Technical information

Application:

The Oventrop isolating set "Optibal PK" made of nickel plated brass is used in central heating systems with circulation pump.

The set consists of a pump ball valve with check valve for installation at the pump inlet, a pump ball valve without check valve with thermometer for the supply pipe and a female threaded ball valve with thermometer for the return pipe.

The set also includes two collar nuts made of nickel plated brass and two flat seals for the pump flanges.

 Models:
 Item no.:

 DN 25
 1353583

 DN 32
 1353584

Function:

The ball valves are opened/closed by turning the operating element by 90° . The position of the ball is indicated by the position of the operating element. The extended plastic operating elements of the ball valves can be equipped with standard insulations.

The integrated check valve at the pump inlet prevents unwanted gravity circulation.

Note:

When the circulation pump is switched off, a low gravity circulation is still possible in heating systems with high circulation pressure despite the check valve as the latter is not tight sealing.

The pump ball valve with check valve can be set to gravity circulation by turning the operating element to 45° position.

Advantages:

- dry running of the pump is prevented by the integrated check valve at the pump inlet
- good optical display of the thermometers with red and blue marking for supply and return
- removable operating elements
- continuous insulation of the extended operating elements made of plastic; no stem extension required
- operating elements outside of the insulation
- check valve lockable for gravity circulation
- blow-off proof stem
- suitable for water and glycol mixtures (max. glycol proportion 50 %)

Ball valves, nickel plated brass

Application: Heating and cooling water

Max. operating pressure p_s : 10 bar (PN 10), Operating temperature t_s : -10 °C up to 120 °C

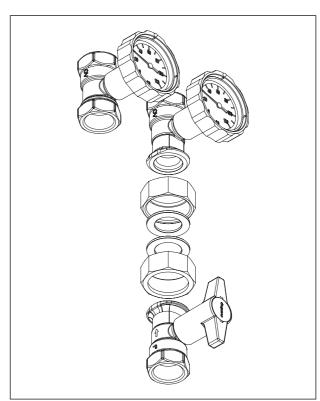
Attention: Prevent the formation of ice as it can destroy the pipework and valves.

Construction of the ball valves:

One-piece body made of nickel plated brass, removable operating element made of plastic, ball made of chrome plated brass with PTFE seats.



"Optibal PK"



"Optibal PK" Isolating set

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Pump ball valve at the pump inlet with check valve, inlet port with female thread, outlet port with pump connection flange

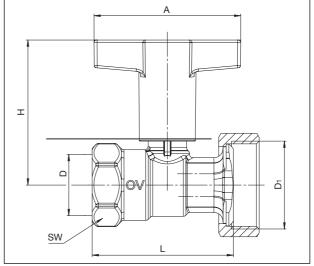
Removable extended plastic handle. Opening pressure of the check valve: approx. 20 mbar

Setting to gravity circulation by turning the handle to 45° position.

Dimensions

DN	L	Α	D	D ₁	Н	SW*	k _{vs}
25	77	80	Rp 1	G 1½	79	41	8.5
32	86	80	Rp 11/4	G 2	82	50	13

^{*}SW = Spanner size



Dimensions pump ball valve at the pump inlet with check valve

Pump ball valve at the pump outlet, inlet port with pump connection flange, outlet port with female thread

Removable round operating element made of plastic with 63 mm thermometer and red marking.

Dimensions

DN	L	А	D	D ₁	Н	SW*	k _{vs}
25	77	74	Rp 1	G 1½	83	41	17
32	86	74	Rp 11/4	G 2	86	50	33

*SW = Spanner size

Z SW

Dimensions pump ball valve at the pump outlet with thermometer (red)

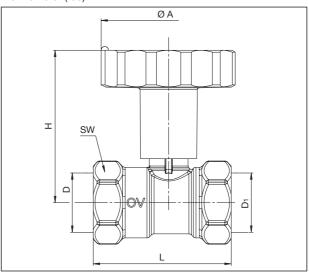
Ball valve for the return pipe, both ports female thread

Removable round operating element made of plastic with 63 mm thermometer and blue marking.

Dimensions

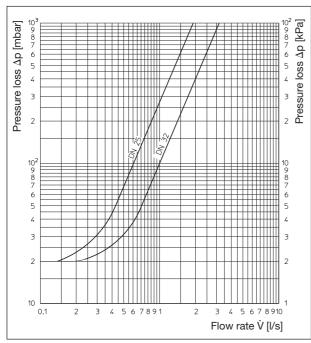
DN	L	Α	D	Н	SW*	k _{vs}
25	75	74	Rp 1	83	41	17
32	86	74	Rp 11/4	86	50	35

*SW = Spanner size



Dimensions pump ball valve for the return pipe with thermometer (blue)

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Flow rate "Optibal PK"

 k_{VS} value of the complete isolating set "Optibal PK": DN 25, $k_{VS}\!=\!$ 6.9 DN 32, $k_{VS}\!=\!$ 11.4

Accessories:

Insulations:

For pump ball valves and ball valve with female thread.

The collar nut of the pump ball valves is within the insulation.

The insulation shells made of anthracite coloured expanded polypropylene are easy to use and can be reused.

Building material class B2 according to DIN 4102.

Thermal conductivity 0.035 W/mK.

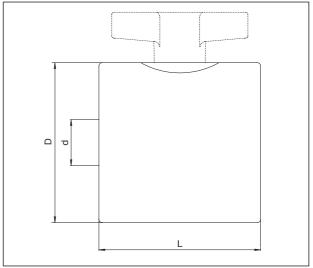
Meet the requirements of the German Energy Saving Directive according to appendix 5, table 1, line 5.

Dimensions insulations for pump ball valve "Optibal P":

Item no.	DN	d	D	L
1078194	25	1"	94	99
1078195	32	1 ½"	114	111

Dimensions insulation for ball valve "Optibal":

Item no.	DN	d	D	L
1078094	25	1"	94	95
1078095	32	1 ½"	114	107



Dimensions insulations item no.: 1078x94/95 (DN 25 and DN 32)

Subject to technical modifications without notice.

Product range 6
ti 303-EN/10/MW
Edition 2017

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