

A consumer validated **Superbrand in piping** category

for **consecutive 4 years** 



India's Most Trusted Pipe Brand based on TRA's Brand Trust Report for the 5<sup>th</sup> time

**Power of Desire** 



India's Most Desired
Brand based on TRA's Brand Trust
Report 2022



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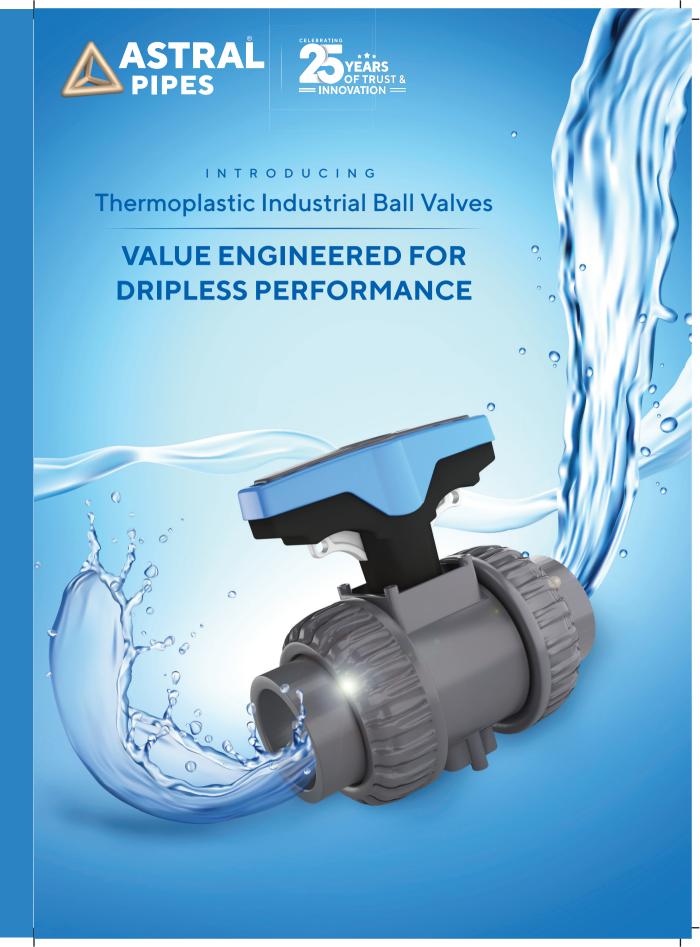
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### THERMOPLASTIC BALL VALVES



#### INTRODUCTION

The Astral Industrial Series True Union ball valve incorporates state-of-the-art manufacturing technology and cutting-edge features, making it one of the most advanced valves currently available in the market. The valves are used in many applications where acids & corrosive chemicals are used in place of stainless systems when a greater corrosion is desired. They are used in a variety of application such as chemical process Industries, aggressive acid, Mining & Mineral processing, pulp & paper and plating & Metal Treatment etc. Its exceptional smoothness of operation, coupled with low operating torque values, ensures trouble-free service and a long operational lifespan. The Industrial Series valves represent our commitment to providing the industry with the finest solutions, achieved through the integration of high-performance components such as PTFE seats and FKM/EPDM rubber rings/gaskets.

These valves are easily removable from their position and can be fully serviced, thanks to their double union design. Rigorous quality control measures have been implemented throughout the manufacturing process of the Industrial Series valves, including comprehensive low and high-pressure testing for every individual unit. This meticulous testing guarantees trouble-free operation under all service conditions.

Our valves are available in both uPVC and CPVC materials, perfectly complementing our range of piping systems - Astral Aquarius Plus and Astral Chempro. By offering this comprehensive product line, Astral solidifies its position as the leading one-step solution provider for all your piping needs.



### **APPLICATION AREAS**

- Aquatic and animal life support System
- · Mining & mineral processing
- Aggresive Acid

- · Pulp & paper
- Chemical process industries
- · Plating & metal treatment
- Power plants

#### **PRODUCT DETAILS**

- **Size:** ½" 4" (15mm to 100mm)
- Material: uPVC, CPVC, PP Handle
- Joint End:
- 1. Flanged

Actuation:

- 2.Socket(IPS/Metric)
- 1:Electric Actuation
- 2:Pneumatic Actuation

• Seat: PTFE

• Seals: EPDM Or FKM

• Pressure Rating:

1. SIZE: ½" - 2": 235 PSI (16kg/cm²)& 2½" - 4": 150 PSI (10 kg/cm²) @ 73°F for Socket type

2. SIZE: ½"-4": 150 PSI (10 kg/cm²) @ 73°F for Flange type



**STANDARDS** 

ASTM D 1784 | ASTM D 2467 ASTM F 439 | ASTM F 1970

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### **FEATURES**

A 4 PCS LOCKABLE HANDLE

Easy fit Ergonomic multi-functional handle equipped with removable tool to adjust with ball seat carrier

B ACTUATOR MOUNTING PROVISION -

Automation with electric or pneumatic actuator possible

**C** ERGONOMIC SHAPE

The valve features an ergonomically designed overall shape, facilitating effortless handling and nut tightening.

D SEAT CARRIER DESIGN

The seat carrier design of our product stands out as one of the industry's finest, featuring an increased number of threads. This design enhancement significantly enhances the valve's ability to withstand high-pressure conditions during operation.

**E** DOUBLE STEM RINGS

Two stem seals providing maximum protection against valve leakage. The stem groove undergoes precision Machining to ensure the highest degree of dimensional accuracy.

F FULL BORE DESIGN

It has full bore flow when open Excellent flow volumes are achieved with this design

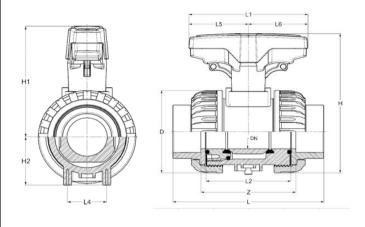
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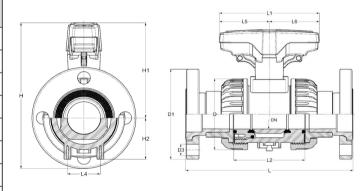
FOR FLANGE TYPE

Size [Inch]	D1	Н	H1	H2	L
1/2"	89	116	71	28	162
3/4"	98	131	81	32	177
1"	108	144	90	37	198
1-1/4"	117	163	105	44	218
1-1/2"	126	185	122	53	244
2"	152	218	142	62	274
2-1/2"	178	248	160	77	294
3″	190	272	177	90	331
4"	230	326	211	107	393



#### FOR SOCKET TYPE

	Size [Inch]	L	D	Н	H1	H2
	1/2"	118	53	99	71	28
3/4" 130		61	113	81	32	
	1″	147	71	127	90	37
	1-1/4"	165	84	149	105	44
	1-1/2"	181	101	175	122	53
	2"	207	120	204	142	62
	2-1/2"	229	152	237	160	77
	3″	257	170	267	177	90
	4"	314	208	318	211	107



## TEMPERATURE PRESSURE RATING

	System Operating Temperature °F (°C)		100 (38)	110 (43)	120 (49)	130 (54)	140 (60)	150 (66)	160 (71)	170 (77)	180 (82)	190 (88)	200 (93)	210 (99)	
		1/2"	uPVC	235 (1.62)	211 (1.45)	150 (1.03)	75 (0.52)	50 (0.34)	-0- (-0-)	-O- (-O-)	-O- (-O-)	-0- (-0-)	-O- (-O-)	-O- (-O-)	-O- (-O-)
	Valve Pressure	2"	CPVC	235 (1.62)	219 (1.51)	170 (1.17)	145 (1.0)	130 (0.90)	110 (0.76)	90 (0.62)	80 (0.55)	70 (0.48)	60 (0.41)	50 (0.34)	-O- (-O-)
-	Rating psi (Mpa)	2-1/2"	uPVC	150 (1.03)	135 (0.93)	110 (0.76)	75 (0.52)	50 (0.34)	-0- (-0-)	-O- (-O-)	-O- (-O-)	-0- (-0-)	-O- (-O-)	-O- (-O-)	-O- (-O-)
		4'	CPVC	150 (1.03)	140 (0.97)	130 (0.9)	120 (0.83)	110 (0.76)	110 (0.70)	90 (0.62)	80 (0.55)	70 (0.48)	60 (0.41)	50 (0.34)	-0- (-0-)





# INDUSTRIAL TRUE UNION BALL VALVE ASSEMBLY PARTS



NO.	COMPONENT	QTY.	MATERIAL
1	Key for opening	1	PVC/CPVC
2	Handle	1	PP
3	Saftey lock	1	POM
4	Stem O ring	2	EPDM/FKM
5	Stem	1	PVC/CPVC
6	Union Nut	2	PVC/CPVC
7	Socket	2	PVC/CPVC
8	Socket seal O ring	2	EPDM/FKM
9	Seat Carrier	1	PVC/CPVC
10	Body Seal O ring	1	EPDM/FKM
11	Ball Seat (Teflon)	2	PTFE
12	Ball	1	PVC/CPVC
13	Body	1	PVC/CPVC