TECHNICAL CATALOGUE

FULL FLOW BALL VALVES: MADRID

ITAP AT A GLANCE

THE COMPANY

ITAP SpA, founded in Lumezzane (Brescia) in 1972, is currently one of the leading production companies in Italy of **valves, fittings and distribution manifolds** for plumbing and heating systems.

Thanks to a fully automated production process, with 85 transfer machines and 55 assembly lines, it is capable of producing 400,000 pieces per day.

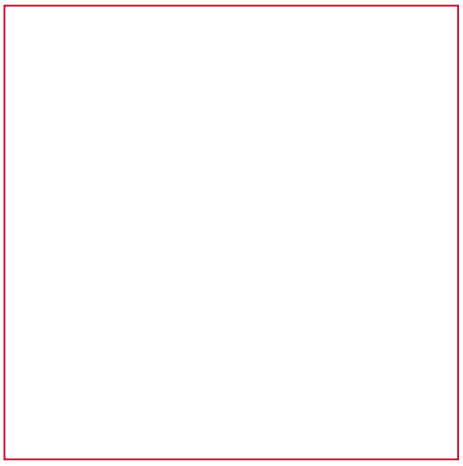
Our innate pursuit for innovation and observance of technical regulations is supported by the company certification ISO 9001. The company has always considered its focus on quality as the main tool to obtain significant business results: today ITAP SpA is proud to offer products bearing the approval of numerous international certifying bodies.

ITAP products have obtained approvals by more than 30 certification bodies from all over the world.

FULL FLOW BALL VALVES: MADRID

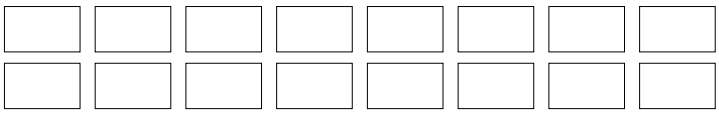
076 Madrid ball valve, full flow

Suitable for domestic water services, heating and air-conditioning plants, compressed air systems.



MEASURE	PRESSURE	CODE	PACKING
1/4" (DN 8)	50bar/725psi	076B014	12/144
3/8" (DN 10)	50bar/725psi	076B038	12/144
1/2" (DN 15)	50bar/725psi	076B012	10/90
3/4" (DN 20)	40bar/580psi	076B034	8/64
1" (DN 25)	40bar/580psi	076B100	6/48
1"1/4 (DN 32)	30bar/435psi	076B114	2/16
1"1/2 (DN 40)	30bar/435psi	076B112	2/10
2" (DN 50)	25bar/362.5psi	076B200	2/10
2"1/2 (DN 65)	18bar/261psi	1200212N	1/5
3" (DN 80)	16bar/232psi	1200300N	1/3
4" (DN 100)	14bar/203psi	1200400N	1/2

CERTIFICATIONS

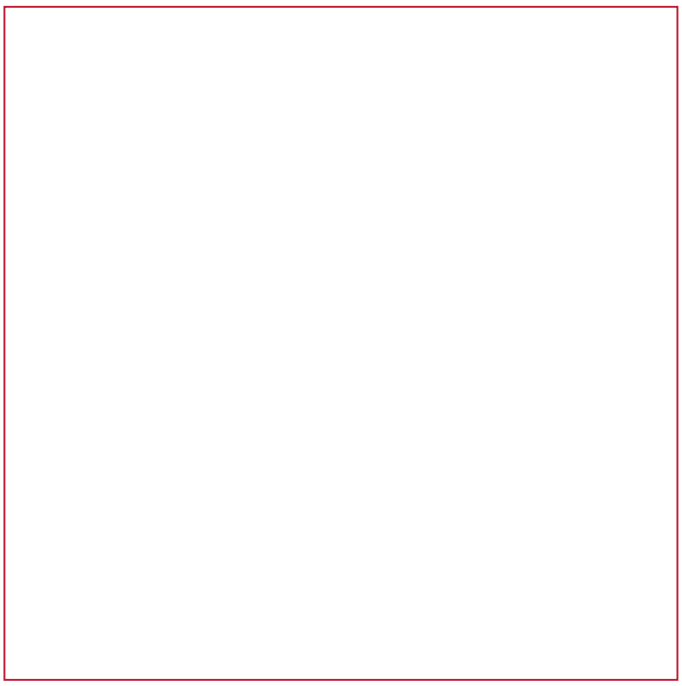


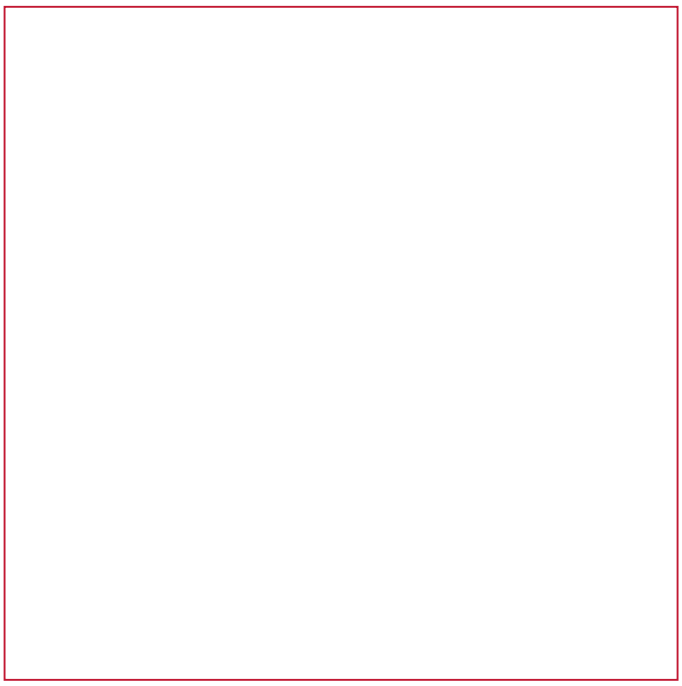
TECHNICAL SPECIFICATIONS

Female/female threads.
Lever handle in steel (aluminium in the sizes 2”1/2, 3” and 4”).
Body in nickel-plated brass.
Minimum and maximum working temperatures: -20°C, 150°C in absence of steam.
Female threads:
- ISO 7/1 Rp parallel (equivalent to DIN EN 10226-1 and BS EN 10226-1) sizes 1/4” through 2”.
- ISO228 (equivalent to DIN EN ISO 228 and BS EN ISO 228) sizes 2”1/2, 3” and 4”

FULL FLOW BALL VALVES: MADRID

OVERALL DIMENSIONS

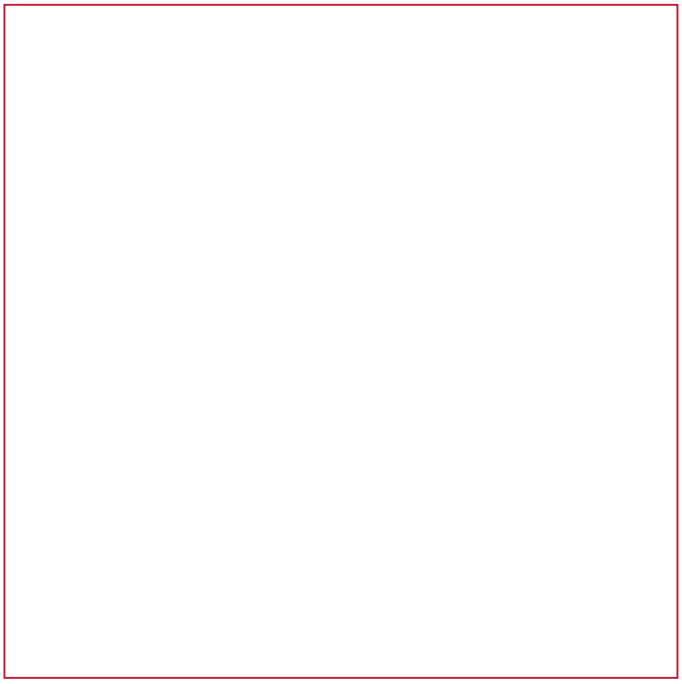




	1/4"	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	3"	4"
DN	8	10	15	20	25	32	40	50	65	80	100
A	49,5	52,4	61	68	85	99,5	109	130	148	168	204
B	23,5	24	30,5	37	45,5	58	71	85	122	142	180
C	37,3	37,3	48,8	54,8	56,8	75	90,3	97,3	126,75	135,75	153,75
D	80	80	88,5	113	113	138	157,8	157,8	250	250	250
E	10	10	15	20	25	32	40	50	65	80	100
F	11	11,4	15	16,3	19,1	21,4	21,4	25,7	25	27,5	30
CH	18	21	25	31	38	47	54	66			
Kg/cm2 bar	50	50	50	40	40	30	30	25	18	16	14
LBS - psi	725	725	725	580	580	435	435	362,5	261	232	203

FULL FLOW BALL VALVES: MADRID

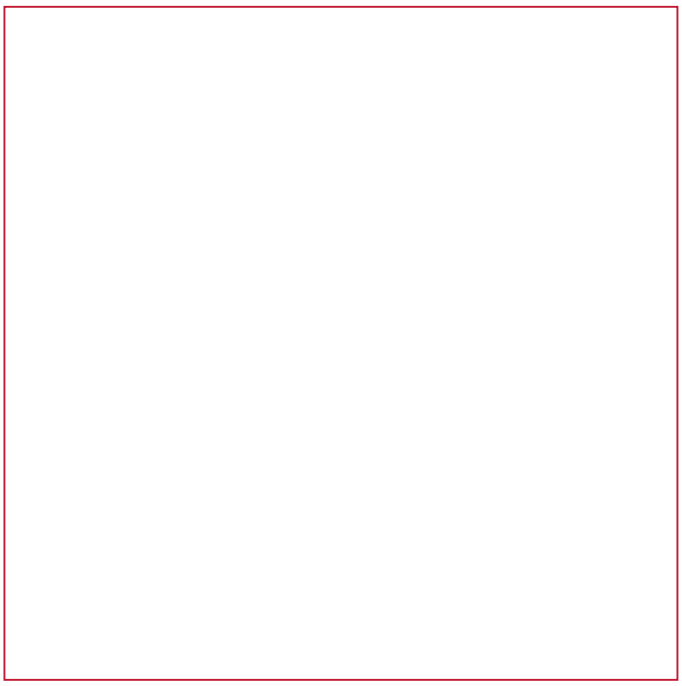
MATERIALS sizes 1/4" through 2"



POS.	DESCRIPTION	N.	MATERIAL
1	Female end adapter	1	Nickel-plated brass CW617N
2	Seat	2	P.T.F.E.
3	Ball	1	Chrome-plated brass CW617N
4	Stem	1	Brass CW614N
5	O-ring	1	NBR
6	O-ring	1	Viton®
7	Body	1	Nickel-plated brass CW617N
8	Lever	1	Varnished steel P04
9	Screw	1	Zinc-plated steel C4C

FULL FLOW BALL VALVES: MADRID

MATERIALS sizes 2"1/2 through 4"



POS.	DESCRIPTION	N.	MATERIAL
1	Female end adapter	1	Nickel-plated brass CW617N
2	Seat	2	P.T.F.E.
3	Ball	1	Chrome-plated brass CW617N
4	Stem	1	Brass CW614N
5	O-ring	1	NBR
6	O-ring	1	Viton®
7	Body	1	Nickel-plated brass CW617N
8	Lever	1	Aluminium
9	Screw	1	Zinc-plated CB4 FF (C34)

FULL FLOW BALL VALVES: MADRID

INSTALLATION

The itap S.p.A.'s valves are bi-directional, that means they manage the flow in both the directions.
The valves are composed by a ball, two seal in PTFE material, one stem, two sailing rings (O-Rings), one handle and a couple of parts made of brass (body and end adopter) that contain them and that are assembled by means of threat and a sealed material to obtain their aim.
In order to avoid that the sealed material gets broken and then the valve looses the connection between the body and the end-adapter, it's necessary to avoid to submit the two parts under the influence of a torque.
For the installation normal hydraulic practices must be used, and especially:
- ones have to be sure that the two pipes are correctly aligned;
- during the assembling process the installer has to apply its assembling tools at the end that is nearest to the pipe;
- the application of the sealing materials by the fitter (PTFE or hempen cloth) must be limited at the threat zone. An excess should interferes in the ball-gasket's closure zone, compromising the tightness.
- in the case that the fluid transported presents some impurities (dust, water too hard, etc.) ones have to remove these impurities by the means of a filter. Otherwise they could damage the seals.

DISASSEMBLY

To remove the valve from the pipe line or anyhow before to unscrew the junctions linked to it:
- wear the clothing protective normally required to work with the fluid transported within the line;
- depressurizze the line and operate in this way:
  - positioning the valve in opened position and than empty the line;
  - handle the valve to put down the residue pressure contained inside the space between the ball and the body before of remove it from the line;
  - during the disassembly apply the screw tool at the end of the valve nearest the pipe;

MAINTENANCE

Verify the valve periodically, according to its application's field and its works' field and its work's conditions, in order to be sure that the valve works correctly.

FULL FLOW BALL VALVES: MADRID

LOSS DIAGRAM (With water), size 1/4" through 2"

	1/4"	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	3"	4"
KV	3,45	5,00	15,65	26,26	41,44	63,69	101	169	376	472	892

FULL FLOW BALL VALVES: MADRID

LOSS DIAGRAM (With water), size 2"1/2 through 4"

	1/4"	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	3"	4"
KV	3,45	5,00	15,65	26,26	41,44	63,69	101	169	376	472	892

FULL FLOW BALL VALVES: MADRID

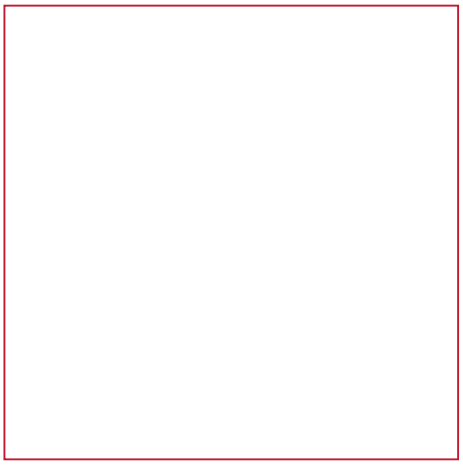
PRESSURE-TEMPERATURE DIAGRAM

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FULL FLOW BALL VALVES: MADRID

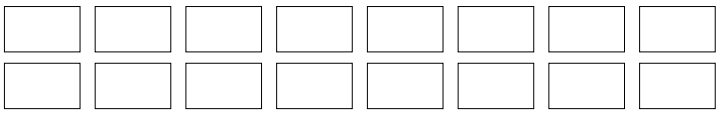
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3/4" (DN 20)	40bar/580psi	077B034	8/64
1" (DN 25)	40bar/580psi	077B100	6/48
1"1/4 (DN 32)	30bar/435psi	077B114	2/16
1"1/2 (DN 40)	30bar/435psi	077B112	2/10
2" (DN 50)	25bar/362.5psi	077B200	1/5
2"1/2 (DN 65)	18bar/261psi	1210212N	1/5
3" (DN 80)	16bar/232psi	1210300N	1/3
4" (DN 100)	14bar/203psi	1210400N	1/2

CERTIFICATIONS



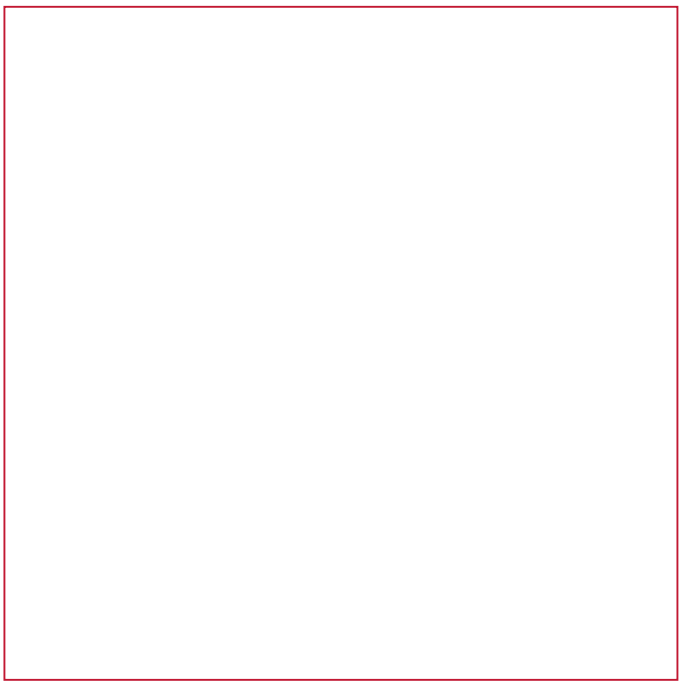
TECHNICAL SPECIFICATIONS

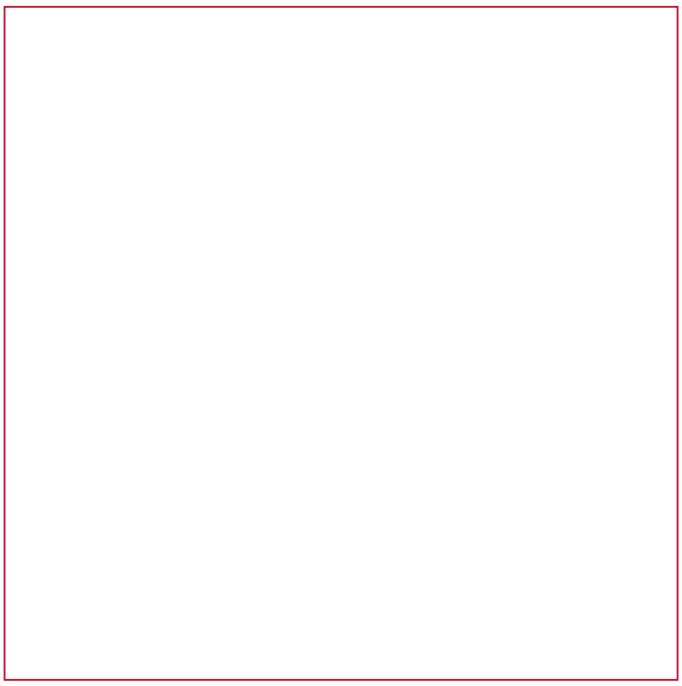
Male/female threads.
Lever handle in steel (aluminium in the sizes 2”1/2, 3” and 4”).
Body in nickel-plated brass.
Minimum and maximum working temperatures: -20°C, 150°C in absence of steam.
Female threads:
- ISO 7/1 Rp parallel (equivalent to DIN EN 10226-1 and BS EN 10226-1) sizes 1/4” through 2”.
- ISO228 (equivalent to DIN EN ISO 228 and BS EN ISO 228) sizes 2”1/2, 3” and 4”

Male threads:
- ISO 7/1 R taper (equivalent to DIN EN 10226-1 and BS EN 10226-1) sizes 1/4” through 2”.
- ISO228 (equivalent to DIN EN ISO 228 and BS EN ISO 228) sizes 2”1/2, 3” and 4”

FULL FLOW BALL VALVES: MADRID

OVERALL DIMENSIONS

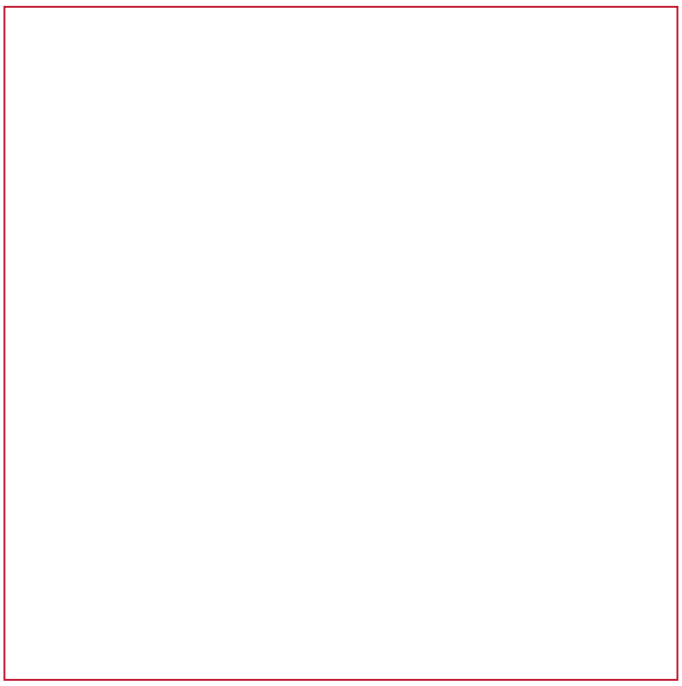




	1/4"	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	3"	4"
DN	8	10	15	20	25	32	40	50	65	80	100
A	56,9	58,9	68	75,5	90,5	105	115,5	135,5	155,5	178	208
B	23,5	24	30,5	37	45,5	58	71	85	122	142	180
C	37,3	37,3	48,8	54,8	58,8	75	90,3	97	126,75	135,75	153,75
D	80	80	88,5	113	113	138	157,8	157,8	250	250	250
E	8	10	15	20	25	32	39	50	63	74	97
F	11	11,4	15	16,3	19,1	21,4	21,4	25,7	25	27,5	30
G	11	11,5	15	16,5	19	21,5	21,5	26	21	24	23
CH	18	21	25	31	38	47	54	66			
Kg/cm2 bar	50	50	50	40	40	30	30	25	18	16	14
LBS - psi	725	725	725	580	580	435	435	362,5	261	232	203

FULL FLOW BALL VALVES: MADRID

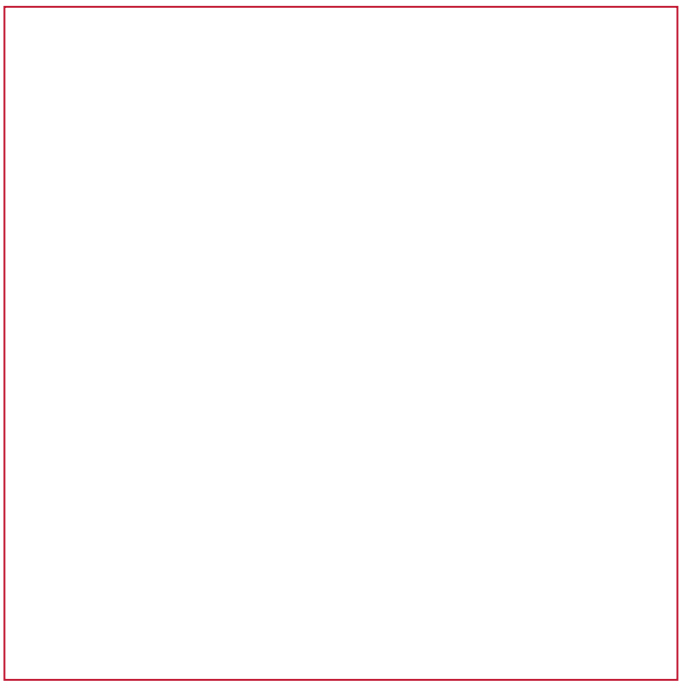
MATERIALS sizes 1/4" through 2"



POS.	DESCRIPTION	N.	MATERIAL
1	Male end adapter	1	Nickel-plated brass CW617N
2	Seat	2	P.T.F.E.
3	Ball	1	Chrome-plated brass CW617N
4	Stem	1	Brass CW614N
5	O-ring	1	NBR
6	O-ring	1	Viton®
7	Body	1	Nickel-plated brass CW617N
8	Lever	1	Varnished steel P04
9	Screw	1	Zinc-plated steel C4C

FULL FLOW BALL VALVES: MADRID

MATERIALS sizes 2"1/2 through 4"



POS.	DESCRIPTION	N.	MATERIAL
1	Male end adapter	1	Nickel-plated brass CW617N
2	Seat	2	P.T.F.E.
3	Ball	1	Chrome-plated brass CW617N
4	Stem	1	Brass CW614N
5	O-ring	1	NBR
6	O-ring	1	Viton®
7	Body	1	Nickel-plated brass CW617N
8	Lever	1	Aluminium
9	Screw	1	Zinc-plated CB4 FF (C34)

FULL FLOW BALL VALVES: MADRID

INSTALLATION

The itap S.p.A.'s valves are bi-directional, that means they manage the flow in both the directions.
The valves are composed by a ball, two seal in PTFE material, one stem, two sailing rings (O-Rings), one handle and a couple of parts made of brass (body and end adopter) that contain them and that are assembled by means of threat and a sealed material to obtain their aim.
In order to avoid that the sealed material gets broken and then the valve looses the connection between the body and the end-adapter, it's necessary to avoid to submit the two parts under the influence of a torque.
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- ones have to be sure that the two pipes are correctly aligned;
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- in the case that the fluid transported presents some impurities (dust, water too hard, etc.) ones have to remove these impurities by the means of a filter. Otherwise they could damage the seals.

DISASSEMBLY

To remove the valve from the pipe line or anyhow before to unscrew the junctions linked to it:
- wear the clothing protective normally required to work with the fluid transported within the line;
- depressurizze the line and operate in this way:
  - positioning the valve in opened position and than empty the line;
  - handle the valve to put down the residue pressure contained inside the space between the ball and the body before of remove it from the line;
  - during the disassembly apply the screw tool at the end of the valve nearest the pipe;

MAINTENANCE

Verify the valve periodically, according to its application's field and its works' field and its work's conditions, in order to be sure that the valve works correctly.

FULL FLOW BALL VALVES: MADRID

LOSS DIAGRAM (With water), size 1/4" through 2"

	1/4"	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	3"	4"
KV	3,45	5	15,65	26,26	41,44	63,69	101	169	376	472	892

FULL FLOW BALL VALVES: MADRID

LOSS DIAGRAM (With water), size 2"1/2 through 4"

	1/4"	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	3"	4"
KV	3,45	5	15,65	26,26	41,44	63,69	101	169	376	472	892

FULL FLOW BALL VALVES: MADRID

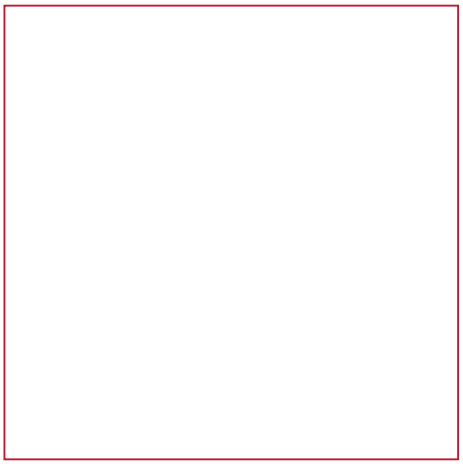
PRESSURE-TEMPERATURE DIAGRAM

The values shown by the dropping lines state the maximum limit of employment of the valves.
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FULL FLOW BALL VALVES: MADRID

078 Madrid ball valve, full flow

Suitable for domestic water services, heating and air-conditioning plants, compressed air systems.



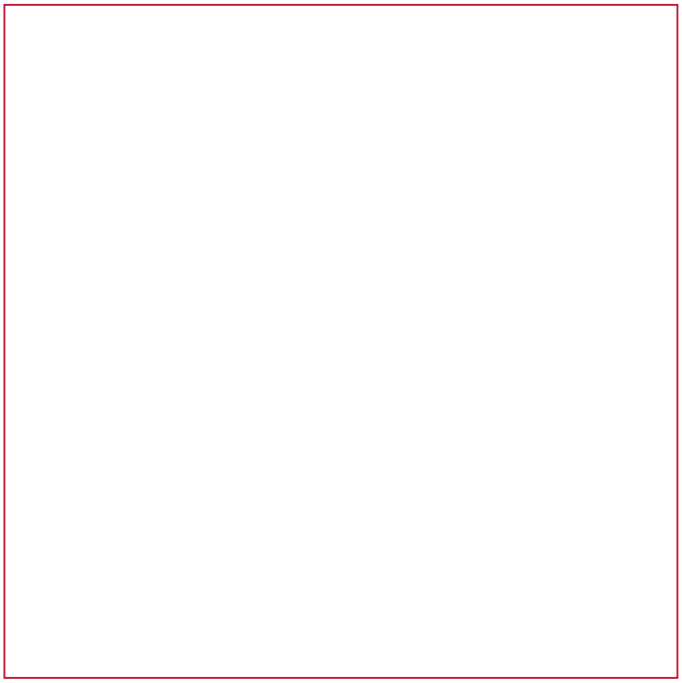
MEASURE	PRESSURE	CODE	PACKING
1/4" (DN 8)	50bar/725psi	078B014	15/180
3/8" (DN 10)	50bar/725psi	078B038	15/180
1/2" (DN 15)	50bar/725psi	078B012	10/120
3/4" (DN 20)	40bar/580psi	078B034	8/80
1" (DN 25)	40bar/580psi	078B100	6/48

CERTIFICATIONS

TECHNICAL SPECIFICATIONS

Female/female threads.
T handle in aluminium.
Body in nickel-plated brass.
Minimum and maximum working temperatures: -20°C, 150°C in absence of steam.
Female threads:
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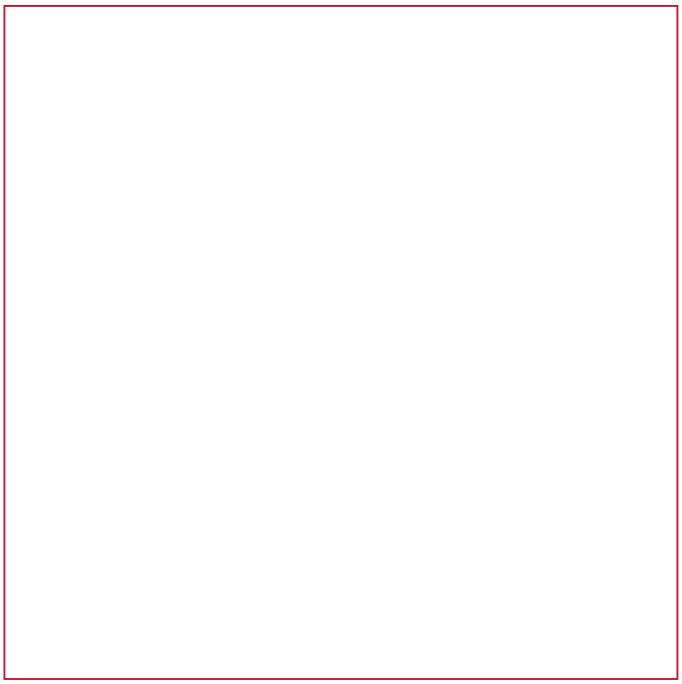
OVERALL DIMENSIONS



FULL FLOW BALL VALVES: MADRID

	1/4"	3/8"	1/2"	3/4"	1"
DN	8	10	15	20	25
A	49,5	52,4	61	68	85
B	23,5	24	30,5	37	45,5
C	37,3	37,3	43,8	46,8	50,8
D	47	47	54	62	62
E	10	10	15	20	25
F	11	11,4	15	16,3	19,1
CH	18	21	25	31	38
Kg/cm2 bar	50	50	50	40	40
LBS - psi	725	725	725	580	580

MATERIALS



POS.	DESCRIPTION	N.	MATERIAL
1	Female end adapter	1	Nickel-plated brass CW617N
2	Seat	2	P.T.F.E.
3	Ball	1	Chrome-plated brass CW617N
4	Stem	1	Brass CW614N
5	O-ring	1	NBR
6	O-ring	1	Viton®
7	Body	1	Nickel-plated brass CW617N
8	T handle	1	Varnished aluminium
9	Screw	1	Zinc-plated steel C4C

FULL FLOW BALL VALVES: MADRID

INSTALLATION

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- in the case that the fluid transported presents some impurities (dust, water too hard, etc.) ones have to remove these impurities by the means of a filter. Otherwise they could damage the seals.

DISASSEMBLY

To remove the valve from the pipe line or anyhow before to unscrew the junctions linked to it:
- wear the clothing protective normally required to work with the fluid transported within the line;
- depressurizze the line and operate in this way:
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MAINTENANCE

Verify the valve periodically, according to its application's field and its works' field and its work's conditions, in order to be sure that the valve works correctly.

FULL FLOW BALL VALVES: MADRID

LOSS DIAGRAM (With water)

	1/4"	3/8"	1/2"	3/4"	1"
KV	3,45	5,00	15,65	26,26	41,44

FULL FLOW BALL VALVES: MADRID

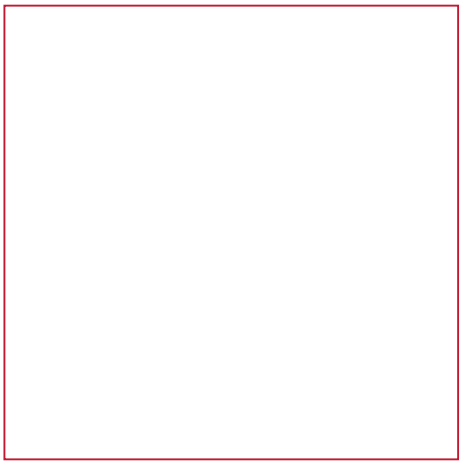
PRESSURE-TEMPERATURE DIAGRAM

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079 Madrid ball valve, full flow

Suitable for domestic water services, heating and air-conditioning plants, compressed air systems.



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1" (DN 25)	40bar/580psi	079B100	6/48

CERTIFICATIONS

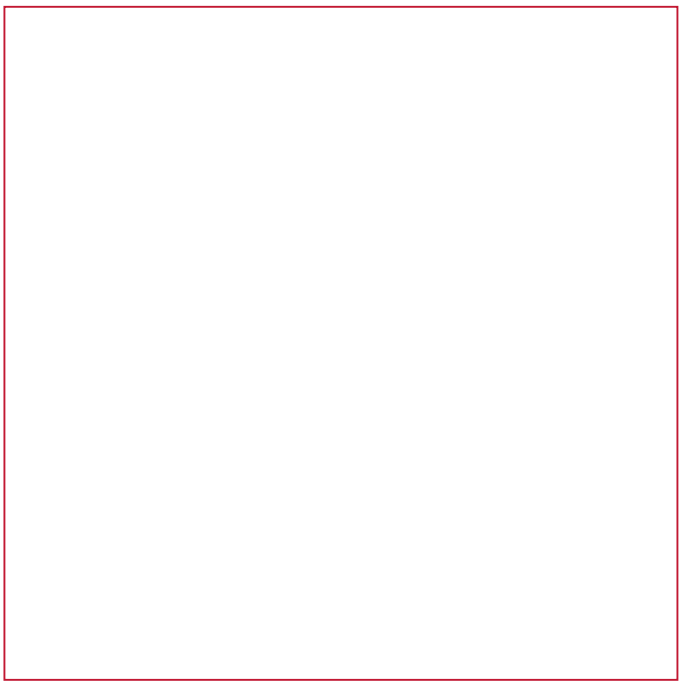
TECHNICAL SPECIFICATIONS

Male/female threads.
T handle in aluminium.
Body in nickel-plated brass.
Minimum and maximum working temperatures: -20°C, 150°C in absence of steam.
Female threads:
- ISO 7/1 Rp parallel (equivalent to DIN EN 10226-1 and BS EN 10226-1) sizes 1/4” through 1”.

Male threads:
- ISO 7/1 R taper (equivalent to DIN EN 10226-1 and BS EN 10226-1) sizes 1/4” through 1”.

FULL FLOW BALL VALVES: MADRID

OVERALL DIMENSIONS



	1/4"	3/8"	1/2"	3/4"	1"
DN	8	10	15	20	25
A	56,9	58,9	68	75,5	90,5
B	23,5	24	30,5	37	45,5
C	37,3	37,3	43,8	46,8	50,8
D	47	47	54	62	62
E	8	10	15	20	25
F	11	11,4	15	16,3	19,1
G	11	11,5	15	16,5	19
CH	18	21	25	31	38
Kg/cm2 bar	50	50	50	40	40
LBS - psi	725	725	725	580	580

FULL FLOW BALL VALVES: MADRID

MATERIALS

POS.	DESCRIPTION	N.	MATERIAL
1	Male end adapter	1	Nickel-plated brass CW617N
2	Seat	2	P.T.F.E.
3	Ball	1	Chrome-plated brass CW617N
4	Stem	1	Brass CW614N
5	O-ring	1	NBR
6	O-ring	1	Viton®
7	Body	1	Nickel-plated brass CW617N
8	T handle	1	Varnished aluminium
9	Screw	1	Zinc-plated steel C4C

FULL FLOW BALL VALVES: MADRID

INSTALLATION

The itap S.p.A.'s valves are bi-directional, that means they manage the flow in both the directions.
The valves are composed by a ball, two seal in PTFE material, one stem, two sailing rings (O-Rings), one handle and a couple of parts made of brass (body and end adopter) that contain them and that are assembled by means of threat and a sealed material to obtain their aim.
In order to avoid that the sealed material gets broken and then the valve looses the connection between the body and the end-adapter, it's necessary to avoid to submit the two parts under the influence of a torque.
For the installation normal hydraulic practices must be used, and especially:
- ones have to be sure that the two pipes are correctly aligned;
- during the assembling process the installer has to apply its assembling tools at the end that is nearest to the pipe;
- the application of the sealing materials by the fitter (PTFE or hempen cloth) must be limited at the threat zone. An excess should interferes in the ball-gasket's closure zone, compromising the tightness.
- in the case that the fluid transported presents some impurities (dust, water too hard, etc.) ones have to remove these impurities by the means of a filter. Otherwise they could damage the seals.

DISASSEMBLY

To remove the valve from the pipe line or anyhow before to unscrew the junctions linked to it:
- wear the clothing protective normally required to work with the fluid transported within the line;
- depressurizze the line and operate in this way:
  - positioning the valve in opened position and than empty the line;
  - handle the valve to put down the residue pressure contained inside the space between the ball and the body before of remove it from the line;
  - during the disassembly apply the screw tool at the end of the valve nearest the pipe;

MAINTENANCE

Verify the valve periodically, according to its application's field and its works' field and its work's conditions, in order to be sure that the valve works correctly.

FULL FLOW BALL VALVES: MADRID

LOSS DIAGRAM (With water)

	1/4"	3/8"	1/2"	3/4"	1"
KV	3,45	5,00	15,65	26,26	41,44

FULL FLOW BALL VALVES: MADRID

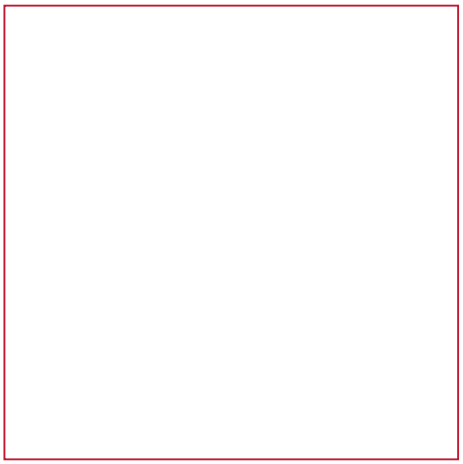
PRESSURE-TEMPERATURE DIAGRAM

The values shown by the dropping lines state the maximum limit of employment of the valves.
The shown values are approximate.

FULL FLOW BALL VALVES: MADRID

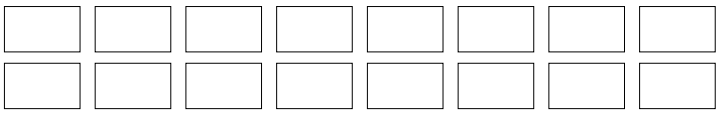
276XB Madrid ball valve, full flow, with flat lever handle in stainless steel

Suitable for domestic water services, heating and air-conditioning plants, compressed air systems.



MEASURE	PRESSURE	CODE	PACKING
1/4" (DN 8)	50bar/725psi	276B014XB	12/108
3/8" (DN 10)	50bar/725psi	276B038XB	12/108
1/2" (DN 15)	50bar/725psi	276B012XB	10/90
3/4" (DN 20)	40bar/580psi	276B034XB	8/48
1" (DN 25)	40bar/580psi	276B100XB	6/48
1"1/4 (DN 32)	30bar/435psi	276B114XB	2/16
1"1/2 (DN 40)	30bar/435psi	276B112XB	2/10
2" (DN 50)	25bar/362.5psi	276B200XB	2/10

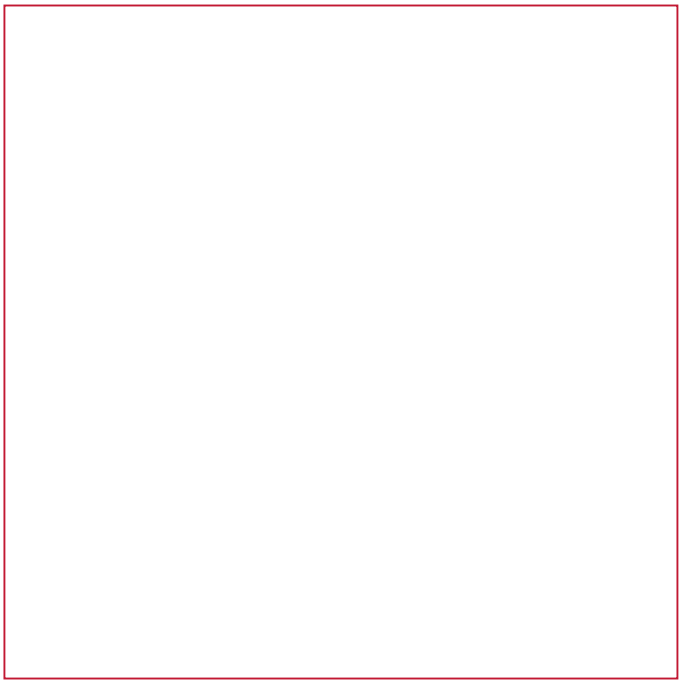
CERTIFICATIONS



TECHNICAL SPECIFICATIONS

Female/female threads.
Flat lever handle in lined stainless steel AISI304.
Body in nickel-plated brass.
Minimum and maximum working temperatures: -20°C, 150°C in absence of steam.
Female threads: ISO 7/1 Rp parallel (equivalent to DIN EN 10226-1 and BS EN 10226-1).

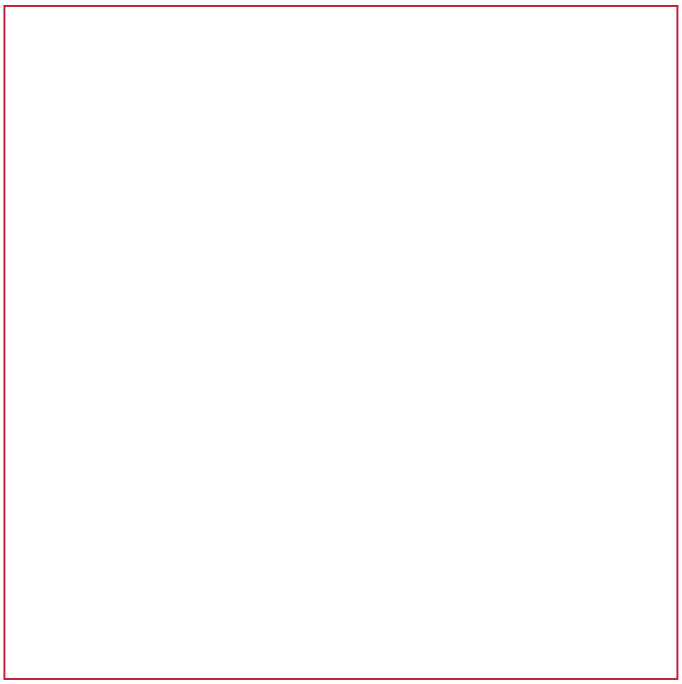
OVERALL DIMENSIONS



FULL FLOW BALL VALVES: MADRID

	1/4"	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"
DN	8	10	15	20	25	32	40	50
A	49,5	52,4	61	68	85	99,5	109	130
B	23,5	24	30,5	37	45,5	58	71	85
C	42,3	42,3	50,8	56,8	60,8	76,8	92,3	99,3
D	86	86	93	114	114	138,5	158,5	158,5
E	10	10	15	20	25	32	40	50
F	11	11,4	15	16,3	19,1	21,4	21,4	25,7
CH	18	21	25	31	38	47	54	66
Kg/cm2 bar	50	50	50	40	40	30	30	25
LBS - psi	725	725	725	580	580	435	435	362,5

MATERIALS



POS.	DESCRIPTION	N.	MATERIAL
1	Female end adapter	1	Nickel-plated brass CW617N
2	Seat	2	P.T.F.E.
3	Ball	1	Chrome-plated brass CW617N
4	Stem	1	Brass CW614N
5	O-ring	1	NBR
6	O-ring	1	Viton®
7	Body	1	Nickel-plated brass CW617N
8	Flat lever handle	1	Stainless steel AISI 304
9	Screw	1	Stainless steel AISI 430

FULL FLOW BALL VALVES: MADRID

INSTALLATION

The itap S.p.A.'s valves are bi-directional, that means they manage the flow in both the directions.
The valves are composed by a ball, two seal in PTFE material, one stem, two sailing rings (O-Rings), one handle and a couple of parts made of brass (body and end adopter) that contain them and that are assembled by means of threat and a sealed material to obtain their aim.
In order to avoid that the sealed material gets broken and then the valve looses the connection between the body and the end-adapter, it's necessary to avoid to submit the two parts under the influence of a torque.
For the installation normal hydraulic practices must be used, and especially:
- ones have to be sure that the two pipes are correctly aligned;
- during the assembling process the installer has to apply its assembling tools at the end that is nearest to the pipe;
- the application of the sealing materials by the fitter (PTFE or hempen cloth) must be limited at the threat zone. An excess should interferes in the ball-gasket's closure zone, compromising the tightness.
- in the case that the fluid transported presents some impurities (dust, water too hard, etc.) ones have to remove these impurities by the means of a filter. Otherwise they could damage the seals.

DISASSEMBLY

To remove the valve from the pipe line or anyhow before to unscrew the junctions linked to it:
- wear the clothing protective normally required to work with the fluid transported within the line;
- depressurizze the line and operate in this way:
  - positioning the valve in opened position and than empty the line;
  - handle the valve to put down the residue pressure contained inside the space between the ball and the body before of remove it from the line;
  - during the disassembly apply the screw tool at the end of the valve nearest the pipe;

MAINTENANCE

Verify the valve periodically, according to its application's field and its works' field and its work's conditions, in order to be sure that the valve works correctly.

FULL FLOW BALL VALVES: MADRID

LOSS DIAGRAM (With water)

	1/4"	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"
KV	3,45	5,00	15,65	26,26	41,44	63,69	101	169

FULL FLOW BALL VALVES: MADRID

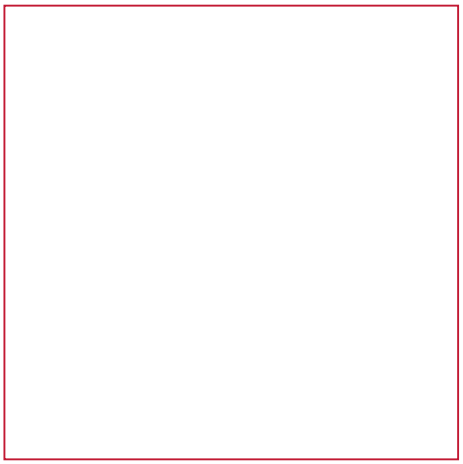
PRESSURE-TEMPERATURE DIAGRAM

The values shown by the dropping lines state the maximum limit of employment of the valves.
The shown values are approximate.

FULL FLOW BALL VALVES: MADRID

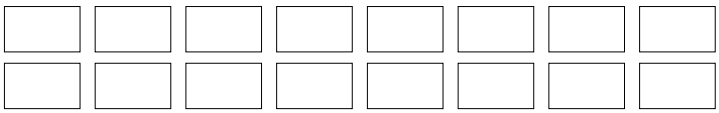
277XB Madrid ball valve, full flow, with flat lever handle in stainless steel

Suitable for domestic water services, heating and air-conditioning plants, compressed air systems.



MEASURE	PRESSURE	CODE	PACKING
1/4" (DN 8)	50bar/725psi	277B014XB	12/108
3/8" (DN 10)	50bar/725psi	277B038XB	12/108
1/2" (DN 15)	50bar/725psi	277B012XB	10/80
3/4" (DN 20)	40bar/580psi	277B034XB	8/48
1" (DN 25)	40bar/580psi	277B100XB	6/48
1"1/4 (DN 32)	30bar/435psi	277B114XB	2/16
1"1/2 (DN 40)	30bar/435psi	277B112XB	2/10
2" (DN 50)	25bar/362.5psi	277B200XB	1/5

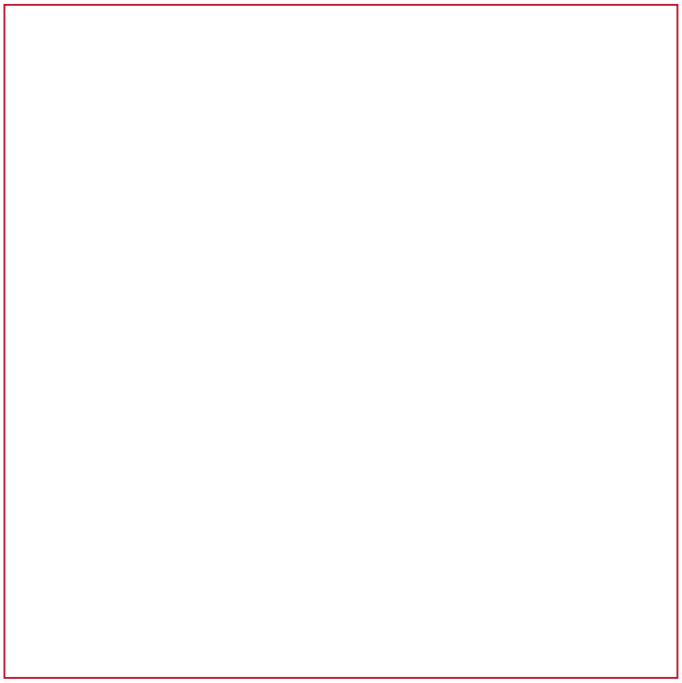
CERTIFICATIONS



TECHNICAL SPECIFICATIONS

Male/female threads.
Flat lever handle in lined stainless steel AISI304.
Body in nickel-plated brass.
Minimum and maximum working temperatures: -20°C, 150°C in absence of steam.
Female threads: ISO 7/1 Rp parallel (equivalent to DIN EN 10226-1 and BS EN 10226-1).
Male threads ISO 7/1 R taper (equivalent to DIN EN 10226-1 and BS EN 10226-1).

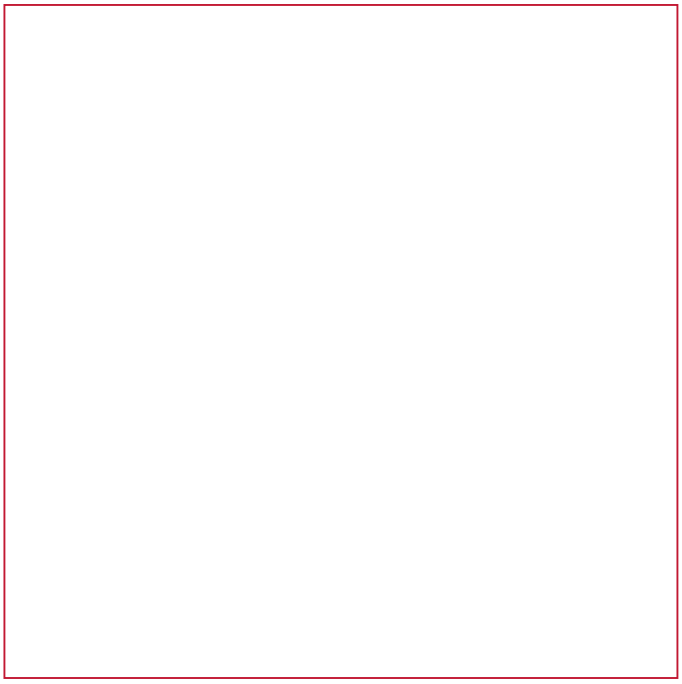
OVERALL DIMENSIONS



FULL FLOW BALL VALVES: MADRID

	1/4"	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"
DN	8	10	15	20	25	32	40	50
A	56,9	58,9	68	75,5	90,5	105	115,5	135,5
B	23,5	24	30,5	37	45,5	58	71	85
C	42,3	42,3	50,8	56,8	60,8	76,8	92,3	99,3
D	86	86	93	114	114	138,5	158,5	158,5
E	8	10	15	20	25	32	39	50
F	11	11,4	15	16,3	19,1	21,4	21,4	25,7
G	11	11,5	15	16,5	19	21,5	21,5	26
CH	18	21	25	31	38	47	54	66
Kg/cm2 bar	50	50	50	40	40	30	30	25
LBS - psi	725	725	725	580	580	435	435	362,5

MATERIALS



POS.	DESCRIPTION	N.	MATERIAL
1	Male end adapter	1	Nickel-plated brass CW617N
2	Seat	2	P.T.F.E.
3	Ball	1	Chrome-plated brass CW617N
4	Stem	1	Brass CW614N
5	O-ring	1	NBR
6	O-ring	1	Viton®
7	Body	1	Nickel-plated brass CW617N
8	Flat lever handle	1	Stainless steel AISI 304
9	Screw	1	Stainless steel AISI 430

FULL FLOW BALL VALVES: MADRID

INSTALLATION

The itap S.p.A.'s valves are bi-directional, that means they manage the flow in both the directions.
The valves are composed by a ball, two seal in PTFE material, one stem, two sailing rings (O-Rings), one handle and a couple of parts made of brass (body and end adopter) that contain them and that are assembled by means of threat and a sealed material to obtain their aim.
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- in the case that the fluid transported presents some impurities (dust, water too hard, etc.) ones have to remove these impurities by the means of a filter. Otherwise they could damage the seals.

DISASSEMBLY

To remove the valve from the pipe line or anyhow before to unscrew the junctions linked to it:
- wear the clothing protective normally required to work with the fluid transported within the line;
- depressurizze the line and operate in this way:
  - positioning the valve in opened position and than empty the line;
  - handle the valve to put down the residue pressure contained inside the space between the ball and the body before of remove it from the line;
  - during the disassembly apply the screw tool at the end of the valve nearest the pipe;

MAINTENANCE

Verify the valve periodically, according to its application's field and its works' field and its work's conditions, in order to be sure that the valve works correctly.

FULL FLOW BALL VALVES: MADRID

LOSS DIAGRAM (With water)

	1/4"	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"
KV	3,45	5	15,65	26,26	41,44	63,69	101	169

FULL FLOW BALL VALVES: MADRID

PRESSURE-TEMPERATURE DIAGRAM

The values shown by the dropping lines state the maximum limit of employment of the valves.
The shown values are approximate.