

HYGIENIC BALL VALVES M3H TRUE BORE (DN 10 – 50 DIN)

DESCRIPTION

M3H three pieces 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.

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.

USE:

Clean steam, gases and liquids compatible with the construction.

AVAILABLE MODELS:

M3H – Complete bar stock construction.

SIZES:

DN10 to DN 50.

CONNECTIONS:

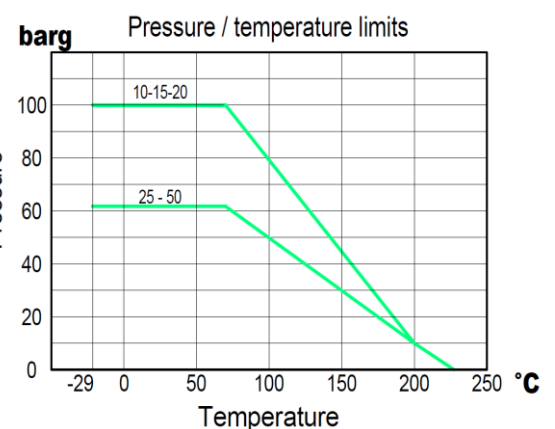
According to DIN 11850 tube.
TC – Sanitary clamps DIN 32676.
ETO – Extended tube orbital welding.
TC / ETO – Combination.

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.

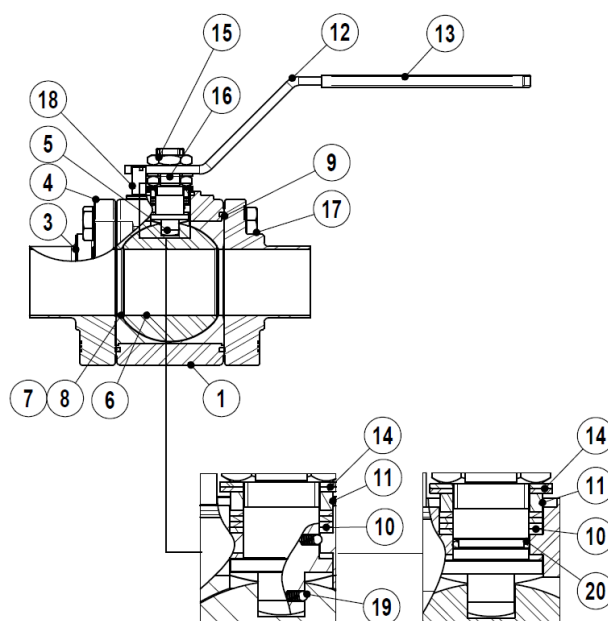
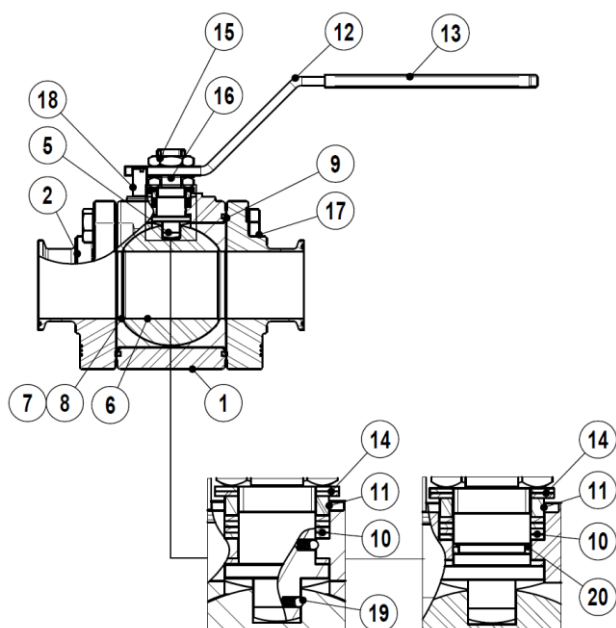
INSTALLATION:

See IMI, installation and maintenance instructions.



Working pressure may be limited by the valve connections.

CE MARKING - GROUP 2 (PED - European Directive)		
PN 100	PN 64	Category
DN 10 to 20	/	SEP
/	DN25 - 32	SEP
/	DN 40 -50	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	CF3M / 1.4409
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	Handle	AISI304 / 1.4301
13	Handle sleeve	Vinyl
14	* Spring washers	AISI304 / 1.4301
15	Compression nut	AISI304 / 1.4301
16	* Lock washer	AISI304 / 1.4301
17	Fixing bolt	AISI304 / 1.4301
18	Stop pin	AISI304 / 1.4301
19	** Antistatic device	AISI316 / 1.4401
20	* O-ring	VITON

* Available spare parts. ** On request

*** Loose flange only applied on the 360° rotation version optional

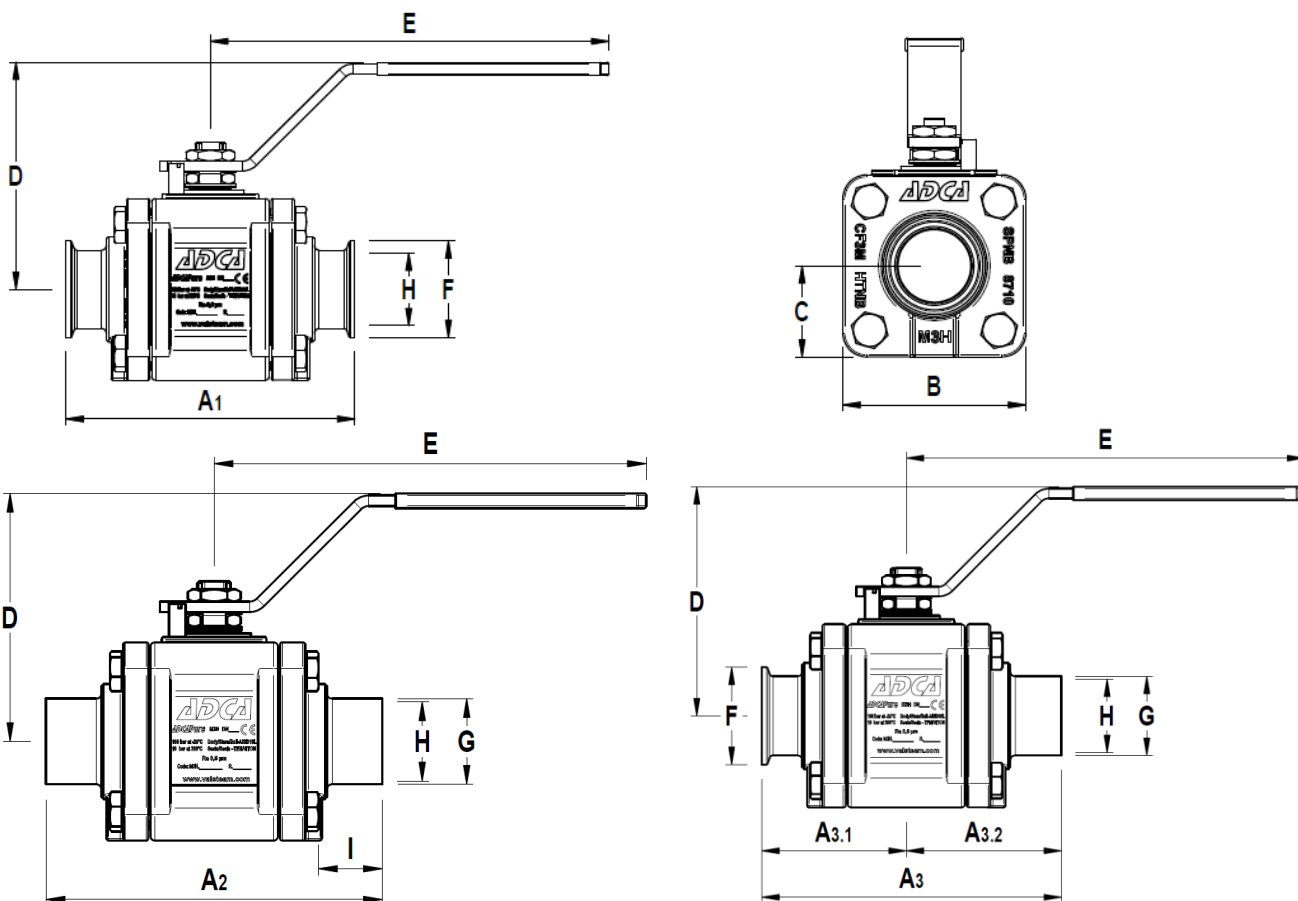
Remarks: FDA/USP Class VI seals certificate on request

All valves have a serial number. In case of non-standard

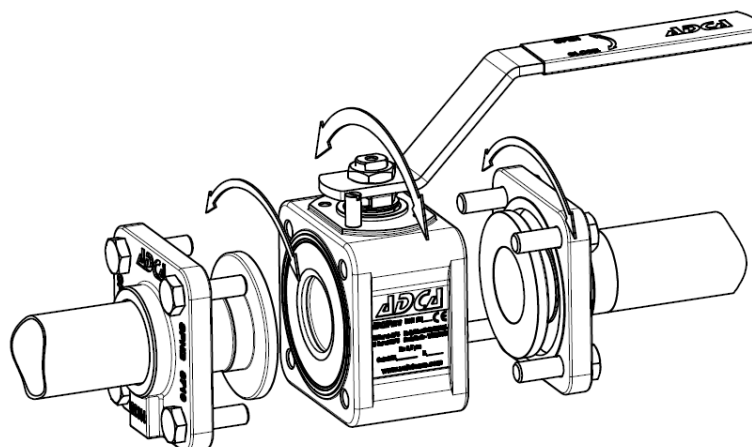
valves this number must be supplied if spare parts are ordered.



DIMENSIONS (mm)																
SIZE DN	A ₁	A ₂	A ₃	A _{3.1}	A _{3.2}	B	C	D	E	Ø F	Ø G	Ø H	I	BALL PORT	ISO 5211	WGT. Kg
10	90	102	96	45	51	42	21	65	150	34	13	10	25	10	F03	0,73
15	100	114	107	50	57	50	25	69	150	34	19	16	27	16	F03	1,49
20	115	127	121,5	57,5	64	62	31	87	175	34	23	20	27	20	F04	1,94
25	125	135	130,5	62,5	68	72	36	92	175	50,5	29	26	27	26	F04	2,62
32	140	153	147	71	76	85	42,5	114	207	50,5	35	32	27	32	F05	4,41
40	150	161	155	75	80	95	47,5	119	207	50,5	41	38	27	38	F05	5,5
50	165	178	172	82	90	105	52,5	124	232	64	53	50	28	50	F05	1,04



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											
Valve model	MH	.	F	F					CB	.	15
M3H 3 pieces ball valve CF3M	MH										
Lever handle											
Flat lever handle stainless steel / plastic cover											(*)
Flat lever handle st. steel / plastic cover w/lockable system											3
Material											
CF3M 1.4409											(*)
Seat design											
Standard seats											(*)
Cavity fillers											F
Seat material											
TFM 1600											F
Special services / Options											
Standard surface finish (mechanical polishing)											(*)
Electropolishing											1
Oxygen cleaning											2
Antistatic device											
None											(*)
Antistatic device											A
End connections											
TC - Sanitary clamps DIN 32676											CD
ETO - Extended tube orbital w elding DIN 11850 (integral non rotation design)											ITD
ETO - Extended tube orbital w elding DIN 11850 (360° rotation)											TD
TC / ETO Combination DIN											CTD
Ball port											
True bore (standard)											(*)
Full bore											NA
Valve size											
DN 10											10
DN 15											15
DN 20											20
DN 25											25
DN 32											32
DN 40											40
DN 50											50
Special valves / Extras 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