

# V5055A-F Industrial Gas Valves

PRODUCT DATA



## APPLICATION

The V5055 Gas Valves are used with the V4055, V4062, and V9055 Fluid Power Actuators to control gas flow to commercial and industrial burners.

While it is possible to combine any V5055 gas valve with any V4055, V4062, V9055 fluid actuator, a limited range of combinations apply to the applications most often used. See Table 1.

## FEATURES

- Used with natural or liquefied petroleum (LP) gases.
- V5055 normally closed valves are rated for final shutoff service (safety shutoff).
- V5055A,C,D,E,F Valves are for On-Off service.
- V5055B Valve has a characterized guide and in combination with the V4055, V4062, and V9055 Fluid Power Actuators, provides slow-opening, hi-lo-off, and modulating functions respectively.
- V5055C,E Valves have a double seal and are used with V4055D,E Actuators to provide proof-of-closure switch and valve seal overtravel interlock.
- V5055D,E Valves are for high pressure applications (see Table 2).
- Seven valve sizes from 3/4 to 3 inches have NPT threaded connections. Models are available with BSP-PL threads. V5055A,B,C Valves are available in a 4 inch size and have flange connections.
- Most models have 1/4 inch upstream and downstream tap and plug. BSP-PL thread models have 1/4 inch upstream tap and plug.
- Yellow SHUT indicator attached to the valve stem provides an indication of the valve closed position.
- Unpainted, die-cast aluminum body.

**NOTICE:** Per Industry Standards, the actuator is required a conduit seal or a cable type that is sealed be installed in a device that can result in a flammable liquid flow through a conduit or cable to an electrical ignition source in the event of a seal leakage or diaphragm failure.

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Table 2. V5055 Pressure Ratings

| Model  | Pipe Size      | STANDARD PRESSURE ACTUATORS<br>V4055A, D, F, G V4062A, D V9055A, D |          |                                  |         | HIGH PRESSURE ACTUATORS<br>V4055B, E V4062B |           |                                  |         |
|--|----------------|--|----------|----------------------------------|---------|---|-----------|----------------------------------|---------|
|  |                | M.O.P.D. <sup>a</sup>  |          | Max. Rated Pressure <sup>b</sup> |         | M.O.P.D. <sup>a</sup>                       |           | Max. Rated Pressure <sup>b</sup> |         |
| STANDARD<br>PRESSURE VALVES<br>V5055A, B, C, F | 3/4" to 1-1/2" | 5 PSI  | 340 mbar | 15 PSI                           | 1.0 Bar | 15 PSI                                      | 1030 mbar | 15 PSI                           | 1.0 Bar |
|  | 2" to 3"       | 5 PSI  | 340 mbar | 15 PSI                           | 1.0 Bar | 15 PSI                                      | 1030 mbar | 15 PSI                           | 1.0 Bar |
|  | 4" flanged     | 3 PSI  | 207 mbar | 15 PSI                           | 1.0 Bar | 5 PSI                                       | 340 mbar  | 15 PSI                           | 1.0 Bar |
| HIGH PRESSURE<br>VALVES V5055D, E              | 3/4" to 1-1/2" | 5 PSI  | 340 mbar | 75 PSI                           | 5.0 Bar | 25 PSI                                      | 1720 mbar | 75 PSI                           | 5.0 Bar |
|  | 2" to 3"       | 5 PSI  | 340 mbar | 45 PSI                           | 3.0 Bar | 15 PSI                                      | 1030 mbar | 45 PSI                           | 3.0 Bar |

<sup>a</sup> Max Operating Pressure Differential (UL) or Max Operating Pressure (CSA); maximum allowable pressure drop from inlet to outlet for proper operation.

<sup>b</sup> Max rated pressure (UL) or Max Close-off Pressure (CSA); maximum pressure that the valve can be exposed to without leakage or damage to the valve.

**Models:** See Table 3.

Table 3. Industrial Gas Valve Models.

| Model Number | Features   |
|--------------|--|
| V5055A       | Industrial Gas Valve for On-Off service.   |
| V5055B       | Industrial Gas Valve with characterized guide for slow opening, HI-LO-OFF, or modulating service.  |
| V5055C       | Same as V5055A but incorporates a double seal. Used with the V4055D Actuator to a provide proof-of-closure switch and a valve seal overtravel interlock. |
| V5055D       | Same as V5055A but for high pressure applications.   |
| V5055E       | Same as V5055C but for high pressure applications.   |
| V5055F       | Same as V5055E but meets the intent of EN161 leakage requirements.   |

**Type of Gas:** Natural or liquefied petroleum (LP) only.

**Pipe Size:** 3/4, 1, 1-1/4, 1-1/2, 2, 2-1/2, 3, and 4 in. (only V5055A,B,C available in 4 in. size).

**Pipe Threads:** NPT or BSP-PL Threads (equivalent to ISO R7 and DIN 2999). Available on inlet and outlet of 3/4 to 3 inch valves. Four inch valves have flange connections.

**Pressure Ratings:** See Table 2.

**Valve Capacities:** See Table 4.

**Upstream Tapping and Plug:** 1/4 in. NPT or BSP-PL is standard.

**Downstream Tapping and Plug:**

1/4 in. NPT on most domestic models.

1/8 in. NPT on V5055C1182.

**Ambient Operating Temperature Rating:**

-40°F to 150°F (-40°C to 66°C); -40°F to 125°F (-40°C to 52°C) when used with V9055.

Table 4. Valve Rated Capacity at 1 in. (2.5 mbar) pressure drop; based on gas with specific gravity of 0.64.

| Valve Size (in.) | CSA Rated Capacity |         |
|------------------|--------------------|---------|
|                  | cf/h               | cu m/hr |
| 3/4              | 665                | 18.8    |
| 1                | 960                | 27.2    |
| 1-1/4            | 1406               | 39.8    |
| 1-1/2            | 1717               | 48.6    |
| 2                | 3620               | 102.5   |
| 2-1/2            | 4250               | 120.3   |
| 3                | 5230               | 148.1   |
| 4 (V5055A)       | 10200              | 288.8   |
| 4 (V5055B,C)     | 9180               | 259.9   |

**Material:** Die-cast aluminum.

**Mounting:** Mounts directly in the gas supply line.

**Dimensions:** See Fig. 2 and 3.

**Weight:**

3/4, 1, 1-1/4, 1-1/2, in. valve: 4 lb. (1.8 kg).

2 in. valve: 8 lb. (3.6 kg).

2-1/2, 3 in. valve: 11 lb. (5.0 kg).

4 in. valve: 28 lb. (12.7 kg).

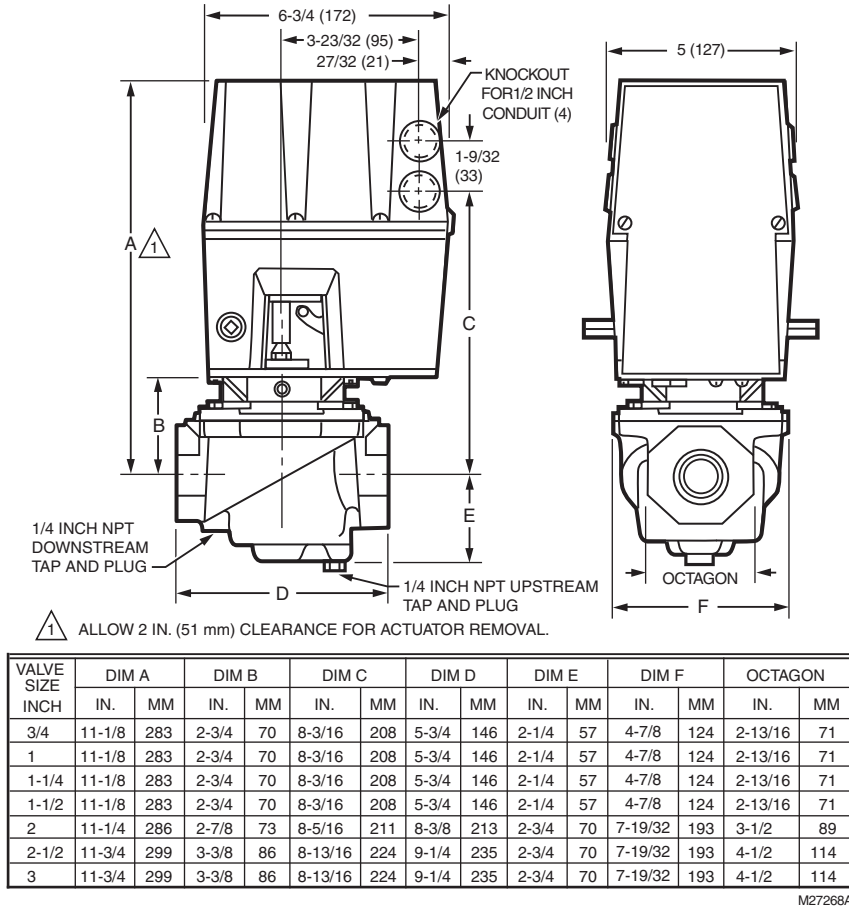


Fig. 2. Approximate dimensions of the 3/4 through 3 in. V5055 Valves, with valve actuator, in in. (mm).