



Energy-saving pumps PX modular system and LMP



- Huge output range, precise output adjustment:

	LMP	PX
Speed range	1400 – 3600 min ⁻¹	360 – 3600 min ⁻¹
Max. delivery pressure/head	120 bar	250 m
Max. delivery rate	570 l/min	170 l/min

- Up to 70 % energy savings
- High degree of operational safety and long pump service lives

**Spandau
pumpen®**

The innovative energy-saving pumps from the LMP and PX modular systems with integrated frequency converters are energy efficient, operationally safe and economically convincing alternatives to standard solutions:

Energy-saving pumps improve the process flows of machines and systems

- Optimized adaptation to the respective machining process due to speed control
- Gentle start-up due to programmable start-up time
- Low level of wear on rotating components
- Low-noise operation

Keep the entire machining process under control with a single energy-saving pump

- Delivery output can be adjusted precisely to the respective output requirements
- Universal controllability of pump speeds through all pressure ranges
- Independent of voltage fluctuations in the power supply

Use of frequency converters, a convincing technology

- Frequency converters operate with almost no loss and require absolutely no maintenance
- Use of standard motors with consistently high power factors across the entire control range ensure low power consumption
- Delivery pressure and delivery rate correspond exactly to the required target quantity in each case
- Economically convincing, energy efficient alternative to standard solutions

Sustainability criteria fulfilled

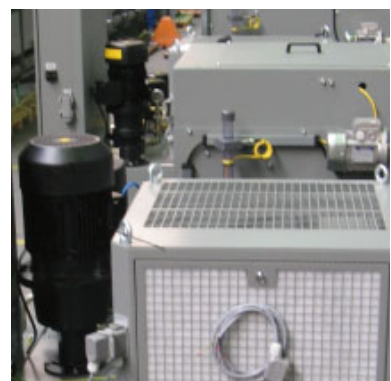
- Speed regulation guarantees effective delivery output and use
- Low heat input into the overall system and thus reduced expenses required for cooling
- Up to 70% energy savings can be achieved in practice

Designed for numerous usages

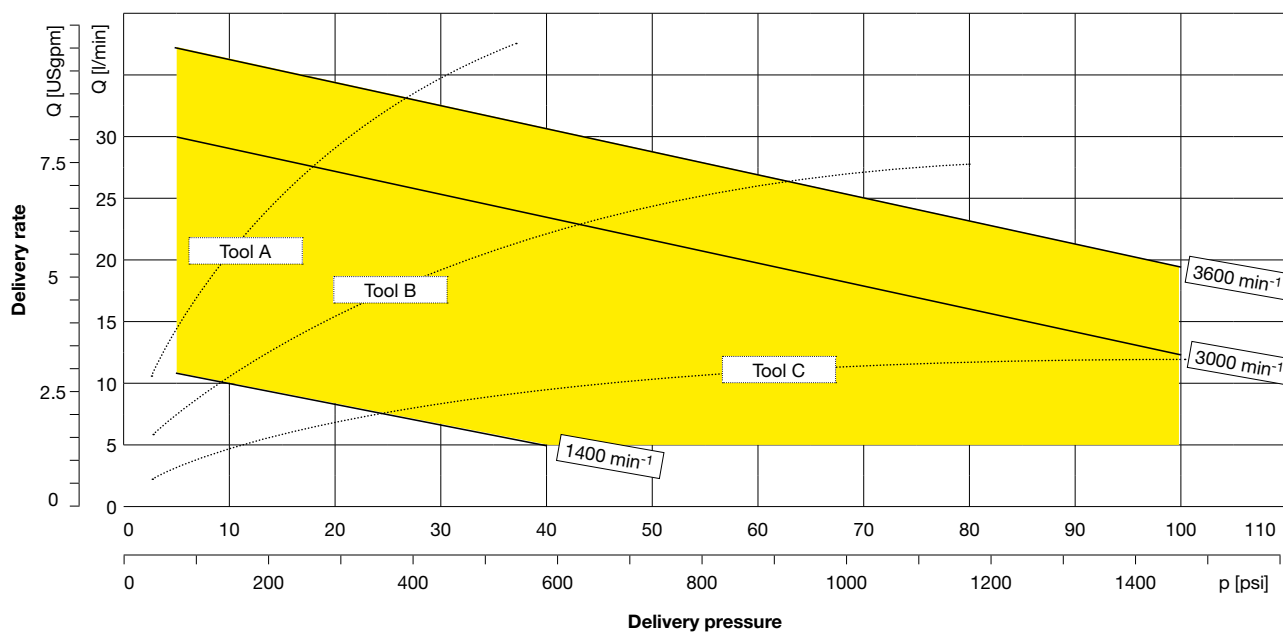
- Solution for original equipment manufacturers and retrofitters
- Machine tools
- Coolant supply and preparation systems
- and much more

Fast and easy start-up, smooth handling in continuous operation mode

- Fast and easy start-up of energy-saving pumps with integrated frequency converter
- Convenient integration in machine control
- No separate control cabinet required
- Continuously adjustable pressure regulation via analog signal
- Programmable pressure levels are controlled digitally
- High degree of operational safety and long pump service lives

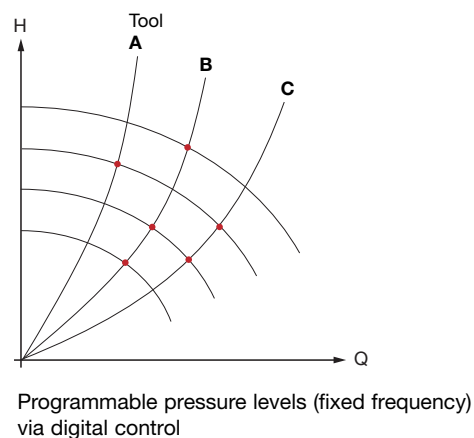
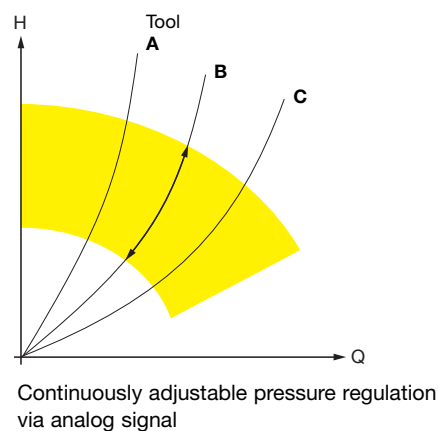
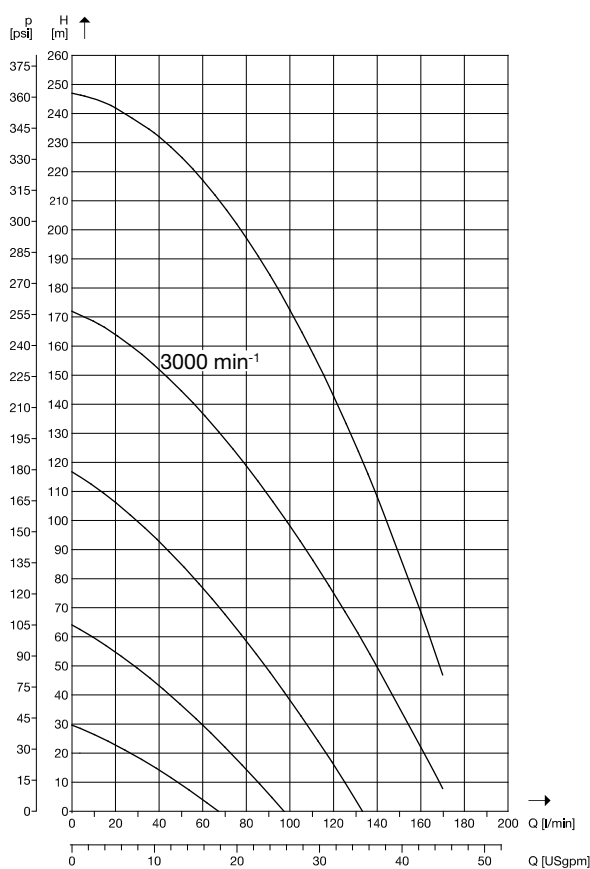


LMP energy-saving pumps with frequency converters



→ For further information about LMP energy-saving pumps see brochure 1-6064-EN

PX energy-saving pumps with frequency converters



→ For further information about PX energy-saving pumps see brochure 1-6062-EN