

NOCCHI SENSORMAT PRESSURE BOOSTER SETS WITH TRANSDUCER CONTROL

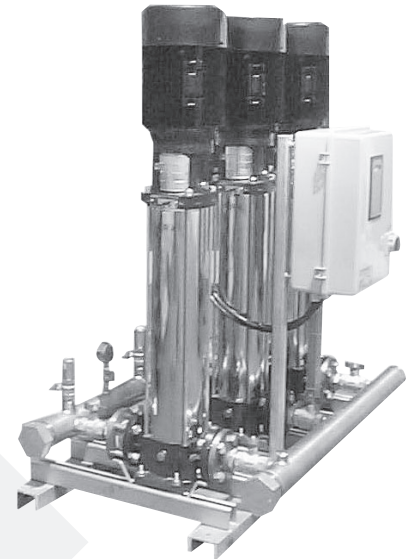
COMPACT, ROBUST, HIGH HYDRAULIC PERFORMANCE, PIPELINES IN AISI 304 STAINLESS STEEL

These are automatic pressure booster sets for installation on the water mains with three phase electric power supply, transducer control and fixed speed.

The pumps are controlled via an electrical panel fitted with an electronic board linked to an electronic transducer that reads the outlet pressure. The keypad on the electrical panel enables the entry of unit configuration parameters and settings (start and stop pressures for each pump, timers for

each pump etc.).

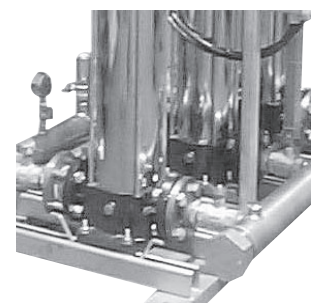
The pumps start up and stop when the mains pressure reaches the set value. At the end of each cycle, the inverter automatically switches the pump start sequence. In the event of large water demands, the electronic board applies a gradual start-up of the pumps, thereby avoiding sudden pressure variations and overload of the power supply.



NUMBER OF PUMPS		MAXIMUM FLOW RATE	
Main	Pilot	L/min	m ³ /h
2	-	1400	84
3	0	2100	126
3	1	2100	126

APPLICATION DATA	VLR 16	
	SM. 2.1	SM. 30/31
Maximum flow rate (m ³ /h)	42	28.8
Maximum head (m.c.a.)	91	
Maximum operating pressure	16 bar	

APPLICATION DATA	VLR 32		MULTINOX - VE
	SM. 21	SM. 30/31	SMD30
Maximum flow rate (m ³ /h)	84	126	28.8
Maximum head (m.c.a.)	89		109
Maximum operating pressure	16 bar		12 bar
Power supply voltage	400 V		
Direct pump start-up	Direct up to 7.5 kW inclusive. Star/Delta over 7.5 kW		
Ambient temperature	+50° C		
Electric pump protection rating	IP55 IP44 for MULTINOX-VE		
El. panel protection rating	IP54		



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PRESSURE BOOSTER SETS WITH TRANSDUCER CONTROL

ELECTRIC PUMP

MULTINOX-VE / VLR:

- Centrifugal, multi-cell, vertical axis.

SUCTION MANIFOLD

In AISI 304 stainless steel with:

- 1 water filling hose
- 1 brass ball valve
- 1 check valve *

BASE

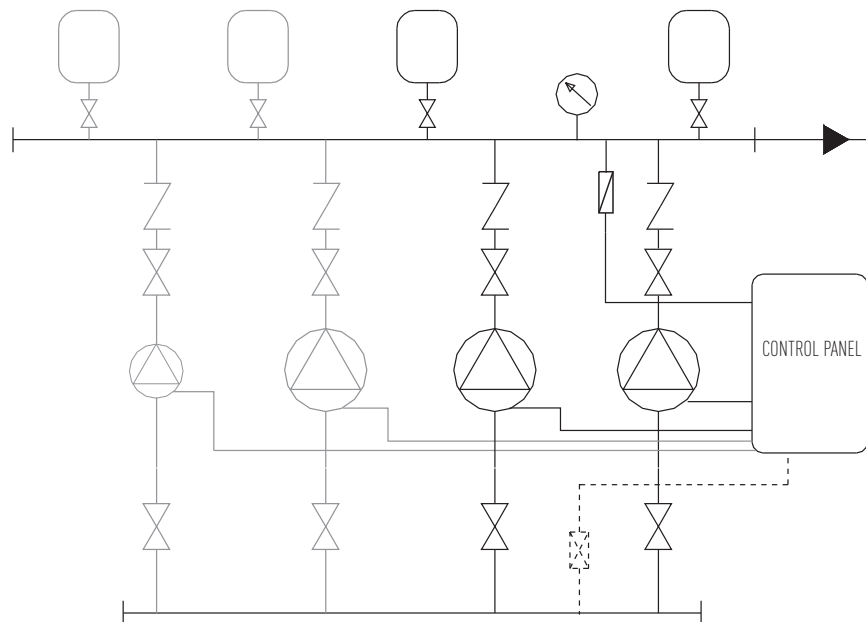
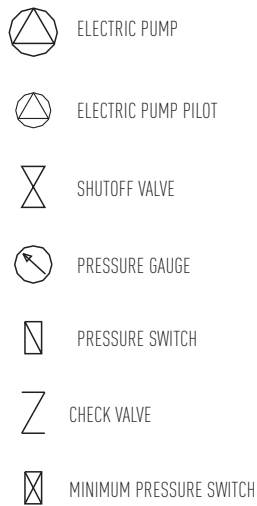
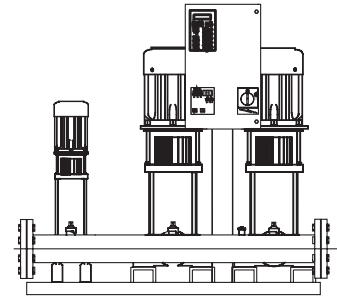
- Galvanized steel profile

DELIVERY MANIFOLD

In AISI 304 stainless steel :

- 1 pressure gauge
- 1 pressure transducer 0-5Volt - 0-10 Bar
- 1 brass ball valve *

* components for each electric pump installed



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PRESSURE BOOSTER SETS WITH TRANSDUCER CONTROL

THREE PHASE ELECTRICAL PANEL



ELECTRICAL PANEL

- IP 54 metal enclosure
- Main switch
- Keypad with SA electronic board.
- Fuses, contactors and thermal relay for each pump.
- Transformer with fuses for auxiliary circuit.
- M-0-T selector for each pump
- Delta-Star starter for motors over 7.5 kW.

SIGNALS AND CONTROLS

- LCD display to indicate operating parameters and for entry of configuration parameters and settings.
- Power ON indicator led.
- Indicator led to signal low water level in tank on first collection or low pressure on water supply line (aqueduct).
- Indicator led to signal trip of the overload thermal cut-out.
- Automatic/Manual mode indicator led.
- Pump running indicator led for each pump.
- Buttons for selection of automatic or manual control.
- Start-stop button for each pump when set to manual mode.
- Button to enter configuration parameters.

MAIN FUNCTIONS

- Sequential inversion of pump start-up at the end of each work cycle.
- Timer, settable from 0 to 255 sec., for pump operation after opening of the pressure switch contact or when operating pressure values are reached.
- ON/OFF control of tank level for first collection or pressure in supply pipeline via a float switch or other differential pressure switch.
- Sequential control of pump start-up to prevent simultaneous activation.

EXTERNAL CONTROL DEVICES

- A differential pressure switch settable as ON/OFF for each pump, or
- An electric pressure transducer (0-5 V)

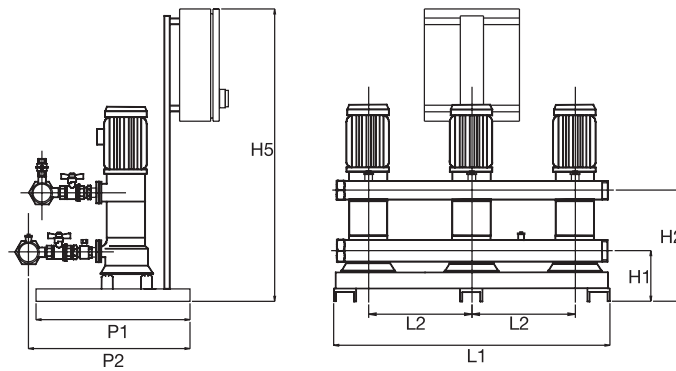
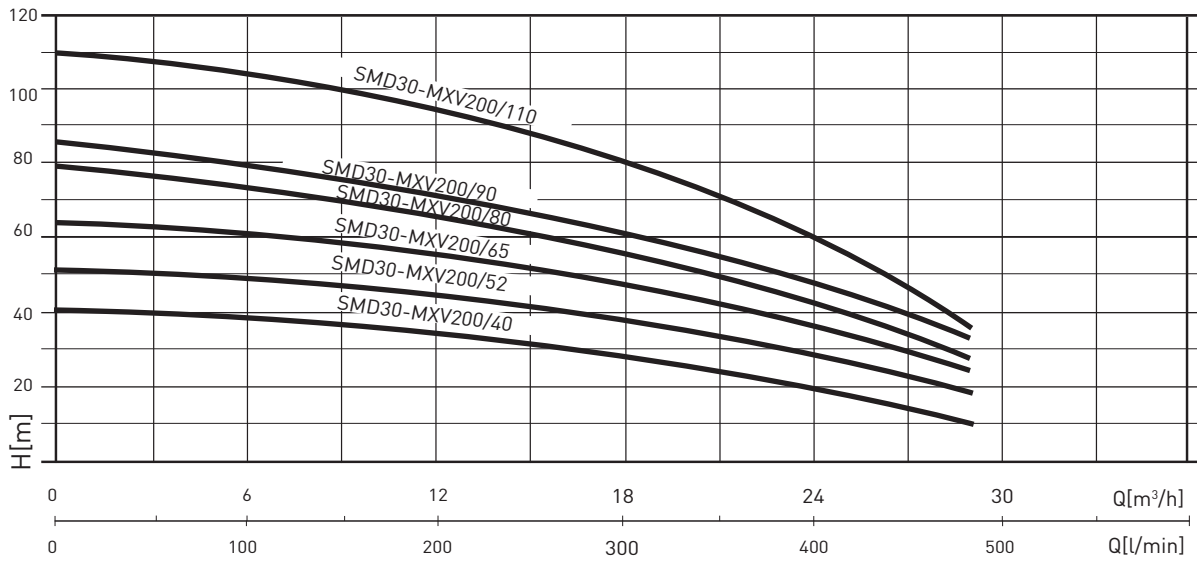
ACCESSORIES

Sensormat accessories available on request	SDM
	SMY
Float switch for protection against dry running	X
Differential pressure switch for inhibition in event of mains pressure failure	X
Electrodes for electronic level control	X
Membrane autoclaves	X

NOCCHI SMD 30 - MXV 200

PRESSURE BOOSTER SETS WITH TRANSDUCER CONTROL

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	kW	L/min	0	60	120	240	360	480
		m ³ /h	4.8	3.6	7.2	14.4	21.6	28.8
SMD30-MXV200/40	3x1.5	m.c.a./m.w.c.	39	38	37	32	24	12
SMD30-MXV200/52	2x1.8		51	50	49	42	32	18
SMD30-MXV200/65	3x2		64	63	60	52	40	24
SMD30-MXV200/80	3x2.6		79	77	73	62	48	27
SMD30-MXV200/90	3x2.7		85	83	78	67	54	33
SMD30-MXV200/110	3x3.2		109	107	103	90	68	35

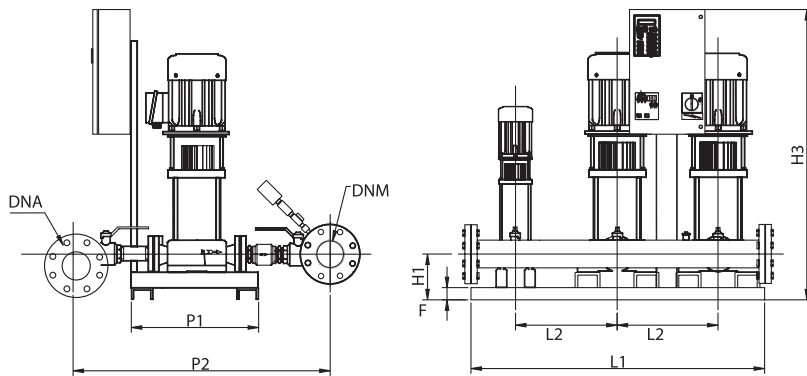
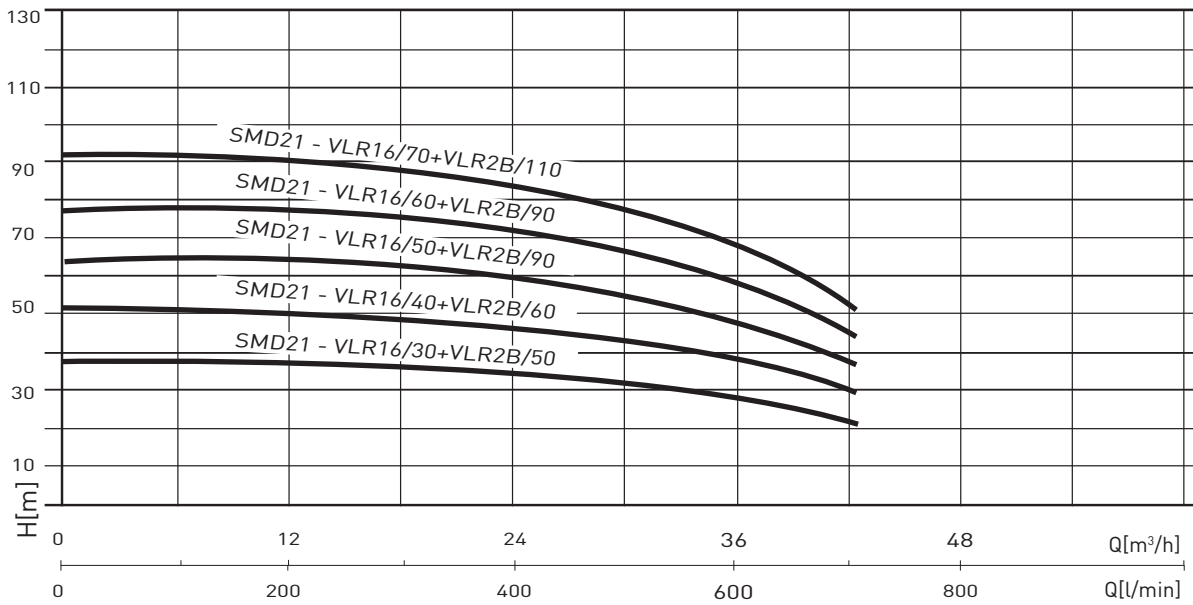
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)									Weight (kg)
	L1	P1	P2	H1	H2	H3	DNA	DNM	L2	
SMD30-MXV200/40	1200	500	540	145	320	1100	3"	2"1/2	370	114
SMD30-MXV200/52	1200	500	540	145	320	1100	3"	2"1/2	370	126
SMD30-MXV200/65	1200	500	540	145	320	1100	3"	2"1/2	370	138
SMD30-MXV200/80	1200	500	540	145	320	1100	3"	2"1/2	370	144
SMD30-MXV200/90	1200	500	540	145	320	1100	3"	2"1/2	370	156
SMD30-MXV200/110	1200	500	540	145	320	1100	3"	2"1/2	370	160

NOCCHI SMD 21 - VLR 16

PRESSURE BOOSTER SETS WITH TRANSDUCER CONTROL

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	kW	L/min	200	400	500	600	700
		m ³ / h	12	24	30	36	42
SMD21-VLR16/30 + VLR2B/50	2x3+0.55	m.c.a. / m.w.c.	39	37	34	30	24
SMD21-VLR16/40 + VLR2B/60	2x4+0.75		52	49	46	40	32
SMD21-VLR16/50 + VLR2B/90	2x5.5+1.1		65	62	57	51	40
SMD21-VLR16/60 + VLR2B/90	2x5.5+1.1		78	74	69	61	47
SMD21-VLR16/70 + VLR2B/110	2x5.5+1.1		91	86	80	71	55

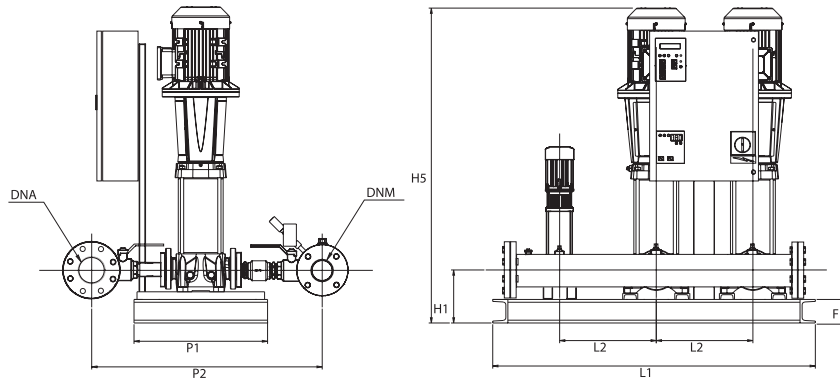
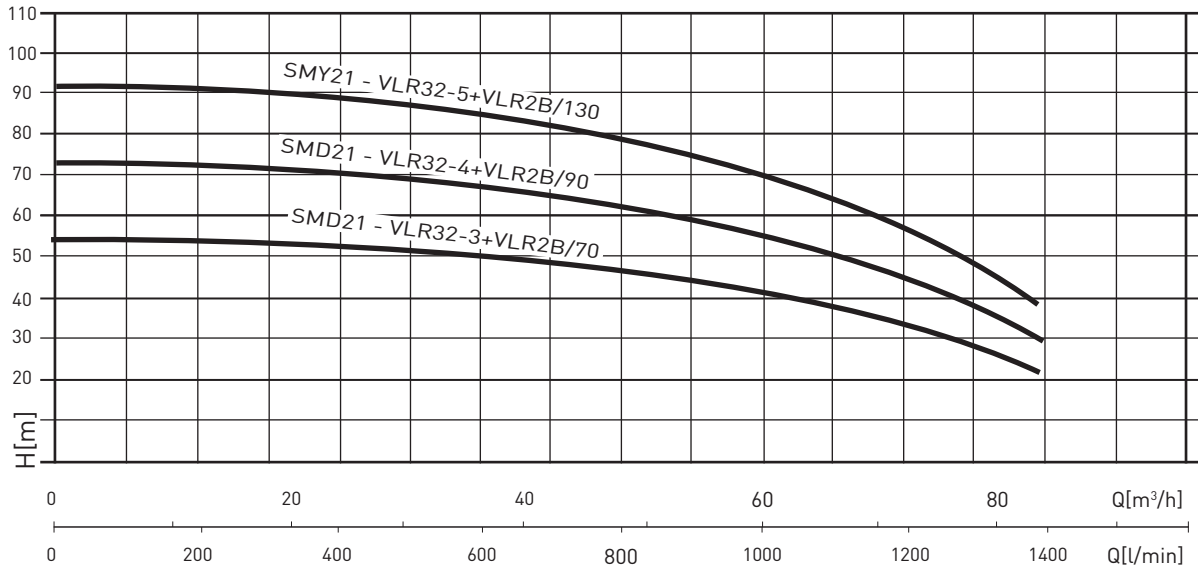
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)									Weight (kg)
	L1	P1	P2	H1	H3	DNA	DNM	F	L2	
SMD21-VLR16/30 + VLR2B/50	1100	610	860	180	1200	3"	3"	45	370	233
SMD21-VLR16/40 + VLR2B/60	1100	610	860	180	1200	3"	3"	45	370	240
SMD21-VLR16/50 + VLR2B/90	1100	610	860	180	1200	3"	3"	45	370	294
SMD21-VLR16/60 + VLR2B/90	1100	610	860	180	1200	3"	3"	45	370	298
SMD21-VLR16/70 + VLR2B/110	1100	610	860	180	1200	3"	3"	45	370	312

NOCCHI SM.21 - VLR 32

PRESSURE BOOSTER SETS WITH TRANSDUCER CONTROL

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	kW	L/min	400	800	1000	1200	1400
		m ³ / h	24	48	60	72	84
SMD21-VLR32-3 + VLR2B/70	2x5.5+0.75	m.c.a. / m.w.c.	53	47	41	33	20
SMD30-VLR32-4 + VLR2B/90	2x7.5+1.1		71	63	55	44	27
SMY30-VLR32-5 + VLR2B/130	2x11+1.1		89	79	69	55	34

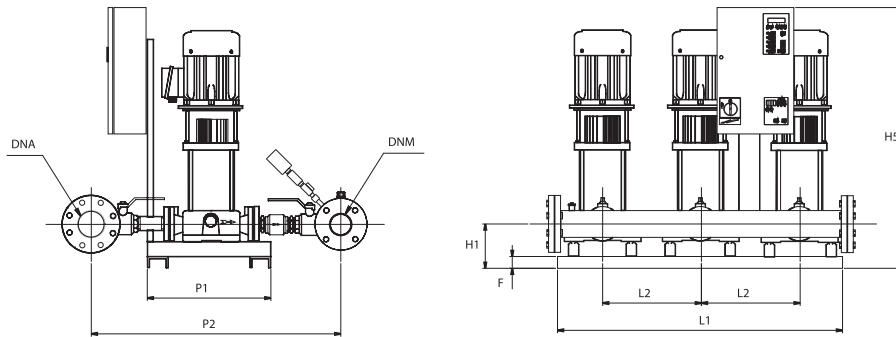
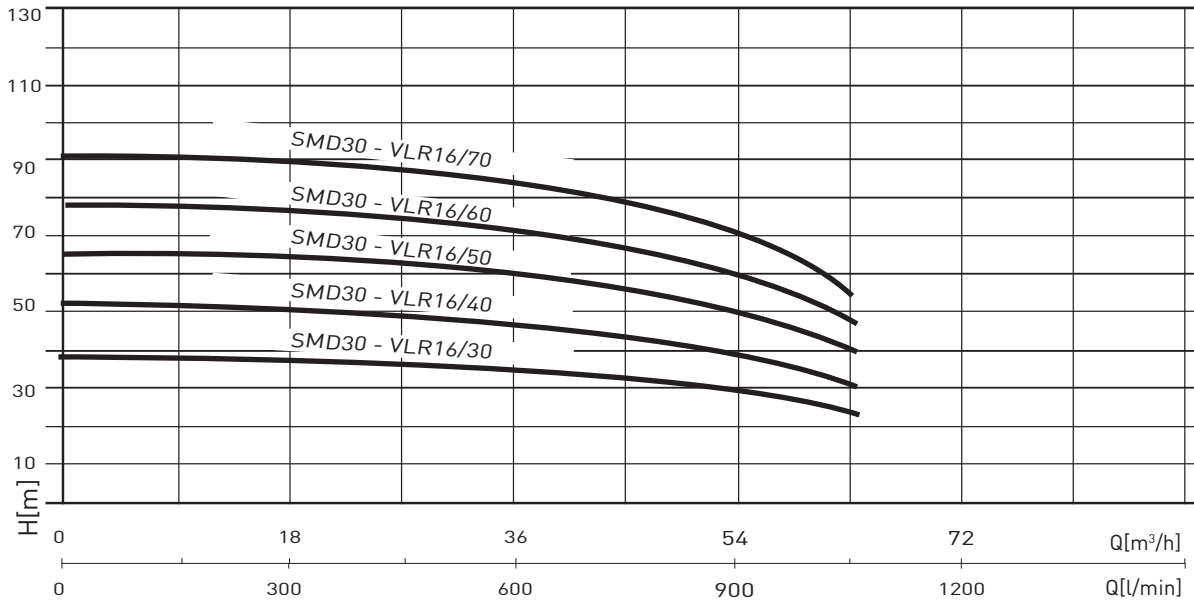
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)									Weight (kg)
	L1	P1	P2	H1	H5	DNA	DNM	F	L2	
SMD21-VLR32-3 + VLR2B/70	1300	700	1060	230	1520	4"	4"	80	440	404
SMD30-VLR32-4 + VLR2B/90	1300	700	1060	230	1520	4"	4"	80	440	424
SMY30-VLR32-5 + VLR2B/130	1300	700	1060	230	1520	4"	4"	80	440	497

NOCCHI SMD 30 - VLR 16

PRESSURE BOOSTER SETS WITH TRANSDUCER CONTROL

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	kW	L/min	300	600	750	900	1050
		m ³ / h	18	36	45	54	63
SMD30-VLR16/30	3x3	m.c.a. / m.w.c.	39	37	34	30	24
SMD30-VLR16/40	3x4		52	49	46	40	32
SMD30-VLR16/50	3x5.5		65	62	57	51	40
SMD30-VLR16/60	3x5.5		78	74	69	61	47
SMD30-VLR16/70	3x7.5		91	86	80	71	55

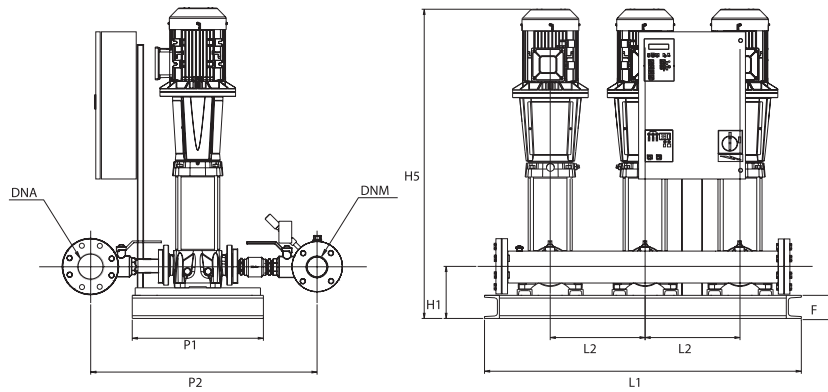
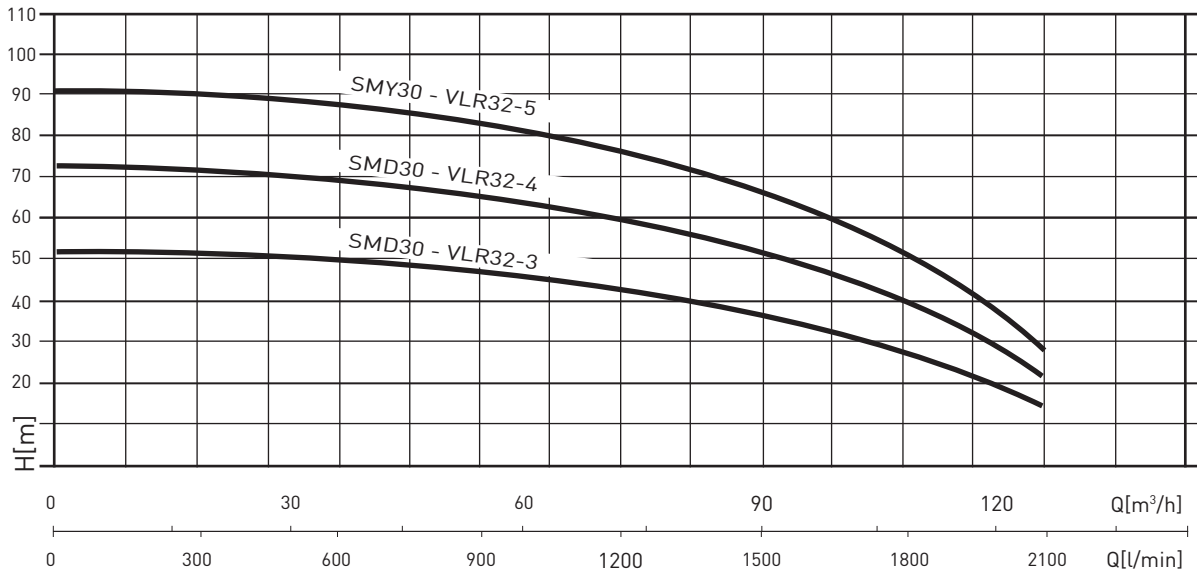
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)									Weight (kg)
	L1	P1	P2	H1	H5	DNA	DNM	F	L2	
SMD30-VLR16/30	1100	610	860	180	1200	4"	3"	45	370	264
SMD30-VLR16/40	1100	610	860	180	1200	4"	3"	45	370	273
SMD30-VLR16/50	1100	610	860	180	1200	4"	3"	45	370	342
SMD30-VLR16/60	1100	610	860	180	1200	4"	3"	45	370	348
SMD30-VLR16/70	1100	610	860	180	1200	4"	3"	45	370	366

NOCCHI SM. 30 - VLR 32

PRESSURE BOOSTER SETS WITH TRANSDUCER CONTROL

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	kW	L/min	600	1200	1500	1800	2100
		m³/h	36	72	90	108	126
SMD30-VLR32-3	3x5.5	m.c.a. / m.w.c.	53	47	41	33	20
SMD30-VLR32-4	3x7.5		71	63	55	44	27
SMY30-VLR32-5	3x11		89	79	69	55	34

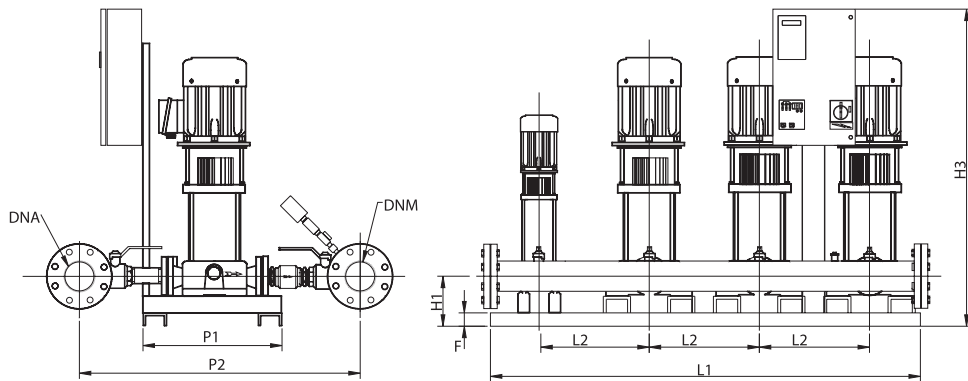
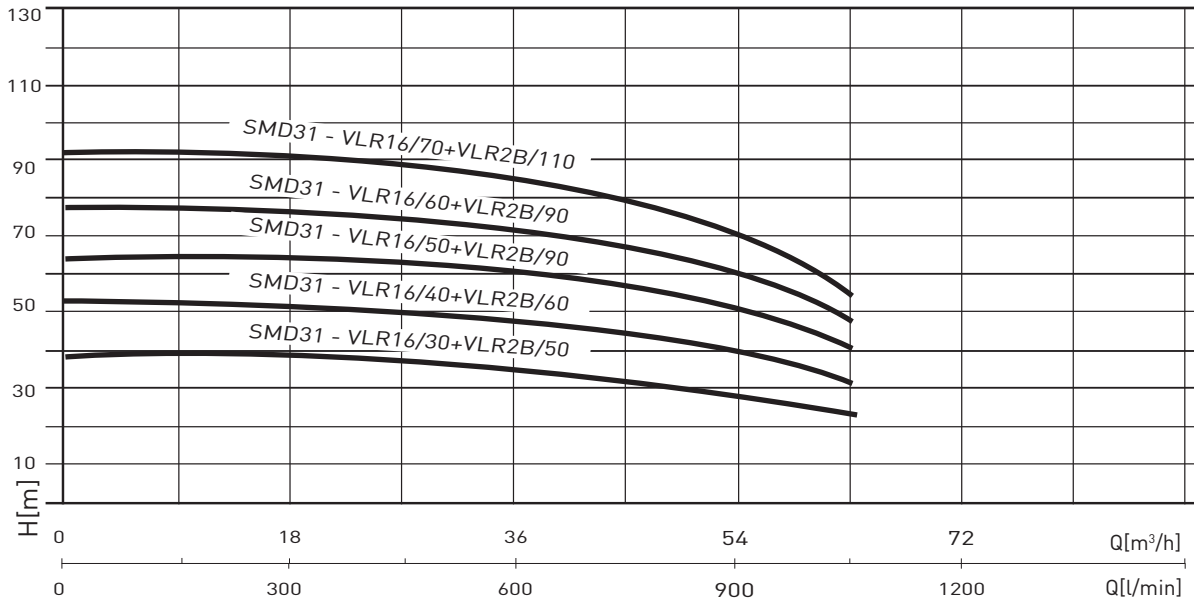
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)									Weight (kg)
	L1	P1	P2	H1	H5	DNA	DNM	F	L2	
SMD30-VLR32-3	1300	700	1060	230	1520	5"	4"	80	440	526
SMD30-VLR32-4	1300	700	1060	230	1520	5"	4"	80	440	550
SMY30-VLR32-5	1300	700	1060	230	1520	5"	4"	80	440	670

NOCCHI SMD 31 - VLR 16

PRESSURE BOOSTER SETS WITH TRANSDUCER CONTROL

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	kW	L/min	300	600	750	900	1050
		m ³ / h	18	36	45	54	63
SMD31-VLR16/30+VLR2B/50	3x3+0.55	n.c.a. / m.w.c.	39	37	34	30	24
SMD31-VLR16/40+VLR2B/60	3x4+0.75		52	49	46	40	32
SMD31-VLR16/50+VLR2B/90	3x5.5+1.1		65	62	57	51	40
SMD31-VLR16/60+VLR2B/90	3x5.5+1.1		78	74	69	61	47
SMD31-VLR16/70+VLR2B/110	3x7.5+1.1		91	86	80	71	55

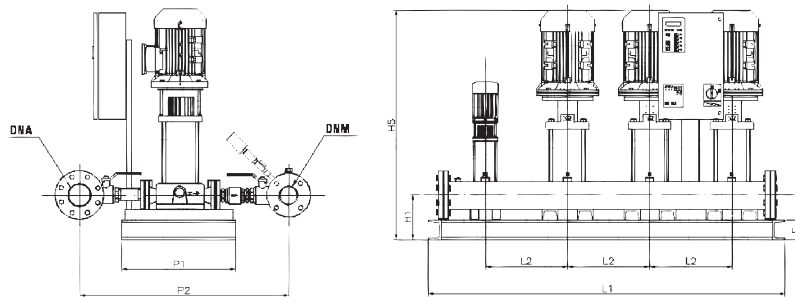
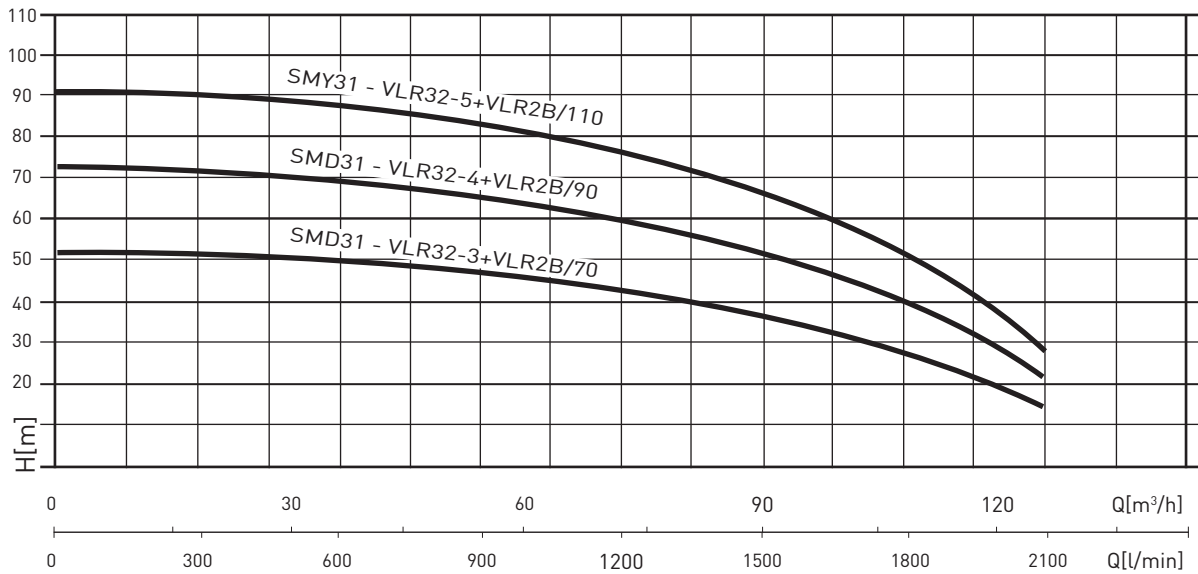
OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)									Weight (kg)
	L1	P1	P2	H1	H3	DNA	DNM	F	L2	
SMD31-VLR16/30+VLR2B/50	1500	610	860	180	1410	4"	4"	45	370	354
SMD31-VLR16/40+VLR2B/60	1500	610	860	180	1410	4"	4"	45	370	364
SMD31-VLR16/50+VLR2B/90	1500	610	860	180	1410	4"	4"	45	370	440
SMD31-VLR16/60+VLR2B/90	1500	610	860	180	1410	4"	4"	45	370	446
SMD31-VLR16/70+VLR2B/110	1500	610	860	180	1410	4"	4"	45	370	470

NOCCHI SMD 31 - VLR 32

PRESSURE BOOSTER SETS WITH TRANSDUCER CONTROL

HYDRAULIC PERFORMANCE



PERFORMANCE TABLE

MODEL	kW	L/min	600	1200	1500	1800	2100
		m³ / h	36	72	90	108	126
SMD31-VLR32-3+VLR2B/70	3x5+0.75	m.c.a. / m.w.c.	53	47	41	33	20
SMD31-VLR32-4+VLR2B/90	3x7.5+1.1		71	63	55	44	27
SMY31-VLR32-5+VLR2B/110	3x11+1.1		89	79	69	55	34

OVERALL DIMENSIONS AND WEIGHTS

MODEL	Dimensions (mm)									Weight (kg)
	L1	P1	P2	H1	H5	DNA	DNM	F	L2	
SMD31-VLR32-3+VLR2B/70	1750	700	1060	230	1520	6"	5"	80	440	591
SMD31-VLR32-4+VLR2B/90	1750	700	1060	230	1520	6"	5"	80	440	611
SMY31-VLR32-5+VLR2B/110	1750	700	1060	230	1520	6"	5"	80	440	715