TAS
082 375 3280 / 011 326 4146

PRESSURE MEASUREMENT

Electrical Contact - Magnetic Type

Type T3: Stainless steel case with brass internals

Type T4: Stainless steel case with stainless steel internals

Data Sheet P EC MAG3-4

Service Intended
Suitable for media such as air, water, oil & gases that do not attack copper alloy or stainless steel parts or will obstruct the pressure system. Typical applications will be for the control and regulation of industrial processes where switching of electrical circuits are required. Externally adjustable, single or double contacts, can be fitted to a SA Gauge pressure gauge to make the gauge suitable to activate or deactivate electrical devices. Contact can make or break in an upward or downward pressure cycle.

Case Details
Nominal Dia: 100, 160 mm diameter. S/Steel 304

Bezel
Bayonet locking, twist type - removable. S/Steel 304

Pressure Connection
Material: Type T3: Brass. Type T4: S/Steel 316
Sizes: 1/4", 3/8" & 1/2" in BSP or NPT
Position: See "Mounting Configurations".

Mounting Flange
Material: S/Steel 304 See "Mounting Configurations".

Pressure Ranges
0...60kPa to 250MPa (also bar, psi, etc.)

Pressure Element
Material: Type T3: Cu-alloy. Type T4: S/Steel 316

Pointer
Gauge Pointer: Black
Single Contact Pointer: Red
Double Contact Pointer: 1st Cont - Green, 2nd Cont - Red

Dial - Aluminium, white with black lettering.

Window - Plexiglass / polycarbonate.

Weather Protection - IP 54.

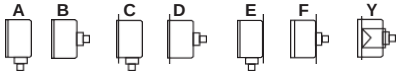
Accuracy Class - Class 1

Working Pressure
Steady: Full scale value
Fluctuating: 90% of full scale value
Short Period: 130% of full scale value
For pulsating pressure, the use of an inlet restrictor and/or damped movement.

Operating Temperature - Ambient: -20 °C to + 60 °C
Medium: +70 °C *(soldered tube)*: + 100 °C *(brazed / tig wellded tube) For live steam use, a syphon tube is recommended.*

Optional Extras - Calibration Certificate
Customized scale plates *(customer logo, red line, etc)*
Special Dials, other than standard *(dual scale, bar, psi)*
Damped movement *(Vibragauge)*, Colour Coding of dial
Blow out disc, Diaphragm seals fitted

MOUNTING CONFIGURATIONS



A: Bottom connection, no flange
B: Rear connection, no flange
C: Bottom connection, front flange
D: Rear connection, front flange
E: Bottom connection, rear flange
F: Rear connection, rear flange
Y: Rear con. narrow front ring (clamp mtg)

ELECTRICAL CONTACT SPECIFICATIONS

Magnetic Snap-Action Contacts
The adjustable magnet of the set pointer causes a mechanical snap-action when making contact, ensuring an arc free contact, avoiding sparking or faulty switching and increasing the life span of the contact point materials. No control unit or extra power supply is required as the unit switches 12V to 230V directly. Allow 2-5% of measuring range to accommodate the resistance force required to break the magnetic contact.

Inductive Contacts
Non-contact switching ensures extended service life. Additional control unit required. Designed for use in hazardous areas, this is an electric contact operating without making mechanical contact. Essentially it consists of a control head attached to the set pointer and a flag moved through the control head by the gauge pointer. The flag makes or breaks the circuit depending on the configuration, having virtually no effect on the gauge accuracy.

Electrical Rating
Maximum Voltage: 250V
Maximum Current: Closed contacts: 1A
Maximum Output: Closed contacts: AC-30VA, DC-30W
Frequency: 10 - 55Hz
The operating life of the switch will be reduced if any one of these limits are exceeded, if excessively, even to the point of immediate failure.

SWITCH FUNCTIONS

Single Contact: With gauge pointer in clockwise motion
NO - Normally Open: Contact makes when pointer reaches set point.
NC - Normally Closed: Contact breaks when pointer reaches set point.
The opposite will apply with pointer in anti-clockwise motion.

Double Contact: With gauge pointer in clockwise motion
NC / NO: 1st contact breaks and 2nd contact makes when pointer reaches set point.
NO / NC: 1st contact makes and 2nd contact breaks when pointer reaches set point.
NC / NC: 1st and 2nd contact breaks when pointer reaches set point.
NO / NO: 1st and 2nd contact makes when pointer reaches set point
The opposite will apply with pointer in anti-clockwise motion