

VÁLVULAS



## Product Catalog

### **Ball Valves:**

Flanged, Screwed  
end & Full Port

### **Plug Valves**





# INDEX



<b>Valves Brand OYM</b>	<b>1</b>
<b>Valve Type Ball</b>	<b>3</b>
<b>Special valves</b>	<b>4</b>
<b>Screwed end ball valves</b>	<b>6</b>
<b>Flanged Ball Valves Type # 150</b>	<b>7</b>
<b>Flanged Ball Valves Type # 300</b>	<b>12</b>
<b>Full Port Flanged Ball Valves</b>	<b>17</b>
<b>Full Port Screwed ball valves</b>	<b>26</b>
<b>type plug valves</b>	<b>31</b>
<b>How to Select your Valves</b>	<b>35</b>

# OYM VALVE

In 1970 a group of Mexican industrialists, decided to form a company to manufacture ball valve brand OYM MR Jamesbury licensed in Mexico.

So OYM brand which currently has a reputation for manufacturing the valves, with the same quality and standards was born.

Since its inception, this company has been to integrate with standard raw materials and components of national origin of the highest quality. Undoubtedly today OYM MR has the best quality ball valves made in Mexico.



VÁLVULAS



# BALL VALVE





# CONCEPT

## Ball Valve

Ball Valve "Double Stamp" uses an ingenious but highly technical principle, where we spin a perforated sphere with mirror polished outer surface for virtually reduced to zero friction at an angle of 0 to 90, every time we close or open fluid flow we want to control.

Sphere we endure in a metal body by two packaging material which is mainly manufacturing polymer technology more advanced chemical resistance that exists in the world: TEFLON, whose molecular chain can break only one of four commercial halogen in highly concentrated form that are used in the market.

The geometry of the packaging design ensures complete tightness in the valve operation eliminates lifetime thereof need to be lubricated, the package is automatically adjusted to the pressure change, positive or negative (vacuum), temperature and wear suffered during the years of operation of the fluid to be handled. The two packages are always working together for double sealing.

The material of construction of the valve body in our own foundry manufacture according to user requirements in a wide range of metals ensuring handling 99.5% and any fluid within a pH of 1 to 13.

The manufacture of the valves is governed strictly within the specifications of international standards such as: ASTM, ASA, MSS, Ci, ASME, ANSI, UL, NACE, soft seat valve. Being the most robust valve which is manufactured OAM. Maintenance, and after a long and mainly handle very dirty and abrasive media use is limited mainly to the change in sphere packings and in very few cases. The availability of parts is immediate. Our valve guarantees the reduction of production costs and lower maintenance to a minimum you can get any type of existing valve on the market.

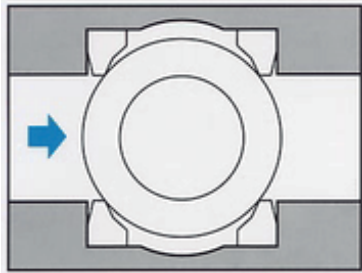
## HIGHLIGHTS

### Outstanding Features

- Valve body one to two parts only.
  - various alloying metals with high resistance to corrosion fluid according to the user to determine: Type 316 Stainless Steel,
- Carpenter 20, 17PH, Monel, Hastelloy C, etc.
- Laminar flow only: The flow diameter of the sphere is uniform and smooth.
- Increase your life well eliminate cavitation (implosion).
- bidirectional valve is also operated in any position.
- Complete operation with only a quarter turn.
- Total tightness.
- No lubrication throughout his life.
- Manual or automatic operation.
  - Accepts any type of auto attendant, the valve body is designed
- for mounting them from the factory.
- Packaging of high technology with automatic adjustment for changes in pressure and temperature.
- Its construction is more robust to ensure a long life.
  - It is the most "economic" valve, long life high resistance to attack by corrosive fluids,
- tightness and ease of maintenance reduces the high cost of downtime Plants.
- Immediate availability of parts.
  - When a high volume of fluid to be controlled designs have "full step" for both ball valves flanged
- threaded as required.



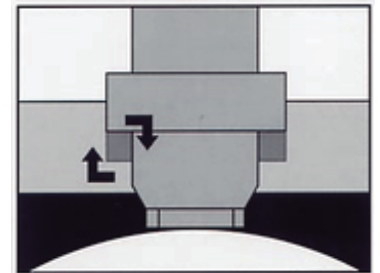




**SEALING CONCEPT:** The design of the packaging kept constant pressure on the field even if they suffer wear multiple operations. Furthermore the fluid pressure exerted on the flexible lip gasket produces a first seal and fluid pressure on the ball causes it to push the flexible lip of the second producing a second seal gasket.



**UNIQUE DESIGN OF PACKAGING:** The flexible lip design cantilever package maintains a constant pressure on the sphere automatically compensating for wear, changes in temperature and fluid pressure ensures a very large number of cycles of operation of the valve.



**SEAL STEM:** The stem seal design is based on the possibility of leakage between two surfaces causing the fluid to travel along a maze occupied by a PTFE packing box section very low frictional resistance is eliminated, which compressed by adjusting the bonnet screws, seal any possibility of leakage.

## VALVE STYLE "A" WITH SCREWED ENDS

Available in various materials of construction, with seating and selected closures. Of particular interest to the passage of acids, alkalis, petroleum products, water, etc.. Complete drive by a quarter turn of key and double lip seal with patented adjustment. Sizes: (. 6.4 to 50.8 mm) 1/4 to 2 inches

## SAFETY VALVES FIRE PROOF (AZ)

Approved for use in the hydrocarbon industry, conform to the strict standards of the American Petroleum Institute (API). In case of fire if the heat does cause loss of soft valve seats, metallic side block seats with absolute effectiveness, the passage of fluid through it. Extreme thread: 1/4 to 2 inches (6.4 to 50.8 mm). With flange, in the series of 150 and 300 pounds. ANSI: 1/2 to 14 inches (12.7 to 356 mm.).

## VALVES FOR CHLORINE (AC)

Designed especially for chlorine, liquid or gaseous state, with certainty. Available in various materials of construction for its perfect adaptation to the service that will be designed.

Mix 0-20 ppm - carbon steel.

Mix 20-50 ppm - carbon steel Monel or Hastelloy C inside.

Mixture 50 ppm or more - Monel body with monel inside.

For temperatures below - 20 ° F - Stainless Steel. Monel 316 or Hastelloy C in its interior.

## VALVES FOR HIGH VACUUM SERVICES

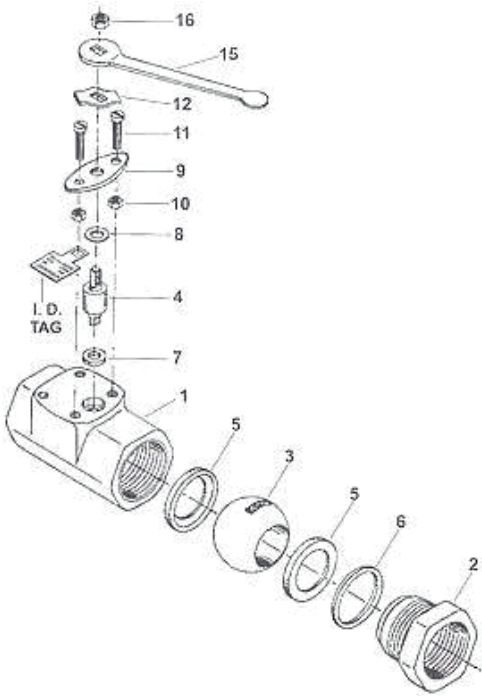
Manufactured solid materials, having no gas absorption properties. Moreover, these valves have been designed to prevent leaks from the outside and also have a flow capacity to accelerate the exhaust air. Approved for services up big empty 0.00001 torr (0.01 microns of mercury).

With threaded ends: (. 6.4 to 50.8 mm) 1/4 to 2 inches

Flanged: (. 12.7 to 356 mm) 1/2 to 14 inches

## HIGH PRESSURE VALVES (HP)

Virtually indestructible by service and unique structure with one-piece body. Services designed especially for high pressure or high vacuum. Available in stainless steels and steels carbono.Con threaded ends NPT and pressure 3000-4500 psi (204-306 atmospheres), 1/4 to 2 inches (6.4 to 50.8 mm.).

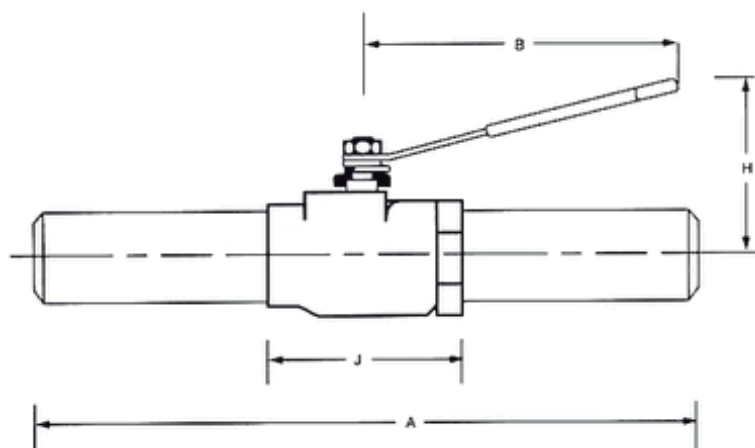


No. PART	NAME
1	BODY
2	BODY CAP
3	BALL
4	STEM
5	SEAT
6	BODY SEAL
7	STEM SEAL
8	STEAM BEARING
9	BONNET PLATE
10	HEX NUT
11	BONNET SCREW
12	INDICATOR STOP
13	EMERGENCY STEM
15	HANDLE
16	STEM NUT
TAG	

## SCREWED END BALL VALVE 1/4 "to 2"

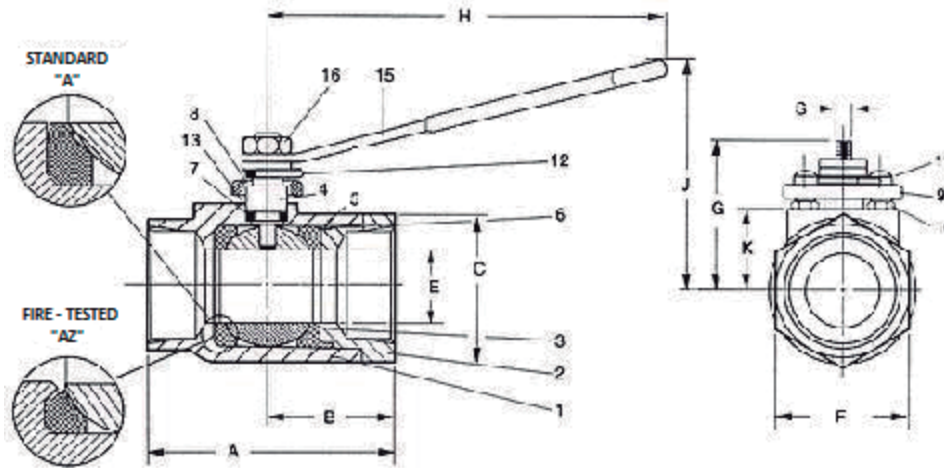
When valves with welding ends are required, MR offers OYM valves A and AZ series of 1/4 "to 2" inserts of the same material of the body of the valve prepared for butt welding in the field without risk of damaging the seats.

ALL DIMENSIONS IN INCH	ALL DIMENSIONS IN MILLIMETERS	A	B	H	J
1/4	8	8 11/16	4 1/8	2 5/8	2 15/16
3/8	10	8 11/16	4 1/8	2 5/8	2 15/16
1/2	15	8 11/16	4 1/8	2 5/8	3 7/16
3/4	20	8 11/16	4 1/8	2 3/4	3 13/16
1	25	9 7/16	6 1/8	3 5/8	4 1/2
1 1/4	32	9 7/8	6 1/8	4 13/16	4 9/16
1 1/2	38	9 7/8	8 3/16	4 13/16	4 9/16
2	51	9 7/8	8 3/16	4 13/16	5



# SCREWED END BALL VALVE

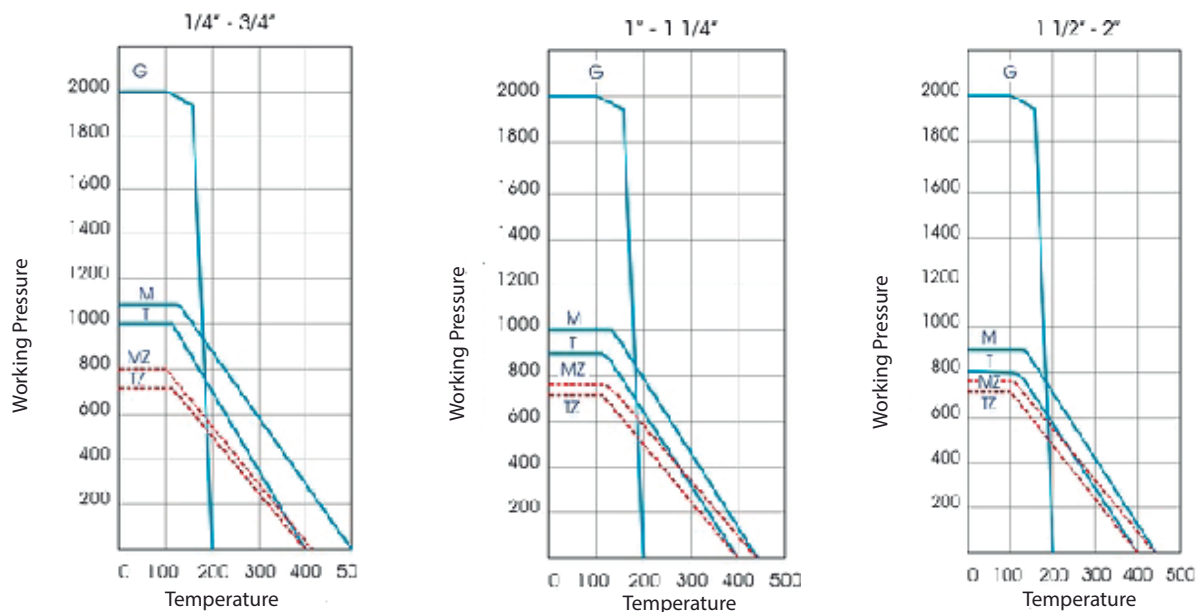
## MODEL "A" AZ 1/4" A 2"



### Size

Size	A	B	C	E	F	G	H	J	K	S
1/4	2 15/16	1 9/16	1 3/16	7/16	1 1/16	2	4 1/8	2 5/8	3/4	3/16
3/8	2 15/16	1 9/16	1 3/16	7/16	1 1/16	2	4 1/8	2 5/8	3/4	3/16
1/2	3 7/16	2 1/16	1 3/16	7/16	1 1/16	2	4 1/8	2 5/8	3/4	3/16
3/4	3 13/16	2 1/4	1 7/16	9/16	1 1/4	2 1/8	4 1/8	2 3/4	13/16	3/16
1	4 1/2	2 1/2	1 13/16	13/16	1 5/8	2 1/2	6 1/8	3 5/8	1	5/16
*1 1/4	4 7/16	2 5/16	2 3/16	1	2	2 5/8	6 1/8	3 13/16	13/16	5/16
1 1/2	4 9/16	2 7/16	2 11/16	1 1/4	2 3/8	3 1/16	8 3/16	4 12/16	1 11/16	3/8
2	5	2 5/8	3 1/8	1 1/2	3 3/4	3 3/16	8 3/16	4 13/16	1 11/16	3/8

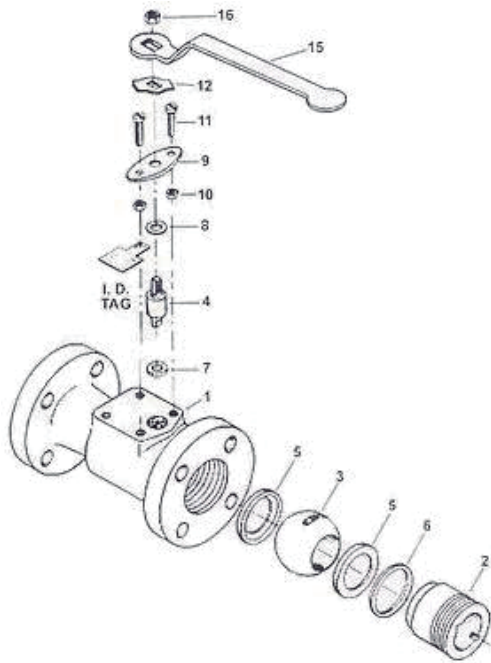
### Curves of seat and seal operating



# FLANGED BALL VALVE 1/2" to 14"

(ANSI CLASS 150 AND 300)

Its main characteristics are its large flow, the unique construction of the body, one-piece, and his perfect seal. They can be operated manually or to engage equipment pneumatic, hydraulic or electric operators.



No. PARTE	NOMBRE
1	BODY
2	INSERT
3	BALL
4	STEM
5	SEAT
6	BODY SEAL
7	STEM SEAL
8	STEM BEARING
9	BONNET PLATE
10	HEX NUT
11	BONNET SCREW
12	INDICATOR STOP
13	EMERGENCY SEAL (AZ)
15	HANDLE AF
16	STEM NUT
	TAG

## THREE - WAY VALVE

Designed especially for the diversion of fluids from one line to another, with the use of a single valve. Manual or remote control, as desired. By incorporating a positioning device, these valves can be used in services fluid mixture.

Flanged: 1 1/2 to 8 inches (50.8 to 203.2 mm).

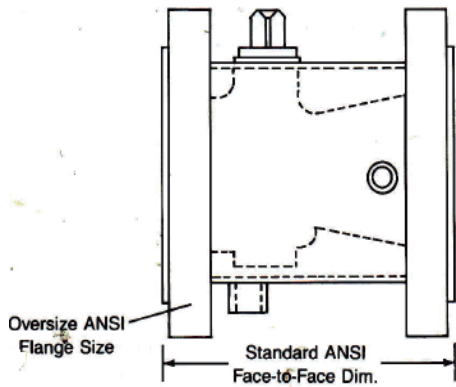
## JACKETED DOUBLES-SEAL BALL VALVES

Whenever necessary handle highly viscous materials or materials that are solid at ambient temperatures, OYM MR can provide valves with steam jackets or other element for heat transfer to ensure free flow through the valve. extending from a flange to the other, in which the original blind flanges have threaded inserts for flange screws (holes instead of passing) also allowing the use of standard pipe flanges for any size valves.

The jacketed valves are rated for 150 psi service. The standard arrangement of the jacket connection is with two connections (sides) and a connection on the lower side. Other arrangements mounted vertically or inverted valves, can also be obtained on request.



Connections jacket halves are threaded couplings in the following measures:



TWO-PIECE REMOVABLE JACKETS	
VALVE SIZE	CONNECTION SIZE
1/2"-2"	1/2"
3"-6"	3/4"
8"-12"	1"

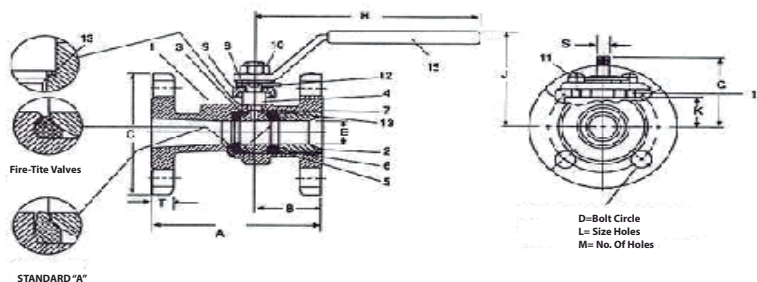
## OXYGEN VALVE TYPE "AO"

OYMMR is a narrow process to ensure that no oil or fat remaining in any of the valves used in oxygen. Moreover, since the assembly will use oxygen compatible lubricants. Clean valves are supplied with dust cover and sealed in plastic bags

## AK150F VALVES MODEL HYDROGEN PEROXIDE

OYM has developed a series of valves for handling hydrogen peroxide concentrations at all. These valves resist the corrosive effect of the peroxide. The lip seal OYM is very special and is designed to vent upstream at a sudden increase in pressure within the valve 200 psi. Pressure inside the body.

## MODEL "A" 150F 1/2 "to 2"

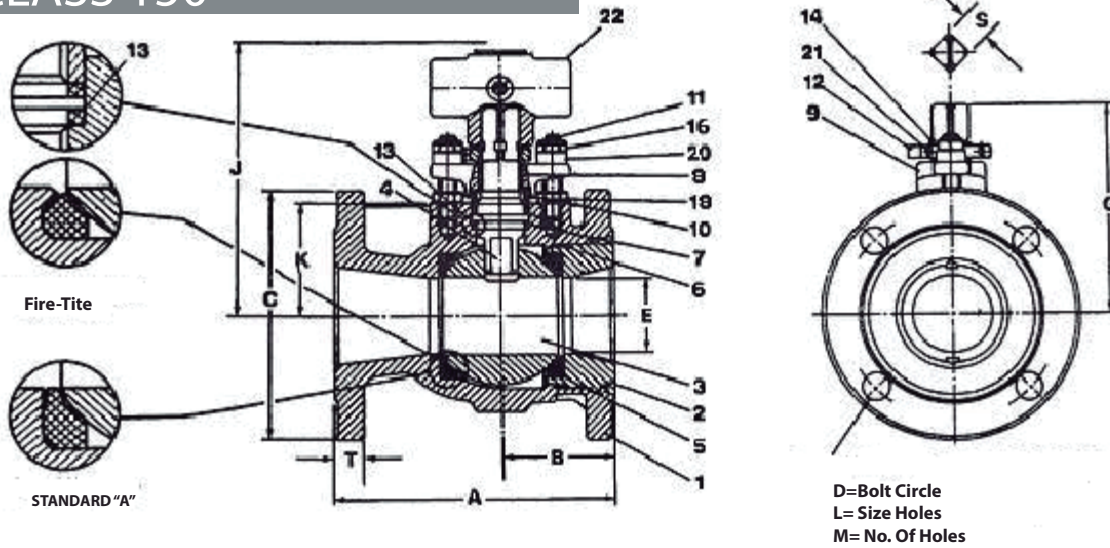


## DIMENSIONS

VALVE SIZE	A	B	C	D	E	G	H	J	K	L	M	S	T
1/2	4 1/4	1 13/16	3 1/2	2 3/8	7/16	2	4 5/8	3 8/4	3/4	5/8	4	3/16	1/2
3/4	4 5/8	2	3 7/8	2 3/4	9/16	2 1/8	4 5/8	3 7/8	13/16	5/8	4	3/16	9/16
1	5	2	4 1/4	3 1/8	13/16	2 3/8	6 5/8	3 1/2	1	5/8	4	5/16	9/16
1 1/4													
1 1/2	6 1/2	2 5/8	5	3 7/8	1 1/4	3	8 5/8	3 7/8	19/16	5/8	4	3/8	11/16
2	7	2 13/16	6	4 3/4	1 1/2	3 1/8	8 5/8	4	11/16	3/4	4	3/8	3/4

# FLANGED BALL VALVE 3" to 6"

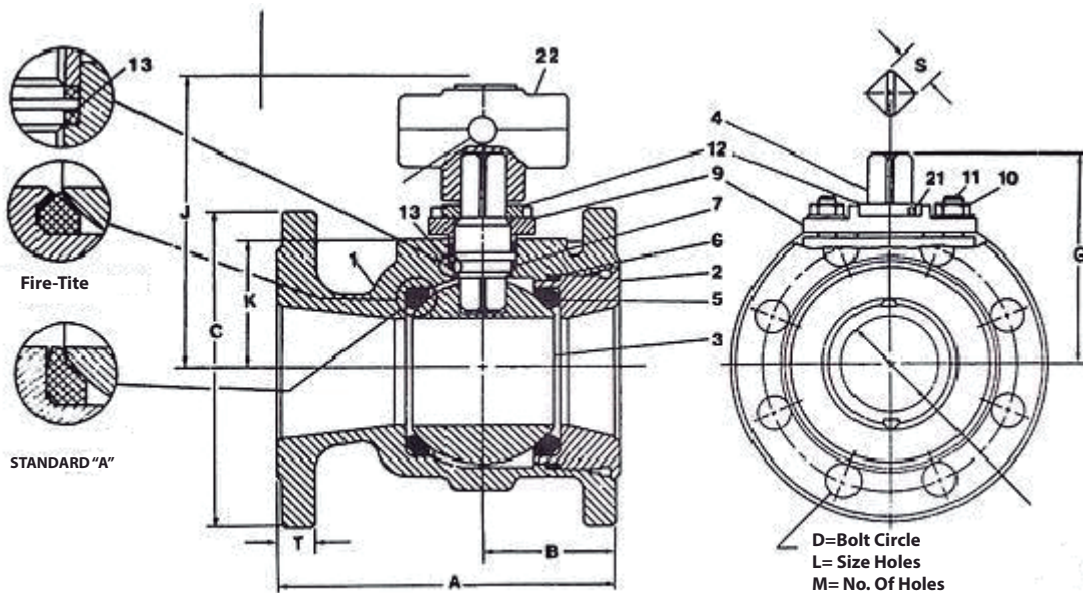
## ANSI CLASS 150



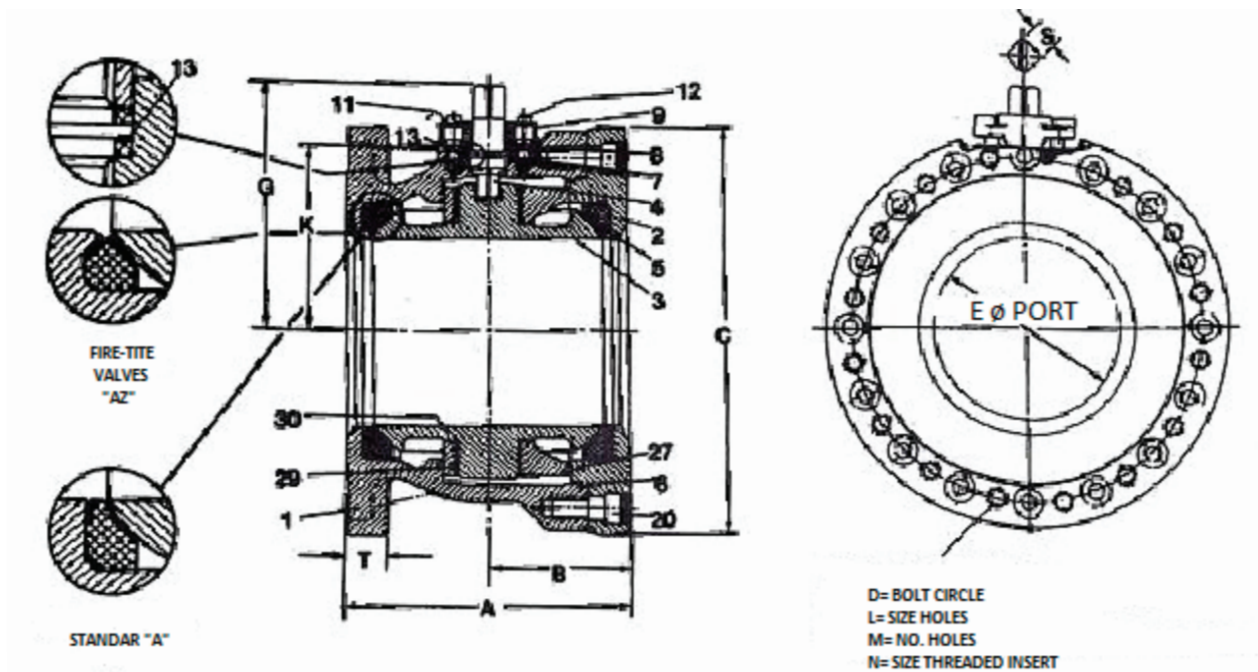
### Dimensions

Valve Size	A	B	C	D	E	J	K	L	M	S	T
3	8	3 1/4	7 1/2	6	25/16	7 7/8	3 3/8	3/4	4	7/8	3/16
4	9	4	9	7 1/2	3 1/8	8 7/8	4	3/4	8	7/8	1
6	10 1/2	5	11	9 1/2	4 1/2	9 13/16	4 7/8	7/8	8	1	1 1/16
8	11 1/2	5 3/4	13 1/2	11 3/4	6	11 13/16	6 3/16	7/8	8	1 5/16	1 3/16
10	13	6 1/2	16	14 1/4	7 3/8	13 13/16	7 1/2	1	12	1 5/16	1 1/4

### MODEL "A" 150F 8" to 10"



# FLANGE MODEL 150F 12 "to 14"



Size Valve	A1	B	C	D	E	K	L	M	N	S	T
12"	14	7	19	17	9 1/2	9 3/8	1	12	9 7/8	1 5/16	1 5/16
14"	15	7 1/2	21	18 3/4	10 1/2	10 7/8	1 1/8	12	1" 1/8	1 5/8	1 1/2

## Cv (FLOW)

Size Valve	Cv
1/2"	9
3/4"	19
1"	45
1-1/2"	125

Size Valve	Cv
2"	165
3"	350
4"	550
6"	765

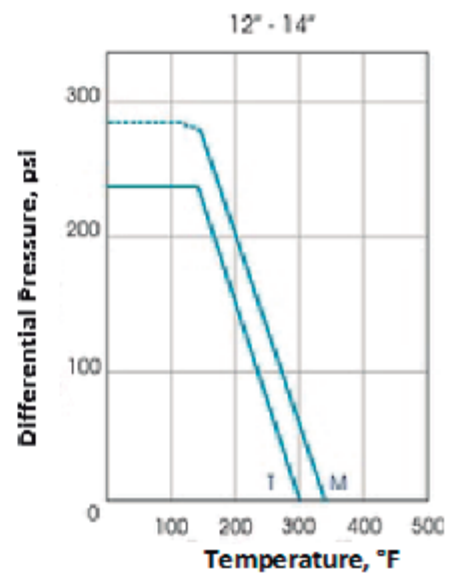
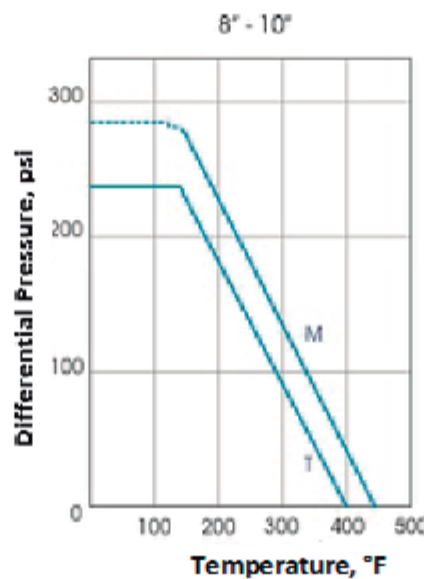
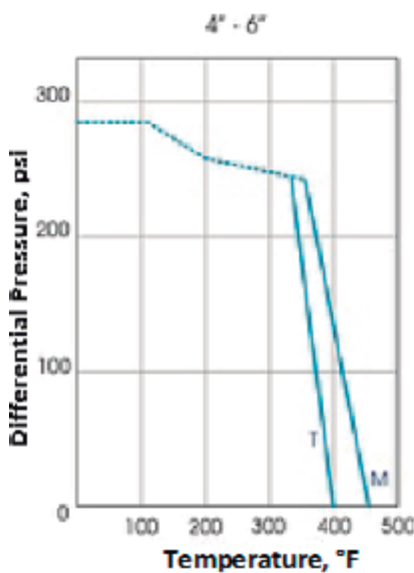
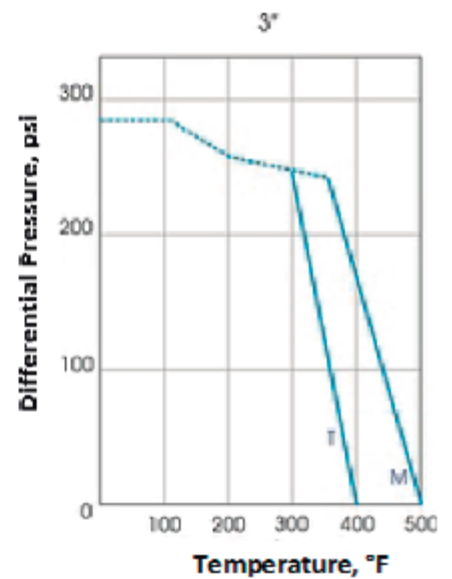
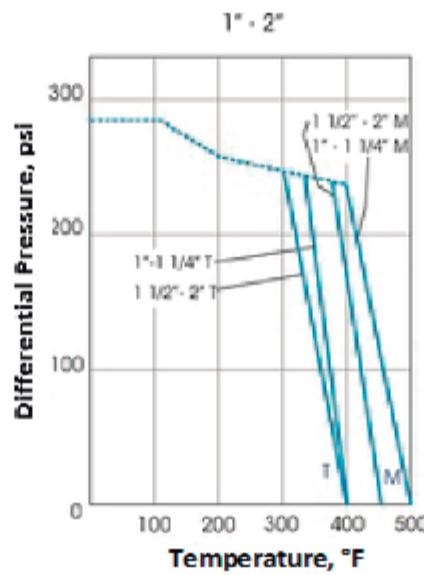
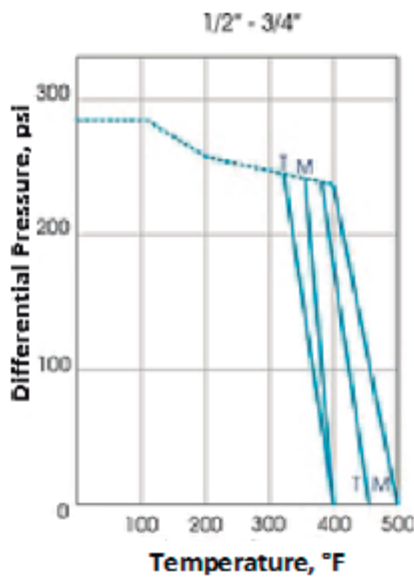
Size Valve	Cv
8"	1890
10"	3900
12"	6700
14"	5100

# RANGE VALVE SEAT A150F

Seating ranges are indicated on the graph by lines and are based on the differential pressure with ball valve in the fully closed position and refer to seats only. The maximum working pressure for valves carbon steel body is indicated by dotted lines.

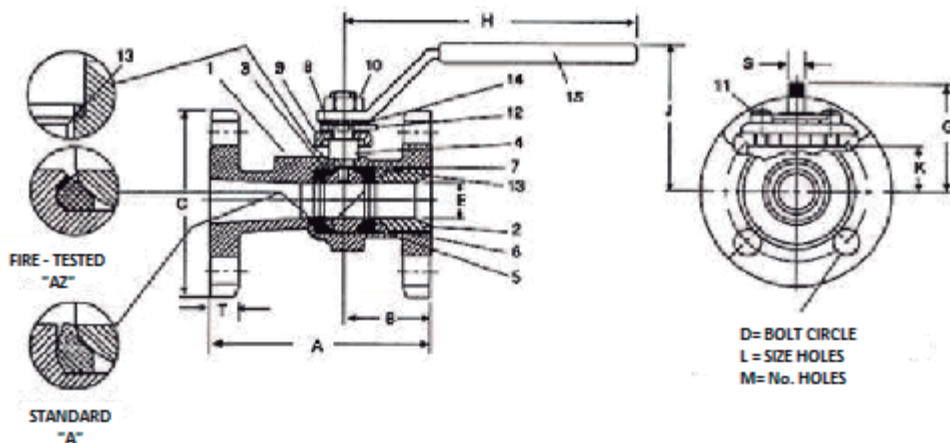
Ranges seats 204mm and larger sizes must be reduced under conditions of fluid.

The Teflon seated valves (T) and reinforced PTFE (M) can be used in services for up to -100 ° F with the valve body on the specific material to this temperature.



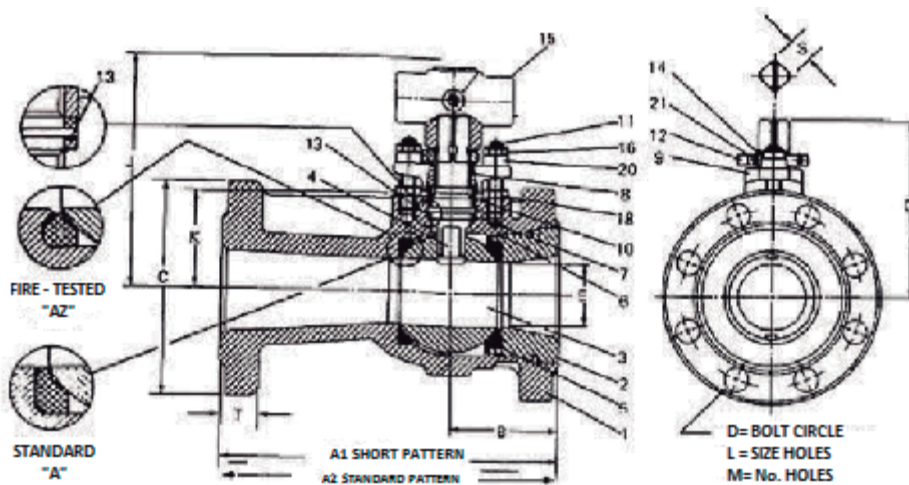


# MODELS AF30S AND A300F OF 1/2" TO 2"



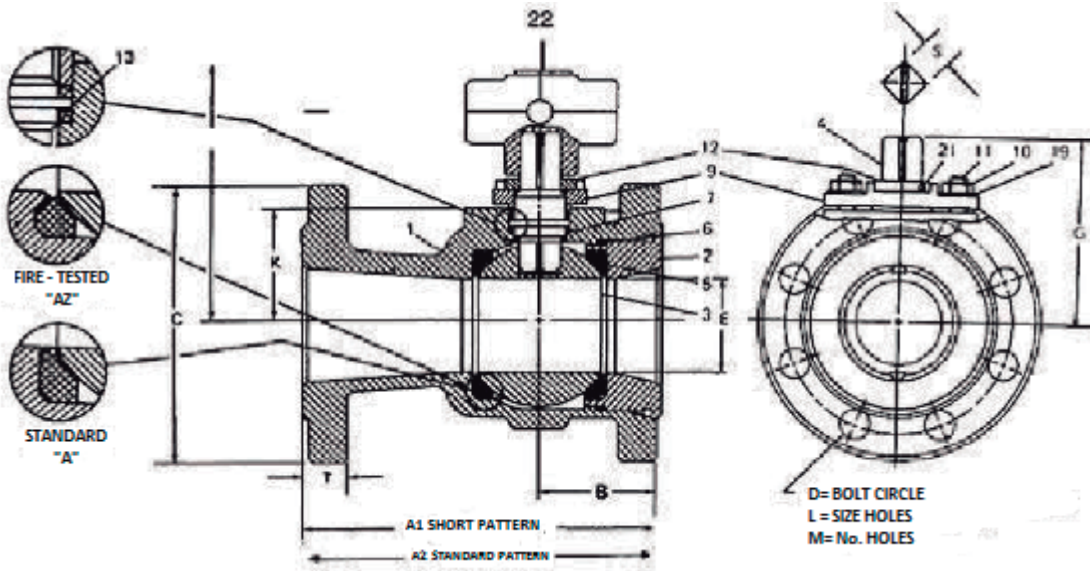
APPROXIMATE DIMENSIONS														
VALVE SIZE	A1	A2	B	C	D	E	G	H	J	K	L	M	S	T
1/2	4 1/4	-	1 13/16	3 3/4	2 5/8	7/16	2	4 5/8	3 3/4	3/4	5/8	4	3/16	5/8
3/4	4 5/4	-	2	4 5/8	3 1/4	9/16	2 1/8	4 5/8	3 7/8	13/16	3/4	4	3/16	11/16
1	5	-	2	4 7/8	3 1/2	13/16	2 3/8	6 5/8	3 1/2	1	3/4	4	5/16	13/16
1 1/4	5 1/2	-	2 1/8	5 1/4	3 7/8	1	2 9/16	6 5/8	3 5/8	1 3/16	3/4	4	5/16	7/8
1 1/2	6 1/2	7 1/2	2 5/8	6 1/8	4 1/2	1 1/4	3	8 5/8	3 7/8	1 9/16	7/8	4	3/8	15/16
2	7	8 1/2	2 13/16	6 1/2	5	1 1/2	3 1/8	8 5/8	4	1 11/16	3/4	8	3/8	1

# MODELS AF30S AND AF300F OF 3" TO 6"



APPROXIMATE DIMENSIONS													
VALVE SIZE	A1	A2	B	C	D	E	H	J	K	L	M	S	T
3"	8	11 1/8	3 1/4	8 1/4	6 5/8	2 5/16	21 1/2	8 1/4	3 3/8	7/8	8	7/8	1 3/16
4"	9	12	4	10	7 7/8	3 1/8	21 1/2	8 7/8	4	7/8	8	7/8	1 5/16
6"	10 1/2	15 7/8	5	12 1/2	10 5/8	4 1/2	30	9 13/16	4 7/8	7/8	12	1 5/16	1 1/2
8"	11 1/2	16 1/2	5 3/4	15	13	6	30	11 1/8	6 3/16	1	12	1 5/16	1 11/16
10"	13	18	6 1/2	17 1/2	15 1/4	7 3/8	72	13 15/16	7 1/2	1 1/8	16	1 5/16	1 15/16

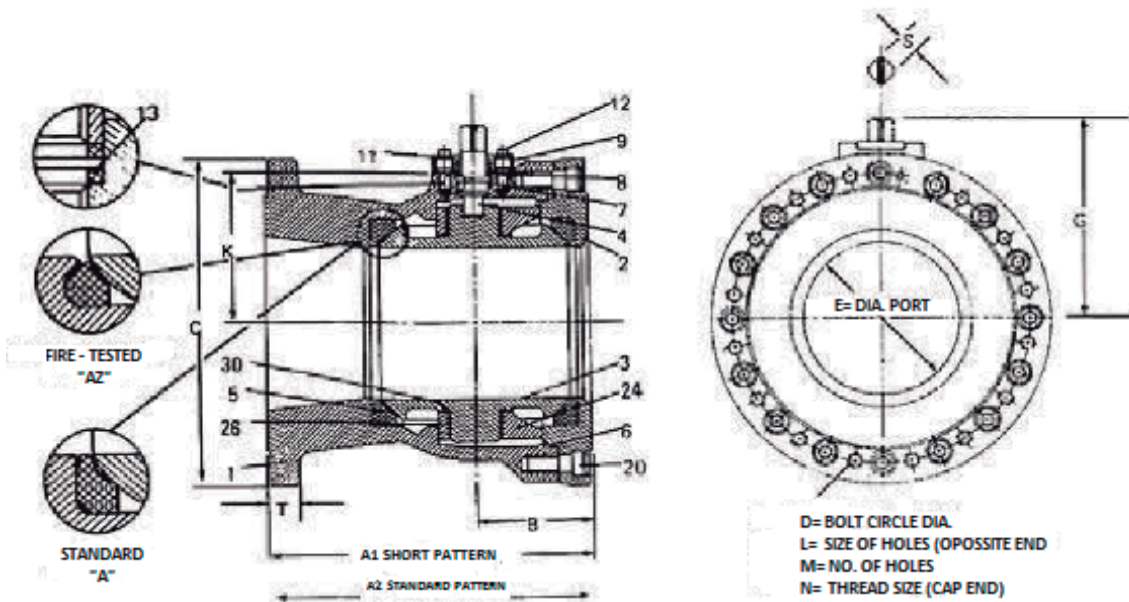
# MODEL AF30S, A300F DE 8" & 10"



APPROXIMATE DIMENSIONS

Size Valve	A1	A2	B	C	D	E	K	L	M	N	S	T
12"	14	19 3/4	7	20 1/2	17 3/4	9 1/2	9 1/2	1 1/4	16	1 1/8-7	1 5/16	2 1/16
14"	15	30	8 1/2	23	20 1/4	10 1/2	10 7/8	1 1/4	20	1 1/4-7	1 5/16	2 1/4

# MODELS AF30S and A300F OF 12" & 14"

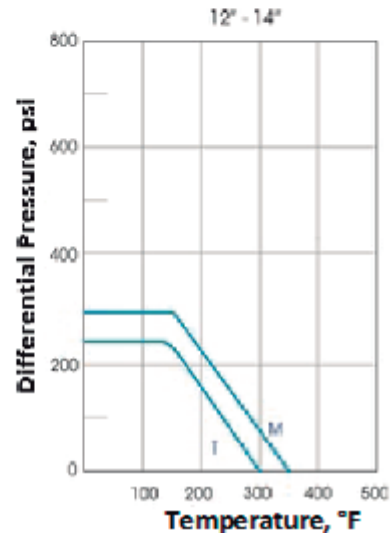
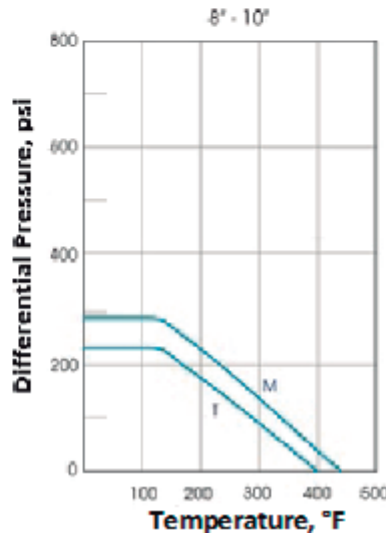
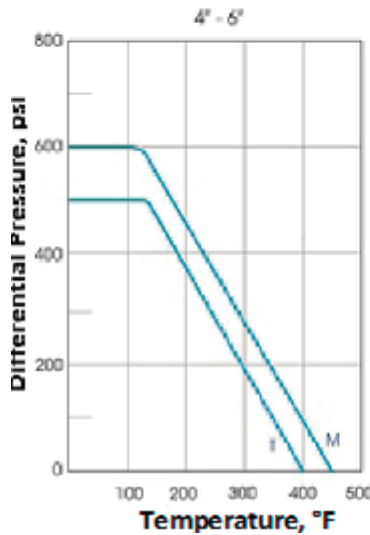
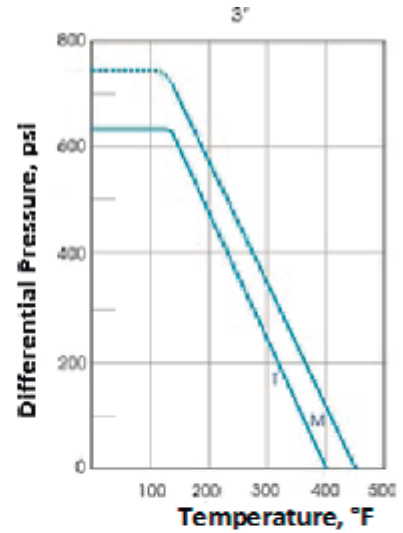
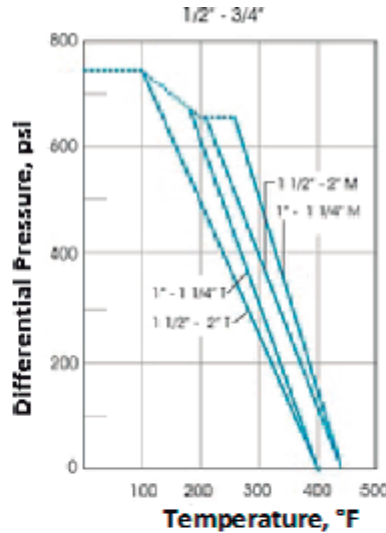
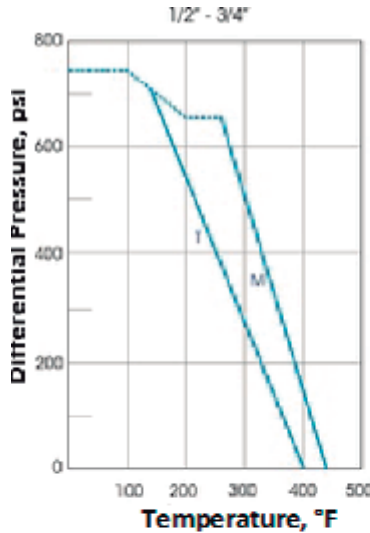


NOTE: The list of parts and materials in valves 300 # equals at 150 #, Please refer to the previous pages.

# FLANGED RANGE VALVE SEAT300#

Seating ranges listed in this chart by lines and are based on the differential pressure with ball valve in the fully closed position and refer to seats only. The maximum working pressure for valves carbon steel body is indicated by dotted lines.

Seats ranges 204mm and larger sizes are reduced under flow conditions. The Teflon seated valves (T) and reinforced PTFE (M) can be used in services for up to -100 ° F with the valve body on the specific material to this temperature.



T - TFE M - FILLED TFE

STANDARD (AF30S) VALVES

FIRE - TESTED (AZF30S)

NOTE: For sizes 3 "to 14" AZF30S fire safety, seats ranges are identical to the ranges of the seat

VÁLVULAS



# FULL BORE VALVE





# MAIN

## Valves Features

### BALL VALVES FLANGED CLASS ANSI 150 FULL BORE 1 1/2" - 8" (DN 38-200)

Ball valves with flanged OyM<sub>MR</sub> offer a patented polymer seat design with flexible lip that allows for a reliable way zip for various applications in industries ranging from chemical, oil to energy and pulp and paper.

**BALL VALVE "Double Stamp"** controls and regulates the passage of fluids through a canal that runs through the area. The design and construction of the valve ensuring a laminar flow without frictional pressure loss.

**FLOATING SPHERE** is housed between two seats specially patented design which are in themselves, true self-adjusting to the conditions of temperature, pressure and wear bearings. This design prevents leakage in the valve. When the channel step of the dial turns to position "closed" absolute Locking occurs in both sealing surfaces, allowing the valve to maintain the level of pressure or vacuum with equal effectiveness, whatever the flow direction. "Double Stamp" means a perfect seal, no leaks, even operating systems.



**A QUARTER BACK** to the lever is sufficient to operate the valve from its fully open position to fully closed, the abrasive particles that may contain the fluid are literally swept away in the process of opening or closing the valve.

**NOT REQUIRE LUBRICATION** not come with springs or bearings end up losing effectiveness due to the effects of corrosion. Ball valves fit OYMMR brand established and internationally accepted standards for dimensions of pipe sizes determined by those rules. With normal precautions of the case, the valve stem can always be removed from it, for your re-packed, while the valve remains in the closed position and install. They can also be replaced in the system the valves without altering the length of the pipes. The seats, seal rings, the same area and stem are all interchangeable components. The costly loss of production, maintenance, as has been virtually eliminated.

## BALL VALVES THREADED STYLE C FULL BORE 1/2" -1 1/2" (DN 15-38)

### Flow Data

The table below indicates the flow coefficients of valves OyMMR described in this bulletin. Cv values represent the flow of water at 60 ° F that passes through the valve in U.S. gallons. UU. per minute with a pressure drop of 1 psi. The metric equivalent, Kv is the flow of water at 16 ° C which passes through the valve in cubic meters per hour with a pressure drop of 1 kg/cm2. To convert Cv to Kv, multiply by 0.8569.

Size Valve		Cv
Inches	MM	Full Bore
1 1/2"	38 mm	270
2"	51 mm	490
3"	76 mm	1160
4"	102 mm	2200
6"	152 mm	5100
8"	204 mm	9300

## RATINGS

### From the valve body

They are nominal pressures referred only to the maximum valve body work. The nominal pressure of the seat, as shown on the next page, determine the practical limitations of pressure and temperature in real operating conditions. Test pressures are recommended for hydrostatic testing with semi open ball.

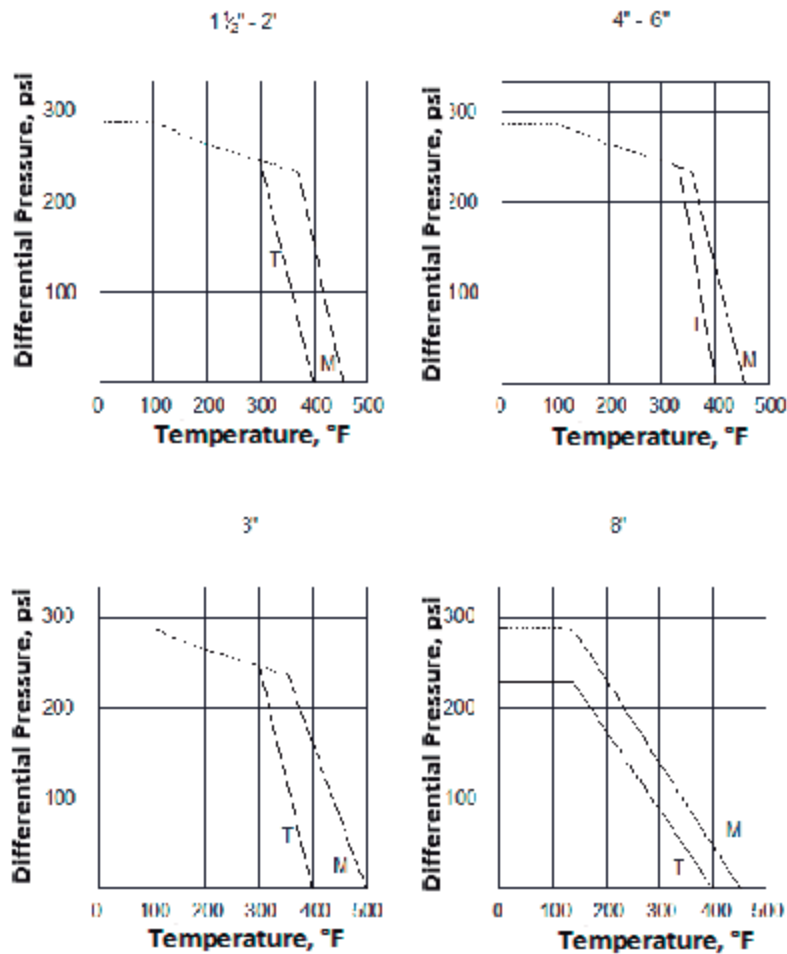
Maximum working pressure in psi						
Temperature °F	Class 150				Class 300	
	Carbon Steel*	Stainless Steel 316*	Alloy 20*	Monel	Carbon Steel*	Stainless Steel 316*
-20 a 100	285	275	230	230	740	720
200	260	235	200	200	675	620
300	230	215	190	190	655	560
400	200	195	190	185	635	515
500	170	170	170	170	600	480
Test Pressure	450	425	350	350	1125	1100

\* In accordance with ANSI B16.34

# RATINGS

## Of valve seats

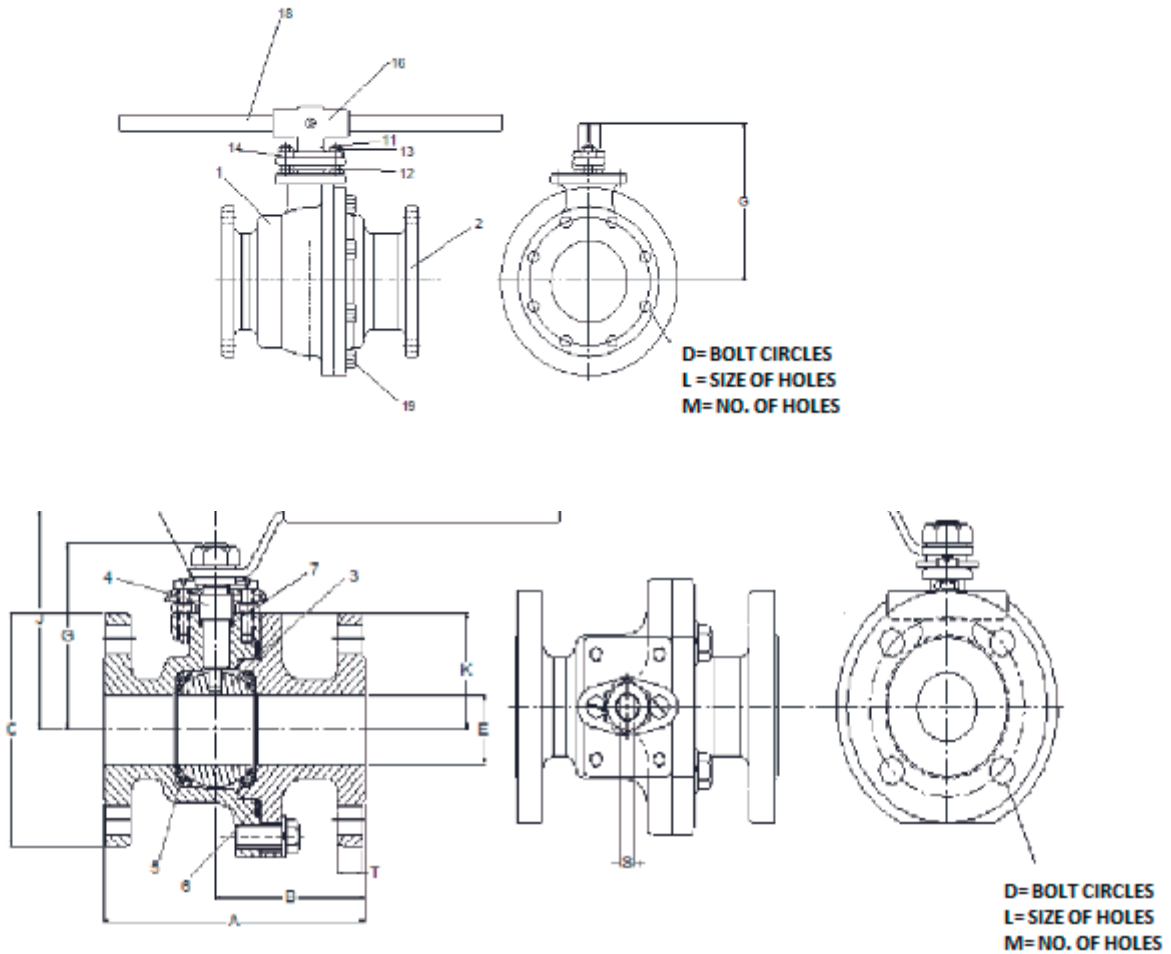
The nominal values of the seat, indicated by solid lines in the figure on the right, based on the differential pressure with valve in fully closed position and refer to seats only. The dashed lines indicate the maximum working pressure of the valve bodies carbon steel WCB Cast B weldable, solderable casting B). (Maximum pressures of work other body materials listed in the tables above.) The combination of solid and dashed lines indicate the maximum rating of the valve under specific conditions of pressure and temperature. Valves with PTFE seats, XTREME, PEEK®, PFA and UHMW can be used at temperatures of up to -60 ° F (-51 ° C), provided that the material of the valve is suitable for that temperature. The nominal value of the carbon steel valves is -20 ° F (-29 ° C).



In saturated steam applications we recommend using a stainless steel trim any pressure, and it is imperative above 200 psi (14 bar). The rods require Peek seats 17-4 PH stainless steel.

# DIMENSIONS

Flanged Valve 1 1/2" & 2"  
(DN 38 -50 MM)



Size Valve	APPROXIMATE DIMENSIONS													WEIGHT (KGS)
	A	B	C	D	E	G	H	J	K	L	M	S	T	
1 1/2"	6 1/2	3 23/32	5	3 7/8	1 1/2	3 63/64	8 9/16	4 3/4	2 1/2	5/8	4	3/8	5/8	8 11
2"	6 15/16	4 5/32	6	4 3/4	2	4 31/64	8 9/16	5 1/4	2 3/4	3/4	4	3/8	5/8	

# MATERIALS AND PART LIST

for Valve 1 1/2" & 2"  
(DN 38 -50 MM)

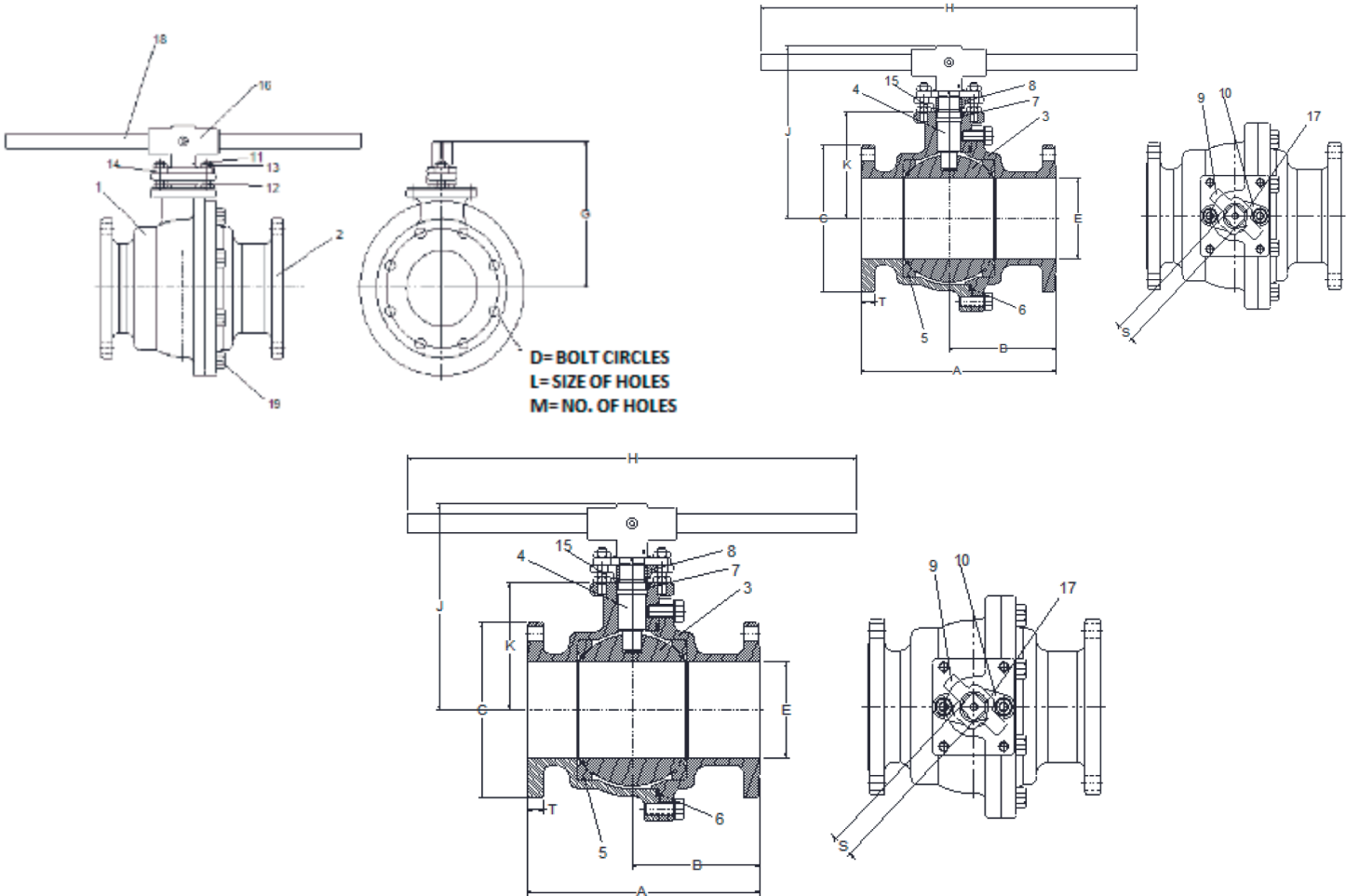
## FULL BORE 1 1/2" & 2" ( DN 38 – 50 ) CLASS 150 LBS

PART NUMBER	NAME OF PARTY	CONSTRUCTION MATERIAL	
		CARBON STEEL (22)	STAINLESS STEEL (36)
1	Body	Carbon Steel ASTM A216 type WCB	Stainless Steel ASTM A351 type CF8M
2	Insert Cap	Carbon Steel ASTM A216 type WCB	Stainless Steel ASTM A351 type CF8M
3	Ball	Carbon Steel - nickel under chrome plated, 316 stainless steel	
4	Stem	Carbon Steel - hard chrome plated, 316 stainless steel	
5	Seat	TFE, glass - filled TFE or special nylon (as specified)	
6	Body Seal	TFE (as specified)	
7	Stem Seal	TFE (as specified)	
8	Stem Bearing	Nylon (as specified)	
9	Indicator Stop	304 stainless steel (as specified)	
10	Bonnet Plate	304 stainless steel (as specified)	
11	Bonnet Screw	304 stainless steel (as specified)	
12	Hex Nut	Galvanized Carbon Steel	304 stainless steel (as specified)
13	Stem Nut	Galvanized Carbon Steel	304 stainless steel (as specified)
14	Handle	Galvanized Carbon Steel	304 stainless steel (as specified)
15	Screw	High Carbon Steel SAE resistance Grade - 5	High strength carbon steel SAE Grade - 5 Galvanized, Stainless Steel 304, 316, as specified



# DIMENSIONS

Flanged Valve Model CF of 3", 4",  
6" y 8" ( DN 80, 100, 150 & 200 MM )



Size Valve	APPROXIMATES DIMENSIONS													WEIGHT (KGS)
	A	B	C	D	E	G	H	J	K	L	M	S	T	
3"	8	4 7/64	7 1/2	5 61/64	3	7 11/16	21 1/2	9 3/16	6	3/4	4	7/8	3/4	24.8
4"	9	4 31/32	9	7 1/2	4	8 15/32	21 1/2	10	5 5/8	3/4	8	7/8	7/8	35.2
6"	15 1/2	8 1/2	11	9 1/2	6	11 21/32	30	12 29/32	7 15/16	7/8	8	1 15/16	1	101.8
8"	18	9 1/32	13 1/2	11 3/4	8	12 43/64	30	14 35/64	8 61/64	7/8	8	1 15/16	1 1/8	152

# MATERIALS AND PART LIST

For Valves of 3", 4", 6" y 8"  
( DN 80, 100, 150 & 200 MM )

FULL BORE 3"- 8" (DN 80 - 200) CLASS 150 LBS.			
Number	NAME	BUILDING MATERIALS	
		CARBON STEEL (22)	STAINLESS STEEL 316 (36)
1	Body	Carbon Steel ASTM A216 type WCB	Stainless Steel 316 ASTM A351 type CF8M
2	Insert	Carbon Steel ASTM A216 type WCB	Stainless Steel 316 ASTM A351 type CF8M
3	Ball	Chrome Carbon Steel Stainless Steel 316	Stainless Steel 316, Alloy 20, Monel, Hastelloy C, como se especificue
4	Stem	Chrome Carbon Steel Stainless Steel 316	Stainless Steel 316, Alloy 20, Monel, Hastelloy C, como se especificue
5	Seat	PTFE, R-PTFE ( M ), Xtreme, Derlin, PFA, Peek, UHMWPE, as specified	
6	Body Seal	PTFE, UHMWPE, as specified	
7	Secondary Stem Seal	PTFE, UHMWPE, as specified	
8	Stem Seal	PTFE, UHMWPE, as specified	
9	Indicator Stop	304 Stainless Steel (as specified)	
10	Bonnet Plate	316 Stainless Steel (as specified)	
11	Bonnet Screw	304 Stainless Steel (as specified)	
12	Hex Nut	Galvanized Carbon Steel	304 Stainless Steel (as specified)
13	Nut	Galvanized Carbon Steel	304 Stainless Steel (as specified)
14	Spacer	304 Stainless Steel (as specified)	
15	Compression Ring	304 Stainless Steel (as specified)	
16	Socket	Carbon Steel ASTM A216 type WCB	
17	Insurance Truck	Galvanized Carbon Steel	
18	Tube Socket (Handle)	Carbon Steel 4140	
19	Screw	High Carbon Steel SAE resistance Grade - 5	High strength carbon steel SAE Grade - 5 Galvanized, Stainless Steel 304, 316, as specify

## SAFETY VALVES FIRE PROOF (CZ):

Approved for use in the hydrocarbon industry, conform to the strict standards of the American Petroleum Institute (API).

In case of fire if soft valve seats a secondary metal seal blocks with absolute effectiveness, the passage of fluid through it.

With Plugs: 1/2 to 2 inches (13 to 50mm).

With flange, in the series of 150 and 300 pounds.

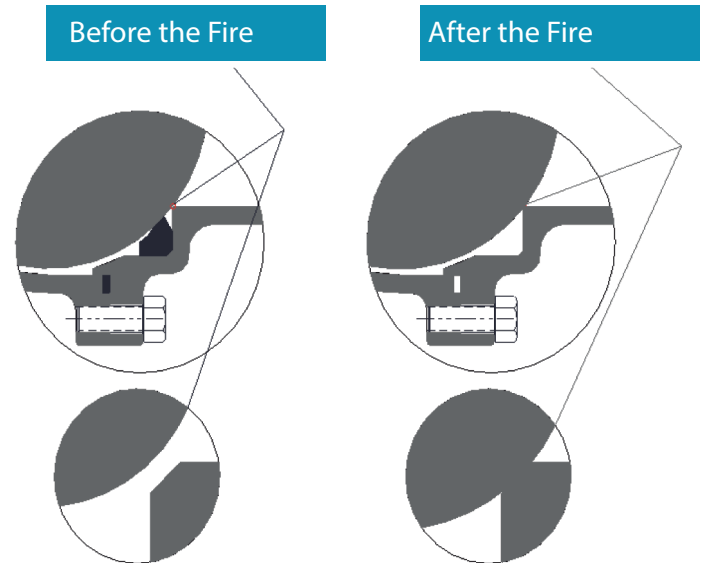
ANSI: 1 1/2 to 8 inches (38 to 200 mm.).

### DESIGN

- Ball Valve Two Piece
- Design by ANSI B16.34
- Dimension face to face by ANSI B16.10
- Flanges by B16.5
- Full Bore
- Lever Operated or Actuator
- Direct Mounting for Actuator ISO
- According Inspection and testing API 598
- Quality Standards for smelting According steels MSS-SP-55
- Flanged ball valves with total steps or reduced. by MSS-SP-72-1992

### WARRANTY:

OYM<sub>MR</sub> product warranty is against manufacturing defects for a period of one year, if the products are intended for the use for which they were manufactured and sold. The warranty of each product limited to the value.



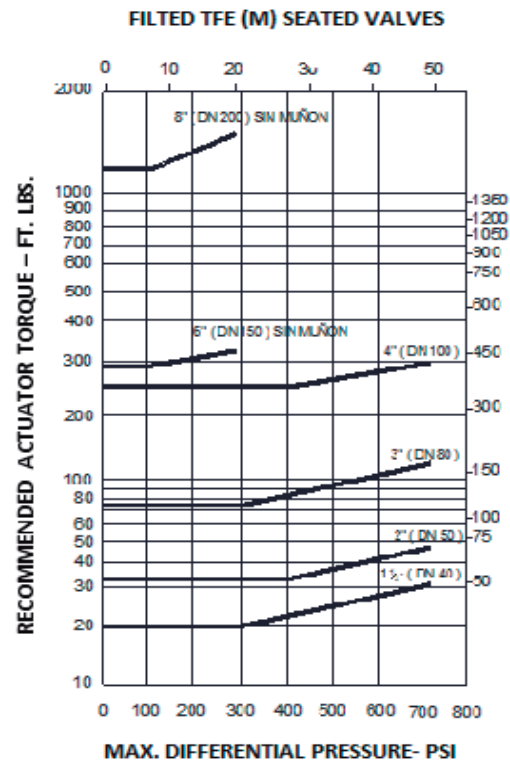
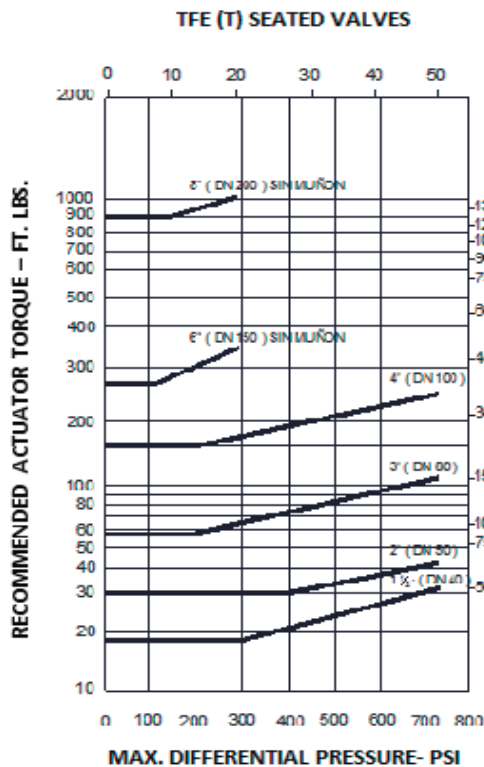
# DATA VALVE TORQUE

Use these torque charts as a guide to select the actuator. The characteristics of the medium, the garrison or the frequency of valve operation may impose additional requirements. For use with clean lubricating fluid, the torque required for valves with PTFE seats (T) or PTFE (M), can only be reduced by 20% when such valves are equipped with corrosion-resistant lining. For difficult problems, such as pimples or semi-solid applications, and oxygen values like 50% When in doubt, play it safe by choosing a larger actuator to increase that normally would select.

## Data Valve Torque ANSI Class 150 lbs

### Valve Seats PTFE (T)

### Valve with PTFE seats compound (M)



NOTE: THE TORQUE CONSULT WITH OTHER MATERIALS COMPANY



**BALL VALVES THREADED STYLE C  
COMPLETE STEP 1/2" - 1 1/2" (DN 15-38)**

# SPECIFICATIONS

## Flow Data

The table to the right shows the flow coefficients of valves OyMMR described in this bulletin. Cv values represent the flow deagua +60 ° F passing through the válvulaen U.S. gallons. UU. per minute with a pressure drop of 1 psi. Elequivalente metric, Kv, is the flow deagua at 16 ° C by passing válvulaen cubic meters per hour at a pressure drop of 1 kg/cm2. Paraconvertir Cv to Kv, multiply by 0.8569.

Valve Size		Cv
Inches	DN	Full Step
1 1/2"	15	18
3/4"	19	50
1"	25	100
1 1/2"	40	270
2"	N/D	N/D

# RATINGS

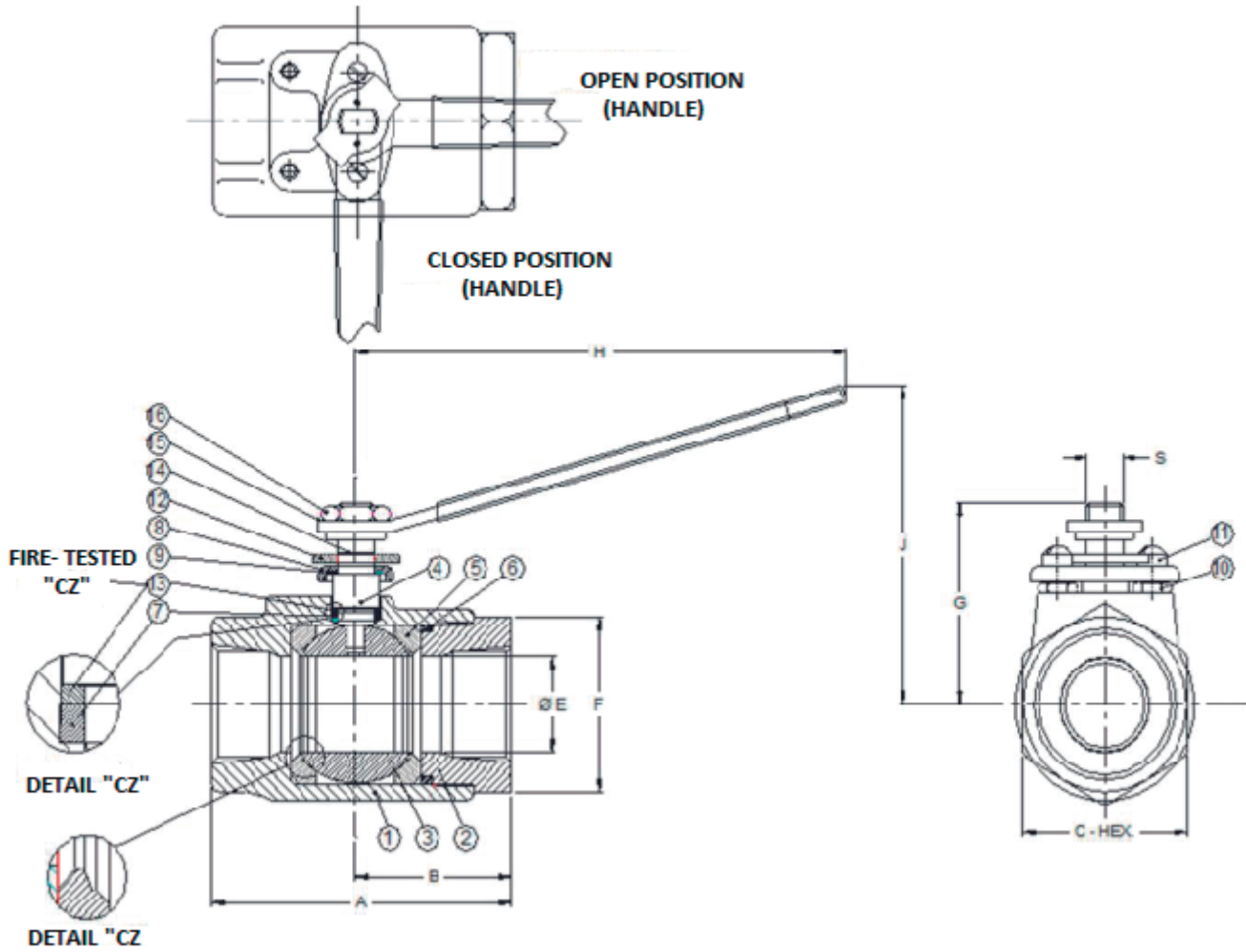
## From the valve body

They are nominal pressures referred only to the maximum valve body work. The nominal pressure of the seat, as shown on the next page, determine the practical limitations of pressure and temperature in real operating conditions. Test pressures are recommended for hydrostatic testing with semi open ball.

BODY MATERIALS	
SIZE	CARBON STEEL (WCB) STAINLESS STEEL ( CF8M)
1/2" - 3/4" WORKING PRESSURE	2000 PSI
TEST PRESSURE	3000 PSI
1" - 1 1/2" WORKING PRESSURE	2000 PSI
TEST PRESSURE	3000 PSI

# DIMENSIONS

Threaded Valve Model C  
1/2 " and 1 1/2" (DN 15 -38 MM)



SIZE VALVE	APPROXIMATE DIMENSIONS INCHES									WEIGHT (KGS)
	A	B	C	E	F	G	H	S		
1/2"	3 7/8	2 5/6	1 1/4	1/2	1 7/16	2 1/8	4 1/8	3/16	0.600	
3/4"	4 1/2	2 1/2	1 5/8	3/4	1 13/16	2 1/2	6 1/8	5/16	1.600	
1"	4 9/16	2 7/16	2 3/8	1	2 11/16	3 1/16	8 3/16	3/8	2.600	
1 1/4"	4 9/16	2 7/16	2 3/8	1 1/4	2 11/16	3 1/16	8 3/16	3/8	2.600	
1 1/2"	5	2 5/8	2 3/4	1 1/2	3 1/8	3 3/16	8 3/16	3/8	3.200	

# MATERIALS AND PART LIST

Valve 1/2" and 1 1/2"  
(DN 15 -38 MM)

## FULL STEP 1/2" AND 1 1/2" ( DN 15 – 38 )

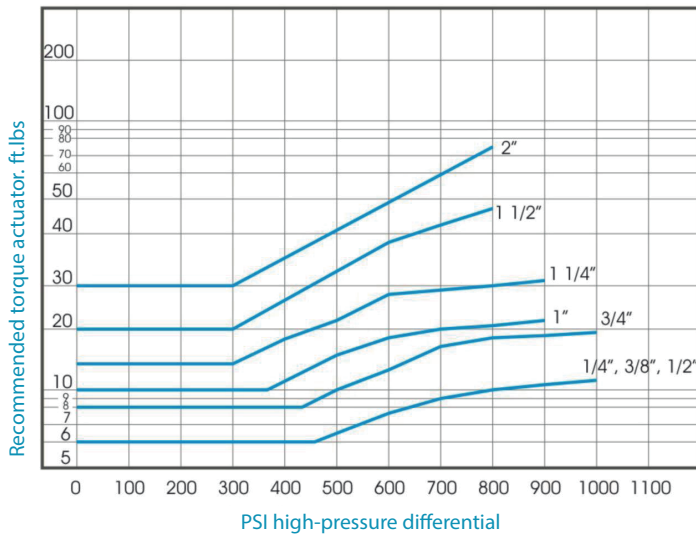
NUMBER	NAME	BUILDING MATERIAL	
		CARBON STEEL (22)	STAINLESS STEEL (36)
1	Body	Acero al Carbón ASTM A216 tipo WCB	Acero Inoxidable ASTM A351 tipo CF8M
2	Insert Cap	Acero al Carbón ASTM A216 tipo WCB	Acero Inoxidable ASTM A351 tipo CF8M
3	Ball	Chrome Carbon Steel, 316 Stainless Steel, Monel, Hastelloy C, as specified	
4	Stem	Chrome Carbon Steel, 316 Stainless Steel, Monel, Hastelloy C, as specified	
5	Seat	PTFE, R- PTFE ( M ), Xtreme, Derlin, PFA, Peek, UHMWPE, as specified	
6	Body Seal	PTFE, as specified	
7	Stem Seal	PTFE, as specified	
8	Stem Bearing	Nylon, as specified	
9	Bonnet Plate	304 Stainless Steel (as specified)	
10	Hex Nut	Galvanized Carbon Steel	304 Stainless Steel ( as specified)
11	Bonnet Screw	304 Stainless Steel (as specified)	
12	Stop Indicator	304 Stainless Steel (as specified)	
13	Emergency Stem Seal	Grafoil Packaging	
14	Insurance Truack	Galvanized Carbon Steel	304 Stainless Steel (as specified)
15	Handle	Galvanized Carbon Steel	304 Stainless Steel (as specified)
16	Stem Nut	Galvanized Carbon Steel	304 Stainless Steel (as specified)

# DATA VALVE TORQUE

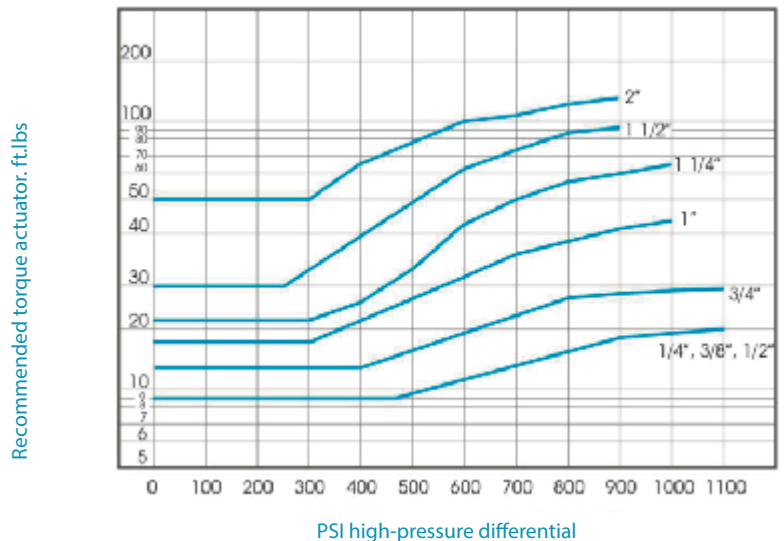
Use these torque charts as a guide to select the actuator. The characteristics of the medium, the garrison or the frequency of valve operation may impose additional requirements. For use with clean lubricating fluid, the torque required for valves with PTFE seats (T) or PTFE (M), can only be reduced by 20% when such valves are equipped with corrosion-resistant lining. For difficult problems, such as pimples or semi-solids, and oxygen use, increase values by 50% When in doubt, play it safe by choosing it more often would select the actuator.

## Valves Style "C" Full Port

### Valve with Teflon seats



### Teflon valve seats (T) Reinforced (M)



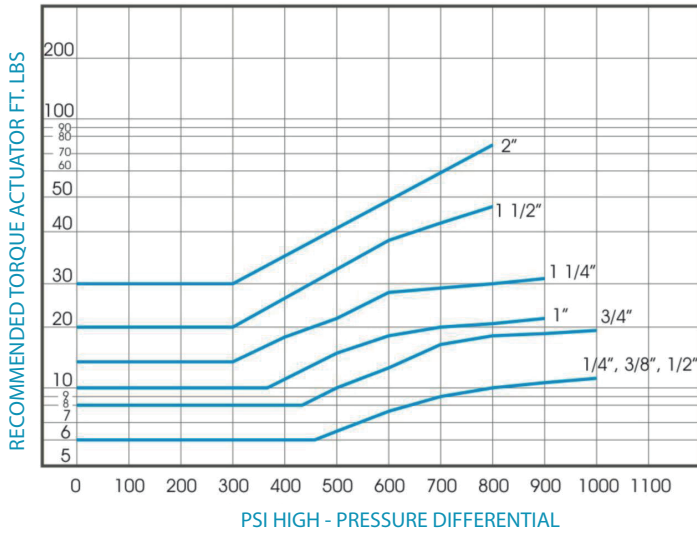


# DATA VALVE TORQUE

Use these torque charts as a guide to select the actuator. The characteristics of the medium, the garrison or the frequency of valve operation may impose additional requirements. For use with clean lubricating fluid, the torque required for valves with PTFE seats (T) or PTFE (M), can only be reduced by 20% when such valves are equipped with corrosion-resistant lining. For difficult problems, such as pimples or semi-solids, and oxygen use, increase values by 50% When in doubt, play it safe by choosing it more often would select the actuator.

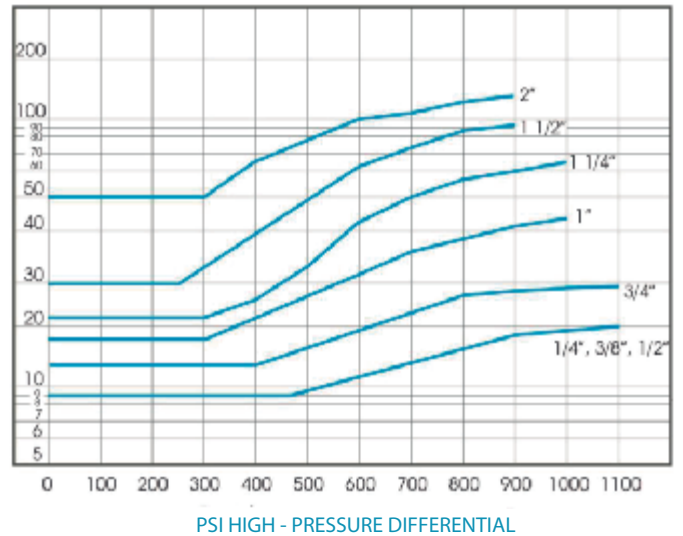
## Valves Style "C" Full Port

Valve with Teflon seats



Teflon valve seats (T)  
Reinforced (M)

RECOMMENDED TORQUE ACTUATOR FT. LBS.



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# PLUG VALVE



# MAIN FEATURES

## Of the OyM Valves

- ▣ Inverse design diaphragm lip provides an airtight seal on the stem.
  - ▣ The shirt will firmly held Teflon the body.
  - ▣ The closure of this valve is tight, and the adjustment can be made on the pipe line.
  - ▣ The flow can be bidirectional; valves can be supplied threaded and flanged 150 lb. ANSI; The operating range is 73 C (-100 F) to 240 C (400 F).
  - ▣ Due to the large port opening of the male, the pressure drop is reduced and the coefficient CV gives a high value.
  - ▣ The key male can be operated in any of the four quadrants, avoiding a potential barrier; this valve has an effective limit for such key.
- The unique design of male (conical shape and body
- ▣ provide a reduced value of the torsional moment of the turn.



### 1 TEFLON DIAPHRAGM:

Reverse lip design, provides a static seal and dynamic auto-adjustable rod.

**2 SHIRT TEFLON:** Due to its large sealing area, it has a tight seal and a long service life.

### 3 EYEBROWS AND SLOTS RETENTION:

Eyebrows, slots and enhanced body retain firmly to the shirt.

### 4 STANDARD FLANGES ANSI

### 5 MALE TAPER:

The unique design provides a low male touch of spin and online adjustment to compensate for wear.

### 6 FIT:

The adjustment may be of +5 mm. (-3/16)

### 7 ADJUSTING:

The adjuster beam system ensures an effective seal, preventing the plug reaches the bottom of the body

### 8 KEY ANGLE:

It has an array of effective unemployment. The key indicates the position of the male (open or closed). As an option the key can operate in all four quadrants.

### 9 TIRES AND ELECTRIC ACTUATORS:

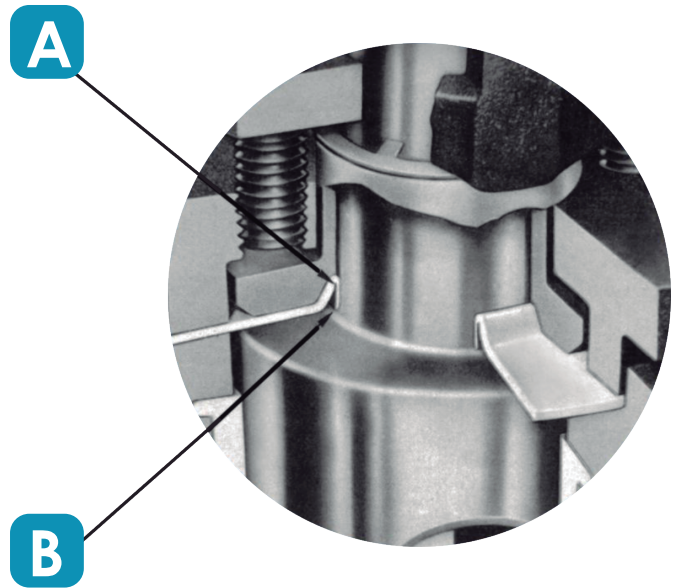
These actuators can be installed without any modification.

### A SEALED STATIC:

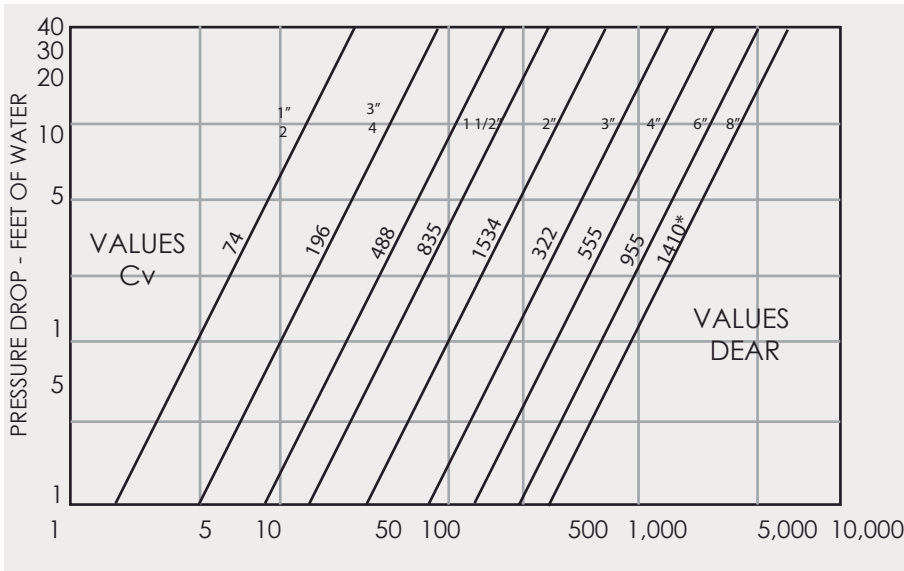
Through efforts collar shoulder, the teflon diaphragm is pushed toward the stem preventing leakage to the atmosphere or to the vacuum valve in service.

### B DYNAMIC SEALING:

Diaphragm reverse lip seal provides a dynamic autoenergizable on the stem formed when the pressure reverse biasing said lip against the rod.



## FLOW RATE CV



Size	Torque FT/LBS
1/2"	13
3/4"	13
1"	35
1 1/2"	68
2"	95
3"	105
4"	210
6"	420
8"	650

- ▣ All CV values were measured according to the standards of the Institute of Fluid Control.

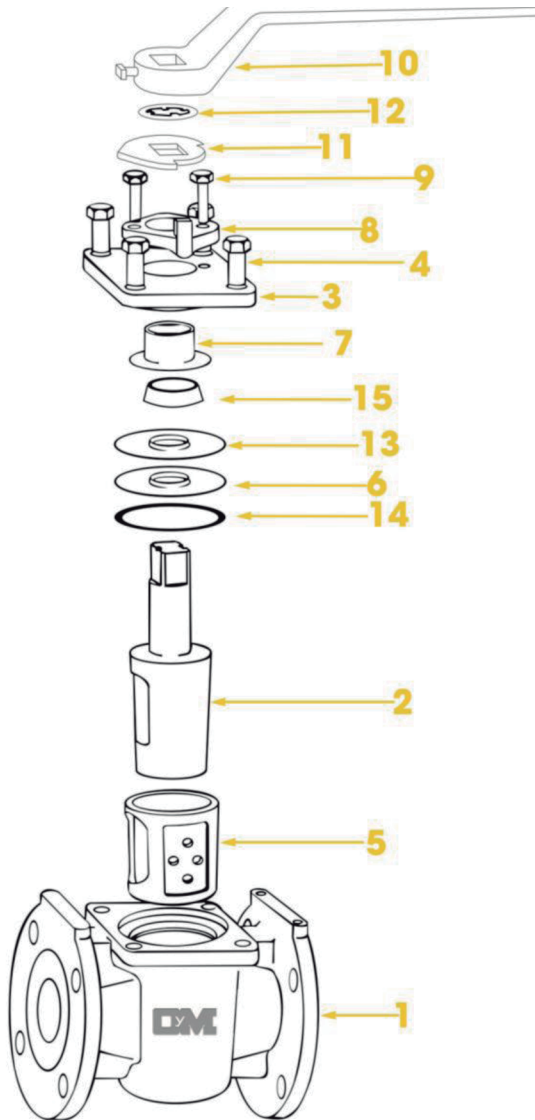
### ◀ AVERAGE TORQUE SPINNING

- ▣ The actuator must be selected will be the one that has the same or greater power output than what is shown in the graph. Additional requirements are determined by the characteristics of the fluid and the operating frequency.  
To service the lubricating fluid can be reduced 30% and severe service increased by 30%.

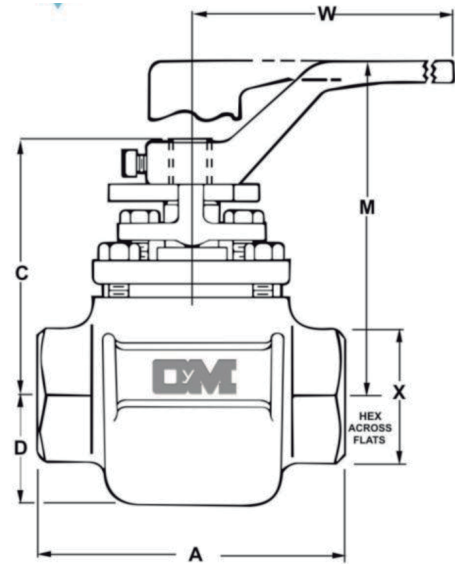
## TIME TORQUE SPINNING

The torsional torque in a plug valve with Teflon sleeve is determined primarily by two factors: the adjustment plug to hold the line pressure and the operating conditions (temperature, corrosion, deposition, operating frequency, etc. .) All valves are tested at the plant to maintaining a pressure of 10 kg/cm<sup>2</sup> (100 psig) air at room temperature.

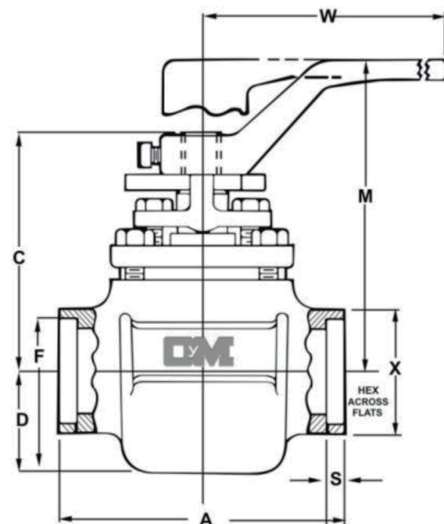
To the right is the average values of torsional torques valve new.



▼ Threaded Valve



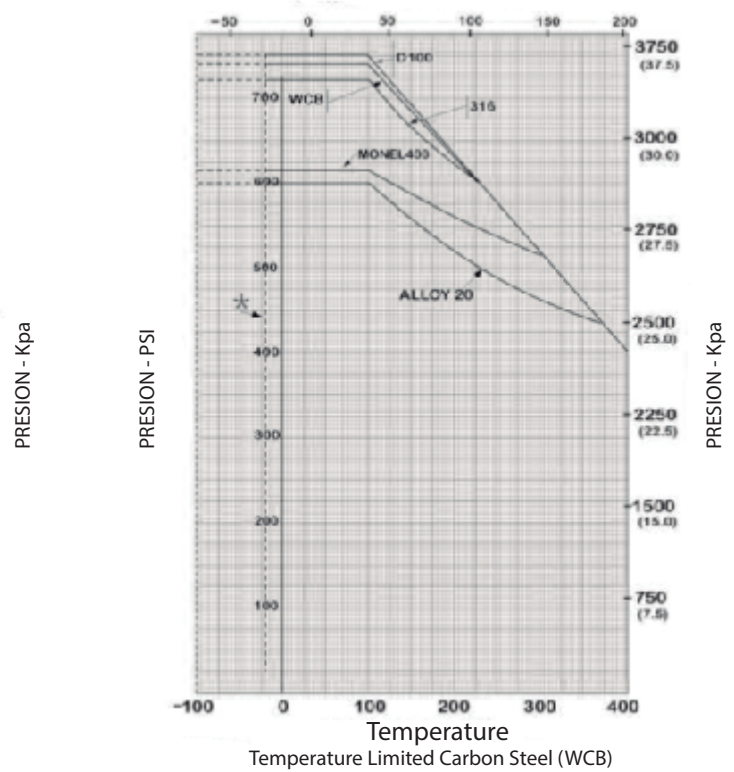
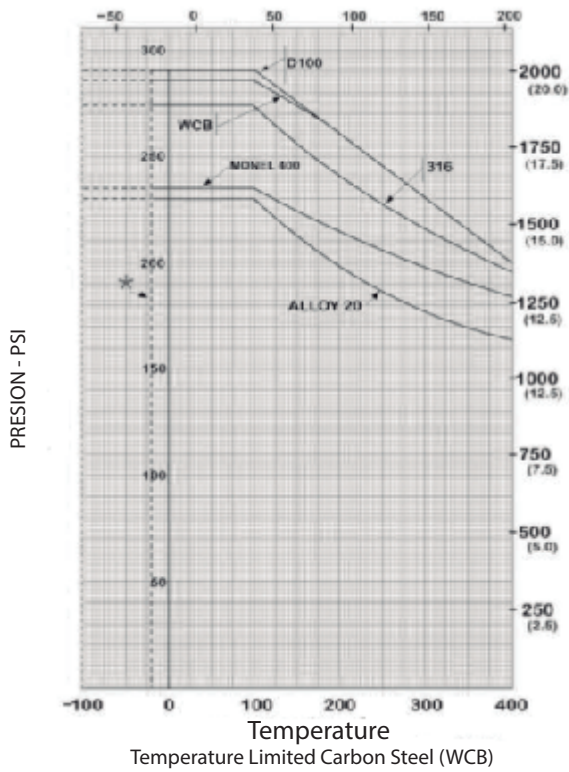
▼ Válvula Socket Weld



Part Number	Description	Building Material	Qty.
1	Body	-	1
2	Plug	-	1
3	Top Cap	-	1
4	Top Cap Fastener	Galvanized Stainless Steel	4
5	Sleeve	Virgin Teflon (PTFE)	1
6	Diaphragm	Virgin Teflon (PTFE)	1
7	Thrust Collar	-	1
8	Adjuster	-	1
9	Adjuster Fastener	Galvanized	2
10	Wrench	Carbon Steel	1
11	Stop Collar	Galvanized	1
12	Stop Collar Retainer	Insurance Truck	1
13	Diaphragm (Fire Tested)	Stainless Steel	1
14	Board (Fire Tested)	Graphite	1
15	Seal (Fire Tested)	Graphite	1



The pressure-temperature range of all materials listed on the bottom, is based on the mechanical properties requerimentos cited in the latest ASTM specifications. The pressure-temperature range is an agreement between the rank given by ANSI B 31.3 and since 1973 by the Institute for Petroleum Refinery Piping. For what elas valves work at temperatures below -17 C (0 f) or that they are in extreme temperature changes, it may be that the valve requires further adjustment.



# SELECTING YOUR VALVE

SIZES	BODY STYLE	BODY MATERIAL	TRIM MATERIAL	SEAT MATERIAL	SEAL MATERIAL
1/4" (6mm) 3/8" (9mm) 1/2" (13mm) 3/4" (19mm) 1" (25mm) 1 1/2" (38mm) 2" (51mm) 3" (76mm) 4" (102mm) 6" (152mm) 8" (204mm) 10" (254mm) 12" (304mm) 14" (355mm)	<b>A</b> (Screwed end Ball Valve) <b>AZ</b> (Screwed end Fire Tested Valve) <b>A 150F</b> (ANSI Class 150 Flanged Ball Valves) <b>AZ 150F</b> (Class 150 Fire Tested Flanged Valve) <b>AF 30S</b> (ANSI Class 300 Flanged Ball Valve) <b>AZF30S</b> (ANSI Class 300 Fire Tested Flanged Valve) <hr/> <b>C</b> (Screwed end Ball Valve Full Port) <b>CZ</b> (Screwed end Ball Valve Full Port Fire Tested) <b>C150 F</b> (ANSI 150 Full Port Flanged Ball Valve) <b>CZ150F</b> (ANSI 150 Full Port Fire Tested Flanged Valve) <hr/> <b>M</b> (Screwed end Plug Valve) <b>MZ</b> (Screwed en Plug Valve Fire Tested) <b>M150F</b> (ANSI Class 150 Flanged Plug Valve) <b>MZ150F</b> (Class 150 Fire Tested Plug Valve) <b>MF30S</b> (Class 300 Flanged Plug Valve) <b>MZF30S</b> (Class 300 Flanged Fire Tested Plug Valve)	22 CARBON STEEL  35 ALLOY 20  36 316 STAINLESS STEEL  71 MONEL  75 HASTELLOY C	22 CARBON STEEL  35 ALLOY 20  36 316 STAINLESS STEEL  71 MONEL  75 HASTELLOY C	T = TFE  M= FILLED TFE	T= TFE

Examples: (The keys are in parenthesis).

1.-A valve screw (A) in type 316 stainless steel (36), with equal inner the body (the number is not noted), Teflon seats (T) and Teflon seal (T), 2 "; forming calls the number of the figure as follows:



1.-A Valve Flanged ANSI Class 150 (C150F) in carbon steel (22) seats Teflon (T) and Teflon seal (T) of 6 "; forming calls the number of the figure as follows:



1.-A Plug Valve ANSI Class 150 (C150F) in carbon steel (22), the interior type 316 stainless steel (36), Teflon seats (T) and Teflon seal (T) of 6 "; forming calls the number of the figure as follows:





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**OYM**®



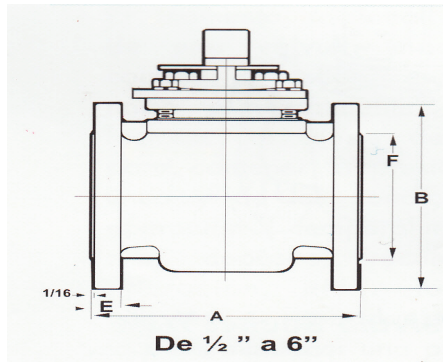
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**OYM S. de R.L. de C.V.**



# DIMENSIONS

Flanged 150 # and 300 # of 1/2" to 8"

## FLANGED APROXIMATE DIMENSIONS (INCHES)



SIZE	BLAST-HOLE 150			BLAST-HOLE 300			A		B		E		F	PORT DIAM.	APPROX. WEIGHT LBS. **	
	NO.	MED.	BC	NO.	MED.	BC	150	300	150	300	150	300			150	300
							1/2	4	5/8	23/8	4	5/8	25/8	41/4		
3/4	4	5/8	23/4	4	3/4	31/4	45/8	6	4	43/4	7/16	5/8	111/16	0.248	7	10
1	4	5/8	31/8	4	3/4	31/2	5	61/2	41/4	47/8	7/16	11/16	2	0.785	10 3/4	17 1/4
1 1/2	4	5/8	37/8	4	7/8	41/2	61/2	71/2	5	61/8	9/16	13/16	27/8	1.21	15 1/2	26
2	4	3/4	43/4	8	3/4	5	7	81/2	6	61/2	5/8	7/8	35/8	2	23 1/2	29 1/2
3	4	3/4	6	8	7/8	65/8	8	11 1/8	71/2	81/4	3/4	11/8	5	4.6	41	69
4	4	3/4	71/2	8	7/8	77/8	9	12	9	10	15/16	11/4	6 3/16	7.4	75	143 3/4
6	8	7/8	91/2	12	7/8	111/2	10 1/2	15 7/8	11	12 1/2	1	1 7/16	8 1/2	16.1	149 3/4	229 1/2
8	8	7/8	11 3/4				11 1/2			13 1/2			10 5/8	28.50	211.640	

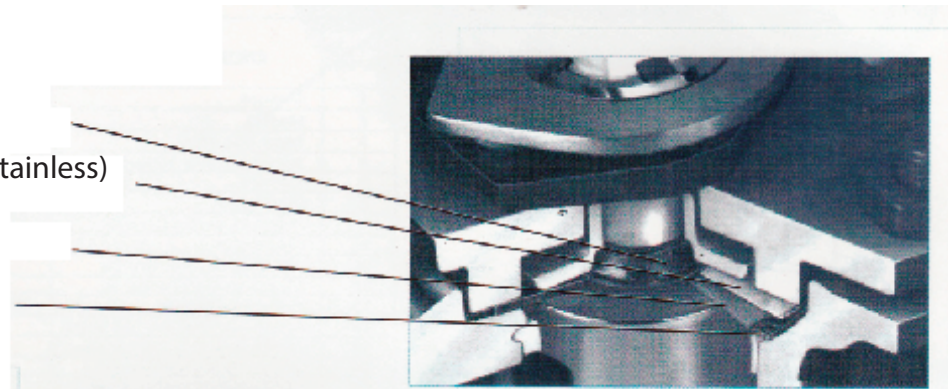
## SAFETY VALVES FIRE PROOF

Seal (grafoil)

Diaphragm (316 Stainless)

Diaphragm (TFE)

Gasket (grafoil)





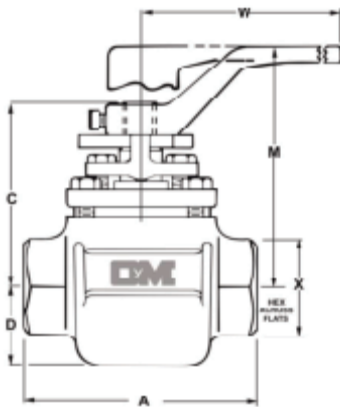
# DIMENSIONS

Screwed-End and Socket Weld  
1/2" to 2 1/2"

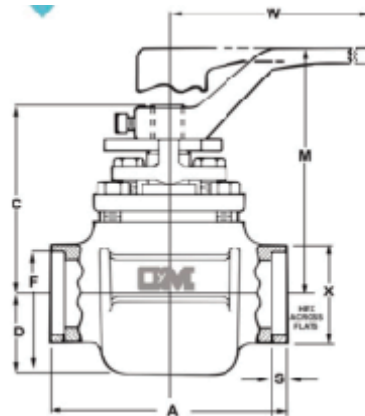
## SCREWED-END AND SOCKET WELD DIMENSIONS

SIZE	A	C	D	F	M	S	W	X	Port Diameter	Approx. WT. In LBS.
1/2	3 1/2	3 3/16	1 11/32	0.86	4 25/32	3/8	6	1 9/16	0.248	3 3/4
3/4	3 1/2	3 3/16	1 11/32	1.07	4 25/32	1/2	6	1 9/16	0.248	3 1/2
1	4 5/8	3 23/32	1 19/32	1.33	4 13/16	1/2	7	1 15/16	0.785	7
1 1/2	5 1/2	4 5/32	1 7/8	1.91	5 1/2	1/2	9	2 9/16	1.21	9 1/4
2	6	4 3/4	2 7/32	2.4	6 5/16	5/8	12	3 1/8	2	15 3/4
2 1/2	8 5/8	5 1/2	3	2.9	6 1/2	5/8	12	3 9/16		27 3/4

Screwed Valve



Socket Weld Valve



## RANGE PFA DIAPHRAGM SCREWED-END AND SOCKET WELD

