

Graphic Symbols for Important Components Used in Vacuum Technology. (Extract from DIN 28 401 Std. Spec.)

Vacuum Pumps



Cryo pump



Diffusion pump



Getter pump



Piston vacuum pump



Roots vacuum pump



Rotary plunger vacuum pump



Suptter-ion pump



Diaphragm vacuum pump



Ejector vacuum pump



Liquid ring vacuum pump



Radial flow pump



Rotary piston vacuum pump (e.g. trochoid pump)



Sliding vane rotary vacuum pump



Sublimation (evaporation) pump



Turbine vacuum pump, general

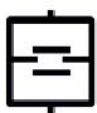


Turbomolecular pump



Vacuum pump, general

Accessories



Baffle, general



Cold trap, general



Cold trap with coolant reservoir



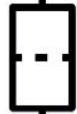
Cooled baffle



Condensate trap, general



Condensate trap with heat exchange (e.g. cooled)



Filtering apparatus, general



Gas filter, general



Sorption trap

Vacuum Chamber



Vacuum chamber

Isolating Devices



Butterfly valve



Gate valve



Isolating valve,
Straight-through valve



Non-return valve



Right-angle stop-cock



Right-angle valve



Safety shut-off valve



Shut-off device,
general



Stop-cock

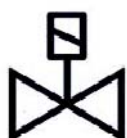


Three-way stop-cock

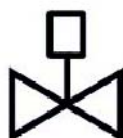
Valve Actuation



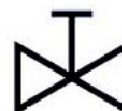
Electric motor operation



Electromagnetic operation



Hydraulic or pneumatic operation



Manual operation



Variable-leak valve



Weight-operated

Connections / Tubes



Branch-off point



Change in the cross-section of a duct



Clamped flange connection



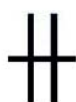
Connection of ducts



Cross-over of two ducts without connection



Flange connection bolted



Flange connection general



Flexible connection (e.g. bellows, flexible tubing)



Liner motion leadthrough, flange-mounted



Small flange connection



Threaded tube connection



Intersection of two ducts with connection
(Subject to international provision still to be agreed on, a contact point may be inserted for improved clearness)

Gauges



Vacuum gauge

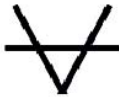


Vacuum gauge
control unit



Measurement of throughput
(This symbol must be used only in the position shown)

General Symbol



General symbol for vacuum
(This symbol must be used only in the position shown)