

APEX10, APEX15 and APEX20 hose pumps

APEX SERIES

Bredel Hose Pumps

FEATURES AND BENEFITS

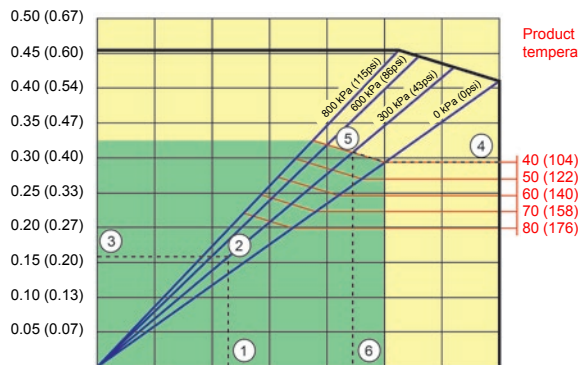
- Seal less, valveless pumping principle for reliable, low maintenance chemical metering
- Single compact pump is configurable to accept three hose element sizes to future-proof your process
- Compact direct coupled design minimises loading on gear motor
- Flow rates from 2.8 to 1,200 litre/hr (0.74 to 317 USGPH) and pressure up to 8 bar (116 psi)
- Long life hose element provides significantly reduced maintenance
- Decreased cost of ownership due to single component change, low inventory stocking



PERFORMANCE

Required motor power kW (hp)

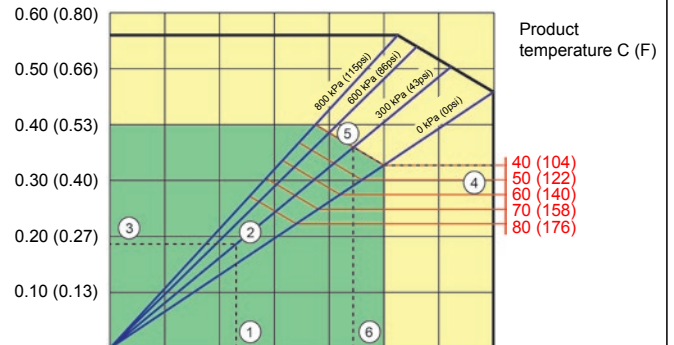
APEX10



Pump speed rpm	20	40	60	80	100	120	140
Capacity L/h	55	110	165	220	275	330	385
Capacity USGPM	0.24	0.48	0.73	0.97	1.2	1.5	1.7

Required motor power kW (hp)

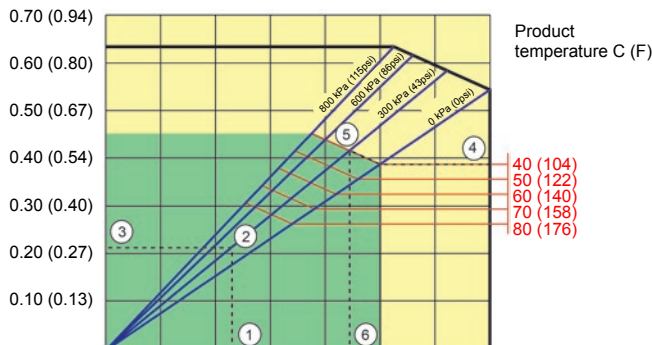
APEX15



Pump speed rpm	20	40	60	80	100	120	140
Capacity L/h	110	220	330	440	550	660	770
Capacity USGPM	0.48	0.96	1.45	1.9	2.4	2.9	3.4

Required motor power kW (hp)

APEX20



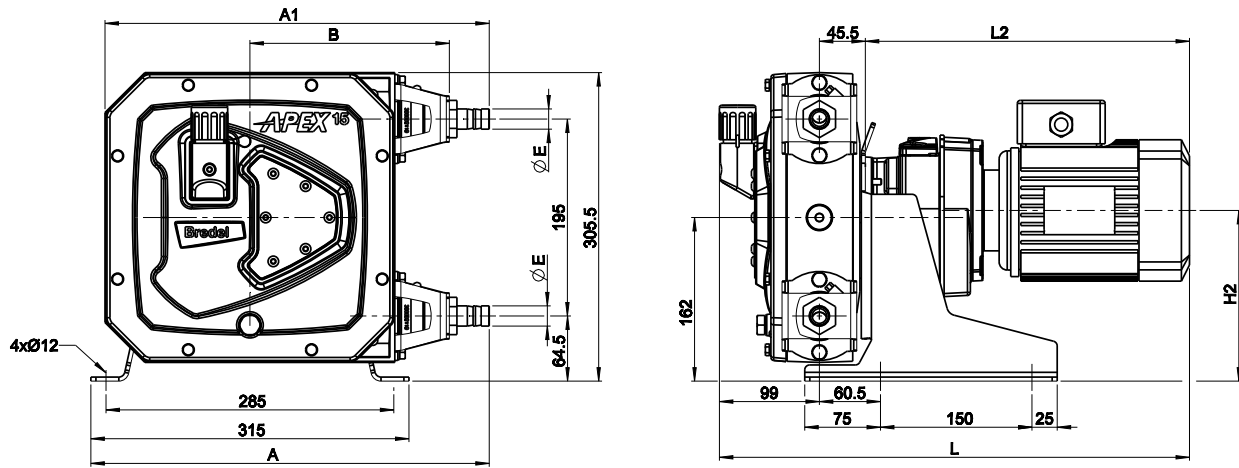
Pump speed rpm	20	40	60	80	100	120	140
Capacity L/h	175	350	525	700	875	1050	1225
Capacity USGPM	0.8	1.5	2.3	3.1	3.8	4.6	5.3

- Continuous Duty
- Intermittent Duty

* Maximum 3 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

DIMENSIONS



	A	A1	B	E	H2max	Lmax	L2max
APEX10 (mm)	388.5	374.5	197.5	Ø16	170	545.5	401
APEX10 (inches)	15.3	17.7	7.8	1/2" NPT	6.7	18.7	14.5
APEX15/20 (mm)	394.5	380.5	197.5	Ø20	170	545.5	401
APEX15/20 (inches)	15.5	15	7.8	3/4" NPT	6.7	18.7	14.5

Connector sizes	MNPT	EN DIN	JIS
APEX10	0.5"	10mm	10mm
APEX15	0.75"	20mm	20mm
APEX20	0.75"	20mm	20mm

TECHNICAL SPECIFICATION

	APEX10	APEX15	APEX20
Flow range continuous	2.8 to 280 L/hr (0.74 to 74 USGPH)	5.5 - 550 L/hr (1.45 to 145 USGPH)	8.7 - 870 L/hr (2.29 to 230 USGPH)
Flow range intermittent	2.8 - 390 L/hr (0.74 to 103 USGPH)	5.5 - 770 L/hr (1.45 to 203 USGPH)	8.7 - 1200 L/hr (2.29 to 317 USGPH)
Capacity	0.046 L/rev (0.012 G/rev)	0.091 L/rev (0.024 G/rev)	0.145 L/rev (0.038 G/rev)
Minimum starting torque	48 Nm (425 inch-lbs)	57 Nm (505 inch-lbs)	57 Nm (505 inch-lbs)
Inner diameter pump element	Ø 10 mm	Ø 15 mm	Ø 20 mm
Common features			
Maximum discharge pressure	800 kPa [8 bar] (116 psi)		
Supply	230/400 V - 3 phases - 50/60Hz fixed speed or inverter duty (other voltages available upon request)		
Continuous operating speed	up to 100 rpm		
Intermittent operating speed	up to 140 rpm		
Product temperature range	- 10C up to 80C (14F up to 176F)		
Ambient temperature range	- 20C up to 45C (-4F up to 113F)		
Hose lubricant required	1 L (0.26 US gallons)		
Weight of complete pumphead	16 kg (35 lbs)		
Typical weight of a complete pump	30 kg (66.13 lbs) (will vary on type of motor and gearbox used)		

MATERIALS OF CONSTRUCTION

	APEX10/15/20
Pump housing	Die cast aluminium (RAL 3011)
Pump rotor with integral shoes	Cast iron
Cover	Die cast aluminium
Brackets	AISI 316
Pump support	Galvanized steel
Fasteners	AISI 316
Hose clamps	AISI 316
Dynamic seal	NBR
Cover window	PMMA
Cover seal	EPDM
Hose connection sealing bush	EPDM

Options	APEX10/15/20
Available hose materials	NR, NBR, EPDM, CSM, NBR for food, F-NBR
Available rotors	Low pressure rotor (0-4 bar / 0-58 psi), Medium pressure rotor (0-8 bar / 0-115 psi)
Available port configurations	Ports left (position 1), right (position 2), up (position 3) and down (position 4). Standard configuration position 2
Available fitting types	1/2" NPT or ANSI Flange (APEX10), 3/4" NPT or ANSI Flange (APEX 15/20), hose barb or tri-clamp style
Integrated FI for stand alone speed control	Factory programmable from 12-80 Hz
Revolution counter	For maintenance and /or metering
Insert combinations	
Hose nipple	AISI 316, PTFE, PVDF
Threaded nipple	AISI 316 BSP, AISI 316 NPT, PP NPT, PVC NPT, AISI 316 DIN 11851
Threaded nipple and flange (+nut) assembly	AISI 316 BSP nipple and Flange DIN threaded AISI 316, AISI 316 BSP nipple and Flange ASA threaded AISI 316
Flange and bracket assembly	Flange DIN AISI 316 + PP insert, Flange ASA AISI 316 + PP insert, Flange DIN AISI 316 + AISI 316 insert, Flange ASA AISI 316 + AISI 316 insert

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Hose Pumps

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