

2" Flowgrid™ Slam Shut 250 and Shutoff Valve

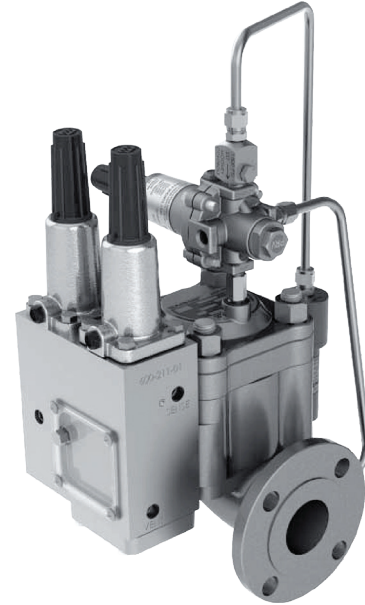
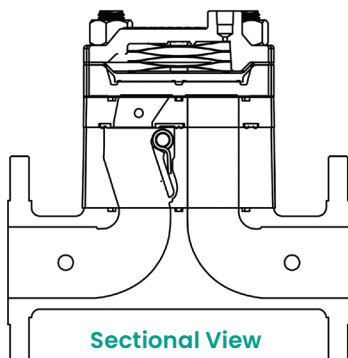
NPT CL 300 | CL 150 RF, CL 300 RF

The 2" **Mooney™** Flowgrid Slam Shut 250 is a combination of a regulator and a slam shut. In addition to pressure regulation, this pneumatically actuated device provides automatic downstream pressure protection. By separating the pneumatic controller and mechanical latching mechanism, shut off occurs only when designated set points are reached. The patent pending design prevents disruptive and costly "accidental shutoffs". Positive shutoff is achieved instantly through the snap acting mechanism, and reset can be completed with common tools.

Specifications

Size	2"
Body Style	Flowgrid 250 with Slam Shut
End Connections	2" NPT CL 300, 2" CL 150 RF Flange, 2" CL 300
Temperature	Working -20°F to 150°F (-29°C to 65°C)
Maximum Differential	250 psig (17 bar)
Minimum Differential	Refer to graph on page 2
Cracking Differential	Refer to graph on page 2
Maximum Inlet Pressure	740 psig (50 bar)
Outlet Pressure Range	Limited by SSV controller and Series 20 Pilot
Flow Direction	Uni-Directional
Body Taps	Four 1/4" - 18 NPT (one inlet, one center port ¹ , one loading and one downstream)

1. Center port - between flapper valve and regulator.



**Flowgrid Regulator with Integral Shutoff Valve,
Series 50D Dual Function Controller.**

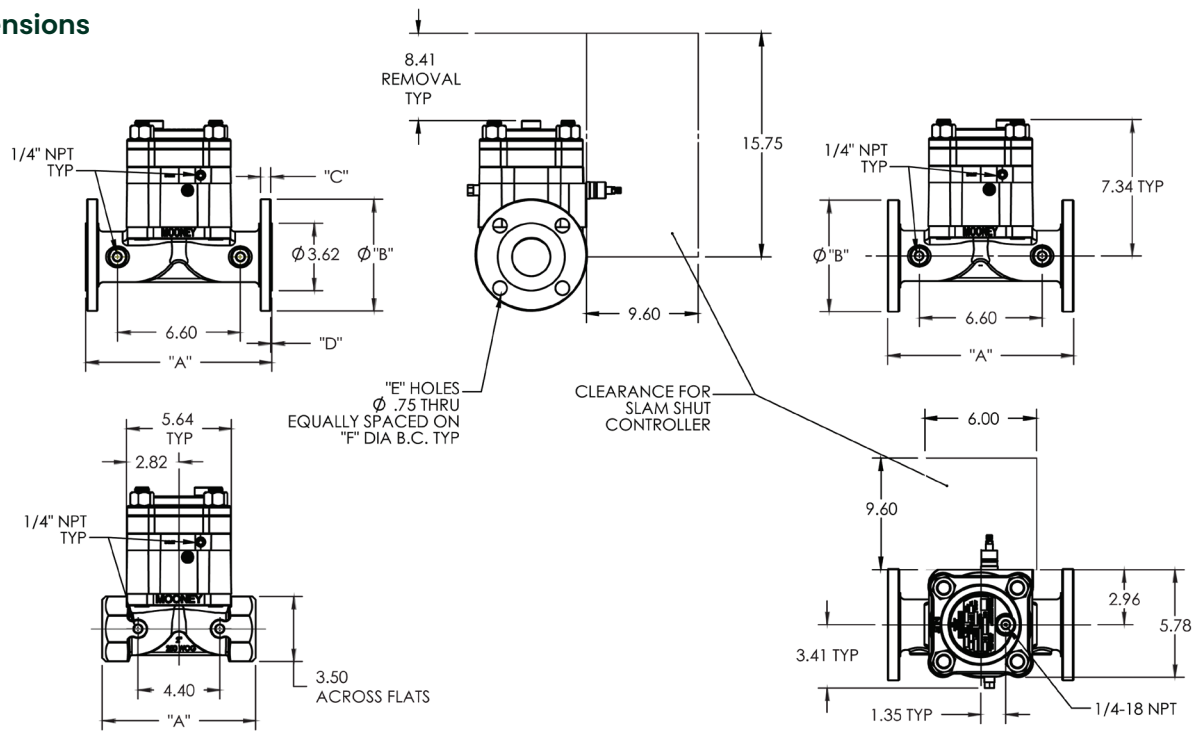
Materials of Construction

Body	Ductile Iron ASTM A 395
Spring Case	ASTM A 356-T6 Hard Anodized Aluminum
Throttle Plate	ASTM A 356-T6 Hard Anodized Aluminum
Seal Retainer and Flapper Body	17 - 4PH Stainless Steel or A515 Carbon Steel with ENC Coating
Diaphragm	Nitrile/Nylon™
O-Ring and Seals	Nitrile
Studs and Nuts	ASTM A 193 GR B-7 ASTM A 194 GR 2H or Equal
Springs	301 Stainless Steel ASTM A 313-03 17-17 SS
Bushings	Acetal
Restricting Plates	Zinc Plated Carbon Steel

Stock Numbers

2" Flowgrid 250 & Shutoff Valve	Stock Number	Weight
NPT CL 300	SG-82	55 lbs.
150# Flange	SG-83	65 lbs.
300# Flange	SG-84	65 lbs.

Dimensions



Flange Dimensions

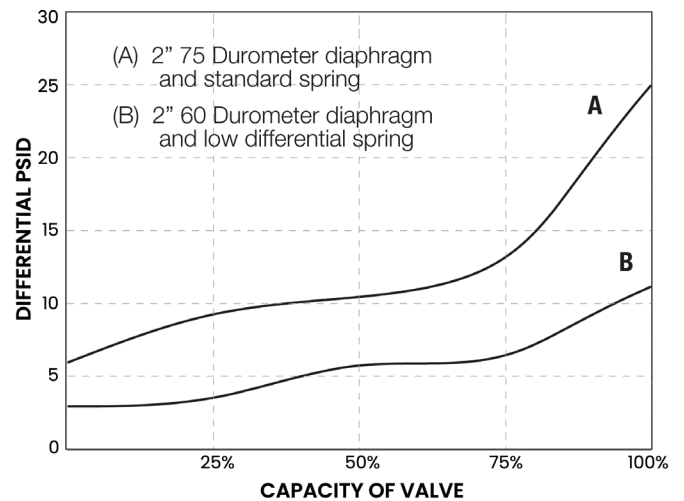
Flange Class	A	B	C	D	E	F
Class 150	10.00	6.00	.62	.06	4	4.75
Class 300	10.00	6.00	.56	-	4	4.75
NPT/SWE	8.25	-	-	-	-	-

Flow Coefficients and Constants¹

2" Flowgrid 250 & Shutoff Valve				Swage Factor	
% Capacity	C_v	C_l	C_g	1.5:1	2:1
100%	40	40	1600	0.97	0.98
75%	32	38	1230	0.98	0.97
50%	23	35	820	0.99	0.98
35%	16	35	560	1.00	1.00

1. Preliminary Data

Minimum Pressure Differential vs. Capacity



Diaphragm Selection

Compound	Temp. Range (°F)	Maximum Differential	Characteristics	Recommended Applications
75 Duro	-20 to 150	1000 psid	Best All Around Material	60 psid to Max. Differential
60 Duro	-25 to 150	300 psid	Best Shutoff at Low Differential Pressure	Low Differential (100 psid or less) or Low Temperature

Baker Hughes 