



## Plastic Diaphragm Valves

GEMÜ leaves nothing to chance in the development and manufacture of plastic diaphragm valves

### Areas of application and industrial sectors

GEMÜ plastic diaphragm valves are available with a variety of high-quality plastic body materials and connections. The plastic diaphragm valves support a large range of industries and applications including water treatment, chemical, environmental systems, power generation, solar, semiconductor, microelectronics, food and beverage, and processing just to name a few. Many of the plastic diaphragm valves are supported by an extensive line of pneumatic operators that can be fully integrated into automated systems allowing industries to save time and money on their operations, while increasing accuracy and efficiency in their performance.

### Diaphragm Valve Design

The structure and function of the diaphragm valve is that of a completely enclosed connection with a weir and short intercepting shaft that accommodates the operation of a mobile seal identified as the diaphragm or membrane. This diaphragm is the essential part of the valve that controls the movement of media through the system the valve is integrated into. The diaphragm valve operates by pressing the diaphragm tightly against the weir, making a fluid tight seal restricting movement of media flow. Alternatively, the diaphragm is lifted away from the weir to allow partial to full media flow. Operation of a diaphragm valve is very simple as it is the accommodation of various stages of full or restricted media flow.

GEMÜ leaves nothing to chance in the development and manufacture of plastic diaphragm valves. The plastic diaphragm valve is designed with the challenges of friction, turbulence, debris and trapped air in mind. The GEMÜ plastic diaphragm valve is flow-optimized by incorporating a smooth media transition structure which allows low friction, low turbulence of media and leaves no offsets that cause the collection of air pockets and debris in the system.

Additionally, GEMÜ plastic diaphragm valves utilize highly durable, low maintenance pneumatic membrane actuators that give precise flow control in high cycle operation.

### GEMÜ Plastic Diaphragm Valves

The GEMÜ Plastic Diaphragm Valves are available with additional considerations to industry needs that include having the same mounting height planes over multiple nominal sizes, compact plant design, reduced control air consumption needs for the pneumatically operated valves and a variety of optional accessories for measurement and control.