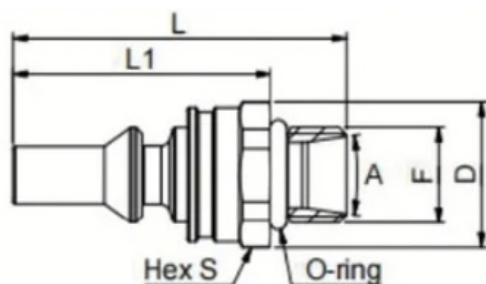




UQD Socket – Hose tail / push-lok type						
Part number	Connection (F)	A	D (mm)	L1	L	S (Hex)
UQD02F-S02H-B (blue ring) UQD02F-S02H-R (red ring)	1/4 Hose tail	N/A	Φ20	21.5	54.8	16
UQD04F-S02H-B UQD04F-S02H-R	1/4 Hose tail	N/A	Φ25.2	24.5	70.1	19
UQD04F-S03H-B UQD04F-S03H-R	3/8 Hose tail	N/A	Φ25.2	24.5	70.1	19
UQD06F-S04H-B UQD06F-S04H-R	1/2 Hose tail	N/A	Φ28	27	79.1	24
UQD04F-S05H-B UQD04F-S05H-R	5/8 Hose tail	N/A	Φ32	27	87.1	27



UQD Socket – Male thread / ORB						
Part number	Connection (F)	A	D (mm)	L1	L	S (Hex)
UQD02F-SM35U-B (blue ring) UQD02F-SM35U-R (red ring)	ORB 7/16-20	32°	Φ20	9.1	42.4	16
UQD04F-SM45U-B UQD04F-SM45U-R	ORB 9/16-18	17°	Φ25.2	10	56	19
UQD06F-SM60U-B UQD06F-SM60U-R	ORB 3/4-16	30°	Φ20.5	11	62.2	24
UQD08F-SM70U-B UQD08F-SM70U-R	ORB 7/8-14	40°	Φ25.2	12.7	72.8	27



UQD Plug – Male thread / ORB						
Part number	Connection (F)	A	D (mm)	L1	L	S (Hex)
UQD02M-SM35U-B (blue ring) UQD02M-SM35U-R (red ring)	ORB 7/16-20	16°	Φ17	31	40.1	16
UQD04M-SM45U-B UQD04M-SM45U-R	ORB 9/16-18	10°	Φ18	35.4	45	16
UQD06M-SM60U-B UQD06M-SM60U-R	ORB 3/4-16	20°	Φ24	38.9	50	22
UQD08M-SM70U-B UQD08M-SM70U-R	ORB 7/8-14	20°	Φ29.5	42.9	55.6	27