

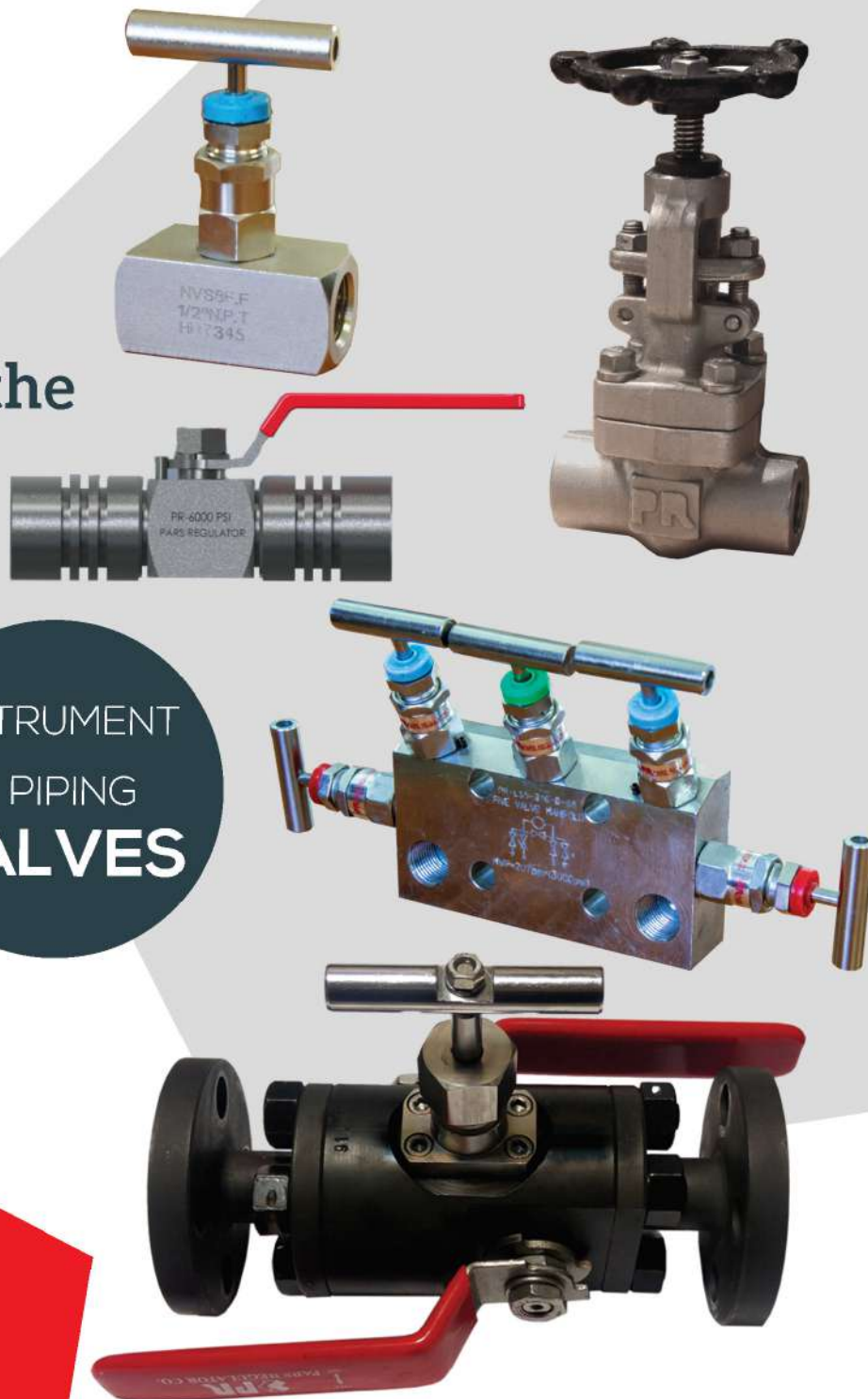
To find  
**The best quality of the  
Iranian products,  
you need to choose  
Pars Regulator Co.**

INSTRUMENT  
& PIPING  
**VALVES**

**SINCE  
1988**

## BETER TOGETHER

We are honored to give services for  
safety of people and improving  
industrial equipment.



## VALVES & STEAM TRAP

Here is the Catalogue of required products in oil, gas & petrochemical industries in your hands.

**+98-21-8830-77-66**

### STANDARD:

ASME/ANSI B16.34  
ASME/ANSI B16.5  
ASME B16.10  
ASME B16.25  
ASME B16.11  
API 598  
API 602  
BS 1414  
BS 1873  
BS 6755  
ISO 17292





# CHOOSE PARS REGULATOR

## Company Brief Introduction

Welcome to Pars Regulator Corp. (Private Joint Stock, P.J.S)! Our Company was founded in 1988 is a family owned Company that has expanded in almost three decades of manufacturing from an initial 4000 square meter's area to a modern manufacturing facilities that encompasses 2500 square meters at the present. For more than 30 years, Pars Regulator Co. has been concentrating on servicing to oil, Gas, Petrochemical industry, Refinery and Power Industries.

Pars Regulator is one of the Iranian leading manufacturers and suppliers:

1. High pressure pipe and tube fittings (compression type)
2. Instrumentation high pressure valves such as: (Needle, Manifolds (2,3,5 ways), Ball)
3. Piping Valves such as: (Ball, Gate, Globe, Check)
4. Single/Double block & bleed valves
5. Flanges
6. Industrial filters
7. High pressure Vessel
8. Condensate pots
9. Steam traps
10. Low and high pressure gas and air regulator
11. Special Product



## Planning, Policy and Guidance

Pars Regulator believes its most important asset is human resources. It is our excellence in skills and innovation that has driven our growth to date and ensures we are in the best position to capitalize on this for future growth. We concentrated on industrial products and trust us that you will enjoy as a partner of us to win-win on industrial products with the support of "trustable quality, short time delivery and competitive prices!"



## Commercial & Raw Material Supplying

Our foreign commercial department is active in import and export of many kinds of regulators, valves, filters, tubes, pipes, industrial equipment and machines and various other products.



## Control and Assurance of Quality

We are proud of our quality assurance systems which satisfies ISO 9001-2008. Compliance utilizing state of the art technology to perform the most severe tests in this industry on your Production. We understand regional market requirements that satisfy customer's needs. Pars Regulator products, meets your standard requirements in accordance with international standards and customer's specifications with:

- 1) fugitive emission
- 2) performance and functionality
- 3) high pressure fluids
- 4) high-low temperature
- 5) fire safe
- 6) NDE inspection
- 7) sour condition, etc.

We provide proper after sales services and supports. Our procedures and testing can be conducted on-site if requested. (Field Test).

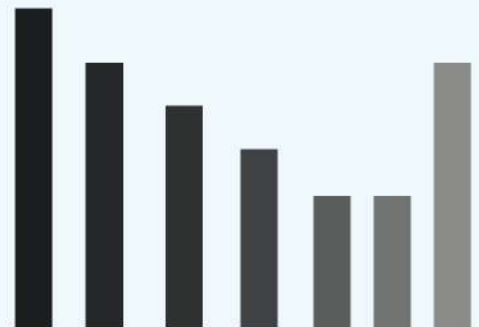
## CAPABILITIES, PROCESS, FACILITIES:

1. Furnace (Frequency induction, fuel)
2. Hydraulic Pressure (Hydraulic press 600 Ton & Impact Press 200 Ton)
3. CNC machining services & Molding process engineering
4. Welding shop
5. Pickling, Cleaning, Descaling and passivation Equipment & system
6. Pleated filter process
7. Hydrostatic, gas, vibration, Impales and shock bench test
8. Laboratory filter systems

Now more than ever, the basic fundamental which guides our business is the belief that "Meeting standards is our Standard". Our employees are working to meet today's increasing demands of process improvements, new material and technologies.

Pars Regulator Co. is a member of "Approved Vendor Lists" (AVL) of major national and private Iranian oil and gas, petrochemical, refinery and power companies such as:

1. NPC (national petrochemical Co.)
2. NIGC (National Iranian gas Co. including SPGC, located in the biggest gas field in the world)
3. NIOC (National Iranian oil Co.)
4. Mapna groups PJS Co., POGC (Pars oil & gas Co.)
5. NIOPDC (National Iranian oil products distribution Co.) and so on.



**Since** then, we have sold remarkable quantity of products in more than 400-500 projects & orders to all main End users & EPC'S Companies.





Pars Regulator Co.

**INSTRUMENT VALVES**

**3-6**

**NEEDLE VALVE**

**7-11**

**BALL VALVE**

**12-15**

**MANIFOLD**

**16-20**

**BLOCK & BLEED**

**PIPING VALVES**

**22-26**

**GATE VALVE**

**27-31**

**GLOBE VALVE**

**32-40**

**CHECK VALVE**

**41-43**

**BALL VALVE**

**45-50**

**STEAM TRAP**

**52-54**

**STRAINER**



**INDEX GUIDE**

PR Valve Catalogue In 4 Categories. Instrumentation Valves are from page 3 to 20, Piping Valves are from 22-43, Steam Traps are from 45-50 and Strainers are from 52-54. PR Products code is in page 1.

[WWW.PARSREGULATOR.COM](http://WWW.PARSREGULATOR.COM)



**Pars Regulator Co.**

## How to Order?



**EXAMPLE: BA1NN3M0020150FPH; BALL VALVE ONE PIECES NPT X NPT CLASS 3000 PSI 1/8" A105N FULL BORE PHOSPHATED**

Type	1
BA	Ball Valve
GA	Gate Valve
GO	Globe Valve
SC	Swing Check V.
PC	Piston Check V.
YC	Y Type Check V.
LC	Lift Check V.
NE	Needle V.

Body	2
W	Welded Bonnet
B	Bolted Bonnet
G	Globe Pattern
A	Angle Pattern
1	One Pieces
2	Two Pieces
3	Three Pieces

Connection	3
NN	NPT(F) X NPT(F)
MM	NPT(M) X NPT(M)
UU	Butt Weld X Butt Weld
CC	Socket Weld X Socket Weld
LL	Plain End X Plain End
OO	Tube Nut X Tube Nut
FF	Flanged X Flanged
NM	NPT(F) X NPT(M)
NC	NPT(F) X Socket Weld

Pre. Rating	4
3M	3000psi
6M	6000psi
10M	10000psi
1W	1000 WOG
2W	2000 WOG
1C	#150
2C	#300
3C	#600
4C	#800
5C	#1500
...	...

Size (Inch)	5
3m	3mm
6m	6mm
9m	9mm
002	1/8" 10.3mm
004	1/4" 13.7mm
006	3/8" 17.10mm
008	1/2" 21.30mm
012	3/4" 26.70mm
016	1" 33.40mm
020	1 1/4" 42.20mm
024	1 1/2" 48.30mm
032	2" 60.3mm
048	3" 88.9mm
064	4" 114.30mm
096	6" 168.30mm
128	8" 219.10mm
160	10" 273.10mm
192	12" 323.90mm

Material	6
01	A105N
02	A350 LF2
03	A182-F11
04	A182-F5
05	A182-F304
06	A182-F304L
07	A182-F316
08	A182-F316L
09	A182-F321
10	A182-F51
11	A182-F53
12	A182-F6a
13	A564 UNS S17400
14	B564 No 4400
15	B649

Seat Material	7
50	P.T.F.E
51	R.P.T.F.E/Glass
52	R.P.T.F.E/Carbon Graphite
53	POM
54	PEEK
55	NYLON 12
56	NYLON 1010
57	NYLON 6
58	FKM
59	NBR
60	Silicon
61	Graphite
62	EPDM
63	Kel-f

Bore	8
F	Full Bore
R	Reduced Bore

Treatment	9
NT	No Treatment
NR	Normalized
QT	Quenched & Tempered
AN	Anealed
SA	Solution Anealed
NP	Electroless Ni. Plated
CP	Cr. Plated
PH	Phosphated
GZ	Galvanized
PI	Pickled
...	...





# INSTRUMENT VALVES

## ALL TYPES

### PR PRODUCT

1

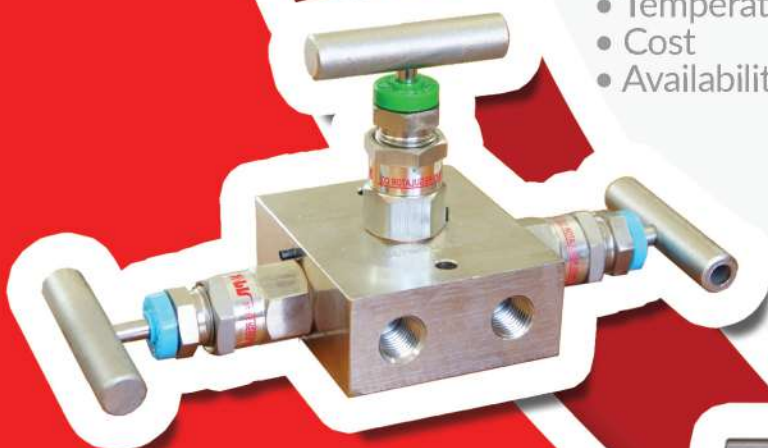
The main parameters to be considered when selecting any equipment are:

- Operating conditions, including temperature, pressure and media contained
- Environment
- Legislation and Internal Regulations
- Cost
- Availability
- Lead time
- Expected life time of the equipment
- Safety

2

In terms of materials, the selection criteria normally translate into some of the following parameters:

- Mechanical properties
- Corrosion resistance to media and environment
- Temperature operating range
- Cost
- Availability on request





## NEEDLE VALVES OD (TUBE END CONNECTIONS)

With more than twenty years of valve design experience, our company can offer the most complete range of Needle valve. This group of valves can handle a wide range of general purpose liquid and gas applications. PR valves find their application in different market, chemical, petrochemical and pharmaceutical industries. All needle valves are made from bar-stock and Forging and available with pressure rating of 3000, 6000, 10000 PSI. This catalogue shows you the standard design of valves but the organization flexibility and productive structure allow PR to meet all different needs of customers. Product innovation and development may require modifications and changes in the information contained in this catalogue. PR reserves the right to make such modifications at their discretion and without prior notification.

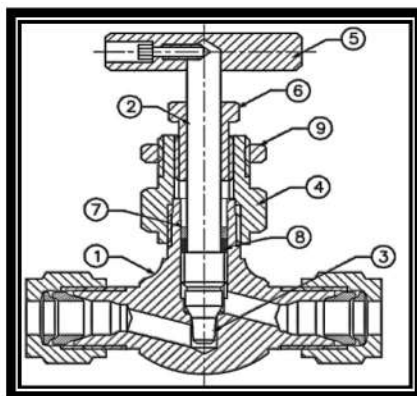
Pars Regulator Bar Stock Needle Valves are manufactured from Bar Stock and 100% factory tested for better reliability and consistency in leak proof performance. Since the orifice is small and the force advantages of the fine-threaded stem is high, needle valves are usually easy to shut off completely, with merely "finger tight" pressure. Small, simple needle valves are often used as bleed valves in hot water heating application.

### Typical Applications

✓ Instrument air lines ✓ Sampling ✓ Gas chromatography ✓ Test stands ✓ Cylinder valves

### Safety

- Integral bonnet provides differential thread pitch between stem threads and packing nut thread preventing accidental stem removal.



ROW	DESCRIPTION	MATERIAL
1	BODY	316L STAINLESS STEEL
2	STEM	316L STAINLESS STEEL
3	STEM TIP	17-4PH STAINLESS STEEL
4	BONNET	316L STAINLESS STEEL
5	HANDLE	STAINLESS STEEL
6	PANEL MOUNTING NUT	316L STAINLESS STEEL
7	RING	316L STAINLESS STEEL
8	STEM PACKING	PTFE + GRAPHIT
9	BONNET NUT	316L STAINLESS STEEL



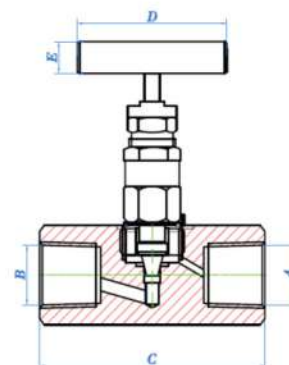


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Needle

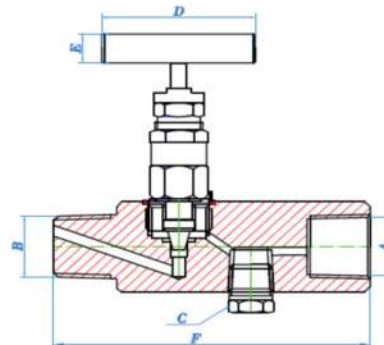
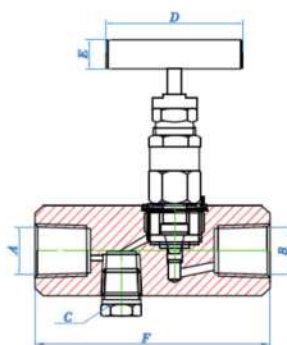


## Needle Valve (Bar Stock)



Part Number Pars Regulator	Max. Working Pressure	End Connection		Dimensions				
		Inlet	Outlet	A	B	C	D	E
NVS 4FF	3000Psi 6000 Psi 10000 Psi	1/4"NPT-Female	1/4"NPT-Female	1/4" NPT (M)	1/4" NPT (M)	55(mm)	58(mm)	Ø13
NVS 6FF		3/8"NPT-Female	3/8"NPT-Female	3/8" NPT (M)	3/8" NPT (M)	59 (mm)	58(mm)	Ø13
NVS 8FF		1/2"NPT-Female	1/2"NPT-Female	1/2" NPT (M)	1/2" NPT (M)	65(mm)	58(mm)	Ø13
NVS 4M4F		1/4" NPT male inlet	1/4" NPT female outlet	1/4" NPT(F)	1/4"NPT (M)	55(mm)	58(mm)	Ø13
NVS 6M6F		3/8" NPT male inlet	3/8" NPT female outlet	3/8" NPT(F)	3/8" NPT (M)	59 (mm)	58(mm)	Ø13
NVS 8M8F		1/2" NPT male inlet	1/2" NPT female outlet	1/2"NPT(F)	1/2" NPT (M)	65(mm)	58(mm)	Ø13
NVS 12FF		3/4" NPT female inlet	3/4" NPT female outlet	3/4" NPT (F)	3/4" NPT (F)	65(mm)	58(mm)	Ø13
NVS 16FF		1"NPT female inlet	1" NPT female outlet	1" NPT (F)	1" NPT (F)	86(mm)	58(mm)	Ø13
NVS 12M8F		3/4" NPT male inlet	1/2" NPT female outlet	1/2" NPT (F)	3/4" NPT (M)	70(mm)	58(mm)	Ø13
NVS 12M12F		3/4" NPT male inlet	3/4" NPT female outlet	3/4" NPT (F)	3/4" NPT (M)	70(mm)	58(mm)	Ø13

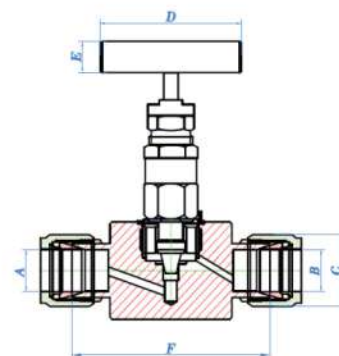
## Needle Valve (With Down Stream Vent)



Part Number Pars Regulator	Max. Working Pressure	End Connection		Drain/test	Dimensions					
		Inlet	Outlet		A	B	C	D	E	F
NVS 4FFV	3000Psi 6000 Psi 10000 Psi	1/4" NPT female inlet	1/4" NPT female outlet	1/4" NPT female	1/4" NPT (F)	1/4" NPT (M)	Vent 1/4" NPT	58(mm)	Ø13	90.5(mm)
NVS 8FFV		1/2"NPT female inlet	1/2" NPT female outlet	1/4" NPT female	1/2" NPT (F)	1/2" NPT (M)	Vent 1/4" NPT	58(mm)	Ø13	90.5(mm)
NVS 12FFV		3/4" NPT Female inlet	3/4" NPT Female Outlet	1/4" NPT female	3/4" NPT (F)	3/4" NPT (M)	Vent 1/4" NPT	58(mm)	Ø14	90.5(mm)
NVS 4M4FV		1/4"NPT-Male inlet	1/4"NPT-Female Outlet	1/4"NPT-Female	1/4" NPT (F)	1/4" NPT (M)	Vent 1/4" NPT	58(mm)	Ø13	90.5(mm)
NVS 8M8FV		1/2"NPT-Male inlet	1/2"NPT-Female Outlet	1/4"NPT-Female	1/2" NPT (F)	1/2" NPT (M)	Vent 1/4" NPT	58(mm)	Ø13	90.5(mm)
NVS 12M12FV		3/4"NPT-Male inlet	3/4" NPT Female Outlet	1/4"NPT-Female	3/4" NPT (F)	3/4" NPT (M)	Vent 1/4" NPT	58(mm)	Ø14	90.5(mm)

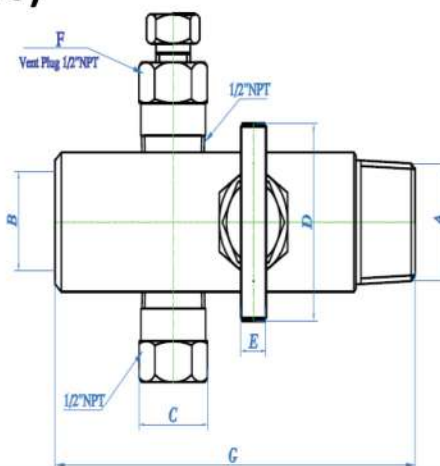


## Needle Valves (Bar Stock)



Part Number Pars Regulator	Max. Working Pressure	End Connection		Dimensions					
		Inlet	Outlet	A	B	C	D	E	F
NVS 4A	3000Psi 6000 Psi 10000 Psi	1/4"Tube O.D.	1/4"Tube O.D.	1/4" Tube O.D	1/4" Tube O.D	Hex 14	58(mm)	Ø13	50(mm)
NVS 6A		3/8"Tube O.D.	3/8"Tube O.D.	3/8" Tube O.D	3/8" Tube O.D	Hex 17	58(mm)	Ø13	55(mm)
NVS 8A		1/2"Tube O.D.	1/2"Tube O.D.	1/2" Tube O.D	1/2" Tube O.D	Hex 22	58(mm)	Ø14	65(mm)
NVS M6A		6 mm Tube O.D.	6 mm Tube O.D.	6 mm Tube O.D.	6 mm Tube O.D.	Hex 14	58(mm)	Ø13	50(mm)
NVS M10A		10 mm Tube O.D.	10 mm Tube O.D.	10 mm Tube O.D.	10 mm Tube O.D.	Hex 17	58(mm)	Ø13	55(mm)
NVS M12A		12mm Tube O.D.	12mm Tube O.D.	12mm Tube O.D.	12mm Tube O.D.	Hex 22	58(mm)	Ø13	65(mm)

## Needle Valves (Multi Port Gauge Valve)



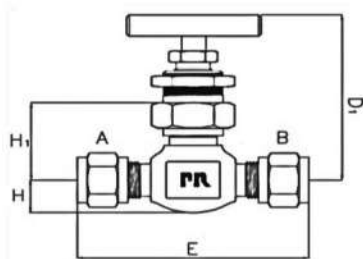
Part Number Pars Regulator	Max. Working Pressure	End Connection		Dimensions						
		Inlet	Outlet	A	B	C	D	E	F	G
GVS 8	3000Psi 6000 Psi	1/2"NPT-Male	3x1/2"NPT-Female	1/2" NPT (M)	1/2" NPT (M)	Plug 1/2" NPT	58(mm)	Ø13	Vent Plug 1/2" NPT	120(mm)
GVS 12	10000 Psi	3/4"NPT-Male	3x1/2"NPT-Female	3/4" NPT (M)	1/2" NPT (M)	Plug 1/2" NPT	58(mm)	Ø13	Vent Plug 1/2" NPT	120(mm)





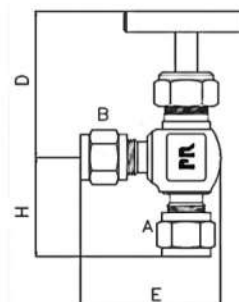
**Pars Regulator Co.**

Needle



Globe Pattern

## NEEDLE VALVE OD (TUBE END CONNECTIONS)



Angle Pattern

### Globe Pattern

Part Number Pars Regulator	Max. Working Pressure	End Connection		Dimensions (mm)					
		Inlet	Outlet		D	D <sup>1</sup>	E	H	H <sup>1</sup>
NEGOO10M002*	10000Psi	1/8" TUBE	1/8" TUBE	inch	2 7/32	2 3/4	2 1/8	19/64	1 1/32
				mm	56	70	54	8	26
NEGMM10M002*		1/8" male NPT	1/8" male NPT	inch	2 1/8	2 21/32	1 3/4	2 5/64	15/16
				mm	54	67	44	10	24
NEGMN10M002*		1/8" male NPT	1/8" female NPT	inch	2 1/8	2 21/32	1 3/4	2 5/64	15/16
				mm	54	67	44	10	24
NEGNN10M002*		1/8" female NPT	1/8" female NPT	inch	2 1/8	2 21/32	1 3/4	2 5/64	15/16
				mm	54	67	44	10	24
NEGOO10M004*		1/4" TUBE	1/4" TUBE	inch	2 1/8	2 21/32	2 3/8	2 5/64	15/16
				mm	54	67	60	10	24
NEGMO10M004*		1/4" male NPT	1/4" TUBE	inch	2 1/8	2 21/32	2 3/16	25/64	15/16
				mm	54	67	56	10	24
NEGMM10M004*		1/4" male NPT	1/4" male NPT	inch	2 1/8	2 21/32	2	25/64	15/16
				mm	54	67	51	10	24
NEGOO10M3m*		3mm TUBE	3mm TUBE	inch	2 3/16	2 3/4	2 1/8	19/64	1 1/32
				mm	56	70	54	8	26
NEGOO10M6m*		6mm TUBE	6mm TUBE	inch	2 1/8	2 21/32	2 3/8	25/64	15/16
				mm	54	67	60	10	24
NEG0010M8m*		8mm TUBE	8mm TUBE	inch	2.125	2 21/32	2 3/8	25/64	15/16
				mm	54	67	60	10	24

### Angle Pattern

Part Number Pars Regulator	Max. Working Pressure	End Connection		Dimensions (mm)					
		Inlet	Outlet		D	D <sup>1</sup>	E	H	H <sup>1</sup>
NEAOO10M002*	10000Psi	1/8" TUBE	1/8" TUBE	inch	2 7/32	2 3/4	1 1/2	1 1/64	1 1/64
				mm	56	70	38	26	26
NEAMM10M002*		1/8" male NPT	1/8" male NPT	inch	2 1/8	2 21/32	1 17/64	7/8	15/16
				mm	54	67	32	22	24
NEANN10M002*		1/8" female NPT	1/8" female NPT	inch	2 1/8	2 21/32	1 17/64	7/8	15/16
				mm	54	67	32	22	24
NEAMO10M002*		1/8" male NPT	1/4" TUBE	inch	2 1/8	2 21/32	1 19/32	7/8	15/16
				mm	54	67	40	22	24
NEAOO10M004*		1/4" TUBE	1/4" TUBE	inch	2 1/8	2 21/32	1 19/32	1 3/16	15/16
				mm	54	67	40	30	24
NEAMO10M004*		1/4" male NPT	1/4" TUBE	inch	2 1/8	2 21/32	1 19/32	7/8	15/16
				mm	54	67	40	22	24
NEAMM10M004*		1/4" male NPT	1/4" male NPT	inch	2 1/8	2 21/32	1 17/64	7/8	15/16
				mm	54	67	32	22	24
NEAOO10M6m*		6mm TUBE	6mm TUBE	inch	2 1/8	2 21/32	1 37/64	1 3/16	15/16
				mm	54	67	40	30	24

All dimensions could be considered as reference.

\*D<sup>1</sup> and H<sup>1</sup> For valves with panel mounting.

\*Please for Insert the other Part Number(Material, Seat Material, etc.) see page 1



## Instrument Ball Valve Introduction

**Pars Regulator is one of the World's Leading Manufacturers of Instrumentation Valves and Manifolds.**

Selection can be made from a comprehensive range of bodies with a variety of connections and material options, optimizing installation and access opportunities. Many of the valves shown in this catalogue are available from stock or within a short period of time. The dimensions shown in this catalogue apply to standard types. If you need the dimensions for your individual type please contact us.

Continuous product development may from time to time necessitate changes in the details contained in this catalogue. Pars Regulator reserves the right to make such changes at their discretion and without prior notice.

All dimensions shown in this catalogue are approximate and subject to change.

## Features:

### Bore Size:

The difference between a standard ball valve and a full-port ball valve is in the size of the ball and bore in relation to the nominal pipe size of the valve. For example, the bore size in a 3/4-inch full-port ball valve is 3/4-inch in diameter, while the bore diameter in a standard ball valve is 1/2-inch in diameter.

Ball sizes are in proportion to bore sizes. The 1/2-inch diameter is the nominal size of the next smaller pipe. This is typical. Full-port bore size equals pipe size; standard-port bore size is the next smaller pipe size.

### Flow Coefficient

The flow coefficient is a measure of the resistance to flow of a given part of a fluid system. It is used to calculate the length of straight pipe equivalent to an elbow or valve or anything else that affects the flow. The flow coefficient for a full-port ball valve is almost as low as that of straight pipe so it provides

minimal resistance to flow and thus creates only a small pressure drop. The standard-port ball valve has a higher flow coefficient and thus causes a larger pressure drop for a given flow.

## Main reference codes:

- National Association of Corrosion Engineers (NACE MR0175/ISO 15156-3) and MR0103
- ASME/ANSI B1.20.1 General Pipe Threads
- ASME/ANSI B16.34 Valves Flanged, Threaded
- ASME/ANSI B16.11 Fittings/Socket Weld, etc.
- ASME/ANSI B31.3 Process Piping (except M Fluid Service)
- MSS SP-25 Standard Valve Markings
- MSS SP-82 Valve Pressure Testing Methods
- MSS SP-99 Instrument Valves

## Seat Material:

- Soft seated
- METAL-TO-METAL SEAT: for high temperatures (larger than 250°C) or dirt/slurry service, Floating Ball Valves can be provided with a spring-energized seat, and hard facing on seat and ball contact surfaces (Tungsten or Chromium Carbide).

## INSPECTION AND TESTING:

Every valve is subjected on routine base to different non-destructive testing, like the dye penetrant test on butt weld ends, on all hard faced and cladding areas. Non-destructive tests are also carried out on the critical areas as defined by ASME B16.34.

Optional examinations like:

Magnetic particules ✓ Hydrostatic test ✓ Air test

Personnel performing NDT are trained and qualified to EN 473/ ASNT-SNT-TC-1A.

Every valve is subject to a pressure test in accordance with the standard API 598 or BS 6755 Part.1.

The rated pressure for the applicable pressure class is in accordance with ASME B16.34 and EN 12516-1/-2.

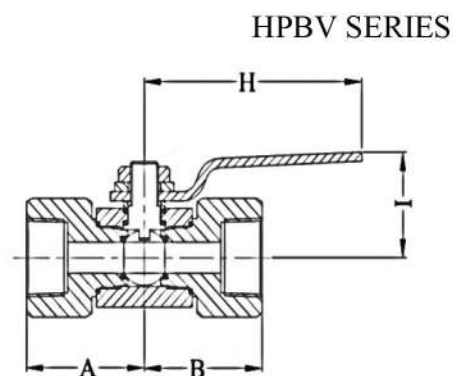
## MARKING AND IDENTIFICATION

Each valve is identified on proper name plate and on valve body as required by MSS SP-25 and ASME B16.34. Name plate carries all information or rating, size, valve body and trim material, customer tags.

On body, marking includes material designations (per ASTM) and heat code and for course the trade mark.



## INSTRUMENTATION BALL VALVE NPT F.F (FEMALE PIPE THREAD END CONNECTIONS)



Part Number	Max. Working Pressure	End Connection	Dimensions (mm)			
Pars Regulator			A	B	I	H
BA1NN3M004*	3000Psi	1/4 Female NPT	46	46	43	105
BA1NN3M006*		3/8 Female NPT	46	46	43	105
BA1NN3M008*		1/2 Female NPT	46	46	43	105
BA1NN3M012*		3/4 Female NPT	46	46	43	105
BA1NN3M016*		1 Female NPT	59	59	54	155

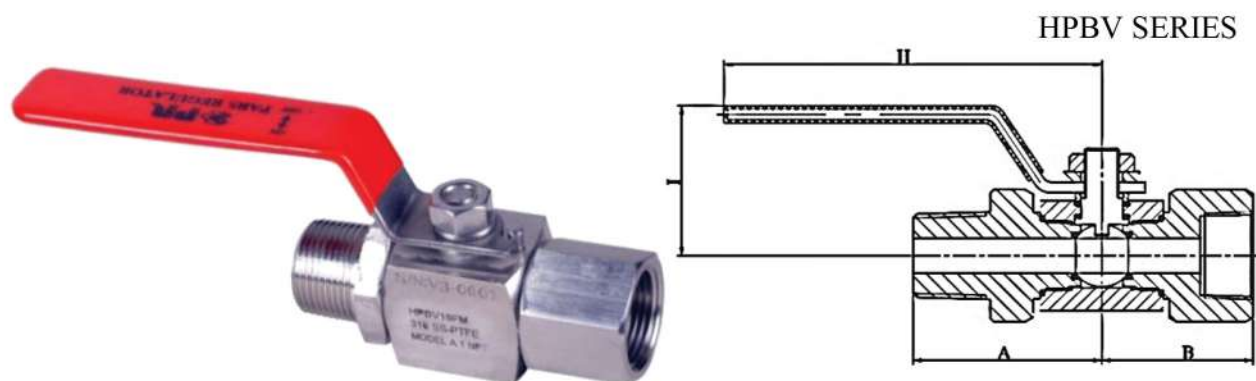
Part Number	Max. Working Pressure	End Connection	Dimensions (mm)			
Pars Regulator			A	B	I	H
BA1NN6M004*	6000Psi	1/4 Female NPT	46	46	43	105
BA1NN6M006*		3/8 Female NPT	46	46	43	105
BA1NN6M008*		1/2 Female NPT	46	46	43	105
BA1NN6M012*		3/4 Female NPT	59	59	54	155
BA1NN6M016*		1 Female NPT	59	59	54	155

\*All dimensions could be considered as reference.

\*Please for Insert the other Part Number(Material, Seat Material, etc.) see page 1

## INSTRUMENTATION BALL VALVE

### NPT F.M(FEMALE& MALE PIPE THREAD END CONNECTIONS)



Part Number	Max. Working Pressure	End Connection	Dimensions (mm)			
Pars Regulator			A	B	I	H
BA1NM3M004*	3000Psi	1/4 Female*Male NPT	46	46	42	105
BA1NM3M006*		3/8 Female*Male NPT	46	48	42	105
BA1NM3M008*		1/2 Female*Male NPT	46	48	42	105
BA1NM3M012*		3/4 Female*Male NPT	48	48	42	105
BA1NM3M016*		1 Female*Male NPT	59	59	54	155

Part Number	Max. Working Pressure	End Connection	Dimensions (mm)			
Pars Regulator			A	B	I	H
BA1NM6M004*	6000Psi	1/4 Female*Male NPT	46	46	43	105
BA1NM6M006*		3/8 Female*Male NPT	46	46	43	105
BA1NM6M008*		1/2 Female*Male NPT	46	46	43	105
BA1NM6M012*		3/4 Female*Male NPT	59	59	54	155
BA1NM6M016*		1 Female*Male NPT	59	59	54	155

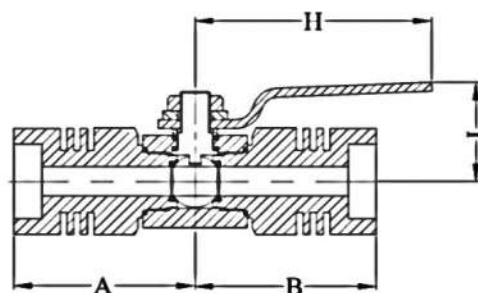
\*All dimensions could be considered as reference.

\*Please for Insert the other Part Number(Material, Seat Material, etc.) see page 1



## INSTRUMENTATION BALL VALVE SW(SOCKET WELD END CONNECTIONS)

HPBV SERIES



Part Number	Max. Working Pressure	End Connection	Dimensions (mm)			
Pars Regulator			A	B	I	H
BA1CC3M004*	3000Psi	1/4 SW	62	62	43	105
BA1CC3M006*		3/8 SW	62	62	43	105
BA1CC3M008*		1/2 SW	62	62	43	105
BA1CC3M012*		3/4 SW	62	62	43	105
BA1CC3M016*		1 SW	79	79	54	155

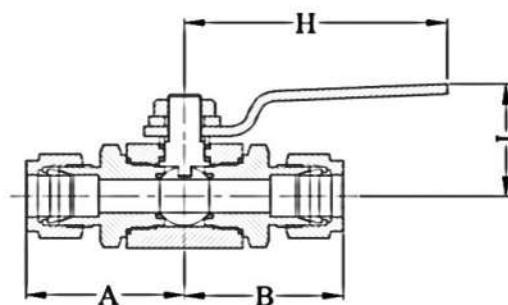
Part Number	Max. Working Pressure	End Connection	Dimensions (mm)			
Pars Regulator			A	B	I	H
BA1CC6M004*	6000Psi	1/4 SW	62	62	43	105
BA1CC6M006*		3/8 SW	62	62	43	105
BA1CC6M008*		1/2 SW	62	62	43	105
BA1CC6M012*		3/4 SW	79	79	54	155
BA1CC6M016*		1 SW	79	79	54	155

\*All dimensions could be considered as reference.

\*Please for Insert the other Part Number(Material, Seat Material, etc.) see page 1

## INSTRUMENTATION BALL VALVE OD (TUBE END CONNECTIONS)

### HPBV SERIES



Part Number Pars Regulator	Max. Working Pressure	End Connection	Dimensions (mm)			
			A	B	I	H
BA1003M004*	3000Psi	1/4 OD	43	43	43	105
BA1003M006*		3/8 OD	45	45	43	105
BA1003M008*		1/2 OD	48	48	43	105
BA1003M012*		3/4 OD	50	50	43	105
BA1003M016*		1 OD	55	55	54	155
BA1003M096*		6 OD	43	43	43	105
BA1003M128*		8 OD	45	45	43	105
BA1003M160*		10 OD	48	48	43	105
BA1003M192*		12 OD	50	50	43	105

Part Number Pars Regulator	Max. Working Pressure	End Connection	Dimensions (mm)			
			A	B	I	H
BA1006M004*	6000Psi	1/4 OD	43	43	43	105
BA1006M006*		3/8 OD	45	45	43	105
BA1006M008*		1/2 OD	48	48	43	105
BA1006M012*		3/4 OD	50	50	54	155
BA1006M016*		1 OD	55	55	54	155
BA1006M096*		6 OD	43	43	43	105
BA1006M128*		8 OD	45	45	43	105
BA1006M160*		10 OD	48	48	43	105
BA1006M192*		12 OD	50	50	54	155

\*All dimensions could be considered as reference.

\*Please for Insert the other Part Number(Material, Seat Material, etc.) see page 1



Introduction of Manifold

Pars Regulator manufactures offers a variety of 2-3 and 5 way valve instrument manifolds. The 2 valve manifolds are designed for static pressure and liquid level applications; 3 and 5 valve manifolds are designed for differential pressure applications.

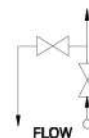
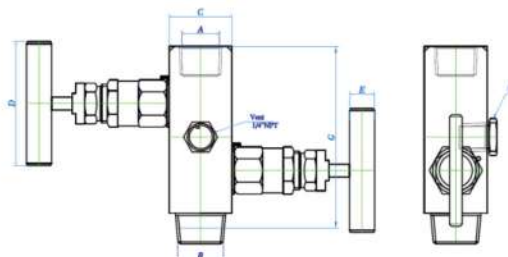
Inspection and Testing

Hydrostatic Proof Test=1.5×Max Working Pressure  
(strength test body and gland seal)  
Sealing Test Max= 1.1×Working Pressure

Valve Manifold	For 6000 psi Working Pressure	For 3000 psi Working Pressure
Max. pre. Rating	6000 psi (413 bar )	3000 psi (207 bar)
Hydrostatic pre. Test (Seat)	6600 psi (455 bar )	3300 psi (228 bar)
Hydrostatic pre. Test (body)	9000 psi (620 bar )	4500 psi (310 bar)
Temp rating	-55 to 200C	-55 to 200C

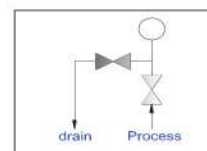
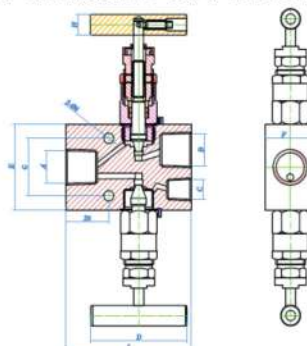


## MANIFOLD NPT (PIPE THREAD END CONNECTIONS) Two Valve Manifold for gauge



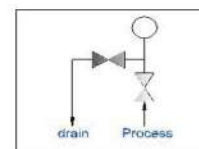
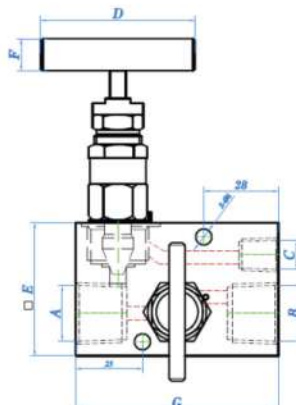
Part Number Pars Regulator	Max. Working Pressure	End Connection		Dimensions						
		Inlet	Outlet	A	B	C	D	E	F	G
2VG2NS	3000Psi	1/4"NPT-Male inlet	1/4"NPT-Female outlet	1/4" NPT(F)	1/4"NPT (M)	SQ32×32	58(mm)	Ø13	Vent 1/4" NPT	89(mm)
2VG4NS		1/2"NPT-Male inlet	1/2"NPT-Female outlet	1/2" NPT(F)	1/2" NPT (M)	SQ32×33	58(mm)	Ø13	Vent 1/4" NPT	95(mm)
2VG2NS-F	6000Psi	1/4"NPT-Female outlet	1/4"NPT-Female outlet	1/4" NPT(F)	1/4"NPT (M)	SQ32×32	58(mm)	Ø13	Vent 1/4" NPT	85(mm)
2VG4NS-F		1/2"NPT-Female outlet	1/2"NPT-Female outlet	1/2" NPT(F)	1/2" NPT (M)	SQ32×33	58(mm)	Ø13	Vent 1/4" NPT	95(mm)

## MANIFOLD Two Valve Manifold(Vertical Port Inlet)



Part Number Pars Regulator	Max. Working Pressure	End Connection		Dimensions							
		Inlet	Outlet	A	B	C	D	E	F	G	H
LS2V	3000Psi 6000Psi	1/2" NPT Female inlet	1/2 NPT-Female	1/2" NPT (F)	1/2" NPT (F)	1/4" NPT (F)	58(mm)	50(mm)	32(mm)	33.5(mm)	Ø13

## MANIFOLD Two Valve Manifold (for panel mounting)



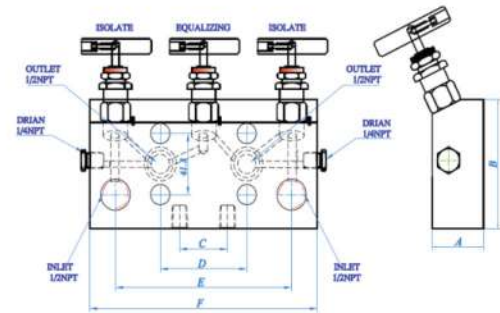
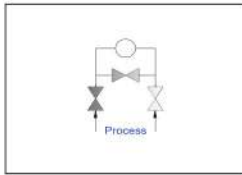
Part Number Pars Regulator	Max. Working Pressure	End Connection			Dimensions						
		Inlet	Outlet	Drain/Test	A	B	C	D	E	F	G
LS2H	3000Psi 6000Psi	1/2 NPT-Female	1/2 NPT-Female	1/4 NPT-Female	1/2"NPT (F)	1/2"NPT (F)	1/4"NPT (F)	58(mm)	50×32	Ø13	76(mm)





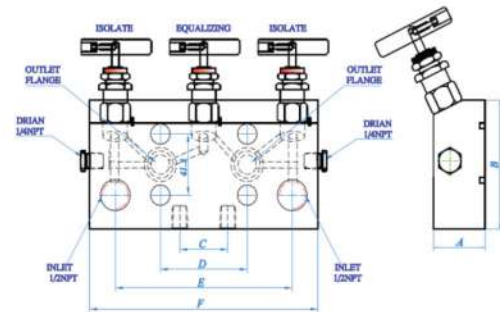
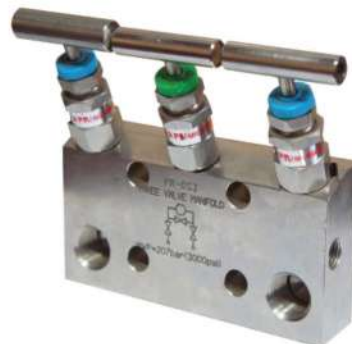
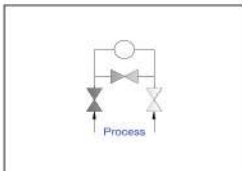
Pars Regulator Co.

## MANIFOLD 3Way Manifold



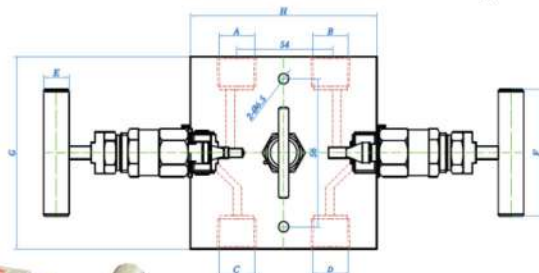
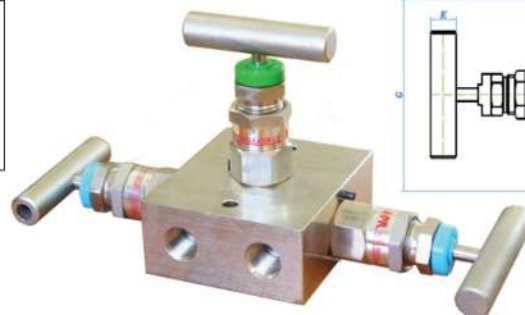
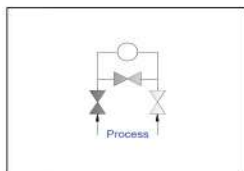
Part Number	Max. Working Pressure	End Connection		Dimensions					
		Inlet	Outlet	A	B	C	D	E	F
LS3	3000Psi 6000Psi	1/2" NPT Female inlet	1/2" NPT Female Outlet	32(mm)	76(mm)	30(mm)	54(mm)	110(mm)	142(mm)

## MANIFOLD 3 Way Manifold (for divert



Part Number	Max. Working Pressure	End Connection		Dimensions					
		Inlet	Outlet	A	B	C	D	E	F
DS3	3000Psi 6000Psi	1/2" NPT Female inlet	Flange	32(mm)	76(mm)	30(mm)	54(mm)	110(mm)	142(mm)

## MANIFOLD 3Way Manifold (for line remote installation)

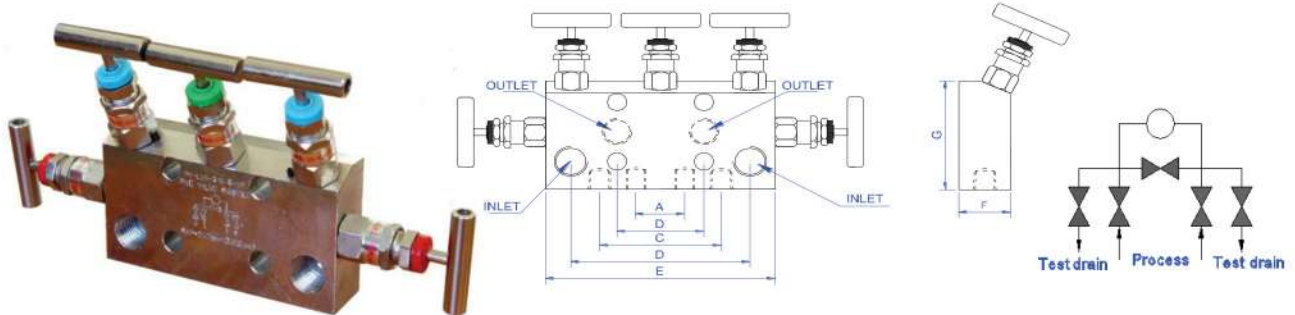


Part Number	Max. Working Pressure	End Connection		Dimensions							
		Inlet	Outlet	A	B	C	D	E	F	G	H
LS3H	3000Psi 6000Psi	1/2" NPT Female inlet	1/2" NPT Female outlet	1/2"NPT (F)	1/2"NPT (F)	1/2"NPT (F)	1/2"NPT (F)	Ø13	58(mm)	76(mm)	86(mm)



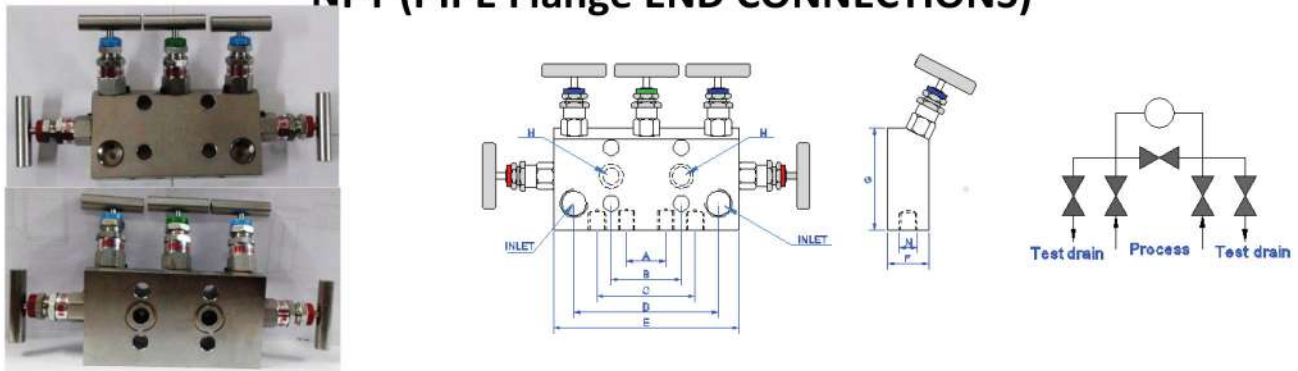
Pars Regulator Co.

## MANIFOLD NPT (PIPE THREAD END CONNECTIONS)



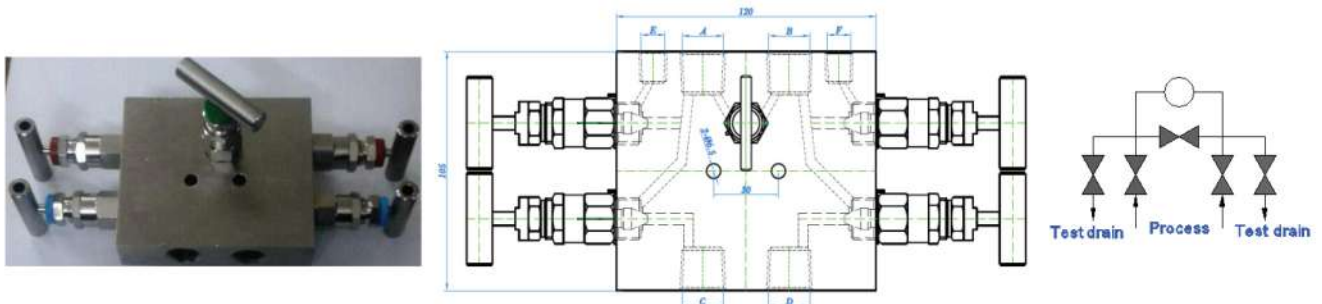
Part Number	Max. Working Pressure	End Connection		Dimensions							
		Inlet	Outlet	A	B	C	D	E	F	G	H
LSS	3000Psi 6000Psi	1/2" NPT Female inlet	1/2" NPT Female	30(mm)	54(mm)	75(mm)	110(mm)	142(mm)	32(mm)	76(mm)	1/2" NPT Female

## MANIFOLD NPT (PIPE Flange END CONNECTIONS)



Part Number	Max. Working Pressure	End Connection		Dimensions							
		Inlet	Outlet	A	B	C	D	E	F	G	H
DSS	3000Psi 6000Psi	1/2" NPT Female inlet	Flanged	30(mm)	54(mm)	75(mm)	110(mm)	142(mm)	32(mm)	76(mm)	1/2" Flange

## MANIFOLD 5Way Manifold (for line mounting)



Part Number	Max. Working Pressure	End Connection		Dimensions					
		Inlet	Outlet	A	B	C	D	E	F
LSSH	3000 Psi 6000Psi	1/2" NPT Female inlet	1/2" NPT Female outlet	1/2"NPT (F)	1/2"NPT (F)	1/2"NPT (F)	1/2"NPT (F)	1/4"NPT (F)	1/4"NPT (F)



### DOUBLE BLEED & BLEED VALVE

The Double Bleed and Bleed Valve can perform the tasks of 2 separate valves (2 separate solenoids and 1 D valve valve) which saves from being huge (space saving can also save on weight and time due to installation and maintenance) involves requiring much less work and time to service being a little to bleed and operate all 2 valves in one location. It has been customary for manifold systems and other systems using, where numerous manifolds of a double was undesirable, to employ two valves back to back with a small bleed valve located between them. This is commonly referred to as a "Double Bleed and Bleed System" or "Bleed and Bleed System". Using 1/4" NPT by brass as a seal material has prevented the subversion of a single valve for the two valves which made up the previous system. A bleed valve is required and is connected to the body cavity around the ball of the ball valve. A Double Bleed and Bleed as shown requires that both seals be tight and are a vacuum seal (where there is a pressure on one or both sides of the valve, with the cavity around the ball being bleed to atmosphere by opening the body drain valve. Design features a Double Bleed and Bleed seal design has been double bleed + valve size 3/4" through 2" inclusive, which will act as a vacuum seal without maintaining it ability to act also as a downstream seal.

### Double Bleed and Bleed Systems

The increased activity in the offshore sector of the energy industry has led to additional factors that have to be taken into consideration when designing piping systems. Space in these modern locations is always at a premium and the design of piping systems and their associated components must therefore be more compact. There are a number of concerns that are also very important, such as keeping the structure as light as possible, and there are obvious benefits from making components smaller and lighter. Corrosion resistance is also very important and any reduction in installation maintenance is also beneficial. The above situation has led to the modification of the savings of valve components to incorporate saving in space, weight, and later costs where possible, while still retaining the original function of the valve. The greatest saving is to be seen in the reduction of lost to atmosphere because the several lost to atmosphere are minimized compared to the conventional design.

Process safety in industry has become more complex as safety issues have to be addressed and the requirement for double bleed and bleed valves has become more commonly used. Double bleed and bleed valves require two 1/2" or 3/4" valve valve, used to drain or vent trapped fluid between the two valve elements.

### Benefits of Bleed and Bleed Valves

Bleed and bleed valves are beneficial for relieving fatigue or moving of fluid with critical components. This makes it ideal for use in petrochemical environments where there is a need to handle and manage toxic waste and other dangerous chemical. The one thing provided in the valve allows easy venting of the fluids and provides considerable safety in high temperature, high pressure. Bleed and bleed valves are important for keeping pressure and introducing flow to a minimum. The efficiency of the valves reduces the need for multiple systems and provides high degree of universal efficiency in a range of industries from LPG and petrochemical to natural gas processing.

### Types of Bleed and Bleed Valves

Different types of bleed and bleed valves offer different features. Bleed and bleed valves are also known as bleed valves or bleed manifold. A manifold that features a number of valves is useful for using a gas supply as well as various industrial uses. Other types of bleed and bleed valves include the double bleed and bleed valves, three valve manifold, large double bleed and bleed valves, bleed and bleed manifold valves, single use double bleed and bleed valves, and double use large double bleed and bleed valves. The standard double bleed and bleed valves, for instance, are used for chemical processes under high pressure environments for handling toxic fluid streams. Bleed valves, on the other hand, are used in steam and hydraulic systems.

### Double Bleed & Bleed - Flowing Type

The design of all ball valves is based on the flowing ball principle which allows the ball to turn freely between the ball seat. A positive seal is achieved by fluid pressure acting on the upstream surface of the ball and a reducing pressure uniformed across the downstream ball seat and the ball. The ball is secured by a sealed handle which improves safety and so when the control handle is moved to the open position, ball valves are needed to be used as a self flow control device and a means to control or throttle fluid flow. The valve should always be kept fully open or fully closed.

**Example-1) : PR -DB-D11 - F 8 R1 N 8 - P -SS**  
**1 3 4 5 3 4 6 7**

**Example-2) : PR -DB-D11 - FB - F 8 R3- P -SS**  
**1 2 3 4 5 6 7**

## 1.VALVE SERIES

SERIES IDENTIFY				1ts ISOLATE	2ts ISOLATE	VENT
SB	SINGLE BLOCK & BLEED VALVES	S1	1	BALL	-	NEEDLE
		S1	2	BALL	-	OS & Y
		S1	3	BALL	-	BALL
		S2	1	OS & Y	-	OS & Y
		S2	2	OS & Y	-	NEEDLE
		S2	3	NEEDLE	-	NEEDLE
DB	DOUBLE BLOCK & BLEED VALVES	D1	1	BALL	BALL	NEEDLE
		D1	2	BALL	BALL	OS & Y
		D1	3	BALL	BALL	BALL
		D1	4	BALL	NEEDLE	NEEDLE
		D1	5	BALL	BALL	-
		D1	6	BALL	NEEDLE	-
		D2	1	OS & Y	OS & Y	OS & Y
		D2	2	OS & Y	OS & Y	NEEDLE
		D2	3	OS & Y	NEEDLE	NEEDLE
		D2	4	NEEDLE	NEEDLE	NEEDLE

### 2. Bore size (mm)

(STD) - 10mm (standard)  
 15- 15mm  
 RB- Reducer Bore  
 FB- Full Bore

### 3. Connection type

F- RAISED FACE FLANGE  
 J- RING JOINT FLANGE  
 N- FEMALE NPT  
 M- MALE NPT  
 FF- FLAT FACE FLANGE  
 BW- BUTT WELD  
 SW- SOCKET WELD

### 4. Connection size(inch)

4- 1/4" 16- 1"  
 6- 3/8" 24- 1.1/2"  
 8- 1/2" 32- 2"  
 12- 3/4"

### 5. Flange rating (class)

R1- 150 R4- 900  
 R2- 300 R5- 1500  
 R3- 600 R6- 2500

### 6. Ball seat material

RP- R.PTFE  
 P- PTFE

### 7. Body material

SS- ASTM A182 GR 316L  
 105- ASTM A105  
 LF2- ASTM A350 LF2

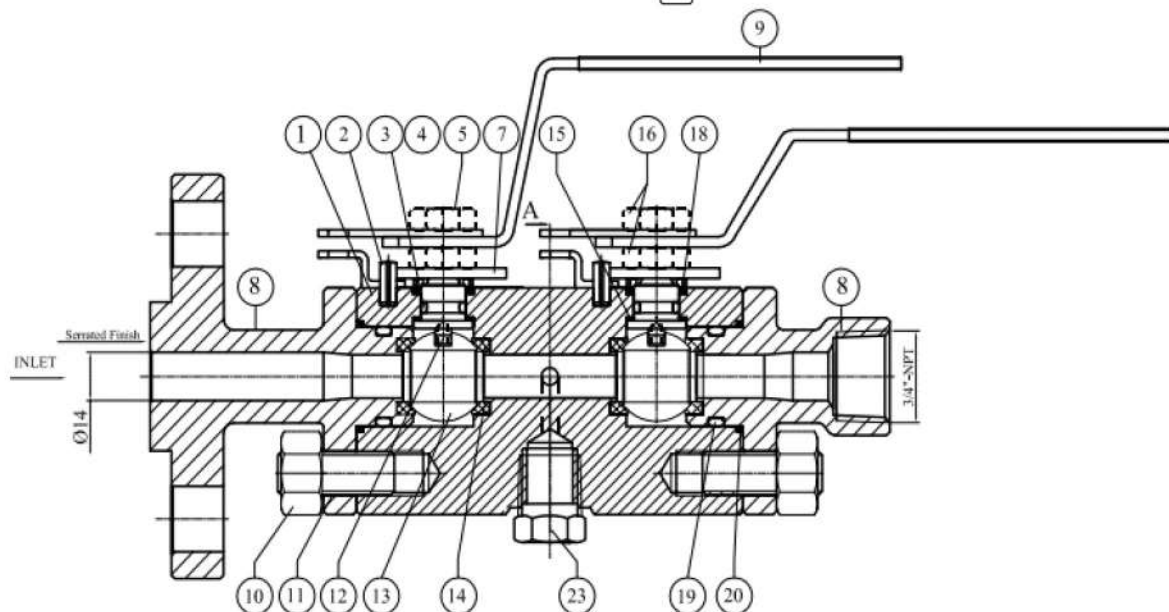
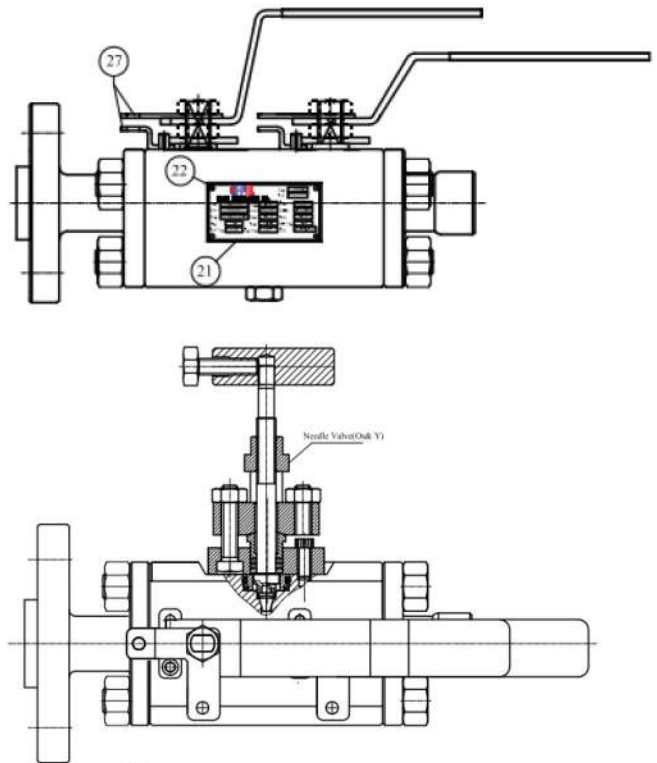


- Reduced or full port
- Construction: B.B , OS & Y
- Socket Welding & Threaded ends
- Material for hard trim is Depend on Client notice & operating condition



## Materials of

Row	PART NAME	Row	PART NAME
1	Body	14	Seat
2	Stopn Pin	15	Thrust Washer
3	Steam O-Ring	16	Stem Nut
4	Ring	18	Stem Gasket
5	Stem	19	Bonnet O-ring
7	Indicator	20	Body Gasket
8	Closure	21	Name Plate
9	Wrench	22	Pin
10	Body Nut	23	Hex Plug 1.4 npt
11	Body Stud Bolt	24	Needle Valve (Type 3)
12	Spring	27	Locking Device
13	Ball		

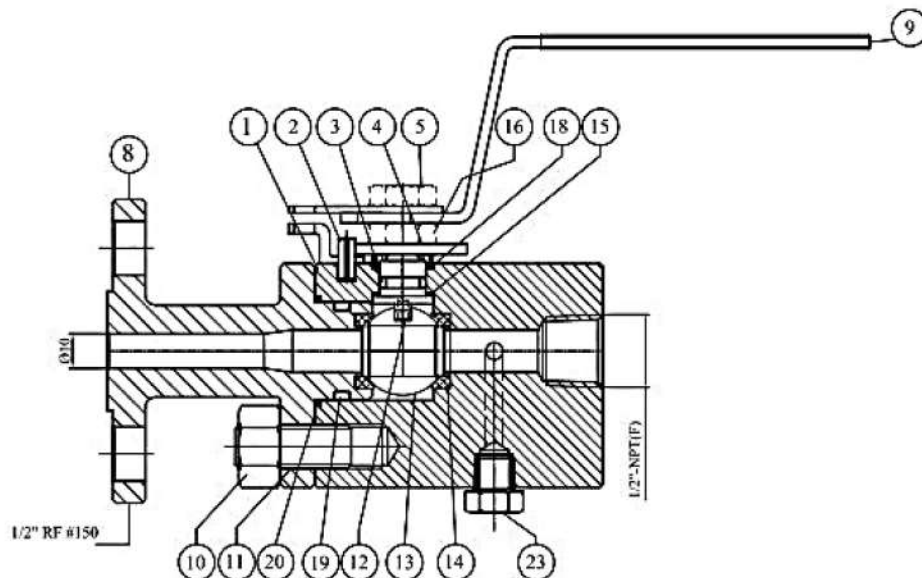
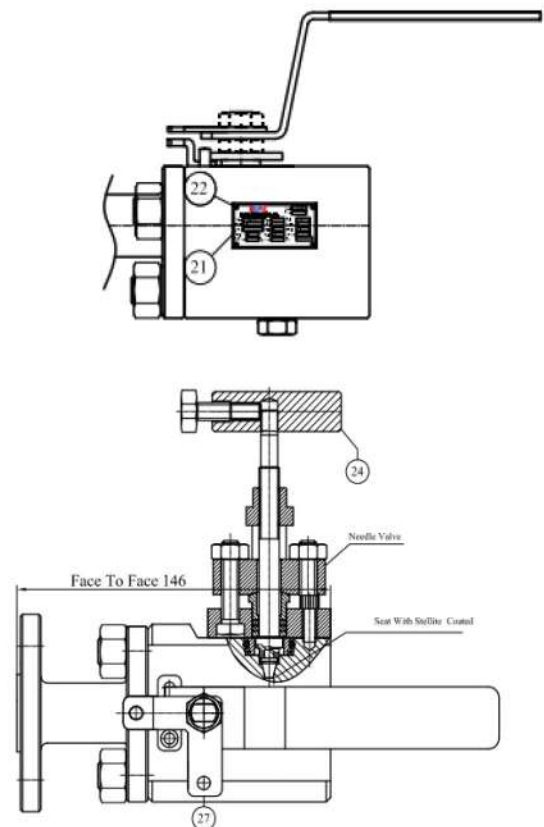


- Reduced or full port
- Construction :B.B , OS & Y
- Socket Welding & Threaded ends
- Material for hard trim is Depend on Client notice & oprating condition



## Materials of Construction

Row	PART NAME	Row	PART NAME
1	Body	14	Seat
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3	Steam O-Ring	16	Stem Nut
4	Ring	18	Stem Gasket
5	Stem	19	Bonnet O-ring
7	Indicator	20	Body Gasket
8	Closure	21	Name Plate
9	Wrench	22	Pin
10	Body Nut	23	Hex Plug 1.4 npt
11	Body Stud Bolt	24	Needle Valve (Type 3)
12	Spring	27	Locking Device
13	Ball		

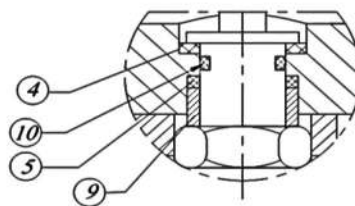




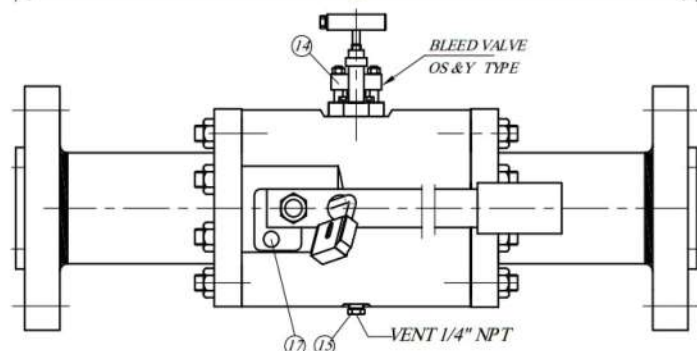
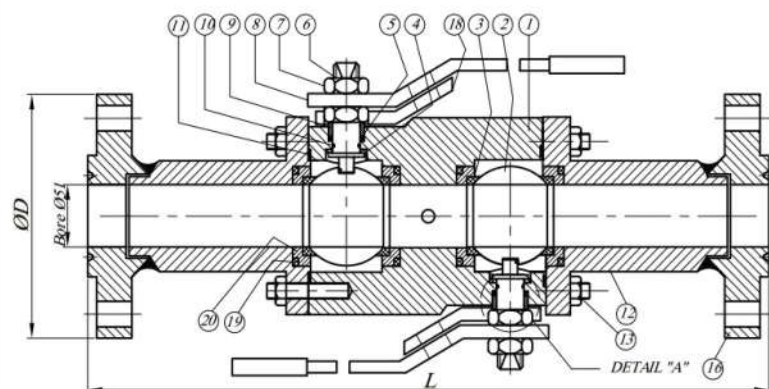
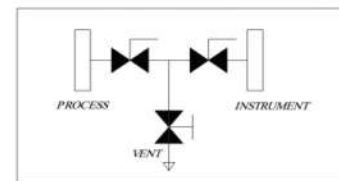
- ASME B 16.5
- FACE CONDITION 125-250 AARH
- WRENCH OPERATION
- BALL ARRANGEMENT: FLOATING
- ANTI-BLOWOUT BECAUSE OF BODY AND STEM CONDITION



BOM		
1	BODY	A105N
2	BALL	S.S316
3	SEAT	PTFE
4	THRUST BEARING	PTFE
5	STEM PACKING	PTFE
6	STEM	S.S316L
7	NUT	S.S304
8	HANDEL (STOPPER)	C.S
9	GLAND	S.S316L
10	O-RING	VITON
11	BODY SEAL	PTFE
12	BONNET	A105N
13	BOLT/NUT	A194-GR2HM/A193 GR.B7M
14	OS & Y	SEAT:17-4PH BONNET:A182 F316L SEAL: PTFE
15	PLUG	A105L
16	FLANGE	A105L
17	STOP PIN	S.S316L
18	LOCKING DEVICE	S.S
19	RETAINER SEAL	PTFE
20	SEAT RETAINER	S.S316L



DETAIL A





# PIPING VALVES

## SMALL VALVES

### PR PRODUCT Memos

1

Various types of valves are required in any piping system in order to regulate the fluid flow within that system.

2

Valves are installed on equipment/piping to perform any of the following functions,

- Isolation
- Regulation
- Non-Return
- Special Purpose

3

It is imperative that process piping engineer should be familiar with all types of valves and the advent of any new designs. Thorough knowledge of the operation, maintenance, and adjustment of valves is equally important since the success of the process plant and its total activity will depend on it.





## Introduction

Forged steel Gate valves are mainly used for the pipelines on various systems of thermal power station, especially for non-corrosive mediums like water and steam with high temperature and high pressure. In service, these valves generally are either fully open or fully closed. When fully open, the fluid or gas flows through the valve in a straight line with very little resistance. Gate valves should not be used in the regulation or throttling of flow, because accurate control is not possible. Furthermore, high flow velocity in partially opened valves may cause erosion of the discs and seating surfaces. Vibration may also result in chattering of the partially opened valve disc. An exception to the above are specially designed gate valves that are used for low velocity throttling, for example, gullotine gate valves for pulp stock.

## Advantages of Gate Valves

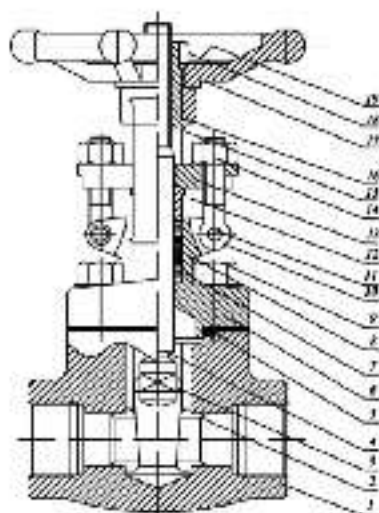
1. They have good shutoff characteristics.
2. They are bidirectional.
3. The pressure loss through the valve is minimal.

## Type Wedge of Gate Valve

Four types of wedges, 1. solid 2. hollow 3. split 4. flexible wedge.

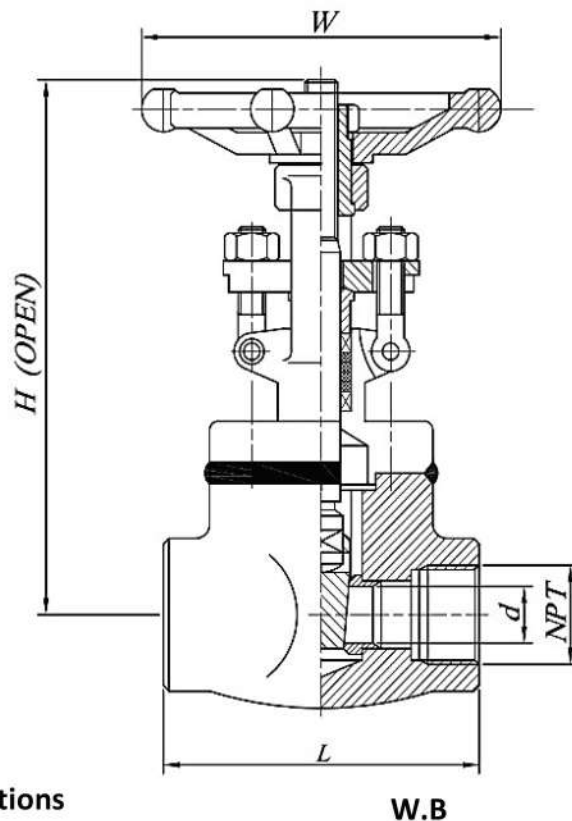
## Features Solid wedge

- A single piece solid construction
- It is most susceptible to leakage
- Generally used in moderate to lower pressure medium and low applications
- The disc cannot be jammed into the body, an action that might make it difficult to open the valve. This is particularly important where motors are used for opening and closing the valve.
- It does not compensate for changes in seat alignment due to pipe end loads or thermal fluctuations.
- Considered the most economical
- The body, an action that might make it difficult to open the valve. This is particularly important where motors are used for opening and closing the valve.
- It does not compensate for changes in seat alignment due to pipe end loads or thermal fluctuations.
- Considered the most economical



No.	Component	Material/ASTM SPECIFICATION
1	Body	A 105N
2	SEAT RING	ASTM A276-420
3	WEDGE	ASTM A182-F6a
4	STEM	ASTM A276-410
5	GASKET	S.S 304 Graphite
6	BONNET	A 105N
7	PACKING	Fiber
8	BONNET BOLT	Graphite
9	GLAND BOLT (EYE BOLT)	ASTM A193-B7M
10	GLAND BOLT PIN	ASTM A193-B7M
11	GLAND	S.S 304 (ISO 87 40)
12	GLAND FLANGE	ASTM A276-410
13	GLAND NUT	A 105N
14	YOKE SLEEVE	CR.13
15	SLEEVE WASHER	AISI 1025
16	HAND WHEEL	Malleable Iron
17	HAU NUT	AISI 1025+Cr. Plated
18	NAME PLATE	S.S 304

**GATE VALVE**  
**NPT (PIPE THREAD END CONNECTIONS)**  
**SW(SOCKET WELD END CONNECTIONS)**



**Features and Applications**

- Reduced or full port
- Construction :W.B ( OS & Y)
- Gasket: Stainless Steel+graphite
- Socket Welding & Threaded ends
- Material for hard trim is Depend on Client notice & operating condition

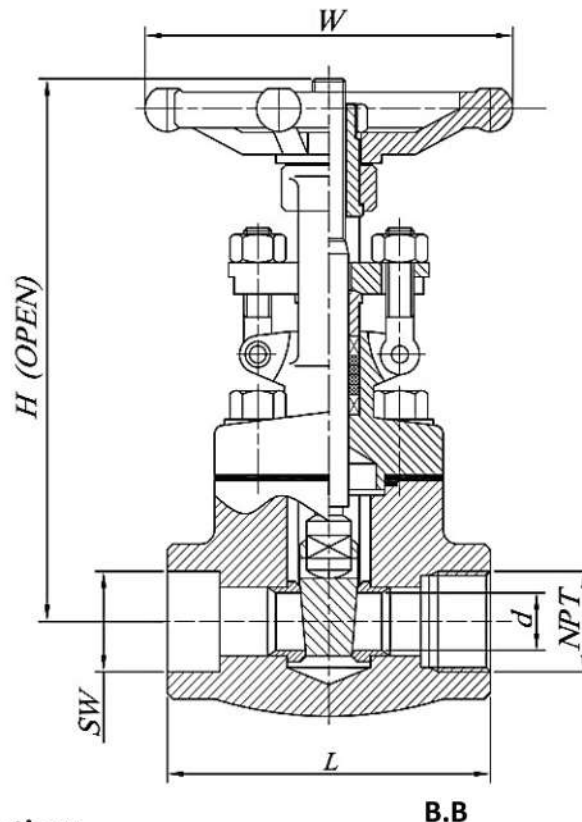
- Design & manufacture: API 602 & ANSI B 16.34
- Socket welding dimension :ANSI B 16.11
- Screw end dimension :ANSI B1.20.1
- Inspect and test :API 598
- Body material:A105,LF2,F5,F11,F22,F304L,F316L
- All dimensions could be considered as reference.

Part Number		CLASS	Size		Dimension				Weight	
Pars Regulator			Reducer Bore	Full Bore	d	L	H(Open)	W	W.W	W.W
NPT	SW				mm	mm	mm	mm	Kg	
GAWNN4C*	GAWCC4C*	800	1/4"	-	7	79	166	100	2.5	-
GAWNN4C*	GAWCC4C*		3/8"	-	7	79	166	100	2.4	-
GAWNN4C*	GAWCC4C*		1/2"	3/8"	10	79	166	100	2.3	2.4
GAWNN4C*	GAWCC4C*		3/4"	1/2"	12.7	92	169	100	2.6	2.7
GAWNN4C*	GAWCC4C*		1"	3/4"	18	111	193	125	4.5	4.6
GAWNN4C*	GAWCC4C*		1 1/4"	1"	23	120	230	160	5.9	6.1
GAWNN4C*	GAWCC4C*		1 1/2"	1 1/4"	28.5	120	246	160	7.2	7.4
GAWNN4C*	GAWCC4C*		2"	1 1/2"	36	140	283	180	11.2	11.4
GAWNN4C*	GAWCC4C*		-	2"	43	170	332	200	18.8	19.1

\*Please for Insert the other Part Number(Material, Seat Material, etc.) see page 1



**GATE VALVE**  
**NPT (PIPE THREAD END CONNECTIONS)**  
**SW (SOCKET WELD END CONNECTIONS)**



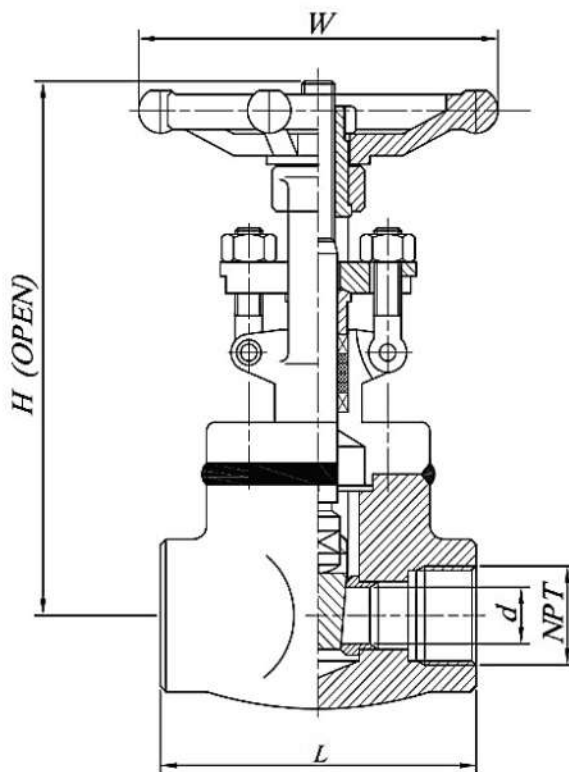
**Features and Applications**

- Reduced or full port
- Construction :B.B ( OS & Y)
- Gasket: Stainless Steel+graphite
- Socket Welding & Threaded ends
- Material for hard trim is Depend on Client notice & oeprating condition
- B.B : BOLTED BONNET
- Design & manufacture: API 602 & ANSI B 16.34
- Socket welding dimension :ANSI B 16.11
- Screw end dimension :ANSI B1.20.1
- Inspect and test :API 598
- Body material:A105,LF2,F5,F11,F22,F304L,F316L
- All dimensions could be considered as reference.

Part Number		CLASS	Size		Dimension				Weight	
Pars Regulator			Reducer Bore	Full Bore	d	L	H(Open)	B	W.B	B.B
NPT	SW				mm	mm	mm	mm	Kg	
GABNN4C*	GABCC4C*	800	1/4"	-	7	79	166	100	2.5	-
GABNN4C*	GABCC4C*		3/8"	-	7	79	166	100	2.4	-
GABNN4C*	GABCC4C*		1/2"	3/8"	10	79	166	100	2.3	2.4
GABNN4C*	GABCC4C*		3/4"	1/2"	12.7	92	169	100	2.6	2.7
GABNN4C*	GABCC4C*		1"	3/4"	18	111	193	125	4.5	4.6
GABNN4C*	GABCC4C*		1 1/4"	1"	23	120	230	160	5.9	6.1
GABNN4C*	GABCC4C*		1 1/2"	1 1/4"	28.5	120	246	160	7.2	7.4
GABNN4C*	GABCC4C*		2"	1 1/2"	36	140	283	180	11.2	11.4
GABNN4C*	GABCC4C*		-	2"	43	170	332	200	18.8	19.1

\*Please for Insert the other Part Number(Material, Seat Material, etc.) see page 1

GATE VALVE  
NPT (PIPE THREAD END CONNECTIONS)  
SW(SOCKET WELD END CONNECTIONS)



**Features and Applications**

**W.B**

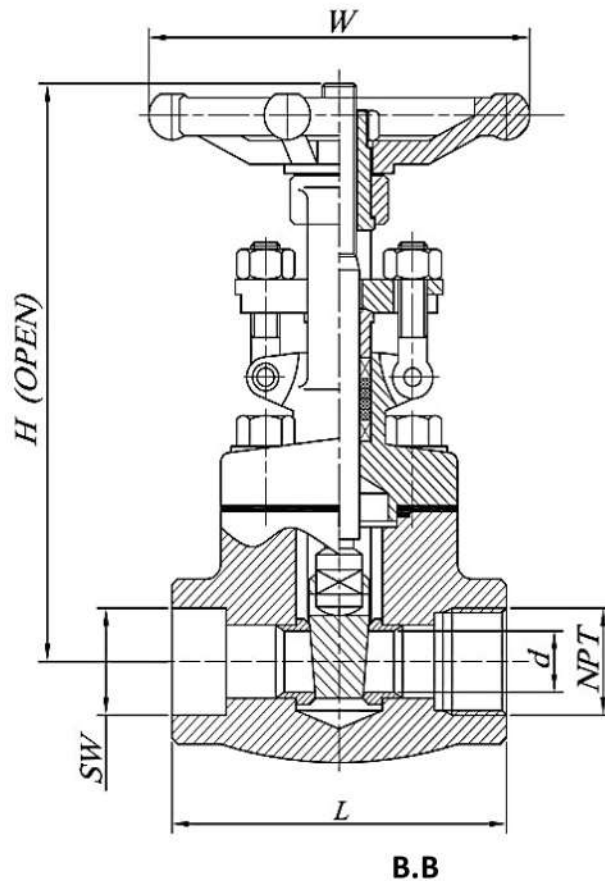
- Reduced or full port
- Construction :W.B( OS & Y)
- Gasket: Stainless Steel+graphite
- Socket Welding & Threaded ends
- Material for hard trim is Depend on Client notice & oeprating condition
- W.B : WELDED BONNET
- Design & manufacture: API 602 & ANSI B 16.34
- Socket welding dimension :ANSI B 16.11
- Screw end dimension :ANSI B1.20.1
- Inspect and test :API 598
- Body material:A105,LF2,F5,F11,F22,F304L,F316L
- All dimensions could be considered as reference.

Part Number		CLASS	Nominal Diameter	Dimension				Weight	
Pars Regulator				d	L	H(Open)	W	B.B	W.B
NPT	SW			mm	mm	mm	mm	Kg	
GAWNN5C*	GAWCC5C*	1500	3/8"	10	79	170	100	4.7	4.8
GAWNN5C*	GAWCC5C*		1/2"	12.7	92	193	100	4.7	4.8
GAWNN5C*	GAWCC5C*		3/4"	18	111	230	100	6.8	6.9
GAWNN5C*	GAWCC5C*		1"	23	120	246	125	9.0	9.2
GAWNN5C*	GAWCC5C*		1 1/4"	28.5	120	283	160	12.4	12.6
GAWNN5C*	GAWCC5C*		1 1/2"	36	140	325	160	17.5	17.7
GAWNN5C*	GAWCC5C*		2"	43	170	334	180	18.0	17.9

\*Please for Insert the other Part Number(Material, Seat Material, etc.) see page 1



**GATE VALVE**  
**NPT (PIPE THREAD END CONNECTIONS)**  
**SW(SOCKET WELD END CONNECTIONS)**



**Features and Applications**

- Reduced or full port
- Construction :W.B ( OS & Y)
- Gasket: Stainless Steel+graphite
- Socket Welding & Threaded ends
- Material for hard trim is Depend on Client notice & oeprating condition
- W.B : WELDED BONNET
- Design & manufacture: API 602 & ANSI B 16.34
- Socket welding dimension :ANSI B 16.11
- Screw end dimension :ANSI B1.20.1
- Inspect and test :API 598
- Body material:A105,LF2,F5,F11,F22,F304L,F316L
- All dimensions could be considered as reference.

Part Number		CLAS S	Nominal Diameter	Dimension				Weight	
Pars Regulator				d	L	H(Open)	W	B.B	W.B
NPT	SW			mm	mm	mm	mm	Kg	
GABNN5C*	GABCC5C*	1500	3/8"	10	79	170	100	4.7	4.8
GABNN5C*	GABCC5C*		1/2"	12.7	92	193	100	4.7	4.8
GABNN5C*	GABCC5C*		3/4"	18	111	230	100	6.8	6.9
GABNN5C*	GABCC5C*		1"	23	120	246	125	9.0	9.2
GABNN5C*	GABCC5C*		1 1/4"	28.5	120	283	160	12.4	12.6
GABNN5C*	GABCC5C*		1 1/2"	36	140	325	160	17.5	17.7
GABNN5C*	GABCC5C*		2"	43	170	334	180	18.0	17.9

\*Please for Insert the other Part Number(Material, Seat Material, etc.) see page 1

### Introduction

The globe valve is suitable for use on a wide variety of applications, from flow rate control to open/close operation. flow rate control is determined not by the size of the opening in the valve seat, but rather by the lift of the valve plug (the distance the valve plug is from the valve seat). Globe valves usually have rising stems, and the larger sizes are of the outside screw-and-yoke construction. Components of the globe valve are similar to those of the gate valve.

Maintenance of globe valves is relatively easy, as the discs and seats are readily refurbished or replaced. This makes globe valves particularly suitable for services which require frequent valve maintenance. Where valves are operated manually, the shorter disc travel offers advantages in saving operator time, especially if the valves are adjusted frequently. Generally, the maximum differential pressure across the valve disc should not exceed 20 percent of the maximum upstream pressure or 200 psi (1380 kPa), whichever is less.

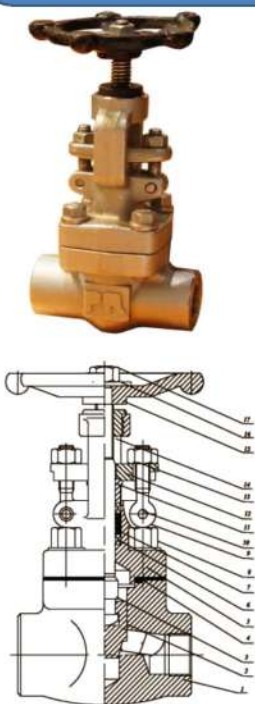
### Features of Globe Valve

- Good shut-off capability
- Globe valves are extensively employed to control flow
- High-differential pressure-throttling service require specially designed valve trim.
- Moderate to good throttling capability
- Shorter stroke (compared to a gate valve)
- Available in tee, wye, and angle patterns, each offering unique capabilities
- Easy to machine or resurface the seats
- With disc not attached to the stem, valve can be used as a stop-check valve
- There is less risk of damage to the valve seat or valve plug by the fluid than with other types of manual valves
- Needle type globe valves are particularly well suited for flow rate control.

### Typical Applications of Globe Valves

The following are some of the typical applications of globe valves:

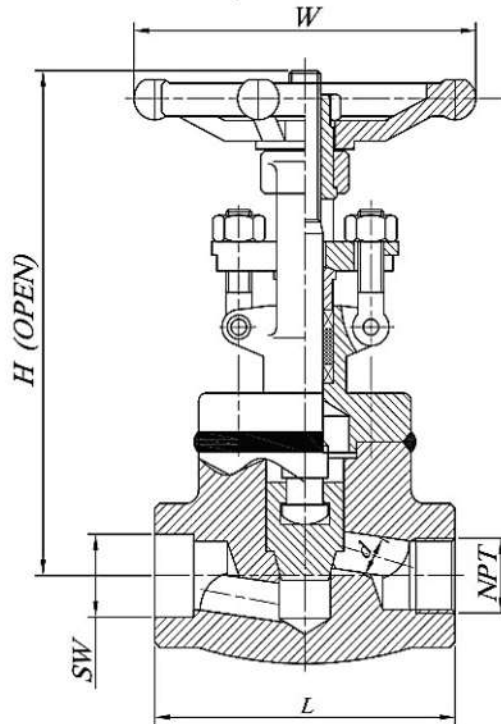
- Cooling water systems where flow needs to be regulated
- Fuel oil system where flow is regulated and leak tightness is of importance
- High-point vents and low-point drains when leak tightness and safety are major considerations
- Feed water, chemical feed, condenser air extraction, and extraction drain systems
- Boiler vents and drains, main steam vents and drains, and heater drains
- Turbine seals and drains
- Turbine lube oil system and others.



No.	Component	Material/ASTM SPECIFICATION
1	Body	A105N
2	SEAT RING	ASTM A276-420
3	WEDGE	ASTM A182-F6a
4	STEM	ASTM A276-410
5	GASKET	S.S 304+Graphite
6	BONNET	A105N
7	PACKING	Fiber
8		Graphite
9	BONNET BOLT	ASTM A193-B7M
10	GLAND BOLT (EYE BOLT)	ASTM A193-B7M
11	GLAND BOLT PIN	S.S 304 (ISO 8740)
12	GLAND	ASTM A276-410
13	GLAND FLANGE	A105N
14	GLAND NUT	ASTM A194-2HM
15	YOKE SLEEVE	CR.13
16	SLEEVE WASHER	AISI 1025
17	HANDWHEEL	Malleable Iron
18	H/W NUT	AISI 1025+Cr. Plated
19	NAMEPLATE	S.S 304



**GLOBE VALVE**  
**NPT (PIPE THREAD END CONNECTIONS)**  
**SW(SOCKET WELD END CONNECTIONS)**



**Features and Applications**

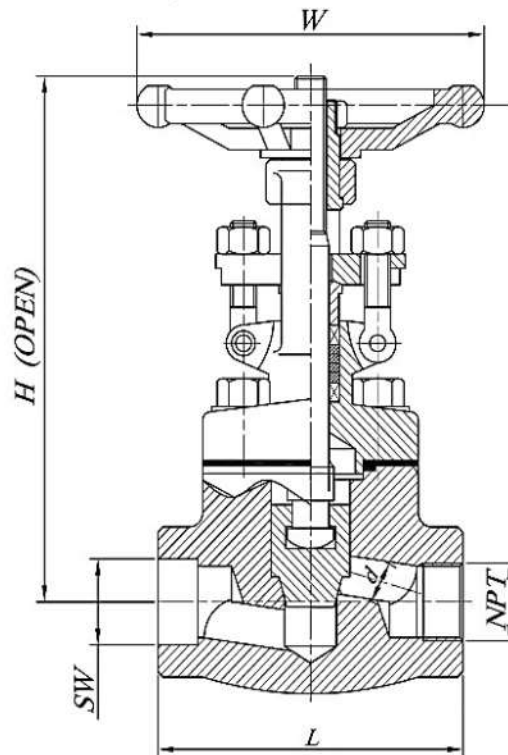
**W.B**

- Reduced or full port
- Construction :W.B( OS & Y)
- Gasket: Stainless Steel+graphite
- Socket Welding & Threaded ends
- Integral seat
- Design & manufacture: API 602 & ANSI B 16.34
- W.B : WELDED BONNET
- Socket welding dimension :ANSI B 16.11
- Screw end dimension :ANSI B1.20.1 (NPT)
- Inspect and test :API 598
- Body material:A105,LF2,F5,F11,F22,F304L,F316L
- All dimensions could be considered as reference.

Part Number		CLASS	Size		Dimension				Weight	
Pars Regulator			Reducer Bore	Full Bore	d	L	H(Open)	W	B.B	W.B
NPT	SW				mm	mm	mm	mm	Kg	
GOWNN4C*	GOWCC4C*	800	1/4"	-	8	79	166	100	2.6	-
GOWNN4C*	GOWCC4C*		3/8"	-	10	79	166	100	2.5	-
GOWNN4C*	GOWCC4C*		1/2"	3/8"	11	79	166	100	2.4	2.5
GOWNN4C*	GOWCC4C*		3/4"	1/2"	13	92	175	100	2.6	2.7
GOWNN4C*	GOWCC4C*		1"	3/4"	18	111	206	125	4.5	4.7
GOWNN4C*	GOWCC4C*		1 1/4"	1"	23	120	228	160	5.9	6.1
GOWNN4C*	GOWCC4C*		1 1/2"	1 1/4"	28.5	152	262	160	8.3	8.5
GOWNN4C*	GOWCC4C*		2"	1 1/2"	33	172	300	180	12.4	12.6
GOWNN4C*	GOWCC4C*		-	2"	43	220	340	240	20	20.4

\*Please for Insert the other Part Number(Material, Seat Material, etc.) see page 1

**GLOBE VALVE**  
**NPT (PIPE THREAD END CONNECTIONS)**  
**SW(SOCKET WELD END CONNECTIONS)**



**Features and Applications**

**B.B**

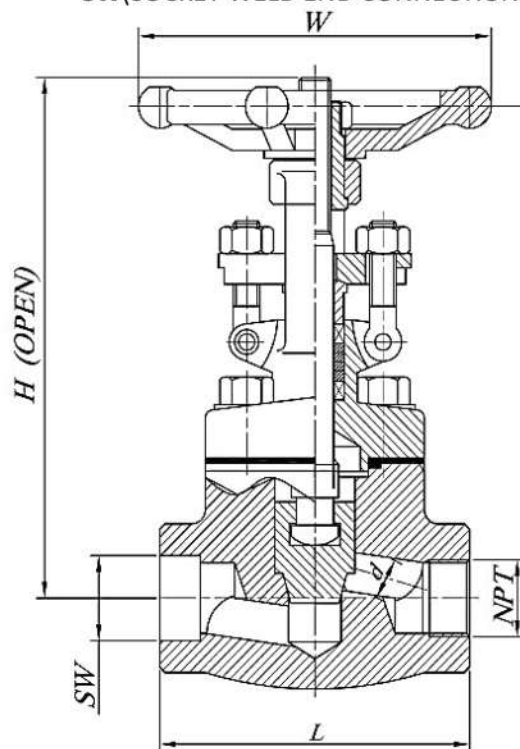
- Reduced or full port
- Construction :B.B (OS & Y)
- Gasket: Stainless Steel+graphite
- Socket Welding & Threaded ends
- Integral seat
- Design & manufacture: API 602 & ANSI B 16.34
- B.B : BOLTED BONNET
- Socket welding dimension :ANSI B 16.11
- Screw end dimension :ANSI B1.20.1 (NPT)
- Inspect and test :API 598
- Body material:A105,LF2,F5,F11,F22,F304L,F316L
- All dimensions could be considered as reference.

Part Number		CLASS	Size		Dimension				Weight	
Pars Regulator			Reducer Bore	Full Bore	d	L	H(Open)	W	B.B	W.B
NPT	SW				mm	mm	mm	mm	Kg	
GOBNN4C*	GOBCC4C*	800	1/4"	-	8	79	166	100	2.6	-
GOBNN4C*	GOBCC4C*		3/8"	-	10	79	166	100	2.5	-
GOBNN4C*	GOBCC4C*		1/2"	3/8"	11	79	166	100	2.4	2.5
GOBNN4C*	GOBCC4C*		3/4"	1/2"	13	92	175	100	2.6	2.7
GOBNN4C*	GOBCC4C*		1"	3/4"	18	111	206	125	4.5	4.7
GOBNN4C*	GOBCC4C*		1 1/4"	1"	23	120	228	160	5.9	6.1
GOBNN4C*	GOBCC4C*		1 1/2"	1 1/4"	28.5	152	262	160	8.3	8.5
GOBNN4C*	GOBCC4C*		2"	1 1/2"	33	172	300	180	12.4	12.6
GOBNN4C*	GOBCC4C*		-	2"	43	220	340	240	20	20.4

\*Please for Insert the other Part Number(Material, Seat Material, etc.) see page 1



**GLOBE VALVE**  
**NPT (PIPE THREAD END CONNECTIONS)**  
**SW(SOCKET WELD END CONNECTIONS)**



**Features and Applications**

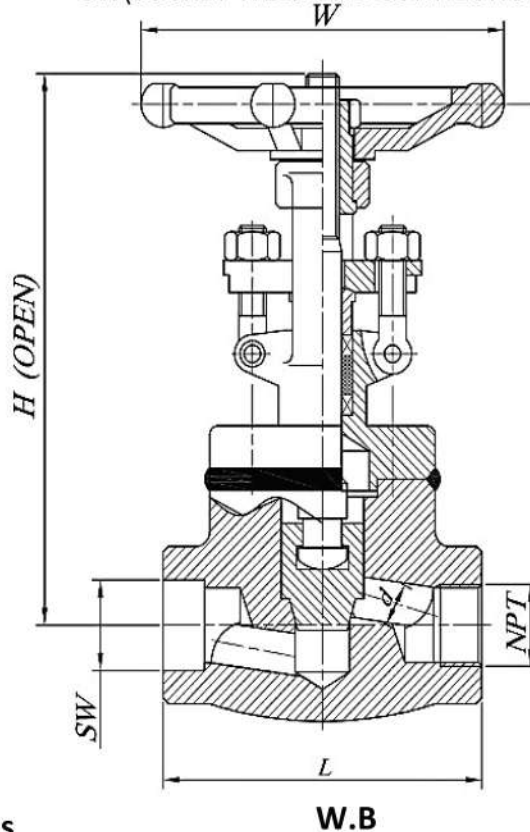
**B.B**

- Construction :B.B (OS & Y)
- Gasket: Stainless Steel+graphite
- Socket Welding & Threaded ends
- Integral seat
- Design & manufacture: API 602 & ANSI B 16.34
- B.B : BOLTED BONNET
- Socket welding dimension :ANSI B 16.11
- Screw end dimension :ANSI B1.20.1 (NPT)
- Inspect and test :API 598
- Body material:A105,LF2,F5,F11,F22,F304L,F316L
- All dimensions could be considered as reference.

Part Number		CLASS	Nominal Diameter	Dimension				Weight	
Pars Regulator				d	L	H(Open)	W	B.B	W.B
NPT	SW			mm	mm	mm	mm	Kg	
GOBNN5C*	GOBCC5C*	1500	3/8"	10	79	166	100	4.8	4.5
GOBNN5C*	GOBCC5C*		1/2"	13	92	170	100	4.7	4.1
GOBNN5C*	GOBCC5C*		3/4"	18	111	193	125	4.7	4.1
GOBNN5C*	GOBCC5C*		1"	23	120	230	160	6.3	6.7
GOBNN5C*	GOBCC5C*		1 1/4"	29	152	246	160	8.8	9.0
GOBNN5C*	GOBCC5C*		1 1/2"	33	172	283	180	12.4	12.1
GOBNN5C*	GOBCC5C*		2"	43	220	325	200	17.5	17

\*Please for Insert the other Part Number(Material, Seat Material, etc.) see page 1

**GLOBE VALVE**  
**NPT (PIPE THREAD END CONNECTIONS)**  
**SW (SOCKET WELD END CONNECTIONS)**



**Features and Applications**

- Construction : W.B( OS & Y)
- Gasket: Stainless Steel+graphite
- Socket Welding & Threaded ends
- Integral seat
- Design & manufacture: API 602 & ANSI B 16.34
- W.B : WELDED BONNET
- Socket welding dimension :ANSI B 16.11
- Screw end dimension :ANSI B1.20.1 (NPT)
- Inspect and test :API 598
- Body material:A105,LF2,F5,F11,F22,F304L,F316L
- All dimensions could be considered as reference.

Part Number		CLASS	Nominal Diameter	Dimension				Weight	
Pars Regulator				d	L	H(Open)	W	B.B	W.B
NPT	SW			mm	mm	mm	mm	Kg	
GOWNN5C*	GOWCC5C*	1500	3/8"	10	79	166	100	4.8	4.5
GOWNN5C*	GOWCC5C*		1/2"	13	92	170	100	4.7	4.1
GOWNN5C*	GOWCC5C*		3/4"	18	111	193	125	4.7	4.1
GOWNN5C*	GOWCC5C*		1"	23	120	230	160	6.3	6.7
GOWNN5C*	GOWCC5C*		1 1/4"	29	152	246	160	8.8	9.0
GOWNN5C*	GOWCC5C*		1 1/2"	33	172	283	180	12.4	12.1
GOWNN5C*	GOWCC5C*		2"	43	220	325	200	17.5	17

\*Please for Insert the other Part Number(Material, Seat Material, etc.) see page 1



### Description

Check valves are designed to pass flow in one direction with minimum resistance and to prevent reverse or back flow with minimal leakage. The principal types of check valves used are the tee-pattern lift check, the swing check, the tilting-disc check, the Wye-pattern lift check, and the ball check. Check valves are available in sizes from NPS 1/4 (DN 8) through NPS 2 (DN 50). Other sizes may be made available to meet specific size requirements. Depending upon the design requirements of a piping system, a check valve may have butt welding, socket welding, threaded, or flanged ends. They are self-actuated and require no external means to actuate the valve either to open or close. They are fast acting.

### Types of Check Valves

There are several types of check valves having varying body configurations. The following are some commonly used types of check valves:

#### 1. Swing Check Valve

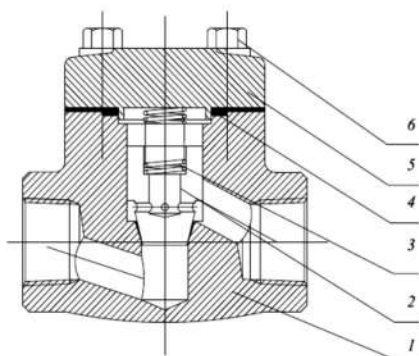
- The disc is unguided when it moves to fully open position or to fully closed position.
- Many different disc and seat designs are available to satisfy requirements of varying applications.
- Soft seated swing check valves provide improved leak tightness compared to metal to metal seating surfaces.
- Combination seats consisting of a metal seat ring with resilient insert also offer better leak tight characteristics.
- The seating angle, the angle between the seat and the vertical plane, may vary from 0 to 45 degrees. Vertical seats have a 0 angle. Larger seat angles reduce the disc travel, resulting in quick closing, thus minimizing the possibility of water hammer. Usually the seat angles are in the range of 5 to 7 degrees.

#### 2. Lift Check Valve

- Adapted for high-pressure service where velocity of flow is high.
- The piston disc is accurately guided by long contact and a close sliding fit with the perfectly centered dash pot.
- The walls of the piston and dash pot are of approximately equal thickness.
- Large steam jackets are located outside of the dash pot and inside the piston to eliminate sticking because of differential expansion.

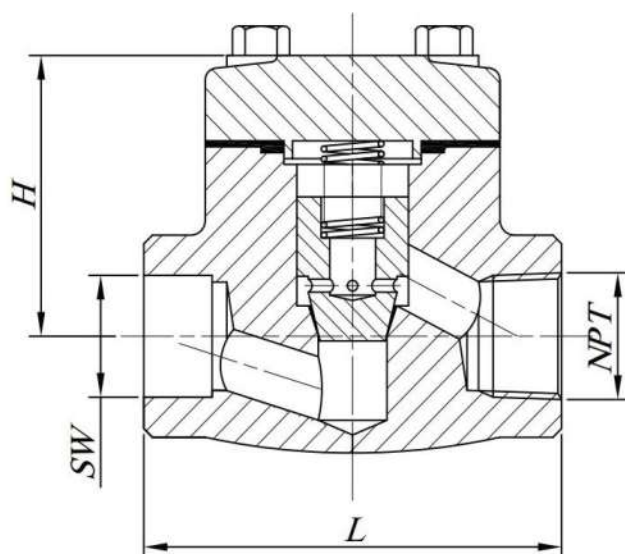
### Application Considerations

- The flow velocity of the fluid through the valve has a significant effect on the life of the check valve.
- The valve should be sized such that the fluid velocity under normal conditions is sufficient to keep the disc fully open and pressed against the stop.
- A swing check valve may be used in the vertical run of a pipe only when the flow is upward.
- In addition, the flow velocity and the fluid pressure must be adequate to overcome the disc weight and swing it to the fully open position.
- A check valve should not be located immediately downstream of a source of turbulence, such as a pump, elbow, control valve, or a tee-branch connection.
- When the flow is suspected to be pulsating and low, use of a swing check valve is not recommended



No.	Component	Material/ASTM SPECIFICATION
1	Body	A105N
2	DISC	A276-419
3	SPRING	S.S 304
4	GASKET	S.S 304+Graphite
5	BONNET	A105N
6	BOLT	ASTM A193-B7M

**CHECK VALVES**  
**NPT (PIPE THREAD END CONNECTIONS)**  
**SW (SOCKET WELD END CONNECTIONS)**



**Features and Applications**

**B.C**

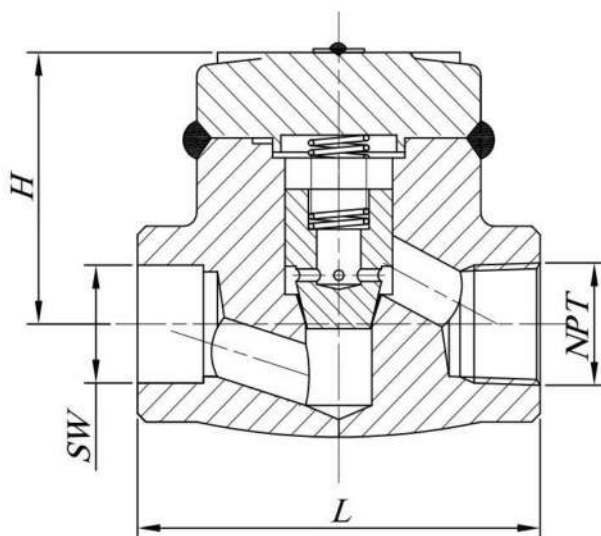
- Reduced or full port
- Construction :B.C (lift check valve)
- Gasket: Stainless Steel+graphite
- Socket Welding & threaded ends
- Integral seat
- Socket Welding dimension : ANSI B 16.11
- B.C : Bolted Cap
- Screw end dimension: ANSI B 1.20.1(NPT)
- Design & manufacture : ANSI B16.34,API 602
- Inspect and test: API 598
- Body material: A105,LF2,F5,F11,F22,F304L,F316L
- All dimensions could be considered as reference.

Part Number		CLASS	Size		Dimension		
Pars Regulator			Reducer Bore	Full Bore	d	L	H
NPT	SW				mm	mm	mm
LCBNN4C*	LCBCC4C*	800	1/4"	-	7	79	62
LCBNN4C*	LCBCC4C*		3/8"	-	7	79	62
LCBNN4C*	LCBCC4C*		1/2"	3/8"	11	79	62
LCBNN4C*	LCBCC4C*		3/4"	1/2"	13	92	63
LCBNN4C*	LCBCC4C*		1"	3/4"	18	111	78
LCBNN4C*	LCBCC4C*		1 1/4"	1"	23	120	82
LCBNN4C*	LCBCC4C*		1 1/2"	1 1/4"	28	152	102
LCBNN4C*	LCBCC4C*		2"	1 1/2"	33	172	120
LCBNN4C*	LCBCC4C*		-	2"	42	220	147

\*Please for Insert the other Part Number(Material, Seat Material, etc.) see page1



**CHECK VALVES**  
**NPT (PIPE THREAD END CONNECTIONS)**  
**SW (SOCKET WELD END CONNECTIONS)**



**Features and Applications**

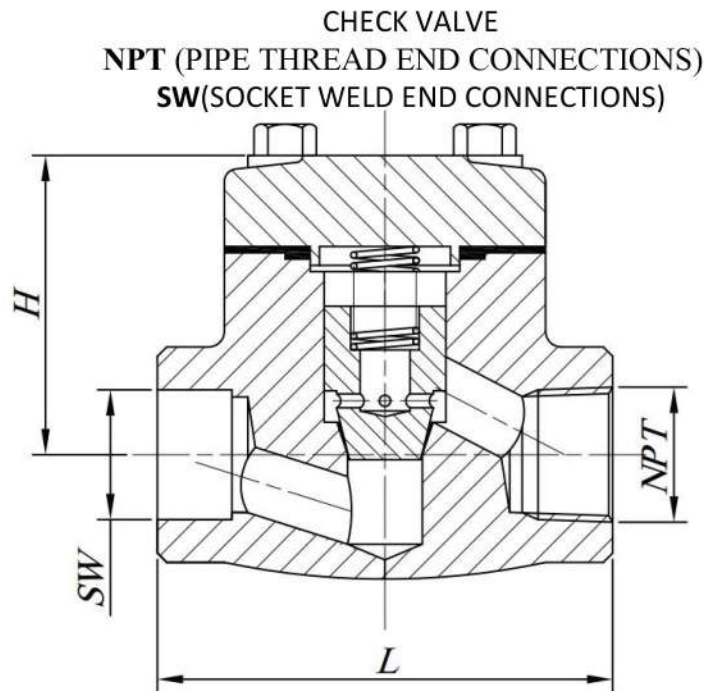
**W.C**

- Reduced or full port
- Construction :W.C (lift check valve)
- Gasket: Stainless Steel+graphite
- Socket Welding & threaded ends
- Integral seat
- Socket Welding dimension : ANSI B 16.11
- W.C : Welded Cap
- Screw end dimension: ANSI B 1.20.1(NPT)
- Design & manufacture : ANSI B16.34,API 602
- Inspect and test: API 598
- Body material: A105,LF2,F5,F11,F22,F304L,F316L

Part Number		CLASS	Size		Dimension		
Pars Regulator			Reducer Bore	Full Bore	d	L	H
NPT	SW				mm	mm	mm
LCWNN4C*	LCWCC4C*	800	1/4"	-	7	79	62
LCWNN4C*	LCWCC4C*		3/8"	-	7	79	62
LCWNN4C*	LCWCC4C*		1/2"	3/8"	11	79	62
LCWNN4C*	LCWCC4C*		3/4"	1/2"	13	92	63
LCWNN4C*	LCWCC4C*		1"	3/4"	18	111	78
LCWNN4C*	LCWCC4C*		1 1/4"	1"	23	120	82
LCWNN4C*	LCWCC4C*		1 1/2"	1 1/4"	28	152	102
LCWNN4C*	LCWCC4C*		2"	1 1/2"	33	172	120
LCWNN4C*	LCWCC4C*		-	2"	42	220	147

\*Please for Insert the other Part Number(Material, Seat Material, etc.) see page 1

Check



### Features and Applications

### B.C

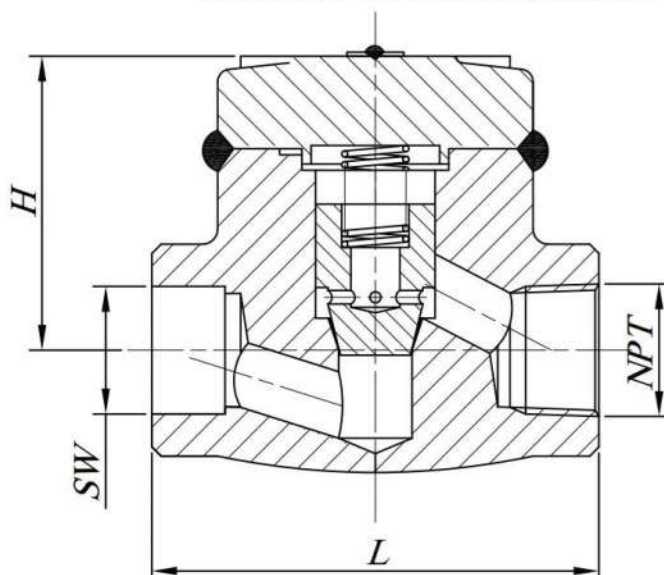
- Construction :B.C (lift check valve)
- Gasket: Stainless Steel+graphite
- Socket Welding & threaded ends
- Integral seat
- Socket Welding dimension : ANSI B 16.11
- Screw end dimension: ANSI B 1.20.1(NPT)
- Design & manufacture : ANSI B16.34,API 602
- Inspect and test: API 598
- Body material: A105,LF2,F5,F11,F22,F304L,F316L
- All dimensions could be considered as reference.

Part Number		CLASS	Nominal Diameter	Dimensions	
Pars Regulator				L	H
NPT	SW			mm	mm
LCBNN5C*	LCBCC5C*	1500	1/2"	92	63
LCBNN5C*	LCBCC5C*		3/4"	111	98
LCBNN5C*	LCBCC5C*		1"	120	104
LCBNN5C*	LCBCC5C*		1 1/4"	152	120
LCBNN5C*	LCBCC5C*		1 1/2"	172	140
LCBNN5C*	LCBCC5C*		2"	220	158

\*Please for Insert the other Part Number(Material, Seat Material, etc.) see page 1



**CHECK VALVE**  
**NPT (PIPE THREAD END CONNECTIONS)**  
**SW(SOCKET WELD END CONNECTIONS)**



**Features and Applications**

**W.C**

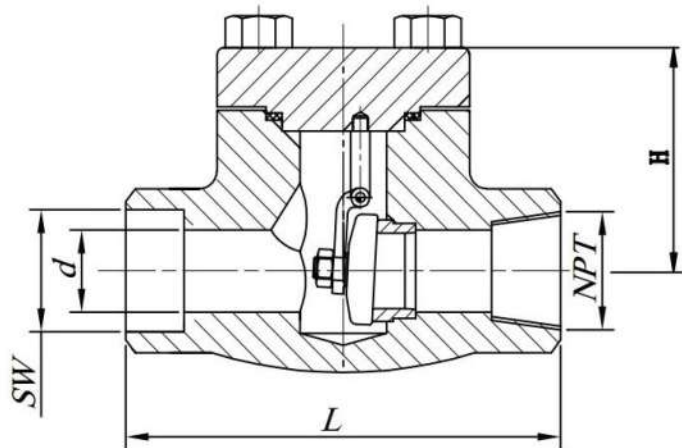
- Construction :W.C (lift check valve)
- Gasket: Stainless Steel+graphite
- Socket Welding & threaded ends
- Integral seat
- Socket Welding dimension : ANSI B 16.11
- W.C : Welded Cap

- Screw end dimension: ANSI B 1.20.1(NPT)
- Design & manufacture : ANSI B16.34,API 602
- Inspect and test: API 598
- Body material: A105,LF2,F5,F11,F22,F304L,F316L
- All dimensions could be considered as reference.

Part Number		CLASS	Nominal Diameter	Dimensions	
Pars Regulator				L	H
NPT	SW			mm	mm
LCWNN5C*	LCWCC5C*	1500	1/2"	92	63
LCWNN5C*	LCWCC5C*		3/4"	111	98
LCWNN5C*	LCWCC5C*		1"	120	104
LCWNN5C*	LCWCC5C*		1 1/4"	152	120
LCWNN5C*	LCWCC5C*		1 1/2"	172	140
LCWNN5C*	LCWCC5C*		2"	220	158

\*Please for Insert the other Part Number(Material, Seat Material, etc.) see page 1

**SWING CHECK VALVE**  
**NPT (PIPE THREAD END CONNECTIONS)**  
**SW(SOCKET WELD END CONNECTIONS)**



**Features and Applications**

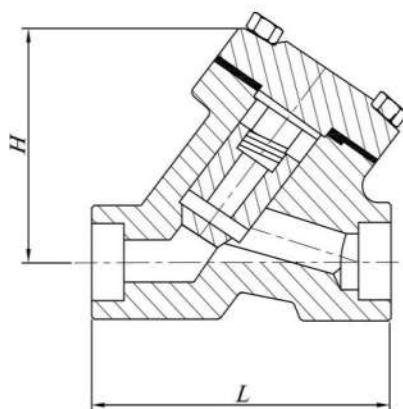
- Reduced or full port
- Construction :B.C swing check valve
- Gasket: Stainless Steel+graphite
- Socket Welding & threaded ends
- Replaceable hard-face seats
- Socket Welding dimension : ANSI B 16.11
- Screw end dimension: ANSI B 1.20.1(NPT)
- Design & manufacture : ANSI B16.34,API 602
- Inspect and test: API 598
- Body material: A105,LF2,F5,F11,F22,F304L,F316L
- All dimensions could be considered as reference.

Part Number		CLASS	Size		Dimension		
Pars Regulator			Reducer Port	Full Port	d	L	H
NPT	SW				mm	mm	mm
SC1NN4C*	SC1CC4C*	800	1/2"	3/8"	10	79	62
SC1NN4C*	SC1CC4C*		3/4"	1/2"	13	92	63
SC1NN4C*	SC1CC4C*		1"	3/4"	18	111	78
SC1NN4C*	SC1CC4C*		1 1/4"	1"	23	120	82
SC1NN4C*	SC1CC4C*		1 1/2"	1 1/4"	28.5	120	1102
SC1NN4C*	SC1CC4C*		2"	1 1/2"	36	140	120
SC1NN4C*	SC1CC4C*		-	2"	42	170	140

\*Please for Insert the other Part Number(Material, Seat Material, etc.) see page 1



Y.Type CHECK VALVE  
NPT (PIPE THREAD END CONNECTIONS)



**B.C**

**Features and Applications**

- Reduced or full port
- Construction :B.C
- Ytype lift check valve with spring & piston
- Gasket: Stainless Steel+graphite
- Socket Welding & threaded ends
- Integral seat
- Socket Welding dimension : ANSI B 16.11
- B.C : Bolted Cap

- Screw end dimension: ANSI B 1.20.1(NPT)
- Design & manufacture : ANSI B16.34,API 602
- Inspect and test: API 598
- Body material: A105,LF2,F5,F11,F22,F304L,F316L
- All dimensions could be considered as reference.

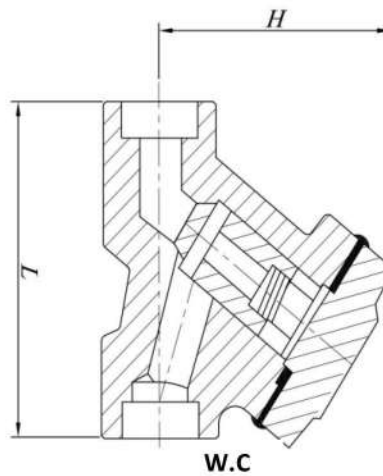
Part Number		CLASS	Nominal Diameter	Dimensions	
Pars Regulator				L	H
NPT	SW			mm	mm
YCBNN4C*	YCBCC4C*	800	3/8"	98	84
YCBNN4C*	YCBCC4C*		1/2"	98	84
YCBNN4C*	YCBCC4C*		3/4"	98	84
YCBNN4C*	YCBCC4C*		1"	120	102
YCBNN4C*	YCBCC4C*		1 1/4"	140	114
YCBNN4C*	YCBCC4C*		1 1/2"	140	115
YCBNN4C*	YCBCC4C*		2"	170	145

Part Number		CLASS	Nominal Diameter	Dimensions	
Pars Regulator				L	H
NPT	SW			mm	mm
YCBNN5C*	YCBCC5C*	1500	3/8"	120	90
YCBNN5C*	YCBCC5C*		1/2"	120	90
YCBNN5C*	YCBCC5C*		3/4"	120	101
YCBNN5C*	YCBCC5C*		1"	140	125
YCBNN5C*	YCBCC5C*		1 1/4"	140	132
YCBNN5C*	YCBCC5C*		1 1/2"	170	143
YCBNN5C*	YCBCC5C*		2"	220	203

\*Please for Insert the other Part Number(Material, Seat Material, etc.) see page 1

Check

**Y.Type CHECK VALVE**  
**NPT (PIPE THREAD END CONNECTIONS)**  
**SW(SOCKET WELD END CONNECTIONS)**



**Features and Applications**

- Reduced or full port
- Construction : W.C
- Ytype lift check valve with spring & piston
- Gasket: Stainless Steel+graphite
- Socket Welding & threaded ends
- Integral seat
- Socket Welding dimension : ANSI B 16.11
- Screw end dimension: ANSI B 1.20.1(NPT)
- Design & manufacture : ANSI B16.34,API 602
- Inspect and test: API 598
- Body material: A105,LF2,F5,F11,F22,F304L,F316L

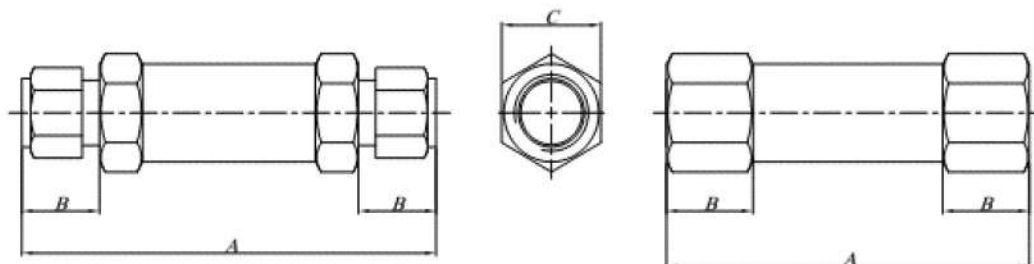
Part Number		CLASS	Nominal Diameter	Dimensions	
Pars Regulator				L	H
NPT	SW			mm	mm
YCWNN4C*	YCWCC4C*	800	3/8"	98	84
YCWNN4C*	YCWCC4C*		1/2"	98	84
YCWNN4C*	YCWCC4C*		3/4"	98	84
YCWNN4C*	YCWCC4C*		1"	120	102
YCWNN4C*	YCWCC4C*		1 1/4"	140	114
YCWNN4C*	YCWCC4C*		1 1/2"	140	115
YCWNN4C*	YCWCC4C*		2"	170	145

Part Number		CLASS	Nominal Diameter	Dimensions	
Pars Regulator				L	H
NPT	SW			mm	mm
YCWNN5C*	YCWCC5C*	1500	3/8"	120	90
YCWNN5C*	YCWCC5C*		1/2"	120	90
YCWNN5C*	YCWCC5C*		3/4"	120	101
YCWNN5C*	YCWCC5C*		1"	140	125
YCWNN5C*	YCWCC5C*		1 1/4"	140	132
YCWNN5C*	YCWCC5C*		1 1/2"	170	143
YCWNN5C*	YCWCC5C*		2"	220	203

\*Please for Insert the other Part Number(Material, Seat Material, etc.) see page 1

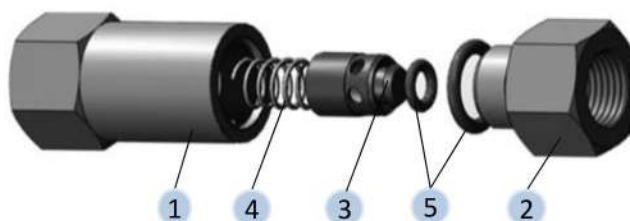


**CHECK VALVE**  
**NPT (PIPE THREAD END CONNECTIONS)**  
**OD (TUBE END CONNECTIONS)**



Part Number	CLASS	End Connection		Dimensions (mm)		
Pars Regulator		Inlet	Outlet	A	B	C
CV01S2FF	6000	1/8"NPT female	1/8"NPT female	55	14	17
CV01S4FF		1/4"NPT female	1/4"NPT female	62	16	22
CV01S6FF		3/8"NPT female	3/8"NPT female	72	20	24
CV01S8FF		1/2"NPT female	1/2"NPT female	80	23	28
CV01S12FF		3/4"NPT female	3/4"NPT female	85	22	41
CV01S16FF		1"NPT female	1"NPT female	97	23	46
CV01S2OD		1/8" O.D.	1/8" O.D.	65	15.5	17
CV01S4OD		1/4" O.D.	1/4" O.D.	73	17.5	20
CV01S6OD		3/8" O.D.	3/8" O.D.	80	19.5	24
CV01S8OD		1/2" O.D.	1/2" O.D.	90	22	28
CV01SM6OD		6mm O.D.	6mm O.D.	73	17.5	20
CV01SM12OD		12MM O.D.	12MM O.D.	90	22	28

All dimensions could be considered as reference.



Check valve		
Component		Valve material Grade/ASTM Specification
1	inlet Body	316 ss/A276
2	outlet Body	316 ss/A276
3	Disk	316 ss
4	Spring	302 ss/A313
5	O-Ring	Viton

### INTRODUCTION

The ball valve is known by a big valve with a spherical body and a round hole. Over recent years the main body of conventional of the ball valve have been developed such that the ball valve is becoming the most popular valve for most process applications. There are two primary designs for the ball valve design.

✓ Flaring Ball Design: This is the most common for the lower duties.

✓ Trunnion Ball Design: This is a more complex design for the higher duties.

The engineering of the ball valve has to include flaring and removing the ball and seal system. Design has to be engineered to enable the valve to be maintained without the method of achieving this is to use the secondary version of the internal seal accessible by removing the seal flange. Another method is to use a three-piece body based on a central piece sandwiched between two end pieces allowing the valve to be removed. These ball valves can be released and moved away from the two end pieces allowing access to all of the valve components.

The ball valve can be engineered as a multi-piece valve for flow-serving duties. An important advantage of all flaring ball valves is that the valve allows certain maintenance operations eg. adding. Ball valves can also be used on branches to enable flow to be isolated and systems during servicing periods.

### ADVANTAGES

- Provides positive shut-off of fluids and gases under extreme service conditions.
- Long life material has increased service life under maximum rated operation in service to meet on flow.
- When long life material is used, reliable performance is achieved, resistance to fatigue cracking, even in highly cyclic applications such as high or cryogenic systems etc.
- A positive seal is achieved by fluid pressure acting on the service face of the ball and reducing any leakage to zero in comparison to other downstream ball valves and the ball.
- Flaring ball valves can be manually actuated (even depending on valve size).
- Diverse use of stem.
- Downstream body for maintenance ease.
- Choice of threaded ends:
- NPS heads to BS21
- NPS heads to ASME B1.20.1
- Sectional body ends to BS3353
- Sectional body ends to ASME B16.11 (e.g. AWS3512)

### MAIN APPLICATIONS

- Standard Design: In accordance with API 607 and DD 17292/BS3353.
- Anomalous Design: In accordance with API 607 and DD 17292.
- Valve ends can be flanged (N, F, M or R) in accordance with ASME B16.3, Sectional Welding, Full Welding, Female & Male Threaded etc.
- The Safe design to BS 6753/ASME B16.3/ API 607, Sectional sealing system provided by a secondary flexible seal. In case of valve soft seats also are provided with secondary metal-to-metal seal on one of the ends.

### SEAL MATERIAL

- Soft seated
- API 607/BS 6753/ASME B16.3/ API 607, Sectional sealing system provided by a secondary flexible seal. In case of valve soft seats also are provided with secondary metal-to-metal seal on one of the ends.

### NON DESTRUCTIVE TESTING

Every valve is subjected on routine basis to different non-destructive testing. Like the dye penetrant test on butt weld ends, on all hard faced and cladding areas. Non-destructive tests are also carried out on the critical areas as defined by ASME B16.34.

On final examination like:

✓ Magnetic particle test ✓ Hydrostatic test ✓ Air test

Personnel performing NDT are trained and qualified to EN 473/ASME-SNT-TC-1A.

Every valve is subjected to a pressure test in accordance with the standard API 598 or BS 6755 Part 1.

The rated pressure for the applicable pressure class is in accordance with ASME B16.34 and EN 12516-1/-2.

### MARKING AND IDENTIFICATION

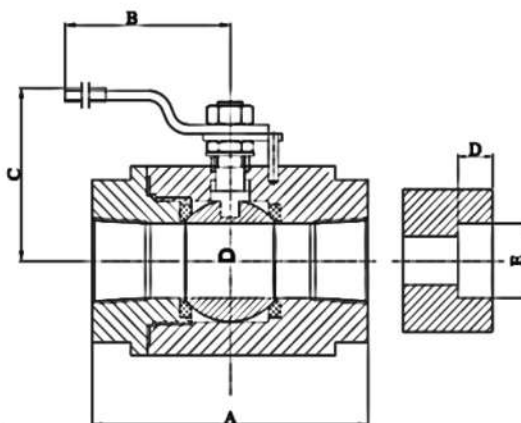
Each valve is identified on proper name plate and on valve body as required by MSS SP-25 and ASME B16.34. Name plate carries all information on rating, size, valve body and trim materials, customer tags.

On body, marking includes material designations (per ASTM) and heat code and for course the trade mark.



## PIPING TWO PIECES FORGED BALL VALVE

NPT (PIPE THREAD END CONNECTIONS) , SW(SOCKET WELD END CONNECTIONS)



### Features and Applications

- Socket Welding & threaded ends
- Socket welding dimension :ANSI B 16.11
- Screw end dimension: ANSI B 1.20.1(NPT)
- Design & manufacture : ANSI B 16.34
- Inspect and test: API 598
- Body material: A105,F304L,F316L
- For service at temperatures ~29 °C and lower, materials shall be specified by the purchaser.
- all dimensions shown are for reference and subject to change without prior notice.

Part Number	CLASS	Size		Dimension							
				End to End		Lever		Center to Top		Ball Bore	
		Reducer Bore	Full Bore	A		B		C		D	
Pars Regulator				mm	in	mm	in	mm	in	mm	in
BA2NN8C*	800	-	1/4"	75	2.95	155	6.1	74	2.91	10	0.39
BA2NN8C*		1/2"	3/8"	75	2.95	155	6.1	74	2.91	10	0.39
BA2NN8C*		3/4"	1/2"	87	3.42	155	6.1	76	2.99	14	0.55
BA2NN8C*		1"	3/4"	105	4.13	170	6.69	98	3.86	19	0.75
BA2NN8C*		1 1/4"	1"	120	4.72	170	6.69	100	3.94	25	0.98
BA2NN8C*		1 1/2"	1 1/4"	130	5.11	230	9.05	120	4.72	32.5	1.29
BA2NN8C*		2"	1 1/2"	140	5.51	230	9.05	124	4.88	38	1.5
BA2NN8C*		-	2"	170	6.69	310	12.2	150	5.9	51	2

Part Number	CLASS	Size		Dimension							
				End to End		Lever		Center to Top		Ball Bore	
		Reducer Bore	Full Bore	A		B		C		D	
Pars Regulator				mm	in	mm	in	mm	in	mm	in
BA2NN5C*	1500	-	1/4"	80	3.15	155	6.1	76	2.99	10	0.39
BA2NN5C*		1/2"	3/8"	80	3.15	155	6.1	76	2.99	10	0.39
BA2NN5C*		3/4"	1/2"	85	3.34	170	6.69	91	3.58	14	0.55
BA2NN5C*		1"	3/4"	110	4.33	170	6.69	96	3.86	19	0.75
BA2NN5C*		1 1/4"	1"	120	4.75	230	9.05	119	4.68	25	0.98
BA2NN5C*		1 1/2"	1 1/4"	140	5.51	230	9.05	124	4.88	32.5	1.29
BA2NN5C*		2"	1 1/2"	160	6.3	310	12.2	147	5.79	38	1.5
BA2NN5C*		-	2"	200	7.87	400	15.75	168	6.61	51	2

SOCKET WELD DIMENSION	6		10		15		20		25		32		40		50	
	1/4		3/8		1/2		3/4		1		1-1/4		1-1/2		2	
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
	11	0.44	11	0.44	12.7	0.5	14.5	0.57	16	0.63	75.5	0.69	19	0.75	22	0.86
	14.2	0.555	17.6	0.69	21.8	0.855	27.02	1.067	33.9	1.33	42.7	1.675	48.8	1.915	61.2	2.4

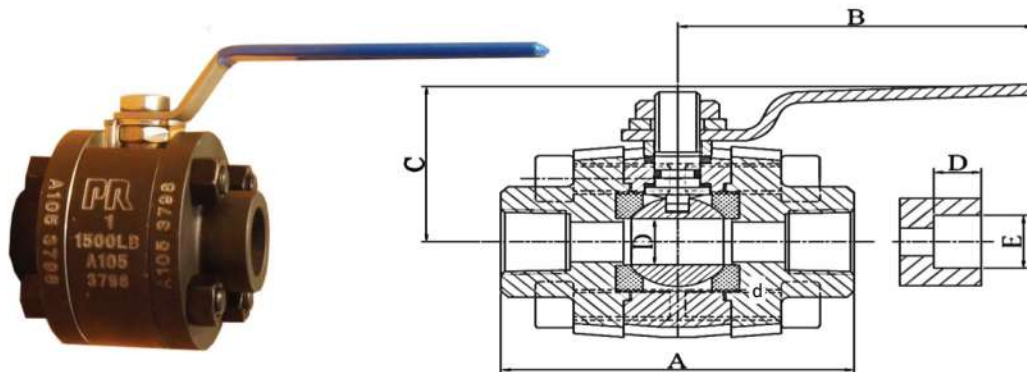
\*Please for Insert the other Part Number(Material, Seat Material, etc.) see page 1





**Pars Regulator Co.**

## PIPING THREE PIECES FORGED BALL VALVE



### Features and Applications

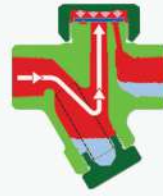
- Socket Welding & threaded ends
- Socket welding dimension :ANSI B 16.11
- Screw end dimension: ANSI B 1.20.1(NPT)
- Design & manufacture : ANSI B 16.34
- Inspect and test: API 598
- Body material: A105,F304L,F316L
- For service at temperatures -29 °C and lower, materials shall be specified by the purchaser.

Part Number	CLAS	Size		Dimension							
				End to End		Lever		Center to Top		Ball Bore	
		Reducer Bore	Full Bore	A		B		C		D	
Pars Regulator	S			mm	in	mm	in	mm	in	mm	in
BA3NN8C*	800	-	1/4"	75	2.95	155	6.1	74	2.83	10	0.39
BA3NN8C*		1/2"	3/8"	75	2.95	155	6.1	74	2.83	10	0.39
BA3NN8C*		3/4"	1/2"	75	2.95	155	6.1	76	2.99	14	0.55
BA3NN8C*		1"	3/4"	87	3.42	155	6.1	98	3.86	19	0.75
BA3NN8C*		1 1/4"	1"	110	4.33	170	6.69	100	3.94	25	0.98
BA3NN8C*		1 1/2"	1 1/4"	120	4.72	230	9.05	120	4.72	32.5	1.29
BA3NN8C*		2"	1 1/2"	140	5.51	230	9.05	130	5.12	38	1.5
BA3NN8C*		-	2"	160	6.29	310	12.2	150	5.9	51	2

Part Number	CLASS	Size		Dimension							
				End to End		Lever		Center to Top		Ball Bore	
		Reducer Bore	Full Bore	A		B		C		D	
Pars Regulator				mm	in	mm	in	mm	in	mm	in
BA3NN5C*	1500	-	1/4"	75	2.95	155	6.1	76	2.99	10	0.39
BA3NN5C*		1/2"	3/8"	75	2.95	155	6.1	76	2.99	10	0.39
BA3NN5C*		3/4"	1/2"	87	3.42	170	6.69	91	3.58	14	0.55
BA3NN5C*		1"	3/4"	110	4.33	170	6.69	96	3.86	19	0.75
BA3NN5C*		1 1/4"	1"	120	4.75	230	9.05	119	4.68	25	0.98
BA3NN5C*		1 1/2"	1 1/4"	140	5.51	230	9.05	124	4.88	32.5	1.29
BA3NN5C*		2"	1 1/2"	160	6.3	310	12.2	147	5.79	38	1.5
BA3NN5C*		-	2"	200	7.87	400	15.75	168	6.61	51	2

SOCKET WELD DIMENSION	6		10		15		20		25		32		40		50	
	1/4		3/8		1/2		3/4		1		1-1/4		1-1/2		2	
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
	11	0.44	11	0.44	12.7	0.5	14.5	0.57	16	0.63	75.5	0.69	19	0.75	22	0.86
	14.2	0.555	17.6	0.69	21.8	0.855	27.02	1.067	33.9	1.33	42.7	1.675	48.8	1.915	61.2	2.4

\*Please for Insert the other Part Number(Material, Seat Material, etc.) see page 1



**STEAM TRAPS**  
Thermodynamics

## PR PRODUCT Memos

1

The Thermo-Dynamic® disc trap is one of the most popular steam traps on the market today. The cost effective, compact design makes the TD ideal for drainage of steam mains, steam tracing lines and small process equipment where size, as well as efficient operation are important.

2

Discharge from the TD is close to steam temperature; therefore, the steam space is kept free from condensate. The tight shut-off the TD provides prevents valuable steam from being wasted. These factors combine to optimize the steam system efficiency.





## Thermodynamic Steam Traps

### Series 711/721 Disc Trap - UniBody (Thermodynamic)

The Series 711/721 UniBody Plus disc trap is designed for light load applications such as steam tracing, steam line drip, and turbine drain. These traps are fully renewable in-line, energy efficient and easy to check.

The 711 is a simple straightway body.

The 721 is a straightway body and has an integral wye strainer and blowoff valve.

Both bodies accept the same renewal capsules without removing the bodies from the line. The standard capsule performs best when applied in service up to 450 psig. The HP capsule has been designed for 150-650 psig service to handle



#### Ratings

Design: 600 psig, 750°F

Operating: 4 to 450 psig/750°F  
[0.3 to 31 bar/400°C]

#### 711HP/721HP only

Design: 650 psig, 750°F

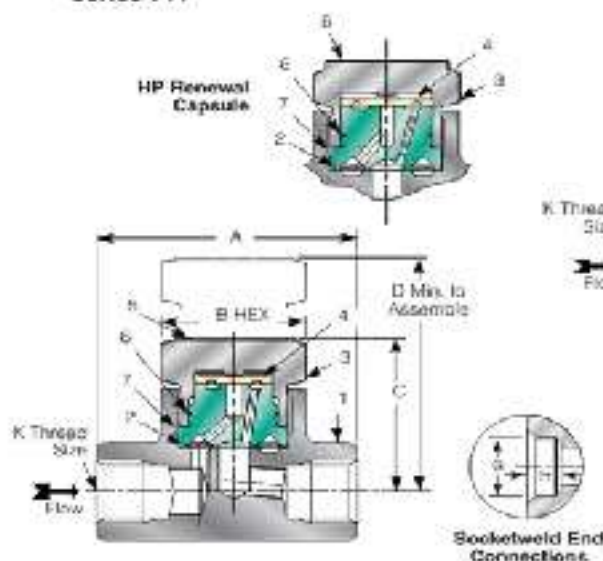
Operating: 150 to 650 psig/750°F  
[10.3 to 45 Bar/400°C]

#### Applicable Codes and Standards

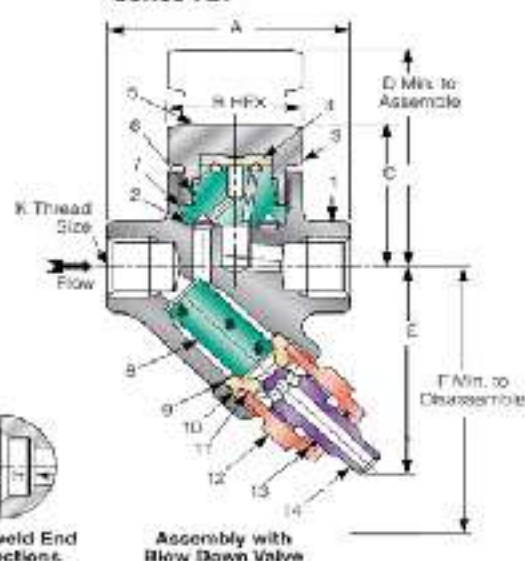
End connections per ANSI

B1.20.1 for threaded ends, per

Series 711



Series 721





### Series 711/721 Disc Trap -UniBody

item	Part	Material
1 <sup>1</sup>	Body	Carbon Steel A105
2 <sup>2</sup>	Seat Gasket	Stainless Steel
3 <sup>2</sup>	Bonnet	ASTM A-582 Type 416/ASTM A276 TYPE410 or 420/ ASTM A276 TYPE 403 OR EQU.
4 <sup>2</sup>	Disc	Stainless Steel HT
5 <sup>2</sup>	Name Plate	Stainless Steel
6 <sup>2</sup>	Retaining ring	ASTM A313 TYPE 302 OR EQU.
7 <sup>2</sup>	Seat	Stainless Steel HT
8	Screen	Stainless Steel 304\304L
9 <sup>3</sup>	Cap Gasket	ASTM A276 TYPE 316L/304L With Silver Coated
10 <sup>3</sup>	Blowdown Seat	ASTM A-582 Type 416/ASTM A276 TYPE410 or 420/ ASTM A276 TYPE 403 OR EQU.
11 <sup>3</sup>	Retaining ring	ASTM A313 TYPE 302 OR EQU.
12 <sup>3</sup>	Blowdown Body	ASTM A-582 Type 416/ASTM A276 TYPE410 or 420/ ASTM A276 TYPE 403 OR EQU.
13 <sup>3</sup>	O-Ring	Silicon
14 <sup>3</sup>	Blowdown Valve	ASTM A-582 Type 416/ASTM A276 TYPE410 or 420/ ASTM A276 TYPE 403 OR EQU.
15 <sup>4</sup>	Strainer Cap	ASTM A-582 Type 416/ASTM A276 TYPE410 or 420/ ASTM A276 TYPE 403 OR EQU.
16 <sup>4</sup>	Plug 3/8 NPT	Carbon Steel A105
17 <sup>4</sup>	Blank Strainer Cap	Stainless Steel

1.Optional Weather Cap for Outdoor use

2.Part of factory assembled renewal capsule

3.Factory assembled blowdown valve renewal kit

4.Optional Strainer Caps

#### Unit Dimensions \* : mm

Trap Size inch	A	B	C	D	E	F	G	H	K
3/8	80	38	49	68	73	100	17.6	9.5	NPT
1/2	80	38	49	68	73	100	21.8	9.5	NPT
3/4	81	38	49	68	73	100	27.2	12.7	NPT
1	100	38	49	68	86	113	33.9	12.7	NPT

\* All dimensions could be considered as reference

### Series 129Y Impulse Trap -UniBody

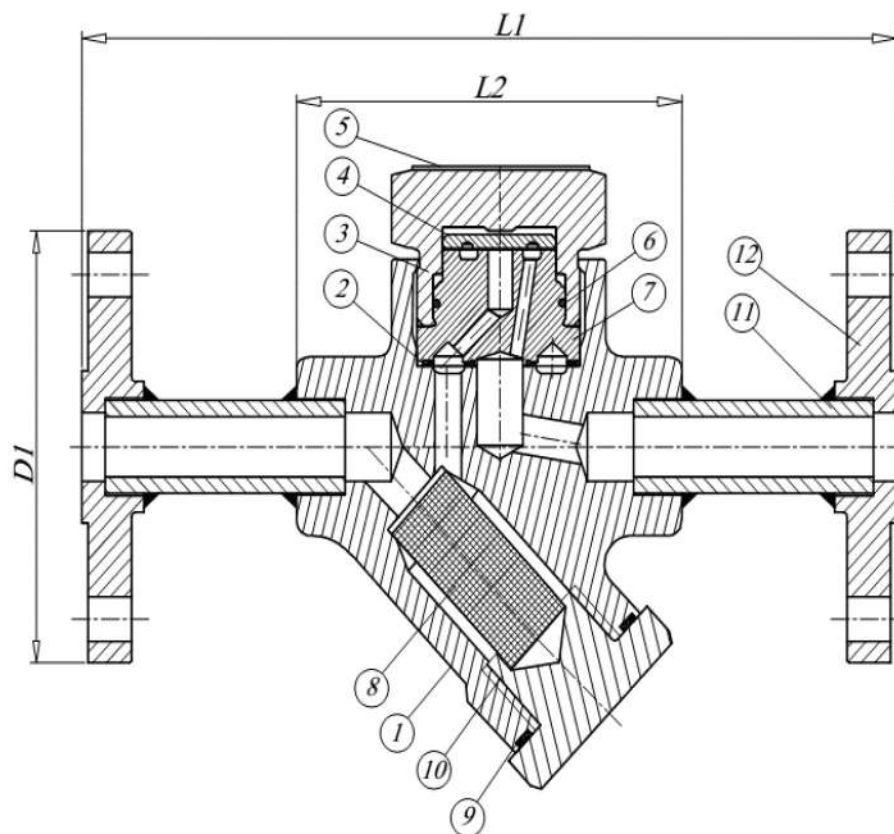
The series 129Y disc traps are designed for light loads such as steam tracing and steam line drip. The 129Y trap may also be used for small process applications

#### Applicable Codes and Standards

End connections per ANSI B1.20.1 for threaded ends, per ANSI

#### Operating:

3/8", 1/2", 3/4" 129Y 400 psi, 750°F



### Series 129Y Impulse Trap -UniBody

item	Part	Material
1	Body	Carbon Steel A105
2	Seat Gasket	Stainless Steel
3	Bonnet	ASTM A-582 Type 416/ASTM A276 TYPE410 or 420/ ASTM A276 TYPE 403 OR EQU.
4	Disk	Stainless Steel HT
5	Name Plate	Stainless Steel
6	Retaining Ring	ASTM A313 TYPE 302 OR EQU.
7	Seat	Stainless Steel
8	Screen	Stainless Steel 304/304L
9	Cap Gasket	ASTM A276 TYPE 316L/304L With Silver Coated
10	Screen Cap	Carbon Steel A105
11	Pipe	ASTM A106 Grade B
12	Flange	Carbon Steel A105

#### Unit Dimensions \* : mm

Trap Size inch	L1	L2	D1*
1/2	210	80	89
3/4	220	81	99

\*D1: FLANGE #150

\* All dimensions could be considered as refrence



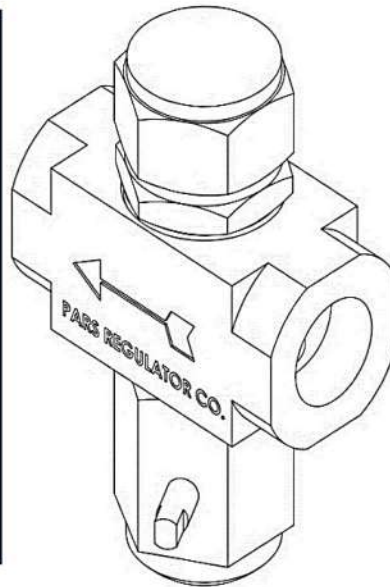


**Pars Regulator Co.**

## Series 121/131 Disc Trap Thermodynammic (Tilting Disc Impulse)

The Series 121/131 Tilting Disc Impulse disc trap is designed for light load applications such as steam tracing, steam line drip, and turbine drain. These traps are fully renewable in-line, energy efficient and easy to check. The 121 is a simple straightway body. The 131 is a straightway body and blowoff valve.

Both bodies accept the same renewal capsules without removing the bodies from the line. The standard capsule performs best when applied in service up to 450 psig. The HP capsule has been designed for 150-650 psig service to



### Ratings

Design: 600 psig, 750°F  
Operating: 4 to 450 psig/750°F  
[0.3 to 31 bar/400°C]

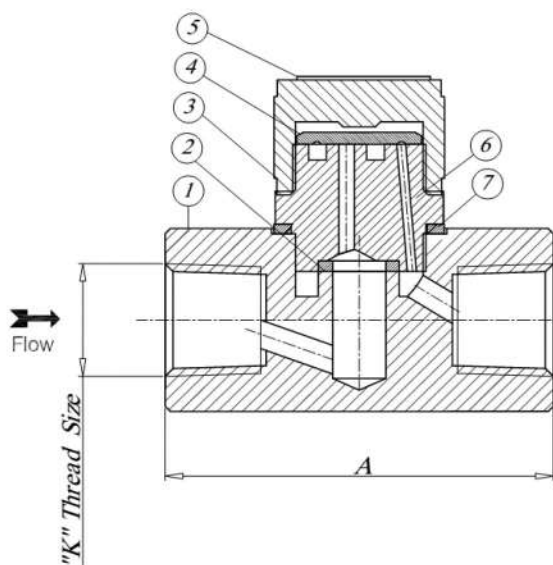
### 130 HP only

Design: 650 psig, 750°F  
Operating: 150 to 650  
psig/750°F  
[10.3 to 45 Bar/400°C]

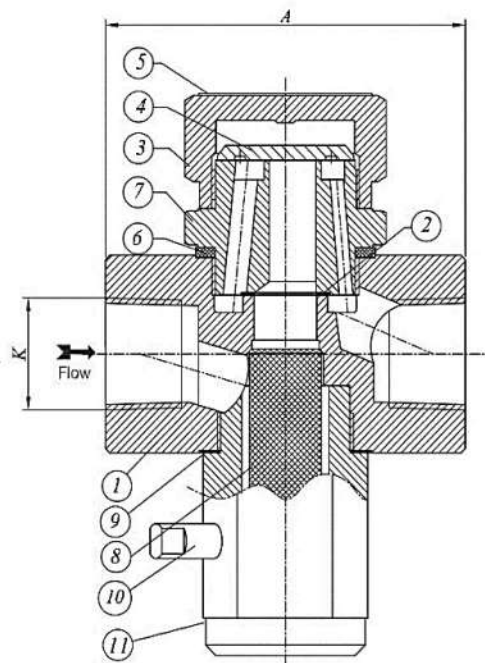
### Applicable Codes and Standards

End connections per ANSI  
B1.20.1 for threaded ends, per ANSI  
B16.11 for socket-welding ends

### SERIES 121



### SERIES 131



### Series 121/131 Disc Trap Thermodynamic (Tilting Disc Impulse)

item	121		131	
	Part	Material	Part	Material
1	Body	Carbon Steel A105	Body	Carbon Steel A105
2	Seat Gasket	Stainless Steel	Seat Gasket	Stainless Steel
3	Bonnet	**	Bonnet	**
4	Disc	Stainless Steel HT	Disc	Stainless Steel HT
5	Name Plate	Stainless Steel	Name Plate	Stainless Steel
6	Seat	Stainless Steel HT	Gasket	Stainless Steel
7	Screen	Stainless Steel 304/304L	Seat	Stainless Steel HT
8	Cap Gasket	ASTM A276 TYPE 316L/304L With Silver Coated	Screen	Stainless Steel 304/304L
9	Blowdown Body	**	Cap Gasket	ASTM A276 TYPE 316L With Silver Coated
10	Blowdown Seat	**	Blowdown Valve	**
11	/	/	Blowdown Body	**
12	/	/	**	**
13	/	/	**	**

\*\*ASTM A-582 Type 416/ASTM A276 TYPE410 or 420/ ASTM A276 TYPE 403 OR EQU.

#### SERIES 121

Unit Dimensions \* : mm

Trap Size inch	A	K
1/2	65	1/2" NPT
3/4	85	3/4" NPT

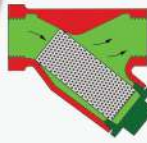
#### SERIES 131

Unit Dimensions \* : mm

Trap Size	A	K
3/8	80	3/8" NPT
1/2	80	1/2" NPT
3/4	81	3/4" NPT
1	100	1" NPT

\* All dimensions could be considered as reference





# INDUSTRIAL STRAINER

Basket, Conical, Tee and Y Type

## PR PRODUCT Memos

1

T-Strainers are compact and used in applications where space is restricted. The standard T-strainer includes a screen suitable for high pressures, which is easy to maintain and replace and capable of filtration of more than 200% of the inlet area. Tee Type Strainers are a low cost solution to large nominal bore straining requirements. This strainer can be easily installed and requires minimal maintenance. T Type Strainer can be used in both vertical and horizontal installations.

2

Y Strainers are designed to protect piping system components such as pumps, meters, control valves, steam traps, regulators etc. from damage caused by dirt or debris in flowing liquids or gases. Y Strainers may be installed in either a vertical or horizontal position, however it is important to ensure the screening element is located on the "down-side" of the strainer body so the entrapped material can properly collect in it.





### Strainers Types

- ✓ FINEST STRAINERS
- ✓ Canals strainers
- ✓ T-type strainers
- ✓ Double flange type strainers
- ✓ Permanent strainers
- ✓ Y-type strainers
- ✓ Ball float strainers
- ✓ Dual basket strainers
- ✓ Canister strainers
- ✓ Self-cleaning strainers
- ✓ TEMPORARY STRAINERS

### Y Type Strainers

Y Strainers are designed to protect a piping system from debris such as sludge, insects, corrosion by-products, scale, regulators etc. from damage caused by dirt & debris flowing through pipes or gases. These strainers are removed by means of a perforated sleeve mechanism or by means of a handle. This makes them generally available in either a fixed or a sliding guide, depending on the size of the strainer to be fitted.

The Y Strainer has a removable filter, allowing the wire mesh to be removed, cleaned out and then re-mounted into the body. Y Strainers are mostly installed into lines where frequent cleaning of the filter is not required. In lines where there is heavy sediment it is advisable to install basket strainers.

Y Strainers may be installed in either a vertical or horizontal position, however it is important to ensure the screening element is located on the "downside" of the strainer body so the unwanted material can easily collect in it.

They are most commonly used in a vertical line, gas or liquid, but can also be used in a horizontal position too. Y-Strainer has the advantage of being able to be installed in either a horizontal or vertical position, however, in both cases, the screening element "leg" must be on the "downside" of the strainer body so that unwanted solids can be easily collected and held for disposal.

### T Type Strainers

T-strainers are common and used in a few cases where space is restricted. The standard T-strainer includes a screen suitable for high pressures, which is easy to maintain and replace and capable of filtering of more than 200% of the nominal line diameter. They are made of stainless steel or forged steel or wire mesh supported by perforated screen. For T-type Strainers a low cost design is a large nominal line size with low pressure. The strainer can be easily installed and requires minimal maintenance. T-strainers are provided with a lock bolt and a nut and a spring cover for easy access and safety. T-type Strainer can be used in both vertical and horizontal positions.

### Canal Strainers

Canal Strainers are used in steam, water or for gas service, and are installed between two flanges for a purpose of downstream protection. They are used either vertically, or where both is of a horizontal line. They are made of stainless steel or forged steel, or wire mesh supported by perforated screen. Canal Strainers are installed with the use of the cone facing the direction of flow. Canal Strainers are designed to collect debris around the outer edges of the cone, because this is a mechanically stronger structure.

### Basket Type Strainers

Strainers are specifically excluded from the requirements of ASME Section VIII, Division 1, under paragraph UG-117, except those, due to the similarity of a pressure boundary and, today's quality manufacturers use the ASME Design for Guide from. In fact, most of the strainers can be fabricated and can be "full" welded pressure vessel.

**Industrial Strainer Selection Considerations:**

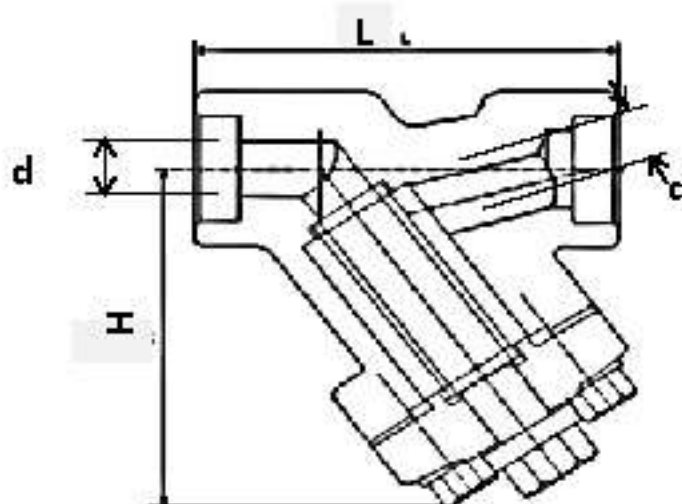
- ✓ Pressure Drop and Velocity ✓ Minimum Allowable Working Pressure ✓ Perforation, Slot or Mesh Size ✓ Open Area Ratio ✓ Viscosity ✓ Dirt Loading ✓ Flow Rate ✓ Particle Size ✓ Service Temperature ✓ Life Cycle Cost ✓ Limited Downtime ✓ Material Selection

**Basket Selection:**

- ✓ Perforated Plate ✓ Wire Cloth ✓ Wedgewire (Wall Screen)

## S.W (NPT) Y Strainer

CL 800



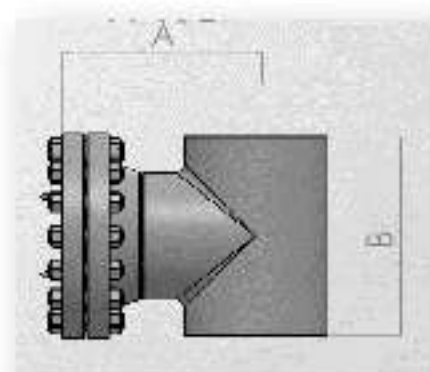
### Features and Applications

- Construction :B.C Y Type
- Gasket:Stainless steel + graphite
- Socket Welding & threaded ends
- Socket welding dimension :ANSI B 16.11
- Screw end dimension: ANSI B 1.20.1(NPT)
- Design & manufacture : API 602, ANSI B 16.34
- Inspect and test: API 598
- Body material: A105,LF2,F5,F11,F22,F304L,F316L
- All dimensions could be considered as reference.

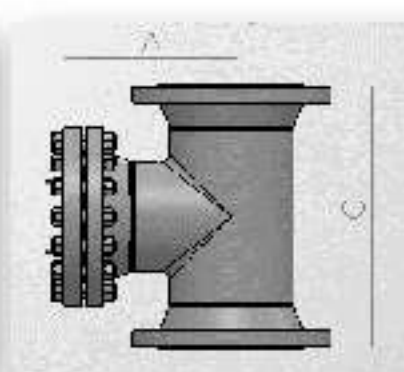
### Dimensions

Narminal diameter	mm(in)	15(1/2)	20(3/4)	25(1)	32(1 1/4)	40(1 1/2)	50(2)
d	mm	11	13	18	23	28	33
L	mm	98	98	120	140	140	170
H	mm	86	86	105	118	120	145
Weight	Kg	2.7	2.5	6.3	8.2	9.2	10.3

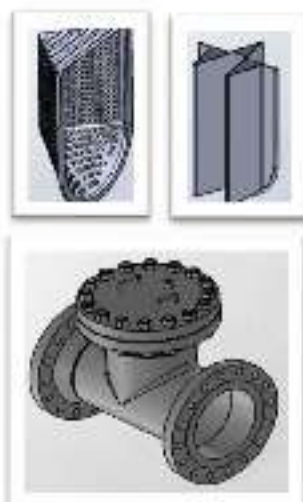
## Tee Type Strainer



**BW**



**RF-RTJ**



### Dimensions And Weights

SIZE	Class 150 lb					Class 300 lb					Class 600 lb					Class 900 lb					Class 1500 lb				
	D	A	e	RgBW	RgRT	A	e	RgBW	RgRT	A	e	RgBW	RgRT	A	e	RgBW	RgRT	A	e	RgBW	RgRT	A	e	RgBW	RgRT
2"	1.31	4.8	2.9	9	15	159	267	13	26	177	286	15	26	203	346	31	43	228	346	31	43				
2 1/2"	1.72	6.2	3.12	16	26	197	311	21	37	215	356	24	41	246	391	36	66	269	422	38	78				
3"	2.16	8.7	3.8	24	38	225	382	38	62	259	426	52	88	284	456	66	104	305	473	87	117				
4"	2.86	11.6	4.9	43	66	286	483	71	111	323	534	106	172	359	581	126	226	446	648	261	272				
5"	3.56	14.6	5.9	71	107	333	578	109	171	382	636	154	276	424	696	211	381	566	884	342	467				
6"	4.32	18.1	6.25	111	161	384	627	181	269	448	756	269	451	492	816	336	585	685	963	568	772				
8"	5.68	24.1	7.7	161	239	438	768	256	384	592	832	346	596	566	924	456	796	846	1162	824	1157				
10"	6.66	28.5	8.8	222	324	486	846	354	536	636	963	438	692	683	1068	583	986	746	1187	1188	1615				
12"	8.16	37.2	10.9	273	393	511	962	449	675	675	979	589	845	845	1065	706	1198	796	1268	1393	2163				
14"	9.46	42.6	12.6	332	474	565	1064	563	821	826	1067	744	1176	766	1169	846	1296	846	1375	2096	2836				
20"	12.2	57.2	16.1	422	598	669	1346	688	1038	976	1156	928	1464	764	1283	1171	1386	948	1568	2889	3624				
24"	16.4	68.5	18.6	666	838	673	1261	982	1458	753	1283	1311	2071	896	1486	2046	1466	1686	1718	424	5776				

- Dimensions and weights are approximate.
- Standard blow off plug M" 3/4" NPT
- Flanged ends to ANSI B16.5
- BW ends to ANSI B 16.25.



[illegible]



تاریخ: ۹۹/۱۱/۱۸  
شماره: ۱۱۱۵۸۸  
پیوست:



شرکت نفت و گاز پارس  
(سهامی خاص)

مدیرعامل محترم شرکت پارس رگولاتور

موضوع: تأییدیه ورود به فهرست سازندگان مجاز شرکت نفت و گاز پارس

باسلام،  
باگشت به نامه شماره ۹۶/۲۹/۴۹۷۳ مورخ ۹۶/۶/۱۱ و مدارک ارائه شده به اطلاع می‌رساند  
استفاده از محصولات تولیدی آن کارخانه شامل Needle valve تا سایز یک اینچ و کلاس  
۳۰۰۰psi و ۶۰۰۰psi و Tube Fitting تا سایز یک اینچ و کلاس ۳۰۰۰psi و ۶۰۰۰psi و  
Manifold تا سایز ۱/۲ اینچ و کلاس ۳۰۰۰psi و ۶۰۰۰psi مطابق با مشخصات فنی پروژه‌ها و  
تأیید بازرسی شخص ثالث (TPA) و با نظارت کارفرما و پیمانکار در حین ساخت و منوط به تأمین  
کلیه اقلام مورد نیاز از فهرست سازندگان مورد تأیید شرکت نفت و گاز پارس به مدت ۸ ماه مورد  
تأیید می‌باشد.  
بدینوسیله است تمدید مدت مذکور منوط به درخواست آن شرکت، ارزیابی مجدد و انجام اصلاحات  
ذکر شده در پیوست خواهد بود.

با تشکر

غلامرضا جنت آبادی

رئیس ارزیابی و توسعه نظام پیمانکاران و سازندگان

www.nipc.ir



شرکت نفت و گاز پارس  
(سهامی خاص)

"اسمه تعالی"

به: مجریان محترم طرح‌های توسعه پارس جنوبی  
از: رئیس ارزیابی و توسعه نظام پیمانکاران و سازندگان

موضوع: شرکت پارس رگولاتور

باسلام و احترام

پیرو بررسی مدارک ارسالی و بازدید بعمل آمده و در راستای حمایت از سازندگان داخلی،  
شرکت مذکور به منظور تولید شیرآلات مشروحه ذیل، برای سرویس شیرین و به شرط رعایت الزامات  
قراردادی، استانداردهای مرجع و تولید مطابق با مشخصات فنی پروژه‌ها به مدت یکسال مورد تأیید قرار  
گرفته است:  
- Gate Valve از سایز ۱/۸ تا ۲ اینچ و کلاس ۱۵۰ تا ۹۰۰  
- Globe Valve از سایز ۱/۸ تا ۲ اینچ و کلاس ۱۵۰ تا ۹۰۰  
- شیر توپی (Ball Valve) از سایز ۱/۸ تا ۲ اینچ و کلاس ۱۵۰ تا ۶۰۰ و به شرط تأمین Ball از  
سازندگان معتبر و مورد تأیید شرکت نفت و گاز پارس.

PARS REGULATOR  
IN CLIENTS AVL  
AVL (APPROVED VENDOR LIST)

شماره: ۶۶۲۹۶  
تاریخ: ۱۳۹۶/۰۸/۲۴  
پیوست:

تجارت  
شرکت نفت مناطق مرکزی ایران  
(سهامی خاص)



"اقتصاد مقاومتی: اقدام و عمل"

مدیرعامل محترم شرکت پارس رگولاتور

موضوع: تأییدیه ثبت شرکت در فهرست منابع شرکت نفت مناطق مرکزی ایران

با سلام

احتراماً، عطف به نامه شماره ۹۶/۲۹/۴۴۶۱ مورخه ۹۵/۵/۲۸ به اطلاع می‌رساند نام شرکت پارس رگولاتور  
جهت موارد ذیل در فهرست منابع مورد تأیید شرکت نفت مناطق مرکزی به ثبت رسیده است این گواهی صرفاً به  
درخواست آن شرکت محترم صادر گردیده و ارزش دیگری ندارد.

مضافاً اینکه فراگرفتن نام آن شرکت در دستور لیست لزوماً هیچگونه تعهدی جهت خرید ایجاد نمی‌نماید.

این گواهی از تاریخ صدور بدست دوسال اعتبار دارد.

لازم بذکر است محصولات تأیید شده در سامانه جامع وزارت نفت نیز ثبت می‌باشند.

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و لوله‌های GATE-BALL-GLOBE تا ۲ اینچ کلاس ۱۵۰۰ PSI

- فیتینگ و یابپ فیتینگ تا ۲ اینچ

شاک پناهی

رئیس واحد شناسایی و بررسی منابع

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تلفن: ۸۷۵۲۰ - کد پستی: ۱۵۹۳۶۴۴۴۱۴ - www.icofc.ir

شرکت مهندسی و ساختمان صنایع نفت



اسمه تعالی

تاریخ: ۱۳۹۵/۶/۲۳  
شماره: ۵۲/۲/۱۵۵۷  
پیوست: ندارد

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جناب آقای حسن روحانی  
مدیر محترم عامل  
شرکت پارس رگولاتور

موضوع: اعلام نتیجه بازدید و ارزیابی شرکت "پارس رگولاتور"

باسلام،

احتراماً، ضمن تشکر از همکاری آن شرکت محترم در انجام فرآیند ارزیابی شرکت‌های سازنده ایرانی، بدین وسیله به  
اطلاع می‌رساند با بررسی اطلاعات و مدارک ارسالی در قالب شناسنامه و پیرو بازدید صورت گرفته، در زمینه تولید

اقلام ذیل:

- 1- Pressure Tube Fitting
- 2- Pressure Pipe Fitting
- 3- Needle Valve - Block & Bleed Valve - Manifold
- 4- Ball, Gate, Globe Valve (small size)
- 5- Steam Trap
- 6- Filter (انواع مختلف)

بر اساس شاخص‌های ارزیابی مورد نظر، امتیاز ۷۶/۷ از ۱۰۰ و رتبه B توسط آن شرکت محترم کسب گردیده  
است.

نتایج حاصله در پرونده شرکت پارس رگولاتور با کد ۸۶۵۸ در سیستم بررسی منابع (Sourcing) شرکت مهندسی و  
ساختمان صنایع نفت (OIEC) ثبت و در زمان مقتضی و با در نظر گرفتن شرایط و اقراسات هر پروژه از آن شرکت  
محترم برای حضور در مناقصات آتی دعوت به عمل خواهد آمد.

اعتبار این نامه از تاریخ صدور به مدت ۲ سال بوده و رتبه اخذ شده توسط آن شرکت هیچگونه تعهدی جهت خرید  
ایجاد نمی‌نماید.

فتح بیاتانی  
مدیر بازرگانی

تهران، خیابان کامرانیه جنوبی، نبش کوچه پهلوان، شماره ۴ - پستی: ۹۴۷۷۵۱۲۵۱  
تلفن: ۶۳۳۴۳۳۸۰۰۵ - فکس: ۶۳۳۴۳۳۸۰۵۱

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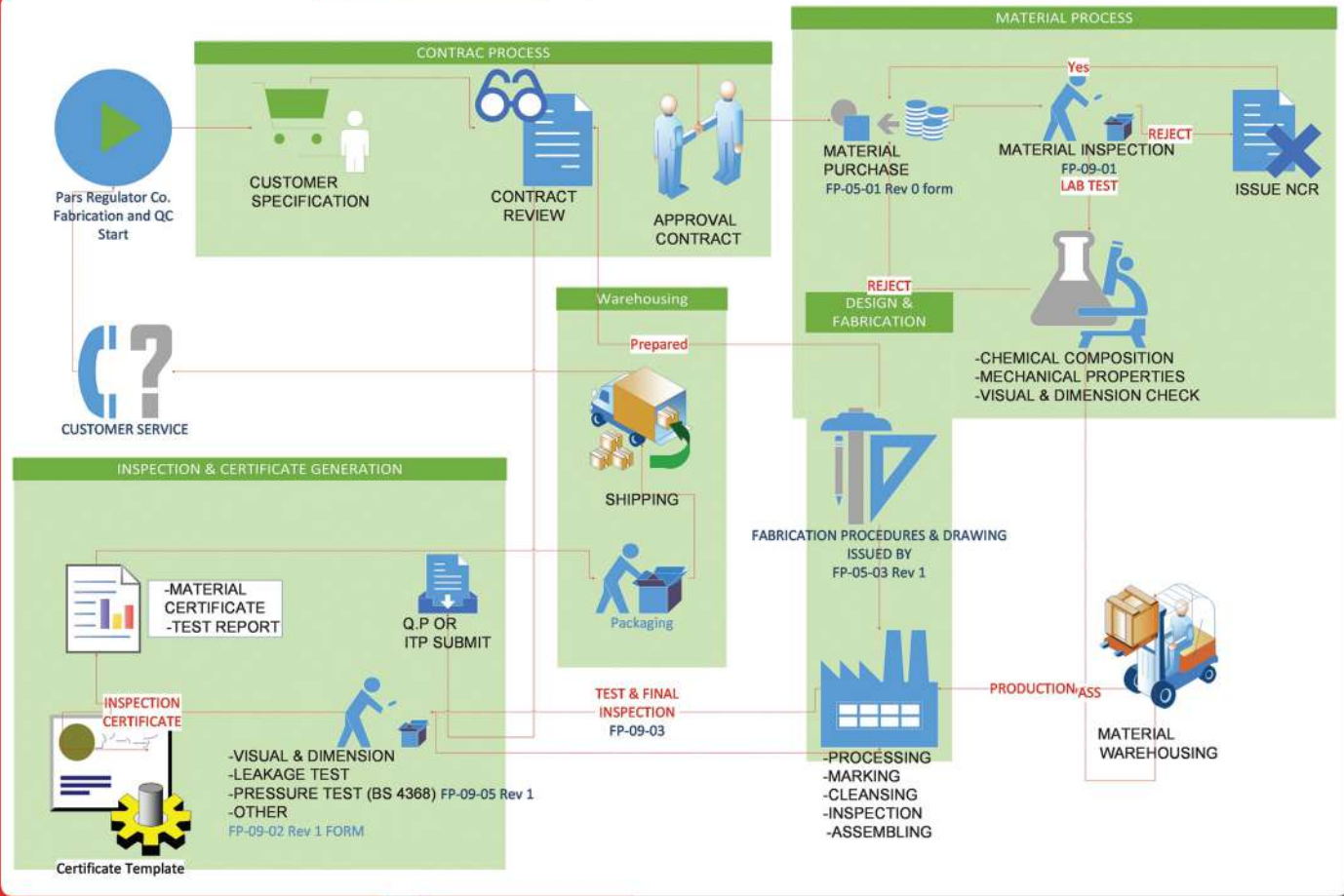




NATIONAL PETROCHEMICAL COMPANY(NPC) AND NATIONAL IRANIAN OIL REFINING AND DISTRIBUTION COMPANY



# PARS REGULATOR QC FLOWCHART



## PR SAMPLE CERTIFICATE

### MILL TEST & INSPECTION CERTIFICATE

According to EN10204: 3.1

Customer: شرکت مجتمع گاز پارس جنوبی

Order No.: 03111

Cert.No.: PR-1208-CE03111-1

REQ.No.: O-9540043-MRS

BLOCK & BLEED VALVE

Date: 12/17/2017



Pars Regulator Co.  
2nd Floor, #46 Building, Karimkhan St.  
1584893117, Tehran - IRAN  
Tel: (+98-21) 88 30 77 66(pbx)  
Fax: (+98-21) 88 83 41 40  
URL: www.parsregulator.com  
Email: info@parsregulator.com

An ISO 9001: 2008 Registered Manufacturer



Row	Item no.	Qty. (pcs)	Serial NO:	Description	Valve Component Part				Valve Component Material				Raw MaterialTraceability No.		Raw MaterialHeat NO .				
1	1	8	665-694	SINGLE BLOCK & BLEED VALVES SIZE:2" FLG *3/4" NPTF BS 5351/API 6D CLASS 150LB, RF NACE MR0175	BODY				ASTM A182 F321 NACE MR0175				14675-1		7056				
					CLOSURE				ASTM A182 F321 NACE MR0175				14480-1		69701				
					BALL				AISI S.S 316/316L				LY101004		C-17				
					STEM				AISI S.S 316/316L				10612-3		6042				
					SEAT				PTFE				11400-1		6981				
					NEEDLE VALVE				ASTM A182 F316/316L				19593-3		3892				
					NEEDLE VALVE (STEM)				17-4PH				2545-1		443567				
					NEEDLE VALVE (DISC)				17-4PH+STL				2545-1, 18331-1		443567, 239920				
PLUG				AISI S.S 316/316L				6164-1		3467									
Chemical Composition ASTM A182 F321 (Percent)														Mechanical Properties					
2-1	Elements			Product Code	C	Si	Mn	P	S	Cr	Mo	Ni	Cu	Fe	Tensile Strength(Mpa)	Yield Strength (Mpa)	Hardness (HB)	Elongation (%)	Reduction Area(%)
	(Body)			7056	0.015	0.42	1.77	0.038	<0.005	17.55	0.29	9.29	0.51	BASE	550	302	180	53	69
	(Closure)			69701	0.017	0.49	1.88	0.032	0.006	17.82	0.26	9.52	0.39	BASE	520	300	193	50	45
Chemical Composition ASTM A182 F316/316L (Percent)														Mechanical Properties					
2-2	Elements			Product Code	C	Si	Mn	P	S	Cr	Mo	Ni	Cu	Fe	Tensile Strength(Mpa)	Yield Strength (Mpa)	Hardness (HB)	Elongation (%)	Reduction Area(%)
	(Ball)			C-17	0.022	0.727	0.714	0.031	0.004	18.296	2.259	9.143	-	BASE	-	-	-	-	-
	(Stem)			6042	0.038	0.54	1.40	0.040	0.021	16.90	2.10	10.70	0.41	BASE	683	539	222	42	75
	(Needle valve)			3892	0.014	0.37	1.59	0.039	0.023	16.89	2.03	10.46	0.41	BASE	638	355	172	51	77
	(Plug)			3467	0.02	0.55	1.03	0.025	<0.003	16.3	2	10.1	0.48	BASE	629	490	191	43	77
Chemical Composition 17-4PH (Percent)														Mechanical Properties					
2-3	Elements			Product Code	C	Si	Mn	P	S	Cr	Mo	Ni	Cu	Fe	Tensile Strength(Mpa)	Yield Strength (Mpa)	Hardness (HB)	Elongation (%)	Reduction Area(%)
	(Needle valve-Stem)			443567	0.018	0.39	0.86	0.023	0.016	15.98	0.16	4.43	3.29	BASE	1213	1151	378	14	58
	(Needle valve-Disc)			443567	0.018	0.39	0.86	0.023	0.016	15.98	0.16	4.43	3.29	BASE	1213	1151	378	14	58
Chemical Composition Stellite Wire (Percent)														Mechanical Properties					
2-4	Elements			Heat NO	C	Si	Mn	P	S	Cr	Mo	Ni	Cu	Fe	Tensile Strength(Mpa)	Yield Strength (Mpa)	Hardness (HB)	Elongation (%)	Reduction Area(%)
	(Stellite)			239920	1.2	1.1	0.01	0.007	0.004	30	0.03	2.8	0.003	2.8	-	-	533(HV)	-	-
3	Test Standard			Pressure/Shell Test				Pressure/Seat Test				Pressure/Air Test				Inspection			
				Pressure	Fluid	Duration	Results	Pressure	Fluid	Duration	Results	Pressure	Fluid	Duration	Results	DIMENTIONAL	OK	OK	OK
	API 598/ASME B16.34			30 bar	WATER	120 Sec	OK	22 bar	WATER	120 Sec	OK	6 bar	AIR	120 Sec	OK	OPERATIONAL COATING	OK	OK	N/A

Remark(s): NACE MR 0175/ISO 15156. Fire Safe API 607/BS 6753. Visual & Dimensional is Satisfactory.

Pars Regulator Co. Hereby Declares that the Product(s) Supplied are in Compliance with the Related Standard(s), Requirement(s) of the Order and Supplies Test Result(s). The Certificate is Valid with Hologram.



Pars Regulator valves are manufactured in a wide range of materials, supplied by the best available steel mills, forged by well known forgery with outstanding equipment and experience. All the material in the chemical composition and the mechanical characteristic.

Material Group	Common Name	Pars Regulator Code	Nominal Type	UNS	Forging Spec. (ASTM)	Castings Spec. Equivalent	DIN	DIN Ni-Mo	Application Notes
Carbon Steel	CS	A103H	Carbon-Fe	A03004	A103H	A216-WCB	C22.8	L046	General non-corrosive from -20F (-28C) to 800F (427C)
Low Temperature Carbon Steel	LCS	LP2	Carbon-Fe	A03011	A350-LP2	A350-LCB A350-LCC	1518.3A.3	L0366	General non-corrosive from -20F (-28C) to 800F (427C)
Low Alloy Steel	Alloy Steel Chromium-Nickel	P11, CL2	1/4 Cr-1/2 Mn	N11372	A132-F11	A216-WCB	1300M040	L735	Up to 1000F (538C)
High Alloy Steel		P5	3/4 Cr-1/2 Mn	N11343	A132-F5	A21-F5	1307M010.3	L7362	High temperature service
Stainless Steel	Austenitic S.S. Steel 300 series S.S. Steel	P304	18Cr-8Ni	S30400	A182-F304	A351-F304	DIN A351-N1.8.9	L4810L	0.008% min. carbon for temp > 1000F (538C)
		P304L	18Cr-8Ni (C<0.03)	S30403	A182-F304L	A351-F304	A351-F304	L4810L	Up to 800F (427C)
		P316	16Cr-12Ni-2Mn (C<0.03)	S31600	A182-F316	A351-F316	DIN A351-N1.8.10	L4810L	0.008% min. carbon for temp > 1000F (538C)
		P316L	16Cr-12Ni-2Mn (C<0.03)	S31603	A182-F316L	A351-F316	A351-F316	L4810L	Up to 800F (427C)
		P321	18Cr-10Ni-1Ti	S32100	A182-F321		A351-F321	L4810L	0.008% min. carbon (grade F321) and Heat treated at 2000F (1100C) for service temp > 1000F (538C)
Austenitic Stainless Steel	F40-18Cr-10Ni	P6	18Cr	S41000	A182-F6	A351-F40.1.3			18% Cr Steel (min. nominal)
		L34PH		S14900	A350 UNS S14900	A350 UNS S14900	A351-F40.1.4	L4810L	
Super Austenitic Steel	Super Austenitic 9Ni	90AL	40Fe-20Ni-21Cr-9Ni	N08904	B409-N08904		21MCDU 2.3-2.0	L4810L	
Duplex Steel	Duplex 220.3	P22	22Cr-5Ni-3Mn-4N	S32203	A182-F22	A351-F22	A351-F22	L4810L	Service to 600F (316C)-the original S32203 UNS designation has been supplemented by S32203 which has higher minimum N, O, and H <sub>2</sub> O.
Super Duplex Steel	Super Duplex 250.7	P25	25Cr-7Ni-4Mn-4N	S32700	A182-F25	A351-F25	A351-F25	L4810L	Service to 600F (316C)
Nickel-Copper	Inconel 400	Inconel	67Ni-35Cu	N04400	B409-N04400	A409-N04400	DIN 1.7730	2.4843	



## SOFT SEAT MATERIAL

CODE	P.R. Co. DESIGNATION	CHEMICAL NAME/ DESIGNATION	TEMPERATURE RANGE	APPLICATION
S0	P.T.T.C	Polytetrafluoroethylene	-200 to 260°C	Virgin PTFE is used as a standard material for its high lubricity and superior sealing up to 260°C. It is white in colour.
S1	R.P.T.T.C/Glass	Polytetrafluoroethylene glass filled	-60 to 260°C	Reinforced PTFEs are made with glass filled PTFE (20%). They are harder than virgin PTFE with colour which goes from blue to purple.
S2	R.P.T.T.C/Carbon Graphite	Polytetrafluoroethylene carbon/graphite filled	-100 to 260°C	Reinforced PTFE with (20%) carbon and 5% graphite. These are black in colour.
S3	POH	Polyoxymethylene acetal resin	-50 to 100	This material is very rigid. It has a combination of strength, stiffness, hardness, dimensional stability, toughness, and good resistance to abrasion resistance, low wear and low friction. It can withstand pressure up to 5000 PSI depending on its size. Do not use in oxygen service.
S4	PDD	Polydimethylsiloxane	-60 to 260°C	PM is recommended for high temperature (up to 260°C) but it is very hard compared to other non-metallic materials. Not applicable for concentrated sulphuric acid.
S5	NYLON 12	Polyamide 12	-60 to 220°C	Nylon 12 is more suitable than PTFE for higher pressure but has a limited range in temperature.
S6	NYLON 12	Polyamide 12	-60 to 220°C	Nylon 12 is more suitable than PTFE for higher pressure but has a limited range in temperature.
S7	NYLON 6	Polyamide 6	-10 to 140°C	Nylon 6 films are tough, possessing high tensile strength, as well as being dry and clean. They are widely used in high pressure containers and chemicals such as acids and alkalis.
S8	PMMA	Polymethylmethacrylate	-20 to 200°C	They have further improved resistance to high temperatures and chemicals and even withstand environments where oxygen plasma are present for many hours.
S9	MIR	Methylmethacrylate rubber	-20 to 100°C	MIR is rubber like material more resistant to oils and acids, and has superior strength but has inferior flexibility.
60	Silicon	-	-60 to 260°C	Silicon is a semi-conducting material which is used as a good resistance to compression etc. Low physical strength and abrasion resistance combined with high flexion (it is called as a pressure sensitive material). Silicon is used primarily for dry heat static seals.
61	Graphite	-	-100 to 600°C	Graphite is used as a sealant for high temperature. No suitable material is available for use in presence of oxidizing atmosphere.
62	EPDM	Ethylene propylene diene monomer	-50 to 150°C	The main properties of EPDM are its outstanding heat, ozone, and weather resistance. The elastomer is a good resistance to acids and alkalis. It is an excellent electrical insulating material. It is a good resistance to ageing, oxidative stability, and stability.
63	Kalor	Polytetrafluoroethylene	-200 to 260°C	PTFE has high tensile strength and good chemical characteristics. It is non-flammable and the heat resistance is up to 175°C. It has a low coefficient of thermal expansion.

**General Specification and Standard**

Valve Type	Gate	Globe	Ball	Check
	API 600	API 600	API 600	API 600
Shell Wall Thickness	API 600	BS 1414	BS 1873	BS 1868
General Valve Design Specifications	ASME/ANSI B16.34			
Pressure-Temperature rating	ASME B16.10			
Face to face or End to end dimensions	ASME B16.10			
End flange dimensions Gasket Contact Facing	ASME/ANSI B16.5			
	ASME B16.25			
Buttwelding end dimensions	ASME B16.11			
welding end dimensions	ASME/ANSI B1.1, B18.2.1, B18.2.2			
Bolt and Nut, thread	ASME/ANSI B1.1, B18.2.1, B18.2.2			
Test and Inspection	Chemical Composition	Relevant ASTM		
	Mechanical property test	Relevant ASTM		
	Pressure test	API 598, BS 5146 and ASME/ANSI B16.34		
	Dimensional inspection	Relevant valve Standard		
	Visual inspection	MSS-SP 55		

Note: Valves For Servicing sour gases or other Hydrogen Sulfide bearing hydrocarbon fluids, PR offers NACE valves made of component material specially heat treatment and hardness controlled in conformity with NACE MR-01-75 standard.

**BODY, BONNET AND CAP MATERIAL**

Description	Carbon steel ASTM A105	Low Temp. Steel per ASTM A350 LF2	Alloy Steel ASTM A182	Austenitic SS ASTM A182			
				304	316	304L	316L
Carbon %	0.35 max.	0.30 max.	F11	0.08 max.	0.08 max.	0.035 max.	0.035 max.
Manganese %	0.6-1.5	1.035 max.	0.10-0.20	20 max.	20 max.	20 max.	20 max.
Phosphor max. %	0.04	0.035	0.030	0.040	0.040	0.040	0.040
Sulphur max. %	0.05	0.04	0.040	0.03	0.03	0.030	0.030
Silicon %	0.35 max.	0.15-0.30	0.5-1.0	1.0 max.	1.0 max.	1.0 max.	1.0 max.
Nickel %	0.04 max.	0.040 max.	-	8.00-11.00	10.00-14.00	8.00-13.00	8.00-15.00
Chromium %	0.30 max.	0.30 max.	1.00-1.5	18.00-20.00	16.00-18.00	18.00-20.00	16.00-18.00
Molybdenum %	0.12 max.	0.12 max.	0.44-0.65	-	2.0-3.0	-	2.00-3.00
Copper %	0.4 max.	0.40 max.	-	-	-	-	-
Vanadium %	0.03 max.	0.03 max.	-	-	-	-	-
Columbium %	0.02 max.	0.02 max.	-	-	-	-	-
Tensile min. (MPa)	485	485-655	515	515	515	485	485
Yield min. (MPa)	250	250	310	205	205	170	170
Elongation min. %	22	22	20	30	30	30	30
Reduction %	30	30	30	50	50	50	50
HB max.	187	187	156-207	-	-	-	-
PREN				17.5-20.8	23.1-28.5	19.4-23.0	23.1-28.5





Pars Regulator Co.

## PRESSURE-TEMPERATURE RATING

The following table indicates rated values of temperature and pressure for main materials of valves. These values are determined according to American standard ASME/ANSI B16.34.

Temperature (°C)	Max. Working Pressure (bar)																			
	150					300					600					900				
	A182 F304	A182 F304L	A182 F316	A182 F316L	A182 F316L	A350 LF2	A182 F304	A182 F304L	A182 F316	A182 F316L	A350 LF2	A182 F304	A182 F304L	A182 F316	A182 F316L	A350 LF2	A182 F304	A182 F304L	A182 F316	A182 F316L
-29 to 38	19.6	19.0	15.9	19.0	15.9	51.1	49.6	41.4	49.6	41.4	102.1	99.3	82.7	99.3	82.7	153.2	148.9	124.1	148.9	124.1
50	19.2	18.3	15.3	18.4	15.3	50.1	47.8	40.0	48.1	40.0	100.2	95.6	80.0	95.6	80.0	150.4	143.5	120.1	144.3	120.1
100	17.7	15.7	13.3	16.2	13.3	46.6	40.9	34.8	42.2	34.8	93.2	81.7	69.6	84.4	69.6	139.8	122.6	104.4	126.6	104.4
150	15.8	14.2	12.0	14.8	12.0	45.1	37.0	31.4	38.5	31.4	90.2	74.0	62.8	77.0	62.8	135.2	111.0	94.2	115.5	94.2
200	13.8	13.2	11.2	13.7	11.2	43.8	34.5	29.2	35.7	29.2	87.6	69.0	58.3	71.3	58.3	131.4	103.4	87.5	107.0	87.5
250	12.1	12.1	10.5	12.1	10.5	41.9	32.5	27.5	33.4	27.5	83.9	65.0	54.9	66.8	54.9	125.8	97.5	82.4	100.1	82.4
300	10.2	10.2	10.0	10.2	10.0	39.8	30.9	26.1	31.6	26.1	79.6	61.8	52.1	63.2	52.1	119.5	92.7	78.2	94.9	78.2
325	9.3	9.3	9.3	9.3	9.3	38.7	30.2	25.5	30.9	25.5	77.4	60.4	51.0	61.8	51.0	116.1	90.7	76.4	92.7	76.4
350	8.4	8.4	8.4	8.4	8.4	37.6	29.6	25.5	30.3	25.5	75.1	59.3	50.1	60.7	50.1	112.7	88.9	75.2	91.0	75.2
375	7.4	7.4	7.4	7.4	7.4	36.4	29.0	24.8	29.9	24.8	72.7	58.1	49.5	59.8	49.5	109.1	87.1	74.3	89.6	74.3
400	6.5	6.5	6.5	6.5	6.5	34.7	28.4	24.3	29.4	24.3	69.4	56.9	48.6	58.9	48.6	102	85.3	72.9	88.3	72.9
425	5.5	5.5	5.5	5.5	5.5	28.8	28.0	23.9	29.1	23.9	57.5	56.0	47.7	58.3	47.7	86.3	84.0	71.6	87.4	71.6
450	4.6	4.6	4.6	4.6	4.6	23.0	27.4	23.4	28.8	23.4	46.0	54.8	46.8	57.7	46.8	69.0	82.2	70.2	86.5	70.2
475	3.7	3.7	3.7	3.7	3.7	17.4	26.9	26.7	26.7	26.7	34.9	53.9	57.3	57.3	57.3	52.3	80.8	86.0	86.0	86.0
500	2.8	2.8	2.8	2.8	2.8	11.8	26.5	26.2	26.2	26.2	23.5	53.0	56.5	56.5	56.5	35.3	79.5	84.7	84.7	84.7





# TEST BENCHES

& Reporting

## TEST TYPES:

1

- Hydrostatic testing
- Proof and Leak Testing
- Gas or Air testing
- Vibration testing
- Impulse and shock testing

## CONCEPT OF PR TEST BENCHES

2

- Pars Regulator test benches are designed for durability, ease of use and accessibility. These test benches can be equipped for use with oil, water, air, gas or any combination of test medium. Pars Regulator test bench could be set up for hydrostatic testing with water and/or leak testing with gas or air.

## PR TEST BENCH FEATURES:

3

- Operators of the Pars Regulator's Test Bench can't change any initial config data (according to related test standards values and conditions). Test Report will be prepared for print, after test result approved by Test Bench.







MALARD WAREHOUSE



FITTING WAREHOUSE



ABBAS ABAD, PLANT 3,4

# PARS REGULATOR CORP. (PJS)

MANUFACTURER, STOCKIST AND TRADING PRIVATE JOINT STOCK (PJS) COMPANY SINCE 1988



High Pressure Instrumentation Tube Fitting, Valve, Manifold  
Ball Valves, Single/Double Block and Bleed Valve, Pipe Fitting, thermodynamic  
Steam Traps, Filters, etc





**STRAINER  
& STEAM  
TRAP**

Design,  
Manufacturing  
& Testing of  
**VALVES**

Speed, **Service,**  
**System, Quality & Delivery.**  
**Our Concern is Quality not Quantity**

We become stronger as much as your request gets more sophisticated, so it makes us grant your wishes with highest quality.

Pars Regulator is able to manufacture many varieties of Valves, Strainer, Steam Trap, Filtration Equipment, Flange, Pipe & Tube Fitting, different types of Sampling Packages, etc and Petrochemical Refineries tools according to customer's request.

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