



Pressure Controls

P77X / P78X / P100X



Get the most reliable, flexible and efficient pressure controls to enhance operational safety in hazardous applications

The power behind **your mission**





Compatible with most common refrigerants

Our pressure controls series are engineered and manufactured to be suitable for a wide range of high- or low-pressure applications. Our state-of-the-art P77, P78 and P100 pressure switches series are available in several pressure ranges and are compatible with most common refrigerants.

They can also be used on other non-corrosive fluid applications. Our pressure controls are also available in several electrical ratings and switch configurations for ultimate flexibility.



We are aware of the safety and compliance requirements for hazardous environments and applications in the European Union, so our pressured controls models come with ATEX certification to ensure safer, more reliable operation.



ATEX Certified

- **Proven reliability:** our models are safe to be used in applications with flammable and natural refrigerants such as R290 (Propane) and R600a (Isobutane).
- **Robust construction:** Single- or dual-pressure controls, built in a very robust aluminum housing, are available.

P77X Adjustable Pressure Switch Single Pressure, IP54



P78X Adjustable Pressure Switch Single Pressure, IP54



P100X Fixed Setting Pressure Switch Direct Mount Pressure Switch, IP67



Product overview

- Suitable for control functions or limit functions, depending on model number.
- Alarm contacts included in all models.
- Standard models include phosphor bronze bellows and brass pressure connections.
- For ammonia applications, selected models offer stainless steel bellows and connectors.
- Devices conforming to PED 2014/68/EU Cat. IV (high-pressure models) have the fail-safe function with double bellows.
- IP54 classification: P77 series pressure controls are suitable for almost all applications.
- Suitable for control functions or limit functions, depending on model number.
- Alarm contacts included in all models (except P78ALA).
- Standard models include phosphor bronze bellows and brass pressure connections.
- For ammonia applications, selected models offer stainless steel bellows and connectors.
- Devices conforming to PED 2014/68/EU Cat. IV have a double bellows on the high-pressure versions.
- IP54 classification: P77 series pressure controls are suitable for almost all applications.
- The P100 series are encapsulated, non-adjustable, direct mount pressure controls typically used for low- and high-pressure cut-outs for OEM applications.
- Available in a wide variety of factory-calibrated, non-adjustable pressure setpoints.
- The small dimensions, weight and protection class make the P100 series applicable for use without the need for additional mounting brackets.
- Applicable for all non-corrosive refrigerants: R134a; R32; R404, R410A, R290 (Propane), R600, R1234, R744 (CO2) and many others.

Features

- Generous wiring space
- Splash-proof enclosure (IP54)
- SPDT contacts are provided as standard on single pressure controls
- Trip-free manual reset
- High refrigerant pressure. Suitable for R410A and CO2 subcritical applications
- Wetted materials approved for use with standard and (mild) flammable A2L / A3 refrigerants
- ATEX Certified models available
- Generous wiring space
- Splash-proof enclosure (IP54)
- Models with gold-plated contacts available
- Patented separate alarm contacts for both low-pressure and high-pressure cut-out (except P78ALA)
- Trip-free manual reset
- High refrigerant pressure. Suitable for R410A and CO2 subcritical applications.
- Wetted materials approved for use with standard and (mild) flammable A2L / A3 refrigerants
- ATEX Certified models available
- Compact size and light weight
- Encapsulated, dust-tight switch IP67
- Wide variety of electrical and pressure connections
- Manual reset models have a trip-free design
- Models with gold-plated contacts available upon request
- Approved according to PED 2014/68/EU Cat. IV
- ATEX Certified models available

Applications

- Designed for use in various applications involving high or low pressure, such as air, water, etc.
- The P77 series offers a "full-range design," allowing the compatibility and use of R22, R134A, R404A, R410A, R290 refrigerants, CO2 subcritical, etc and other non-corrosive refrigerants that are within the control operating range.
- Selected models can be used with ammonia.
- All models are tested and approved to PED 2014/68/EU Cat. IV (supersedes DIN and TUV approval).
- Designed for use in various applications involving high or low pressure, such as air, water, etc.
- The P78 series offers a "full-range design," allowing the compatibility and use of R22, R134A, R404A, R410A, R290 refrigerants, CO2 subcritical, etc and other non-corrosive refrigerants that are within the control operating range.
- Selected models can be used with ammonia.
- All models are tested and approved to PED 2014/68/EU Cat. IV (supersedes DIN and TUV approval).
- Designed for use in various commercial refrigeration applications, including computer room air conditioning, ice machines and food service equipment.
- The P100 series can be used for all non-corrosive refrigerants like R134a; R32; R404, R410A, R290 (Propane), R600, R1234, R744 (CO2) and many others.
- Selected models can be used with ammonia.
- All models are tested and approved to PED 2014/68/EU Cat. IV (supersedes DIN and TUV approval).

About Johnson Controls:

At Johnson Controls, we transform the environments where people live, work, learn and play. From optimizing building performance to improving safety and enhancing comfort, we drive the outcomes that matter most. We deliver our promise in industries such as healthcare, education, data centers and manufacturing. With a global team of 100,000 experts in more than 150 countries and over 130 years of innovation, we are the power behind our customers' mission. Our leading portfolio of building technology and solutions includes some of the most trusted names in the industry, such as Tyco®, YORK®, Metasys®, Ruskin®, Titus®, Frick®, Penn®, Sabroe®, Simplex®, Ansul® and Grinnell®.

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