

## Series UPRS

### Full Shut-off Ultrapure Pressure Regulator



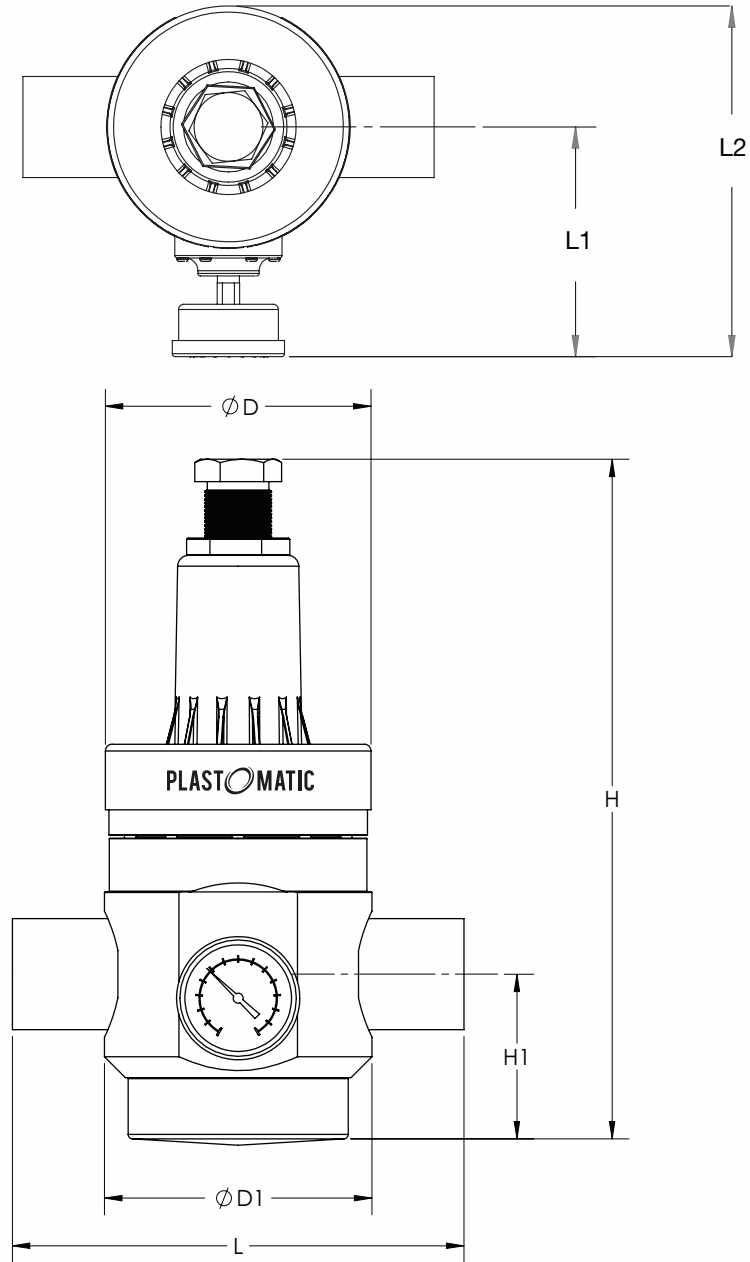
#### FEATURES:

- 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 applications<sup>1</sup>
- 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.



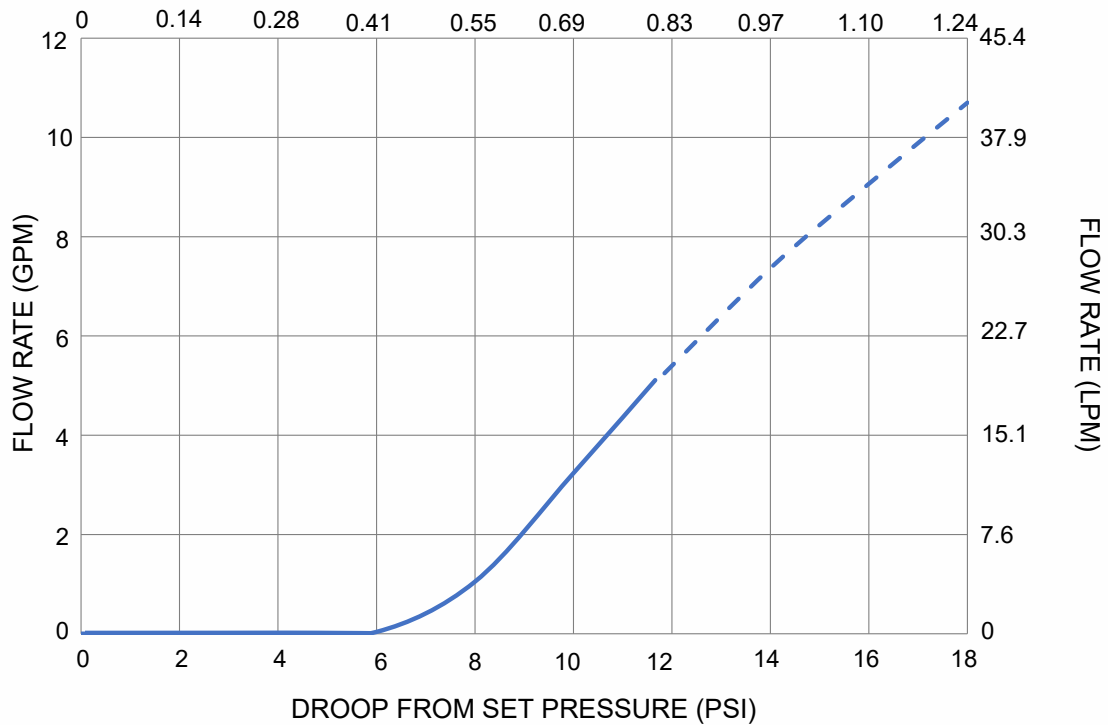
### DIMENSIONS

PIPE SIZE		H (MAX)		H1		D		D1		L		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	4.6	117	6.4	162
3/4"	25	9.2	233	2.2	55	4.0	102	4.0	102	7.9	200	4.8	122	6.8	173
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

## UPRS 20mm FLOW CHART

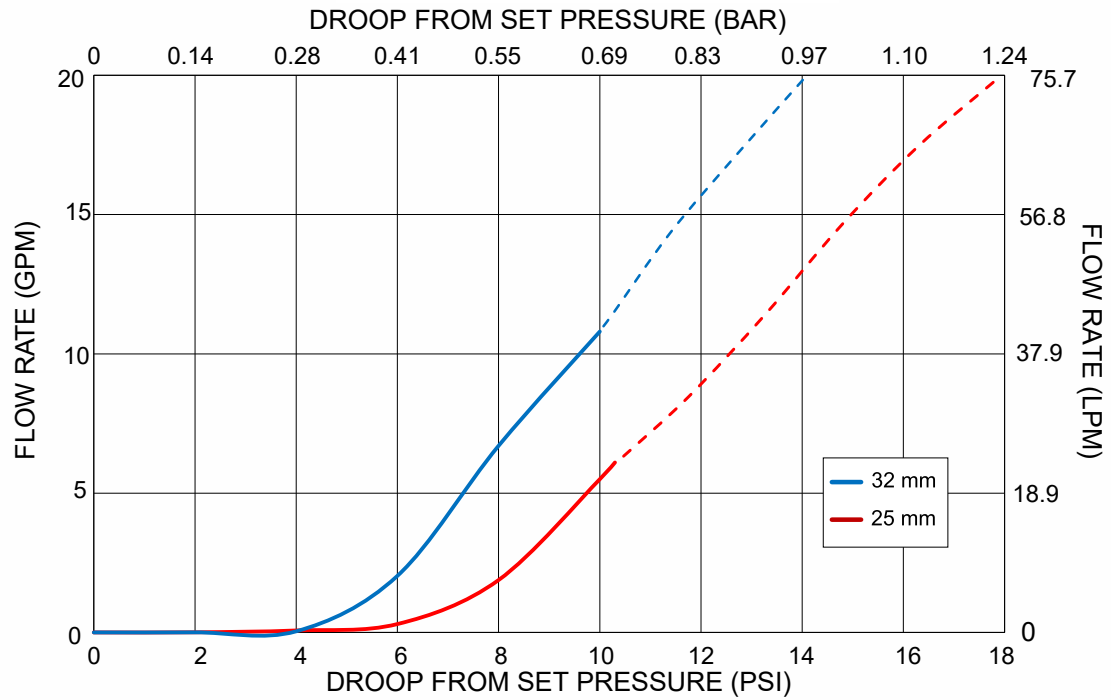
TESTED WITH CITY WATER

DROOP FROM SET PRESSURE (BAR)



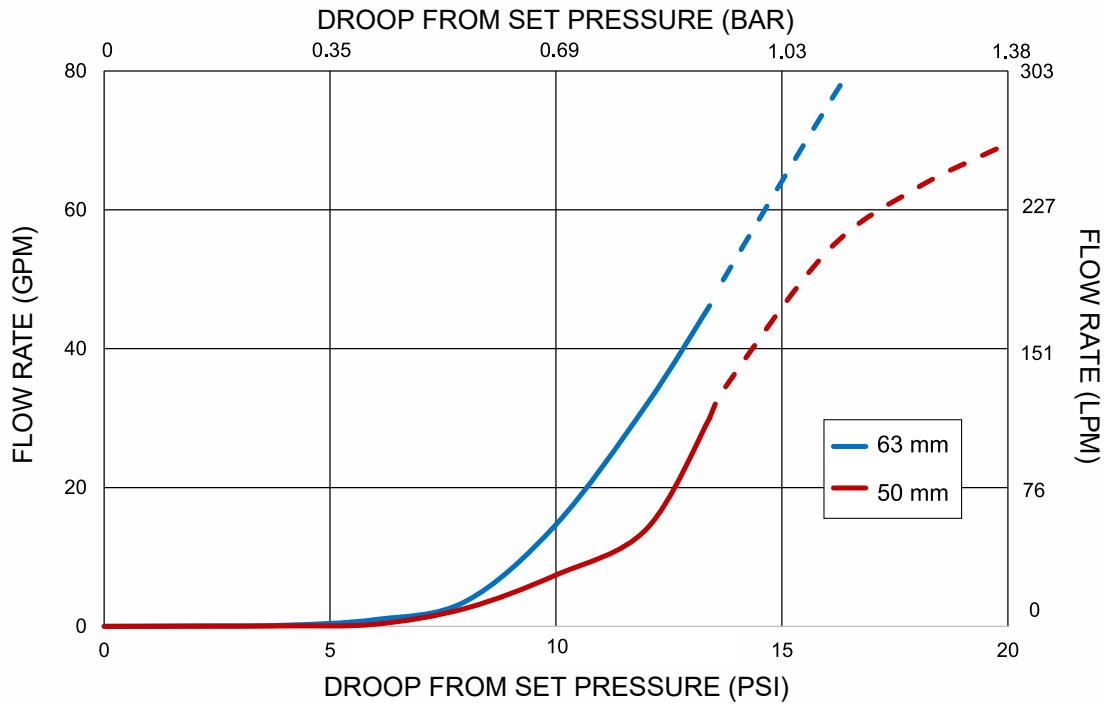
## UPRS 25mm & 32mm FLOW CHARTS

TESTED WITH CITY WATER



## UPRS 50mm & 63mm FLOW CHARTS

TESTED WITH CITY WATER



### PART NUMBERS & ORDERING INFORMATION

Size	No Pressure Gauge	w/Gauge, L to R Flow
20 mm	UPRS20-SP1-PF	UPRS20-SP1-PF-LR
25 mm	UPRS25-SP1-PF	UPRS25-SP1-PF-LR
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. 20, 25 & 32 mm sizes use KALREZ semiconductor grade FFKM barrier seal. For alternate pressure ranges/styles, contact factory.

