### **Energy-saving pumps** PX modular system and LMP



• Huge output range, precise output adjustment:

	LMP	PX
Speed range	1400 – 3600 min <sup>-1</sup>	360 – 3600 min <sup>-1</sup>
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



www.spandaupumpen.com

# 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 continous 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

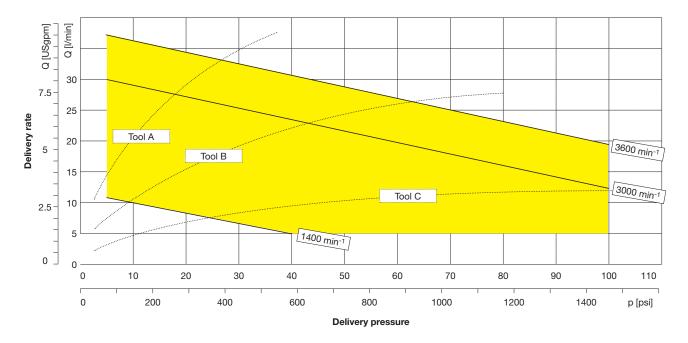




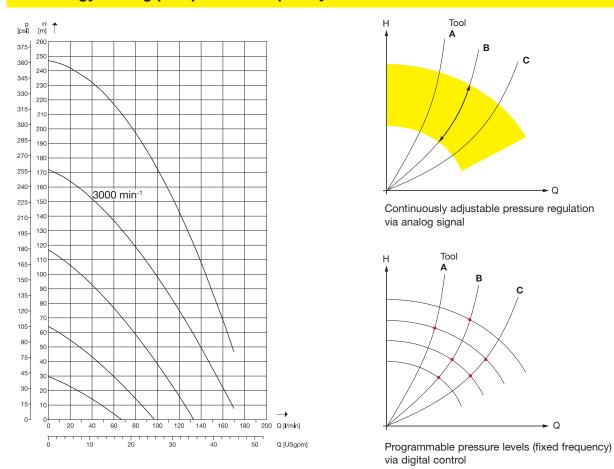




### LMP energy-saving pumps with frequency converters



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



PX energy-saving pumps with frequency converters

 $\rightarrow$  For further information about PX energy-saving pumps see brochure 1-6062-EN

The contents of this publication are the copyright of the publisher and may not be reproduced (even extracts) unless permission is granted. Every care has been taken to ensure the accuracy of the information contained in this publication but no liability can be accepted for any loss ordamage whether direct, indirect or consequential arising out of use of the information contained herein.

This brochure was presented by:

SKF Lubrication Systems Germany GmbH Product department Spandau Pumps Motzener Strasse 35/37 · 12277 Berlin · Germany PF 970444 · 12704 Berlin · Germany Tel. +49 (0)30 72002-0 · Fax +49 (0)30 72002-261 www.spandaupumpen.com