

# Bredel 65, Bredel 80 and Bredel 100 hose pumps

# Bredel

SERIES  
Bredel Hose Pumps

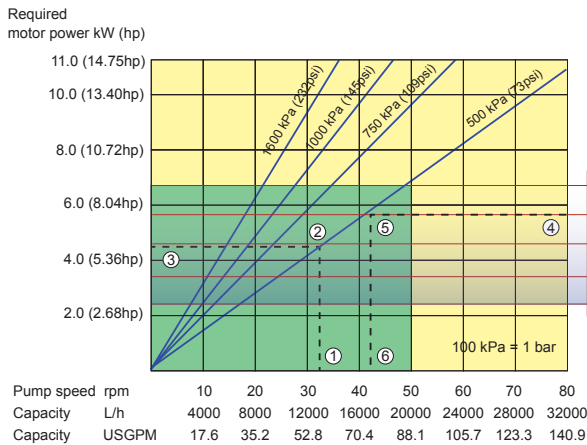
## FEATURES AND BENEFITS

- Sealless, valveless pumping principle for reliable, low maintenance metering, dosing and transfer
- Flow rates up to 53,000 L/hr (233 USGPM) and pressures up to 16bar (232 psi)
- Dry running and self-priming, with up to 9.5 meters (30 foot) suction lift capability
- Robust design for aggressive chemicals or abrasives
- Compact direct coupled design to maximise gearbox life
- Simple hose change decreases cost of ownership, downtime and need for parts inventory

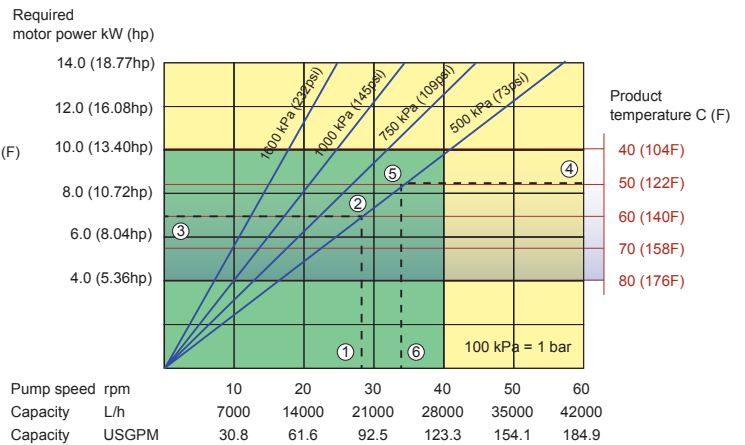


## PERFORMANCE

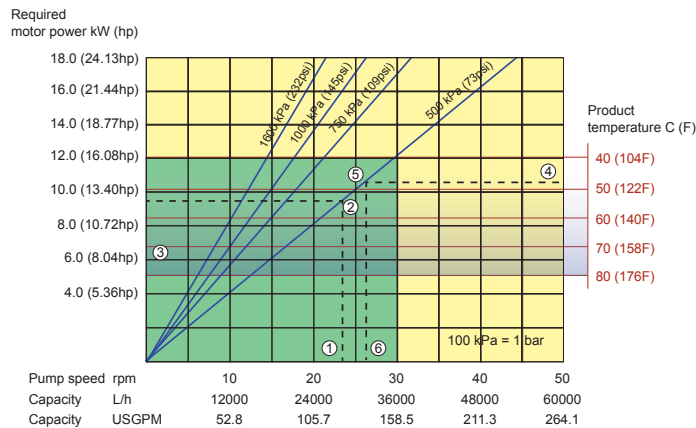
### Bredel 65



### Bredel 80



### Bredel 100



- Continuous Duty
- Intermittent Duty\*

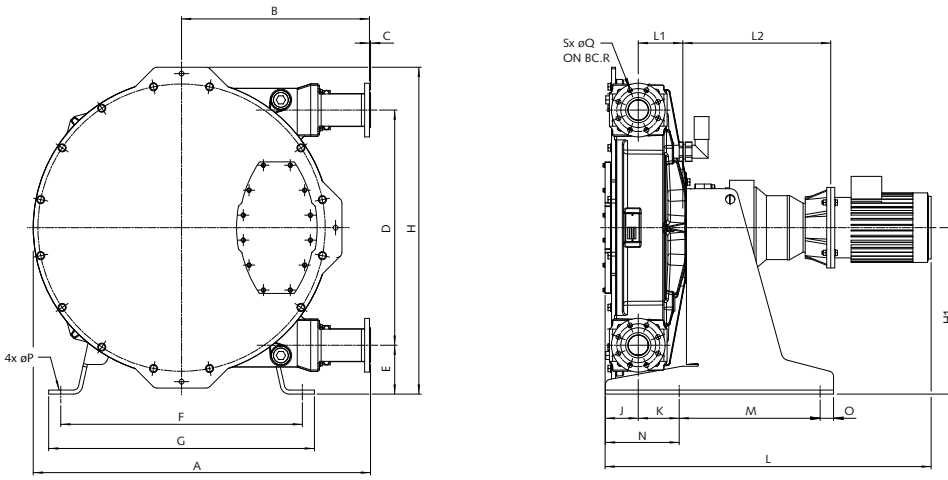
\* Maximum 2 hours operation followed by minimum 1 hour stop

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 >40C (104F), the area of continuous operation is limited by the corresponding red temperature line.

## DIMENSIONS



Connector sizes	ANSI 150#	EN DIN	JIS
Bredel 65	2.5"	65mm	65mm
Bredel 80	3"	80mm	80mm
Bredel 100	4"	100mm	100mm

Type	A	B	C	D	E	F	G	H	H1	J	K	Lmax	L1	L2max	M	N	O	ØP	ØQ	R	S
Bredel 65 (mm)	1059	580	3	746	152	680	740	1036	525	104	137	1172	141	486	415	220	50	18	18	145	4
Bredel 65 (inches)	41.7	22.8	0.12	29.4	6	26.8	29.1	40.8	20.7	4.1	5.4	46.1	5.6	19.1	16.3	8.7	2	0.71	0.71	5.7	0.16
Bredel 80 (mm)	1257	700	4	876	182	900	990	1218	620	124	153	1351	166	582	525	275	50	22	18	160	8
Bredel 80 (inches)	49.5	27.6	0.16	34.5	7.2	35.4	39	48	24.4	4.9	6	53.2	6.5	22.9	20.7	10.8	2	0.9	0.71	6.3	0.31
Bredel 100 (mm)	1468	813	3	1042	199	1050	1140	1415	720	151	173	1392	200	489	540	310	50	22	18	180	8
Bredel 100 (inches)	57.8	32	0.12	41	7.8	41.3	44.9	55.7	28.3	5.9	6.8	54.8	7.9	19.3	21.3	12.2	2	0.9	0.71	7.1	0.31

## TECHNICAL SPECIFICATIONS

	Bredel 65	Bredel 80	Bredel 100
Flow range	up to 32,000 L/hr (140.9 USGPM)	up to 40,000 L/hr (176.1 USGPM)	up to 53,000 L/hr (233.4 USGPM)
Capacity	6.7 L/rev (1.77 G/rev)	11.7 L/rev (3.09 G/rev)	20 L/rev (5.28 G/rev)
Minimum starting torque	1,150Nm (10,178 inch-lbs)	2,000Nm (17,701 inch-lbs)	3,100Nm (27,437 inch-lbs)
Hose lubricant required	20 litres (5.28 USG)	40 litres (10.57 USG)	60 litres (15.85 USG)
Pumphead weight	398kg (877 lbs)	672kg (1482 lbs)	1032kg (2275 lbs)
Max inlet pressure	2.0bar abs (30 psia)	1.5bar abs (23 psia)	
<b>Common features</b>			
Suction pressure	0.05bar abs (0.73 psia)		
Maximum discharge pressure	1,600 kPa (16 bar) (232psi)		
Product temperature range*	-10C up to 80C (14F up to 176F)		
Ambient temperature range**	-20C up to 45C (-4F up to 113F)		

\*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

## MATERIALS OF CONSTRUCTION

Components	Materials
Pump housing	Cast iron
Rotor	Cast iron
Pressing shoes	Aluminium or epoxy
Cover	Mild steel
Brackets	Galvanized steel or AISI 316
Flanges	Galvanized steel or AISI 316
Inserts	AISI 316, PVC, PP, PVDF
Support frame	Galvanized steel or AISI 316
Hose clamps	Galvanized steel or AISI 316
Shaft	Alloy steel
Seals	Neoprene or nitrile

\*\*\*NR Endurance available for Bredel 65

Options	Features
Available hose materials	NR Endurance***, NBR, EPDM, CSM, NBR for food, F-NBR
Available flanges	ANSI, EN DIN, JIS
Available inserts	Bredel standard or with sanitary connectors
High level float switch	Max. 2A, 230 V AC/DC, max. 40VA
Low level float switch	ATEX: max. 50 mA, max. 28V AC/DC
Integrated FI for stand alone speed control	Factory programmable from 12-80 Hz
Revolution counter	For maintenance intervals and /or metering
Vacuum assist	For difficult suction conditions and high viscosity fluids
Cover lifting device	For one-man pump maintenance

The information contained in this document is believed to be correct at the time of publication, but Watson-Marlow Bredel BV accepts no liability for any error it contains, and reserves the right to alter specifications without prior notice. All mentioned values in this document are values under controlled circumstances at our test bed. Actual flow rates achieved may vary because of changes in temperature, viscosity, inlet and discharge pressures and/or system configuration. APEX, DuCoNite®, Bioprene® and Bredel are registered trademarks.

**Bredel**  
Hose Pumps

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