

## HIGH PURITY BALL VALVES M3HP TRUE BORE ( DN 1/2" – 2" ASME BPE )

ADCAPure

### DESCRIPTION

M3HP three pieces body ball valves are isolating valves designed for use on 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 be used only as an isolating valve, fully open or fully closed.

The product was 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  
 Anti blow out proof stem

### STANDARD SURFACE FINISH

Internal wetted parts:  $\leq 0,5$  micron Ra  
 External :  $\leq 0,8$  micron Ra  
 ( 0,25 micron Ra and electro polished as option)  
 Ultrasonic cleaning

### OPTIONS:

Antistatic device  
 Different sealing materials  
 ISO 5211 mounting  
 Degreased for oxygen use

### USE:

Clean steam, gases and liquids compatible with the construction.

### AVAILABLE MODELS:

M3HP – Complete bar stock construction

### SIZES:

DN1/2" to DN 2"

### CONNECTIONS:

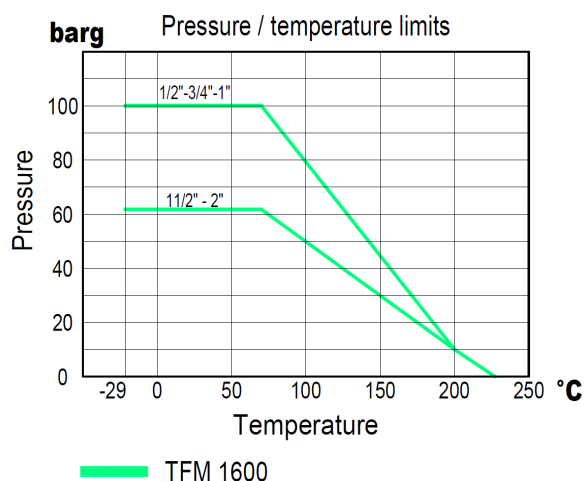
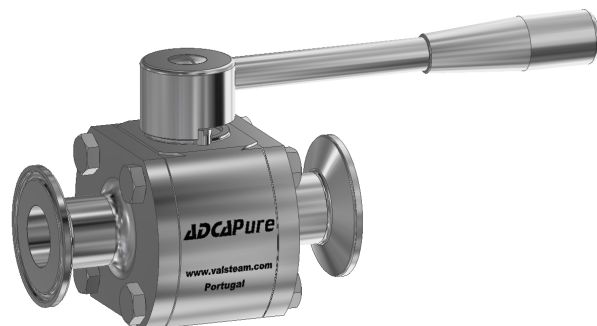
According to ASME BPE  
 TC – Sanitary clamps  
 ETO – Extended tube orbital welding  
 TC / ETO – Combination

### PACKAGING:

Assembling and packaging in a clean room certified according to ISO 14644-1.  
 The product is end capped and vacuum sealed with recyclable plastic film to avoid contamination.

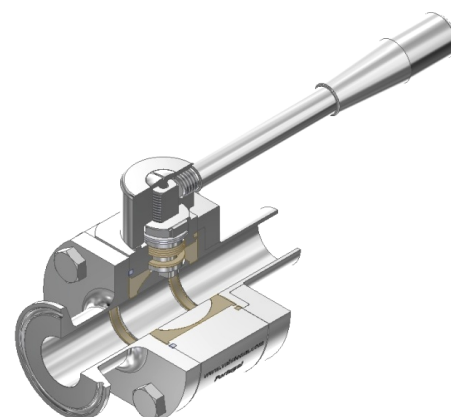
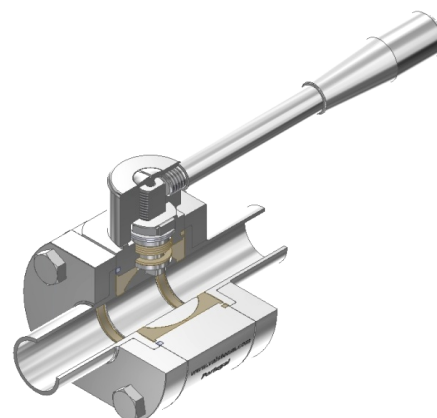
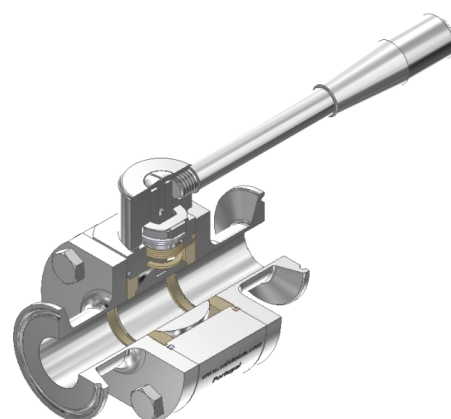
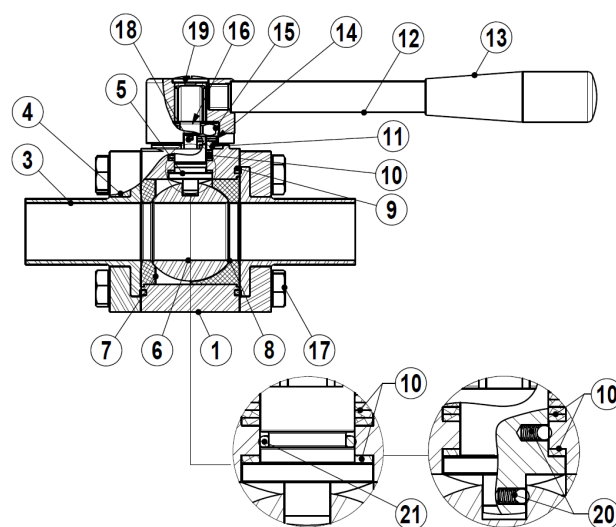
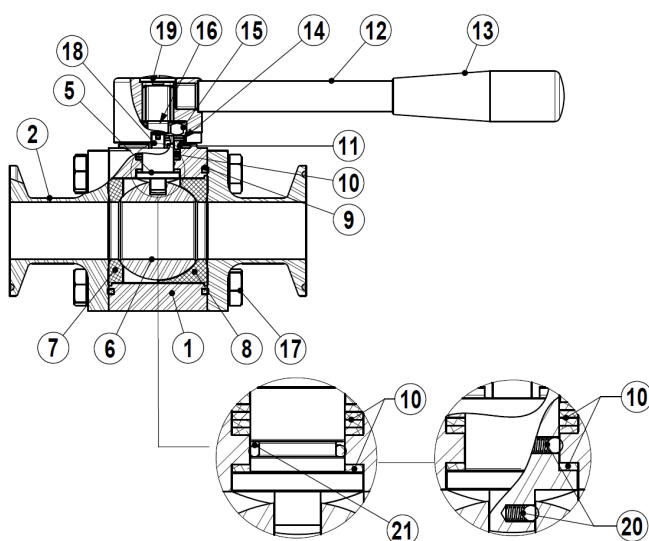
### INSTALLATION:

See IMI, installation and maintenance instructions.



Working pressure may be limited by the valve connections.

CE MARKING (PED - European Directive 97/23/EC)		
PN 100	PN 64	Category
DN 1/2" to 1"	/	SEP - art. 3, paragraph3
/	DN 1 1/2" - 2"	1 (CE Marked)



MATERIALS		
POS.	DESIGNATION	MATERIAL
1	Valve body	AISI316L / 1.4404
2	TC end connection	AISI316L / 1.4404
3	Tube weld end conn.	AISI316L / 1.4404
4	Flange	AISI316L / 1.4404
5	Stem	AISI316L / 1.4404
6	* Valve ball	AISI316L / 1.4404
7	* Standard seat	TFM 1600
8	* Cavity filler seat	TFM 1600
9	* Body seal	PTFE
10	* Stem seals	TFM 1600
11	* Spacer	AISI316 / 1.4401
12	Lever	AISI304 / 1.4301
13	Lever end	AISI304 / 1.4301
14	* Spring washers	AISI304 / 1.4301
15	Compression nut	AISI304 / 1.4301
16	* Lock washers	AISI304 / 1.4301
17	Fixing bolt	AISI304 / 1.4301
18	Stop pin	AISI304 / 1.4301
19	Fixing screw	AISI304 / 1.4301
20	Antistatic device	AISI316 / 1.4401
21	O-ring	VITON

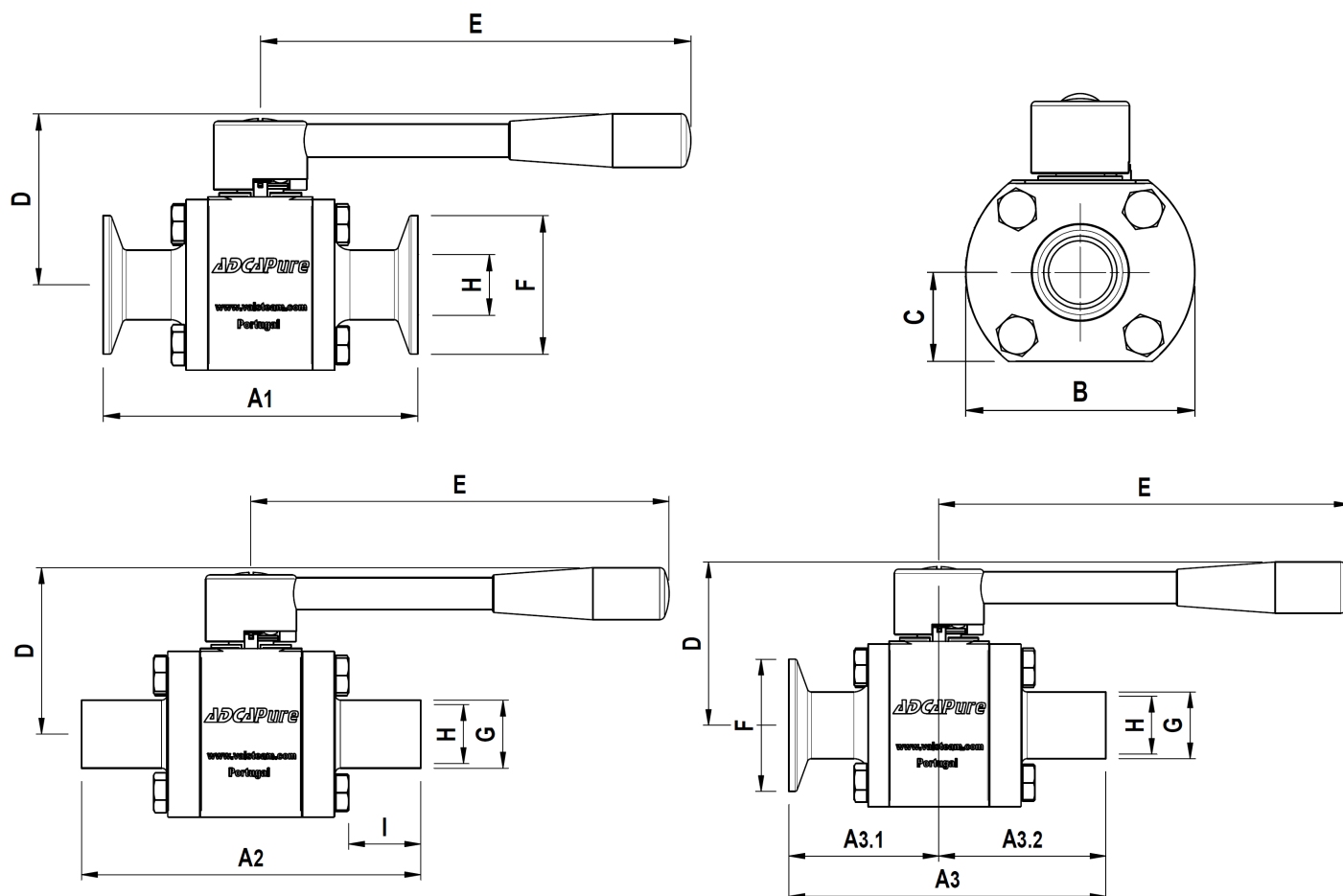
\* Available spare parts. \*\* On request

Remarks: FDA/USP Class VI seals certificate on request

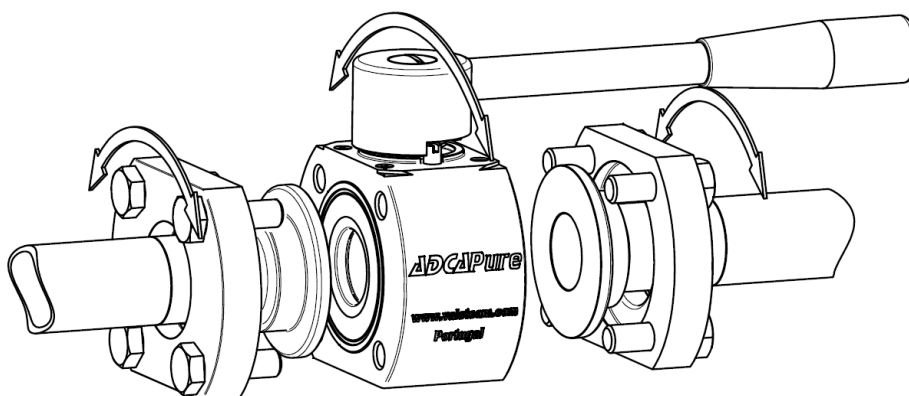
All valves have a serial number. In case of non-standard valves this number must be supplied if spare parts are ordered.

DIMENSIONS (mm)																
SIZE DN	A1	A2	A3	A3.1	A3.2	B	C	D	E	F	G	H	I	BALL PORT	ISO 5211 *	WGT. Kgs
1/2"	88,9	101,6	95,5	44	51,5	59	22	44	110	25	12,7	9,4	25	9,4	F03 **	0,9
3/4"	101,6	114,3	108	51	57	64	24,5	48	110	25	19,05	15,75	27	15,8	F03 **	1,4
1"	114,3	127	120,5	57	63,5	79	31	62	155	50,5	25,4	22,1	27	22,1	F04	2,3
1 1/2"	139,7	152,4	146,5	70	76,5	109	44	78	185	50,5	38,1	34,8	27	34,8	F05	5,3
2"	165,1	177,8	171,5	82,5	89	134	53	89	185	64	50,8	47,5	28	47,5	F05	8,5

\* Available on request. \*\* Flange adapter is required.



**Easy and quick installation**



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

<b>ORDERING CODES M3HP</b>									
<b>Valve model</b>		<b>MHP</b>	.	<b>F</b>	<b>F</b>		<b>CB</b>	.	<b>15</b>
M3HP 3 pieces ball valve AISI 316L		<b>MHP</b>							
<b>Seat design</b>									
Standard seats									(1)
Cavity fillers									<b>F</b>
<b>Seat material</b>									
TFM 1600						<b>F</b>			
<b>Special services / Options</b>									
None									(1)
Electropolishing									<b>1</b>
Oxygen cleaning									<b>2</b>
<b>End connections</b>									
TC - Sanitary clamps ASME BPE								<b>CB</b>	
ETO - Extended tube orbital welding ASME BPE								<b>TB</b>	
TC / ETO Combination ASME BPE								<b>CTB</b>	
<b>Valve size</b>									
DN 1/2"									<b>15</b>
DN 3/4"									<b>20</b>
DN 1"									<b>25</b>
DN 1 1/2"									<b>40</b>
DN 2"									<b>50</b>
<b>Special valves / Extras b)</b>									<b>E</b>

(1) Omitted if a standard valve is requested

b) Full description or additional codes have to be added in case of non-standard combination.