

## HIGH PURITY BALL VALVES M3HP TRUE BORE (6" ASME BPE)

### DESCRIPTION

M3HP three piece body ball valves are isolating valves designed for use with clean steam, condensate and other gases and liquids used in high purity and aseptic processes.

The valve is not designed as a control valve and should only be used as an isolating valve, fully open or fully closed.

The product is mainly designed for the pharmaceutical, biotech, semiconductor, cosmetics, fine chemical, food and beverage industries.

### MAIN FEATURES

- True bore floating ball design.
- Completely made from solid bar stock material.
- Can be serviced without removal from pipeline.
- Bidirectional.
- Antistatic device.
- Anti blow out proof stem.
- Tube weld with loose body flanges (360° rotation after installation).
- ISO 5211 mounting.

### STANDARD SURFACE FINISH

- Internal wetted parts: ≤ 0,51 micron Ra – SF1.
- External : ≤ 0,76 micron Ra – SF3.
- Other surface conditions see IS PV20.00 E – Technical information.
- Ultrasonic cleaning.

- OPTIONS:** Different sealing materials.  
Degreased for oxygen use.  
Cavity filler.
- USE:** Clean steam, gases and liquids compatible with the construction.
- AVAILABLE MODELS:** M3HP – Complete bar stock construction.

**SIZES:** 6".

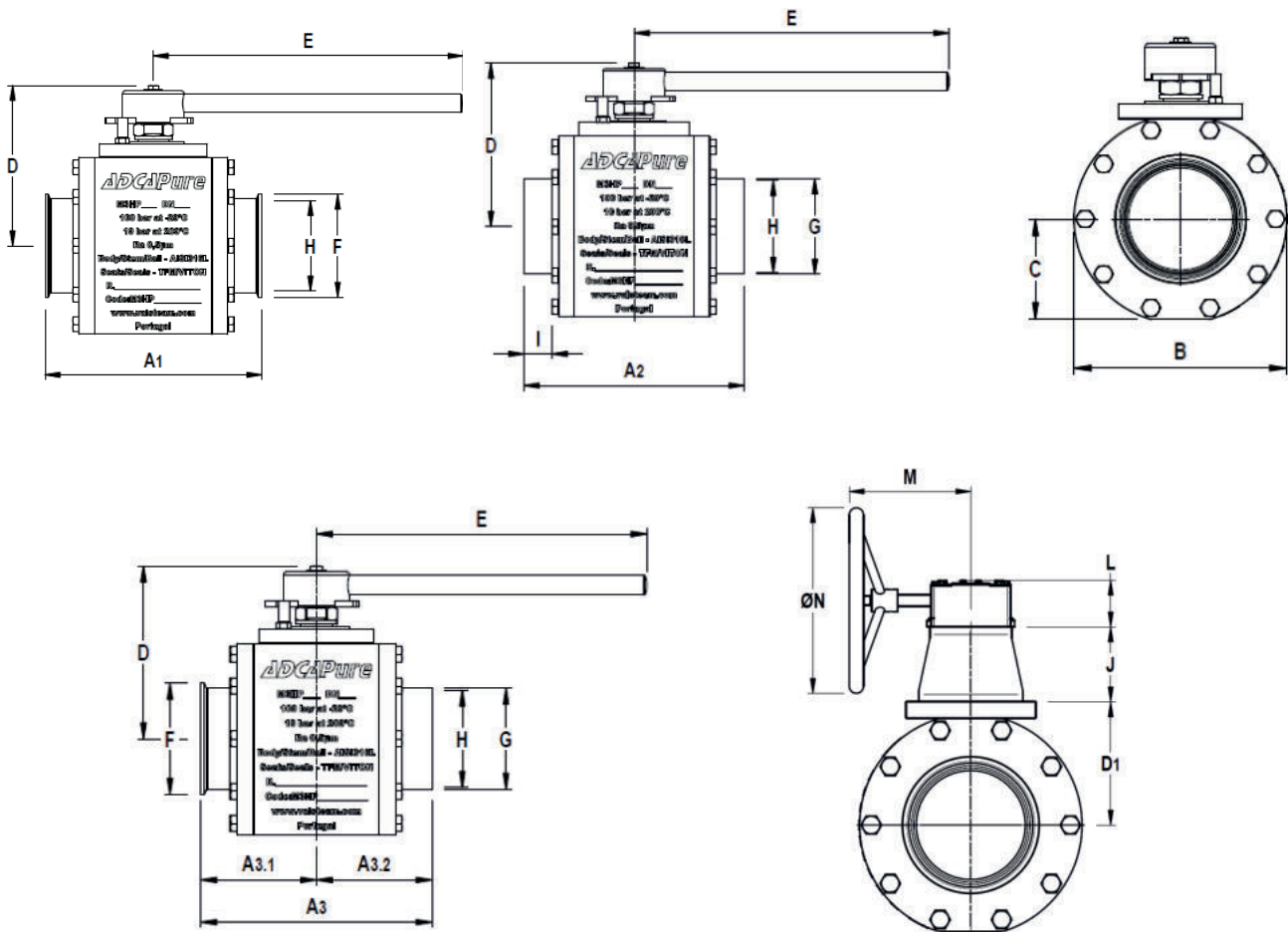
- CONNECTIONS:** According to ASME BPE.  
TC – Sanitary clamps.  
ETO – Extended tube orbital welding.  
TC / ETO – Combination.

**PACKAGING:** Assembling and packaging in a clean room certified according to ISO 14644-1.  
The product is end capped and sealed with recyclable thermo-shrinkable plastic film, to avoid contamination.

**INSTALLATION:** See IMI – Installation and maintenance instructions.



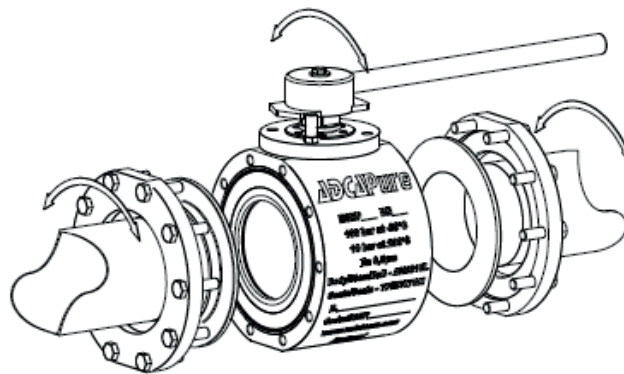
CE MARKING – GROUP 2 (PED – European Directive)	
PN16	Category
6"	1 (CE marked)



DIMENSIONS (mm) ASME BPE

SIZE	A1	A2	A3	A3.1	A3.2	B	C	D	D1	E	F	G	H	I	J	L	M	N	BALL PORT	ISO 5211	WGT. (kg)
6"	350	350	350	175	175	300	144	260	166	500	167	152	147	45	101	63	164	250	152,4	F14	101,6

Tube weld easy and quick installation - standard



Loose body flanges make it possible to install the valve without aligning of the welded end connections. After installation the valve can rotate on 360° for the desired orientation.

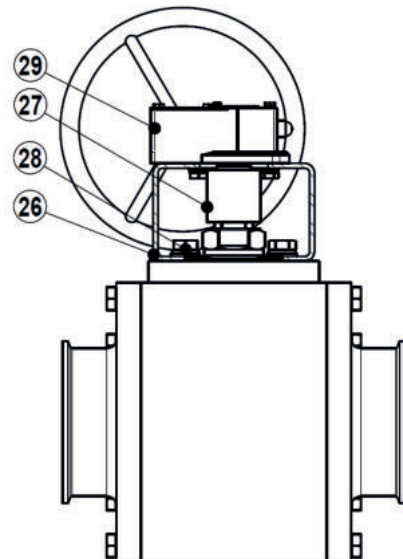
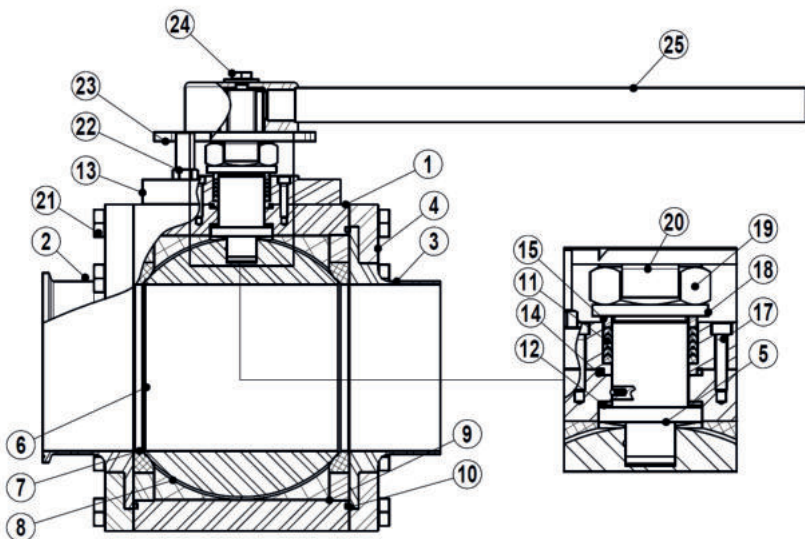
**MATERIALS**

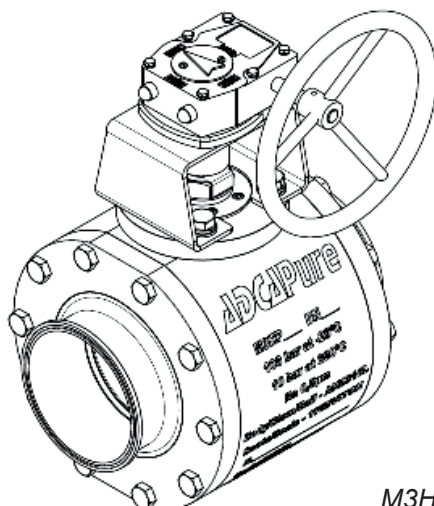
POS. N°	DESIGNATION	MATERIAL
1	Valve body	AISI 316L / 1.4404
2	TC end connection	AISI 316L / 1.4404
3	Tube weld end connection	AISI 316L / 1.4404
4	Flange	AISI 316L / 1.4404
5	Stem	AISI 316L / 1.4404
6	* Valve ball	AISI 316L / 1.4404
7	* Standard seat	TFM 1600
8	* Cavity filler seat	TFM 1600
9	Body ring	AISI 316L / 1.4404
10	* Body seal	PTFE
11	* Stem seals	TFM 1600
12	* Stem thrust seal	TFM 1600 + PEEK
13	ISO flange	AISI 316L / 1.4404
14	ISO flange seal	TFM 1600
15	* Spacer	AISI 316 / 1.4401
17	Bolts	AISI 304 / 1.4301
18	Spring washer	AISI 304 / 1.4301
19	Compression nut	AISI 304 / 1.4301
20	* Lock washer	AISI 304 / 1.4301
21	Fixing screw	AISI 304 / 1.4301
22	Handle stopper pin	AISI 304 / 1.4301
23	Handle stopper	AISI 304 / 1.4301
24	Handle fixing bolt	AISI 304 / 1.4301
25	Handle	AISI 304 / 1.4301
26	Bracket	AISI 304 / 1.4301
27	Bracket stem	AISI 304 / 1.4301
28	Bracket bolts	AISI 304 / 1.4301
29	Gear box	Cast iron

\* Available spare parts;

Remarks: FDA / USP Class VI seals certificate on request.

All valves have a serial number. In case of non-standard valves, this number must be supplied if spare parts are ordered.





M3HP 6" with gearbox

ORDERING CODES M3HP												
<b>Valve model</b>	MHP	1	X	X	F	X	X	CB	X	150		
M3HP 3 pieces ball valve - AISI 316L	MHP											
<b>Lever handle</b>												
Round lever handle complete stainless steel		1										
Bare stem		9										
<b>Material</b>												
AISI 316L / 1.4404			X									
<b>Seat design</b>												
Standard seats				X								
Cavity fillers				F								
<b>Seat material</b>												
TFM 1600					F							
<b>Surface finish a)</b>												
Standard surface finish						X						
Mirror mechanical polished external surfaces (SF1)						P						
Electropolished internal wetted parts (SF5)						E						
<b>Special features</b>												
None								X				
Oxygen cleaning								O				
<b>End connections</b>												
TC – Sanitary clamps ASME BPE									CB			
ETO – Extended tube orbital welding ASME BPE (360° rotation design)									TB			
TC / ETO – Combination ASME BPE (360° rotation design)									CTB			
<b>Ball port</b>												
True bore (standard)										X		
Full bore										NA		
<b>Size</b>												
6"											150	
<b>Special valves / Extras</b>												
Full description or additional codes have to be added in case of a non standard combination											E	

a) Consult IS PV20.00 (Technical information) for further details and other surface finish options.

NA – Not available.