

The Model 5100 "Freezeless" dump valve is perfectly suited for fluid control in oil and gas separators and other process vessels. The valves body design allows the plug and seat to be constantly submerged in the process media, thus giving the valve its "Freezeless" characteristic.

### Features:

- Compact Valve Size
- Stainless Steel Trim
- Screwed Process Connections
- NACE MR-01-75 Compliance Option

### Valve Specifications

Process Connections:	1" MNPT x 1/2" FNPT 1" MNPT x 1" FNPT 2" MNPT x 1" FNPT
Body Style:	"Freezeless" Angle
Operating Pressure (Max.):	2220 psig (153 Bar)
Operating Temperature:	-20° to 180°F (-29° to 82°C)

### Actuator Specifications

Air Supply Connection:	1/4" FNPT
Action:	Reverse (Fail Close)
Effective Area:	35 Sq. In.
Maximum Supply Pressure:	50 psig (3.5 Bar)

### Materials of Construction

Body:	1018 Carbon Steel
Plug & Seat:	302 SST
Valve Stem:	303 SST 316 SST (Optional)
Seals:	Buna-N Viton (Optional)
Actuator Housing:	Steel

### Trim Characteristic

Quick Opening (On/Off)

### Port Diameter / Flow Coefficient (C<sub>v</sub>)

0.38"	4.8 C <sub>v</sub>
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### Estimated Weight

1" MNPT x 1/2" FNPT:	13.5 lbs (6.6 Kg)
1" MNPT x 1" FNPT:	14.5 lbs (6.6 Kg)
2" MNPT x 1" FNPT:	14.5 lbs (6.6 Kg)



### Liquid Sizing Equation

$$Q = (C_v) \sqrt{\frac{(\Delta P)}{(SG)}}$$

where:

Q	= Flow Rate (gpm)
C <sub>v</sub>	= flow coefficient
SG	= specific gravity
Δ P	= pressure drop, (psi)

### Useful Conversions for Liquid Flow:

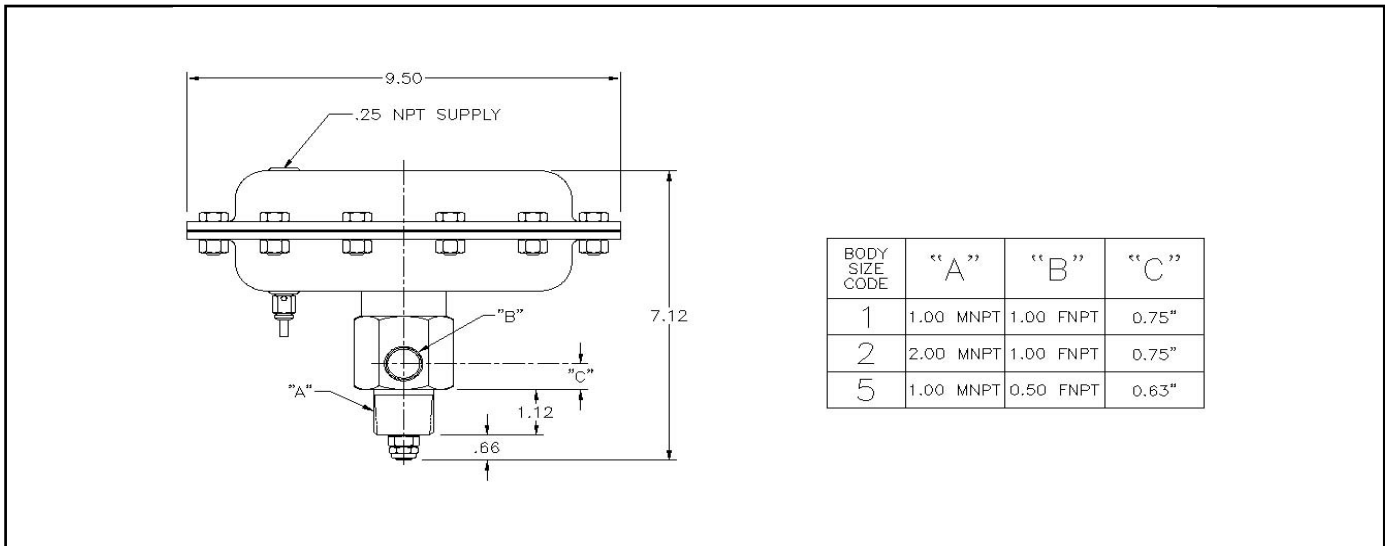
To Convert	Multiply By	To Obtain
Barrels	42	U.S. Gallons
Barrels/Hr.	0.7	U.S. gpm
Barrels/Day	0.02917	U.S. gpm
Ft. <sup>3</sup> /Sec.	448.83	U.S. gpm
M <sup>3</sup> /Hr.	4.403	U.S. gpm
Lb./Hr.	0.0020	U.S. gpm
Kg./Hr.	0.0044	U.S. gpm

Model Number Information

Sample Model Number: 5100- 5 S S 9 - R A B - 35

<b>BODY SIZE</b>	<b>CODE</b>
1" MNPT x 1/2" FNPT	5
1" MNPT x 1" FNPT	1
2" MNPT x 1" FNPT	2
<b>BODY CONNECTION</b>	<b>CODE</b>
Screwed	S
<b>WETTED MATERIALS</b>	<b>CODE</b>
Standard	S
NACE	N
<b>VALVE RATING</b>	<b>CODE</b>
2220 PSIG (153 Bar)	9
<b>ACTUATOR STYLE</b>	<b>CODE</b>
Reverse (Fail Close)	R
<b>BODY STYLE</b>	<b>CODE</b>
Angle	A
<b>SEALS</b>	<b>CODE</b>
Buna-N	B
Viton	V
<b>ACTUATOR SIZE</b>	<b>CODE</b>
35 Sq.In. (9.5" Dia.)	35

DIMENSIONS:



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**Mallard Control Company, Inc.**

4970 Washington Boulevard  
 Beaumont, Texas, USA 77707  
 409 842-5392 Phone  
 409 842-8165 FAX  
 www.MallardControl.com