

# SP/50 C.I.P.

## FEATURES CLEANING-IN-PLACE HOSE PUMPS

- ✓ Recommended for sanitary processes or other applications requiring regular cleaning of the process lines
- ✓ EHEDG certified
- ✓ High fluid speed for pump and system C.I.P. cleaning
- ✓ Maximum sterilization temperature 120 °C
- ✓ Food approved NBR and Bioprene® pump element available with food grade lubricant (NSF registered)
- ✓ Stainless steel sanitary connectors available
- ✓ Flow rates up to 8,500 l/hour
- ✓ Discharge process pressures up to 16 bar
- ✓ Shoes on the rotor retract automatically for cleaning of pump hose inside
- ✓ Cam actuated electrically, pneumatically or manually
- ✓ 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
- ✓ Easy maintenance low cost, short downtime.
- ✓ Replacement of hose without dismantling pump
- ✓ Only wearing part is the hose
- ✓ Heavy duty bearings, greased for life
- ✓ Easily and completely cleanable
- ✓ Reversible rotation
- ✓ Suitable for high viscosities and densities
- ✓ No metal to metal contact
- ✓ Low noise level
- ✓ Designed to pump liquids containing particles (abrasion is no restriction)
- ✓ Self priming to 95% vacuum (5 kPa.a)

## SPX Hose Pumps

Improve your process performance

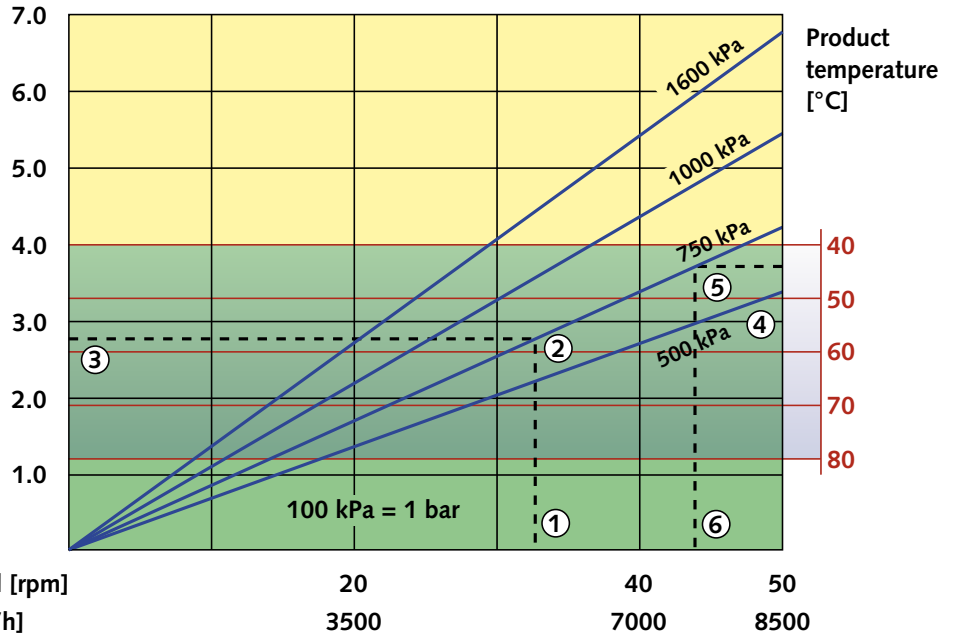


The perfect pump for the perfect application

### SP/50 C.I.P.

- Maximum flow:  
**8.500 L/h**
- Capacity:  
**2.92 L/rev**
- Maximum discharge pressure:  
**1.600 kPa [16 bar]**
- Inner diameter pump element:  
**Ø 50 mm**
- Required lubricant:  
**20 L**
- Minimum starting torque:  
**620 Nm**

### Required motor power [kW]



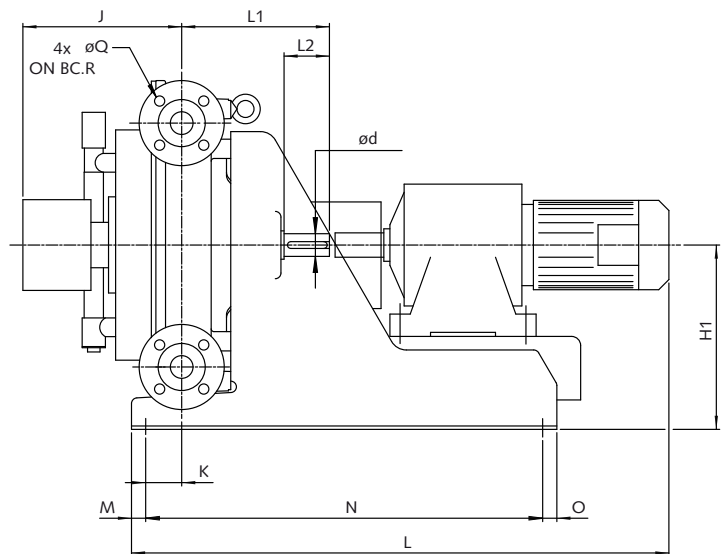
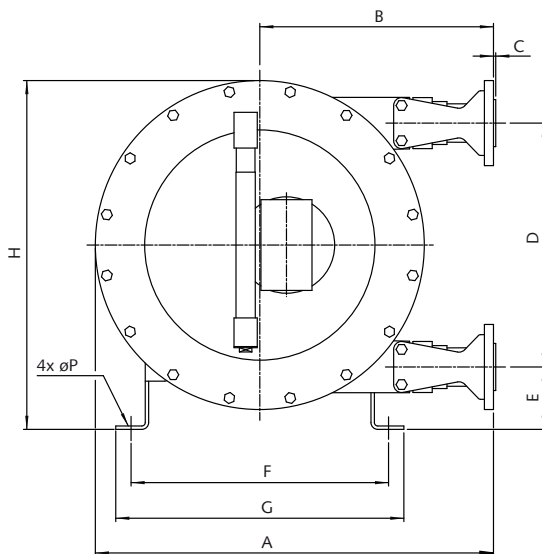
Continuous Duty Intermittent Duty Maximum 2 hours operation followed by minimum 1 hour stop

### 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	ANSI 316		PVC/PP/PVDF		D	Ødxl	E	F	G	H	H1	J <sub>max</sub>	K	L	L1	L2	M	N	O	Q	R
	A	B	C	C																	
SP/50	835	475	3	10	554	50k6x100	123	444	496	760	400	433	78	*	325	100	25	870	25	18	125

\*Depends on motorsize and type - All dimensions in [mm]

## TECHNICAL SPECIFICATIONS

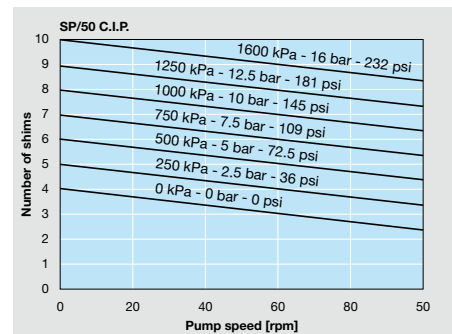
Supply:	230/400 V - 3 phases - 50 Hz
Operating Speeds:	max. 7.5 bar: up to 50 rpm continuous max. 16 bar: intermittent up to 50 rpm
Fluid Temperature Range*:	NBR pump element: -10 °C up to 80 °C Bioprene® pump element: -20 °C up to 60 °C
Ambient Temperature Range**:	-20 °C up to 45 °C
Hose Lubricant Required:	20 litres
Discharge Pressure:	up to 1,600 kPa [16 bar]
Hose Materials:	NBR and Bioprene®
Flanges:	DIN galvanized steel/AISI 316
Inserts:	Sanitary connections (Tri-clamp, DIN 11851, DIN 11864, SMS, IDF, RJT), AISI 316, PVC, PP, PVDF

## MATERIALS OF CONSTRUCTION

Pumphead:	Cast Iron
Rotor:	Cast Iron
Cover:	Cast Iron
Brackets:	AISI 316
Pressing Shoes:	Aluminium
Support Frame:	Steel
Fasteners:	AISI 316
Hose Clamps:	AISI 316
Shaft:	Alloy Steel
Seals:	NBR
Pump head Weight:	265 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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NEN-EN-ISO  
9001:2000