

We: Delta Controls Ltd,  
Island Farm Avenue,  
West Molesey  
Surrey  
KT8 2UZ  
England

## Description

Pressure, Pressure Difference and Temperature switches comprising a housing in cast Zinc (Mazak) 'or Stainless steel, with an integral spring and venting chamber to which is attached a process sensor. Process changes in pressure, pressure difference or temperature applied to the sensor moves a push rod, which passes through the enclosure wall to actuate one or two microswitches.

As the manufacturers of the apparatus, listed, declare under our sole responsibility that the products listed below:- Pressure, Pressure Difference, Temperature Switches:- Series "N" 201 – 209, 281, 231- 234 and 301- 305, 381 and 384, 721 - 723, 731- 733, 771, 741-744, 761 - 764, 781, to which this declaration relates are in conformity with the following relevant harmonised standards for Category 3 products:-

EN 50021:1999  
EN 61421-0: 2006  
EN 61421-1: 2004

II 3GD EEx nC II T6 T<sub>amb</sub> (-25 °C to +40 °C), T4 T<sub>amb</sub> (-25 °C to +80 °C)

Ex tD A22 T23 °C

Note: Instrument has not been tested regarding maximum temperature with respect to dust layer **above 50 mm**. Therefore product is not suitable for operating under excess layer of dust.  
Self certified by Delta controls Ltd in accordance with Article 9 of the Council Directive 94/9/EC.

And thereby, conforms to the requirements of the ATEX Directive 94/9/EC.

Signed



R. Harrison  
Managing Director

Dated 2nd June 2009

To be read in conjunction with general Operating Instructions supplied with each unit or from our web site, [www.delta-controls.com](http://www.delta-controls.com), under product guide, Pressure and Vacuum, Temperature or Pressure Difference or flow depending on type.

### References for Selection and Installation

BS EN 60529:1992 IEC 529 IP RATING (Ingress Protection)

### Standards Applied to Product

EN 50021: 1999  
EN 61241-0: 2006  
EN 61241-1: 2004

### Temperature classification

Instrument classified group II  
T6 ( $T_{amb}$   $-25^{\circ}\text{C}$  to  $+40^{\circ}\text{C}$ ), T4 ( $T_{amb}$   $-25^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$ ),

### Product Code first character - Enclosures

N – Zinc (Mazak) enclosure  
O – Stainless steel enclosure

### Second, third and fourth character – Type

201-208, 281, 231-234 – pressure switches  
720 srs, 730 srs 740/760 – temperature switches  
301, 303, 381, 304 ,384 – pressure difference switches

### Installation of electrical adaptors and cable glands to the electrical entry

Take care to select and install adaptors to the electrical entry (see general ops) that do not reduce the enclosure degree of protection. The product code at character 4 indicates the size and type of thread. Most commonly a 22mm clearance hole is supplied **Failure to observe these requirements will render the installation unsafe!**

A Cable entry hole is provided for the accommodation of suitable ATEX certified cable entry devices, with or without interposition of a suitable ATEX certified thread adapter.

### Alternative electrical entry threads that may be supplied to order

1 electrical entry elbow threaded as follows:-  
 $\frac{3}{4}$ " ET, PG13.5, 1.2"NPTF, M20 x 1.5 F

### Removing covers/lid

The enclosure contains potentially sparking contacts so the cover/lid should never be removed while electrical power is connected to the switch and/or when a flammable gas is present.

### Replacing cover/lid

Gasket and contact surfaces may be lightly lubricated using a non-setting non-corrosive grease compatible with the lid seal. **Do not use copper bearing grease**. Before connecting to electrical power, replace cover/lid making sure that mating surfaces of the lid and enclosure are in contact.

### End of line resistors

Some products may be supplied to order fitted with end of line resistors. Resistors in use may generate a heat source. The type, quantity, configuration, fitment method and allowable electrical loads are limited by the scope of the certification. **Never fit end of line resistors or modify without reference to Delta Controls!**

**Only operation, maintenance or repair procedures either contained herein or approved by Delta Controls may be used, to avoid rendering the equipment unsafe in operation and/or nullifying the Certification. NO MODIFICATIONS ARE PERMITTED.**

**Note:** Instrument has not been tested regarding maximum temperature with respect to dust layer above 50 mm. Therefore product is not suitable for operating under excess layer of dust.