

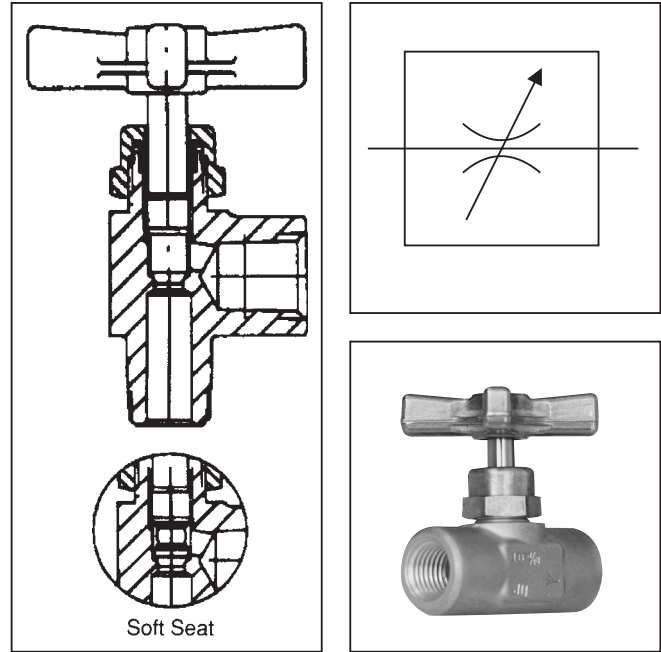
General Description

Series 133, 135, 143 and S133, S135, S143 needle valves are capable of metering flow of a wide variety of liquids and gases. A soft seat design can be used when zero leakage is required.

Features

- Low-priced brass needle valves available in metal and soft seat designs.
- Special stem designs offer precision control of small volume flows.
- External pipe threaded ports are counterbored to accept solder-type tube fittings.
- Stops, prevents stems from being screwed out accidentally.
- In the soft seat type the resiliency of the captive thermoplastic nose assures positive shut-off.

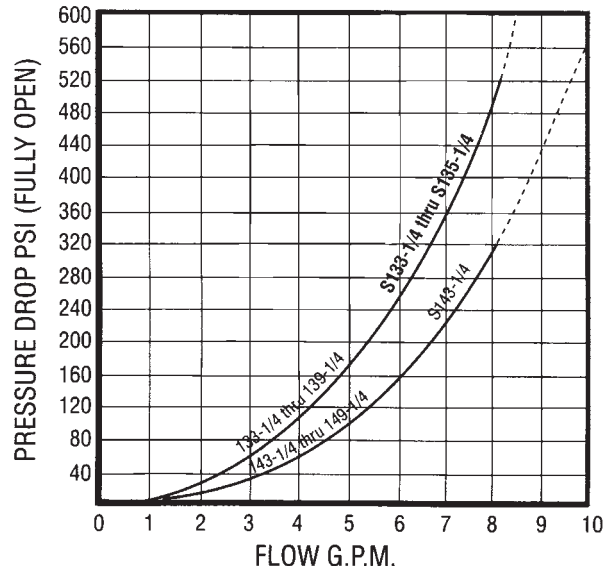
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Specifications

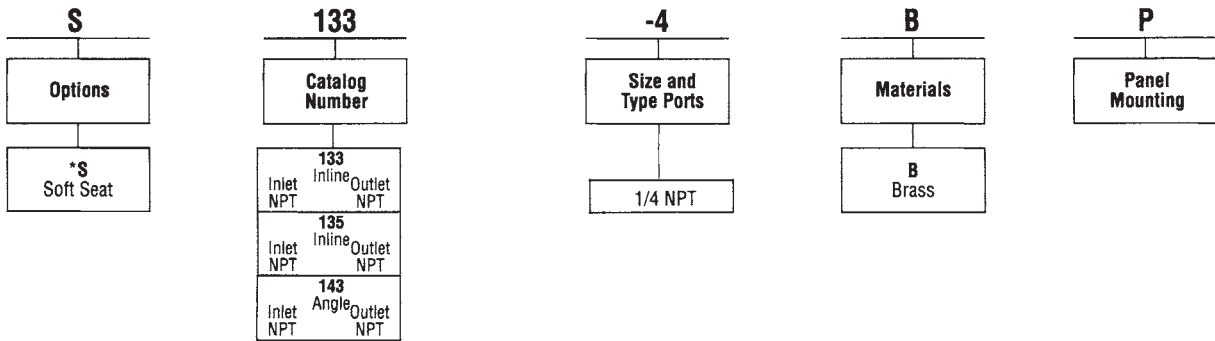
Service Applications	133, 135, 143: Liquids S133, S135, S143: Gases and liquids
Maximum Operating Pressure	133, 135, 143: Working: 345 Bar (5000 PSI) Proof: 517.5 Bar (7500 PSI) Burst: 862.5 Bar (12,500 PSI) S133, S135, S143: 207 Bar (3000 PSI)
Sizes	NPT: 1/4
Ports	NPT: Pipe threads
Internal Leakage	Zero
Mounting	In-line or panel. Maximum panel thickness 1/2". Panel hole diameter 17/32".
Material	Body: Brass Cap: Brass Cap Washer: 316 Stainless Steel Locknut: Brass Stem: 303 or 316 Stainless Steel Stem Nose Soft Seat: Thermoplastic Washers: 304 Stainless Steel Packing: PTFE Handle: Aluminum alloy star (metal seat)
Operating Temperature	133, 135, 143: Brass: -54°C to 93°C (-65°F to 200°F) Consult factory for special temps. S133, S135, S143: Stainless Steel: -54°C to 93°C (-65°F to 200°F)

Performance Curves



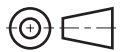
Size	CV Factors		Weights (Approx.)
	Inline	Angle	
1/4	.19	.37	.25 Lb.

Ordering Information

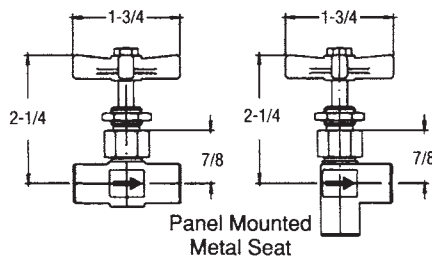


Dimensions

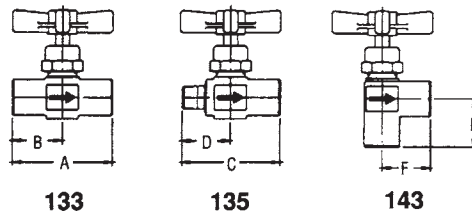
Dimensions are shown in inches



Handle and Centerline



Flow Direction of Soft Seat is Reverse of Arrows Shown Below



Dimensions Apply to Both Regular and Panel-Mounting Types, Metal and Soft Seat

Dash Number	Size		A	B	C	D	E	F	G	H	J
	Tube	Pipe									
1/4	—	1/4	1-7/8	15/16	1-13/16	7/8	1-3/4	7/8	15/16	—	—