

# **Series UPRS**

Full Shut-off Ultrapure Pressure Regulator

### **FEATURES:**

- Superior flow with minimal metal ion contamination and 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 applications¹
- 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, stainless steel springs and external fasteners.
- Variable area diaphragm provides excellent sensitivity.
- Set pressure 10-100 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.

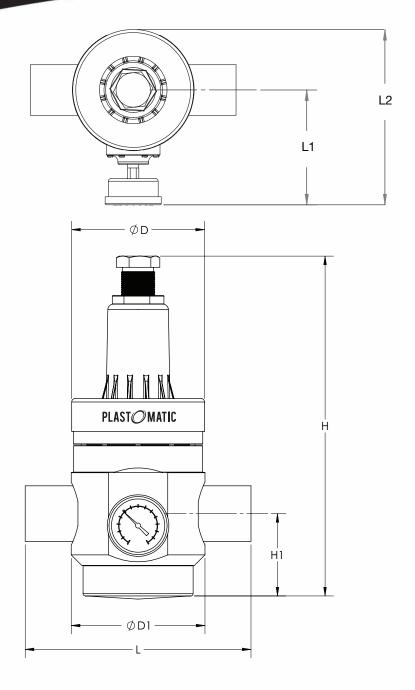
### **CAUTIONARY NOTES:**

- 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.

<sup>1</sup>Based on multiple SEMI F-57 testing performed by Balazs™ NanoAnalysis of select Kalrez® grades and other leading perfluoroelastomers, May 2017 through December 2019.







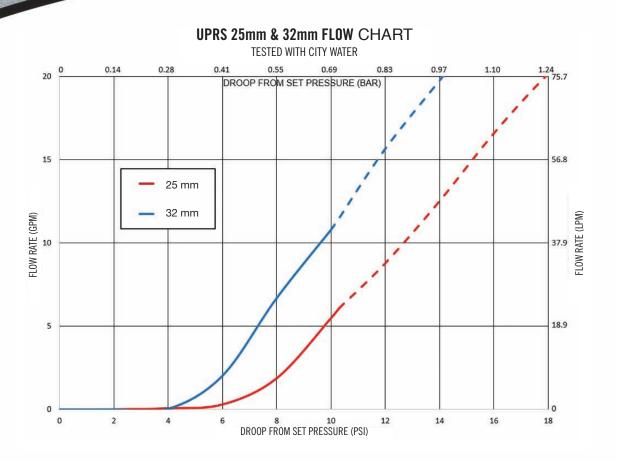
## **DIMENSIONS**

PIPE SIZE		H (MAX)		H1		D		DI		Ĺ		L1		L2	
IN.	mm.	IN.	mm.	IN.	mm.	IN.	mm.	IN.	mm.	IN.	mm.	IN.	mm.	IN.	mm.
1/2"	20	8.1	205	2.0	51	3.5	90	3.5	90	7.6	193	N/A	N/A	N/A	N/A
3/4"	25	9.2	233	2.2	55	4.0	102	4.0	102	7.9	200	N/A	N/A	N/A	N/A
1"	32	9.5	241	2.2	55	4.3	109	4.3	109	8.0	203	4.7	120	6.9	174
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

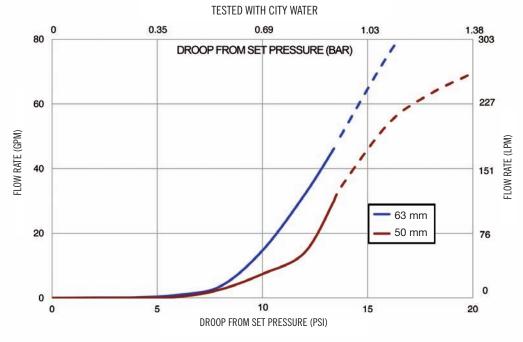
N/A DATA WILL BE ADDED WHEN THESE UNITS BECOME AVAILABLE WITH GAUGE GUARDS AND GAUGES.







### **UPRS 50mm & 63mm FLOW CHART**







#### PART NUMBERS & ORDERING INFORMATION

Size	No Pressure Gauge	w/Gauge, L to R Flow			
20 mm	UPRS20-SP1-PF	Consult Factory			
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.





