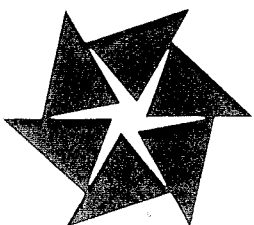
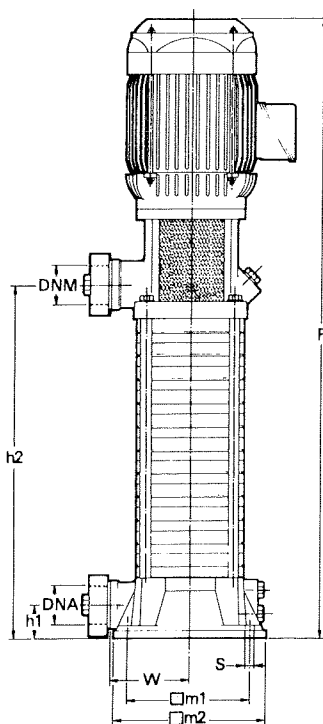


# **Type CV Vertical Multistage Pumps**



**For Hot and Cold Water Boosting-  
High Pressure Wash-down-  
Boiler Feed, etc.**

## Dimensions



Single phase pump type	Three phase pump type	Motor kW	Dimensions in mm							DNA BSP	DNM BSP	Weight kg
			F	h1	h2	□m1	□m2	S	W			
CVM 50 - 2/B	CV 50 - 2/B	0.37	403	33	144	130	162	Ø10	85	1"	1"	14.5
CVM 50 - 3/B	CV 50 - 3/B	0.37	422	33	163	130	162	Ø10	85	1"	1"	15
CVM 50 - 4/B	CV 50 - 4/B	0.55	441	33	182	130	162	Ø10	85	1"	1"	16.5
CVM 50 - 5/B	CV 50 - 5/B	0.55	460	33	201	130	162	Ø10	85	1"	1"	17
CVM 50 - 7/B	CV 50 - 7/B	0.75	579	33	239	130	162	Ø10	85	1"	1"	19.5
CVM 50 - 10/B	CV 50 - 10/B	1.1	636	33	296	130	162	Ø10	85	1"	1"	22.5
	CV 50 - 12/B	1.5	727	33	372	130	162	Ø10	85	1"	1"	28
	CV 50 - 14/B	1.5	765	33	410	130	162	Ø10	85	1"	1"	29.5
	CV 50 - 16/B	2.2	803	33	448	130	162	Ø10	85	1"	1"	33.5
	CV 50 - 18/B	2.2	841	33	486	130	162	Ø10	85	1"	1"	34.5
	CV 50 - 20/B	2.2	879	33	524	130	162	Ø10	85	1"	1"	35.5
CVM 90 - 2/B	CV 90 - 2/B	0.37	443	37	172	145	190	Ø13	100	1 1/4"	1 1/4"	17
CVM 90 - 3/B	CV 90 - 3/B	0.55	469	37	198	145	190	Ø13	100	1 1/4"	1 1/4"	19.5
CVM 90 - 4/B	CV 90 - 4/B	0.75	556	37	224	145	190	Ø13	100	1 1/4"	1 1/4"	21.5
CVM 90 - 5/B	CV 90 - 5/B	1.1	582	37	250	145	190	Ø13	100	1 1/4"	1 1/4"	23.5
CVM 90 - 6/B	CV 90 - 6/B	1.1	608	37	276	145	190	Ø13	100	1 1/4"	1 1/4"	24
	CV 90 - 8/B	1.5	695	37	328	145	190	Ø13	100	1 1/4"	1 1/4"	30
	CV 90 - 10/B	2.2	747	37	380	145	190	Ø13	100	1 1/4"	1 1/4"	34
	CV 90 - 12/B	2.2	851	37	484	145	190	Ø13	100	1 1/4"	1 1/4"	35
	CV 90 - 14/B	3	945	37	536	145	190	Ø13	100	1 1/4"	1 1/4"	40
	CV 90 - 16/B	3	997	37	588	145	190	Ø13	100	1 1/4"	1 1/4"	41
	CV 90 - 18/B	4	1049	37	640	145	190	Ø13	100	1 1/4"	1 1/4"	49
	CV 90 - 20/B	4	1115	37	692	145	190	Ø13	100	1 1/4"	1 1/4"	50
	CV 150 - 2/B	1.1	545	48	205	180	225	Ø15	117	2"	2"	33
	CV 150 - 3/B	1.1	579	48	239	180	225	Ø15	117	2"	2"	35
	CV 150 - 4/B	1.5	644	48	273	180	225	Ø15	117	2"	2"	41
	CV 150 - 5/B	2.2	678	48	307	180	225	Ø15	117	2"	2"	44.5
	CV 150 - 6/B	2.2	712	48	341	180	225	Ø15	117	2"	2"	45.5
	CV 150 - 8/B	3	823	48	409	180	225	Ø15	117	2"	2"	50
	CV 150 - 10/B	4	972	48	545	180	225	Ø15	117	2"	2"	58
	CV 150 - 12/B	4	1040	48	613	180	225	Ø15	117	2"	2"	59.5
	CV 150 - 14/B	5.5	1169	48	681	180	225	Ø15	117	2"	2"	79
	CV 150 - 16/B	5.5	1237	48	749	180	225	Ø15	117	2"	2"	80.5
	CV 150 - 18/B	7.5	1305	48	817	180	225	Ø15	117	2"	2"	82
	CV 150 - 20/B	7.5	1373	48	885	180	225	Ø15	117	2"	2"	95

## CV Vertical Multistage Pumps

These pumps are the result of well-proven methods in the technology of stainless steel pressings and welding.

Their construction is a high technology development that assures maximum efficiency in performance and durability.

Pumps are rated for continuous service and run very quietly under any operating conditions.

## Applications

Hot and cold water boosting—boiler feed—high pressure washdown.

## Material Specifications

Shaft, conveyors, diffusers, impellers, tie rods and the stage external elements are manufactured from stainless steel.

Top and bottom pump bodies are manufactured from

grey cast iron.

Bottom bearings are manufactured from phosphor-bronze and intermediate guide bearings from tungsten carbide/ceramic.

Mechanical seals—self-adjusting type with carbon rotating face running against a stationary ceramic seat.

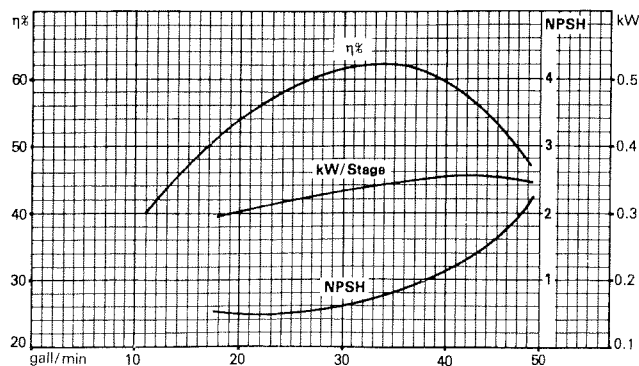
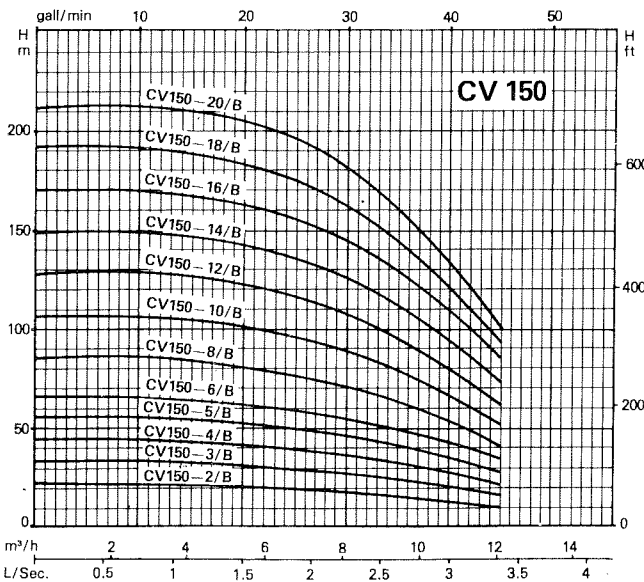
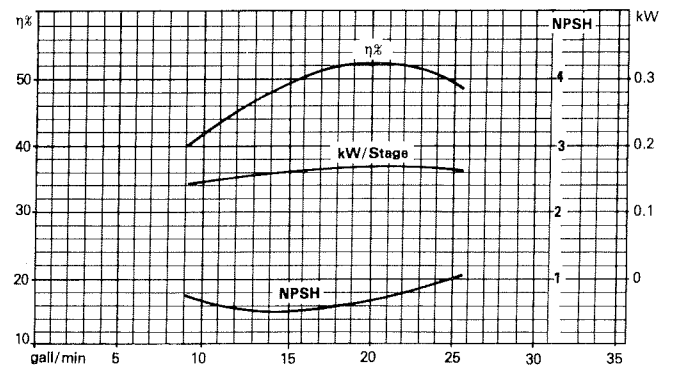
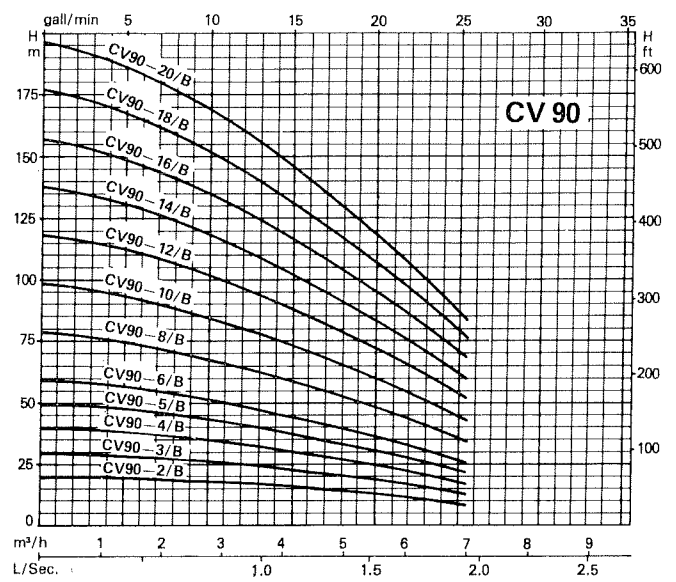
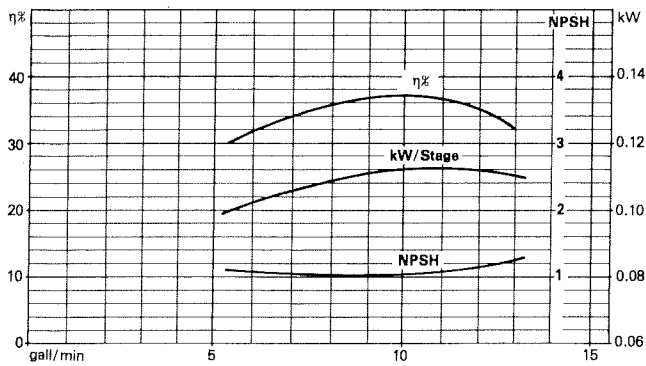
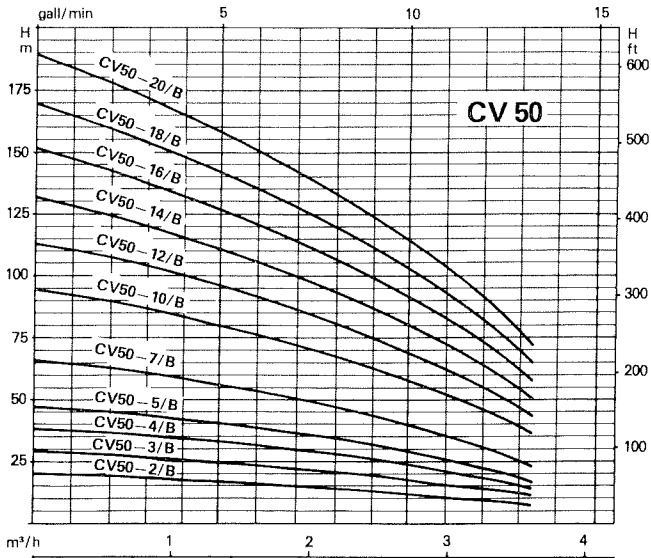
Pump/motor coupling manufactured from cold forged steel.

## Electrical Specifications

Motors—T.E.F.C. conforming to metric standards continuously rated at 2900 r.p.m. Windings insulated to Class 'F'. Single phase versions, with overload protection built into the motor, are available up to 1.1 kW (1.5 hp). Standard voltages are 415V 3ph 50Hz and 240V 1ph 50Hz.

Other voltages and frequencies are available upon request.

# Performance Characteristics



## Limitations – CV Pumps

Designed to handle liquids at temperatures from 5°C to 110°C.

'O' rings manufactured from ethylene – propylene.

All operating curves shown refer to Cold Water applications 5°C – 40°C.

Pumps capable of 4 metres suction lift where Specific Gravity of water = 1.0.

For suction lifts higher than 4.0 metres up to a maximum of 8.0 metres, a pipe having a diameter larger than the pump inlet **MUST** be installed.

Maximum allowable operating pressure 21 bar.

Refer to Pullen Pumps Ltd. for details of pump curves for Hot Water applications (40°C – 110°C.)

# Prescon Unit 'Series E'

This unit is ideally suited for any single pump booster application such as small housing schemes, high pressure washdown and laboratory taps, etc.

The unit is neatly packaged with all the necessary controls to give a fully automatic booster unit.

Vertical multistage pumps from our CV range enable a perfect duty selection to suit customers' requirements.

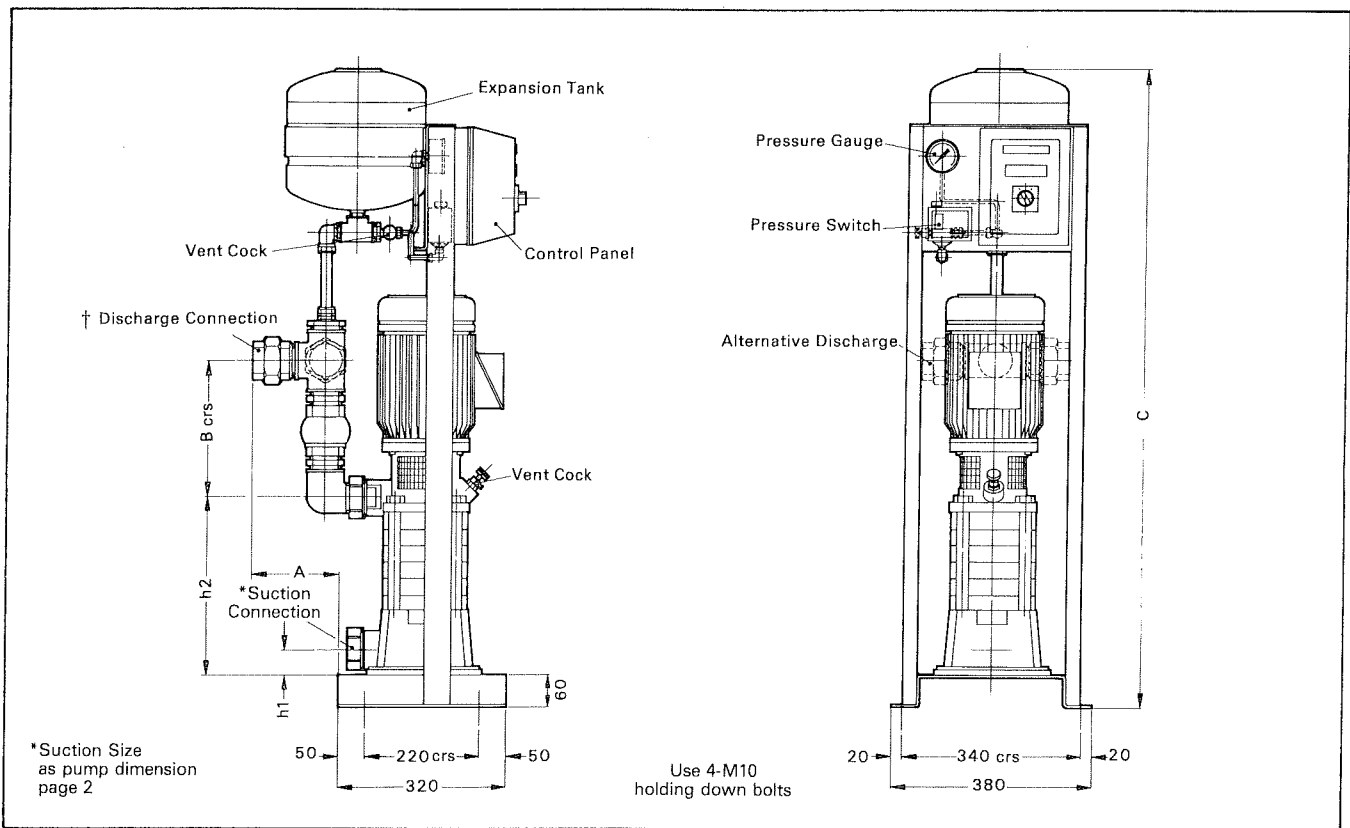
## Operation

The initial source of energy is supplied from a small diaphragm tank, mounted above the pump discharge and charged with air to 5 lb/in<sup>2</sup> below the pump cut-in

pressure. The pump is controlled by a differential pressure switch so that in a system which is at rest and pressurised, the operation of a tap or fitting will cause the water, energised by the air in the expansion tank, to drain down the vessel thus lowering the pressure.

When the pump cut-in pressure is reached the pump will start and supply water to the services. As draw-off ceases, the pump will operate up its curve raising the pressure in the tank until the pump cut-out pressure is reached. At this point a run-on timer is energised to keep the pump running for a further two minutes, and therefore protecting the electrical equipment from too frequent operation.

## Dimensions



Pump Size	CV50	CV90	CV150
Dimension A	88	130	174
Dimension B	191	230	257
Connection Size (Galvanised) †	1" BSP	1 1/2" BSP	2" BSP
Connection Size (Copper)	28mm	42mm	54mm

Dimension C	1000	1205	1512
Pump Size CV50	2-7 stage	10-14 stage	14-16 stage
Pump Size CV90	2-5 stage	6-10 stage	12-16 stage
Pump Size CV150	2-3 stage	4-6 stage	8-12 stage

*As we are constantly endeavouring to improve standards, we reserve the right to alter details given without prior notice.*

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