

## PRESSURE

To properly select the correct flexible hose and fittings, consider that the maximum working pressure for these components must be higher than the maximum system pressure of the application.

It is necessary to consider both the static working pressure and the dynamic or “pulsing” pressure when variations occur within a dynamic application.

SAE Standard J1927 gives a method to define the reduction of the life of the flexible hose according to a specific hydraulic application when measuring pressure peaks and pulsing frequencies.



### **WARNING**

Selection has to be made according to the maximum pressure reached by the system.

Pressure spikes and drops can be verified through a device able to record short measurements. An assembly can be calibrated by checking the safety valve placed on the assembly in order to be assured against eventual pressure spikes and drops.

Hydraulic system classification can be made according to the following pressure range:

- Low pressure: 1000 – 1595 PSI (70 – 110 bar)
- Medium to High pressures: 3000 – 5000 PSI (210 – 245 bar)
- High to Very High pressures: up to and above 6000 PSI (420 bar)

### **Fluid to convey:**

Fluid type: chemical identification, concentration, temperature, etc.

Flexible hose selection must consider chemical compatibility of the conveying fluid.

The enclosed summarizing sheet on page 41 provides information about the compound type used for the production of the flexible hose. This information is essential to determine fluid type compatibility.

The sheet concerning chemical resistance details the compatibility with several products.

As a precaution with applications which emit fumes or dangerous and aggressive fluids, these products will require an evaluation of the fluid to determine if it is necessary to pin-prick the cover to facilitate permeability of the fluid through the hose.