

PRESSOMAT

BOOSTER SETS - FIX SPEED

- High hydraulic efficiency
- Sturdy and resistant
- Piping in stainless steel AISI 304
- Compact



DESCRIPTION

These are automatic pressure booster set for the pressurization of distribution networks with single phase and three-phase power supply.

The pumps are controlled by two differential pressure switches with adjustable settings, via an electrical panel with an analogue electronic board for:

- the sequential start-up of the pumps
- the inversion of the start-up order
- timer settable from 0 to 180», only for the three-phase version
- protection against dry running

When the network pressure reaches the value for the closing of the electrical contact of pressure switch n.1, a pump starts.

If the pressure continues to fall, when the closing value of the second pressure switch is reached, the second pump is started up.

When the value of the network pressure increases, the pressure switches open their contact causing the relative pump to stop.

At the end of each cycle, the automatic inverter changes the starting order of the pumps (once pressure switch n.1 is associated to pump n.1; in the next cycle to pump n.2).

If the two pressure switches close at the same time, the electronic board will delay the start-up of the second pump avoiding abrupt changes in pressure and the overload of the power supply.

MECHANICAL DATA

Operating pressure max.	16 bar	Temperature of the liquid max.	40 °C
Type of liquid	clean water without suspended solids or abrasive material		

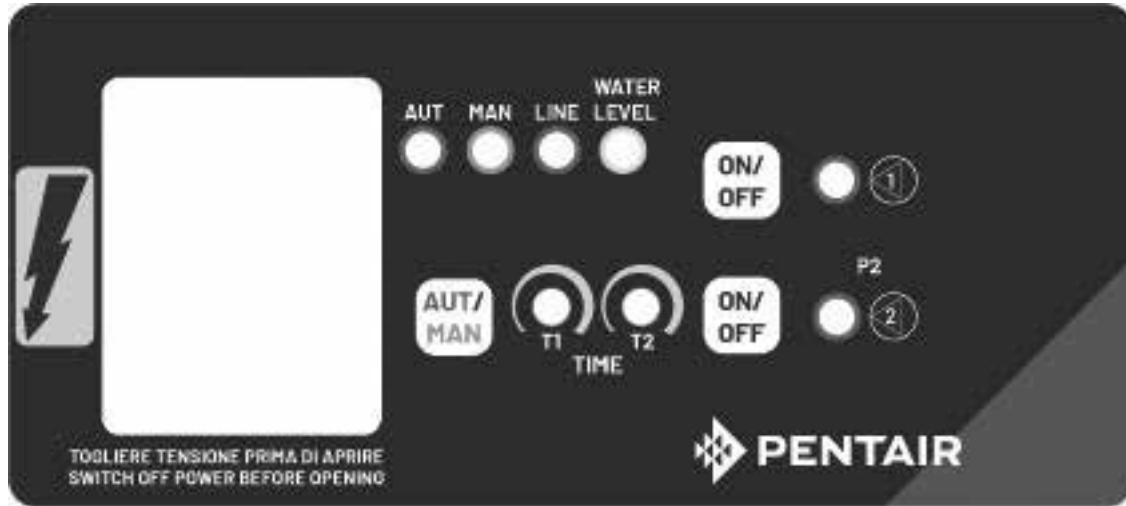
ELECTRICAL DATA

Type of enclosure	IP 55	Ambient temperature max.	50 °C
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SINGLE PHASE ELECTRICAL PANEL



Electrical panel

- Box in plastic material IP55
- Main circuit breaker
- Electronic control panel with manual - automatic buttons for each pump
- SML electronic board
- Pump start-up relay

Main functions

- Cyclic inversion of the start-up order of the pumps after each cycle end
- ON/OFF control of the level of the tank or the pressure of the supply duct by means of a float switch or a different differential pressure switch.

Signals and controls

- LED indicating the presence of power
- LED indicating the low water level in the tank or an insufficient pressure in the supply duct (aqueduct)
- LED indicating the operation of each pump

External control devices

- Two adjustable differential pressure switches ON/OFF
- ON/OFF float switch, located in the water collection tank, or
- Reverse pressure switch inserted in the water supply duct (aqueduct)

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THREE PHASE ELECTRICAL PANEL



Electrical panel

- Box in metal IP54
- Main switch
- Keyboard with electronic board SA
- Fuses, contactor and thermal relay for each pump
- Transformer with fuses for the auxiliary circuit
- M-O-T switch for each pump
- Star-delta starter for motors above 7.5 kW

Main functions

- Cyclic inversion of the start-up order of the pumps after each cycle end
- ON/OFF control of the level of the tank or the pressure of the supply duct by means of a float switch or a differential pressure switch
- Timer of the pumps settable from 0 to 180 seconds, after the opening of the pressure switch operation contact

Signals and controls

- LED indicating the presence of power
- LED indicating the low water level in the tank or an insufficient pressure in the supply duct (aqueduct)
- LED indicating the operation of each pump
- LED indicating that one of the two thermal relays has tripped because of an overload
- LED indicating manual or automatic operation
- Buttons to select manual or automatic control
- Buttons to start or stop each pump (manual operation)

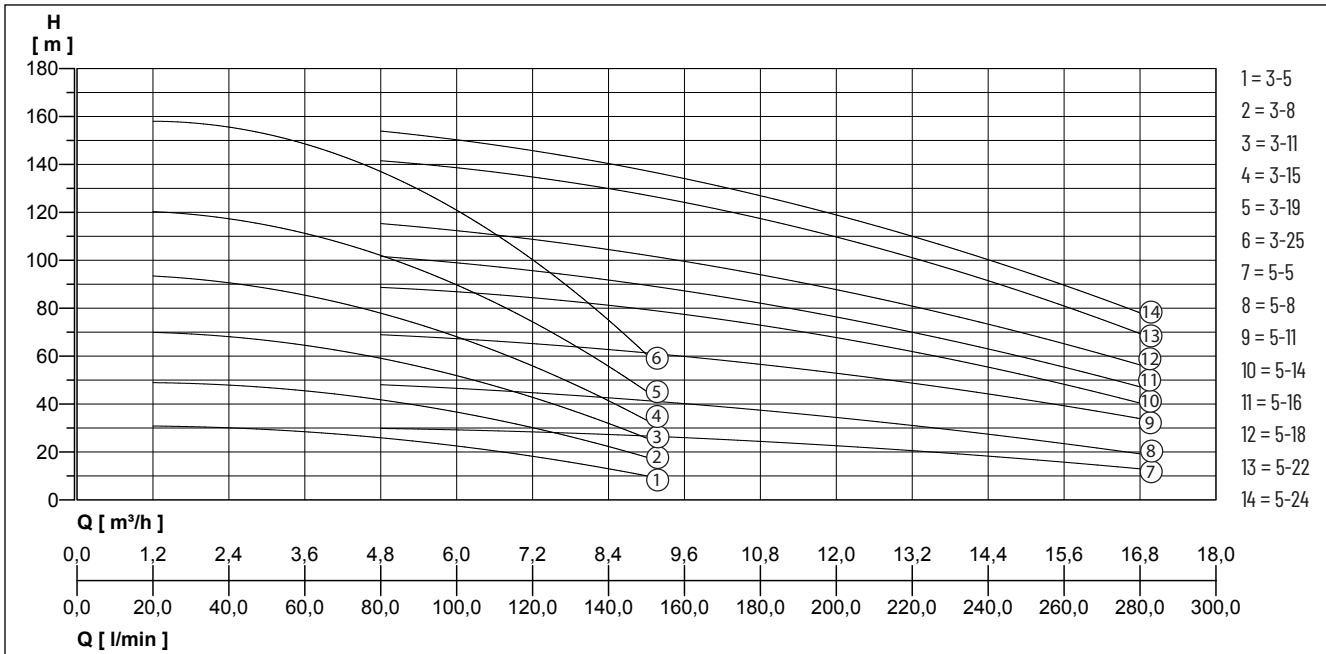
External control devices

- Two adjustable differential pressure switches ON/OFF
- ON/OFF float switch, located in the water collection tank, or
- 3 electrodes for the electronic control of the level of the tank, or
- Reverse pressure switch inserted in the water supply duct (aqueduct)

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PERFORMANCE



We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 ISO 9906:2012 - Grade 3B tolerances.

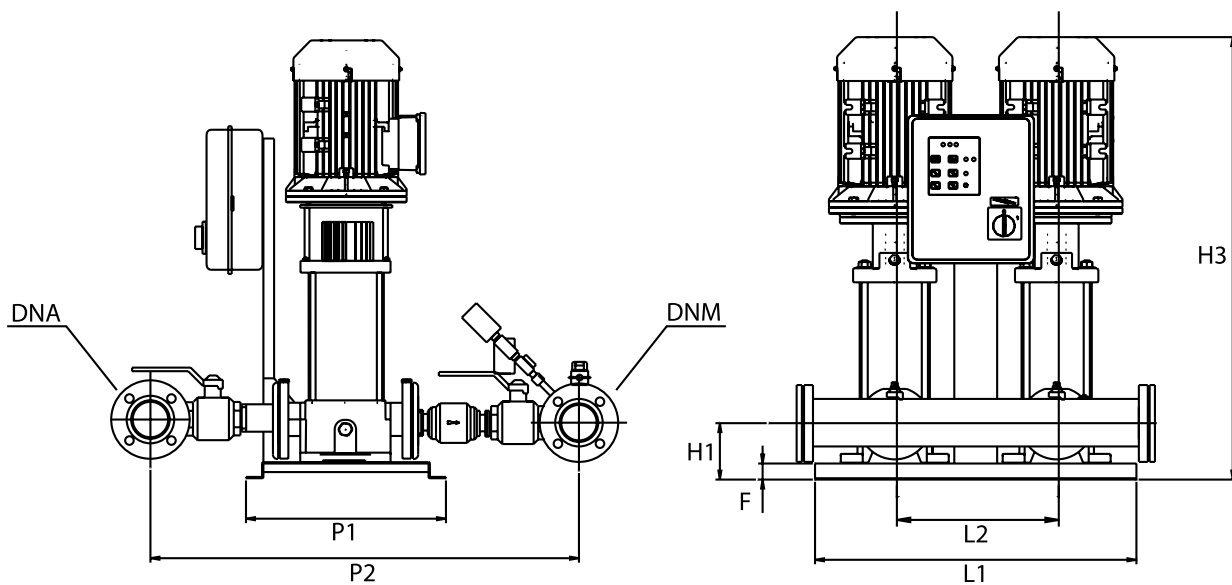
Type	Flow rate Q [m³/h]	0	1	2	4	4.8	5	6	7	7.2	8	9	9.6	12	14.4	16.8
PMD20 PVM 3-5 F	Delivery head H [m]	40	31	30	28		26	23	18		13	10				
PMS20/PMD20 PVM 3-8 F		50	49	48	45		42	37	30		22	18				
PMS20/PMD20 PVM 3-11 F		72	70	68	64		60	52	42		32	26				
PMS20/PMD20 PVM 3-15 F		97	94	90	85		78	68	57		41	33				
PMS20/PMD20 PVM 3-19 F		123	121	117	110		102	90	76		55	45				
PMD20 PVM 3-25 F		165	157	156	150		138	120	98		75	62				
PMS20/PMD20 PVM 5-5 F						30					28		26	23	18	13
PMS20/PMD20 PVM 5-8 F						48					45		40	34	28	19
PMD20 PVM 5-11 F						69					65		60	53	44	34
PMD20 PVM 5-14 F						89					84		77	68	56	40
PMD20 PVM 5-16 F						107					95		87	77	63	47
PMD20 PVM 5-18 F						120					109		100	88	72	57
PMD20 PVM 5-22 F						148					134		124	110	92	69
PMD20 PVM 5-24 F						164					146		133	120	100	78

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Type	Code No.	Voltage	Motor rating 2xP2	Weight
PMD20 PVM 3-5 F	UP460000	3/N/PE~400 V	0.37 kW	106 kg
PMS20 PVM 3-8 F	UP450010	1/N/PE~230 V	0.75 kW	108 kg
PMD20 PVM 3-8 F	UP460010	3/N/PE~400 V	0.75 kW	113 kg
PMS20 PVM 3-11 F	UP450020	1/N/PE~230 V	1.10 kW	113 kg
PMD20 PVM 3-11 F	UP460020	3/N/PE~400 V	1.10 kW	118 kg
PMS20 PVM 3-15 F	UP450030	1/N/PE~230 V	1.10 kW	116 kg
PMD20 PVM 3-15 F	UP460030	3/N/PE~400 V	1.10 kW	121 kg
PMS20 PVM 3-19 F	UP450040	1/N/PE~230 V	1.50 kW	136 kg
PMD20 PVM 3-19 F	UP460040	3/N/PE~400 V	1.50 kW	141 kg
PMD20 PVM 3-25 F	UP460050	3/N/PE~400 V	2.20 kW	151 kg
PMS20 PVM 5-5 F	UP450060	1/N/PE~230 V	0.75 kW	107 kg
PMD20 PVM 5-5 F	UP460060	3/N/PE~400 V	0.75 kW	112 kg
PMS20 PVM 5-8 F	UP450070	1/N/PE~230 V	1.10 kW	113 kg
PMD20 PVM 5-8 F	UP460070	3/N/PE~400 V	1.10 kW	118 kg
PMD20 PVM 5-11 F	UP460080	3/N/PE~400 V	2.20 kW	144 kg
PMD20 PVM 5-14 F	UP460090	3/N/PE~400 V	2.20 kW	147 kg
PMD20 PVM 5-16 F	UP460100	3/N/PE~400 V	2.20 kW	149 kg
PMD20 PVM 5-18 F	UP460110	3/N/PE~400 V	3.00 kW	166 kg
PMD20 PVM 5-22 F	UP460120	3/N/PE~400 V	4.00 kW	177 kg
PMD20 PVM 5-24 F	UP460130	3/N/PE~400 V	4.00 kW	179 kg



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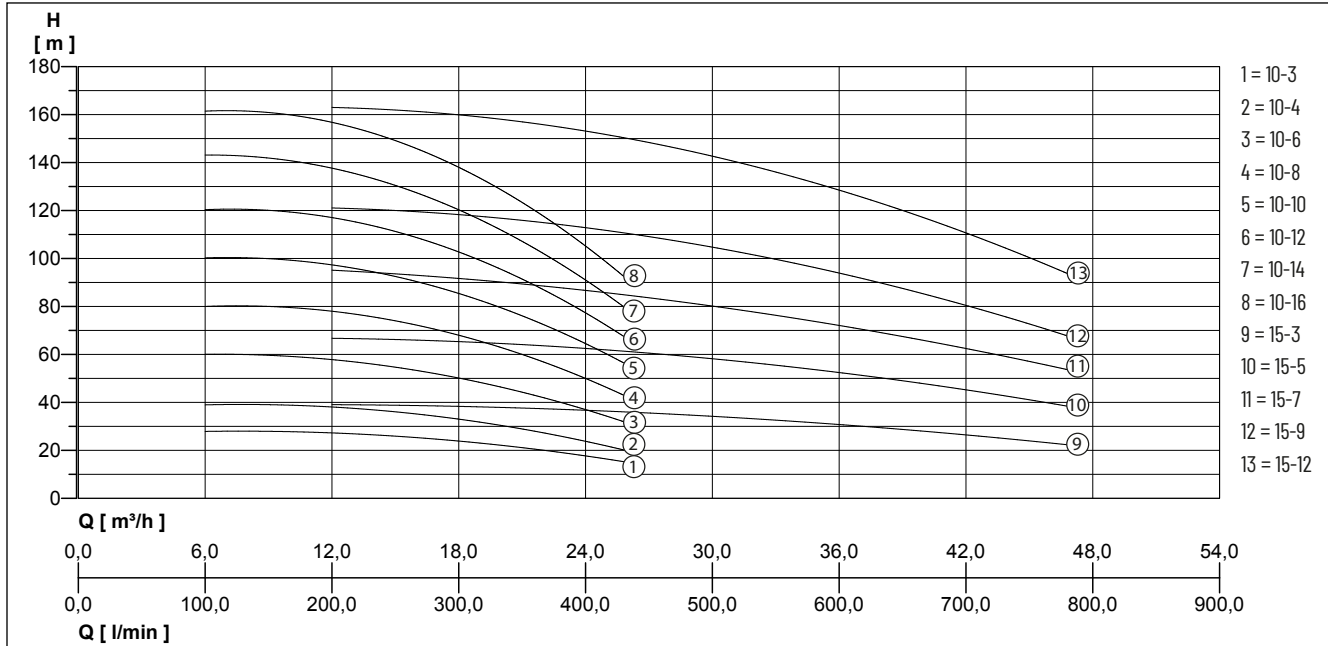
DIMENSIONS [mm]

Type	F	L1	L2	P1	P2	H1	H2	H3	DNA	DNM
PMD20 PVM 3-5 F	30	600	370	320	690	105	780	540	2"	2"
PMS20/PMD20 PVM 3-8 F	30	600	370	320	690	105	780	640	2"	2"
PMS20/PMD20 PVM 3-11 F	30	600	370	320	690	105	780	694	2"	2"
PMS20/PMD20 PVM 3-15 F	30	600	370	320	690	105	780	766	2"	2"
PMS20/PMD20 PVM 3-19 F	30	600	370	320	690	105	780	886	2"	2"
PMD20 PVM 3-25 F	30	600	370	320	690	105	780	994	2"	2"
PMS20/PMD20 PVM 5-5 F	30	600	370	320	690	105	780	631	2"	2"
PMS20/PMD20 PVM 5-8 F	30	600	370	320	690	105	780	712	2"	2"
PMD20 PVM 5-11 F	30	600	370	320	690	105	780	841	2"	2"
PMD20 PVM 5-14 F	30	600	370	320	690	105	780	922	2"	2"
PMD20 PVM 5-16 F	30	600	370	320	690	105	780	976	2"	2"
PMD20 PVM 5-18 F	30	600	370	320	690	105	780	1088	2"	2"
PMD20 PVM 5-22 F	30	600	370	320	690	105	780	1203	2"	2"
PMD20 PVM 5-24 F	30	600	370	320	690	105	780	1257	2"	2"

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PERFORMANCE



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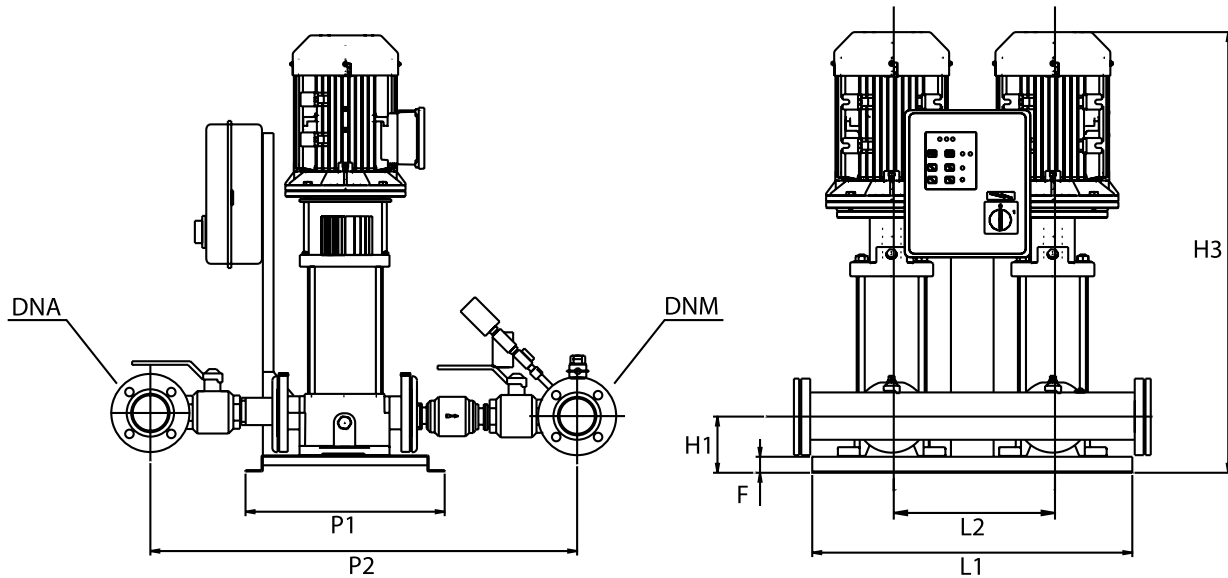
Type	Flow rate Q [m³/h]	0	6	12	18	24	26	36	42	47
PMS20/PMD20 PVM 10-3 F	Delivery head H [m]	28.0	28.0	27.0	24.0	18.0	15.0			
PMS20/PMD20 PVM 10-4 F		39.0	39.0	38.0	33.0	24.0	20.0			
PMD20 PVM 10-6 F		60.0	60.0	58.0	50.0	37.0	32.0			
PMD20 PVM 10-8 F		80.0	80.0	78.0	68.0	50.0	43.0			
PMD20 PVM 10-10 F		100.0	100.0	98.0	85.0	64.0	57.0			
PMD20 PVM 10-12 F		120.0	120.0	118.0	102.0	77.0	68.0			
PMD20 PVM 10-14 F		142.0	143.0	138.0	120.0	91.0	80.0			
PMD20 PVM 10-16 F		160.0	161.0	158.0	137.0	105.0	93.0			
PMD20 PVM 15-3 F		39.8		39.2		36.3		31.0	26.8	22.0
PMD20 PVM 15-5 F		68.0		66.9		62.0		52.7	45.7	38.0
PMD20 PVM 15-7 F		97.0		95.0		87.0		72.0	62.0	54.0
PMD20 PVM 15-9 F		124.0		121.0		113.0		94.0	80.0	68.0
PMY20 PVM 15-12 F		166.0		163.0		153.0		129.0	110.0	94.0

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Type	Code No.	Voltage	Motor rating 2xP2	Weight
PMS20 PVM 10-3 F	UP450110	1/N/PE~230 V	1.1 kW	135 kg
PMD20 PVM 10-3 F	UP460140	3/N/PE~400 V	1.1 kW	140 kg
PMS20 PVM 10-4 F	UP450120	1/N/PE~230 V	1.5 kW	155 kg
PMD20 PVM 10-4 F	UP460150	3/N/PE~400 V	1.5 kW	160 kg
PMD20 PVM 10-6 F	UP460160	3/N/PE~400 V	2.2 kW	169 kg
PMD20 PVM 10-8 F	UP460170	3/N/PE~400 V	3.0 kW	189 kg
PMD20 PVM 10-10 F	UP460180	3/N/PE~400 V	4.0 kW	200 kg
PMD20 PVM 10-12 F	UP460190	3/N/PE~400 V	4.0 kW	204 kg
PMD20 PVM 10-14 F	UP460200	3/N/PE~400 V	5.5 kW	269 kg
PMD20 PVM 10-16 F	UP460210	3/N/PE~400 V	5.5 kW	273 kg
PMD20 PVM 15-3 F	UP460220	3/N/PE~400 V	3.0 kW	191 kg
PMD20 PVM 15-5 F	UP460230	3/N/PE~400 V	4.0 kW	204 kg
PMD20 PVM 15-7 F	UP460240	3/N/PE~400 V	5.5 kW	270 kg
PMD20 PVM 15-9 F	UP460250	3/N/PE~400 V	7.5 kW	294 kg
PMY20 PVM 15-12 F	UP460260	3/N/PE~400 V	11.0 kW	379 kg

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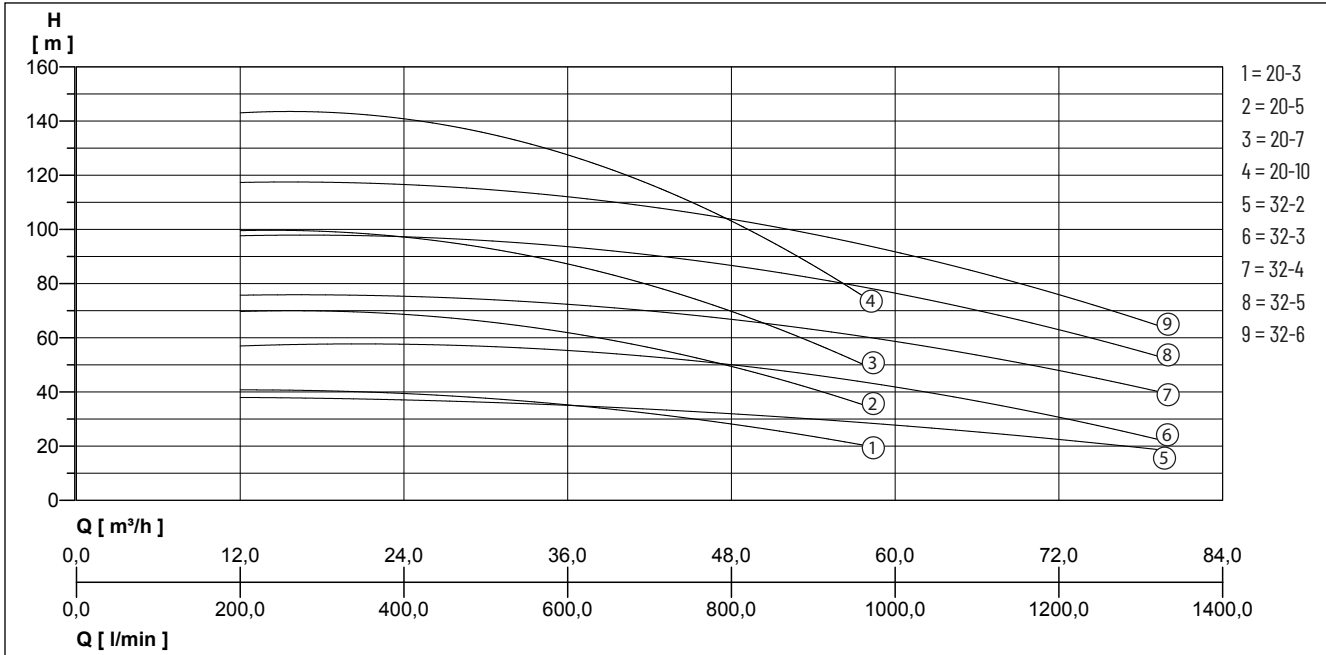
DIMENSIONS [mm]

Type	F	L1	L2	P1	P2	H1	H2	H3	DNA	DNM
PMS20 PVM 10-3 F	30	620	370	320	690	105	780	642	2 1/2"	2 1/2"
PMD20 PVM 10-3 F	30	620	370	320	750	110	780	642	2 1/2"	2 1/2"
PMS20 PVM 10-4 F	30	620	370	320	690	105	780	720	2 1/2"	2 1/2"
PMD20 PVM 10-4 F	30	620	370	320	750	110	780	720	2 1/2"	2 1/2"
PMD20 PVM 10-6 F	30	620	370	320	750	110	780	780	2 1/2"	2 1/2"
PMD20 PVM 10-8 F	30	620	370	320	750	110	780	900	2 1/2"	2 1/2"
PMD20 PVM 10-10 F	30	620	370	320	750	110	780	966	2 1/2"	2 1/2"
PMD20 PVM 10-12 F	30	620	370	320	750	105	780	1026	2 1/2"	2 1/2"
PMD20 PVM 10-14 F	30	620	370	320	750	110	780	1155	2 1/2"	2 1/2"
PMD20 PVM 10-16 F	30	620	370	320	750	110	780	1215	2 1/2"	2 1/2"
PMD20 PVM 15-3 F	30	620	370	380	860	110		816	3"	2 1/2"
PMD20 PVM 15-5 F	30	620	370	380	860	110		913	3"	2 1/2"
PMD20 PVM 15-7 F	30	620	370	380	860	110		1072	3"	2 1/2"
PMD20 PVM 15-9 F	30	620	370	380	860	110		1182	3"	2 1/2"
PMY20 PVM 15-12 F	30	620	370	380	860	110		1507	3"	2 1/2"

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PERFORMANCE



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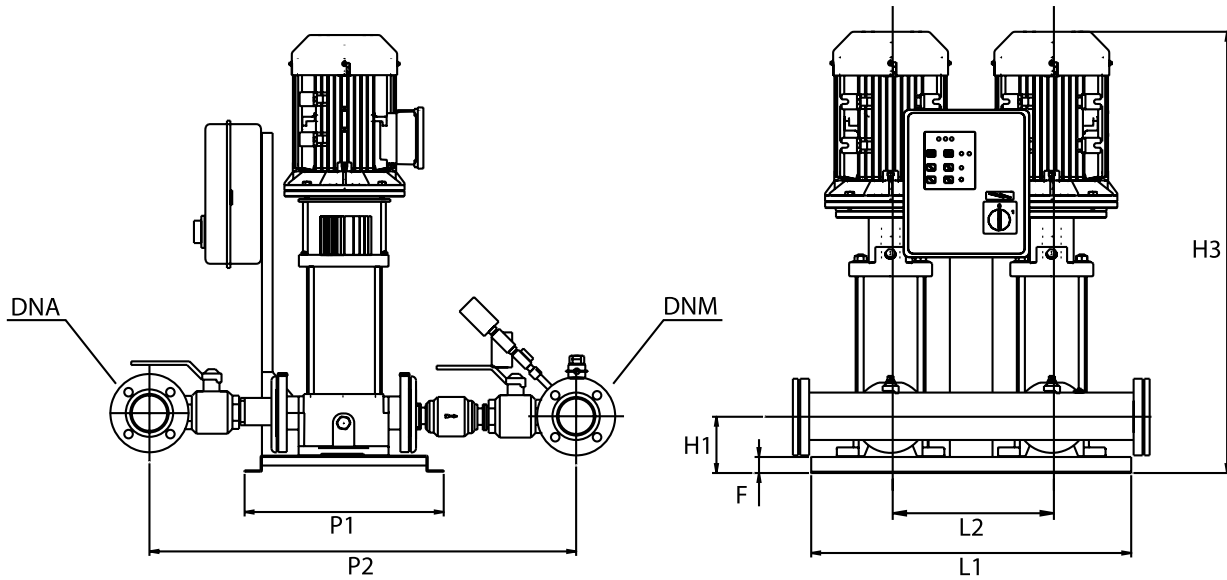
Type	Flow rate Q [m³/h]	0	12	24	36	48	57.6	60	72	79.2
PMD20 PVM 20-3 F	Delivery head H [m]	42	41	39	35	29	20			
PMD20 PVM 20-5 F		72	70	68	62	50	35			
PMD20 PVM 20-7 F		101	100	96	88	70	50			
PMY20 PVM 20-10 F		146	144	139	127	106	74			
PMD20 PVM 32-2 F		39	38	37	35	32		28	22	19
PMD20 PVM 32-3 F		58	58	57	54	49		43	35	30
PMD20 PVM 32-4 F		76	76	75	72	67		59	48	40
PMY20 PVM 32-5 F		98	98	97	93	87		77	63	53
PMY20 PVM 32-6 F		117	118	116	111	104		93	76	64

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Type	Code No.	Voltage	Motor rating 2xP2	Weight
PMD20 PVM 20-3 F	UP460270	3/N/PE~400 V	4.0 kW	199 kg
PMD20 PVM 20-5 F	UP460280	3/N/PE~400 V	5.5 kW	265 kg
PMD20 PVM 20-7 F	UP460290	3/N/PE~400 V	7.5 kW	289 kg
PMY20 PVM 20-10 F	UP460300	3/N/PE~400 V	11.0 kW	310 kg
PMD20 PVM 32-2 F	UP460310	3/N/PE~400 V	4.0 kW	140 kg
PMD20 PVM 32-3 F	UP460320	3/N/PE~400 V	5.5 kW	160 kg
PMD20 PVM 32-4 F	UP460330	3/N/PE~400 V	7.5 kW	169 kg
PMY20 PVM 32-5 F	UP460340	3/N/PE~400 V	11.0 kW	189 kg
PMY20 PVM 32-6 F	UP460350	3/N/PE~400 V	11.0 kW	200 kg

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DIMENSIONS [mm]

Type	F	L1	L2	P1	P2	H1	H3	DNA	DNM
PMD20 PVM 20-3 F	30	620	370	380	860	110	823	3"	2 1/2"
PMD20 PVM 20-5 F	30	620	370	380	860	110	982	3"	2 1/2"
PMD20 PVM 20-7 F	30	620	370	380	860	110	1092	3"	2 1/2"
PMY20 PVM 20-10 F	30	620	370	380	860	110	1417	3"	2 1/2"
PMD20 PVM 32-2 F	80	665	440	700	1036	185	642	4"	3"
PMD20 PVM 32-3 F	80	665	440	700	1036	185	720	4"	3"
PMD20 PVM 32-4 F	80	665	440	700	1036	185	780	4"	3"
PMY20 PVM 32-5 F	80	665	440	700	1036	185	900	4"	3"
PMY20 PVM 32-6 F	80	665	440	700	1036	185	966	4"	3"