

# SPX40

## FEATURES

- ✓ Can run dry indefinitely without damage (no product in line)
- ✓ Highly suitable for handling abrasive, shear sensitive, viscous, high density products and corrosive liquids
- ✓ Smooth liquid passage without valves, dead corners or glands
- ✓ 100% positive flow (no slip)
- ✓ Accurate (+/- 1%) dosing (metering) capabilities
- ✓ Product pumped does not contact mechanical parts or seals
- ✓ Only wearing part is the hose
- ✓ Easy maintenance low cost, short downtime. Replacement of hose without dismantling pump
- ✓ Heavy duty bearings, greased for life
- ✓ Easily and completely cleanable
- ✓ Reversible rotation
- ✓ Suitable for high viscosities and densities
- ✓ No metal to metal contact
- ✓ 100% positive flow (no slip)
- ✓ Low noise level
- ✓ Safe use for explosive environments
- ✓ Designed to pump liquids containing particles (abrasion is no restriction)
- ✓ Permanent lubrication and cooling of pump element with specially compounded food grade lubricant
- ✓ Self priming to 95% vacuum (5 kPa.a)
- ✓ Two year comprehensive warranty
- ✓ Patented direct coupled design with rotor supporting integrated into the pump head and unique buffer zone to provide protective barrier between pump head and drive arrangement
- ✓ Ultra compact footprint with flanged helical gearing; no coupling or drive alignment required

## SPX Hose Pumps

Improve your process performance

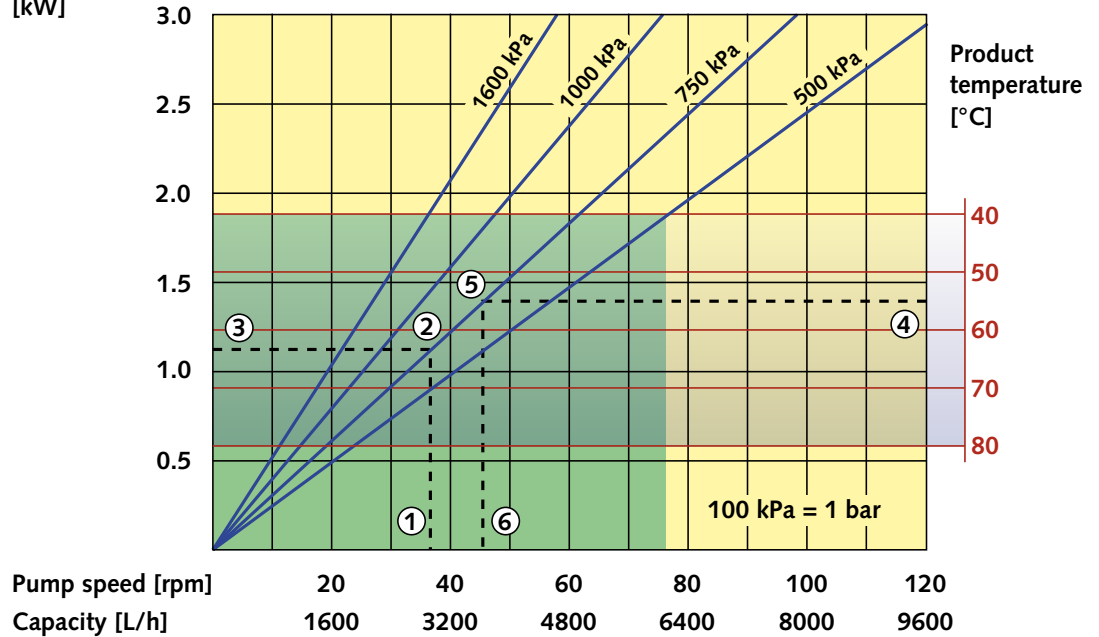


The perfect pump for the perfect application

### SPX40

- Maximum flow:  
**9,600 L/h**
- Capacity:  
**1,33 L/rev**
- Maximum discharge pressure:  
**1,600 kPa [16 bar]**
- Inner diameter pump element:  
**Ø 40 mm**
- Lubricant required:  
**5.0 litres**
- Minimum starting torque:  
**320 Nm**

### Required motor power [kW]



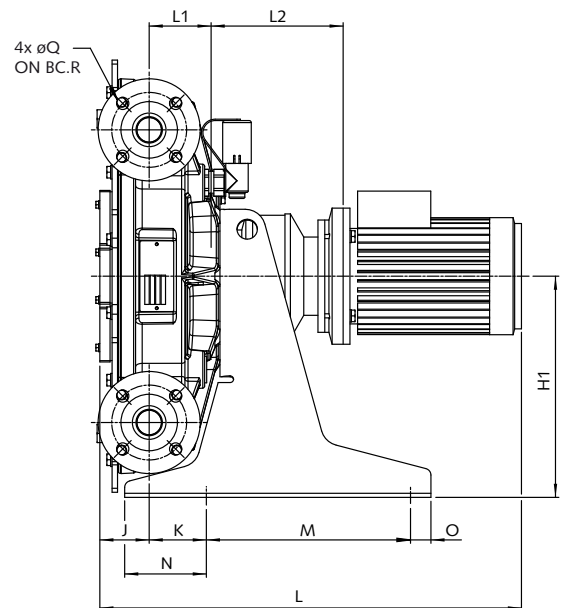
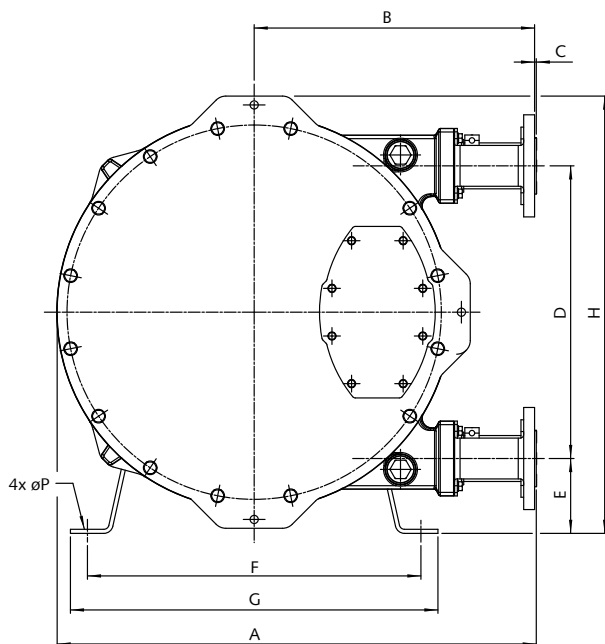
Continuous Duty Intermittent Duty Maximum 2 hours operation followed by minimum 1 hour stop

### HOW TO USE THE CURVES

1. Flow required indicates pump speed
2. Calculated discharge pressure
3. Net motor power required
4. Product temperature
5. Calculated discharge pressure
6. Maximum recommended pump speed

**Note:** The area of continuous operation diminishes with increased product temperatures.

For product temperatures > 40 °C, the area of continuous operation reduces to the corresponding red temperature line.



Type	A	B	C	D	E	F	G	H	H1	J	K	L <sub>max</sub>	L1	L2 <sub>max</sub>	M	N	O	P	Q	R
SPX40	705	412	2.5	430	110	490	540	643	325	73	84	906	91	301	300	120	30	Ø18	Ø18	110

All dimensions in [mm]

## TECHNICAL SPECIFICATIONS

**Supply:** up to 2.2 kW: 230/400 V - 3 phases - 50 Hz  
3.0 kW and larger: 400/690 V - 3 phases - 50 Hz

**Operating Speeds:**

**Minimum starting torque:** 320 Nm

**Product Temperature Range\*:** -10 °C up to 80 °C

**Ambient Temperature Range\*\*:** -20 °C up to 45 °C

**Hose Lubricant Required:** 5 litres

**Flow Range:** up to 9,600 L/hr

**Discharge Pressure:** up to 1,600 kPa [16 bar];

**Suction Pressure:** 9.5 metres lift to 200 kPa [2 bar]

**Available Hose Materials:** NR, NBR, EPDM, CSM (Hypalon®)

**Available flanges:** DIN, ASA, JIS: mild steel galvanised

DIN, ASA, JIS: AISI 316

**Available inserts:** AISI 316, PP, PVC, PVDF

**Optional High Level Hose Leak Sensor:** NO or NC: 1A max, 250V max, 50 VA max

## MATERIALS OF CONSTRUCTION

**Pumphousing:** Cast-iron

**Rotor:** Cast-iron

**Pressing shoes:** Aluminium or epoxy

**Cover:** Mild steel

**Brackets:** Mild steel, galvanized

**Support Frame:** Mild steel, galvanized

**Mounting material:** Mild steel, galvanized

**Hose Clamps:** AISI 316

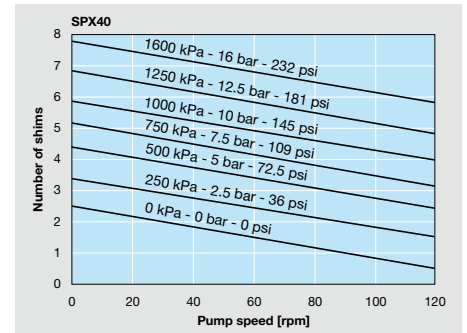
**Shaft:** Alloy Steel

**Seals:** Neoprene or Nitrile

**Pumphead Weight:** 180 kg

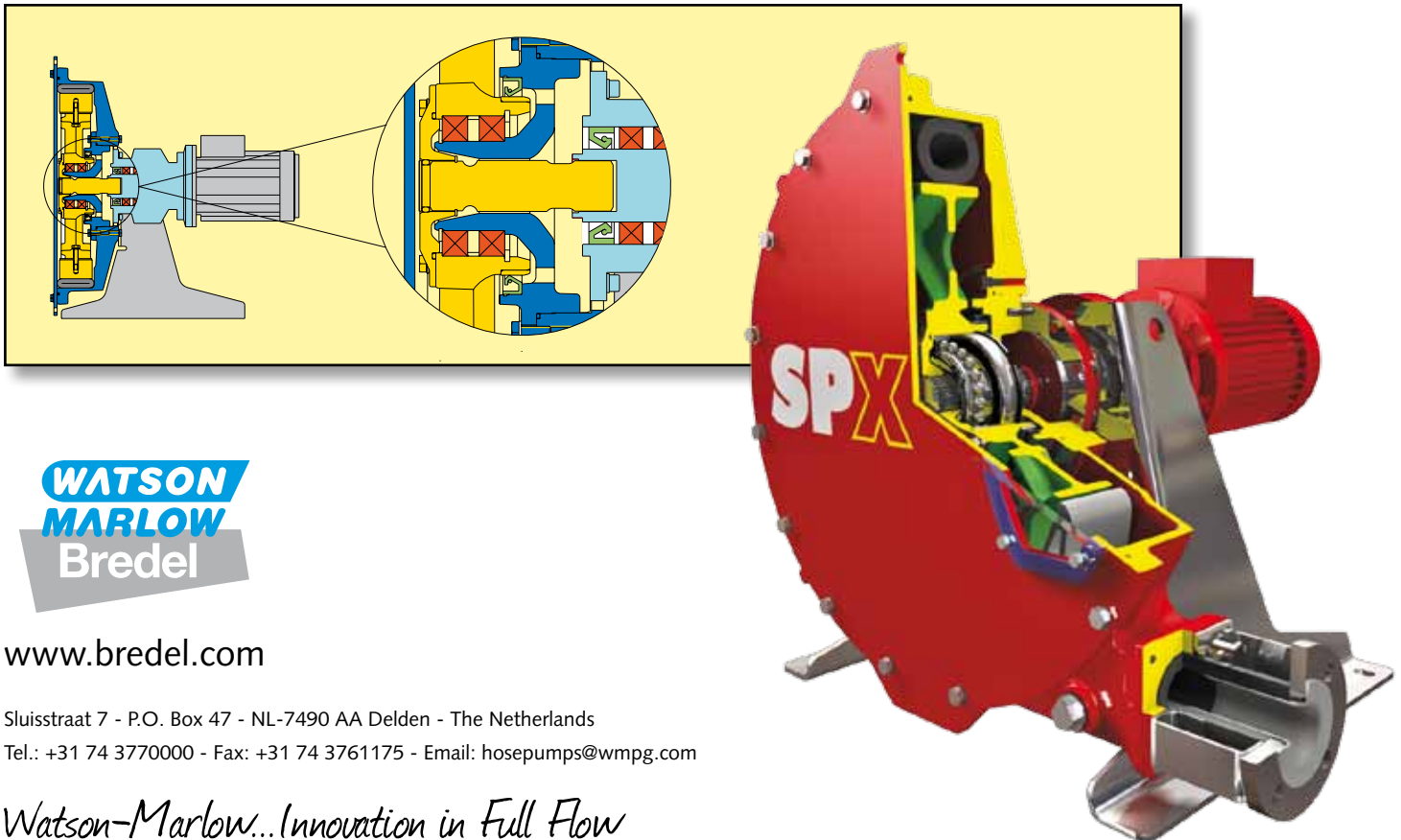
\* Please consult your Bredel representative for lower or higher temperature operation.

\*\* Allowable ambient temperature is based on pump capabilities and may be further limited by gearbox ambient capabilities.



## SHIMS SPECIFICATIONS.

When the temperatures are above 60 °C always use one shim less than indicated in the diagrams. Always round up the number of shims.



**WATSON  
MARLOW  
Bredel**

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*Watson-Marlow...Innovation in Full Flow*

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9001:2000