

Tender specification:

Oventrop three-way diverting valve “Tri-D TB” and three-way diverting valve “Tri-D plus TB” with screwed T-piece PN 16 up to 120 °C.

Connection thread M 30 x 1.5.

Bronze body, valve disc and O-rings made of EPDM, stem of the regulating insert made of stainless steel.

Connection of copper, precision steel and plastic pipe as well as the Oventrop composition pipe “Copipe” with the help of male threaded compression fittings G ¾ with cone “Euro”.

Moreover, threaded, solder and plug-in tailpipes with collar nuts as well as a T-piece may be connected.

Technical data:

Max. operating temperature t_s : + 120 °C
(for short periods up to 130 °C)
Min. operating temperature t_s : -10 °C
Max. operating pressure p_s : 16 bar (PN 16)
Max. differential pressure Δp_v : 1 bar

Models:

“Tri-D TB”
T-piece
“Tri-D plus TB”

Item no.:

1142504
1142561
1142604

Application:

Two pipe central heating systems and chilled ceiling systems with circulation pump (“Tri-D TB”).

Two pipe central heating systems, fan coil units and chilled ceiling systems with circulation pump (“Tri-D plus TB”).

Diverting or changing-over of the flow in bivalent heating systems or hot water storage cylinders, for instance for solar and heat pump technology.

With Oventrop temperature controllers for flow control of air heaters.

Moreover, for instance with actuators and the corresponding temperature controllers for flow temperature control of chilled ceilings.

Function:

Oventrop three-way diverting valves “Tri-D TB” have one inlet port and two outlet ports. Depending on the position of the valve disc, the direction of flow is directed from one to the other outlet port.

Actuators:

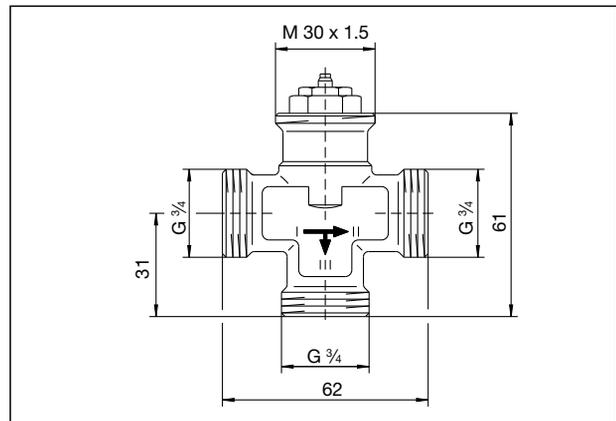
The three-way diverting valves “Tri-D TB” can be combined with the following Oventrop actuators (M 30 x 1.5):

Actuator	Voltage	Regulation behaviour		
		2 point	3 point	Proportional
Electro-thermal	24V	1012816/26 1012916/26		1012951 (0-10V)
	230V	1012815/25/17 1012915/25		
Electro-motive	24V		1012708	1012705/06 (0-10V)
	230V		1012710 1012703	
	EIB			1156065/66
	LON			1157065

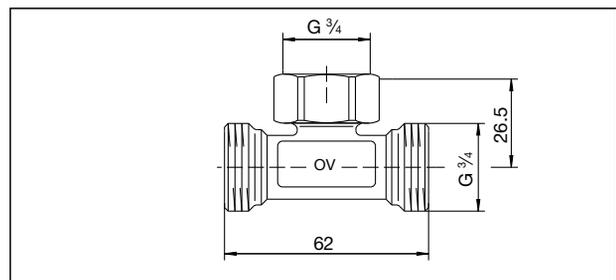
When using a steady control, Oventrop temperature controllers with immersion sensor (item no. 1140561 – 1140574 with connection thread M 30 x 1.5) or Oventrop temperature controllers with contact sensor (item no. 1142861 – 1142864 with connection thread M 30 x 1.5) are used. These are proportional controllers working without auxiliary energy and allowing intermediate positions. With the temperature at the sensor rising, the straight port is closed and the angle port is opened.



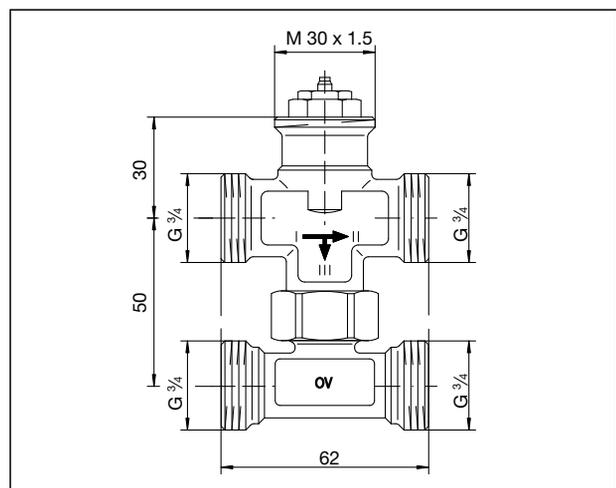
“Tri-D TB” Three-way diverting valve



Dimensions “Tri-D TB”

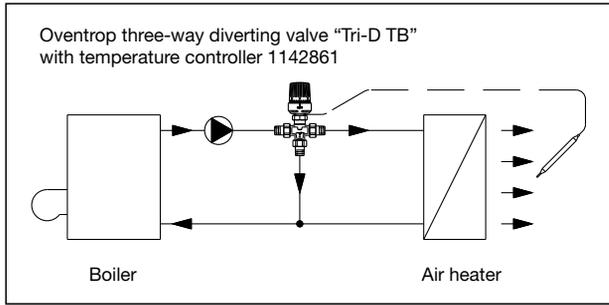


Dimensions T-piece

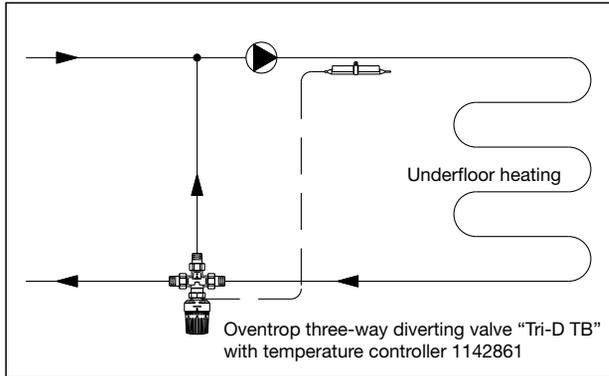


Dimensions “Tri-D plus TB”

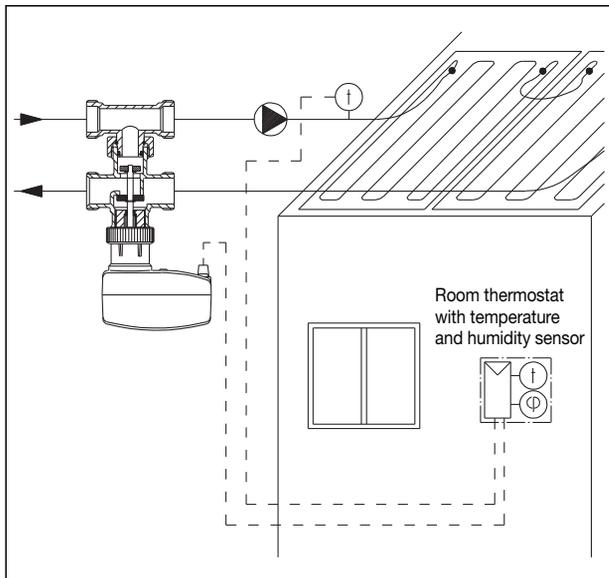
“Tri-D TB” Three-way diverting valves PN 16
“Tri-D plus TB” Three way diverting valves with T-piece PN 16



System illustration
 Use in a heating system with air heater
 The air outlet temperature of the air heater is controlled.



System illustration
 Control of underfloor heating systems
 The flow temperature of the underfloor circuit is limited to the set value.



System illustration
 Control of chilled surfaces
 The flow temperature of the chilled ceiling circuit is controlled depending on the dew point temperature of the room. Adaptation of the flow temperature of the chilled ceiling without interrupting cooling.

OVENTROP GmbH & Co. KG
 Paul-Oventrop-Straße 1
 D-59939 Olsberg, Germany
 Phone +49 (0)29 62 82-0
 Fax +49 (0)29 62 82-450
 E-Mail mail@oventrop.de
 Internet www.oventrop.de

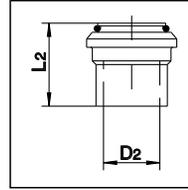
Subject to technical modification without notice.

Product range 3
 ti 136-EN/10/MW
 Edition 2015

For an overview of our global presence visit www.oventrop.de.

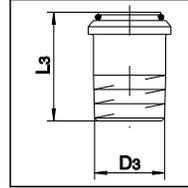
Accessories sets:

One set includes three tailpipes and three collar nuts.



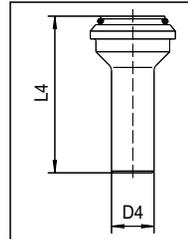
DN	D ₂	L ₂	Item no.
15	12	22	1140191
15	15	22	1140192

Solder tailpipe



DN	D ₃ EN 10226	L ₃	Item no.
15	R 1/2	31,5	1140292

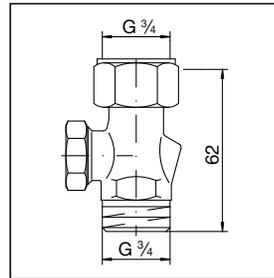
Threaded tailpipe



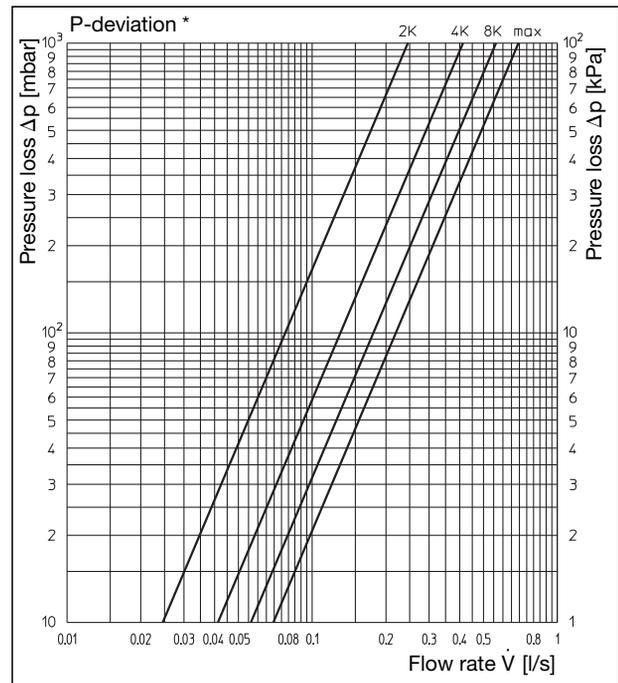
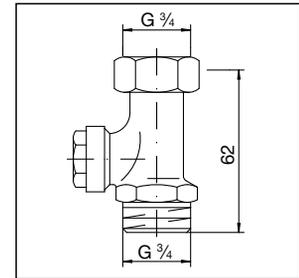
DN	D ₄	L ₄	Artikel-Nr.:
15	10	41	1140390
15	12	45	1140391
15	15	47	1140392

Plug-in tailpipe

Isolating fittings
 Item no. 1016106



Item no. 1016155



Performance data

* When used with Oventrop temperature controllers. The values correspond to the flow of the straight port I-II at the given P-deviations. The kvs value corresponds to the flow in direction I-II with the valve fully open or in direction I-III with the valve closed.