

## 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 SDR21 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 procedure in class 100 (ISO 5) clean room is standard; includes multi-stage cleaning with DI water, 18 megohm DI rinse, nitrogen purge, blacklight inspection and double bag.

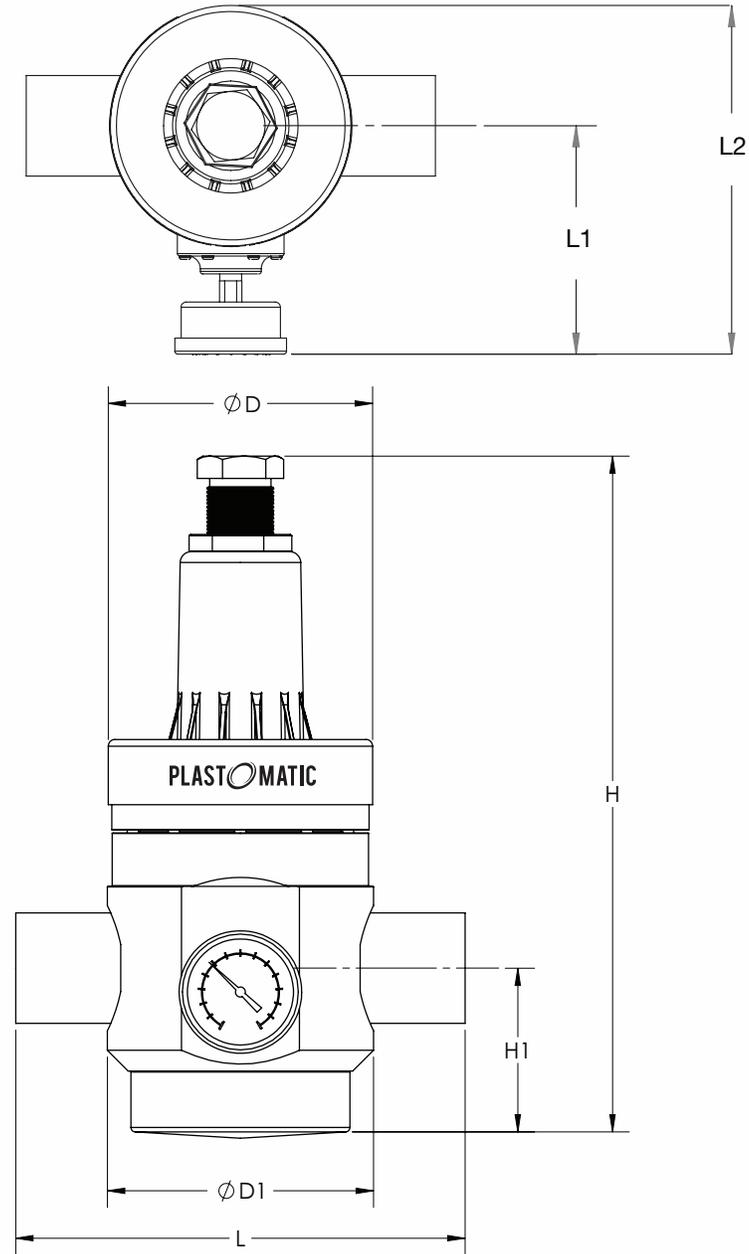


*Photo represents a specific model and size; actual appearance varies.*

#### 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.



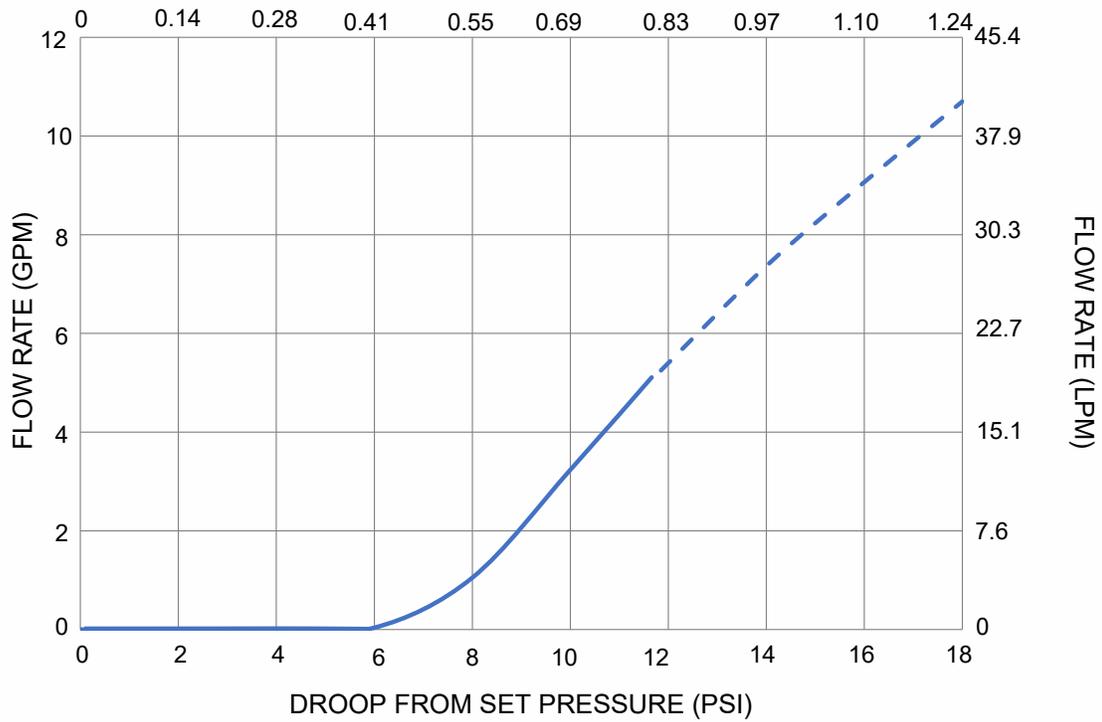
### DIMENSIONS

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

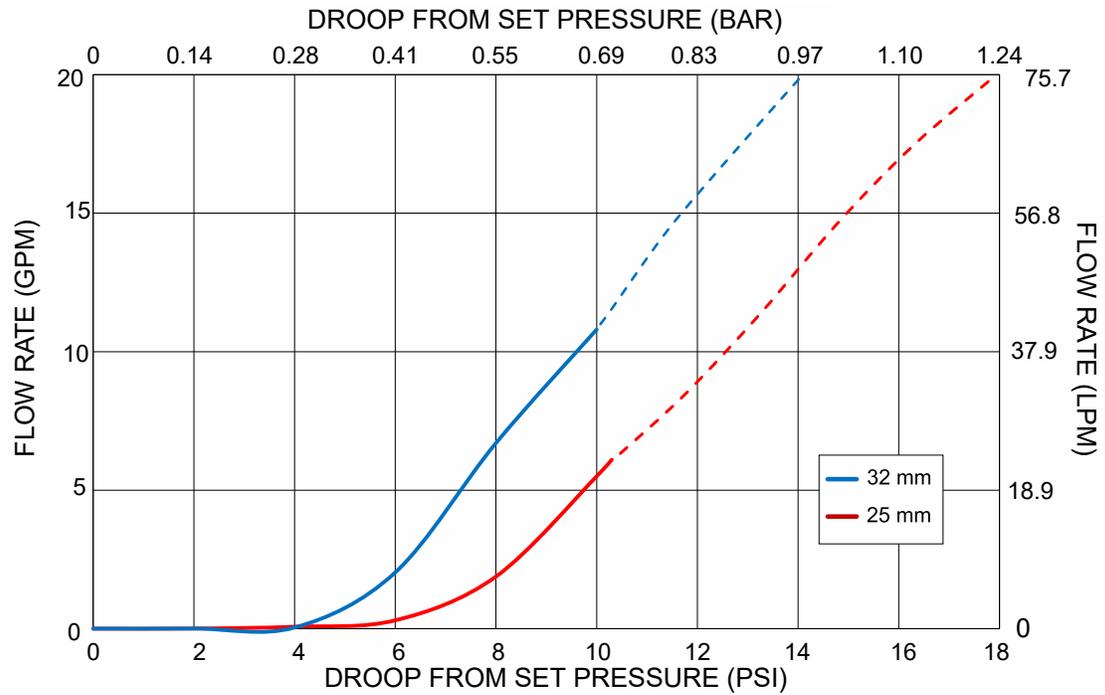
TESTED WITH CITY WATER

DROOP FROM SET PRESSURE (BAR)



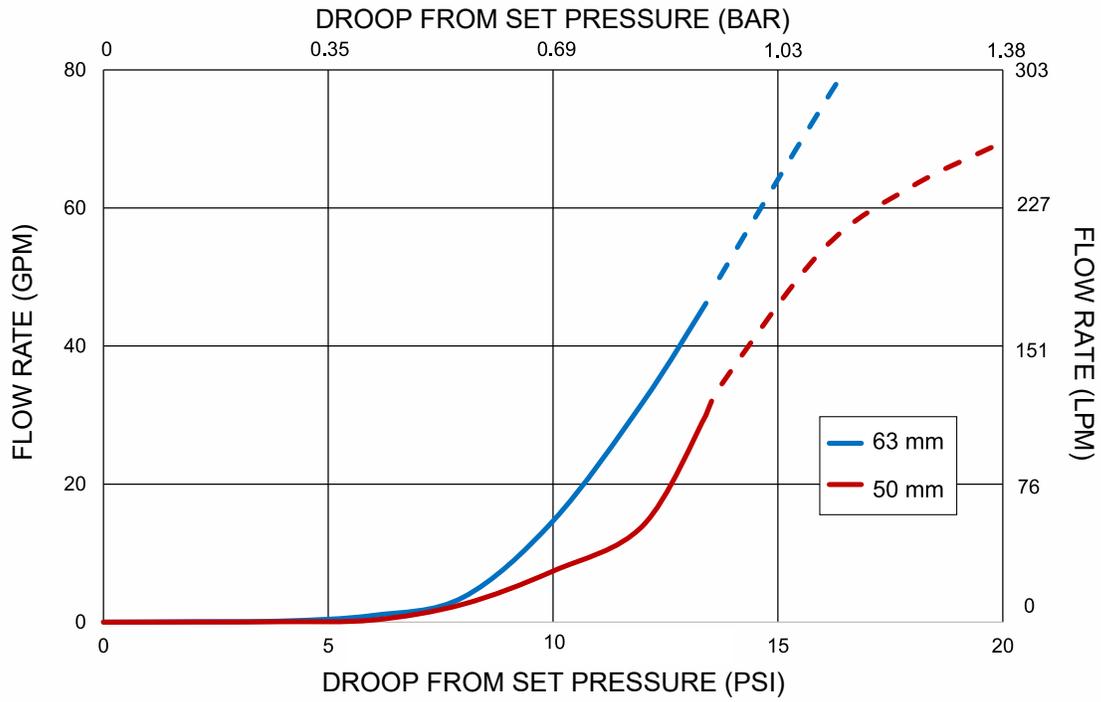
## UPRS 25mm & 32mm FLOW CHARTS

TESTED WITH CITY WATER



## UPRS 50mm & 63mm FLOW CHARTS

TESTED WITH CITY WATER



### PART NUMBERS & ORDERING INFORMATION

Size	Series UPRS	w/Gauge, L to R Flow**
20 mm	UPRS20-SP-PF	UPRS20-SP-PF-LR
25 mm	UPRS25-SP-PF	UPRS25-SP-PF-LR
32 mm	UPRS32-SP-PF	UPRS32-SP-PF-LR
50 mm	UPRS50-SP-PF	UPRS50-SP-PF-LR
63 mm	UPRS63-SP-PF	UPRS63-SP-PF-LR

**Note:** Includes ultrapure CDB procedure (clean, double-bag w/18 megohm DI rinse)  
Part numbers shown with PVDF SDR21 spigots.

**\*\* Consult factory for models with pressure gauge and integral gauge guard.** Flow direction should be specified to permit visibility of the gauge: "LR" indicates gauge placement for left to right flow. For right to left, change to "RL". Example: UPRS50-SP-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 pricing, availability, alternate pressure ranges/styles, additional cleaning levels, and any other custom features, contact factory.



*Photo represents a specific model and size; actual appearance varies. For intrinsic gauge shown, consult factory.*

  
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