



**Factory Mutual Research**  
2177 Huntington Avenue  
P.O. Box 5665  
Cleveland, Ohio 44106  
USA  
Tel: +1 216 244 4120  
Fax: +1 216 244 4122  
E-Mail: [factorymutual@factorymutual.com](mailto:factorymutual@factorymutual.com)

**2177 Huntington Avenue**  
Cleveland, Ohio 44106  
U.S.A.

November 1, 1998

2177 Huntington Avenue  
Cleveland, Ohio 44106  
U.S.A.

2177 Huntington Avenue  
Cleveland, Ohio 44106  
U.S.A.

2177 Huntington Avenue  
Cleveland, Ohio 44106  
U.S.A.

2177 Huntington Avenue  
Cleveland, Ohio 44106  
U.S.A.

**Certification of Trade Mark**

**VALVOLTA VERDE®**  
(ECO VALVE)

The article named "Ball Valve 2" model "TOPIC" the course  
representation of Factory Mutual  
of manufacturer "ENODIAS S.p.A."  
located at: via Europa, 227 - 39063 Denno (BO)  
When being certified by Factory Mutual S.p.A. is able to get the mark  
"VALVOLTA VERDE®"

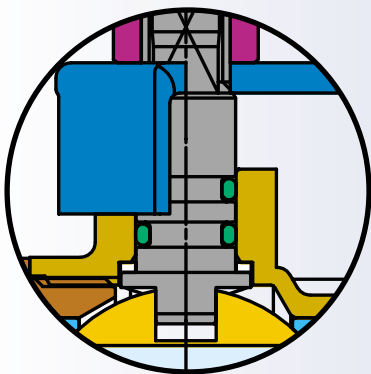
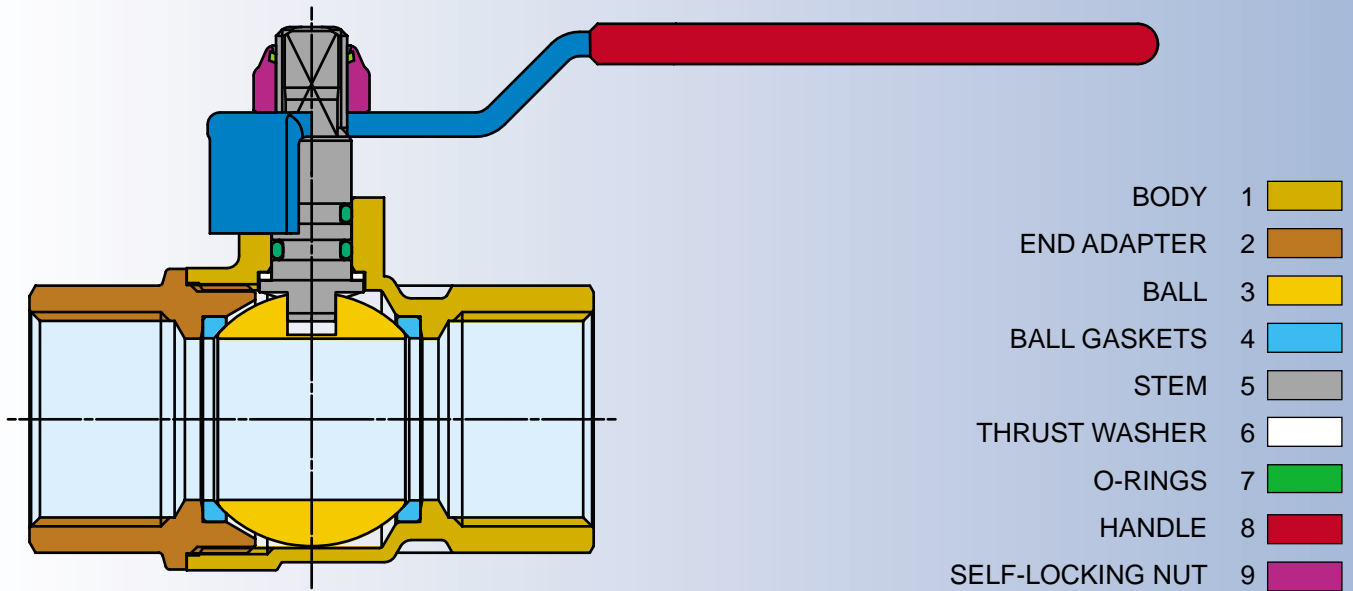
Responsible for  
the article:

The article is certified in accordance with the following limits:

METAL	RESULTS (µm)	RESULTS pH	LIMITS
PHOSPHORUS	+++ (µg)	+++ (µg)	10-15 (µg)

Responsible for the article:  
Enodias S.p.A.

Responsible for the article:  
Enodias S.p.A.



### DOUBLE SEAL BLOW OUT-PROOF STEM

- The **TOPIC** ball valves are bottom loaded stem designed. This "anti-blow-out" stem also prevents from tampering with the internals of the valve when in the line.
- The **TOPIC** ball valves have 2 elastomer O-Rings on the stem, having longlife resistance to ageing.
- The double seal is performed by an anti-friction teflon thrust washer, working as a high pressure gasket.



### FEATURES

- Standard line, full bore, long threads.
- Perfect seal at low and high pressure.
- Wear resistant, solid and long lasting materials.
- Rapid on/off 90° turn operation.
- Easy visual control of open/closed position.

### END CONNECTIONS

- Screwed to ISO 7/1 Rp parallel standard.
- Screwed to ISO 7/1 Rc taper standard, available only upon request. The delivery time is to be agreed with the manufacturer everytime.

### UTILISATION

- The **TOPIC** ball valves are suitable for hot and cold water, compressed air, oils, non-corrosive fluids and hydrocarbons in general.
- For special uses, see the table of chemical resistance on page 206 and 207.

### WORKING PRESSURE

- From PN 50 (size 1/4") to PN 20 (size 2").
- See pressure/temperature diagram.

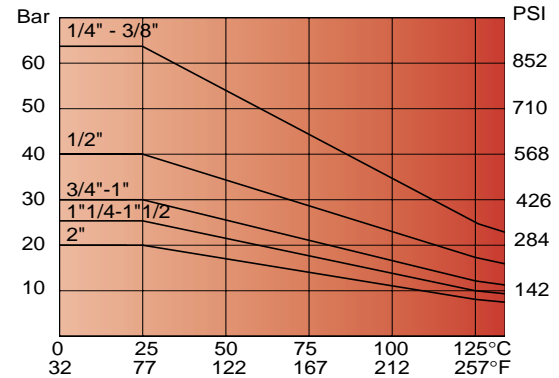
### TEMPERATURE LIMITS

- -20°C +130°C

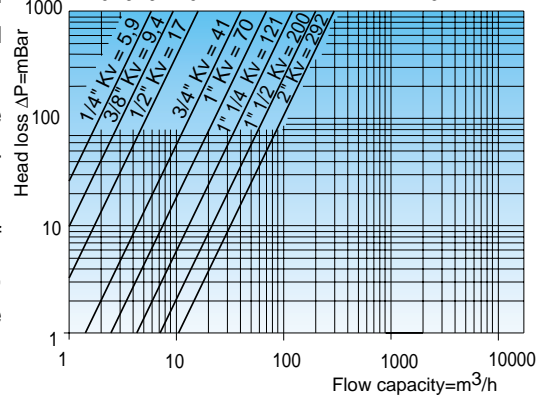
### LEAD WASHED BRASS VALVES

- It is possible to receive the TOPIC valves in the lead washed version upon request.
- Recent studies have indeed proven that brass valves and cocks release significant quantities of lead (which is contained in each lead alloy) in water. This quantity is higher in the first months of use of the valve.
- Enolgas Bonomi S.p.A. has managed to take lead away from the brass surface in a simple and cheap way, by using a patented washing process.
- The products which undergo this process are completely according to the new standards concerning the release of lead in drinkable water.
- As a consequence of such process, the release of lead is always lower than 10 micrograms/liter, which is the value recommended by the WHO (World Health Organization).

### PRESSURE/TEMPERATURE DIAGRAM



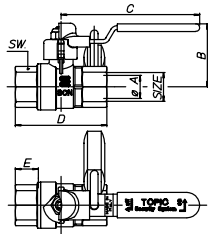
### LOSS OF HEAD DIAGRAM



## MATERIAL SPECIFICATION

ITEM	MATERIAL	DESCRIPTION
■ 1 Body	CW 617 N UNI EN 12165	Nickel-plated forged brass
■ 2 End adapter	CW 617 N UNI EN 12165	Nickel-plated forged brass
■ 3 Ball	CW 614 N UNI EN 12164	Machined brass bar, chrome-plated
■ 4 Ball gaskets	P.T.F.E.	Pure Teflon
■ 5 Stem	CW 614 N UNI EN 12164	Machined brass bar, nickel-plated
□ 6 Thrust washer	P.T.F.E.	Pure Teflon
■ 7 O-Rings	Elastomer	Suitable for the use
■ 8 Handle	Steel Fe P02	Zinc-plated, red P.V.C. insulated
Lever and T-handle	AL UNI5076	Red polyurethan-coated aluminium
■ 9 Self-locking nut	8G Steel	Zinc-plated steel

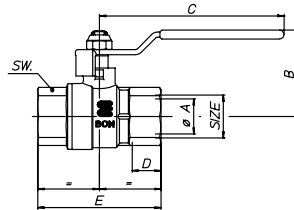
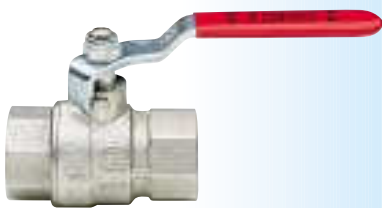
Art. S. 0200 - S. 1200 TOPIC



Full bore ball valve, female/female, with steel handle, lockable in closed and open position by means of a padlock, nickel-plated.  
Art. S.0200 without padlock  
Art. S.1200 with padlock

SIZE	1/2"								
øA bore	15								
B mm	41								
C mm	90								
D mm	59,5								
E mm	15								
SW mm	25								
Weight gr.	231								

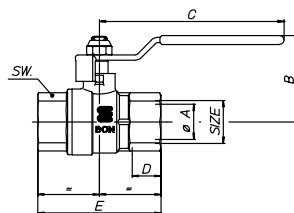
Art. S. 0201 TOPIC



Full bore ball valve with steel handle, female/female, nickel-plated.

SIZE	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
øA bore	15	20	25	32	40	50			
B mm	41	49,5	53,5	66	72	86			
C mm	90	105	105	140	140	170			
D mm	15	16,3	19,1	21,4	21,4	25,7			
E mm	59,5	70	83	98,5	108	130			
SW mm	25	31	38	47	54	66			
Weight gr.	204	346	533	987	1475	2456			

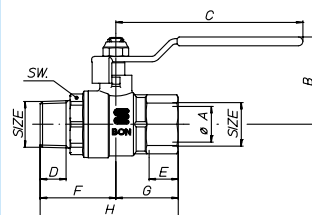
Art. S. 0201V TOPIC • GREEN VALVE  
AVAILABLE ALSO IN DZR BRASS



Full bore ball valve with steel handle, female/female, lead washed.

SIZE	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
øA bore	15	20	25	32	40	50			
B mm	41	49,5	53,5	66	72	86			
C mm	90	105	105	140	140	170			
D mm	15	16,3	19,1	21,4	21,4	25,7			
E mm	59,5	70	83	98,5	108	130			
SW mm	25	31	38	47	54	66			
Weight gr.	204	346	533	987	1475	2456			

Art. S. 0202 TOPIC

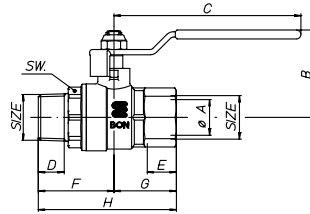


Full bore ball valve with steel handle, male/female, nickel-plated.

SIZE	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"			
øA bore	15	20	25	32	40	50			
B mm	41	49,5	53,5	66	72	86			
C mm	90	105	105	140	140	170			
D mm	13,2	14,5	16,8	19,1	19,1	23,4			
E mm	15	16,3	19,1	21,4	21,4	25,7			
F mm	37,25	42,5	47,5	53,75	59,5	71,5			
G mm	29,75	35	41,5	49,25	54	65			
H mm	67	77,5	89	103	113,5	136,5			
SW mm	25	31	38	47	54	66			
Weight gr.	223	371	564	960	1492	2483			

### Art. S. 0202V TOPIC • GREEN VALVE

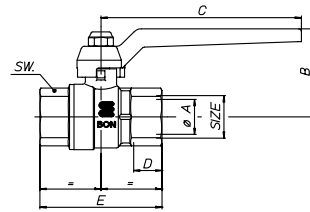
AVAILABLE ALSO IN DZR BRASS



Full bore ball valve with steel handle, male/female, lead washed.

SIZE	½"	¾"	1"	1¼"	1½"	2"			
øA bore	15	20	25	32	40	50			
B mm	41	49,5	53,5	66	72	86			
C mm	90	105	105	140	140	170			
D mm	13,2	14,5	16,8	19,1	19,1	23,4			
E mm	15	16,3	19,1	21,4	21,4	25,7			
F mm	37,25	42,5	47,5	53,75	59,5	71,5			
G mm	29,75	35	41,5	49,25	54	65			
H mm	67	77,5	89	103	113,5	136,5			
SW mm	25	31	38	47	54	66			
Weight gr.	223	371	564	960	1492	2483			

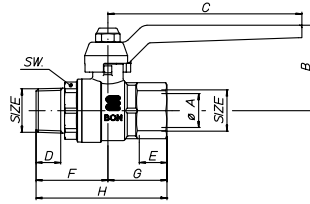
### Art. S. 0204 TOPIC



Full bore ball valve with aluminium lever, female/female, nickel-plated.

SIZE	½"	¾"	1"	1¼"	1½"	2"			
øA bore	15	20	25	32	40	50			
B mm	41	50,5	54,5	66	72	88,5			
C mm	95	115	115	150	150	170			
D mm	15	16,3	19,1	21,4	21,4	25,7			
E mm	59,5	70	83	98,5	108	130			
SW mm	25	31	38	47	54	66			
Weight gr.	192	325	512	958	1446	2414			

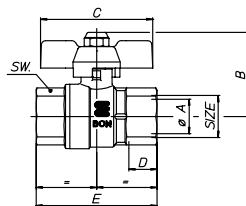
### Art. S. 0205 TOPIC



Full bore ball valve with aluminium lever, male/female, nickel-plated.

SIZE	½"	¾"	1"	1¼"	1½"	2"			
øA bore	15	20	25	32	40	50			
B mm	41	50,5	54,5	66	72	88,5			
C mm	95	115	115	150	150	170			
D mm	13,2	14,5	16,8	19,1	19,1	23,4			
E mm	15	16,3	19,1	21,4	21,4	25,7			
F mm	37,25	42,5	47,5	53,75	59,5	71,5			
G mm	29,75	35	41,5	49,25	54	65			
H mm	67	77,5	89	103	113,5	136,5			
SW mm	25	31	38	47	54	66			
Weight gr.	211	350	543	939	1421	2441			

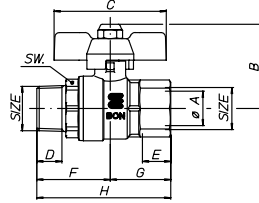
### Art. S. 0207 TOPIC



Full bore ball valve with T-handle, female/female, nickel-plated.

SIZE	½"	¾"	1"						
øA bore	15	20	25						
B mm	39,5	49	53,5						
C mm	52	65	66						
D mm	15	16,3	19,1						
E mm	59,5	70	83						
SW mm	25	31	38						
Weight gr.	182	312	499						

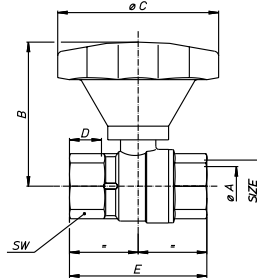
Art. S. 0208 TOPIC



Full bore ball valve with T-handle, male/female, nickel-plated.

SIZE	½"	¾"	1"						
øA bore	15	20	25						
B mm	39,5	49	53,5						
C mm	52	65	65						
D mm	13,2	14,5	16,8						
E mm	15	16,3	19,1						
F mm	37,25	42,5	47,5						
G mm	29,75	35	41,5						
H mm	67	77,5	89						
SW mm	25	31	38						
Weight gr.	201	337	530						

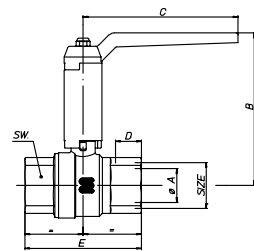
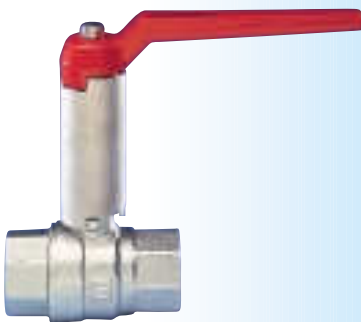
Art. S. 0458 TOPIC·BRAVO



Full bore ball valve with BRAVO gear handle, female/female, nickel-plated.

SIZE	¼"	¾"	½"	¾"	1"	1¼"	1½"	2"	
øA bore	10	10	15	20	25	32	40	50	
B mm	65,5	65,5	69,5	74	80	114	120	130	
øC mm	82	82	82	82	82	128	128	128	
D mm	11	11,4	15	16,3	19,1	21,4	21,4	25,7	
E mm	47,5	49,5	59,5	70	83	98,5	108	130	
SW mm	17	21	25	31	38	47	54	66	
Weight gr.	175	213	242	325	562	1070	1566	2570	

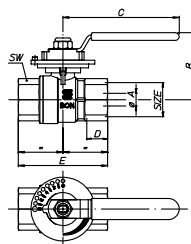
Art. S. 0466 TOPIC·XT



Full bore ball valve with extended stem, female/female, nickel-plated.

SIZE	¼"	¾"	½"	¾"	1"	1¼"	1½"	2"	2½"	3"	4"
øA bore	10	10	15	20	25	32	40	50	65	80	100
B mm	96,5	96,5	98,5	109,5	113,5	123	133	145	164,5	176	197,5
C mm	80	80	95	115	115	130	150	170	170	235	235
D mm	11	11,4	15	16,3	19,1	21,4	21,4	25,7	30,2	33,3	39,3
E mm	47,5	49,5	65	73,5	86,5	101,5	111,5	132,5	158	181,5	219
SW mm	17	21	26	32	39	48	55	68	83	97	124
Weight gr.	203	216	326	484	713	1160	1747	2925	3723	6366	11562

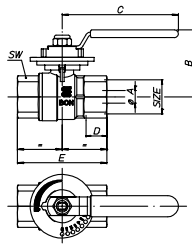
Art. S. 1205 HEATING BALL VALVE



Ball valve for floor heating equipment with graduated disc, red lever, nickel-plated.

SIZE	¾"								
øA bore	10								
B mm	52,6								
C mm	91								
D mm	16,3								
E mm	70								
SW mm	31								
Weight gr.	382								

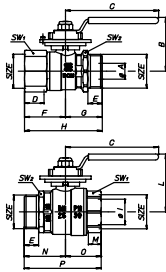
### Art. S. 1206 HEATING BALL VALVE



Ball valve for floor heating equipment with graduated disc, blue lever, nickel-plated.

SIZE	3/4"																		
øA bore	10																		
B mm	526																		
C mm	91																		
D mm	163																		
E mm	70																		
SW mm	31																		
Weight gr.	382																		

### Art. S. 1207 HEATING BALL VALVE



Couple of ball valves for floor heating equipment with graduated discs, red and blue levers, nickel-plated.

SIZE	1"																		
øA bore	15,3																		
B mm	528																		
C mm	91																		
D mm	191																		
E mm	14																		
F mm	40																		
G mm	36																		
H mm	76																		
øI mm	25																		
L mm	566																		
N mm	41,6																		
O mm	349																		
P mm	76,5																		
SW1 mm	39																		
SW2 mm	38																		
Weight gr.	940																		