

## HYGIENIC BALL VALVES M3H FULL BORE ( DN 65 – 100 DIN)

### DESCRIPTION

M3H 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

Full 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:  $\leq 0,51$  micron Ra – SF1.

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:

DN65 to DN 100.

### CONNECTIONS:

According to DIN 11850 tube.

TC – Sanitary clamps DIN 32676.

ETO – Extended tube orbital welding.

TC / ETO – Combination.

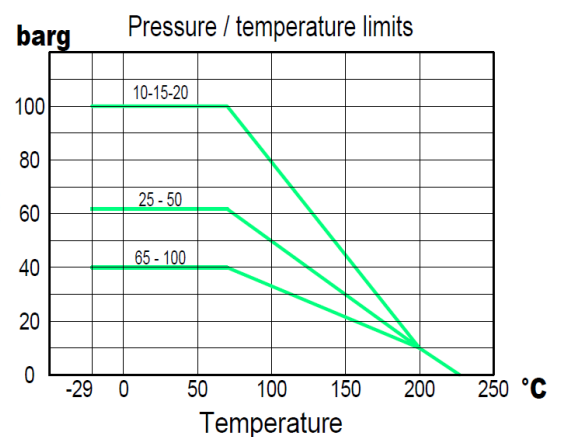
### PACKAGING:

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.

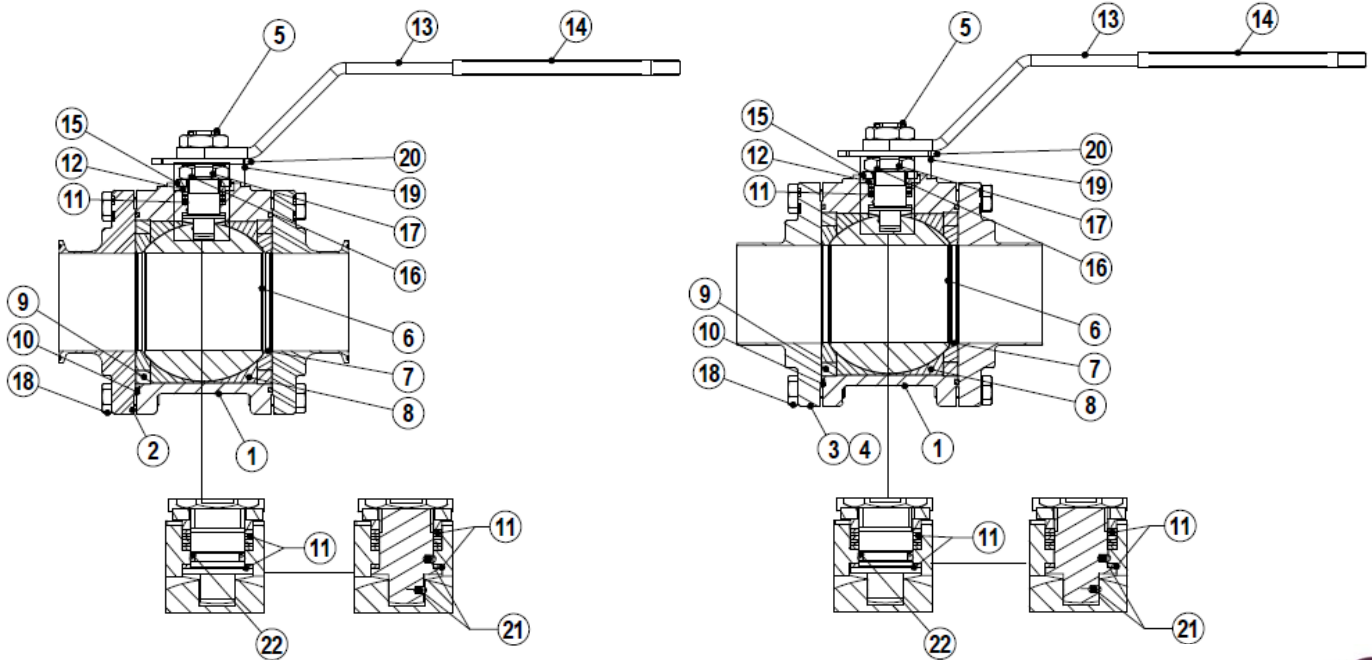


Working pressure may be limited by the valve connections.

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

IS M3H.25 E 03.16

CE MARKING - GROUP 2 (PED - European Directive)	
PN 40	Category
DN 65 - 100	1 (CE Marked)


**MATERIALS**

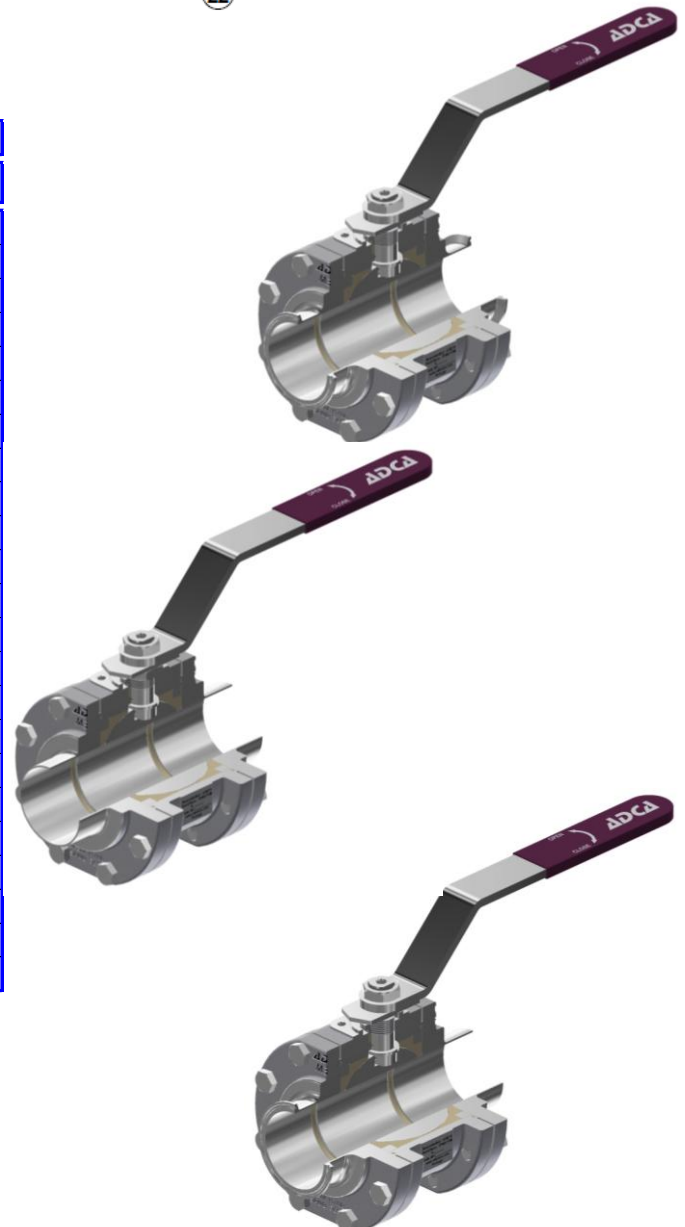
POS.	DESIGNATION	MATERIAL
1	Valve body	CF3M / 1.4409
2	TC end connection	CF3M / 1.4409
3	Tube weld end conn.	CF3M / 1.4409 (Integral)
3	Tube weld end conn.	AISI316L / 1.4404 (360° rotation)
4	*** Flange	AISI316L / 1.4404
5	Stem	AISI316L / 1.4404
6	* Valve ball	AISI316L / 1.4404
7	* Standard seat	TFM 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 washer	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.

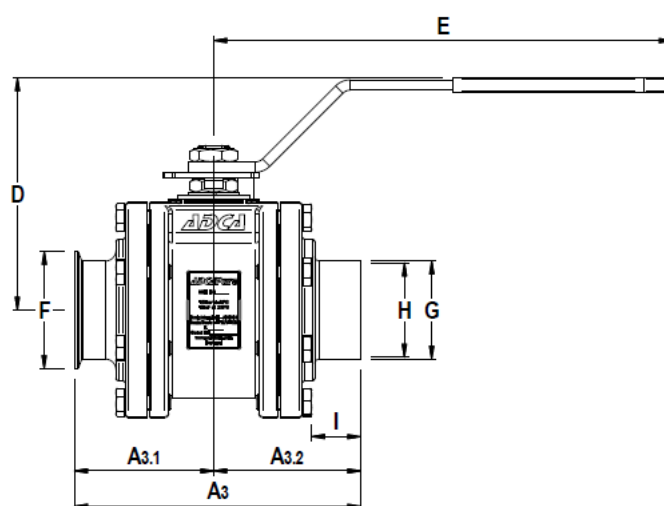
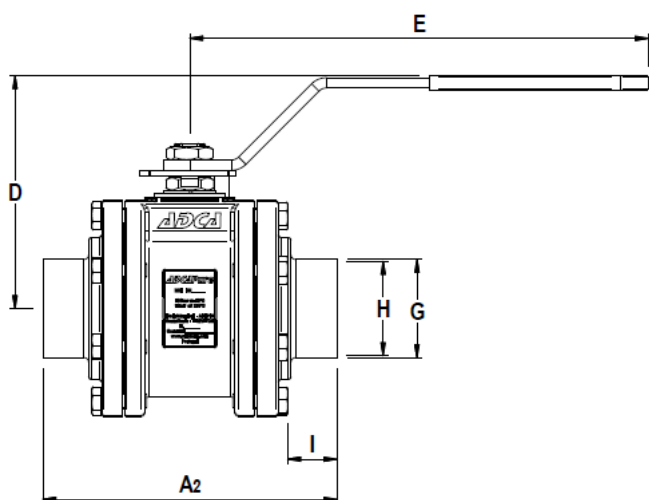
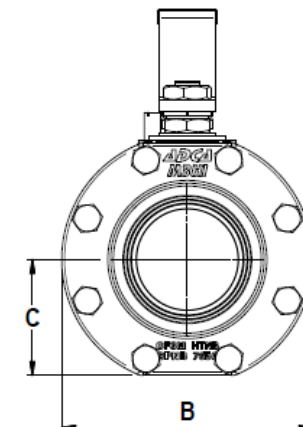
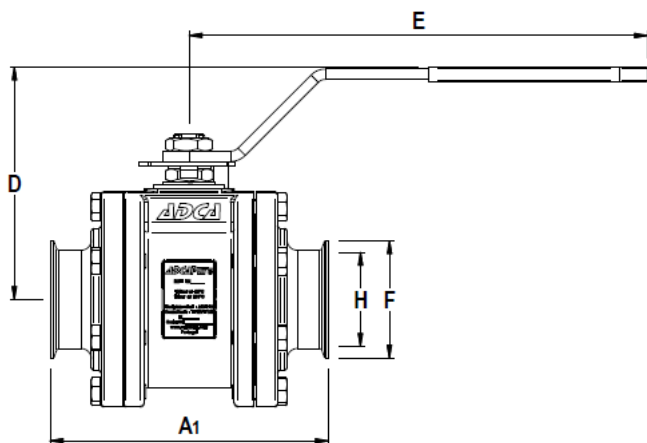
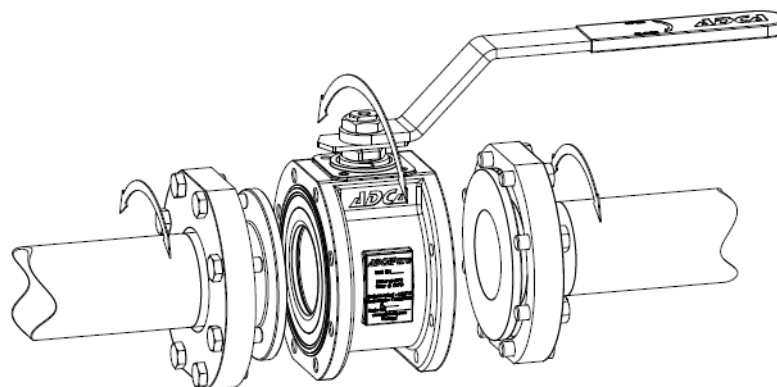
Remarks: FDA/USP Class VI seals certificate on request

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	Ø F	Ø G	Ø H	I	BALL PORT	ISO 5211	WGT. Kgs
65	190	203	197	95	98,5	160	72,5	169	355	91	70	66	37	62	F7	13,3
80	216	228	222	108	111	180	83,5	180	355	106	85	81	38	75	F7	18,6
100	255	267	261	127,5	133,5	220	101,5	198	460	119	104	100	44	98	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>		<b>MH</b>	.	<b>F</b>	<b>F</b>			<b>CB</b>	.	<b>65</b>
M3H 3 pieces ball valve CF3M		<b>MH</b>								
<b>Lever handle</b>										
Flat lever handle stainless steel / plastic cover										(*)
Flat lever handle st. steel / plastic cover w/lockable system										<b>3</b>
<b>Material</b>										
CF3M 1.4409										(*)
<b>Seat design</b>										
Standard seats										(*)
Cavity fillers										<b>F</b>
<b>Seat material</b>										
TFM 1600										<b>F</b>
<b>Special services / Options</b>										
Standard surface finish ( mechanical polishing)										(*)
Electropolishing										<b>1</b>
Oxygen cleaning										<b>2</b>
<b>Antistatic device</b>										
None										(*)
Antistatic device										<b>A</b>
<b>End connections</b>										
TC - Sanitary clamps DIN 32676										<b>CD</b>
ETO - Extended tube orbital w elding DIN 11850 (integral non rotation design)										<b>ITD</b>
ETO - Extended tube orbital w elding DIN 11850 (360° rotation)										<b>TD</b>
TC / ETO Combination DIN										<b>CTD</b>
<b>Ball port</b>										
True bore (standard)										(*)
Full bore										<b>NA</b>
<b>Valve size</b>										
DN 65										<b>65</b>
DN 80										<b>80</b>
DN 100										<b>100</b>
<b>Special valves / Extras b)</b>										<b>E</b>

(\*) 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