

## HYGIENIC BALL VALVES M3H TRUE BORE ( DN 2 1/2" – 4" ASME BPE )

### DESCRIPTION

M3H three piece 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

A351 CF3M body and ends with ferrite content of less than 3% and low sulphur between 0,005 and 0,017%.

Can be serviced without removal from pipeline

Bidirectional

Anti blow out proof stem

ISO 5211 mounting

### STANDARD SURFACE FINISH

Internal wetted parts: ≤ 0,5 micron Ra

External : as casted

Ultrasonic cleaning

### OPTIONS:

Antistatic device  
Different sealing materials  
Degreased for oxygen use  
Tube weld with loose body flanges  
(360° rotation after installation)

### USE:

Clean steam, gases and liquids compatible with the construction.

### AVAILABLE

MODELS: M3H

### SIZES:

DN21/2" to DN 4"

### CONNECTIONS:

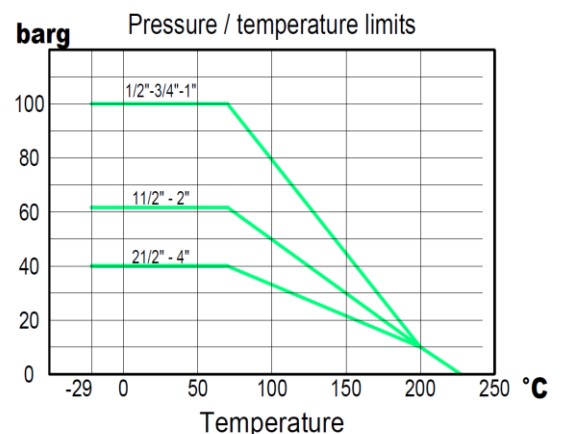
According to ASME BPE  
TC – Sanitary clamps  
ETO – Extended tube orbital welding  
TC / ETO – Combination

### 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.



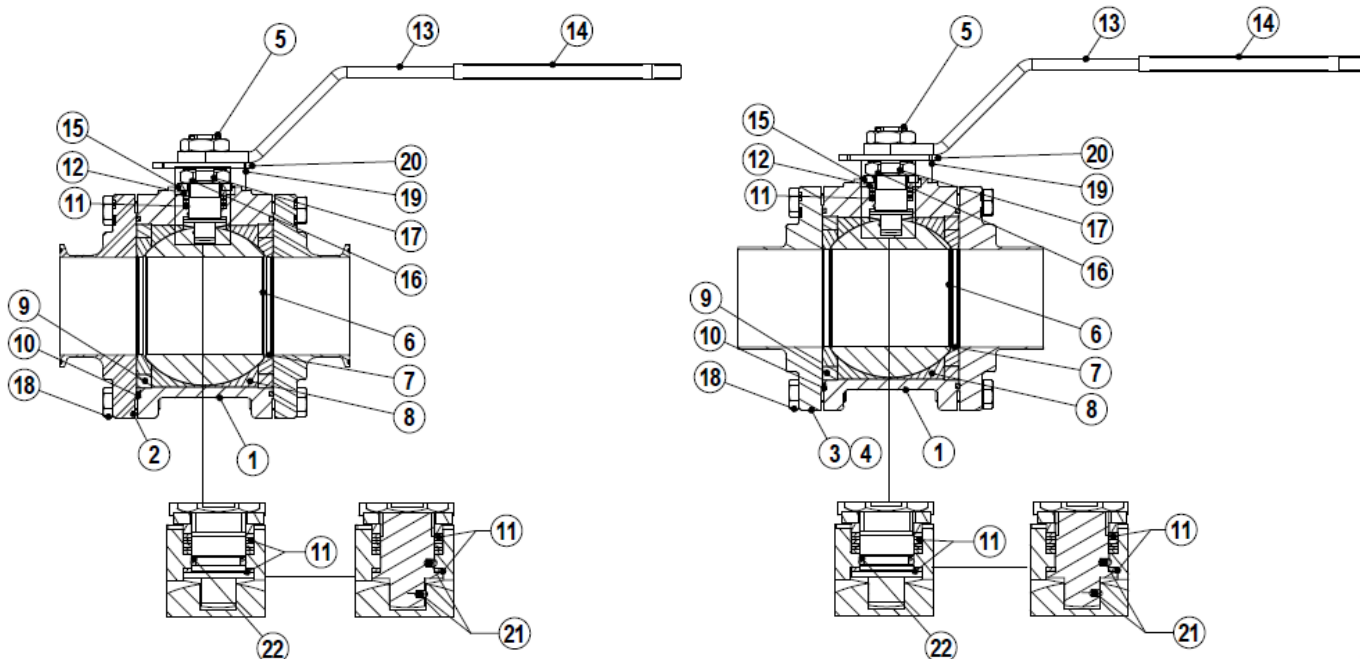
TFM 1600

Working pressure may be limited by the valve connections.

We reserve the right to change the design and material of this product without notice.

IS M3H.15 E 06.16

CE MARKING (PED - European Directive 97/23/EC)	
PN 40	Category
DN 2 1/2" - 4"	1 (CE Marked)


**MATERIALS**

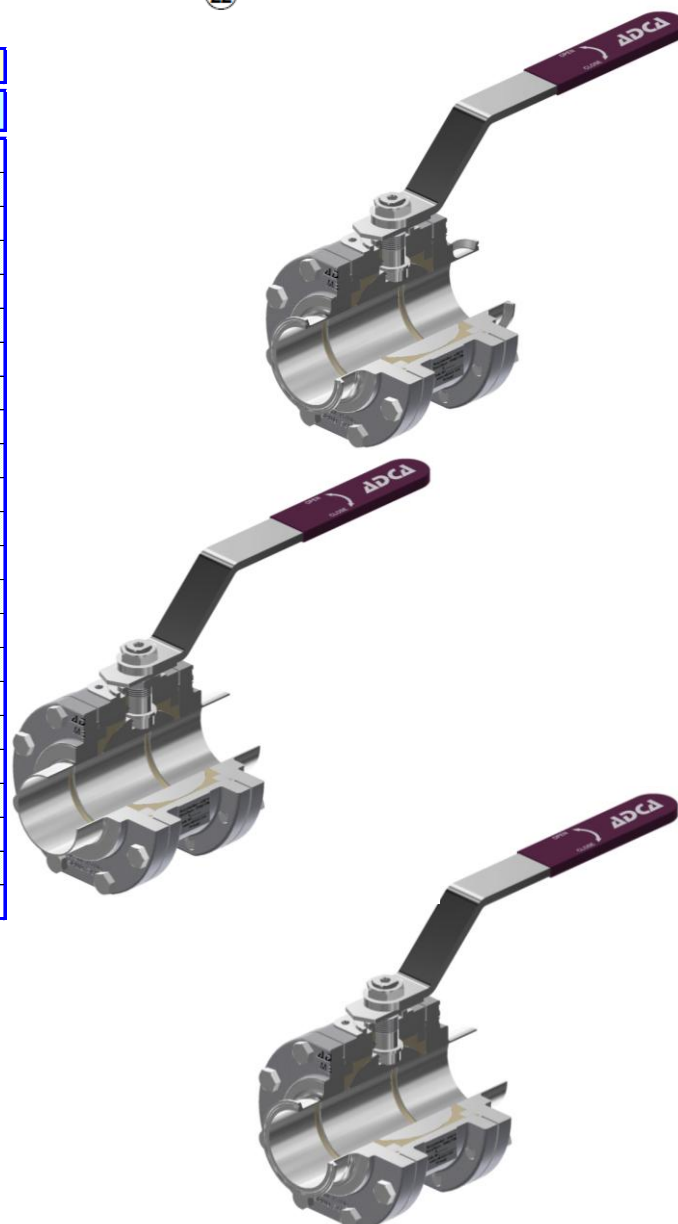
POS.	DESIGNATION	MATERIAL
1	Valve body	CF3M / 1.4409
2	TC end connection	CF3M / 1.4409
3	Tube weld end conn.	CF3M / 1.4409 (Integral)
3	Tube weld end conn.	AISI316L / 1.4404 (360° rotation)
4	*** Flange	AISI316L / 1.4404
5	Stem	AISI316L / 1.4404
6	* Valve ball	AISI316L / 1.4404
7	* Standard seat	TFM 1600
8	* Cavity filler seat	TFM 1600
9	Body ring	AISI316L / 1.4404
10	* Body seal	PTFE
11	* Stem seals	TFM 1600
12	* Spacer	AISI316 / 1.4401
13	Handle	AISI304 / 1.4301
14	Handle sleeve	Vinyl
15	* Spring washers	AISI304 / 1.4301
16	Compression nut	AISI304 / 1.4301
17	* Lock washers	AISI304 / 1.4301
18	Fixing bolt	AISI304 / 1.4301
19	Stop pin	AISI304 / 1.4301
20	Handle stopper	AISI304 / 1.4301
21	** Antistatic device	AISI316 / 1.4401
22	O-ring	VITON

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

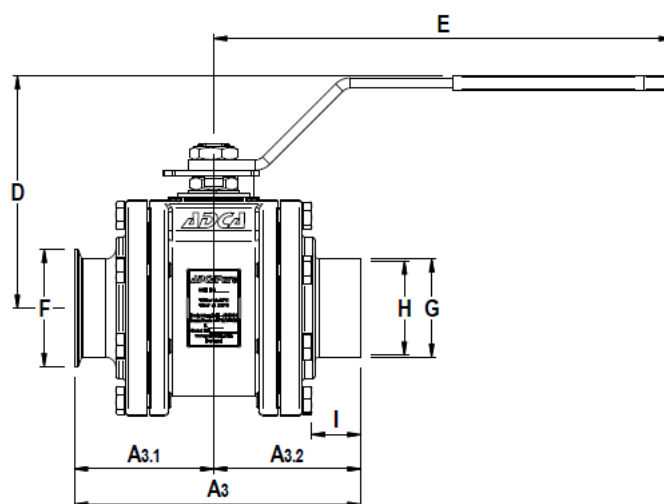
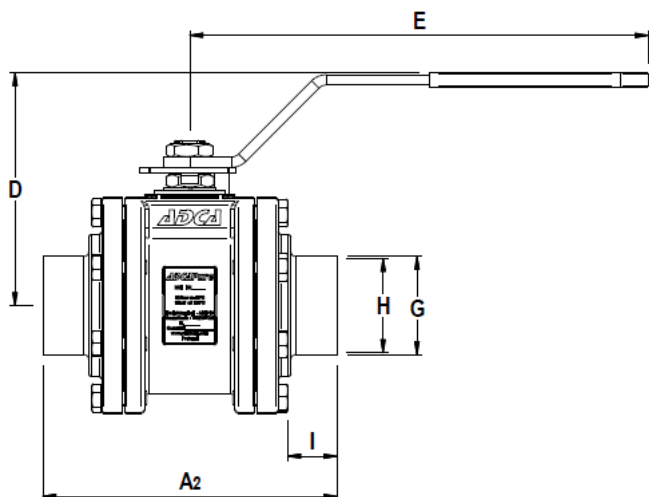
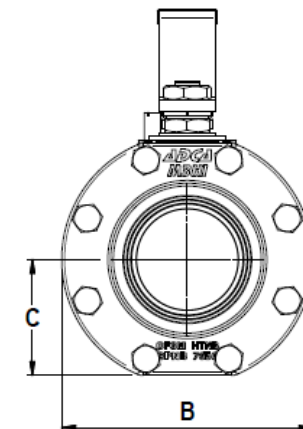
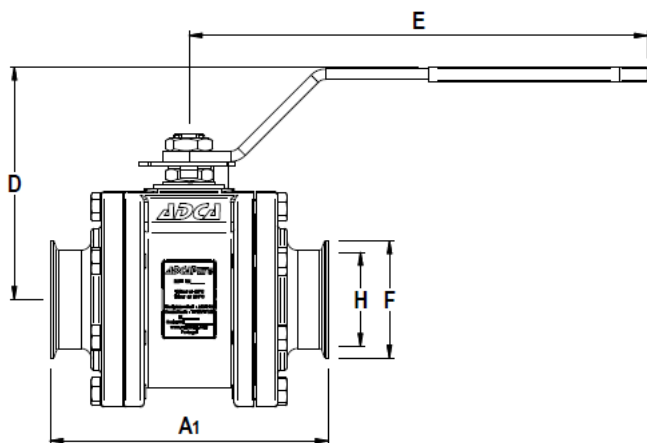
\*\*\* Loose flange only applied on the 360° rotation version option.

Remarks: FDA/USP Class VI seals certificate on request

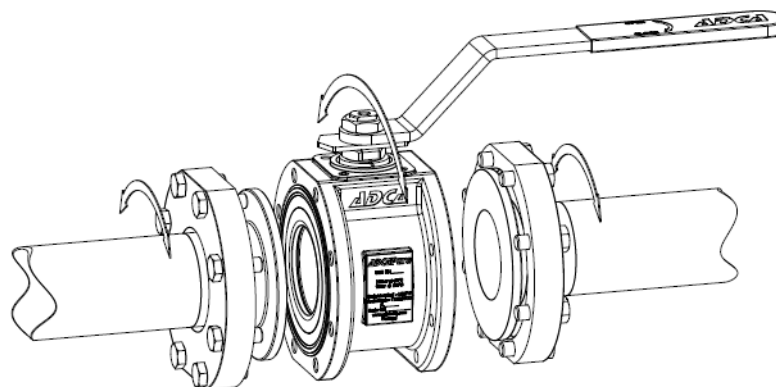
All valves have a serial number. In case of non-standard valves this number must be supplied if spare parts are ordered.



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
2 1/2"	190	203	196,3	95	101,5	160	72,5	169	355	77,4	63,5	60,2	37	60,2	F7	13,3
3"	216	228	222	108	111	180	83,5	180	355	90,9	76,2	72,9	38	72,9	F7	18,6
4"	254	267	260,5	127	133,5	220	101,5	198	460	118,9	101,6	97,4	44	97,4	F10	29,6



**Tube weld easy and quick installation - optional**



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.



ORDERING CODES M3H											
<b>Valve model</b>	MH	.		F	F				CB	.	65
M3H 3 pieces ball valve CF3M	MH										
<b>Material</b>											
CF3M 1.4409											(*)
<b>Seat design</b>											
Standard seats											(*)
Cavity fillers											F
<b>Seat material</b>											
TFM 1600											F
<b>Special services / Options</b>											
Standard surface finish ( mechanical polishing)											(*)
Electropolishing											1
Oxygen cleaning											2
<b>Antistatic device</b>											
None											(*)
Antistatic device											A
<b>End connections</b>											
TC - Sanitary clamps ASME BPE											CB
ETO - Extended tube orbital w elding ASME BPE (integral non rotation design)											ITB
ETO - Extended tube orbital w elding ASME BPE (360° rotation)											TB
TC / ETO Combination ASME BPE											CTB
<b>Ball port</b>											
True bore (standard)											(*)
Full bore											NA
<b>Valve size</b>											
DN 21/2"											65
DN 3"											80
DN 4"											100
<b>Special valves / Extras b)</b>											E

(\*) Omitted if a standard valve is requested

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

NA - Not available