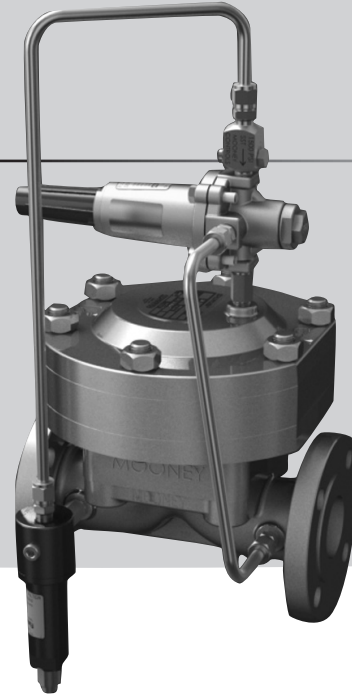




# 2" Added Capacity Port

Flanged CL 150, 300 & 600  
NPT & SWE CL 600

The 2" x 3" Flowgrid® Valve is an economical and easy to maintain pilot operated valve for both gas and liquid applications. The valve is designed to be used in conjunction with a self contained pilot control system as pictured. This valve combines a 2" body with a 3" port producing a very strong piping installation with low regulator outlet velocity. It is ideal for skid mounted, vault and enclosure installations.

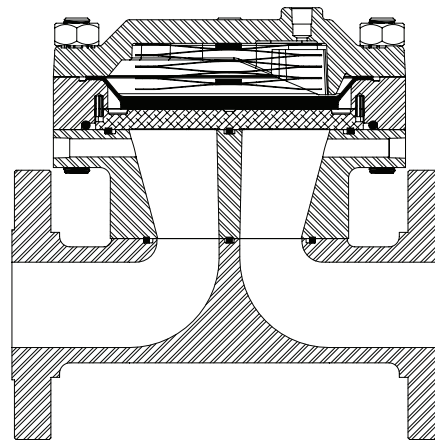


## Specifications

<b>Size</b>	2"
<b>Body Style</b>	Single Port (2")
<b>End Connections</b>	2" CI 150, 300, 600 Flanged 2" CI 600 NPT, SWE
<b>Temperature</b>	Working -20°F to 150°F Emergency -40°F to 175°F
<b>Maximum Operating Differential</b>	800 psig
<b>Maximum Emergency Differential</b>	1000 psig
<b>Minimum Differential</b>	Refer to Graph on pg 2
<b>Cracking Differential</b>	Refer to Graph on pg 2
<b>Maximum Inlet Pressure</b>	1480 psig*
<b>Outlet Pressure Range</b>	Limited by Pilot
<b>Flow Directon</b>	Bi-Directional**
<b>Body Taps</b>	Two 1/4" - 18 NPT

\* Limited by pilot or flange rating

\*\* Reverse flow by changing pilot connections and reversing spring case



Sectional View

## Stock Numbers

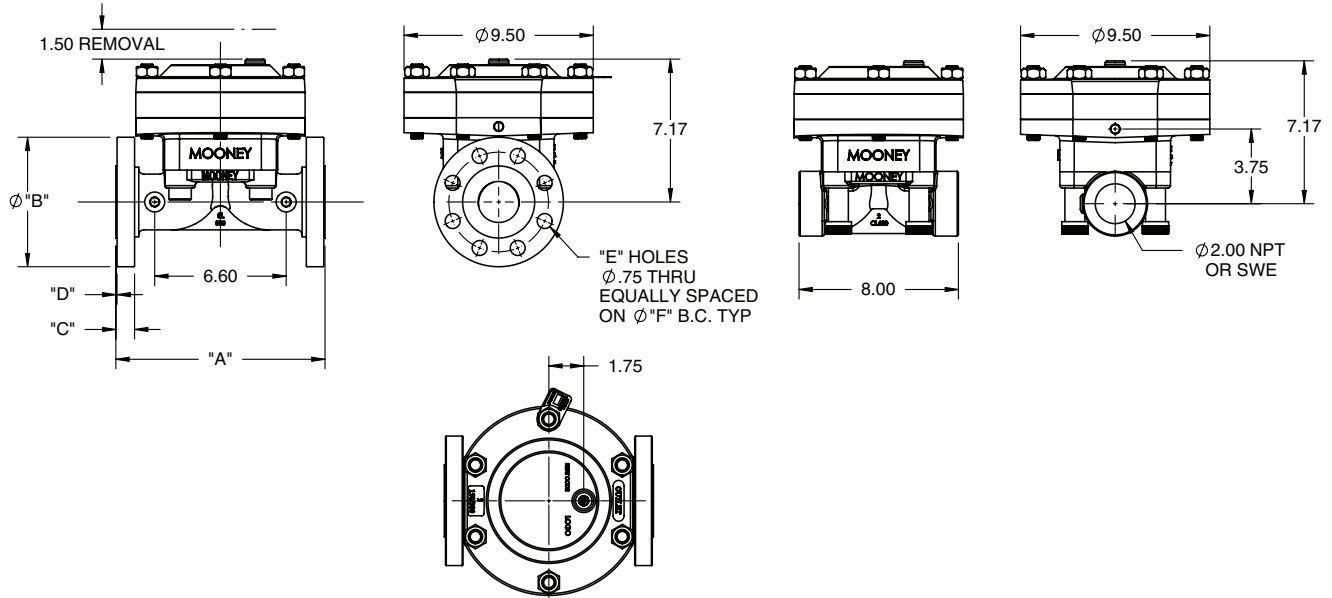
2" x 3" Adapter	Stock Number	Weight
150 # Flange	FG-119	78 lbs
300# Flange	FG-120	82 lbs
600# Flange	FG-121	88 lbs
NPT CL 600	FG-117	68 lbs
SWE CL 600	FG-118	68 lbs

## Materials of Construction

<b>Body &amp; Spring Housing</b>	ASTM A 216 GR WCB Carbon Steel
<b>Throttle Plate</b>	17 - 4PH Stainless Steel or A515 Carbon Steel with ENC Coating
<b>Diaphragm</b>	Nitrile/Nylon*
<b>O-Ring &amp; Seals</b>	Nitrile
<b>Bolting</b>	ASTM A 193 GR B-7 or Equal
<b>Spring</b>	301 Stainless Steel

\* Refer to diaphragm selection chart on page 2

## Dimensions



## Flange Dimensions

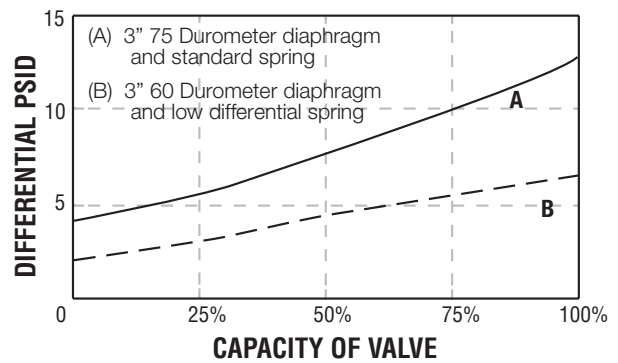
Flange Class	A	B	C	D	E	F
<b>Class 150</b>	10.00	6.00	.75	.06	4	4.75
<b>Class 300</b>	10.50	6.50	.88	.06	8	5.00
<b>Class 600</b>	11.25	6.50	1.25	.25	8	5.00

## Flow Coefficients and Constants

Percent	2" Added Capacity Single Port			Swage Factor	
	$C_v$ Preliminary	$C_1$	$C_g$	1.5:1	2:1
100%	56	35	1970	0.96	0.93

\* Preliminary data

## Minimum Pressure Differential vs. Capacity



\* Preliminary data

## Diaphragm Selection

Compound	Temp. Range (Degrees F)	Maximum Differential	Characteristics	Recommended Applications
<b>75 Duro</b>	-20 to 150	1000 psid	Best All Around Material	60 psid to Max. Differential
<b>60 Duro</b>	-25 to 150	300 psid	Best Shutoff at Low Differential Pressure	Low Differential (100 psid or less) or Low Temperature
<b>80 Duro High ACN</b>	-5 to 175	1000 psid	Higher Abrasion and Swelling Resistance	High Differential (400 psid or higher) or Abrasive Conditions with Distillates
<b>80 Duro Low ACN</b>	-20 to 150	1000 psid	Higher Abrasion Resistance and Low Temperature Flexibility	High Differential (400 psid or higher) or Abrasive Conditions at Low Temperatures



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