

SERIES S6

1/2" - 2"



**The most robust of the valves.
Manufactured of solid bar stock in diverse materials,
with seals for extreme service conditions,
ANSI Class 2500#, can also be automated.**



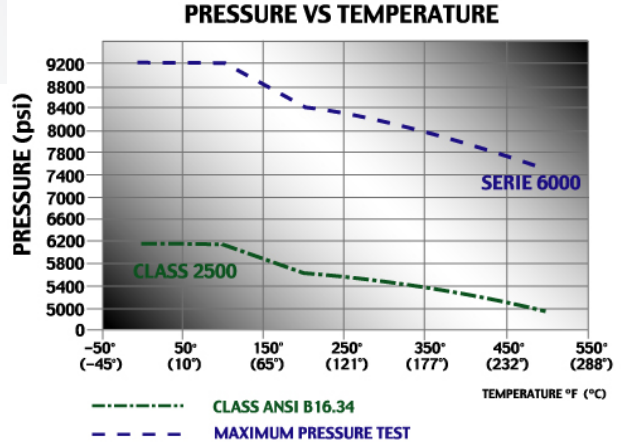
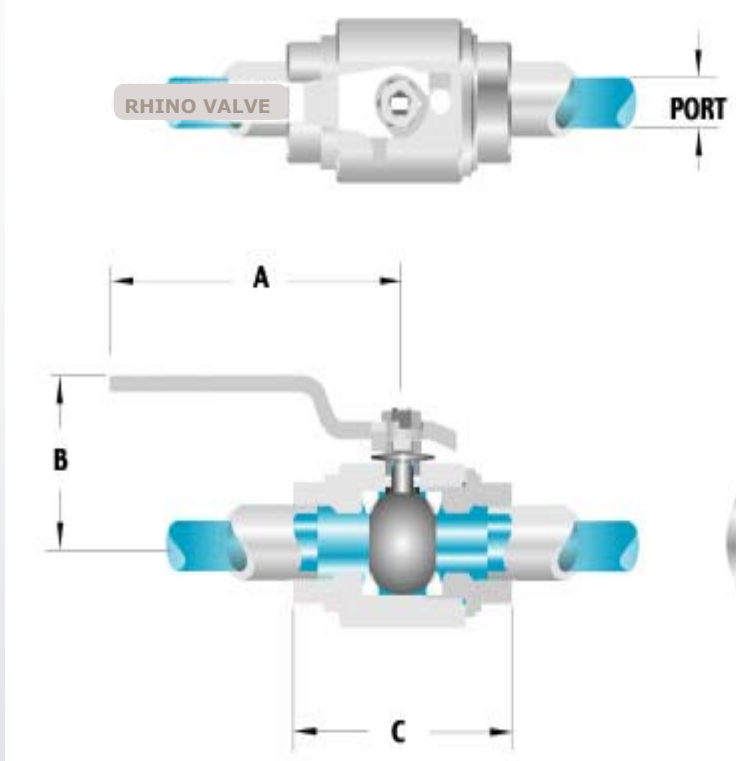
LICENSE No. 6D-0321



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RHINO VALVE USA

SERIES S6 DIMENSIONS



SERIES S6 1/2" - 2"

B16.34 class 2500

SIZE	A	B	C	D	PORT	WEIGHT IN Lbs.
1/2"	4 1/4	1.81	3.26	1.67	0.500	2.227
3/4"	4 1/4	2.05	3.75	1.86	0.750	3.880
1"	5 3/4	2.54	4.44	2.48	1.000	5.688
1 1/2"	7	3.33	5.12	3.06	1.500	18.629
2"	7 3/8	4.01	5.50	3.57	2.000	29.410

Service Conditions:

CONDITION	CARBON STEEL	STAINLESS STEEL
ANSI CLASS #	2500	2500
OPERATION TEMPERATURE	-20 to 100°F (-29 to 38°C)	-20 to 100°F (-29 to 38°C)
MAX. ALLOWABLE WORKING PRESSURE	6170 psi (434 kg/cm ²)	6000 psi (422 kg/cm ²)
MAXIMUM PRESSURE TEST	9275 psi (651 kg/cm ²)	9000 psi (633 kg/cm ²)

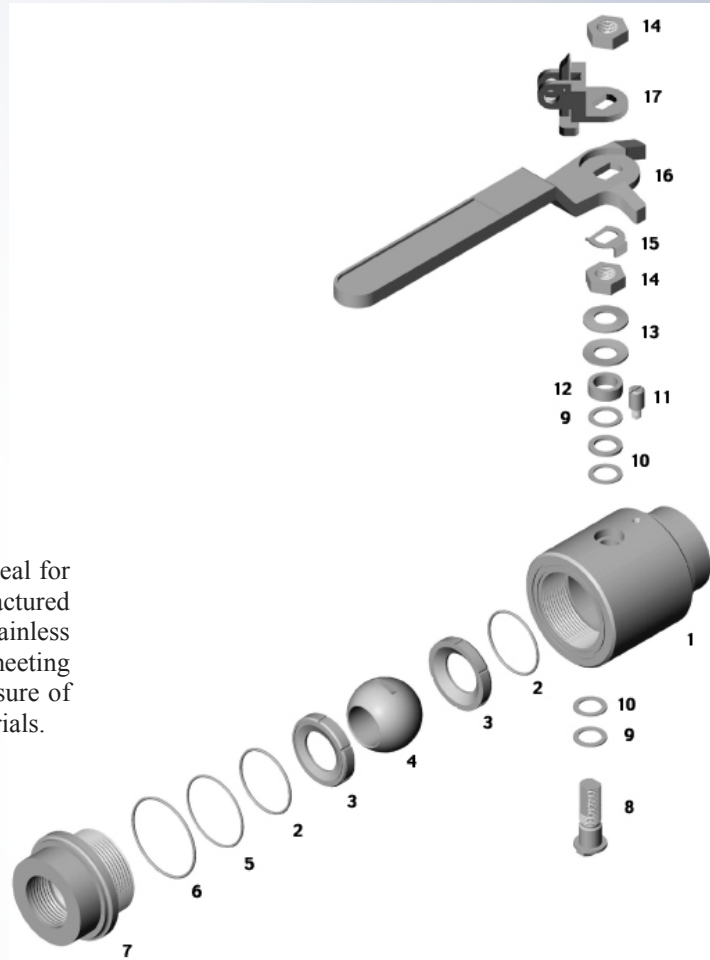
Note: Always consider the maximum, pressure allowed by the soft elements as seats and seals.

SERIES S6

EXPLODED VIEW

- TWO PIECE DESIGN, FULL PORT
- MASSIVE HEAVY DUTY BODY MADE FROM BAR STOCK.
- THREADED NPT or BS, SW.
- WALL THICKNESS: ANSI 2500
- MAXIMUM OP. PRESSURE: 6000 psi.
- SEATS: DELRIN W/ VITON;
- BODY SEAL: VITON
- STEM SEAL: DELRIN / MULTIFIL
- SS 17.4 PH STEM AND BALL

SERIES S6. This robust valve of heavy duty design is ideal for High Pressure service. Full port from 1/2" to 2", manufactured from solid A105 bar stock of carbon steel or 316 Stainless Steel. Two piece body design with a wall thickness meeting ANSI 2500#. This valve has a maximum operating pressure of 6000 psi with heavy duty seals made of a variety of materials. Locking device on handle is optional.



PARTS LISTING OF SERIES 6000

ITEM	QUANTITY	DESCRIPTION	MATERIAL	
			CARBON STEEL	STAINLESS STEEL
1	1	BODY	ASTM A 576 Tp. 1018	ASTM A 479 Tp. 316
2	2	SEAT'S "O-RING"	VITON	VITON
3	2	SEAT	DELRIN	DELRIN
4	1	BALL	ASTM A 574 (S17400)	ASTM A 574 (S17400)
5	1	PLUG END'S "O-RING"	VITON	VITON
6	1	PLUG END'S EXTERNAL "O-RING"	VITON	VITON
7	1	PLUG END	ASTM A 576 Tp. 1018	ASTM A 479 Tp. 316
8	1	STEM	ASTM A 574 (S17400)	ASTM A 574 (S17400)
9	2	STEM SEAL	DELRIN	DELRIN
10	3	SEAL PROTECTOR	MULTIFIL	MULTIFIL
11	1	STOP PIN	AISI 316	AISI 316
12	1	FOLLOWER	AISI 416	AISI 416
13	2	BELLEVILLE WASHER	AISI 1075	AISI 302
14	2	STEM NUT	ASTM A 194 2HM	ASTM A 594 TYPE A 304
15	1	LOCK NUT	AISI 304	AISI 304
16	1	HANDLE	ASTM A 743 CF8/CA15	ASTM A 743 CF8/CA15
17	1	LOCK DEVICE (OPTIONAL)	ASTM A 743 CF8/CA15	ASTM A 743 CF8/CA15

SERIES S6

SPECIFICATIONS

Rhino Valve, as always thinking of your safety and your industrial needs, has developed "The Series S6 Ball Valve ANSI 2500#".

This ANSI 2500# Valve consists, generally, of a body made of 2 robust pieces with NPT, BS & SW ends and double "O" ring security seals, a full bore stainless steel ball to avoid strong line pressure drops, a casted stainless steel handle with locking device (optional). These are just some of the features that this robust valve has to safely handle high pressures. They have added to the Rhino Valve safety characteristics.

This valve is adequate for applications up to 6000 psi. The Series S6 Valve is the most convenient Ball Valve for high pressure installations. It's economy, design, ease of installation, security against leakage, low torque operation and reliability are easily characterized by Rhino Valve.

With comprehensive stocks available, assures short delivery time, availability of spare parts, possibility of modification according to your needs for a particular application/use and assured quality from a ISO 9001 registered company since 1994.

Available in sizes from 1/2" to 2" in Carbon Steel and Stainless Steel 316. The Series S6 valve normally is supplied with Delrin or Peek* seats, but as in all the Rhino Valves there are available several materials of seats and seals for each application.

*Subject availability.

SPECIFICATIONS

Valve Size

1/2", 3/4", 1", 1 1/2", 2" (Full bore)
(15,20,25,40,50)

Wall Thickness:

ANSI 2500#

Body and Plug Materials :

Carbon Steel: ASTM A29 Gr12L14
Stainless Steel: ASTM A276 Gr316

Stem Design:

Bottom entry, live self-adjustable seal (Belleville, Double internal nut seals, four upper seal nuts)

Bolting:

Screw and Nut: Stainless Steel: ASTM A193/193M (AISI 304)
Carbon Steel: Screw-SAE J429 Gr5; Nut-ASTM A304 Gr5

Stem Seals:

Delrin and Multifil or Peak and Multifil

Seats:

Delrin (Lubetal) UHMWPE, Peek, with Viton Seals ("O" rings) on back for "live load".

Body Seals:

Double Viton Seals ("O" rings).

Note: Some others materials of seals and seats can be supplied, please check with factory availability.

SERIES S6

SPECIFICATION

Ball Materials:

Stainless Steel: ASTM A276 Gr316

Stems Materials: Stainless Steel: 17-4 PH

Style: Body and Plug threaded

Operation: Manual: Casted handle (1/2" to 2")

Designs Specifications: ANSI B16.10 - Face to Face dimensions

ANSI B16.34 - Wall thickness

SEATS

The design of Rhino Valves allows flow pressure in both directions which is transferred to the floating ball. Then, the ball is pressed against the downstream seat, resulting in a bubble tight sealing. The resilient seats patented by Rhino allows for relief of the pressure to the upstream seat against the ball, resulting a low torque of operation and a long, soft operation even with high differential pressures. This low torque characteristic, permits for a smaller actuator operation, resulting in lower cost. The seats also act as a ball stripper, as it removes any adhered material to the ball for a better sealing.

STEM

The stem is designed for both safety and a long, leak-tight service life.

Inserted from the bottom through the cavity, it rests securely against an interior body shoulder.

The stem is held in place by a live loaded retaining system, featuring opposing Belleville washers. These flex in response to thermal expansions and contractions and maintain effective sealing pressure as they compensate for normal stem seal wear. The seal can also be easily adjusted in-line by the accessible stem nut. In SERIES 400 and 600, the stem nut retaining clip holds the nut in place and prevents backing off, particularly in high cycle actuated services. In the SERIES FP 152 a CHEVRON^o type external stem seal is provided.

TORQUE

The operating torque of the ball valve is influenced by a number of factors which has to be considered to size a valve for actuation. The factors considered are design, (type and material of valve seats), and application (pressure, media and frequency of operation).

The torque shown is a function of the pressure, as the friction between the floating ball and the seat is higher as the pressure is incremented.

Note: Our charts were made for reduced port valves (except for Series FP 152, which can be read directly). If you want to find the torque of a full port valve, please look for the curve of the next higher size, for example if you want to know the torque of a 1" full port valve, you have to see the 1 1/4" valve readout.

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