

# NV55

## High Flow Diaphragm Valve



**VERIFLO**

technological

leadership

by design

ISO 9001 Certified

Veriflo's NV55 is a high quality industrial-grade diaphragm valve based on the 955 valve. The high flow NV55 valve, with its aerodynamic passages, is ideally suited for use when flowing large volumes of corrosive and non-corrosive liquids and gases.



### features

- ▶ .55 C<sub>v</sub> flow capacity.
- ▶ .48 C<sub>v</sub> flow capacity for lever versions.
- ▶ Internally threadless.
- ▶ Ideal for high flow applications.
- ▶ Fully functional from vacuum to 125 psig for AOP valve and 250 psig for manual valves.
- ▶ Aerodynamic, smooth flow passages.
- ▶ No springs in wetted area.
- ▶ High cycle life (including corrosive service).
- ▶ 100% leak tested.
- ▶ Metal-to-metal seal assures high leak integrity.
- ▶ Positive shut off.

### materials of construction

#### Wetted

Body..... 316L Stainless Steel  
 Seat..... PCTFE (formerly Kel-F81®)  
 Optional PEEK™, Vespel®  
 Diaphragm..... Elgiloy® or equivalent

#### Non-wetted

Nut..... 316L Stainless Steel  
 Cap..... 316L Stainless Steel  
 Actuation..... AOP, Indicator knob - Aluminum  
 ..... All Levers - Zinc, Handwheel - ABS

### operating conditions

Maximum operating pressure:  
 AOP, Indicator Knob, Handwheel  
 125 psig (8.6 barg)  
 Lever versions..... 250 psig (17.2 barg)  
 Minimum operating pressure..... Vacuum  
 Temperature  
 PCTFE (formerly Kel-F81®)..... -40°F to 150°F  
 (-40°C to 66°C)  
 PEEK™..... -40°F to 250°F  
 (-40°C to 121°C)  
 Vespel®..... -40°F to 250°F  
 (-40°C to 121°C)  
 Bake out in the open position..... 250°F  
 (121°C)  
 Actuator pressure..... 60-120 psig (4-8 barg)

### surface finishes

Standard Ra..... 64 micro inch

### functional performance

Flow capacity:  
 AOP, Indicator Knob, Handwheel..... C<sub>v</sub>= .55  
 Lever Versions..... C<sub>v</sub>= .48  
 (ANSI/ISA S 75.02 1988 using water)

Design Proof Pressure..... 375 psig (26 barg)  
 Design Burst Pressure..... 750 psig (52 barg)  
 Design Leak Rate:  
 Outboard..... 1 x 10<sup>-8</sup> scc/sec He  
 Inboard..... 1 x 10<sup>-8</sup> scc/sec He  
 Across seat..... 1 x 10<sup>-8</sup> scc/sec He

### standard connections

1/4" Compression, Male NPT, Female NPT  
 3/8" Compression, Male NPT, Female NPT  
 1/2" Compression, Male NPT, Female NPT

### internal volume

3.29 cc

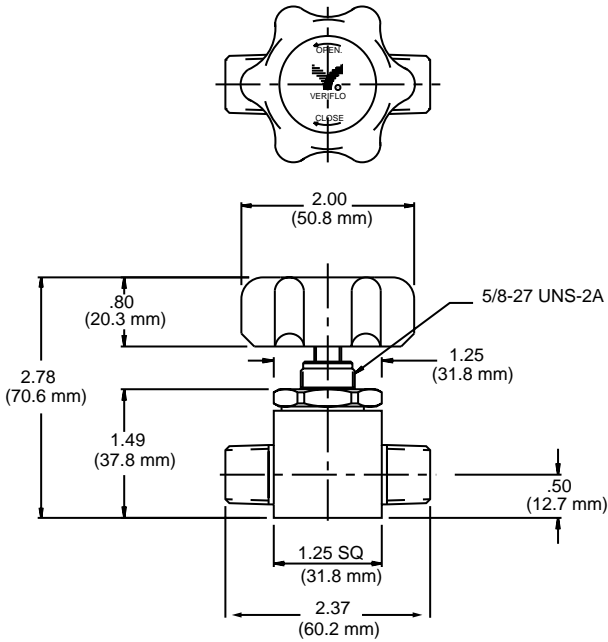
### approximate weight

.81 lbs (.36 kg)

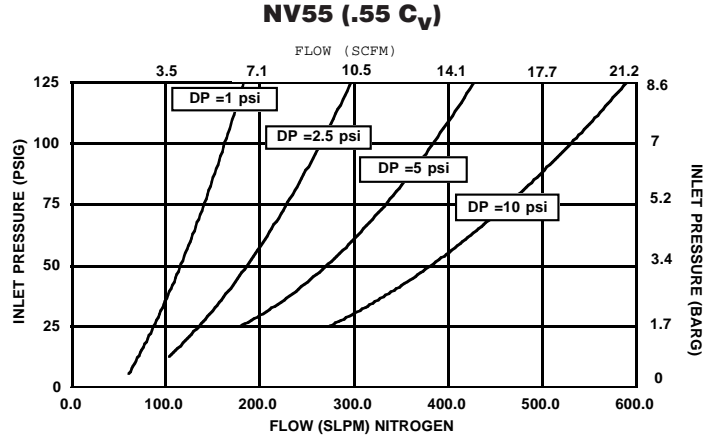


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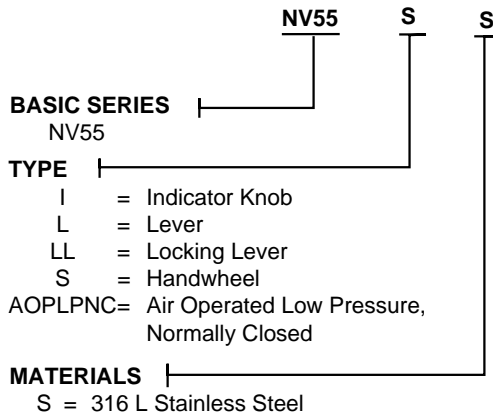
## Dimensional Drawing



## Flow Curve



## Ordering Information



**44MM** **PM**

### OPTIONAL FEATURES

- MK = Machined Knob
- PM = Panel Mount\*
- VESP = Vespel® seat
- PEEK = PEEK™ seat

### CONNECTIONS

- 44MM = 1/4" Male NPT In and 1/4" Male NPT Out
- 44TT = 1/4" Compression In and 1/4" Compression Out
- 44FF = 1/4" Female NPT In and 1/4" Female NPT Out
- 66MM = 3/8" Male NPT In and 3/8" Male NPT Out
- 66TT = 3/8" Compression In and 3/8" Compression Out
- 66FF = 3/8" Female NPT In and 3/8" Female NPT Out
- 88MM = 1/2" Male NPT In and 1/2" Male NPT Out
- 88TT = 1/2" Compression In and 1/2" Compression Out
- 88FF = 1/2" Female NPT In and 1/2" Female NPT Out

Elgiloy® is a registered trademark of Elgiloy  
 Vespel® is a registered trademark of DuPont Company.  
 Kel-F81® is a registered trademark of 3M Company  
 Peek™ is a registered trademark of Victrex plc.

\*Not available on I or AOP units.

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