

Range Specification

Features

- On demand operation
- Auto rotation of duty pump
- Auto changeover on duty pump trip
- Advanced electronic controllers
- Flow through controllers
- BMS I/O connection
- Digitally adjustable cut-in and cut-out pressure
- Working pressure range 0.8 - 9 bar
- Low friction losses through pump controllers
- Anti-vibration mounts for base plate

Protection

- Dry run protection
- Overload protection
- Feed tank low level alarm

Components

- Controller per pump
- Pressure vessel
- Electronic pressure & flow sensors built into controllers
- Baseplate & manifolds in 304 Stainless Steel (SS)
- Connection box c/w alarm output connection - IP55 enclosure
- GSM dial out alarm (Optional)



Pumps:	Pedrollo Range
Max head:	9.7 bar
Number of pumps:	1 - 3
Capacity:	1 x duty pump - up to 12m ³ /h 2 x duty pump - up to 24m ³ /h
kW range:	≤ 2.2kW
Power input:	230V/1PH/50Hz 400V/3PH/50Hz
Temperature range:	
Liquid -	up to +40°C
Ambient -	up to +40°C
Pressure rating:	PN10

Controls

A series of small horizontal pumps operating in a cascade system enables high flow demands to be met whilst being efficient during periods of low use.

FLOW V - Constant Pressure - Steadypres

- Constant working pressure - selectable/adjustable
- Variable speed drive (VSD) per pump
- Drives are water cooled
- Advanced power management
- Operation log including; alarms & hours run



The **POWERBOOST FLOW V** is made up from two or three pumps in parallel, managed by a variable speed controller on each pump to keep the system pressure constant and provide protection against over current and dry running.

When the pressure in the system falls below the cut in set point the system will start one pump at minimum speed and gradually increase its speed to maintain the pre-set system pressure as the flow increases. If one pump is not sufficient to maintain the system pressure at the set point as the flow increases then the control unit will start the second pump and in three pump systems the third pump in turn varying their speed as required to maintain the set pressure whilst minimising energy usage and excessive pressure in the system.

As the flow decreases the system will slow down each pump in turn to maintain the pre-set pressure. As each pump reaches minimum speed it will switch off until only one pump is running, this final pump will run on for ten seconds to pressurise the vessel and ensure that the pump set does not cycle excessively.

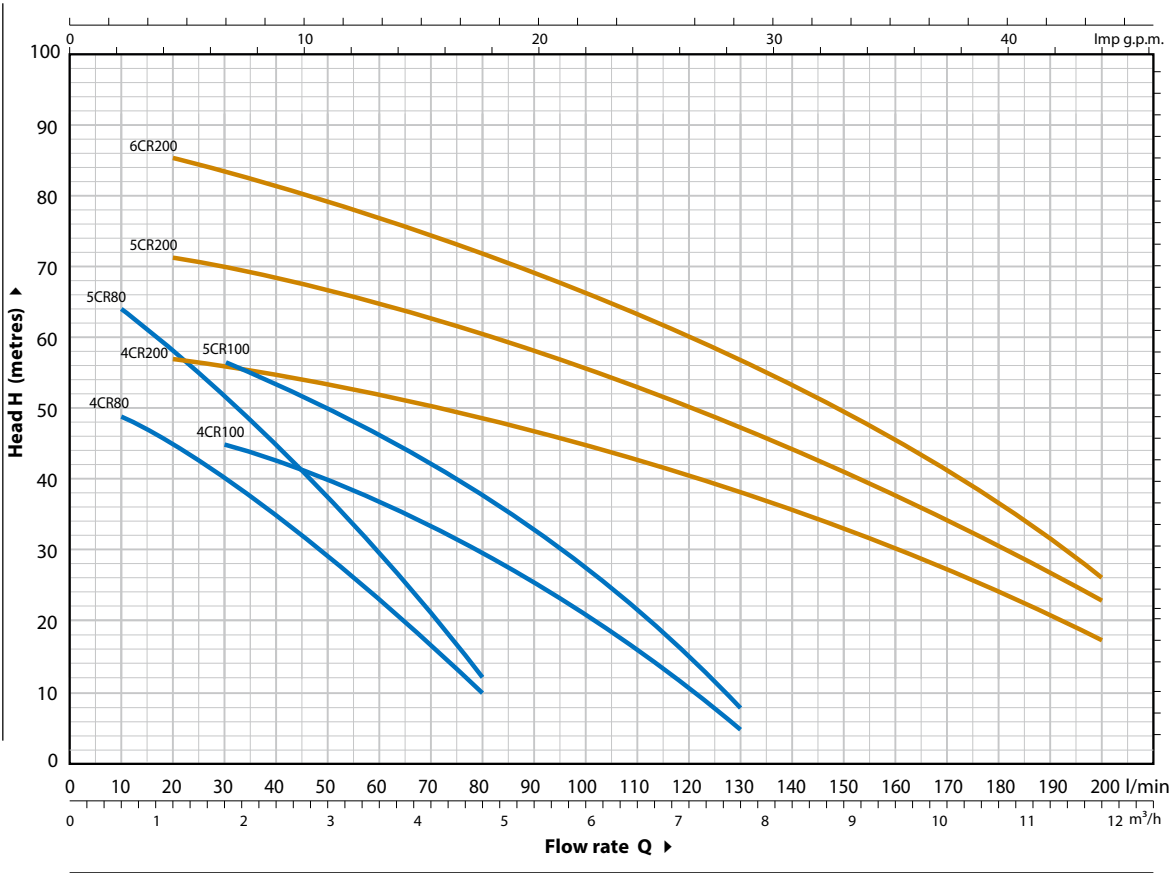
The control unit alternates the order in which pumps start to balance the hours run on each pump. There is an input for a float switch to be installed in the feed tank and a volt free BMS connection for general alarm signals. In the event of an alarm condition the controller attempts to automatically reset after 10 minutes.

FLOW V Variable Speed Range



Characteristic Curves & Performance Data

50 Hz n= 2900 rpm HS= 0 m



230V/1PH/50Hz Power supply

Code		FLC (A)	Model	Power (P2)			1x	0	05	10	15	20	25	30	40	50	60	70	80	90	100	110	120	130
230V/1PH				(Per Pump)	Q l/min	2x	0	10	20	30	40	50	60	80	100	120	140	160	180	200	220	240	260	
				kW	HP	Pump	3x	0	15	30	45	60	75	90	120	150	180	210	240	270	300	330	360	390
2 PUMP	1029560	6.8	4CR80	0.55	0.75	H Meters		52	50	49	47	44.5	42	40	34	28.5	22.5	16	10	-	-	-	-	-
3 PUMP	1029561	10.2						67	66	64	62	59	56	53	45.5	37.5	29.5	20.5	12	-	-	-	-	-
2 PUMP	1029562	8.6	5CR80	0.75	1			50	50	49	48	47	46	45	42	39.5	37	34	30.5	26.5	22	17	11	5
3 PUMP	1029563	12.9						63	62	61.5	60.5	59.5	58	57	53.5	50.5	46.5	42.5	38	33	28	22	15	8
2 PUMP	1029564	9	4CR100	0.75	1			63	62	61.5	60.5	59.5	58	57	53.5	50.5	46.5	42.5	38	33	28	22	15	8
3 PUMP	1029565	13.5						73	72	71.5	71	69	65.5	62	56.5	48	44.5	38	30	24	17	11	5	
2 PUMP	1035355	8.4	5CR100	1.1	1.5			87	86	85.5	85	82	78	73	67	57	53	45	36	26				
3 PUMP	1035353	12.6						102	100	99	97	94	90	85	78	70	62	52	42	32	22	12	7	

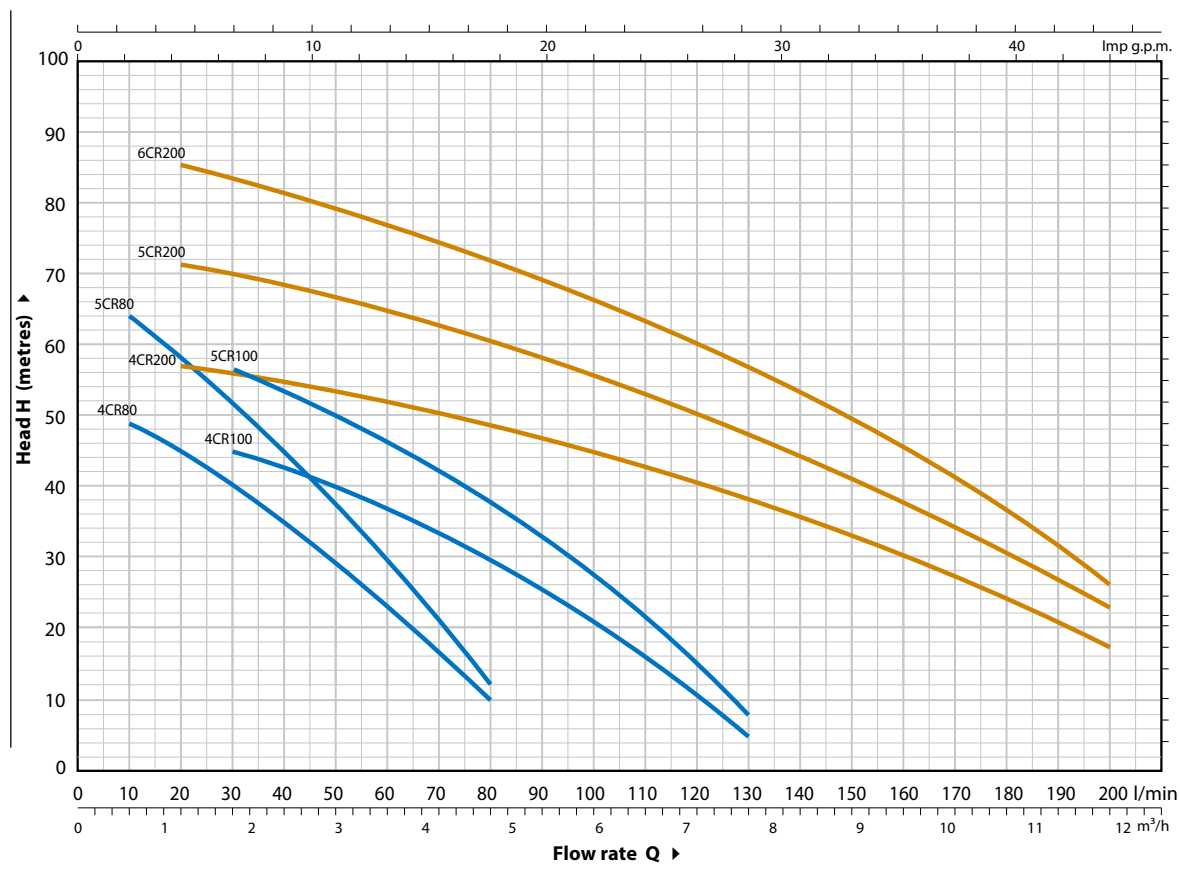
Code		FLC (A)	Model	Power (P2)			1x	0	05	10	20	40	60	80	100	130	140	160	180	200
230V/1PH				(Per Pump)		Q l/min	2x	0	10	20	40	80	120	160	200	260	280	320	360	400
				kW	HP	Pump	3x	0	15	30	60	120	180	240	300	390	420	480	540	600
2 PUMP	1029566	14.6	4CR200	1.5	2	H Meters		58	57.5	57.5	57	55	52.5	49.5	45	38	35.5	30	24	17
3 PUMP	1029567	21.9																		
2 PUMP	1029568	18.8	5CR200	1.8	2.5			73	72	71.5	71	69	65.5	62	56.5	48	44.5	38	30	22
3 PUMP	1029569	28.2																		
2 PUMP	1029570	20.4	4CR200	2.2	3			87	86	85.5	85	82	78	73	67	57	53	45	36	26
3 PUMP	1029571	30.6																		

* Curves show individual pump performance. See tables for 2 & 3 pump performance details

*FLC - Full Load Current

Characteristic Curves & Performance Data

50 Hz n= 2900 rpm HS= 0 m



400V/3PH/50Hz Power supply

Code		FLC (A)	Model	Power (P2)			1x	0	05	10	15	20	25	30	40	50	60	70	80	90	100	110	120	130
400V/3PH				(Per Pump)		Q l/min	2x	0	10	20	30	40	50	60	80	100	120	140	160	180	200	220	240	260
				kW	HP	Pump	3x	0	15	30	45	60	75	90	120	150	180	210	240	270	300	330	360	390
2 PUMP	1037485	4	4CR80	0.55	0.75	H Meters	52	50	49	47	44.5	42	40	34	28.5	22.5	16	10	-	-	-	-	-	
3 PUMP	1037492	6																						
2 PUMP	1037486	5	5CR80	0.75	1		67	66	64	62	59	56	53	45.5	37.5	29.5	20.5	12	-	-	-	-	-	
3 PUMP	1037493	7.5																						
2 PUMP	1037487	5.2	4CR100	0.75	1		50	50	49	48	47	46	45	42	39.5	37	34	30.5	26.5	22	17	11	5	
3 PUMP	1037494	7.8																						
2 PUMP	1037488	4.8	5CR100	1.1	1.5		63	62	61.5	60.5	59.5	58	57	53.5	50.5	46.5	42.5	38	33	28	22	15	8	
3 PUMP	1037495	7.2																						

Code		FLC (A)	Model	Power (P2)			1x	0	05	10	20	40	60	80	100	130	140	160	180	200
400V/3PH				(Per Pump)		Q l/min	2x	0	10	20	40	80	120	160	200	260	280	320	360	400
				kW	HP	Pump	3x	0	15	30	60	120	180	240	300	390	420	480	540	600
2 PUMP	1037489	8.4	4CR200	1.5	2	H Meters														
3 PUMP	1037496	12.6																		
2 PUMP	1037490	10.8	5CR200	1.8	2.5															
3 PUMP	1037497	16.2																		
2 PUMP	1037491	11.8	4CR200	2.2	31															
3 PUMP	1037498	17.7																		

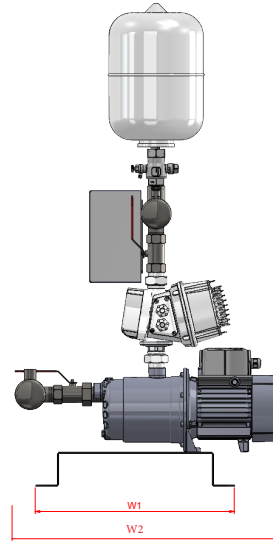
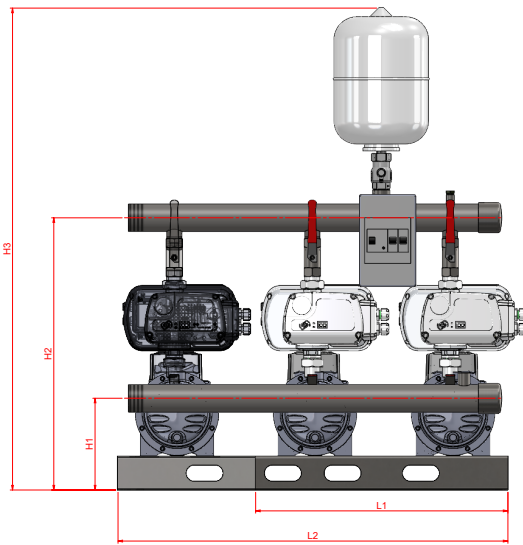
* Curves show individual pump performance. See tables for 2 & 3 pump performance details

*FLC - Full Load Current

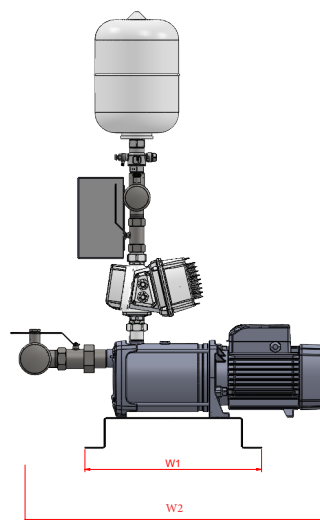
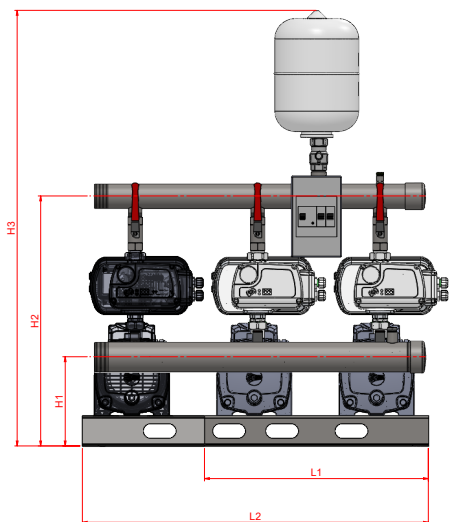
FLOW V Variable Speed Range



FLOW V - CR Range



Model	No. Of Pumps	H1(mm)	H2(mm)	H3(mm)	L1(mm)	L2(mm)	W1(mm)	W2(mm)	PIPE CONNECTIONS	
									Inlet	Outlet
4CR80	2	200	600	950	550		440	590	2"BSPP	
	3	200	600	950		850	440	590	2"BSPP	
5CR80	2	200	600	950	550		440	590	2"BSPP	
	3	200	600	950		850	440	590	2"BSPP	
4CR100	2	200	600	950	550		440	590	2"BSPP	
	3	200	600	950		850	440	590	2"BSPP	
5CR100	2	200	600	950	550		440	590	2"BSPP	
	3	200	600	950		850	440	590	2"BSPP	



Model	No. Of Pumps	H1(mm)	H2(mm)	H3(mm)	L1(mm)	L2(mm)	W1(mm)	W2(mm)	PIPE CONNECTIONS	
									Inlet	Outlet
4CR200	2	220	620	970	550		440	790	2 1/2" BSPP	2"BSPP
	3	220	620	970		850	440	790	2 1/2" BSPP	2"BSPP
5CR200	2	220	620	970	550		440	790	2 1/2" BSPP	2"BSPP
	3	220	620	970		850	440	790	2 1/2" BSPP	2"BSPP
6CR200	2	220	620	970	550		440	790	2 1/2" BSPP	2"BSPP
	3	220	620	970		850	440	790	2 1/2" BSPP	2"BSPP