

HIGH PURITY BALL VALVES M3HP FULL BORE (DN 65 – 100 DIN)

DESCRIPTION

M3HP 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

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

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.

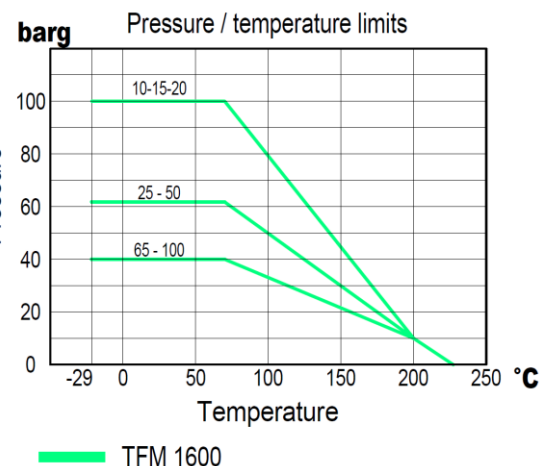
- AVAILABLE MODELS:
- M3HP – Complete bar stock construction

- SIZES:
- DN65 to DN 100

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

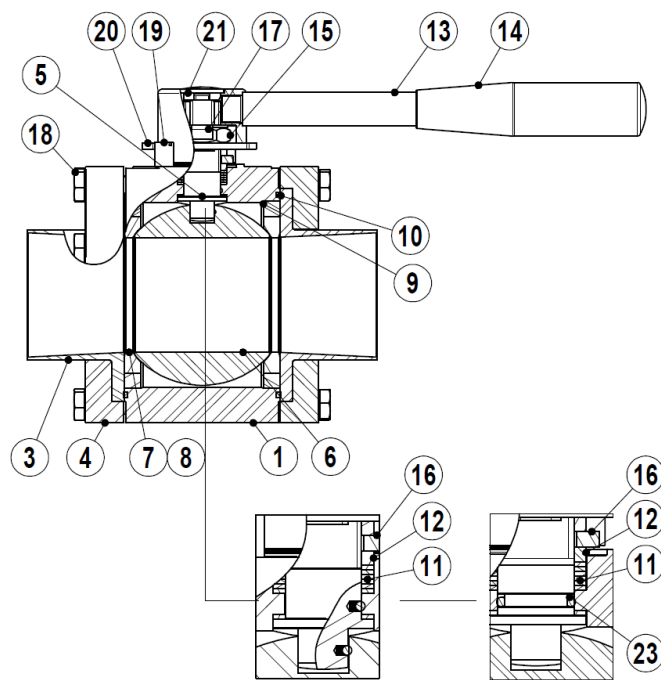
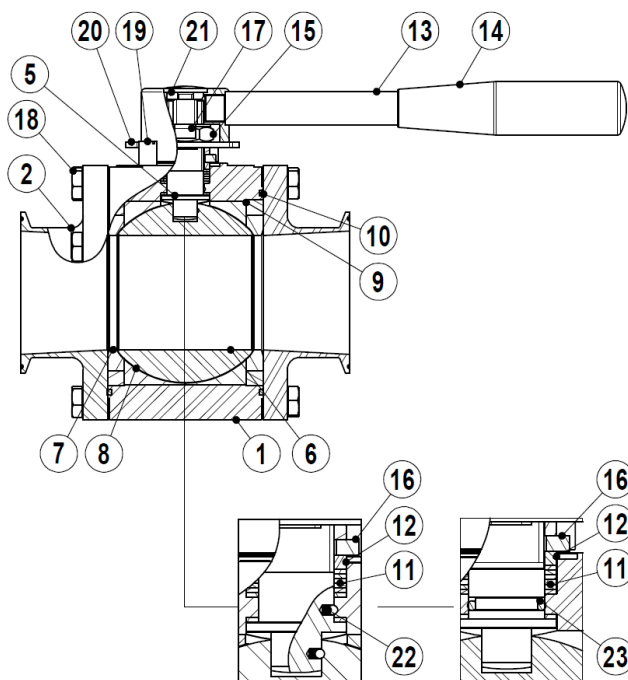
- PACKAGING:
- Assembling and packaging in a clean room certified according to ISO 14644-1. The product is end capped and vacuum sealed with recyclable plastic film to avoid contamination.

- INSTALLATION:
- See IMI, installation and maintenance instructions.



Working pressure may be limited by the valve connections.

CE MARKING (PED - European Directive 97/23/EC)	
PN 40	Category
DN 65 - 100	1 (CE Marked)

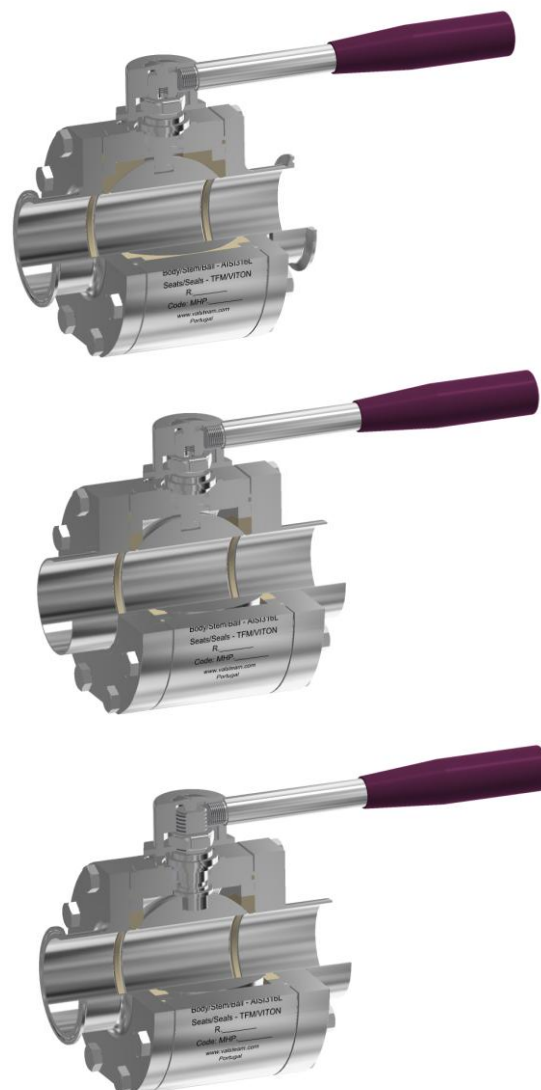


MATERIALS		
POS.	DESIGNATION	MATERIAL
1	Valve body	AISI316L / 1.4404
2	TC end connection	AISI316L / 1.4404
3	Tube weld end conn.	AISI316L / 1.4404
4	Flange	AISI316L / 1.4404
5	Stem	AISI316L / 1.4404
6	* Valve ball	AISI316L / 1.4404
7	* Standard seat	TFM 1600
8	* Cavity filler seat	TFM 1600
9	Body ring	AISI316L / 1.4404
10	* Body seal	PTFE
11	* Stem seals	TFM 1600
12	* Spacer	AISI316 / 1.4401
13	Handle	AISI304 / 1.4301
14	Handle end	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	Fixing screw	AISI304 / 1.4301
22	** Antistatic device	AISI316 / 1.4401
23	O-ring	VITON

* Available spare parts. ** On request

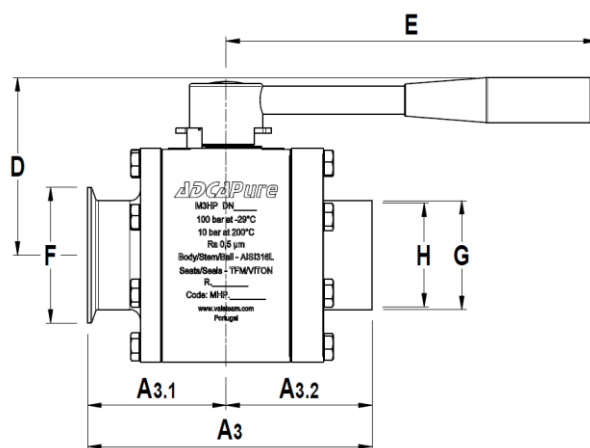
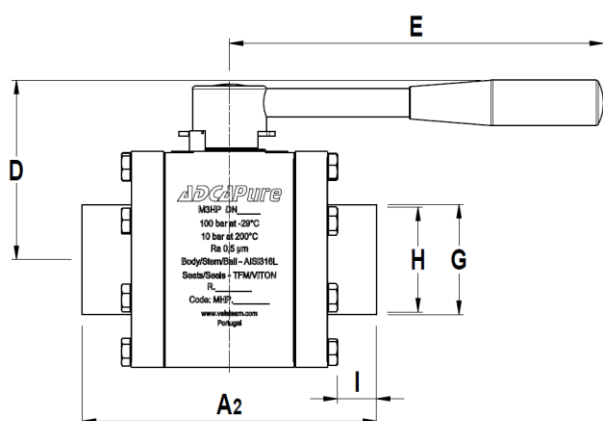
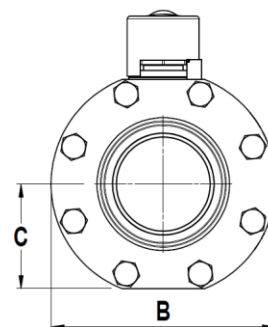
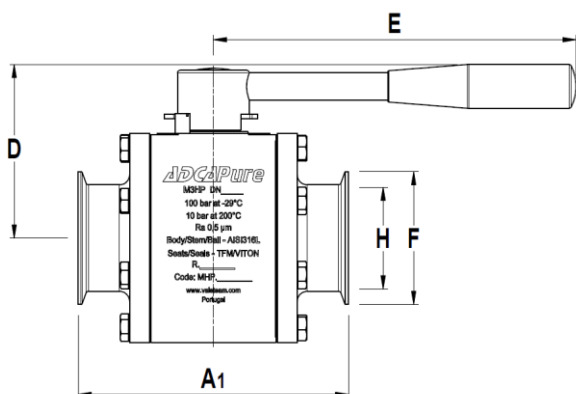
Remarks: FDA/USP Class VI seals certificate on request

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

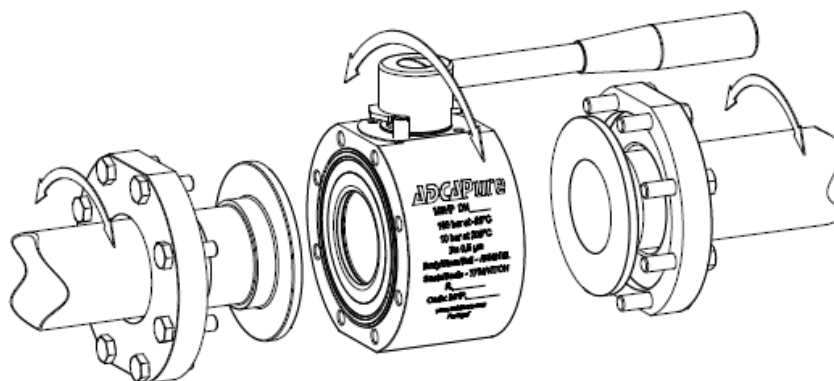


DIMENSIONS (mm)																
SIZE DN	A1	A2	A3	A3.1	A3.2	B	C	D	E	F	G	H	I	BALL PORT	ISO 5211 *	WGT. Kg
65	190	203	197	95	102	160	72,5	130	250	91	70	66	29	62	F7	15,4
80	216	228	222	108	114	180	83,5	140	290	106	85	81	30	75	F7	22,1
100	255	267	261,5	127,5	134	220	101,5	158	290	119	104	100	36	98	F10	36,4

* Available on request.



Tube weld easy and quick installation - standard



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 M3HP												
Valve model		MHP	.	F	F				CD	.	T	65
M3HP 3 pieces ball valve AISI 316L		MHP										
Material												
AISI 316L 1.4404			(*)									
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 (360° rotation)								TD				
TC/ ETO Combination DIN (360° rotation)								CTD				
Ball port												
True bore											NA	
Full bore											T	
Valve size												
DN 65												65
DN 80												80
DN 100												100
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