

Application:

Oventrop bronze ball valves “Optibal” with full flow are especially used for district heating, amongst others for transmission stations up to a nominal pressure PN 40. They are suitable for flow temperatures up to 150 °C (with aluminium lever) or 120 °C (with plastic handle).

Functions:

The ball valve is opened/closed by turning the lever or handle by 90°. The position of the ball is indicated by the position of the lever or handle which moves parallel to it. Even if the lever or handle are removed, the stem with two flats still indicates the position of the ball.

Advantages:

- full flow
- standard types of levers and handles are available
- simple insulation of the models with extended plastic handle
- suitable for high pressures due to blow-off proof stem and solid bodies
- PN 40

Construction:

Two-piece body made of unplated brass, full flow, ball made of chrome plated brass with PTFE seats, brass stem with double O-ring seal.



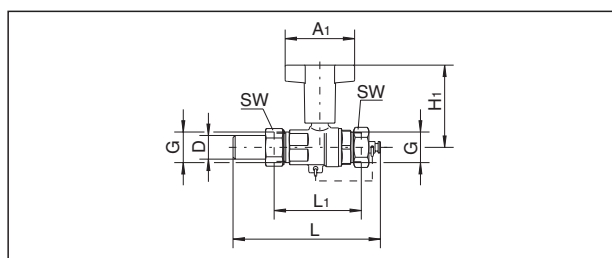
“Optibal”

Ball valves “Optibal”, bronze, unplated full flow:

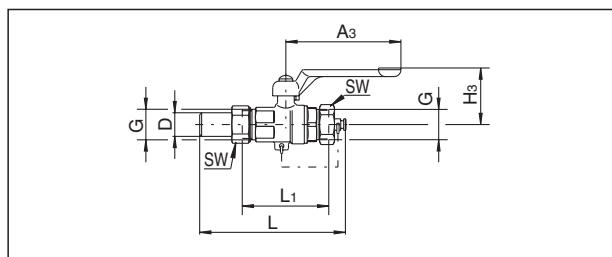
one port with weldable steel tailpipe,
one port with cap:

DN	D	L	L ₁	A ₁	A ₃	H ₁	H ₃	SW*	G
15	20.5	179	75	60	100	72	50	30	¾
20	26	186	82	60	100	76	54	37	1
25	33	220	96	80	120	82	62	46	1¼
32	42.5	260	136	80	120	89	67	58	1¼

*SW = Spanner size



Dimensions item no. 1066604-10 (DN 15 up to DN 32)
with extended plastic handle



Dimensions item no. 1066504-10 (DN 15 up to DN 32)
with aluminium lever

**“Optibal” Bronze high pressure ball valves
with full flow**

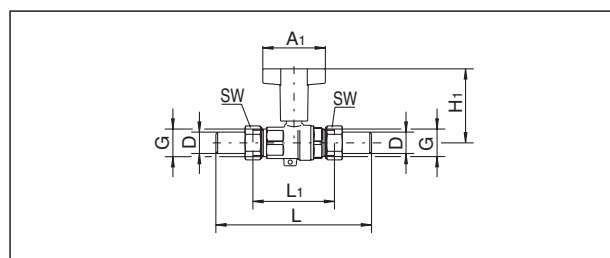
both ports weldable steel tailpipes

DN	D	L	L ₁	A ₁	A ₃	H ₁	H ₃	SW*	G
15	20,5	142	75	60	100	72	50	30	¾
20	26	149	82	60	100	76	54	37	1
25	33	173	96	80	120	82	62	46	1¼
32	42,5	214	136	80	120	89	67	58	1¾

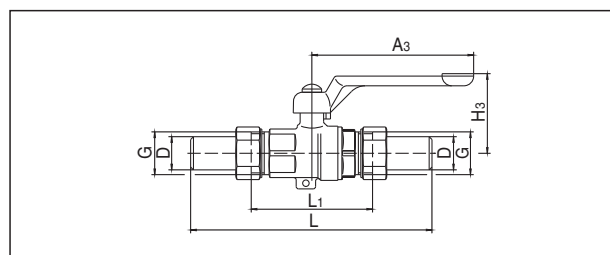
*SW = Spanner size

Insulation:

The Oventrop bronze ball valves “Optibal” with extended plastic handle may be covered with standard insulation material.



Dimensions item no. 1065604-10 (DN 15 up to DN 32)
with extended plastic handle



Dimensions item no. 1065504-10 (DN 15 up to DN 32)
with aluminium lever

Resistance of the ball valves to fluids being transported:

The indications in the table are for general orientation. Unknown factors may impair the resistance considerably. Therefore the given values are not binding. The ball valves “Optibal” are not DVGW approved.

Values of resistance:

- 1 : low or no affect
- 2 : weak or moderate affect
- 3 : strong affect, may not be used
- : no data existing

Fluid	Values of resistance
Air, compressed air	1
Amyl alcohol, 60 °C	1
Barium sulphate	-
Barium sulphide	3
Beer, 20 °C	2
Benzene	2
Borax, aqueous, 60 °C	-
Butane, gaseous, 20 °C	1
Carbon dioxide, dry, 60 °C	1
Chlorine, dry, gaseous, 20 °C	3
Chloroform, dry, 20 °C	2
Citric acid, aqueous	3
Crude oil, 20 °C	1
Diesel oil, 60 °C	1
Ethyl alcohol, 30-96 %, 20 °C	-
Gasoline, trade quality	1
Glucose, aqueous, 80 °C	1
Glycerine, aqueous, 100 °C	1
Heating oil, 60 °C	1
Hydraulic oil	1
Hydrogen, 20 °C	1
Lactic acid, aqueous, 10 %, 20 °C	3
Linseed oil, 60 °C	2
Machine oil, mineral, 80 °C	1
Magnesium hydroxide	2
Magnesium sulphate, aqueous, 100 °C	3
Methane, 20 °C	1
Methyl alcohol (methanol)	2
Methyl chloride	2
Methylene chloride, 20 °C	2
Mineral oil	1
Natural gas, 20 °C	1

Fluid	Values of resistance
Nitrogen, gaseous, 20 °C	1
Oxalic acid, aqueous, 100 °C	3
Paraffin, aqueous, 60 °C	1
Petroleum, 60 °C	1
Petroleum ether, 60 °C	1
Potassium chloride, aqueous, 60 °C	3
Propane, gaseous, 20 °C	1
Refrigerating agents according to DIN 8960:	
R 11	2
R 12	2
R 13	1
R 13 B1	2
R 14	1
R 32	3
R 113	2
R 115	2
R C318	2
Saturated steam	1
Sea water, 20 °C	2
Silicone oil, 20 °C	1
Soap suds, aqueous, 20 °C	2
Sodium bicarbonate, aqueous, 20 °C	3
Sodium silicate, aqueous, 60 °C	2
Sodium sulphate, aqueous, 60 °C	2
Starch, aqueous, 60 °C	1
Sulphur dioxide, dry, 80 °C	1
Sulphuric carbon, 20 °C	-
Tartaric acid, aqueous	3
Trichloroethylene, dry, 20 °C	2
Turpentine, 60 °C	2
Water	1
Water-glycol mixture	2

Subject to technical modifications without notice.

Product range 5
ti 180-EN/10/MW
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