

# MANI-FLOW

Customised Manifold Solutions for Mass Flow and Pressure

## > Introduction

Bronkhorst High-Tech B.V., the European market leader in thermal Mass Flow Meters/Controllers and Electronic Pressure Controllers, has many years of experience in designing and manufacturing precise and reliable measurement and control devices. With a wide range of instruments, Bronkhorst offers innovative solutions for many different applications in many different markets. The instruments are made to customers' specification, in various styles, suitable for use in laboratory, industrial environment, hazardous areas, semiconductor processing or analytical equipment. In addition, the company provides tailor-made, complete fluid control solutions for O.E.M. systems, e.g. the MANI-FLOW product line.

## > MANI-FLOW series

The MANI-FLOW series originate from the demand of some customers (Original Equipment Manufacturers or OEM's) to design an economical solution that combines various functions into one compact device. Since 1996 a large variety of solutions has been designed and manufactured. On a compact manifold one or more mass flow or pressure sensor modules can be combined with control valves, two- or three-way valves, shut-off valves, filters or any other functional module as per customer's request.

The specifications are open for discussion. The ranges for the flow sensor can be selected between approx. 5 ml<sub>r</sub>/min up to 50 l<sub>r</sub>/min or even higher. In case a pressure sensor is included, the pressure range can be chosen between 0-100 mbar and 0-10 bar absolute or gauge. The maximum Kv-value for control valves is 1,0 and there is no low limit. Depending on the application the customer may prefer an aluminium or stainless steel manifold, with female threads for gas connections to specification. On request, the system will be assembled, tested, and packaged in a cleanroom. Because of the infinite number of possible solutions, we recommend you to contact our nearest distributor to discuss your application.



## > Benefits

- ◆ compact assembly ensures space efficiency
- ◆ economical solution, low cost of ownership
- ◆ combination of functions on one manifold (i.e. tubeless construction) reduces potential leak points
- ◆ modular construction enables easy exchange of functional modules
- ◆ pre-tested "Plug and Play" units, reducing custom testing requirements

## > Fields of application

The MANI-FLOW series has great potential in many different markets, for instance in:

- ◆ Industrial processes
- ◆ Medical and pharmaceutical systems
- ◆ Analytical applications
- ◆ Biotechnological and chemical installations
- ◆ Food and beverage processes
- ◆ Semiconductor and electronics industries

