

# Datenblatt | Data sheet

## Glass materials

Material	Borosilicate glass	Soda-lime glass	Quartz glass
<b>Hardness Knoop</b>	420 - 520	465 - 585	420 - 520
<b>Density g/cm<sup>3</sup></b>	2,23	2,5	2,2
<b>Break load in traction MPa</b>	1900 - 2100	900 - 100	1050 - 1050
<b>Operating temperature °C</b>	0 - 200	0 - 200	0 - 1000
<b>Available with</b>			
<b>Diameter (mm)</b>	1 - 100	1 - 100	0,3 - 100
<b>Diameter (in)</b>	3/64 - 4	3/64 - 4	1/64 - 4
<b>Precision grade</b>	G10 - G2000	G50 - G2000	G10 - G100
<b>Surface</b>	polished / matt	polished / matt	poliert / matt
<b>Description</b>	High chemical and thermal stability. Electrically insulating, resistant to strong external loads and pressure fluctuations.	Chemically inert. Surfaces are optimally machinable.	Chemically inert. Surfaces are optimally machinable.
<b>Field of application</b>	Special/safety valves, metering pumps. Used in the pharmaceutical sector and photographic equipment.	Special bearings and valves, mixers, low-cost control valves, metering pumps, flow meters, measuring instruments, plastic bearings, optical fiber applications, ink cartridges, bottle caps, centrifugal jets, grinding processes. For art and decoration purposes	Due to the high softening temperature, thermal load capacity and temperature resistance, excellently suited for applications in the high-temperature range: special bearings and valves, mixing units, metering pumps, flow meters, measuring instruments, plastic bearings, applications made of optical fibers, ink cartridges, bottle caps, centrifugal jets, grinding processes, etc.
<b>Resistant to</b>	Excellent chemical resistance to water, most acids, salt solutions, organic solutions and halogens.	Strong alkaline solutions; Almost inert.	Acids and alkalis
<b>Unresistant to</b>	Moderate resistance to alkali solutions		

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