

# SPX15 DuCoNite®

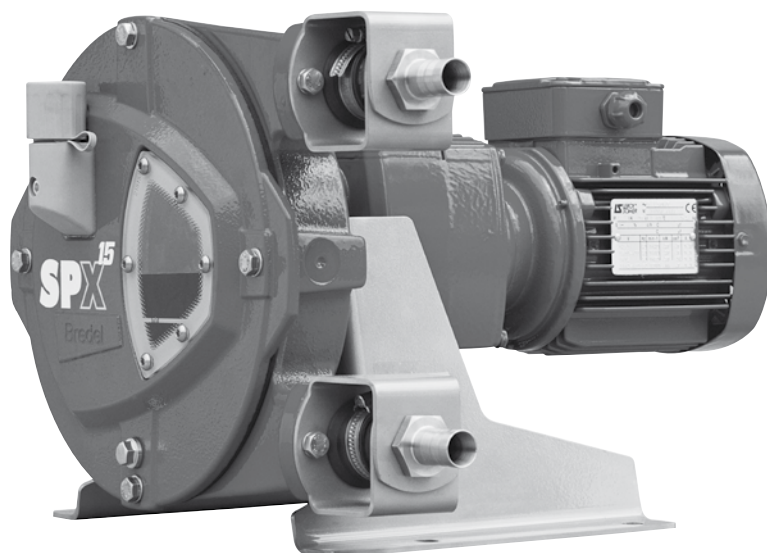


## FEATURES

- ✓ 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
- ✓ Possibility of choice of high or low pressure rotor greatly enhances hose life
- ✓ 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

# SPX15 DuCoNite

• Maximum flow:  
525 L/h

• Capacity:  
0.083 L/rev

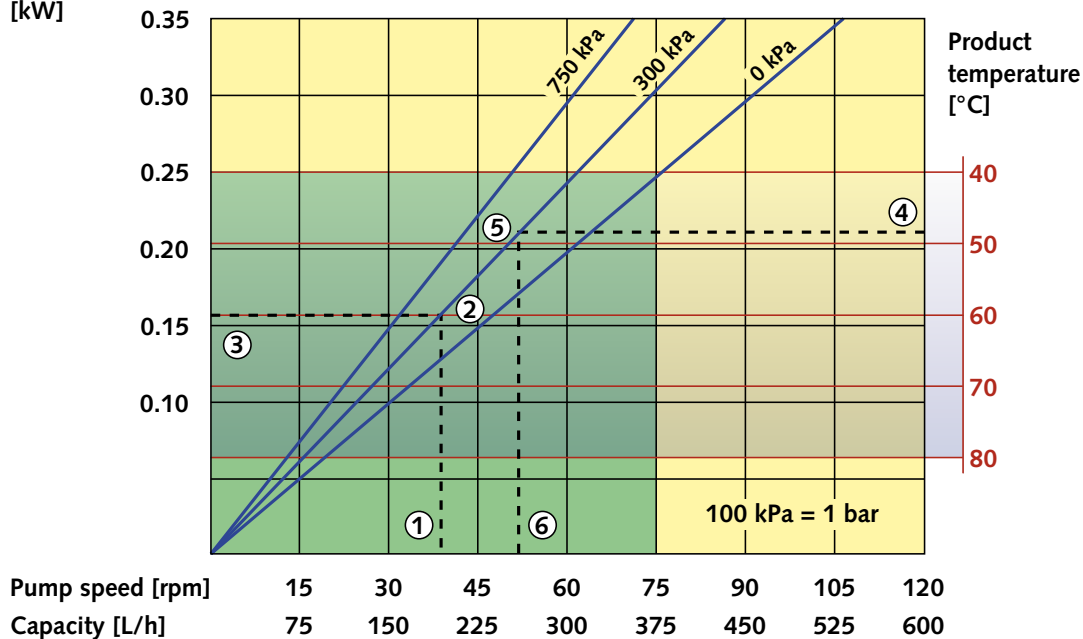
• Maximum discharge pressure:  
750 kPa [7.5 bar]

• Inner diameter pump element:  
Ø 15 mm

• Lubricant required:  
0.5 litres

• Minimum starting torque:  
60 Nm

## Required motor power [kW]



Continuous Duty Intermittent Duty

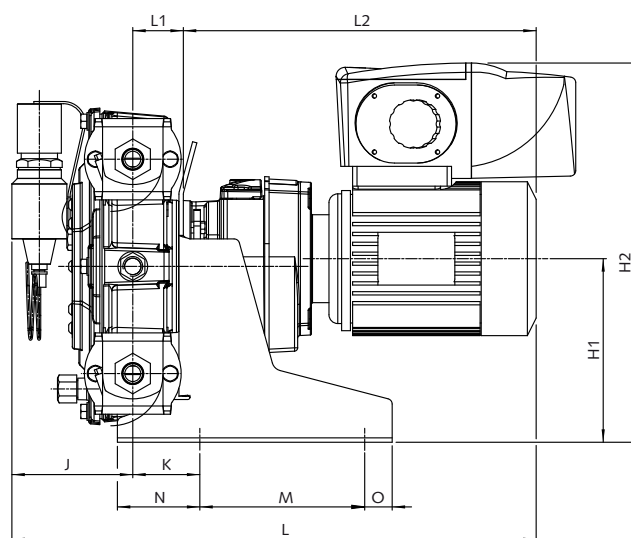
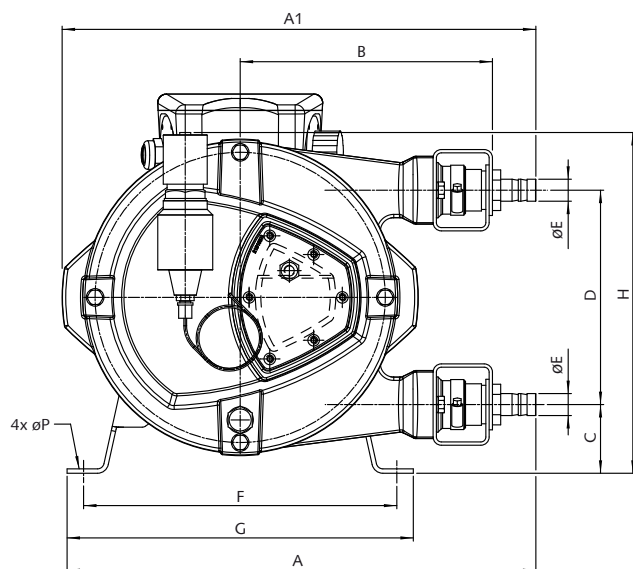
Maximum 2 hours operation followed by minimum 1 hour stop

## 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   | A1  | B   | C  | D   | E   | F   | G   | H   | H1  | H2 max | J  | K  | L max | L1 | L2 max | M   | N  | O  | P   |
|-----------------|-----|-----|-----|----|-----|-----|-----|-----|-----|-----|--------|----|----|-------|----|--------|-----|----|----|-----|
| SPX15 DuCoNite® | 427 | 431 | 230 | 63 | 195 | Ø20 | 285 | 315 | 304 | 167 | 359    | 82 | 61 | 525   | 46 | 398    | 150 | 75 | 25 | Ø12 |

All dimensions in [mm]

## TECHNICAL SPECIFICATIONS

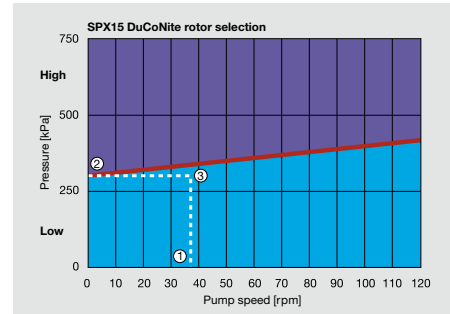
|   |   |
|---|---|
| Supply:                                 | 230/400 V - 3 phases - 50 Hz  |
| Operating Speeds:                       | up to 75 rpm continuous; up to 110 rpm intermittent                                 |
| Minimum starting torque:                | 60 Nm   |
| Product Temperature Range*:             | -10 °C up to 80 °C  |
| Ambient Temperature Range**:            | -20 °C up to 45 °C  |
| Hose Lubricant Required:                | 0.5 litre   |
| Flow Range:                             | up to 525 L/hr  |
| Discharge Pressure:                     | high pressure rotor: up to 750 kPa [7.5 bar]<br>low pressure rotor: 400 kPa [4 bar] |
| Suction Pressure:                       | 9.5 metre lift to 200 kPa [2 bar]   |
| Available Hose Materials:               | EPDM, CSM (Hypalon®)  |
| Available pump element nipple assembly: | PTFE, PVDF, AISI 316  |
| Available flanges:                      | ANSA AISI 316, DIN AISI 316, DIN/ ANSI Titanium<br>ASA AISI 316                     |
| Available inserts:                      | PP, AISI 316, Titanium threaded nipple (BSP) AISI 316                               |
| Optional High Level Hose Leak Sensor:   | NO or NC: 1A max, 250V max, 50 VA max   |

## MATERIALS OF CONSTRUCTION

|                            |                |
|----------------------------|----------------|
| Pumphousing:               | Cast-iron      |
| Rotor with Integral Shoes: | Cast-iron      |
| Bearing Hub:               | Not applicable |
| Cover:                     | Cast-iron      |
| Brackets:                  | AISI 316       |
| Support Frame:             | AISI 316       |
| Fasteners:                 | AISI 316       |
| Hose Clamps:               | AISI 316       |
| Shaft:                     | Alloy Steel    |
| Seals:                     | VITON and EPDM |
| Pumphead Weight:           | 18,5 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.



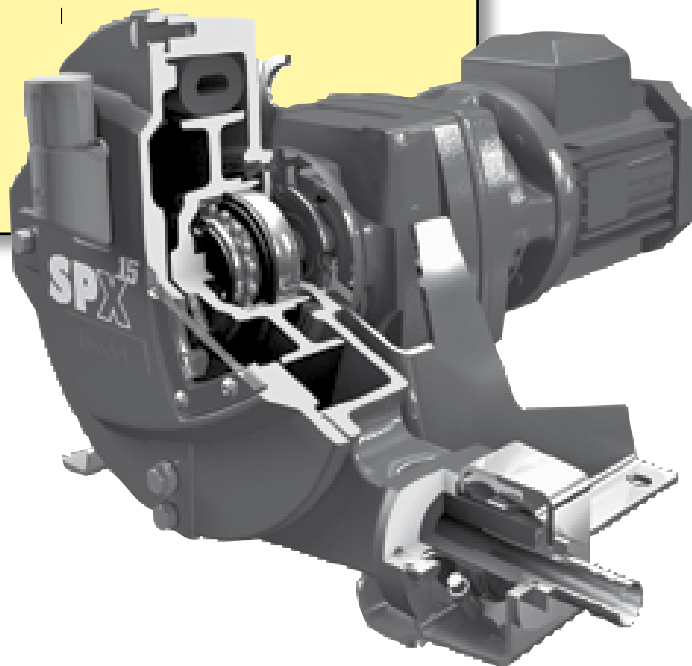
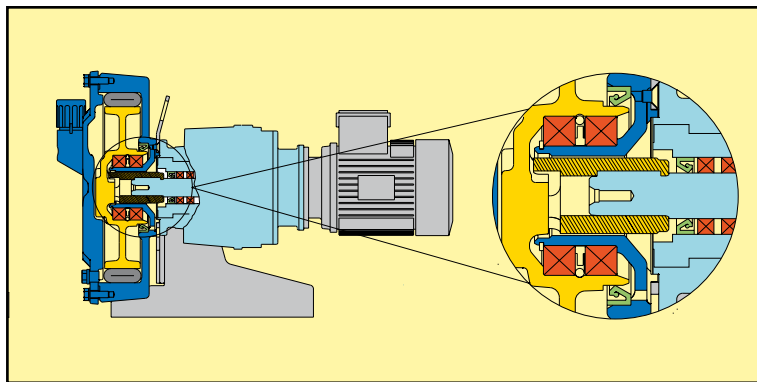
## SELECTION OF ROTOR SIZE.

Determine operating point (rpm/discharge pressure).

- 1 Required pump speed;
- 2 Calculated discharge pressure;
- 3 When operating below the red line the Low pressure rotor is used. When operating above the red line the High pressure rotor is used.

## REMARK

With a variable speed drive and operating in both areas, the High pressure rotor should be used.



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

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