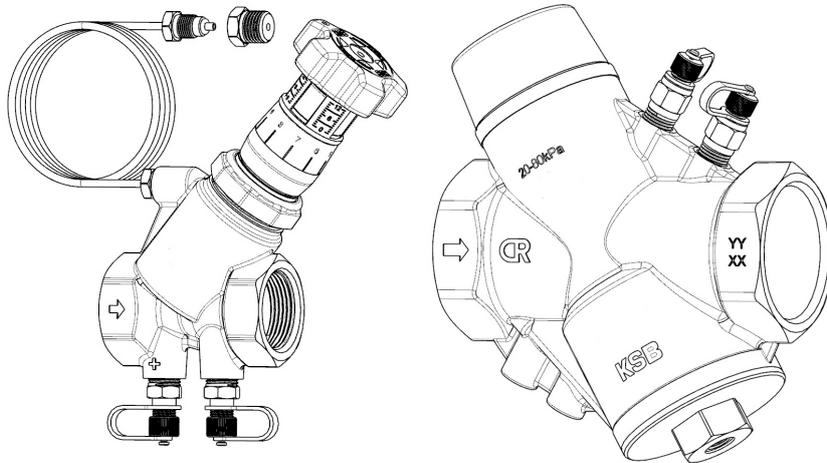


# 1 Quick-reference Operating Manual

## 1.1 BOA-Control DPR



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### 1.1.1 General

This quick-reference operating manual supplements the installation/operating manual. All information given in the installation/operating manual must be observed.

**Table 1:** Relevant operating manuals

Type series	Reference number of the installation/operating manual
BOA-Control DPR	7137.8

### 1.1.2 Installation information

When installing the product in a piping system, observe the following points:

- Ensure the valves and piping are clean and do not contain any foreign matter.
- Flow through the valves must be in the direction indicated by the flow direction arrow cast on the valve body.
- The flow rate required must be within the valve's operating range.
- Connect the pressure measurement line to a pressure tap point in the supply (ideally BOA-Control SBV).
- Install the valves so that they are not exposed to mechanical stress.
- Fully open the valve when flushing the system.

### 1.1.3 Operation

The valves are specifically designed for heating and cooling systems, where they serve to automatically control the differential pressure, maintaining a constant differential pressure between the supply and return. They are installed in the return. The valves must always be connected to a pressure tap point in the supply by means of a pressure measurement line. The differential pressure to be controlled can be preset by means of a handwheel or screw.

### 1.1.4 Balancing the system

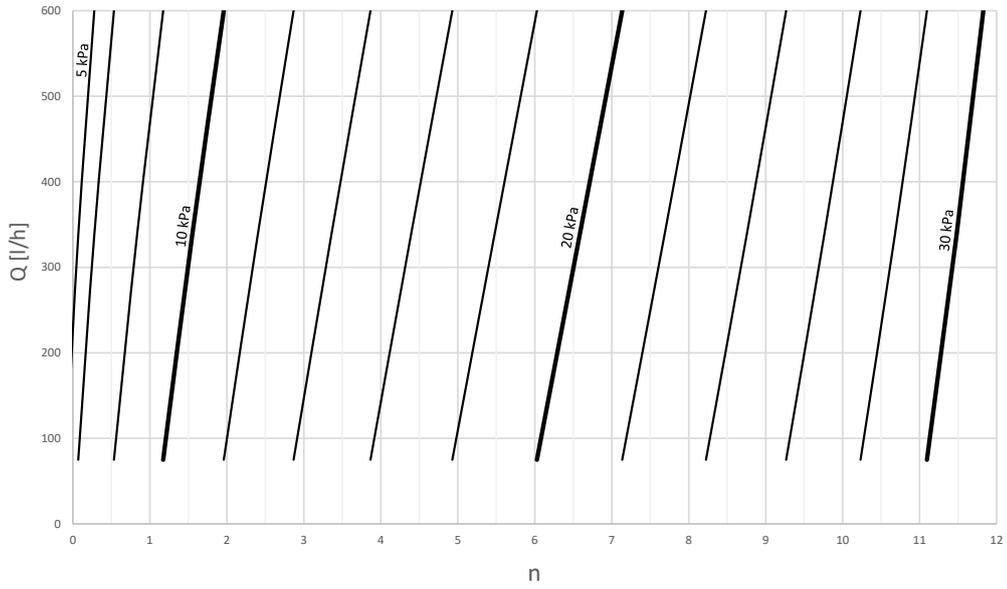
1. **DN 32 - 50 only:** Turn the valve in anti-clockwise direction to close it. This enables counting the number of rotations  $n$  in clockwise direction.
2. Set the differential pressure  $\Delta p$  using the handwheel (DN 15 - 25) or an Allen key WAF 4 (DN 32 - 50). Refer to the diagrams for the presettings of the handwheel travel scale or the number of rotations  $n$  ( $\Rightarrow$  Section 1.1.5, Page 2) . The flow rate can be determined by measuring the differential pressure at both pressure measurement connection branches.

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1.1.5 Presettings

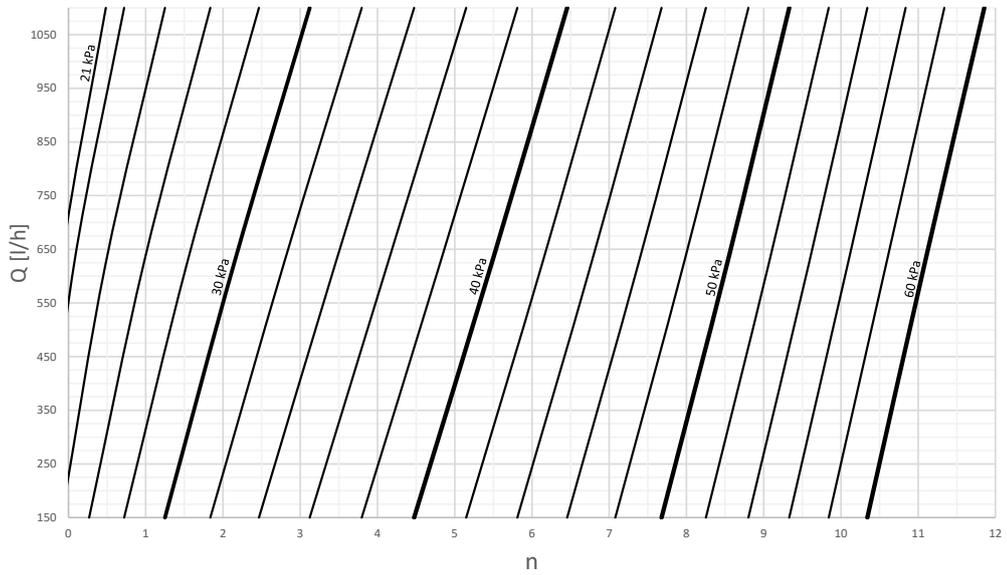
DN 15 LP

$\Delta p$ [kPa]	Q [l/h]	Kvs
5 - 30 kPa	75 - 600	4,1



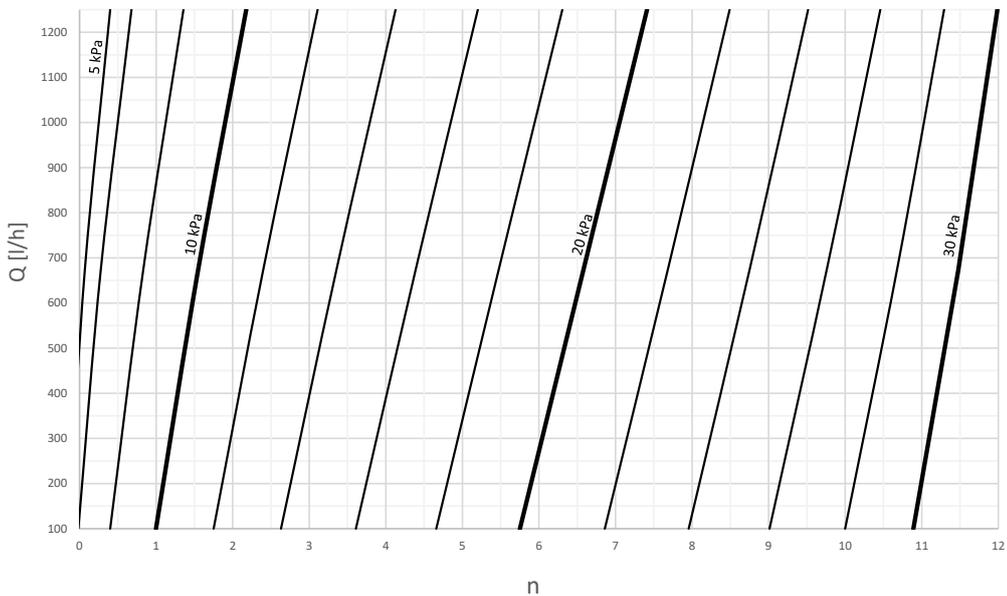
DN 15 HP

$\Delta p$ [kPa]	Q [l/h]	Kvs
20 - 60 kPa	150 - 1100	4,1



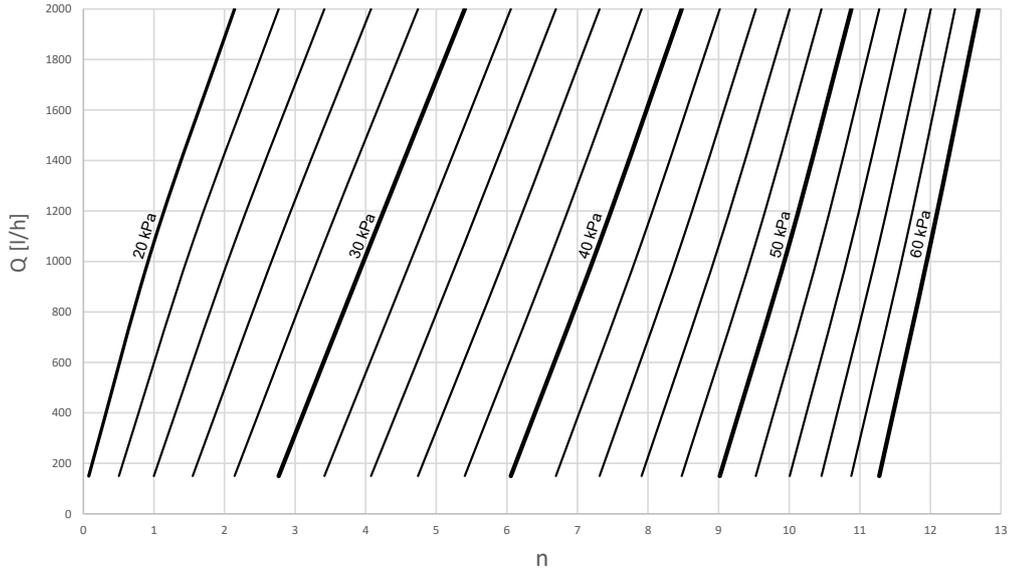
DN 20 LP

$\Delta p$ [kPa]	Q [l/h]	Kvs
5 - 30 kPa	100 - 1250	4,9



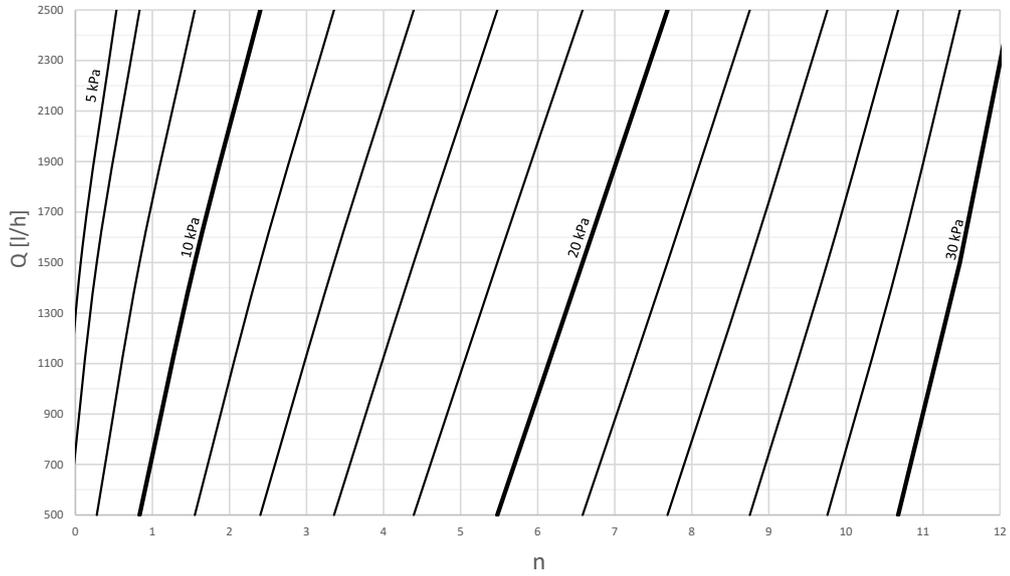
DN 20 HP

$\Delta p$ [kPa]	Q [l/h]	Kvs
20 - 60 kPa	150 - 2000	4,9



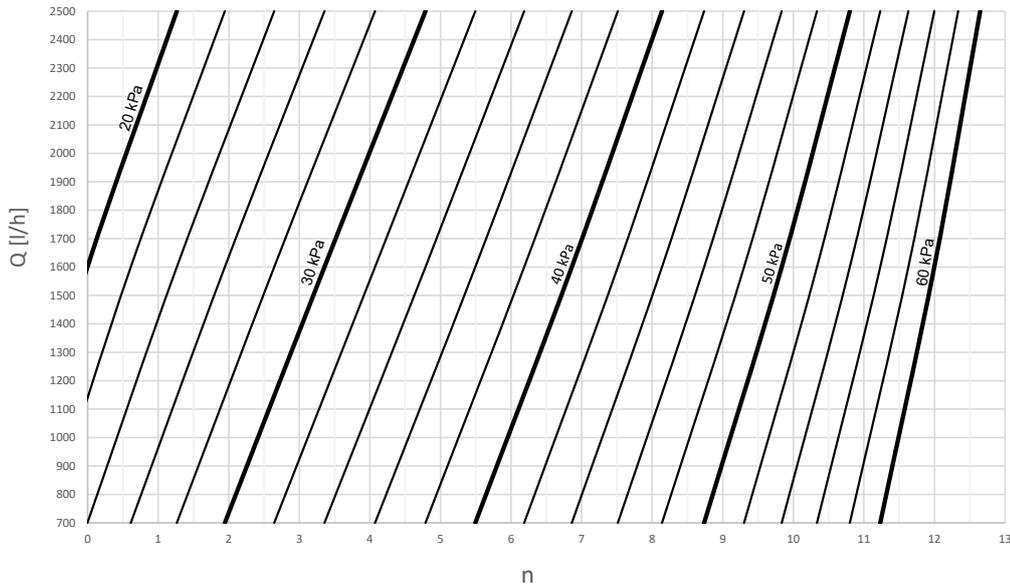
DN 25 LP

$\Delta p$ [kPa]	Q [l/h]	Kvs
5 - 30 kPa	500 - 2500	5,0



DN 25 HP

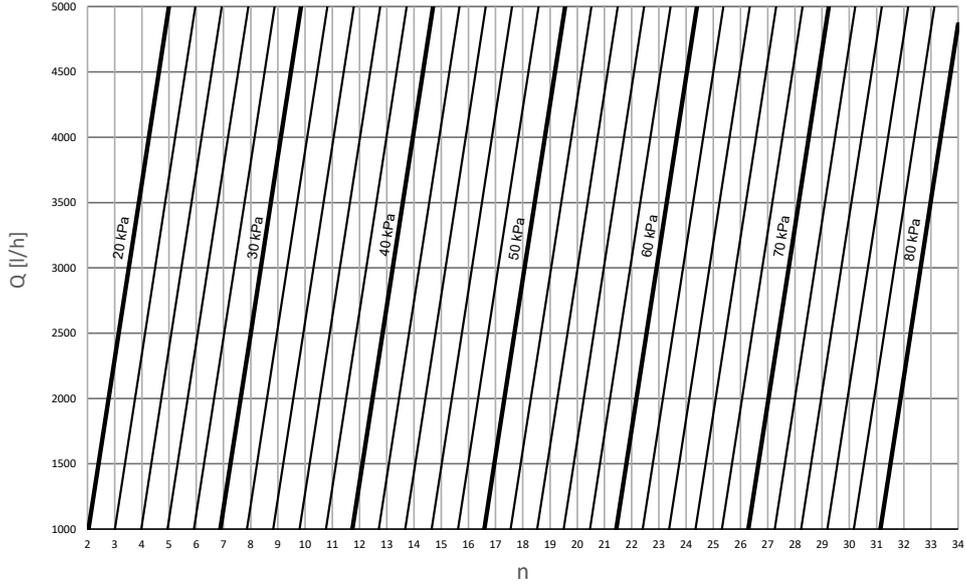
$\Delta p$ [kPa]	Q [l/h]	Kvs
20 - 60 kPa	700 - 2500	5,0



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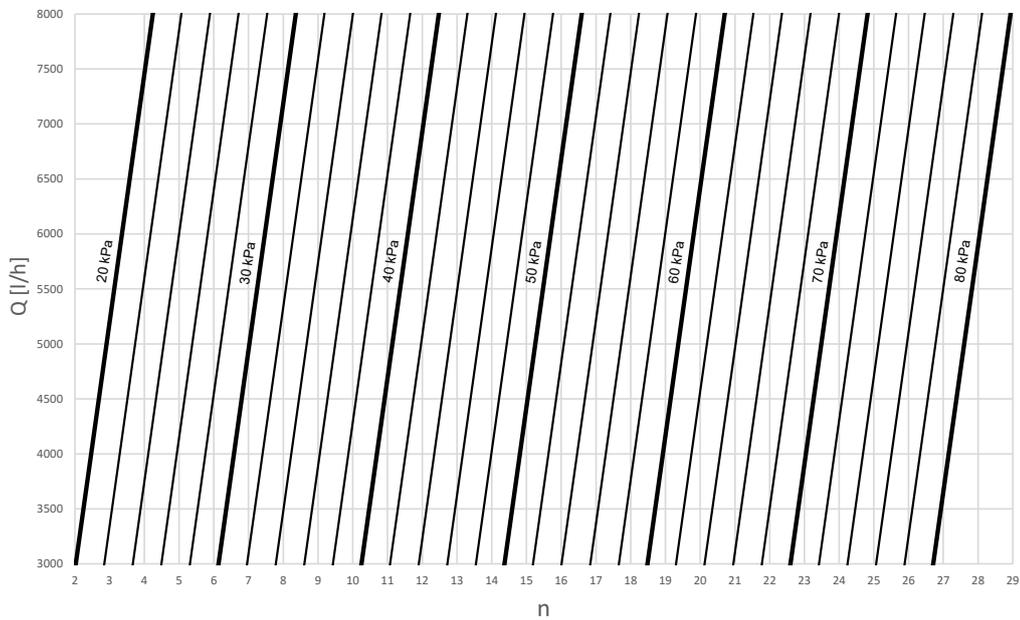
DN 32

$\Delta p$ [kPa]	20 - 80 kPa	Kvs	11,4
Q [l/h]	1000 - 5000		



DN 40

$\Delta p$ [kPa]	20 - 80 kPa	Kvs	16,4
Q [l/h]	3000 - 8000		



DN 50

$\Delta p$ [kPa]	20 - 80 kPa	Kvs	17,9
Q [l/h]	5000 - 15000		

