SECTION 5.2

FLO FAB

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Multi-function Valves Series "MFV"

Manufacturer of Pumps, Tanks, Heat Exchangers & Accessories
for HVAC Market After-Sales Parts and Services

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Multi-function Valves Series "MFV"

FLO FAB INC
LAKE WORTH,
FLORIDA, USA

Multi-function Valves
Series MFV

MFV-F (FLANGED) & MFV-G (GROOVED)

SUBMITTAL DATA SHEET
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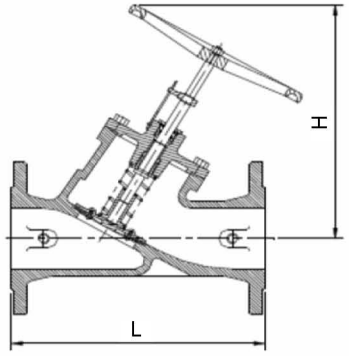
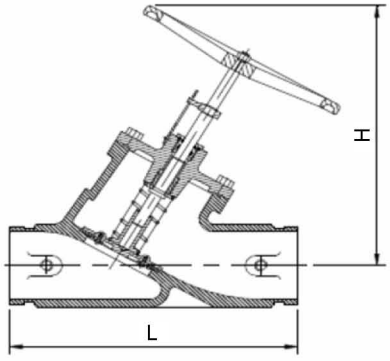
Multi-function VALVE

Calibrated Balancing Valve – Shut Off Valve – Non Slam Check Valve





Series: MFV – 150 - F (Flanged Ends)

Series: MFV – 150 - G (Grooved Ends)

Mat	Material / ASTM Spec.
Body	Cast Iron,
Cover	Cast Iron,
Disc	Stainless Steel, SS304
Gasket	EPDM
Disc Seat	EPDM
Spring	Stainless Steel, SS304
Hand Wheel	Cast Iron, ASTM A126 Class B
Indicator	Aluminium
Indicator Plate	Aluminium

Features :

1. Flange Drilled to BS4505 PN16
2. Grooved-End according to AWWA C606
3. Maxi Working Pressure : 150 psi (1034 kPa) Standard
4. Maxi Working Pressure : 300 psi (2069 kPa) (Optional)
5. Maxi Working Temperature : 225°F (108C) Standard
6. Maxi Working Temperature : 300°F (149C) Standard
7. Pressure Tap Port Metering Connections bronze
8. External and Internal Parts – Epoxy Powder Coated

Dimension

MODELS	MFV0200-150-F MFV0200-150-G	MFV0250-150-F MFV0260-150-G	MFV0300-150-F MFV0300-150-G	MFV0400-150-F MFV0400-150-G	MFV0500-150-F MFV0500-150-G	MFV0600-150-F MFV0600-150-G
Sizes	2" 50.00 mm	2.5" 65.00 mm	3" 80.00 mm	4" 100.00 mm	5" 125.00 mm	6" 150.00 mm
DIM "L"	9 1/8"	10 5/8"	12 3/16"	13 3/4"	15 3/4"	19"
DIM "H"[1]	11 7/16"	12 5/8"	13 3/4"	18"	20 1/4"	22 1/4"

MODELS	MFV0800-150-F MFV0800-150-G	MFV1000-150-F MFV1000-150-G	MFV1200-150-F MFV1200-150-G	MFV1400-150-F MFV1400-150-G	MFV1600-150-F MFV1600-150-G	MFV1800-150-F MFV1800-150-G
Sizes	8" 200.00 mm	10" 250.00 mm	12" 300.00 mm	14" 350.00 mm	16" 400.00 mm	18" 450.00 mm
DIM "L"	23 7/16"	28 3/4"	33 1/2"	35"	26 3/4"	28 3/8"
DIM "H"[1]	28"	25 1/4"	39 5/8"	41"	41"	41"

[1] is in close position

*All dimensions are NOT certified.
*Do not use for construction.
*Design, dimensions and material are subject to change without notice.

Multi-function Valves Series MFV-F & MFV-G

FEATURES

Low Pressure Drop	The multi-function valve streamlined design results in low pressure drop, making it extremely energy efficient.
Control	Greater range of control allows precise flow control versus On-Off throttling valves.
Positive Shut-Off	Without valve chattering. These valves are positive shut-off valves, when using MFV valves, other types of valves are not required
Calibrated Nameplate	The multi-function valve allows you to return to the balance position after shutting it off.
Durability	Bronze seat and disc with stainless steel stem construction ensure long life and reliability.
Design	The multi-function valve is a double regulating, contol and shut-off valve with a built in pressure drop measuring in-line flow. Balancing problems are quite evident in a system, like central air conditioning plants and in process heat exchangers. The MFV valve is a combination of a shut-off valve (gate / plug / bal l/ butterfly valve) plus a flow regulating (globe style valve), a flow measuring station. It is not merely a valve but a system control valve in itself. It provides a scientific basis for flow balancing in a system with database. The valves are used HVAC systems and other process applications wherever balancing is required. Balancing is done to improve the performanceof a closed circuit, forced circulation water in the system for heating and cooling. Balancing makes the building provide the desired indoor climate under all operating conditions at minimum energy cost. Balancing is a matter of adjusting pressure drops to get the precise required flow of water in a circuit. Balancing reduces energy costs by almost 10% to 40% by reducing average temperature in a heating system and increasing average temperature in a cooling system with less energy for pumping. Replacing three valve with one MFV-F (flange) or MFV-G (grooved) valves can dramatically reduce your up-front material and labor costs
Spring Loaded Clapper	Allows the Multi-function valve to be installed horizontally or vertically upward.In-line
Serviceability	Allows easy maintenance and replacement without disturbing the piping.

Benefits

1) Using a multifunction valve avoid user's complaints with unbalanced heating or cooling systems in different parts of the building.
2) Easy correction of system design and installation errors
3) Better accuracy of flow measurement
4) Economic; system components like boilers/chillers don't have to be oversized for possible errors and varying conditions. A balanced system only needs the actually required flows which is usually less than system when not balanced.

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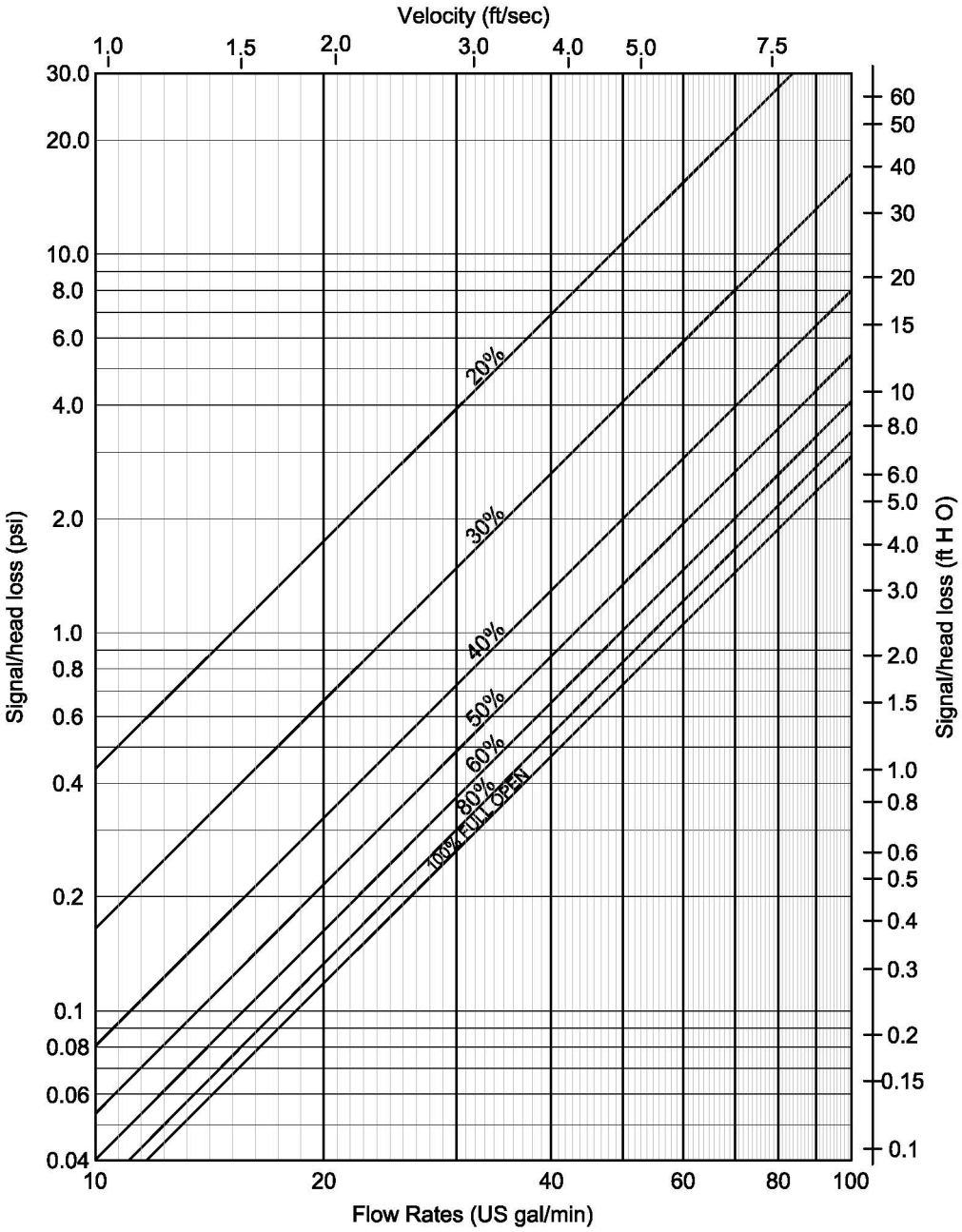
2" MULTI-FUNCTION VALVE "MFV"
FLOW DIAGRAM
(FLANGED & GROOVED)

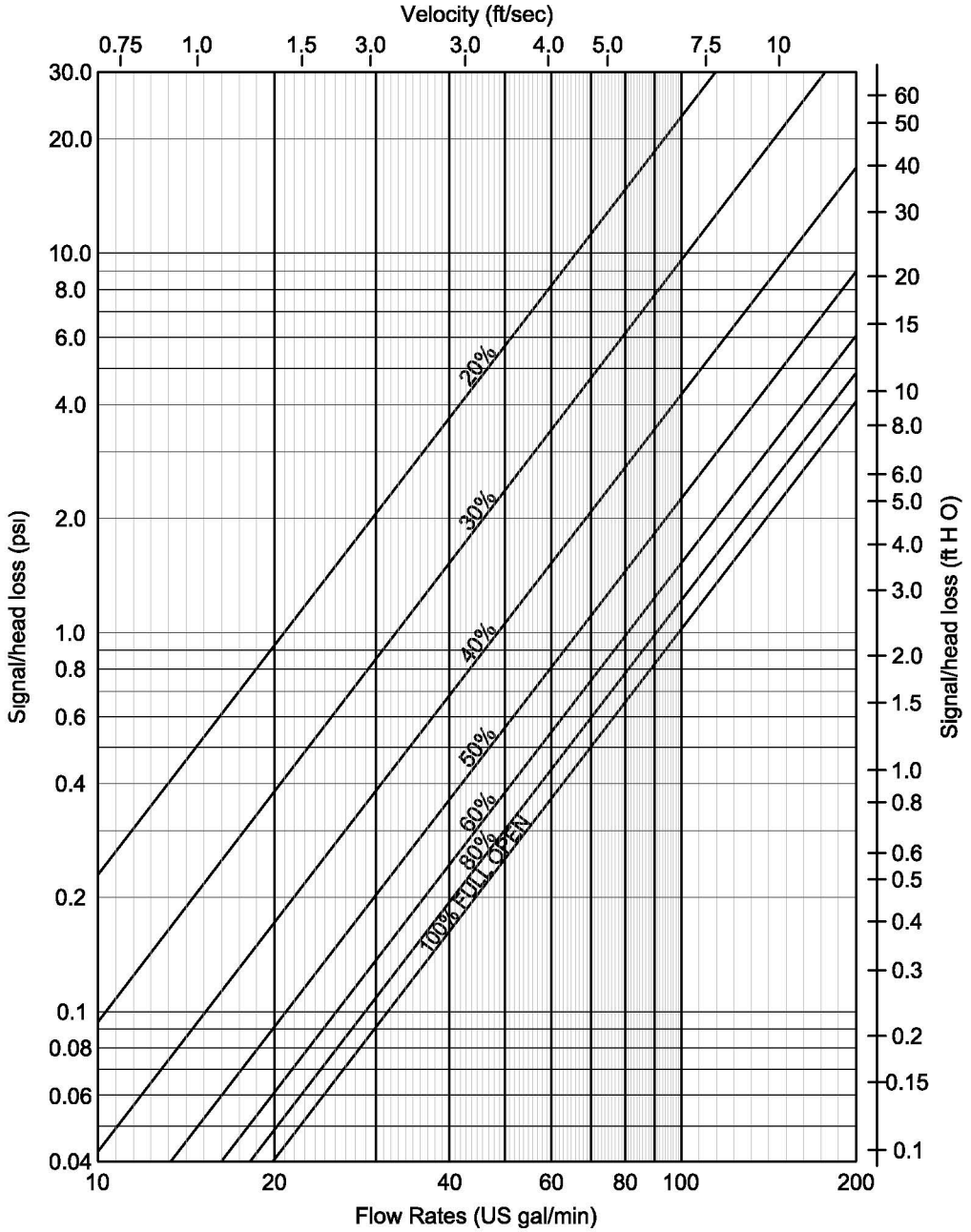


Graph of signal/Head Loss against Flow Rate indicating pressure drop attributable to the valve installed in a circuit.
Velocity based on average inside diameter of Schedule 40 pipe.

NOTE:
MULTI-FUNCTION VALVES PROVIDES REGULATION AND FLOW MEASUREMENT WITHIN AN ACCURACY OF 25%.

2-1/2" MULTI-FUNCTION VALVE "MFV"

FLOW DIAGRAM
(FLANGED & GROOVED)



Graph of signal/Head Loss against Flow Rate indicating pressure drop attributable to the valve installed in a circuit.
Velocity based on average inside diameter of Schedule 40 pipe.

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860 BLVD INDUSTRIEL, BOIS-DES-FILIONS (QUÉBEC) J6Z 4V7
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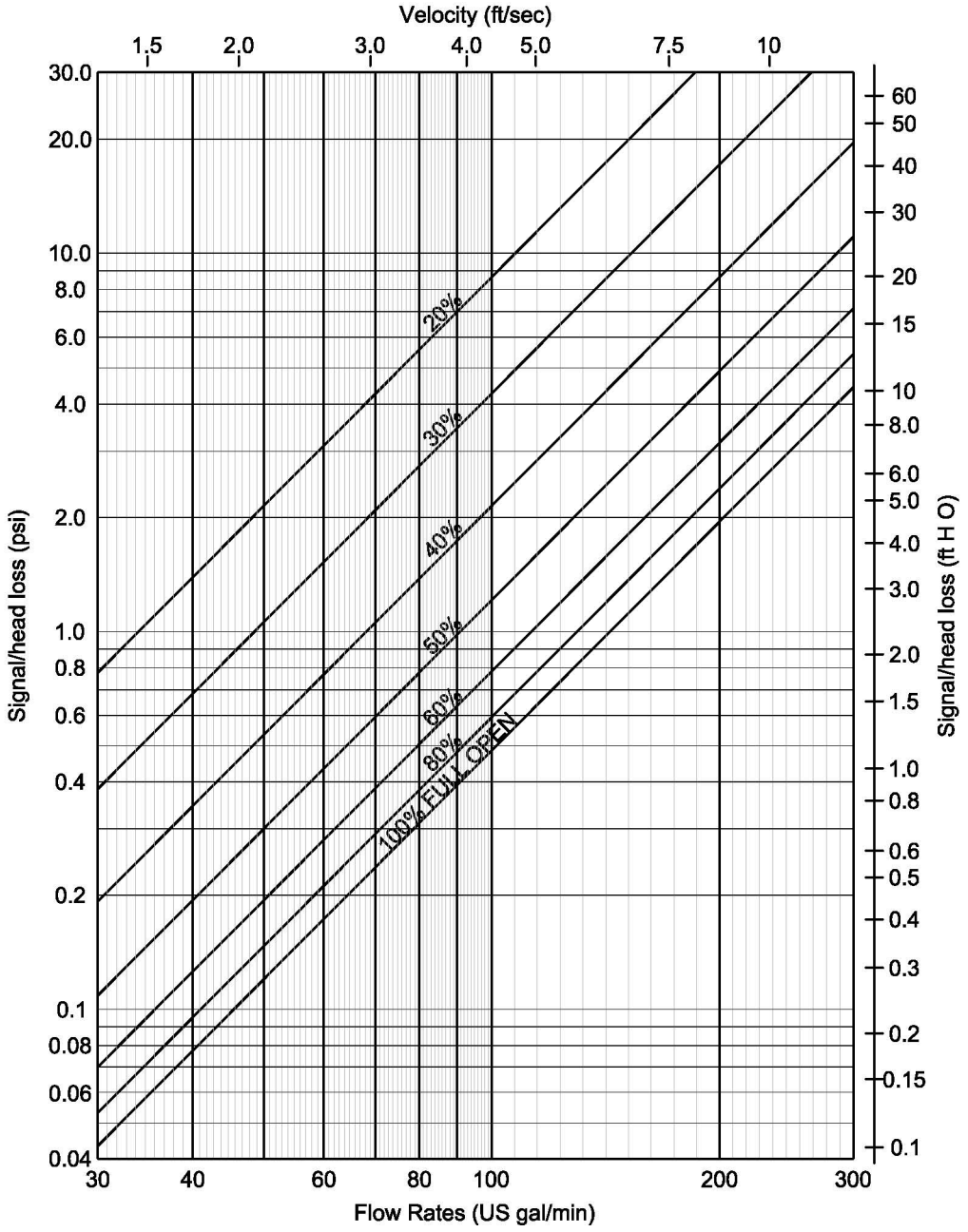
3" MULTI-FUNCTION VALVE ''MFV''
FLOW DIAGRAM
(FLANGED & GROOVED)



Graph of signal/Head Loss against Flow Rate indicating pressure drop attributable to the valve installed in a circuit.
Velocity based on average inside diameter of Schedule 40 pipe.

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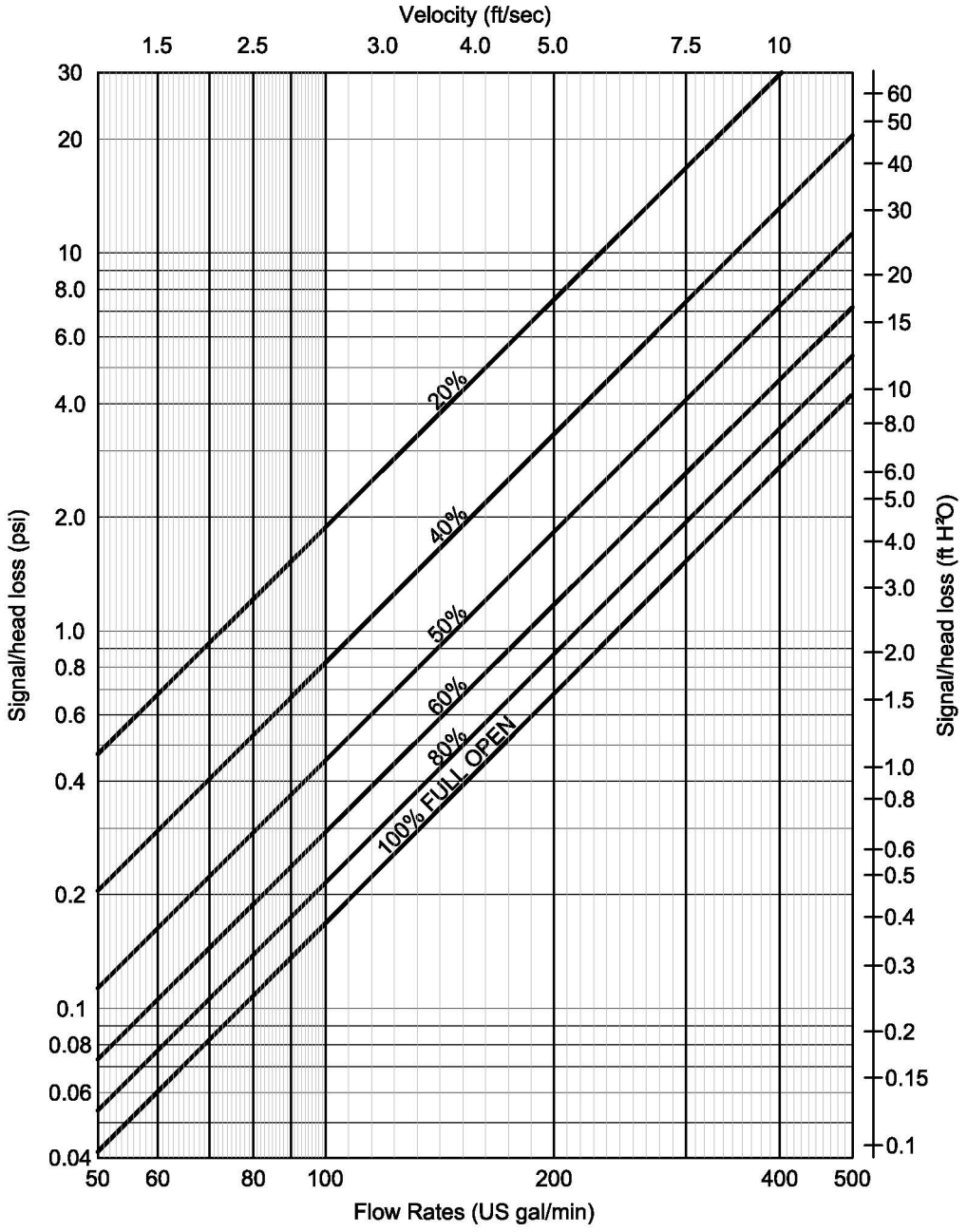
4" MULTI-FUNCTION VALVE "MFV"

FLOW DIAGRAM
(FLANGED & GROOVED)



Graph of signal/Head Loss against Flow Rate indicating pressure drop attributable to the valve installed in a circuit.
Velocity based on average inside diameter of Schedule 40 pipe.

NOTE:
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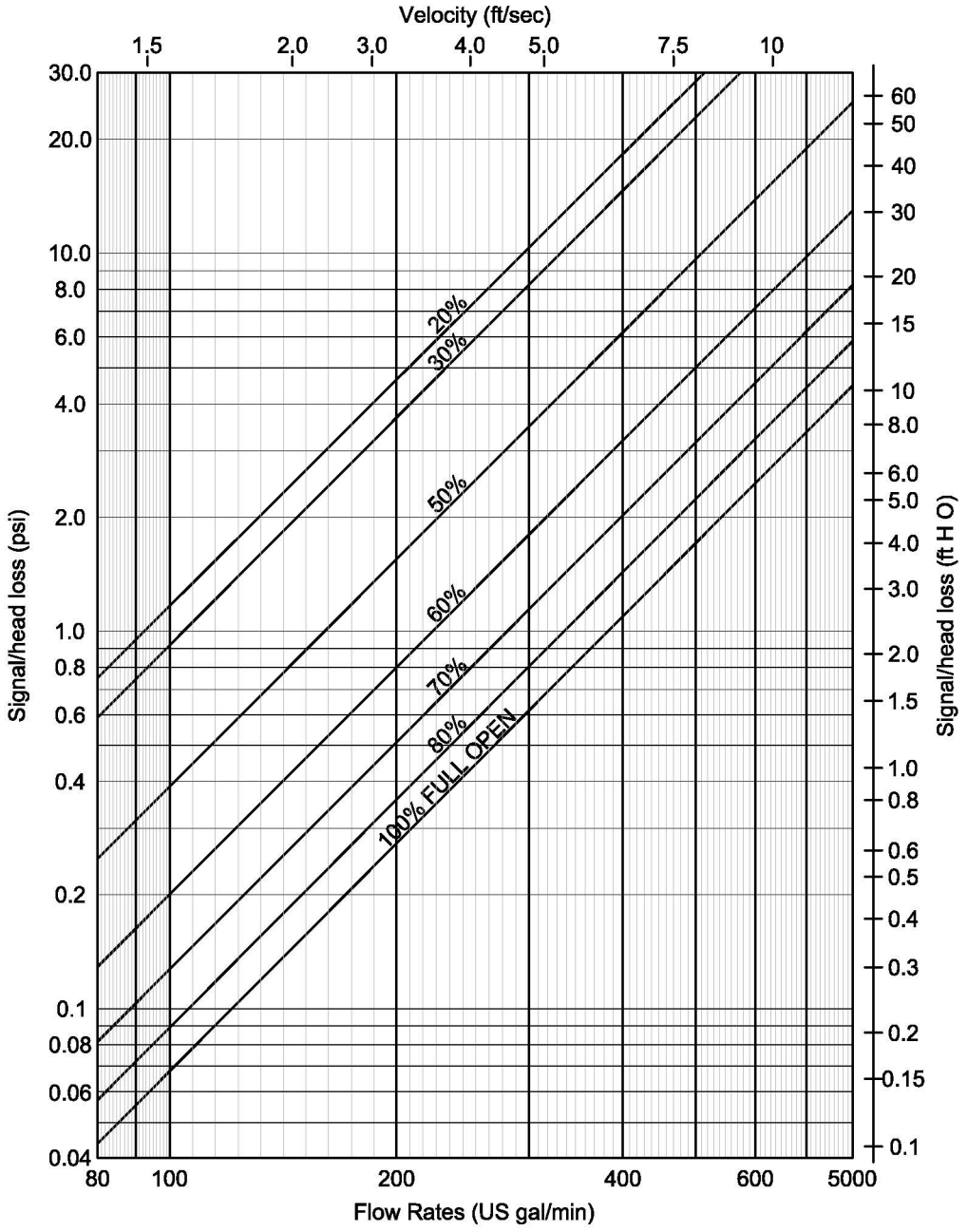
5" MULTI-FUNCTION VALVE ''MFV''
FLOW DIAGRAM
(FLANGED & GROOVED)



Graph of signal/Head Loss against Flow Rate indicating pressure drop attributable to the valve installed in a circuit.
Velocity based on average inside diameter of Schedule 40 pipe.

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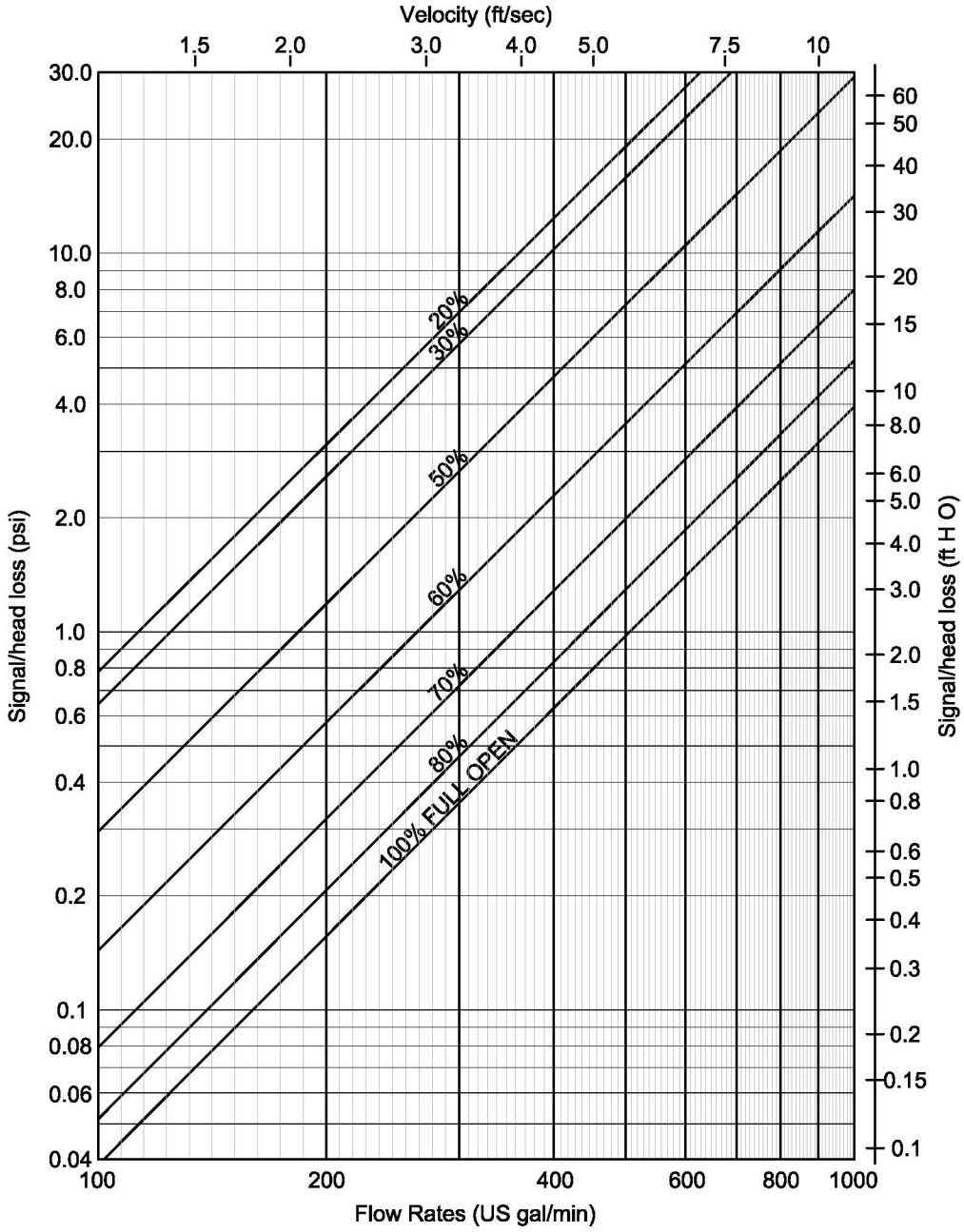
6" MULTI-FUNCTION VALVE ''MFV''
FLOW DIAGRAM
(FLANGED & GROOVED)



Graph of signal/Head Loss against Flow Rate indicating pressure drop attributable to the valve installed in a circuit.
Velocity based on average inside diameter of Schedule 40 pipe.

NOTE:

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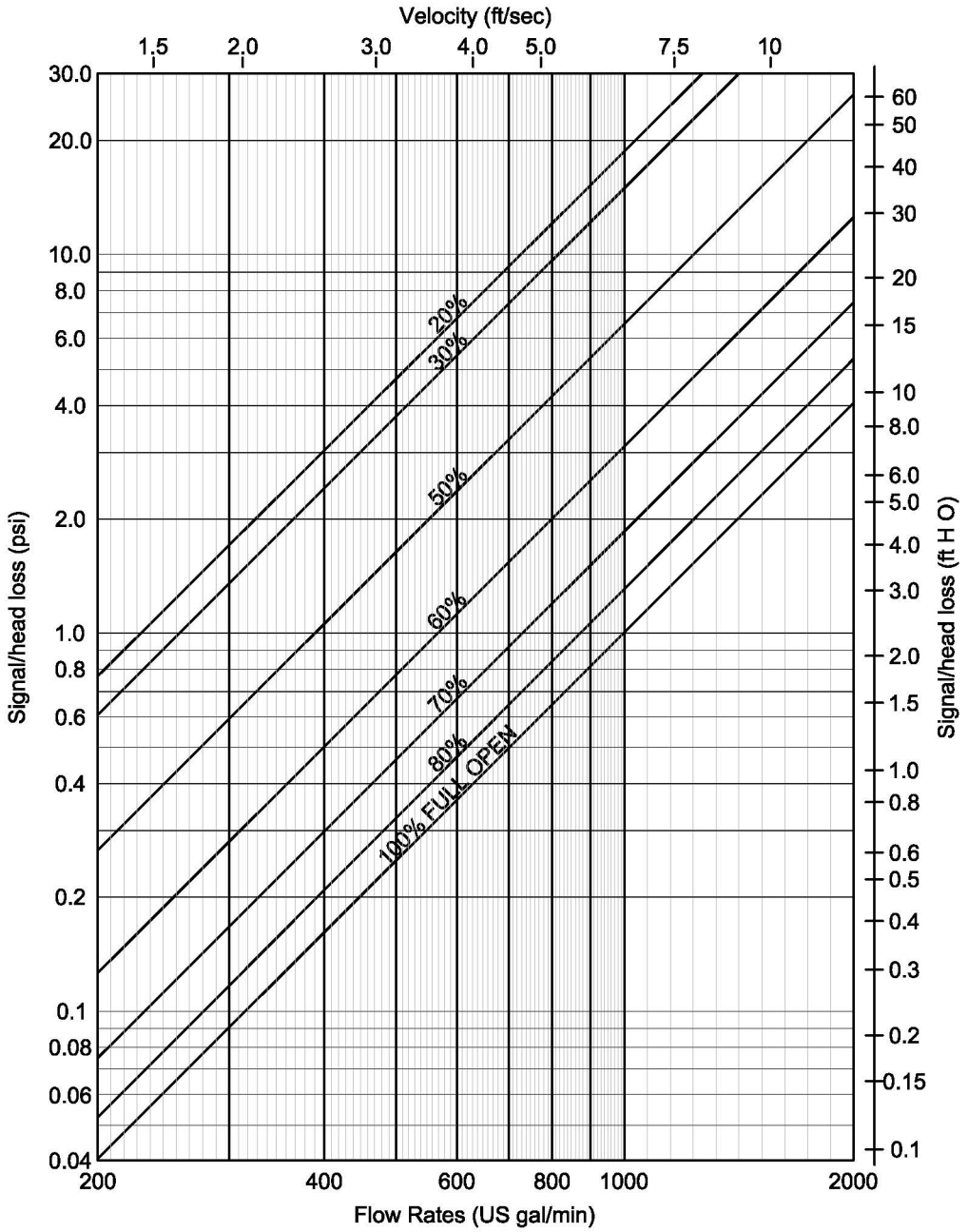
8" MULTI-FUNCTION VALVE ''MFV''
FLOW DIAGRAM
(FLANGED & GROOVED)



Graph of signal/Head Loss against Flow Rate indicating pressure drop attributable to the valve installed in a circuit.
Velocity based on average inside diameter of Schedule 40 pipe.

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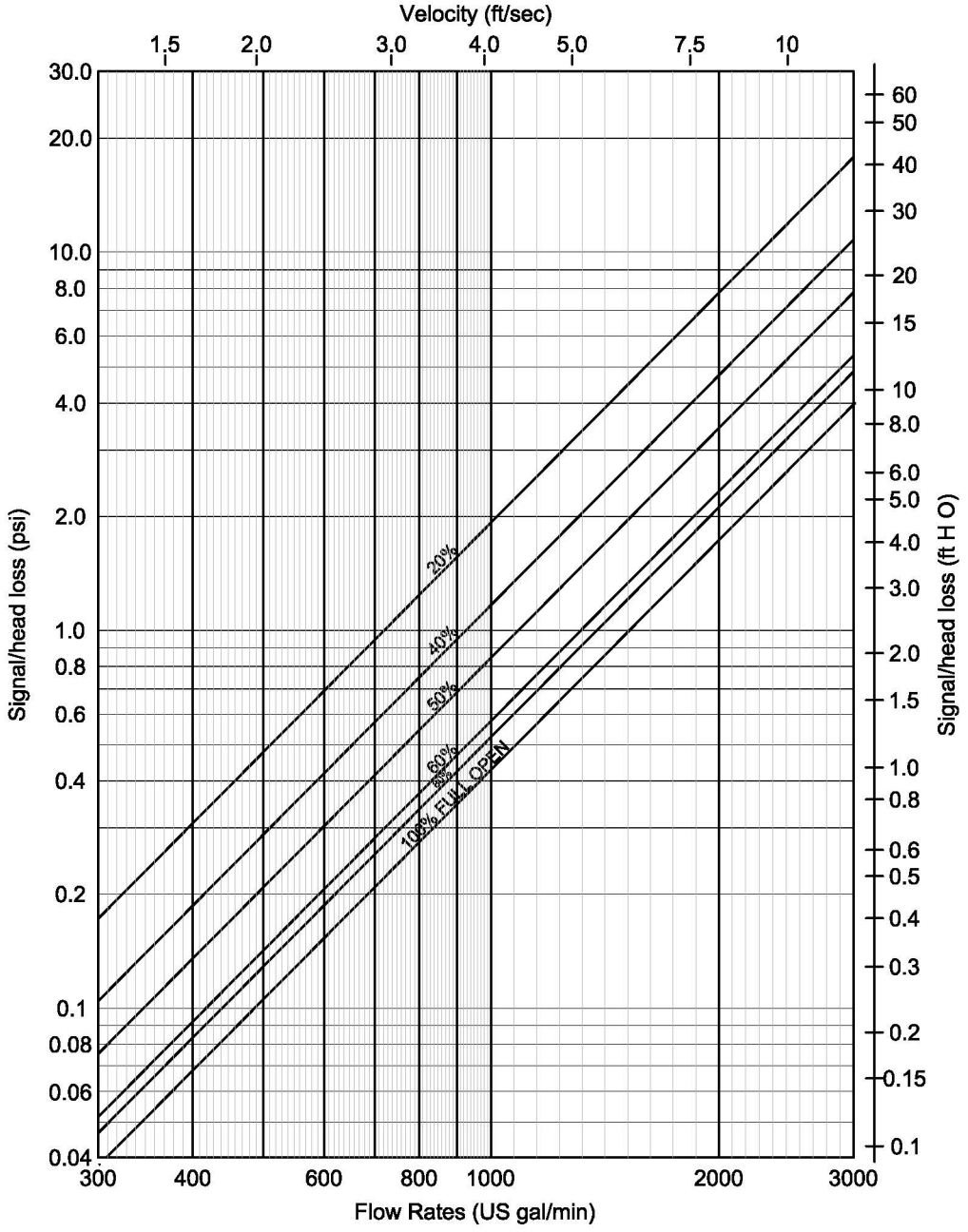
10" MULTI-FUNCTION VALVE ''MFV''
FLOW DIAGRAM
(FLANGED & GROOVED)



Graph of signal/Head Loss against Flow Rate indicating pressure drop attributable to the valve installed in a circuit.
Velocity based on average inside diameter of Schedule 40 pipe.

NOTE:
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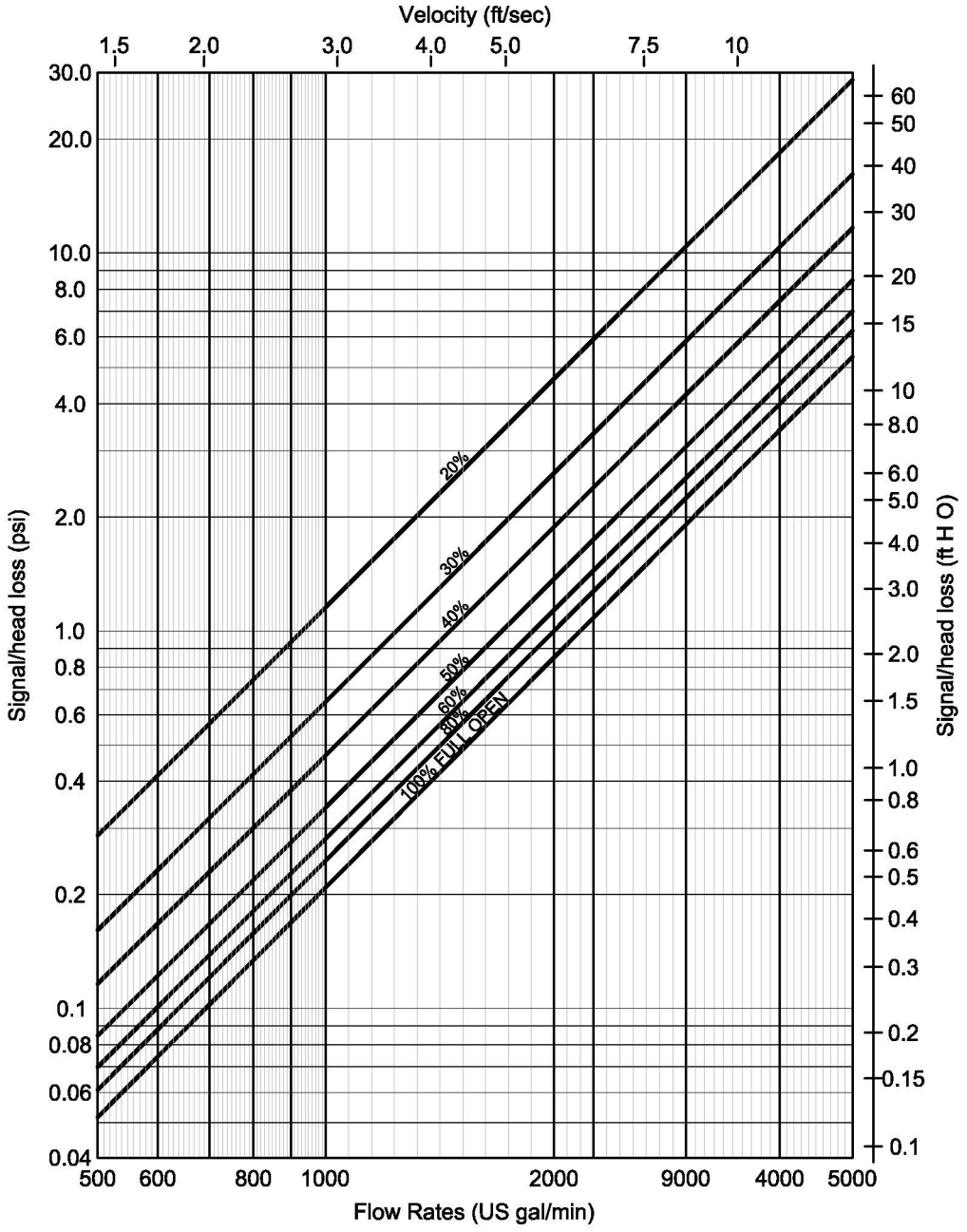
12" MULTI-FUNCTION VALVE ''MFV''
FLOW DIAGRAM
(FLANGED & GROOVED)



Graph of signal/Head Loss against Flow Rate indicating pressure drop attributable to the valve installed in a circuit.
Velocity based on average inside diameter of Schedule 40 pipe.

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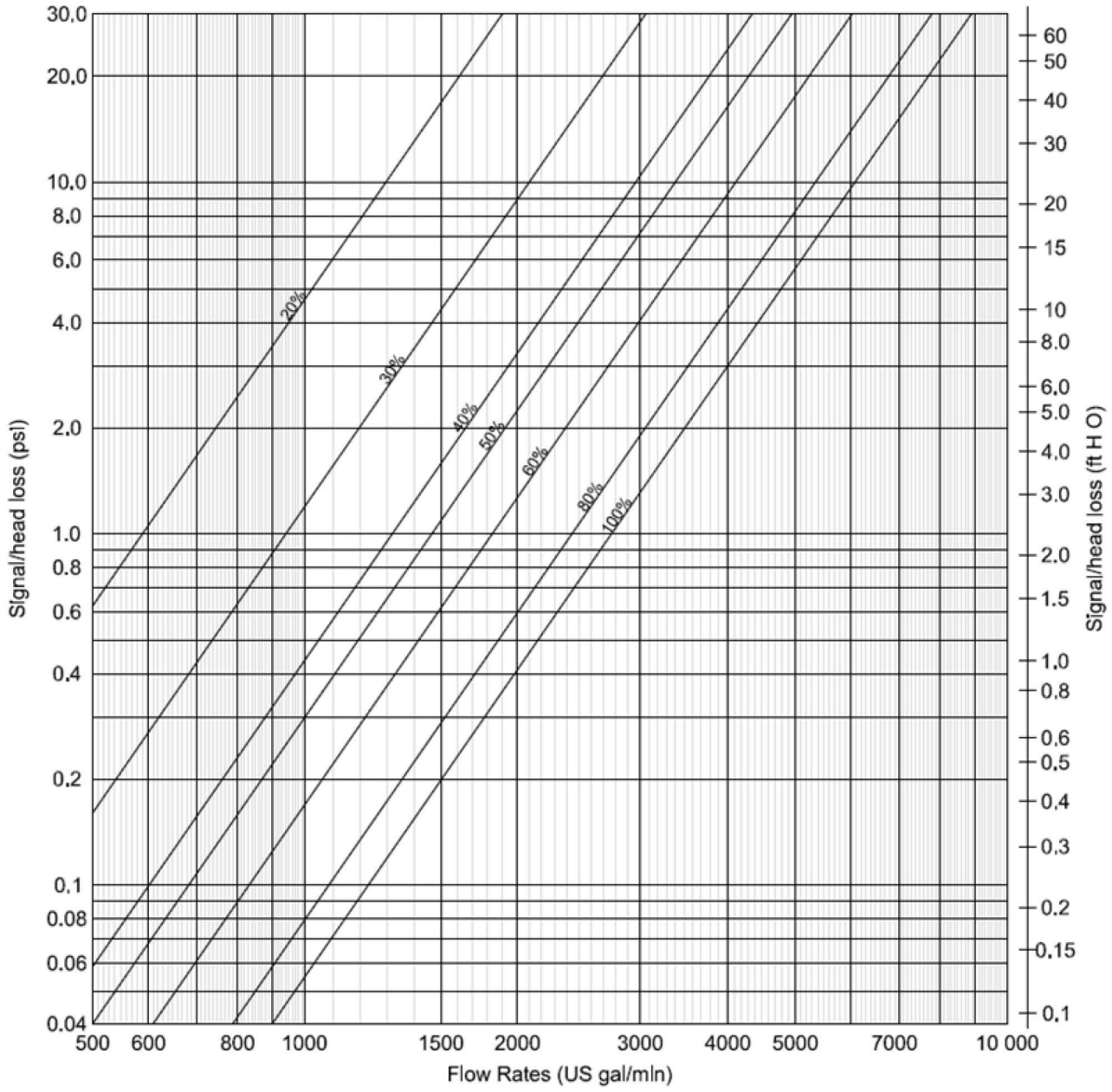
14" MULTI-FUNCTION VALVE ''MFV''
FLOW DIAGRAM
(FLANGED & GROOVED)



Graph of signal/head loss against flow rate indicating pressure drop attributable to the valve installed in a circuit.
Velocity based on average inside diameter of schedule 40 pipe.

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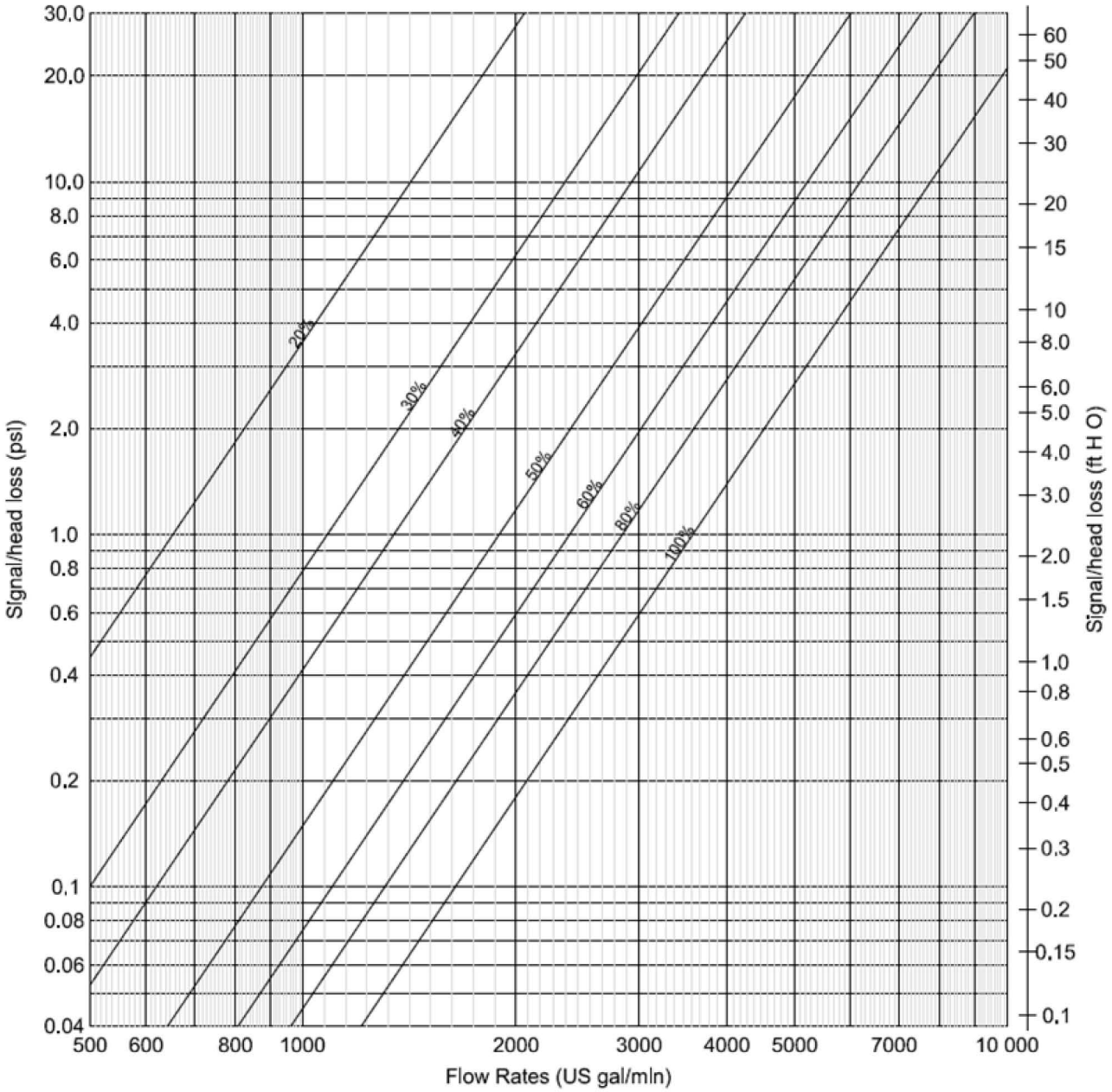
16" MULTI-FUNCTION VALVE ''MFV''
FLOW DIAGRAM
(FLANGED & GROOVED)



Graph of signal/head loss against flow rate indicating pressure drop attributable to the valve installed in a circuit.
Velocity based on average inside diameter of schedule 40 pipe.

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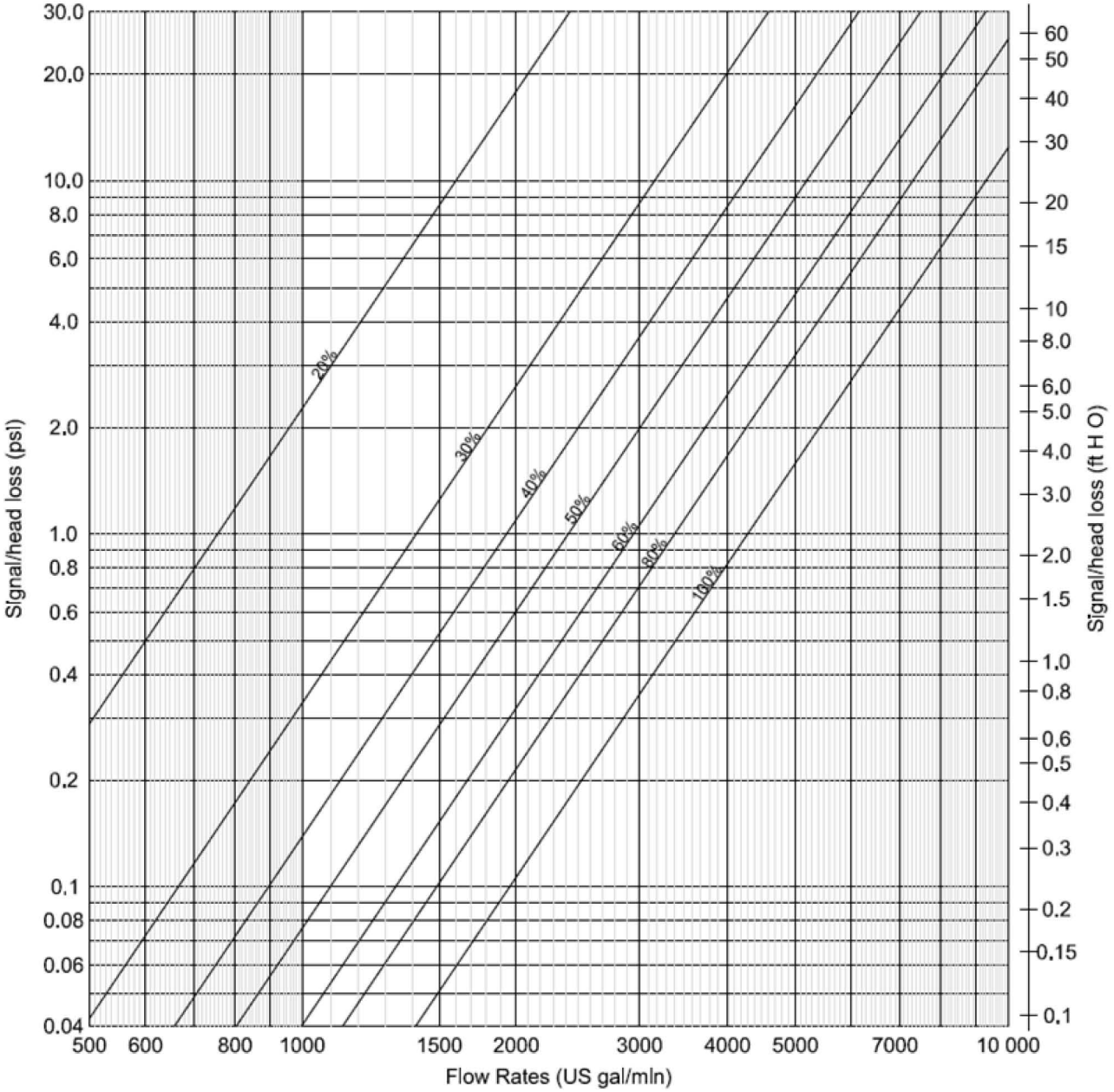
18" MULTI-FUNCTION VALVE ''MFV''
FLOW DIAGRAM
(FLANGED & GROOVED)



Graph of signal/head loss against flow rate indicating pressure drop attributable to the valve installed in a circuit.
Velocity based on average inside diameter of schedule 40 pipe.

NOTE: MULTI-FONCTION VALVES PROVIDES REGULATION AND FLOW MEASUREMENT WITHIN AN ACCURACY OF 25%

Typical Pipings Details Series MFV-F & MFV-G

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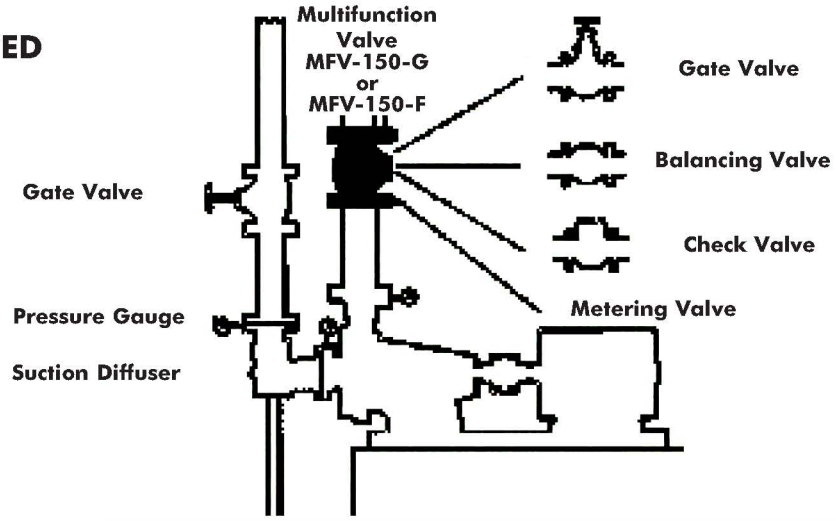
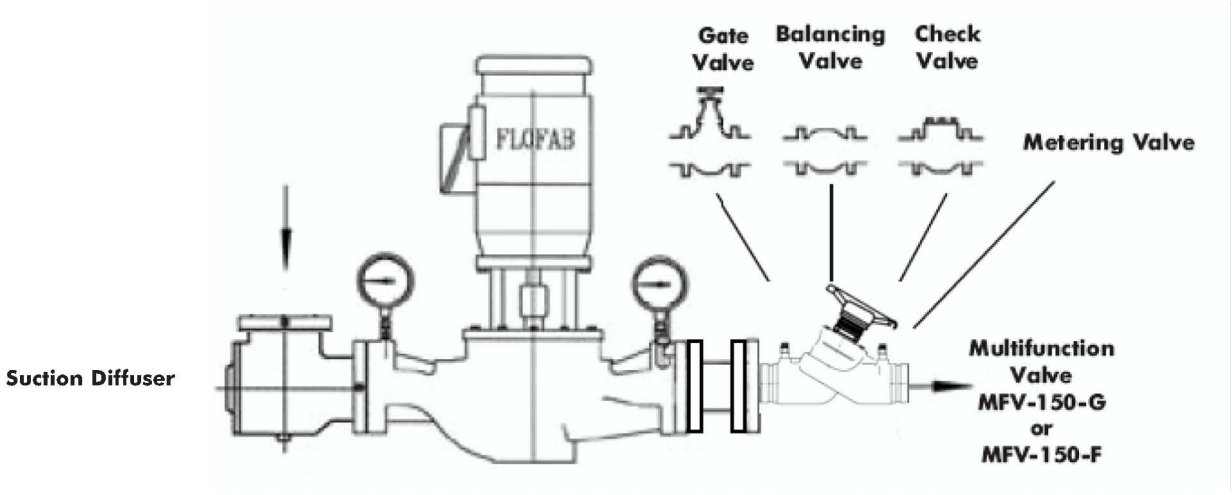
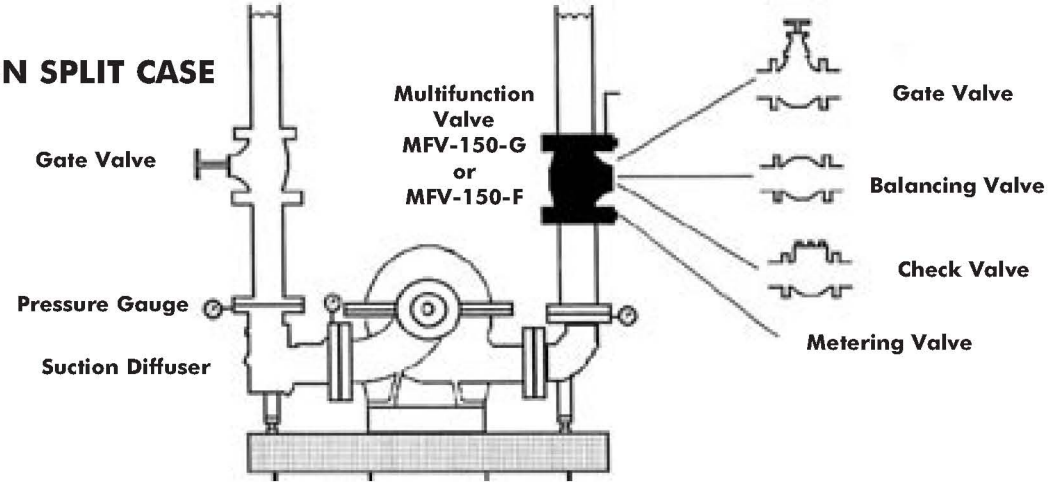
FRAME MOUNTED



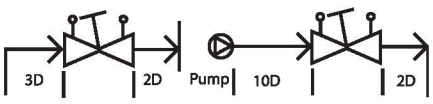
IN-LINE



DOUBLE SUCTION SPLIT CASE



RECOMMENDED PIPING LENGHT FOR INSTALLATION



For Future Use

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