

VARIO 1-20

PRESSURE BOOSTER SET WITH TWO VARIABLE SPEED PUMPS

The new series of variable speed pressurization booster set VARIO 1-20 represents a reliable solution which is easy to use, for residential and industrial applications. The system involves the installation in parallel of two inverters integrated directly on the motor of each pump installed. The two frequency converters communicate and alternate the starting order of each work cycle, always keeping the pressure constant in the distribution system.

APPLICATIONS

- Lifting and distribution of water in domestic systems
- Pressurization systems
- Irrigation
- Industry
- Washes

BASE

- in galvanized metal complete with rubber isolated pads

SUCTION MANIFOLD

in galvanized steel with:

- N.2 brass ball valves

TECHNICAL CHARACTERISTICS

- Supply voltage: inverter 1x230 Vac $\pm 10\%$.
- Inverter output voltage: 3x230 Vac $\pm 10\%$
- Maximum rated power: 2x2.4 kW
- Input frequency: 50/60 Hz $\pm 3\%$
- Output maximum rated power: 8 Amp
- Degree of protection: IP55 MULTINOX VE+ / PVM
- Maximum temperature $+50^{\circ}\text{C}$
- Input filter complying with EMC directive
- Pressure transducer 0 - 5 Volt - 0 - 10 Bar
- Serial interface connectivity RS 485
- Optional contacts 3 (external set-point, alarm, system inhibition)

DELIVERY MANIFOLD

in galvanized steel with:

- N.2 brass ball valves
- N.1 pressure gauge
- N.2 pressure sensors

Protection electrical panel with circuit breakers

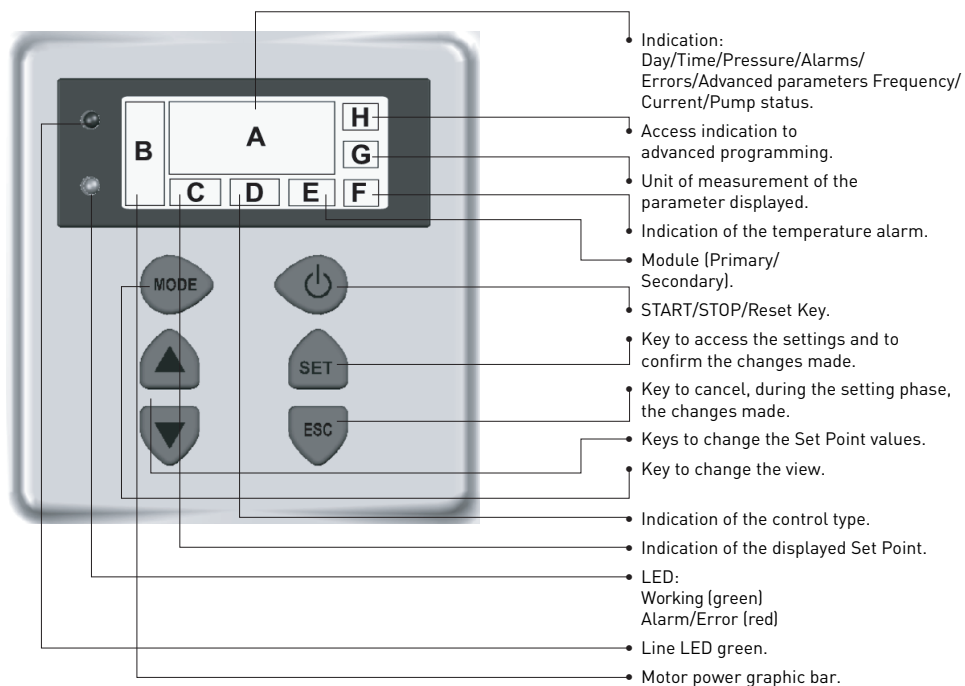


USAGE DATA	MULTINOX-VE+	PVM 1	PVM 3	PVM 5	PVM 10
Maximum capacity (m ³ /h)	25.2	4.8	9	17	26
Maximum head (m.c.a.)	80	160	160	110	60
Maximum operating pressure	14 bar			16 bar	
Power supply VOLT.:			1~230 V		
Ambient temperature			50° C		
Degree of protection of pump	IP44			IP55	
Degree of protection of electrical panel			IP54		

VARIO 1-20

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CONTROL PANEL

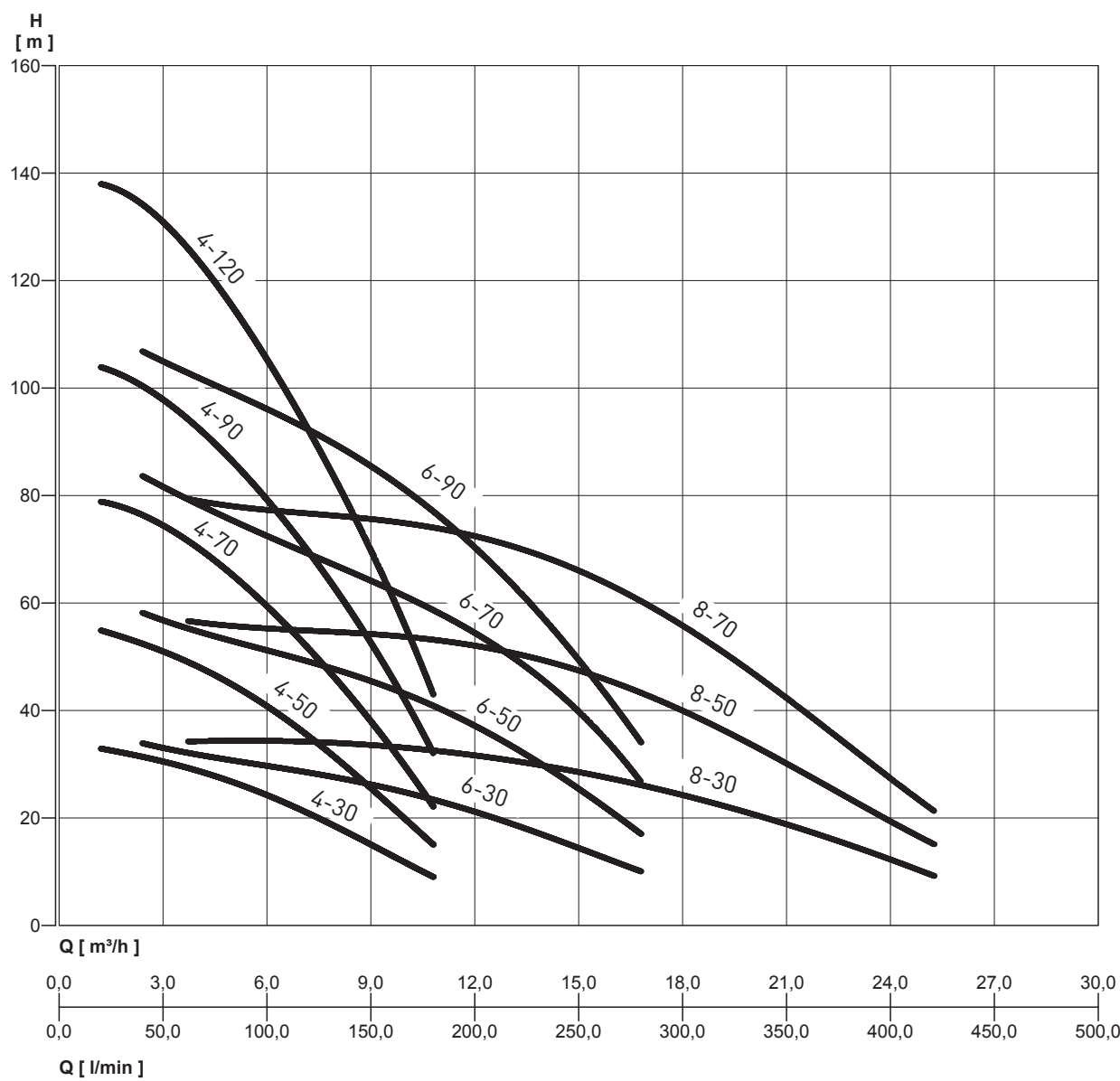


- Backlight display (switches off automatically after a reset time and can be turned on again by pressing any key)

VARIO 1-20 MULTINOX VE +

PRESSURE BOOSTER SET WITH TWO VARIABLE SPEED PUMPS

HYDRAULIC PERFORMANCE

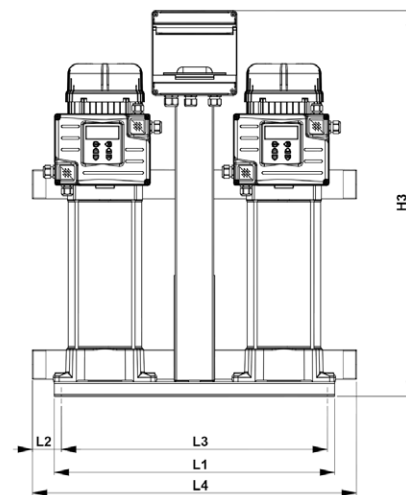
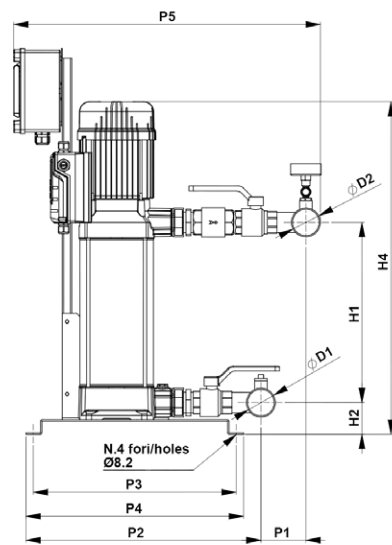


VARIO 1-20 MULTINOX VE +

PRESSURE BOOSTER SET WITH TWO VARIABLE SPEED PUMPS

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	In (A)	Q	l/min	20	40	60	80	100	120	140	160	180	200	240	280	300	360	420	
	kW				m³/h	1,2	2,4	3,6	4,8	6	7,2	8,4	9,6	10,8	12	14,4	16,8	18	21,6	25,2	
VARIO1-20 MULTINOX VE+ 4-30	2x0,5	1 ~ 230	2x4.4	m.c.w.		33	31	30	27	24	21	17	13	9							
VARIO1-20 MULTINOX VE+ 4-50	2x0,84	1 ~ 230	2x6.71			55	52	50	45	41	35	29	22	15							
VARIO1-20 MULTINOX VE+ 4-70	2x1,17	1 ~ 230	2x9.39			79	76	72	67	59	51	43	33	22							
VARIO1-20 MULTINOX VE+ 4-90	2x1,5	1 ~ 230	2x12,08			104	100	95	88	79	69	59	46	32							
VARIO1-20 MULTINOX VE+ 4-120	2x2	1 ~ 230	2x16,3			138	134	127	117	105	92	78	61	43							
VARIO1-20 MULTINOX VE+ 6-30	2x0,67	1 ~ 230	2x5.95				34	32	31	30	28	27	26	23	21	16	10				
VARIO1-20 MULTINOX VE+ 6-50	2x1,1	1 ~ 230	2x9.02				58	56	53	51	49	47	44	41	37	28	17				
VARIO1-20 MULTINOX VE+ 6-70	2x1,5	1 ~ 230	2x13,82				83	80	77	76	61	68	64	59	55	42	27				
VARIO1-20 MULTINOX VE+ 6-90	2x2	1 ~ 230	2x15,75				107	103	99	97	92	88	83	76	71	54	34				
VARIO1-20 MULTINOX VE+ 8-30	2x1	1 ~ 230	2x8.7						35	35	35	35	35	34	33	32	30	27	25	18	10
VARIO1-20 MULTINOX VE+ 8-50	2x1,5	1 ~ 230	2x14.4						57	57	56	56	56	54	53	52	50	45	40	28	16
VARIO1-20 MULTINOX VE+ 8-70	2x1,9	1 ~ 230	2x15,5						80	79	78	78	77	75	74	73	70	60	56	40	22



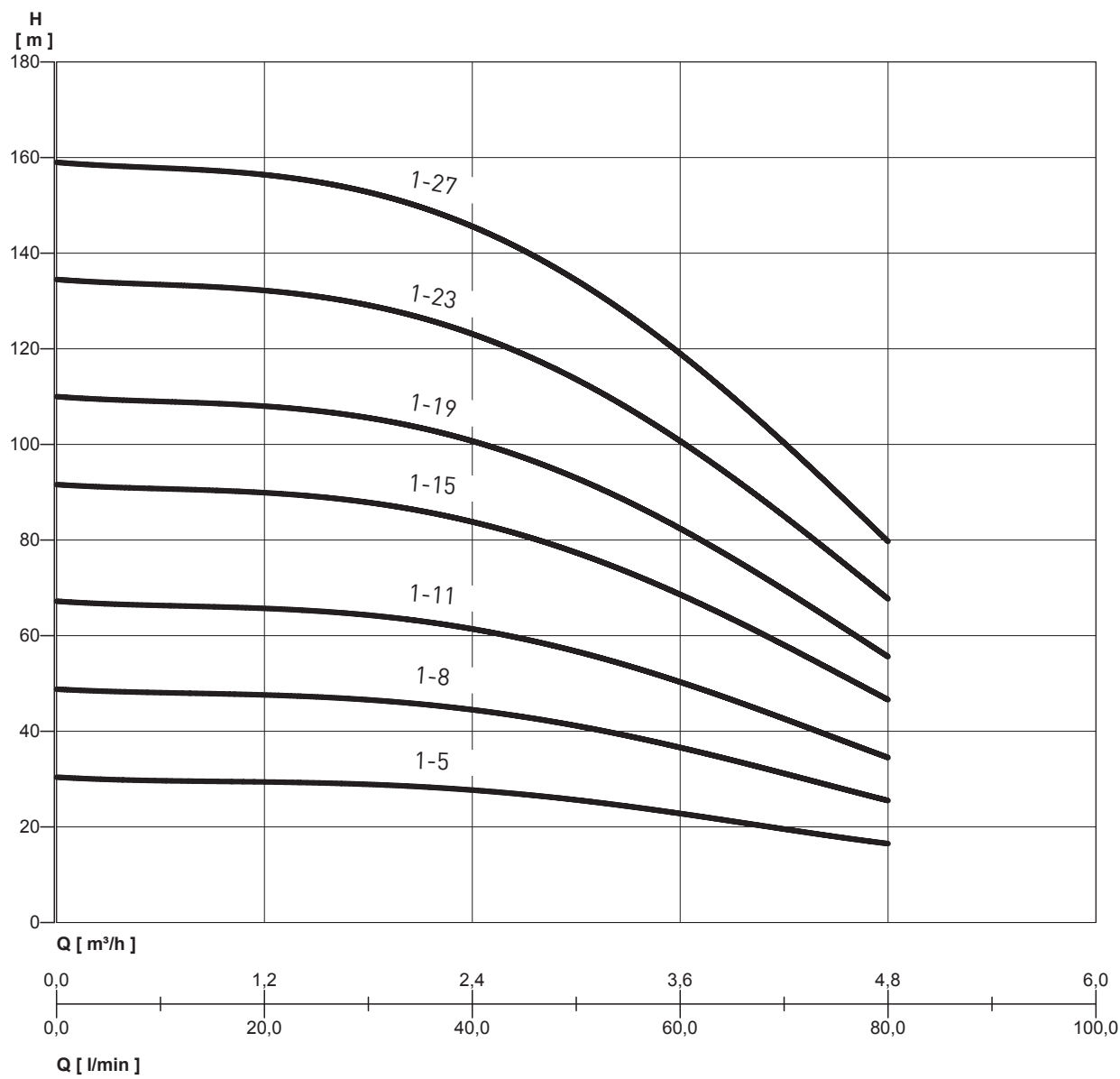
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.															WEIGHT Kg
	L1	L2	L3	L4	P1	P2	P3	P4	P5	H1	H2	H3	H4	ØD1	ØD2	
VARIO1-20 MULTINOX VE+ 4-30	580	70	530	670	90	485	420	450	635	130	65	800	446	2"	2"	71
VARIO1-20 MULTINOX VE+ 4-50	580	70	530	670	90	485	420	450	635	184	65	800	500	2"	2"	79
VARIO1-20 MULTINOX VE+ 4-70	580	70	530	670	90	485	420	450	635	238	65	800	554	2"	2"	87
VARIO1-20 MULTINOX VE+ 4-90	580	70	530	670	90	485	420	450	635	292	65	800	608	2"	2"	89
VARIO1-20 MULTINOX VE+ 4-120	580	70	530	670	90	485	420	450	635	373	65	800	690	2"	2"	93
VARIO1-20 MULTINOX VE+ 6-30	580	70	530	670	90	485	420	450	635	130	65	800	446	2"	2"	71
VARIO1-20 MULTINOX VE+ 6-50	580	70	530	670	90	485	420	450	635	184	65	800	500	2"	2"	79
VARIO1-20 MULTINOX VE+ 6-70	580	70	530	670	90	485	420	450	635	238	65	800	554	2"	2"	87
VARIO1-20 MULTINOX VE+ 6-90	580	70	530	670	90	485	420	450	635	292	65	800	608	2"	2"	89
VARIO1-20 MULTINOX VE+ 8-30	580	70	530	670	90	485	420	450	635	130	65	800	446	2"	2"	71
VARIO1-20 MULTINOX VE+ 8-50	580	70	530	670	90	485	420	450	635	184	65	800	500	2"	2"	79
VARIO1-20 MULTINOX VE+ 8-70	580	70	530	670	90	485	420	450	635	238	65	800	554	2"	2"	87

VARIO 1-20 PVM

PRESSURE BOOSTER SET WITH TWO VARIABLE SPEED PUMPS

HYDRAULIC PERFORMANCE

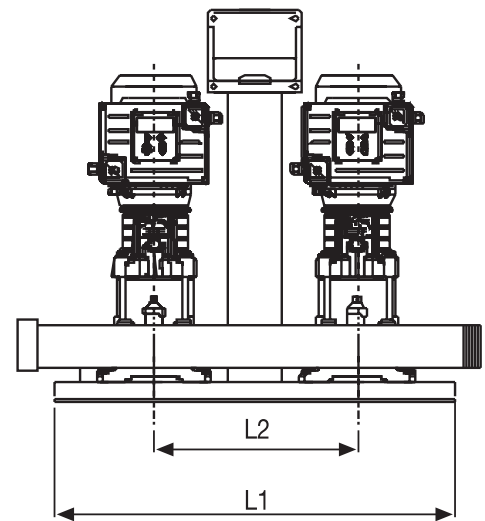
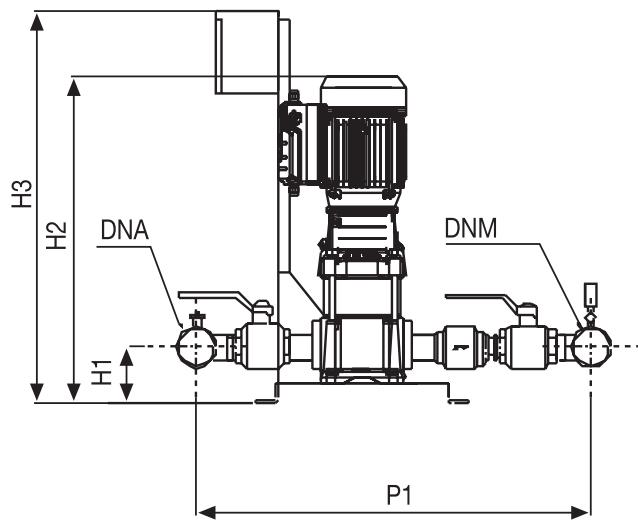


VARIO 1-20 PVM

PRESSURE BOOSTER SET WITH TWO VARIABLE SPEED PUMPS

PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	In (A)	0	l/min m³/h	0	20	40	60	80
	kW					0	1,2	2,4	3,6	4,8
VARIO1-20 PVM 1-5 F	2x0,37	1 ~ 230	2x2,7	m.c.w.		30,4	29,4	27,7	22,8	16,5
VARIO1-20 PVM 1-8 F	2x0,55	1 ~ 230	2x4,1			48,8	47,6	44,5	36,6	25,5
VARIO1-20 PVM 1-11 F	2x0,55	1 ~ 230	2x4,4			67,2	65,7	61,4	50,3	34,5
VARIO1-20 PVM 1-15 F	2x0,75	1 ~ 230	2x5,8			91,6	89,9	83,8	68,6	46,6
VARIO1-20 PVM 1-19 F	2x1,1	1 ~ 230	2x7,4			110	108	100,7	82,4	55,6
VARIO1-20 PVM 1-23 F	2x1,1	1 ~ 230	2x8,3			134,5	132,2	123,1	100,7	67,7
VARIO1-20 PVM 1-27 F	2x1,5	1 ~ 230	2x9,9			159	156,4	145,6	119	79,7



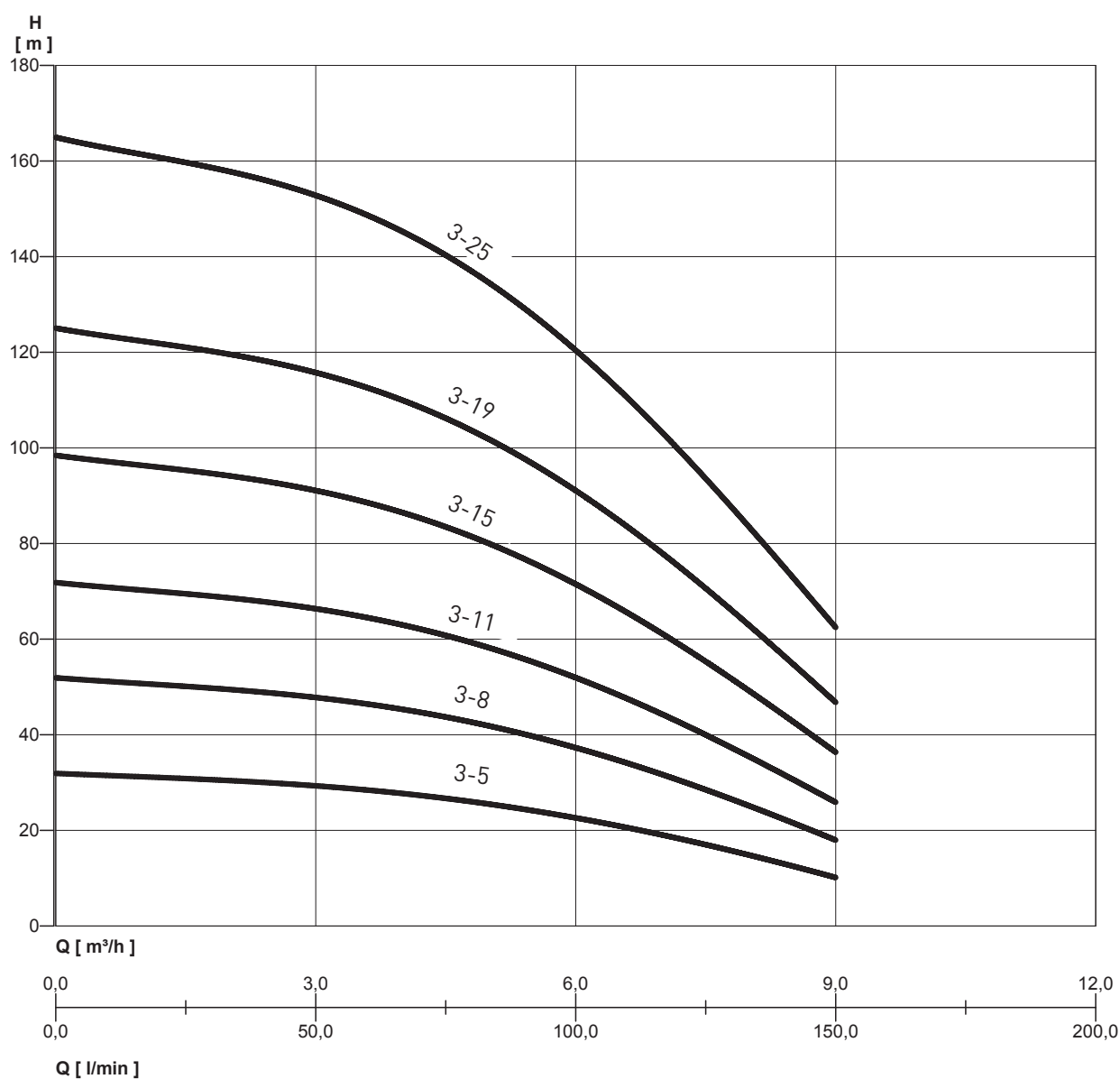
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHT Kg
	L1	L2	H1	H2	H3	P1	DNA	DNM	
VARIO1-20 PVM 1-5 F	600	370	105	580	700	620	2"	2"	60
VARIO1-20 PVM 1-8 F	600	370	105	594	700	620	2"	2"	62
VARIO1-20 PVM 1-11 F	600	370	105	648	700	620	2"	2"	67
VARIO1-20 PVM 1-15 F	600	370	105	766	700	620	2"	2"	73
VARIO1-20 PVM 1-19 F	600	370	105	838	700	620	2"	2"	80
VARIO1-20 PVM 1-23 F	600	370	105	910	700	620	2"	2"	90
VARIO1-20 PVM 1-27 F	600	370	105	1030	700	620	2"	2"	94

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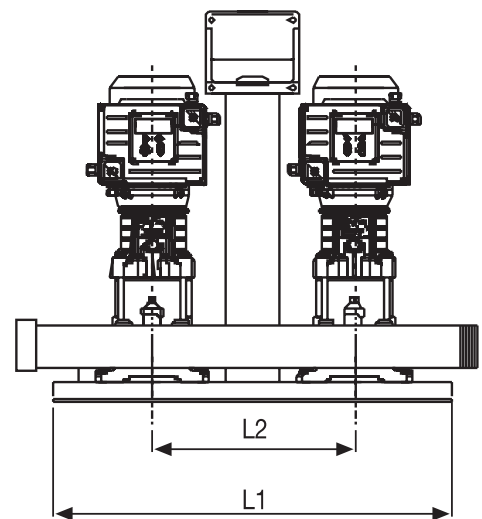
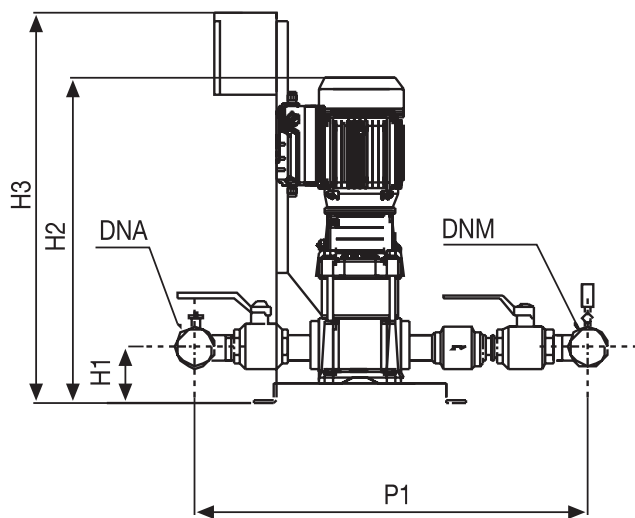


VARIO 1-20 PVM

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PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	In (A)	Q	l/min m³/h	0	20	40	60	80	100	120	140	150
	kW					0	1,2	2,4	3,6	4,8	6	7,2	8,4	9
VARIO1-20 PVM 3-5 F	2x0,37	1 ~ 230	2x3	m.c.w.		31,9	31,1	30	28,3	26,2	22,6	18	13,3	10
VARIO1-20 PVM 3-8 F	2x0,75	1 ~ 230	2x4,8			51,9	50,5	48,9	46,2	42,9	37,3	30,1	22,7	17,8
VARIO1-20 PVM 3-11 F	2x1,1	1 ~ 230	2x6,6			71,8	70	67,9	64,1	59,6	52,1	42,1	32,1	25,7
VARIO1-20 PVM 3-15 F	2x1,1	1 ~ 230	2x9			98,4	96	93,2	88	81,9	71,7	58,2	44,7	36,1
VARIO1-20 PVM 3-19 F	2x1,5	1 ~ 230	2x11			125	121,9	118,4	111,9	104,2	91,3	74,3	57,2	46,5
VARIO1-20 PVM 3-25 F	2x2,2	1 ~ 230	2x15			164,9	160,8	156,3	147,8	137,6	120,8	98,4	76	62,1



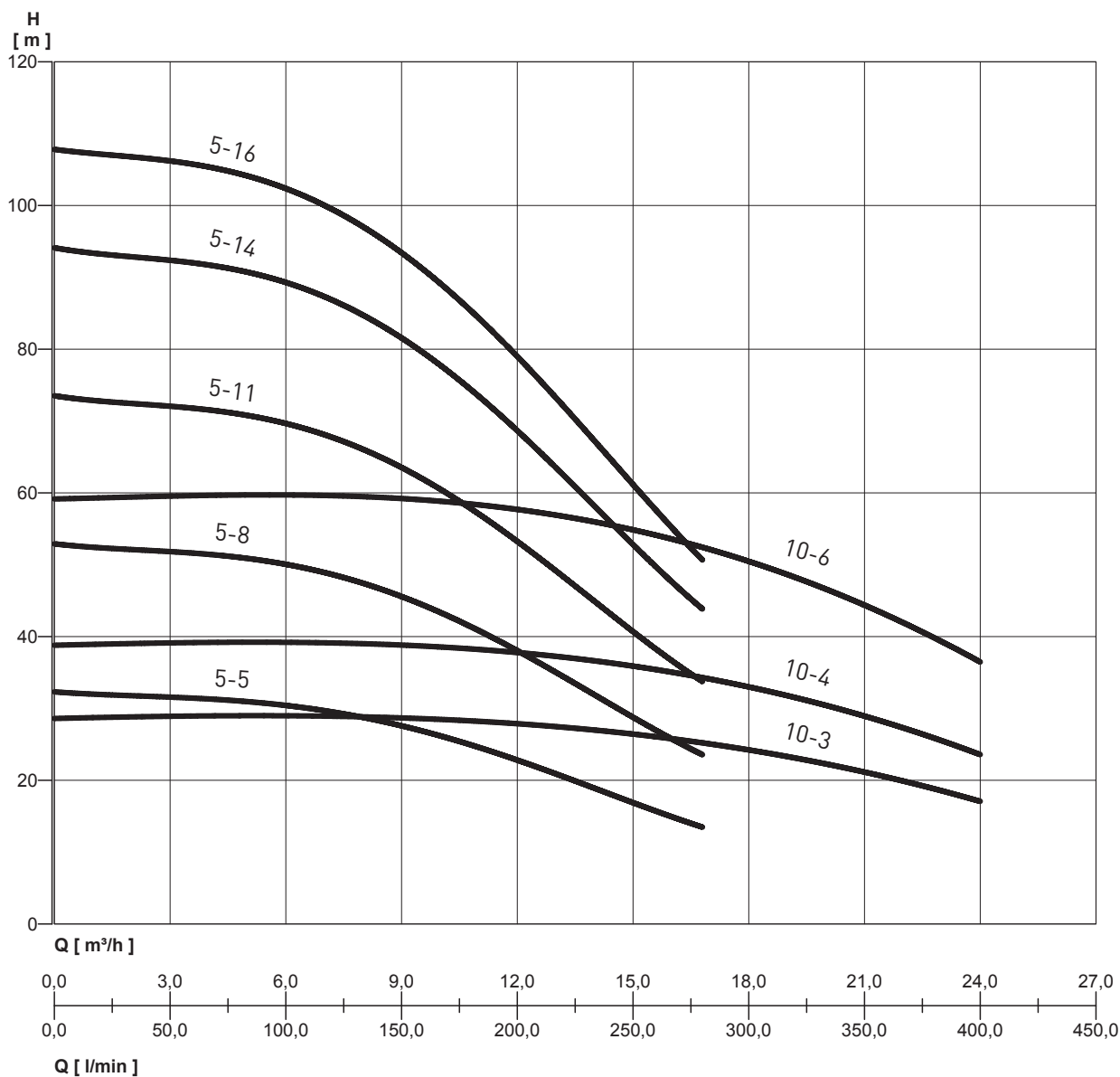
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHT Kg
	L1	L2	H1	H2	H3	P1	DNA	DNM	
VARIO1-20 PVM 3-5 F	600	370	105	540	700	620	2"	2"	62
VARIO1-20 PVM 3-8 F	600	370	105	640	700	620	2"	2"	65
VARIO1-20 PVM 3-11 F	600	370	105	694	700	620	2"	2"	73
VARIO1-20 PVM 3-15 F	600	370	105	766	700	620	2"	2"	75
VARIO1-20 PVM 3-19 F	600	370	105	886	700	620	2"	2"	80
VARIO1-20 PVM 3-25 F	600	370	105	994	700	620	2"	2"	90

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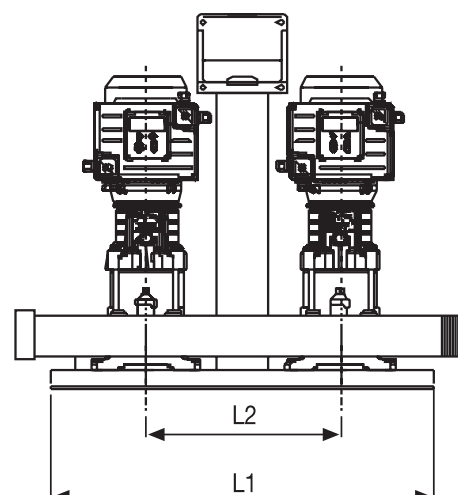
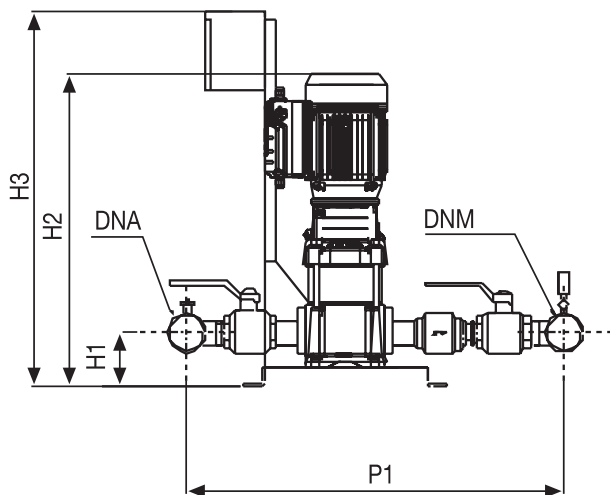


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PERFORMANCE TABLE

MODEL	P2	VOLT. (V)	In (A)	Q	l/min	0	80	120	160	200	240	280		
	kW				m³/h	0	4,8	7,2	9,6	12	14,4	16,8		
VARIO1-20 PVM 5-5 F	2x0,75	1 ~ 230	2x5,4	m.c.w.		32,3	31,1	29,4	26,8	22,9	18	13,5		
VARIO1-20 PVM 5-8 F	2x1,1	1 ~ 230	2x8,7			52,9	51,1	48,5	44,3	38,2	30,5	23,6		
VARIO1-20 PVM 5-11 F	2x2,2	1 ~ 230	2x12			73,5	71,1	67,5	61,8	53,5	43	33,8		
VARIO1-20 PVM 5-14 F	2x2,2	1 ~ 230	2x15,2			94,1	91,1	86,6	79,4	68,9	55,8	43,9		
VARIO1-20 PVM 5-16 F	2x2,2	1 ~ 230	2x17,4			107,8	104,5	99,3	91	79,1	64,7	50,7		
MODEL	P2	VOLT. (V)	In (A)	Q	l/min	0	50	100	150	200	250	300	350	400
	kW				m³/h	0	3	6	9	12	15	18	21	24
VARIO1-20 PVM 10-3 F	2x1,1	1 ~ 230	2x2,4	m.c.w.		28,6	28,9	29	28,7	27,8	26,4	24,4	21	17,1
VARIO1-20 PVM 10-4 F	2x1,5	1 ~ 230	2x3,2			38,8	39,1	39,2	38,9	37,7	35,8	33,2	28,8	23,6
VARIO1-20 PVM 10-6 F	2x2,2	1 ~ 230	2x4,8			59,2	59,4	59,8	59,4	57,5	54,7	50,8	44,2	36,5



OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions mm.								WEIGHT Kg
	L1	L2	H1	H2	H3	P1	DNA	DNM	
VARIO1-20 PVM 5-5 F	600	370	105	631	810	660	2"	2"	76
VARIO1-20 PVM 5-8 F	600	370	105	712	810	660	2"	2"	80
VARIO1-20 PVM 5-11 F	600	370	105	841	810	660	2"	2"	92
VARIO1-20 PVM 5-14 F	600	370	105	922	810	660	2"	2"	98
VARIO1-20 PVM 5-16 F	600	370	105	976	810	660	2"	2"	100
VARIO1-20 PVM 10-3 F	620	370	100	612	820	700	2" 1/2	2" 1/2	100
VARIO1-20 PVM 10-4 F	620	370	100	714	820	700	2" 1/2	2" 1/2	110
VARIO1-20 PVM 10-6 F	620	370	100	714	820	700	2" 1/2	2" 1/2	120