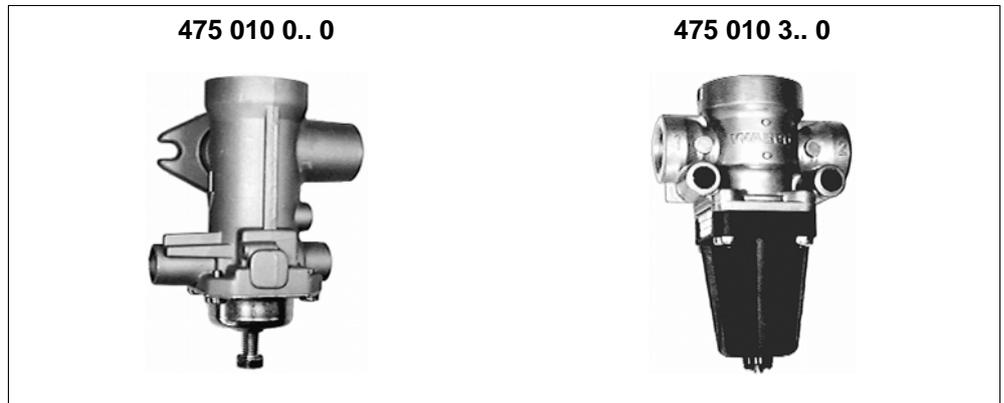


Pressure limiting valve 475 010

Pressure limiting valve 475 010



Application

Multiple applications, on a lifting axle e.g. for limiting the pressure on the lift bellows.

Purpose

To limit the output pressure to a set level.

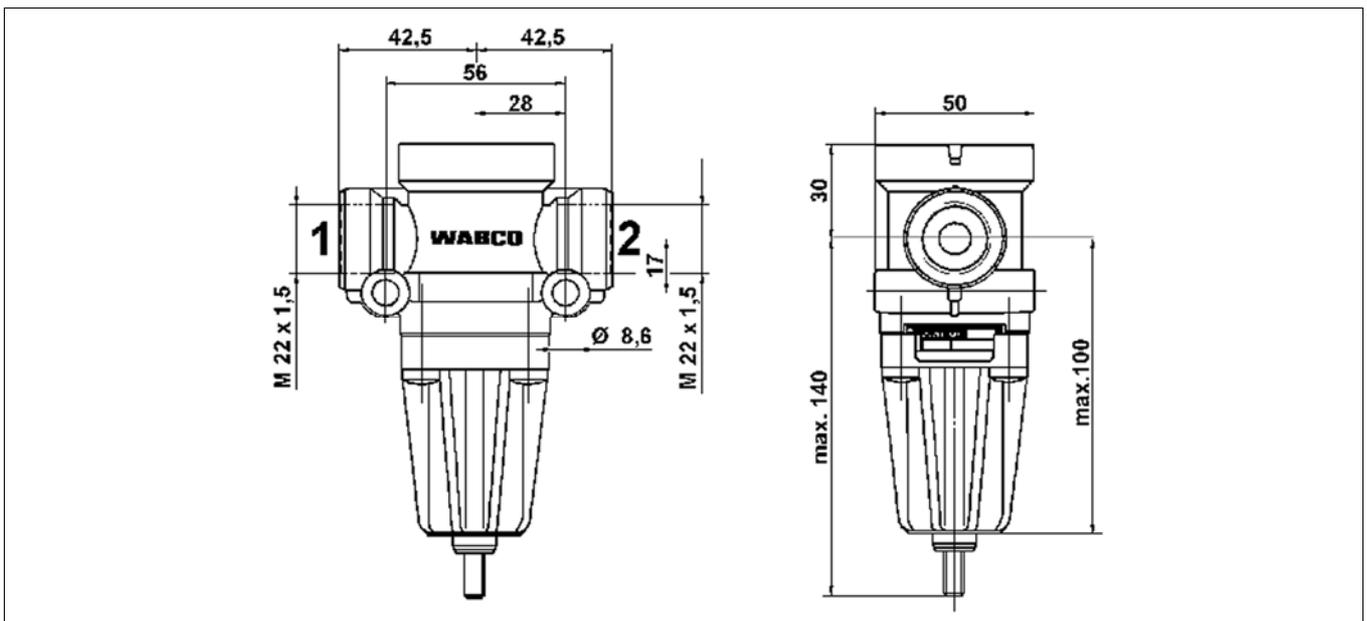
Maintenance

Special maintenance that extends beyond the legally specified inspections is not required.

Installation recommendation

- Install the pressure limit valve vertically so that the vent 3 points downward.
- Fasten the pressure limit valve with two M8 bolts.

Installation dimensions



Connections

1	Energy supply	2	Energy delivery	3	Exhaust
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Pressure limiting valve 475 010

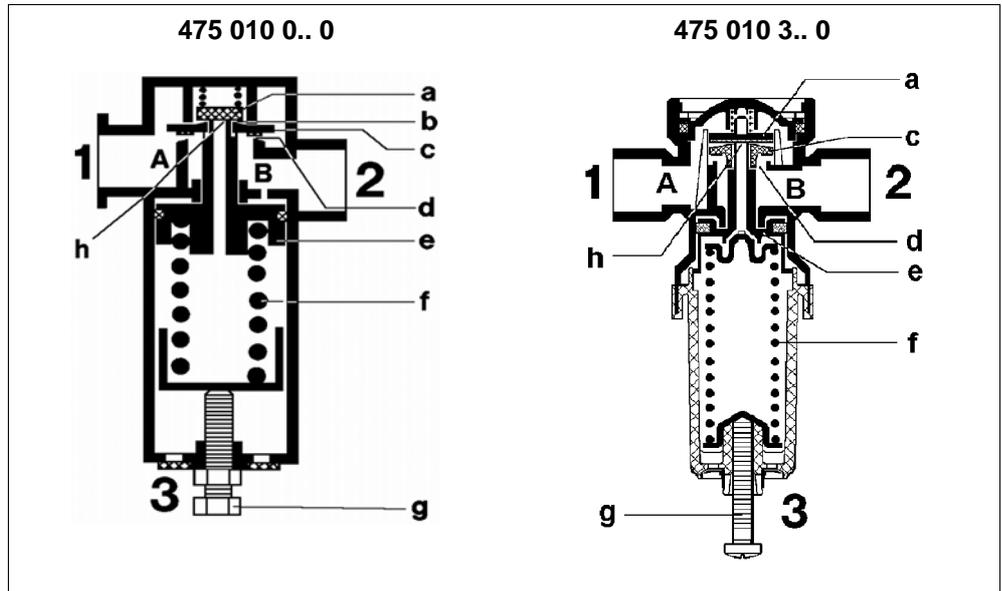
Technical data

Max. operating pressure	20 bar
Port threads	M 22x1.5 - min. 12 deep
Permissible medium	Air
Operating temperature range	-40 °C to +80 °C
Weight	0.37 kg

Order number	Input pressure p_1	Output pressure p_2	Adjustment range with $p_1 = 7.5$ bar
475 010 302 0	7.5 bar	5.3 +0.3 bar	1.5 - 6.0 bar
475 010 303 0		1.8 +0.3 bar	1.5 - 6.0 bar
475 010 305 0		6.0 +0.3 bar	6.0 - 7.5 bar
475 010 309 0		5.7 +0.3 bar	1.5 - 6.0 bar
475 010 310 0		4.0 +0.3 bar	1.5 - 6.0 bar
475 010 312 0		5.5 +0.2 bar	1.5 - 6.0 bar
475 010 313 0		3.3 +0.3 bar	1.5 - 6.0 bar
475 010 307 0	8.0 bar	1.8 +0.3 bar	1.5 - 6.0 bar
475 010 324 0		1.4 +0.3 bar	0.5 - 1.6 bar
475 010 311 0	8.5 bar	3.5 +0.3 bar	1.5 - 6.0 bar

Pressure limiting valve 475 010

Operation



The compressed air reaching chamber (A) via port 1 (input) flows through inlet (d) into chamber B and on to port 2 (output). At the same time, piston (e) is pressurized but is initially held in its upper end position by the pressure spring (f). When the pressure in chamber B has reached the level set for the output side, piston (e) is moved downwards against the force of the pressure spring (f). The following valves (a and c) close inlet (d). When the pressure in chamber B has risen above the preset value, the piston (e) will continue to move downwards, thus opening outlet (h). The excess compressed air now escapes to atmosphere via the center hole in piston (e) and vent 3. When the preset pressure has been reached, outlet (h) is closed once more.

If air consumption in the output line causes a pressure loss, the piston (e) raises the valve (c) as a result of the lost pressure. Inlet (d) opens and a corresponding additional amount of compressed air is fed in.

When port (1) is vented, the higher pressure in chamber (B) raises valve (c) and with it valve (a). Inlet (d) opens and the output line is vented via chamber A and port 1. In this process, piston (e) is returned to its upper end position by the force of the pressure spring (f).

The preset pressure limit can be adjusted within a certain range by changing the initial tension of the pressure spring (f) by turning the adjusting screw (g).