



Criteria	SOMA SINUS SODIAL® Sinus Pump	Peristaltic Pump
Design	Few components, 1 sinus rotor and 1 seal → robust	Hose is the main wear part, must be replaced regularly
Maintenance effort	Very low, maintenance possible within minutes	Hose replacement complex, frequent downtimes
Maintenance execution	All parts incl. mechanical seal can be replaced in place	Often requires complete pump removal for hose replacement
Maintenance costs	Low, hardly any wear parts	High, hoses are expensive and need frequent replacement
Service life	Very robust, long service life, lifetime warranty on housing & cover	Strongly dependent on hose material, significantly shorter service life
Product handling	Very gentle, almost shear-free → ideal for sensitive media	High stress due to hose compression
Handling of solids	Very good, up to 80 mm without damage	Limited, risk of clogging or hose damage
Pulsation	Almost pulsation-free, smooth product flow	Strong pulsation due to roller movement, pulsation dampener required
Energy efficiency	Up to 50% less energy demand, especially with highly viscous products	High energy consumption, as hose is constantly deformed
Viscosity range	Very wide, from 1 cps to 9,000,000 cps	Limited, not suitable for very highly viscous media
Temperature range	-30 °C to approx. 240 °C, pump housing heatable/coolable	Limited, usually max. 90–120 °C (depending on hose material)
Back pressure / discharge pressure	Suitable for pressures up to 40 bar	Limited discharge pressure, usually only 10–15 bar
Stainless steel execution	Fully stainless steel incl. bearing housing, no painted parts → hygienic	Many painted components, risk of paint flaking & corrosion
Hygiene & cleaning	CIP-/SIP-capable, easy manual cleaning possible	Cleaning often only possible by hose replacement
Operational safety	Very high operational safety, no risk of sudden part failure	Risk of hose rupture → high product loss, unplanned downtimes