

**Vacuum Symbols**

All symbols, except those marked \*) may be used in any orientation.

\*) These symbols must only be used in the indicated position (tip of the triangle pointing downwards)

The symbols for vacuum pumps should always be so positioned that the narrowing lines point to the side of higher pressure.

**Vacuum Pumps**

	Vacuum pump, general		Ejector vacuum pump		Gas filter, air filter, general		Stopcock
	Piston vacuum pump		Diffusion pump		Filter or filter device, general		Butterfly valve
	Diaphragm vacuum pump		Adsorption pump		Vapour baffle, general		Right-angle stopcock
	Rotary positive displacement pump		Getter pump		Vapour baffle cooled (with heat exchange)		Three-way stopcock
	Rotary piston vacuum pump		Sputter-ion pump		Cold trap, general		Check valve
	Sliding vane rotary vacuum pump		Cryopump		Cold trap with supply reservoir		
	Rotary plunger vacuum pump		Scroll vacuum pump		Cold trap		
	Liquid ring vacuum pump						
	Roots vacuum pump		Vessel with crowned ends, general		Shut-off fitting, general		Manual operation
	Turbine vacuum pump, general		Vacuum bell jar		Gate valve		Fluid drive (hydraulic or magnetic)
	Turboradial vacuum pump				Shut-off valve, Straight-line valve		Solenoid operation
	Turboraxial vacuum pump		Seperator, general		Right-angle valve		Electric motor drive
	Turbomolecular pump		Seperator with heat exchange, (e. g. cooled)		Shut-off device with safety function		Weight-actuated

**Container**

**Isolating Devices**

**Valve Actuation**

**Accessories**

**Connections and Piping**

	Flange connector, general		Flange connector, general		Rotary and linear motion feedthrough		*) Vacuum (to indicate the presence of a vacuum)
	Flange connector, bolted		Change in pipe cross section (e. g. reducer nipple)		Rotary motion feedthrough		*) Vacuum measurement, Vacuum measurement point
	Small flange connector		Junction of two pipes with communication		Electric current feedthrough		*) Vacuum gauge
	Clamped flange connector		Cross-over of two pipes without communication				*) Recording vacuum gauge (writing)
	Threaded pipe connector		Branch point				*) Vacuum gauge with analogue display
	Ball-and-socket joint		Bundle pipes				*) Vacuum gauge with digital display
	Spigot-and-socket joint		Port allowing sliding motion, with flange				Flow measurement
	Connection by taper ground joint		Linear motion feedthrough				

**Vacuum Measurement and Gauges**