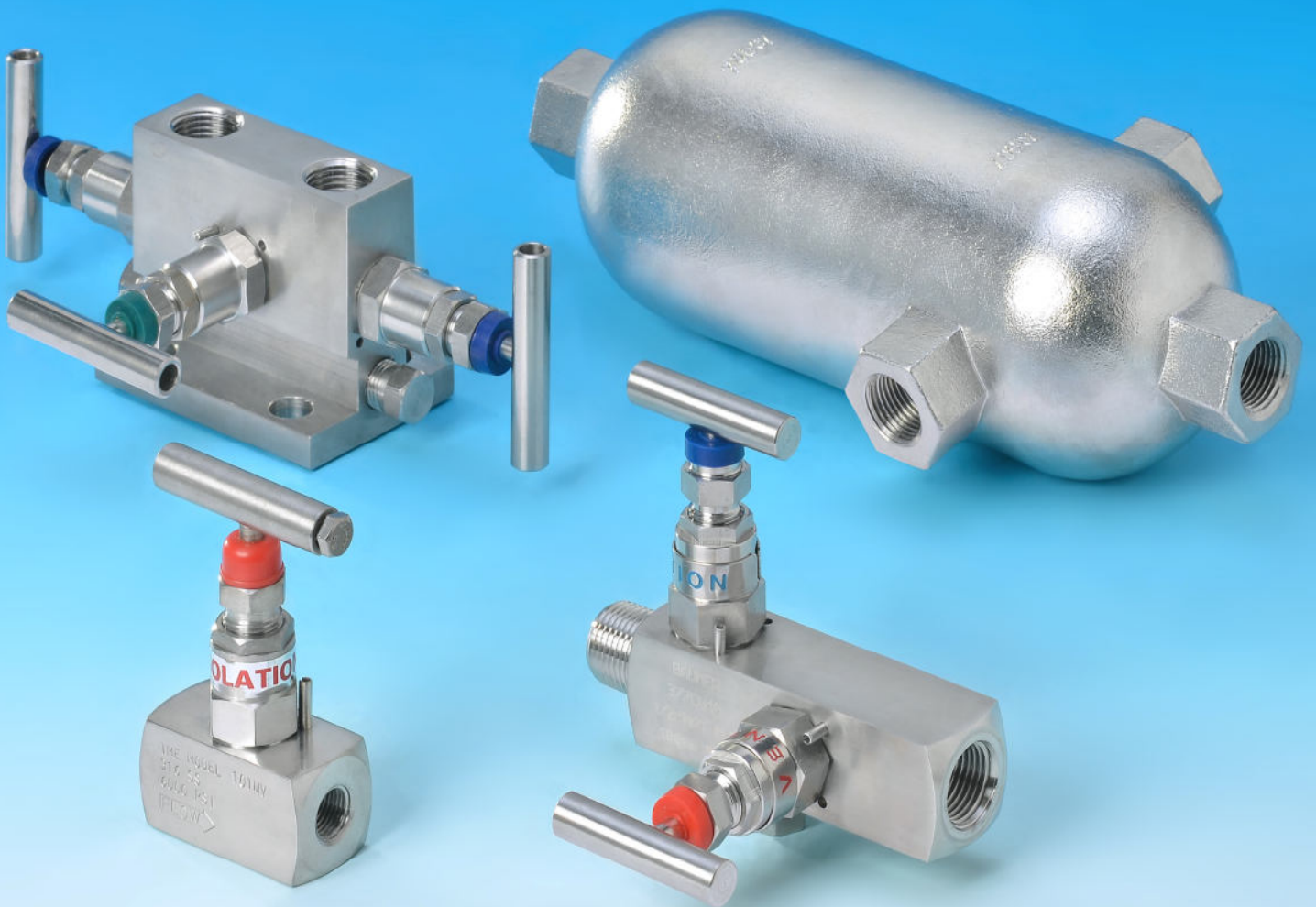


# INSTRUMENT MANIFOLDS, VALVES & CONDENSATE POT



SEPTEMBER 2013



## INTERNATIONAL METAL ENGINEERING

## COMPANY PROFILE

**E**stablished in 1991 by a group of engineers with a wealth of experience in instrument and process control, IME has developed a complete line of supportive products for a wide range of industry needs, ranging from highly demanding off shore exploration to the basic needs of the food and beverage industries. Our products range from valves and manifolds available for OEM and private labeling agreements to junction boxes, custom designed enclosures as well as a full range of temperature measuring instruments and accessories. Our products are economically priced and designed to meet the needs of our OEM's worldwide as well as end users with no compromise in quality.



In addition to an ISO 9001:2008 Quality award, IME has both a QAN (Quality Assurance Notification) and QAR (Quality Assurance Report) which allows us to design and manufacture products that meet the stringent requirements of the ATEX and IECEx directives. Fully equipped with state of the art manufacturing facilities and backed by a team of qualified and dedicated design and production engineers, IME is positioned to meet the ever changing demands of process industries worldwide.



# INTERNATIONAL METAL ENGINEERING

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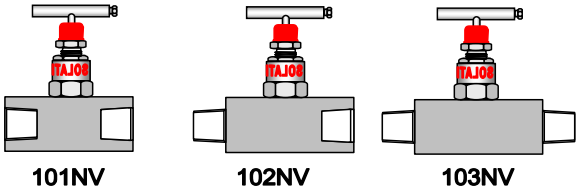
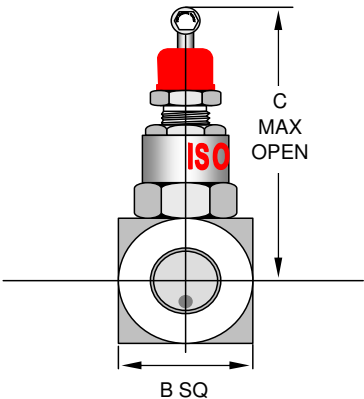
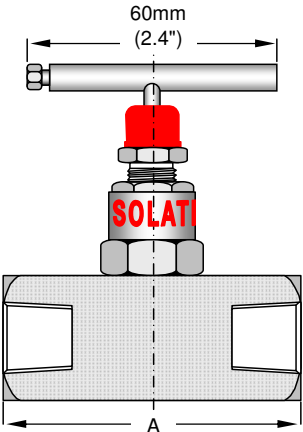
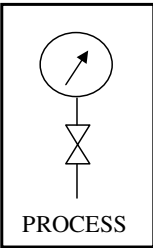
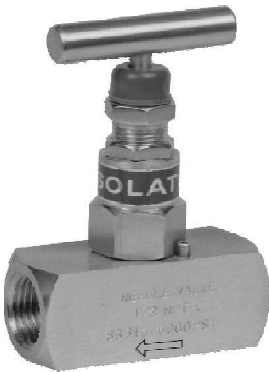
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MODEL 101NV / 102NV / 103NV BARSTOCK NEEDLE VALVE

Introduction

The Model 101NV / 102NV / 103NV Needle Valves are designed for a wide variety of applications, requiring throttling or shut off, this is an extremely versatile valve with a wide selection of inlet and outlet configurations.

This design is suitable for applications up to 6,000psi (420Bar)



Specifications

Material of Construction:

SS316, Carbon Steel, Monel, Hastelloy  
Test Pressure (at 25°C Room Temperature)

Hydrostatic:	Body	-	620Bar
	Seat	-	415Bar
Pneumatic:	Seat	-	40Bar

Gland Packing

PTFE	:	Standard
Graphoil	:	Temperatures Above 180°C

Finish

CS: Zinc Plated; SS: Natural

Connection:

See below

Weight

1.50LBS (700g)

Accessories

None

Order Information

Model	Description				
101NV	Barstock Needle Valve, Female x Female connection				
102NV	Barstock Needle Valve, Male x Female connection				
103NV	Barstock Needle Valve, Male x Male connection				
	Code	Size	A	B	C
	01	1/4" NPT	56 (2.2")	25 (1.0")	89 (3.5")
	02	3/8" NPT	56 (2.2")	25 (1.0")	89 (3.5")
	03	1/2" NPT	65 (2.6")	28 (1.1")	90 (3.5")
	Materials of Construction				
	S2	SS 316			
	CS	Carbon Steel			
	MN	Monel 400			
	HA	Hastelloy C			
	XX	Other ( Specify)			
	Code	Packing Material			
	TF	Teflon			
	GR	Graphoil			
	XX	Other ( Specify)			
101NV	03	S2	TF		

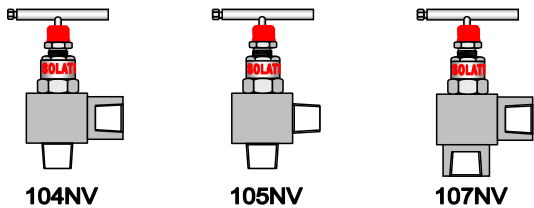
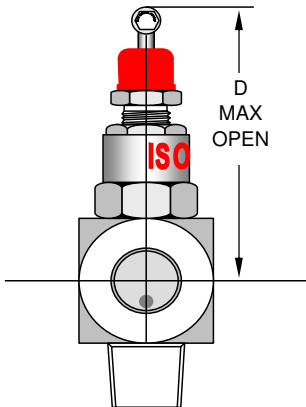
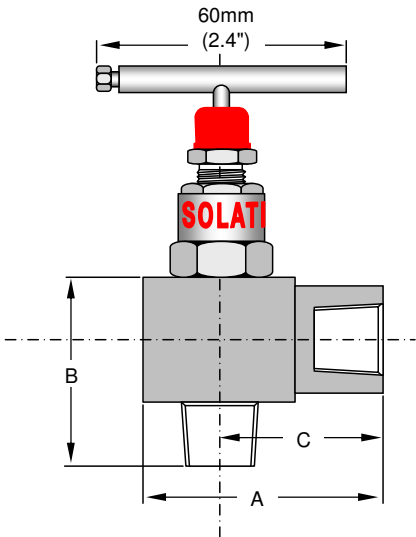
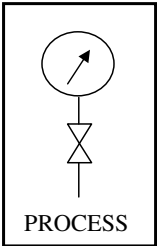


MODEL 104NV / 105NV / 107NV BARSTOCK NEEDLE VALVE

Introduction

The Model 104NV / 105NV / 107NV Needle Valves are designed for a wide variety of applications, requiring throttling or shut off, this is an extremely versatile valve with a wide selection of inlet and outlet configurations.

This design is suitable for applications up to 6,000psi (420Bar)



Specifications

Material of Construction:

SS316, Carbon Steel, Monel, Hastelloy

Test Pressure (at 25°C Room Temperature)

Hydrostatic:	Body	-	620Bar
	Seat	-	415Bar
Pneumatic:	Seat	-	40Bar

Gland Packing

PTFE	:	Standard
Graphoil	:	Temperatures Above 180°C

Finish

CS: Zinc Plated; SS: Natural

Connection:

See below

Weight

1.50LBS (700g)

Accessories

None

Order Information

Model	Description				
104NV	Barstock Needle Valve, Male x Female connection				
105NV	Barstock Needle Valve, Male x Male connection				
107NV	Barstock Needle Valve, Female x Female connection				
	Code	Size	A	B	C
	01	1/4" NPT	56 (2.2")	25 (1.0")	89 (3.5")
	02	3/8" NPT	56 (2.2")	25 (1.0")	89 (3.5")
	03	1/2" NPT	65 (2.6")	28 (1.1")	90 (3.5")
	Code	Materials of Construction			
	S2	SS 316			
	CS	Carbon Steel			
	MN	Monel 400			
	HA	Hastelloy C			
	XX	Other ( Specify )			
	Code	Packing Material			
	TF	Teflon			
	GR	Graphoil			
	XX	Other ( Specify )			
104NV	03	S2	TF		

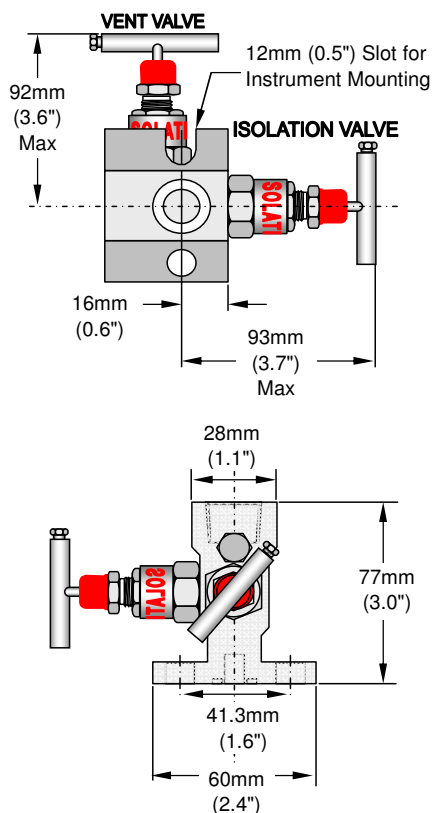
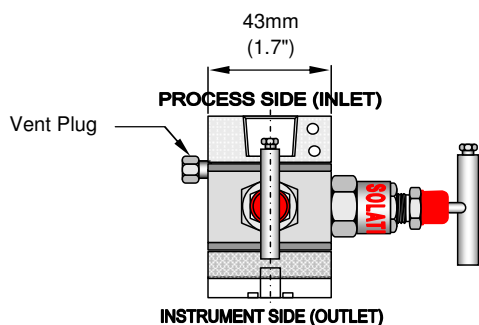
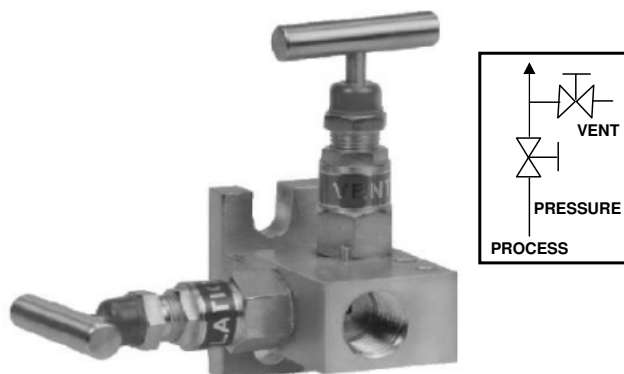
# INTERNATIONAL METAL ENGINEERING

## MODEL 369DM 2 VALVE MANIFOLD, DIRECT MOUNTING

### Introduction

The Model 369DM 2 valve manifold has been designed to be directly mounted when used with pressure transmitters, pressure switches, absolute pressure transmitters or pressure gauges. Its "T" type and directly opposed bonnets provide isolating and calibrating functions in a compact unit.

This design is suitable for applications up to 6,000psi (420Bar)



### Specifications

#### Material of Construction:

SS316, Carbon Steel, Monel, Hastelloy

#### Test Pressure (at 25°C Room Temperature)

Hydrostatic:	Body	-	620Bar
	Seat	-	415Bar
Pneumatic:	Seat	-	40Bar

#### Gland Packing

PTFE	:	Standard
Graphoil	:	Temperatures Above 180°C

#### Finish

CS: Zinc Plated; SS: Natural

#### Connection:

See below

#### Weight

1.50LBS (700g)

#### Accessories

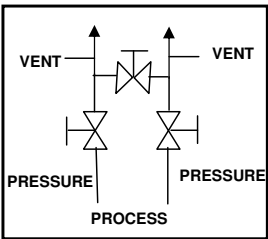
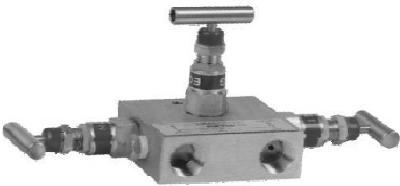
Mounting Bolts, Teflon Ring

### Order Information

Model	Description		
369DM	2 Valve Manifold, Direct Mounting		
	Code	Inlet	Outlet
	01	1/4" NPT	Directly Mounted
	02	3/8" NPT	Directly Mounted
	03	1/2" NPT	Directly Mounted
	Code	Materials of Construction	
	S2	SS 316	
	CS	Carbon Steel	
	MN	Monel 400	
	HA	Hastelloy C	
	XX	Other ( Specify )	
	Code	Packing Material	
	TF	Teflon	
	GR	Graphoil	
	XX	Other ( Specify )	
369DM	03	S2	TF

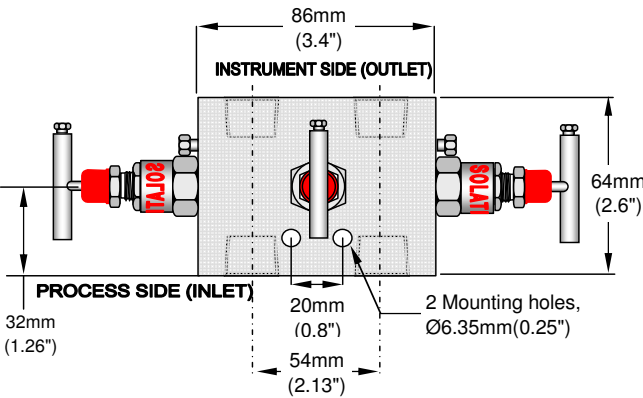
MODEL 310RM 3 VALVE MANIFOLD, REMOTE MOUNTING

- Pressures up to 6000psi
- Standard 2.13" center to center inlet/outlet
- 3/16" bore
- Wide choice of materials and options



Introduction

Model 310 Remotely Mounted 3 valve manifold allows manifold to be remote from the differential gauge, switch or transmitter. Two isolating and one equalizing valves are provided in a single compact space saving unit.



Specifications

Material of Construction:

SS316, Carbon Steel, Monel, Hastelloy

Test Pressure (at 25°C Room Temperature)

Hydrostatic:	Body	-	620Bar
	Seat	-	415Bar
Pneumatic:	Seat	-	40Bar

Gland Packing

PTFE	:	Standard
Graphoil	:	Temperatures Above 180 °C

Finish

CS: Zinc Plated; SS: Natural

Connection:

Inlet	Outlet	Drain/Vent
See Below	See Below	1/4" NPT(F)

Mounting Kit

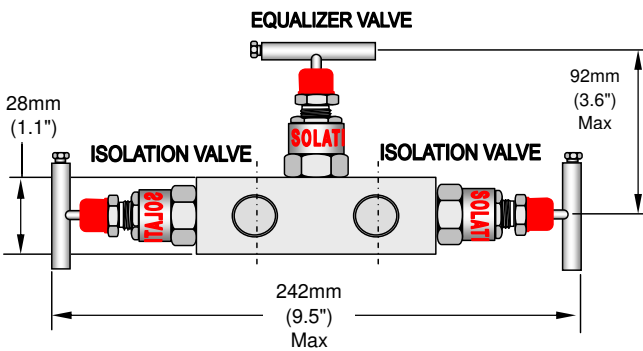
Mounting Bracket with "U" Bolts and Necessary kits for fitting on 2" NB Stanchion pipe stand or wall mount. (Order Separately)

Weight

6.83LBS (2.7Kg)

Accessories

None



Order Information

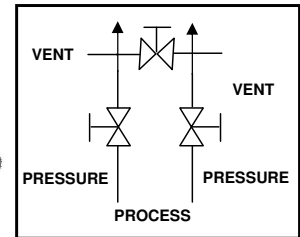
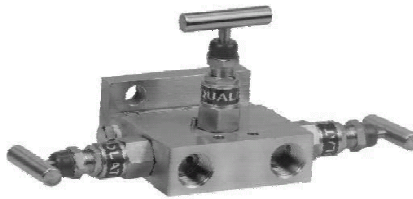
Model	Description		
310RM	3 Valve Manifold, Remote Mounting		
	Code	Inlet	Outlet
	01	1/4" NPT (F)	1/4" NPT (F)
	02	3/8" NPT (F)	3/8" NPT (F)
	03	1/2" NPT (F)	1/2" NPT (F)
	Code	Materials of Construction	
	S2	SS 316	
	CS	Carbon Steel	
	MN	Monel 400	
	HA	Hastelloy C	
	XX	Other ( Specify)	
	Code	Packing Material	
	TF	Teflon	
	GR	Graphoil	
	XX	Other ( Specify)	

310RM	03	S2	TF
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# INTERNATIONAL METAL ENGINEERING

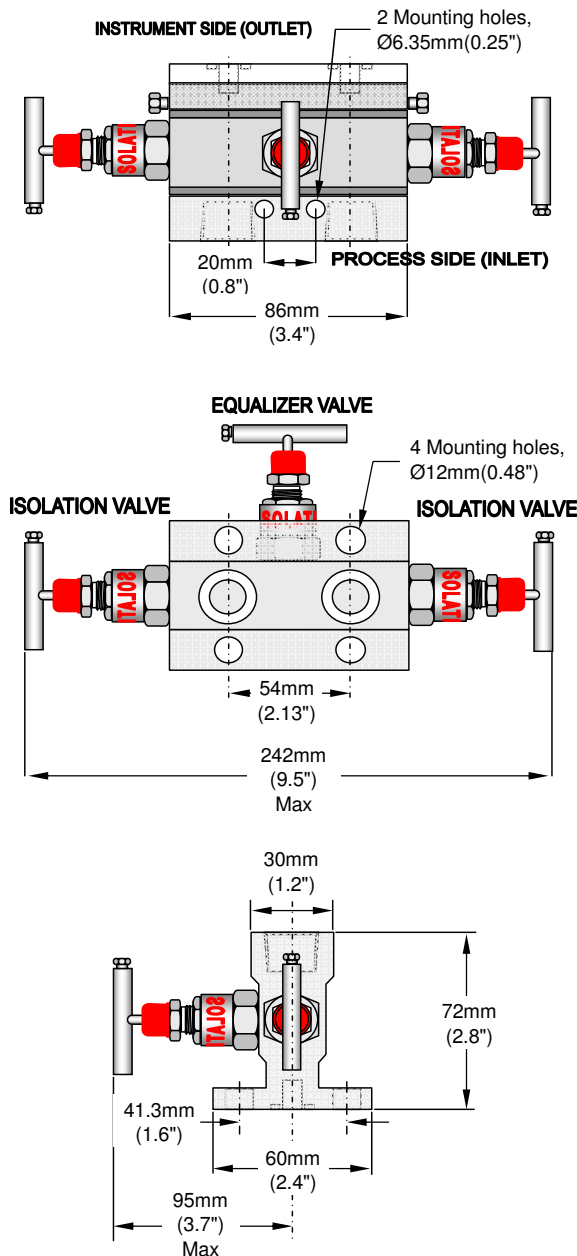
## MODEL 305DM 3 VALVE MANIFOLD, DIRECT MOUNTING

- Pressures up to 6000psi
- Standard 2.13" center to center inlet/outlet
- 3/16" bore
- Wide choice of materials and options



### Introduction

Model 305 Single Flanged 3 valve manifold, allows the pressure transmitter to be directly mounted, eliminating the need for additional piping, valves and fittings.



### Specifications

#### Material of Construction:

SS316, Carbon Steel, Monel, Hastelloy

#### Test Pressure (at 25°C Room Temperature)

Hydrostatic:	Body	-	620Bar
	Seat	-	415Bar
Pneumatic:	Seat	-	40Bar

#### Gland Packing

PTFE	:	Standard
Graphoil	:	Temperatures Above 180°C

#### Finish

CS: Zinc Plated; SS: Natural

#### Connection:

Inlet	Outlet	Drain/Vent
See Below	Direct Mount	1/4" NPT(F)

#### Mounting Kit

Mounting Bracket with "U" Bolts and Necessary kits for fitting on 2" NB Stanchion pipe stand or wall mount. (Order Separately)

#### Weight

5.95LBS (2.7Kg)

#### Accessories

Mounting Bolts, Teflon Rings

### Order Information

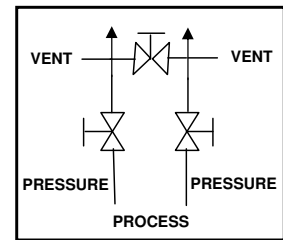
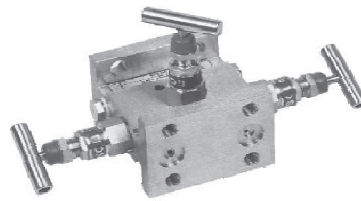
Model	Description		
305DM	3 Valve Manifold, Direct Mounting		
	Code	Inlet	Outlet
	01	1/4" NPT (F)	Directly Mounted
	02	3/8" NPT (F)	Directly Mounted
	03	1/2" NPT (F)	Directly Mounted
	Code	Materials of Construction	
	S2	SS 316	
	CS	Carbon Steel	
	MN	Monel 400	
	HA	Hastelloy C	
	XX	Other ( Specify )	
	Code	Packing Material	
	TF	Teflon	
	GR	Graphoil	
	XX	Other ( Specify )	
305DM	03	S2	TF



# INTERNATIONAL METAL ENGINEERING

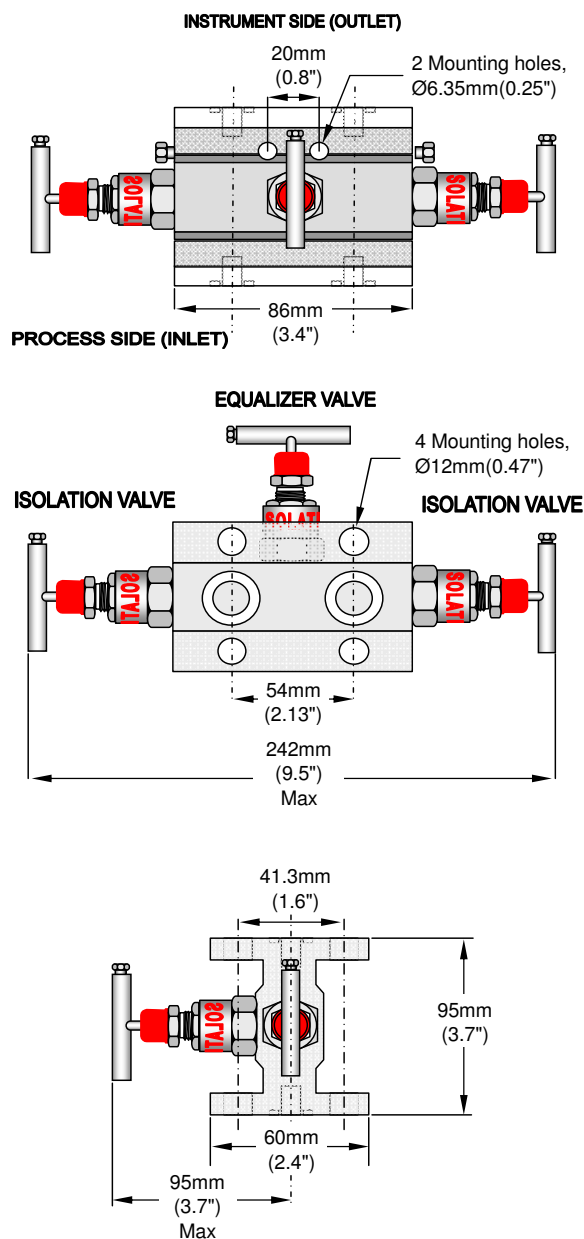
## MODEL 301DF 3 VALVE MANIFOLD, DOUBLE FLANGED

- Pressures up to 6000psi
- Standard 2.13" center to center inlet/outlet
- 3/16" bore
- Wide choice of materials and options



### Introduction

Model 301 Double Flanged 3 valve manifold, allows the pressure transmitter to be directly mounted, eliminating the need for additional piping, valves and fittings.



### Specifications

#### Material of Construction:

SS316, Carbon Steel, Monel, Hastelloy

#### Test Pressure (at 25°C Room Temperature)

Hydrostatic:	Body	-	620Bar
	Seat	-	415Bar
Pneumatic:	Seat	-	40Bar

#### Gland Packing

PTFE	:	Standard
Graphoil	:	Temperatures Above 180°C

#### Finish

CS: Zinc Plated; SS: Natural

#### Connection:

Inlet	Outlet	Drain/Vent
Direct Mount	Direct Mount	1/4" NPT(F)

#### Mounting Kit

Mounting Bracket with "U" Bolts and Necessary kits for fitting on 2" NB Stanchion pipe stand or wall mount. (Order Separately)

#### Weight

6.83LBS (3.1Kg)

#### Accessories

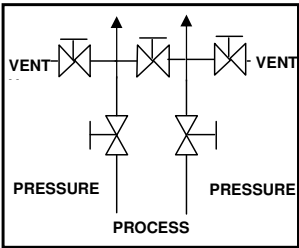
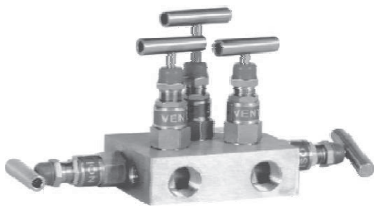
Mounting Bolts, Teflon Rings

### Order Information

Model	Description		
301DF	3 Valve Manifold, Double Flanged		
	Code	Inlet	Outlet
	00	Direct Mount	Direct Mount
	Code	Materials of Construction	
	S2	SS 316	
	CS	Carbon Steel	
	MN	Monel 400	
	HA	Hastelloy C	
	XX	Other ( Specify)	
	Code	Packing Material	
	TF	Teflon	
	GR	Graphoil	
	XX	Other ( Specify)	
301DF	00	S2	TF

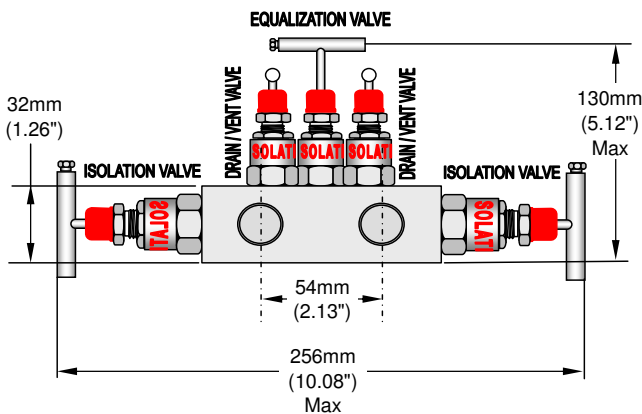
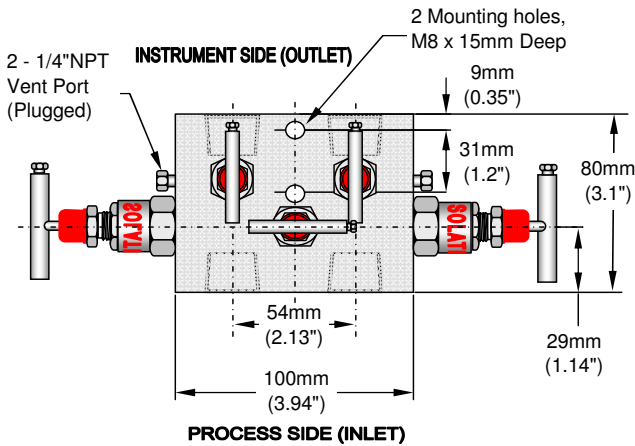
MODEL 510RM 5 VALVE MANIFOLD, REMOTE MOUNTING

- Pressures up to 6000psi
- Standard 2.13" center to center inlet/outlet
- 3/16" bore
- Wide choice of materials and options



Introduction

Model 510 Remotely Mounted 5 valve manifold allows manifold to be remote from the differential gauge, switch or transmitter. Two isolating and one equalising valve are provided in a single compact space saving unit.



Specifications

Material of Construction:

SS316, Carbon Steel, Monel, Hastelloy

Test Pressure (at 25°C Room Temperature)

Hydrostatic:	Body	-	620Bar
	Seat	-	415Bar
Pneumatic:	Seat	-	40Bar

Gland Packing

PTFE	:	Standard
Graphoil	:	Temperatures Above 180 °C

Finish

CS: Zinc Plated; SS: Natural

Connection:

Inlet	Outlet	Drain/Vent
See Below	See Below	1/4" NPT(F)

Mounting Kit

Mounting Bracket with "U" Bolts and Necessary kits for fitting on 2" NB Stanchion pipe stand or wall mount. (Order Separately)

Weight

6.83LBS (3.1Kg)

Accessories

None

Order Information

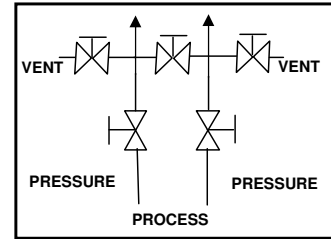
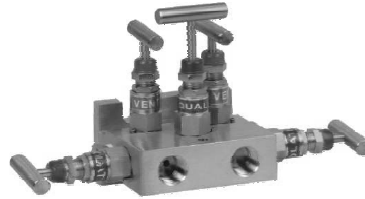
Model	Description	
510RM	5 Valve Manifold, Remote Mounting	
	Code	Outlet
	01	1/4" NPT (F)
	02	3/8" NPT (F)
	03	1/2" NPT (F)
	Code	Materials of Construction
	S2	SS 316
	CS	Carbon Steel
	MN	Monel 400
	HA	Hastelloy C
	XX	Other ( Specify)
	Code	Packing Material
	TF	Teflon
	GR	Graphoil
	XX	Other ( Specify)

510RM	03	S2	TF
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# INTERNATIONAL METAL ENGINEERING

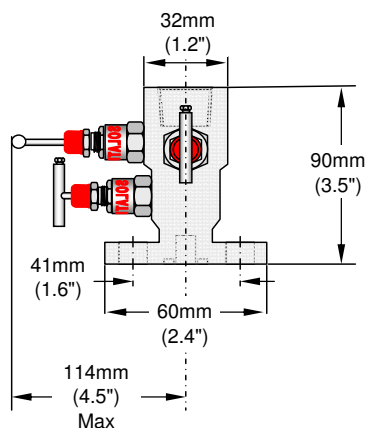
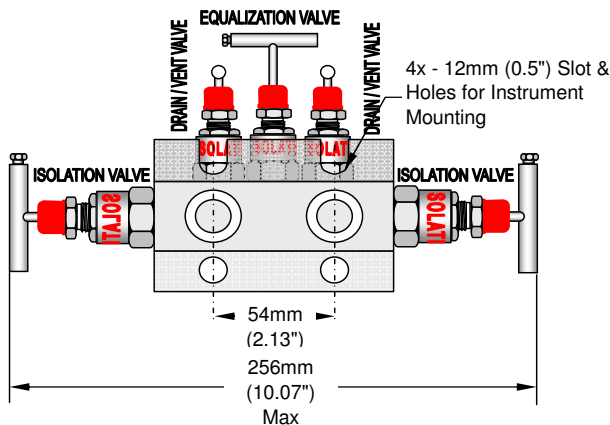
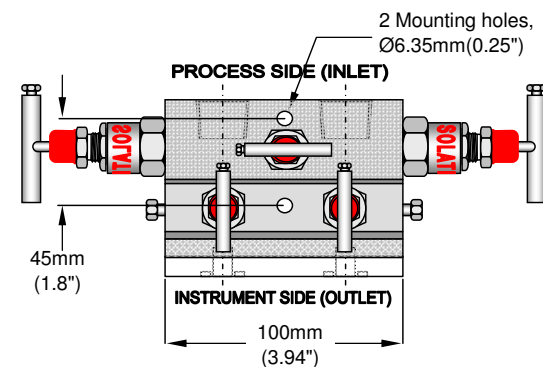
## MODEL 505DM 5 VALVE MANIFOLD, DIRECT MOUNTING

- Pressures up to 6000psi
- Standard 2.13" center to center inlet/outlet
- 3/16" bore
- Wide choice of materials and options



### Introduction

Model 505 Single Flanged 5 valve manifold, allows the pressure transmitter to be directly mounted, eliminating the need for additional piping, valves and fittings.



### Specifications

#### Material of Construction:

SS316, Carbon Steel, Monel, Hastelloy

#### Test Pressure (at 25°C Room Temperature)

Hydrostatic:	Body	-	620Bar
	Seat	-	415Bar
Pneumatic:	Seat	-	40Bar

#### Gland Packing

PTFE	:	Standard
Graphoil	:	Temperatures Above 180°C

#### Finish

CS: Zinc Plated; SS: Natural

#### Connection:

Inlet	Outlet	Drain/Vent
See Below	Direct Mount	1/4" NPT(F)

#### Mounting Kit

Mounting Bracket with "U" Bolts and Necessary kits for fitting on 2" NB Stanchion pipe stand or wall mount. (Order Separately)

#### Weight

7.28LBS (3.3Kg)

#### Accessories

Mounting Bolts, Teflon Rings

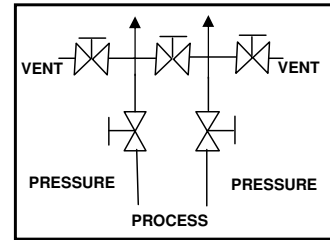
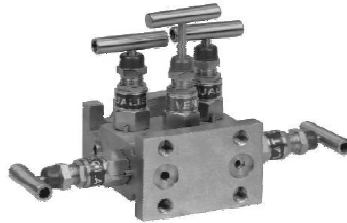
### Order Information

Model	Description		
505DM	5 Valve Manifold, Direct Mounting		
	<b>Code</b>	<b>Inlet</b>	<b>Outlet</b>
	01	1/4" NPT (F)	Directly Mounted
	02	3/8" NPT (F)	Directly Mounted
	03	1/2" NPT (F)	Directly Mounted
	<b>Code</b>	<b>Materials of Construction</b>	
	S2	SS 316	
	CS	Carbon Steel	
	MN	Monel 400	
	HA	Hastelloy C	
	XX	Other ( Specify)	
	<b>Code</b>	<b>Packing Material</b>	
	TF	Teflon	
	GR	Graphoil	
	XX	Other ( Specify)	
505DM	03	S2	TF

# INTERNATIONAL METAL ENGINEERING

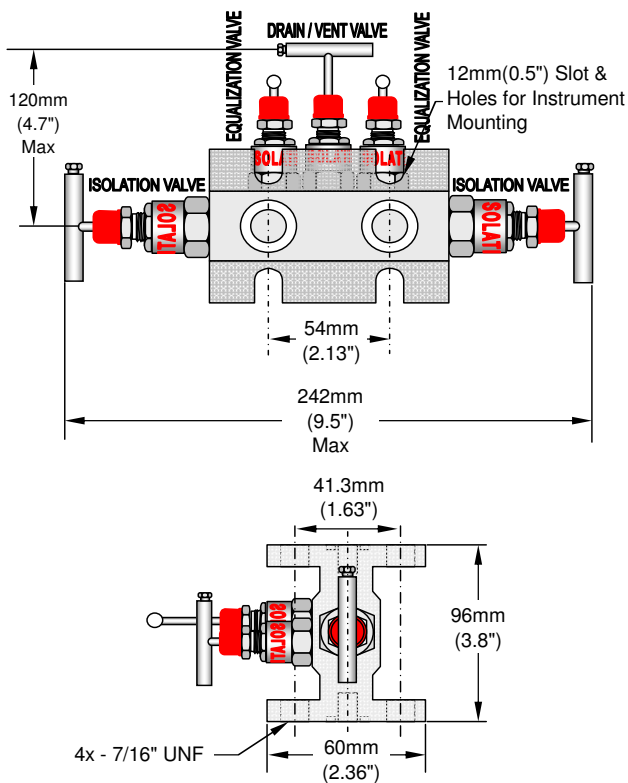
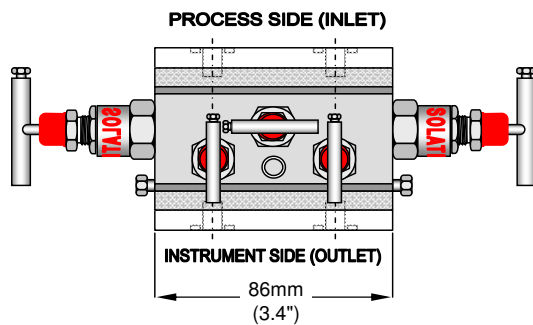
## MODEL 501DF 5 VALVE MANIFOLD, DOUBLE FLANGED

- Pressures up to 6000psi
- Standard 2.13" center to center inlet/outlet
- 3/16" bore
- Wide choice of materials and options



### Introduction

Model 501 Double Flanged 5 valve manifold, allows the pressure transmitter to be directly mounted, eliminating the need for additional piping, valves and fittings.



### Specifications

#### Material of Construction:

SS316, Carbon Steel, Monel, Hastelloy

#### Test Pressure (at 25°C Room Temperature)

Hydrostatic:	Body	-	620Bar
	Seat	-	415Bar
Pneumatic:	Seat	-	40Bar

#### Gland Packing

PTFE	:	Standard
Graphoil	:	Temperatures Above 180°C

#### Finish

CS: Zinc Plated; SS: Natural

#### Connection:

Inlet	Outlet	Drain/Vent
Direct Mount	Direct Mount	1/4" NPT(F)

#### Mounting Kit

Mounting Bracket with "U" Bolts and Necessary kits for fitting on 2" NB Stanchion pipe stand or wall mount. (Order Separately)

#### Weight

7.72LBS (3.5Kg)

#### Accessories

Mounting Bolts, Teflon Rings

### Order Information

Model	Description		
501DF	5 Valve Manifold, Double Flanged		
	Code	Inlet	Outlet
	00	Direct Mount	Direct Mount
	Code	Materials of Construction	
	S2	SS 316	
	CS	Carbon Steel	
	MN	Monel 400	
	HA	Hastelloy C	
	XX	Other ( Specify)	
	Code	Packing Material	
	TF	Teflon	
	GR	Graphoil	
	XX	Other ( Specify)	
501DF	00	S2	TF

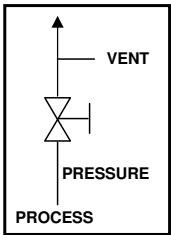
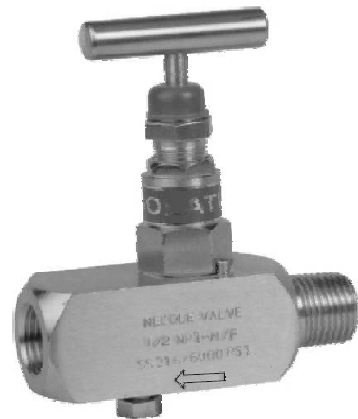
MODEL 322GV GAUGE VALVE

Introduction

The Model 322GV Gauge Valve is simple and economical way to mount a pressure gauge or switch in the field and yet provide the facilities to easy removal and replacement of the device.

A 1/4" NPT drain valve is supplied as standard.

This design is suitable for applications up to 6,000psi (420Bar)



Specifications

Material of Construction:

SS316, Carbon Steel, Monel, Hastelloy

Test Pressure (at 25°C Room Temperature)

Hydrostatic:	Body	-	620Bar
	Seat	-	415Bar
Pneumatic:	Seat	-	40Bar

Gland Packing

PTFE	:	Standard
Graphoil	:	Temperatures Above 180°C

Finish

CS: Zinc Plated; SS: Natural

Connection:

See below

Weight

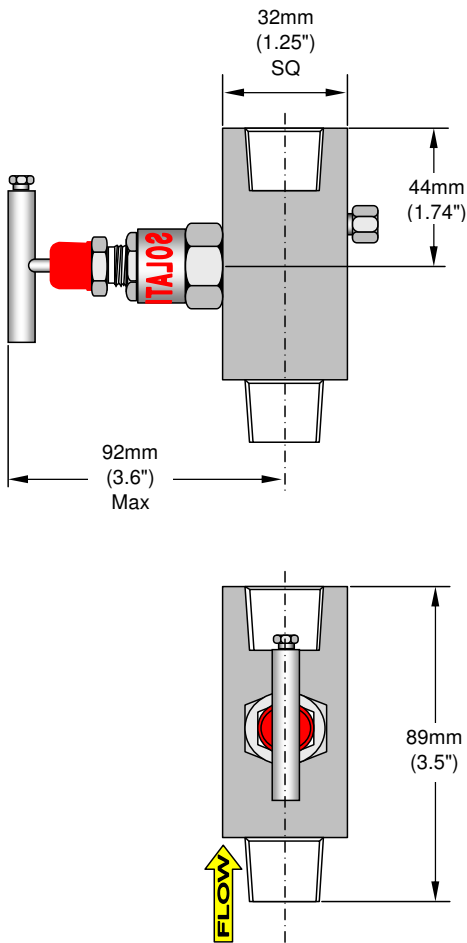
1.50LBS (700g)

Accessories

None

Order Information

Model	Description		
322GV	Gauge Valve		
	Code	Inlet	Outlet
	01	1/2" NPT(M)	1/2" NPT(M)
	02	1/2" NPT(M)	1/2" NPT(F)
	03	1/2" NPT(F)	1/2" NPT(M)
	04	1/2" NPT(F)	1/2" NPT(F)
	Code	Materials of Construction	
	S2	SS 316	
	CS	Carbon Steel	
	MN	Monel 400	
	HA	Hastelloy C	
	XX	Other ( Specify)	
	Code	Packing Material	
	TF	Teflon	
	GR	Graphoil	
	XX	Other ( Specify)	
322GV	03	S2	TF





MODEL 377CB BLOCK AND BLEED VALVE

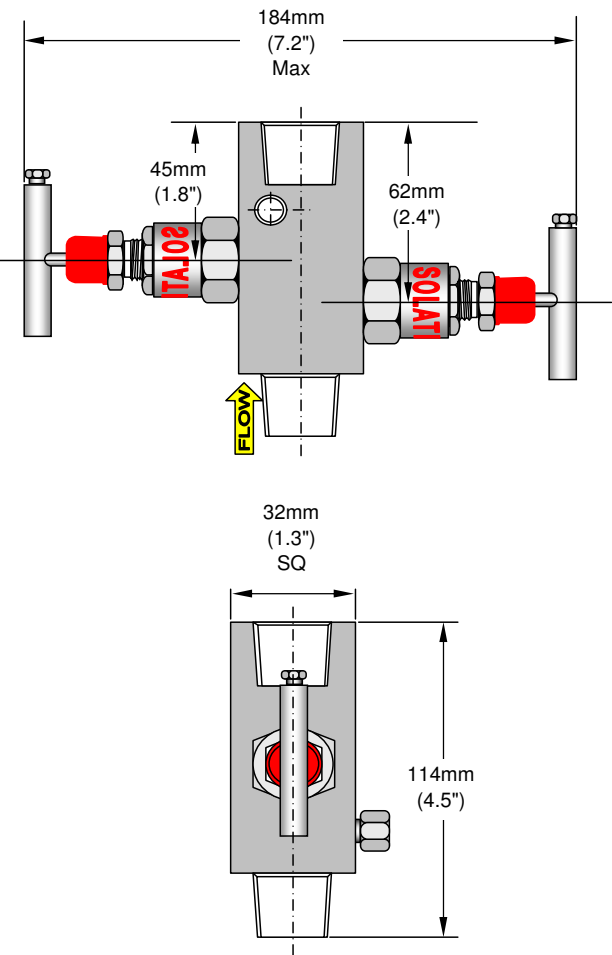
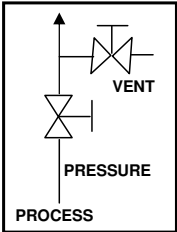
Introduction

ISOLATING AND CALIBRATING

The Model 377CB valve has been designed as an economical and compact valve and yet provide the facilities for remote mount block and bleed function.

Connections can be ½" NPT male and female as shown with a ¼" gauge / vent port available on each side of the body.

This design is suitable for applications up to 6,000psi (420Bar)



Specifications

Material of Construction:

SS316, Carbon Steel, Monel, Hastelloy

Test Pressure (at 25 °C Room Temperature)

Hydrostatic:	Body	-	620Bar
	Seat	-	415Bar
Pneumatic:	Seat	-	40Bar

Gland Packing

PTFE	:	Standard
Graphoil	:	Temperatures Above 180 °C

Finish

CS: Zinc Plated; SS: Natural

Connection:

See below

Weight

1.50LBS (700g)

Accessories

None

Order Information

Model	Description		
377CB	Block and Bleed Valve		
	Code	Inlet	Outlet
	01	½" NPT(M)	½" NPT(M)
	02	½" NPT(M)	½" NPT(F)
	03	½" NPT(F)	½" NPT(M)
	04	½" NPT(F)	½" NPT(F)
	Code	Materials of Construction	
	S2	SS 316	
	CS	Carbon Steel	
	MN	Monel 400	
	HA	Hastelloy C	
	XX	Other ( Specify )	
	Code	Packing Material	
	TF	Teflon	
	GR	Graphoil	
	XX	Other ( Specify )	
377CB	03	S2	TF



These units are Cast Schedule 160 size pipes, with internal reinforced ribs. They have been tested to pressure above 6500psi and can be safely used up to pressures of 6000psi at elevated temperatures. The units are available in SS316. All process connections are 1/2" NPT. Other sizes and materials are available on request.

The design and manufacture of these units meet CSA-51 Boiler Code requirements and Canadian Registration Numbers (CRN) have been applied for. Once available, the appropriate CRN Number will be stamped on the assembly when requested.

### Specifications

#### Material of Construction

Stainless Steel (SS316)

#### Surface Finish

Electro Polished

#### Connections

1/2"NPT

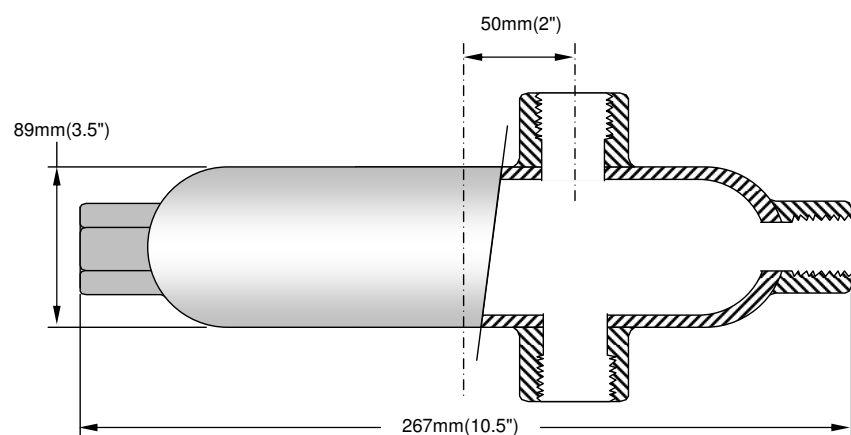
#### Pipe Size

Schedule 160

#### Maximum Pressure

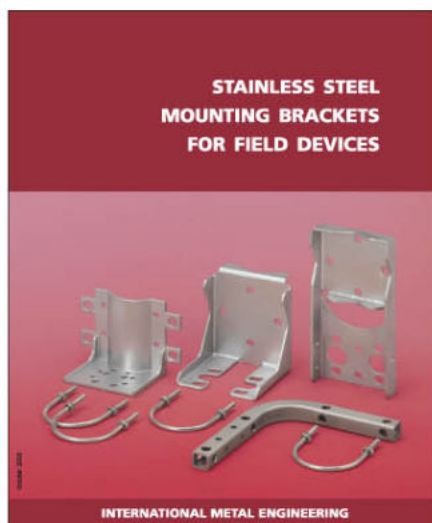
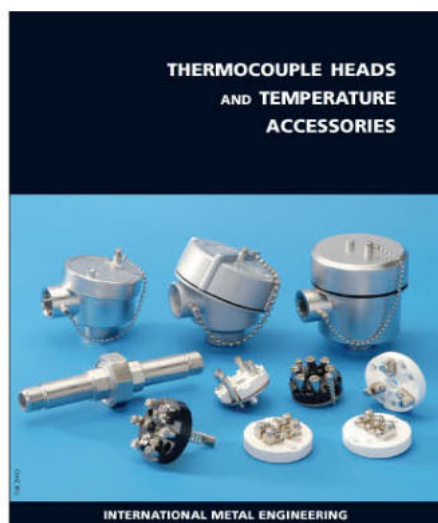
6000psi at elevated temperature.

### Dimensions



Model 1038BB

## OUR OTHER PRODUCTS



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INTERNATIONAL METAL ENGINEERING

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