Series UPRS

Full Shut-off Ultrapure Pressure Regulator



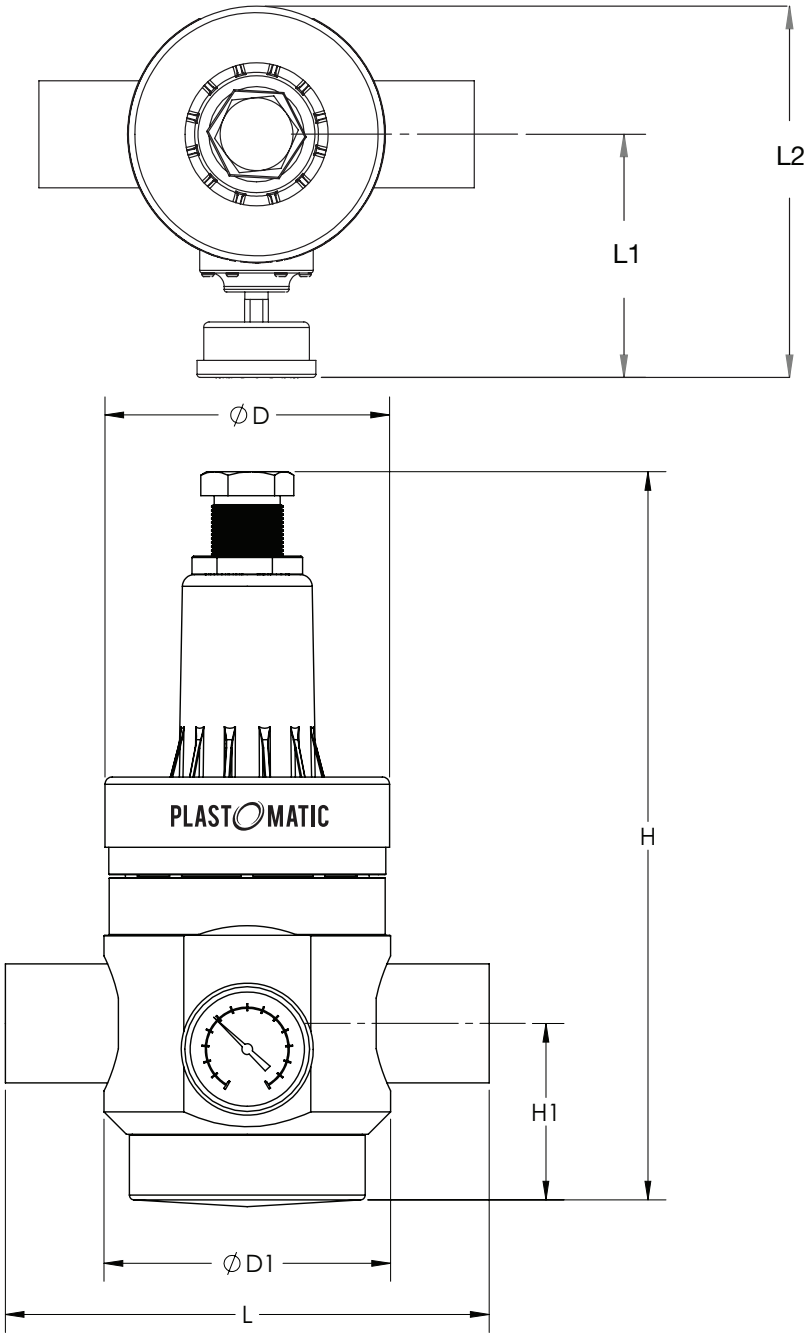
FEATURES:

- Superior flow with minimal particle shedding.
- Full shutoff design, eliminates pressure creep across the regulator under no-flow condition.
- All thermoplastic fluoropolymer construction; FFKM elastomers treated with proprietary cleaning (boil/acid/scavenge).
- Kalrez® FFKM ultrapure grade perfluoroelastomer specification provides the lowest metal ion contamination performance in semiconductor and other high purity applications[1]
- Standard connections: PVDF butt-fusion for Asahi or GF high purity piping systems. Flare and other types available; consult factory.
- High performance regulator provides maximum flow with minimal pressure loss downstream.
- No metal components other than non-wetted, Xylan coated stainless steel springs and external fasteners.
- Variable area diaphragm provides excellent sensitivity.
- Set pressure 5-100 PSI
- Multi-turn pressure adjustment provides accurate, infinite settings.
- Maximum inlet pressure 150 PSI
- High purity CDB-16 (8 hour hot / 8 hour cold DI rinse) procedure is standard; clean and double bag in class 100 (ISO 5) clean room.
- Available with or without isolated gauge guard and pressure gauge.

CAUTIONARY NOTES:

1. If the system is to be shut down for a length of time, a valve upstream of the regulator should be closed and pressure downstream should be released. This will relieve stress on the regulator components when not in use.
2. The upstream valve must be opened slowly prior to re-starting system to prevent a pressure surge and possible damage to the regulator. The valve must also be opened slowly prior to setting pressure.
3. Quick closing valves installed downstream of the regulator can cause water hammer. This may result in damage to the regulator.

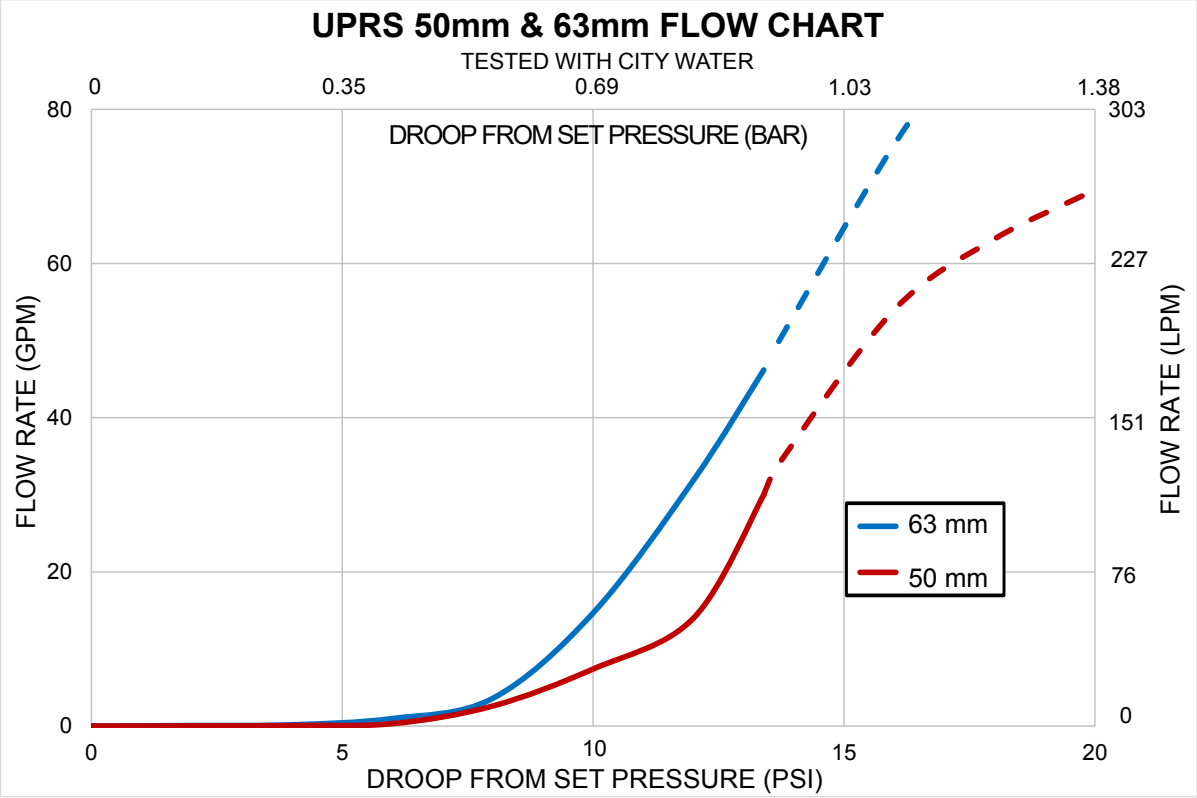
[1]Based on multiple SEMI F-57 testing performed by Balasz™ NanoAnalysis of select Kalrez® grades and other leading perfluoroelastomers, May 2017 through December 2019.



DIMENSIONS

PIPE SIZE		H (MAX)		H1		D		D1		L		L1		L2	
IN.	mm.	IN.	mm.	IN.	mm.	IN.	mm.	IN.	mm.	IN.	mm.	IN.	mm.	IN.	mm.
1-1/2"	50	15.0	382	3.3	84	5.9	151	5.0	126	10.0	253	5.2	131	8.1	207
2"	63	15.8	401	3.7	93	5.9	151	6.0	152	10.1	256	5.6	143	8.6	218

PLEASE NOTE: L1 & L2 DIMENSIONS ONLY APPLY TO UPRS REGULATORS WITH OPTIONAL GAUGE



PART NUMBERS & ORDERING INFORMATION

Size	No Pressure Gauge	w/Gauge, L to R Flow
25 mm	UPRS25-SP1-PF	Consult Factory
32 mm	UPRS32-SP1-PF	UPRS32-SP1-PF-LR
50 mm	UPRS50-SP1-PF	UPRS50-SP1-PF-LR
63 mm	UPRS63-SP1-PF	UPRS63-SP1-PF-LR

Note: Includes ultrapure CDB-16 procedure (clean, double-bag w/16 hour rinse)

Part numbers are shown with Asahi type spigots.
For GF spigots, change “SP1” to “SP2”, for example, UPRS50-SP2-PF.

Models with pressure gauge and integral gauge guard should be selected with flow direction to permit visibility of the gauge: "LR" indicates gauge placement for left to right flow. For right to left, change to "RL".

Example: UPRS50-SP1-PF-RL. Standard pressure gauge is center back mount 160 PSI / 11 Bar with PVDF barrier seal. 32 mm size uses FFKM barrier seal. For alternate pressure ranges/styles, contact factory.