

HIGH PURITY BALL VALVES M3HP TRUE BORE (DN 10 – 50 DIN)

DESCRIPTION

M3HP 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

- True bore floating ball design.
- Completely made from solid bar stock material.
- Can be serviced without removal from pipeline.
- Bidirectional.
- Antistatic device.
- Anti blow out proof stem.
- Tube weld with loose body flanges (360° rotation after installation).
- ISO 5211 mounting (only sizes ≥ DN 20).

STANDARD SURFACE FINISH

- Internal wetted parts: ≤ 0,51 micron Ra – SF1.
- External : ≤ 0,76 micron Ra – SF3.
- Other surface conditions see IS PV20.00 E – Technical information.
- Ultrasonic cleaning.

OPTIONS:

- Different sealing materials.
- DN 10 and DN 15 ISO mounting with adapter.
- Degreased for oxygen use.
- Cavity filler.

USE: Clean steam, gases and liquids compatible with the construction.

AVAILABLE MODELS: M3HP – Complete bar stock construction.

SIZES: DN 10 to DN 50.

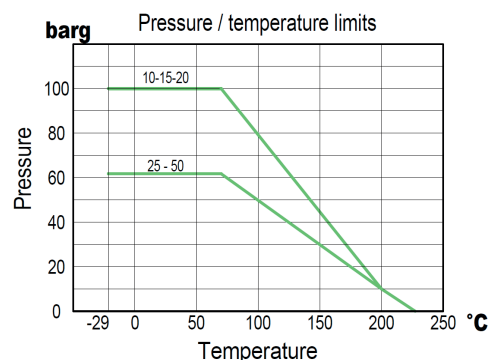
CONNECTIONS:

- 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 sealed with recyclable thermo-shrinkable plastic film, to avoid contamination.

INSTALLATION: See IMI – Installation and maintenance instructions.

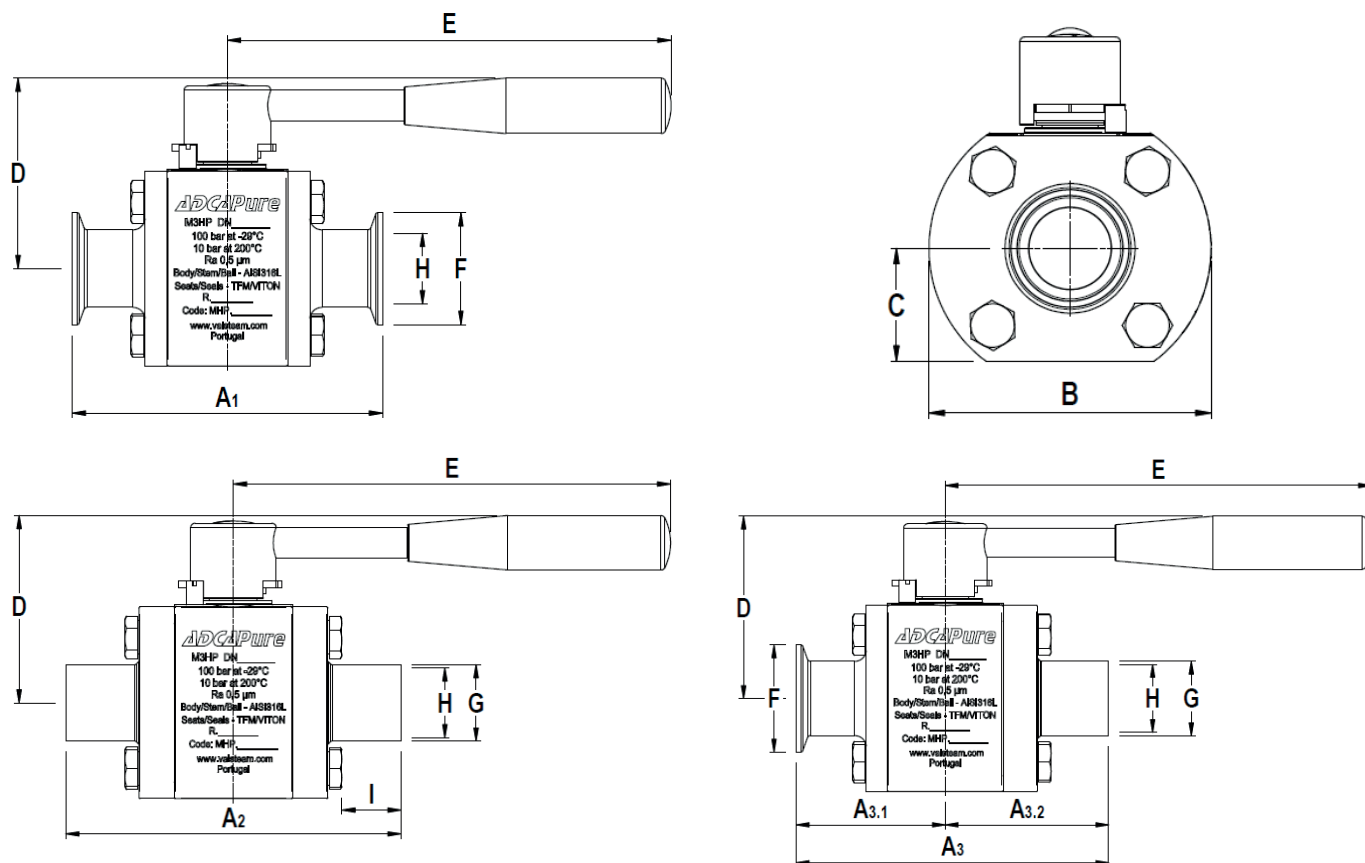


TFM 1600

Note: Working pressure may be limited by the valve connections.

CE MARKING – GROUP 2 (PED – European Directive)

PN63	PN100	Category
—	DN 10 to 20	SEP
DN 25 to 32	—	SEP
DN 40 to 50		1 (CE Marked)

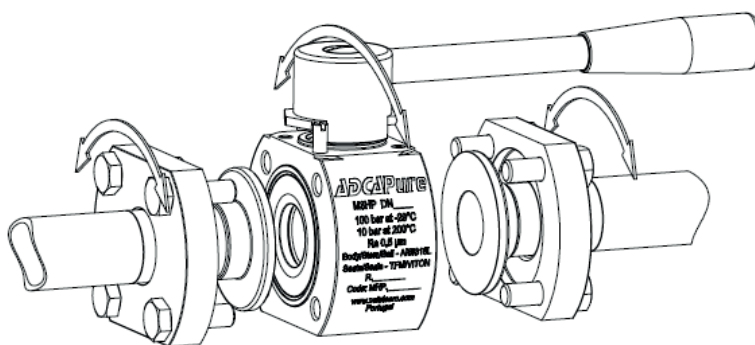


DIMENSIONS (mm) DIN

SIZE	A1	A2	A3	A3.1	A3.2	B	C	D	E	F	G	H	I	BALL PORT	ISO 5211	WGT. (kg)
DN 10	90	102	96	45	51	59	22	48	130	34	13	10	25	10	F03 *	0,8
DN 15	100	114	107	50	57	64	24,5	53	130	34	19	16	27	16	F03 *	1,1
DN 20	115	127	121,5	57,5	64	79	31	68	165	34	23	20	27	20	F04	2,2
DN 25	125	135	130,5	62,5	68	89	36	73	165	50,5	29	26	27	26	F04	2,9
DN 32	140	153	147	71	76	109	44	86	200	50,5	35	32	27	32	F05	5,1
DN 40	150	161	155	75	80	119	48	90	200	50,5	41	38	27	38	F05	6,3
DN 50	165	178	172	82	90	134	53	97	200	64	53	50	28	50	F05	8,4

* Flange adapter is required, against extra price. See IS M3H.25 E Options and extras.

Tube weld easy and quick installation - standard



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

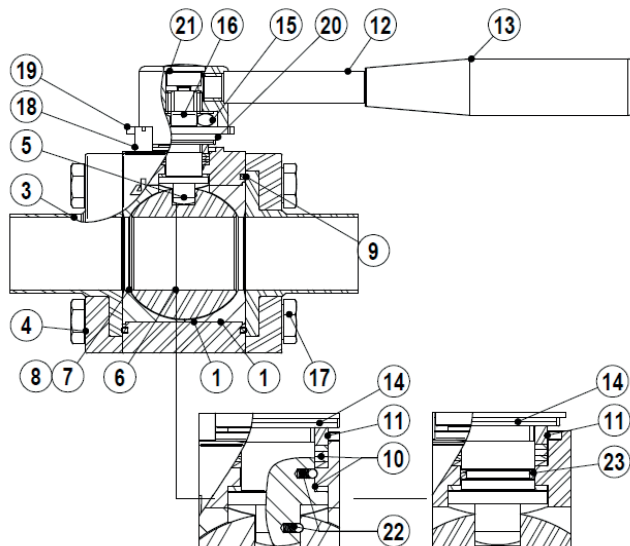
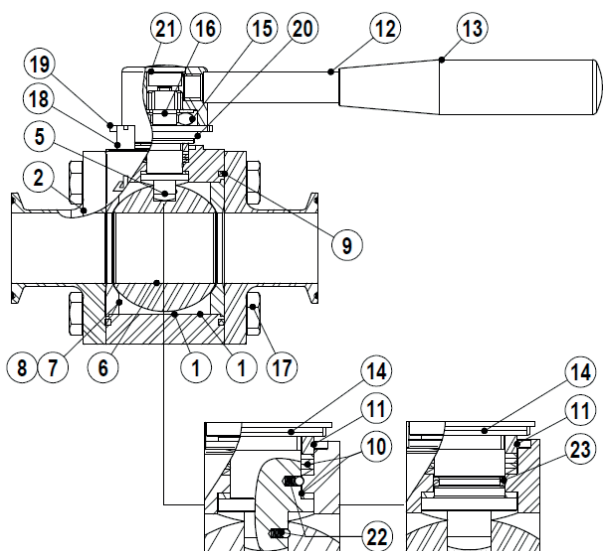
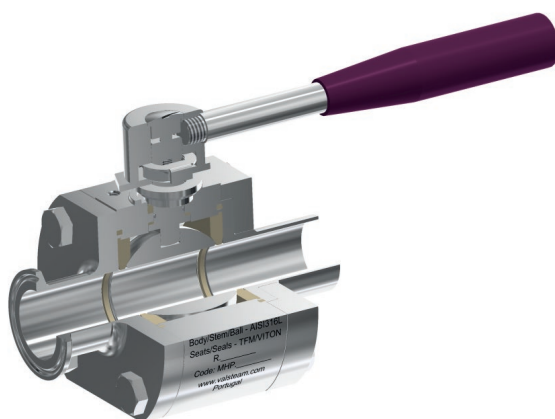
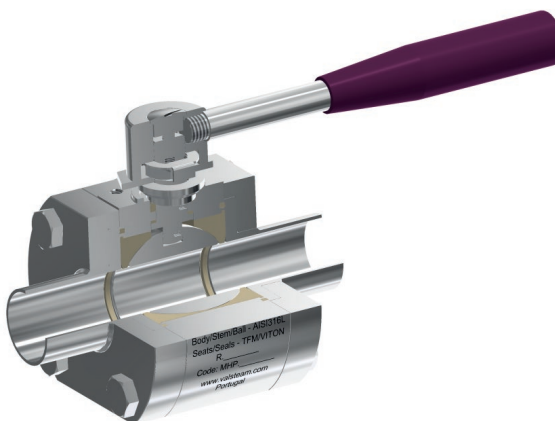
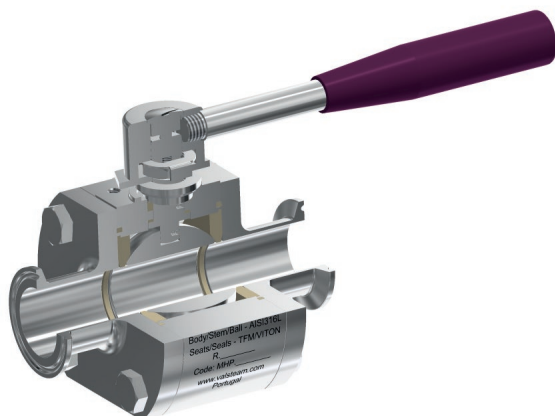
MATERIALS

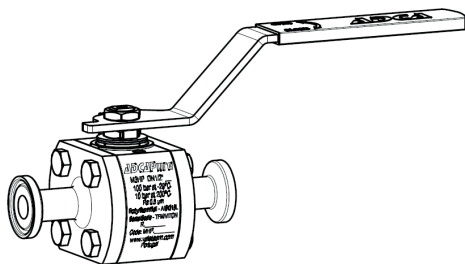
POS. N°	DESIGNATION	MATERIAL
1	Valve body	AISI 316L / 1.4404
2	TC end connection	AISI 316L / 1.4404
3	Tube weld end connection	AISI 316L / 1.4404
4	Flange	AISI 316L / 1.4404
5	Stem	AISI 316L / 1.4404
6	* Valve ball	AISI 316L / 1.4404
7	* Standard seat	TFM 1600
8	* Cavity filler seat	TFM 1600
9	* Body seal	PTFE
10	* Stem seals	TFM 1600
11	* Spacer	AISI 316 / 1.4401
12	Handle	AISI 304 / 1.4301
13	Handle end	Vinyl
14	* Spring washers	AISI 304 / 1.4301
15	Compression nut	AISI 304 / 1.4301
16	* Lock washer	AISI 304 / 1.4301
17	Fixing bolt	AISI 304 / 1.4301
18	Stop pin	AISI 304 / 1.4301
19	Handle stopper	AISI 304 / 1.4301
20	Washer	AISI 304 / 1.4301
21	Fixing screw	AISI 304 / 1.4301
22	Antistatic device	AISI 316 / 1.4401
23	O-ring	Viton

* Available spare parts;

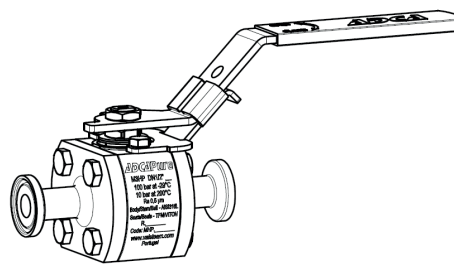
Remarks: FDA / USP Class VI seals certificate on request.

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





Flat lever handle with plastic cover.



Flat lever handle with plastic cover and lockable system.

ORDERING CODES M3HP

Valve model	MHP	X	X	X	F	X	X	CD	X	15	
M3HP 3 pieces ball valve - AISI 316L	MHP										
Lever handle											
Round lever handle stainless steel / plastic cover		X									
Round lever handle complete stainless steel		1									
Flat lever handle stainless steel / plastic cover		2									
Flat lever handle stainless steel / plastic cover w/ lockable system		3									
Bare stem		9									
Material											
AISI 316L / 1.4404			X								
Seat design											
Standard seats				X							
Cavity fillers				F							
Seat material											
TFM 1600					F						
Surface finish a)											
Standard surface finish						X					
Mirror mechanical polished external surfaces (SF1)						P					
Electropolished internal wetted parts (SF5)						E					
Special features											
None							X				
Oxygen cleaning							O				
End connections											
TC – Sanitary clamps DIN 32676								CD			
ETO – Extended tube orbital welding DIN 11850 (360° rotation)								TD			
TC / ETO – Combination DIN (360° rotation)								CTD			
Ball port											
True bore (standard)									X		
Full bore									NA		
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											
Full description or additional codes have to be added in case of a non standard combination											E

a) Consult IS PV20.00 (Technical information) for further details and other surface finish options.

NA – Not available.

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

DESCRIPTION

M3HP 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.

Completely made from solid bar stock material.

Can be serviced without removal from pipeline.

Bidirectional.

Antistatic device.

Anti blow out proof stem.

Tube weld with loose body flanges (360° rotation after installation).

ISO 5211 mounting.

STANDARD SURFACE FINISH

Internal wetted parts: $\leq 0,51$ micron Ra – SF1.

External : $\leq 0,76$ micron Ra – SF3.

Other surface conditions see IS PV20.00 E – Technical information.

Ultrasonic cleaning.

OPTIONS: Different sealing materials.
Degreased for oxygen use.
Cavity filler.

USE: Clean steam, gases and liquids compatible with the construction.

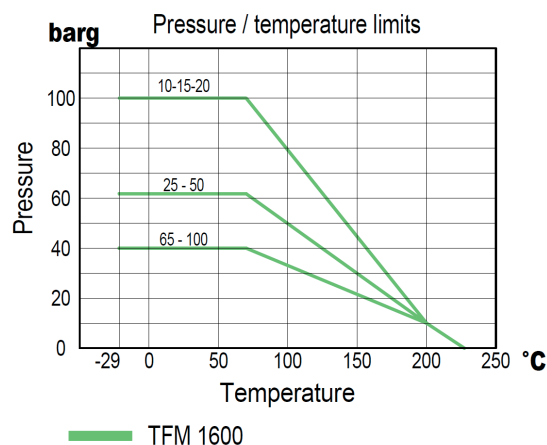
AVAILABLE MODELS: M3HP – Complete bar stock construction.

SIZES: DN 65 to DN 100.

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

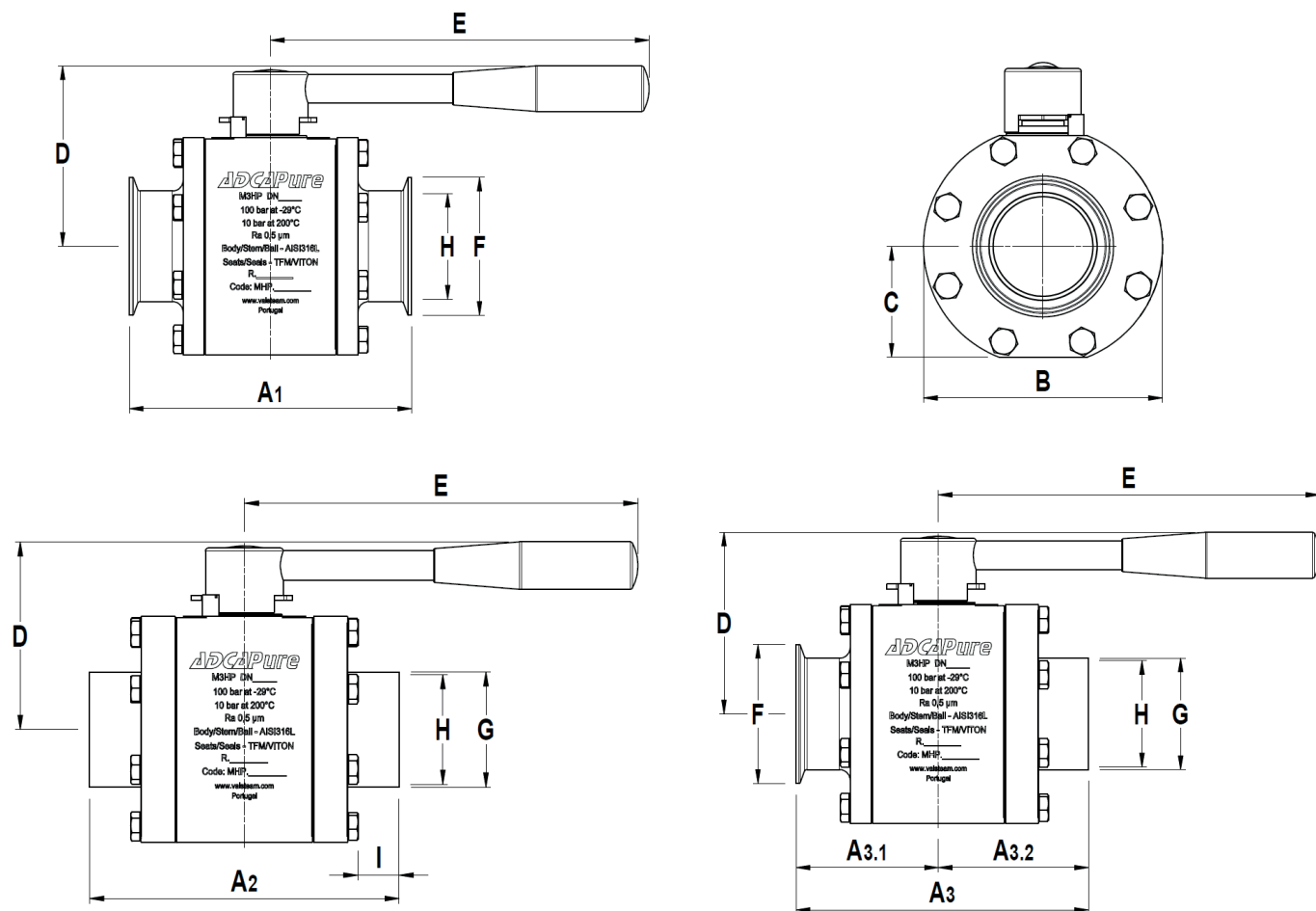
PACKAGING: Assembling and packaging in a clean room certified according to ISO 14644-1.
The product is end capped and sealed with recyclable thermo-shrinkable plastic film, to avoid contamination.

INSTALLATION: See IMI – Installation and maintenance instructions.



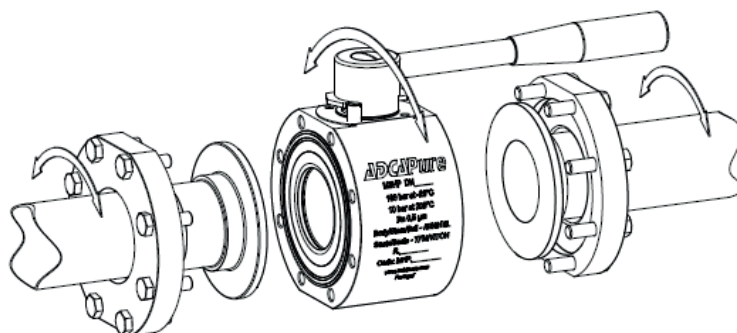
Note: Working pressure may be limited by the valve connections.

CE MARKING – GROUP 2 (PED – European Directive)	
PN40	Category
DN 65 to DN 100	1 (CE marked)



DIMENSIONS (mm) DIN																
SIZE	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

Tube weld easy and quick installation - standard



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

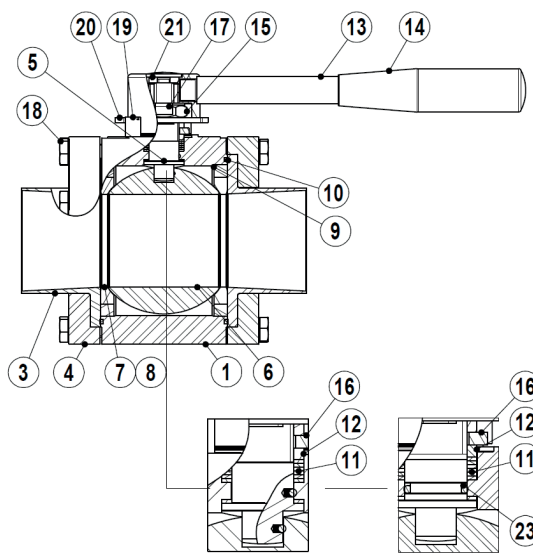
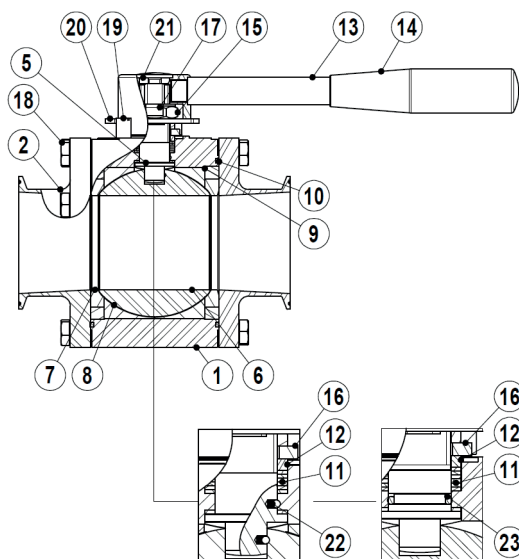
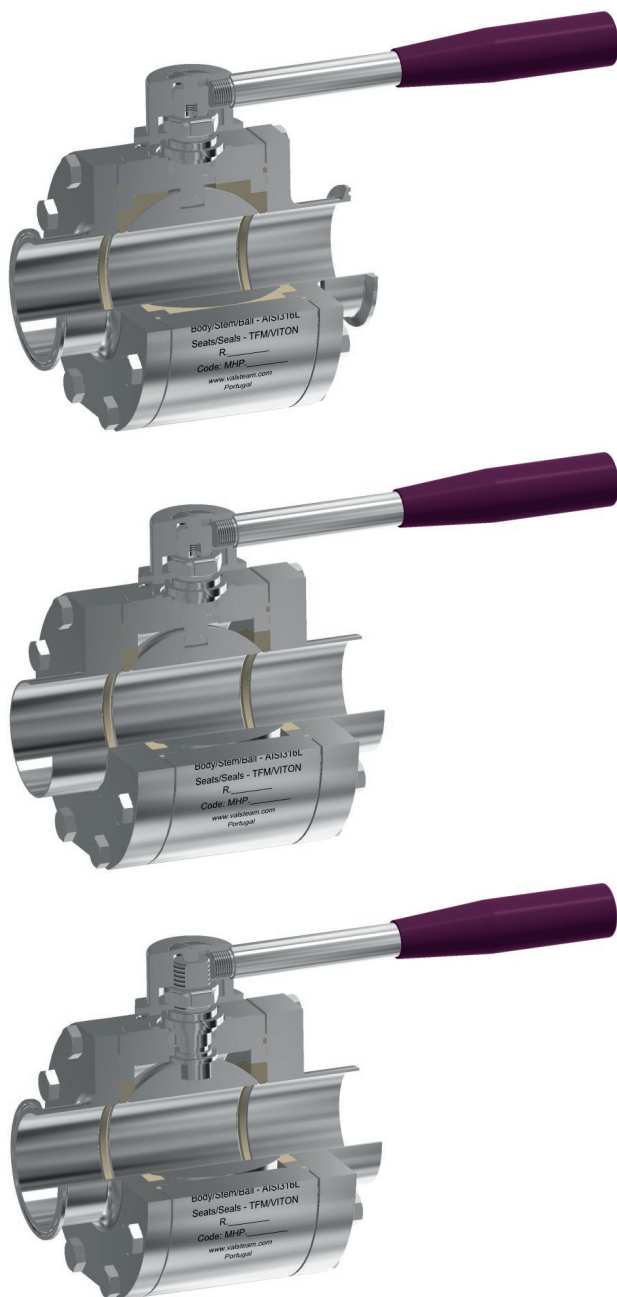
MATERIALS

POS. N°	DESIGNATION	MATERIAL
1	Valve body	AISI 316L / 1.4404
2	TC end connection	AISI 316L / 1.4404
3	Tube weld end conn.	AISI 316L / 1.4404
4	Flange	AISI 316L / 1.4404
5	Stem	AISI 316L / 1.4404
6	* Valve ball	AISI 316L / 1.4404
7	* Standard seat	TFM 1600
8	* Cavity filler seat	TFM 1600
9	Body ring	AISI 316L / 1.4404
10	* Body seal	PTFE
11	* Stem seals	TFM 1600
12	* Spacer	AISI 316 / 1.4401
13	Handle	AISI 304 / 1.4301
14	Handle end	Vinyl
14	Handle end (optional)	AISI 316L / 1.4404
15	Compression nut	AISI 304 / 1.4301
16	* Spring washers	AISI 304 / 1.4301
17	* Lock washer	AISI 304 / 1.4301
18	Fixing bolt	AISI 304 / 1.4301
19	Stop pin	AISI 304 / 1.4301
20	Handle stopper	AISI 304 / 1.4301
21	Fixing screw	AISI 304 / 1.4301
22	Antistatic device	AISI 316 / 1.4401
23	O-ring	Viton

* Available spare parts;

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.



ORDERING CODES M3HP												
Valve model	MHP	X	X	X	F	X	X	CD	X	65		
M3HP 3 pieces ball valve - AISI 316L	MHP											
Lever handle												
Round lever handle stainless steel / plastic cover		X										
Round lever handle complete stainless steel		1										
Flat lever handle stainless steel / plastic cover		2										
Flat lever handle stainless steel / plastic cover w/ lockable system		3										
Bare stem		9										
Material												
AISI 316L / 1.4404			X									
Seat design												
Standard seats					X							
Cavity fillers					F							
Seat material												
TFM 1600					F							
Surface finish a)												
Standard surface finish						X						
Mirror mechanical polished external surfaces (SF1)						P						
Electropolished internal wetted parts (SF5)						E						
Special features												
None							X					
Oxygen cleaning							O					
End connections												
TC – Sanitary clamps DIN 32676								CD				
ETO – Extended tube orbital welding DIN 11850 (360° rotation)								TD				
TC / ETO – Combination DIN (360° rotation)								CTD				
Ball port												
Full bore (standard)									X			
True bore									NA			
Size												
DN 65										65		
DN 80										80		
DN 100										100		
Special valves / Extras												
Full description or additional codes have to be added in case of a non standard combination												E

a) Consult IS PV20.00 (Technical information) for further details and other surface finish options.

NA – Not available.

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

DESCRIPTION

M3HP 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

True bore floating ball design.

Completely made from solid bar stock material.

Can be serviced without removal from pipeline.

Bidirectional.

Antistatic device.

Anti blow out proof stem.

Tube weld with loose body flanges (360° rotation after installation).

ISO 5211 mounting (only sizes ≥1").

STANDARD SURFACE FINISH

Internal wetted parts: ≤ 0,51 micron Ra – SF1.

External : ≤ 0,76 micron Ra – SF3.

Other surface conditions see IS PV20.00 E – Technical information.

Ultrasonic cleaning.

OPTIONS: Different sealing materials.
1/2" and 3/4" ISO mounting with flange adapter.
Degreased for oxygen use.
Cavity filler.

USE: Clean steam, gases and liquids compatible with the construction.

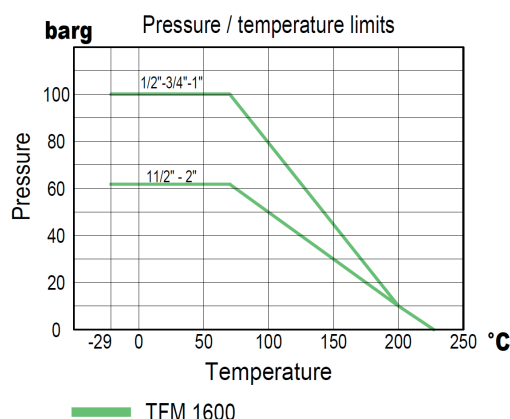
AVAILABLE MODELS: M3HP – Complete bar stock construction.

SIZES: 1/2" to 2".

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

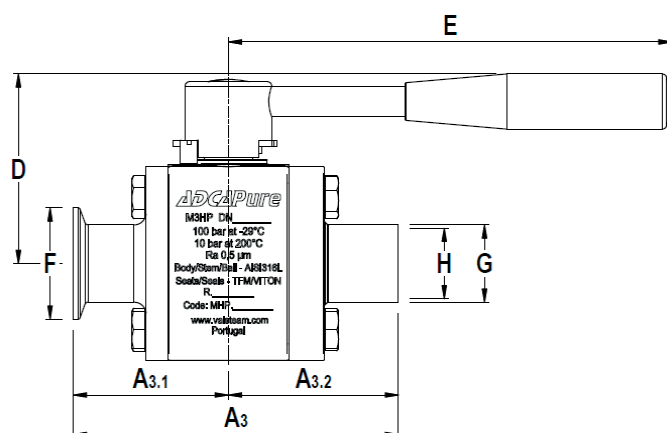
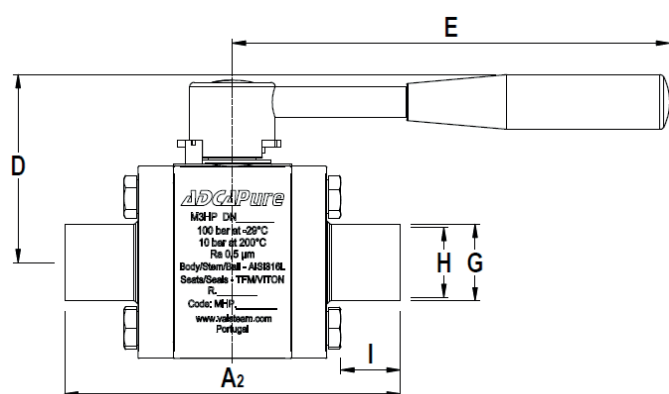
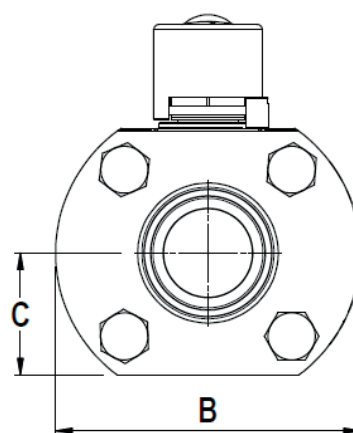
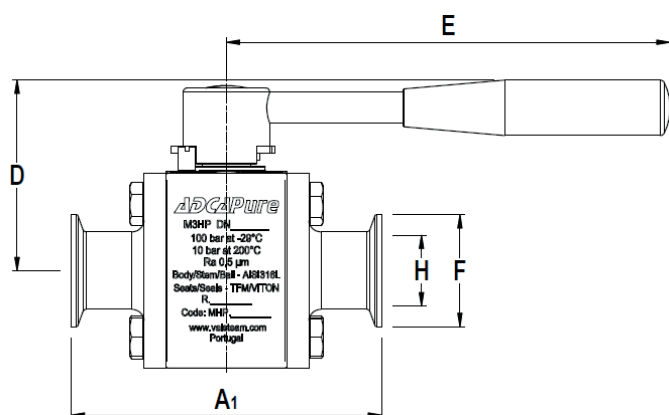
PACKAGING: Assembling and packaging in a clean room certified according to ISO 14644-1.
The product is end capped and sealed with recyclable thermo-shrinkable plastic film, to avoid contamination.

INSTALLATION: See IMI – Installation and maintenance instructions.



Note: Working pressure may be limited by the valve connections.

CE MARKING – GROUP 2 (PED – European Directive)		
PN63	PN100	Category
—	1/2" to 1"	SEP
1 1/2" to 2"	—	1 (CE marked)

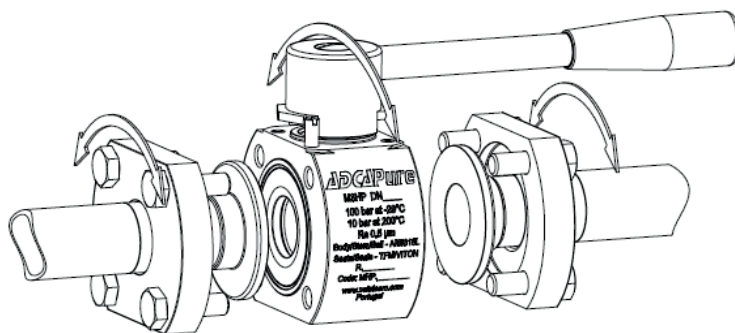


DIMENSIONS (mm) ASME BPE

SIZE	A1	A2	A3	A3.1	A3.2	B	C	D	E	F	G	H	I	BALL PORT	ISO 5211	WGT. (kg)
1/2"	88,9	101,6	95,5	44	51,5	59	22	49	130	25	12,7	9,4	25	9,4	F03 *	0,9
3/4"	101,6	114,3	108	51	57	64	24,5	53	130	25	19,05	15,75	27	15,8	F03 *	1,4
1"	114,3	127	120,5	57	63,5	79	31	68	165	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	86	200	50,5	38,1	34,8	27	34,8	F05	5,3
2"	165,1	177,8	171,5	82,5	89	134	53	97	200	64	50,8	47,5	28	47,5	F05	8,5

* Flange adapter is required, against extra price. See IS M3H.25 E Options and extras.

Tube weld easy and quick installation - standard



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

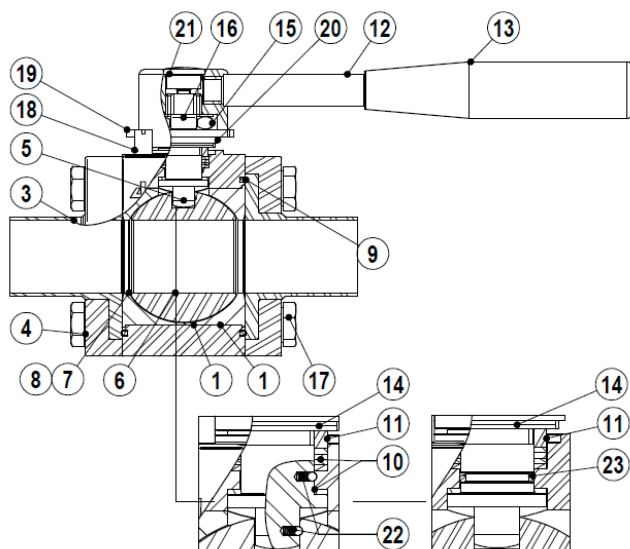
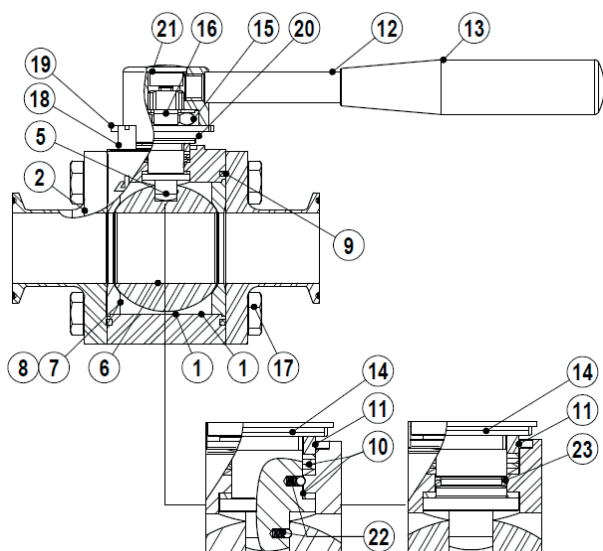
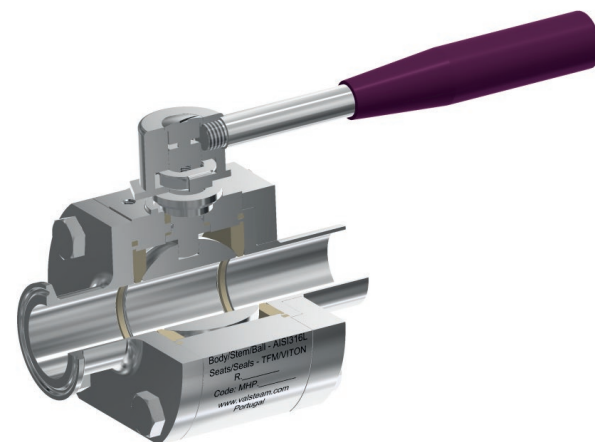
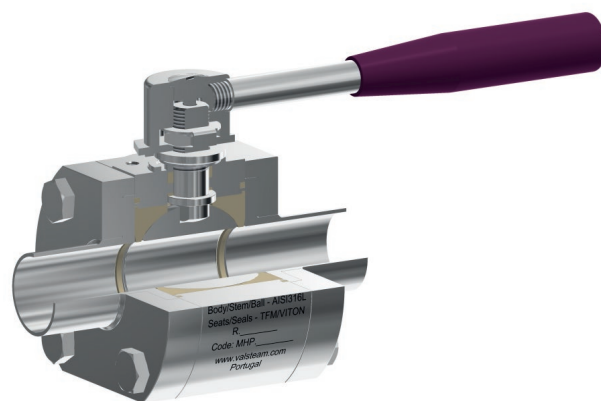
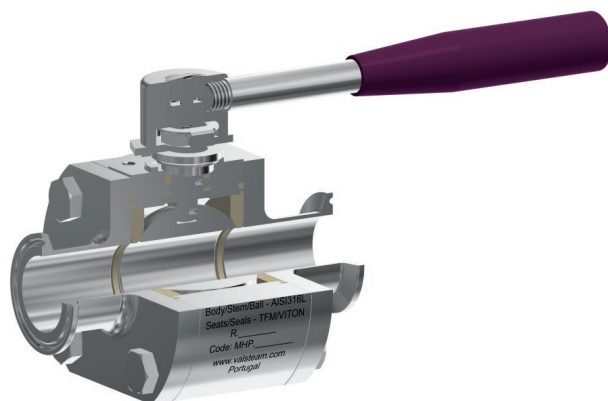
MATERIALS

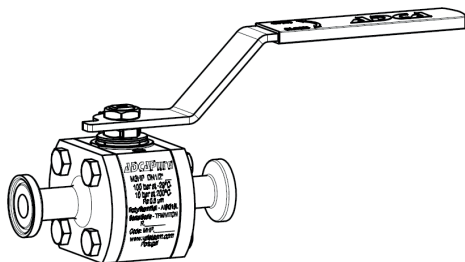
POS. N°	DESIGNATION	MATERIAL
1	Valve body	AISI 316L / 1.4404
2	TC end connection	AISI 316L / 1.4404
3	Tube weld end connection	AISI 316L / 1.4404
4	Flange	AISI 316L / 1.4404
5	Stem	AISI 316L / 1.4404
6	* Valve ball	AISI 316L / 1.4404
7	* Standard seat	TFM 1600
8	* Cavity filler seat	TFM 1600
9	* Body seal	PTFE
10	* Stem seals	TFM 1600
11	* Spacer	AISI 316 / 1.4401
12	Handle	AISI 304 / 1.4301
13	Handle end	Vinyl
13	Handle end (optional)	AISI 316L / 1.4404
14	* Spring washers	AISI 304 / 1.4301
15	Compression nut	AISI 304 / 1.4301
16	* Lock washer	AISI 304 / 1.4301
17	Fixing bolt	AISI 304 / 1.4301
18	Stop pin	AISI 304 / 1.4301
19	Handle stopper	AISI 304 / 1.4301
20	Washer	AISI 304 / 1.4301
21	Fixing screw	AISI 304 / 1.4301
22	Antistatic device	AISI 316 / 1.4401
23	O-ring	Viton

* Available spare parts;

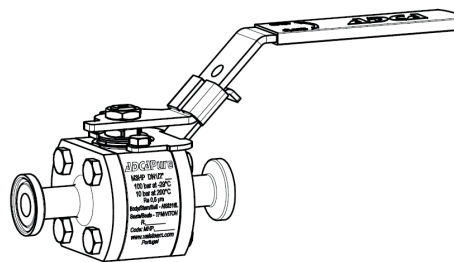
Remarks: FDA / USP Class VI seals certificate on request.

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





Flat lever handle with plastic cover.



Flat lever handle with plastic cover and lockable system.

ORDERING CODES M3HP												
Valve model	MHP	X	X	X	F	X	X	CB	X	15		
M3HP 3 pieces ball valve - AISI 316L	MHP											
Lever handle												
Round lever handle stainless steel / plastic cover		X										
Round lever handle complete stainless steel		1										
Flat lever handle stainless steel / plastic cover		2										
Flat lever handle stainless steel / plastic cover w/ lockable system		3										
Bare stem		9										
Material												
AISI 316L / 1.4404			X									
Seat design												
Standard seats				X								
Cavity fillers				F								
Seat material												
TFM 1600					F							
Surface finish a)												
Standard surface finish						X						
Mirror mechanical polished external surfaces (SF1)						P						
Electropolished internal wetted parts (SF5)						E						
Special features												
None							X					
Oxygen cleaning							O					
Pipe connections												
TC – Sanitary clamps ASME BPE								CB				
ETO – Extended tube orbital welding ASME BPE (360° rotation design)								TB				
TC / ETO – Combination ASME BPE (360° rotation design)								CTB				
Ball port												
True bore (standard)									X			
Full bore									NA			
Size												
1/2"										15		
3/4"										20		
1"										25		
1 1/2"										40		
2"										50		
Special valves / Extras												
Full description or additional codes have to be added in case of a non standard combination											E	

a) Consult IS PV20.00 (Technical information) for further details and other surface finish options.

NA – Not available.

HIGH PURITY BALL VALVES M3HP TRUE BORE (21/2" – 4" ASME BPE)

DESCRIPTION

M3HP 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.

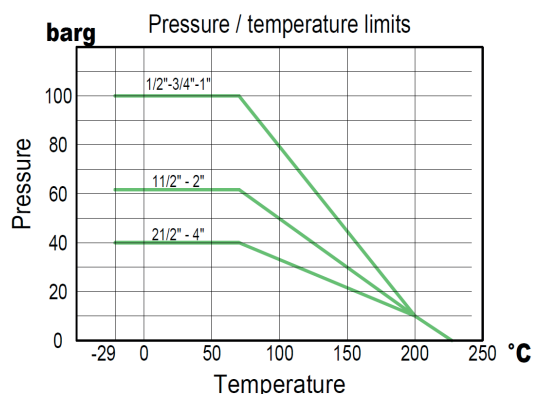
MAIN FEATURES

- True bore floating ball design.
- Completely made from solid bar stock material.
- Can be serviced without removal from pipeline.
- Bidirectional.
- Antistatic device.
- Anti blow out proof stem.
- Tube weld with loose body flanges (360° rotation after installation).
- ISO 5211 mounting.

STANDARD SURFACE FINISH

- Internal wetted parts: ≤ 0,51 micron Ra – SF1.
- External : ≤ 0,76 micron Ra – SF3.
- Other surface conditions see IS PV20.00 E – Technical information.
- Ultrasonic cleaning.

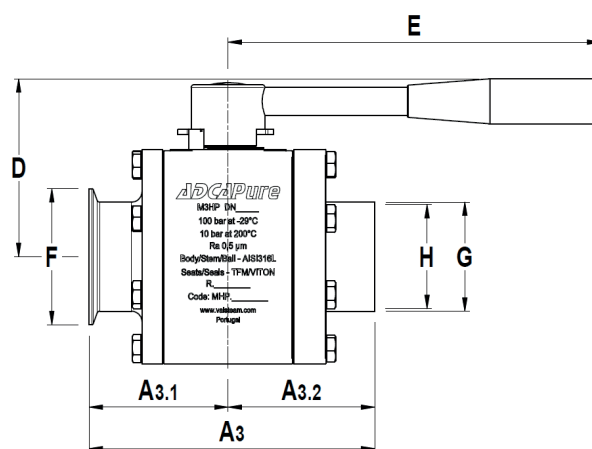
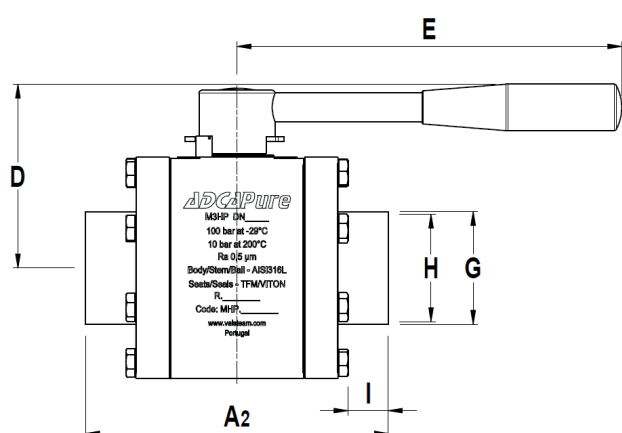
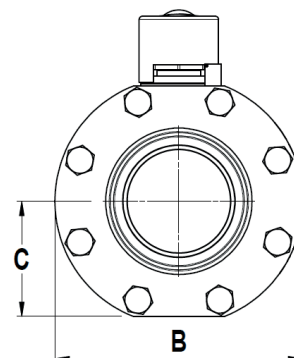
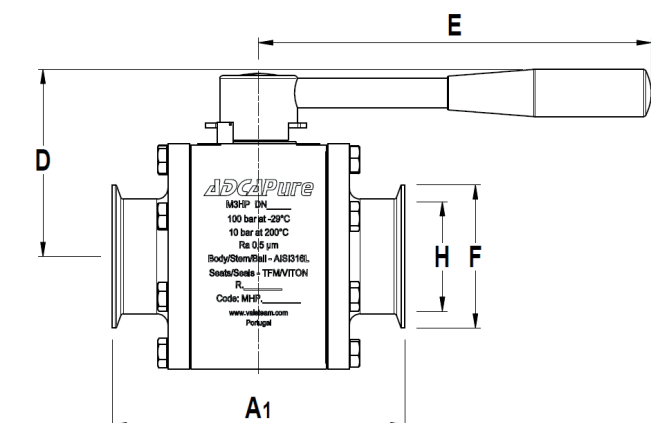
- OPTIONS:** Different sealing materials.
Degreased for oxygen use.
Cavity filler.
- USE:** Clean steam, gases and liquids compatible with the construction.
- AVAILABLE MODELS:** M3HP – Complete bar stock construction.
- SIZES:** 21/2" to 4".
- CONNECTIONS:** According to ASME BPE.
TC – Sanitary clamps.
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 sealed with recyclable thermo-shrinkable plastic film, to avoid contamination.
- INSTALLATION:** See IMI – Installation and maintenance instructions.



TFM 1600

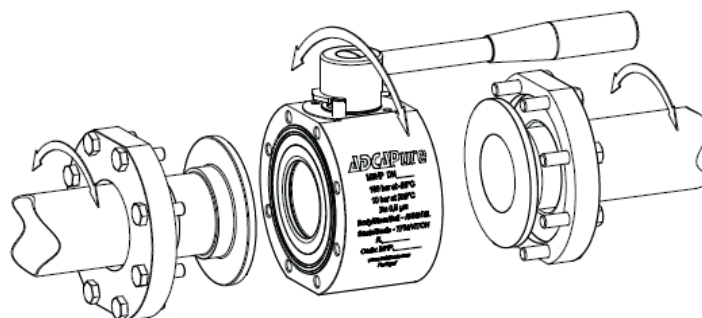
Note: Working pressure may be limited by the valve connections.

CE MARKING – GROUP 2 (PED – European Directive)	
PN40	Category
21/2" to 4"	1 (CE marked)



DIMENSIONS (mm) ASME BPE																
SIZE	A1	A2	A3	A3.1	A3.2	B	C	D	E	F	G	H	I	BALL PORT	ISO 5211	WGT. (kg)
2 1/2"	190	203	196,3	95	101,5	160	72,5	130	250	77,5	63,5	60,2	29	60,2	F7	15,3
3"	216	228	222	108	114	180	83,5	140	290	91	76,2	72,9	30	72,9	F7	22,1
4"	254	267	260,5	127	133,5	220	101,5	158	290	119	101,6	97,4	36	97,4	F10	39,7

Tube weld easy and quick installation - standard



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

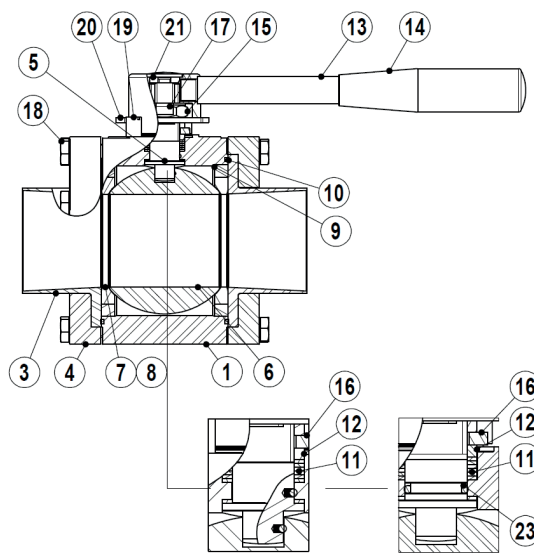
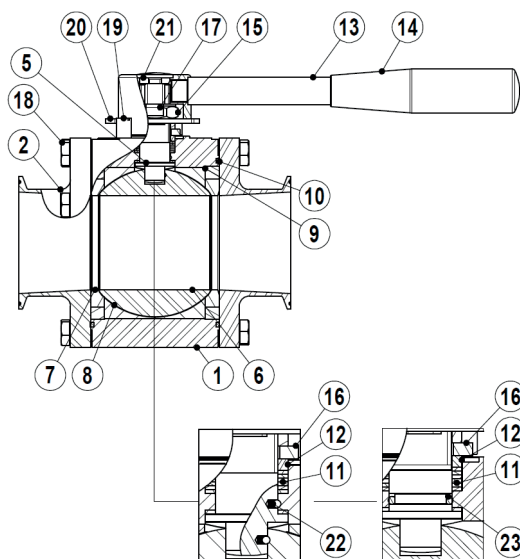
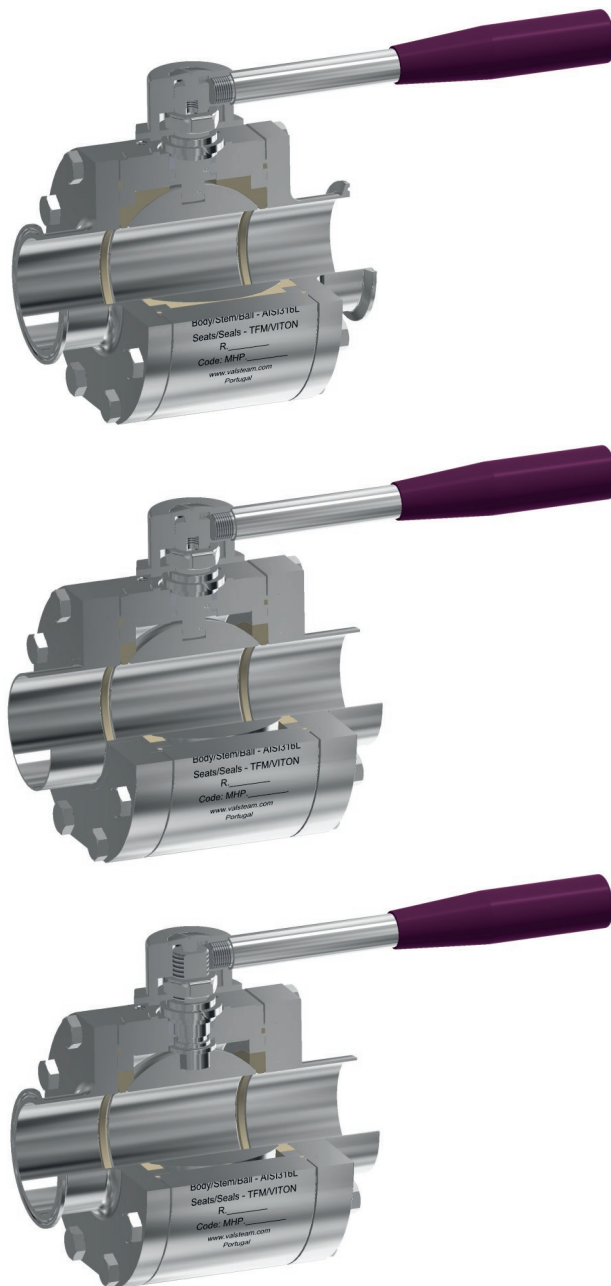
MATERIALS

POS. N°	DESIGNATION	MATERIAL
1	Valve body	AISI 316L / 1.4404
2	TC end connection	AISI 316L / 1.4404
3	Tube weld end connection	AISI 316L / 1.4404
4	Flange	AISI 316L / 1.4404
5	Stem	AISI 316L / 1.4404
6	* Valve ball	AISI 316L / 1.4404
7	* Standard seat	TFM 1600
8	* Cavity filler seat	TFM 1600
9	Body ring	AISI 316L / 1.4404
10	* Body seal	PTFE
11	* Stem seals	TFM 1600
12	* Spacer	AISI 316 / 1.4401
13	Handle	AISI 304 / 1.4301
14	Handle end	Vinyl
14	Handle end (optional)	AISI 316L / 1.4404
15	Compression nut	AISI 304 / 1.4301
16	* Spring washers	AISI 304 / 1.4301
17	* Lock washer	AISI 304 / 1.4301
18	Fixing bolt	AISI 304 / 1.4301
19	Stop pin	AISI 304 / 1.4301
20	Handle stopper	AISI 304 / 1.4301
21	Fixing screw	AISI 304 / 1.4301
22	Antistatic device	AISI 316 / 1.4401
23	O-ring	Viton

* Available spare parts;

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.



ORDERING CODES M3HP												
Valve model	MHP	X	X	X	F	X	X	CB	X	65		
M3HP 3 pieces ball valve - AISI 316L	MHP											
Lever handle												
Round lever handle stainless steel / plastic cover		X										
Round lever handle complete stainless steel		1										
Flat lever handle stainless steel / plastic cover		2										
Flat lever handle stainless steel / plastic cover w/ lockable system		3										
Bare stem		9										
Material												
AISI 316L / 1.4404			X									
Seat design												
Standard seats					X							
Cavity fillers					F							
Seat material												
TFM 1600					F							
Surface finish a)												
Standard surface finish						X						
Mirror mechanical polished external surfaces (SF1)						P						
Electropolished internal wetted parts (SF5)						E						
Special features												
None							X					
Oxygen cleaning							O					
Pipe connections												
TC – Sanitary clamps ASME BPE								CB				
ETO – Extended tube orbital welding ASME BPE (360° rotation design)								TB				
TC / ETO – Combination ASME BPE (360° rotation design)								CTB				
Ball port												
True bore (standard)									X			
Full bore									NA			
Size												
2 1/2"										65		
3"										80		
4"										100		
Special valves / Extras												
Full description or additional codes have to be added in case of a non standard combination												E

a) Consult IS PV20.00 (Technical information) for further details and other surface finish options.
NA – Not available.

HIGH PURITY BALL VALVES M3HP TRUE BORE (6" ASME BPE)

DESCRIPTION

M3HP 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

- True bore floating ball design.
- Completely made from solid bar stock material.
- Can be serviced without removal from pipeline.
- Bidirectional.
- Antistatic device.
- Anti blow out proof stem.
- Tube weld with loose body flanges (360° rotation after installation).
- ISO 5211 mounting.

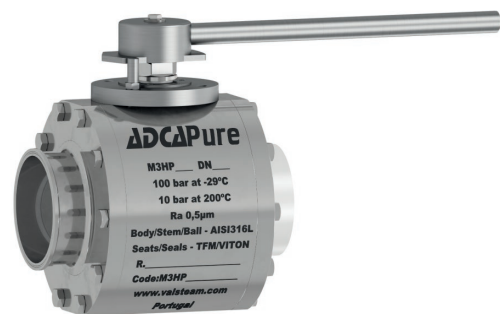
STANDARD SURFACE FINISH

- Internal wetted parts: $\leq 0,51$ micron Ra – SF1.
- External : $\leq 0,76$ micron Ra – SF3.
- Other surface conditions see IS PV20.00 E – Technical information.
- Ultrasonic cleaning.

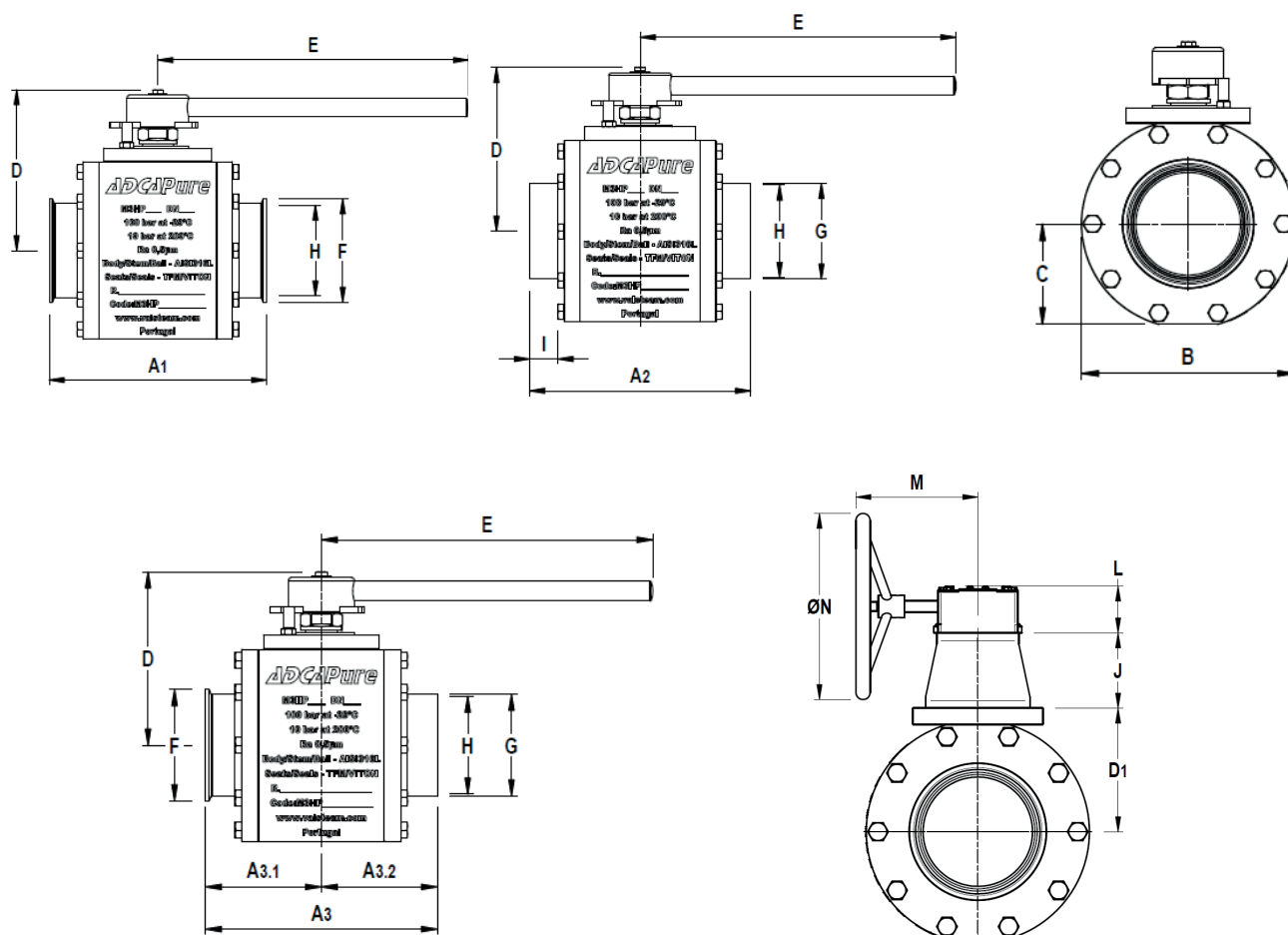
- OPTIONS:** Different sealing materials.
Degreased for oxygen use.
Cavity filler.
- USE:** Clean steam, gases and liquids compatible with the construction.
- AVAILABLE MODELS:** M3HP – Complete bar stock construction.
- SIZES:** 6".
- CONNECTIONS:** According to ASME BPE.
TC – Sanitary clamps.
ETO – 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 sealed with recyclable thermo-shrinkable plastic film, to avoid contamination.

- INSTALLATION:** See IMI – Installation and maintenance instructions.



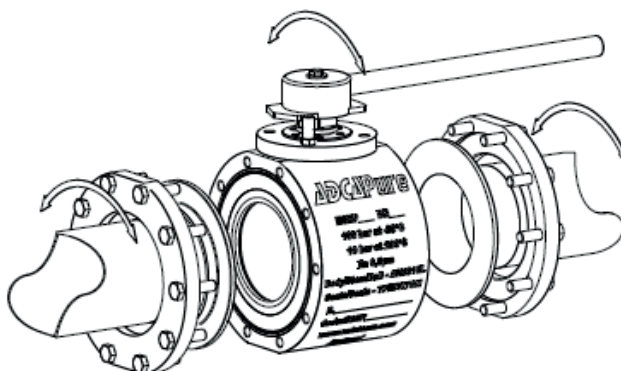
CE MARKING – GROUP 2 (PED – European Directive)	
PN16	Category
6"	1 (CE marked)



DIMENSIONS (mm) ASME BPE

SIZE	A1	A2	A3	A3.1	A3.2	B	C	D	D1	E	F	G	H	I	J	L	M	N	BALL PORT	ISO 5211	WGT. (kg)
6"	350	350	350	175	175	300	144	260	166	500	167	152	147	45	101	63	164	250	152,4	F14	101,6

Tube weld easy and quick installation - standard



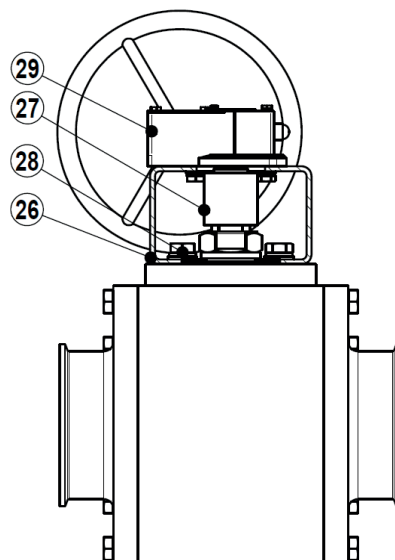
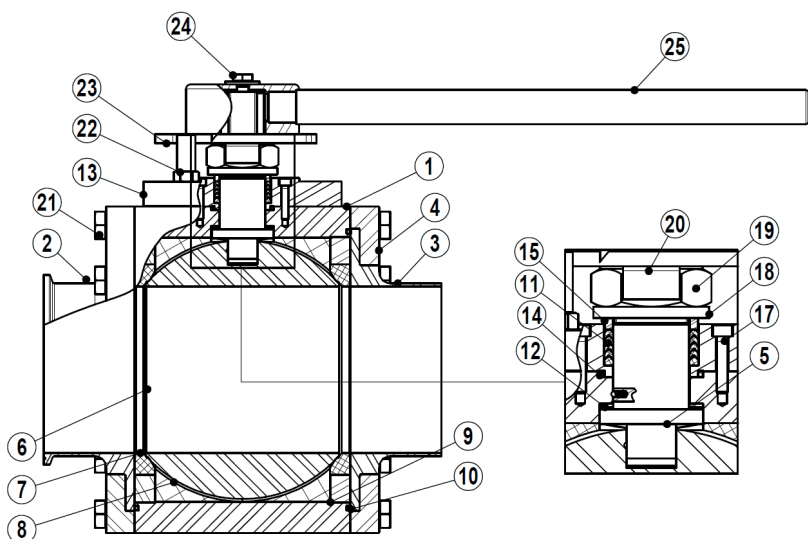
Loose body flanges make it possible to install the valve without aligning of the welded end connections.
After installation the valve can rotate on 360° for the desired orientation.

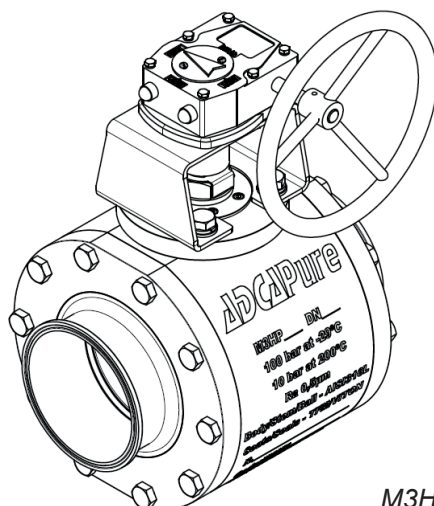
MATERIALS		
POS. Nº	DESIGNATION	MATERIAL
1	Valve body	AISI 316L / 1.4404
2	TC end connection	AISI 316L / 1.4404
3	Tube weld end connection	AISI 316L / 1.4404
4	Flange	AISI 316L / 1.4404
5	Stem	AISI 316L / 1.4404
6	* Valve ball	AISI 316L / 1.4404
7	* Standard seat	TFM 1600
8	* Cavity filler seat	TFM 1600
9	Body ring	AISI 316L / 1.4404
10	* Body seal	PTFE
11	* Stem seals	TFM 1600
12	* Stem thrust seal	TFM 1600 + PEEK
13	ISO flange	AISI 316L / 1.4404
14	ISO flange seal	TFM 1600
15	* Spacer	AISI 316 / 1.4401
17	Bolts	AISI 304 / 1.4301
18	Spring washer	AISI 304 / 1.4301
19	Compression nut	AISI 304 / 1.4301
20	* Lock washer	AISI 304 / 1.4301
21	Fixing screw	AISI 304 / 1.4301
22	Handle stopper pin	AISI 304 / 1.4301
23	Handle stopper	AISI 304 / 1.4301
24	Handle fixing bolt	AISI 304 / 1.4301
25	Handle	AISI 304 / 1.4301
26	Bracket	AISI 304 / 1.4301
27	Bracket stem	AISI 304 / 1.4301
28	Bracket bolts	AISI 304 / 1.4301
29	Gear box	Cast iron

* Available spare parts;

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.





M3HP 6" with gearbox

ORDERING CODES M3HP												
Valve model	MHP	1	X	X	F	X	X	CB	X	150		
M3HP 3 pieces ball valve - AISI 316L	MHP											
Lever handle												
Round lever handle complete stainless steel		1										
Bare stem		9										
Material												
AISI 316L / 1.4404			X									
Seat design												
Standard seats				X								
Cavity fillers				F								
Seat material												
TFM 1600					F							
Surface finish a)												
Standard surface finish						X						
Mirror mechanical polished external surfaces (SF1)						P						
Electropolished internal wetted parts (SF5)						E						
Special features												
None							X					
Oxygen cleaning							O					
End connections												
TC – Sanitary clamps ASME BPE								CB				
ETO – Extended tube orbital welding ASME BPE (360° rotation design)								TB				
TC / ETO – Combination ASME BPE (360° rotation design)								CTB				
Ball port												
True bore (standard)									X			
Full bore									NA			
Size												
6"										150		
Special valves / Extras												
Full description or additional codes have to be added in case of a non standard combination												E

a) Consult IS PV20.00 (Technical information) for further details and other surface finish options.

NA – Not available.