



# ***DOWN MOUNT PRODUCTS***

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Catalog 4518/USA  
*December 2005*



# DM3000 Series

## Miniature Pressure Regulator ANSI/ISA 76.00.02.2002

Parker Hannifin Corporation's Veriflo Division presents the DM3000 Series pressure regulator. The DM3000 is a miniature threadless type, non-tied diaphragm regulator with a footprint designed for the ANSI/ISA 7600.02.2002 Modular Surface Mount.

By design, the DM3000 allows faster purge times and extended seat life. The DM3000 provides precise gas regulation and performance in a miniature size.



### features

- ▶ Miniature footprint with low internal volume.
- ▶ Dimensions are interchangeable with Veriflo Down Mount valves.
- ▶ Spherical Poppet.
- ▶ No threads exposed to the wetted area.
- ▶ Critically Dampened to improve Flow Stability.
- ▶ O<sub>2</sub> Cleaned.

### Specifications

#### materials of construction

##### wetted materials

Body	316L Stainless Steel
Seat	PCTFE
Diaphragm	Hastelloy C-22® or equivalent
Poppet	Inconel®
Poppet Spring	Inconel®
Poppet Pin	Hastelloy C-22® or equivalent
Seat Retainer	316L Stainless Steel
Compression Member	316L Stainless Steel

##### non-wetted materials

Cap	Nickel Plated Brass
Adjusting screw	416 Stainless Steel
Knob (Black)	ABS Plastic

#### operating conditions

Maximum inlet pressure	500 psig (35 barg)
Outlet pressure	1-30 psig (2 barg) 1-60 psig (4 barg), 2-100 psig (7 barg), 3-250 psig (17 barg)
Temperature:	
Operating	-40°F to 150°F (-40°C to 66°C)
Storage	-40°F to 150°F (-40°C to 66°C)

#### functional performance

Flow capacity	C <sub>V</sub> 0.1 SEMI Flow Coefficient Test #F-32-0998
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Maximum Inboard Design: Leak Rate	<2 x 10 <sup>-7</sup> cc/sec He
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#### surface finishes

Standard Ra	32 micro inch or less
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#### internal volume

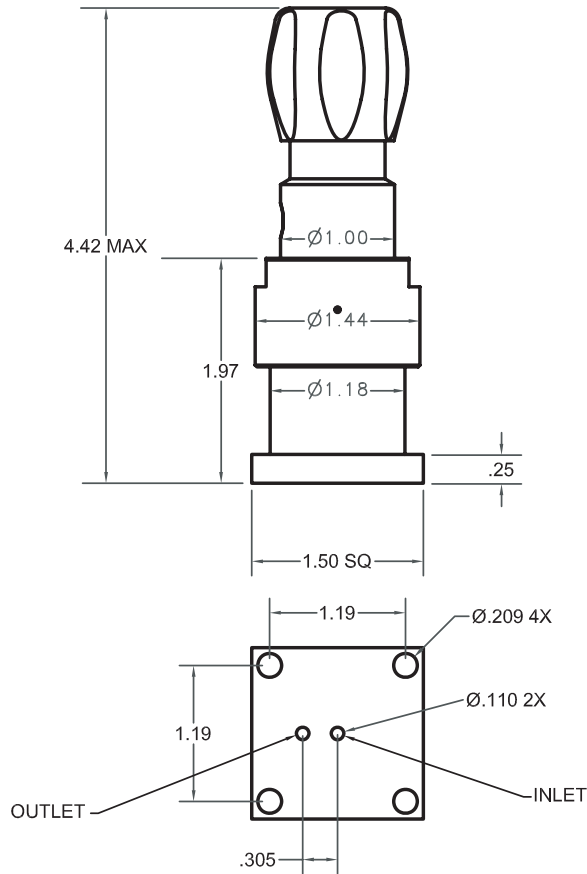
approximately 1.5 cc

#### approximate weight

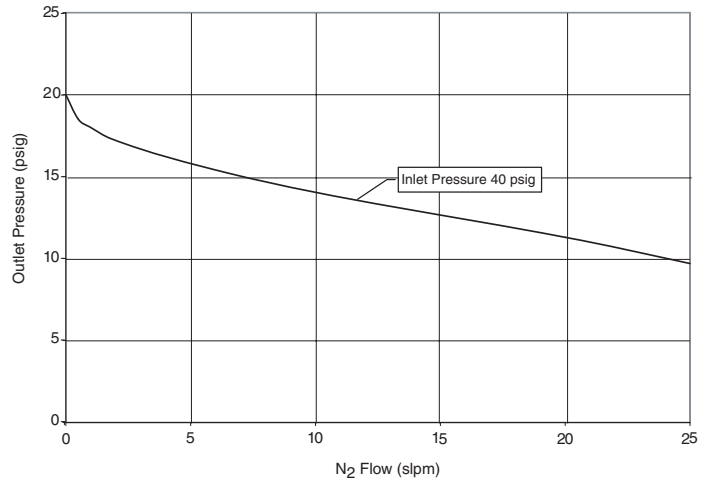
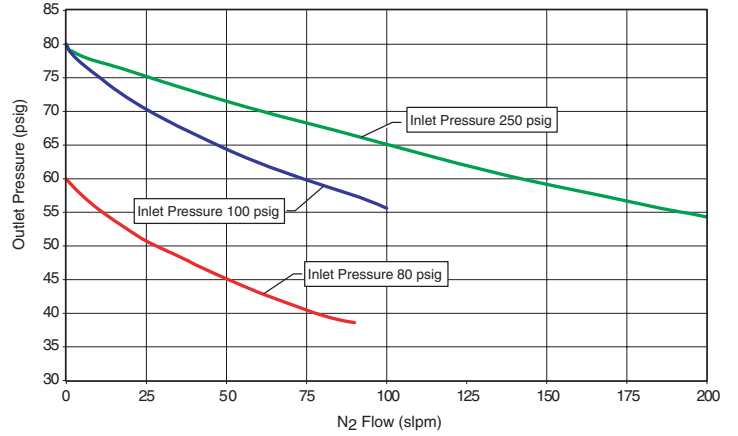
0.6 lb

# DM3000 Series

## Dimensional Data



## Flow Curves



## Ordering Information

	<b>DM3001</b>	<b>S</b>	<b>10</b>	
<b>BASIC SERIES</b>				<b>CONNECTIONS</b>
DM3001 = 1 - 30 psig				10 = 2 Port, Standard O-Ring
DM3002 = 1 - 60 psig				<b>MATERIAL</b>
DM3003 = 2 - 100 psig				S = 316L Stainless Steel
DM3004 = 3 - 250 psig				

Hastelloy C-22® is a registered trademark of Haynes International, Inc.  
Inconel® is a registered trademark of Inco Alloys International

# DM930 1-1/2"

## Down Mount Diaphragm Valve

Parker Hannifin Corporation's Veriflo Division presents the Down Mount 930 Air Operated and Manual Diaphragm Valve. The DM930 diaphragm valve provides exceptional performance for today's ANSI/ISA SP76.00.02 modular interface systems.



### features

- ▶ Meets ANSI/ISA SP76.00.02 modular interface for the Parker Intraflow System.
- ▶ Standard surface finish is 32 micro inch Ra.
- ▶ Internally threadless and springless.
- ▶ Fully functional for pressure ranges from vacuum to 125 psig for Air Operated valves and 250 psig for manual valves.
- ▶ Ability to change from air operated actuator to lever, or visa versa, without intruding into the wetted area.
- ▶ O<sub>2</sub> Cleaned.

### Specifications

#### materials of construction

##### Wetted

Body . . . . . 316L Stainless Steel  
Seat . . . . . PCTFE  
optional PEEK™, Vespel®  
Diaphragm . . . . . Elgiloy® or equivalent

##### Non-wetted

Nut . . . . . 316L Stainless Steel  
Cap . . . . . Nickel Plated Brass

#### operating conditions

Maximun Operating Pressure:

AOP . . . . . 125 psig (8.6 barg)  
Manual . . . . . 250 psig (17 barg)  
Minimum Operating Pressure . . . . . Vacuum  
AOP Actuation . . . . . 70 psig (4.8 barg) Nominal  
Temperature . . . . . -40°F to 150°F (-40°C to 66°C)  
Bake Out . . . . . 250°F (121°C) in the open position

#### functional performance

Flow capacity:

AOP . . . . . C<sub>v</sub> = .25  
Manual . . . . . C<sub>v</sub> = .20  
SEMI Flow Coefficient Test #F-32-0998

Leak Rate . . . . . Bubble Tight

Design Proof Pressure:

AOP . . . . . 188 psig (13 barg)  
Manual . . . . . 375 psig (26 barg)

Design Burst Pressure:

AOP . . . . . 375 psig (26 barg)  
Manual . . . . . 750 psig (52 barg)

#### surface finishes

Standard Ra . . . . . 32 micro inch or less

#### internal volume

approximately 0.4 cc

#### standard connection

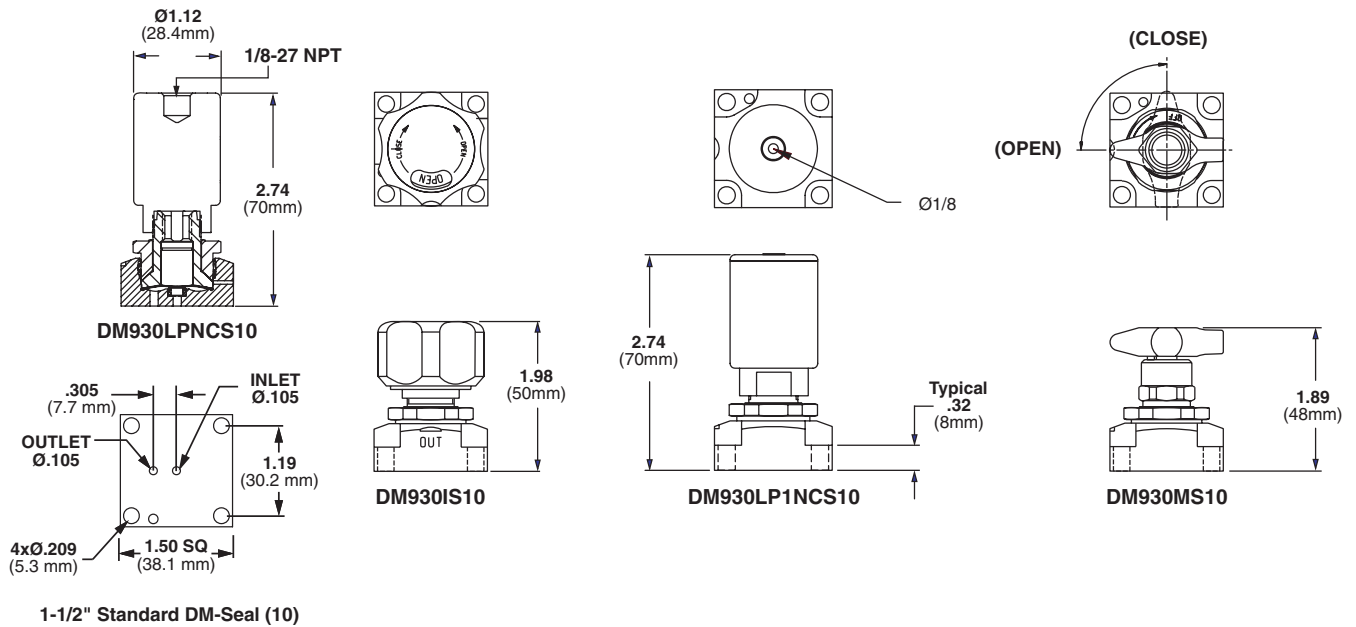
ANSI/ISA SP76.00.02

#### approximate weight

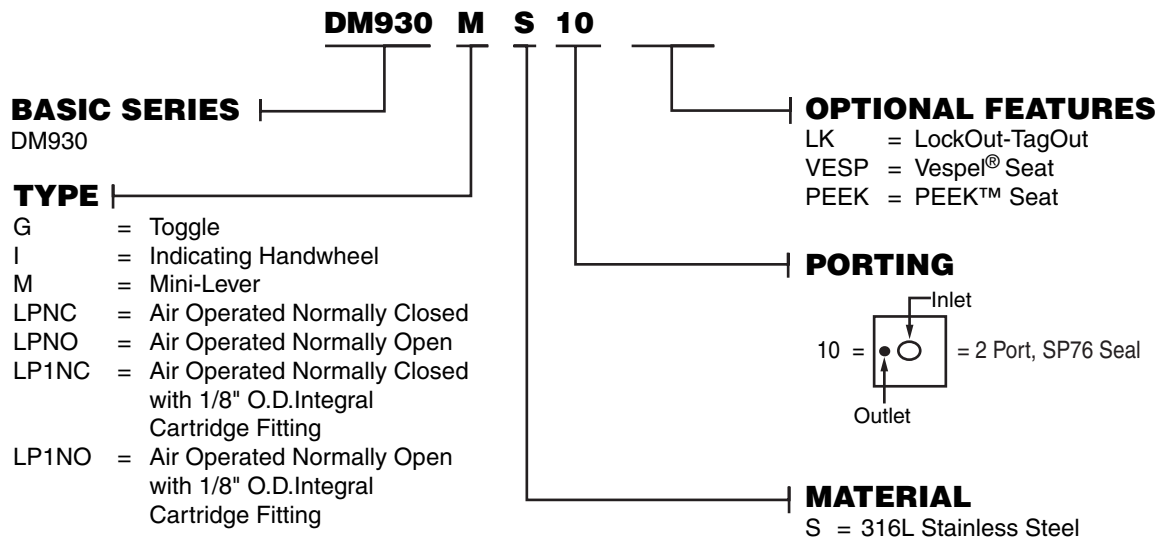
0.6 lb (0.27 kgm)

# DM930 1-1/2"

## Dimensional Data



## Ordering Information



### Notes:

LK includes LockOut-TagOut bracket for G-Type Valve; LOTO Clamp for M type Valve

Vespel<sup>®</sup> seat material is recommended for Nitrous Oxide (N<sub>2</sub>O) Service

Elgiloy<sup>®</sup> is a registered trademark of Elgiloy Company.  
Vespel<sup>®</sup> is a registered trademark of DuPont.  
PEEK<sup>™</sup> is a trademark of Victrex plc.

# DMFS190 1-1/2"

## Down Mount Excess Flow Shut- Off Valve

Parker Hannifin Corporation's Veriflo Division presents the Down Mount FS190. The DMFS190 is a non-attitude sensitive, excess flow shut-off valve designed to operate with a wide range of inlet pressures. The DMFS190 is designed to automatically shut off the delivery of gas if the flow exceeds a preset limit. The DMFS190 provides exceptional performance for today's ANSI/ISA SP76.00.02 modular interface systems.

An actuating knob has been designed to manually reset the valve and clearly indicate the relative operating position - either "Open (Reset)" or "Auto (Shut Off)". A pneumatic actuator is available, which will allow resetting of the valve from a remote source.

The DMFS190 is offered with six different pressure/flow limits: A, B, C, D, E, and F (see Sizing Chart).



## Specifications

### materials of construction

#### Wetted

Body	316L Stainless Steel
Seat	PCTFE
Diaphragm	Elgiloy® or equivalent
Spring	Hastelloy C-22®
Poppet	316L Stainless Steel
Orifice	316L Stainless Steel

#### Non-wetted

Knob	Anodized Aluminum (Red)
Stem	416 Stainless Steel (lubricated)
Cap	316L Stainless Steel

### operating conditions

#### Pressure Requirements:

A - D	20 psig (min) to 3500 psig (1.4 barg to 241 barg)
E - F	30 psig (min) to 3500 psig (2 barg to 241 barg)
Differential Pressure	5 psig or 12 psig (.3 barg or .8 barg)
Flow Limit Setting	6 available See Sizing Chart
Temperature	-10°F to 150°F (-23°C to 66°C)

### functional performance

Design Leak Rate:	
Inboard	$2 \times 10^{-10}$ scc/sec He

### internal volume

approximately 0.4 cc

### surface finishes

Standard Ra . . . . . 32 micro inch or les

### standard connection

ANSI/ISA SP76.00.02

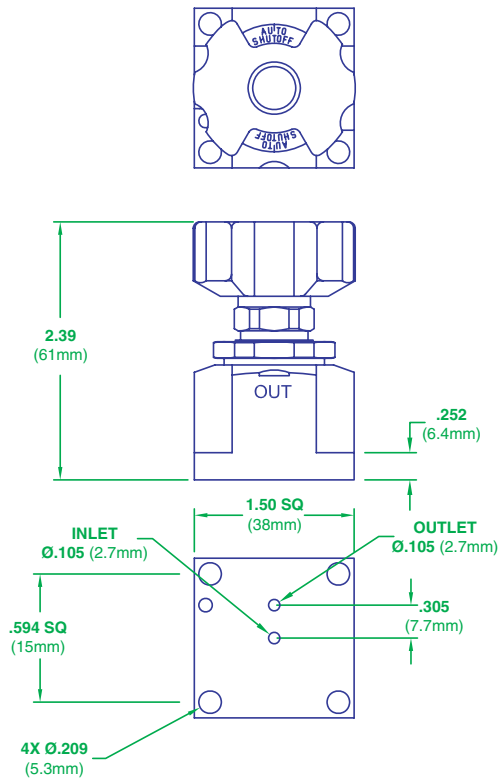
### approximate weight

0.6 lb (0.27 kgm)

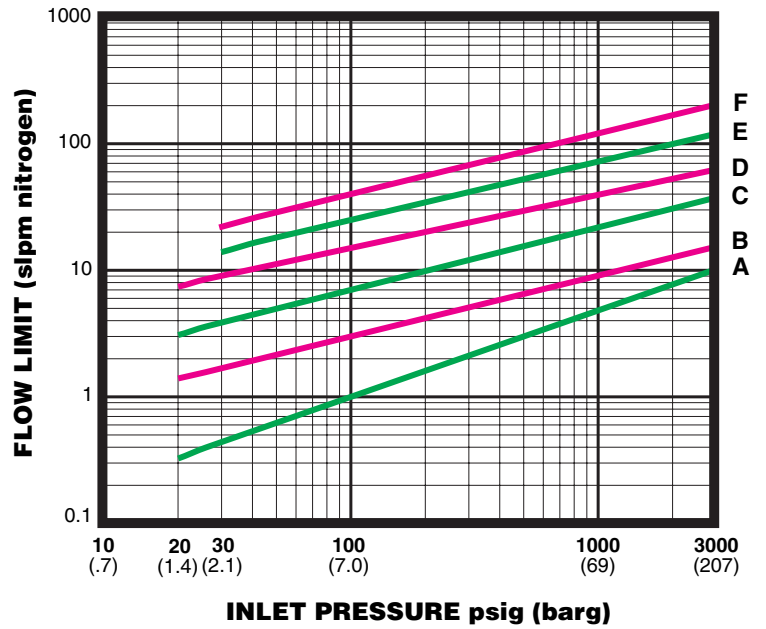
### O<sub>2</sub> Cleaned

# DMFS190 1-1/2"

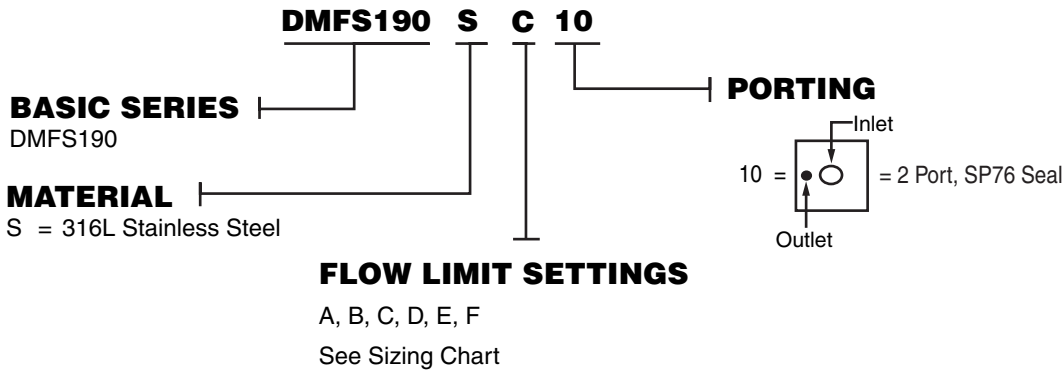
## Dimensional Data



## Sizing Chart



## Ordering Information



Elgiloy® is a registered trademark of Elgiloy Company.  
Hastelloy C-22® is a registered trademark of Haynes International, Inc.



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