

# SPF

## DESIGN FEATURES

The R-K SPF (Super Low Diaphragm Pressure Regulator) features a compact molded and/ or machined thermoplastic valve especially designed to be used in critical low pressure and/or high purity fluid regulating applications.

Adjustable screw (Type 1) makes it easy to convert varying upstream pressure into accurate pre-set downstream pressure.

Type 2 (1:1 ratio) uses air pressure to control the regulating process. Downstream pressure will be equal to applied air pressure.

No metal or elastomer contact with the fluid.

One piece of TEFLON diaphragm and piston combination.

Self-draining to prevent contamination and bacteria growth.

Direct acting full flow and top entry for easy maintenance and minimum water hammer.

Available in Flare, Butt fusion, or NPT ends.

Ideal for most harsh chemicals, DI water, Bio-Medical, Pharmaceutical and other ultra-pure applications.

Type 1 : spring operated pressure regulator.

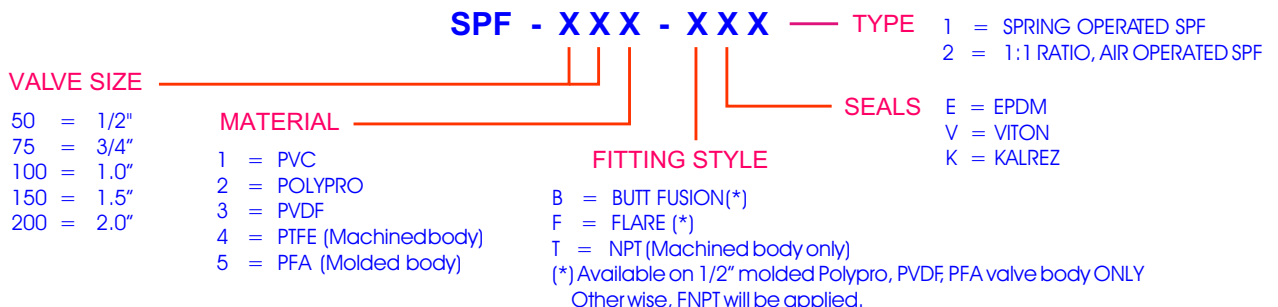
## SUPER LOW DIAPHRAGM PRESSURE REGULATOR

### SPECIFICATIONS

Inlet Pressure	0 to 150 PSIG	Diaphragm	Virgin Teflon
Air actuating Pressure	1 to 20 PSIG (Type 2 only)	O-Ring	Viton (Standard)
Regulating Pressure	1 to 20 PSIG (Regulated pressure must be specified when placing order)	Valve ports	Flare ends (Polypro, PVDF & PFA)* Butt fusion (Polypro, PVDF & PFA)* *Apply to 1/2" Molded valve ONLY FNPT (1/2" - 1.0" machined body) MNPT (1.5" - 2.0" machined body)
Temperature Range	0F to 140 F for PVC 0 F to 180 F for POLYPRO 0 F to 280 F for PVDF 0 F to 340 F for TEFLON	Mounting method	(2) 3/16" Self tapping screws *1/2" Molded valve ONLY (4) 1/4"-20 tapped holes for standard machined valve body
Material	Valve Body PVC Polypropylene PVDF TEFLON (PTFE and PFA)	Valve types	Type 1: Spring operated SPF Type 2: 1 : 1 ratio Air operated SPF

### ORDER INFORMATION

The chart below will specify R - K standard valves regarding valve size, valve material, and seal material. For special orders, please consult the factory for pricing and delivery information.

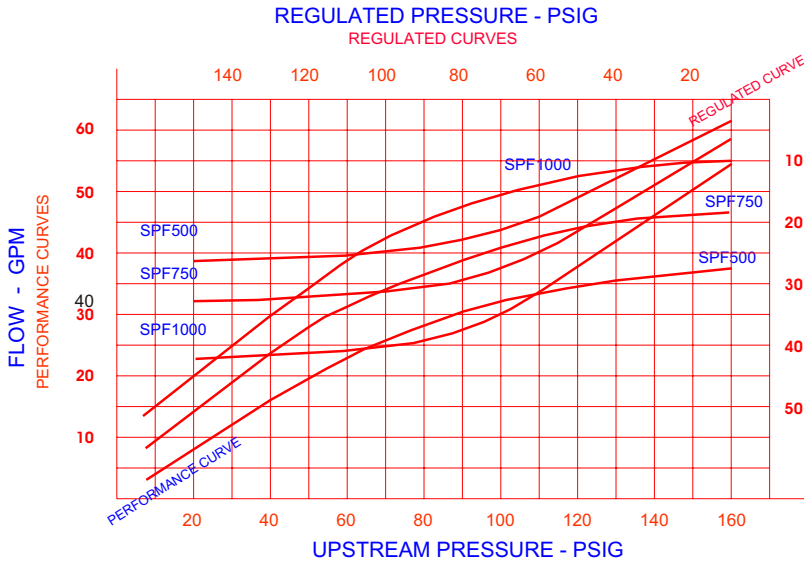


# R - K Industries

1120 E. Locust Street, Ontario, Ca. 91761  
Tel (909) 947-5227 Fax (909) 947-3039

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# ENGINEERING & PERFORMANCE DATA



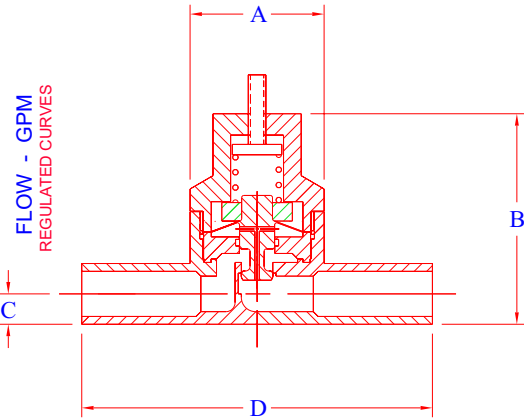
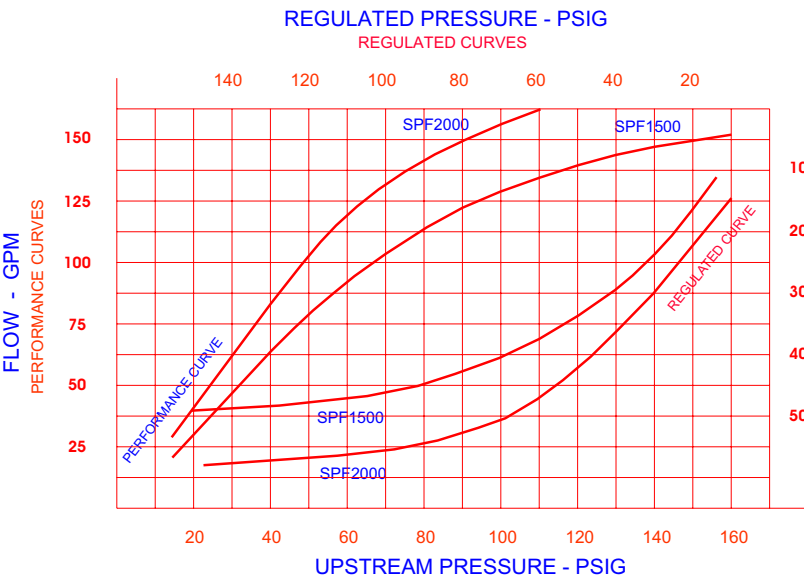
## NOTES

PERFORMANCE CURVES SHOW THE FLOW RATE OF SPF VALVES WITH POPPET SEAL FULLY OPEN. REGULATED CURVES SHOW THE FLOW RATE OF SPF VALVES AT THE POINTS OF PRE-SET DOWNSTREAM PRESSURE

TEST DATA WAS PERFORMED WITH 68 DEGREE F WATER, AND 150 MAXIMUM PRESSURE.

THESE PERFORMANCE CURVES WILL BE CHANGED WITH HIGHER VISCOSITY LIQUID, SYSTEM CONDITION, AND/OR HIGHER TEMPERATURE.

CONSULT YOUR LOCAL SALES REP. OR MANUFACTURER DIRECTLY FOR CUSTOM PRODUCTS OR SPECIAL APPLICATIONS.



## DIMENSIONAL DATA

*Dim Unit = Inches*

Valve size	Ports type	A	B	C	Cv	D
1/2" Molded	Flare/Fuse	1.90	3.50	.43	2.64	4.90/4.27
1/2"	FNPT	2.50	3.85	.65	2.64	
3/4"	FNPT	3.00	4.65	.75	2.92	
1.0"	FNPT	3.50	6.30	.98	3.87	
1.5"	MPT	4.00	7.18	1.25	16.93*	
2.0"	MPT	5.00	7.75	1.62	22.41*	

(\*) Cv value @ 150 GPM

