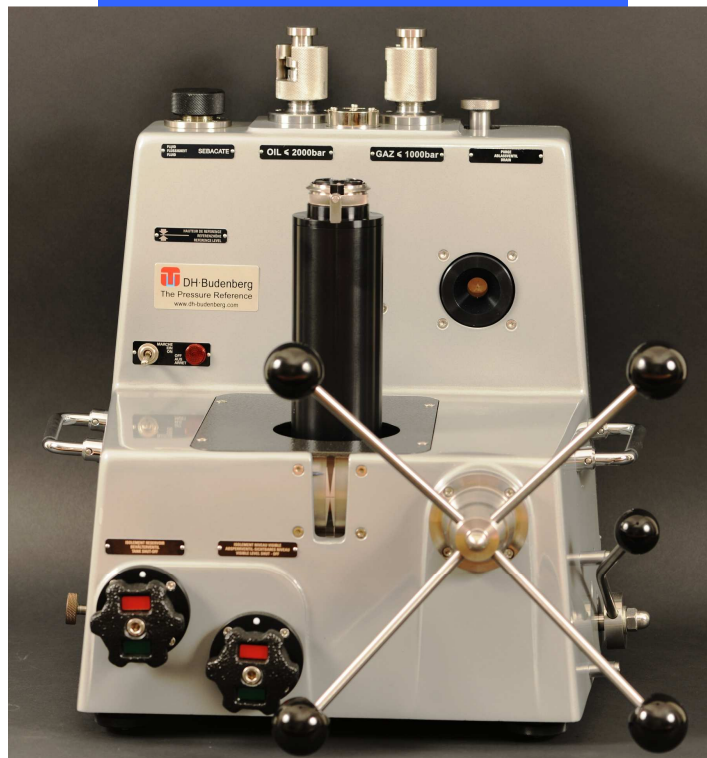


NEW

**METROLOGICAL
RANGE**



Integrated 2000 bar hydraulic pressure generation capability.

Integrated 1000 bar oil/gas interface.

One pressure standard to works either with oil and with gas

5404G

**OIL / GAS
PRESSURE
STANDARD**

Several measuring ranges.

Up to 2000 bar oil.

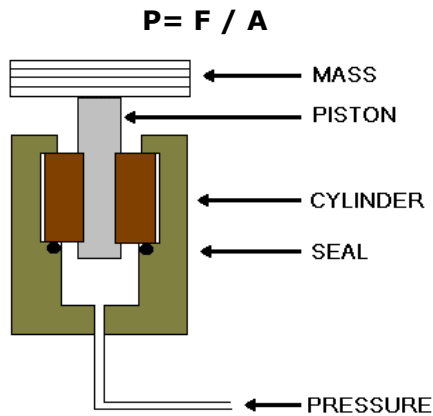
Up to 1000 bar gas

High level uncertainties down to 20 ppm.

INTRODUCTION

The DH-Budenberg 5400 series pressure standards are oil operated pressure balance used to test gauges, sensors and transmitters.

The 5404 G model is oil/gas operating pressure balance. An oil/gas separator is fitted in the balance and allows the operator to use it either with oil or with gas. The pressure measurement **P** is calculated from the conversion of the pressure applied on the section **A** on one side of the piston to the force that can be measured from the weight **F** of the masses on the other side of the piston. The total weight of the masses must equilibrate exactly the pressure in the circuit.



GENERAL CHARACTERISTICS

The 5404G pressure balance has been specially designed to work either with oil (the piston cylinder is lubricated with oil) or with gas.

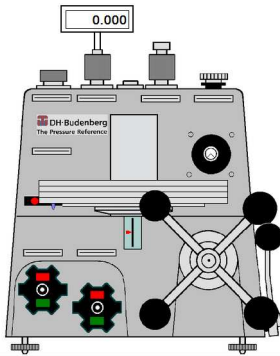
In a single housing are enclosed, all the necessary parts to generate and measure hydraulic pressure up to 2000 bar, as well as a gas /oil visible interface to use gas as measuring medium and oil as piston cylinder lubricating medium.

When using the 5404G in gas measuring mode, an external gas pressure generator / controller must be used (not included in the 5404G).

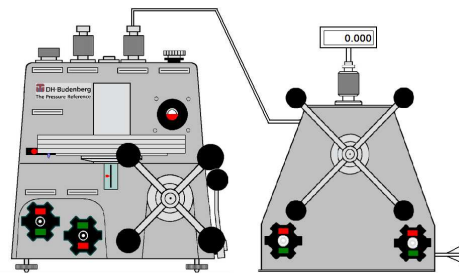
As well as all 5000 series pressure balance, the 5404G is equipped with a mechanical piston displacement detector, a piston cylinder rotating motor, a temperature platinum probe, and can be equipped with optional Terminal 5000 electronic interface for ambient condition monitoring and pressure calculation.

The 5404 G is fitted with a free deformation measuring post and accept several size of piston cylinder (made in tungsten carbide) from 1 bar/kg up to 50 bar/kg. This measuring post accepts a mass set up to 100 kg. All masses are multiple or sub-multiple of the kilogram.

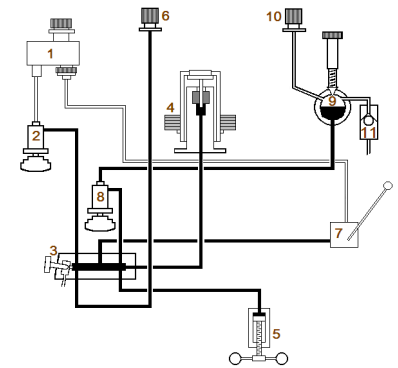
5404 G used in oil



5404G used in gas with external gas controller



Hydraulic circuit



METROLOGICAL DATA

Range : From 1 to 2000 bar in oil (depending of the piston-cylinder KN).
From 1 to 1000 bar in gas (depending of the piston-cylinder KN).

Mass set : From 10 kg up to 40 kg with 2 kg main mass or up to 100 kg with 5 kg main mass.

Available piston cylinder KN : 1 bar/kg (0.1 Mpa/kg), 2 bar/kg (0.2 Mpa/kg), 5 bar/kg (0.5 Mpa/kg), 10 bar/kg (1 Mpa/kg), 20 bar/kg (2 Mpa/kg), 50 bar/kg (5 Mpa/kg) and 100, 200, 250, 300 or 500 psi/kg.

Total uncertainty: Down to 20 ppm of reading.