



The Oventrop Quality Management System is certified to DIN-EN-ISO 9001

### Four-way valve "Tri-M plus"

Technical information

#### Application:

Four-way valve "Tri-M plus" for heating and cooling systems (e.g. Fan Coil installations, chilled ceiling modules and fan convectors).

Max. working temperature: 120°C

Min. working temperature: -10°C

Max. working pressure: 10 bar

Max. differential pressure: 1 bar

Fluid: Water, ethylene glycol water mixtures or propylene glycol water mixtures (max. 50%)  
ph value 6.5 to 10

#### Models:

½" male thread, flat sealing

Item no.	kvs value	Gland mark
114 27 51	0.45	P1
114 27 52	1.00	P2
114 27 53	1.80	P3

#### Function:

The Oventrop four-way mixing valve "Tri-M plus" controls the room temperature by changing the flow rate to the terminal unit with the help of actuators whilst maintaining an almost constant flow within the distribution circuit.

Bronze body, seals made of EPDM or PTFE, bonnet made of brass resistant to dezincification, valve stem made of stainless steel with double O-ring seal.

#### Installation:

- The flow direction must conform with the arrow on the valve body.
- The valve may be installed in any position other than with the actuator pointing vertically downwards.
- Do not use any lubricant or oil when installing the valves, as these may destroy the valve seals. If this is unavoidable, all lubricant or oil residues must be removed from the pipework by flushing the latter.
- All installation work being completed, check all installation points for leaks.

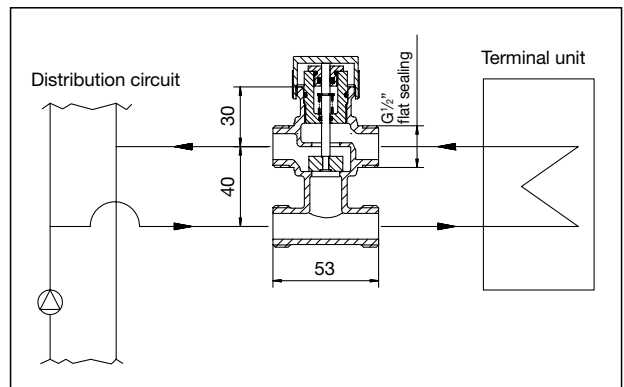
#### Pipe connection:

- In case of tensile or flexional strains, the pipes have to be fixed additionally.
- Provide for expansion loops in case of thermal conditional changes in length.

#### Actuators:

The following Oventrop actuators (M 30 x 1,5) may be used:

Actuator	Voltage	Control		
		Two point	Three point	Proportional
Electro-thermal	24 V	1012486		1012951 (0-10 V)
	230 V	1012485/87/89		
Electro-motive	24 V		1012701	1012700 (0-10V)
	EIB			1156065/66
	LON			1157065



Installation example, dimensions

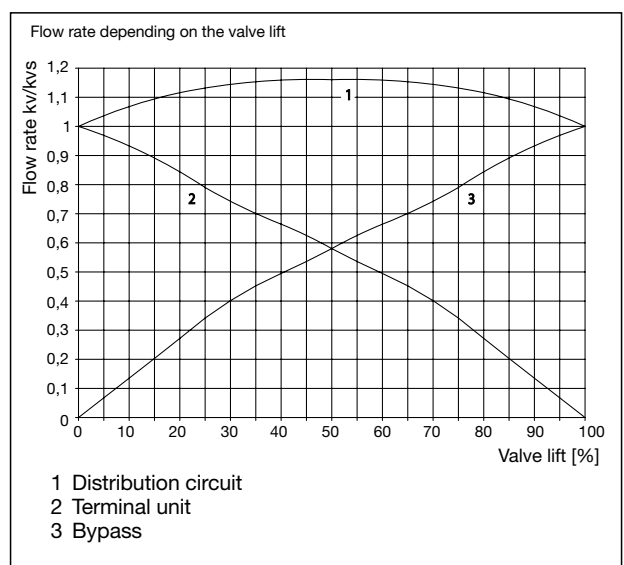


Chart 1

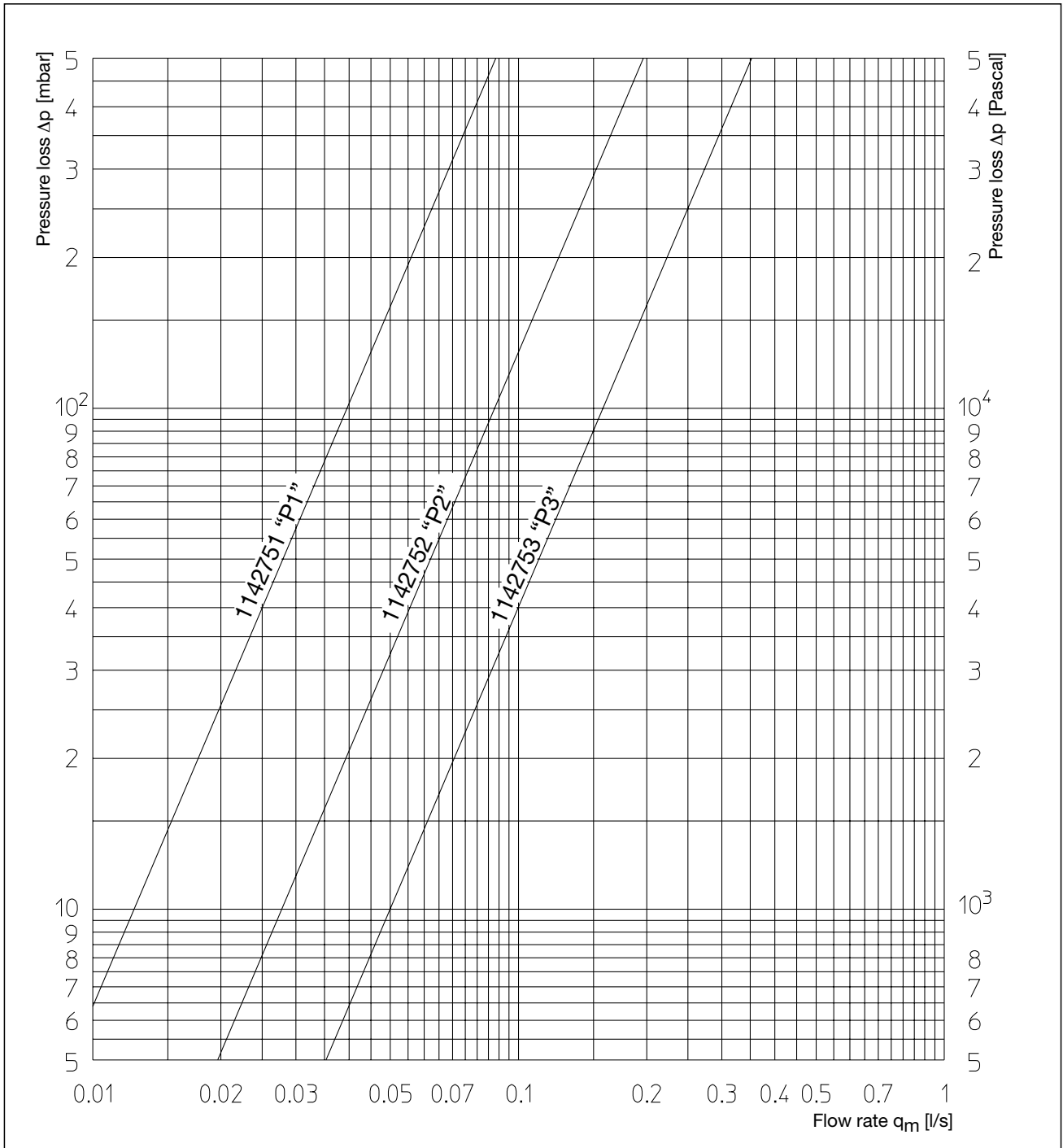


Chart 2

Subject to technical modification without notice.

Product range 3  
 ti 176-1/10/MW  
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