

## PRESSURE GAUGE - WHAT IS A PRESSURE GAUGE WINDOW

The pressure gauge window is the clear membrane that allows the user to see the dial of the gauge. Windows can be made of different materials, such as;

1. Safety Glass
2. Polycarbonate
3. Acrylic

### Safety glass

Safety glass is basically a hardened or toughened glass that has unique properties, such as the durability and the way it breaks. Safety glass is often used in places or in applications that require a high level of human safety. Kinds of safety glass include tempered glass and laminated glass.

The European Standard EN 837-1, pressure gauges used in operating systems with oxygen and acetylene, should be fitted with safety glass regardless of their range or diameter. This is because safety glass provides a high level of protection for the user should there be a complete failure of the pressure system. Safety glass windows will not shatter, splinter or disintegrate like standard pressure gauges fitted with acrylic. These windows are designed to be held in place when there is a failure of the operating system, stopping glass flying towards the user, instead these gauges deflect towards the blow out disk at the back of the pressure gauge.

On the bottom of the window, in the middle, 'SAFETY GLASS', will be clear to see if the pressure gauge is fitted with this kind of window.

### Polycarbonate

Polycarbonate is a type of plastic. It is very strong, up to 250 times stronger than glass and 30 times stronger than acrylic and is a perfect material for screens or windows as it can withstand both intentional and accidental stresses and is impact resistant. Polycarbonate is more cost effective than glass making the price of pressure gauges more affordable.

### Acrylic

Acrylic, just like polycarbonate is very strong and is stronger than glass, and therefore more resistant to stresses. Acrylic does not shatter like glass, instead it will break up into blunt size pieces, offering the user a certain level of safety. Furthermore, acrylic is more cost effective than glass and so pressure gauges are more affordable.

