



## Pressure Switches

## QPL...

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The pressure switches are used for monitoring gas or air pressures. When the pressure falls below the switching point, the associated electrical circuit will open or switch over.

The QPL... and this Data Sheet are intended for use by OEMs which integrate the pressure switches in their products.

### Use

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The QPL... are pressure switches for minimum pressure. The pressure ranges cover pressures from 1.5 to 280 mbar.

## Warning notes



To avoid injury to persons, damage to property or the environment, the following warning notes should be observed!

### Do not open, interfere with or modify the pressure switch!

- Before performing any wiring changes in the connection area of the switch, completely isolate the equipment from the mains supply (all-polar disconnection)
- Ensure protection against electric shock hazard by providing adequate protection for the connection terminals
- Check to ensure that wiring is in an orderly state
- Fall or shock can adversely affect the safety functions. Such units may not be put into operation, even if they do not exhibit any damage
- Do not use the pressure switch in inflammable or explosive gas atmospheres

## Engineering notes

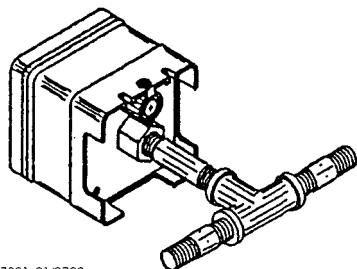
### Setting the switching point

To set the required switching point, remove the cover of the pressure switch and turn the setting knob clockwise to increase the set value, and counterclockwise to decrease it (see scale in Fig. 7221m01 under «Dimensions»). Replace cover and tighten the 2 screws to prevent tampering.

## Mounting notes

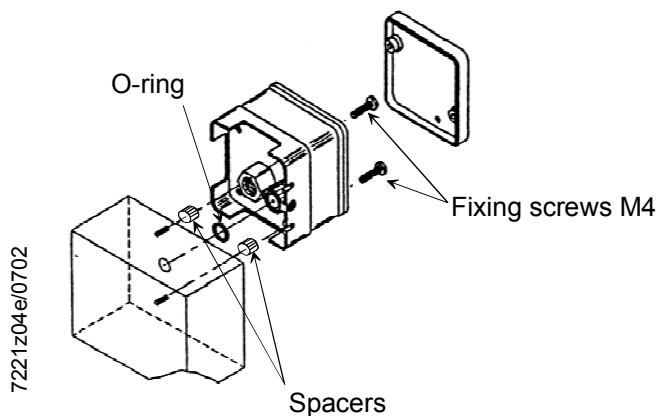
- Ensure that the relevant national safety regulations are complied with
- Check piping connections and housing of the pressure switch to ensure that there are no leaks
- The pressure switch can be mounted either horizontally or vertically
- The pressure switch can be connected via a 1/4" thread or O-ring, depending on the type of switch (refer to Figs 7221z01 and 7221z04 below)

### Connection via 1/4" thread



7221z01/0702

### Connection via O-ring QPL1...



## Installation notes

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- Installation work must be carried out by qualified staff

## Commissioning notes

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- Commissioning work must be carried out by qualified staff
- Prior to commissioning, ensure that wiring is in an orderly state

## Norms and standards

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Conformity to EEC directives	
- Electromagnetic compatibility EMC (immunity)	89 / 336 EEC
- Directive for gas-fired appliances	90 / 396 EEC
- Pressure sensing devices for gas burners and gas-fired appliances	EN 1854 (CE 0063 BL 1455)

## Service notes

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- Maintenance work must be carried out by qualified staff
- Each time a pressure switch has been replaced, check to ensure that wiring is in an orderly state

## Disposal notes

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The unit contains electrical and electronic components and may not be disposed of together with household waste.  
Local and currently valid legislation must be observed.

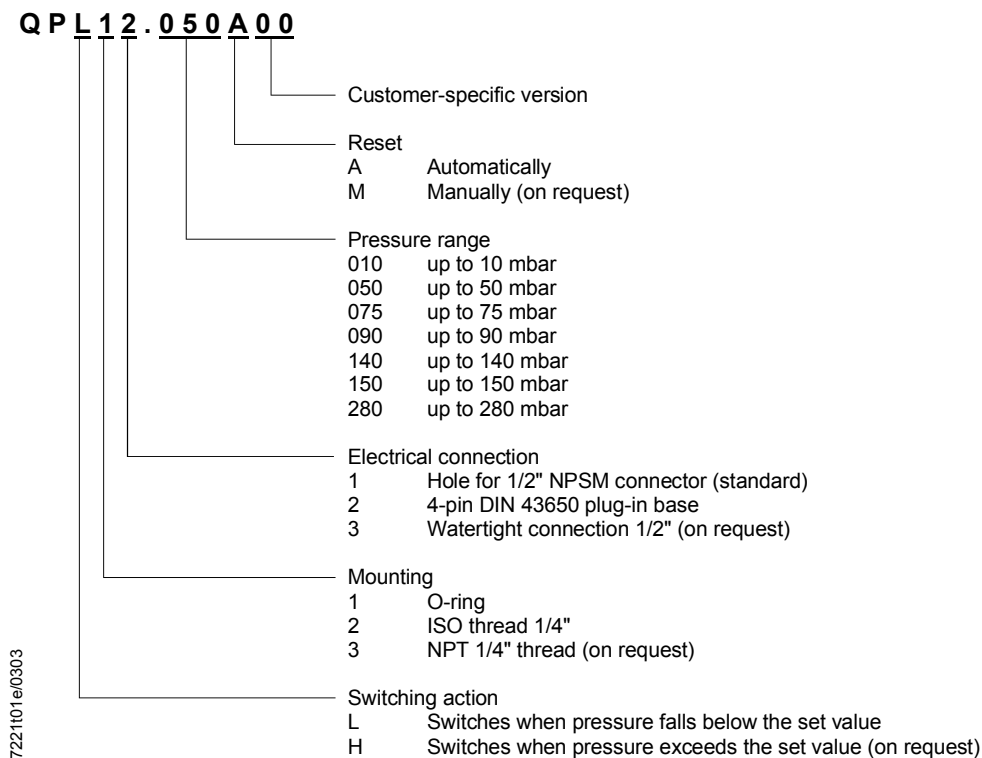
## Mechanical design

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- Housing made of durable plastic with die-cast aluminium base
- Adjustable switching point
- Automatic reset – manual reset on request

The pressure switch can be adjusted within the respective pressure range indicated by the scale at the top. The QPL... comes calibrated and has been checked for leaks.

## Type code



## Type summary

Pressure switches with automatic reset.

Pressure switches for minimum pressure

Pressure range	1/4" connection	O-ring connection
1.5...10 mbar	QPL22.010A00	QPL12.010A00
2.5...50 mbar	QPL22.050A00	QPL12.050A00
12.5...75 mbar	QPL22.075A00 <sup>1)</sup>	QPL12.075A00 <sup>1)</sup>
70...280 mbar	QPL22.280A00	QPL12.280A00

<sup>1)</sup> On request

## Ordering

When ordering, please give type reference according to «Type summary».

## Technical data

General data	Switching voltage	DC / ACeff max. 250 V
	Switching current	ACeff max. 10 A (at cosφ 1 lamp load) ACeff max. 2 A DC max. 0.25 A ACeff min. 20 mA DC min. 20 mA
	Adjustable operating pressure	1.5... 280 mbar (different ranges)
	Pressure surge	1 bar for 2 s
	Operating pressure	max. 600 mbar for max. 30 s
	Operating pressure (continuously)	400 mbar
	Weight	approx. 225 g
	Low-pressure range	refer to «Type summary»
	Mounting position	horizontal or vertical
	Safety class	II
	Degree of protection	IP 40 (to be ensured through adequate mounting)
	Deviation of switching point	±15 %, referred to the setpoint (diaphragm in vertical position)

Typical hysteresis:

Type reference	Deviation switching point
QPLxx.010	0.5 mbar
QPLxx.050	1 mbar
QPLxx.075	3 mbar
QPLxx.280	5 mbar

Environmental conditions	<b>Transport</b>	DIN EN 60 721-3-2
	Climatic conditions	class 2K2
	Mechanical conditions	class 2M2
	Temperature range	-40...+60 °C
	Humidity	< 95 % r.h.
	<b>Operation</b>	DIN EN 60 721-3-3
	Climatic conditions	class 3K5
	Mechanical conditions	class 3M2
	Temperature range	-20...+60 °C
	Humidity	< 95 % r.h.



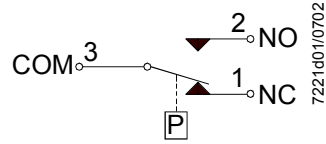
**Condensation, formation of ice and ingress of water are not permitted!**

## Function

With automatic reset.

Pressure switches for minimum pressure	Switch opens the electrical circuit when the air or gas pressure falls below the set value.
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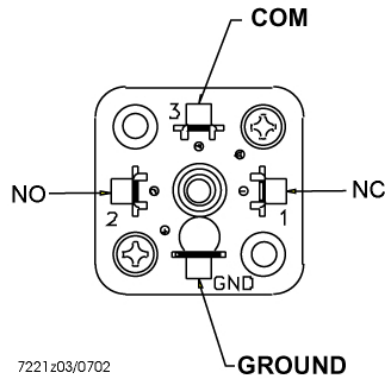
**Connection diagram**



**Pressure switch QPL... for minimum pressure**

When pressure falls below the set value:  
NO opens, NC closes

Connection via  
connector to DIN 43650



**Dimensions**

Dimensions in mm

