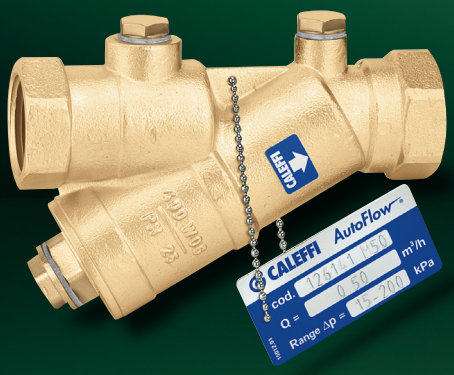
Automatic flow rate regulators with polymer cartridge

121 - 126 - 127 series

www.caleffi.com



- Automatic flow rate regulators capable of maintaining a constant flow rate of the medium as the operating conditions of the hydraulic circuit vary.
- Used to balance the hydraulic circuit automatically and guarantee the design flow rate to each terminal.
- Interchangeable cartridge made of high-strenght, scale-resistant and low-noise polymer.
- 121 series: with Y-body for easy cartridge removal and complete with a ball shut-off valve.
- 126 series: with Y-body for easy cartridge removal and connections fitted for pressure test ports.
- 127 series with compact valve body and compact size for easy installation on individual terminals or system zones.

CALEFFI
Hydronic Solutions

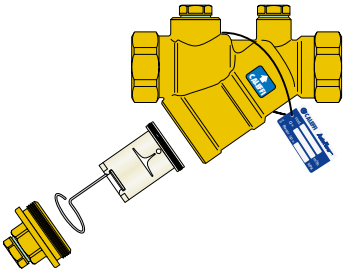
PRODUCT RANGE

CODE	CONNECTION	FLOW RATES (m³/h)
121141...	1/2"	0,085–1,2
121151...	3/4"	0,085–1,6
121161...	1"	0,5–5
121171...	1 1/4"	0,5–5
121181...	1 1/2"	5,5–11
121191...	2"	5,5–11

CODE	CONNECTION	FLOW RATES (m³/h)
126141...	1/2"	0,085–1,2
126151...	3/4"	0,085–1,6
126161...	1"	0,5–5
126171...	1 1/4"	0,5–5
126181...	1 1/2"	5,5–11
126191...	2"	5,5–11

CODE	CONNECTION	FLOW RATES (m³/h)
127141...	1/2"	0,02–1,4
127151...	3/4"	0,02–1,6
127161...	1"	0,5–5
127171...	1 1/4"	0,5–5
127181...	1 1/2"	4,5–11
127191...	2"	4,5–11

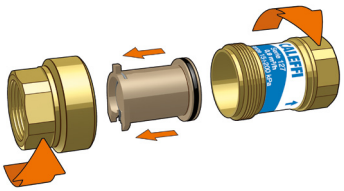
REPLACEABLE CARTRIDGE



121 - 126 series

The internal regulator is assembled in the form of a self-contained cartridge so as to permit easy removal from the body for inspection or replacement.

COMPACT VALVE BODY

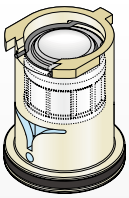


127 series

This special series of devices is also supplied with a compact, simplified valve body for easy fitting on pipes and more cost-efficient installation.
The cartridge can be replaced or checked by unscrewing the cartridge locking nut from the valve body.

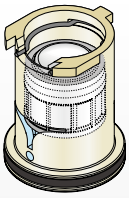
OPERATING PRINCIPLE

Below the working range



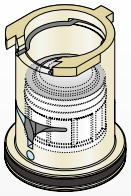
The regulating piston remains in equilibrium without compressing the spring and gives the medium the maximum free flow cross section.
The piston acts as a fixed regulator and thus the flow depends solely on the differential pressure.

Within the working range

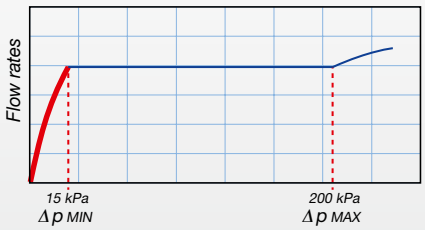


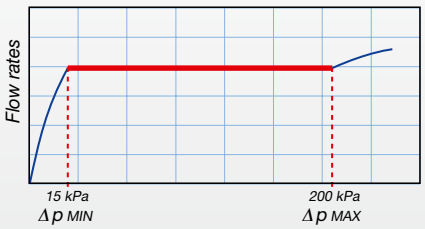
If the differential pressure is contained within the working range, the piston compresses the spring and gives the medium a free flow cross section to permit regular flow at the nominal rate.

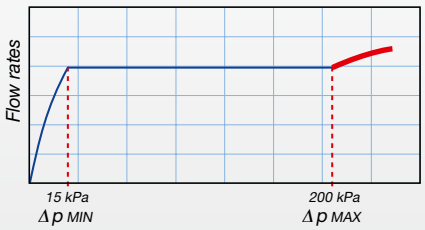
Above the working range



The piston compresses the spring fully and only leaves the fixed geometry aperture for the medium to pass through.
The piston acts as a fixed regulator. The flow rate thus depends only on the differential pressure.







TECHNICAL SPECIFICATIONS

Δp RANGE	15–200 kPa 20–200 kPa (flow rate 0,02-0,04-0,06)
WORKING TEMPERATURE RANGE	-20–100 °C (121-126 series) 0–100 °C (127 series)

MAX WORKING PRESSURE	16 bar (127 series) 25 bar (121 - 126 series)
MEDIUM	water, glycol solutions
MAX. PERCENTAGE OF GLYCOL	50 %

REFERENCE DOCUMENTATION:

121 - 126 -127 series - Technical brochure 01141
127 series - Technical brochure 01166

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