



SWAK

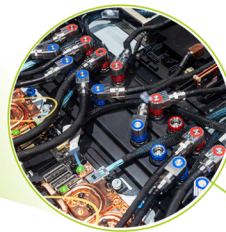
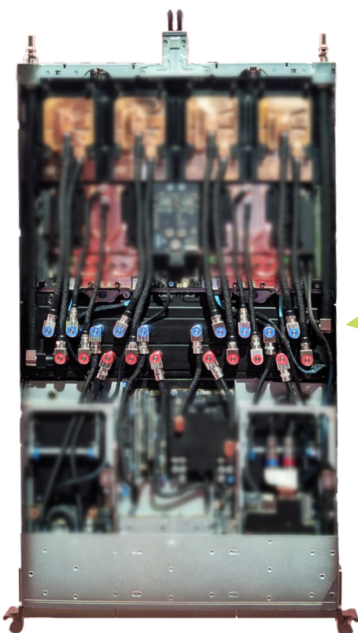


SWAK Products

LIQUID COOLING SOLUTION

MQD (Multi-Quick Disconnect) Series

SWAK offers three sizes of the MQD, MQD02, MQD03 and MQD04, specifically designed for liquid cooling applications in HPC and data centers. The MQD is specifically designed for single-phase (such as water or ethyleneglycol) liquid cooling systems for electronic equipment, and complies with NVIDIA's standards.



MQD (Multi-Quick Disconnect)

Designed for high flow rates and to prevent dripping when disconnected. MQD couplings are ideal for in-rack applications requiring displacement assembly.



Key Features

- ✓ Meet NVIDIA's standards
- ✓ Push-to-connect design
- ✓ High flow and no spillage
- ✓ Double shut off - flat face valves
- ✓ Best in class force to connect
- ✓ Standard seal material: EPDM-P(Peroxide cured)
- ✓ Standard material: Stainless steel provides broad fluid compatibility

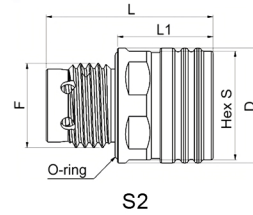
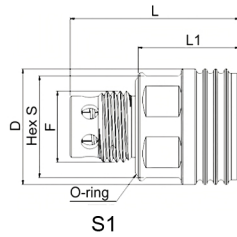
Applications for Liquid Cooling Systems

- ✓ **AI Data Centers** - Efficient thermal management in high-density rack infrastructure
- ✓ **Server Manifolds** - Simplified installation in modular liquid-cooled server environments
- ✓ **High-Performance Computing (HPC)**- Leak-free operation for compute-intensive environments
- ✓ **Energy Storage Systems (ESS)**- Safe coolant handling in battery packs and inverters

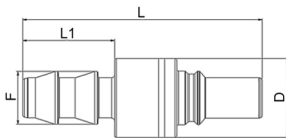
Spec Sheet

MQD Size	02	03	04	04MINI
Nominal Diameter DN	DN03	DN04	DN05	DN05
Rated Flow	2.08 L/min	4.54 L/min	6.81 L/min	6.81 L/min
Maximum Fluid Loss per Cycle	0.02 ml	0.023 ml	0.025 ml	0.025 ml
Minimum Cv	0.3	0.6	1	0.8
Pressure - Maximum Operating	6.89 BAR(g)/100 PSI(g)			
Pressure - Minimum Burst	20.68 BAR(g)/300 PSI(g)			
Temperature Range - Shipping	-40°C to +75°C			
Temperature Range - Operating	17°C to 65 °C			
Coupling Cycles - Minimum	5,000 mating cycles			
Main Components Material	Stainless Steel			
Seals Material	EPDM			
Applicable Cooling Fluid	Ethylene glycol coolant, propylene glycol coolant, deionized water, etc.			

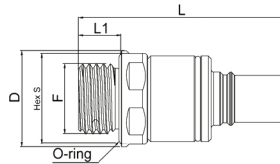
Physical characteristics



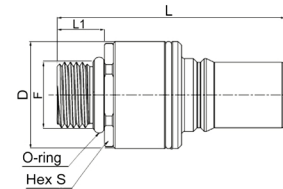
Icon	Part Number	Connection F	A	D	L1	L	S
S1	MQD02S-1SMU042N	7/16-20UNF Male Thread	N/A	Ø18	15.4	25.7	15.9
S2	MQD03S-1SMG022N	G1/4" Male Thread	N/A	Ø18	14.45	25.25	17
S2	MQD04S-1SMG042N	G3/8" Male Thread	N/A	21.6	21.8	31.6	20
S2	MQD04S-MINI2N	G3/8" Male Thread	N/A	Ø21.6	18.3	29.1	20



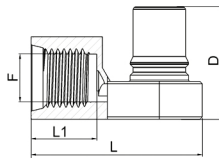
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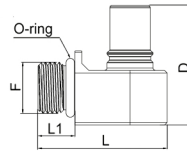
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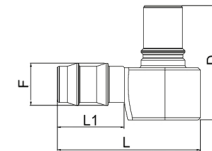
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P5

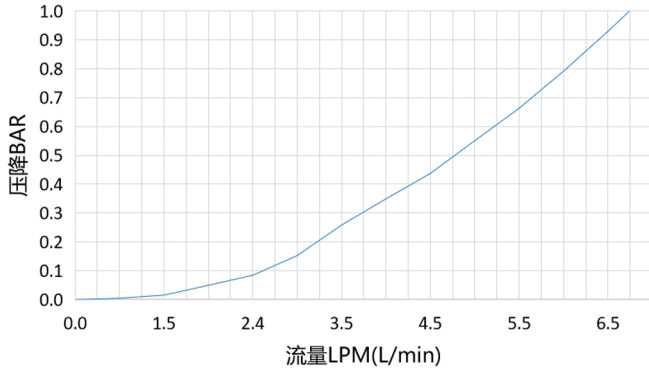


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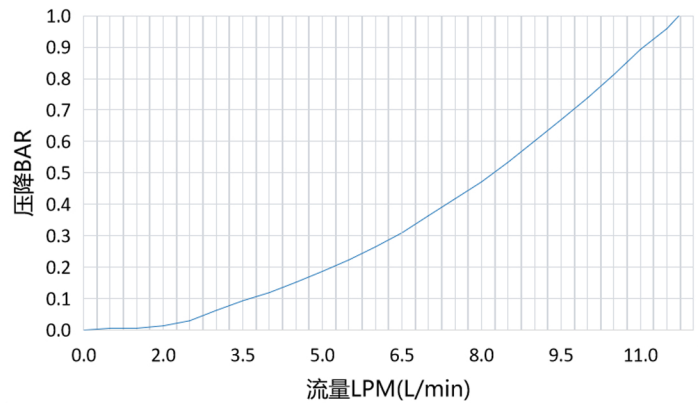
Icon	Part Number	Connection F	A	D	L1	L	S
P1	MQD02P-1SWP042N	1/4" Hose Barb Push-Lok	N/A	Ø13	15.06	39.26	N/A
P6	MQD02P-1SEP042N	1/4" Hose Barb Push-Lok	N/A	24.2	15.25	31	N/A
P5	MQD03P-1SEU042N	7/16-20UNF Male Thread	N/A	26	8	28	N/A
P6	MQD03P-1SEH082N	8mm Hose Barb Push-Lok	N/A	26	15.25	32.5	N/A
P3	MQD03P-1SMU042N	7/16-20UNF Male Thread	N/A	Ø16.1	7.9	35.4	15
P2	MQD03P-1SMG022N	G1/4" Male Thread	N/A	Ø18	8.1	39	17
P5	MQD04P-1SEU042N	7/16-20UNF Male Thread	N/A	30.75	8	32	N/A
P3	MQD04P-1SMU042N	7/16-20UNF Male Thread	N/A	Φ18.1	8	38.5	17
P4	MQD04P-MINI2N	9/16-18UNF Female Thread	N/A	23.7	13.8	36.05	N/A

Physical characteristics

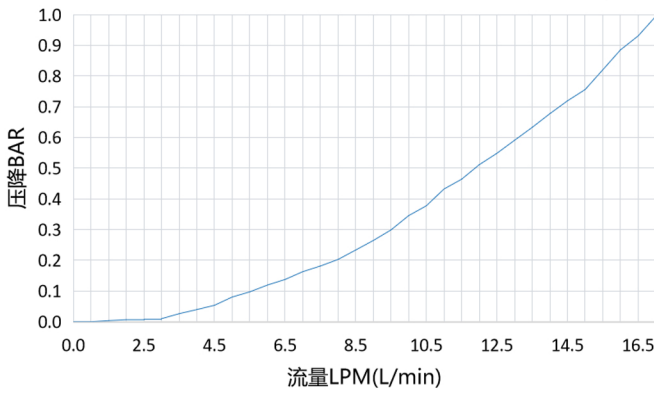
MQD02



MQD03



MQD04



MQD04MINI

