

## Thermowells



### • Description

Thermowells are metallic sockets generally consisting of 3 main parts: assembly hexagon, process connection and immersion tube.

Thermowells are used to separate the thermometer bulb or temperature probe from the media in order to avoid a possible corrosive effect of the stem, as well as to protect them from working pressure and from the possible high speed flow rate. Thermowells also allow the inspection of the instruments in case of maintenance and replacement without disturbing or stopping the process, avoiding possible fluid leaks in order to safeguard the system, the environment and the operator.

## ● Features

Highlighted the most important parts of thermowells and their definitions:

### Materials:

Materials are generally chosen considering the corrosion resistance from the process fluid. Apart from this, it is also important to consider the regulations of each specific industry, in order to avoid the migration factor, for example in FOOD industry.

All materials have a polished finishing in order to confer to the thermowells the highest level of resistance to corrosion and to avoid any bacterial charges caused by the fluids sediments.

### Extension:

This is the material part between the upper end of the process connection and the lower end of the assembly hexagon. It is meant to distance the instrument from the process, if necessary.

### Immersion length:

It is the part of the thermowell between the lower bulb end (tip), to be inserted into the process fluid, and the process connection (threaded or flanged).

### Process connection:

Thermowells may have a wide range of process connections:

Standard thread (GAS UNI-338 BSP)



DIN 11851 connections, liner + nut or threaded part ( SANITARY CONNECTIONS)



Special connections for specific applications or welding thermowells without any connection



ASME flanged connections

