







UQD Series

Quick Disconnect Couplings for Liquid Cooling

Engineering Evaluation Overview

The UQD Series provides high-reliability quick connect / disconnect performance designed for liquid cooling systems in demanding data center and HPC environments. Built with premium materials and proven sealing technology for secure, leak-resistant operation.

-  316 stainless steel body
-  EPDM seal
-  Nominal bore options
3.5 / 6.5 / 8 / 10 mm
-  Hose-barb socket +
UNF threaded plug configurations
-  Quick connection / disconnection
for liquid cooling loops
-  Suitable for engineering evaluation
and system development



APPLICATIONS

AI Servers • HPC Systems • Data Centers • Thermal Management Loops



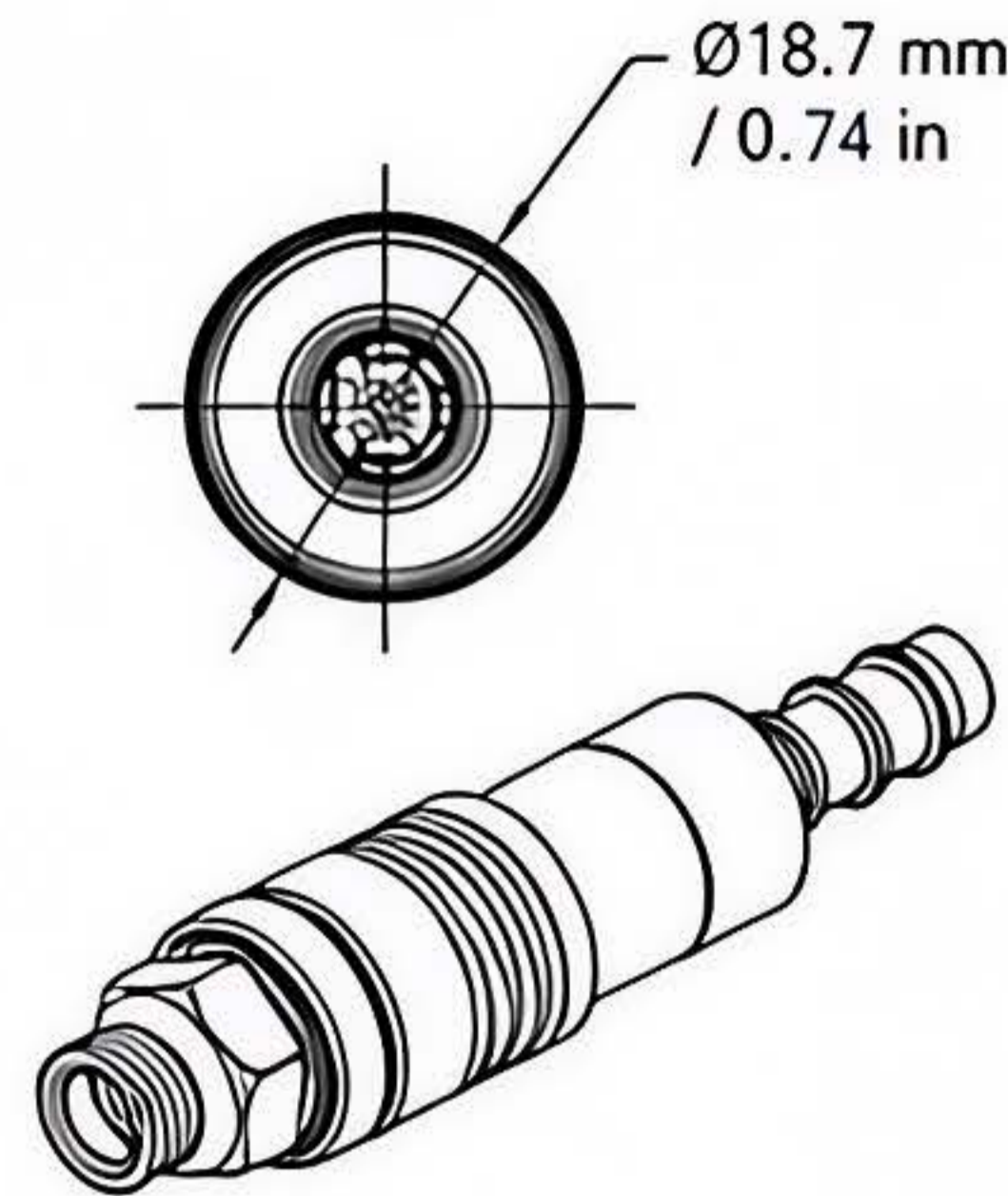
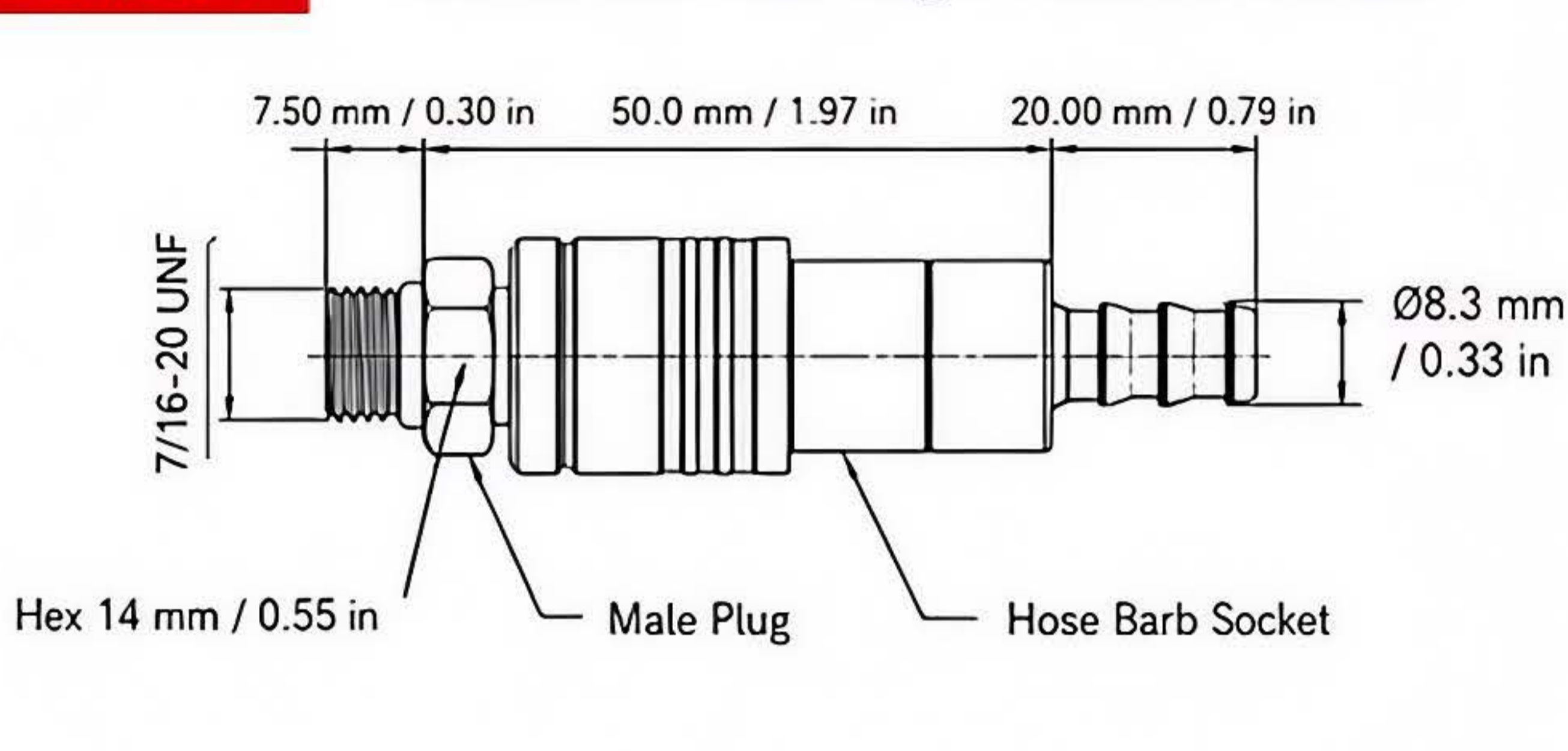
*For engineering evaluation only.
Final performance should be verified under customer operating conditions.*

Dimensions & Connection Configurations

UQD02 / UQD04 / UQD06 / UQD08

UQD02

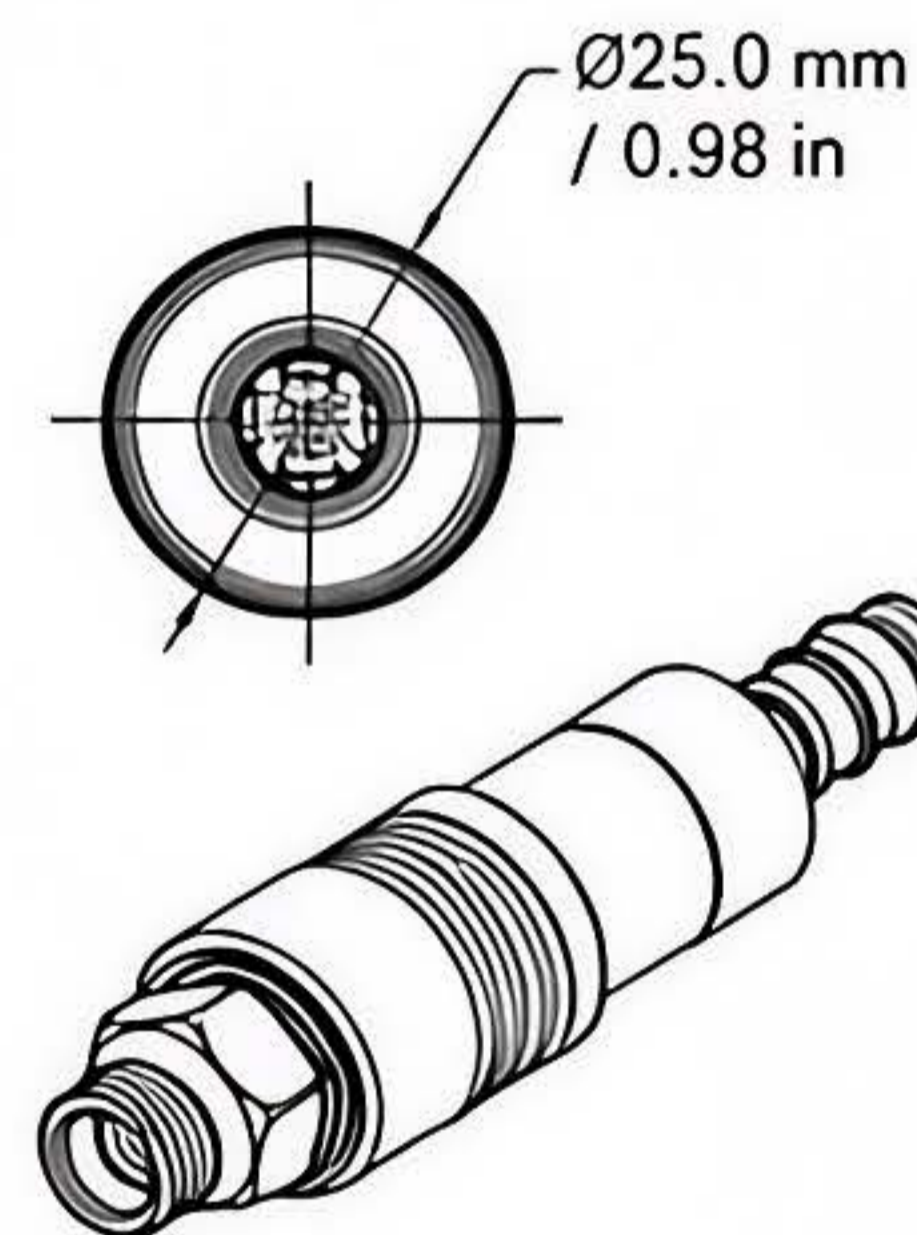
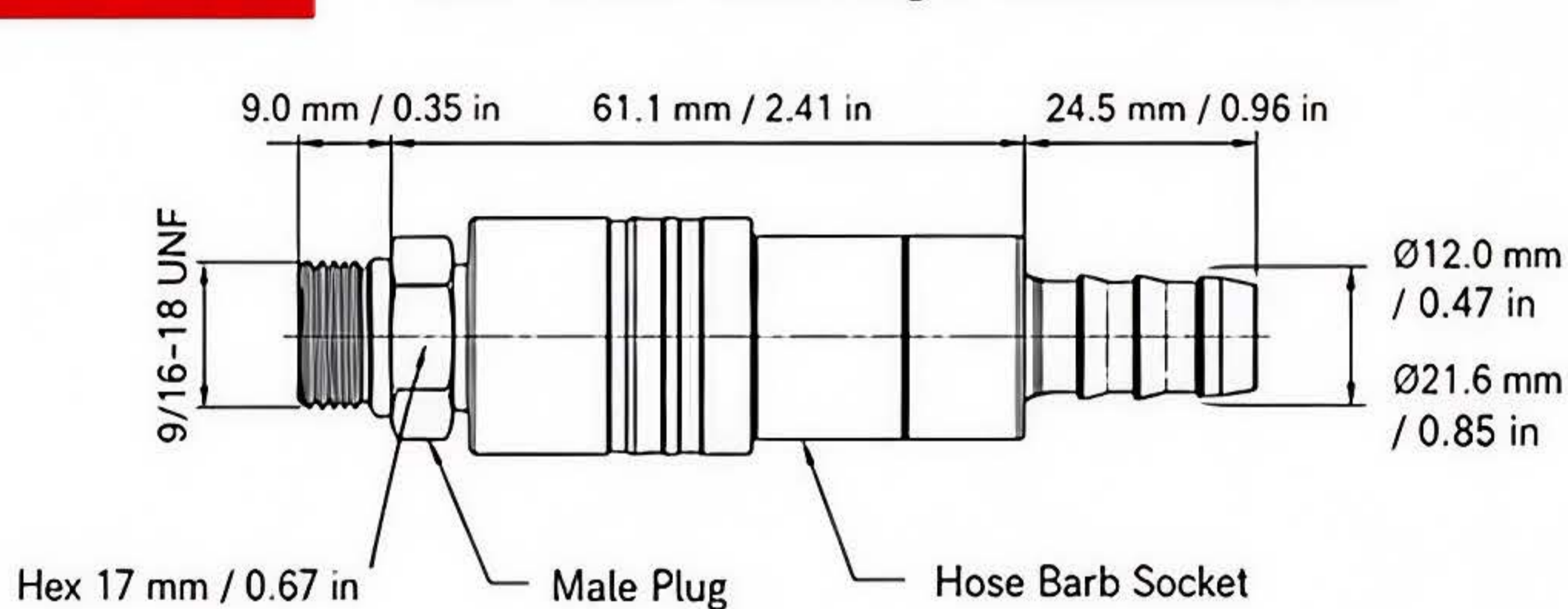
7/16-20 UNF Male Plug × Hose Barb Socket



Dimension	mm / in
A (Overall Length)	77.5 mm / 3.05 in
B (Max Body Diameter)	Ø18.7 mm / 0.74 in
C (Socket Barb OD)	Ø8.3 mm / 0.33 in
D (Thread)	7/16-20 UNF
E (Wrench Size)	14 mm / 0.55 in

UQD04

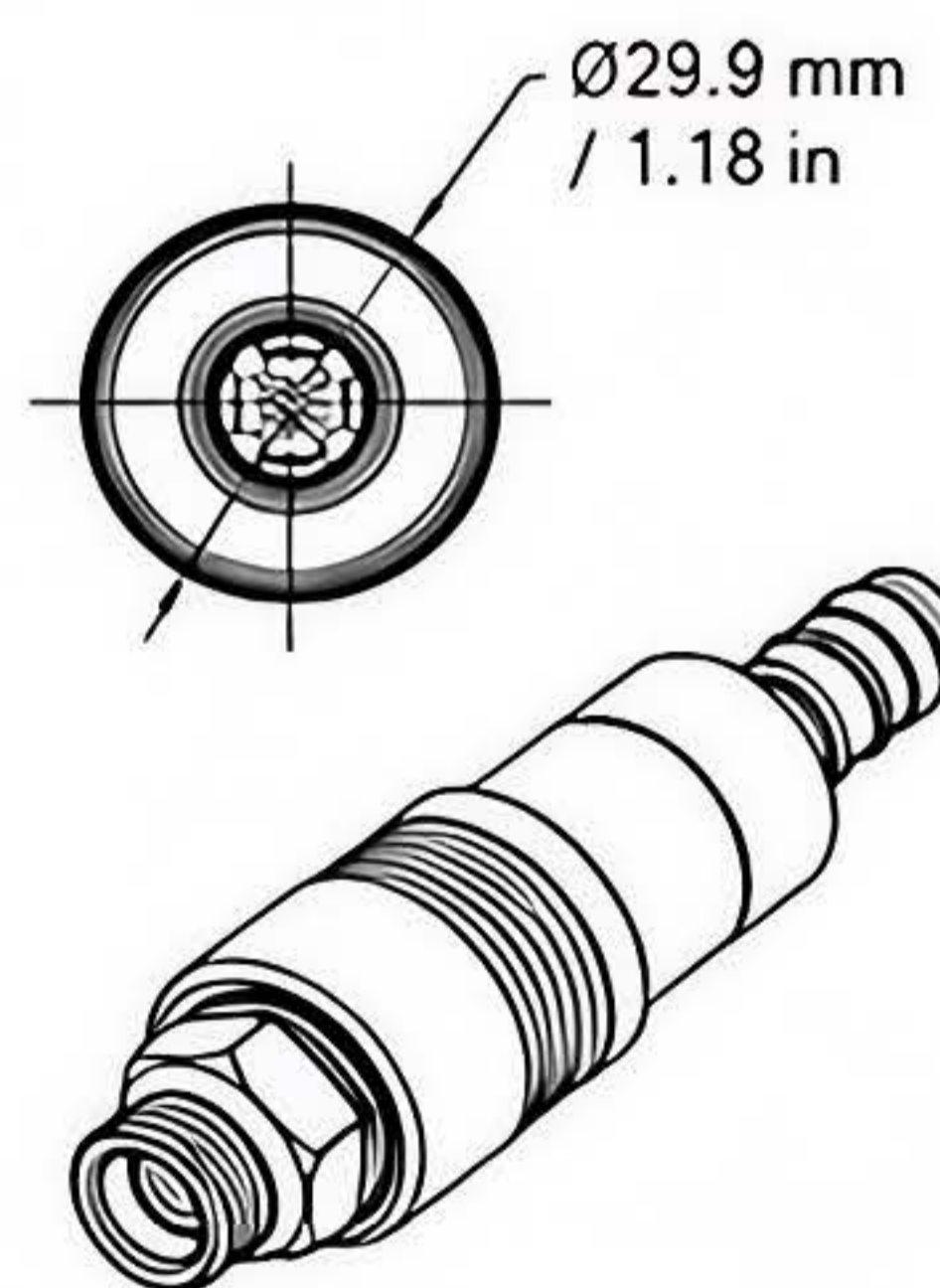
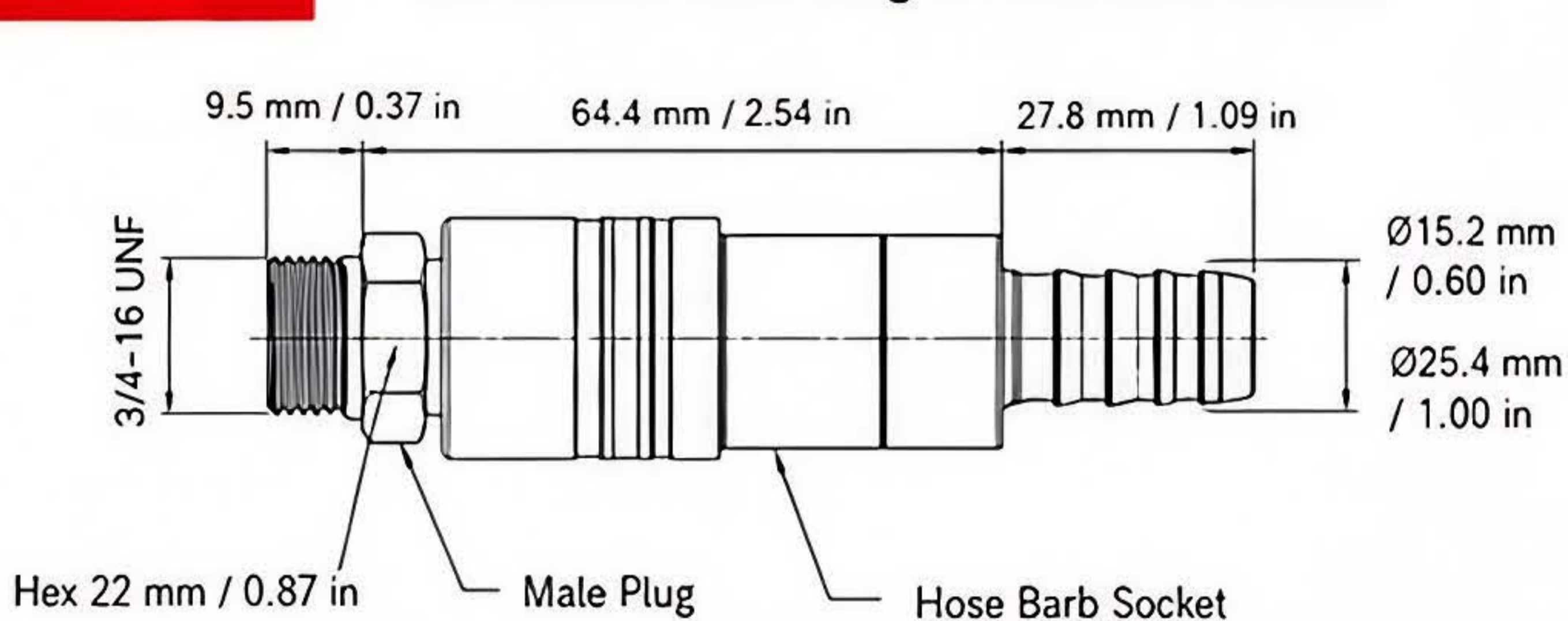
9/16-18 UNF Male Plug × Hose Barb Socket



Dimension	mm / in
A (Overall Length)	94.6 mm / 3.72 in
B (Max Body Diameter)	Ø25.0 mm / 0.98 in
C (Socket Barb OD)	Ø12.0 mm / 0.47 in
D (Thread)	9/16-18 UNF
E (Wrench Size)	17 mm / 0.67 in

UQD06

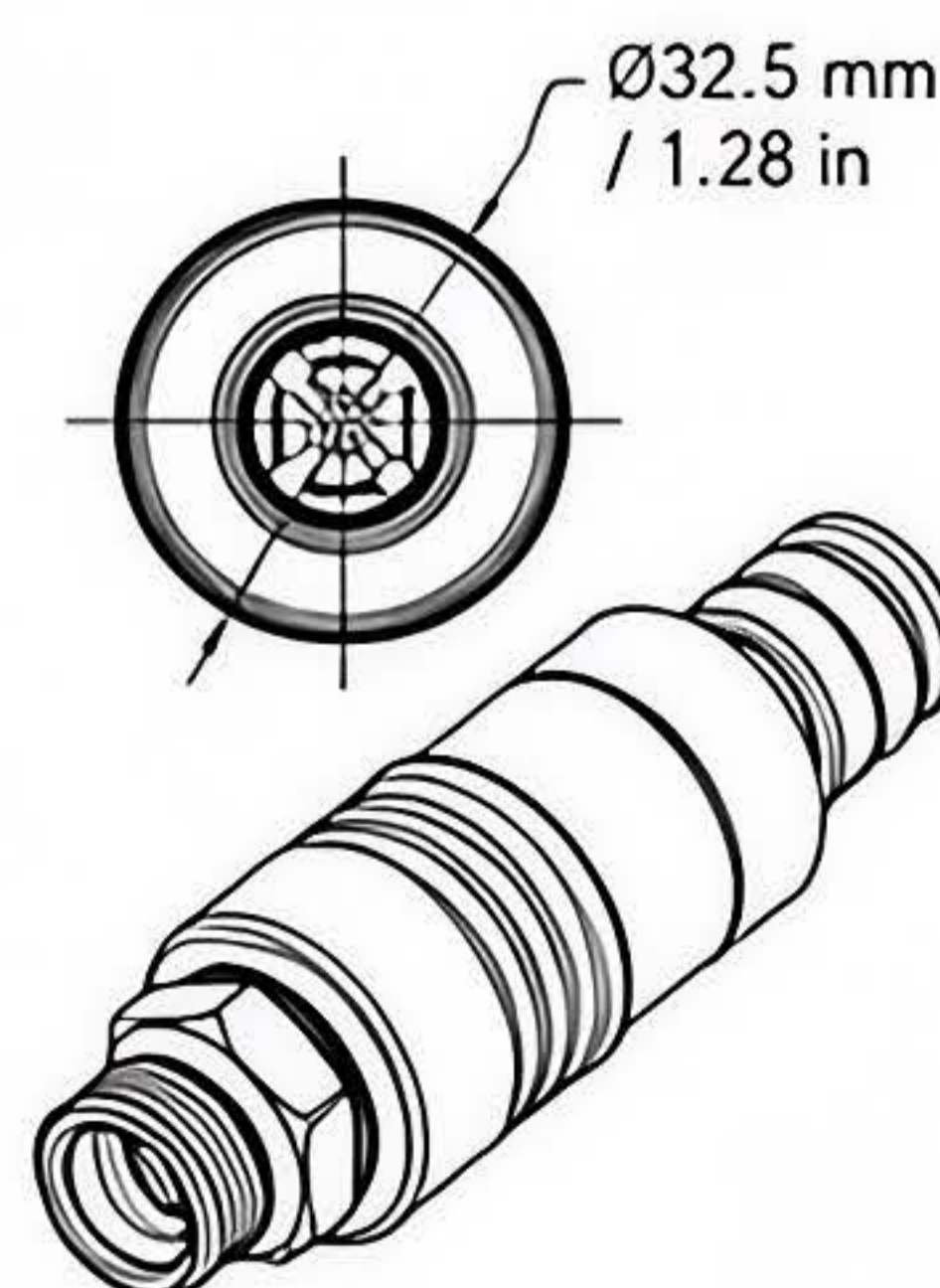
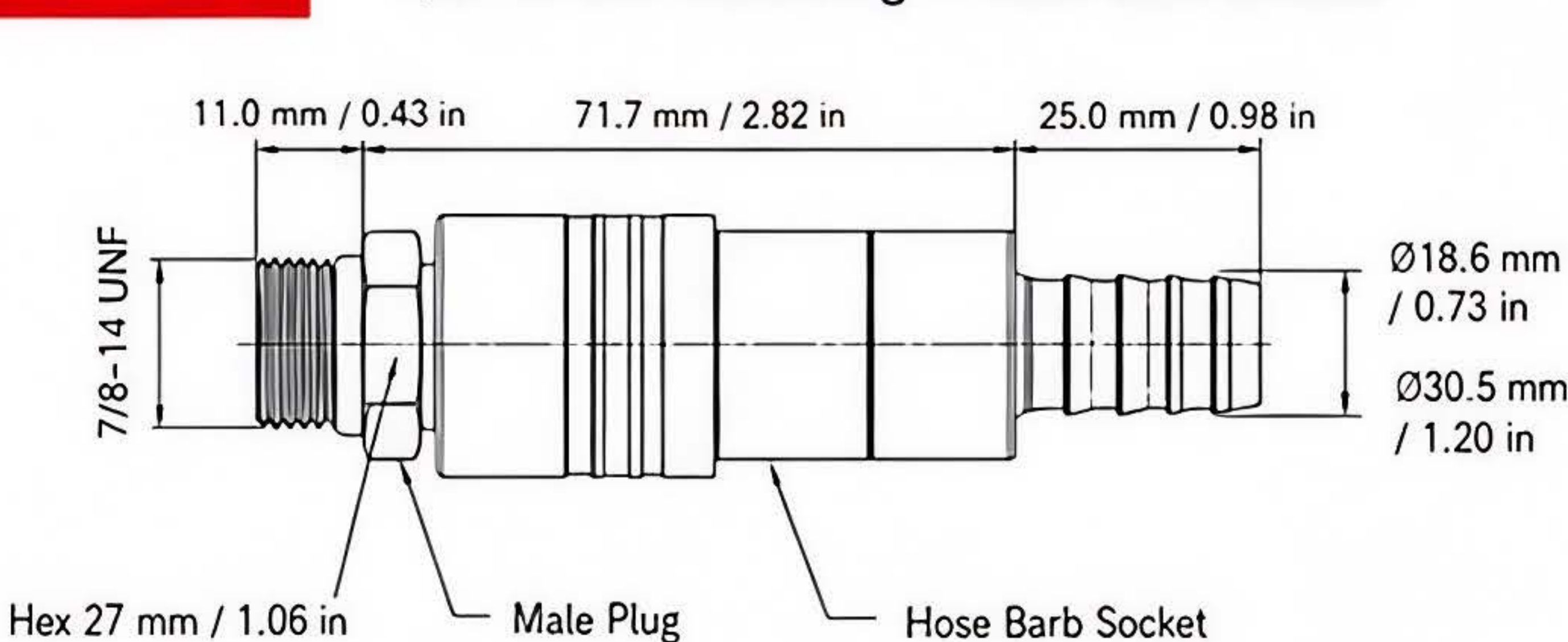
3/4-16 UNF Male Plug × Hose Barb Socket



Dimension	mm / in
A (Overall Length)	101.7 mm / 4.00 in
B (Max Body Diameter)	Ø29.9 mm / 1.18 in
C (Socket Barb OD)	Ø15.2 mm / 0.60 in
D (Thread)	3/4-16 UNF
E (Wrench Size)	22 mm / 0.87 in

UQD08

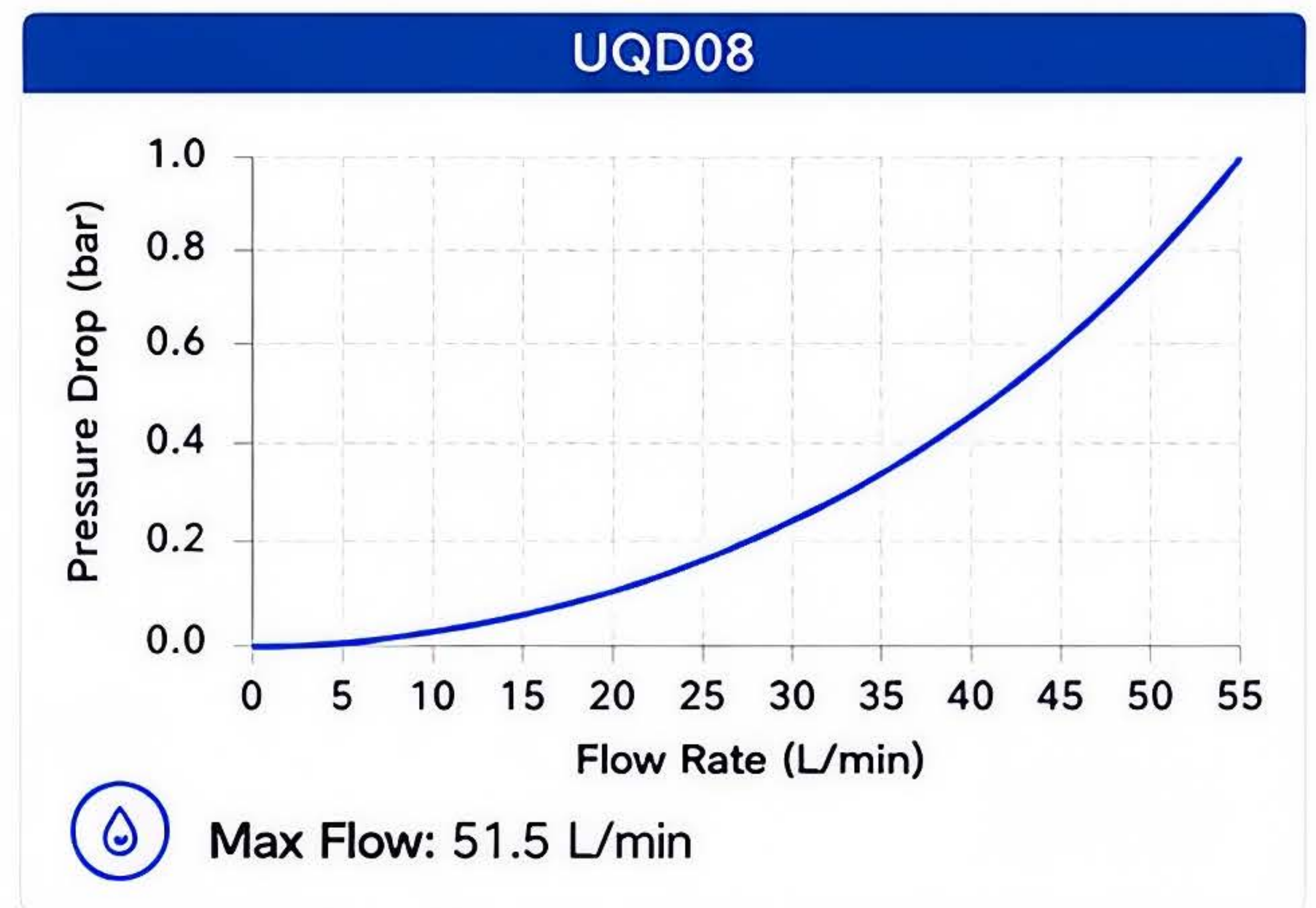
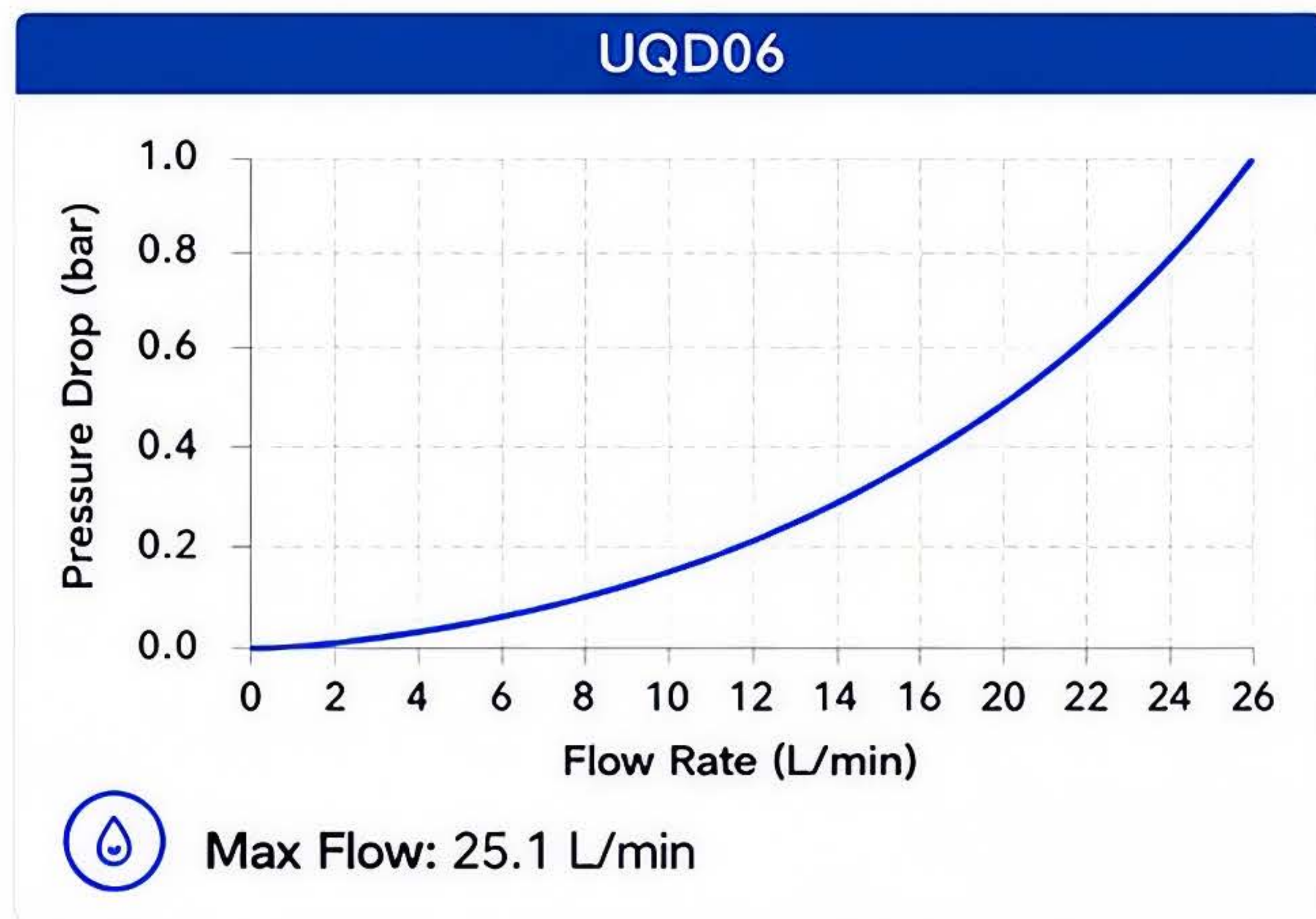
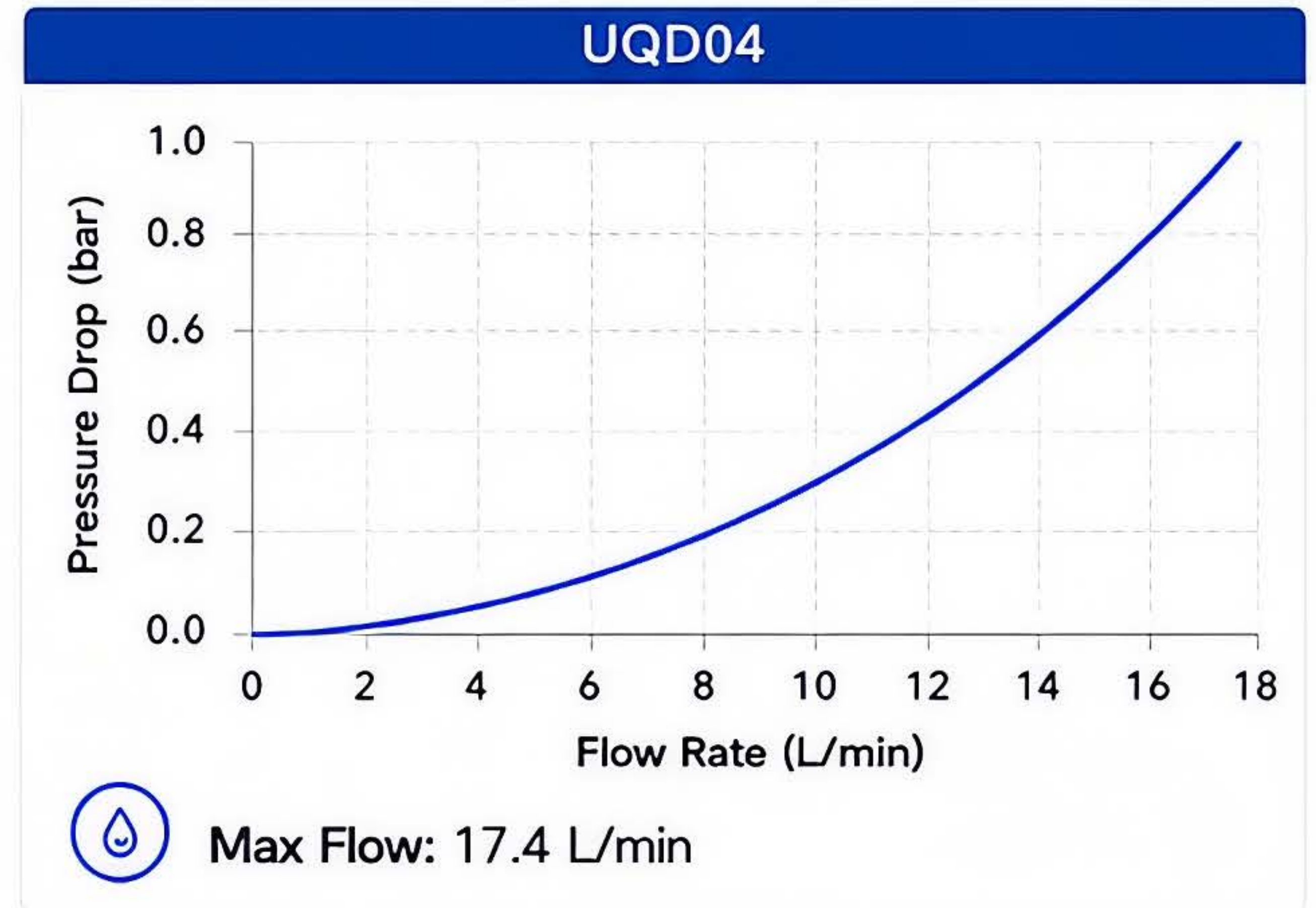
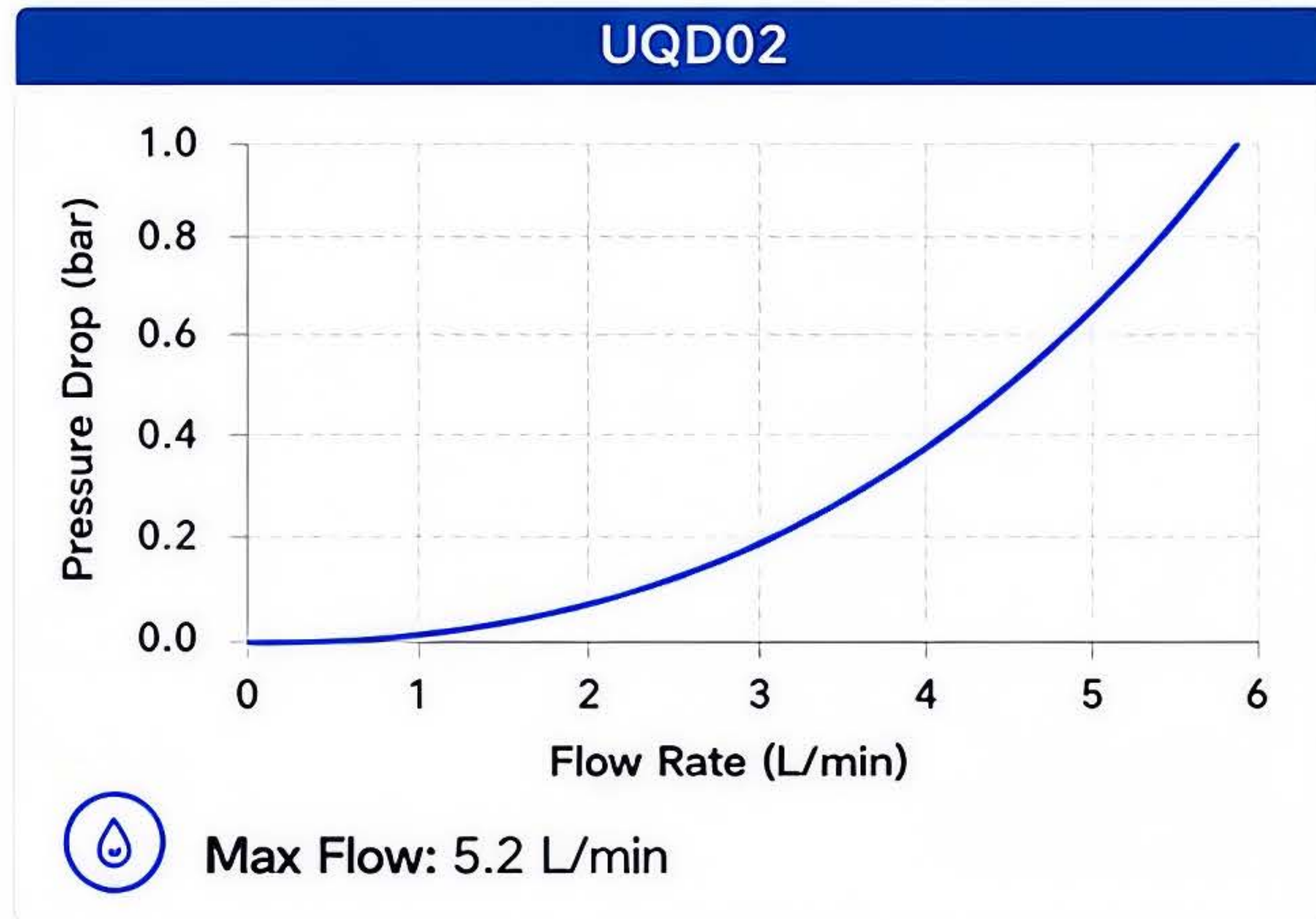
7/8-14 UNF Male Plug × Hose Barb Socket



Dimension	mm / in
A (Overall Length)	107.7 mm / 4.24 in
B (Max Body Diameter)	Ø32.5 mm / 1.28 in
C (Socket Barb OD)	Ø18.6 mm / 0.73 in
D (Thread)	7/8-14 UNF
E (Wrench Size)	27 mm / 1.06 in

UQD Series

Flow Performance & Technical Characteristics



Technical Characteristics

Body Material	316 stainless steel
Spring Material	Stainless steel
Locating Pin Material	Plastic
Seal Material	EPDM
Fluid Media	Purified water / Deionized water
Fluid Temperature Range	-40°C to +120°C
Storage Temperature Range	-40°C to +75°C
Leakage Rate	$<1.0 \times 10^{-3}$ Pa·m ³ /s at 6 bar
Mating Cycles	5000

Model	Max Pressure (bar)	Unmating Force (N)	One-time Leakage (mL)
UQD02	20	60	0.020
UQD04	16	65	0.025
UQD06	6.9	85	0.035
UQD08	6.9	95	0.070



Engineering Note

- Reference performance data for engineering evaluation.
- Final performance should be verified under customer operating conditions.