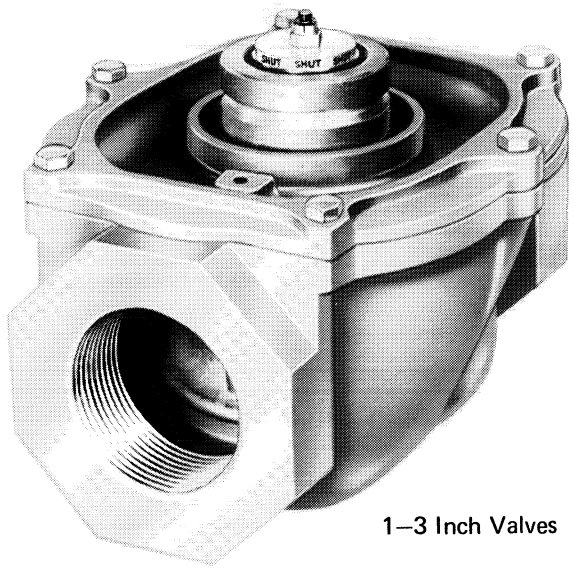
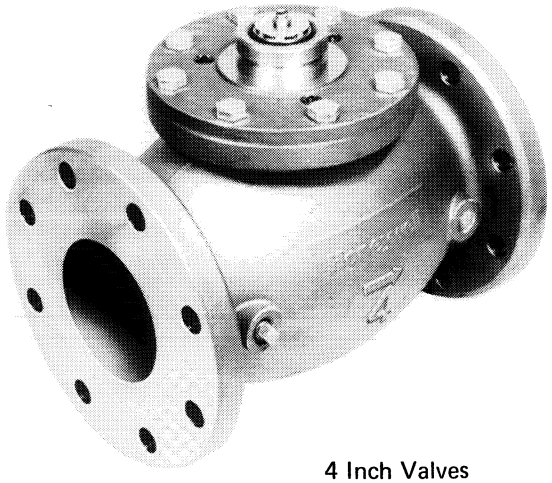
Honeywell

V5055 Industrial Gas Valves



1–3 Inch Valves



4 Inch Valves

Gas Flow vs. Valve Opening

Table of Contents

Introduction

The following curves relate gas flow through the V5055 Industrial Gas Valve to stem travel. These curves show valve performance under American Gas Association standard conditions:

Specific gravity of gas	0.64
Temperature (Fahrenheit)	60.00 [16 C]
Inlet pressure (inches water)	2.00 [0.5 kPa]
Pressure drop across valve (inches water)	1.00 [0.25 kPa]

The flow is given in both cubic feet per hour (left side of graphs) [cubic metres per hour] and percent of rated flow (right side of graphs). Maximum stem travel is 1.05 inches [26.6 mm].

The V5055A Gas Valve is designed for ON-OFF service.

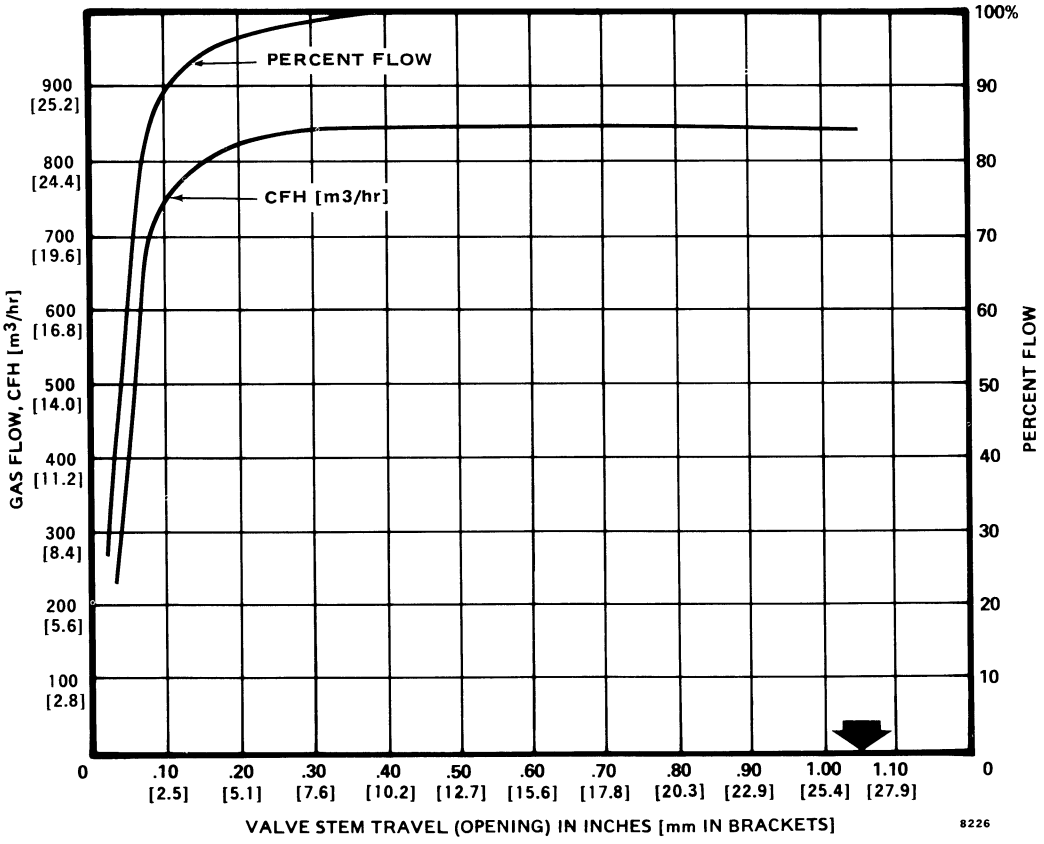
The V5055B Gas Valve has a characterized guide for use with LOW-HIGH or MODULATING actuators, or with ON-OFF actuators to aid in smooth light off.

The V5055C Gas Valve is designed for ON-OFF service. When used with the proper actuator, it meets Factory Mutual requirements for valve closed indication and Underwriters Laboratories Inc. requirements for valve seal overtravel interlock.

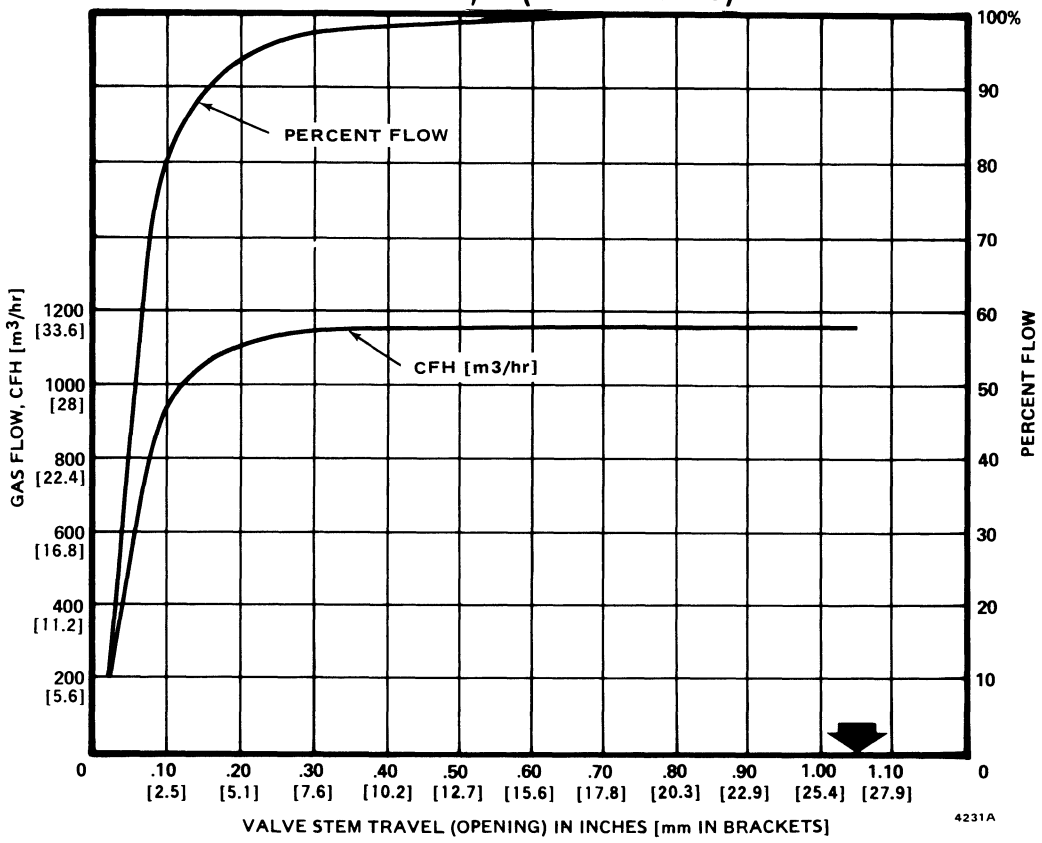
The V5055D Gas Valve is designed for ON-OFF service in high pressure applications.

The V5055E Gas Valve is designed for ON-OFF service in high pressure applications. When used with the proper actuator, it meets Factory Mutual requirements for valve closed indication and Underwriters Laboratories Inc. requirements for valve seal overtravel interlock.

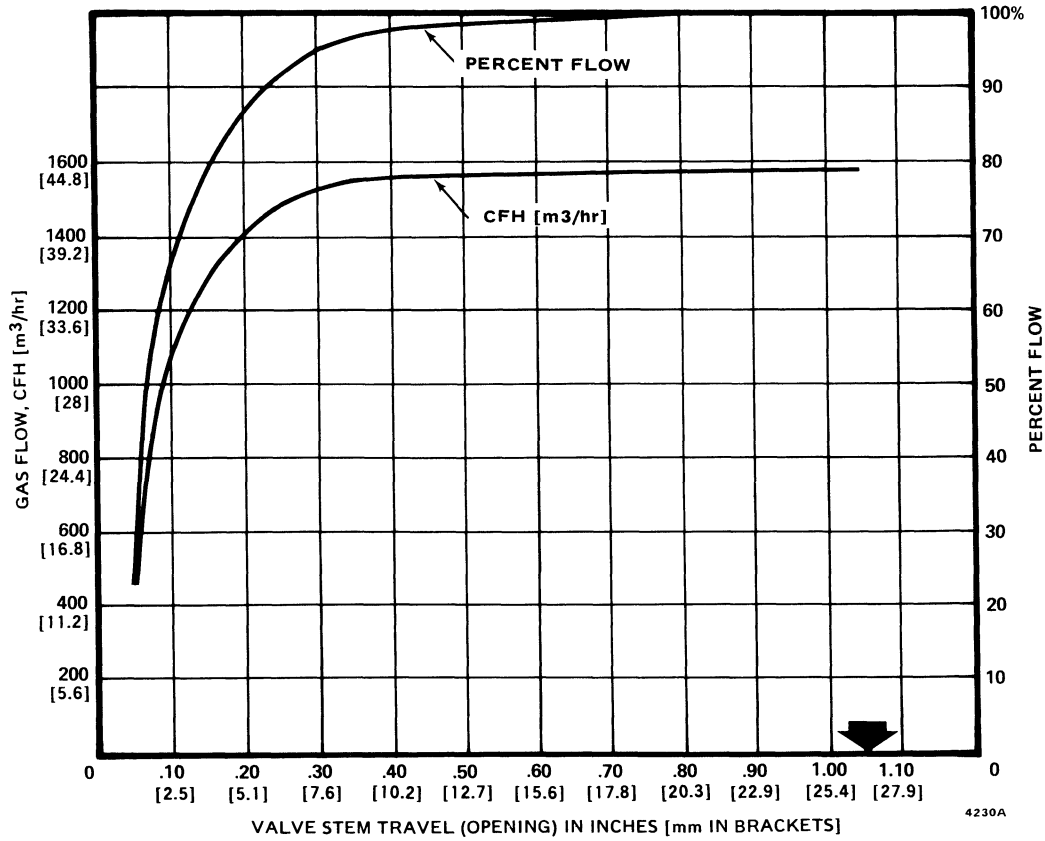
V5055A,D (3/4 INCH NPT)



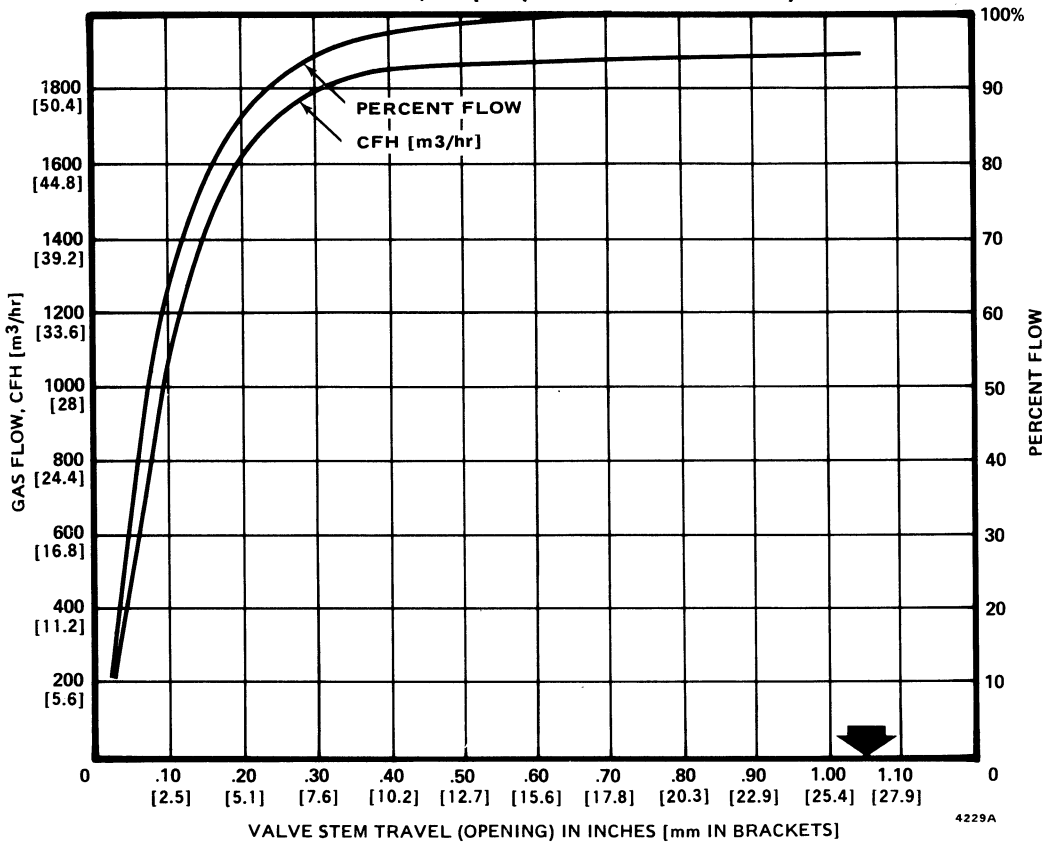
V5055A,D (1 INCH NPT)



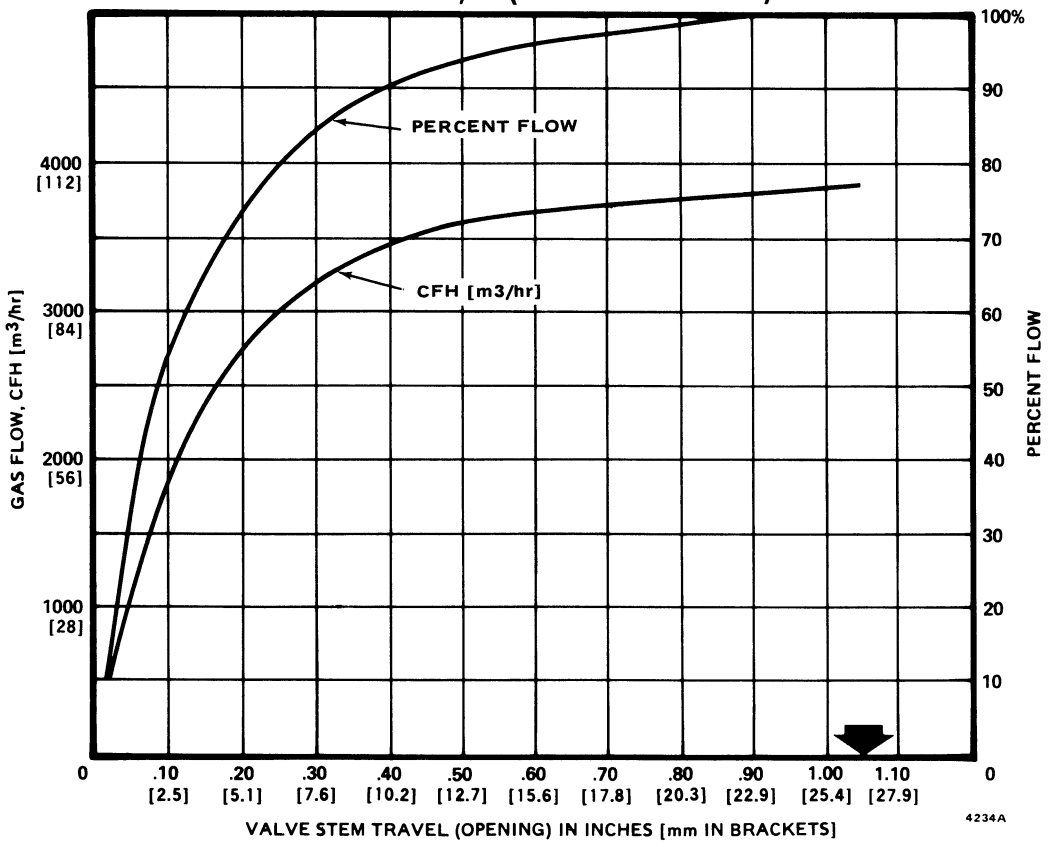
V5055A,D (1-1/4 INCHES NPT)



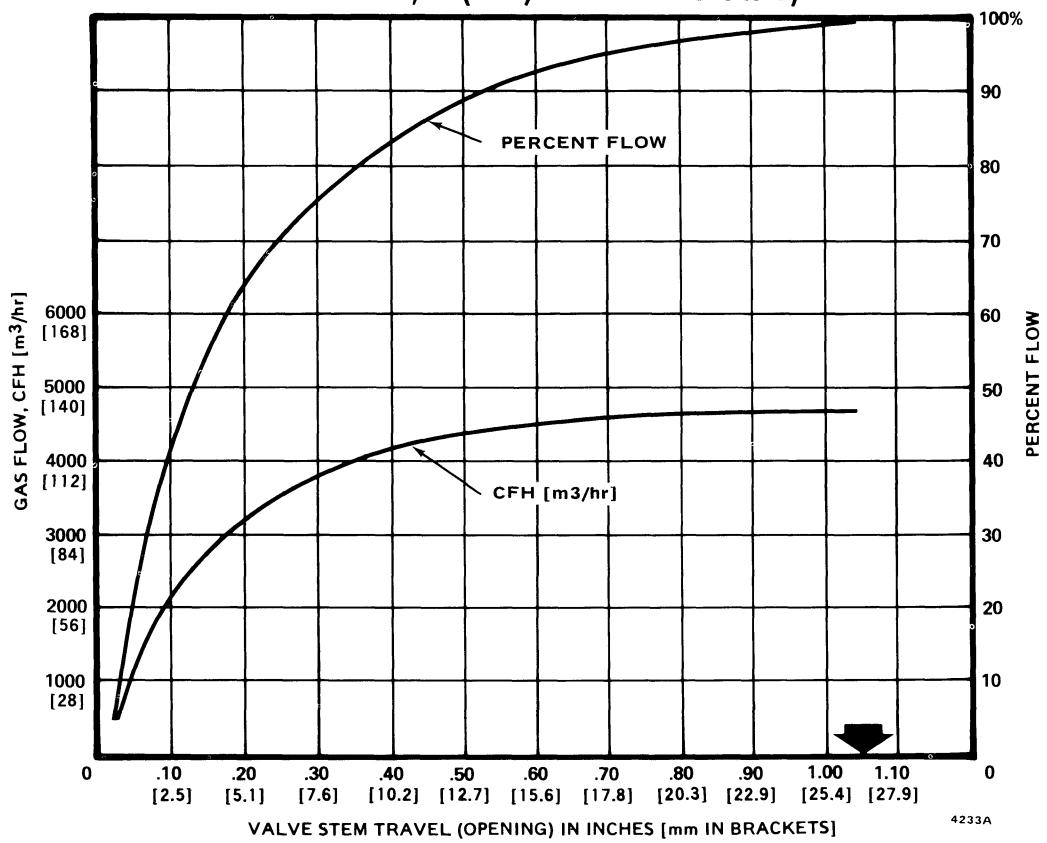
V5055A,D (1-1/2 INCHES NPT)



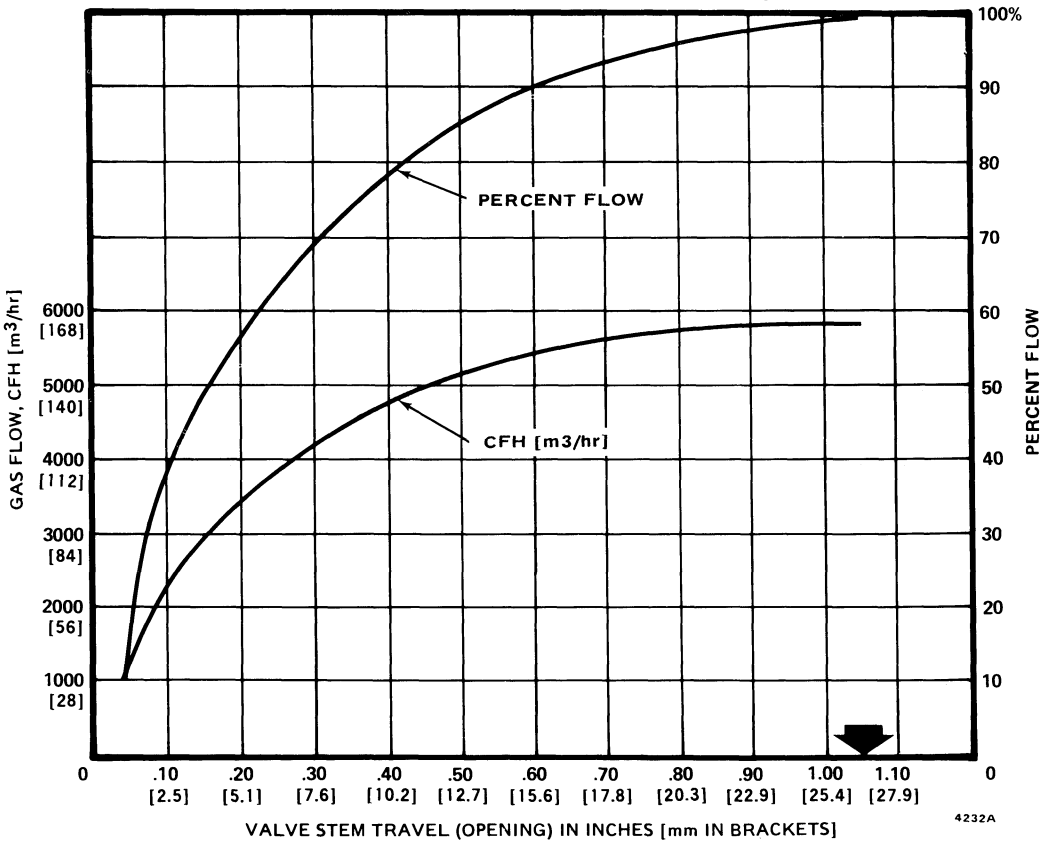
V5055A,D (2 INCHES NPT)



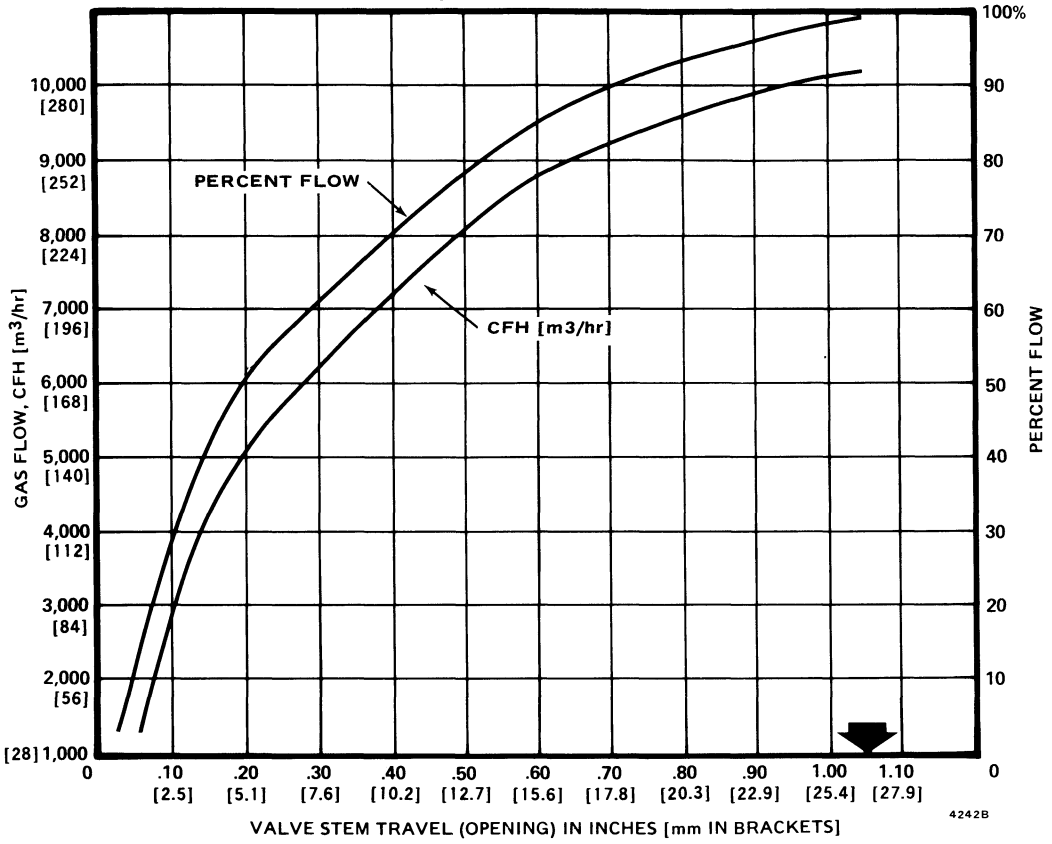
V5055A,D (2-1/2 INCHES NPT)



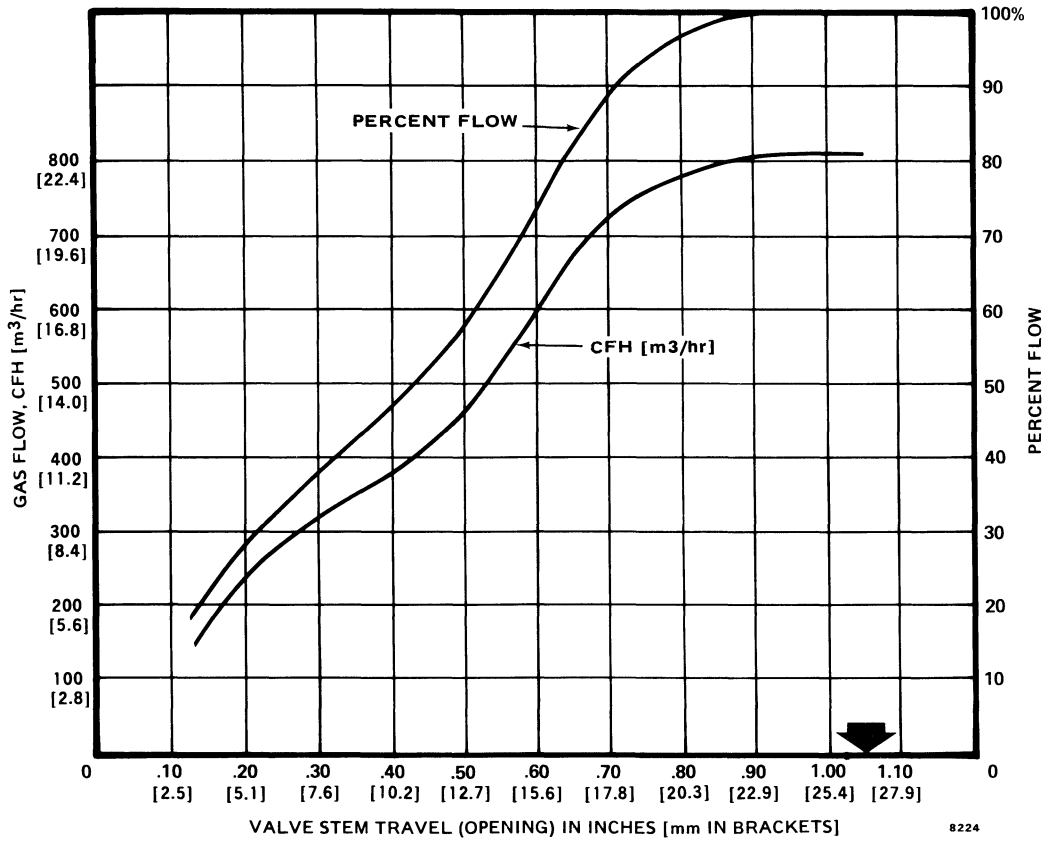
V5055A,D (3 INCHES NPT)



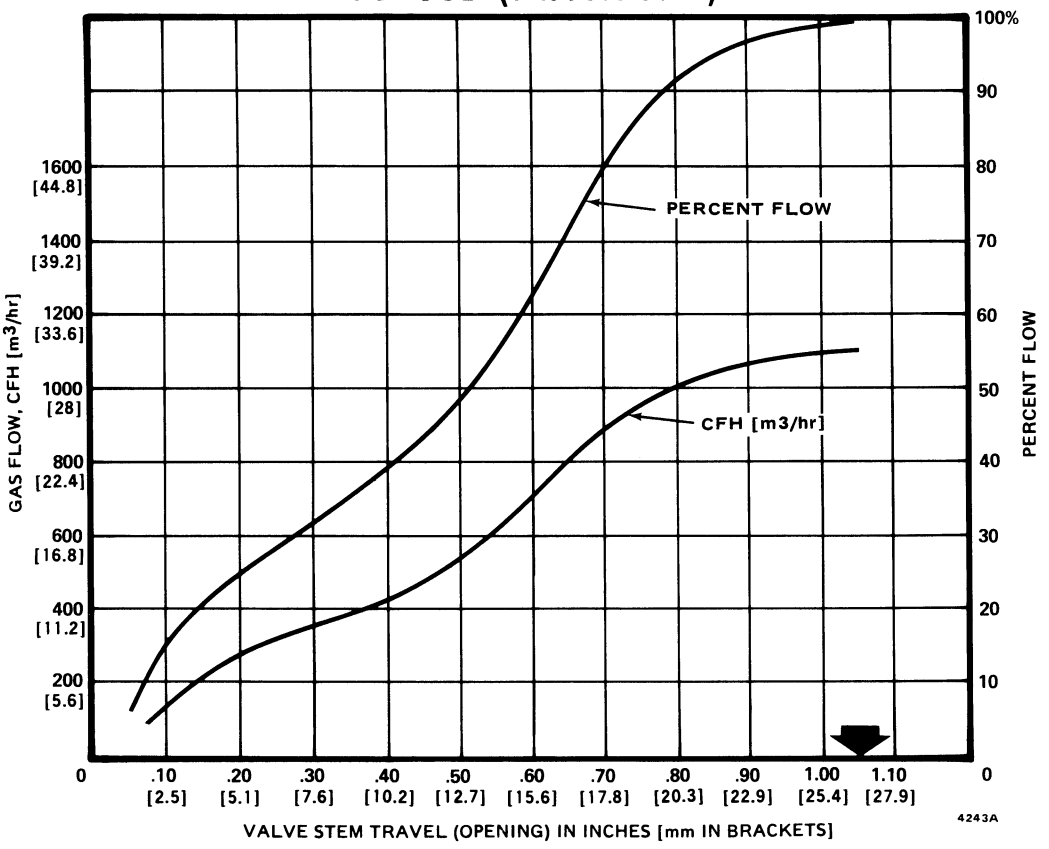
V5055A (4 INCHES FLANGED)



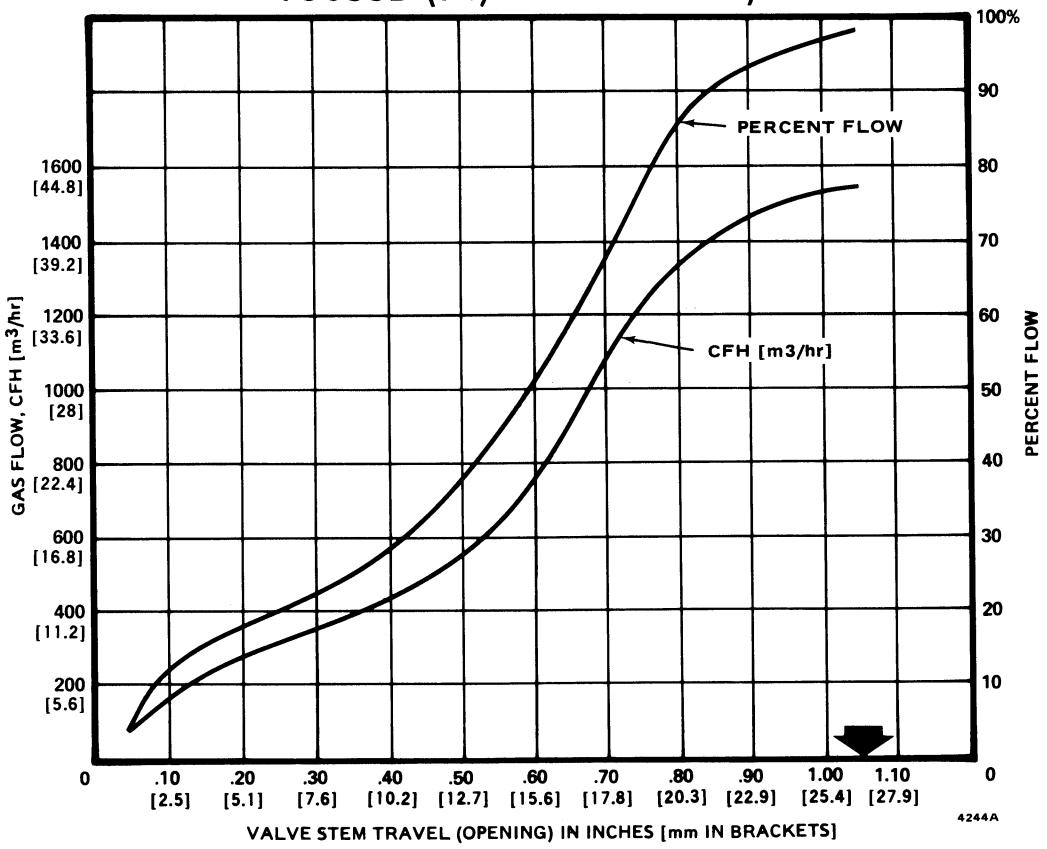
V5055B (3/4 INCH NPT)



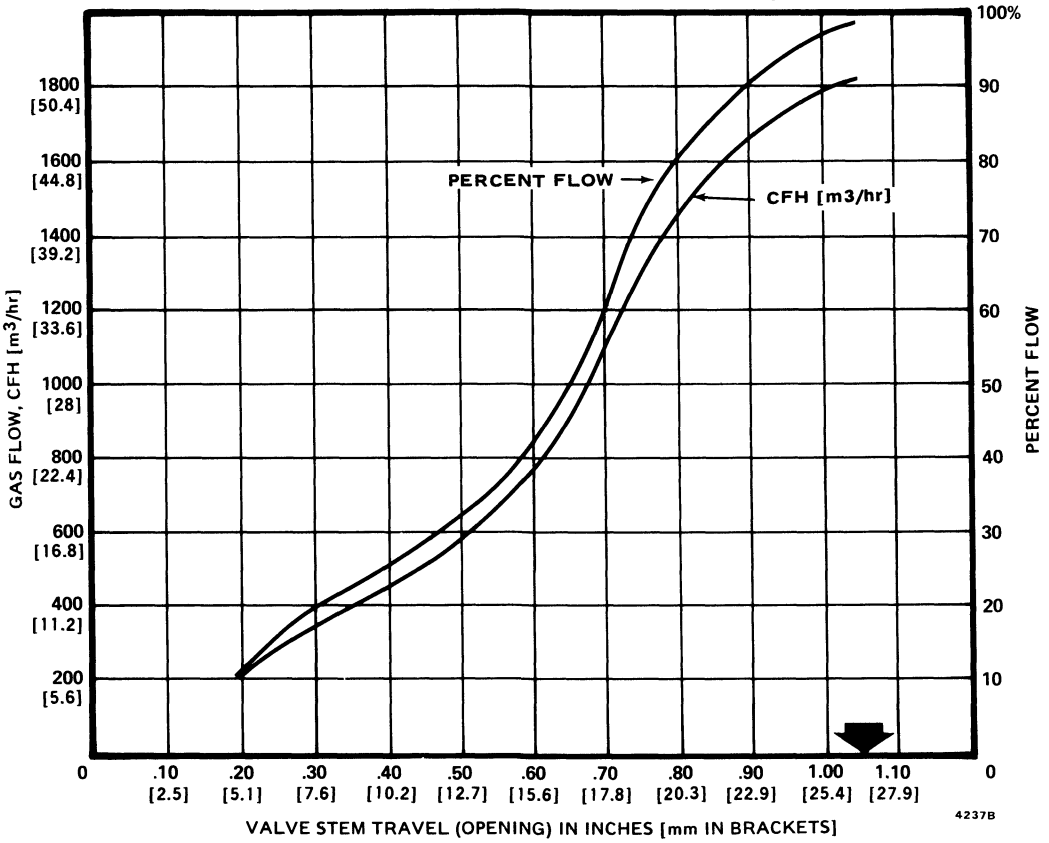
V5055B (1 INCH NPT)



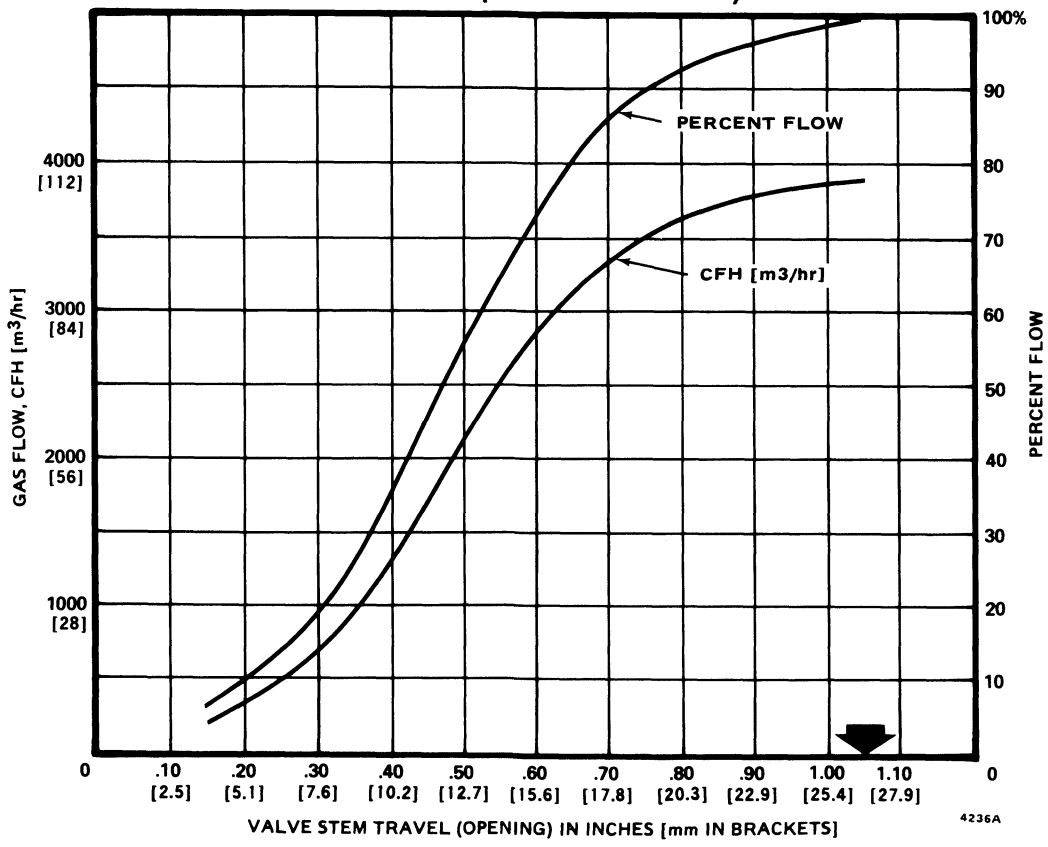
V5055B (1-1/4 INCHES NPT)



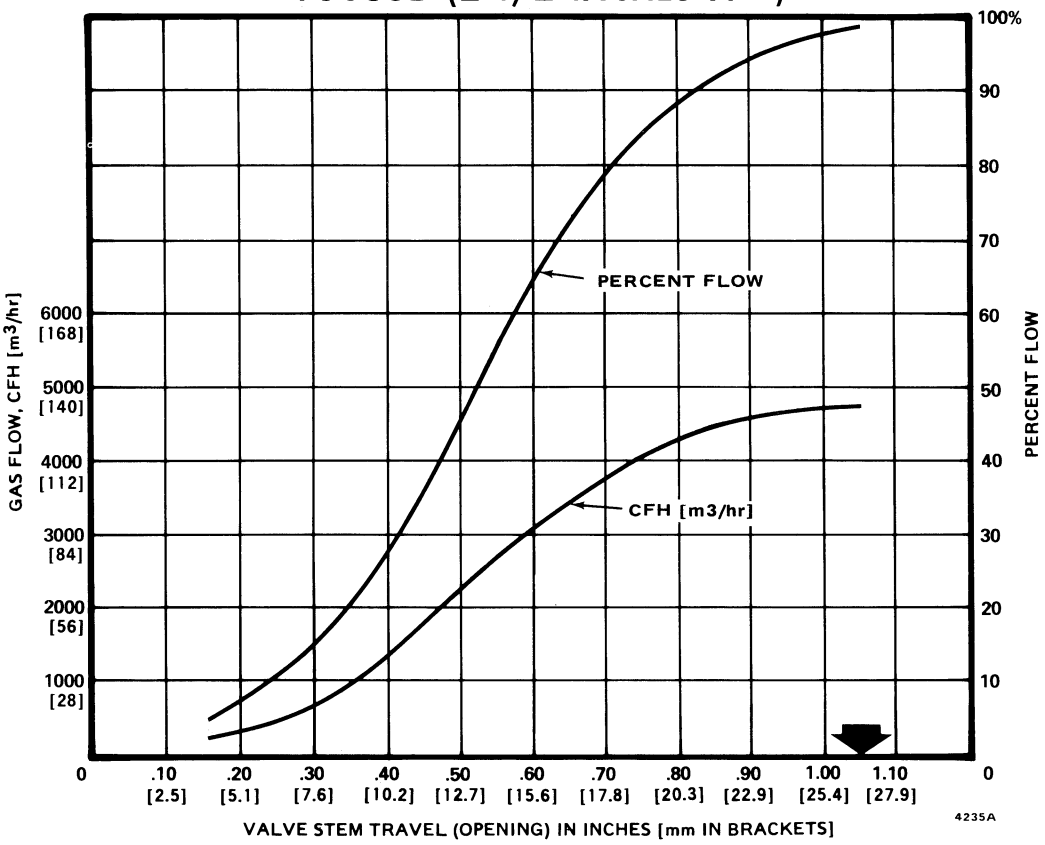
V5055B (1-1/2 INCHES NPT)



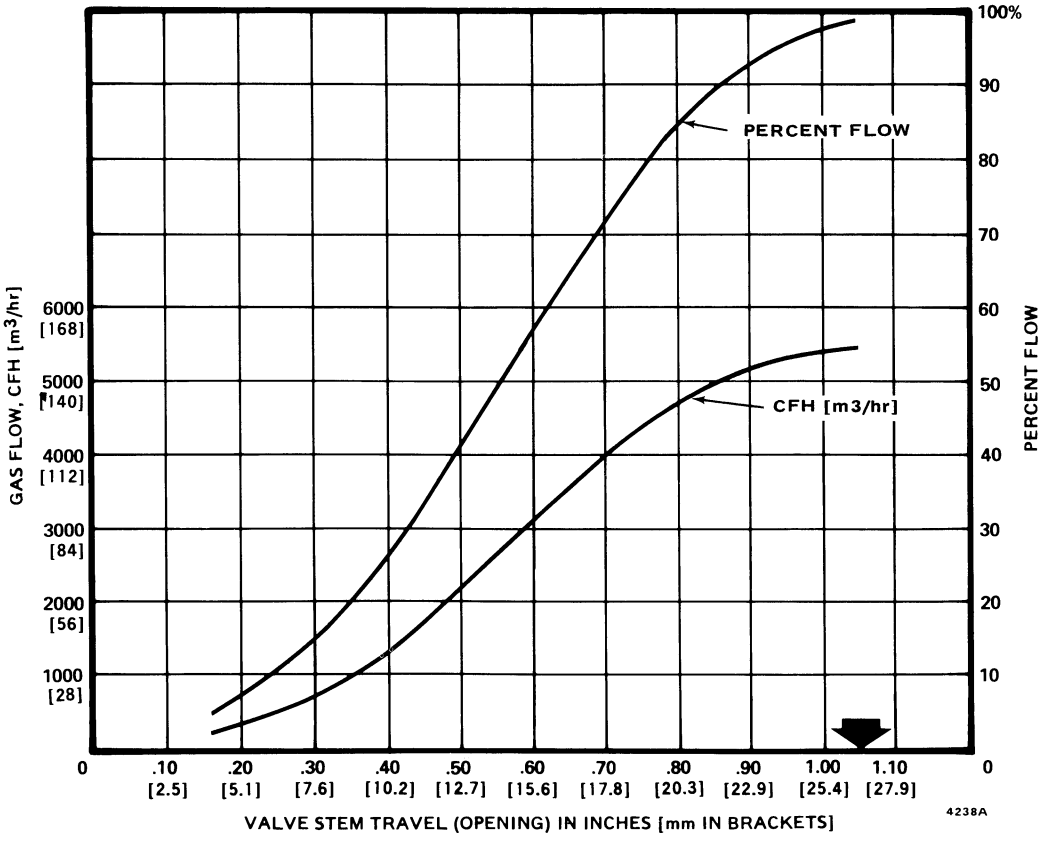
V5055B (2 INCHES NPT)



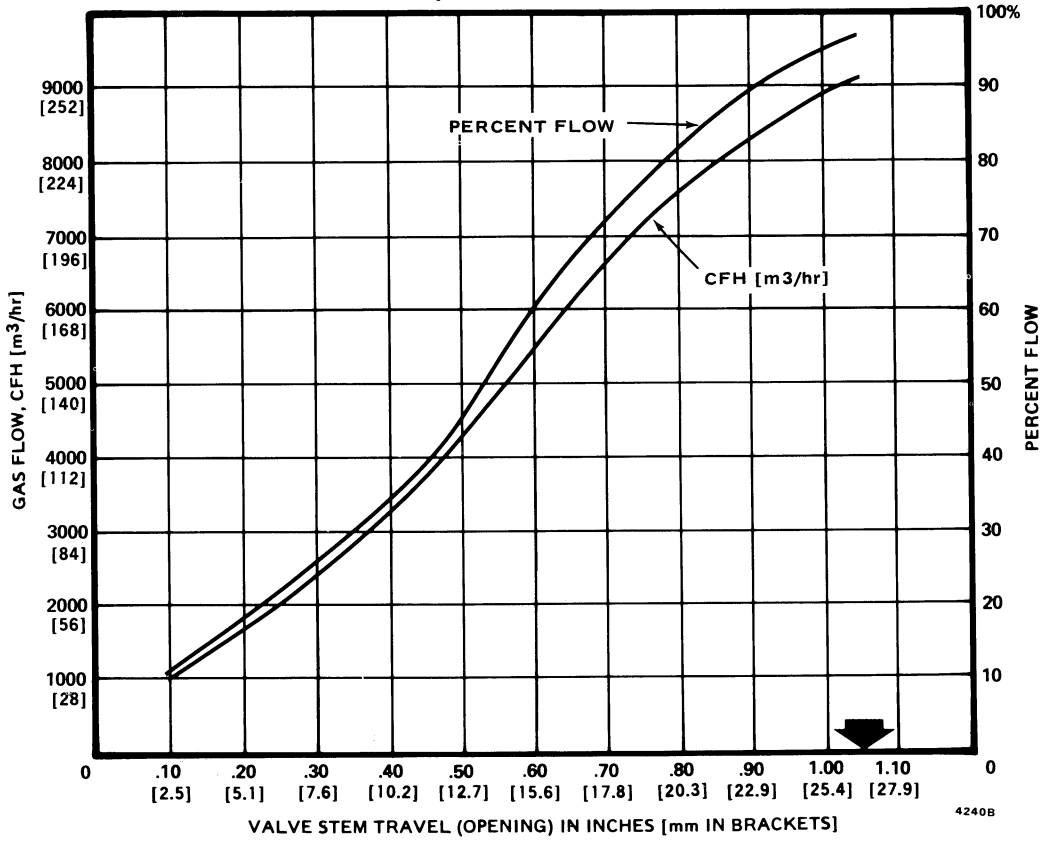
V5055B (2-1/2 INCHES NPT)



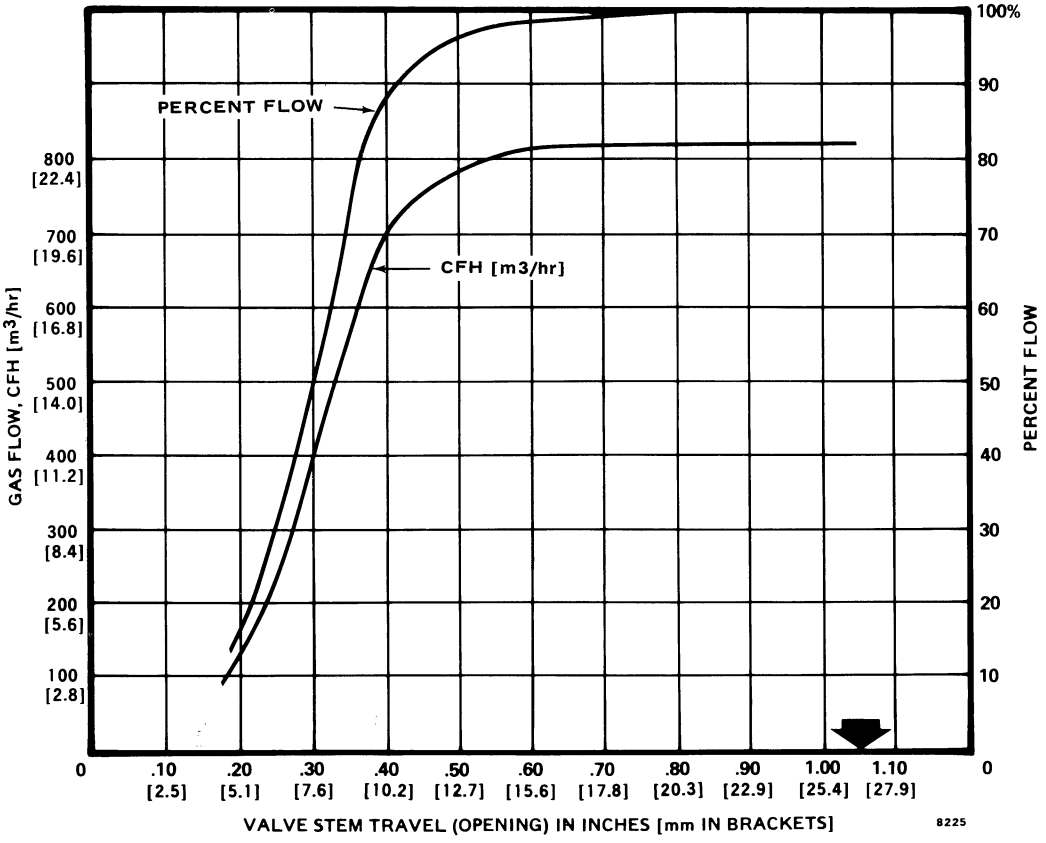
V5055B (3 INCHES NPT)



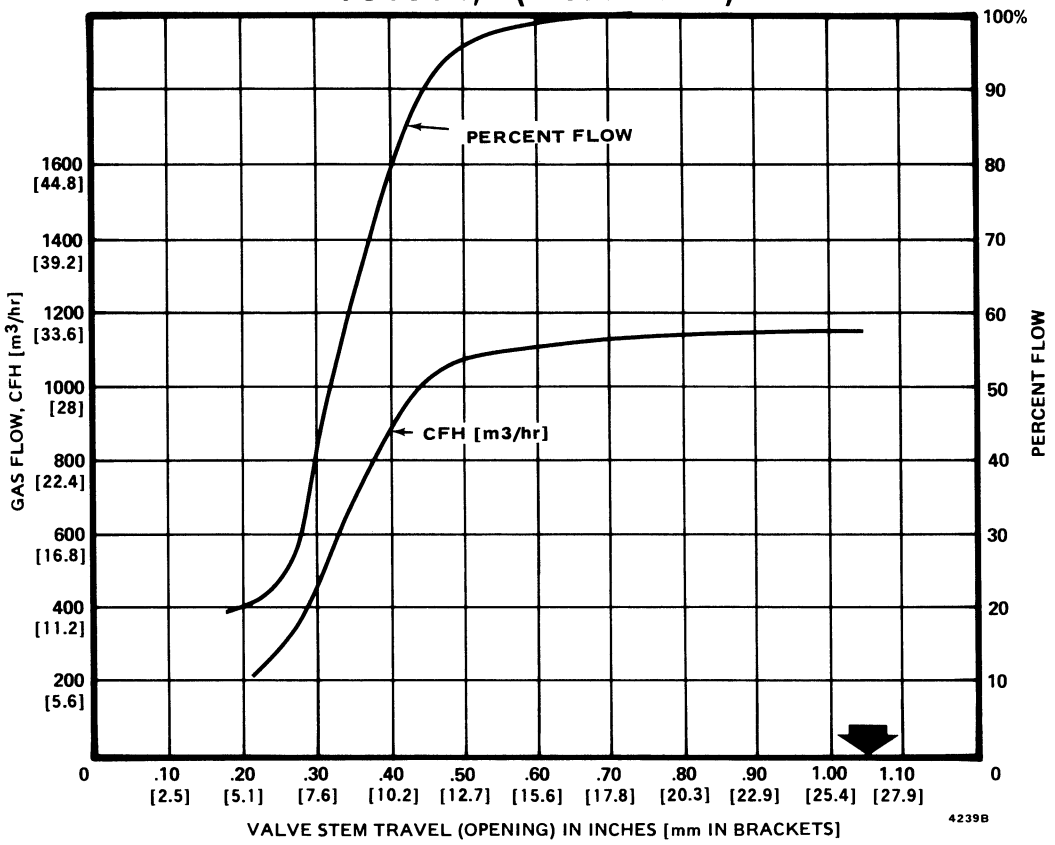
V5055B (4 INCHES FLANGED)



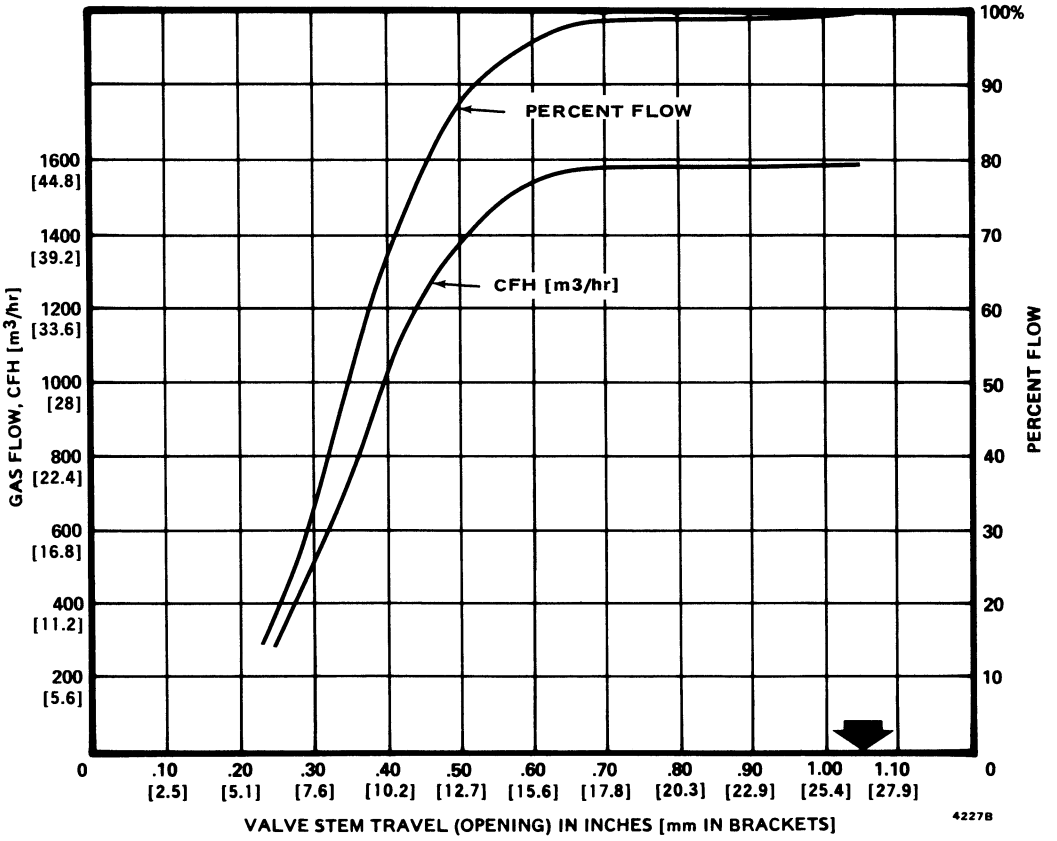
V5055C,E (3/4 INCH) NPT



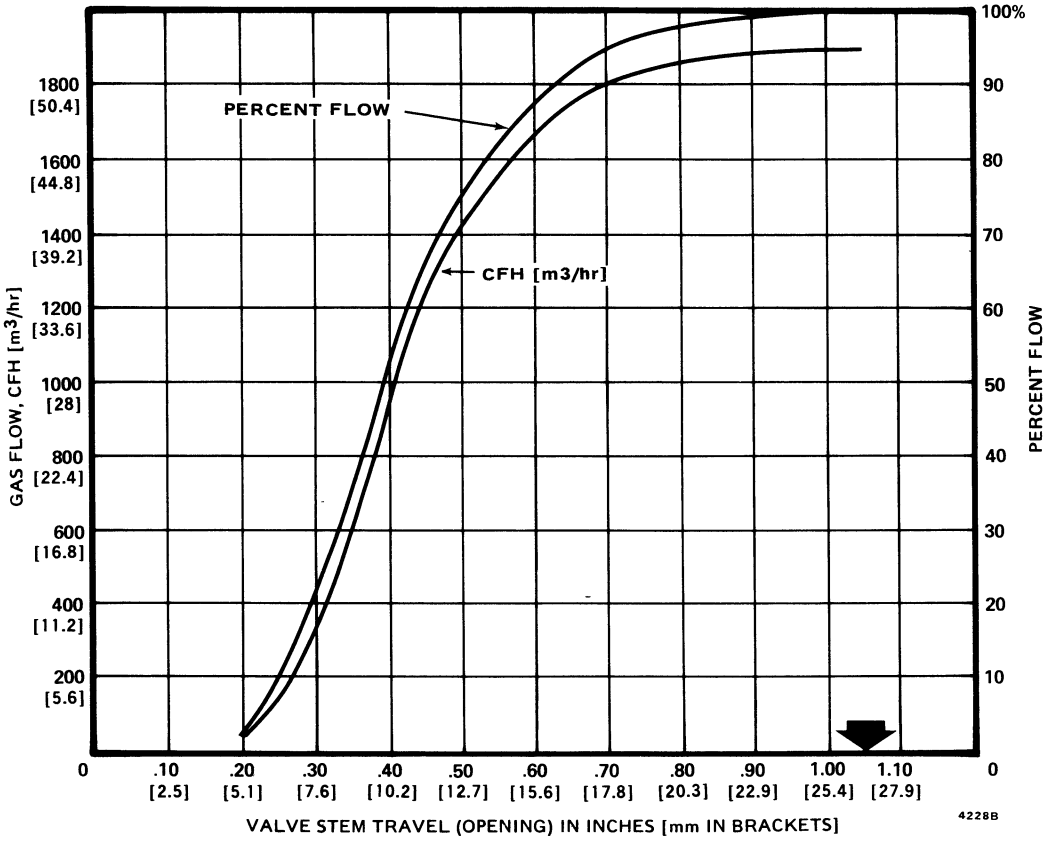
V5055C,E (1 INCH NPT)



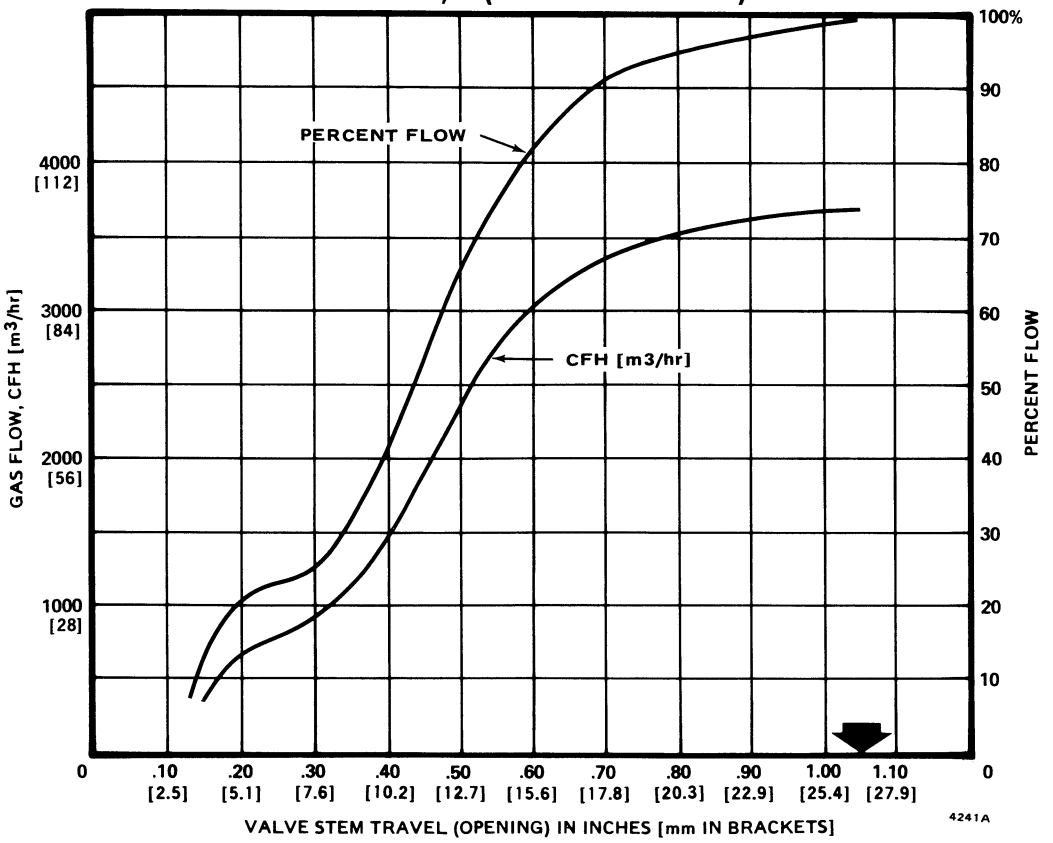
V5055C,E (1-1/4 INCHES NPT)



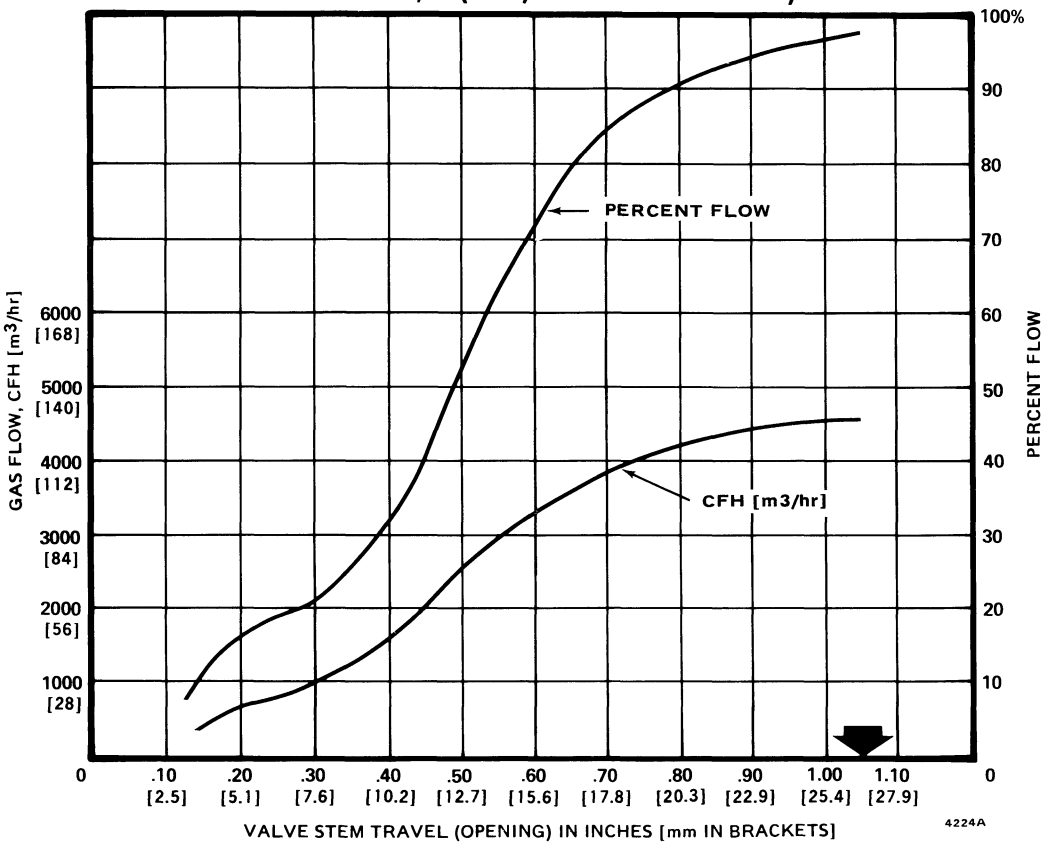
V5055C,E (1-1/2 INCHES NPT)



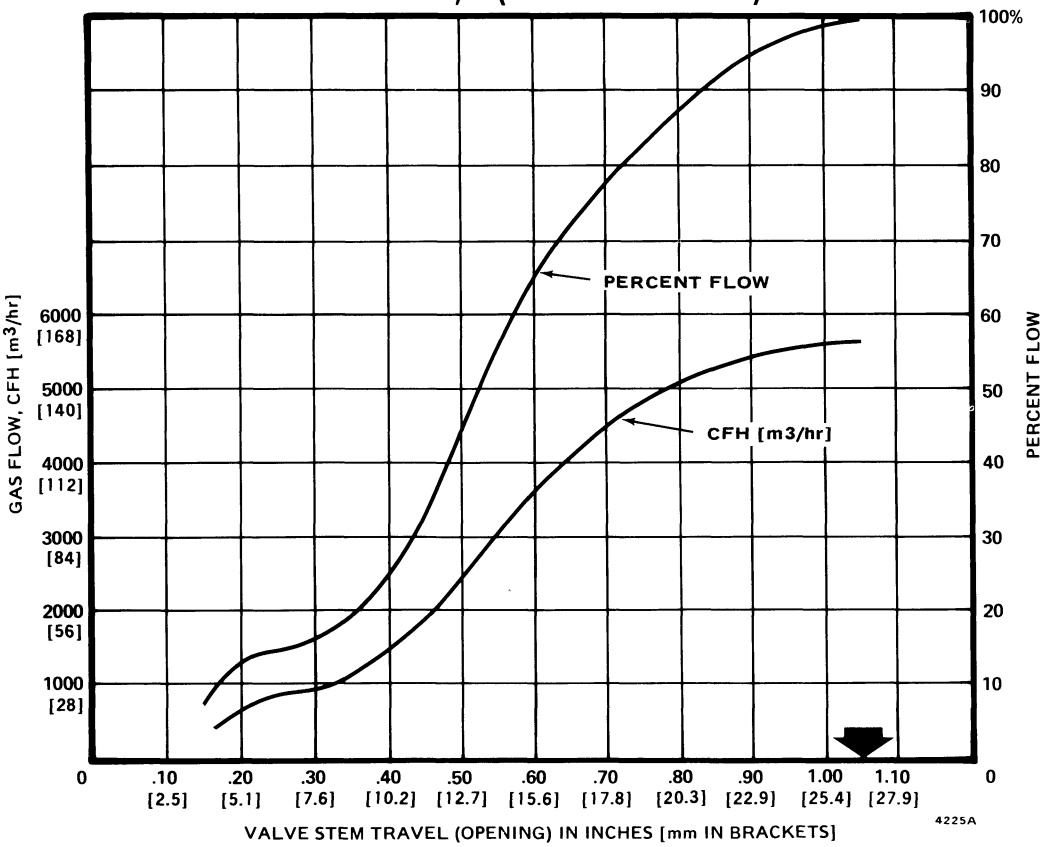
V5055C,E (2 INCHES NPT)



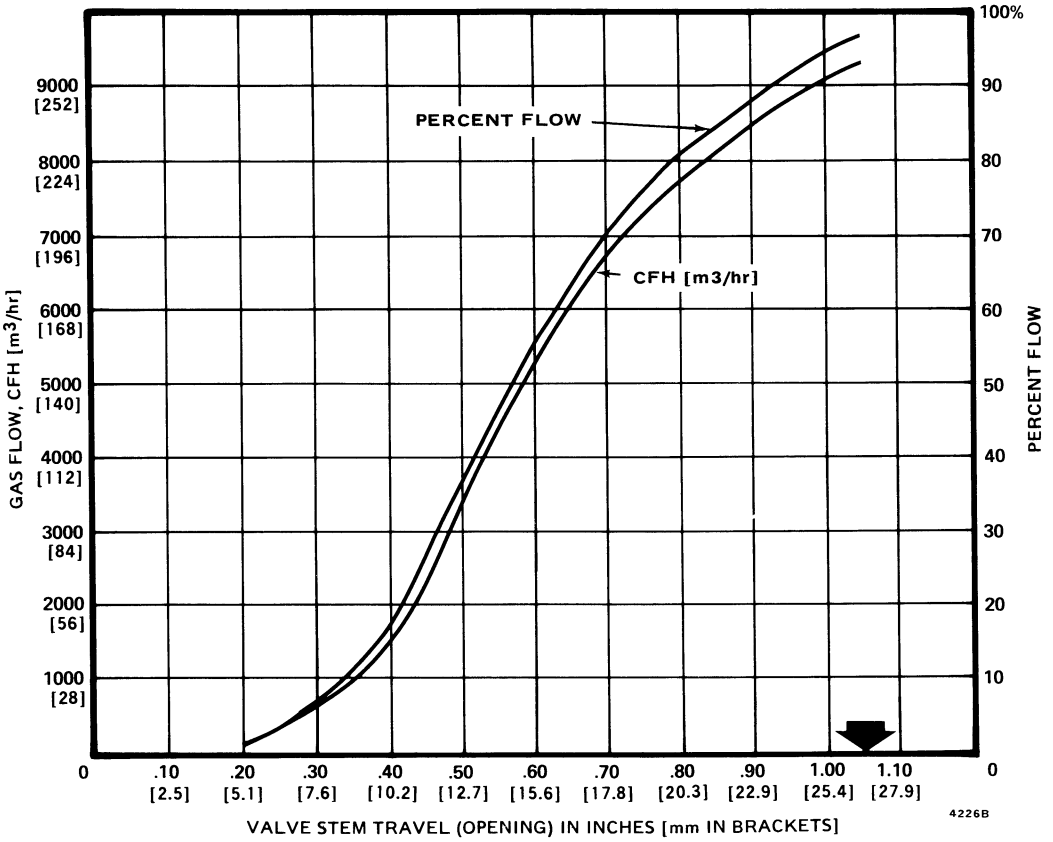
V5055C,E (2-1/2 INCHES NPT)



V5055C,E (3 INCHES NPT)

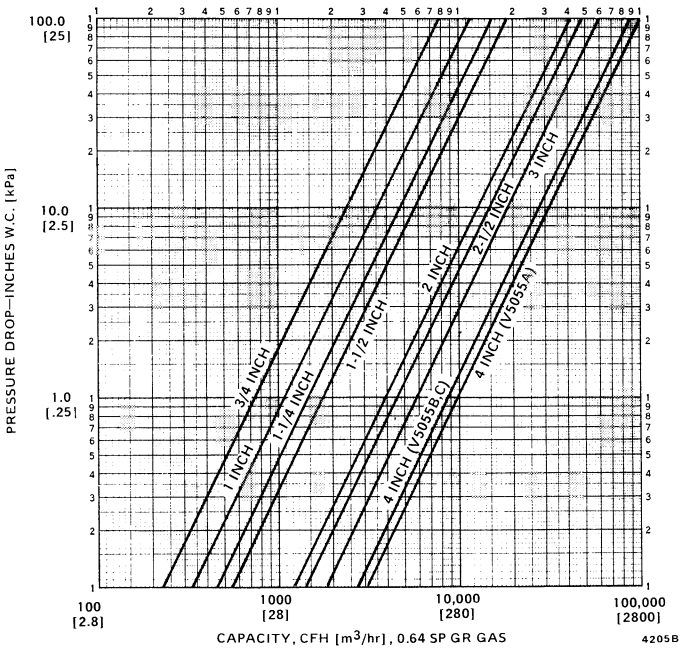


V5055C (4 INCHES FLANGED)

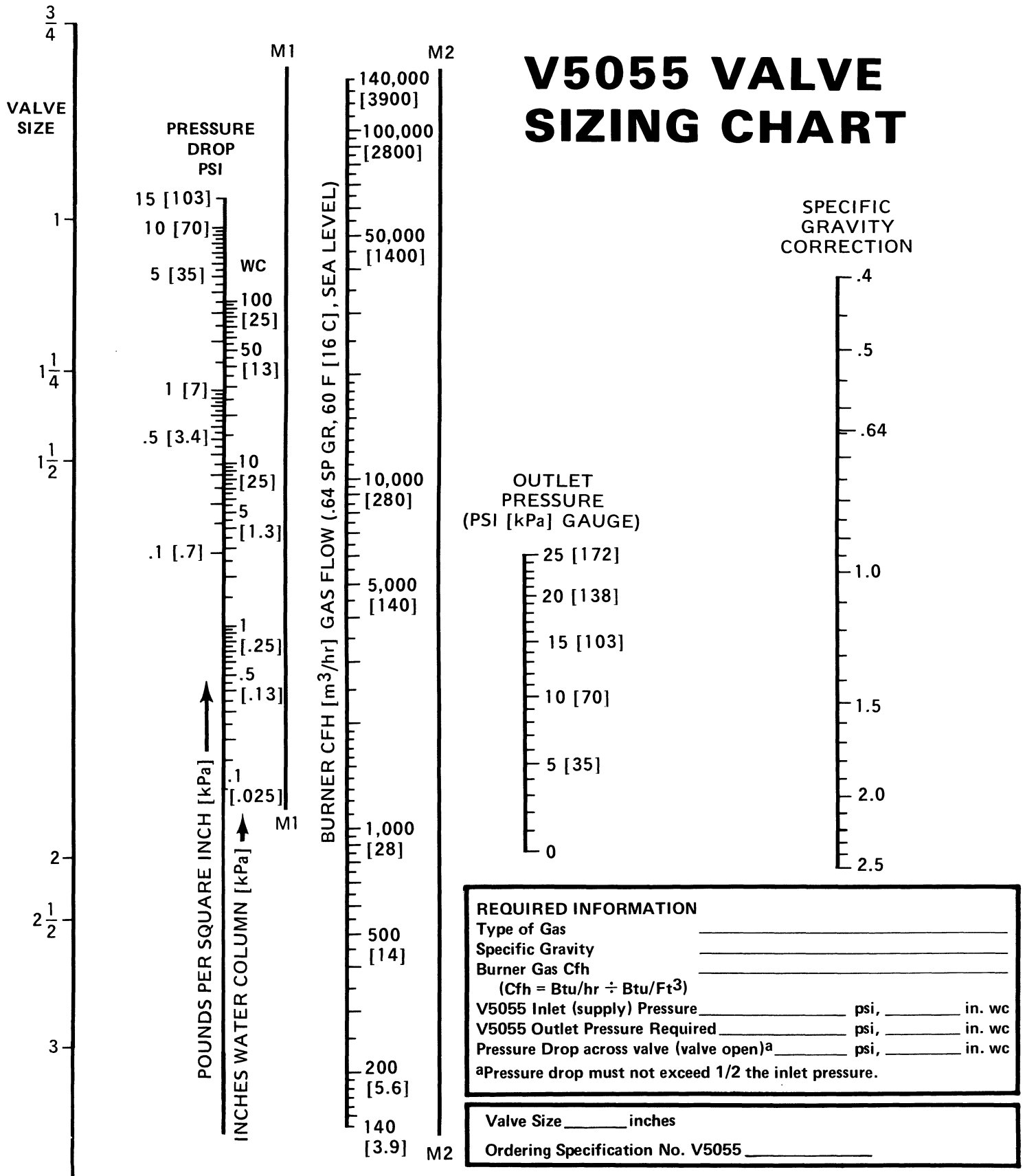


Capacity Vs. Pressure Drop

(for all V5055 Valves)



V5055 VALVE SIZING CHART



REQUIRED INFORMATION

Type of Gas _____

Specific Gravity _____

Burner Gas Cfh _____

(Cfh = Btu/hr ÷ Btu/Ft^3)

V5055 Inlet (supply) Pressure _____ psi, _____ in. wc

V5055 Outlet Pressure Required _____ psi, _____ in. wc

Pressure Drop across valve (valve open)[a] _____ psi, _____ in. wc

[a]Pressure drop must not exceed 1/2 the inlet pressure.

Valve Size _____ inches

Ordering Specification No. V5055 _____

INSTRUCTIONS

NOTE: If natural gas (specific gravity 0.64) is used, skip steps one and two, and start with step three.

1. Draw line (1) from 0.64 on "Specific Gravity Correction" to required "Cfh Gas Flow."
2. Draw line (2) from "Specific Gravity" of gas used through intersection of line (1) and M_2 to get "Burner Cfh."
3. Draw line (3) from "Outlet Pressure" to "Pressure Drop." Convert pressure from inch wc to psi, if necessary.
4. Draw line (4) from "Burner Cfh," through intersection of M1 and line (3), to "Valve Size." When point falls between two valve sizes, select the larger one.

Honeywell

Dear Customer,

We welcome your comments and suggestions for improving this publication. Your assistance is greatly appreciated and will enable us to provide better technical information for you.

Please send your comments and suggestions to:
Honeywell Inc.
Honeywell Plaza
Minneapolis, Minnesota 55408
ATTN: Publications Supervisor MN12-3247

HONEYWELL MINNEAPOLIS, MN 55408 INTERNATIONAL Sales Offices in all principal cities of the world. Manufacturing in Australia, Canada, Finland, France, Germany, Japan, Mexico, Netherlands, Spain, Taiwan, United Kingdom, U.S.A.

PRINTED IN U.S.A.

R.L.
REV. 12-78 (.96)

PRINTED IN U.S.A.

70-8311