

# BPV

Proportional relief valve

2004.10







#### General

BPV is a proportional relief valve for use in heating and cooling systems. In systems with radiator valves, in which many of the radiator valves have closed, a big part of the pump head will affect the valves since the pressure drop in pipes and accessories has decreased. If the available differential pressure is higher than 30 kPa, noise may occur.

#### **Technical description**

#### **Applications:**

Heating and cooling systems Tapwater systems

#### **Function:**

Proportional relief Adjustable differential pressure ( $\Delta p$ ) Shut-off

Pressure class: PN 20

#### **Temperature:**

Max working temperature: 120°C Min working temperature: -20°C

#### Materials:

Valve body, bonnet and stem: AMETAL<sup>®</sup>. Union nuts, sleeve and cap: Brass Gaskets: Graphite Springs: Stainless steel O-rings: EPDM rubber Guide ring: PTFE

AMETAL<sup>®</sup> is the dezincification resistant alloy of TA.

# Marking:

Valve type, DN and inch size.

## Straight



# Adjustable range 10-60 kPa

TA No	DN	D	L	Н		
52 198-315	15	G1/2	70	93		
52 198-320	20	G3/4	85	93		
52 198-325	25	G1	98	103		
52 198-332	32	G1 1/4	112	105		

### Angle

# H Da

#### Adjustable range 10-60 kPa

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TA No	DN	d	D	Da	L	Н
52 198-020	20	R3/4	G3/4	M34x1,5	70	122
52 198-025	25	R1	G1	M40x2,0	83	138

BPV DN 15 and DN 20 can be connected to smooth pipes with KOMBI compression couplings. KOMBI is ordered separately. See catalogue leaflet KOMBI

#### Installation

#### Installation of BPV

Install the BPV in the circuit after the balancing valve and between the supply and return pipe. The BPV is adjustable and opens at the preset differential pressure, making it possible to maintain desired pressure and flow in the distribution system. By that, the temperature in the pipes is also maintained and the pump is ensured a minimum flow.



Use an Allen key to adjust the BPV valve to operate at the required differential pressure.



#### Support material

Manuals

See the following manuals for descriptions of various balancing methods:

Total hydronic balancing

Manual no. 1: Balancing control circuits

Manual no. 2: Balancing distribution systems

Manual no. 3: Balancing of radiator systems

Manual no. 4: Hydronic balancing with differential pressure controllers

Valve characteristics Adjust the BPV valve to the required differential pressure (10-60 kPa). The valve characteristics will be as shown in the diagrams below.



\*) Differential pressure setting.